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The Problems of Financing Small Business in Egypt

By:

Mahrous Ahmed Hasan

Thesis submitted to the University of Durham
in fulfilment of the requirements for
the degree of Doctor of Philosophy

January 1990

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2 5 JUN 1990

Abstract

The problem investigated in this thesis is the finance gap experienced by small businesses in Egypt. Such a finance gap is represented in limited access to institutional finance in general and medium-and long-term finance in particular. The survey undertaken covered 81 small-scale manufacturing firms (SSMFs) in the greater Cairo area. A questionnaire was used in order to ascertain the reasons for the finance gap. The survey also included 9 case studies whose purpose was to provide more detailed information on various questions regarding finance. In addition to the survey-based work, this study includes a review of the financial literature (3 chapters), an overview of the Egyptian economy and an assessment of the financial resources of Egypt.

This thesis examines the following hypotheses:

(i) The banking service in Egypt is inadequate.

(ii) The owners/managers of small firms are reluctant to employ institutional finance.

(iii) Institutional finance is more difficult to obtain than non-institutional finance.

(iv) The owners/managers of small firms are unaware of the relative advantages of institutional finance as compared with some forms of non-institutional finance (mainly equity capital and retained profits).

The research findings rejected the first hypothesis and proved the rest of the hypotheses, which represent the reasons for the finance gap experienced by SSMFs in Egypt. In order to assess their relevance, the research findings were compared with the financial literature as well as the results of other studies. Finally, some recommendations were suggested in order to overcome the problems of financing small businesses in Egypt and give these businesses more access to institutional finance.

To: Egypt

I love her

more than words can tell

Declaration

The work presented in this thesis was carried out at the University of Durham between October 1986 and January 1990. This material has not been submitted previously for any degree at this or any other university.

Mahrous A. Hasan

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Abbreviations

CAPMS = Central Agency for Public Mobilisation and Statistics.

CBE = Central Bank of Egypt.

CD = Certificate of Deposit.

DIB = Development Industrial Bank.

EIDDC = Engineering and Indusrtrial Design Development Centre.

EPCSSI = Establishment for Productive Cooperation and Small-Scale Industries

GDP = Gross Domestic Product

GNP = Gross National Product.

IB banks = Investment-and-Business banks.

ISSI = Institute of Small-Scale Industries.

LE = Livre Egyptienne (Egyptian Pound). Exchange rate on the 3rd of January, 1990: £1 = LE 4.163, $1 = LE 2.563.

LSIF(s) = Large-Scale Industrial Firm(s).

LSMF(s) = Large-Scale Manufacturing Firm(s).

MTLT = Medium-Term and Long-Term.

ODEP = Open-Door Economic Policy.

PADH = Public Authority for Developing Handicraftsmen.

PAI = Public Authority for Industrialisation.

PAIFZ = Public Authority for Investment and Free Zones.

SIA = Social Insurance Agency.

SSIF(s) = Small-Scale Industrial Firm(s).

SSMF(s) = Small-Scale Manufacturing Firm(s).

TA = Tax Agency.

Definitions

Feddan = 1.038 acres = 4,200 square metres.

Hectare = 10,000 square metres.

Owner-manager(s) = Owner(s) and manager(s) at the same time.

Owner(s)/manager(s) = Owner(s) or manager(s).

Ton = 1,000 kilograms.

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Chapter One

Introduction

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1.2.2. The Industrial Bank

1.2.3. Commercial Banks

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1.3. Research Hypotheses

1.4. Research Objectives

1.5. Research Methodology

1.6. Previous Studies



This chapter is, by definition, an introductory one which lays the basis for the whole study; consequently it may be appropriate to take into consideration that:
(a) The definition of small businesses will not be discussed in this chapter as it will be discussed later, in chapter seven, in the context of defining small businesses in Egypt. The main reason is that this chapter, and the theoretical chapters, will deal with the issue of small business finance in general terms, *i.e.* the context may apply to small businesses in general regardless of the different definitions adopted in different countries.
(b) Small firms engaged in the industrial activity are often referred to, in many studies, as "small-scale industries", but this study will adopt the term "small-scale industrial firms". The rationale for this choice is that the former term may be understood to refer to the scale of the industry rather than the scale of the firm itself; however, the term "small-scale industries" will be mentioned either as part of a quotation or as a title of another study.
(c) The main concern of this study, mainly the empirical study, is small-scale manufacturing firms (SSMFs) rather than small-scale industrial firms (SSIFs); this issue will be discussed in detail in chapter seven.

1.1. The Finance Gap:

The issue of the finance gap dates back to 1931, when the Macmillan Committee[1] in the U.K. reported that small businesses experienced difficulties in raising long-term finance in amounts that were not large enough for a public issue. This finding has become known in the financial literature as the *Macmillan Gap.* Forty years later, in 1971, the Bolton Committee reported that there was no gap corresponding to the Macmillan Gap, but with the following reservation:

(1) Report of the Committee on Finance and Industry, Cmnd. 3897, 1931, quoted in James Bates. The Financing of Small Business. 2nd ed. (London: Sweet and Maxwell, 1971) p. 15.

> "This is not to say that existing institutional arrangements are perfect, still less that every small business will be able to find finance of the type it needs at the price it can afford to pay".[2]

On the other hand, Ray and Hutchinson[3] argue that a finance gap exists in two ways: (a) if the marginal return on investments available to small businesses exceeds their marginal cost of capital, but due to discontinuities in the provision of finance, funds were not available for otherwise profitable investments; or (b) if the cost of money to small businesses, including a premium for risk and loan administration, exceeds the cost of money to large businesses. Such excessive cost, from the viewpoint of Ray and Hutchinson, will deter the investment and growth of small businesses. It is also argued that a finance gap is mainly due to the inadequacy of the capital base, on the grounds that small businesses require equity rather than loan finance.[4]

On the whole, a finance gap may exist in either one or more of the following forms:

(a) a shortage of long-term finance

(b) discontinuities in the provision of finance

(c) a relatively high cost of finance

(d) an inadequate capital base

However, it can be claimed that these forms neither represent all possible forms of the finance gap, nor are they confined to a certain country or a group of countries. In other words, a finance gap might exist in different forms in different countries, or in different forms in the same country in different times, or it might

---

(2) Report of the Committee of Inquiry on Small Firms, Cmnd., 4811, London: HMSO, 1971, p. 188.

(3) Graham H. Ray and Patrick J. Hutchinson, The Financing and Financial Control of Small Enterprise Development (Aldershot: Gower Publishing Co. Ltd., 1983) p. 26.

(4) J.F. Collins, "Why Deregulating Banks Would Mean a Better Deal for Small Businesses", Chartered Accountant of Australia, (52) no.9, 1982, pp. 25-8, cited in H.D. Griffiths, "A Finance Gap for Small Business – is the Situation Improving?", Management Forum, (12) no.1, March 1986, p. 28.

not even exist at all. Hence, the existence, or magnitude, of a finance gap can be said to be dependent on:

(a) the relative size of the firm

(b) the degree of sophistication or backwardness of the country's financial system, which is a consequence of the status of the country's economy

(c) the attitudes of the monetary authorities and the tools they adopt to control institutional finance

(d) the degree of competition, or monopoly, in the financial markets

(e) the awareness of small business managers of the existence and the relative advantages of different credit facilities

(f) the governments' involvement in the financing of small businesses.

1.2. Statement of the Problem:

The author's interest in small business finance in general, and small business finance in Egypt in particular, was motivated by the following:

(a) the proliferating literature, during the 1980s, in the area of small business finance

(b) the growing interest amongst international organisations, especially the World Bank, in fostering small businesses, particularly in developing countries

(c) the growing importance of the role of the industrial sector in sustaining economic development

(d) the lack of significant Government schemes to assist small businesses in Egypt, especially in the area of finance

(e) the lack of significant studies of small businesses in Egypt.

As far as this study is concerned, the problem to be investigated will be defined via demonstrating the difficulties that faced SSIFs, in obtaining institutional finance, from the establishment of the first indigenous bank in Egypt until the present time.

1.2.1. Banque Misr:

Banque Misr (Bank of Egypt) was found in 1920 as the first bank to be wholly owned by Egyptians; the main concern of this bank was to develop the Egyptian economy in almost all areas. To do so, Banque Misr established, shared in and lent to many businesses in the country, especially industrial firms. In 1922 both the Government and Banque Misr directed their attention to SSIFs when the Government deposited LE 100,000 in the Bank for allocation to the financing of SSIFs; this amount was increased until it reached LE 300,000.[5] According to the Bank's lending terms, the maximum loan maturity was five years and businessmen were required to provide enough collateral, usually, through real-estate pledging. Many businessmen did not have the required collateral, and Banque Misr did not accept the pledging of machinery as collateral for loans; accordingly, this attempt failed and almost all the lending of the Bank was directed towards large-scale industrial firms (LSIFs) that had the required collateral.[6]

1.2.2. The Industrial Bank:

This bank was licensed in 1947 and started to operate in 1949 with a paid-up capital of LE 1.5 million of which the Government's share was 51 percent.[7] The inauguration of the Industrial Bank was to fill a gap in financing industrial firms, especially SSIFs after the unsuccessful experience of SSIFs with Banque Misr during the 1920s and 1930s. The main purpose of the Industrial Bank was to extend short-term as well as long-term loans to SSIFs, provided that they had a sound financial position and enough collateral. The major part of the Bank's lending was directed towards private-sector firms until 1964 when it started concentrating on financing public-sector companies; however, private-sector firms

(5) Mohammed H. Al-Zahar, "The Role of Small-Scale Industries in the Egyptian Economy: with Special Reference to their Financing Problem", Egyptian Review for Commercial Studies, (El-Mansourah University), (6) no.2, 1982 (in Arabic) p. 37.

(6) Ibid., p. 38.

(7) "The Development Industrial Bank (DIB) in Ten Years", a report published on the 10th anniversary of the DIB, Cairo: DIB, 1986 (in Arabic) p. 12.

regained their position as the Bank's major borrowers during the years 1969 and 1970.[8] The loans to SSIFs represented a small fraction of the Bank's total loans as shown in the following table:

Table 1.1. The Industrial Bank's loans to SSIFs as compared to other borrowers, 1964/65 – 1969/70.

Borowers	1964/65		1965/66		1966/67		1967/68		1968/69		1969/70	
	LE 000	%	LE 000	%	LE 000	%	LE 000	%	LE 000	%	LE 000	%
SSIFs	19	1.6	228	9.0	246	5.1	547	13.8	638	10.8	1,001	12.2
Other borrowers*	1,150	98.4	2,296	91.0	4,535	94.9	3,426	86.2	5,296	89.2	7,222	87.8
Total	1,169	100	2,524	100	4,781	100	3,973	100	5,934	100	8,223	100

* Embraces: public-sector companies, private-sector LSIFs and the cooperative sector.

Source: Compiled from Mamdouh F. Al-Sharqawy, "Means and Methods of Developing Small-Scale Industries in Egypt", Cairo: Development Industrial Bank (DIB),1981, (in Arabic) pp. 83-4.

As shown in the table, the Industrial Bank's loans to SSIFs had been increasing in both amount and relative importance through the stated period. This was due to the percentage increase in loans to these firms being in excess of the percentage increase in loans to other borrowers and/or the Bank's total loans. In the financial year 1967/68 loans to SSIFs reached their peak, accounting for 13.8 percent of the Bank's total loans, as a result of an increase in loan amounts to these firms while both loans to other borrowers and the Bank's total loans decreased simultaneously. Nevertheless, whether considered in absolute amounts or in percentages, loans to SSIFs did not represent a significant proportion of the Industrial Banks's loan portfolio. However, in 1971 SSIFs became worse off when the Industrial Bank was amalgamated with the Bank of Alexandria, and these

(8) Mamdouh F. Al-Sharqawy, "Means and Methods of Developing Small-Scale Industries in Egypt", Cairo: DIB, 1981 (in Arabic) p. 83.

firms were left without a specialised bank.

1.2.3. Commercial Banks:

Also in 1971 the functional specialisation, among commercial banks, was implemented.[9] According to this system each bank was assigned the financing of a specific economic activity; such specialisation was applied to the banks' dealings with public-sector companies and the private sector was left free to deal with all banks. In this regard it is worth mentioning that the banking sector in Egypt, during the period 1961–1973, consisted of only public-sector banks. As far as the industrial sector was concerned, public-sector companies had to deal only with the Bank of Alexandria while private-sector firms had the choice of dealing with any bank. Hence, commercial banks gave priority to public-sector companies in their lending practices; being state-owned, these companies were not denied any credit although they owed the banks substantial amounts of money in arrears.[10]

However, the National Bank of Egypt was regarded as the most willing commercial bank to lend to SSIFs in the 1970s. Nevertheless, its loans to SSIFs in 1975 amounted to only LE 0.5 million, mainly short-term loans, while its loan portfolio amounted to LE 1,400 million.[11] These loans to SSIFs accounted for only 0.04 percent of the Bank's loan portfolio, and this is an indication of the insignificant amount of finance provided to these firms. In a study of SSIFs engaged in the textile industry the Institute of National Planning[12] showed that medium-and long-term loans provided to all SSIFs by commercial banks were

(9) Republican decree no. 2422 of 1971.

(10) Mahrous A. Hasan, "An Appraisal of Lending Policies in the Egyptian Commercial Banks", (Cairo: Ain Shams University, M.B.A. thesis, 1980) (in Arabic) p. 153.

(11) Khalid Ikram (Coordinating Author), Egypt: Economic Management in a Period of Transition (Published for the World Bank, Baltimor: The Johns Hopkins University Press, 1980) p. 250.

(12) The Institute of National Planning. "Small-Scale Industries and Industrial Development: a Case Study of the Textile Industry in Egypt", Cairo: the Institute of National Planning. 1981 (in Arabic) p. 149.

insignificant, as indicated by the following figures:

(a) loans from the National Bank of Egypt to SSIFs for the financing of machinery accounted for 13.6 percent of the Bank's loans to these firms;

(b) loans from Banque du Caire (Cairo Bank) to SSIFs for the financing of machinery accounted for only 3.6 percent of the Bank's loans to these firms; and

(c) loans from both Banque Misr and the Bank of Alexandria were confined to short-term loans for the financing of raw materials.

1.2.4. The Development Industrial Bank:

Five years after the amalgamation of the Industrial Bank with the Bank of Alexandria in 1971, the Development Industrial Bank (DIB) was inaugurated in August 1976. According to its statute, the main purpose of the DIB is the promotion of Egyptian industry especially SSIFs, cooperatives and handicraft establishments, via the following measures:[13]

(a) carrying out feasibility studies for new projects that apply for finance from the Bank

(b) advancing secured as well as unsecured loans as follows:

- short-term loans for no more than 12 months to finance short-term operations
- medium-term loans for no more than 5 years to finance raw-material needs and other production operations
- long-term loans for no more than 25 years to finance the expansion of projects and replacement operations

(c) participating in industrial projects

(d) helping graduates of technical schools and patentees to launch industrial projects

(e) investing excess funds in shares and bonds.

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(13) The DIB in Ten Years, op. cit., p. 16.

The DIB is a state-owned bank whose capital is wholly owned by the Central Bank of Egypt (CBE), and its balance sheet is shown in the following table:

Table 1.2. The DIB's balance sheet on June 30, 1986

Assets / Liabilities	LE 000	%
Assets:		
Cash in hand and with banks	19,296	3.00
Loans, investments and participations	555,637	94.00
Fixed assets and other debit balances	17,929	3.00
Total assets	592,862	100
Liabilities:		
Deposits and current accounts	41,557	7.00
Banks' dues	175,182	29.55
Creditors	57,615	9.72
Provisions	67,602	11.40
Loans from international organizations	212,792	35.90
Net worth	38,114	6.43
Total liabilities	592,862	100

Source: DIB, "Annual Report: 1985/86", Cairo: DIB, 1987, p. 17.

The DIB's balance sheet shows that the main source of funds for the Bank is loans from international organisations accounting for 35.9 percent of total liabilities. These organisations are, mainly, the European Community, the World Bank, the United States Agency for International Development (USAID) and many others. Loans from such organisations are advanced to the DIB on favourable terms in order to enable it to sustain industrial enterprises in Egypt in general, and SSIFs in particular. The second major component of the DIB's liabilities is banks' dues (29.55 percent of total liabilities), as the Bank obtains loans (mainly long-term) from the CBE, as well as other banks, in order to finance its long-term operations. Unlike commercial banks, the DIB (as a specialised bank) does not accept

demand deposits as one of its main activities;[14] and this conforms to the nature of its operations that have mainly long-term maturities. As for the Bank's assets, they are shown in the balance sheet in aggregate figures which makes it difficult to assess the magnitude of each component of the most important assets, *i.e.* loans, investments and participations. However, some details about the Bank's loans are available, and this helps in investigating these loans as shown in the following table:

(14) Article 43 of law no. 163 of 1957 and article 16 of law no. 120 of 1975.

Table 1.3. Distribution of loans approved by the DIB during the financial year 1985/86

Sectors	Short-term loans in local currency			Medium-and long-term loans in local currency			Medium-and long-term loans in foreign currency			Total		
	No.	LE 000	%	No.	LE 000	%	No.	LE 000	%	No.	LE 000	%
Very small industrial firms	193	9,786	27.8	335	9,913	13.8	127	12,112	11.8	655	31,811	15.2
Small-scale industrial firms	73	7,439	21.1	137	9,997	14.0	48	9,596	9.4	258	27,032	12.9
Others	35	17,960	51.1	75	51,720	72.2	60	80,724	78.8	170	150,404	71.9
Total	301	35,185	100	547	71,630	100	235	102,432	100	1,083	209,247	100

Source: Ibid., p. 22.

Table 1.3 shows that the DIB finances not only SSIFs, but also handicraft activities (very small industrial firms) or what the Bank calls "very small industries". In this regard, it is apparent from the table that total loans to very small industrial firms (VSIFs) account for 15.2 percent of the Bank's total loans, total loans to SSIFs account for 12.9 percent and total loans to other sectors account for 71.9 percent. If both VSIFs and SSIFs are considered as one group, they will account for only 28.1 percent of the Bank's total loans *vis-à-vis* 71.9 percent for other sectors. In this respect, it can be claimed that those other sectors are mainly large-scale industrial firms (LSIFs) on the grounds that they obtained 170 loans amounting to LE 150,404 thousand, and this results in an average loan amount of LE 885 thousand (150,404/170). On the other hand, the average loan amount for VSIFs is LE 48.6 thousand, and the average loan amount for SSIFs is LE 105 thousand. This means that each single loan to a firm from the other sectors is equivalent to 18 loans to VSIFs and 8 loans to SSIFs; and this may emphasise that those other sectors are mainly LSIFs.

Nevertheless, it may be argued that the DIB finances more small than large firms, on the grounds that it advanced 655 loans to VSIFs and 258 loans to SSIFs, compared with only 170 loans to other sectors. Such an argument is refutable because:

(a) the number of loans does not correspond to the number of firms that deal with the Bank, simply because each firm can obtain as many as three loans according to the categories shown in table 1.3; and

(b) even if the number of loans is assumed to correspond to the number of firms, which is not realistic, this number represents only a tiny fraction of small firms in Egypt (in 1986 there were at least 3,000 SSIFs in Egypt; the number of VSIFs is not known but it should be much more than the number of SSIFs).

Concerning the shares of different sectors in loans according to maturity, both VSIFs and SSIFs account together for 48.9 percent of short-term loans,

compared with 51.1 percent for other sectors. As regards medium-and long-term loans (MTLT loans), other sectors dominate these loans in both local currency (72.2 percent) and foreign currencies (78.8 percent). If all MTLT loans in all currencies are considered, other sectors will account for 76.1 percent of these loans compared with 23.9 percent for both VSIFs and SSIFs together. On the other hand, the average size of an MTLT loan to other sectors (in all currencies) is LE 981 thousand, *vis-à-vis* LE 47.7 thousand for VSIFs and LE 105.9 thousand for SSIFs. These figures indicate that (a) the dominance of other sectors is more evident in MTLT loans than it is in short-term loans; and (b) these other sectors, once again, are mainly LSIFs. In this regard, the relatively small share of SSIFs in the DIB's loans in general and in MTLT loans in particular implies that:

(a) the DIB is reluctant to lend to SSIFs; or

(b) the Bank imposes difficult lending terms on these firms; or

(c) many SSIFs have alternative sources of finance, particularly MTLT finance; or

(d) the owners/managers of SSIFs are reluctant to borrow from the DIB for some unknown reasons.

On the whole, the pros of the DIB are:

(a) It is more keen on providing MTLT loans, especially to SSIFs, than commercial banks.

(b) It allocates a reasonable proportion of its loans for the financing of new businesses; at the end of June 1986 loans to new businesses accounted for 46.6 of the Bank's total loans.[15]

(c) It represents a good source of foreign-currency finance which SSIFs need for the importation of raw materials and/or machinery.

On the other hand, the cons of the DIB are:

(a) It has only three branches, one in Cairo, one in Alexandria and one in Tanta,

(15) DIB, "Annual Report: 1985/86", Cairo: DIB, 1987, p. 22.

all located in northern Egypt; even the other three branches under construction are located in northern Egypt (the 10th of Ramadan city, the 6th of October city, and Port Saeid city).

(b) As a consequence of branch location, the Bank's lending is concentrated in the north of the country; the total loans which the DIB advanced between 1976 and 1986 are distributed as 73.4 percent in northern Egypt, 12.8 percent in new cities (which are mainly in northern Egypt), 10.4 percent in southern Egypt and 3.4 percent in the Suez Canal zone.[16]

(c) As discussed above, the major proportion of the Bank's loans are directed towards LSIFs rather than SSIFs.

(d) From tables 1.2 and 1.3 above the DIB's total loans (LE 209,247 thousand) account for only 37.7 percent of the Bank's loans, investments and participations (LE 555,637 thousand), and these investments and participations are not known, *i.e.* whether they are in SSIFs or LSIFs, in new businesses or in existing businesses, ... etc.

From the preceding context, it can be noticed that SSIFs face the following difficulties:

(a) Banks usually require collaterals for loans to small firms, and some of these firms cannot provide such collaterals.

(b) Small firms face tough competition from large firms when seeking to obtain institutional finance.

(c) Commercial-bank credit provided to small firms, mainly MTLT loans, may be regarded as insignificant.

(d) Some small firms have no access to the DIB because of the concentration of the Bank's activity in a particular part of the country.

(e) The major part of the DIB's loans, especially MTLT loans, is directed to large firms rather than small firms.

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(16) Ibid., p. 19.

Accordingly, the problem which faces small firms in Egypt can be diagnosed as a finance gap represented in limited access to institutional finance in general, and MTLT finance in particular.

1.3. Research Hypotheses:

Given the diagnosis of the problem as limited access to institutional finance, this study is based on the following hypotheses:

(i) The banking service in Egypt is inadequate.

(ii) The owners/managers of small firms are reluctant to employ institutional finance.

(iii) Institutional finance is more difficult to obtain than non-institutional finance.

(iv) The owners/managers of small firms are unaware of the relative advantages of institutional finance as compared with some forms of non-institutional finance (mainly equity capital and retained profits).

1.4. Research Objectives:

This study has two objectives:

(i) Testing the validity of the above-mentioned hypotheses.

(ii) Suggesting some practical solutions to the problems that small firms encounter in obtaining the necessary finance, mainly institutional finance.

1.5. Research Methodology:

In order to achieve its objectives, this study adopts both theoretical and empirical approaches as follows:

(a) The theoretical approach depends on providing a background on finance in general, and small business finance in particular. This will be achieved by reviewing the theory of finance and its relevance to small businesses; in this regard, references will be made to the experience of some developed countries, especially the U.K.

(b) In order to provide a background on the environment in which small firms exist, the study contains an overview of the Egyptian economy and its position at the present time.

(c) Also, the finance resources of Egypt, mainly institutional finance resources, will be investigated in order to assess their magnitude and the way they are directed.

(d) As for the empirical study, details of the survey's methodology are provided in chapter seven.

(e) Finally, the study concludes by a summary of the results and the findings that can be deduced from these results. On the basis of the survey findings, the conclusion includes some suggestions for solving the problems of financing small businesses in Egypt; these suggestions will take into account the limitations and considerations that could be found in a country like Egypt.

1.6. Previous Studies:

To the author's knowledge this is the first survey-based study of small business finance in Egypt. Most of the studies of small businesses are mainly papers that deal with general aspects of small businesses, and the main source of information for such papers is the published data. However, there are only two studies of small businesses in Egypt that might be regarded as significant compared with the others; even though, these studies deal with many aspects of SSIFs where the issue of finance has little attention. An outline of these two studies is provided below.

The first study is entitled: "Small-Scale Industries and Industrial Development: a Case Study of the Textile Industry in Egypt". This study was prepared by a team of four scholars and a team of assistants at the Institute of National Planning in 1981. The objective of this study was to demonstrate the role of SSIFs in industrial development in general and their role in industrial develop-

ment in Egypt in particular; it consists of eight chapters as follows:

Chapter one: The Objective and Methodology of the Study.

Chapter two: The Concept of Small-Scale Industries.

Chapter three: The Participation of Small-Scale Industries in the Industrial Development in Egypt and Japan.

Chapter four: The Expected Role of Small-Scale Industries in the Industrial Development in Egypt.

Chapter five: Financial Analysis of Small-Scale Industries: the Case of the Textile Industry.

Chapter six: Internal Problems that Small-Scale Industries Encounter.

Chapter seven: External Problems that Small-Scale Industries Encounter.

Chapter eight: Recommendations for Sustaining Small-Scale Industries.

As far as finance is concerned, it is dealt with in two sections, among eight sections, of chapter six. This did not give scope for a detailed investigation of the problem of finance and its implications.

The second study is entitled: "Small-Scale Industries in the Egyptian Economy: an Analytical Study". This study is a master's thesis in economics at Cairo University, prepared by Ola A.H. El-Sheikh in 1985; it consists of three chapters as follows:

Chapter one: The Concept of Small-Scale Industries and their Expected Role in Economic Development.

Chapter two: An Analytical Study of the Status of Small-Scale Industries in the Egyptian Industrial Structure.

Chapter three: Strategy and Programmes for Reviving Small-Scale Industries in Egypt.

It is worth mentioning that the latter study, as well as the former one, incorporates handicraft activities as well as SSIFs, although they are quite different as

will be discussed later. Concerning the issue of finance, it was dealt with briefly in the last chapter, *i.e.* a brief description of finance facilities available to SSIFs in Egypt.

The scope of the above-mentioned studies suggests that there is a lack of work in the area of small business finance in Egypt; such a lack of work gives a reasonable justification for this study and highlights its importance. Also, this study comes at a time when the Egyptian Government is giving an increasing attention to SSIFs as a useful vehicle for economic development in general and industrial development in particular.

Chapter Two

Short-Term Finance

2.1. The Matching of Maturities

2.2. The Main Sources of Short-Term Finance

2.2.1. Trade Credit

2.2.2. Bank Short-Term Credit

2.2.2.1. Secured Short-Term Credit

2.2.2.2. Unsecured Short-Term Credit

2.3. Short-Term Finance and Small Businesses

2.3.1. The Cost of Short-Term Finance

2.3.2. The Relationship with Creditors

2.3.3. The Features of Small Business Finance

2.1. The Matching of Maturities:

It is commonly known, in the financial literature, that the financing of any business enterprise should be based on matching the maturities of both assets and sources of finance. In other words, short-term current assets should be financed by short-term sources, and both fixed assets and the permanent part of current assets should be financed by long-term sources. This matching of maturities is not an easy task, especially for newly-established firms that have to predict their financing needs which depend on their investment plans (both short-term and long-term). These plans, in turn, depend on the firm's expected market share and the availability, and cost, of each financing source. For well-established firms, the matching of the maturities of both assets and financing sources depends, to a large extent, on their experience in the realms of business; even though, such a matching might involve significant difficulties in times of bad sales or tight financial markets. However, bad sales and tight financial markets are deemed to be the exception rather than the common practice.

In this respect, some scholars regard the firm's financing needs on an aggregate basis, in the sense that they define the total cost of both current assets and fixed assets as the firm's "cumulative capital requirement". This cumulative capital requirement should be financed, mainly, by long-term sources; accordingly, from their point of view, the raised long-term finance will determine whether the firm is a short-term borrower or lender.(1) The implications of this viewpoint are: (a) if the raised long-term finance exactly meets the firm's cumulative capital requirement, this firm will face no problem; (b) if the raised long-term finance is less than the firm's cumulative capital requirement, it has to borrow on a short-term basis to bridge the gap; and (c) if the raised long-term finance exceeds the firm's cumulative capital requirement, this firm has the opportunity to invest the

(1) Richard Brealey and Stewart Myers, Principles of Corporate Finance (New York: McGraw-Hill Book Co., 1984) pp. 617-18.

excess raised funds on a short-term basis. On the whole, this viewpoint suggests that long-term finance is the determinant of short-term finance; but this seems questionable because:

(a) Concerning the assumption of long-term finance being in excess of the firm's cumulative capital requirement, first of all, why should the firm raise funds in excess of its needs? And if this happens, it means that the firm has to look for other uses for the excess funds either by lending them, if applicable, or by investing them in marketable securities. This approach has two implications: first, the return on the investment of the excess funds must be greater than or, at least, equal to the cost of long-term finance; second, this raises the issue of evaluating different investment opportunities and the time elapsed therein.

(b) Even if the raised long-term finance exactly meets the firm's cumulative capital requirement, this means that some short-term assets are financed by long-term sources which results in the payment of interest on unused funds, although this may happen only in certain times during the year.

(c) When the raised long-term finance lags behind the firm's cumulative capital requirement and the difference is covered by short-term finance, this raises the issue of the suitability of the raised short-term finance for the firm's financing needs (as this approach may result in financing long-term assets by short-term sources that will be due well before the maturity of such assets).

As far as debt maturity is concerned, some scholars argue that there are strong similarities between a lengthy financing relationship involving a sequence of short-term loans and loans with a long formal maturity.[2] This argument is based on the notion that a long-standing lender-borrower relationship will allow the formal short maturity of loans to be informally extended in a bad year which makes the "effective" maturity of such loans indefinitely long. In other words,

(2) Stephen H. Archer, G. Marc Choates and George Racette, Financial Management. 2nd ed. (New York: John Wiley and Sons, 1983) pp. 684-5.

according to this viewpoint, short-term loans are often granted with the mutual expectation between the firm and the bank that the loan will be renewed. Such a viewpoint, also, seems debatable because:

(a) According to this viewpoint, the "strong" similarities between a sequence of short-term loans and loans with long formal maturities are attributed to the renewal of short-term loans in a bad year. As mentioned earlier, bad years are deemed to be the exception rather than the common practice.

(b) Neither the borrower nor the lender should "often" make a short-term loan with the expectation of its renewal. This is because the borrower's application for a short-term loan should be based on his exact financing needs as predicted or planned, and the lender should advance the loan after assessing the borrower's financing needs and their justifications.

(c) If the borrower is not sure of the length of his financing needs he can arrange a flexible form of short-term finance such as an overdraft or a line of credit.

(d) The frequent renewal of short-term loans, on the part of the borrower, might jeopardize his relationship with the lender as the latter plans the uses of his funds according to the maturities of these funds, and such a renewal may deter his plans.

(e) When all these factors are taken into consideration and some unpredicatable hazards occur, the lender is not expected to reject the circumstantial renewal of a short-term loan.

Hence, it can be said that the matching of maturities should be considered as the basis of determining the firm's financing needs in order to avoid the consequences of the unmatched maturities. Also, the financial manager should base his financing decisions on facts or, to say the least, on sound planning rather than on a "comfortable" financing policy.

2.2. The Main Sources of Short-Term Finance:

A review of the financial literature may reveal that there are many sources of short-term finance; however, this chapter is concerned with the most common sources of short-term finance for business enterprises in general and for small businesses in particular, namely trade credit and bank short-term credit.

2.2.1. Trade Credit:

Trade credit can be considered as one of the most traditional sources of finance for all business enterprises both large and small. This kind of credit arises when the manufacturer, or wholesaler, of raw materials, or resale goods, provides the buyer with such commodities without requiring immediate payment. The seller of goods, however, may ask the buyer to sign a promissory note as a guarantee for the debt. In any case, trade credit is provided against a satisfactory track record, for old customers, or after assessing the creditworthiness of the buyer, for new customers, as conceived by the seller. The maturity of trade credit is the grace period granted to the buyer to pay for the purchased goods. This grace period, which is known as the *terms of credit*, differs from one seller to another and may differ from one buyer to another (although dealing with the same seller), depending on the nature of their activities and their creditworthiness. Also, these terms of credit may include a cash discount if the buyer repays within a certain period of time. For example, if the terms of credit are 3 percent/10, net 40 days, this means that the buyer will be granted a 3 percent cash discount if he repays within 10 days or, if otherwise, he must repay the full amount of debt within not more than 40 days.

Although trade credit might involve formal terms of credit and an assessment of the buyer's creditworthiness, it can be said to represent an informal or a non-institutional source of finance as it is based, in many cases, on the personal contact between the buyer and the seller, especially if both of them are small businesses.

Other advantages of trade credit are:[3]

(a) It represents a continuous form of credit because there is no need for formal arrangement of financing.

(b) If there are some restrictions in trade credit, they are less than those imposed by money lenders.

(c) It is a flexible financing method because the firm does not have to pledge any collateral or adhere to a strict payments schedule.

Also, some firms may stretch the payments of trade credit beyond the agreed-upon period in order to make the maximum possible use of this facility; but such a practice might mar the relationship between the firm and its suppliers which may downgrade the firm's creditworthiness. Even if the firm does not stretch the repayment beyond the net period, as set-up by the commodity supplier, trade credit may become noticeably expensive. For example, if the terms of credit are 2 percent/15, net 45 days, the value of the ordered goods is £10,000, and the firm decides to repay on the 45th day, this firm will lose 2 percent discount, or £200, in order to make use of the amount to be paid, or £9,800, for extra 30 days. In this case the annual cost of trade credit is:

$$\frac{200}{9,800} \times \frac{365}{30} = 0.248 \quad \text{or} \quad 24.8\,\text{percent per annum}$$

or, equivalently, it can be calculated as follows:

$$\frac{0.02}{1 - 0.02} \times \frac{365}{30} = 0.248 \quad \text{or} \quad 24.8\,\text{percent per annum}$$

These calculations show the significant increase in the cost of trade credit if the firm chooses not to benefit from the offered discount; of course the cost of trade credit will increase if the offered discount increases and/or the net period

(3) James C. Van Horne, Financial Management and Policy, 6th ed. (New Jersey: Printice-Hall. Inc., 1983) pp. 439-40.

decreases and vice versa. The main implications of this situation are:

(a) The existence of an early-repayment discount may force the firm to repay in the early period stated in the terms of credit in order to avoid the relatively high cost of the lost discount.

(b) It may be useful for the purchasing firm to obtain a bank loan, with a maturity corresponding to the discount period, in order to pay for the purchased goods and benefit from the discount, as the interest on bank loans is expected to be less than the cost of the lost discount.

(c) Small businesses are expected to incur a relatively high cost of trade credit if they cannot afford early repayment depending on their own funds or if they do not qualify for a bank loan.

(d) It seems that the real benefits of trade credit materialize when the terms of credit do not include an early-repayment discount.

2.2.2. Bank Short-Term Credit:

The term *bank credit*, rather than *bank loans*, is used in this context as it incorporates all bank transactions, including loans, which result in providing a customer with money to be repaid at some date in the future. On the other hand, the term bank loans is often referred to as a lump sum of money provided to a customer to be repaid at some date in the future; all forms of bank credit, however, can be repaid, together with the interest, either as a lump sum or on an instalment basis. Also, bank credit will be regarded, in this context, to come from commercial banks rather than any other financial institutions on the grounds that these banks are the main suppliers of short-term finance for different business enterprises. Hence, the word *bank* or *banks* will be used as a synonym for *commercial bank* or *commercial banks* respectively.

Commercial-bank credit, in general, has a fairly short-term maturity, as a major part of the sources of funds for these banks is represented in current

accounts and deposits that are subject to withdrawal without notice such as savings accounts. Consequently, commercial banks have to maintain a minimum level of liquidity in their assets in order to cater for customers' withdrawals from these accounts whenever requested. Also, some banks are conservative in their lending policies to the extent that their provision of funds, to business enterprises, is almost confined to short-term and medium-term credit. On the whole, the maturity of bank short-term credit is often one year or less as it is deemed to finance short-term or current assets and temporary activities. In this regard, short-term loans are said to be self-liquidating in the sense that such loans are provided to finance seasonal or cyclic business peaks which will generate cash to pay off the loan.[4] In general, short-term credit can be either secured or unsecured, as discussed below.

2.2.2.1. Secured Short-Term Credit

If a bank credit is secured, this means that the firm pledges part of its assets as collateral for the provided funds in order to eliminate or reduce loss should the borrowing firm default; this happens when the firm's ability to repay a loan, as perceived by the bank, is questionable. The firm's ability to repay the loan becomes questionable if the bank assesses its creditworthiness as unsatisfactory or if it is a newly established firm which, by definition, does not have a track record or financial statements to show to the bank. Some banks, however, ask for collateral as an extra precaution even if the firm's creditworthiness is assessed to be satisfactory. In any case they consider the matching between the loan maturity and the collateral's maturity, *i.e.* they accept only current assets as collateral for short-term loans. Also, banks prefer that the value of the collateral exceeds the loan amount because (a) the loan will be due together with the interest charged; and (b) to make sure that they will get back the amount due should the collateral's

(4) John J. Hampton, Financial Decision Making: Concepts, Problems and Cases, 3rd ed. (Virginia: Reston Publishing Co., Inc., 1983) p. 507.

market value deteriorate in case of liquidation. As for interest rates on secured loans, they are expected to be higher than the bank's *prime rate*[5] because: (a) secured loans are deemed to be advanced to less creditworthy customers; and (b) there is the transaction cost incurred in assessing and monitoring the collateral.

Secured short-term credit, in general, falls in two main categories: receivables, or accounts receivable, loans and inventory loans.[6]

Receivables Loans: If a firm makes a significant proportion of its sales on credit against promissory notes signed by the buyers, it may use these notes as collateral for a short-term loan should the lender's terms require such collateral. In this case, the bank will assess both the general quality and the average size of these accounts receivable in order to determine the maximum amount to be advanced against them. Usually, the loan represents a certain precentage of the total value of the accounts receivable, and the remaining percentage is retained as a safety margin for the bank because of the above-mentioned reasons. This safety margin, however, depends on the quality of the accounts receivable as well as the access given to the bank to monitor these accounts.

As an alternative to obtaining a receivable-secured loan, a firm may factor its accounts receivable by selling them to a factor for a discount from their face value. In this case the firm does not receive any payments before its accounts receivable are due. Also, the factoring arrangement may be with or without recourse. A factoring arrangement with recourse means that the firm bears the risk of its customers' default while a factoring arrangement without recourse means that the factor bears the risk of the firm's customers' default. If the firm requires early payment it may obtain a loan, from the factor, secured by its accounts receivable. In this case, the factor charges the firm an interest rate, on such a loan, as well as

(5) A bank's prime rate is the interest charged to its best customers

(6) Stephen H. Archer et al., op. cit., pp. 704-8; James C. Van Horne, op. cit., pp. 454-62.

the factoring fee which ranges between one percent and two percent of the face value of the accounts receivable. Another phase of factoring is that which arises when the manufacturer sells his goods to a factor for a discount and this factor will be responsible for collecting the debts; in this case the factor may either pay immediately or on the maturity date of the debts.(7) A factoring arrangement seems to be a suitable means of finance for small businesses, especially if it is without recourse, as it relieves them of following up their accounts receivable and the cost incurred therein. Also, a factoring arrangement may be more useful for small businesses if it results in immediate payment by the factor provided that the total cost of factoring does not exceed the cost of a loan secured by accounts receivable.

Inventory Loans: These loans are, more or less, similar to receivables loans in the sense that they are advanced against the pledge of current assets, in this case the firm's inventory. As is the case in receivables loans, the loan represents a certain percentage of the pledged goods and this percentage varies according to the marketability of these goods and their resistance to deterioration. Also, interest rates on such loans are expected to be higher than the bank's prime rate and the forementioned reasons hold.

As far as small businesses are concerned, the majority of short-term loans are expected to be secured either by accounts receivable or by inventory for two reasons: (a) if the firm is newly established, it will have no track record to help in assessing its creditworthiness; and (b) if the firm has been in the realms of business for a farily long period of time, its creditworthiness can be held less satisfactory as compared with any other larger firm; in other words, its smallness of size will imply that it is more vulnerable to market fluctuations as compared with any other larger firm.

(7) James Bates, The Financing of Small Business, 2nd ed. (London: Sweet and Maxwell, 1971) p. 128.

Documentary Credits: A documentary credit is an agreement between a bank and its customer according to which terms the former pays an agreed-upon amount of money, on behalf of the customer, to a third party. This credit is said to be documentary as it entitles the bank to possess certain documents as collateral for the advanced credit. Such documents include the bill of lading, the insurance certificate and any other documents to accompany a cargo of merchandise shipped to the customer by the forementioned third party (the seller). According to this definition, documentary credits are deemed to be advanced, mainly, for the financing of imported raw materials or resale goods. Besides these documents, however, banks usually require their customers to deposit a certain percentage of the agreed-upon amount of credit as a further guarantee. This percentage, as well as the interest charged, may vary according to the bank's assessment of the customer's creditworthiness and his past record if any.

Documentary credits seem to be good facilities for different business enterprises whose activities depend, partly or completely, on imported goods because: (a) when the exporter of goods is paid via bank arrangement, this makes him more confident in dealing with the importer; (b) it saves the time consumed in making payments abroad especially if it requires certain procedures; and (c) as the buyer will pay the bank only a percentage of the price of the imported goods, documentary credits make such goods available to the buyer without having to pay their price in full. Compared with large businesses, small businesses may be in an unfavourable situation as regards their accessibility to documentary credits because: (a) some small businesses may not qualify as documentary-credit customers and, consequently, they have to arrange the payments directly with the exporter who may require cash payments; (b) even if they qualify as documentary-credit customers, small businesses may be charged a higher interest rate; and (c) small businesses may be required to deposit a higher percentage of the credit amount as they may be regarded as less creditworthy, *i.e.* a small business should

be in a fairly liquid position in order to have access to documentary credits.

2.2.2.2. Unsecured Short-Term Credit:

If a bank provides credit to a business enterprise without pledging some of its assets, this means that the bank depends, in making such a decision, on the borrower's creditworthiness. In order to assess the borrower's creditworthiness banks, usually, investigate the following aspects:

(a) The manager's charisma amongst the business's executives and employees.

(b) The manager's personal reputation among those who deal with him, especially credit supliers.

(c) The business's past record with other credit suppliers, if any, as well as with the bank itself.

(d) The business's capital gearing, *i.e.* the relationship between its equity capital and debts.[8]

(e) The business's financial performance, as deduced from the analysis of its financial statements, especially in the areas of profitability and turnover.

Having assessed the borrower's creditworthiness as satisfactory, the bank can provide such a borrower with an unsecured short-term credit; the main types of such credit are: unsecured short-term loans, overdrafts, lines of credit, revolving credits and transaction loans.[9]

Unsecured Short-Term Loans: These loans represent a traditional form of short-term financing. A short-term loan is usually obtained in a lump sum and repaid either on the maturity date, together with the interest due, as lump sum or on an instalment basis. Short-term loans, in this sense, are assumed to finance

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(8) This issue will be discussed, in detail, in chapter four.

(9) Adapted from: Edward W. Davis and John Pointon, Finance and the Firm (London: Oxford University Press, 1984) pp. 196-7; Hal B. Pickle and Royce L. Abrahamson, Small Business Management, 4th ed. (New York: John Wiley and Sons, 1986) pp. 134-6; Robert R. Owen, Daniel R. Garner and Dennis S. Bunder, Arthur Young Guide to Financing for Growth (New York: John Wiley and Sons, 1986) pp. 96-7; James C. Van Horne, op. cit., pp. 444-6.

operations with definite maturity otherwirse they will become expensive. In other words, if the borrower estimates his financing need to last for one year but used the borrowed money for less than this period, the loan will become relatively expensive as the interest is due on the whole amount of the loan no matter whether it has been fully or partly used. For small businesses the cost of obtaining a short-term loan gains more significance, as any increase in the cost of borrowing can be easily reflected in a decrease in their profits; hence, it is preferable for small businesses to seek more flexible forms of short-term credit.

Overdrafts: An overdraft is an informal agreement between a bank and its customer to allow the latter to draw on his current account up to a certain debit amount, which represents the maximum limit of the agreed-upon overdraft. The main advantage of overdrafts is their flexibility, as the borrower does not have to withdraw all the agreed-upon amount of money, and this makes them relatively cheap as the interest is charged only on the withrawn amount; another advantage is that there is no penalty on the unwithdrawn amount. On the other hand, the main disadvantages of overdrafts are that they are technically repayable on demand; also, it is difficult for the borrower to calculate their cost exactly as the interest rate on overdrafts is variable according to market conditions.

Lines of Credit: A line of credit is the American counterpart for an overdraft in the U.K. with a slight difference which is that a line of credit is established, usually, for one year while an overdraft is repayable on demand, but both of them can be renewed. For small businesses, both overdrafts and lines of credit represent flexible forms of short-term credit which relieve them of being bound to a fixed amount of money for a fixed maturity as is the case with traditional short-term loans. Also, they gain a special importance for firms that cannot estimate the exact amount and the exact duration of their short-term financing needs. On the other hand, a small business may face a significant problem if the bank refuses to renew an overdraft or a line of credit.

Revolving Credits: A revolving credit is a formal agreement between a bank and its customer which entitles the latter to borrow up to a certain maximum amount of funds. The formal characteristic of the revolving credit subjects the borrower to paying a commitment fee on the unborrowed amount should his borrowing be less than the agreed-upon maximum amount. According to this definition, a revolving credit can be disadvantageous, if compared with both overdrafts and lines of credit, because of the commitment fee which the borrower has to pay. However, a revolving credit may be for a longer maturity than both overdrafts and lines of credit.

Transaction Loans: These loans are advanced to finance a single activity, *e.g.* a contract to provide certain goods or services. In this case, the contractor is expected to repay the loan, together with the interest due, after he receives payments for the goods or services provided. This type of credit is limited to those businesses that work on a remittent basis according to their customers' orders.

Although the above-mentioned forms of bank credit are not secured by certain assets, some banks may require a compensating balance to be deposited with the bank, at the time of making the loan, which makes the "real" cost of the loan higher than the nominal interest rate. For example, a borrower may apply for a one-year loan of £10,000 at a 15 percent interest rate but the bank requires a compensating balance of 20 percent of the loan amount. In this case, the following formula is suggested to calculate the real interest rate on such a loan:

$$\text{the real interest rate} = \frac{\text{the nominal interest rate}}{1 - \text{the percentage of the compensating balance}}$$

$$= \frac{0.15}{1 - 0.20} = 0.1875 \quad \text{or } 18.75 \text{ percent}$$

This rise in the interest rate is due to the payment of 15 percent interest on £10,000 while using only £8,000, *i.e.* the "net" loan amount is £8,000.

Equivalently, if the net loan amount of £8,000 is insufficient for the borrower's

needs, he has to borrow more than £10,000 in order to meet the compensating-balance requirement and, simultaneously, keep the loan amount to be £10,000. The amount to be borrowed can be calculated using the following, suggested, formula:

$$\text{the amount to be borrowed} = \frac{\text{the needed amount}}{1 - \text{the percentage of the compensating balance}}$$

$$= \frac{10,000}{1 - 0.20} = £\,12,500$$

This means that the borrower will pay 15 percent interest on £12,500 while using only £10,000, and the real interest rate will be 18.75 percent as well.

Likewise, if the bank deducts the interest in advance from the loan amount, the real interest rate will be higher than the nominal interest rate. For example, if the interest of 15 percent is to be deducted in advance, the following formula is suggested to calculate the real interest rate:

$$\text{the real interest rate} = \frac{\text{the nominal interest rate}}{1 - \text{the nominal interest rate}}$$

$$= \frac{0.15}{1 - 0.15} = 0.176 \quad \text{or } 17.6 \text{ percent.}$$

Having estimated his short-term financing needs, and having obtained the necessary information about the available forms of short-term credit, does the borrower have a free choice among these forms? He does not because all borrowers are expected to apply for unsecured credit, while banks seek to secure their money often by requiring a collateral especially for credit provided to less creditworthy borrowers. Also, it is argued that the crucial consideration is the bank manager's attitude as he is in the position of being able to dictate the terms and the businessman should accept this and fit in (sic) with the wishes of the bank manager.[10]

(10) Jim Dewhurst and Paul Burns, Small Business: Finance and Control (London: Macmillan Press Ltd., 1983) p. 82.

2.3. Short-Term Finance and Small Businesses:

As far as small businesses are concerned, short-term finance may have some special implications as regards: (a) its cost; (b) the relationship between small businesses and their suppliers of short-term finance, especially banks; and (c) the main features that characterise short-term finance for small businesses.

2.3.1. The Cost of Short-Term Finance

In general, it can be said that the main determinant of the cost of finance to all business enterprises is the cost of these funds to credit suppliers. In addition to the cost of funds, there are some other factors to be taken into consideration such as: (a) the existing prime rate; (b) the creditworthiness of the borrower; and (c) the present and prospective relationship between the borrower and the lender.[11] Also, there are other aspects which may be accounted for, in determining the cost of credit, such as the supply of and demand for finance as well as the transaction costs incurred by the creditor. Some lenders, however, may charge exaggerated interest rates to their borrowers, especially small businesses, in order to offset the relatively high costs associated with small business loans. A study conducted in Mexico on small-scale manufacturing firms revealed that interest rates charged on such businesses, by some moneylenders, are between 2 and 8 times those charged by official banks and lending institutions.[12]

Given the fact that the interest rate on bank credit, or the price of goods provided by trade creditors, should be higher than, or at least equal to, the cost incurred by those credit suppliers, and given that small businesses do not enjoy a strong negotiating position as do large businesses, it can be argued that the cost of short-term finance to small businesses is relatively high as compared with large businesses because:

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(11) James C. Van Horne, op. cit., p. 448.

(12) Hubert Schmitz. "Growth Consraints on Small-Scale Manufacturing in Developing Countries: A Critical Review", World Development. (10) no.6, 1982, pp. 440-41.

(a) Interest rates on bank short-term credit are usually tied to the bank's prime rate, and small businesses are often regarded as less creditworthy, than large businesses. Accordingly, the interest rates on bank credit provided to small businesses are expected to be equal to the prime rate plus a risk premium, which usually ranges between 2 percent and 4 percent.

(b) Transaction costs, which banks incur in processing loans and collaterals, are deemed to be fixed costs that do not vary propotionately with the loan size. Hence, the cost of small loans, to small businesses, is expected to be higher than the cost of large loans to large businesses.

(c) Some banks require compensating balances to be deposited against some loans, and this makes the real cost of such loans noticeably higher than the nominal interest rate, as the real amount acquired by the borrower is less than the nominal size of the loan.

(d) When trade creditors offer cash discount for early repayment, some small businesses cannot repay during the discount period either because of the lack of liquidity or because they wish to direct the funds to other uses. This makes the cost of trade credit significantly high as discussed earlier.

2.3.2. The Relationship with Creditors:

The relationship between business enterprises and their creditors builds up through time and cannot be determined by a single transaction. Also, such a relationship will be strengthened when the debtor carries out his obligations sincerely and the creditor adopts objective and flexible criteria of evaluating credit applications. However, there are some practices that may hinder such a relationship; some of these practices can be attributed to the debtor, others can be attributed to the creditor as follows:

(a) Some businesses stretch their trade-credit payments beyond the credit period in order to make the maximum use of funds; but such a practice involves dangers

because suppliers may refuse any credit or they may quote higher prices.[13]

(b) Even if the supplier of trade credit will not react in such a way, slow payment only shifts the financial burden to the seller, and if the seller is also a small business there is only a shifting of the problem to another business unit or sector.[14]

(c) Some banks strictly apply some rules of thumb on a univariate basis. For example, if the accounts of a small business show high profit and low liquidity, it is difficult for such banks to make a trade off when they insist that the current ratio should be 2:1.[15]

(d) Some lenders may regard their customers on a short-term rather than a long-term basis, in the sense that they evaluate credit applications on a transaction basis as if the customer were a casual one. Such a practice can be against the lender's interest because a small borrower, and consequently a less profitable one today, may become a large borrower, and consequently a more profitable one, in the future.

2.3.3. The Features of Small Business Finance:

Small business finance in general and short-term finance in particular has the following features:[16]

(a) Small business loans tend to be of a shorter term.

(b) Some small firms depend more heavily on banks for external finance than do most large firms.

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(13) J. Fred Weston and Eugene F. Brigham, Managerial Finance, 5th ed. (London: Holt, Rinehart and Winston, Inc., 1975) p. 836.

(14) Roland I. Robinson, "The Financing of Small Business in the United States", in Stuart W. Bruchey (ed.), Small Business in American Life (New York: Columbia University Press, 1980) p. 292.

(15) Graham H. Ray and Patrick J. Hutchinson, The Financing and Financial Control of Small Enterprise Development (Aldershot: Gower Publishing Co. Ltd., 1983) p. 69.

(16) Adapted from: Committee of Inquiry on Small Firms (Bolton Committee), "Financial Facilities for Small Firms", Research Report no.4. London: HMSO, 1971, p. 19; Graham H. Ray and Patrick J. Hutchinson, op. cit., pp. 45-6; J.S. Boswell, "Small Firm Survey", London: Industrial and Commercial Finance Corporation Ltd., 1967, p. 5; R. Richardson Pettit and Ronald F. Singer, "Small Business Finance: A Research Agenda", Financial Management Review, Autumn, 1985, p.56; James Bates, op. cit., p. 15.

(c) The general standard of creditworthiness imposed by the banks on small businesses rises, in times of credit squeeze, affecting these businesses with differential severity.

(d) A more important role of trade credit.

(e) The trade-credit position of small firms worsens as large firms demand prompt payment for supplies while delaying their own payments of bills.

(f) Loans from directors are common in small firms.

(g) Small business loans tend to have more detailed and stringent indenture agreements or covenants.

(h) Small business loans tend to be secured by particular assets, perhaps by assets that are not part of the firm, *i.e.* assets of the individual personal guarantees or assets of other firms owned by the same individuals.

(i) The small business may not be able to demonstrate its chances of success in order to persuade potential lenders.

(j) Lending institutions may not cater for the special problems involved in small business finance.

(k) The businessman may not know how or where to obtain finance.

Chapter Three

Medium-and Long-Term Finance

3.1. Start-up Capital

3.1.1. Sources of Start-up Capital

3.1.2. The Problems of Raising Start-up Capital

3.2. Equity Capital

3.2.1. Ordinary Shares (Common Stock)

3.2.2. Retained Profits

3.2.3. Preference Shares (Preferred Stock)

3.3. Medium-and Long-Term Loans

3.4. Lease Finance

3.4.1. The Main Types of Leases

3.4.2. Assessing Lease Finance

3.5. Venture Capital

3.5.1. Sources of Venture-Capital Finance

3.5.2. Assessing Venture-Capital Finance

3.6. Financing Expansion

3.6.1. The Firm's Life Cycle

3.6.2. The Problems of Financing Expansion

3.1. Start-up Capital:

Broadly defined, start-up capital or initial capital can be regarded as the funds needed to start a new business. In this respect, it may be appropriate to distinguish between the term *start-up capital* and the term *seed capital*; Patrick Liles defines seed capital as follows:

> "Seed capital might typically be used to make a feasibility study, develop a new product or idea into the prototype stage, or to start a new company".(1)

This definition implies that seed capital and start-up capital are the same, but it can be argued that they are different. On the one hand, seed capital represents the funds needed to finance the pre-start-up stage of the business, mainly the feasibility study which tests the *launchibility* of the entrepreneur's idea. On the other hand, start-up capital, or initial capital, represents the funds required for the real start of the business. In other words, it represents the cost of acquiring the assets such as premises, machinery, raw materials ... etc., necessary to start the business. The main reasons for distinguishing between the two types of finance are: (a) providing seed capital for a certain project does not necessarily mean that this project will start its activity, simply because the feasibility study might prove that such a project is unfeasible; and (b) not all financial backers, who might be interested in providing finance for the start-up stage, are expected to provide seed capital, as there will be almost no tangible assets to take possession of should the project prove to be unfeasible. Accordingly, seed capital is expected to be provided, mainly, by the owner(s) of the new business, while start-up capital can be provided by both the owner(s) and other sources of finance. William Chandler(2) estimates that at least 95 percent of the successful seed financing, in the United States, must still come from traditional sources such as family

(1) Patrick R. Liles, New Business Ventures and the Entrepreneur (Illinois: Richard D. Irwin, Inc., 1974) p. 465.

(2) William R. Chandler, "Pre-start up capital", in Stanley E. Pratt (ed.), Guide to Venture Capital Sources, 7th ed. (Massachusetts: Capital Publishing Corporation, 1983) p. 29.

members, friends, or groups of private investors; he also states that 90 percent of the active professional venture-capital groups seldom make seed-stage investment.

3.1.1. Sources of Start-up Capital:

Start-up capital cannot be expected to be provided entirely by external sources of finance, as the owner(s) should contribute a reasonable portion of such capital; this portion represents the base component which stimulates other sources to take part in the start-up financing. In general, start-up finance may be for a long term to finance fixed assets and the permanent part of current assets. Also, it may be for a short term to finance the rest of current assets, especially accounts receivable, as the new business is expected to provide trade credit to its customers and, at the same time, pays in cash to its suppliers. Besides the owner(s)' funds, the other main sources of start-up capital are:[3]

(a) Family members, friends and acquaintances.

(b) Banks.

(c) Finance companies.

(d) Wealthy individuals.

(e) Venture-capital companies such as the Industrial and Commercial Finance Corporation (ICFC) in the U.K. and Small Business Investment Companies (SBICs) and Minority Enterprise Small Business Investment Companies (MESBICs) in the United States.

(f) Trade-credit suppliers.

(g) Leasing companies.

(h) Past employees who have confidence in the entrepreneur and his project.

(i) Industrial companies that are interested in the development or purchase of new products or ideas.

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(3) Adapted from: Committee to Review the Functioning of Financial Institutions (Wilson Committee), "The Financing of Small Firms", Cmnd. 7503, London: HMSO, 1979, pp. 4-5; Irving Burstiner, The Small Business Handbook (New Jersey: Prentice Hall. Inc., 1979) pp. 76-8; Patrick R. Liles, op. cit., p. 466

(j) Brokers and firms established to provide initial capital.

3.1.2. The Problems of Raising Start-up Capital:

The above-mentioned sources of start-up capital can be classified in two main categories: (a) institutional sources represented in banks, finance companies, venture-capital companies, leasing companies, industrial companies and firms established to provide start-up capital; and (b) non-institutional sources represented in family members, friends, acquaintances, wealthy individuals, trade-credit suppliers, past employees and brokers. By and large, it can be said that non-institutional sources are easier to approach than institutional sources, but each of them has its own characteristics and problems. For example, individuals might ask for an equity stake in the business, in return for providing a portion of the start-up capital, which may not appeal to the owner who prefers to retain full control of the business. As for institutional sources of start-up capital, the problems associated with their provision of funds vary according to the nature of each institution, or group of institutions, as follows:

(a) Banks, especially commercial banks, usually prefer to lend on a short-term, rather than on a long-term, basis which makes bank finance seldom suitable for start-up purposes; even though, they often ask for collateral for their loans.

(b) Finance companies usually charge higher interest rates on the finance facilities they provide, as compared with banks.

(c) ICFC, in the U.K. , provides finance for few launches, and it is more likely to support proprietors with good track records.[4]

(d) SBICs, in the United States, are less willing to finance start-ups as they invest only about 25 percent of their funds in new companies.[5]

These difficulties may make start-up financing the most crucial stage in the

(4) Committee to Review the Functioning of Financial Institutions, op. cit., p. 9.

(5) David. J. Gladstone, "SBA Programs for Financing a Small Business", in Stanley E. Pratt (ed.). op. cit., p. 33.

financing of the business, upon its success depends the success of the subsequent stages of financing the business. If the business to be started is small, the situation is even worse as the suppliers of start-up capital will regard such a business as more risky; consequently, they will either reject its request for finance or impose difficult terms on it.

3.2. Equity Capital:

Equity capital represents the owner(s)' funds invested in the business; these funds consist of the owner(s)' initial capital plus retained profits if any. If the business is a sole proprietorship and the owner wants to raise additional equity capital, he will need another partner, or other partners, as supplier(s) of such capital. The original owner will have the advantage of the new partner(s) sharing with him *the unlimited responsibility for the firm's* debts. On the other hand, there are some disadvantages such as:[6]

(a) The original founder of the business must share profits with the new partner(s).

(b) The founder loses full control of the management of his business.

(c) The founder will be subject to the risk that his partner may rashly involve the firm in further liabilities.

(d) In the event of the firm's liabilities exceeding its assets on dissolution and his partner becoming bankrupt, the founder partner will be held responsible for all the firm's debts even if this means realising his private assets to meet them.

The first two of these disadvantages seem to be inevitable consequences of raising equity capital in such a way; the other two can be significantly reduced by choosing the right partner as these latter disadvantages seem to be dependent on his personality. However, many proprietors tend to choose their new partners from family members or friends in whom they have confidence based on a fairly long relationship.

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(6) Kenneth Midgley and Ronald G. Burns, Business Finance and the Capital Market. 2nd ed. (London: Macmillan Press Ltd., 1972) p. 27.

If the business's capital is divided into shares, equity capital will consist of ordinary shares plus retained profits plus preference shares; loans from shareholders are sometimes considered as part of equity capital. However, these loans will be excluded from equity capital, in this context, as they do not qualify as either shares or retained profits but they are, by definition, loans.

3.2.1. Ordinary Shares (Common Stock):

Ordinary shares represent part of the owners' interest in a business as the other part is represented in preference shares which will be discussed below. If a company wants to raise additional equity capital, it may do so via issuing new ordinary shares and selling them to the prospective investors. To float an ordinary-share issue the company incurs the costs associated with the floatation such as brokers' commission, legal charges, advertising .... etc. Some of these costs vary with the size of the issue, others do not, *i.e.* they are the same for any size of issue such as advertising. If these fixed costs are calculated as a percentage of the issue size, they will vary adversely with this size; in other words, they will represent a higher percentage of small issues and vice versa, as shown in the following table:

Table 3.1. Estimated costs of two different share issues

Elements of Cost	Amount of issue			
	£250,000		£1,000,000	
	£	%	£	%
Advertising	5,000	2.0	5,000	0.5
Accounting fees	2,000	0.8	3,000	0.3
Legal charges	1,000	0.4	2,000	0.2
Commission	7,500	3.0	20,000	2.0
Quotation fee	210	0.084	525	0.053
Miscellaneous	1,000	0.4	1,000	0.1
Total	16,710	6.7	31,525	3.2

Source: Calculated from: Committee of Inquiry on Small Firms (Bolton Commitee). "Financial Facilities for Small Firms", Research Report no.4, London: HMSO, 1971, p. 38.

The previous table shows that although advertising and miscellaneous costs are the same for both issues, they represent higher percentages of the smaller issue than of the larger one. All other costs vary consecutively, in amount, with the issue size but they vary adversely as percentages; the same applies to total costs as shown in the table. As small businesses are expected to issue a relatively small amount of common stock, the cost of raising equity capital in such a way will be noticeably high and may be prohibitive. Thus, small businesses may face a real difficulty in raising external equity capital.

3.2.2. Retained Profits:

Retained profits represent that portion of the achieved profits kept in the company to be reinvested; hence, retained profits represent an internal source of finance in general and of equity finance in particular. The amount of retained profits, however, depends on: (a) the amount of profits achieved at the end of each financial year, as this amount fluctuates from one year to another, and the

balance of retained profits may become negative should the company incur loss; (b) the tax situation of the partners, as highly taxed partners usually prefer the profits to be retained while low-taxed partners prefer the profits to be distributed to them, depending on their propensity to consume; (c) the expected rate of return on alternative investment opportunities, as the partners may prefer to withdraw their profits from the company and invest them elsewhere if the expected rate of return in the company is lower, and vice versa; and (d) the dividend policy of the company, as this policy differs from one company to another and from one country to another. For example, U.K. companies usually pay an interim dividend and a final dividend each year, while most American companies pay equal quarterly dividends.[7]

As far as small businesses are concerned, retained profits are expected to represent an important source of equity finance due to the difficulties which these businesses encounter in raising external equity finance as discussed above. On the other hand, the dependence of small businesses on retained profits, as a source of finance, may be hindered if the partners depend completely on their shares in profits as sources of income.

3.2.3. Preference Shares (Preferred Stock):

Preference shares have some of the characteristics of both ordinary shares and loans. They resemble ordinary shares in the sense that they do not have a maturity date, and they resemble loans in the sense that they involve a fixed obligation on the company in the form of the fixed dividend percentage to be paid to the holders of preference shares. On the other hand, preference shares differ from ordinary shares in the sense that preference shareholders do not have the voting right, and they differ from loans in the sense that the holder of a preference share cannot force the company to pay him the annual dividend if the profits are

(7) D.R. Myddleton, Financial Decisions, 2nd ed. (Essex: Longman Group Ltd., 1983) p. 154.

not sufficient or if the company decides not to make any dividends. Nevertheless, preference shares may be cumulative in the sense that preference shareholders may have the right to be paid their dividends in arrears before the company can distribute any profits to its ordinary shareholders. There are, however, two different views of preference shares as a source of finance; they may be regarded either as an alternative to ordinary shares or as an alternative to debt finance, as shown in the following figure:

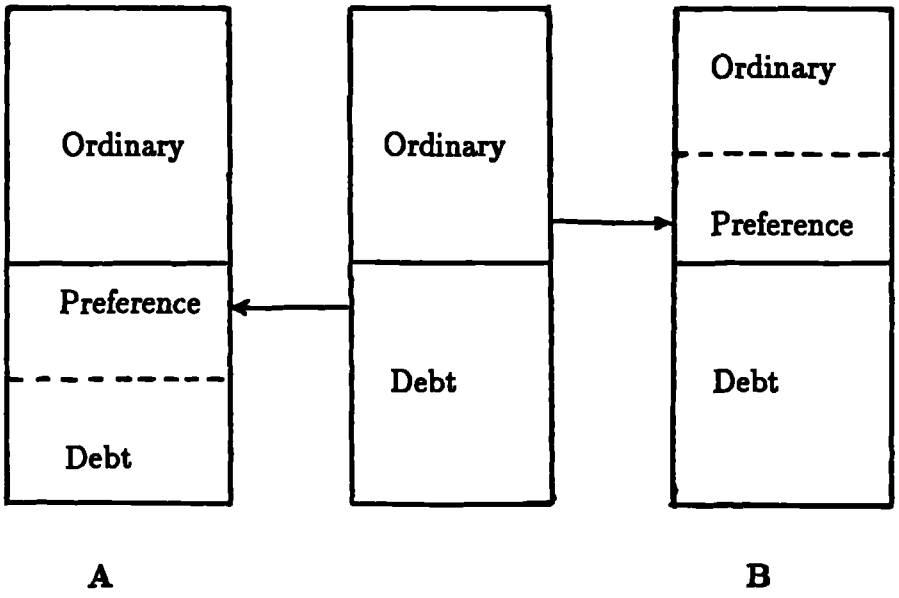


Figure 3.1. Alternative views of preference capital

Source: D.R. Myddleton, Financial Decisions, 2nd ed. (Essex: Longman Group Ltd., 1983) p. 100.

Column A shows that a preference-share issue can be used as an alternative to debt finance; but this is not attractive because preference shares are more expensive than loans as will be discussed in the next chapter. Column B shows that a preference-share issue can be used as an alternative to an ordinary-share issue if the company reaches, or is near to, its debt limit.

In assessing public equity markets in the United States, William Wetzel[8]

(8) William E. Wetzel, Jr., "*Informal Investors – when and where to look*" in Stanley E. Pratt (Ed.), op. cit., p. 25.

argues that these markets are not a source of capital for most corporations, and retained profits are the only source of equity capital for privately-held corporations. The grounds for this argument is that, in the United States, there are over two million incorporated businesses but only about 12,000 enjoy sufficiently wide ownership to be considered publicly owned, and the shares of about 4,000 firms are traded on an organised stock exchange. Given the forementioned difficulties of raising equity capital, the difficulties that small businesses might encounter are obvious.

3.3. Medium-and Long-Term Loans:

The border line between medium-term and long-term loans is not very clear in the financial literature; *i.e.* the maturities of both types of loans are mixed. In other words, the maturity of medium-term loans ranges between 3–10 years, while the maturity of long-term loans ranges between 5–10 years or even more. In this context, the term medium-and long-term (MTLT) will be used to incorporate all loans with maturities in excess of one year unless otherwise denoted.

Medium-and long-term loans (MTLT loans) can be obtained either by floating a bond issue in the capital market or by applying for such loans to banks or other financial institutions. If a company wants to obtain a long-term loan via the floatation of a bond issue, it will incur all costs associated with such a floating. These costs include printing costs, legal fees and underwriting expenses including the underwriter's spread; thus, the larger the issue the smaller the costs as a percentage of the floating proceeds.[9] When a company applies to a bank, or another financial institution, for a medium-term or a long-term loan, this company has to comply with the lender's terms; these terms may include the minimum and/or the maximum loan amount, the interest rate on the loan and the required

(9) James C. Van Horne, Financial Management and Policy, 6th ed. (New Jersey: Prentice-Hall, Inc., 1983) p. 526.

collateral if any. Also, the company's loan application must qualify as a sound loan according to the lender's criteria discussed in the last chapter.

Small businesses are expected to face some difficulties in obtaining *MTLT* loans, such as:

(a) It may be difficult for a small business to obtain a long-term loan via the floatation of a bond issue, as the needed amount of funds may not meet the minimum limit set by the underwriter. Even if the underwriter does not set a minimum size for the bond issue, the floatation costs for a relatively small issue will be noticeably high and may be prohibitive.

(b) Some small businesses may not be able to meet the lenders' requirements concerning interest rates or collaterals.

The Bolton Committee[10] pointed out some difficulties encountered by U.K. small businesses, in obtaining MTLT loans, such as:

(a) The proportion of funds of some insurance companies going to small firms varied from nil to under one percent.

(b) Only a minority of pension funds engage in financing small firms.

(c) The high-lower limits put by financial institutions concerning term-loan schemes.

(d) The high fees charged to small business loans such as legal, accounting and surveying charges, and these do not vary proportionately with the loan size.

(e) Many of the institutions supplying term loans have been subject to "ceilings", and such restrictions may encourage them to concentrate on large transactions.

(f) Although the number of applications for term loans is much lower than that for short-term loans, a high proportion is refused.

Given these difficulties in obtaining MTLT loans, some small businesses may approach non-institutional sources for such loans, especially loans from directors

(10) Adapted from: Committee of Inquiry on Small Firms (Bolton Committee) "Financial Facilities for Small Firms", Research Report no.4, London: HMSO, 1971, pp. 31-5.

or even from partners. Such loans have the advantage of avoiding the formalities associated with institutional loans as well as better terms because those directors or partners are expected to be keen not to let the business face financial difficulties. The following table shows the loans from directors as a percentage of long-term loans in both small and large businesses in the U.K.

Table 3.2. Percentage distribution of long-term loans in both small and large businesses in the U.K., 1975

Types of loans	Manufacturing	Non-manufacturing	All small companies	Large companies
Loans from directors	37.0	57.6	51.5	0.0
Other long-term loans	63.0	42.4	48.5	100
Total	100	100	100	100

Source: Adapted from: Committee to Review the Functioning of Financial Institutions (Wilson Committee), "The Financing of Small Firms", Cmnd. 7503, London: HMSO, 1979. p. 57.

This table shows that loans from directors represent a major component of small business long-term loans, as they account for more than half the total long-term loans in small companies *vis-à-vis* nil in large companies. This phenomenon reflects the difficulties that face small businesses in obtaining long-term loans from financial institutions while large businesses seem not to face any difficulties in this respect. However, major clearing banks started to provide long-term loan schemes of up to 20 years duration, and they no longer concentrate on the provision of short-term loans.(11)

3.4. Lease Finance:

Leasing a particular asset means having the right to use that asset without having a title to it. In other words, the owner of an asset (the lessor) allows

(11) Jim Dewhurst and Paul Burns. Small Business: Finance and Control (London: Macmillan Press Ltd., 1983) pp. 84-6.

another party (the lessee) to make a full use of this asset for a certain period of time in return for regular payments, over that period, including the charged interest rate. In the U.K., for instance, this rate lies in the range of 2 to 5 percentage points above the Bank of England Minimum Lending Rate or to be negotiated at some margin above the London Inter-Bank Offered Rate (LIBOR) or the Finance House Base Rate.[12] The lease agreement is put in a formal contract which contains stipulations as regards lease period, lease payments, the lessor's right to repossess the asset should the lessee default ... etc. Lease contracts can apply to almost all fixed assets that can be used by individuals or business enterprises such as buildings, machinery, computers, ships, aircraft, vehicles ... etc. The main suppliers of lease finance are banks, bank subsidiaries, finance companies and insurance companies. Sole proprietorships can be said to be less qualified to provide lease finance due to their lack of the necessary funds and expertise that are available to large institutions.

3.4.1. The Main Types of Leases:

Lease contracts lie in two main types: operating lease and financial lease. Under an operating-lease agreement the lessee has the right to use the asset for a relatively short period of time which is less than the economic life of the leased asset. There is no consensus, however, on the length of the operating-lease period; but it is estimated to range from six months to three years.[13] On the whole, the main characteristics of an operating lease are:

(a) It is for a fairly short period of time.

(b) It is subject to cancellation either by the lessor or by the lessee after giving a stipulated notice.[14]

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(12) Edward W. Davis and John Pointon, Finance and the Firm (London: Oxford University Press. 1984) p. 213.

(13) Ibid., p. 211.

(14) John J. Hampton, Financial Decision Making: Concepts. Problems and Cases, 3rd ed. (Virginia: Reston Publishing Co., Inc., 1983) p. 565.

(c) it is, usually, a full-service lease according to which terms the lessor provides maintenance, pays for the insurance and pays any property tax due on the leased asset.

The other type is a financial lease which is also called *capital lease* or *full-payment lease.* A financial lease can be defined as an agreement according to which terms the lessee is allowed to use an asset for a period corresponding to the asset's economic life in return for regular payments over the stipulated period. The main characteristics of a financial lease are:

(a) It is a long-term financing method as it extends to almost all the asset's estimated economic life.

(b) It is a non-cancellable contract either by the lessor or by the lessee.

(c) Lease payments usually correspond to the cost of the leased asset plus a profit to the lessor.

(d) According to a financial-lease contract the lessee agrees to maintain the asset, insures it and pays any property tax due on that asset.

(e) Some lease contracts give the lessee the option to buy the leased asset, at the end of the lease period, for a bargain price or an agreed-upon price or at the market value of the asset at the end of the lease period.

(f) Some lease contracts entitle the lessee to a proportion of the proceeds of the sale of the leased asset at the end of the lease period. For example, most U.K. financial lease contracts entitle the lessee to 90 to 99 percent of the sale proceeds.[15]

There are, however, other types of lease agreements such as hire-purchase and sale-and lease-back agreements. Under a hire-purchase agreement the lessee is given the option to purchase the leased asset before the expiry of the leasing period. In this case the lessee's decision to exercise the option will depend on the

(15) Colin M. Young, "Leasing", in Jack Broyles, Ian Cooper and Simon Archer (eds), Financial Management Handbook, 2nd ed. (Aldershot: Gower Publishing Co. Ltd., 1983) p. 287.

availability of funds and his evaluation of the purchase against the continuation of the lease agreement. Sale-and lease-back agreements arise when a firm sells an asset to another party and leases it back from that party; under such an agreement the firm loses its title to the asset and acquires the use of that asset for the lease period. Firms that sell and lease back their assets do so when they are in need of funds to finance urgent requirements, in which case the firm finds it difficult to obtain finance from other sources.

3.4.2. Assessing Lease Finance:

It is worth mentioning that the assessment of lease finance will focus only on financial lease, which represents the most suitable substitute for MTLT loans as well as being the most commonly used form of leasing. Accordingly, the terms *leasing* or *lease finance* will be used as synonyms for *financial lease* unless otherwise denoted. Assessing lease finance, in this context, means the examination of its merits assuming that the other alternative is to buy the particular asset and finance this purchase with a long-term loan. In order to decide whether to buy the asset or lease it, the decision maker calculates the net present value of both costs and gains realised under each alternative, in order to choose the alternative which achieves the largest positive net present value.

One of the main advantages attributed to lease finance is that it is an off-balance sheet finance, in the sense that the lessee does not have to show the leased assets and lease obligtations on his balance sheet; instead, he only adds a brief footnote to his accounts describing the lease obligations. This off-balance sheet finance is deemed to maintain the firm's borrowing capacity and its credit rating. Financial institutions, however, have become aware of such a loophole in accounting practices and sought a way out. At the beginning of 1977, United States firms were required to capitalise their financial leases.(16) Capitalising fi-

(16) Richard Brealey and Stewart Myers, Principles of Corporate Finance (New York: McGraw-Hill Book Co., 1984) p. 545.

nancial leases means calculating the present value of lease payments and showing this amount on both sides of the balance sheet. The leased asset and its corresponding liability will be amortized by deducting lease payments from both sides of the firm's balance sheet.

Another advantage associated with lease finance is that all lease payments are tax-deductible expenses while only the interest on borrowed money is a tax-deductible expense. This advantage seems to be plausible as it results in the actual lease payments being less than those registered in the firm's books. For example, if the firm's annual lease payments are £50,000 and the corporate tax rate is 40 percent, then the firm achieves a tax saving of £20,000 $(50,000 \times 0.40)$ which makes the "real" lease payments £30,000 $(50,000 \times (1-0.40))$. Sometimes the firm incurs loss or its profits do not reach the threshold of corporate tax; in this case the tax-saving advantage loses its credibility as there will be no tax charges.

When the lessor realises any investment tax benefits he can pass them to the lessee in the form of reduced lease payments. In the U.K., for instance, there is an investment incentive represented in allowing the owner of an asset to offset its cost against his taxable profits for the year in which the asset is purchased.[17] Also, in the United States the owner of an asset is entitled to an investment incentive known as the Investment Tax Credit (ITC). According to this incentive the owner of an asset reduces his taxes by the ITC without affecting the depreciation schedule of the asset; under the 1981 law the ITC is 6 percent for qualified assets depreciated over 3 years and 10 percent for all other qualified assets.[18] These incentives will result in reducing the cost of acquiring the asset to the owner, and it is assumed that such reduction, or part of it, will be passed to the lessee who incurs less payments than otherwise would be the case. This

(17) Colin M. Young, op. cit., p. 274.
(18) John J. Hampton, op. cit., pp. 582-3.

assumption has two implications, first: it implies that the owner of the asset is a tax payer; but if he incurs losses or if his profits do not reach the threshold of corporate tax, he will not benefit from such incentives and, consequently, will not pass any reductions to the lessee. Second: it implies that the lessor is willing to pass the investment benefits to the lessee; but if the lessor is in a monopolistic position, he will dictate his terms on the lessee including lease payments which might be fairly large.

It is also worth noticing that leasing may not represent a hundred percent finance if lease payments are payable in advance.[19] The rationale for this viewpoint can be easily inferred, that is paying rentals in advance makes the real cost of leasing higher than otherwise would be the case. For example, if the cost of the leased equipment is £100,000 and the annual lease payment is £20,000 payable in advance, this means that the instant financing realised by the lessee is only £80,000 (100,000 – 20,000).

As far as small businesses are concerned, lease finance seems to be appealing because: (a) it relieves them of paying a lump sum of money to buy the particular asset, and this money can be invested elsewhere in the firm; (b) it is useful for those businesses which do not have profits to be retained to finance the purchase of fixed assets; and (c) it is useful for those businesses which have no access to bank credit or face difficulties in dealing with banks.

3.5. Venture Capital:

The term *venture capital* or *risk capital* refers to financing situations where both risk and profitability are noticeably high. Definitions given to venture capital regard it as representing the provision of funds for the financing of:[20]

(19) R. Fawthrop, "Equipment Leasing", in Michael Firth and Simon Keane (Eds.) Issues in Finance (Oxford: Philip Allan Publishers, Ltd., 1986) p. 106.

(20) Adapted from: Patrick R. Liles, op. cit., p. 461; James C. Van Horne, op. cit., p. 533; Jim Dewhurst and Paul Burns, op. cit., p. 107; Stanley E. Pratt (ed.), op. cit., p. 7.

(a) New, high-risk, high-profit-oriented enterprises.

(b) Large interests in publicly traded companies where uncertainty is significant.

(c) Seed-capital requirements.

(d) Start-up capital requirements.

(e) Early-stage development.

(f) Expanding the business's activity.

(g) Going concerns that are unable to raise funds from conventional public or commercial sources.

(h) Relatively small, rapidly growing concerns.

These areas of financing seem to be compatible with the term *venture capital* except for the last three areas because: (a) for a business to expand its activity, this implies that the business is successful and profitable, also this implies that the business is fairly well established which reduces the risk associated with its activity; (b) going concerns, that are unable to raise funds from conventional sources, are expected to be small and such an inability does not necessarily mean that they are risky but it may, rather, mean that such sources are not interested in financing small businesses; and (c) small, rapidly growing companies may represent the favourite arena for venture-capital financing due to their good profit potential; the Apple Computer Corporation is a good example of such businesses.

Yet, the financial literature often relates venture-capital financing to small business financing, which seems to involve a fallacy represented in the confusion between "small businesses" and "young businesses". While the term *small* refers to the firm's size in terms of the number of workers or the volume of sales, or whatever criterion is adopted, the term *young* refers to the firm's age in terms of maturity and stability. Accordingly, venture-capital finance should be related to young businesses rather than small businesses because if a certain business is small, this does not necessarily mean that it is young; and if a certain business is large, this does not necessarily mean that it is old enough or well-established.

In other words, financial backers may come across a small business which is well-established but the nature of its activity keeps it small; also, financial backers may come across a large business which is still premature but it started large. The main consequence of such a notion is that providing finance for large-young companies may be riskier than providing finance for small-old firms, as the amount of funds and the magnitude of risk in the former case are greater than those in the latter. However, the question which arises is how old is a young business? The answer depends on the business's type of activity and the time it takes to reach the maturity stage; light industries, for instance, are expected to take a shorter time to reach the maturity stage than do heavy industries.

3.5.1. Sources of Venture-Capital Finance

Like most types of finance, venture-capital funds can be obtained from institutional as well as non-instutional sources; these sources are:[21]

(a) Wealthy individuals.

(b) Pension funds.

(c) Life insurance companies.

(d) Bank holding companies.

(e) The Industrial and Commercial Finance Corporation (ICFC), in the U.K., and its subsidiaries; this corporation is owned by the clearing banks and the Bank of England.

(f) The British Technology Group (BTG) which was formed in 1981 by the merger of the National Research and Development Corporation and the National Enterprise Board.

(g) Investment development companies such as the American Research and De

(21) Adapted from: Patrick R. Liles, op. cit., p. 462; James C. Van Horne, op. cit., p. 534; Jim Dewhurst and Paul Burns, op. cit., pp. 107-8; Robert R. Owen, Daniel R. Garner and Dennis S. Bunder, Arthur Young Guide to Financing for Growth (New York: John Wiley and Sons, 1986) pp. 74-6; Addison W. Parris, The Small Business Administration (New York: Frederick A. Praeger, 1968) p. 150; J. Fred Weston and Eugene F. Brigham, Managerial Finance, 5th ed. (London: Holt, Rinehart and Winston, Inc., 1975) p. 842.

velopment Corporation.

(h) The Small Business Investment Companies (SBICs) and Minority Enterprise Small Business Investment Companies (MESBICs); all those companies are licensed and regulated by the Small Business Administration (SBA) in the United States.

(i) Corporation venture capital activities set up in some large industrial companies to make investments in related but non-competing fields.

(j) Investment banking firm's venture capital funds.

(k) Private venture capital partnerships established by experienced individuals in order to provide venture capital, as well as providing skills and experience.

These suppliers of venture capital usually consider the trade off between risk and profitability in order to minimise the risk and/or maximise the profitability of their invested funds. In this respect, venture-capital suppliers evaluate both the entrepreneur and the business itself as follows:[22]

(a) Concerning the entrepreneur, they consider his integrity and reliability, abilities and competence, attitudes and ambitions, innovation and enthusiasm and his willingness to take risks

(b) Concerning the business, they examine its suitability as a venture-capital investment, potential economic gains, the probability of success and the documentation to be attached to the application for finance such as a full business plan including projected profit-and-loss accounts, balance sheets and cash-flow statements.

3.5.2. Assessing Venture-Capital Finance

The assessment of venture-capital finance will be held in terms of the magnitude of such finance and its share in risky situations, mainly start-ups. Also, the assessment will be confined to the U.K. and the United States as they are the

(22) Adapted from: Patrick R. Liles, op. cit., pp. 473-9; Jim Dowhurst and Paul Burns, op. cit., pp. 110-12.

leading countries in this area and the most important sources of literature. In this regard, it is noticed that:

(a) For venture-capital suppliers to minimise their risk and maximise their profits, they concentrate on industries with which they are familiar; moreover, they seek to have a voice in the management of the firms they finance.[23]

(b) For a firm to attract the interest of institutional venture investors, it must have a growth rate in excess of 40 percent per year.[24] This implies that a growth rate of up to 40 percent will be financed by internal sources; and this means that the firm with this growth rate must achieve a 40 percent rate of return on equity capital and retains all the profits for growth financing.

(c) In 1985 only about 30 percent of the number of financings made by U.K. venture-capital organisations were for start-ups and early-stage companies.[25]

(d) Also in the U.K., ICFC tends to support the proprietors who have good track records or those who prove to be winners or near-winners of competitions.[26]

(e) In the United States, less than half of the annual new investments by venture-capital industry goes to start-up situations; also, less than a quarter of the new ventures launched annually are backed by professional venture investors, and the rest are backed by individuals or groups of individuals.[27]

(f) Also in the United States, SBICs provide small businesses with loans rather than equity capital because they borrow most of their funds from the SBA.[28]

The preceding context suggests that institutional venture-capital suppliers seem to adopt conservative financing policies, either because of the nature of their sources of funds or because of their attitudes towards risk-bearing finance. Consequently, institutional sources of venture-capital finance are expected to be

(23) Robert R. Owen et al., op. cit., p. 73.
(24) William E. Wetzel, Jr., op. cit., p. 25.
(25) Richard Hargreaves, Starting a Business, 2nd ed. (London: Heinman Ltd., 1987) p. 76.
(26) Committee to Review the Functioning of Financial Institutions (Wilson Committee) op. cit., p. 9.
(27) William E. Wetzel, Jr., op. cit., p. 24.
(28) David J. Gladstone, op. cit., p. 32.

of less importance to small businesses as compared with individuals who seem to be more risk takers.

3.6. Financing Expansion:

Expanding a firm's activity means increasing its market share, provided that the market can absorb more quantities of the particular product(s). The main consequence of expanding the firm's activity is the growing need for additional funds, especially in the form of long-term finance in order to cope with the growth requirements. The growth of any business usually occurs gradually; in other words, most business enterprises do not move suddenly from inception to maturity but, rather, they pass through some stages known as the life cycle of the firm.

3.6.1. The Firm's Life Cycle:

The life cycle concept adopted in this context depends on that developed by Eugene Brigham[29] who divides the firm's life cycle into four stages as follows:

Stage one: Experimentation: both sales and profits grow slowly.

Stage two: Exploitation: rapid growth of sales and profitability due to the acceleration of market acceptance of its product.

Stage three: Maturity: the growth rate of sales slows down as growth, in large part, is dependent on replacement demand.

Stage four: Decline: this decline is due to: (a) new competitive products; (b) technological and managerial obsolescence; and (c) saturation of demand for its product.

The financing patterns corresponding to these stages are shown in the following table:

(29) Eugene F. Brigham, Financial Management: Theory and Practice, 3rd ed. (New York: The Dryden Press, 1982) p. 821.

Table 3.3. Financing patterns at four stages of a firm's development

Stage	Financing pattern
1. Formation	Personal savings, trade credit, government agencies.
2. Rapid growth	Internal financing, trade credit, bank credit, venture capital.
3. Growth to maturity	Going public, money and capital markets.
4. Maturity and industry decline	Internal financing, share repurchases, diversifications, mergers.

Source: Eugene F. Brigham, Financial Management: Theory and Practice, 3rd ed. (New York: The Dryden Press, 1982) p. 832.

This view of the firm's financing patterns was modified later by Hutchinson and Ray as shown in the following table:

Table 3.4. The traditional view of the financial life-cycle of the firm

Stage	Source of finance	Potential stress factors
Inception	Owners' resources.	Under capitalization
Growth I	As above plus: retained profits, trade credit, bank loans and overdrafts, hire purchase, leasing.	"Overtrading" Liquidity crises
Growth II	As above plus: longer-term finance from financial institutions.	Finance gap
Growth III	As above plus: new issue market.	Loss of control
Maturity	All sources available.	Maintaining the return on investment
Decline	Withdrawal of finance, firm taken over, share repurchase, liquidation.	Falling return on investment

Source: Patrick Hutchinson and Graham Ray, "Surviving the Financial Stress of Small Enterprise Growth", in James Curran, John Stanworth and David Watkins (Eds.). The Survival of the Small Firm: Volume one: the Economics of Survival and Entrepreneurship (Aldershot: Gower Publishing Co. Ltd., 1986) p. 55.

Both table 3.3 and table 3.4 present almost the same financing patterns, during the firm's life cycle, especially for the growth stages. Concerning the stage of decline, it can be argued that this stage is not inevitable for all firms. In other words, many firms can maintain the maturity stage and survive the decline stage via research and development programmes, market research programmes and management training programmes. Nevertheless, the relevant stage, in this context, is the growth stage which is expressed as rapid growth in table 3.3 and growth I through growth III in table 3.4. Table 3.4 shows the problems that face a growing firm, the most important of which are overtrading and the finance gap; these problems seem to embody the difficulties associated with the financing of expansion.

3.6.2. The Problems of Financing Expansion:

The difficulties which face small businesses, in obtaining the necessary finance for their expansion, are usually associated with rapid growth. In other words, if a certain business is expanding slowly, this expansion will be almost unnoticeable and can be fairly easily financed, whereas a rapidly-growing business will need sizeable amounts of funds most of which will be on a long-term basis. Unfortunately, some businesses have no choice but to expand rapidly simply to withstand the rapidly-growing market and/or the rapidly growing competition. In this regard, it is argued that financing rapid growth is more difficult than financing the investment in a new plant or some other aspect of steady growth, because rapid growth involves greater risk although the potential rewards may be high.[30] It is also argued that the existence of the small, rapidly growing firm is precarious because: (a) it faces difficulties in obtaining equity capital because it is not large enough to go public and little is known about it; and (b) its own demonstrated success may stimulate an influx of new firms, with the consequent likelihood of a

(30) A. C. Hazel and A.S. Reid. Rapid Company Growth: How to Plan and Manage Small Company Expansion (London: Business Books Ltd., 1979) p. 75.

declining market share and increased competitive pressure.[31]

Empirical studies seem to support these viewpoints as they stress the problem of financing as an impediment to expansion. A study of 860 small businesses in West Scotland, in 1982, by A. Leyshon[32] showed that growth inhibition due to the availability/cost of finance is more explicit among manufacturing firms than other types of businesses as follows:

(a) Growth inhibition due to the availability of finance was reported by 31.0 percent of manufacturing firms, 26.5 percent of retailing firms and 22.0 percent of services firms.

(b) Growth inhibition due to the cost of finance was reported by 54.9 percent of manufacturing firms, 45.2 percent of retailing firms and 29.3 percent of services firms.

In the United States, William Wetzel, Jr. and Ian Wilson[33] carried out a study of 110 New Hampshire-based firms with at least 50 employees and growing at rates of 15 percent or more; some of the research findings are:

(a) 44 percent of the firms growing at rates between 30 percent and 40 percent experienced curtailed growth because of the lack of access to the necessary capital.

(b) 67 percent of companies expanding at rates of 50 percent or more reported growth problems as a result of inadequate expansion capital.

(c) As company size increases, the problems of access to capital tend to decrease.

(d) Forced reliance on short-term debt is primarily a problem of the smaller, more rapidly-growing firms.

(e) 51 percent of the sample firms reported that there was a shortage of equity and

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(31) Eugene F. Brigham, op. cit., p. 826.

(32) A. Leyshon, "The U.K. Government Small Business Model – A Review", European Small Business Journal, (1) no.1, 1982, pp. 58-66, quoted in Martin Walbank, "Equity Sharing Policies in New Venture Funding", European Small Business Journal, (1) no.3, 1983, p. 12.

(33) William E. Wetzel, Jr. and Ian G. Wilson, "Seed Capital Gaps: Evidence from High-Growth Ventures", Frontiers of Entrepreneurship Research, 1985, pp. 222-230.

long-term debt capital, and this was common among the smaller, more rapidly growing firms.

(f) Companies growing by 40 percent or more are twice as likely to pursue external equity financing as companies growing at less than 20 percent annually.

The previous context suggests that small businesses face real problems in the financing of expansion; this issue stimulates the question of whether small businesses have to expand. Jim Dewhurst and Paul Burns[34] point out that when economies of scale are important the small business must grow simply to survive, and when economies of scale are not important the optimal firm size is relatively small. Yet, growth inhibition is not necessarily due to the lack of access to external finance but it could be due to the business itself as well. In other words, some sole proprietorships may experience growth inhibition because the owner-managers are unwilling to give up part of their control over their businesses in return for additional external equity capital; and this may result in the business's expansion being dependent on the sufficiency of retained profits.

(34) Jim Dewhurst and Paul Burns, op. cit., p. 50.

Chapter Four

Capital Structure and the Cost of Capital

4.1. Capital Structure

4.1.1. Business Risk

4.1.2. Financial Risk

4.1.3. The Effect of Capital Structure on Shareholders' Income

4.1.4. Small-Business Capital Structure

4.2. Cost of Capital

4.2.1. The Weighted Average Cost of Capital

4.2.2. Optimal Capital Structure

4.2.3. Agency Costs

4.2.4. Small-Business Cost of Capital

4.1. Capital Structure:

The term *capital structure* refers to the way of financing the firm's assets; in other words, it represents the variety of sources used in financing the firm's assets and the relative importance of each source. As is well known, the main sources of finance are ordinary shares, preference shares and debt (both short-term and long-term debts). Hence, the term capital structure refers to the distribution of these financing sources or, broadly defined, the extent to which a firm depends on debt financing as parallel to equity financing. The degree of the firm's dependence on debt financing is known as *financial gearing* or *financial leverage* which is measured as follows:

$$\text{Financial gearing (financial leverage)} = \frac{\text{total debt}}{\text{total assets}} \times 100$$

or, equivalently, it can be measured as follows:

$$\text{Financial gearing (financial leverage)} = \frac{\text{total debt}}{\text{equity capital}}$$

Accordingly, if a certain firm has total assets of £10 million and these assets are financed with £4 million worth of equity capital and £6 million worth of debt, this firm's financial gearing is 60 percent $\left(\frac{£6 \text{ million}}{£10 \text{ million}} \times 100\right)$ or 1.5 $\left(\frac{£6 \text{ million}}{£4 \text{ million}}\right)$. On the other hand, if the firm depends only on equity capital to finance its assets, it is said to be ungeared or unlevered. A question may arise concerning the significance of studying the capital structure or measuring the financial gearing or financial leverage. The reason is that different financing sources have different attributes from the standpoint of investors on the one hand and the standpoint of the firm on the other, especially the risk associated with each source. These different views are shown in the following figure:

Investors' standpoint The firm's standpoint

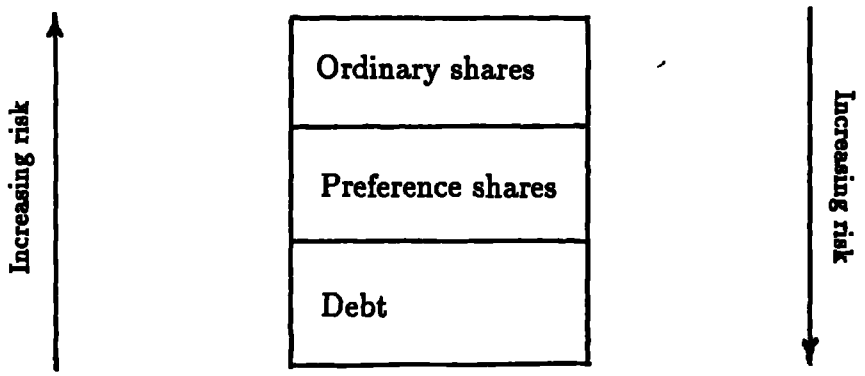


Figure 4.1. Risk classification of different sources of finance

From the investors' standpoint, the safest investment in a certain firm is to buy bonds issued by it, as these bonds represent funds lent to the firm. Bond holders are virtually sure that they will get their periodic interest payments no matter how low are the firm's profits; the same can hold for banks as suppliers of loans. Moreover, if the firm fails to pay the debtors their periodic interest and/or loan instalments, they can force it into liquidation and have prior cliam on its assets. On the extreme end, in figure 4.1, are ordinary shares that neither have any pre-determined return nor have they any pre-determined claim on the firm's assets. In other words, ordinary shareholders will get all the remaining profits after paying all other claims; in case of liquidation, ordinary shareholders have a residual claim on the firm's assets after satisfying all other claims. In case of ordinary partnerships or sole proprietorships, the owners' responsibility for the firm's debts can be extended to their personal properties should the firm's assets be insufficient to meet debtors' claims in case of liquidation. As for preference shares, they have some of the attributes of both ordinary shares and debt. They resemble ordinary shares in the sense that they have no maturity date, and they resemble debt in the sense that they have a fixed annual dividend. The main difference between preference shares and both other sources is that the annual dividend on these shares is not a legal obligation on the firm. In other words,

if the firm's profits, after paying all debt obligations, are insufficient or if the board of directors decides not to pay any dividends, then preference shareholders cannot force the firm to make such dividends albeit they may be paid in arrears. Assessing these sources from the firm's standpoint, they will be ranked the other way round, *i.e.* ordinary shares are the least risky, debt is the most risky source, and preference shares lie in between, and the same reasons hold.

Given the main characteristics of different sources of finance and given that debt finance is the riskiest of these sources from the firm's standpoint, the question which arises is: What are the main determinants of the firm's capital structure? The answer is that these determinants are business risk and financial risk.

4.1.1. Business Risk:

The term *business risk* refers to the probable fluctuations in the firm's operating profits (before interest and tax) due to the fluctuations in sales revenue and/or in total costs. The extent to which the firm's profits may fluctuate depends on the sensitivity of such profits to any changes in the firm's sales and/or costs. Business risk can be regarded as part of the unsystematic risk, which is peculiar to a certain firm or industry, representing the effect of competition or technological change in the particular industry. On the other hand, systematic risk represents the changes in the economy as a whole or in political relations among countries, thus affecting all activities in a particular country or a group of countries; but this latter issue is irrelevant in this context.

To assess the sensitivity of the firm's profits to any variations in sales revenue or total costs, break-even analysis is employed. This analysis stems from the fact that variable costs vary with the volume of units produced and sold but they are fixed for each single unit; and fixed costs do not vary with the volume of units produced and sold but they are variable for each single unit. Hence, it is the fixed costs that matter as the firm incurs these costs at all levels of production

and sales, at least in the short run. The incurring of fixed costs, regardless of the volume of production and sales, is known as the "operating leverage".[1] The effect of the operating leverage can be shown in the break-even chart as follows:

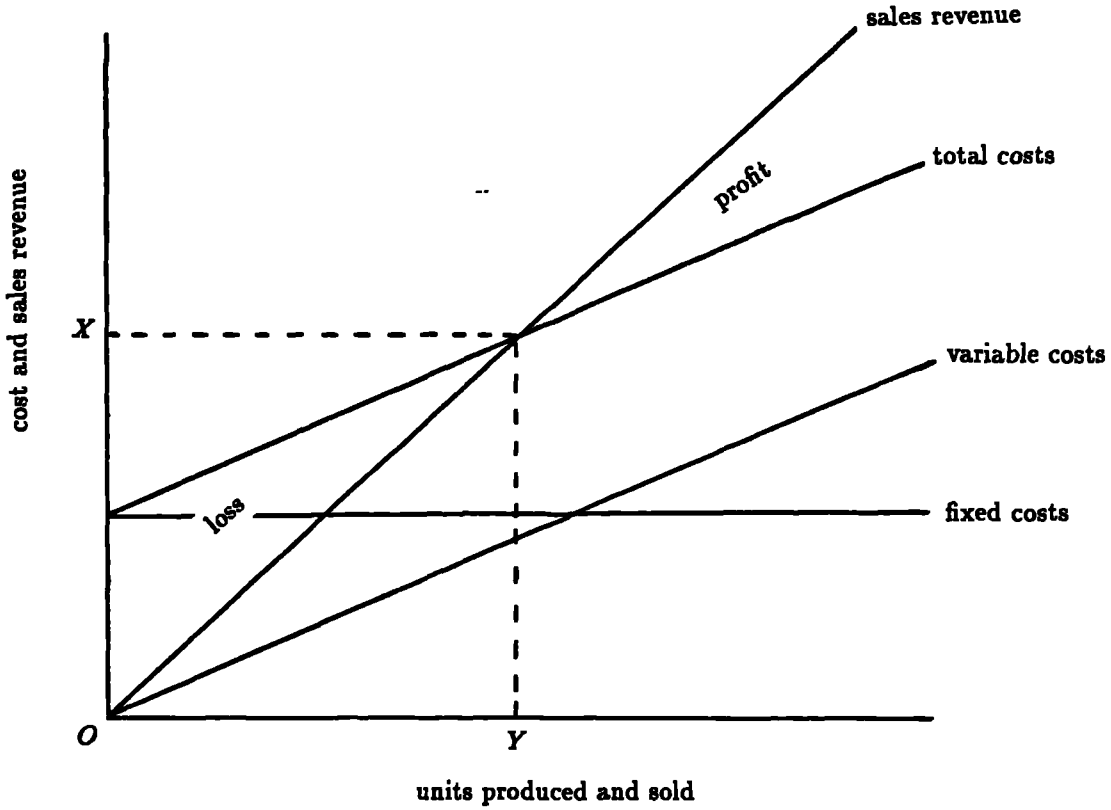


Figure 4.2. Break-even chart

This chart shows the main elements that affect the firm's profits, namely sales revenue and total costs. The latter consist of variable costs, which vary directly with the volume of units produced and sold, such as raw materials, direct labour costs, direct sales costs and the like. The other component is fixed costs, which do not vary with the volume of units produced and sold, such as depreciation, rents, administrative costs and the like. The most important element is fixed costs that must be met regardless of the volume of the production and sales. Figure 4.2. shows that at a certain level of fixed costs, and consequently of total costs, the firm must produce and sell the volume OY (with sales revenue of OX)

(1) James C. Van Horne. Financial Management and Policy. 6th ed. (New Jersey: Prentice-Hall. Inc.. 1983) p. 144.

merely to meet its total costs. Accordingly, the break-even point is represented by the intercept between the sales-revenue line and the total-cost line. If the firm produces and sells a volume greater than OY, it will achieve profits; if the firm produces and sells a volume less than OY, it will incur loss. The break-even point can be expressed mathematically as follows:

$$Y = \frac{F}{P - V}$$

where:

Y = the break-even volume (units to be produced and sold)

F = fixed costs

P = price per unit

V = variable cost per unit

For example, if the firm's fixed costs are £10,000, the price per unit is £ 30 and the variable cost per unit is £20, then the break-even volume is:

$$Y = \frac{10,000}{30 - 20} = 1,000 \quad \text{units}$$

This means that for the firm to meet its fixed costs it has be produce and sell 1,000 units; any volume of production and sales in excess of 1,000 units will result in profits, and any volume of production and sales less than 1,000 units will result in loss. The effect of the operating leverage will be magnified if any of the following occurs: (a) fixed costs increase; (b) the variable cost per unit increases; or (c) the price per unit decreases. In all these cases, the firm has to produce and sell more units merely to break even.

4.1.2. Financial Risk:

Financial risk can be regarded as a consequence of the excessive use of financial leverage; *i.e.* the excessive dependence on debt financing which results

in fixed obligations represented in loan instalments and/or interest payments. These fixed obligations will increase the firm's fixed costs and, consequently, raise its break-even point. The risk factor involved in the use of debt financing is that debt payments have claims on the firm's earnings prior to those of shareholders regardless of the volume of these earnings. Moreover, if the firm's earnings are insufficient to meet debt obligations, lenders and bondholders can force it into liquidation. Thus, the presence of debt financing is deemed to raise the firm's break-even point as shown in the following chart:

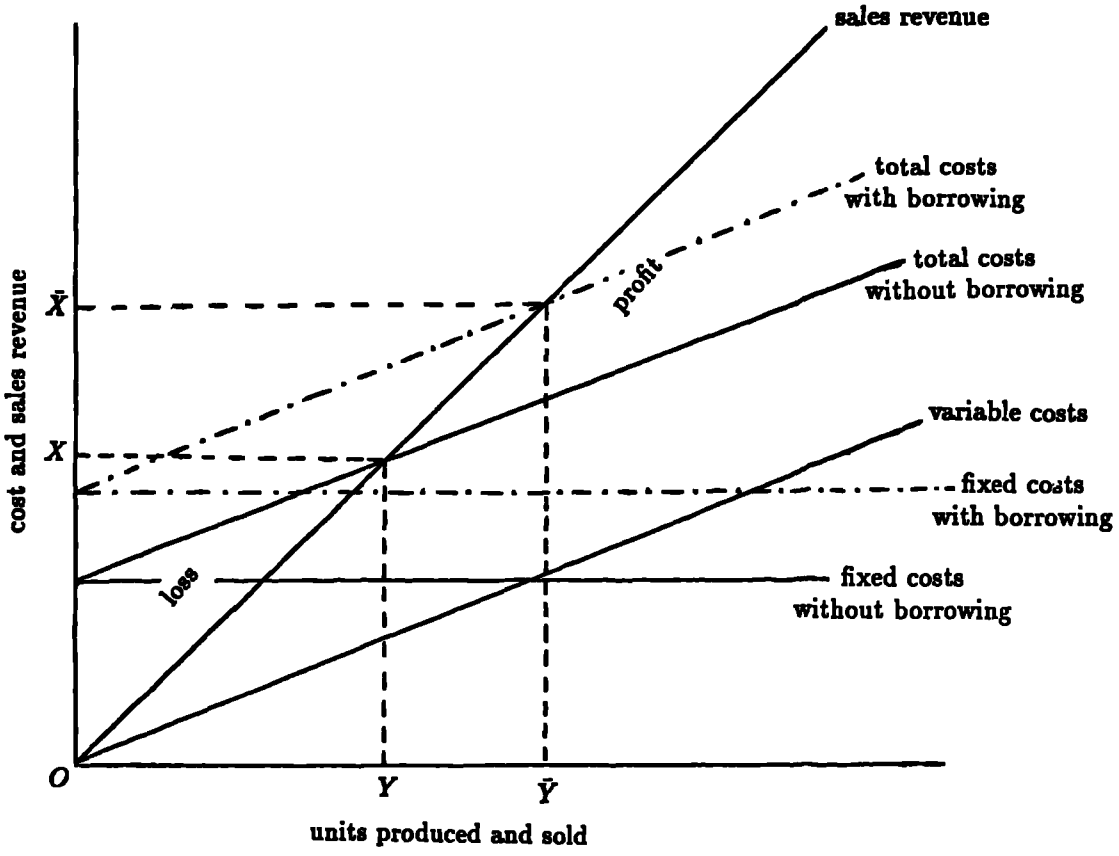


Figure 4.3. Break-even chart with borrowing

Source: Adapted from J.R. Franks and J.E. Broyles. Modern Managerial Finance (Chichester: John Wiley and Sons, 1979) p.211.

This figure depicts the combined effect of both operating leverage and financial leverage. In other words, the presence of financial leverage pushes up both fixed

costs and total costs, thus shifting the break-even point upwards. In this case, the firm has to produce and sell the volume $O\bar{Y}$ (with sales revenue $O\bar{X}$) in order to meet the costs incurred under the new situation and avoid the financial risk associated with debt financing.

4.1.3. The Effect of Capital Structure on Shareholders' Income:

As mentioned earlier in this chapter, the shareholders of *any firm* have a residual claim on the firm's profits after fully meeting interest payments on the firm's debt. Consequently, those shareholders will incur all losses resulting from debt financing should the firm's profits lag behind debt commitments. By the same token, shareholders will be entitled to all accrued profits should these profits be in excess of debt commitments. Hence, it can be said that the employment of financial gearing, or financial leverage, affects the income of shareholders. To illustrate this notion, it is assumed that there are three firms, A,B and C, identical in all aspects but their capital structure as follows:

Capital structure	Firm A	Firm B	Firm C
Equity capital	100,000	50,000	30,000
Borrowing (at a 12 percent interest rate)	–	50,000	70,000
Total capital and liabilities	100,000	100,000	100,000

Assuming a corporate income tax rate of 40 percent for all firms, if the net operating income (before interest and tax) is £ 20,000 for all firms in year one, and this income is halved in year two to become £10,000, then the results will be as shown in the following table:

Table 4.1. The effect of financial gearing on shareholders' income

Items	Year one	Year two
Firm A: (Financial gearing = zero)		
Net operating income before interest and tax	20,000	10,000
– Interest payments	–	–
Net profits before tax	20,000	10,000
– Corporate tax (40%)	8,000	4,000
Net profits after tax	12,000	6,000
Return on equity = $\frac{\text{net profits after tax}}{\text{equity capital}}$	$\frac{12.000}{100,000} = 12\%$	$\frac{6.000}{100.000} = 6\%$
Firm B: (Financial gearing = 50%)		
Net operating income before interest and tax	20,000	10,000
– Interest payments = $50,000 \times 0.12$	6,000	6,000
Net profits before tax	14,000	4,000
– Corporate tax (40%)	5,600	1,600
Net profits after tax	8,400	2,400
Return on equity = $\frac{\text{net profits after tax}}{\text{equity capital}}$	$\frac{8.400}{50.000} = 16.8\%$	$\frac{2.400}{50.000} = 4.8\%$
Firm C: (Financial gearing = 70%)		
Net operating income before interest and tax	20,000	10,000
– Interest payments = $70,000 \times 0.12$	8,400	8,400
Net profits before tax	11,600	1,600
– Corporate tax (40%)	4,640	640
Net profits after tax	6,960	960
Return on equity = $\frac{\text{net profits after tax}}{\text{equity capital}}$	$\frac{6.960}{30.000} = 23.2\%$	$\frac{960}{30.000} = 3.2\%$

The preceding example shows that the employment of debt financing accelerates the return on equity capital in year one. This is proven as firm A, with no debt, achieves a 12 percent return on equity capital, firm B, with 50 percent debt, achieves 16.8 percent and firm C, with 70 percent debt, achieves 23.2 percent. On the other hand, when net operating income drops, the return on equity capital is noticeably reduced by the employment of debt financing. This is proven as firm A, with no debt, achieves a 6 percent return on equity capital, firm B, with 50 percent debt, achieves 4.8 percent and firm C, with 70 percent debt, achieves 3.2 percent. Hence, it can be said that financial gearing magnifies the effect of changes in operating income upon shareholders' income; consequently, the employment of debt financing should be handled with caution. In other words, firms with significant business risk should reduce their dependence on debt financing in order to avoid the combined-negative effects of both operating leverage and financial leverage. For those firms with good profit potential, it is not unwise to increase their dependence on debt financing; but to what extent can a firm employ debt financing? This issue will be dealt with later in this chapter.

4.1.4. Small-Business Capital Structure:

Small-business capital structure is not expected to be similar to that of large businesses, in the sense that small businesses are expected to be less geared than large businesses due to their relatively low dependence on debt financing. This phenomenon may be due to one or more of the following reasons:

(a) Some small businesses may not have access to institutional finance either becasue they do not qualify as borrowers or because of the unavailability of such finance.

(b) Banks often set a maximum gearing ratio at which they decline loan applications, and this restricts the businesses' ability to borrow, even if they are successful enough to pay back these loans.

(c) High interest rates required by some institutional lenders tend to make *debt*

financing noticeably expensive.

(d) Many small businesses cannot afford the floatation costs of a bond issue, if any, which may be prohibitive.

In the U.K., in the 1970s, banks were criticized by the Wilson Committee[2] for requiring a low level of capital gearing[3] in order to lend to small businesses. The level of gearing required by U.K. banks, according to the Wilson Committee, was 1:1 compared with 2:1 or 3:1 in other European countries. In 1981, the U.K. Government introduced a loan guarantee scheme called Small Business Loan Guarantee Scheme, known as LGS or the Scheme. According to the LGS, the Department of Industry guarantees the repayment of 80 percent of medium-term loans over two to seven years (not overdrafts) made by the participating financial institutions to eligible businesses.[4] After two years from the introduction of the LGS, small-business capital gearing was as shown in the following table:

(2) Committee to Review the Functioning of Financial Institutions (Wilson Committee), "The Financing of Small Firms", Cmnd. 7503, London: HMSO, 1979, p. 23.

(3) Calculated as $\frac{\text{total borrowing}}{\text{equity capital}}$.

(4) Robson Rhodes, "A Study of Businesses Financed under the Small Business Loan Guarantee Scheme", London: Department of Trade and Industry, 1984, p. 7.

Table 4.2. Small-business capital gearing in the U.K., 1983.

Capital Gearing*	New %	Existing %
Less than 1 : 1	8	8
1 : 1 to 2 : 1	4	29
2 : 1 to 3 : 1	8	17
3 : 1 to 4 : 1	6	6
4 : 1 to 5 : 1	8	3
5 : 1 to 10 : 1	14	3
10 : 1 to 20 : 1	2	–
Over 20 : 1	4	–
Infinite (negative shareholders' funds)	46	34
Total	100	100

* Calculated as $\frac{\text{total borrowing}}{\text{equity capital}}$

Source: Robson Rhodes, "A Study of Businesses Financed under the Small Business Loan Guarantee Scheme", London: Department of Trade and Industry, 1984, p. 104.

This table shows that: (a) new businesses tend to be highly geared as compared with existing businesses; (b) gearing ratios, in general, significantly exceed the limits required by the U.K. banks in the 1970s (1:1); and (c) a considerable percentage of small businesses, especially new ones, employed excessive borrowing, so much so that they became insolvent (negative shareholders' funds). These phenomena imply either that financial institutions have violated sound lending practices, depending on the Government's guarantee of the repayment of 80 percent of loans, or that small businesses have abused the Scheme, depending also on the Government's guarantee. Even so, these businesses cannot be considered to represent all U.K. small businesses; the reason is that, at the time of the above-mentioned study, small businesses in the U.K. were estimated to amount to one and a quarter million of which only one percent have received a scheme loan.[5]

(5) Ibid., p. 3.

An interesting study of small business finance was conducted recently in twelve countries, some of which were developed and others developing countries. Some of the findings of this study are:[6]

(a) Capital structure of growing firms varies directly with age and size of the firm and with the level of economic development of the country.

(b) In the early stages of growth, the firms are less dependent on bank borrowing and more dependent on relatives/friends and personal equity capital; this phenomenon is more noticeable in developing countries.

(c) As the small firm grows, in size or age, more financing options become available to it.

Small-business dealing with banks, according to the above-mentioned study, is shown in the following table:

(6) Rein Peterson and Joel Shulman, "Capital Structure of Growing Small Firms: A 12-Country Study on Becoming Bankable", International Small Business Journal, (5) no.4, 1987, p. 11.

Table 4.3. Percentage distribution of firms which depend on bank credit

Host country	Number of employees	
	5–20	Moré than 50
West Germany	88	90
Canada	67	74
U. K.	72	100
U. S. A.	62	77
Spain	50	57
Netherlands	61	71
Japan	67	85
Cameron	54	75
Colombia	55	87
Brazil	35	63
Indonesia	33	59
Kenya	32	65
All countries	57	75
Developed countries	70	83
Developing countries	43	67

Source: Rein Peterson and Joel Shulman, "Capital Structure of Growing Small Firms: A 12-Country Study on Becoming Bankable", International Small Business Journal. (5) no.4, 1987, p. 13.

This table shows that firms with 5–20 employees are, generally, less dependent on bank credit than those with more than 50 employees. In the developed countries, the majority of both size groups depends on bank credit, 70 percent of the former group and 83 percent of the latter (only in the U.K. do all firms with more than 50 employees deal with banks). For developing countries, less than half of the firms with 5–20 employees and two thirds of the other group depend on bank credit. Hence, small-business capital structure is expected to be dominated by equity capital and non-institutional credit; the expected reasons are mentioned at the beginning of this section. If less dependence on bank credit

makes these businesses less vulnerable to financial risk, it may deter their growth because: (a) non-institutional credit may be less sufficient than bank credit; and (b) loan financing is the cheapest source of finance as will be discussed below.

4.2. Cost of Capital:

The common objective of any business enterprise is to maximise its value to its shareholders, *i.e.* to maximise its share price in the capital market. To achieve this objective, the firm has to choose investment projects whose cash inflows exceed the cash outlay required for these investments. As cash inflows will be realised in the future, they must be discounted to the present in order to compare their present value with the cash outlay. The discount rate used in this process is the cost of capital to the firm; and this discount rate is a weighted average of the individual costs of the different sources used in financing the investment.

4.2.1. The Weighted Average Cost of Capital:

As mentioned earlier, the main sources of finance are ordinary shares, preference shares and debt. If a certain firm or investment project is financed with only one of these sources, then the cost of capital to this firm or project is the cost of the particular source used in its financing. On the other hand, if a certain firm or investment project is financed with more than one of these sources, then the cost of capital to this firm or project is the average cost of the particular sources, weighted according to their relative percentages in the firm's capital structure. Hence, to arrive at the weighted average cost of capital, the cost of each individual source must be calculated first.

Cost of ordinary shares: As ordinary shareholders are entitled to all the remaining profits after satisfying all other claims, then the cost of these shares to the firm can be simply regarded as the distributable profits related to the value of ordinary shares. In other words, what represents a cost to the firm represents, at the same time, a return to the investors. However, firms do not often dis-

tribute all the achieved profits but, rather, they retain part of these profits to be reinvested in the firm. The retention of profits means that the firm deprives the investors from reinvesting their profits either in the firm's shares or elsewhere with the same risk. Accordingly, the investors expect the firm to reinvest the retained profits in such a way as to yield at least the same rate of return on their investment in ordinary shares, in order to offset the lost opportunity of investing the profits elsewhere.

Nevertheless, the cost of ordinary shares if often regarded, in the financial literature, as the cost of equity capital. This is implied by the incorporation of the cost of ordinary shares and the cost of retained profits. In this context, however, the cost of ordinary shares will not be referred to as the cost of equity capital because preference shares are regarded as part of equity capital, and the cost of the these shares is calculated in a different way as will be discussed below. The cost of ordinary shares is calculated as follows:

$$C_o = \frac{D}{P} + G$$

where:

C_o = cost of ordinary shares

D = the expected dividend per share

P = the market price per share

G = the expected rate of growth in dividends

For example, if the market price per share is £100, the expected dividend per share is £12 and the expected rate of growth in dividends is 5 percent, then the cost of ordinary shares is:

$$C_o = \frac{12}{100} + 0.05 = 0.17 \quad \text{or} \quad 17 \text{ percent}$$

Using the Capital Asset Pricing Model (CAPM), the cost of ordinary shares

can be calculated as follows:

$$C_o = RF + \beta(RM - RF)$$

where:

C_o = cost of ordinary shares

RF = risk-free rate of return

β = a coefficient calculated to reflect the risk associated with investing in the firm's shares

RM = the market return on a portfolio of securities

$(RM - RF)$ = the risk premium required by investors in the market

For example, if the return on treasury bills is 10 percent (risk-free rate of return), the market return is 16 percent and β for the particular firm is 1.2, then the cost of ordinary shares is:

$$C_o = 0.10 + 1.2(0.16 - 0.10) = 0.172 \quad \text{or} \quad 17.2 \text{ percent}$$

Cost of Preference Shares: The cost of preference shares is, simply, the annual fixed dividend on each share. This dividend can be designated either as a fixed amount of annual dividend or as a percentage of the share's par value. If the par value of a preference share is £20 and the annual dividend percentage is 15 percent, then the annual dividend per share is $20 \times 0.15 = £3$ and the cost of preference shares to the firm is 15 percent. Equivalently, if the par value of a preference share is £20 and the annual dividend per share is £3, the cost of preference shares to the firm is:

$$C_r = \frac{D}{P} = \frac{3}{20} = 0.15 \quad \text{or} \quad 15 \text{ percent}$$

where:

C_r = cost of preference shares

D = the annual dividend per share

P = the par value per share

However, this equation is not always true because the firm usually incurs the costs of floating a preference-share issue. These floatation costs make the net proceeds from a preference-share issue less than the par value of the shares, thus raising the cost of these shares to the firm (the same applies to ordinary share-issues). In this case, the net proceeds from the sale of a share must be employed in calculating the cost of preference shares as follows:

$$C_r = \frac{D}{P - F}$$

where:

C_r = cost of preference shares

D = the annual dividend per share

P = the par value per share

F = the floatation cost per share

For example, if the par value of a preferene share is £20, the annual dividend is £3 and floatation cost per share is £2, the cost of preference shares is:

$$C_r = \frac{3}{20 - 2} = 0.167 \quad \text{or} \quad 16.7 \text{ percent}$$

Cost of Borrowing: The cost of borrowing, in general, is the interest charged on loans; nevertheless, this cost is not as simple as it seems to be. For example, if a certain firm wants to obtain a loan via the floatation of a bond issue, this firm will incur the floatation costs which make the net proceeds from the issue less than the par value of the issued bonds. In this case the cost of borrowing is calculated as follows:

$$C_b = \frac{R}{P - F}$$

where:

C_b = cost of borrowing

R = the interest due on each bond

P = the par value per bond

F = the floatation cost per bond

For example, if the par value per bond is £50, the interest rate is 10 percent and the floatation cost per bond is £3, then the interest due on each bond is $50 \times 0.10 = £5$, and the cost of borrowing is:

$$C_b = \frac{5}{50 - 3} = 0.1064 \quad \text{or} \quad 10.64 \text{ percent}$$

From the standpoint of business enterprises, the above-mentioned cost of borrowed funds does not represent the "real" cost of these funds because interest payments are deductible expenses for tax purposes. In other words, when a firm deducts interest payments in the profit-and-loss account, it reduces the taxable profits and, hence, pays less taxes than otherwise would be the case. This deduction makes the *real* interest less than the *nominal* interest on the borrowed funds, and this real cost of borrowing is calculated as follows:

$$C_b = R(1 - T)$$

where:

C_b = cost of borrowing

R = the interest rate on borrowed funds

T = the corporate tax rate

For example, if the interest rate on borrowed funds is 13 percent and the corporate tax rate is 40 percent, then the real cost of borrowing is:

$$C_b = 0.13(1 - 0.40) = 0.078 \quad \text{or} \quad 7.8 \text{ percent}$$

In this case, the firm achieves a tax saving of the corporate tax rate times the

interest on borrowing or $0.13 \times 0.40 = 0.052$ or 5.2 percent. Equivalently, if the borrowed amount is £10,000 and the interest rate is 13 percent, then:

The interest due $= 10,000 \times 0.13 =$ £1,300

The tax saving $= 1,300 \times 0.40 =$ £520

Then, the real interest payment $= 1,300 - 520 =$ £780

In this regard, it is worth mentioning that not all firms benefit from the tax saving resulting from borrowing. The reason is that the firm might incur loss or its profits might not reach the threshold of corporate tax; therefore this firm will not pay taxes and there will be no tax saving.

After calculating the cost of each individual source, the average cost of capital to the firm can be calculated by multiplying the cost of each source by its relative weight in the firm's capital structure. This will be done by assuming that XYZ firm has the *following capital structure:*

XYZ capital structure	£000
Ordinary shares	50
Preference shares	10
Borrowing (at a 13 percent interest rate)	40
Total capital and liabilities	100

The total book value of this firm is £100 thousand (total assets or total capital and liabilities), and this value will be used in calculating the weight of each source of finance which produces the following average cost of capital:

$$K = C_o\left(\frac{o}{V}\right) + C_r\left(\frac{r}{V}\right) + C_b\left(\frac{b}{V}\right)$$

where:

K = the weighted average cost of capital

V = the total value of the firm

C_o = cost of ordinary shares

o = the value of ordinary shares

C_r = cost of preference shares

r = the value of preference shares

C_b = cost of borrowing

b = the value of borrowed funds

If the cost of ordinary shares is 17 percent, the cost of preference shares is 16 percent and the cost of borrowing is 8 percent, the weighted average cost of capital, K, is calculated as follows:

$$K = 0.17\left(\frac{50}{100}\right) + 0.16\left(\frac{10}{100}\right) + 0.08\left(\frac{40}{100}\right)$$

$$= 0.17 \times 0.50 + 0.16 \times 0.10 + 0.08 \times 0.40 = 0.133 \quad \text{or} \quad 13.3 \text{ percent}$$

From the previous equation, the cost of capital to XYZ firm is 13.3 percent; and this means that this firm should use a discount rate of 13.3 percent in calculating the present value of cash inflows generated from its investments. In other words, 13.3 percent is the minimum rate of return which XYZ should earn on its investments in order to maintain its value in the capital market.

4.2.2. Optimal Capital Structure:

It is worth mentioning that the weighted average cost of capital, as discussed above, can be considered a "historical" cost which may not represent the true cost of capital because:

(a) The weighted average cost of capital represents the cost of financing sources already used, and this makes it valid for the appraisal of existing investments while the cost of financing new investments may be more or less different.

(b) Book values, of the different financing sources, were used in calculating the weighted average cost of capital, and these values may differ from the "current" market values at which any new financing will be made.

(c) The weights used in calculating the average cost of capital imply that the existing capital structure is optimal, and any future financing will be made in the same proportions.

Consequently, new investments will be financed with new capital whose cost may be different from the existing cost of capital; and this necessitates the use of the marginal cost of the incremental financing. For the weighted average cost of new financing to be marginal, the weights employed must be marginal in the sense that they must correspond to the proportions of financing sources the firm intends to employ.[7] In this respect, the firm is expected to intend to employ an optimal capital structure. But what is the optimal capital structure? The answer to this question will be cited after depicting the cost/return classification of different financing sources as follows:

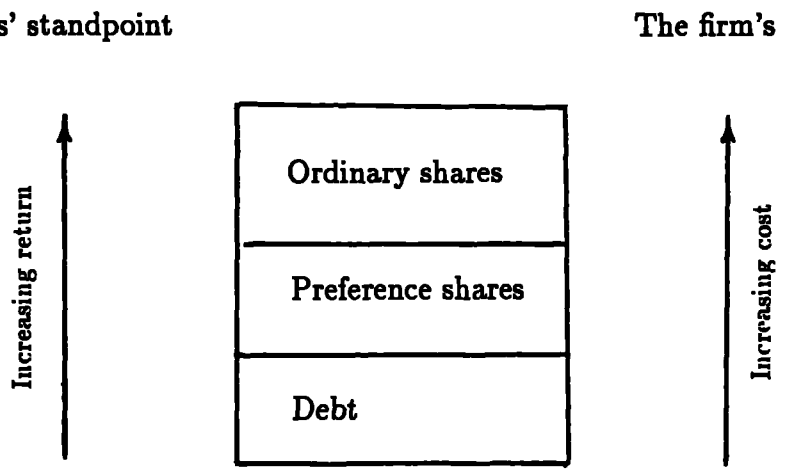


Figure 4.4. Cost/return classification of different sources of finance

From the firm's standpoint, the cheapest source is debt financing as its real cost is noticeably less than the nominal interest rate because of the tax saving discussed earlier. Preference shares are more expensive than loans, though they bear a fixed annual dividend, because the dividend on preference shares is an appropriation of profit rather than a deductible expense. As for ordinary shares,

(7) James C. Van Horne, op. cit., p. 222.

they are the most expensive source of finance because ordinary shareholders are entitled to all the remaining profits after satisfying both debtors and preference shareholders. From the investors' standpoint, bond issues have the least return, ordinary shares have the highest return and preference shares lie in between; the reason is the inverse relation between return and safety discussed earlier in this chapter.

For a firm which wants to minimise its cost of capital, the optimal capital structure might be regarded as an all-debt structure,*i.e.* the firm is entirely financed by borrowing. But this is not realistic, because both institutional and non-institutional lenders will not lend to the firm in the absence of a reasonable equity base. If the optimal capital structure is regarded as the structure with the possible maximum debt/equity ratio, this may have an adverse effect on both the cost of capital and the value of the firm in the capital market because: (a) increasing debt involves a higher financial risk, which gives shareholders cause to require higher rates of return on their shares; and (b) increasing debt adversely affects the firm's credit rating and, consequently, the lenders might charge the firm higher interest rates and/or impose some restrictive covenants on it.

If the optimal capital structure is regarded to minimise the cost of capital and maximise the value of the firm, each of these two requirements is a direct consequence of the other; this can be proved as follows:[8]

the value of the firm $V = D + E$

where:

D = the market value of the firm's debt

E = the market value of firm's equity

the weighted average cost of capital $P = K_i\left(\frac{D}{V}\right) + K_e\left(\frac{E}{V}\right)$

where:

(8) J. Board, "Corporate Borrowing Policy", in Michael Firth and Simon M. Keane (eds), Issues in Finance (Oxford: Philip Allan Publishers Ltd., 1986) p. 60.

P = the average return or capitalisation rate which represents the average returns on debt and equity

K_i = return on debt

K_e = return on equity

According to these equations, there is an inverse relation between the average cost of capital, P, and the total value of the firm V; accordingly, any capital structure which maximises V will also minimise P. In this regard, it can be argued that the value of the firm is affected by the firm's overall risk; *i.e.* business risk and financial risk. Hence, given a certain level of business risk, the optimal capital structure must achieve the following objectives simultaneously: (a) the maximisation of the firm's value; (b) the minimisation of the cost of capital; and (c) the minimisation of the firm's overall risk. When a firm decides what would be its optimal capital structure, it may face some discrepancies between the existing and the target capital structure; in this case there are two financing strategies:[9]

(a) If the firm is substantially below its target debt/equity ratio, the management might recapitalise by issuing new debt and purchasing its own ordinary shares with sale proceeds in order to achieve the target mix of equity and debt; or

(b) The management might finance new investments, with debt, in a gradual approach until it reaches the target capital structure; with either strategy, the target weights must be used to compute the marginal cost of capital.

One of the most important views, concerning the issue of optimal capital structure, is that of Modigliani and Miller[10] which is based on the following assumptions:

(a) Perfect capital markets under conditions of atomistic competition.

(b) The expected values of probability distribution of the returns on shares are

(9) Stephen H. Archer, G. Marc Choate and George Racette, Financial Management, 2nd ed. (New York: John Wiley and Sons, 1983) pp. 439-40 .

(10) Franco Modigliani and Merton Miller, "The Cost of Capital, Corporation Finance, and the Theory of Investment", American Economic Review, (XLVIII) no.3, June, 1958, pp. 267-72.

the same for all investors.

(c) Firms are divided into equivalent-return classes, and all shares of firms within a certain class are perfect substitutes for each other.

(d) No corporate income taxes; this assumption was relaxed later in the analysis.

Given these assumptions, and apart from the mathematical proofs, the view of Modigliani and Miller can be summarised as follows:

Proposition I: The market value of any firm is independent of its capital structure and is obtained by capitalising its expected return at a rate appropriate to its class. Equivalently, the average cost of capital to any firm is completely independent of its capital structure and is equal to the capitalisation rate of a pure equity stream of its class. The rationale of this proposition is what they call "the arbitrage process" in which an investor can sell the overpriced shares and buy the underpriced ones. As investors exploit these arbitrage opportunities, the value of the overpriced shares will fall and that of the underpriced shares will rise, thereby eliminating the discrepancy between the market values of the firms.

Proposition II: This proposition takes into consideration both the interest rate on debt and the financial risk. Accordingly, the expected yield of a share of stock is equal to the appropriate capitalisation rate for a pure equity stream in the class plus a premium, related to financial risk, equal to the debt-to-equity ratio times the spread between the capitalisation rate and the interest rate.

Depending on these propositions, Modigliani and Miller conclude that an optimal capital structure does not exist, as all structures are equivalent from the point of view of the cost of capital. Yet, they later recognised the tax saving which results from debt financing and admitted that the existence of debt in the firm's capital structure will cause the value of the firm to rise.[11]

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(11) Franco Modigliani and Merton Miller, "Taxes and the Cost of Capital: A Correction", American Economic Review, (53) June, 1963, pp. 433-43, cited in James C. Van Horne, op. cit., p. 255.

Nonetheless, the issue of optimal capital structure is still controversial and a comprehensive theory of the firm's capital structure seems to be unachievable in the near future because:

(a) All the attempts made so far to lay a basis for a theory of capital structure are based on theoretical assumptions which can hardly exist in the real world. The most important of these assumptions is the existence of perfect capital markets; but market imperfections do exist, such as transaction costs, bankruptcy costs, the unavailability of information to some investors and the existence of irrational investors.

(b) Theorists often assume that investors will act according to abstract formulae, but those investors may have subjective incentives to invest in certain securities; moreover, some investors might sell out certain securities merely because of rumours.

(c) Theorists assume that all types of finance are available to all firms at all times; but some firms, especially small firms, have limited access, or probably no access at all, to certain types of finance.

4.2.3. Agency Costs:

The agency theory regards the manager (or management) of a firm as an agent to the owners, in case of the separation of management from ownership, or an agent to outside owners in case of the firm being partially owned by the manager(s). The non-manager owners expect the manager to act in their interest, *i.e.* to take the decisions that maximise their wealth. Agency problems arise when the manager seeks his own interest by consuming part of the firm's resources in the form of non-pecuniary perquisites such as prestigious expenditure. In this case, the outside owners seek the necessary means which guarantee that the manager will act in their interest. Also, debtholders may become aware of the risky investments that the manager might undertake in anticipation of high profits. Such awareness, on the part of debtholders, stems from the fact that if the

firm goes bankrupt and the value of its assets substantially deteriorates, they may not realise the value of their debt. Consequently, debtholders seek the necessary means which restrict the manager's decisions in such a way as to minimise the probability of bankruptcy. The actions of both equity holders and debtholders involve different types of expenses called *agency costs.*

In their introduction to a theory of corporate ownership structure, Michael Jensen and William Meckling[12] regard agency costs as being the sum of the following costs:

(a) the monitoring expenditure incurred by the principal (the owner(s)) in order to limit divergences from his interest by establishing appropriate incentives for the agent and by observing, measuring and controlling his behaviour;

(b) the bonding expenditure incurred by the agent (the manager(s)) in order to guarantee that he will not take actions which would harm the principal, or ensure that the principal will be compensated if he takes such actions; and

(c) the residual loss which is represented in the reduction of the welfare experienced by the principal (expressed in pecuniary terms) as a result of the divergence between the agent's decisions and those decisions which would maximise the welfare of the principal.

Yet, there is another source of agency costs represented in informational asymmetry which means that the management possesses some information which is valuable but unavailable to the market; without such informatiron the market cannot identify the true nature of the project before it is undertaken.[13] According to this viewpoint, if this asymmetry is not resolved, the management will obtain less for the sold securities than the "fair value"; and the difference between the fair price and the actual price is the agency cost associated with informational

(12) Michael C. Jensen and William H. Meckling, "Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure", Journal of Financial Economics, (3), October, 1976. p. 308.

(13) Amir Barnea, Robert A. Haugen and Lemma W. Senbet, "Market Imperfections, Agency Problems and Capital Structure: A Review", Financial Management. Summer, 1981, p.9.

asymmetry.

If a certain firm is wholly owned by its manager, he will neither need any incentives nor will he require any monitoring in order to act in the interest of another party; accordingly, agency costs associated with outside equity are zero. In partially-owned firms there is an inverse relation between the owner-manager's share in the firm's equity and his incentive to consume part of the firm's resources in the form of perquisites and, consequently, the need to monitor his behaviour. Thus, the more the manager's share in the firm's equity the less the agency costs associated with outside equity and vice versa. On the other hand, if a firm is wholly owned by people who are not involved in its management, they will hire a professional management team who require more monitoring costs than would otherwise be the case. In this case, it is expected that the managerial labour market will exert some pressures on the firm to sort and compensate managers according to their performance; these pressures can be in different forms such as:(14)

(a) Potential new managers are concerned with the mechanics by which their performance will be judged, and they seek information about the responsiveness of the system in rewarding their performance.

(b) In the existence of a competitive managerial labour market, if the firm's reward system is not responsive to performance, the firm loses managers and the best are the first to leave.

Agency costs associated with debt are represented in the inclusion of different covenants in the indenture provisions, which enable bondholders to limit the management's behaviour. The costs involved in this case are the costs of writing the detailed provisions, the costs of enforcing them and the reduced profitability of the firm because of the limited ability of the management to take optimal deci-

(14) Eugene F. Fama, "Agency Problems and the Theory of the Firm", in Michael C. Jensen and Clifford W. Smith, Jr. (eds), The Modern Theory of Corporate Finance (New York: McGraw-Hill Book Co., 1984) p. 138.

sions in certain issues.[15] There are also bankruptcy costs which increase as the probability of bankruptcy increases; these costs are represented in the difference between the face value of debt claims and the value realised from the sale of the firm's assets after deducting all legal and other expenses. If debtholders are aware of these costs, they will pass them to the owner(s) in the form of reduced prices for debt claims.

4.2.4. Small-Business Cost of Capital:

One of the perspectives that may be adopted in assessing the cost of capital to small businesses is the comparison with large businesses, *i.e.* discussing the size-related factors that affect the cost of capital. In this regard, two main factors may contribute to raising the cost of capital to small businesses: (a) the costs of floating small security issues are higher, as a percentage, than those of floating large security issues; and (b) the cost of bank loans is relatively higher for small businesses as transaction costs do not vary proportionately with loan size. Another factor is the location of the business, especially retail establishments, which might add more risk to the business, thereby raising its cost of capital.[16] In other words, location is vital for retail establishments, and mistakes in forecasting the location success are costly for a single-outlet retailer compared with a chain of retailers which has more flexibility in changing the location.

The cost of capital to small businesses can, also, be assessed from the perspective of agency costs especially those associated with informational asymmetry. In this respect, it is argued that the small firm has a greater ability and a greater incentive to take actions which transfer wealth from its creditors. This will increase agency costs of debt which will have two effects: first, an increase in the direct cost of borrowing when lenders demand high interest rates; and second,

(15) Michael Jensen and William Meckling, op. cit., p. 338.

(16) Roland I. Robinson, "The Financing of Small Business in the United States", in Stuart W. Bruchey (ed.), Small Business in American Life (New York: Columbia University Press, 1980) p. 285.

an increase in the indirect cost of borrowing represented in restrictive covenants which limit the management's ability to operate efficiently; and this will lead to a decrease in the firm's value.[17] Also, the cost of equity capital may be higher when asymmetric information is severe; this happens when some small firms have superior investment opportunities but have trouble in conveying such information to outsiders.[18] In this case, new equity issued at "low" market prices will dilute the original-equity value and raise the cost of equity capital.

For the small firm which is wholly owned by its manager, it might be argued that the cost of equity capital to such a firm is relatively low, as agency costs associated with equity financing are virtually nil. Such an argument may be questionable because the sole owner-manager incurs an implicit cost in order to avoid the agency costs associated with external equity financing. Such an implicit cost is represented in sacrificing some, or even all, of life's luxuries in order to be more devoted to his business as well as saving money to be reinvested in the business.

(17) R. Richardson Pettit and Ronald F. Singer, "Small Business Finance: A Research Agenda", Financial Management, Autumn, 1985, p.55.

(18) S.C. Myers and N.S. Majluf, "Corporate Financing and Investment Decisions when Firms have Information that Investors do not have", Journal of Financial Economics, June, 1984, pp.187-222, cited in Ibid., p. 56.

Chapter Five

The Egyptian Economy: An Overview

5.1. Agriculture

5.1.1. Land Ownership

5.1.2. Land Reclamation

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5.4. The Open-Door Economic Policy

5.5. Current Status and the Future

5.5.1. The Current Status of the Egyptian Economy

5.5.2. Future Expectations for the Egyptian Economy

Although Egypt is considered as a developing country, it is more developed than most Arab countries in terms of economic structure as its economic base is more diversified. In comparison with other Arab countries, there are several favourable factors from the point of view of development. These factors are:[1]

(a) The labour participation rate of 33.5 percent is the highest in all Arab countries.

(b) The University attendence is higher than that in other Arab countries.

(c) Egypt's population accounts for 40 percent of the population of the Arab East and 36 percent of the total Arab population in its widest definition (including Somalia).

(d) Egypt is the only Arab country which has a long industrial tradition and a diversified industrial structure; in this regard it is the most advanced of all Arab countries.

(e) The percentage of Gross Domestic Product (GDP) accounted for by the manufacturing sector in Egypt is the highest in the Arab world.

On the other hand, the rapid increase in Egypt's population has its adverse effects on the development plans and the country's foreign trade. According to the latest census, in 1986, Egypt's population amounted to 50.5 million including 2.25 million Egyptians abroad.[2] Given an annual increase of 2.8 percent, Egypt's population is expected to exceed 70 million by the end of the century. Of the total area of 386,000 square miles (about one million square kilometers) only 4 percent is inhabited and cultivated and the rest of Egypt is mainly desert. This gives an average population density of 48 persons per square kilometer, and a population density of 1,170 persons per square kilometer for the inhabited area. These factors explain why the Government is undertaking significant programmes

(1) Roberto Aliboni et al. (eds). Egypt's Economic Potential (London: Croom Helm, 1984) pp. 84-5.

(2) Central Agency for Public Mobilisation and Statistics (CAPMS), Statistical Year Book: 1952–1987 (Cairo: CAPMS, 1988) (in Arabic) p. 19.

in the following areas:

(a) Land reclamation in order to expand the cultivable territory.

(b) Birth control measures in order to curb the population increase.

(c) Erecting new cities in the uninhabited areas in order to lessen the pressure on the Nile Valley and the Delta.

5.1. Agriculture:

The agriculture sector used to be and still remains the most important sector in the Egyptian economy. During the eighteenth century the few crops grown in Egypt were mainly for the consumption needs of the limited population. During the nineteenth century, agriculture in Egypt witnessed considerable development thanks to the efforts of Mohammed Ali who achieved substantial changes in the agricultural sector; his achievements included:[3]

(a) The introduction of cotton cultivation in the Nile Delta.

(b) The introduction of new varieties of cotton.

(c) Raising and strengthening the banks of the Nile river in order to protect summer crops from flood water.

(d) Deepening the Delta canals to ensure an adequate water supply during the whole year.

(e) Building dams across these canals to raise the water level.

5.1.1. Land Ownership:

Before 1952 there was an obvious maldistribution of land ownership among Egyptians. In 1913, 0.8 percent of land owners held 44.2 percent of the land; at the same time 91 percent of the proprietors owned 26 percent of the land.[4]

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(3) Charles Issawi, Egypt at Mid-Century: An Economic Survey (London: Oxford University Press, 1954) pp. 21-2; Richard F. Nyrop (ed.), Egypt: a Country Study (Washington, D.C.: Department of Army, 1983) pp. 16-17.

(4) Khalid Ikram (Coordinating Author), Egypt: Economic Management in a Period of Transition (Published for the World Bank, Baltimor: the Johns Hopkins University Press, 1980) p. 13.

In 1947, more than 70 percent of proprietors owned one feddan or less and their total holdings accounted for one eighth of the cultivated land.[5] By the 1950s, 3 percent of land owners held 55 percent of the cultivated land, and the 60 largest owners held farms averaging almost 2000 hectares while most farms were below 2 hectares.[6]

In 1952, the Revolution's Government turned its first attention towards the agricultural sector in order to diminish the difference between large and small land holdings. The first measure taken in this respect was the Land Reform Law no. 178 of 1952 which limited the land holding to 200 feddans per person. The implementation of this law resulted in a considerable change in the structure of land holdings, as the owned land was redistributed in such a way as to give landless farmers the chance to be land owners. Moreover, in 1961 Land Reform Law no. 127 was passed to limit land holding to 100 feddans per person, thus adding a further adjustment in the structure of land ownership. The distribution of land ownership in Egypt, after the implementation of this law, is shown in the following table:

(5) Richard Nyrop, op. cit., P.132.
(6) Rodney Wilson, Trade and Investment in the Middle East (London: the Macmillan Press Ltd., 1977) p. 23.

Table 5.1. Distribution of land ownership in Egypt after the implementation of the Land Reform Law no. 127 of 1961

Bracket	Land owners		Area owned	
	Thousand persons	%	Thousand feddans	%
Less than 5 feddans	2,919	94.1	3,172	52.1
5 feddans –	80	2.6	526	8.5
10 feddans –	65	2.1	638	10.6
20 feddans –	26	0.8	818	13.5
50 feddans –	6	0.2	430	7.1
100 feddans –	5	0.2	500	8.2
Total	3,101	100	6,084	100

Source: CAPMS, Statistical Year Book: 1952–1983 (Cairo: CAPMS, 1984) p. 75.

This table shows that the structure of land ownership in Egypt, after 1961, is quite different from that which prevailed before 1952, as small ownerships are the dominant brackets in terms of both the number of owners and the owned area. On the one hand, owners of less than 5 feddans acount for 94.1 percent of total land owners and 52.1 percent of the owned area; on the other hand, owners of 100 feddans account for only 0.2 percent of total land owners and 8.2 percent of the owned area. In this regard, it can be claimed that such a measure may be welcomed from the standpoint of social justice, but the advantages are doubtful from the standpoint of economies of scale. In other words, the breaking of land ownership into small properties may make it difficult to use modern technologies in the cultivation of land. As shown in table 5.1, the first bracket is represented by 2,919 thousand owners of 3,172 feddans; this gives an average of 1.1 feddans per person. In this case the mechanization of agriculture may raise the cost of production so that it may become prohibitive.

5.1.2. Land Reclamation:

Given the limited cultivated area and the increasing population, land reclamation represents a central target for the Government in order to increase the agricultural production and, simultaneously, create new jobs in rural areas. In fact land reclamation in Egypt started as early as the nineteenth century when the successive Governments' attention was directed towards the desert in order to increase the cultivable area. Between 1892 and 1952, 400 thousand feddans were reclaimed by the Government, large landlords and specialized companies.(7) After 1952 more attention was given to land reclamation, and the total reclaimed area between 1952 and 1986/87 amounted to 1,293.9 thousand feddans; 63.5 percent of this area was reclaimed between 1952 and 1967/68, and 36.5 percent was reclaimed between 1968/69 and 1986/87.(8) The currrent Five-Year Plan (1987/88–1991/92) estimates the reclaimable area until the year 2002 to be 2,818.1 thousand feddans.(9) The area to be reclaimed during the Plan is 627 thousand feddans; this area is distributed as 137 thousand feddans to be reclaimed by the private sector, and 490 thousand feddans to be reclaimed by the Government.(10) By 1992 the cultivable area is expected to be 6,466.6 thousand feddans, which is the sum of the currently cultivated area (5,839.6 thousand feddans) and the area to be reclaimed during the plan (627 thousand feddans). In fact the cultivated area does not represent the cropped area, as more than one crop can be cultivated each year. For instance, the cultivated area in 1987 was 5,839.6 thousand feddans while the cropped area was 11,184.9 thousand feddans (*i.e.* the cropped area is almost double the cultivated area); hence, the expected cropped area in 1992 is about 12,933 thousand feddans. In this respect, the question which arises is: does this mean that Egypt is self sufficient in the agricultural

(7) Robert Mabro, The Egyptian Economy: 1952–1972 (London: Oxford University Press, 1974) p. 98.
(8) Calculated from CAPMS (1988), P.82.
(9) The Five-Year Plan: 1987/88–1991/92, Cairo: Ministry of Planning, 1988, p. 464.
(10) Ibid., p. 468.

production? The answer is no because Egypt imports more than 70 percent of its needs of wheat, albeit it exports other kinds of crops especially cotton, fruit and vegetables.

5.2. Industry:

Egypt has a long industrial tradition which has resulted in a diversified industrial base and experienced entrepreneurs. During Mohammed Ali's reign (1805–1849) many industries were established in Egypt, but this period was characterized by the State ownership of almost all industries, and this resulted in a limited share of the private sector in the industrial activity. Although Mohammed Ali's main purpose was to supply the army and navy with the necessary equipment, there were many civil industries such as textiles, sugar, oil, paper ... etc. Besides the provision of equipment and other commodities to the army, the industrialization during Mohammed Ali's reign had other indirect benefits such as reducing imports and providing the Treasury with new revenue. Nevertheless, this industrialization attempt failed because of several reasons such as:[11]

(a) The quality of many manufactured goods was inferior and the costs of production were higher than in Europe.

(b) There was European interference in Egypt, which was not allowed to protect its own industries from European competition.

(c) The ineffectiveness of the State in controlling the economy and implementing policy.

(d) The inability to create institutions that could ensure the efficient performance of the economy.

(e) Resources were diverted to the military establishment and industry suffered from labour shortages and financial restraints.

(f) There was a difficulty in resolving the conflict between related development

(11) Robert Mabro and Samir Radwan, The Industrialization of Egypt 1939–1973: Policy and Performance (Oxford: Clarendon Press, 1976) pp. 16-18.

objectives competing for scarce resources.

5.2.1. The Evolution of Private-Sector Industry:

After the experiment of Egypt's industry under Mohammed Ali, the Egyptian economy had become export-oriented. Cotton was the main component of Egypt's exports, and most of the limited number of industries established then were related to cotton. In order to give impetus to industry, the private sector was encouraged through foreign investment in Egypt. The introduction of foreign investment to Egypt had its negative effects on the economy due to the remission of capital abroad and payment on foreign debt contracted by private investors.

In 1920 Banque Misr (Bank of Egypt) was established as the first indigenous bank to be wholly owned by Egyptians. The main concern of Banque Misr was to sustain the then existing industrial companies as well as establishing new ones, especially textile companies. Also, the establishment of Banque Misr encouraged wealthy Egyptians to establish industrial firms, as the Bank was their prospective source of finance. The involvement of Banque Misr in the establishment of industrial companies was well regarded by the Egyptians, as such involvement was envisaged as a good support to the economy in general and the industrial sector in particular. However, the outbreak of World War II had its negative effects on world economies, especially the banking sector, and Bank Misr faced a liquidity crisis in 1940 which was overcome thanks to the Government's intervention to sustain the Bank. After the crisis of 1940, the "aggressive" investment policy of Banque Misr was held back, and it could not regain power until the mid-1950s.

On the whole, during the 1930s and 1940s Egyptian industry experienced some positive and some negative consequences of the Great Depression and World War II; these are:[12]

(a) The emergence of skilled workers and foremen, as the Allied armies employed

(12) Adapted from Khalid Ikram. op. cit.. p. 236.

100,000–200,000 men in various plants and workshops.

(b) The emergence of entrepreneurial talent in response to import shortages.

(c) The experiences of the Great Depression and World War II reinforced import-substituting industrialization, as entrepreneurs and capitalists acquired better knowledge about the local market and its needs.

(d) During the War Egyptian industry gained some protection from foreign competition due to the disruption of foreign trade.

(e) On the other hand, the disruption of foreign trade prevented Egyptian industry from importing equipment and spare parts necessary for new investment and the replacement of worn-out machinery.

5.2.2. The Emergence of Public-Sector Industry:

Until mid-1950s the private sector dominated Egyptian industry, as well as other aspects of the economy, and the State ownership was confined to a limited number of industries as well as infrastructure and social services. In 1957 the Government took some measures to reduce the existence of foreign investments in the country; these measures were known as the "Egyptianization". Egyptianization means transferring the ownership of companies from foreigners to Egyptians, *i.e.* the shares of joint ventures and foreign companies were transferred from foreigners to Egyptians. In 1960 a wave of nationalizations began, starting with banks and insurance companies and extending to industrial companies.

By and large, the 1960s witnessed the transformation of the Egyptian economy from an economy dominated by the private sector to an economy dominated by the public sector. The dominance of the public sector resulted in a planned economy; the first Five-Year Plan (1960–1965) was successful, but the second one never took place due to the 1967 war and the mobilization of resources to rebuild the army. The dominance of the public sector can be demonstrated via its share in gross value-added in the manufacturing industry as shown in the following table:

Table 5.2. Public sector's share in gross value-added in manufacturing, 1966/67 (percentage)

Manufacturing establishments employing 10 persons and more		All manufacturing establishments	
Industry	Public sector's share	Industry	Public sector's share
Petroleum	100	Petroleum	100
Electrical machinary	97	Tobacco	94
Basic metals	96	Basic metals	94
Tobacco	96	Chemicals	94
Textiles	95	Rubber	93
Paper	95	Textiles	92
Rubber	95	Paper	91
Chemicals	95	Electrical machinery	90
Beverages	91	Beverages	88
Transport equiment	88	Non-electrical machinery	75
Non-electrical machinery	86	Non-metalic products	65
Food	81	Food	60
Metalic products	79	Transport equipment	59
Non-metalic products	79	Metalic products	51
Furniture	72	Leather	20
Wood	68	Furniture	20
Wearing apparel	66	Wood	20
Leather	47	Wearing apparel	14
Printing	16	Printing	14

Source: Robert Mabro and Samir Radwan, The Industrialization of Egypt 1939–1973: Policy and Performance (Oxford: Clarendon Press, 1976) p. 97.

Table 5.2 shows that the various groups of manufacturing industry are dealt with in the context of establishments employing 10 workers or more (usually referred to as the "modern sector" or the "formal sector"), and in the context of all manufacturing establishments including those employing less than 10 persons (usually referred to as the "informal sector"). If dominance is deemed to mean a share in gross value-added of more than 50 percent, public-sector dominance of the manufacturing industry is obvious in both categories of establishments. However, the dominance of the public sector is more obvious in establishments employing 10 persons or more than it is in all manufacturing establishments; the reasons may be:

(a) The relatively large size of public-sector companies, as the nationalization measures concentrated on large companies rather than small ones.

(b) The tendency of private-sector establishments to be more concentrated in the informal sector.

(c) The limited room left for the private sector in economic activities in general and in industrial activities in particular.

In terms of industrial activities, table 5.2 shows that the public sector's share in gross value-added ranged between 100 percent in petroleum and 14 percent in wearing apparel and printing. Within this range the private sector dominated some activities, namely leather, furniture, wood, wearing apparel and printing; the reason may be that these activities are relatively easy to enter, and they do not require a significant capital outlay. On the whole, the average share of the public sector in gross value-added is 81.16 percent for establishments employing 10 persons or more, and 64.95 percent for all manufacturing establishments. This is evidence of the overwhelming role of the public sector and the minor role of the private sector, which prevailed during the 1960s and the early 1970s.

5.3. Banks:

Egyptian banks, like other institutions in the country, experienced different stages of ownership. The evolution of the Egyptian banking sector seems to follow the same pattern as other sectors, especially the industrial sector. In fact this is not unusual, as the banking sector represents the main source of finance for all economic activities, and it is the first sector to attract any government's attention when it decides upon any measures to be implemented in the economy.

5.3.1. The Dominance of Private-Sector Banks:

Until the late 1950s the Egyptian banking sector was dominated by privately-owned banks. Moreover, almost all these institutions were either branches of foreign banks or foreign-owned ones initiated in Egypt. The main banks established in Egypt, until 1920, are shown in the following table:

Table 5.3. The main banks established in Egypt until 1920

Year of establish-ment	Institution	Location	Ownership
1856	The Egyptian Bank	Cairo	Foreign-owned
1864	The Anglo-Egyptian Bank	Cairo	Sponsored by Agra and Mastermans Bank (an important Anglo-Indian concern) and a French finance company
1867	The Ottoman Bank	Alexandria	a branch of the Ottoman Bank
1870	The Yokohama Specie Bank	Cairo	Japanese branch
1872	The Ottoman Bank	Port Saeid	a branch of the Ottoman Bank
1875	The Crédit Lyonnais	Port Saeid	an office of the Crédit Lyonnais
1880	Crédit Foncier Egyptien	Cairo	French
1881	Sociétté Financière	Cairo	French
1887	Cassa di Sconto e di Risparimo	Cairo	Italian
1887	The Ottoman Bank	Cairo	an office of the Ottoman Bank
1895	Bank d'Athenes	Cairo	Greek
1898	The National Bank of Egypt	Cairo	Mainly British-owned with the share of two local cotton exporting firms
1902	The Agriculture Bank	Cairo	owned by the National Bank of Egypt
1920	Banque Misr	Cairo	Egyptian

Source: Compiled from Rodney Wilson, Banking and Finance in the Arab Middle East (London: Macmillan Publishers, Ltd., 1983) pp. 19-29.

It is noticed in table 5.3 that Banque Misr was the only indigenous bank to be wholly owned by Egyptians; the rest of the banks were either foreign-owned or branches of foreign banks. Even the bank which bears the name of Egypt, *i.e.* the National Bank of Egypt, was mainly foreign-owned with limited participation of Egyptians. Apart from financing the cotton crop, foreign banks had little interest in the financing of productive sectors, mainly industry, due to the relatively high risk associated with financing such sectors. Consequently, foreign banks gave more attention to the financing of the trade sector, as the credit provided to this sector achieved a higher turnover and higher profits. The fact that the majority of banks were branches of foreign banks suggests that they had to operate according to the policies established by their headquarters abroad; such policies were deemed to comply with the interests of the banks rather than the interests of Egypt's economy.

5.3.2. The Emergence of Public-Sector Banks:

After the nationalization of the Suez Canal company and the tripartite aggression in 1956, the Government decided to restrict foreign interests in the country in general and in the banking sector in particular. In this regard Law no. 22 of 1957 was passed Egyptianizing all banks operating in Egypt; this law stipulated that banks' shares must be owned only by Egyptians. Also in 1957 Law no. 163 was passed in order to regulate banking and credit operations; in essence, this law established the rules that govern the functioning of the Central Bank as well as the banks to be registered with it.

However, it seems that the Egyptianization of the banking sector did not satisfy the Government's desire to control such an important sector; hence, the nationalization of the banking sector began in 1960. The nationalization of banks started with Banque Misr and the National Bank of Egypt (NBE) in 1960; in 1961 the rest of the banks were nationalized, and this process was accompanied by

some liquidations and amalgamations among small banks. By 1963 the Egyptian banking sector was brought under the control of the State, as it consisted of only public-sector banks. As far as the Central Bank was concerned, the NBE had been acting as a central bank until 1960 when the bank-note-issue department of the NBE was reconstituted as the Central Bank of Egypt (CBE), and the NBE continued to operate as a commercial bank.[13] The main drawback of nationalizing the banks was that they experienced a lack of flexibility, because these institutions had to comply with several laws that govern their functioning as banks and as public-sector entities.[14]

In 1964 a specialization measure was implemented amongst the Egyptian banks, known as the "sectoral specialization", according to which the banking operations of public-sector comapnies were distributed among commercial banks in order to concentrate the operations of each sector with one bank.[15] In 1971 some amalgamations among banks were implemented, in order to achieve more efficiency and benefit from the economies of scale. The Bank of Port Saeid was amalgamated with Banque Misr, the Industrial Bank was amalgamated with the Bank of Alexandria and the Crédit Agricole Hypothécaire d'Egypte (the Agricultural Hypothecary Credit [Bank] of Egypt) was amalgamated with the Crédit Foncier Egyptien (the Egyptian Real-Estate Credit [Bank]). Also in 1971 the sectoral specialization was abolished and substituted by the "functional specialization", according to which each bank was assigned the financing of a specific economic activity.[16] In this regard, the NBE was assigned the financing of foreign trade, Banque Misr was assigned the financing of home trade and agriculture, the Bank of Alexandria was assigned the financing of industry and the

(13) Law no. 250 of 1960, amended by Law no. 277 of 1960.
(14) Law no. 163 of 1957 concerning banks and credit, Law no. 58 of 1971 concerning civil employees, Law no. 60 of 1971 concerning public-sector companies and Law no. 61 of 1971 concerning public-sector employees.
(15) CBE, Economic Review, (XXIV) no. 3, Cairo: CBE, 1984, p. 284.
(16) Republican Decree no. 2422 of 1971.

Crédit Foncier Egyptien was assigned the financing of housing and construction. It is worth mentioning that such a specialization was applied to the banks' dealings with public-sector companies, and the private sector was left free to deal with all banks.

The implementation of the functional specialization among commercial banks was designed to achieve full control and coordination, among different sectors of the economy, within the context of a planned economy. Nevertheless, such a specialization brought about some negative consequences such as:[17]

(a) An unbalanced performance among banks, *i.e.* the bank which was assigned the financing of an activity which was in a continuous need of finance (*e.g.* industry) faced liquidity shortages. On the other hand, the bank which was assigned the financing of an activity which enjoyed a higher turnover (*e.g.* trade) experienced excess liquidity.

(b) The lack of a competitive spirit among these banks as regards public-sector customers. Also some banks did little to attract private-sector customers, as the financing of public-sector companies exhausted most of their resources.

In 1975, however, the functional specialization was abolished in order to give the banks more freedom in dealing with different sectors, and to revive the spirit of competition among these banks.[18]

5.4. The Open-Door Economic Policy:

Egypt was in a state of war from 1948 until 1973; during this period Egypt was involved in four wars, the last of them was in 1973. Egypt's involvement in these wars necessitated substantial amounts of military expenditure as shown in the following table:

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(17) Mahrous A. Hasan, "An Appraisal of Lending Policies in the Egyptian Commercial Banks" (Cairo: Ain Shams University. M.B.A. thesis, 1980) (in Arabic) p.150.

(18) Republican Decree no. 663 of 1975.

Table 5.4. The economic burden of defence expenditure in Egypt.

Year	Total spending ($million)	Spending per capita ($)	Percentage of GNP
1963/64	437	16	8.6
1968	690	22	12.5
1969	805	24	13.0
1970	1,262	38	19.6
1971	1,495	43	21.7
1972	1,510	43	20.2
1973	2,757	77	31.0
1974	3,117	111	22.8
1975	6,103	163	N. A.
1976	4,859	128	N. A.

N. A. = not available.

Source: Rodney Wilson, The Economies of the Middle East (London: The Macmillan Press Ltd., 1979) p. 33.

It is noticeable in table 5.4 that defence expenditure, both total and per capita spending, was increasing until 1975. In 1976 both total spending and spending per capita decreased; the reason is that military spending after 1973 was mainly for the substitution of equipment and rebuilding the army rather than preparing for a war. However, defence expenditure had obvious opportunity costs, as such expenditure could have generated extra production and extra income had it been used in other productive sectors. Moreover, the state of war had other indirect negative effects on other economic activities such as tourism and the Suez Canal which was closed during the period 1967–1975. On the other hand, defence expenditure, as a percentage of the Gross National Product (GNP), increased until it reached its peak in 1973 when it accounted for 31 percent of GNP. This is an indication of the magnitude of defence expenditure incurred during the period shown in table 5.4. By and large, the main consequences of incurring

such expenditure were the negative effects on the economy's performance and contracting foreign debt, especially military debt.

After the 1973 war, the Government reckoned that achieving a reasonable economic development and growth could not be achieved in the context of a socialist-oriented economy. Hence, it was decided to open the economy to Arab and foreign investors, as well as the indigenous private sector, via a policy known as the Open-Door Economic Policy (ODEP). In this respect a law was passed in 1974, known as Law no. 43 of 1974 concerning the investment of Arab and foreign funds and free zones, which was amended by Law no. 32 of 1977. The areas available for Arab and foreign investment are enumerated in the Law as follows:[19]

(a) Industry, mining, energy, tourism, transportation and other areas.

(b) Reclamation and cultivation of desert and barren land, animal husbandry and fishing projects.

(c) Housing and urban extension projects, which include the division of land and erecting new buildings and their public utilities.

(d) Investment companies whose objective is the investment of funds in the areas specified by this Law.

(e) Investment-and-business banks and reinsurance companies whose activities are confined to foreign-exchange transactions.

(f) Banks that undertake transactions in local currency, as long as they are joint ventures, with the local Egyptian share being not less than 51 percent.

(g) Construction activities outside the cultivated area and the boundaries of existing cities.

(h) Contracting activities undertaken by joint-stock companies with an Egyptian share of not less than 50 percent.

(i) Technical consultancy activities undertaken by joint-stock companies, provided

(19) Article 3 of Law no.43 of 1974, as amended by Law no. 32 of 1977.

that their activities are relevant to the areas enumerated in this Law.

It is noticeable that Arab and foreign investors can launch new projects in almost all areas of the Egyptian economy. Moreover, the Law established several incentives and guarantees in order to encourage different investors to invest their money in Egypt in compliance with the State's policies and plans. These incentives and guarantees are:[20]

(a) The projects are not to be nationalized or confiscated; also the assets of these projects cannot be seized, blocked or sequestrated without a judicial rule.

(b) Companies established according to the provisions of this Law will be considered as private-sector companies regardless of the legal status of indigenous participants; also the legislation and statutes that govern the public sector and its employees are not applicable to these companies.

(c) Companies established according to this Law are not obliged to observe Law no. 73 of 1973 concerning the conditions and procedures of electing workers' representatives to the boards of directors of public-sector companies, quoted companies and private societies and establishments. The companies' statutes shall provide for the workers' participation in their management.

(d) Projects established according to the provisions of this Law will be exempted from corporate tax and other taxes for a five-year period; this can be extended to eight years according to a proposal from the board of directors of the Public Authority for Investment and Free Zones (PAIFZ) and with the Cabinet's approval. Tax exemption will be for ten years for the projects engaged in reconstruction, land reclamation and erecting new cities outside the cultivated area and the boundaries of existing cities; this exemption may be extended to fifteen years by a Republican Decree based on a proposal from the board of directors of the PAIFZ.

The above-mentioned guarantees and incentives stimulated many investors,

(20) Articles 7,9,10 and 16 of Law no. 43 of 1974, as amended by Law no. 32 of 1977.

both indigenous and foreign, to launch new projects in Egypt. By the end of December 1987 there were 1,355 projects, established according to the forementioned Law, as shown in the following table:

Table 5.5. Projects established in Egypt under the provisions of Law no. 43 of 1974, as amended by Law no. 32 of 1977, until December 31, 1987.

Sectors	Number of projects	Authorized capital LE million	Target cost LE million
Industry	571	2,644.5	6,819.6
Finance*	256	1,829.0	2,050.1
Agriculture and livestock	105	349.3	760.9
Construction	197	688.0	1,494.4
Services	226	1,200.6	2,560.3
Total	1,355	6,711.4	13,685.3

* Embraces banks and investment companies

Source: Public Authority for Investment and Free Zones (PAIFZ), Cairo, 1988.

Table 5.5 shows that the projects started in the industrial sector outnumber the projects engaged in any other sector; if their percentage is calculated, the industrial projects will account for 42.1 percent of total projects. This seems to comply with the Government's policy of encouraging local industries in order to satisfy the local demand as well as that for export. On the other hand, the projects started in agriculture and livestock are the least numerous, as they account for only 7.8 percent of total projects. The reason for the smaller number of agricultural projects may be the relatively long period required for reclaiming the land and cultivating it. This does not affect the tax-exemption period, as this period starts from the beginning of the first financial year which succeeds the starting of the activity (according to the Law). In fact the agricultural sector needs more investment than any other sector, save industry, as the agricultural output, mainly from food crops, lags behind the population's needs. Also, as mentioned earlier,

the cultivated area represents only 4 percent of Egypt's total area; taking into consideration the annual increase in population, the importance of productive sectors is quite obvious. Concerning other sectors, the financial projects come in the second place (after the industrial projects), accounting for 18.9 percent of the total, service projects in the third place (16.7 percent) and construction projects in the fourth place (14.5 percent). In this regard, it is worth mentioning that of the 1,355 projects, 849 started their activities by December, 1987, accounting for 62.7 percent of total projects, and the rest are still under construction. Also, the highest percentage of the projects that started their activities is in the service sector (65 percent), and the lowest is in the agricultural sector (43.8 percent).[21] This may be due to the difference in the period required for them to materialize, which favours the service sector rather than the agricultural sector. Such a factor may be behind the Government's obvious involvement in land reclamation, from which the private sector often refrains.

5.5. Current Status and the Future:

5.5.1. The Current Status of the Egyptian Economy:

The current status of the Egyptian economy can be assessed by demonstrating the shares of different sectors in GDP as shown in the following table:

(21) Percentages are calculated *from more detailed data* collected from the PAIFZ, Cairo, 1988.

Table 5.6. Distribution of GDP in 1986/87, at 1981/82 prices

Sectors	LE million	%	Annual growth %
Agriculture	4,670.0	16.7	2.9
Industry and mining	4,128.7	14.8	7.3
Petroleum	3,866.5	13.8	(2.1)
Electricity	240.8	0.9	9.8
Construction	1,241.7	4.4	(2.5)
Total commodity sectors	14,147.7	50.6	2.3
Transportation and storage	2,176.9	7.8	6.1
Suez Canal	662.6	2.4	1.5
Trade	3,428.5	12.2	4.3
Finance	1,873.0	6.7	6.0
Insurance	46.9	0.2	7.1
Restaurants and hotels	299.4	1.1	16.1
Total productive services	8,487.3	30.4	5.3
Real estate	579.8	2.1	8.0
Public utilities	112.8	0.4	19.9
Social and personal services	1,190.0	4.2	7.5
Social insurance	46.4	0.2	17.8
Government services	3,393.0	12.1	7.4
Total social services	5,322.0	19.0	7.8
Grand total	27,957.0	100	4.2

() = negative growth

Source: The Five-Year Plan: 1987/88–1991/92, Cairo: Ministry of Planning, 1988, p. 29.

It is noticed in table 5.6 that commodity sectors account for more than half the GDP generated in the fiscal year 1986/87 (50.6 percent compared with 30.4 percent for productive services and 19.0 percent for social services). The agricultural sector has the highest share in GDP among commodity sectors (and all other sectors), accounting for 16.7 percent of GDP and the industrial sector

comes in the second place accounting for 14.8 percent. The annual growth in the agricultural sector (2.9 percent) is notably less than that of the industrial sector (7.3 percent). This may be due to: (a) industrial projects, stimulated by the ODEP, are more than fivefold the agricultural projects, as shown earlier in table 5.5; (b) many land reclamation projects have not materialized yet; and (c) the agricultural output is vulnerable to insects and changes in the weather. Also, it is noticed in table 5.6 that the annual growth in commodity sectors is less than that of other sectors (2.3 percent compared with 5.3 percent for productive services and 7.8 percent for social services). In fact the growth in commodity sectors was hindered by the negative growth in the petroleum and construction sectors (minus 2.1 percent and minus 2.5 percent respectively), which diluted the reasonable growth achieved in industry and electricity.

Hence, it can be said that the Egyptian economy tends to be commodity-oriented rather than service-oriented, as the share of commodity sectors in GDP is 50.6 percent *vis-à-vis* 49.4 percent for service sectors. Nevertheless, Egypt needs to achieve more output and more growth in commodity sectors, in order to increase exports and reduce imports. Such an achievement may help in tackling the following problems:[22]

(a) In 1987 the total external debt amounted to $34.4 billion, and the debt service ratio for the same year was 23.2 percent.

(b) Also in 1987, the trade deficit amounted to $4.33 billion, and the current account deficit to $0.32 billion.

(c) The current account deficit is expected to be aggravated by highly-priced cereal imports, depressed oil prices, uncertainty over workers' remittances and the need to keep up debt servicing.

(d) A gross deficit in the 1988/89 budget of LE 7.2 billion which is expected to

(22) Compiled from the Economist Intelligence Unit (EIU), Country Profile: Egypt (London: the Economist Publications Ltd., 1988) pp.20-44; EIU, Egypt: Country Report. No.1. 1989 (London: the Economist Publications Ltd., 1989) pp. 2-5.

be equivalent to 15.8 percent of GDP.

(e) Food imports cost over $2 billion a year.

(f) The rate of price inflation during the period 1981–1987 lies in the range of 16–18 percent, which was an imported inflation, mainly due to the depreciation of the exchange rate for the Egyptian Pound.

(g) Although the share of industrial exports in visible exports grew from 5.1 percent in 1981/82 to 8.2 percent in 1986/87, the growth of industrial production slowed down from 10 percent during the 1970s and the early 1980s to about 7 percent in 1985/86 and 1986/87.

5.5.2 Future Expectations for the Egyptian Economy:

The future expectations for the Egyptian economy may be envisaged through the planned GDP as well as the planned investment. In this regard, it is worth mentioning that the first development plan that came into effect since the 1960s was the 1982/83–1986/87 plan, and the second plan is the current Five-Year plan (1987/88–1991/92). This latter plan expects the GDP in the fiscal year 1991/92 to be as follows:

Table 5.7. Planned GDP in 1991/92, at 1986/87 prices

Sectors	LE million	%	Annual growth %
Agriculture	10,550.0	19.5	4.1
Industry and mining	10,397.0	19.2	8.4
Petroleum	1,898.0	3.5	2.3
Electricity	729.0	1.4	7.1
Construction	2,647.0	4.9	5.9
Total commodity sectors	26,221.0	48.5	5.8
Transportation and storage	3,963.5	7.3	5.8
Suez Canal	855.5	1.6	1.1
Trade, finance and insurance	12,624.0	23.3	5.5
Restaurants and hotels	668.0	1.2	10.9
Total productive services	18,111.0	33.4	5.6
Housing and public utilities	1,409.0	2.6	11.4
Other services	8,385.0	15.5	5.4
Total social services	9,794.0	18.1	6.2
Grand total	54,126.0	100	5.8

Source: The Five-Year Plan, p. 113.

The most distinctive feature of the planned GDP, as shown in table 5.7, is that commodity sectors are expected to account for only 48.5 percent of GDP in 1991/92 compared with 50.6 percent in 1986/87. The main reason is the decline in the share of petroleum in GDP from 13.8 percent in 1986/87 to only 3.5 percent in 1991/92, as petroleum is not expected to represent a significant sector during the 1990s. On the other hand, shares in GDP of the rest of the commodity sectors are expected to be higher than their shares during the 1980s, with the most significant increase anticipated in industry and mining. As regards service sectors, productive services are the only sectors to expect an increase in their share in GDP (33.4 percent in 1991/92 compared with 30.4 percent in 1986/87),

which offsets the decrease in the shares of both commodity sectors and social services. Also, the overall growth rate of GDP is expected to be 5.8 percent in 1991/92 compared with 4.2 percent in 1986/87, with the highest growth rate to be achieved in commodity sectors (5.8 percent in 1991/92 compared with 2.3 percent in 1986/87).

The increasing attention given to commodity sectors, mainly industry and agriculture, stems from the Government's desire to reduce imports of some commodities and increase exports of others. Also, the Government tries to avoid dependence on uncontrollable revenues from some sources such as oil, Suez Canal tolls and workers' remittances. Among other objectives, the Five-Year Plan 1987/88–1991/92 aims at improving the status of the balance of payments via the following measures:[23]

(a) A target annual increase of 14 percent in industrial exports, which are expected to account for 44 percent of total commodity exports by 1991/92 compared with 30 percent in 1986/87.

(b) A target annual increase of 7 percent in agricultural exports, which are expected to account for 17 percent of total commodity exports by 1991/92.

(c) A target annual increase of 17.8 percent of tourism revenues, which will be achieved via sophisticated promotional campaigns.

(d) Reducing imports of luxury commodities, and achieving self sufficiency in other commodities by increasing local production from import-substituting industries.

The objectives demonstrated in the current Five-Year Plan will be achieved with a planned investment of LE 45,816.6 million as shown in the following table:

(23) The Five-Year Plan. op. cit., pp. 378-9.

Table 5.8. Planned investment for the period 1987/88–1991/92

Sectors	Public sector		Private sector		Both sectors	
	LE million	%	LE million	%	LE million	%
Commodity sectors	14,584.5	52.4	9,600.0	53.3	24,184.5	52.8
Productive services	5,527.5	19.9	1,700.0	9.5	7,227.5	15.8
Social services	7,704.6	27.7	6,700.0	37.2	14,404.6	31.4
Total	27,816.6	100	18,000.0	100	45,816.6	100

Source: Adapted from the Five-Year Plan, p. 272.

Table 5.8 shows that commodity sectors are expected to absorb more than half the planned investment compared with 15.8 percent for productive services and 31.4 percent for social services. Also, it is noticed that the planned investment for the public sector of LE 27,816.6 million outweighs the expected investment from the private sector of LE 18,000 million, accounting for 60.7 percent and 39.3 percent of the total planned investment respectively. However, the private sector is expected to have a major share in the planned investment for some sectors as follows:[24]

(a) The private sector is expected to undertake investments worth LE 2.7 billion, accounting for 53.7 percent of the planned investment for agriculture and land reclamation of LE 4.9 billion.

(b) The private sector is expected to undertake investments worth LE 6.4 billion, accounting for 52.2 percent of the planned investment for industry of LE 12.2 billion.

(c) The private sector is expected to undertake investments worth LE 220 million, accounting for 51.4 percent of the planned investment for tourism of LE 428 million.

(24) Ibid., pp. 490-91.

Chapter Six

Finance Resources in Egypt

6.1. Banks

6.1.1. The Egyptian Banking System

6.1.2. Commercial Banks

6.1.3. Investment-and-Business Banks

6.2. Insurance Companies

6.3. Profit-Sharing Finance

6.3.1. Islamic Banks

6.3.2. Other Sources of Profit-Sharing Finance

6.1. Banks:

6.1.1. The Egyptian Banking System:

Before 1974 the Egyptian banking system consisted of public-sector banks only, and these banks undertook the financing of all economic activities in the country. After the adoption of the ODEP in 1974 private-sector banks emerged; these include indigenous private-sector banks, joint-venture banks and branches of foreign banks. By June 1986 the total number of banks operating in Egypt amounted to 99 banks, 98 of which are registered with the Central Bank of Egypt (CBE) and the other one is a free-zone bank which undertakes off-shore operations. The Egyptian banking system is illustrated in the following figure:

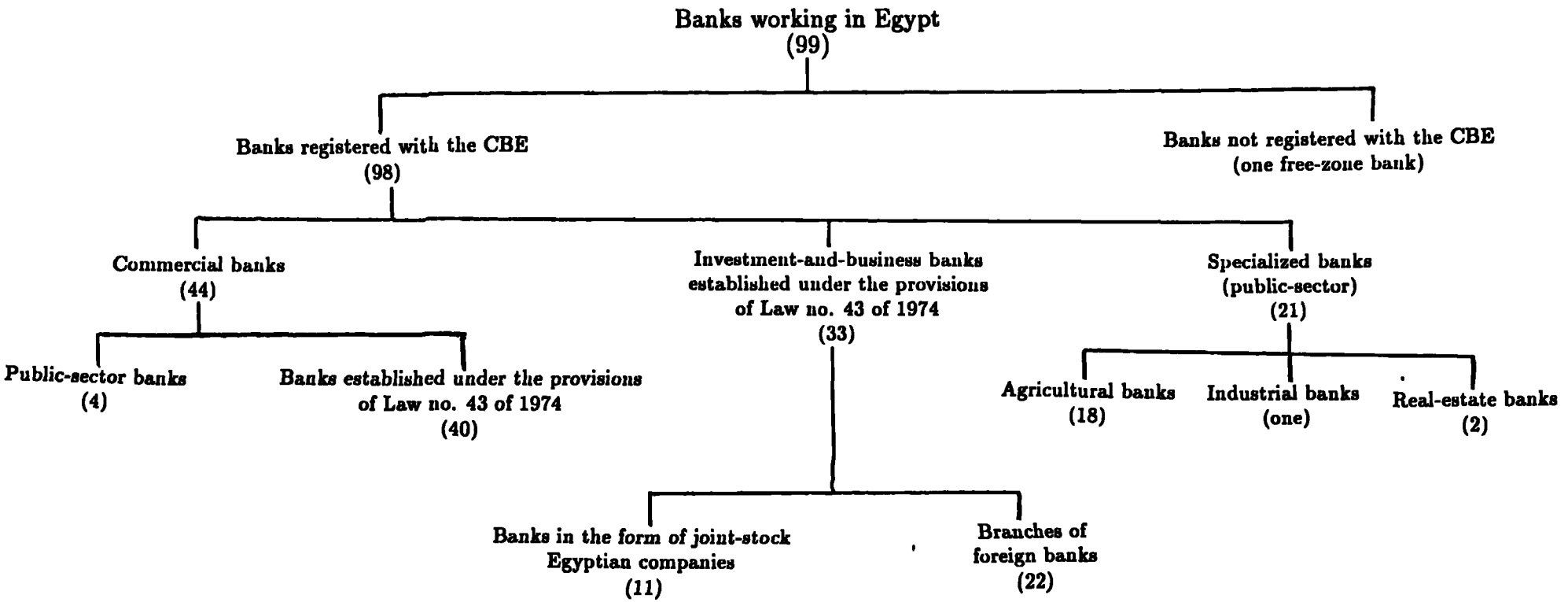


Figure 6.1. The Egyptian banking system

Source: Compiled from: CBE, "Credit and Banking Developments During the Period: July, 1984–June, 1986," Cairo: CBE, 1987 (in Arabic) pp. 37-41.

It can be noticed that almost all banks operating in Egypt are under the control of the CBE, and the only exception is one bank operating in the free zone. The rest of the banks fall into three main categories: Commercial banks, specialized banks and investment-and-business banks (IB banks) established under the provisions of law no. 43 of 1974 (amended by law no. 32 of 1977). From the standpoint of ownership, these banks fall into three categories: public-sector, joint-stock Egyptian companies and branches of foreign banks. Commercial banks represent the major activity, accounting for 45 percent of all banks registered with the CBE, IB banks account for 33.6 percent and specialized banks account for 21.4 percent. On the other hand, it might be inferred, from figure 6.1., that public-sector banks are no longer dominating the banking activity in Egypt on the grounds that all public-sector banks (both commercial and specialized) amount to 25 banks *vis-à-vis* 73 other banks. But this inference may prove untrue if the geographical spread is investigated in terms of the number of branches, as shown in the following table:

Table 6.1. Distribution of bank branches in Egypt according to legal form and type of activity, 1986

Legal form / Type of activity	Public-sector banks	Banks established under the provisions of Law no. 43 of 1974	Total*
Commercial banks	625	199	824
Specialized banks	153	–	153
IB banks	–	86	86
Total*	778	285	1,063

* Excluding branches abroad.

Source: Compiled and calculated from Ibid., pp. 42-57.

Table 6.1 shows that public-sector banks still dominate the banking activity in Egypt in terms of the number of branches. If commercial banks are consid-

ered, branches of public-sector banks amount to 625 branches (76 percent of the total of commercial-bank branches) compared with 199 branches of banks established under the provisions of Law no. 43 of 1974 (24 percent of the total of commercial-bank branches). Also, public-sector banks dominate the whole activity of specialized banks, accounting for 153 branches. As for the total number of banks in all activities, the public-sector-bank branches are 778 branches, accounting for 73 percent of all-activity branches compared with 285 branches for Law 43 banks which account for merely 27 percent of all-activity branches. On the other hand, it can be noticed that banks established under the provisions of Law no. 43 of 1974 did not enter the activity of specialized banks; this may be due to the nature of the loans of specialized banks which have a long maturity and a low profit margin. This phenomenon has two implications: (a) non-public-sector banks usually seek safe and profitable activities; and (b) the Government has to interfere in the banking activity in order to secure sufficient finance for productive businesses, especially in the agricultural and industrial fields.

Before discussing the different types of banks, it is worth mentioning that the following types of banks will be excluded:

(a) The DIB which was discussed in *chapter one*.

(b) Agricultural banks and real-estate banks, as they are irrelevant to the financing of small-scale industrial firms (SSIFs).

(c) The free-zone bank (not registered with the CBE) which carries out off-shore operations.

6.1.2. Commercial Banks:

As mentioned above, commercial banks represent the major proportion of the banking activity in Egypt. In terms of the number of banks, commercial banks account for 45 percent of all banks working in Egypt; and in terms of the number of branches, they account for 77.5 percent of all bank branches in

Egypt. Commercial banks, also, include four public-sector banks which represent the big four in the Egyptian banking system, with the longest experience and the most substantial ammounts of resources compared with other kinds of banks. The magnitude of the activity of commercial banks can be illustrated in their consolidated balance sheet as shown in the following table:

Table 6.2. Consolidated balance sheet of commercial banks in Egypt, June, 30, 1987

Assets/Liabilities	LE million	%
Assets:		
Cash	715.0	1.6
Securities and investments	4,332.7	9.4
Due on banks in Egypt	11,959.0	26.1
Due on banks abroad	6,080.5	13.2
Loans and discounting	20,142.4	43.9
Other assets	2,670.4	5.8
Total assets	45,900.0	100
Liabilities:		
Net worth	1,263.2	2.8
Provisions	2,006.8	4.4
Bonds and long-term loans	203.2	0.4
Due to banks in Egypt	3,157.2	6.9
Due to banks abroad	3,624.2	7.9
Deposits	30,803.9	67.1
Other liabilities	4,841.5	10.5
Total liabilities	45,900.0	100

Source: CBE, "Annual Report: 1986/87", Cairo: CBE, 1987, p. 42.

Table 6.2 shows that commercial banks have substantial amounts of funds represented in their balance-sheet total of LE 45.9 billion; the significance of this

figure becomes clear when it is compared with the State-budget total of LE 23.06 billion for the fiscal year 1987/88.[1] The major components of this consolidated balance sheet are the balance sheets of public-sector banks (the big four). All of these banks rank among the largest banks in the Arab world in terms of total assets.

The most significant component of this commercial-bank balance sheet is the deposits, which account for 67.1 percent of total liabilities; these deposits are deemed to finance the banks' advancement of credit after catering for liquidity requirements. However, these banks have to comply with the restriction imposed by the CBE regarding the upper limit for the loans they can advance; this limit is currently 65 percent of total deposits, which is known as the *credit ceiling.* The implementation of this restriction is evident in the size of loans and discounting which represent 65.4 percent of total deposits. Nevertheless, commercial banks can offset the credit-ceiling restriction by increasing their investments, as they can participate in the establishment of projects.[2] Unfortunately, the magnitude of commercial-bank investments cannot be derived from their consolidated balance sheet, shown in table 6.2, as the securities include Government securities that constitute part of liquidity requirements. Accordingly, the most significant component to be investigated is loans and discounting shown in the following table:

(1) CBE, "Annual Report: 1987/88," Cairo: CBE, 1988, p. 102.
(2) Article 15 of Law no.120 of 1975.

Table 6.3. Distribution of commercial-bank loans and discounting, according to sectors and types of activity, in Egypt, June, 30, 1987

Sectors/Types of activity	LE million	%
Sectors:		
Government	4,242.0	21.1
Public-sector companies	5,362.0	26.6
Private enterprises	9,751.4	48.4
Households	527.5	2.6
Foreign	259.5	1.3
Total loans and discounting	20,142.4	100
Types of activity:		
Agriculture	559.9	2.8
Industry	7,017.6	34.8
Trade	7,501.3	37.3
Services	4,137.4	20.5
Unclassified sectors	926.2	4.6
Total loans and discounting	20,142.4	100

Source: Ibid., p. 45.

It is noticeable that the figures shown in table 6.3 embrace bill discounting as well as loans, presumably because the discounting of bills represents a credit advance to the customers. The distribution of loans according to sectors shows that the major sectors receiving commercial-bank loans are private enterprises (48.4 percent), public-sector companies (26.6 percent) and the Government (21.1 percent). The loans advanced to private-sector enterprises amount to more than the sum of loans advanced to both the public sector and the Government. This can be regarded as a consequence of the emergence of a significant private sector in the Egyptian economy after the adoption of the ODEP in 1974. Concerning the loans to both the public sector and the Government, they can be said to be

almost confined to public-sector banks that have financial resources large enough to undertake such financing.

Concerning the distribution of loans according to the types of activity, it is noticeable that the major receivers of commercial-bank loans are trade, industry and services, accounting for 37.3 percent, 34.8 percent and 20.5 percent respectively. Loans to agriculture will not be discussed in this context, as they are insignificant due to the existence of agricultural banks all over the country. As far as industry is concerned, loans to this activity are more significant than those advanced to services; this can be due to many services being mainly in the Government's hands, such as health, education, transport and communications, and these services being financed directly from the State budget. On the other hand, loans to industry lag behind those advanced to the trade activity; this may be due to one or more of the following reasons:

(a) Loans for the trade activity are mainly short-term, which achieves a higher turnover as compared with loans to the industrial activity.

(b) Loans for the trade activity are more profitable than those advanced to the industrial activity, as the interest-rate structure set by the CBE establishes a minimum of 16 percent and no maximum for loans to the trade activity, compared with a minimum of 11 percent and maximum of 15 percent for both industry and agriculture.[3]

(c) The reluctance of commercial banks to get involved in long-term financing, mainly industrial financing, and the risk associated therewith.

Hence, it can be claimed that commercial banks tend to prefer short-term, rather than long-term, loans as inferred from the high share of loans accounted for by the trade activity. Ironically, the CBE set a high interest rate on loans to the trade activity in order to curb the credit advanced to it; but this resulted in the opposite outcome because trade enterprises could afford such a high cost of

(3) CBE, "Annual Report: 1986/87", Cairo: CBE. 1987, p. 96.

borrowing, as they could pass it on fairly easily to their customers. In this regard, it might be argued that commercial banks depend mainly on customers' deposits and they must cater for any withdrawals from these deposits. Such an argument seems to be refutable, as commercial banks can advance medium-and long-term loans (MTLT loans) without fear of liquidity shortages because:

(a) A reasonable proportion of their deposits is represented in non-volatile deposits, *i.e.* time deposits and saving deposits. During the period 1981–1985, for instance, the average percentage of time deposits to total commercial-bank deposits was 30.8 percent, and the average percentage of saving deposits was 10.4 percent.[4]

(b) The liquidity requirement (a minimum of 30 percent of total deposits) is set by the CBE in order to enable these banks to meet their customers' withdrawals from deposits.

(c) The withdrawal of funds by the customers usually intersects with the depositing of funds; this results in a minimum level of deposits at any time during the year.

(d) Apart from being state-owned, public-sector banks are more qualified than private-sector ones to advance MTLT loans, as they are well established and have significant resources, especially their equity base.

6.1.3. Investment-and-Business Banks:

These banks were introduced to Egypt in the 1970s after the opening of the economy in 1974. According to the law, the main purposes of investment-and-business banks (IB banks) are:[5]

(a) the pooling and promotion of savings;

(b) establishing investment companies and other companies; and

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(4) Calculated from: National Bank of Egypt, Economic Bulletin, (XXXIX), no.3, 1986, p. 190.

(5) Article 17 of Law no.120 of 1975.

(c) the financing of Egypt's foreign trade.

According to this definition, the activites of IB banks are expected to be, more or less, different from those of commercial banks; these activities are shown in the following consolidated balance sheet:

Table 6.4. Consolidated balance sheet of IB banks in Egypt, June, 30, 1987

Assets/Liabilities	LE million	%
Assets:		
Cash	65.8	0.6
Securities and investments	399.6	3.6
Due on banks in Egypt	2,024.9	18.2
Due on banks abroad	2,427.0	21.8
Loans and discounting	5,124.8	46.1
Other assets	1,085.4	9.7
Total assets	11,127.5	100
Liabilities:		
Net worth	962.0	8.7
Provisions	651.5	5.9
Bonds and loans	14.5	0.1
Due to banks in Egypt	2,549.7	22.9
Due to banks abroad	1,905.6	17.1
Deposits	3,893.4	35.0
Other liabilities	1,150.8	10.3
Total liabilities	11,127.5	100

Source: Ibid., p. 48.

It is noticeable in table 6.4 that the liabilities of IB banks have a different distribution, as compared with those of commercial banks, mainly deposits and due to banks both in Egypt and abroad. In this regard, IB banks seem to be

less dependent on deposits than commercial banks, as the deposits account for 35 percent of their liabilities while they account for 67.1 percent of commercial-bank liabilities. Concerning the funds due to banks, both in Egypt and abroad, they are more significant than deposits, as they account together for 40 percent of total liabilities compared with 14.8 percent for commercial banks. On the other hand, the funds due on banks, both in Egypt and abroad, have the same relative importance as that of the funds due to banks (40 percent of total assets), which is nearly the same as in commercial banks (39.3 percent of total assets). Hence, it can be inferred that IB banks are more dependent on inter-bank activities than commercial banks, and these activities are deemed to be mainly for clearing purposes. At the same time, it can be inferred that commercial banks tend to be creditors, rather than debtors, to other banks; and this might imply that commercial banks lend to, or deposit funds in, other banks.

As far as the assets are concerned, table 6.4 shows that the most significant component of these assets is loans and discounting, which account for 46.1 percent of total assets compared with 43.9 percent for commercial banks. Yet the most interesting point to notice is that securities and investments account for only 3.6 percent of the assets of IB banks, while they account for 9.4 percent of the assets of commercial banks. This shows that IB banks are more inclined to concentrate on loans rather than investments, although they are, by definition, investment banks. In this regard, it might be argued that the insignificance of investments can be offset by concentrating on MTLT loans to productive sectors, mainly industry. Such an argument cannot be correct in the light of the distribution of loans advanced by IB banks as shown in the following table:

Table 6.5. Distribution of loans and discounting advanced by IB banks, according to sectors and types of activity, in Egypt, June, 30, 1987

Sectors/Types of activity	LE million	%
Sectors:		
Government	735.8	14.3
Public-sector companies	225.1	4.4
Private enterprises	2,781.0	54.3
Households	108.6	2.1
Foreign	1,274.3	24.9
Total loans and discounting	5,124.8	100
Types of activity:		
Agriculture	83.3	1.6
Industry	699.4	13.7
Trade	*1,485.2*	*29.0*
Services	1,251.3	24.4
Unclassified sectors	1,605.6	31.3
Total loans and discounting	5,124.8	100

Source: Ibid., p. 52.

The sectoral distribution of the loans advanced by IB banks, in table 6.5, shows that private enterprises represent the leading sector, as they account for more than half of these loans. The second major sector is the foreign sector which accounts for 24.9 percent of IB loans, while it accounts for only 1.3 percent of commercial-banks loans. This may be because IB banks are mainly joint-stock banks or branches of foreign banks, which facilitates their dealings with foreign sectors especially if such dealings require foreign currencies. On the other hand, loans to the Government and public-sector companies are much less significant, as they account for 14.3 percent and 4.4 percent of IB loans compared with 21.1 percent and 26.6 percent of commercial-bank loans, respectively. This is because

commercial banks include public-sector banks with which the dealings of the Government and public-sector companies concentrate.

Concerning the distribution of loans according to the types of activity, table 6.5 shows that the "unclassified sectors" account for the highest proportion of these loans (31.3 percent). In this regard, it is worth mentioning that it was impossible for the author to obtain any details about these "unclassified sectors"; hence, this item will be excluded from the discussion. As regards other activities, the trade activity is of major importance, similar to commercial banks with a relatively lower percentage, and the same expected reasons hold. The most striking point is that the industrial activity has a minor share, as it accounts for only 13.7 percent of these loans, compared with 29.0 percent for trade and 24.4 percent for services. Taking into consideration these figures as well as the minor share of investments, in the consolidated balance sheet of IB banks, the orientation of these banks is quite clear. The main reason for the major share in the loans advanced by IB banks, accounted for by the trade activity, seems to be a loophole in the Law; in defining IB banks, Law n.120 of 1975 mentioned that these banks "may also undertake the financing of Egypt's foreign trade". This phrase seems to indicate a secondary objective for IB banks, but it turned out to represent the main objective of these banks although they are, by definition, investment banks.

During the final stages of this study some more detailed data became avaiable; these data emphasize the inferences drawn above as regards the inclination of both commercial banks and IB banks to prefer short-term loans. Such an emphasis will be demonstrated via the distribution of loans advanced by both types of banks, according to maturity, as shown in the following table:

Table 6.6. Distribution of loans, advanced by both commercial banks and IB banks, according to maturity, June, 30, 1987 (excluding discounting)

Items	LE million	%
Secured short-term loans	6,042.0	24.0
Unsecured short-term loans	13,311.0	52.7
Total short-term loans (up to one year)	19,353.0	76.7
Secured MTLT loans	3,923.0	15.5
Unsecured MTLT loans	426.0	1.7
Total MTLT loans (more than one year)	4,349.0	17.2
Matured and unrepaid loans	1,549.0	6.1
Total loans	25,251.0	100

Source: Adapted from : CBE,"Annual Report: 1987/88", Cairo: CBE, 1988, p. 132.

Table 6.6 is quite clear in showing the dominant share accounted for by short-term loans (76.7 percent of total loans), and the minor share accounted for by MTLT loans (17.2 percent of total loans). As regards security, short-term loans tend to be unsecured; if secured short-term loans are considered, they will account for only 31.2 percent of total short-term loans. In fact, this is not unusual as those short-term loans are for one year or less, and they are assumed to finance temporary or self-liquidating operations. On the other hand, MTLT loans tend to be secured; if secured MTLT loans are considered, they will account for 90.2 percent of total MTLT loans. Concerning bill discounting, it represents a tiny fraction of these banks' credit; from tables 6.3 and 6.5 total loans and discounting amount to LE 25,267.2 million, and from table 6.6. total loans amount to LE 25,251.0 million which results in the amount of discounted bills being LE 16.2 million. To the author's knowledge, the discounting of bills in the Egyptian banks is mainly for six months or less, which means that bill discounting constitutes part of short-term credit. These results indicate that: (a) MTLT loans represent

a minor activity for both commercial banks and IB banks; and (b) these banks usually require colateral for their MTLT loans.

6.2. Insurance Companies:

In spite of the emergence of private-sector insurance companies after 1974, the insurance activity in Egypt is still dominated by public-sector companies. The dominance of these companies is embodied in their significant financial resources, their branch spread all over the country and their fairly long experience. The insurance sector in Egypt consists of:

(a) three public-sector insurance companies;

(b) one public-sector reinsurance company;

(c) three private-sector insurance companies; and

(d) a Government authority for insurance supervision, whose objective is to monitor the activities of all insurance companies in Egypt.

Insurance companies in Egypt perform almost all insurance activities, which makes available to them huge amounts of funds. Of course, these companies have to invest a major proportion of their funds in different assets, provided that they set aside enough provisions for compensations to be claimed by policyholders. According to the latest avaiable data, the activities of insurance companies in Egypt are shown in their consolidated balance sheet as follows:

Table 6.7(a): Consolidated balance sheet of public-sector insurance companies in Egypt, June, 30, 1986

Assets/Liabilities	LE million	%
Assets:		
Real estate	103.7	7.8
Shares, bonds and certificates of deposits	486.7	36.5
Loans	64.7	4.8
Deposits with banks	392.9	29.4
Deposits with the CBE and provisions for Government bonds	4.4	0.3
Cash	26.8	2.0
Policyholders' debit balances	66.9	5.0
Insurance and reinsurance companies	114.5	8.6
Debtors and other debit balances	66.5	5.0
Equipment, furniture and vehicles	8.0	0.6
Total assets	1,335.1	100
Liabilities:		
Net worth	29.6	2.2
Policyholders' funds	736.2	55.2
Provisions	161.4	12.1
Insurance and reinsurance companies	196.7	14.7
Creditors and other credit balances	211.2	15.8
Total liabilities	1,335.1	100

Source: Adapted from: Egyptian Authority for Insurance Supervision (EAIS), The Year Book: 1985/86 (Cairo: EAIS, 1987) (in Arabic) pp. 353-60.

Table 6.7(b): Consolidated balance sheet of private-sector insurance companies in Egypt, June, 30, 1986

Assets/Liabilities	LE million	%
Assets:		
Real estate	6.1	6.6
Shares, bonds and certificates of deposits	17.0	18.7
Loans	0.3	0.3
Deposits with banks	31.4	34.5
Cash	5.0	5.5
Policyholders' debit balances	16.8	18.5
Insurance and reinsurance companies	2.1	2.3
Debtors and other debit balances	9.8	10.8
Equipment, furniture and vehicles	2.6	2.8
Total assets	91.1	100
Liabilities:		
Net worth	8.4	9.3
Policyholders' funds	33.9	37.2
Provisions	10.1	11.0
Insurance and reinsurance companies	20.4	22.5
Creditors and other credit balances	18.3	20.0
Total liabilities	91.1	100

Source: Ibid., pp. 407-13.

Tables 6.7(a) and 6.7(b) show that the insurance sector in Egypt, in terms of financial resources, is less significant than the banking sector. In this regard, the sum of the consolidated balance sheet, of both public-sector and private-sector insurance companies, accounts for 3.1 percent of the balance sheet of commercial banks and 12.8 percent of the balance sheet of IB banks. However, it cannot be claimed that the insurance sector is negligible as a source of finance, especially MTLT finance, for business enterprises in general and SSIFs in particular.

Compared to commercial banks and IB banks, insurance companies enjoy more stable financial resources, as they are less vulnerable to sudden withdrawals of funds. In assessing the role of insurance companies as a source of finance the discussion will focus on assets, as the liabilities are less argumentative.

Concerning public-sector companies, it is noticeable in table 6.7(a) that they invest a large proportion of their funds in profitable assets, namely shares, bonds, certificates of deposits (CDs), deposits and loans. If these items are added up, they will amount to LE 1,048.0 million accounting for 78.5 percent of total assets. The least significant of these items is loans, which account for only 4.8 percent of total assets. Details of these loans show that almost 20 percent of them are advanced to policyholders and buyers of flats, but the use of the remaining percentage is not known. On the other hand, the most significant item is represented in shares, bonds and CDs, accounting for 36.5 percent of total assets; the second major item is deposits with banks, which accounts for 29.4 percent of total assets. Details of the assets show that CDs alone amount to LE 271.6 million, accounting for 20.3 percent of total assets. Given that CDs are considered as deposits, then if their amount is added to that of the deposits, they will account together for 49.7 percent of total assets. Hence, public-sector insurance companies invest almost half of their funds in deposits, as these deposits are regarded as being risk-free investment; moreover, interest on deposits is tax-exempted in Egypt.[6] These results suggest that public-sector insurance companies could have used part of their funds in lending to some business enterprises or even having an equity stake in them. Consequently, it seems that risk averseness is the main factor behind the investment policies of these companies.

As regards private-sector insurance companies, there is no noticeable difference between them and their public-sector counterparts concerning their investment policies. In this respect, table 6.7(b) shows that the most significant item

(6) Article 4 of Law no. 157 of 1981.

of the assets of private-sector companies is the deposits with banks, which accounts for 34.5 percent of total assets. Details of the deposits show that CDs alone amount to LE 14.3 million, accounting for 15.7 percent of total assets. As CDs are considered as deposits, their amount should be added to that of the deposits with banks, which results in these two items accounting together for 50.2 percent of total assets. On the other hand, the least significant item is loans which account for only 0.3 percent of total assets; moreover, it seems that these loans are advanced to policyholders as they are secured by life-insurance policies. Hence, it can be said that private-sector insurance companies are no better than their public-sector counterparts, as regards their investment policies. Nevertheless, private-sector companies might have reason for being risk-averse, as they are fairly new in the realms of insurance, as well as having less financial resources compared with public-sector companies. On the whole, it can be argued that the financing resources available to insurance companies represent a *scaled-down finance*. In other words, insurance companies have reasonable amounts of funds that can be invested on a long-term basis; instead, they deposit these funds with banks and these banks, in turn, use these deposits in lending on a short-term basis. Such a scaled-down finance deprives business enterprises of a reasonable source of MTLT finance.

6.3. Profit-Sharing Finance:

Profit-sharing finance is the Islamic substitute for interest-bearing finance, as dealing with interest is prohibited in Islam. Instead of discussing the different aspects of this financing method, this section is concerned with demonstrating its main sources and their significance in Egypt. The main source of profit-sharing finance for buisness enterprises is Islamic banks, albeit some forms of it can be obtained from individuals.

6.3.1. Islamic Banks:

Islamic banks perform almost all banking activities either on a profit-sharing basis or on a cost-plus basis, as substitutes for interest. The most commonly known of these activities are *Mudarabah*, *Murabahah* and *Musharakah*; these financing methods are defined as follows:(7)

Mudarabah: according to this method, capital is provided by one party and the other party provides the enterprise. If the project achieves profits, these profits will be divided between the two parties according to agreed-upon proportions; in case of loss only the supplier of capital incurs this loss, as the entrepreneur's loss will be represented in his unrewarded labour. If capital is provided by more than one party, profits are to be divided among them according to agreed-upon proportions; in case of loss each one's share in this loss will be proportionate to his share in the project's capital.

Murabahah: This method can be regarded as a substitute for both trade credit and documentary credit. In this case the bank purchases a specified commodity on behalf of its customer who, in turn, agrees to pay the bank on a cost-plus basis either in a lump sum or in instalments. The mark-up which the customer pays to the bank should be specified in advance before the purchase of the commodity.

Musharakah: according to this method, the bank and the customer (the entrepreneur) enter into a temporary partnership, usually for more than one year, where both of them share the project's capital. If the project achieves profits, these profits will be divided between them according to agreed-upon proportions, after allocating part of these profits for the entrepreneur as a reward for his labour; in case of loss each party's share in this loss will be proportionate to his share in the project's capital. There is, however, another characteristic which is peculiar

(7) Adapted from: Muhammad Abdul-Mannan, Islamic Economics: Theory and Practice (Kent: Hodder and Stoughton Ltd., 1986) pp. 164-5; Ziauddin Ahmed, Munawar Iqbal and M. Fahim Khan (eds), Money and Banking in Islam (Islamabad: Institute of Policy Studies, 1983) pp. 9-14.

to this financing method, that is the bank (as a partner) has the right to interfere in the business's management.

In Egypt, there are three Islamic banks, which perform almost all Islamic-banking activities; these banks are:

(a) Faisal Islamic Bank, which was established by a special law[8] in 1977, and it is registered with the CBE as a commercial bank.

(b) Islamic International Bank for Investment and Development, which was established in 1980, and it is registered with the CBE as an investment-and-business bank.

(c) Nasser Social Bank, which was established in 1971; this bank has not been under the control of the CBE, but procedures are under way to register it with the CBE.

The following table shows some indicators of the activities of Islamic banks in Egypt, according to the available data:

(8) Law no. 48 of 1977.

Table 6.8. Some comparative indicators of Islamic-bank activities in Egypt, 1985

Items	Faisal Islamic Bank		Islamic International Bank		Nasser Social Bank		Total	
	LE million	%	LE million	%	LE million	%	LE million	%
Total balance sheet	1,725.3	55.3	946.1	30.3	450	14.4	3,121.4	100
Employed capital	1,338.5	59.1	637.5	28.2	288.2	12.7	2,264.2	100
Deposits	1,324.3	62.2	624.4	29.3	180.6	8.5	2,129.3	100
Net worth	100	57.8	11	6.4	61.9	35.8	172.9	100
Operating branches	10	23.8	5	11.9	27	64.3	42	100
Planned branches	12	52.2	8	34.8	3	13.0	23	100
Interest-free loans	N. A.	N. A.	0.04	N. A.	60	N. A.	60.04	N. A.

N. A. = not available.

Source: Adapted from: Islamic Economics Centre, "The Role of Islamic Banks in Mobilizing Resources and Local Development", Cairo: Islamic International Bank for Investment and Development, 1986 (in Arabic) p. 14.

This table shows that Islamic banks in Egypt have a balance-sheet total of LE 3,121.4 million and deposits of LE 2,129.3 million after a relatively short time since their inauguration. If compared with other banks in the same year, Islamic banks' balance-sheet total will account for 50.5 percent of that of IB banks and 10.0 percent of that of commercial banks; also Islamic banks' total deposits account for 104 percent of those of IB banks and 10.7 percent of those of commercial banks.[9] These figures suggest that Islamic banks have the opportunity and the ability to operate and, even, grow alongside other banks in Egypt; also, this reflects the willingness of Egyptian individuals and businessmen to deal with these banks.

(9) Islamic Economics Centre, "The Role of Islamic banks in Mobilizing Resources and Local Development", Cairo: Islamic International Bank for Investment and Development. 1986 (in Arabic) p.15.

Table 6.8 gives some general indicators of the activities of Islamic banks rather than a basis for assessing the performance of each individual bank. In terms of financial resources, Faisal Islamic Bank is the most significant bank and Nasser Social Bank is the least significant; this is evident from comparing the balance-sheet total, employed capital and deposits. In terms of total branches, both operating and planned, Nasser Social Bank takes the lead with 30 branches, compared with 22 branches for Faisal Islamic Bank and 13 branches for the Islamic International Bank. Concerning interest-free loans to help the needy, Nasser Social Bank is the pre-eminent with LE 60 million interest-free loans, which account for 13.3 percent of its balance-sheet total and 96.9 percent of its net worth. At the same time those loans amount to only LE 0.04 million in the Islamic International Bank, and those of Faisal Islamic Bank are not known. In fact, the main purpose of Nasser Social Bank is the advancement of interest-free loans, as well as helping individuals to set up their own businesses. This growth and spread of Islamic banks in a relatively short period of time induced other banks to establish new branches that accept deposits and provide finance, according to the methods adopted by Islamic banks; some observers estimate that there are about 40 branches of this kind in Egypt.

6.3.2. Other Sources of Profit-Sharing Finance:

The success of the experiment of Islamic banks in Egypt can be attributed mainly to the willingness of many people to invest their savings on a profit-sharing basis, instead of depositing them in return for fixed interest. Islamic banks accept deposits from those people in order to invest them in their customers' projects and share the return with the depositors, according to agreed-upon proportions. This approach appealed to some businessmen who prefer not to deal with banks and, at the same time, cannot finance their businesses depending only on their own funds. Consequently, many businessmen approached their relatives and friends for finance on a profit-sharing basis, and those businessmen found an encouraging

response from their relatives and friends. Within a few years this method of finance became well known among businessmen as well as the public, who represented the non-institutional source of profit-sharing finance in Egypt. From the individuals' point of view, providing funds to business enterprises on the bases of profit sharing is more profitable than depositing these funds with Islamic banks that will be entitled to a proportion of these profits, as these banks represent the intermediary between the depositors and business enterprises. From the entrepreneurs' point of view, obtaining funds from individuals on the basis of profit-sharing relieves them of the formalities associated with obtaining such funds from Islamic banks, as those individuals might show more flexibility especially if they are family members or friends.

As profit-sharing finance became fairly popular, some entrepreneurs estabablished new companies, known as *investment companies*, for the purpose of receiving funds from the public and investing them on behalf of those people on a profit-sharing basis. These companies continued to proliferate and grow, so much so that they became major competitors to Islamic banks as well as as other banks. The main reason for the rapid growth of investment companies was the influx of funds into them attracted by the high percentage distributed as a profit on the deposited funds; this percentage was well above that distributed by Islamic banks, as well as the interest on deposits in all other banks. Because investment companies did not publish their financial accounts or any other data, little was known about their real number and the magnitude of their activities. However, it is estimated that there are six large companies and 100–300 small obscure firms, and their total deposits are estimated to be LE 12 billion.[10] During 1987 and early 1988 some of these companies faced serious financial difficulties that are said to be the consequences of unsuccessful speculation in international financial markets; these difficulties caused major worries among the hundreds of thousands

(10) EIU, Country Profile: Egypt (London: the Economist Publications Ltd., 1988) p. 48.

of depositors. The spread of rumours, as well as the escalation of disputes, about the activities of investment companies, aggravated the depositors' worries and many of them decided to withdraw their money. Accordingly, a new law was passed in June, 1988 which is known as Law no. 146 of 1988; this law establishes some regulations, concerning receiving funds for the purpose of investing them, such as:[11]

(a) The receiving of funds for investment is confined to publicly quoted companies established for this purpose.

(b) These companies must issue investment documents for the funds they receive.

(c) The investment documents entitle the holders to a share in the profits or losses.

(d) Investment-document holders have priority over shareholders in case of liquidation.

(e) The existing companies, or individuals, that will not comply with the Law and opt to liquidate their activities, must repay the depositors' money within two years.

Hence, it can be said that the promulgation of Law no.146 of 1988 marked the end of non-institutional sources of profit-sharing finance for business enterprises, represented in individuals. According to the Law, businessmen cannot approach individuals for finance on the basis of profit-sharing, as this is confined to the companies that are set up especially for such an activity. Consequently, for an entrpreneur to obtain profit-sharing finance he has to approach institutional sources represented in Islamic banks. As regards investment companies, they are expected to be concerned mainly with establishing new projects, albeit they might enter into partnerships with some entrepreneurs.

(11) Articles 1, 6 and 18 of Law no. 146 of 1988.

Chapter Seven

Survey Methodology

7.1. Defining a Small Business

7.1.1. Two Types of Definitions

7.1.2. Defining SSIFs in Egypt

7.2. Objectives and Scope of the Survey

7.3. Sources and Methods of Collecting the Information

7.3.1. The Questionnaire

7.3.2. The Population

7.3.3. The Sample

7.3.4. Other Sources of Information

7.4. Difficulties Encountered During the Survey

7.1. Defining a Small Business:

Smallness is a relative concept, *i.e.* a certain business cannot be described as small unless it is compared with a larger one; consequently, how big is a small business will depend on how big a large business is. This relativity of smallness resulted in countless definitions given to small businesses in different countries, or in different times in the same country, or even to different kinds of businesses in the same country at the same time. Instead of arguing the pros and cons of each definition, different definitions will be discussed in a broad sense by classifying them in two main categories in order to infer their main characteristics as well as their advantages and disadvantages. Subsequently, the definitions of small-scale industrial firms (SSIFs) in Egypt will be examined in order to choose the most relevant definition for the purpose of this study or to suggest an appropriate one.

7.1.1. Two Types of Definitions:

The two main categories of small-business definitions are quantitative and qualitative. Quantitative definitions adopt some yardsticks whereby they establish cut-off points after which the business ceases to be small; such cut-off points are expressed in terms of the number of employees (or workers), the annual sales (or turnover) or the value of the firm's total assets. Neither the criterion of the annual sales nor that of total-asset value can easily be compared with those of other countries, because of the problems of inflation and unstable exchange rates. Hence, the only comparable criterion is the number of employees; even though this criterion varies from country to country, or even in the same country according to the purpose of the definition. In the U.K., for instance, the Bolton Committee established a maximum of 200 employees for small-scale manufacturing firms (SSMFs).[1] Also in the U.K. the 1981 Companies Act established a maximum number of weekly employees, together with other criteria, of 50 employees for all

(1) Report of the Committee of Inquiry on Small Firms, Cmnd. 4811, London: HMSO, 1971, p. 3.

small businesses;[2] but in the United States the maximum number of employees for SSMFs is 500.[3] In the case of developing countries, the maximum number of employees for SSMFs is 50 workers in some African countries and 100 workers in some Asian countries.[4]

Qualitative definitions, on the other hand, define a small business according to some special characteristics as follows:[5]

(a) It has a relatively small share of its market.

(b) It is managed by its owners or part-owners in a personalised way, rather than through the medium of a formalised management structure.

(c) It is independent in the sense that it does not form part of a large enterprise.

(d) The owner-managers should be free from outside control in taking principal decisions.

(e) Capital is supplied and ownership is held by an individual or a small group.

(f) The area of operations is mainly local.

(g) It lacks access to the stock market.

On the whole, the following table shows the different criteria for defining a small business, as adopted by a sample of both industrialised countries and developing countries:

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(2) Jim Dewhurst and Paul Burns, Small Business: Finance and Control (London: Macmillan Press Ltd., 1983) p. 5.

(3) Hal B. Pickle and Royce L. Abrahamson, Small Business Management, 4th ed. (New York: John Wiley and Sons, 1986) p. 11.

(4) Dennis Anderson, "Small Industry in Developing Countries", World Bank working paper no. 518, Washington D.C.: The World Bank, 1982, p. 8.

(5) Michael Chesterman, Small Businesses, 2nd ed. (London: Sweet and Maxwell Ltd., 1982) p. 5; Graham H. Ray and Patrick J. Hutchinson, The Financing and Financial Control of Small Enterprise Development (Aldershot: Gower Publishing Co. Ltd., 1983) p. 2; Hal B. Pickle and Royce L. Abrahamson, op. cit., p. 10.

Table 7.1. Criteria for determining the sizes of enterprises

Criterion	Developing countries	Industrialised countries
Number of employees	6 countries	9 countries
Assets employed	10 countries	1 country
Sales turnover	1 country	–
Employees and turnover	1 country	2 countries
Employees and assets	16 countries	3 countries
Turnover and assets	1 country	–
Employees, sales and assets	4 countries	–
Total sample	39 countries	15 countries

Source: K.E. Auciello et al., Employment Generation Through Stimulation of Small Industries: An International Compilation of Small-Scale Industry Definitions (Atlanta: Georgia Institute of Technology, 1975), in Malcolm Harper, Small Business in the Third World (Chichester: John Wiley and Sons, 1984) p. 2.

The main characteristics of the various definitions of small businesses can be derived from the preceding context as follows:

(a) They differ between developed countries, on the one hand, and developing countries on the other.

(b) They differ from one country to another.

(c) They may differ in the same country according to the purpose of the definition.

(d) Developing countries are more inclined to adopt quantitative definitions, as compared with developed countries.

(e) Although developed countries employ capital-intensive technologies, the range of the number of employees for SSMFs (200–500) is notably larger than the same range in developing countries (50–100) which employ labour-intensive technologies; and this may reflect the difference in the perception of how big a large business is.

(f) The terms *employees* and *workers* are used interchangeably, but the term *employees* is deemed to comprise workers as well as the administrative staff.

(g) Some qualitative criteria, namely the small market share, are loose and difficult to perceive.

However, qualitative definitions seem to be more universal and more convenient than quantitative definitions because:

(a) Quantitative definitions, except those based on the number of employees, are vulnerable to inflation and need to be adjusted periodically.

(b) Quantitative definitions are too difficult to be compared among different countries, mainly because of the problem of unstable exchange rates.

(c) Quantitative definitions establish rigid cut-off points after which the business becomes "large"; and this shift in the business's size may be because it employs one more worker, or because its assets or sales exceed the limit by a very small amount of money.

Nevertheless, it can be argued that the definition of a small business should be local, in the sense that the definition which is valid for an industrialised country should not be adopted by a developing country. Also in terms of locality, the definition of a small business may differ from one industrialised country to another, and from one developing country to another, depending on the degree of industrialisation as well as the prevailing size of large businesses. If international comparisons are to be made as regards the status of small businesses, the firm size should be held constant, *i.e.* the issue of firm size should be neutralized.

7.1.2. Defining SSIFs in Egypt:

There are two criteria adopted in Egypt to define SSIFs, namely the number of workers and the value of fixed assets. The most commonly adopted criterion is the number of workers; accordingly, SSIFs are defined as those employing 10 to 49 workers each, and those employing fewer than 10 workers each are considered as handicraft establishments. The other criterion (*i.e.* the value of fixed assets) is adopted by the DIB, which defines SSIFs as those firms with fixed assets, exclud-

ing land and buildings, of more than LE 0.55 million to LE 1.1 million, ~~according~~ at ~~to~~ 1987 prices.[6] Also according to the DIB's definition, establishments with fixed assets, excluding land and buildings, of LE 0.55 million or less are considered as *very small industrial firms* which may be a synonym for handicraft establishments; these figures are adjusted annually according to inflation. These definitions imply that large-scale industrial firms (LSIFs) are those firms employing 50 workers or more each, or those firms with fixed assets, excluding land and buildings, of more than LE 1.1 million ~~according to~~ at 1987 prices.

It can be noticed that the above-mentioned definitions establish rigid cut-off points between SSIFs and handicraft establishments, on the one hand, and between SSIFs and LSIFs on the other. Hence, it may be argued that both definitions are questionable because:

(a) Handicraft establishments cannot be defined according to the number of workers or the value of their fixed assets, as such establishments acquire their identity from the distinct products they provide rather than any other criterion.

(b) SSIFs usually have the potential of being expanded, while handicraft establishments are expected to remain small, as their success stems mainly from their smallness and the production means they employ, *i.e.* their dependence on human skill.

(c) Such definitions create the problem of borderline firms; in other words, a firm may be considered as a handicraft establishment if it employs 9 workers even if it is completely similar to other firms with 10 workers each. On the other hand, a firm may be regarded as a large one if it employs 50 workers, even if it is no different from other similar firms with 49 workers each.

(d) There may be some firms with fewer than 10 workers each but which employ sophisticated expensive machinery; such firms may be regarded as handicraft es-

(6) An interview with the vice-general manager for small-scale industry credit, Cairo: DIB, December, 1987.

tablishments according to the number of workers they employ, but may qualify as LSIFs according to the value of their machinery. On the other hand, there may be some firms with more than 49 workers each but which employ primitive cheap machinery; such firms may be regarded as LSIFs according to the number of workers they employ, but may qualify as handicraft establishments according to the value of their machinery.

On the whole, the objective of defining SSIFs in Egypt is not quite clear; such a purpose may be: (a) distinguishing handicraft establishments in order to direct certain assistance programmes to them; or (b) distinguishing SSIFs in order to direct certain assistance programmes to them; or (c) distinguishing LSIFs in order to exclude them from certain assistance programmes. Consequently, SSIFs might be better defined in qualitative terms, in such a way as to establish a clear distinction between them and either handicraft establishments or LSIFs. In this regard, a business may be classified as a handicraft establishment if, at least, two of the following conditions apply:

(a) the activity is performed at home

(b) the production process is completely dependent on simple tools and/or human skill

(c) the business produces a distinct product which is not produced, with the same quality, by mechanized factories.

On the other hand, a business may be classified as a LSIF if, at least, one of the following conditions apply:

(a) the business is a publicly-quoted company (or a public-sector company)

(b) the business has more than one plant

(c) the business is engaged in a heavy-industry activity.

According to the above-mentioned criteria, SSIFs are those firms that do not qualify either as handicraft establishments or as LSIFs. As far as Egypt is con-

cerned, this definition is expected to have the following advantages:

(a) Avoiding the rigid cut-off points either in terms of the number of workers or in terms of the value of fixed assets, thereby solving the problem of borderline firms.

(b) Widening the span of SSIFs so that a larger number of firms can benefit from Government asistance programmes, if any.

(c) The classification of industrial firms is expected to be easier than would otherwise be the case; in other words, the data will be collected about these firms only once instead of the periodical revision of the number of workers and the value of fixed assets.

(d) It avoids the classification problems of the same business, associated with quantitative definitions; *i.e.* a firm may be reclassified as a large one merely because it employed one more worker or because it replaced a piece of old equipment with a new and more expensive one.

(e) It shows how big are LSIFs in Egypt as indicated by the above-mentioned criteria, which might be normally applicable to SSMFs in the developed countries. Public-sector companies, however, are excluded from the definition because they are self-sustained, *i.e.* they have all the privileges of being state-owned.

(f) Finally, this definition could apply to other developing countries that share some similarities with Egypt, especially in the realms of business-size structure.

Also the above-suggested definition can match whatever objective is sought in defining SSIFs; in other words:

(a) if the purpose of defining SSIFs is to direct certain assistance programmes to them, both handicraft establishments and LSIFs can be excluded; or

(b) if the purpose is to distinguish handicraft establishments in order to direct certain assistance programmes to them, they can be identified according to the above-mentioned criteria; or

(c) if the purpose is just to exclude LSIFs from certain assistance programmes,

both handicraft establishments and SSMFs can be identified either separately or collectively.

However, it might be argued that widening the span of SSIFs means more demand for, and more burden on, Government assistance programmes that might be insufficient for a larger number of businesses. Such an argument seems to be refutable, on the grounds that a large proportion of business enterprises in developing countries in general need to be supported and motivated in order to grow or even to survive. Also, it might be argued that the technology employed must be taken into consideration when defining SSIFs, on the grounds that SSIFs employ intermediate technologies rather than advanced ones. It is true that SSIFs *tend* to employ intermediate technology, but the employment of such a technology might not be considered as a distinctive characteristic of SSIFs for the following reasons:
(a) Employing intermediate technology might be due to the unavailability of another technology, for one reason or another, rather than the size of the firm.
(b) Advanced technology is not necessarily confined to LSIFs, as many owners/managers of SSIFs are keen to adopt contemporary production means in order to avoid lagging behind LSIFs as regards product quality.
(c) The term "advanced technology" itself is a relative concept, in the sense that what is considered as advanced technology is one country may not be considered so in another; also, what is considered as advanced technology at one time may not be considered so at another.

Nevertheless, this study regards SSIFs in Egypt as those firms employing 10–49 workers, as it is the definition according to which the data were collected.

7.2. Objectives and Scope of the Survey:

It is worth mentioning that the objectives and scope of the study, in general, are discussed in chapter one; the objectives of the survey, on the other hand, are as follows:

(a) Presenting a general assessment of SSIFs in Egypt.

(b) Examining the accessibility of SSMFs to institutional finance, namely bank credit.

(c) Exploring the attitudes of the owners/managers of SSMFs, towards the different sources of finance.

(d) Exploring the different types of finance employed by SSMFs and the difficulties associated therewith.

(e) Conducting a further detailed investigation of some SSMFs.

Accordingly, the survey-based part of this study consists of four chapters as follows:

Chapter eight: a general assessment of SSIFs in Egypt

Chapter nine : dependence on bank credit among SSMFs

Chapter ten : types and sources of finance employed by SSMFs

Chapter eleven: case studies

Concerning its scope, the main concern of the survey is private-sector SSMFs, rather than all SSIFs. The concentration of the survey on private-sector firms is due to: (a) public-sector companies in general are state-owned and are not expected to face major problems, especially in the area of finance; (b) public-sector SSIFs are decreasing through time, presumably because of rapid expansion; and (c) public-sector SSIFs do not represent a major part of all SSIFs in Egypt. In 1971, for instance, there were 224 public-sector SSIFs *vis-à-vis* 3,495 private-sector SSIFs; in 1981 there were only 180 public-sector SSIFs *vis-à-vis* 4,361 private-sector SSIFs.[7] If the percentages of public-sector SSIFs are calculated, these firms will account for 6.0 percent and 4.0 percent of all SSIFs for the two years respectively. Also, the survey is confined to SSMFs because of the enormous significance of these firms as compared with the rest of SSIFs. In Egypt, there

(7) Ola A.H. El-Sheikh, "Small-Scale Industries in the Egyptian Economy: an Analytical Study" (Cairo University, Master's Thesis, 1985) (in Arabic) p. 51.

are 3,162 SSIFs consisting of 3,145 SSMFs, 16 small-scale mining firms, and one small-scale petroleum firm.[8] According to these figures, SSMFs account for 99.5 percent of all SSIFs, while both mining firms and petroleum firms account together for only 0.5 percent of all SSIFs.

7.3. Sources and Methods of Collecting the Information:

7.3.1. The Questionnaire:

The major part of the information, employed in the succeeding four chapters, was collected via a questionnaire directed to the owners/managers of SSMFs. This questionnaire consisted of 40 questions, 38 of which were multiple-choice questions, the last two being open-ended questions. The design of the questionnaire took into consideration that: (a) the questions are worded in such a way as to make it easy for the respondents to understand and answer these questions in a clear fashion; (b) the alternative responses represent the status quo in Egypt; and (c) there should be room for any unexpected responses. On the other hand, the open-ended questions have two purposes: (a) to cater for the responses that could not be pre-determined in the form of alternative responses; and (b) to give the respondents the chance to add any relevant information that was not included in the rest of the questions. However, the questionnaire was tested on some colleagues and businessmen in Egypt, and their remarks and comments led to the amendment of some questions before distributing the questionnaire to the respondents.

7.3.2. The Population:

As far as the survey is concerned, the target population is SSMFs in Egypt, and the sampled population is SSMFs in greater Cairo as shown in the following table:

(8) Compiled and calculated from appendix two.

Table 7.2. Distribution of the target population and the sampled population according to the number of firms, the number of workers and the production value, December, 1987.

Area	Firms		Workers		Production	
	Number	%	Number	%	LE million	%
Cairo	1,337	42.5	28,654	41.0	716.7	31.3
Giza	226	7.2	5,099	7.3	283.0	12.4
Qaliubeya	387	12.3	8,895	12.7	158.1	6.9
Greater Cairo	1,950	62.0	42,648	61.0	1,157.8	50.6
The rest of Egypt	1,195	38.0	27,175	39.0	1,129.6	49.4
Total of Egypt	3,145	100	69,823	100	2,287.4	100

Source: Compiled and calculated from appendix two.

This table shows that greater Cairo accounts for 62.0 percent of all SSMFs in Egypt, compared with 38.0 percent for the rest of the country, and Cairo city alone accounts for 42.5 percent of SSMFs in Egypt. Also, it is noticed that the share of greater Cairo in the production value (50.6 percent) is relatively low compared with its share in the number of firms and in the number of workers. However, Giza governorate is an exception as its share in the production value (12.4 percent) is relatively high compared with its share in the number of firms and in the number of workers (7.2 percent and 7.3 percent respectively). If the average annual production per firm is calculated, it will be LE 536.0 thousand for Cairo, LE 1,252.2 thousand for Giza and LE 408.5 thousand for Qaliubeya. If the average annual production per worker is calculated, it will be LE 25.0 thousand for Cairo, LE 55.5 thousand for Giza and LE 17.8 thousand for Qaliubeya. On the other hand, the average annual production for SSMFs in greater Cairo is LE 593.7 thousand per firm and LE 27.2 thousand per worker; whereas this value for SSMFs in the rest of Egypt is LE 945.3 thousand per firm and LE 41.6 thousand per worker. This relatively low productivity in greater Cairo

implies that SSMFs in this area encounter some problems, among which may be the problem of finance. However, the relatively low productivity of SSMFs in greater Cairo, both per firm and per worker, is aggravated by the low productivity in Qaliubeya, where the textile industry concentrates. According to informal sources, private-sector firms engaged in the textile industry face serious problems, mainly in raw-material supplies, which resulted in many of these firms operating at low capacity or being shut down completely. Another characteristic of greater Cairo is that it comprises both areas where the DIB has branches and areas where there are no such branches. For these reasons, greater Cairo was chosen as the sampled population.

7.3.3. The Sample:

The sample size was calculated as follows:[9]

$$SE_p = \sqrt{\frac{\pi(1-\pi)}{n}}, \qquad \text{and} \quad n = \frac{\pi(1-\pi)}{(SE_p)^2}$$

where:

SE_p = the standard error of the proportion with the particular attribute

π = the proportion with the particular attribute in the population

n = the sample size

Dependence on bank credit represents the particular attribute in the population, which was the basis for calculating the sample size. The proportion of SSMFs in the population that depend on bank credit was expected to be less than 50 percent; hence this proportion was roughly estimated to be 40 percent. On the other hand, the desirable standard error for this proportion was 5 percent; accordingly, the sample size was calculated as follows:

$$n = \frac{0.4(1-0.4)}{(0.05)^2} = 96 \text{ firms}$$

(9) C.A. Moser, Survey Methods in Social Investigation (London: Heinman Educational Books Ltd., 1965) p. 116.

In order to cater for nonresponse, 100 questionnaires were distributed but only 86 were collected. Of the 86 questionnaires 5 were discarded because of the inconsistent responses given by the respondents; there were, therefore, 81 valid questionnaires giving a response rate of 84.4 percent, which can be considered as acceptable. However, the sample is expected to have some degree of bias due to: (a) the non-cooperative respondents who either gave inconsistent responses or did not respond at all; and (b) the way of selecting the firms was not 100 percent random because of the lack of a reliable sample frame. However, such a bias is not expected to have a significant effect on the survey results, because the sampled population is large enough and diversified enough. In other words, the sampled population represents 62.0 percent of the target population, as well as comprising firms of various attributes and characteristics that can be found in SSMFs in Egypt.

The basis of selecting the surveyed firms was firm size, therefore other attributes were not considered in selecting these firms. Consequently, the results obtained from some questions do not necessarily represent estimations for these attributes in the population; these attributes are the type of activity, date of starting the activity and the legal form. However, the significance of these attributes stems from their correlation with other aspects as regards the financing of SSMFs and the problems associated therewith.

The information collected via the questionnaire was analysed using the Statistical Package for Social Sciences (SPSS–X) in order to produce frequency tables and crosstables. The employment of statistical measures such as correlation was not adopted. This was because the author was advised to limit the work to crosstabulation as: (a) the data itself did not qualify for the employment of such measures; and (b) crosstables were considered as correlation measures.[10]

(10) An interview with Dr. W.R. Williams, the Computer Centre, Durham University, October, 1988.

7.3.4. Other Sources of Information:

In addition to the questionnaire, there were other primary sources that were approached in order to collect the further information required for the survey. The most significant of these sources was the interviews with the owners/managers of SSMFs and handicraft establishments, for the purpose of collecting detailed information about these businesses for the case study part of the survey. The case studies included in the survey were not chosen randomly but, rather, were chosen from businesses whose owners/managers were either relatives of some of the author's friends or known to him. In this regard, it is worth mentioning that no conclusions will be drawn depending only on these case studies, as they do not represent the population from which they were selected. Accordingly, these case studies were envisaged to be supplementary to the questionnaire, in the sense that their purpose was to provide for further investigation of some important aspects of SSMFs in addition to questions of finance. The case studies of handicraft establishments had two purposes: (a) to examine the validity of defining handicraft establishments according to the number of workers; and (b) to assess their expansion potential. In addition, there were case studies from banks whose purpose was to assess the banks' decisions to approve or reject loan applications from some SSMFs; the sources for such case studies were the banks' documents to which the author was given access by the bank staff. In aggregate, the survey contains nine case studies as follows:

(a) five case studies of SSMFs;

(b) two case studies of handicraft establishments; and

(c) two case studies from banks.

The rest of the sources provide information relevant to the financing of SSMFs, as well as the general assessment of these firms; these sources were:

(a) Annual reports of the CBE which contain information about the interest-rate structure and the banking sector in general.

(b) Annual reports of the DIB which contain information about the Bank's activity, especially the financing of SSMFs.
(c) Interviews with bank staff, mainly the DIB's staff, in order to collect more information about the financing of SSMFs.
(d) The Public Authority for Industrialization (PAI), a subsidiary of the Ministry of Industry, which has computerized data about SSIFs in Egypt.
(e) The Central Agency for Public Mobilization and Statistics (CAPMS), which is the only official Government agency to publish statistics on almost all economic and social facets of Egypt, including industrial and population censuses.
(f) Some researches on small businesses in Egypt, but these researches were approached only in cases of the unavailability of the required data from their primary sources.

7.4. Difficulties Encountered During the Survey:

The difficulties encountered during the survey were mainly related to collecting informatiron from SSMFs. The main problem was the reluctance of some businessmen to cooperate with researchers whom they "suspect" of being associated with the authorities. In this regard, there are two Government agencies with which every businessman in Egypt has to deal, the Social Insurance Agency (SIA) and the Tax Agency (TA). Each of these agencies has branches and offices in each town and in each district of large cities.

The SIA is a subsidiary of the Ministry of Insurance and Social Affairs, whose main concern is to make sure that every employee in the country is insured. Consequently, every employee must be registered with the SIA and pay a monthly subscription, either himself or via his/her employer, which has two implications: (a) the employee's wage will increase by the amount of subscription; and (b) it becomes difficult for the employer to fire any employee without good reasons. Some private-sector employers try to avoid registering their workers, or some of

them, with the SIA in order to save the subscription fee and to make it easy for themselves to fire the unwanted workers. Such employers do not want the SIA officers to know the real size of their work force, so the SIA officers visit factories unexpectedly to check the numbers of workers against the numbers registered with them. At the same time, some businessmen claim that the SIA officers register any one in the factory as a worker, even if he/she is a trainee or a volunteer from the owner's family.

The TA is a subsidiary of the Ministry of Finance, and its main purpose is to make sure that every individual and every businessman pays income tax. Therefore, every individual and every businessman must report his annual income to the TA, but some businesses, especially new ones, do not take the initiative and report their incomes to the TA. That is why the TA officers (tax assessors) visit both new and old businesses in order to: (a) estimate the incomes of new businesses and claim the due taxes; and (b) check whether there is an expansion in the business's activity and estimate the increment in the business's income thereof. In this regard, some businessmen claim that tax assessors visit new businesses a long time after starting the activity, and overestimate the business's income without taking into consideration the low income during the first years of activity.

This situation caused a lack of liaison between businessmen, on the one hand, and both SIA officers and TA officers on the other. Hence, almost all businessmen in Egypt suspect any "stranger" who visits the business and asks about any aspect of the business's activity, especially if the enquiry involves figures such as the number of workers, the annual income, the annual turnover or any balance-sheet figure. To solve this problem the author had to: (a) give some questionnaires to his friends and acquaintances in different areas of business location, as they can have access to the businesses in their areas because they are not "strangers"; and (b) to ask some friends to introduce him to the respondents and interviewees in

their areas, and assure them that he is not an SIA officer or a tax assessor. For these reasons, and because of the limited time, the survey involved more than a score of people, all of whom had either a first university degree or a higher degree.

Moreover, the author encountered the following difficulties:

(a) It was impossible to obtain copies of the balance sheets of the surveyed SSMFs because these firms, usually, do not produce audited financial accounts; even if there are estimates of such accounts, there is no way to obtain them.

(b) Only a few owners/managers agreed to be interviewed by the author for the purpose of case studies; even those who did were reluctant to give the required detailed information.

(c) Some Government agencies refused to give the required data, although it was not confidential, without the intervention of high-rank Government officers.

(d) The latest available industrial census was the 1979 census, and this forced the author to obtain some data from previous researches.

(e) It was very difficult to obtain information about banks' lending policies or their lending practices, even with the intervention of some friends in the banks themselves.

(f) The author could not have access to any information related to the sources and uses of pension funds.

(g) There are no statistics about business failure in Egypt.

Chapter Eight

A General Assessment of Small-Scale Industrial Firms in Egypt

8.1. SSIFs Before 1974

8.2. SSIFs After 1974

8.2.1. The Status of SSIFs Among Private-Sector Firms

8.2.2. Regional Distribution of SSIFs in Egypt

8.3. Fostering SSIFs in Egypt

8.3.1. Productive Cooperatives

8.3.2. The Institute of Small-Scale Industries

8.3.3. The Engineering and Industrial Design Development Centre

8.3.4. Industrial Estates

8.1. SSIFs Before 1974:

The main purpose of this section is to demonstrate the status of SSIFs before the adoption of the ODEP, in 1974, which gave impetus to the private sector in almost all areas of the Egyptian economy. The status of SSIFs will be demonstrated within the context of private-sector industrial firms, as compared with public-sector industrial firms. However, there is no reliable data about SSIFs before 1967 when a comprehensive census of industrial firms took place. In this regard, it is worth mentioning that the period 1960–1973 was characterised by the dominance of public-sector firms, namely those employing 50 workers or more. Hence, and according to the available data, the years 1967 and 1971 are chosen to indicate the relative status of SSIFs, both public-sector and private-sector, before the opening of the economy in 1974. This is shown in the following table:

Table 8.1. Distribution of industrial firms in Egypt according to size, sector and workforce, 1967 and 1971

Year	Firm size	Firms						Workers					
		Public-sector		Private-sector		Total		Public-sector		Private-sector		Total	
		Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
1967	10–49 workers	278	6.6	3,921	93.4	4,199	100	8,518	10.2	75,291	89.8	83,809	100
	50 workers and more	674	63.6	386	36.4	1,060	100	468,464	90.3	50,567	9.7	519,031	100
1971	10–49 workers	224	6.0	3,495	94.0	3,719	100	7,113	9.3	69,556	90.7	76,669	100
	50 workers and more	784	68.2	366	31.8	1,150	100	531,864	91.0	52,554	9.0	584,418	100

Source: Adapted and calculated from: Ola A. H. El-Sheikh, "Small-Scale Industries in the Egyptian Economy: an Analytical Study" (Cairo University, Master's thesis, 1985) (in Arabic) p. 51.

The first and clearest point to notice, from the previous table, is that the private sector is much more significant than the public sector concerning SSIFs and they swap roles concerning large-scale industrial firms (LSIFs). Another point to notice is that there is no significant difference between the two years concerning the relative importance of the public sector and the private sector in both SSIFs and LSIFs. In 1967, the private sector dominated SSIFs, accounting for 93.4 percent of the firms and 89.8 percent of the workforce; and the public sector dominated LSIFs accounting for 63.6 percent of the firms and 90.3 percent of the workforce. In 1971, public-sector SSIFs decreased in both number and relative importance, and at the same time, public-sector LSIFs increased in both number and relative importance. This phenomenon might be due to: (a) consolidations among public-sector SSIFs; or (b) the growth of some public-sector SSIFs that entered the bracket of LSIFs; or (c) new nationalizations of some industrial firms; or (d) more than one of the preceding reasons. Also, in 1971, private-sector SSIFs decreased in number in spite of their increased relative importance; and private-sector LSIFs decreased in both number and relative importance. Concerning private-sector SSIFs, their decrease might be due to: (a) the growth of some SSIFs that entered the bracket of LSIFs; or (b) the failure of some of them; or (c) both reasons.

8.2. SSIFs in Egypt After 1974:

The adoption of the ODEP in 1974 stimulated many investors to launch new projects in different areas of the Egyptian economy in general and the industrial sector in particular. Between 1974 and 1979 there were 225 new industrial projects established under the provisions of Law no.43 of 1974 (amended by Law no. 32 of 1977), accounting for 40.5 percent of the total number of 555 projects.[1] Also

(1) Calculated from data collected from the Public Authority for Investment and Free Zones (PAIFZ). Cairo, 1988.

in 1979 the status of SSIFs was as follows:[2]

(a) There were 6,139 industrial firms in Egypt, 83 percent of which were private-sector firms and 17 percent public-sector firms.

(b) SSIFs accounted for 91.5 percent of private-sector industrial firms, and only 17 percent of public-sector industrial firms.

(c) The number of SSIFs, both private-sector and public-sector, was 4,853 firms accounting for 79 percent of the total number of 6,139 industrial firms.

8.2.1. The Status of SSIFs Among Private-Sector Firms:

Before discussing the status of private-sector SSIFs it might be useful to demonstrate the status of all private-sector industrial firms, compared with public-sector industrial firms, as shown in the following table:

Table 8.2. Distribution of the industrial firms in Egypt according to the number of firms, number of workers and production value, 1987

Sectors	Firms		Workers		Production value	
	Number	%	Number	%	LE million	%
Private sector	9,551	91.6	219,680	27.5	13,390.0	58.0
Public sector	872	8.4	579,213	72.5	9,722.7	42.0
Total	10,423	100	798,893	100	23,112.7	100

Source: Compiled and calculated from appendix two.

As shown in table 8.2, private-sector industrial firms outnumber public-sector ones, accounting for 91.6 percent of total industrial firms compared with 8.4 percent for public-sector firms. On the other hand, the majority of the workforce engaged in industrial activity are enrolled in public-sector firms accounting for 72.5 percent of the total number of workers *vis-à-vis* 27.5 percent for private-sector firms. These figures suggest that public-sector industrial firms are mainly large,

(2) Compiled and calculated from CAPMS, Census of Industrial Production, 1979 (Cairo: CAPMS. 1984) (in Arabic) pp. 114-31.

while private-sector firms are mainly small; consequently, it is to be expected that public-sector firms dominate the industrial sector in terms of production value. Nonetheless, the figures shown in table 8.2 partly contradict such an expectation, as private-sector firms overtake public-sector ones accounting for 58 percent of total production value compared with 42 percent for public-sector firms. The latter figures raise the question of efficiency in terms of the productivity of both firms and workers in both sectors; this is shown in the following table:

Table 8.3. Comparative average size and productivity of private-sector and public-sector industrial firms in Egypt, 1987

Sectors	Average number of workers per firm[a]	Average annual production per firm LE 000[b]	Average annual production per worker LE 000[c]
Private sector	23	1,402	61
Public sector	664	11,150	17

(a) Calculated as $\frac{\text{number of workers}}{\text{number of firms}}$

(b) Calculated as $\frac{\text{production value}}{\text{number of firms}}$

(c) Calculated as $\frac{\text{production value}}{\text{number of workers}}$

Source: Calculated from table 8.2.

The previous table shows the following:

(a) In terms of firm size there is a substantial difference between the average size of a public-sector firm and that of a private-sector one, as the average size of the former is about 29 times that of the latter.

(b) In terms of the average annual production the difference is notably narrowed, as the average annual production of a public-sector firm is only eight times that of a private-sector firm.

(c) Concerning the average annual production per worker the situation is reversed, as the average annual production of a private-sector worker is almost fourfold that

of a public-sector worker.

These results seem to have serious implications as regards the comparative efficiency of both sectors. The most significant of these implications is that public sector firms tend to be overmanned, *i.e.* they employ more people than the activity would require. In fact this phenomenon is a consequence of: (a) the Government's obligation, especially during the 1960s and the 1970s, to provide a job for everyone of working age, especially educated people; and (b) the laws that govern employment in the public-sector and Government agencies, as such laws make it virtually impossible for public-sectore employers to fire any worker. Hence, it can be claimed that in comparison the private sector enjoys a relatively reasonable amount of flexibility, especially in its employment policy, which makes it more efficient than the public sector.

Given the relative importance of private-sector industrial firms within the industrial activity in general, and given that this study is concerned with private-sector SSMFs, this raises the issue of the relative importance of SSIFs among private-sector industrial firms as a whole. This is shown in the following table:

Table 8.4. The relative importance of SSIFs among private-sector industrial firms in Egypt, 1987

Categories	Firms		Workers		Production value	
	Number	%	Number	%	LE million	%
SSIFs	3,162	33.1	70,294	32.0	2,298.6	17.2
Other private-sector industrial firms*	6,389	66.9	149,386	68.0	11,091.4	82.8
Total	9,551	100	219,680	100	13,390.0	100

* Embraces LSIFs and industrial firms employing less than 10 workers.

Source: Compiled and calculated from appendix two.

Table 8.4 shows that SSIFs represent about one third of the number of private-sector industrial firms, and 32 percent of the workforce engaged in private-sector industrial firms in Egypt. Concerning the production value, SSIFs account for only 17.2 percent of the industrial production generated by the private sector, compared with 82.8 percent for other private-sector industrial firms. These latter figures imply that the relatively low share in private-sector industrial production, accounted for by SSIFs, is due to: (a) their smallness, which results in relatively low capabilities; and/or (b) their relative inefficiency, as compared with other private-sector industrial firms. If this relatively low share is a result of smallness, it will be regarded as an inevitable consequence which should be neutralized; but if this relatively low share is assumed to be due to inefficiency, such an assumption should be tested. Hence, the relative efficiency of SSIFs will be tested in terms of productivity, as shown in the following table:

Table 8.5. Comparative average size and productivity of SSIFs and other private-sector industrial firms in Egypt, 1987

Categories	Average number of workers per firm[a]	Average annual production per firm LE 000[b]	Average annual production per worker LE 000[c]
SSIFs	22	727	33
Other private-sector industrial firms	23	1,736	74

(*a*) Calculated as $\frac{\text{number of workers}}{\text{number of firms}}$

(*b*) Calculated as $\frac{\text{production value}}{\text{number of firms}}$

(*c*) Calculated as $\frac{\text{production value}}{\text{number of workers}}$

Source: Calculated from table 8.4.

Before discussing the issue of relative efficiency there is another issue which is worth discussing, that is, the average size of firm for both SSIFs and other

private-sector industrial firms. In this respect, table 8.5 shows that the average number of workers per firm is 22 workers for SSIFs and 23 workers for other private-sector industrial firms. However, an average number of 22 workers per firm seems to be plausible for SSIFs, as these firms are defined in Egypt as those employing 10-49 workers. On the other hand, an average number of 23 workers per firm for the rest of private-sector industrial firms implies that: (a) the inclusion of firms employing less than 10 workers, as well as those employing more than 49 workers, has a noticeable effect in diluting the average size per firm, and/or (b) many LSIFs tend to be near to the border line of SSIFs, in terms of the number of workers, *i.e.* 50 workers. Concerning the average annual production per firm for SSIFs, it is less than half that of other firms (LE 727 thousand compared with LE 1,736 thousand), which implies that: (a) the average annual production per firm for LSIFs is large enough to offset the effect of the inclusion of firms employing less than 10 workers; and/or (b) SSIFs are less efficient than other private-sector industrial firms, mainly LSIFs.

As far as workers' productivity is concerned, the average annual production per worker for SSIFs is less than half that in other private-sector industrial firms (LE 33 thousand compared with LE 74 thousand), which indicates the relatively low productivity of workers in SSIFs. Such a low productivity may be due to either one or more of the following factors:

(a) A less-advanced technology employed by SSIFs, as compared with that employed by LSIFs.

(b) A deteriorating condition of the machinery employed by SSIFs, which results in a low level of output.

(c) A lack of finance which results in discontinuity of raw-material supply and bottlenecks in production lines.

(d) A lack of finance which results in a delay in equipment maintenance and replacement.

(e) The existence of redundant workers who cannot be fired either for legal reasons or for sentimental reasons.

Also in line with productivity, it was inferred from table 8.3 that private-sector industrial firms are more efficient than their public-sector counterparts in terms of the average annual production per worker. Hence, in the light of the above-mentioned inferences, it can be said that the relative efficiency of private-sector industrial firms can be attributed to LSIFs rather than SSIFs.

8.2.2. Regional Distribution of SSIFs in Egypt:

Small businesses in general are expected to be more widespread than large businesses, as the requirements needed to establish a small business, especially finance, are much less than those needed to establish a large one. Hence, SSIFs are not expected to be concentrated in one region or more in Egypt, thus participating in a balanced regional development. However, the regional distribution of SSIFs depends, among other factors, on: (a) the regional distribution of the population and the labour force, as the former represents the market for the products of SSIFs and the latter represents the main production factor; and (b) the regional distribution of banking services represented in bank branches in each region. These factors are shown in tables 8.6(a) and 8.6(b) below:

Table 8.6(a): Percentage distribution of SSIFs, population and labour force in Egypt, by region

Region	SSIFs %	Population %	Labour force %
Northern Egypt[a]	34.4	42.9	43.9
Greater Cairo[b]	61.8	25.5	27.0
Southern Egypt[c]	2.3	27.8	25.1
Suez canal area[d]	1.3	2.6	2.9
Frontier governorates[e]	0.2	1.2	1.1
Total	100	100	100

(*a*) consists of 8 governorates: Alexandria, Beheira, Gharbeya, Daqahleya, Kafr El-Sheikh, Damietta, Menofeya and Sharqeya.

(*b*) consists of 3 governorates: Cairo, Giza and Qaliubeya.

(*c*) consists of 7 governorates: Fayoum, Beni Suef, Menya, Asiute, Sohag, Qena and Aswan.

(*d*) consists of 3 governorates: Port Saeid, Suez and Ismaeileya.

(*e*) consists of 5 governorates: Matrouh, North Sinai, South Sinai, New Valley and the Red Sea area.

Source: Distribution of SSIFs is compiled and calculated from appendix two; distribution of both population and labour force are compiled and calculated from CAPMS. Population, Housing and Establishment Census, 1986 (Cairo: CAPMS, 1987) p. 20 and pp. 48-51 respectively.

Table 8.6(b): Regional distribution of banking service in Egypt, as related to SSIFs

Region	SSIFs		Bank branches		Branch/SSIF ratio[a]	SSIF/branch ratio[b]
	Number	%	Number	%		
Northern Egypt	1,090	34.4	302	33.2	0.3	3.6
Greater Cairo	1,954	61.8	370	40.6	0.2	5.3
Southern Egypt	72	2.3	150	16.5	2.1	0.5
Suez canal area	40	1.3	50	5.5	1.3	0.8
Frontier governorates	6	0.2	38	4.2	6.3	0.2
Total	3,162	100	910	100	0.3	3.5

(*a*) Calculated as: $\frac{\text{number of branches}}{\text{number of SSIFs}}$

(*b*) Calculated as: $\frac{\text{number of SSIFs}}{\text{number of branches}}$

Source: Distribution of SSIFs is compiled and calculated from appendix two; distribution of bank branches is compiled and calculated from CBE, "Credit and Banking Developments during the period: July, 1984 – June, 1986", Cairo: CBE, 1987 (in Arabic) pp. 42-57.

Before drawing any inferences from tables 8.6(a) and 8.6(b) it is worth noticing that:

(a) While the distribution of SSIFs is based on 1987 data, the latest data available for population, labour force and bank branches is the 1986 data; however, this is not expected to affect the accuracy of calculations and comparisons.

(b) The division of Egypt into the above-mentioned regions is the commonly used division, albeit northern Egypt is often referred to as *Lower Egypt* and southern Egypt is often referred to as *Upper Egypt*.

(c) Both specialized banks and free-zone banks are excluded from table 8.6(b). Concerning specialized banks, they are of three types: real-estate banks, agricultural banks and industrial banks; both real-estate banks and agricultural banks are irrelevant to the financing of SSIFs and there is only one industrial bank (the DIB) which was discussed in chapter one. As for free-zone banks, there is only one

bank which performs off-shore activities and it is not registered with the CBE.

Table 8.6(a) shows that the regional distribution of the labour force almost matches the regional distribution of population, except for greater Cairo and southern Egypt. The share of greater Cairo in labour force exceeds its share in population, and it is the other way round for southern Egypt. This implies that: (a) greater Cairo, especially Cairo city, represents an area of attraction for inter-regional immigration, mainly for people of working age; (b) southern Egypt represents the major source for labour-force immigration to the greater Cairo area; and (c) southern Egypt has a fairly low share of development programmes, which is reflected in a lack of employment opportunities.

Concerning SSIFs, their regional distribution does not match the regional distribution of both population and labour force, as they tend to be concentrated in greater Cairo, especially Cairo city, which accounts for 42.5 percent of all SSIFs in Egypt.[3] Such a concentration can be regarded as a consequence, rather than a cause, of lopsided development which gives more attention to specific regions of the country. In other words, the concentration of modern services in greater Cairo attracts more businesses to this area, which provides some externalities to such businesses. These externalities result from: (a) easy access to airports, seaports and Government agencies; (b) the availability of modern communication means and infrastructure; and (c) other externalities resulting from the establishment of other businesses. In contrast to greater Cairo is southern Egypt, which accounts for 27.8 percent of population and 25.1 percent of labour force, while it accounts for only 2.3 percent of SSIFs. These figures seem to justify the inference drawn above as regards the lesser development of southern Egypt and the immigration from this region to greater Cairo. The rest of the regions do not seem to have a noticeable imbalance in the distribution of population, labour force and SSIFs except for frontier governorates, because SSIFs do not exist in South Sinai and

(3) Calculated from appendix two.

the Red Sea area.

As far as the banking service is concerned, table 8.6(b) shows that SSIFs in Egypt do not seem to face any shortage of such a service. Apart from the DIB's three branches, there are 910 bank branches to serve 3,162 SSIFs, which results in 0.3 bank branch for each SSIF or 3.5 SSIFs corresponding to each bank branch. Also, it is noticed that the distribution of bank branches, in table 8.6(b), has more or less the same mode of concentration as that of the distribution of SSIFs in table 8.6(a). That is to say that bank branches tend to be more concentrated in greater Cairo followed by northern Egypt, southern Egypt, the Suez canal area and frontier governorates. Nevertheless, if the sufficiency of banking service is considered, the situation will be almost reversed. In this regard, it can be noticed that greater Cairo is the poorest region, as there are 370 bank branches to serve 1,954 SSIFs, *i.e.* there is 0.2 bank branch for each SSIF or 5.3 SSIFs corresponding to each bank branch. At the opposite extreme, frontier governorates represent the worst region as regards their share of SSIFs and bank branches, but they have the best banking service. In other words, there are 38 bank branches to serve only 6 SSIFs, which results in 6.3 bank branches for each SSIF or 0.2 SSIF corresponding to each bank branch. Also, southern Egypt enjoys a much better banking service, compared with greater Cairo and northern Egypt, in the sense that there are 150 bank branches to serve 72 SSIFs which results in 2.1 bank branches for each SSIF or 0.5 SSIF corresponding to each bank branch. Hence, it can be claimed that the major reason for the concentration of SSIFs in greater Cairo is the above-mentioned externalities rather than the availability of banking services.

8.3. Fostering SSIFs in Egypt:

There were some attempts to assist and foster SSIFs in Egypt, especially after the 1952 Revolution and the Government's reorientation towards comprehensive

economic and social development. However, the concept of SSIFs was then conceived to include artisans and handicraft establishments as well as small factories using primitive machinery. Consequently, the majority of programmes were directed to handicraft establishments and "productive families", in spite of bearing the name of SSIFs. This section will be concerned with the main attempts to assist SSIFs in Egypt after 1952, as there is no reliable data about any programmes prior to that date.

8.3.1. Productive Cooperatives:

The Government's first attempt to foster SSIFs took the form of cooperatives; and this effort was embodied in setting up the Establishment for Productive Cooperation and Small-Scale Industries (EPCSSI) in 1960. This Establishment was concerned with vocational training and the development of the production of the very small factories in different regions of Egypt. The EPCSSI also rendered the service of providing very small producers with machinery and raw materials on a credit basis as well as helping them in marketing their products. Yet, the businesses which benefited from the services rendered by the EPCSSI were handicraft establishments and very small industrial firms, especially those with products depending on local raw materials such as: textiles, rug weaving, bamboo products and honey production.

In 1969 the EPCSSI was given another title, the Public Authority for Developing Handicraftsmen (PADH). It then became the central organization concerned with planning and follow-up, and the supervision of local industrial cooperatives was allocated to the local administration of each governorate.(4)

8.3.2. The Institute of Small-Scale Industries (ISSI):

This Institute was established in 1963 with collaboration between the EPCSSI

(4) Bank of Alexandria, "Means and Methods of Developing Small-Scale Industries in Egypt", Economic Bulletin, (17), 1985 (in Arabic), p. 53.

and the International Labour Organization (ILO); but the beginning of its activities was in 1965. In 1969, the ISSI started to face troubles as the ILO stopped providing it with the necessary help. Being unable to carry on performing its functions, the ISSI was consolidated with the Engineering and Industrial Design Development Centre (EIDDC) in 1976.[5]

8.3.3. The Engineering and Industrial Design Development Centre (EIDDC):

This centre was established in Cairo in 1969 as an affiliate of the Ministry of Industry. After being consolidated the ISSI in 1976, another branch was opened in Cairo as well. The EIDDC is concerned with rendering technical services to SSIFs such as:[6]

(a) Design and development of products.

(b) Industrial design.

(c) Equipment design.

(d) Plant layout.

(e) Giving SSIFs access to the facilities of the Centre such as laboratories, workshops and equipment.

In 1977, the World Bank conducted a survey of SSIFs in Egypt and suggested that the EIDDC should develop more services to SSIFs in collaboration with the DIB. Since then the services of the EIDDC have been extended to include training foremen and engineers in SSIFs as well as making visits to SSIFs in order to discover the problems which they face, and help them to solve such problems. In 1983, a new branch of the EIDDC was inaugurated in Alexandria to extend

(5) Ola A.H. El-Sheikh, "Small-Scale Industries in the Egyptian Economy: an Analytical Study" (Cairo University, Master's thesis, 1985) (in Arabic) p. 204.

(6) Ezel-Din Al-Sharqawy, "The Role of the Engineering and Industrial Design Development Centre in Providing Consultation to Small-Scale Industries", a paper submitted to the Symposium on Promoting Small-Scale Industries in Egypt, held in collaboration between the Fredrich Ebert Society (Germany) and the Institute of National Planning (Egypt), Cairo: 1–4 April, 1984 (in Arabic) pp. 2-3.

services to other governorates outside the Cairo area.[7]

8.3.4. Industrial Estates:

The adoption of the ODEP by the Egyptian Government in 1974 resulted in several industrial projects, both indigenous and joint-venture, being established in Egypt. To encourage such projects, the Government took the initiative to establish industrial estates outside the inhabited area, the most important of which is the 10th of Ramadan city, located about 35 miles (56 kilometers) north of Cairo. Many of the investors and businessmen faced some difficulties in launching SSIFs in the city of the 10th Ramadan due to their limited financial resources compared with investors in LSIFs. In 1987, the Government tried to rectify the situation and launched a programme establishing an SSIF industrial estate in this area. This programme is intended to provide land, buildings and infrastructure to SSIFs in return for instalment payment corresponding to the real cost of such facilities. After being completed, this part of the 10th of Ramadan city will be the first pre-planned SSIF-industrial estate in Egypt.

In addition to the forementioned efforts to foster SSIFs, there were two unsuccessful attempts to foster SSIFs in Egypt.[8] The first one was to establish three industrial estates outside the congested area of Cairo, but all efforts were discontinued due to the 1967 war. The second attempt was to establish the Arab Institute for Small-Scale Industries; this Institute was supposed to be under the supervision of the Industrial Development Centre of Arab States (IDCAS) which is an affiliate of the Arab League. This attempt ended in a fiasco, as well, due to the deterioration of the relationship between Egypt and Arab countries after the peace treaty between Egypt and Israel in 1979.

From the previous discussion, it can be noticed that the EPCSSI was con-

(7) Ibid., p. 8.
(8) Azmy M. Ali, "Means and Methods of Developing Small-Scale Industries in Egypt", Cairo: DIB, 1981 (in Arabic) pp. 44-5.

cerned mainly with artisan activities which took the form of "productive cooperatives". Moreover, the EPCSSI was declared, after 1967, to be concerned only with establishments employing less than 10 workers, so that SSIFs gained no assistance from it. Concerning the ISSI, it was unsuccessful due to the lack of aid from the ILO.

The remaining organization to assist SSIFs is the EIDDC which can be considered as the only source of assistance to SSIFs, other than the DIB. The problem with the EIDDC is that it is located in Cairo, with only one branch in Alexandria; and this may confine it to a limited area. This limited spread of the EIDDC may result in a shortage of services rendered to SSIFs, and this shortage may be due to: (a) the cost and effort which the owners/managers of SSIFs incur in order to approach the EIDDC; and (b) the lack of information about the EIDDC available to SSIFs in other regions.

As regards the SSIF industrial estate in the 10th of Ramadan city, it is located in the area where SSIFs concentrate; and this will aggravate the unbalanced development among different regions. However, it is worth mentioning that there are some points to be borne in mind in anticipating the success potential of this industrial estate; these are:

(a) The availability, and efficiency, of the necessary infrastructure.

(b) The availability, and sufficiency, of all necessary information required by the interested businessmen.

(c) The procedures and documents required by Government agencies in order to give businessmen access to the industrial estate and, consequently, the time which elapses until SSIFs can start production.

Chapter Nine

Dependence on Bank Credit Among Small-Scale Manufacturing Firms

9.1. The Firms which Depend on Bank Credit

9.2. The Firms which do not Depend on Bank Credit

9.2.1. Firm Size and Dependence on Bank Credit

9.2.2. Legal Form and Dependence on Bank Credit

9.2.3. The Alternative Sources to Bank Credit

9.3. Finance Preferences Among SSMFs

It is worth mentioning that, in Egypt, employing bank credit is not a common practice among small businesses in general and SSMFs in particular. The survey of SSMFs revealed that only 30 firms depend on bank credit and 51 firms do not, accounting for 37 percent and 63 percent of the sample respectively.[1] Hence, it is necessary to investigate the attitudes of the firms which depend on bank credit and those of the firms which do not.

9.1. The Firms which Depend on Bank Credit:

In order to highlight the attitudes and judgements of the firms which depend on bank credit, three questions must be answered: (a) do these firms shop around for a loan?; (b) if not, do they go to a specific bank(s)?; and (c) if so, why do they go to this specific bank(s)? The answer to the first question is that only 23.1 percent of these firms approach more than one bank before applying for a loan while 76.9 percent go directly to a specific bank.[2] The reasons for dealing with a specific bank are shown in the following table:

Table 9.1. Percentage distribution of the reasons for dealing with a specific bank, as given by the owners/managers of SSMFs

The specified banks	It is the only available bank %	It is the only bank we know %	We have had past dealings with it %	It does not deal with interest %	Total %
The DIB	20.0	60.0	20.0	0.0	100
A specific commercial bank	57.1	14.3	28.6	0.0	100
A specific Islamic bank	0.0	0.0	0.0	100	100

Source: Questions 10 and 11.

(1) Analysis of question number 8.
(2) Analysis of question number 9.

This table shows that the majority of the firms which deal with the Development Industrial Bank (DIB) (60 percent of them) do so because it is the only bank they know. This implies that these firms either used not to deal with banks before the inauguration of the DIB, in 1976, or they were established after 1975. A further analysis of the data showed that all the firms which go directly to the DIB were established after 1975.[3] This finding suggests that the establishment of the DIB had the outcome of stimulating only new SSMFs to deal with it , but did not influence older ones to do so. For those firms which deal with DIB because it is the only available bank (20 percent), this may be either because they had approached other banks but failed to obtain finance, or because they knew from others that they can only approach the DIB for finance; in either case it demonstrates the usefulness of the DIB. Concerning the firms which deal with the DIB because they have had past dealings with it (20 percent), it seems that such firms were among the first customers to obtain finance from the DIB, because they were established soon after 1975.

On the other hand, 57.1 percent of the firms, which deal with a specific commercial bank, stated that they do so because it is the only available bank, and 14.3 percent stated that they do so because it is the only bank they know. A further analysis of the data showed that both groups were established after 1975;[4] hence , both groups can be considered as one group accounting for 71.4 percent of the firms which deal with a specific commercial bank. This implies that: (a) these firms had approached other banks but failed to obtain finance, and among those other banks may be the DIB; or (b) the particular bank is the only bank which has a branch in the area; or (c) they have been introduced to this bank by other customers and continued dealing with it. As for the SSMFs which stated that they deal with a specific commercial bank because they have had past

(3) Crosstabulation of questions 2 and 10.
(4) Crosstabulation of questions 2, 10 and 11.

dealings with it (28.6 percent), a further analysis of the data showed that these firms were established during the 1960s,[5] when they had no choice but to deal with public-sector commercial banks. Finally, it is an axiom that all the firms which deal with a specific Islamic bank do so because it advances interest-free finance which complies with the piety of the owners/managers. These firms were established after 1975 and so were Islamic banks in Egypt with the exception of the Nasser Social Bank which was established in 1971 (as discussed in section 6.3.1 of chapter six).

Concerning SSMFs which do not adhere to a specific bank, 44 percent of them obtained credit from more than one bank;[6] the reasons which they gave are shown in the following table:

Table 9.2. Percentage distribution of the reasons for obtaining credit from more than one bank, as given by the owners/managers of SSMFs

Reasons	%
To benefit from the advantages of each bank	54.5
To guarantee the financing of the firm in emergency cases	36.4
We deal with the bank which offers better terms	9.1
Total	100

Source: Question number 13.

Table 9.2. shows a positive sign of *financial awareness* among the owners/managers of the concerned firms, as more than half of them (54.5 percent) realise that not all banks have the same advantages and disadvantages. Also, 36.4 percent of these firms deal with more than one bank, as a precaution should one of these banks reject the firm's application for credit in a critical time. The rest of these firms, which seek the best lender in almost each single financing operation, account for only 9.1 percent of the concerned firms. However, it can be said that

(5) Ibid.
(6) Analysis of question number 12.

they are similar to the first group but expressed their attitude in different terms; in other words, they were more explicit about cost-related factors.

Another aspect of the relationship between this group of firms and banks should be considered; this is represented in whether they misconceive some facets of their dealings with banks. This is shown in the following table:

Table 9.3. Percentage distribution of SSMFs, which depend on bank credit, according to their perception of relative interest rates

Relative interest rates as perceived by SSMFs	%
The same as that charged to public-sector companies	11.5
Higher than that charged to public-sector companies	23.1
Do not know	65.4
Total	100

Source: Question number 20.

This table shows that the majority of the concerned firms' owners/managers are not aware of how interest rates are set, as 65.4 percent of them do not know whether banks charge them the same interest rates as those charged to public-sector companies. Moreover, 23.1 percent of those owners/managers believe that they are discriminated against in terms of the interest charged on their loans as compared with public-sector companies. It appears that only 11.5 percent of the owners/managers realise that such discrimination does not exist. In fact, only the latter minority of owners/managers knows the truth, because the Central Bank of Egypt (CBE) sets the structure of interest rates on loans, as regards different economic activities (industry, agriculture, trade and services), rather than on a public-sector/private-sector basis. This is in order to curb the credit advanced to certain activities and boost the credit advanced to others. Hence, it can be inferred that those owners/managers who regard their businesses as discriminated against gave their responses on a subjective basis. This might be attributed to

their belief that the DIB and some commercial banks, as public-sector banks, are biased towards public-sector companies; moreover, such a belief might include the CBE itself as a Government agency.

Another aspect of the relationship between SSMFs, which depend on bank credit, and banks is represented in the way of charging the interest on loans as conceived by these firms. This is shown in the following table:

Table 9.4. Percentage distribution of SSMFs, which depend on bank credit, according to their perception regarding the charging of interest on loans

The way of charging interest as perceived by SSMFs	%
Fixed for the duration of the loan	69.2
Variable during the duration of the loan	15.4
Do not know	15.4
Total	100

Source: Question number 21.

As shown in table 9.4. the majority of the SSMFs, which depend on bank credit (69.2 percent), mentioned that the interest rates charged on their loans are fixed for the duration of the loan; this conforms to reality as interest rates in Egypt are not floating. On the other hand, 15.4 percent of these firms mentioned that these interest rates are variable, usually upwards, during the duration of the loan. This may happen only when the CBE establishes a new interest-rate structure which applies to the loans contracted after the date of declaring the new interest-rate structure. Accordingly, the owners/managers of these firms are expected to have faced such variable interest rates when they renewed some existing loans, at a time when the CBE had changed the interest-rate structure. Finally, the remaining 15.4 percent of the concerned firms stated that they do not know whether interest rates are fixed or variable; and this implies that the owners/managers of these firms either do not get involved in loan contracts or do

not ask the lending bank about the interest rate to be charged.

9.2. The Firms which do not Depend on Bank Credit:

As mentioned earlier, SSMFs which do not depend on bank credit account for 63 percent of the surveyed firms. This phenomenon is deemed to be more important than the attitudes of the firms which depend on bank credit towards their lenders. Consequently, the phenomenon of not employing bank credit needs a thorough investigation in order to assess the real reasons, rather than the symptoms, of such a phenomenon. The first step towards achieving this objective is assessing the reasons for not depending on bank credit as given by the owners/mangers of the surveyed firms.

Table 9.5. Percentage distribution of the reasons for not depending on bank credit, as given by the owners/managers of SSMFs

Reasons for not depending on bank credit	%*
1. Banks impose difficult terms on the business	37.7
2. Loans are interest-bearing finance	29.0
3. Lengthy lending procedures	10.2
4. High interest rates	10.2
5. Do not like to deal with banks	7.2
6. Have sufficient funds	4.3
7. Do not know how to deal with banks	1.4
Total	100

* Multiresponse.

Source: Question number 26.

It is worth mentioning that the reasons, shown in table 9.5, are given numbers in order to facilitate the classification and assessment of these reasons. Hence, the reasons for not depending on bank credit, as shown in table 9.5, can be classified in two categories: (i) reasons attributed to banks; and (ii) reasons attributed to the firms' owners/managers.

(i) The first category incorporates reasons 1, 3 and 4 which account, together, for 58.1 percent of all the responses. This percentage might indicate that the limited access, for SSMFs, to bank credit is attributed to the banks rather than the firms themselves; but such an inference cannot be taken for granted without further investigation. Concerning the owners/managers who mentioned that banks impose difficult terms on them (37.7 percent of the responses), they mean, mainly, the collateral required for bank loans, the banks' request for financial accounts and the requirement of a sound finanical position as measured by ratio analysis carried out by bank staff. For those owners/managers who stated that the lending procedures are lengthy (10.2 percent of the responses), they mean, mainly, the time which elapses between submitting the loan application and the loan approval and the time involved in completing the legal procedures of pledging the firm's assets as collateral for the loan.

The above-mentioned reasons, though interrelated, seem to be plausible, especially the legal procedures of pledging the assets, which represent a common source of complaint, so much so that bank staff themselves complain of these lengthy procedures. Concerning the requirement of financial accounts, the firms' owners/managers consider it a problem because they neither prepare such accounts nor keep formal accounting books; and this represents a source of disturbance to bank managers and staff who spend more time and effort in analysing the data presented to them by small businesses. As for the owners/managers who described interest rates on bank loans as high (10.2 percent of the responses), they compare the cost of bank credit with the cost of retained profits, which they regard as a *cost-free* source of finance. This may be because they are unaware of the opportunity cost associated with retained profits which makes them the most expensive source of finance, as discussed in chapter four. Even when those owners/managers compare the cost of bank credit with the cost of trade credit, they regard the former as more expensive than the latter; but, as discussed in

chapter two, trade credit may be noticeably more expensive if the cost of the lost discount, if any, is taken into account. Also, the complaint of high interest rates is refutable on the grounds that interest rates on loans to both the agricultural sector and the industrial sector, set by the CBE, range from 11 percent to 15 percent; meanwhile the interest rate on loans to the trade sector has a minimum of 16 percent and no maximum.[7] If the interest rates on loans to both the agricultural sector and the industrial sector are compared with the Bank Rate of 13 percent and the highest interest rate on deposits of 13.25 percent,[8] these loans are relatively cheap. Hence, it can be said that the complaint of high interest rates is based on a misconception of the cost of different sources of finance as well as a lack of acquaintance with the interest-rate structure prevailing in Egypt. Nevertheless, if banks require compensating balances for their loans, this requirement will increase the cost of borrowing, as discussed in chapter two.

(ii) The second group of reasons incorporates reasons 2, 5, 6 and 7 which account, together, for 41.9 percent of all responses. The most significant reason in this group is that loans are interest-bearing finance (29 percent of the responses) which reflects the adherence of those owners/managers to the prohibition of interest of interest in Islam. A further analysis of the data revealed that the firms which stated these reasons employ all the mentioned sources of finance but loans, either from the DIB or from commercial banks.[9] One of the most interesting reasons, given by the owners/managers for not depending on bank credit, is that they do not like to deal with banks (7.2 percent of the responses); and this reflects an existing hostility between some owners/managers and banks. Such a hostility may be because those owners/managers have some information about other businessmen who faced difficulties in dealing with banks and/or because they regard banks as bureaucratic Government agencies, that resemble tax agencies and social

(7) CBE, "Annual Report: 1986/1987", Cairo: CBE, 1987, p. 96.
(8) Ibid., p. 97.
(9) Crosstabulation of questions 26 and 27.

insurance agencies, with which those owners/managers almost always have problems. As regards those owners/managers who mentioned that they have sufficient funds (4.3 percent of the responses), they mean that they have enough retained profits. A further analysis of the data showed that those firms depend only on retained profits as a substitute for bank loans.[10] Finally, the reason "we who do not know how to deal deal with banks" (1.4 percent of the responses) was mentioned by one respondent who seems to be unacquainted with the availability of bank credit and/or the firm itself is newly established; a further analysis showed that this firm was established after 1975.[11]

These results suggest that the reasons for the inaccessibility of some SSMFs to bank credit, which can be attributed to banks are reasons 1 and 3 (which account for 47.9 percent of the responses); but the majority of the reasons (which account for 52.1 percent of the responses) can be attributed to the owners/managers of the surveyed SSMFs. Consequently, it can be said that it is the attitudes of those owners/managers, rather than the reluctance of banks, which impede the accessibility of SSMFs to bank credit. In other words, the main reasons for such an inaccessibility, on the part of the owners/managers, are: (a) their piety, which prevents them from employing interest-bearing finance; and (b) their misconception of the nature and cost of bank credit, as compared with other sources of finance.

However, banks cannot be relieved of their responsibility towards small businesses in general and SSMFs in particular. In this regard, it seems that the owners/managers who mentioned reason 1 had tried to obtain bank credit but could not meet the banks' terms. Also, it seems that the owners/managers who mentioned reason 3 used to deal with banks and gave up afterwards because of the lengthy procedures. As mentioned above, the reasons attributed to banks

(10) Ibid.
(11) Crosstabulation of questions 2 and 26.

account for 47.9 percent of the responses. This percentage cannot be considered as insignificant, especially if those reasons represent difficulties which these banks can eliminate, without undermining sound banking practices, in order to give more access to small businesses to bank credit.

Having assessed the reasons for not depending on bank credit, on the part of SSMFs, it may be appropriate to investigate the other factors that may limit the accessiblity of SSMFs to bank credit. Such factors represent some of the characteristics of these firms which may make them ineligible for institutional finance in general and bank credit in particular. These factors, from the author's point of view, are firm age, firm size and the firm's legal form; after testing the first factor it was found insignificant and was rejected. Accordingly, the remaining factors, that might influence the firm's accessibility to bank credit, are firm size and the firm's legal form.

9.2.1. Firm Size and Dependence on Bank Credit:

In order to facilitate the testing of the effect of firm size on its access to bank credit, the surveyed SSMFs are divided into two groups; the first group represents the firms employing 10–24 workers and will be regarded as the *smaller-small firms*, and the second group represents the firms employing 25–49 workers and will be regarded as the *bigger-small firms*. The relationship between firm size and dependence on bank credit is shown in the following table:

Table 9.6. Percentage distribution of the surveyed SSMFs according to their dependence, or non-dependence, on bank credit as based on their relative size

The firm's relative size	Does the firm depend on bank credit?		Total
	Yes %	No %	%
10 – 24 workers	26.0	74.0	100
25 – 49 workers	56.0	44.0	100

Source: Questions 3 and 8.

It can be noticed, from table 9.6, that there is a correlation between firm size and dependence on bank credit as just over a quarter of the smaller-small firms depend on bank credit while more than half of the bigger-small firms depend on bank credit. Hence, these figures suggest that smaller-small firms have limited access to bank credit as compared with bigger-small firms. The main reason for such limited accessibility is that these firms, or the majority of them, are relatively new and this may have one or more of the following implications:

(a) Smaller-small firms are less acquainted with the credit facilities which banks can provide.

(b) There is no need, for the time being, for institutional finance as their production operations are still limited and can be financed from non-institutional sources.

(c) Banks are sceptical in lending to such new firms because they have no track record and less information is available about them.

(d) Smaller-small firms themselves are sceptical in seeking institutional finance and regard dealing with banks as hazardous.

9.2.2. Legal Form and Dependence on Bank Credit:

The relevance of the firm's legal form to its depending, or not depending, on bank credit stems from the legal and financial consequences associated with debt,

and these consequences vary according to the legal status of the owner(s) and the manager(s). The relationship between the firm's legal form and its dependence on bank credit is shown in the following table:

Table 9.7. Percentage distribution of the surveyed SSMFs according to their dependence, or non-dependence, on bank credit as based on their legal forms

Legal form	Does the firm depend on bank credit?		Total
	Yes %	No %	%
Sole proprietorship	40.0	60.0	100
Ordinary partnership	17.6	82.4	100
Limited partnership	83.3	16.7	100

Source: Questions 4 and 8.

The data shown in table 9.7 can be classified into two groups: (a) the firms which tend to depend on bank credit; and (b) the firms which tend not to depend on bank credit. The first group is represented in limited partnerships, where 83.3 percent of them depend on bank credit while only 16.7 percent do not; the second group incorporates both sole proprietorships and ordinary partnerships where only 40 percent and 17.6, respectively, depend on bank credit. If the second group is considered, the figures seem to contradict what many people believe: that partnerships, in general, are more eligible for bank credit than sole proprietorships, as they are supposed to have more equity capital which provides a safety base against which banks can lend to such firms. On the other hand, table 9.7 shows that limited partnerships are significantly more dependent on bank credit than ordinary partnerships. The reasons for these phenomena may be:

(a) The partners in ordinary partnerships are infinitely responsible for the firm's debts, and this makes them more cautious in getting involved in debts.

(b) Although the owner in a sole proprietorship is also infinitely responsible for the firm's debts, he enjoys more freedom in decision making, compared with the

partner in an ordinary partnership, especially if this owner is the manager of the firm at the same time.

(c) A limited partnership tends to have more partners than an ordinary partnership, who provide more equity base which makes such a firm more eligible for bank credit.

(d) Ordinary partnerships in Egypt tend to be confined to family members, and this makes a minor increment, or even none at all, in the partners' personal assets over the owner's assets should these firms be sole proprietorships. This situation may give the banks reasons to be more cautious in lending to ordinary partnerships whose finance needs may be more than those of sole proprietorships.

So far it has been shown that there is a correlation between both the size of the firm and its legal form, on the one hand, and its dependence, or non-dependence, on bank credit on the other. In this respect it may be appropriate to examine which one of the two factors has a more significant effect on the firm's dependence, or non-dependence, on bank credit; this is shown in the following table:

Table 9.8. Percentage distribution of the relative size of the surveyed SSMFs as based on their legal forms

Legal form	Number of workers		Total
	10 – 24	25 – 49	
	%	%	%
Sole proprietorship	85.7	14.3	100
Ordinary partnership	54.5	45.5	100
Limited partnership	54.5	45.5	100

Source: Questions 3 and 4.

First of all, the analysis of question number 3 showed that 68.4 percent of the surveyed firms employ 10–24 workers, and 31.6 percent employ 25–49 workers. In this regard, it can be noticed that SSMFs tend to be more concentrated in

the smaller-small section of table 9.8, especially sole proprietorships. In other words, the majority of sole proprietorships, 85.7 percent of them, are concentrated in the smaller-small size; while both ordinary partnerships and limited partnerships have the same distribution between the smaller-small size and the bigger-small size, accounting for 54.5 percent and 45.5 percent, respectively. Consequently, if firm size is the main factor which affects the firm's dependence, or non-dependence, on bank credit, then sole proprietorships are expected to have the least proportion of dependence on bank credit and both ordinary partnerships and limited partnerships have, more or less, the same proportion of dependence on bank credit. However, table 9.7 shows that the proportion of sole proprietorships which depend on bank credit is more than twice that of ordinary partnerships, and the proportion of limited partnerships which depend on bank credit is more than twice that of sole proprietorships and more than four times that of ordinary partnerships. These results suggest that the legal form of the firm has more effect than its size on the firm's dependence on bank credit; the same reasons mentioned above, in the context of legal form, hold. On the whole, the effect of firm size and the firm's legal form, on its dependence on bank credit, may explain the reasons attributed to the banks for not depending on bank credit; these reasons were discussed in section 9.2 above.

9.2.3. The Alternative Sources to Bank Credit:

Having assessed the factors which affect the firms' dependence on bank credit, it is an essential requisite to investigate the alternative financing sources employed by these firms as substitutes for bank credit. In other words, for those firms which do not depend on bank credit, it is necesary to find out whether they employ alternative institutional or non-institutional sources of finance as this will help to define their attitudes towards certain sources of finance. The alternative financing sources, as employed by the surveyed SSMFs, are shown in the following table:

Table 9.9. Percentage distribution of the financing sources employed by SSMFs as substitutes for bank credit

Alternative sources to bank credit	%*
Retained profits	46.1
Loans from family members and friends	2.6
Profit-sharing finance	9.2
Trade credit	36.8
Loans from the partners	5.3
Total	100

* Multiresponse.

Source: Question number 27.

Table 9.9. shows that the most significant substitutes for bank credit are retained profits and trade credit which account for 46.1 percent and 36.8 percent of the responses respectively. Because these percentages represent multiresponses, this means that each of these two sources is employed in combination with another source or other sources. However, 28.8 percent of SSMFs, which do not depend on bank credit, mentioned that they depend only on retained profits, 13.5 percent of them depend only on trade credit and 32.7 percent of these firms depend on both retained profits and trade credit as substitutes for bank credit.[12] These figures show the popularity of both retained profits and trade credit among SSMFs in Egypt. The main reason is that the owners/managers of small businesses in Egypt, in general, regard such sources as cost-free finance because they are concerned about the *out-of-pocket cost* rather than the opportunity cost. As far as profit-sharing finance is concerned, it does not represent a significant substitute for bank credit as it accounts for only 9.2 percent of the responses. Yet, it is worth noticing that profit-sharing finance is employed by 7 firms, 3 of which obtain this type of finance from individuals (mainly relatives) and the other 4 obtain it from

(12) Different analysis of question number 27.

Islamic banks which represent the only institutional alternative to conventional bank credit. The remaining alternative sources are loans from family members and friends and loans from the partners. These do not represent significant sources of finance as they account for only 2.6 percent and 5.3 percent of the responses, respectively.

9.3. Finance Preferences Among SSMFs:

The main concern of this section is to define the best sources of finance from the standpoint of the surveyed SSMFs which depend on bank credit and those which do not. Such a definition may help to cast some light on the firms' attitudes towards certain sources of finance, and the reasons they have for such attitudes, in order to assess these firms' finance preferences. The preferred sources, as well as the reasons for their preference, are shown in tables 9.10(a) and 9.10(b) below:

Table 9.10(a): Percentage distribution of the best sources of finance from the standpoint of the surveyed SSMFs

The best sources of finance	%*
Retained profits	58.3
Increasing the firm's equity capital	5.3
Loans from family members and friends	12.1
Loans from the DIB	3.0
Profit-sharing finance	5.3
Trade credit	16.0
Total	100

* Multiresponse.

Source: Question number 38.

Table 9.10(b): The reasons for preferring certain sources of finance as given by the surveyed SSMFs

The preferred sources	Reasons for preference
Retained profits	1. It is a cost-free source of finance. 2. It is easier to obtain than loans. 3. It avoids the complications of dealing with banks. 4. It avoids the problems of loans. 5. Nobody will interfere in the management of the firm. 6. It is an interest-free source of finance (because interest is prohibited in Islam). 7. We can avoid the risk associated with borrowing. 8. It is cheaper than loans. 9. It achieves self-sufficiency. 10. It is more acceptable, psychologically, than loans. 11. It is less risky than any other source. 12. We do not get worried about repayment. 13. We feel comfortable with it. 14. It means independence from people and banks. 15. I do not like to have a partner.
Trade credit	1. It relieves us of the problems of dealing with banks. 2. It is easier to obtain than loans. 3. It is more available than loans. 4. We do not get worried about repayment as is the case with loans. 5. It is cheaper than loans. 6. It is an interest-free source of finance (because interest is prohibited in Islam).

Table 9.10(b), continued

Family members and friends	1. We do not get worried about repayment. 2. It is a cost-free source of finance. 3. The business is still in its infancy.
The DIB	1. It finances the purchase of machinery. 2. It is easy to approach.
Profit-sharing finance	1. It does not involve an interference in the management of the firm. 2. It does not involve the payment of interest (which is prohibited in Islam).

Source: Question number 39.

Once again, as table 9.10(a) shows, retained profits represent the most favoured source of finance to SSMFs accounting for 58.3 percent of the responses. As this percentage represents multiresponse, this means that retained profits are mentioned to be the best source of finance together with another source or other sources. A further analysis shows that retained profits are mentioned alone, as being the best source of finance, by 58.7 percent of the surveyed SSMFs.[13] Yet, table 9.10(b) shows plenty of reasons which the owners/managers gave for preferring retained profits to other sources of finance. The most interesting of these reasons is that retained profits represent a cost-free source of finance because those owners/managers, as mentioned earier, are concerned about the out-of-pocket cost rather than the opportunity cost. The rest of the reasons can be divided into three categories: (a) reasons that reflect the reluctance of the owners/managers to employ bank credit because of the difficulties and risks associated with dealing with banks; (b) reasons that reflect the desire of the owner-managers not to have

(13) Different analysis of question number 38.

partners; and (c) reasons that reflect the piety of some owners/managers who shy away from interest-bearing sources of finance.

The second favourite source of finance for the surveyed SSMFs is trade credit, which accounts for 16 percent of the responses, shown in table 9.10(a), and which is the only source, other than retained profits, to be mentioned alone as the best source of finance (2.5 percent of the surveyed SSMFs).[14] Although the reasons for preferring trade credit are not the same as those for preferring retained profits, they have the same implications, except those of the unwillingness of the owner-managers to have partners. On the other hand, when the respondents mention that trade credit is easier to obtain than bank credit, they are referring to informal and personal relationships with raw-material suppliers, namely private-sector suppliers, as compared with the formal relationships with banks and public-sector suppliers of raw materials. The main problem of dealing with public-sector suppliers of raw materials is that these companies are alleged to enjoy a monopolistic status, especially in the textile industry, and force SSMFs to accept a "package deal" containing bad-quality materials as well as good-quality materials.

Concerning the loans from family members and friends, which account for 12.1 percent of the responses shown in table 9.10(a), they are employed, as is the case with the rest of the sources, in combination with another source or other sources of finance. In this regard, when some respondents mention that loans from family members and friends are cost-free finance, they tell the truth because relatives and friends, sometimes, do not require interest on their money when they lend to the owner-manager, *i.e.* it is a sentimental relationship. As regards increasing the firm's equity capital (5.3 percent of the responses), it is not as common as retained profits due to: (a) the formalities and legal procedures associated with it; and (b) the reluctance of many owner-managers to have partners in their businesses. Profit-sharing finance has the same relative importance as increasing

(14) Ibid.

the firm's equity capital (5.3 percent of the responses), but it is mentioned by pious owners/managers who adhere to the prohibition of interest in Islam. Finally, although the DIB accounts for only 3.0 percent of the responses shown in table 9.10(a), commercial banks are not mentioned at all. The main reasons may be: (a) the DIB provides foreign-currency loans for the importation of machinery and raw materials; and (b) some owners/managers of SSMFs have established good relationships with the DIB's managers and staff who seem, according to the author's observation, to be helpful and cooperative.

The preceding discussion was concerned about finance preferences among all the surveyed SSMFs both those which depend on bank credit and those which do not, but it does not reveal finance preferences within each group. In other words, for those firms which have dealings with banks, do they prefer bank credit?; and for those firms which do not have dealings with banks, do they prefer non-institutional sources of finance? The answers to these questions are shown in the following table:

Table 9.11. Percentage distribution of the surveyed SSMFs according to their preferred sources of finance as based on their dependence, or non-dependence, on bank credit.

The best sources of finance	Does the firm depend on bank credit?		Total
	Yes %	No %	%
Retained profits	37.7	62.3	100
Increasing the firm's equity capital	28.6	71.4	100
Loans from family members and friends	37.5	62.5	100
Loans from the DIB	100	0.0	100
Profit-sharing finance	71.4	28.6	100
Trade credit	52.4	47.6	100

Source: Questions 8 and 38.

As shown in table 9.11, the majority of the preferred sources of finance are non-instutional ones which are favoured by both the firms which depend on bank credit and those which do not. Concerning the first three sources, although the majority of the firms which prefer them are those which do not depend on bank credit, there are still some firms which depend on bank credit and, at the same time, prefer these non-institutional sources, notably retained profits and loans from family members and friends. Of course the firms which prefer loans from the DIB are those which have dealing with it; but it should be noticed that the firms which prefer loans from the DIB represent two thirds of the firms which have dealings with it,[(15)] and this implies that some of the DIB's clients are not satisfied with it. Also, it is noticed, in table 9.11, that none of the SSMFs mentioned that they prefer loans from commercial banks. This implies that the firms which have dealings with commercial banks might wish to satisfy their financing needs from other sources. As for profit-sharing finance, it is noticed that the

(15) Crosstabulation of questions 10 and 38.

majority of the firms which prefer this type of finance have dealings with banks (71.4 percent); these firms obtain profit-sharing finance from Islamic banks and the rest obtain it from individuals (mainly relatives and friends). Surprisingly, 52.4 percent of the firms which prefer trade credit do employ bank credit and only 47.6 percent do not. Besides showing the popularity of trade credit amongst SSMFs, these figures imply that the owners/managers compare the complexity of borrowing from banks with the simplicity of dealing with raw-material suppliers, especially private-sector suppliers. Also, these figures suggest that some owners/managers who go directly to a specific bank, especially a specific commercial bank, do so because it is the only available bank rather than because they are satisfied with it. On the whole, it is quite clear that non-institutional sources of finance are more popular amongst, and more favourable to, SSMFs than institutional sources, namely banks.

Chapter Ten

Types and Sources of Finance Employed by Small-Scale Manufacturing Firms

10.1. Start-up Capital

10.2. Short-Term Finance

10.2.1. Sources of Short-Term Finance

10.2.2. Forms of Short-Term Finance

10.3. Medium-and Long-Term Finance

10.4. Foreign-Currency Finance

10.5. Lease Finance

10.6. Financing Firms' Expansion

10.6.1. The Relationship Between Expansion and Other Attributes of the Firm

10.6.1.1. Dependence on Bank Credit

10.6.1.2. Firm Age

10.6.2. Sources for Financing Firms' Expansion

10.1. Start-up Capital:

It is worth mentioning that the pre-startup stage, or seed-capital stage, will not be considered in this context as it is assumed to be financed entirely by the owner(s)' funds. Concerning the start-up stage, it may be financed by the owner(s)' funds as well as other external sources such as banks, raw-material suppliers, family members, friends ... etc. The sources of start-up capital employed by the surveyed SSMFs are shown in the following table:

Table 10.1. Percentage distribution of the surveyed SSMFs according to their employment of different sources of start-up capital

Sources of start-up capital	%
Owner(s)' funds only	43.2
Owner(s)' funds + loans	18.5
Owner(s)' funds + trade credit	27.2
Owner(s)' funds + loans + trade credit	9.9
Owner(s)' funds + trade credit + profit-sharing finance from friends	1.2
Total	100

Source: Question number 5.

This table shows that the most commonly used source of start-up capital is that provided by the owner(s) of the firm, as 43.2 percent of the surveyed firms depended only on this source. Concerning external sources of start-up capital, trade credit is the most significant one employed by 27.2 percent of these firms, while loans are employed by only 18.5 percent of the firms. If the percentage of the firms which employed both loans and trade credit (9.9 percent) is added to those which employed trade credit (27.2 percent) and those which employed loans (18.5 percent), then trade credit will account for 37.1 percent *vis-à-vis* 28.4 percent for loans. As regards profit-sharing finance, it was employed by only one firm in combination with trade credit, even though this profit-sharing finance came

from friends rather than Islamic banks. These figures suggest that: (a) a major proportion of the owners of SSMFs tend to be confined to their own resources to start their businesses; and (b) institutional sources of finance play a minor role in start-up financing. When the owners/managers, who did not depend on loans to finance their start-ups, were asked why this was the case they mentioned the same reasons for not depending on bank credit, as discussed in the last chapter.

Before drawing more inferences from these figures, it may be appropriate to investigate the sources of the loans used as part of start-up capital; these sources are shown in the following table:

Table 10.2. Percentage distribution of the surveyed SSMFs according to their dependence on the different sources of start-up loans

Sources of start-up loans	%
Family members	29.0
Friends	19.4
The DIB	35.5
Commercial banks	16.1
Total	100

Source: Question number 6.

It is noticed, in table 10.2, that not all start-up loans came from institutional sources, as 48.4 percent of SSMFs obtained such loans from non-institutional sources represented in family members and friends. On the other hand, institutional sources of start-up loans are represented in loans from both the DIB and commercial banks which are employed together by 51.6 percent of SSMFs. These figures suggest that: (a) taking into consideration the figures shown in table 10.1, non-institutional sources play a major role in start-up financing of SSMFs; and (b) the DIB is the most significant supplier of institutional loans for

start-up purposes. In fact the DIB provides start-up loans for two purposes:[1] (a) the financing of buildings where the loan represents 60 percent of the estimated value of the buildings, and the client pledges these buildings as collateral for the loan; and (b) the financing of working capital for one production cycle where the loan represents 75 percent of the estimated value for raw materials, and the client pledges these raw materials as collateral for the loan. Yet, it is not surprising that commercial-bank loans are employed by relatively few SSMFs, as these banks, in contrast to the DIB, are more conservative in their lending policies and concentrate on short-term, rather than long-term, loans. Moreover, many commercial banks shy away from getting involved in the financing of start-up situations. Taking into consideration the reluctance of many businessmen to employ bank credit, one can easily understand the reasons for the minor role of institutional finance in start-ups.

Another phase of start-up financing is investigating the sources of the owner(s)' funds, or equity capital, used in the financing of SSMFs during the start-up stage. For a sole proprietorship there is only one source of equity capital represented in the owner of the firm himself; for partnerships there are different sources of equity capital as shown in the following table:

(1) An interview with the vice-general manager for small-scale industry credit. Cairo: DIB, February. 1988.

Table 10.3. Percentage distribution of SSMF partnerships according to the sources of start-up equity capital

Sources of start-up equity capital	Ordinary partnerships %	Limited partnerships %	Both partnerships %
Family members	85.3	90.0	86.3
Friends	11.8	10.0	11.4
Other people	2.9	0.0	2.3
Total	100	100	100

Source: Questions 4 and 7.

As shown in table 10.3, partnerships in SSMFs tend to be family businesses, as 86.3 percent of them obtained equity capital from family members, 11.4 percent obtained equity capital from friends and a mere 2.3 percent of them approached other people to be their partners. The main implication of these figures is that the owners of these partnerships tend to keep their businesses within the family rather than taking "strangers" as partners. In fact, many businessmen in Egypt have such an attitude, which sometimes results in selling personal properties and seeking personal loans, even if all these means result in a meagre equity capital to start with. Comparing ordinary partnerships with limited partnerships, it is noticed in table 10.3 that limited partnerships are more dependent on family members, and less dependent on friends and other people, than ordinary partnerships, although limited partnerships are expected to have more partners than ordinary partnerships. The reason may be that the term "family", at least in Egypt, has two meanings: (a) the narrow meaning which refers to the persons who live with each other in the same house or flat, namely the parents and the offspring; and (b) the broad meaning which refers to all the relatives who might amount to scores of people. Consequently, it could be assumed that the partners in ordinary partnerships are mainly family members in its narrow meaning,

and the partners in limited partnerships are mainly family members in its broad meaning.

10.2. Short-Term Finance:

Business concerns in general, and SSMFs in particular, need short-term finance for the purchase of raw materials and necessary components from the local market or from abroad if these items are not available locally. Short-term finance can be obtained from institutional sources such as banks or non-institutional sources such as raw-material suppliers.

10.2.1. Sources of Short-Term Finance:

The main sources of short-term finance for SSMFs are commercial banks, the DIB and raw-material suppliers. Islamic banks provide short-term finance via *Murabahah*, but they will not be referred to in this context because they are mentioned by the respondents as sources of long-term, rather than short-term, finance. The following table shows the sources of short-term finance for the surveyed SSMFs.

Table 10.4. Percentage distribution of the surveyed SSMFs according to their dependence on different sources of short-term finance

Sources of short-term finance	%*
The DIB	4.9
Commercial banks	19.8
Raw-material suppliers	75.3
Total	100

* Multiresponse.

Source: Question number 14.

This table shows that the most significant source of short-term finance is raw-material suppliers, which accounts for more than 75 percent of the responses.

According to table 10.4 the least significant source of short-term finance is the DIB which accounts for less than 5 percent of the responses compared with 19.8 percent for commercial banks. As these figures represent multiresponses, this means that some of these sources, or even all of them, are used in combination with other sources. A further analysis shows that 71.8 percent of the surveyed firms depend only on raw-material suppliers, 14.1 percent depend only on commercial banks, and none of them mentioned that they depend only on the DIB for short-term finance.[2] Once again these figures emphasize the significance of trade credit as a source of short-term finance compared with institutional sources of such finance, especially the DIB. In this regard, it is worth mentioning that if the DIB is not a significant source of short-term finance for SSMFs it is probably a significant source of medium-and long-term finance (MTLT finance), and this will be examined later in this chapter. However, the question which might arise is: if short-term finance from institutional sources is confined to the firms which depend on bank credit, is short-term finance from non-institutional sources confined to the firms which do not depend on bank credit? The answer is shown in the following table:

Table 10.5. Percentage distribution of SSMFs according to their dependence on the different sources of short-term finance as based on their dependence, or non-dependence, on bank credit

Does the firm depend on bank credit?	Sources of short-term finance			Total
	The DIB	Commercial banks	Raw-material suppliers	
	%	%	%	%
Yes	10.0	40.0	50.0	100
No	0.0	0.0	100	100

Source: Questions 8 and 14.

(2) Different analysis of question number 14.

It is a natural consequence that the firms which do not employ bank credit depend completely on trade credit provided by raw-material suppliers; but the interesting point is that half of the firms which depend on bank credit nevertheless employ trade credit as shown in table 10.5. These results suggest that: (a) bank credit is insufficient in satisfying the needs of SSMFs for short-term finance, and this point was emphasized above where only 14.1 percent of the surveyed firms mentioned that they depend only on institutional sources, represented in commercial banks, for short-term finance; (b) non-institutional sources of finance, represented by raw-material suppliers, are the dominant sources of short-term finance for SSMFs in Egypt; and (c) commercial banks represent the major institutional source of short-term finance for SSMFs in Egypt.

10.2.2. Forms of Short-Term Finance:

While raw-material suppliers provide only trade credit, banks provide short-term finance in different forms such as short-term loans, overdrafts, documentary credits ... etc. The main forms of short-term finance, as employed by the surveyed firms, are shown in the following table:

Table 10.6. Percentage distribution of SSMFs according to their employment of the different forms of short-term finance as based on their dependence, or non-dependence, on bank credit

Does the firm depend on bank credit?	Forms of short-term finance				Total
	Short-term loans	Overdrafts	Documentary credits	Trade credit	
	%	%	%	%	%
Yes	23.9	15.2	17.4	43.5	100
No	0.0	0.0	0.0	100	100

Source: Questions 8 and 15.

It is worth noticing that trade credit accounts for 50 percent of the responses of the firms which depend on bank credit, in table 10.5, while it accounts for 43.5 percent of the responses, of the same firms, in table 10.6. The reason is that both question number 14 and question number 15 are multiresponse questions. Apart from the firms which do not depend on bank credit, table 10.6 shows that trade credit is still the dominant form of short-term finance for the firms which depend on bank credit, accounting for 43.5 percent of the responses. As regards the institutional forms of short-term finance, short-term loans are the most used (and the traditional) form of short-term finance. On the other hand, overdrafts are the least used form of short-term finance; yet, overdrafts are mentioned by the respondents only as supplementary to other forms of finance while short-term loans are most mentioned as the only form of short-term finance.[3] Cocerning documentary credits, they are more significant than overdrafts as they are the only means of financing *the imported raw materials used by the surveyed SSMFs.*

Finally, it can be said that short-term finance from banks is generally secured, as 90 percent of the owners/managers of the surveyed firms mentioned that banks require collateral for short-term loans, while only 10 percent mentioned that banks do not require collateral for such loans.[4] Documentary credits are, by definition, secured by the documents which accompany the imported merchandise such as the bill of lading and the insurance certificate. Concerning overdrafts, they are usually unsecured, as banks advance such facilities to the trust-worthy customers who often have deposits with the same bank; however, overdrafts represent the least employed form of short-term finance, as shown in table 10.6 above.

(3) Analysis of question number 15.
(4) Analysis of question number 16.

10.3. Medium-and Long-Term Finance:

This section incorporates the main sources of medium-and long-term finance (MTLT finance) which prevail among business enterprises, in Egypt, in general and among SSMFs in particular. Lease finance represents a form of MTLT finance but it is dealt with in a separate section in order to show the characteristics peculiar to the employment of lease finance by SSMFs in Egypt.

MTLT finance for SSMFs comes from two main sources: (a) institutional sources represented in commercial banks, the DIB and Islamic banks; and (b) non-institutional sources represented in the firms themselves (in the form of retained profits), family members, friends and the partners. The main types of MTLT finance, employed by the surveyed firms, are shown in the following table:

Table 10.7. Percentage distribution of the surveyed SSMFs according to their employment of the different types of MTLT finance

Types of MTLT finance	%*
Retained profits	54.4
Loans from family members and friends	5.5
Loans from the DIB	15.6
Loans from commercial banks	10.0
Profit-sharing finance	6.7
Trade credit	1.1
Loans from the partners	6.7
Total	100

* Multiresponse.

Source: Question number 17.

The types of MTLT finance, shown in table 10.7, can be classified in two main categories: institutional and non-institutional. The first category incorporates loans from the DIB (15.6 percent of the responses), loans from commercial banks (10.0 percent of the responses) and profit-sharing finance from Islamic banks

(4.5 percent of the responses). In this regard, it should be noticed that profit-sharing finance, as shown in table 10.7, represents profit-sharing finance from both individuals and Islamic banks, but they are separated via further analysis of the data.[5] Hence, all institutional types of MTLT finance account for only 30.1 percent of the responses, which shows the minor role of financial institutions as sources of MTLT finance. Nonetheless, the DIB has a more significant role in providing SSMFs with MTLT loans as compared with commercial banks; in this respect, it is worth mentioning that:

(a) The maturities of MTLT loans from the DIB and from commercial banks are relatively short, as 81 percent of the firms which depend on bank credit mentioned that the maturities of MTLT loans are between 2–5 years, while only 19 percent of these firms mentioned that such maturities are between 6–10 years.[6]

(b) The maximum maturity of the DIB's loans to SSMFs is 5 years with the possibility of extending this maturity for one or two more years.[7]

(c) Commercial banks are expected to be restrictive in setting loan maturities, as only one respondent mentioned that MTLT loans from commercial banks have maturities between 6–10 years.[8]

(d) Both the DIB and commercial banks require collateral for MTLT loans, as all the respondents mentioned that these loans are secured.[9]

The second category represents non-institutional types of MTLT finance which incorporate retained profits (54.4 percent of the responses), loans from family members and friends (5.5 percent of the responses), profit-sharing finance from individuals (2.2 percent of the responses),[10] trade credit (1.1 percent of the responses) and loans from the partners (6.7 percent of the responses). Hence, all

(5) Crosstabulation of questions 10 and 17.
(6) Analysis of question number 18.
(7) An interview with the vice-general manager for small-scale industry credit, Cairo: DIB, February, 1988.
(8) Crosstabulation of questions 17 and 18.
(9) Analysis of question number 19.
(10) Crosstabulation of questions 10 and 17.

non-institutional types of MTLT finance account for 69.9 percent of the responses. The most significant source of MTLT finance in general, and non-institutional MTLT finance in particular, is retained profits which accounts for more than half the responses; moreover, retained profits are mentioned by 51.9 percent of SSMFs as the only source of MTLT finance.[11] Also, if retained profits are compared with all non-institutional sources of MTLT finance, they will account for 77.8 percent of these sources.[12] The other interesting point is the employment of trade credit for the financing of MTLT requirements, but it should be noticed that it is not a common practice as it is mentioned by only one respondent who stated that it was for the purchase of machinery from domestic market. On the whole, non-instituional sources are much more significant than institutional sources of MTLT finance, and the main implications are:

(a) As mentioned in the last chapter, the owners/managers of SSMFs regard retained profits as a cost-free source of finance because they are unaware of the opportunity cost associated with such profits.

(b) The owners/managers of SSMFs are encouraged to employ loans from family members and friends as those loans are often cost-free because of the reluctance of some relatives and friends to charge the borrower any interest, provided that they have confidence in him and his project's potential.

(c) The owners/managers who employ profit-sharing finance from individuals are not necessarily those pious people who do not employ interest-bearing types of finance. The reason is that the majority of them obtain such finance from relatives and friends with whom they feel more comfortable than would otherwise be the case. However, this type of finance is no longer available to SSMFs, as it became confined to publicly quoted companies which are established for the purpose of receiving money from the public for investment.[13]

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(11) Different analysis of question number 17.
(12) Calculated by the author from the responses to question number 17.
(13) Article one of Law no. 146 of 1988.

(d) Loans from partners appeal to many owner-managers because: first, it is an *easy-to-approach* source of finance compared with loans from banks, especially if those partners, or some of them, are wealthy; second, because those owners share the management of the firm, they have more confidence in each other; and third, in many cases these loans are interest-free.

Given that institutional MTLT finance is confined to the firms which depend on bank credit, is non-institutional MTLT finance confined to those firms which do not depend on bank credit? The answer can be derived from the following table:

Table 10.8. Percentage distribution of the surveyed SSMFs according to their employment of the different types of MTLT finance as based on their dependence, or non-dependence, on bank credit

Does the firm depend on bank credit?	Retained profits %	Loans from family members and friends %	Loans from the DIB %	Loans from commercial banks %	Profit-sharing finance %	Trade credit %	Loans from the partners %	Total %
Yes	16.7	5.6	38.9	25.0	11.0	2.8	0.0	100
No	79.6	5.6	0.0	0.0	3.7	0.0	11.1	100

Source: Questions 8 and 17.

Table 10.8 shows that the firms which have dealings with banks employ both institutional and non-institutional MTLT finance, albeit institutional MTLT finance is employed by the majority of these firms. The institutional types are loans from the DIB, loans from commercial banks and profit-sharing finance from Islamic banks, which account together for 74.9 percent of the responses. In this regard, the DIB is the most significant source of MTLT finance for these firms, as it accounts for 38.9 percent of the responses compared with 25.0 percent for commercial banks. On the other hand, the firms which depend on bank credit employ non-institutional MTLT finance, especially retained profits, which account for 16.7 percent of the responses and come in the third place after the DIB and commercial banks but before Islamic-bank finance. Also, these firms depend on loans from family members and friends to the same extent as those firms which do not depend on bank credit. Trade credit does not represent a significant source of finance, even though it is employed by the firms which have dealings with banks rather than those which do not. Concerning the firms which do not depend on bank credit, their main source of MTLT finance is retained profits, which account for 79.6 percent of the responses. The importance of retained profits, as a source of MTLT finance for these firms, can be demonstrated by comparing them with the second important source (the partners) which accounts for only 11.1 percent of the responses. These results suggest that:

(a) Taking into consideration the reasons for not depending on bank credit, discussed in the last chapter, it seems that the dependence on retained profits is a consequence of not dealing with banks and not vice versa.

(b) Institutional sources of MTLT finance seem to be insufficient, as these sources are approached, in some cases, in combination with non-institutional sources.[14]

(c) The DIB, which has only three branches, is a more important source of MTLT finance for SSMFs than commercial banks, which have hundreds of branches; but

(14) Different analysis of question number 17.

this applies only to the firms which have dealings with banks rather than SSMFs in general, *i.e.* the DIB does not represent a significant source of MTLT finance if all the surveyed firms are considered.

10.4. Foreign-Currency Finance:

Business concerns in Egypt in general, and SSMFs in particular, need foreign-currency finance for the importation of raw materials, product components and equipment for which there are no local substitutes or where the local supply does not meet the demand. In this regard, the survey shows that 41.4 percent of SSMFs obtain foreign-currency finance and 58.6 percent do not.(15) Of course this type of finance is obtained from institutional sources represented by commercial banks, the DIB and Islamic banks. The forms of foreign-currency finance are shown in the following table:

Table 10.9. Percentage disribution of SSMFs, which depend on bank credit, according to their employment of the different forms of foreign-currency finance

Forms of foreign-currency finance	%*
Short-term loans	14.3
Documentary credits	57.1
MTLT loans	28.6
Total	100

* Multiresponse.

Source: Question number 23.

It is noticed that documentary credits represent the most significant form of foreign-currency finance, as they account for more than half the responses. The reasons for this may be: (a) documentary credits are the traditional forms of foreign-currency finance and are well known to all firms; and (b) documentary credits can be provided by almost all types of banks. On the other hand,

(15) Analysis of question number 22.

short-term loans are the least employed, accounting for only 14.3 percent of the responses. In fact, it is not a common practice for a small firm, in Egypt, to obtain a foreign-currecny short-term loan for the importation of raw materials as it is often easier to import raw materials via documentary credits. MTLT loans are employed by twice the number of firms which employ short-term loans. This may be because SSMFs need to import machinery rather than raw materials, as the shortage in local production of the former is more evident than is the case with the latter. On the whole, it seems that the DIB is the main supplier of foreign-currency long-term loans because: (a) its share in providing MTLT loans to SSMFs is larger than that of commercial banks, as shown in section 10.7 above; and (b) it is the only financial institution in Egypt to carry out the programmes of financing small-scale industrial firms in general, and SSMFs in particular, depending on loans from international organizations in foreign currencies.

Given that the supply of foreign currencies in Egypt lags behind the demand for them, SSMFs are expected to face some difficulties in obtaining foreign-currency finance. According to the survey results, 69.2 percent of the firms, which depend on bank credit, mentioned that they face problems in obtaining foreign-currency finance, while 30.8 percent mentioned that they do not face such problems.[16] The problems that face SSMFs, concerning foreign-currency finance, are shown in the following table:

(16) Analysis of question number 24.

Table 10.10. Percentage distribution of SSMFs, which depend on bank credit, according to the problems which they face in obtaining foreign-currency finance

The problems of foreign-currency finance	%*
Difficult lending terms	43.7
Insufficient amounts of funds	18.7
Exchange-rate problems	31.3
Unstable rules of foriegn-currency dealings	6.3
Total	100

* Multiresponse.

Source: Question number 25.

As shown in table 10.10, the most significant problem is the difficult lending terms (43.7 percent of the responses). This problem is common among almost all SSMFs concerning almost all types of institutional finance, as discussed in the last chapter. As far as foreign-currency finance is concerned, this problem gains a special importance because of the limited amount of foreign currencies in the banks. This has two dimensions: (a) for commercial banks, the availability of foreign currencies depends to a large extent on the transfer of money from abroad via these banks, foreign-currency deposits and the amount of foreign currencies they purchase in the local market; and (b) for the DIB, the main determinant of its foreign-currency resources is the availability of loans from international organizations such as the World Bank and the European Community. Consequently, commercial banks and the DIB are expected to set up some criteria to be used as *screening devices* in order to select the most eligible customers for foreign-currency finance. Concerning the problem of insufficient amounts of funds (18.7 percent of the responses), it can be said to be a problem whose symptoms are the difficult lending terms discussed above. As for the exchange-rate problems (31.3 percent of the responses), they can be regarded as consequences of the problem of the unstable rules of foreign-currency dealings (6.3 percent of the responses).

Accordingly, the exchange-rate problem can be said to account for 37.6 of the responses (31.3 percent plus 6.3 percent). The following regulations, which are extracted from a certain bank's circular memoranda, are deemed to stress the above-mentioned problems:

– Before January 5, 1985, the Bank used to treat foreign-currency loans according to the exchange rate of $1 = LE 0.84.

– On October 13, 1986, the Higher Committee of Investment and Economic Affairs (in the Bank) decided that foreign-currency loans advanced to the Bank's customers on January 5, 1985 onwards would be treated according to the exchange rate in the "commercial-bank pool", where the exchange rate ranged between $1 = LE 1.12 and $1 = LE 1.18.

– On November 23, 1986, the Executive Committee (in the Bank) approved the decision of the Committee of Credit (in the Bank) to add the following clause to loan contracts: "the loans will be repaid in the same foreign currency and the Bank may accept the local currency according to the highest exchange rate declared by the CBE, plus a bonus to be declared on the date of maturity or repayment whichever is higher; and the borrower will bear the exchange-rate risk whether he repays in foreign currency or in local currency".

– On March 23, 1987, the Bank's board of directors decided that due to the fluctuations in the exchange rate between the Egyptian Pound and the US Dollar: (a) the terms of the contracts of foreign-currency loans would be amended, for the unsigned contracts, to state that foreign-currency loans must be repaid, together with the interest, in foreign currency; (b) a clause to be added to the contract stipulating that repayment may be in the local currency, if the concerned authorities decide so, according to the highest exchange rate on the day of repayment; and (c) concerning the contracts which are signed but their credit accounts are not open yet, the legal department has to prepare a form to that effect to be signed by the customer.

– On May 12, 1987, as a result of the implementation of the free-market exchange rate (declared on May 10, 1987), the Executive Committee (in the Bank) decided that: (a) all contracts which are signed until May 11, 1987, would be dealt with according to the old system; and (b) any contracts which will be signed after that date should stipulate that the customer's obligations are in foreign currency and the repayment will be according to the highest exchange rate in the free market if the Government decides so.

It is noticeable that SSMFs face real problems in obtaining foreign-currency finance; meanwhile, the banks cannot take all the blame for such problems, as the institutions themselves are victims of the unstable exchange-rate rules in Egypt.

10.5. Lease Finance:

The main features of lease finance in Egypt are: (a) it does not represent a significant type of finance for small businesses in general and for SSMFs in particular; and (b) the main objects of leasing for SSMFs are trucks, either for the transportation of raw materials or for the transportation of products or even for both purposes. The survey of SSMFs shows that only 7.4 percent of these firms employ lease finance while 92.6 percent of them do not.[17] The main source of lease finance is the private sector which provides 85.7 percent of leases compared with 14.3 percent for the public sector.[18] SSMFs which employ lease finance have different reasons for employing this type of finance as shown in the following table:

(17) Analysis of question number 28.
(18) Analysis of question number 30.

Table 10.11. Percentage distribution of SSMFs according to the reasons for employing lease finance

Reasons for employing lease finance	%*
1. It is cheaper than bank loans	14.3
2. It is easier to deal with than bank loans	28.6
3. It is not an interest-bearing type of finance	28.5
4. It is cheaper than purchase	14.3
5. It does not represent tied-up capital	14.3
Total	100

* Multiresponse.

Source: Question number 29.

The reasons shown in table 10.11 are given numbers in order to facilitate their explanation. Hence, these reasons can be classified into three categories: the first category incorporates reasons 1 and 2 which account, together, for 42.9 percent of the responses; these reasons are given by firms with no dealings with banks as they regard bank loans as expensive and difficult to deal with.[19] The second category is represented in reason 3 (28.5 percent of the responses) which seems to be given either by firms that deal with Islamic banks or by firms that do not have dealings with banks at all; in either case, this reason demonstrates the adherence of such firms to the prohibition of interest in Islam. Finally, the third category of reasons incorporates reasons 4 and 5 which account, together, for 28.6 percent of the responses; these reasons are expected to be given by those owners/managers who are aware of cost effectiveness and opportunity cost in finance. This latter point shows that some owners/managers have the *financial awarenenss* which favours leasing compared with purchasing, given that: (a) lease payments are less than loan payments, should the owner/manager buy the asset and finance the purchase with a loan; and/or (b) the use of the leased asset is sporadic or for a

(19) Crosstabulation of questions 8 and 29.

fairly short period of time.

The above-mentioned results suggest that the employment of lease finance among the surveyed firms cannot be attributed to any one category of reasons, as each of the categories accounts for less than 50 percent of the responses. In this regard, it could be argued that the first category of reasons (reasons 1 and 2) has the highest percentage of responses (42.9 percent of the responses), and these reasons are given by firms that do not have dealings with banks, consequently lease finance is employed as a substitute for bank credit. Such an inference cannot be held true as the survey results show that although 83.3 percent of the firms which depend on bank credit do not employ lease finance, 61.3 percent of the firms which do not depend on bank credit do not employ lease finance at the same time.[20]

Given that 92.6 percent of SSMFs do not employ lease finance, this phenomenon is more important, and is worth investigating, than the phenomenon of employing lease finance. The reasons for not employing lease finance, as given by SSMFs, are shown in the following table:

Table 10.12. Percentage distribution of SSMFs according to the reasons for not employing lease finance

Reasons for not employing lease finance	%
1. It is not available	25.0
2. We have enough equipment	58.4
3. We prefer purchase	5.0
4. It is not familiar to us	3.3
5. Raw materials can be processed in another factory	3.3
6. It is difficult to move the equipment from one factory to another	5.0
Total	100

Source: Question number 31.

(20) Crosstabulation of questions 8 and 28.

It is noticed, in table 10.12, that the most significant reason for not employing lease finance is that the respondents have enough equipment (58.4 percent of the firms). This result justifies the insignificant relationship between employing, or not employing, lease finance and not depending, or depending, on bank credit; moreover, question number 31 included the alternative answer "because it is more expensive than bank loans", and no respondent chose it. The second major reason is that lease finance is not available which is mentioned by 25.0 percent of the firms, and this implies that these firms could have employed lease finance were it available to them. For those firms, which do not employ lease finance because it is not available, a further investigation shows that 60 percent of them depend on bank credit,[21] which implies that they may be using bank credit as a substitute for lease finance. The rest of the reasons can be classified into two categories: the first category incorporates reasons 3 and 4 (mentioned, together, by 8.3 percent of the firms); these reasons reflect the cultural background of those owners/managers who prefer to have their own assets rather than using "other people's assets". The second category incorporates reasons 5 and 6 (mentioned, together, by 8.3 percent of the firms); these reasons reflect the impracticality of leasing because: (a) the sporadic nature of some products and the small size of production do not even justify leasing the equipment (reason number 5); and (b) the complexity of equipment deters the leasing of such equipment as firms, if applicable, lease each other's equipment because of the unavailability of specialized leasing companies in Egypt.

10.6. Financing Firms' Expansion:

Expanding a firm's activity means increasing its production capacity, which requires additions to its fixed assets, mainly machinery, its current assets and its workforce. Consequently, the type of finance required for the expansion is mainly

(21) Crosstabulation of questions 8 and 31.

MTLT finance; this means that the surveyed SSMFs are expected to depend, in the first place, on MTLT *finance at such a stage. According to the survey results*, 53.7 percent of SSMFs expanded their activities while 46.3 percent did not expand at all.[22] For those firms which expanded their activities, the main implication is that they are successful and have the ability to penetrate the market for their products. As for those which did not expand, this has one or more of the following implications:

(a) They are not successful enough to expand.

(b) The market for their activities is not large enough to absorb more output.

(c) They have the opportunities to expand but they lack the necessary finance to carry out the expansion.

(d) they are relatively new.

The first implication cannot be assessed in this context because it is irrelevant to this study, and there is no information about SSMFs to help in assessing their performance. Concerning the second implication, it is too early to claim that there is demand saturation in the Egyptian market, as supply lags behind demand for the majority of products. Yet, the last two implications raise some questions related to the relationship between expansion and some attributes and characteristics of the surveyed firms, namely the dependence on bank credit and the age of the firm.

10.6.1. The Relationship Between Expansion and Other Attributes of the Firm:

10.6.1.1. Dependence on Bank Credit:

As discussed in chapter four, the employment of bank credit makes available additional funds at a relatively low cost which enhances the firm's profitability;

(22) Analysis of question number 32.

high profitability enables the firm to retain more profits which, in turn, sustain its ability to expand. The relationship between expansion and dependence on bank credit is shown in the following table:

Table 10.13. Percentage distribution of the expanded and non-expanded SSMFs according to their dependence, or non-dependence, on bank credit

Has the firm expanded its activity?	Does the firm depend on bank credit?		Total
	Yes %	No %	%
Yes	55.8	44.2	100
No	16.2	83.8	100

Source: Questions 8 and 32.

As this table shows, more than half of the firms which expanded their activities depend on bank credit while the rest do not. On the other hand, only 16.2 percent of the firms which did not expand their activities depend on bank credit while 83.8 percent do not. These figures may suggest that there is a correlation between expansion, or non-expansion, and depending, or not depending, on bank credit. Such an inference needs confirmation by testing the relationship the other way round, *i.e.* by testing the relationship between depending, or not depending, on bank credit and expanding, or not expanding, the firm's activity as shown in the following table:

Table 10.14. Percentage distribution of the surveyed SSMFs according to their dependence, or non-dependence, on bank credit as based on the expansion, or non-expansion, of their activities

Does the firm depend on bank credit?	Has the firm expanded its activity?		Total
	Yes %	No %	%
Yes	80.0	20.0	100
No	38.0	62.0	100

Source: Questions 8 and 32.

Table 10.14 shows that 80 percent of the firms which depend on bank credit have expanded their activities while only 20 percent of them have not. On the other hand, only 38 percent of the firms which do not depend on bank credit have expanded their activities while 62 percent have not. These figures support the inference, drawn from table 10.13, that there is a correlation between depending, or not depending, on bank credit and expanding, or not expanding, the firm's activity. Hence, it can be claimed that banks can play an important role, not only as sources of finance for business enterprises, but also as means to enhance the growth of these businesses due to: (a) the relatively low cost of bank credit as compared with the cost of equity financing; and (b) the readiness of bank credit as compared with equity financing should the owner/manager look for new partner(s) or await the retainment of enough profits. However, the hazards of employing bank credit, as discussed in chapter four, should be taken into consideration as such a source of finance might turn out to be a fatal one.

10.6.1.2. Firm Age:

It can be presumed that the older the firm the more viable it is to expand; hence, a consecutive relationship is expected to exist between firm age and expansion. The distribution of the expanded SSMFs, according to age, is shown in the following table:

Table 10.15. Percentage distribution of the expanded and non-expanded SSMFs as based on their age

Date of starting the firm's activity	Has the firm expanded its activity?		Total
	Yes %	No %	%
– 1959	33.3	66.7	100
1960 – 1969	100	0.0	100
1970 – 1974	50.0	50.0	100
1975 onwards	46.7	53.3	100

Source: Questions 2 and 32.

Apart from the first age group (*i.e.* the firms that started their activities before 1960), the percentages of the expanded firms seem to be consistent with the dates of starting their activities. For the first age group, only one third of the firms have expanded their activities while two thirds have not, which seems to be eccentric among the rest of the groups. A further investigation shows that none of those firms, which were established before 1960, have dealings with banks;[23] and this supports the inferences, drawn from tables 10.13 and 10.14, that employing bank credit enhances the firm's growth. Given that the firm is successful and market conditions are favourable, these results suggest that:

(a) Expanding the firm's activity depends not only on its age but also on the availability of external finance, mainly bank credit.

(b) Even if a firm can expand its activity while depending only on internal sources of finance, such expansion is expected to be limited.

(c) Non-institutional types of finance can have a significant effect on the firm's growth only if they are available in fairly large amounts and on better terms than those offered with bank credit.

(23) Crosstabulation of questions 2 and 8.

10.6.2. Sources for Financing Firms' Expansion:

As mentioned earlier, the main financing requirement for expansion is MTLT finance; consequently, MTLT sources of finance are expected to dominate the financing of the surveyed firms' expansion. The sources of financing the expansion, employed by these firms, are shown in the following table:

Table 10.16. Percentage distribution of SSMFs according to the employment of different sources for financing their expansion

Sources for financing firms' expansion	%*
Retained profits	34.9
Increasing the firm's equity capital	25.3
Loans from family members and friends	10.9
Loans from the DIB	10.9
Loans from commercial banks	9.6
Profit-sharing finance	6.0
Trade credit	2.4
Total	100

* Multiresponse.

Source: Question number 33.

It can be noticed in table 10.16 that equity finance is the most common source for financing the expansion among the surveyed firms, as both retained profits and equity capital account, together, for 60.2 percent of the responses. Moreover, 11.6 percent of these firms financed their expansion with retained profits only and 9.3 percent of them financed their expansion depending only on increasing their equity capital.[24] Although loans from family members and friends and loans from the DIB have the same relative importance (10.9 percent each), 4.7 percent of the firms financed their expansion with loans from the DIB only, but none of them mentioned loans from family members or friends as the only source for financing

(24) Different analysis of question number 33.

the expansion.[25] Also, loans from commercial banks account for 9.6 percent of the responses *vis-à-vis* 6.0 percent for profit-sharing finance; but only one firm mentioned that it financed the expansion by depending only on profit-sharing finance, while none of the firms mentioned commercial banks as the only source of financing the expansion.[26] Trade credit is the least employed source for financing the expansion (2.4 percent of the responses)– this is expected to represent the purchase of equipment on credit. These results suggest that:

(a) Institutional finance does not have a significant role in the financing the expansion of SSMFs, as both loans from the DIB and loans from commercial banks account, together, for 20.5 percent of the responses.

(b) Even if profit-sharing finance is assumed to have come from Islamic banks, the relative importance of institutional sources will become 26.5 percent compared with 73.5 percent for non-institutional sources.

(c) The DIB has a more significant role than commercial banks in financing the expansion of the surveyed firms.

(d) Apart from equity finance, other non-insitutional sources of finance can be employed only as supplementary to each other or to institutional sources.

However, if banks, as sources for financing the expansion, are confined to the firms which employ bank credit, does this mean that non-institutional sources are confined to those firms which do not employ bank credit? The answer can be derived from the following table:

(25) Ibid.
(26) Ibid.

Table 10.17. Percentage distribution of SSMFs according to their employment of different sources for financing the expansion as based on their dependence, or non-dependence, on bank credit

Sources for financing the expansion	Does the firm depend on bank credit?		Total
	Yes %	No %	%
Retained profits	51.7	48.3	100
Increasing the firm's equity capital	47.6	52.4	100
Loans from family members and friends	44.4	55.6	100
Loans from the DIB	100	0.0	100
Loans from commercial banks	100	0.0	100
Profit-sharing finance	80.0	20.0	100
Trade credit	50.0	50.0	100

Source: Questions 8 and 33.

Table 10.17 shows that non-institutional sources are employed by all firms, both the firms that depend on bank credit and those which do not, to finance their expansion. It is noticed that 51.7 percent of the firms which employed retained profits to finance their expansion depend on bank credit, which means that retained profits are employed to supplement bank credit rather than a substitute for it. On the other hand, more than half of the firms which employed both equity capital and loans from family members and friends are those firms that do not have dealings with banks; this means that these sources tend to be substitutes for bank credit rather than supplementary to it. In this regard, it should be noticed that loans from family members and friends are employed in combination with either retained profits or equity capital,[27] which means that these loans cannot, alone, replace bank credit. With profit-sharing finance, 80 percent of it came from Islamic banks and 20 percent came from individuals, and

(27) Ibid.

these types are substitutes for each other and for bank credit, as they are usually available in sufficient amounts. As for trade credit, it can be employed either as a substitute for or to supplement bank credit, though for the most part it tends to be supplementary to bank credit. On the whole, these results seem to support the inferences drawn from table 10.16 above.

Finally, it can be noticed that throughout this chapter, and chapter nine, no respondent mentioned investment-and-business banks as sources of finance. This may be due to one or more of the following reasons:

(a) These banks are fairly unknown among many businssmen, as they were introduced to Egypt after 1974.

(b) These banks are reluctant to finance SSMFs, which they may regard as more risky and less profitable than other businesses.

(c) The owners/managers of SSMFs are hesitant to approach these banks, as the majority of them are branches of foreign banks.[28]

Also, it is noticed, in this chapter and chapter nine, that insurance companies have no role in financing SSMFs.[29] As discussed in chapter six, insurance companies have reasonable amounts of funds which can satisfy the financing needs of several businesses, especially for long-term finance, but these companies choose a safe approach by depositing these funds with banks.

(28) See figure 6.1 in chapter six.

(29) No respondent answered question number 34 concerning obtaining finance from insurance companies and, consequently, questions 35 through 37.

Chapter Eleven

Case Studies

11.1. Five Case Studies of SSMFs

11.2. Two Case Studies of Handicraft Establishments

11.3. Two Case Studies From Banks

This chapter undertakes three types of case studies:

(a) five case studies of SSMFs, in order to assess their current status and their potential;

(b) two case studies of handicraft establishments in order to predict the possibility of their expansion; and

(c) two case studies of SSMFs from the banks' viewpoint, *i.e.* how banks assess the creditworthiness of these firms.

It is worth mentioning that the information included in these case studies was given by the owners/managers in interviews with the author either in the firm itself or outside the firm after office hours. During the interviews which took place in the firms, the author was given the chance to observe the different aspects of the firm's activity and operations. Concerning the interviews which took place outside the firms, the only source of information was the owner/manager. In Egypt, however, it is very difficult for any researcher to collect detailed information about any business unless he or she is a friend of the owner/manager or is introduced to him by one of his or her friends or relatives. Hence, the case studies of firms represent the firms to which the author could have access via his friends; even though, some of the owners/managers did not give the detailed information required, especially that involving figures such as turnover, profits, debts, asset value ...etc., which they considered as confidential. As regards collecting information from banks, the situation is even worse, partly because they do not like to reveal their lending practices and partly because they do not like to reveal any information about their clients. Accordingly, the information contained in this chapter represents the maximum amount of material which could be obtained within the limits of time and restrictions.

11.1. Five Case Studies of SSMFs:

Case One: A Tobacco Factory

– This factory was established in 1957 with start-up capital of LE 100 which amounted to LE 100,000 at the beginning of 1988.

– Activity: tobacco products.

– Location: Cairo.

– Owned and managed by Mr. Sobhi Zaghloul.

– The factory started with 4 workers, who increased to 52 in 1978. The type of labour employed in the factory is mainly skilled labour whose wages are determined according to the items produced by each worker.

– The equipment employed is manually operated, and there is only one semi-automatic machine which was imported before a similar one was produced locally.

– The factory uses five kinds of raw materials; two of them are imported and three produced locally. All raw materials are bought at the local market either from the producers or from dealers in imported merchandise; the suppliers of the raw materials can be either private-sector or public-sector companies.

– With respect to marketing, no sales take place in Cairo because of the strong competition from three large public-sector companies and about sixty private-sector companies. Hence, the marketing of the factory's product takes place in two governorates, one of them 120 kilometers south of Cairo and the other 90 kilometers south west of Cairo, where the factory sells to wholesalers from two storage places in these two governorates. The factory does not export its product because it has no market abroad, and the owner has little overseas knowledge.

– The production cycle is one week and the annual turnover is LE 450,000.

– The factory owes no debt because: (a) it does not obtain trade credit, as payments for raw materials are made in advance or on delivery; and (b) it does

not depend on bank credit, as the owner-manager regards dealings with banks as "disastrous". Hence, the main sources of finance are equity capital and retained profits; the annual net profits range between LE 12,000 and LE 25,000.

– This factory faces the following problems:

(a) The demand for its product is decreasing.

(b) The prices of the imported raw materials are increasing because of the depreciation of the exchange rate for the Egyptian Pound, as well as the inflation in the exporting countries.

(c) Both the weight and the price of the tobacco pack are determined by the Government; and this results in a low profit margin which may be, according to one of the owner-manager's sons, as low as 5 percent.

(d) The owner/manager is getting old and is unable to carry out the management duties as he should; he also has no assistant because his sons are engaged in their own businesses which are more profitable than the factory itself. At the same time the owner-manager is unwilling to hire a professional manager because he does not trust anybody to take command of the business.

– As a result of the forementioned problems, the factory's activity is shrinking; one evidence for this shrinkage is that the number of workers decreased to 12 at the beginning of 1988, a mere fraction of its past work force of 52 in 1980. The owner-manager does not intend to replace the workers who left the factory because they retired or resigned to work elsewhere; even those who were fired were not replaced.

<u>Assessment:</u>

This is an example of a fading business which faces crucial problems caused, mainly, by the owner-manager who made some serious mistakes as follows:

(a) The most serious mistake made by the owner-manager is the wrong choice of plant location. As mentioned above, the factory is located in Cairo and markets its product in two governorates, one of them 120 kilometers south of Cairo

and the other 90 kilometers south west of Cairo. The rational choice of plant location suggests that the factory should have been established in either one of the two governorates simply because they are only 42 kilometers apart and have almost the same market size. The time and cost which could have been saved can easily be envisaged by comparing the transportation of the production under each alternative. Under the current situation the simplest way of transporting the production is to carry it for 90 kilometers south west of Cairo and then continue with the other governorate's quota for 42 kilometers which gives a sum of 132 kilometers; if each governorate's quota is to be transported individually, the situation will be even worse (the total distance will be 210 kilometers). If the factory had been established in either one of the two governorates, only one governorate's quota would have been transported for 42 kilometers. In this latter case, the time and cost which could have been saved are obvious. However, it seems that the owner-manager had chosen the factory's location mainly because he lives in Cairo, *i.e.* his business had followed him, not vice versa.

(b) The second mistake is that the owner-manager did not prepare a second-generation manager, who could be one of his three sons or one of his relatives, or even a hired assistant manager. Another alternative could be taking one partner, or more, who could share the management of the business at the same time.

(c) Also, the business does not depend on bank credit because the owner-manager regards dealings with banks as "disastrous". This attitude may be because the establishment of the factory coincided with the Egyptianization of foreign companies in 1957 and the wave of nationalizations which started in 1960. The significance of such coincidence is that the banking sector, during the 1960s, enjoyed a monopolistic status which resulted in a falling standard of customer service; that is why some businessmen used to consider banks as bureaucratic government agencies. As far as this factory is concerned, it seems that the owner-manager did not try to obtain credit from banks, and he established his judgement of dealing with

banks on the experience of other businessmen who do not, necessarily, represent the banks' customers.

On the whole, this business is unlikely to survive because:

(a) Its product is a special type of tobacco consumed by some people of the working class and some people in the countryside. Because the consumption of this kind of tobacco requires special preparations (narghile, or hookah, and coal), many young people are unwilling to consume it and some older people turn to other kinds or even give up smoking completely. Moreover, this factory has neither the flexibility nor the financial capability to move to the production of another kind of tobacco.

(b) The strong competition from other companies, especially public-sector companies, whose products are marketed all over the country and are well known to the customers; meanwhile, the product of this factory is not known enough even in the two governorates which represent its market.

(c) The Government intervention in determining the price and weight of the pack limits the profit margin; from the above-mentioned figures, the average profitability of sales is 4.1 percent (a minimum of 2.7 percent and a maximum of 5.5 percent).

(d) Given this limited profit margin and given the rising inflation in Egypt, this business seems to be vulnerable should there be a significant increase in the cost of production or transportation.

(e) The total dependence on equity finance makes the cost of capital to this business relatively high; from the above-mentioned figures, the average return on equity capital is 18.5 percent (a minimum of 12 percent and a maximum of 25 percent). Whether it is equal to the opportunity cost or not, this percentage is higher than the maximum interest rate, on loans to the industrial sector, of 15 percent (as established by the CBE). Moreover, as discussed in chapter four, the real cost of borrowing is less than 15 percent if the tax saving from interest

payment is taken into account.

(f) Finally, the significant decrease in the work force, which will not be replaced, is evidence of deterioration.

Case two: **A Cotton-Textile Factory**

– This factory was established in 1948 by five owner-managers.

– Location: Cairo.

– According to one of the owner-managers, the factory produces a distinct type of textiles.

– Although three of the owner-managers died, the number of partners is 32 because: (a) the sons and daughters of the dead partners inherited their shares in the factory; (b) some of the sons and daughters of the existing partners are partners as well; and (c) some of the grandsons and granddaughters, of the founder-partners, are partners in the factory.

– The management of the factory is carried out by some of the male partners because: (a) some of the male owners have their own jobs and businesses, and others are not experienced enough to take part in the management of the business; (b) some of the female owners are not interested in such business and others do not work at all; and (c) the number of partners is too much to share the management of the factory.

– The factory does not depend on bank credit because, according to one of the owner-managers, banks impose difficult lending terms including high interest rates.

– The sources for financing the factory's activity are equity capital, retained profits, and trade credit.

– During the period 1963–1974, the factory used to market its products via public-sector companies; during the period 1975–1987, the marketing was made via wholesale stores owned by some of the partners' sons.

– The factory faces the problem of the rising prices of raw materials that must be bought from public-sector companies which monopolise the supply of these materials and impose their terms on the buyers.

– The machinery is too old and must be replaced, but the main problem which faces the partners is finance because: (a) the prices of machinery have increased dramatically in recent years because of the world inflation and the depreciation of the exchange rate for the Egyptian Pound; (b) the owner-managers are reluctant to borrow from banks as they regard the interest rates as too high to be paid from the earnings; and (c) retained profits are insufficient to finance the purchase of new machinery.

– The factory is at a standstill because of the problem of finance, and the partners could not reach an agreement to solve this problem.

Assessment:

The case of this factory stresses the seriousness of the problem of finance, so much so that the factory came to a standstill because of the lack of finance. The question which arises, in this case, is who caused the problem? In other words, is this problem a consequence of some difficulties encountered in obtaining bank credit? Or is it a consequence of a mismanagement of the business? The answer is that the problem tends to be attributed to the mismanagement, rather than outside factors, because:

(a) The founder owner-managers represent the traditional managers who believe that the best sources of finance are equity capital and retained profits; their reason is that bank credit is always risky and time consuming.

(b) The younger generation of owner-managers seem to have inherited this belief from their fathers and did not even try to borrow from banks.

(c) The owner-managers, like many others, believe that retained profits represent a cost-free source of finance; and this makes them regard bank credit as expensive no matter how low the interest rate is.

(d) It seems that almost all the partners share the decision making, as regards certain aspects of the business, which makes it very difficult to reach a final decision; this issue indicates the lack of authority delegation which should be given to the managers.
(e) Even if it is assumed that non-dependence on bank credit is a sound financial policy, there was no concrete plan for the replacement of machinery, *e.g.* replacing it one item at a time over a certain period.

On the other hand, the complaint concerning the difficulties associated with obtaining raw materials seemed to be plausible because:
(a) The rising cost of raw materials is a common complaint among SSMFs in general and textile factories in particular. In the meantime, these factories have limited ability to raise the prices of their products because of the strong competition from large companies, especially public-sector companies.
(b) Public-sector companies, as the major source of raw materials for the textile factories, could force their clients to buy both bad-quality materials and good-quality materials.

Case three: **A Silk-Textile Factory**

– Established in 1940.
– Location: Cairo.
– It is owned by two brothers and managed by a professional manager who has a long experience and is well regarded among the neighbouring factory managers.
– The machinery installed in the factory was manufactured in 1935 and must be replaced. According to the author's observation, all the machinery on the upper floor ceased to operate and became a pile of scrap iron; also, more than half the machinery on the ground floor ceased to operate and the rest cannot operate efficiently.
– The replacement of machinery costs LE 1 million, but the owners and the

manager are reluctant to finance the replacement with bank credit because they do not expect the earnings to cover the repayment of the credit. The manager gave an example of the expense of bank credit, mentioning that he applied for a documentary credit of LE 250,000 and the bank retained, in advance, both the compensating balance and the interest for the first year, which resulted in the real amount of the credit being only LE 150,000. He also mentioned that the bank always requires collateral for any type of credit.

– Concerning short-term finance, the manager stated that there is a steady rise in the prices of raw materials; an example is that the price of synthetic silk was LE 7,000 per ton in 1987 and became LE 9,000 in January 1988. He also mentioned that these prices are imposed by public-sector companies, which have the monopoly on such raw materials, require cash payment and refuse to give the buyer a grace period and force the business to buy bad-quality materials.

– The manager complained of the haphazard estimation of the business's profits by the tax assessors who always overestimate these profits. He stated, also, that the Tax Agency (TA) has the right to sequestrate the business's balances with banks for the settlement of overdue taxes.

– The number of workers in the factory is now 6 workers, but the number used to be 70 during the peak of the factory's activity.

– The owners intend to shut down the factory, but they are waiting for the remaining workers to retire or resign; then the factory will be converted into a storage place for a glass factory, which is being established by the same owners.

<u>Assessment:</u>

This case is almost a repetition of the last case with one major difference. In the last case the owners did not reach a decision as regards the destiny of the factory, but in this case the owners decided to shut down the factory and start a different business. The closure of this factory seems to be due to some reasons that are more influential than the lack of finance; one evidence of this inference

is that the owners have access to financial resources which are sufficient enough to start a new business. Consequently, the collapse of this business is expected to be due to the following reasons:

(a) The rising cost of raw materials and the inability of the business to raise the price of its product, in order to maintain a certain profit margin, because of the strong competition, especially from public-sector companies. Even if some businesses can raise the prices of their products, this rise usually lags behind the rise in raw-material prices which has an adverse effect on the performance of these businesses.

(b) The deterioration in the quality of the product due to the use of bad-quality materials imposed on the business by public-sector companies.

(c) The deterioration in production operations and product quality due to the obsolescence of the machinery whose replacement is well overdue.

(d) The rising cost of production caused by the continuous maintenance of the machinery, which requires more expenses and interrupts the production process.

(e) There was no long-term plan for the replacement of machinery as mentioned in the last case.

(f) It seems that the experience of the manager applies to the technical rather than the financial aspects of the business.

(g) It seems also that the manager is not the only decision maker in the business but, rather, the owners share the decision-making process or, even, they are the ultimate decision makers.

(h) The overestimation of taxes due on the business, by the tax assessors, represents a common complaint among almost all the surveyed firms as indicated by the comments on question 40 of the questionnaire. In this regard, it is worth mentioning that some of these complaints are true and others are not; the main reason is the lack of confidence between businessmen and the tax officers.

To the author's knowledge, a large number of textile factories have collapsed

during the last few years because of many problems, not least of which is the problem of finance. The manager of the above-mentioned factory claims that private-sector textile factories are decreasing in number, as there used to be 1,000 of these factories in 1986, but this was reduced to only 200 in 1988; the problem, he added, is mainly a problem of finance.

Case four: An Engineering-Product Factory

– Established in 1958.

– Location: Cairo.

– Activity: manufacturing different tools made of brass and aluminium.

– The factory used to be owned and managed by two brothers, but one of them left in 1978 and went into real-estate businesses.

– After 1978, the factory has become a limited partnership between the owner-manager and his sons.

– Before 1978 the factory used to employ 60 workers, but numbers have been decreasing steadily, and there were only 10 workers at the beginning of 1988.

– According to one of the owner-manager's sons, the factory's activity has been shrinking because:

(a) The owner-manager who left was interested in real-estate businesses to such an extent that he used to withdraw money from the factory to finance his real-estate projects; also, the owner-manager who left established some of his projects on parts of the factory's space.

(b) After the separation of his partner, in 1978, the other owner-manager was ill and could not look after the factory for some time.

(c) Some of the workers resigned and joined public-sector companies which they regarded as more secure; at the same time, the owner-manager faced serious difficulties in replacing the skilled labour who resigned.

– At present, the factory's activity is confined to aluminium products whose

quality, according to the owner-manager's son, compares favourably with those produced by larger companies.

– The major problem which faces the owner-manager is the rising prices of raw materials which threaten the continuation of production.

– The factory does not depend on bank credit, and the main sources of finance are equity capital, retained profits and trade credit.

Assessment:

According to the forementioned information, it can be claimed that the turning point in this factory's life was the year 1978, during which: (a) one of the two owner-managers was separated; (b) the number of workers started to decrease; and (c) the factory's activity started shrinking. However, the key factor was the separation of the two owner-managers. The other factors can be regarded as the consequences of this separation. Yet, there is another important factor represented in the reason for this separation, which is one partner's interest in real-estate businesses. In fact, both the real-estate sector and the trade sector have become the most lucrative activities in Egypt during the first decade of the Open-Door Economic Policy (ODEP), adopted in 1974, because:

(a) the influx of both native and foreign businesses created a substantial demand for office space and residential flats, especially in Cairo, which the existing supply could not satisfy; and

(b) the trade sector enjoyed a high turnover and a high profit margin as compared with other types of businesses, especially with the increasing purchasing power resulting from invisible earnings such as remittances.

Concerning the rising prices of raw materials, they seem not to be confined to the textile industry; and they represent one result of the inflationary pressures in the Egyptian economy. On the whole, it can be deduced that: (a) in contrast with his brother, the owner-manager who left was a profit-seeking investor rather than

a dedicated businessman; and (b) the shrinking of this factory's activity is one of the passive consequences of the ODEP which introduced unfair competition, in terms of profitability, among different types of businesses.

Case five: **A Sock Factory**

– This factory was established in 1957.

– Activity: manufacturing different types of socks.

– Owned and managed by two sisters.

– The owner-managers started their business depending only on equity capital which was sufficient to buy the necessary machinery and the raw materials required for two production cycles.

– The building is leased since the establishment of the factory.

– The machinery is as old as the factory itself.

– The factory employs 10 workers who are paid according to the items produced.

– The work force is not permanent as workers leave the factory whenever they find better opportunities.

– The factory does not depend on bank credit.

– The factory's activity is shrinking because:

(a) Some of the machinery ceased to operate because of the lack of maintenance which is, in turn, due to the unavailability of specialists to maintain such types of machinery.

(b) The remaining machinery is too old to operate effectively.

(c) The profits achieved represent the only soure of finance for the factory as well as the only source of income for the owner-managers.

(d) The owner-managers are getting old and they have no spouses or relatives to help them in managing the factory.

(e) It is difficult for the factory to face competition from modern factories.

(f) The cost of production is rising steadily because of the rising prices of raw

materials and the rising wages of workers.

Assessment:

Taking into consideration the above-mentioned reasons for the shrinkage in the factory's activity, it can be inferred that this business is unlikely to survive because:

(a) Modern factories can provide better-quality goods at reasonable prices because they employ modern production technologies.

(b) The fierce competition from modern factories makes it difficult for the owner-managers to raise the prices of their products in line with the rising production costs.

(c) The aging machinery is unlikely to be replaced, as this depends only on the business's meagre financing resources, represented in retained profits, which seem to be hardly enough to meet short-term requirements.

(d) The absence of managerial assistance either from relatives or hired executives.

(e) More important is the fact that the interviewed owner-manageress mentioned that she and her sister have no ambitions in life except earning enough money to survive; this spirit of despair may be because the owner-managers have neither offspring nor relatives to inherit the business after their death.

11.2. Two Case Studies of Handicraft Establishments:

These handicraft case studies are included in this chapter for three purposes: (a) to predict the likelihood of their future growth; (b) to assess the problems that inhibit such growth; and (c) to test the validity of the number of workers as a determinant criterion in defining SSMFs.

Case six: **A Rug Factory**

- Established in 1971.
- Location: Cairo.

– Activity: darning and manufacturing rugs.

– Owned and managed by Mr. Abo Talib.

– This factory started as a one-man business where the owner was working on his own, and he started hiring workers afterwards.

– By the beginning of 1988, the factory employed 8 workers as well as the owner-manager who works himself.

– The factory depends completely on manual tools and looms.

– This business does not depend on bank credit because: (a) the owner-manager can use the down payments, from some customers, to pay for the raw materials, and other requirements can be financed by retained profits; (b) the owner-manager does not expect his earnings to meet interest payments; and (c) the owner-manager wants to avoid prosecution, and other legal complications, should the business fail.

– According to the owner-manager, the business faces the following problems:

(a) Taxes: tax assessors do not pay any visits to new businesses but, rather, they wait for a long period of time which might be extended to seven years. When they visit the business they estimate its profits according to the current earnings without taking into consideration the low income during the early years of the business's activity. Consequently, the tax assessors overestimate the business's profits and, accordingly, the taxes due on it.

(b) Social insurance: the business faces real difficulties in firing any workers, after being registered with the Social Insurance Agency (SIA), because of the complicated and lengthy procedures involved.

(c) Workforce: it is difficult to train young boys who drop their school studies because the SIA officers visit factories and require the registration of these boys as workers; this means that the owner-manager must pay their insurance subscription which increases their wages. This difficulty, according to the owner-manager, prevents the training of skilled labour, and this results in a scarcity of such labour

and a dramatic increase in their wages.

Assessment:

It is worth mentioning that the main activity of this factory is rug darning and the subordinate activity is rug manufacturing. For the main activity there is almost no financing problem as the required inputs cost little, and the main factor is the skilled labour whose wages usually lag behind the customers' payments. As for the subordinate activity, *i.e.* the rug manufacturing, it is practiced on a very narrow scale which makes short-term finance fairly limited especially with the down payments made by the customers. The issue of finance emerges only in terms of dealing with the expansion potential where finance plays a major role. In this regard it can be argued that if this factory is to expand, it must seek external finance because:

(a) The factory's expansion requires larger premises, as the existing premises cannot house more equipment and the owner-manager could be obliged to buy such premises if leasing is not available. Also, the expansion requires the purchase of more looms, as the leasing of such equipment is almost non-existent in Egypt.

(b) The profit achieved seems to be insufficient to finance any significant expansion especially when it represents the only source of income for the owner-manager.

(c) Even if it is presumed that the business can survive and expand depending only on retained profits, it will take a fairly long time to achieve any significant expansion.

It is clear that the problems with taxes and social insurance stem from the lack of confidence between the tax officers and the SIA officers, on the one hand, and businessmen on the other. This lack of confidence is due to the following factors:

(a) Some businessmen do not take the initiative in reporting their income to the tax authorities in the due time.

(b) Almost all handicraftsmen and the majority of small businesses do not prepare audited financial statements or keep formal accounting books.

(c) Some businessmen try to dodge the tax officers and the SIA officers.

(d) Some tax assessors overestimate the profits of their clients.

(e) Some tax officers and some SIA officers presume that businessmen do not report their true income or their true workforce.

Case seven: A Silver-Craft Factory

– Established in 1965.

– Location: Cairo.

– Activity: manufacturing silver crafts such as souvenirs and picture frames, as well as processing other factories' products.

– Owned and managed by the founder who depends on his four sons as assistants.

– The factory employs 15 workers including the owner-manager's sons.

– This factory depends completely on simple tools, as the main production factor is the human skill.

– The factory has been expanding since its establishment, as it started with only 4 workers including the founder himself.

– Sources of finance: equity capital, retained profits and trade credit; but since 1978 trade credit ceased to exist, as raw-material suppliers require cash payments.

– The factory markets its products via retailers, but it may occasionally sell directly to consumers.

– According to the owner-manager, the main problems which face the factory are:

(a) The Government restricts the importation and exportation of silver, and this obliges him to buy second-hand silver products, such as silver ornaments, and use them as raw materials for the factory's products.

(b) The supply of raw materials is unstable which makes it difficult to predict the

prices of raw materials.

(c) During bad seasons the retailers buy the factory's products on credit and do not pay until they can sell the whole stock to their customers.

Assessment:

This factory has some qualifications for success as follows:

(a) It is located in the heart of its marketing area, in a market for souvenirs which is well known to tourists.

(b) The factory faces no problem concerning the availability of skilled labour, which is the main production factor.

(c) The simplicity of its production operations helps reduce the production costs and makes the production cycle fairly short.

(d) The owner-manager needs no significant capital requirements should he require more tools for expansion.

On the other hand, there are some factors that have an adverse effect on the factory's expansion potential as follows:

(a) The factory occupies one floor in an old building which cannot be extended any more; thus, a significant expansion requires the movement of the factory to larger premises that might be far from the market.

(b) The unavailability of external finance, mainly bank credit, restricts the factory's viability to undertake a major expansion.

(c) The unavailability of trade credit results in an inefficient use of retained profits as a source for financing short-term requirements.

(d) The Government's restriction on the importation of silver and the unstability of raw-material supplies do not encourage expansion.

(e) The existence of bad seasons necessitates a careful feasibility study for any planned expansion.

Finally, it is noticed that this factory qualifies as a SSMF according to the

definition adopted in Egypt (as it employs more than 10 workers), but it is considered as a handicraft establishment according to the author's argument in chapter seven (as it depends on simple tools and human skills). On the other hand, the silk-textile factory, discussed in case three, is considered as a SSMF although it employs only 6 workers (as it does not qualify as a handicraft establishment). These two cases show the invalidity of the number of workers as a determinant criterion in defining SSMFs, as discussed in chapter seven.

11.3. Two Case Studies from Banks:

These case studies represent two loan applications submitted by two SSMFs to certain banks in Egypt; one of these applications was approved and the other was rejected. The purposes of presenting these case studies are: (a) to demonstrate the rationale according to which a loan application is approved or rejected; and (b) to assess the bank's decision in each case. However, according to the banks' request, the names of the banks, as well as the names of the clients will not be revealed as the information was given to the author in confidence.

Case eight: An Approved Loan Application

– In February 1987, a firm applied for a documentary credit in foreign currency to finance the importation of new machinery for the firm's expansion.

– The credit amount was LE 260 thousand, with a five-year maturity.

– The firm's situation with the bank and other banks during that time was as follows:

(a) A foreign-currency loan from the same bank of LE 543 thousand secured by tangible and intangible assets, which amount to LE 372 thousand, as well as a compensating balance of 10 percent of the loan amount.

(b) A loan from another bank of LE 500 thousand secured by raw materials.

– The firm owes the bank no arrears.

– The main findings of the ratio analysis of the firm's financial statements were

as follows:

current ratio = 1.5

gearing ratio (total debts/net worth) = 0.9

return on sales = 21 percent

return on equity = 25.5 percent

break-even point = 23 percent of the production capacity of the firm

– Other indicators for the expansion project:

net present value = LE 58 thousand (positive)

pay-back period = 6 years

– The bank's decision: the loan was approved with the following terms:

(a) The firm was to deposit, with the bank, 25 percent of the loan amount, and this sum of money will be deducted from the last instalment which is due at the end of the five years (the loan maturity).

(b) The firm was to deposit, with the bank, for six months (renewable) an amount of money equivalent to the customs duty on the machinery to be imported; as an alternative, the firm can submit a letter of guarantee from another bank with the same value.

(c) The bank was to possess the documents of the machinery to be imported until it is installed in the factory when it will be pledged as collateral for the loan.

(d) The firm was to pledge the existing machinery as collateral for the loan.

(e) The interest rate on the loan was 15 percent.

<u>Assessment</u>

As far as the bank is concerned, it can be noticed that:

(a) The bank withholds a compensating balance of 25 percent of the loan amount which they call a "cash guarantee". As discussed in chapter two, this compensating balance raises the cost of borrowing; using one of the formulae suggested in

chapter two, the real cost of this loan can be calculated as follows:

$$\text{the real interest rate} = \frac{\text{the nominal interest rate}}{1 - \text{the percentage of the compensating balance}}$$

$$= \frac{0.15}{1 - 0.25} = 0.20 \quad \text{or} \quad 20 \text{ percent}$$

(b) According to the bank's lending rules, the compensating balance is 10 percent of the loan amount; and this balance will be entitled to interest, according to the interest-rate structure declared by the CBE, and any amount in excess of 10 percent will not be entitled to interest, as it will be kept temporarily. However, the bank mentioned that the whole balance (25 percent) will be withheld until the last year of the loan's maturity.

(c) Also according to the bank's lending rules, the loan which will be advanced against new machinery, as collateral, represents 80 percent of the value of this machinery if the loan maturity does not exceed five years. In this case, however, the bank lent to to the firm against 60 percent of the value of the new machinery, although this latter percent applies only to old machinery, according to the bank's rules.

(d) In this case, the loan amount is deemed to be equal to the compensating balance plus 60 percent of the collateral. When these values were calculated, they amounted to LE 399 thousand while the loan amount was only LE 260 thousand, which means that the collateral was exaggerated.

(e) The figures used in calculating the pay-back period and the net present value for the new project are inconsistent, *i.e.* when the bank calculated the pay-back period it considered the total cost of the project as LE 904 thousand, but when it calculated the net present value the bank considered the total cost of the project as LE 373 thousand for unknown reasons.

(f) Apart from the inaccuracy of the figures, the discount rate used to calculate the net present value was 13 percent, without explaining the rationale for choosing this discount rate. If it is assumed that this rate is accurate, this means that the

new project is unprofitable because the highest interest rate on deposits in Egypt (a risk-free rate) was 13.25 percent which is, in addition, tax free. In fact the employed discount rate is inaccurate because it does not represent the marginal cost of capital for the new project (which should be a weighted average cost) that can be calculated as follows:

– The capital structure for the new project is 30.2 percent equity financing and 69.8 percent loan financing.

– According to the available data, the cost of equity financing is represented in the return on equity at the end of the year prior to the implementation of the project, and this return was 25.5 percent.

– As discussed in chapter four, the cost of borrowing represents the real interest on the borrowed funds which is calculated as follows:

the real cost of borrowing = the nominal interest rate × (1 – the tax rate).

As the tax rate for this firm is 32 percent, then:

the real cost of borrowing = $0.15 \times (1 - 0.32) = 0.102$ or 10.2 percent.

– The weighted average cost of capital for the new project is:

$= (0.255 \times 0.302) + (0.102 \times 0.698)$

$= 0.077 + 0.0712 = 0.1482$ or 14.82 percent.

Hence, the minimum discount rate, which should be used to calculate the present value of the cash inflows generated by the new project, should be 14.82 percent (excluding a risk premium for the new project).

The most significant point in this assessment seems to be the relatively high cost of borrowing in real terms (20 percent), which is due to the requirement of a compensating balance of 25 percent of the loan amount. If the bank has required only 10 percent as a compensating balance, the real cost of the loan to the firm would have been only 16.7 percent. Consequently, if the bank requires a compensating balance of 25 percent from all its clients, those clients will have

good reason to complain of the high cost of borrowing which might exceed the cost of equity capital to some firms.

Case nine: A Rejected Loan Application

– Before applying for a loan from the bank, the firm's obligations towards this bank were as follows:

Credit facilities from the bank	Amount of credit LE 000	The firm's obligations LE 000	Arrears from 1986 LE 000
The equivalent of a foreign-currency loan	416.342	625.104	11.167
Local-currency loan	240.0	248.690	8.690
Trade credit	31.452	31.499	0.050
Letter of guarantee	113.960	113.960	22.792*
Total	801.754	1,019.253	42.699

* represents the cash coverage of the letter.

– In March 1987, the firm applied for the postponement of its arrears related to both the foreign-currency loan and the local-currency loan.

– In June 1987, the firm applied for a short-term loan (one year) of LE 100 thousand.

– The bank decided the following:

(a) Postponing the firm's arrears until the end of December, 1987.

(b) Rescheduling both the local-currency loan and the foreign-currency loan in such a way as to make the first repayment due at the end of December 1989; at the same time the maturity of the foreign-currency loan will be extended to nine years instead of five years.

(c) Rejecting the firm's application for a short-term loan of LE 100 thousand.

The bank's decision to reject the firm's application for a short-term loan was

based on the following:

(a) The firm offered buildings valued at LE 46 thousand as collateral for a loan of LE 100 thousand; in this case the collateral covers only 46 percent of the loan while it should cover 166.7 percent of the loan (*i.e.* the loan should not exceed 60 percent of the value of the collateral) according to the bank's lending policy.

(b) If the bank approves the loan, this means that the total short-term finance, provided by the bank to the firm, will amount to LE 165 thousand, while the total value of its working capital is LE 200 thousand. In this regard, the bank mentioned that the sound lending practices suggest that the firm should finance at least two thirds of the working capital from its own resources.

(c) The firm's total assets amount to LE 1,352.7 thousand and the finance provided by the bank amounts to LE 1,019.253 thousand; and this means that the bank finances 75.3 percent of the firm's assets, *i.e.* the bank's share in financing these assets is triple the firm's share.

Assessment:

In addition to the above-mentioned reasons for rejecting the firm's application, there is another reason which can be inferred; that is the bank regards the firm's reputation as not good because it is in arrears as regards all its obligations towards the bank. Concerning the bank's reasons for rejecting the loan application, it can be noticed that:

(a) Having rejected the collateral, the bank was not expected to provide an unsecured loan to the firm while it is in arrears.

(b) The bank should have mentioned that the firm offered buildings (fixed assets) as collateral for a short-term loan for the financing of current assets.

(c) When the bank calculated its share in financing the firm's assets it considered a letter of guarantee as a source of finance; but it can be argued that a letter of guarantee does not represent a source of finance as it does not result in funds being advanced to the client. Consequently, if the value of the letter of guarantee

is excluded from the firm's obligations, these obligations will become LE 905.3 thousand and the bank's share in financing the firm's assets will become 67 percent. In this case, the bank's share in financing the firm's assets is twice, rather than triple, the firm's share; and if the bank is the only creditor to the firm, the firm's financial gearing will be 67 percent, rather than 75.3 percent, which may be considered as acceptable.

(d) Finally, the bank was responsive and helpful in postponing the firm's arrears and rescheduling its loans.

Chapter Twelve

Conclusion

12.1. Summary of the Results

12.2. Research Findings

12.2.1. General Findings

12.2.2. Finance-Related Findings

12.2.3. Relevance of the Findings

12.3. Recommendations

12.3.1. General Recommendations

12.3.2. Finance-Related Recommendations

12.4. Suggestions for Further Research

12.1. Summary of the Results:

The starting point in this section is the status quo of the Egyptian economy, which represents the environment in which SSMFs exist and by which they are affected either directly or indirectly. In this regard, chapter five showed that the Egyptian economy tends to be commodity-oriented, as the percentage of GDP accounted for by commodity sectors is 50.6 percent for the fiscal year 1986/87 *vis-à-vis* 49.4 percent for service sectors. However, by the fiscal year 1991/92 the share of commodity sectors in GDP is expected to become only 48.5 percent *vis-à-vis* 51.5 percent for service sectors. This relatively low share of commodity sectors in GDP will be due to the fall of the petroleum sector's share in GDP from 13.8 percent in 1986/87 to only 3.5 percent in 1991/92. For the rest of commodity sectors, their share in GDP is expected to rise significantly during the period up to the fiscal year 1991/92, especially industry and agriculture. As the Egyptian economy is open to foreign as well as indigenous investors, the private sector is gaining a considerable momentum in different aspects of the economy. For instance, the private sector is expected to undertake more than 50 percent of the planned investment for agriculture, industry and tourism by the fiscal year 1991/92.

On the other hand, Egypt encounters the following economic problems:

(a) Servicing the external debt which amounted to $34.4 billion in 1987.

(b) A chronic deficit in the balance of trade.

(c) A chronic deficit in the State budget, which is caused mainly by subsidies to foodstuffs of about LE 2 billion a year.

(d) An inflation rate of 16–18 percent during the period 1981–1987, and some observers estimated the inflation rate for 1988 to be 35 per cent.

(e) A slow down in the growth of industrial production, as the growth rate of industrial production slowed down from 10 percent during the 1970s and the early 1980s to 7 percent in 1985/86 and 1986/87.

Concerning the finance resources, chapter six showed that there are 99 banks in Egypt, of which only one bank is not registered with the CBE, and these banks have 1,063 branches all over the country. If the 153 branches of specialized banks are excluded, the result will be 910 bank branches, of both commercial banks and IB banks, to serve all business enterprises in the country. All industrial enterprises in Egypt, both private-sector and public-sector, amount to 10,423 enterprises which means that there are 11.5 industrial enterprises corresponding to each bank branch. If the DIB is taken into account, the industrial enterprises will be in a better situation in terms of the banking service available to them. Also apart from specialized banks, the consolidated balance sheet of commercial banks ammounted to LE 45.9 billion on the 30th of June, 1987 and the consolidated balance sheet of IB banks amounted to LE 11.13 billion on the same date; this is compared with the State-budget total of LE 23.06 billion for the fiscal year 1987/88. Consequently, the problem is not the insufficiency of the banking service but, rather, it is a problem of lending preferences as envisaged by the banks. In other words, chapter six showed the following:

(a) Only 34.8 percent of commercial-bank loans was advanced to the industrial sector, compared with 37.3 percent for trade.

(b) Only 13.7 percent of the loans advanced by IB banks was directed to the industrial sector, compared with 29.0 percent for trade and 24.4 percent for services.

(c) 76.7 percent of the loans advanced by both commercial banks and IB banks were short-term, compared with 17.2 percent for MTLT loans.

(d) 31.2 percent of short-term loans, advanced by both commercial banks and IB banks, were secured and 90.2 percent of MTLT loans were secured.

As far as insurance companies are concerned, they have almost no role in the financing of business enterprises in Egypt but, rather, they prefer secure investments with a relatively low return, *i.e.* they are risk-averse. In this respect,

it was shown that almost half the funds of public-sector insurance companies is invested in deposits with banks, compared with 16.2 percent for shares and bonds, 7.8 percent for real-estate investment and 4.8 percent for loans. Also, 50.2 percent of the funds of private-sector insurance companies is invested in deposits with banks, compared with 3.0 percent for shares and bonds, 6.6 percent for real-estate investment and 0.3 percent for loans. This attitude of insurance companies embodies what may be called as a *scaled-down finance.* That is to say that although insurance companies have reasonable amounts of funds which can be invested on a long-term basis, instead they deposit these funds with banks and those banks, in turn, use these deposits in lending on a short-term basis. Such a scaled-down finance deprives business enterprises of a reasonable source of finance, thus contributing to the creation of a finance gap.

The investigation of the regional distribution of SSIFs, in chapter eight, showed that these firms tend to be concentrated in the greater Cairo area, especially Cairo city. In this regard, greater Cairo accounts for 61.8 percent of all SSIFs in Egypt with Cairo city alone accounting for 42.3 percent of all SSIFs in Egypt; the same applies to SSMFs, as these two areas account for 62.0 percent and 42.5 percent of SSMFs in Egypt respectively. As the greater Cairo area proved to have the least banking service compared with the rest of the regions, in terms of the number of SSIFs corresponding to each bank branch, the banking service was excluded as the reason for the concentration of SSIFs in this area. Accordingly, SSIFs are said to be attracted to the greater Cairo area by the externalities that can be achieved in this area. Such externalities may result from: (a) easy access to airports, seaports and Government agencies; (b) the availability of modern communication means and infrastructure; and (c) other externalities resulting from the establishment of other businesses. The maldistribution of SSIFs among different regions is expected to be aggravated by the establishment of the new industrial estate in the 10th of Ramadan city, which is only 35 miles (56 kilo-

meters) north of Cairo. This industrial estate will, mainly, benefit businessmen from Cairo and some neighbouring cities. Those businessmen are not expected to move from their cities, especially Cairo, to live in this "new" area because: (a) this area will be less attractive to them in terms of living facilities; and (b) it is not far from their areas of residence. On the whole, the concentration of SSIFs in greater Cairo, and the inevitable congestion resulting from it, is expected to be a consequence of a lopsided development which gives more attention to certain areas in the country.

Chapter eight also showed that private-sector industrial firms are more efficient than their public-sector counterparts, as the average annual production per worker is LE 61 thousand for the former compared LE 17 thousand for the latter. This relative efficiency of private-sector industrial firms was attributed to the overmanning of public-sector companies, which inhibits efficiency. Concerning SSIFs, they were found to be less efficient than LSIFs, where the average annual production per worker is LE 33 thousand for the former compared with LE 74 thousand for the latter. The relative inefficiency of SSIFs was attributed to either one or more of the following factors:

(a) A less-advanced technology employed by SSIFs, compared with that employed by LSIFs.

(b) A deteriorating condition of the machinary employed by SSIFs, which results in a low level of output.

(c) A lack of finance which results in discontinuity of raw-material supply and bottlenecks in production lines.

(d) A lack of finance which results in a delay in equipment maintenance and replacement.

(e) An existence of redundant workers who cannot be fired either for legal reasons or for sentimental reasons.

Concerning the firms' dependence on bank credit, it was shown in chapter

nine that only 37.0 percent of the surveyed SSMFs depend on bank credit while 63.0 percent do not. Also, it was shown that the firm's legal form has more effect on its dependence, or non-dependence, on bank credit than its size. That is to say that although the surveyed firms tend to be concentrated in the smaller-small section ($10-24$ workers) where dependence on bank credit is less obvious, limited partnerships are more dependent on bank credit than both sole proprietorships and ordinary partnerships.

For SSMFs which depend on bank credit, the survey showed the following:
(i) Only 23.1 percent of these firms approach more than one bank before applying for a loan, while 76.9 percent go directly to a specific bank. This implied that either these firms were satisfied with their lenders or they had no choice but to deal with a particular bank, *i.e.* it is the only bank which has a branch in their area.
(ii) 65.4 percent of the owners/managers of these firms did not know whether the interest rates charged on their loans were the same as, or different from, those charged on loans to public-sector companies. Moreover, 23.1 percent of the owners/managers of these firms believe that the banks charge them interest rates that are higher than those charged to public-sector companies. In other words, those owners/managers believe that they are discriminated against, in terms of the cost of borrowing, as compared with public-sector companies. The first group seems to be unaware of the further details of bank *lending and/or they are not interested* in being acquainted with such details. The second group seems to believe that the DIB and public-sector commercial banks are biased towards public-sector companies, and such a belief might include the CBE itself as a Government agency. The remaining minority of the owners/managers (11.5 per cent) realize that such a discrimination does not exist, *i.e.* they know that they are charged the same interest as public-sector companies. In fact the CBE establishes the interest-rate structure as regards different economic activities (industry, agriculture, trade and

services) rather than on a public-sector/private-sector basis.

(iii) Although these firms depend on bank credit, not a small proportion of them prefer non-institutional sources of finance. In this regard, SSMFs which depend on bank credit represented 37.7 percent of the firms which prefer retained profits as a source of finance, 37.5 percent of those which prefer loans from family members and friends and 28.6 of the firms which prefer equity capital. The striking point is that 52.4 percent of the SSMFs which prefer trade credit are those which have dealings with banks. The most important implications of these figures were:

(a) the owners/managers of these firms are not fully satisfied with their banks, and they perhaps wish if they could satisfy their financing needs from non-institutional sources; and

(b) some of the owners/managers who go directly to a specific bank, especially a specific commercial bank, do so because it is the only available bank rather than because they are satisfied with it.

As regards SSMFs which do not depend on bank credit, chapter nine also showed the following:

(i) The reasons for the inaccessibility of these firms to bank credit, which can be attributed to their owners/managers, accounted for 52.1 percent of the responses to question number 26. These reasons had the following implications:

(a) Some owners/managers are unaquainted with the differential costs of financing sources, as they regard both retained profits and trade credit as *cost-free* types of finance compared with bank credit. This was also shown in case study one where the owner-manager depends completely on retained profits whose cost averaged 18.5 percent; at the same time the interest rate on loans to industrial firms was 11 percent for short-term loans and $12 - 15$ percent for MTLT loans.

(b) The piety of some owners/managers who adhere to the prohibition of interest in Islam.

(c) An existing hostility between some owners/managers and banks, as they gave

the reason "we do not like to deal with banks". Also, the owner-manager of the factory demonstrated in case study one mentioned that dealing with banks is "disastrous", and one of the owner-managers of the factory demonstrated in case study two mentioned that dealing with banks is "risky".

(ii) The reasons for the inaccessibility of these firms to bank credit, which can be attributed to banks, accounted for 47.9 percent of the responses to question number 26. These reasons were:

(a) Difficult lending terms, which was the most significant among all reasons, as the main source of complaint was the requirement of collateral for bank loans. This was also demonstrated in case studies three and eight; moreover, in case study eight the bank lent to the firm against 60 percent of the value of the machinery, although its lending policy stipulates that this percentage is 80 percent.

(b) Lengthy lending procedures, where the main sources of complaint were the time which elapses in assessing the firm's creditworthiness and the lengthy procedures of pledging the firm's assets. This was referred to in case study two, where the owner-manager mentioned that dealing with banks is "time consuming".

On the whole, the owners/managers who mentioned these reasons seem to have tried to obtain bank credit but were unsuccessful, or used to deal with banks but gave up because of the above-mentioned reasons. In addition, there was the requirement of a compensating balance which resulted in a noticeable increase in the cost of borrowing. In case study three the manager mentioned that he applied for a documentary credit of LE 250 thousand and the bank retained, in advance, both the compensating balance and the interest for the first year, which resulted in the real amount of the credit being only LE 150 thousand. Also, in case study eight the bank retained a compensating balance of 25 percent of the loan amount, which resulted in the real interest rate being 20 percent instead of 15 percent.

(iii) The most significant substitutes for bank credit were retained profits and trade credit, as they accounted for 46.1 percent and 36.8 percent of the responses

to question number 27 respectively. Moreover, 28.8 percent of these firms mentioned that they depend only on retained profits as a substitute for bank credit, 13.5 percent depend only on trade credit and 32.7 percent depend only on retained profits and trade credit. Given these results and given that a significant proportion of SSMFs which depend on bank credit prefer non-institutional sources of finance, the popularity of these sources among SSMFs is quite obvious. Equally important are the reasons for preffering non-institutional sources of finance, shown in table 9.10(b), which have the following implications:

(a) Some owners/managers are concerned about the *out-of-pocket* cost rather than the opportunity cost, *e.g.* they regard retained profits as a cost-free type of finance.

(b) Approaching banks for credit involves some difficulties which the owners/managers want to avoid.

(c) Some owners/managers adhere to the prohibition of interest in Islam.

(d) Some owners/managers prefer to be "self-sufficient".

(e) Loan repayment is a source of worry for some owners/managers.

(f) The existence of a *psychological barrier* between some owners/managers, on the one hand, and banks on the other.

(g) The desire of some owner-managers to be independent, in the sense that they prefer not to get involved in borrowing or even in having partners.

(h) Non-institutional sources of finance are less expensive and easier to approach than institutional sources.

Hence, it can be claimed that there are *invisible barriers* between SSMFs and banks, and this raises the question of who erected these barriers? The answer is that these barriers represent a consequuuence of the following factors:

(a) The two extreme experiences which the Egyptian economy had before 1960 and during the period 1960–1973. Before 1960, as discussed in chapter five, the Egyptian banking system was dominated by foreign banks; these banks, pre-

sumably, considered profitability and safety in their operations rather than the interests of their customers. Consequently, small businesses were not expected to qualify as borrowers from these banks unless they provided satisfactory guarantees, as envisaged by these banks, not least of which was collateral. Between 1960 and 1973 the Egyptian banking system consisted of only public-sector banks within the context of a planned economy dominated by public-sector companies in the majority of economic activities. This situation had the following outcomes:

– Public-sector banks were managed in almost a bureaucratic style which resulted in lengthy lending procedures.

– These banks enjoyed a monopolistic status, as they had no private-sector competitors.

– Being state-owned, these banks were regarded by many businessmen as "powerful" institutions that can force the borrowing business into liquidation should it be in arrears.

(b) The unavailability of information to small-business owners/managers as regards the credit facilities that banks can provide, the terms of lending and the main characteristics of different credit facilities. Moreover, neither banks nor the concerned Government agencies took the initiative to contact businessmen and inform them of the best ways of financing their businesses.

(c) In recent years some banks in Egypt encountered serious problems with some customers who could not repay their loans, and these cases were referred to court amid allegations that some bank officers lent to some customers on unsound lending bases. These cases had the outcome of many bank managers being hesitant in taking lending decisions, which became a source of complaint among many applicants, especially private-sector firms.

The investigation of the different types and sources of finance employed by SSMFs, in chapter ten, showed the following:

(i) Non-institutional finance had a dominant role in these firms' start-ups, com-

pared with institutional finance, as indicated by the following results:

(a) 43.2 percent of the surveyed firms financed their start-ups depending only on equity capital.

(b) Trade credit was employed by 37.1 percent of these firms, to finance their start-ups, *vis-à-vis* 28.4 percent for loans.

(c) 48.4 percent of start-up loans came from family members and friends.

When the owners/managers, who did not employ bank loans for start-up financing, were asked why this was the case they mentioned the same reasons for not depending on bank credit as mentioned above. For those who employed bank loans for start-up financing, the DIB represented the major source of institutional loans accounting for 35.5 percent of start-up loans *vis-à-vis* 16.1 for commercial banks. However, it seems that there are no Government start-up schemes, as start-up loans advanced by the DIB and some commercial banks represent part of short-term and/or MTLT loans rather than pre-planned schemes.

(ii) Short-term finance was mainly obtained from non-institutional sources, namely raw-material suppliers; this was proven as follows:

(a) For all the surveyed firms raw-material suppliers represented the dominant source of short-term finance, as they accounted for 75.3 percent of the responses to question number 14 compared with 19.8 percent for commercial banks and 4.9 percent for the DIB.

(b) 71.8 percent of all the surveyed firms depend only on raw-material suppliers for short-term finance.

(c) Even for SSMFs which depend on bank credit, trade credit accounted for 43.5 percent of all forms of short-term finance.

(iii) Non-institutional sources are approached by the majority of SSMFs in Egypt for MTLT finance; this was proven as follows:

(a) For all the surveyed SSMFs, non-institutional types of finance accounted for 69.9 percent of the responses to question number 17, compared with only 30.1

percent for institutional types of finance.

(b) Retained profits represented the most significant source of MTLT finance, as it accounted for 54.4 percent of the responses to question number 17, and was mentioned by 51.9 percent of the surveyed firms as the only source of MTLT finance.

(c) For SSMFs which do not depend on bank credit, retained profits represented the dominant source of MTLT finance, accounting for 79.6 percent of the responses of these firms to question number 17.

(d) Even SSMFs which depend on bank credit employed non-institional types of MTLT finance, which accountered for 25.1 percent of their responses to question number 17, with retained profits in the third place after loans from the DIB and loans from commercial banks.

(e) The popularity of non-instutional sources of MTLT finance, mainly retained profits, was also demonstrated in case studies one through seven; moreover, retained profits were employed to finance short-term requirements in case studies one, three, five, six and seven.

For SSMFs which depend on bank credit, the DIB was the most significant source of MTLT finance and commercial banks came in the second place. In this respect, it should be noticed that:

(a) The DIB has only three branches, concentrated in northern Egypt, while commercial banks have 824 branches spread all over the country.

(b) The maturities of MTLT loans from the DIB and from commercial banks are relatively short, *i.e.* they are mainly for 2–5 years.

(c) All MTLT loans from the DIB and from commercial banks are secured.

(iv) SSMFs which depend on bank credit face some problems in obtaining foreign-currency finance; the most serious of these problems was that of the exchange rate. Before May, 1987, the main problem of foreign-currency finance was the unstable exchange rate between the Egyptian pound and foreign currencies, which created

uncertainty as regards the real amount of repayment should the borrower repay in local currency. In May, 1987 the exchange rate for the Egyptian pound was depreciated and it was decided that the exchange rate should depend on the daily free rates, mainly in the London market. Consequently, foreign-currency borrowers, who were supposed to repay their loans in local currency, faced the problem of swollen repayments as their indebtedness to banks was almost trebled. This problem has not yet been solved, and it is still a subject of debate among debtors, banks and the CBE.

(v) Lease finance does not represent a significant type of MTLT finance for SSMFs in Egypt, as only 7.4 percent of the surveyed firms employed lease finance while 92.6 percent did not. For SSMFs which employed lease finance, it could not be assured that lease finance is employed as a substitute for bank credit. In this regard, the survey results showed that although 83.3 percent of SSMFs which depend on bank credit did not employ lease finance, 61.3 percent of SSMFs which do not depend on bank credit did not employ lease finance either. As regards SSMFs which do not employ lease finance, the survey results showed that:

(a) The most significant reason for not employing lease finance is that they have enough equipment, which justifies the assumption that lease finance is not employed as a substitute for bank credit.

(b) The second significant reason is that lease finance is not available, which implies that these firms could have employed lease finance were it available.

(c) Also, for SSMFs which did not employ lease finance because it is not available, the survey results showed that 60 percent of these firms depend on bank credit; this implies that bank credit was employed as a substitute for lease finance, but not vice versa.

(d) The rest of the reasons for not employing lease finance, reflected two aspects:

– the cultural background of some owners/managers who prefer to have their own assests rather than employing "other people's assets"; and

– the impracticality of leasing in some cases such as the sporadic nature of the product, the small size of production and the complexity of equipment.

(vi) As far as expansion was concerned, 53.7 percent of the surveyed SSMFs expanded their activities while 46.3 percent did not. For the firms which expanded their activities, the main implication was that they are successful and have the ability to penetrate the market for their products. As for those which did not expand, the most relevant implications were: (a) they had the opportunity to expand but they lack the necessary finance to carry out the expansion; and (b) they were relatively new.

Concerning the relationship between expansion and other characteristics and attributes of the surveyed firms, it was found out that the employment of bank credit has more effect on the firm's growth than its age. The main implications of these results were:

(a) Expanding the firm's activity depends not only on its age, but also on the availability of external finance, mainly bank credit.

(b) Even if a firm can expand while depending only on internal sources of finance, such expansion is expected to be limited.

(c) Non-institional types of finance can have a significant effect on the firm's growth, only if they are available in fairly large amounts and on better terms than those offered with bank credit.

As regards the financing of firms' expansion, the survey results showed that the expanded firms financed their expansion depending mainly on non-institutional sources of finance, especially retained profits and increasing their equity capital. Moeover, non-institutional finance was employed by SSMFs which depend on bank credit as well as those which do not. Also, these results showed that:

(a) Institutional finance did not represent a significant source of financing the expansion of the surveyed firms, as loans from the DIB and from commercial banks

accounted, together, for 20.5 percent of the responses to question number 33.
(b) When profit-sharing finance was assumed to have come from Islamic banks, the relative importance of institutional sources became 26.5 percent *vis-à-vis* 73.5 percent for non-institutional sources.
(c) The DIB had a more significant role in financing the expansion of SSMFs than commercial banks, as 4.7 percent of the expanded firms financed their expansion depending only on loans from the DIB, while none of them mentioned commercial banks as the only source of financing their expansion.
(d) Apart from equity finance, other non-institional sources of finance tend to be supplementary to each other or to institutional sources.
(vii) IB banks have no role in the financing of SSMFs, as no respondent mentioned them as sources of finance.

Also, related to the survey results are the comments of the owners/managers on question number 40; these comments indicated the following problems:
(i) They complained of the overestimation of the firm's profits by the tax assessors, which results in overestimated corporate-tax payments; this complaint was also demonstrated in case studies three and six. The main reason for this complaint is that the majority of small businesses in Egypt do not produce audited financial accounts or keep formal accounting books. Therefore, tax assessors visit these businesses unexpectedly in order to watch the flow of production and/or sales and estimate the annual income accordingly.
(ii) They also complained of the social insurance officers who are alleged to register any one in the factory as a worker even if he/she is a trainee or a relative who volunteers to help the owner-manager. The main reason for this complaint is that the Social Insurance Agency (SIA) wants to make sure that every employee in the country is insured, in order to guarantee a reasonable income should he/she retire or have an accident. This complaint and the former one can be regarded as symptoms of a problem represented in a lack of liaison between tax assessors and

SIA officers, on the one hand, and businessmen on the other. The main causes of this problem are:

(a) Some tax assessors might estimate the business's sales on a "theoretical" basis without taking into consideration sales fluctuations throughout the year, and the situation worsens if the tax assessor visits the business on a peak day.

(b) Some owners/managers might not distinguish between "tax avoidance" and "tax evasion". Tax avoidance means reducing tax payments by legal means, *i.e.* by making use of tax saving resulting from deducting some expenses such as interest and depreciation. On the other hand, tax evasion means reducing tax payments by illegal means such as omitting some receipts and/or exaggerating the expenses.

(c) Some social insurance officers might presume that the owner/manager is unwilling to register his workers with the SIA; accordingly, they register any one in the working site as a worker unless the owner/manager proves that he/she is not.

(d) Some owners/managers might not register their workers with the SIA in order to avoid the increment in the worker's wage by the subscription amount, and to make it easy for themselves to fire the unwanted workers.

(iii) Many owners/managers face problems with their workforce; these problems are: (a) a scarcity in skilled labour, which results in a dramatic increase in their wages; and (b) the adverse effects of absenteism and high turnover of workers.

(iv) When the owners/managers borrow from individuals and those individuals charge them interest, the Tax Agency (TA) does not recognize such interest payments as tax-deductible expenses. In this case non-institutional loans might be more expensive than institutional loans, as the borrowers will not enjoy the tax saving from interest payments which results in the *real* interest rate being equal to the *nominal* interest rate.

(v) The most common complaint among almost all the respondents was the rising prices of raw materials, which was also refered to in case studies one through

five. The main cause of this problem seems to be the inflationary pressures in the Egyptian economy, which affect all economic activities in the country. At the same time, some SSMFs find it difficult to raise the prices of their products in line with inflation because of the competition from larger companies, especially public-sector companies.

(vi) Almost all the owners/managers of the textile factories mentioned that public-sector companies monopolize the supply of raw materials and levy high prices for them. They also mentioned that these companies allocate an insufficient quota for each customer, and force their customers to buy bad-quality materials as well as good-quality materials; these complaints were also mentioned in case studies two and three. The reasons for these problems seem to be: (a) the inflationary pressures which affect the economy as a whole; and (b) the orientation of some public-sector companies towards exporting. They, of course, export the good-quality materials and may supply an inferior quality to the home market. Also, many owners/managers of the surveyed firms mentioned that public-sector companies usually require prompt payment for raw-material supplies. Hence, it seems that when the owners/managers mentioned that they prefer trade credit as a source of finance, they meant trade credit obtained from private-sector suppliers rather than their public-sector counterparts.

12.2. Research Findings:

The problem under investigation was diagnosed as a finance gap represented in limited access to institutional finance in general, and MTLT finance in particular. Consequently, this study was based on the following hypotheses:

(i) The banking service in Egypt is inadequate.

(ii) The owners/managers of small firms are reluctant to employ institutional finance.

(iii) Institutional finance is more difficult to obtain than non-institutional finance.

(iv) The owners/managers of small firms are unaware of the relative advantages

of institutional finance as compared with some forms of non-institutional finance (mainly equity capital and retained profits).

This study had two objectives:

(i) Testing the validity of these hypotheses.

(ii) Suggesting some practical solutions to the problems that small firms encounter in obtaining the necessary finance, especially institutional finance.

The findings of this study are divided into two main parts: general findings, *i.e.* findings related to areas other than finance, and finance-related findings. However, finance-related findings are the main concern of this section as they represent the underlying proof of the validity, or invalidity, of the above-mentioned hypotheses.

12.2.1. General Findings:

1. SSIFs in general and SSMFs in particular are concentrated in the greater Cairo area, especially Cairo city.

2. The new industrial estate in the 10th of Ramadan city will aggravate this concentration, as it is located only 35 miles (56 kilometers) north of Cairo.

3. Although private-sector industrial firms, in general, are more efficient than their public-sector counterparts, SSIFs are less efficient than other private-sector industrial firms, mainly LSIFs.

4. The owners/managers of SSMFs encounter some difficulties in dealing with Government agencies, especially the TA and the SIA.

5. There is the problem of the scarcity of skilled labour, which results in a dramatic increase in their wages as well as a high turnover of the workforce.

12.2.2. Finance-Related Findings:

1. Egypt enjoys a reasonable banking service, both in terms of the spread of bank branches and the amounts of funds available to these banks.

2. The DIB, which is the only bank to be specialised in financing the industrial sector, is concentrating its branches in greater Cairo and northern Egypt.

3. The real problem of the banking service in Egypt is the lending practices of the banks in terms of:

(a) directing more lending to the trade sector;

(b) concentrating on short-term, rather than long-term, lending; and

(c) attaching much importance to collateral, especially with MTLT loans.

4. Insurance companies have no role in financing business enterprises in general and SSMFs in particular.

5. Only 37 percent of the surveyed firms depend on bank credit, while 63 percent do not.

6. The firm's legal form has more effect on its dependence, or non-dependence, on bank credit than its relative size.

7. The majority of the owners/managers of SSMFs which depend on bank credit (63.4 percent) are unaware of the interest-rate structure prevailing in Egypt.

8. Some owners/managers of SSMFs, which depend on bank credit, go directly to a specific bank because it is the only available bank rather than because they are satisfied with it.

9. The reasons for not employing bank credit, which can be attributed to the surveyed SSMFs, are:

(a) The owners/managers of these firms do not employ bank credit either because of their piety or because of their negative attitudes towards banks.

(b) The owners/managers of these firms are unaware of the comparative costs of institutional and non-institutional finance.

10. The reasons for not employing bank credit, which can be attributed to banks,

are:

(a) The difficult lending terms established by the banks, mainly the requirement of collaterals for their loans.

(b) Lengthy lending procedures.

11. Both short-term finance and MTLT finance, as well as start-up finance, were obtained mainly from non-institutional sources.

12. Loans to SSMFs tend to be secured, as 90 percent of short-term loans are secured and all MTLT loans are secured.

13. Lease finance does not represent a significant type of finance for SSMFs in Egypt.

14. Bank credit tends to be employed by some SSMFs as a substitute for lease finance, but not vice versa.

15. The employment of bank credit has more effect on the firm's growth than its age.

16. Non-institutional finance was employed by the majority of the surveyed SSMFs, both those which depend on bank credit and those which do not, to finance their expansion.

17. IB banks have no role in the financing of SSMFs in Egypt.

18. According to Law no. 146 of 1988, profit-sharing finance from individuals is no longer available for all business enterprises in Egypt.

19. There seems to be an information gap encountered by SSMFs, in the sense that many owners/managers of these firms have no knowledge about the financing facilities, which banks can advance, as well as the lending terms of these banks.

20. Small businesses in Egypt in general, and SSMFs in particular, tend to be managed by their owners, thus eliminating agency costs associated with outside equity. Moreover, the owner-manager is expected to restrict his personal expenditure in order to sustain the equity base of his business.

21. Excessive, or full, dependence on equity financing by some SSMFs is expected

to raise the cost of capital to these firms.

22. None of the surveyed firms is publicly quoted, which avoids the problems associated with raising equity capital via share issues.

23. SSMFs face the problem of the rising prices of raw materials.

24. Textile factories face the problem of the monopoly of public-sector companies on raw materials.

The first finding rejects the first hypothesis; findings 9(a), 11, 14 and 16 prove the second hypothesis, findings 2, 3, 4, 10(a), 10(b) and 17 prove the third hypothesis and findings 7, 9(b) and 15 prove the fourth hypothesis. Having been proved, these hypotheses represent the reasons for the limited access to institutional finance as experienced by SSMFs. Apart from findings 23 and 24, the rest of the findings are either supportive or explanatory to the main findings. Finding 23 represents a general problem encountered by all business enterprises in Egypt. Finding 24 represents a problem which is peculiar to textile factories in their dealings with public-sector companies.

12.2.3. Relevance of the Findings:

This section investigates the relevance of the finance-related findings to the financial literature, as well as the results of other studies. In this regard, it can be noticed that:

(i) In chapter one, it was shown that the Macmillan Gap was expressed in terms of the difficulties associated with raising long-term finance in amounts that were not large enough for a public issue. On the other hand, the Bolton Committee reported that there was no gap corresponding to the Macmillan Gap, but pointed out that not every small business was able to find finance of the type it needs at the price it can afford to pay. As far as Egypt is concerned, the finance gap experienced by SSMFs is represented in limited access to institutional finance.

This is expressed in finding 5 where 63 percent of the surveyed firms do not depend on bank credit; the reasons for this limited access are shown in findings 9 and 10. Concerning the difficulties associated with long-term finance, finding 3 shows that banks concentrate on short-term, rather than long-term, lending; also, finding 17 shows that IB banks have no role in financing SSMFs in Egypt. Raising long-term finance via bond issues is not known among small businesses in Egypt because: (a) none of these businesses is publicly quoted; (b) they are very small compared with many small businesses in the U.K.; and (c) the floatation cost is prohibitive.

Also in chapter one, Ray and Hutchinson argued that a finance gap exists when the cost of money to small businesses exceeds the cost of money to large businesses. If the cost of money is deemed to represent the declared interest rate on loans, this issue will be irrelevant to SSMFs in Egypt. In other words, the interest rates on loans to the industrial sector are established by the CBE on a concessional basis in order to encourage industrial firms, large and small, to employ bank credit. Hence, if banks want to charge SSMFs higher interest rates, the only way to do so is to stick to the upper limit of the interest-rate structure. In this case, the cost of loans to industrial firms will be notaceably less than the cost of loans to trade firms, as the maximum interest rate on the former is one percentage point less than the minimum interest rate on the latter (as discussed in chapters six and nine). Nevertheless, the requirement of a compensating balance may raise the cost of borrowing noticeably; this was shown in case study eight where the bank retained a compensating balance of 25 percent of the loan amount, which resulted in the real interest rate being 20 percent instead of 15 percent.

(ii) The review of the financial literature in chapter two revealed some features of small business finance, the most important of which are:

(a) There is a more important role of trade credit in the financing of small busi-

nesses. This is shown in finding 11 where short-term finance is obtained mainly from non-institutional sources, *i.e.* from trade-credit suppliers. Also, finding 16 shows that non-institutional finance is employed by both SSMFs which depend on bank credit and those which do not.

(b) Small business loans tend to be secured. This also represents a feature of small business loans in Egypt, as finding 12 shows that 90 percent of short-term loans, to SSMFs, are secured and all MTLT loans are secured.

(c) The small businessman may not know how or where to obtain finance. This is shown in finding 9, which summarises the reasons for not employing bank credit that can be attributed to the owners/managers of the surveyed firms. Moreover, finding 7 shows that the majority of the owners/managers of SSMFs, which depend on bank credit, are unaware of the interest-rate structure prevailing in Egypt. Also, finding 19 shows that many owners/managers of SSMFs have no knowledge about the financing facilities, which banks can advance, as well as the lending terms of these banks.

(d) The trade-credit position of small firms worsens as large firms demand prompt payment for supplies while delaying their own payments of bills. This is shown in finding 24, where textile factories face the problem of the monopoly of public-sector companies on raw materials, and these companies require prompt payment for raw-material supplies. Also, this issue was referred to in chapter nine where some owners/managers of the surveyed firms complained that public-sector companies seldom give them a grace period for raw-material payments.

(e) Some small firms depend more heavily on banks for external finance than do most large firms. This issue is irrelevant to small business finance in Egypt, as finding 5 shows that 63 percent of the surveyed firms do not depend on bank credit.

(f) Loans from directors are common in small firms. These loans correspond to loans from the partners in the surveyed firms, as those partners often share the

management of the firm at the same time. However, loans from the partners do not seem to be popular amongst SSMFs in Egypt. In other words, although findings 11 and 16 show the popularity of non-institutional finance, it was shown in table 9.9 (in chapter nine) that loans from the partners, as a substitute for bank credit, accounted for only 5.3 percent of the responses to question number 27. Moreover, loans from the partners were not mentioned in table 9.10(a) as one of the best sources of finance from the viewpoint of the owners/managers of the surveyed firms.

(iii) The results of some surveys, discussed in chapter three, raised various issues concerning MTLT finance for small businesses as follows:

(a) A research report by the Bolton Committee revealed that the cost of raising equity capital via share issues is higher, as a percentage, for a small issue than for a large issue mainly because of fixed costs which do not vary proportionately with the issue size. Finding 22 shows that none of the surveyed firms is publicly quoted, and this makes the problems of raising equity capital via share issues irrelevant to this study. In fact none of the small businesses, in all activities, in Egypt is publicly quoted as they fall in three categories: sole proprietorships, ordinary partnerships and limited partnerships.

(b) The Bolton Committee, also, pointed out two main difficulties encountered by U.K. small businesses in obtaining MTLT finance; these are:

– The proportion of funds of some insurance companies going to small firms varied from nil to under one percent. This is shown in finding 4, where insurance companies in Egypt have no role in financing business enterprises in general and SSMFs in particular.

– Only a minority of pension funds engage in financing small firms. In this regard, it was mentioned in chapter seven that the author could not have access to any information related to the sources and uses of pension funds in Egypt. However, pension funds in Egypt are not expected to engage in financing the private sector

in general and small businesses in particular, as these funds are administered by the Government in the context of its budget and plans.

(c) The Wilson Committee showed that loans from directors represent 51.5 percent of long-term loans to small businesses in the U.K. As mentioned above, these loans correspond to loans from the partners in SSMFs in Egypt. In this regard, table 10.7 (in chapter ten) showed that loans from the partners accounted for only 6.7 percent of the responses to question number 17 concerning the different types of MTLT finance. Also, table 10.8 showed that these loans were employed by SSMFs which do not depend on bank credit, and they accounted for only 12.1 percent of the responses of these firms to question number 17.

(d) The study of 860 small businesses in West Scotland revealed that growth inhibition due to the availability of finance was reported by 31.0 percent of manufacturing firms, 26.5 percent of retailing firms and 22.0 percent of services firms. As far as SSMFs in Egypt are concerned, finding 15 shows that the employment of bank credit has more effect on the firm's growth than its age. In other words, it was shown in chapter 10 (table 10.15) that two thirds of of the oldest group of the surveyed firms did not expand, and none of the firms in this group depend on bank credit.

(iv) The 12-country study, discussed in chapter four, had the following results:

(a) In developing countries 43 percent of the firms with 5–20 employees depend on bank credit, and this percentage is 70 percent for developed countries. For developing countries, the percentage of small firms which depend on bank credit is 32 percent in Kenya, 33 percent in Indonesia, 35 percent in Brazil, 54 percent in Cameron and 55 percent in Colombia. As far as Egypt is concerned, finding 5 shows that 37 percent of the surveyed firms depend on bank credit. This percentage lies within the range of the forementioned developing countries, albeit the definition of SSMFs in Egypt is different from that adopted in the 12-country study.

(b) In the early stages of growth, the firms are less dependent on bank borrowing and more dependent on relatives/friends and personal equity capital; and this phenomenon is more noticeable in developing countries. This is shown in finding 16, where non-institutional finance was employed by the majority of the surveyed firms, both those which depend on bank credit and those which do not, to finance their expansion. In this regaed, table 10.16 (in chapter ten) showed that retained profits accounted for 34.9 percent of the surveyed firms' responses to question number 33 as a source of financing their expansion, equity capital 25.3 percent and family members and friends 10.9 percent.

(c) As the small firm grows in size or age, more financing options become available to it. For SSMFs in Egypt, the availability of more financing options is deemed to mean the availability of bank credit to these firms. In this respect, finding 6 shows that the firm's legal form has more effect on its dependence, or non-dependence, on bank credit than its relative size. This was shown in tables 9.6, 9.7 and 9.8 (in chapter nine), where limited partnerships were more dependent on bank credit than both sole proprietorships and ordinary partnerships, although all of them tend to be more concentrated in the smaller-small section (10−24 workers) where dependence on bank credit is less evident.

(v) Also in chapter four, the review of the literature showed that the cost of equity financing is the highest among all other types of finance. Hence, more dependence on equity financing means higher cost of capital to the firm and vice versa. Finding 21 shows that excessive, or full, dependence on equity financing by some SSMFs is expected to raise the cost of capital to these firms. In this regard, it was shown in table 10.7 (in chapter ten) that retained profits accounted for 54.4 percent of the responses of SSMFs to question number 17 concerning the types of MTLT finance. Also, table 9.10(a) (in chapter nine) showed that retained profits and equity capital accounted for 58.3 percent and 5.3 percent, respectively, of the responses of SSMFs to question number 38 concerning the best sources of finance.

12.3. Recommendations:

Although the main concern of this section is finance-related recommendations, some general recommendations will be suggested for solving the problems represented by the general findings.

12.3.1. General Recommendations:

1. As the Government has the intention and the resources to establish new industrial estates for SSMFs, these industrial estates must be established far from the congested metropolitan area. This can have two advantages: (a) curbing labour-force immigration from rural areas to urban areas, especially greater Cairo, as these industrial estates will provide new jobs for the growing population; and (b) achieving balanced development among different regions.

On the other hand, the implementation of this recommendation requires the following:

(a) Improving the infrastructure in rural areas in order to match those in urban areas.

(b) Providing some means of attraction to these areas such as tax relief.

(c) The location of these industrial estates should take into consideration the availability of raw materials and markets for the products.

As these requirements involve capital expenditure, the Government should start with the most needed industries in the most needy regions according to a certain plan. Also, those costs will be recovered from the direct and indirect benefits from the new industrial estates, such as job creation, regional development, import substitution and export promotion.

2. Apart from finance, there should be genuine programmes to improve the efficiency of SSMFs. This can be achieved as follows:

(a) Training programmes for the owners/managers of SSMFs, especially in the areas of production management, accounting and marketing.

(b) Technical training for the existing workforce, as well as the unemployed, in order to bridge the gap in skilled labour.

Implementing this recommendation requires the following:

(a) The existence of training centres or other Government agencies that can carry out these programmes. In this regard the EIDDC is a useful resource, but it needs the collaboration of the universities and research centres in order to apply the academic research to the real world. As subsidiaries of the Ministry of Industry, both the EIDDC and the PAI can cooperate in setting more comprehensive training programmes for the owners/managers of SSMFs.

(b) More important is the need for those owners/managers to be convinced of the value of approaching these agencies for help or training. In other words, businessmen in Egypt usually refrain from approaching Government agencies which represent, to them, bureaucracy and lengthy procedures. Accordingly, both the EIDDC and the PAI should take the initiative to approach their would-be clients. This can be done by issuing leaflets about their activities and sending them to the owners/managers of SSMFs; also, these agencies' staff may visit those owners/managers in order to explain the services they render and encourage them to benefit from these facilities.

(c) Concerning the financing of the training programmes, the budgets of both the EIDDC and the PAI can meet part of the expenses. Also, the trainees may be charged a certain fee, which should be less than the cost of the programmes in order to encourage attendance and, at the same time, avoid the abuse of these programmes should they be free of charge.

3. As regards the difficulties which SSMFs encounter in dealing with Government agencies, especially the TA and the SIA, these difficulties cannot be eliminated by decisions from the concerned authorities or by new legislation. As these difficulties are due to a lack of liaison between those agencies and businessmen, the solution is to create an atmosphere of liaison and confidence between the two parties. This

can be achieved via the following:

(a) Training programmes for the tax assessors and the SIA officers on how to deal with businessmen and gain their confidence.

(b) Simplifying the procedures of dealing with these agencies, namely the required documents and approvals.

(c) For the businesses which do not keep formal acounting books, tax estimation should be on an average basis rather than on a one-day sales basis.

(d) Issuing and distributing leaflets which explain the duties and rights of each party towards the other and the penalties for violating the rules.

(e) Businessmen themselves should be convinced that Government officers are there to perform certain duties rather than to penalize their clients.

4. Finally, the following suggestions may be useful in encouraging and assisting SSMFs, as well as benefiting the economy as a whole:

(a) Promoting agro-industries in rural areas depending on the availability of different raw materials in different regions.

(b) Promoting feeder industries which can provide various components to the producers of durable goods such as cars and household appliances.

(c) Publishing regular statistics about small businesses in the country, especially in the area of business failure and the reasons for this failure.

(d) The PAI and/or the PAIFZ may collect information about the market (supply, demand, consumer preference and consumer spending) and make this information available to the potential investors via information bureaux in different areas.

(e) Setting variable corporate tax rates by establishing different thresholds, corresponding to different tax brackets, instead of a uniform tax rate for all business enterprises large and small.

12.3.2. Finance-Related Recommendations:

It has often been recommended that the Government should establish new financial institutions to specialise in the financing of SSIFs. Such a recommendation seems to be impractical because: (a) there is the DIB whose main purpose is to finance SSIFs; (b) the existing banking service in Egypt is not insufficient; (c) the benefits from establishing new financial institutions are not expected to justify the costs of their establishment; and (d) establishing new institutions will place a further burden on the Government's resources which are already stretched to the limit, or even more than the limit. Hence, the following recommendations are suggested within the context of the existing banking system, in order for these recommendations to be more practical.

1. Widening the role of the DIB and strengthening its position via the following means:

(a) New branches should be established outside the regions where the existing branches are concentrated, preferably where new industrial estates will be established.

(b) As deposits represent a tiny fraction of the DIB's resources, the CBE can help it in attracting time deposits in order to sustain its loanable funds.

(c) Restricting the finance advanced to LSIFs by the DIB in order to give more room for the financing of SSIFs, *e.g.* by confining the financing of LSIFs to local-currency loans.

(d) The DIB's role in the financing of SSIFs may be confined to MTLT loans and start-up loans.

(e) The DIB may relax the requirements of collaterals and compensating balances from SSIFs.

2. It might be suggested that a minimum proportion of bank loans should be allocated for small business lending, in order to secure enough finance for small

businesses. Such a suggestion may result in either unused funds, should there be fewer applicants, or a misuse of funds on the part of banks in order to satisfy the limit. However, the Government can encourage the banks to lend to SSIFs by adopting a guarantee scheme similar to the Small Business Loan Guarantee Scheme in the U.K. In this regard, the Egyptian Government, represented by the Ministry of Industry, may guarantee the repayment of 50 percent of loans to SSIFs. Apart from the simplicity of calculation, the rationale for suggesting a 50 percent guarantee is that less than 50 percent may be less attractive for both the borrowers and the lenders. On the other hand, more than 50 percent might lead to abusing the scheme by both the borrowers and the lenders. In other words, some businesses might borrow excessively depending on the Government's guarantee and some banks might not take the necessary care in assessing loan applications depending, also, on the Government's guarantee of these loans.

The implementation of the suggested scheme requires the following:

(a) The lending procedures should be simplified in order to reduce the time which elapses in assessing the loan application and reaching a decision.

(b) Easing the requirments of collaterals and compensating balances.

(c) Apart from collaterals and compensating balances, the banks should assess the borrower's creditworthiness as though the scheme were non-existent.

(d) The borrower should sign a declaration that, for the duration of the loan, he/she will *not* pledge assets equivalent to those to be pledged should the loan be secured.

(e) The borrower should have a current account with the same bank.

(f) In case of default, the bank should use all possible means with the borrower, such as rescheduling the loan, before claiming repayment from the Government.

3. Insurance companies can have a significant role in the financing of industrial enterprises in general and SSMFs in particular. In this respect, insurance companies may provide lease finance or hire-purchase, as those types of finance are

insignificant in Egypt; they may also provide loans for the financing of buildings. Providing finance to SSMFs can achieve dual benefit for insurance companies because: (a) they achieve profits from the provision of finance to these firms; and (b) the owners/managers of SSMFs may insure their factories with these companies, as almost all the surveyed firms have no insurance dealings.

4. As profit-sharing finance from individuals is no longer available for SSMFs, as well as for all other business enterprises in Egypt, they have to approach Islamic banks which can represent a significant source of finance for these firms, especially MTLT finance. However, it might be argued that providing profit-sharing finance for small businesses is risky for Islamic banks and more expensive for these firms; such an argument is refutable because:

(a) Unlike commercial banks, Islamic banks are assumed to be risk takers.

(b) If providing profit-sharing finance is riskier than providing interest-bearing loans, Islamic banks may be compensated by the relatively high return on their funds.

(c) If obtaining profit-sharing finance is more expensive for SSMFs than obtaining interest-bearing loans, this relatively high cost may be justified by the safety of such finance should the business fail or incur loss.

5. The problem of the rising prices of raw materials is a national problem caused by the inflationary pressures in the economy as a whole. The solution of this problem can be achieved through macroeconomic policies that are not the concern of this study.

6. As regards the public-sector monopoly on raw materials used by textile factories, there are two probabilities and, accordingly, two solutions:

(a) What seems to be monopoly is a shortage of supply because the producers, both public-sector and private-sector, prefer to export these materials in order to secure enough foreign currencies for the financing of their imports. In this case,

there should be Government intervention in order to divert part of these exports to the local market, especially public-sector exports. This solution has the advantage of solving the problems of textile-producing firms which, in turn, can export finished goods rather than raw materials. On the other hand, the Government is required to secure foreign-currency resources for raw-material producers, as they may need to import some equipment from abroad.

(b) This monopoly is a consequence of public-sector companies being the only source of these raw materials. In this case, the solution is creating competition in the market by encouraging private investors to enter the activity of spinning. If the processing of raw cotton is confined to public-sector companies, this restriction should be eased and many private investors may enter the activity of spinning stimulated by the shortage of supply. This solution is expected to have the outcome of forcing public-sector companies to improve their product quality and their marketing policies, as well as eliminating a source of trouble for private-sector manufacturing firms.

So far the recommendations have been concerned with the supply side of finance, in the sense that they have been concerned with securing more finance for small businesses. Equally important is the demand side, *i.e.* stimulating small businesses to employ institutional finance. This can be done through the following methods:

7. The above-suggested loan guarantee scheme may work as a stimulus for SSIFs in general, and SSMFs in particular, to employ bank credit. Nevertheless, such a scheme might be useless in this regard if it is not accompanied by sufficient publicity. In other words, in order for this scheme to be successful in attracting small business to employ bank credit, it is a prerequisite that all businessmen know about it. This can be done as follows:

(a) Advertising the scheme in both the EIDDC and the PAI as well as all bank branches in the country.

(b) Using the media to announce the existence of the scheme with details of how to benefit from it.

(c) The scheme can also be advertised in Government agencies, with which small businesses often deal, such as the TA.

(d) A leaflet about the scheme can also be enclosed with official correspondence with small businesses, *e.g.* letters from the EIDDC, the PAI or the TA.

8. For SSMFs which do not depend on bank credit, the training programmes suggested earlier may include financial education programmes for the owners/ managers of SSMFs. This can be done as follows:

(a) Explaining the different aspects of both institutional and non-institutional finance, such as the cost of each type and the different situations in which one or the other is preferable.

(b) Inviting bank managers to explain the nature of their activities to the trainees.

(c) Bank managers may invite the trainees to visit them in their banks as a preliminary step towards encouraging those businessmen to deal with banks.

(d) All this must be done in an informal atmosphere in order to encourage discussions and inquiries.

(e) Also, the issue of publicity for these programmes should be stressed.

These programmes, as well as the loan guarantee scheme, can achieve the following advantages:

(a) Improving the financial knowledge of the owners/managers of SSMFs.

(b) Bridging the information gap experienced by those owners/managers.

(c) Encouraging SSMFs to employ bank credit, *i.e.* bringing down the *invisible barriers* which seperate these firms from banks.

9. For those firms which have at least current accounts with banks, bridging the information gap can be achieved as follows:

(a) The interest-rate structure must be displayed in every branch of each bank.

(b) The banks should display leaflets in their branches to advertise the services which they provide to their customers, especially small businesses.

(c) The banks should advertise in the media more widely the financing services they render to their customers, especially small businesses.

(d) The banks can also introduce the advisory service to small businesses.

12.4. Suggestions for Further Research:

As this study was confined to the problems of financing SSMFs in Egypt, further research can be carried out in the following areas:

(a) The problems of financing small farms.

(b) The effect of agency costs on the financing of small businesses.

(c) Risk/return analysis of profit-sharing finance.

(d) The effect of capital structure on the cost of capital to small businesses.

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Appendices

Appendix One: The Questionnaire

Appendix Two: SSIFs and All Industrial Enterprises in Egypt,

December 1987

Appedix One

The Questionnaire

I. General Information:

1. Type of activity: . . . . . .
2. Date of starting activity: . . . . . .
3. Number of workers:
   (a) 10 – 24
   (b) 25 – 49
4. Legal form:
   (a) sole proprietorship
   (b) ordinary partnership
   (c) limited partnership

II. Financial Information:

5. What is the source(s) of start-up capital?
   (a) owner(s)' funds only
   (b) owner(s)' funds + loans
   (c) owner(s)' funds + trade credit
   (d) owner(s)' funds + loans + trade credit
   (e) other sources (please specify) . . . . . .
   . . . . . .
6. If (b) or (d), are those loans from:
   (a) family members
   (b) friends
   (c) the Development Industrial Bank
   (d) commercial banks

(e) other sources (please specify) . . . . . .

. . . . . .

7. If the business is a partnership, what is the source(s) of the owners' start-up capital ?

(a) family members

(b) friends

(c) other people

8. Do you depend on bank credit?

(a) yes

(b) no

9. If you depend on bank credit , do you approach more than one bank for a loan?

(a) yes

(b) no

10. If no, do you go directly to:

(a) the Development Industrial Bank

(b) a specific commercial bank

(c) a specific Islamic bank

(d) another financial institution (please specify) . . . . . .

. . . . . .

11. Why do you go to this particular institution?

(a) because it is the only available one

(b) because it is the only one you know

(c) because you have had past dealings with it

(d) because it does not deal with interest

(e) other reasons (please specify) . . . . . .

. . . . . .

12. Do you obtain credit facilities from more than one one bank?

(a) yes

(b) no

13. If yes, why?

    (a) to benefit from the advantages of each bank

    (b) because you have changed your lender

    (c) to guarantee the financing of the firm in emergency cases

    (d) other reasons (please specify) . . . . . .

    . . . . . .

14. What is the source(s) of short-term finance?

    (a) the Development Industrial Bank

    (b) commercial banks

    (c) raw-material suppliers

    (d) other sources (please specify) . . . . . .

    . . . . . .

15. What is the form(s) of short-term finance?

    (a) short-term loans

    (b) overdrafts

    (c) documentary credits

    (d) trade credit

16. Does the bank require collateral for short-term loans?

    (a) yes

    (b) no

17. What is the type(s) of medium-and long-term finance?

    (a) retained profits

    (b) increasing the firm's equity capital

    (c) loans from family members and/or friends

    (d) loans from the Development Industrial Bank

    (e) loans from commercial banks

    (f) profit-sharing finance from individuals and/or Islamic banks

    (g) trade credit

    (h) loans from the partners

(i) other sources (please specify) . . . . . .

. . . . . .

18. What is the maturity of medium-and long-term loans?

    (a) 2 – 5 years

    (b) 6 – 10 years

    (c) more than 10 years

19. Does the bank require collateral for medium-and long-term loans?

    (a) yes

    (b) no

20. Does the bank charge you an interest rate which is:

    (a) the same as that charged to public-sector companies

    (b) higher than that charged to public-sector companies

    (c) you don't know

21. Does the bank charge you an interest rate which is:

    (a) fixed for the duration of the loan

    (b) variable during the duration of the loan

    (c) you don't know

22. Do you obtain finance in foreign curruncies?

    (a) yes

    (b) no

23. If yes, in which form?

    (a) short-term loans

    (b) overdrafts

    (c) documentary credits

    (d) medium-and long-term loans

24. Do you face any problems with foreign-currency finance?

    (a) yes

    (b) no

25. If yes, what are these problems?

(a) *difficult lending terms*

(b) insufficient amounts of funds

(c) exchange-rate problems

(d) other problems (please specify) . . . . . .

. . . . . .

26. If you do not depend on bank credit, why not?

(a) because banks refuse to lend to the business

(b) because banks impose difficult terms on the business

(c) because loans are interest-bearing finance

(d) lengthy lending procedures

(e) high interest rates

(f) other reasons (please specify) . . . . . .

. . . . . .

27. What is the alternative type(s) to bank credit?

(a) retained profits

(b) increasing the firm's equity capital

(c) loans from family members and/or friends

(d) profit-sharing finance from individuals and/or Islamic banks

(e) trade credit

(f) loans from the partners

(g) other sources (please specify) . . . . . .

. . . . . .

28. Do you depend on lease finance?

(a) yes

(b) no

29. If yes, why?

(a) because it is cheaper than bank loans

(b) because it is more easy to deal with than bank loans

(c) because it is not an interest-bearing type of finance

(d) because it is cheaper than purchase

(e) other reasons (please specify) . . . . . .

. . . . . .

30. What is the source(s) of lease finance?

(a) public-sector companies

(b) private-sector companies

(c) other sources (please specify) . . . . . .

. . . . . .

31. If you do not depend on lease finance, why not?

(a) because it is not available

(b) because it is more expensive than bank loans

(c) because you have enough equipment

(d) because you prefer purchase

(e) other reasons (please specify) . . . . . .

. . . . . .

32. Have you expanded your activity?

(a) yes

(b) no

33. If yes, what is the source(s) for financing this expansion?

(a) retained profits

(b) increasing the firm's equity capital

(c) loans from family members and/or friends

(d) loans from the Development Industrial Bank

(e) loans from commercial banks

(f) profit-sharing finance from individuals and/or Islamic banks

(g) trade credit

(h) loans from the partners

(i) other sources (please specify) . . . . . .

. . . . . .

34. Do you obtain finance from insurance companies?

    (a) yes

    (b) no

35. If yes, in which form?

    (a) short-term loans

    (b) long-term loans

    (c) an equity stake in the firm

36. Do you face any problems in obtaining finance from insurance companies?

    (a) yes

    (b) no

37. If yes, what are these problems?

    (a) difficult lending terms

    (b) high interest rates

    (c) other problems (please specify) . . . . . .

    . . . . . .

38. What is, in your opinion, the best source(s) of finance?

    (a) retained profits

    (b) increasing the firm's equity capital

    (c) loans from family members and/or friends

    (d) loans from the Development Industrial Bank

    (e) loans from commercial banks

    (f) profit-sharing finance from individuals and/or Islamic banks

    (g) trade credit

    (h) loans from the partners

    (i) other sources (please specify) . . . . . .

    . . . . . .

39. Why do you prefer this source(s) in particular?

40. If you have any further comments, please add here?

Appendix Two

SSIFs in Egypt

December, 1987.

Governorate	Type of industry	Number of firms	Number of workers	Production value LE million
Alexandria	Food	105	2,494	46.37
	Textiles	165	3,651	35.55
	Chemical	102	2,210	46.86
	Engineering	114	2,922	38.82
	Construction	29	622	9.67
	Mining	2	77	2.55
	Petroleum	1	48	2.12
Total		518	12,024	181.94
Beheira	Food	20	421	9.94
	Textiles	9	186	6.20
	Chemical	8	188	7.88
	Engineering	17	388	23.76
	Construction	24	506	5.05
	Mining	1	27	0.04
Total		79	1,716	52.87
Matrouh	Food	1	15	0.02
	Mining	1	18	0.05
Total		2	33	0.07
Gharbeya	Food	33	711	12.98
	Textiles	115	2,257	23.63
	Chemical	17	350	8.33
	Engineering	18	332	3.37
	Construction	25	626	7.32
Total		208	4,276	55.63

Governorate	Type of industry	Number of firms	Number of workers	Production value LE million
Daqahleya	Food	21	493	35.24
	Textiles	12	258	5.33
	Chemical	7	122	2.67
	Engineering	33	653	33.19
	Construction	23	446	5.85
Total		96	1,972	82.28
Kafr El-Sheikh	Food	8	134	1.05
	Textiles	6	84	0.06
	Chemical	1	37	1.61
	Engineering	1	12	0.05
	Construction	11	179	1.48
	Mining	1	21	0.03
Total		28	467	4.28
Damietta	Food	15	314	5.76
	Textiles	5	109	0.67
	Chemical	1	13	0.17
	Engineering	7	183	2.97
	Construction	7	139	7.96
Total		35	758	17.53
Menofeya	Food	16	422	5.81
	Textiles	2	50	10.09
	Chemical	1	35	1.65
	Engineering	1	11	0.03
	Construction	15	312	3.19
Total		35	830	20.77

Governorate	Type of industry	Number of firms	Number of workers	Production value LE million
Port Saeid	Food	9	220	4.24
	Textiles	1	11	0.01
	Chemical	1	37	4.97
	Engineering	5	151	1.40
	Construction	1	29	0.04
Total		17	448	10.66
Suez	Food	3	121	2.44
	Textiles	2	61	0.51
	Chemical	2	36	3.00
	Engineering	2	43	0.34
	Construction	1	25	0.39
Total		10	286	6.68
Ismaeileya	Food	4	77	0.61
	Chemical	2	26	0.21
	Engineering	3	55	0.15
	Construction	4	67	0.59
Total		13	225	1.56
Sharqeya	Food	23	582	42.65
	Textiles	12	375	21.24
	Chemical	19	592	47.62
	Engineering	27	778	129.72
	Construction	10	462	13.91
Total		91	2,789	255.14
Sinai	Textiles	1	18	0.06
	Construction	1	18	0.10
	Mining	1	35	1.39
Total		3	71	1.55

Governorate	Type of industry	Number of firms	Number of workers	Production value LE million
Menya	Food	11	272	11.01
	Metal	1	23	0.22
Total		12	295	11.23
Asiute	Food	6	124	2.70
	Textiles	2	57	0.18
	Chemical	1	14	0.12
	Construction	2	48	0.67
Total		11	243	3.67
Sohag	Food	7	205	405.79
	Textiles	1	18	0.08
Total		8	223	405.87
Qena	Food	7	184	11.40
Total		7	184	11.40
Aswan	Food	6	186	3.67
	Mining	4	71	3.82
Total		10	257	7.49
New Valley	Food	1	33	0.07
Total		1	33	0.07
Fayoum	Food	1	14	0.01
	Textiles	1	12	0.19
	Chemical	3	50	2.02
	Engineering	3	45	2.05
	Construction	2	32	0.15
	Mining	1	23	0.16
Total		11	176	4.58

Governorate	Type of industry	Number of firms	Number of workers	Production value LE million
Beni Suef	Food	3	54	2.27
	Chemical	1	11	0.05
	Construction	8	124	2.18
	Mining	1	24	0.15
Total		13	213	4.65
Cairo	Food	178	4,842	161.00
	Textiles	475	9,727	124.05
	Chemical	246	4,933	280.65
	Engineering	371	7,686	125.93
	Construction	66	1,419	23.49
	Metal	1	47	1.56
	Mining	2	57	0.17
Total		1,339	28,711	716.85
Giza	Food	48	1,364	101.01
	Textiles	32	653	9.69
	Chemical	44	995	109.25
	Engineering	55	1,248	42.02
	Construction	47	839	20.97
	Mining	2	70	0.79
Total		228	5,169	283.73
Qaliubeya	Food	27	702	48.07
	Textiles	222	4,920	22.93
	Chemical	55	1,380	37.37
	Engineering	64	1,452	41.30
	Construction	19	441	8.45
Total		387	8,895	158.12
Total SSIFs		3,162	70,294	2,298.62

All Industrial Enterprises in Egypt

Decmber, 1987

Sectors	Number of firms	Number of workers	Production value LE million
All private-sector industrial enterprises	9,551	219,680	13,390.0
All public-sector industrial enterprises	872	579,213	9,722.7

Source: Public Authority for Industrialization (PAI), Cairo, January, 1988.