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بسم الله الرحمن الرحيم

والذين جاهدوا فينا لنهدينه سبلا وان الله مع المحسنين.

صدق الله العظيم.

سورة الأنبياء آية رقم 19.
THE FINANCIAL PERFORMANCE OF SMALL FIRMS IN LEBANON (1975-1986)

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ABSTRACT

The purpose of this thesis is to contribute to a better understanding of the financial performance of small businesses. This work represents a contribution to the literature on the subject. The methodology adopted may perhaps be also applied to small business in many developing countries. The approach takes the form of a multi-stage model assessing the firm's financial performance. This is applied to small firms in Lebanon during the war period between 1975 and 1985.

A review of the literature on financial performance is presented identifying the key issues of concern and debate where research was needed with special concentration on small firms. Furthermore, an extensive and original historical review of the literature which chronologically describes the Lebanese socioeconomic system is presented.

Several hypotheses were formed and tested practically through an original survey undertaken in Lebanon which included 75 small manufacturing firms. The financial performance of these firms was tested extensively in terms of their manpower, financial management, structure, finance, profit and growth and the environment.

The results enabled the major hypotheses to be proven. It has been demonstrated that changes in the economic and financial resources of the country as a result of the war have lead to a radical change in the structure of small firm. Much criticism has been made of government policy because of the limited contribution the government has made to the financing of small manufacturing firms. The major conclusions are discussed and a series of recommendations for policy makers were indicated together with suggestions for further research topics.
ACKNOWLEDGEMENTS

In the process of research and writing this thesis, I have received help from numerous people without whom this work could not have been completed. Mentioning them here is the least that I can do to express my appreciation.

Firstly, I wish to thank both my supervisors, Dr. Rodney Wilson and Mr. Bahadur Najak, who have always found time to supervise meticulously every stage of my research endeavours. For their generosity in sharing with me their academic experience and knowledge, which has undoubtedly enriched my thesis, I have the highest respect and gratitude.

I am also grateful to the British Council in Lebanon for financing my research. Special thanks are due also to the British Council in Newcastle, in particular to my programme officers Mrs. Jane Butterfield and Ms Angie Stephenson for their particular help and care.

Special thanks also to the Owner-Managers of 75 Lebanese small firms, to Dr. Nabil Al-Ladzyky the chairman of the Lebanese Industrialist Association, to Mr. Ayoub Hmaied the General director of the Ministry of Information, Dr. Talhat Al-Yafi the chairman of the board of directors of the N.B.I.T.D. and his credit manager Mr. Naji Hassan, and Ms Gadda Balout for their contribution, assistance and the facilities provided for me during the process of the field work, which were significant and highly appreciated.

I should like to extend further thanks to Dr. Robert Williams and his colleagues at the university computer centre for their valuable advice and assistance during the data analysis of this research. The staff of the Centre for Middle Eastern and Islamic Studies in Durham and Mr. Nadeem Shehadeh, the director of the Centre for Lebanese Studies at Oxford University are, also acknowledged.

At Durham University Business School my thanks to all the staff and to every individual who spared his/her time for this thesis. Special thanks should be extended to Dr. Barry Witcher the director of the research centre at the Business School for the facilities provided for me during the period of accomplishing this research. I should not forget the courtesy of the Compass services and the kindness of Mrs. Debby Corner and Mr. William Hudspeth which made the Business School a special home for me.

Regarding my father, mother and brothers: their continuous prayers, encouragement and unlimited moral support, their suffering and patience under the brutal conditions of the civil war in Lebanon, leave one with no words with which ones to convey adequately appreciation. May the day come when I shall be able to contribute my share in return.

Mohamed A. A. Haidar
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER ONE.</th>
<th>PAGE No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION.</td>
<td></td>
</tr>
<tr>
<td>1.1 INTRODUCTION TO THE TOPIC</td>
<td>1</td>
</tr>
<tr>
<td>1.2 PURPOSE AND IMPORTANCE OF THE RESEARCH</td>
<td>2</td>
</tr>
<tr>
<td>1.3 THE CONCEPT OF THE RESEARCH</td>
<td>4</td>
</tr>
<tr>
<td>1.4 THE CENTRAL HYPOTHESES</td>
<td>5</td>
</tr>
<tr>
<td>1.5 PLAN OF THE RESEARCH AND OUTLINES OF THE THESIS</td>
<td>6</td>
</tr>
<tr>
<td>1.6 REFERENCES</td>
<td>9</td>
</tr>
</tbody>
</table>

| CHAPTER TWO | |
| FINANCING SMALL BUSINESS AND MEASURES OF PERFORMANCE | |
| INTRODUCTION | 10 |
| 2.1 - SAVING AND INTERNAL FINANCE | |
| 2.1.1 - Profit | 14 |
| 2.1.2 - Cash flow | 16 |
| 2.1.3 - Depreciation | 17 |
| 2.2 - SHORT TERM FINANCING | 18 |
| 2.2.1 - Trade Credit Finance | 19 |
| 2.2.2 - Money Market Credit | 20 |
| 2.2.3 - Short Term Loans | 21 |
| 2.2.3.1 - Overdrafts | 21 |
| 2.2.3.2 - Factoring and Bill Discount | 22 |
| 2.2.3.3 - Hire Purchase | 23 |
| 2.2.3.4 - Export Finance | 23 |
| 2.3 - LONG TERM FINANCING | 23 |
| 2.3.1 - Equity Finance | 24 |
| 2.3.2 - Debentures | 24 |
| 2.3.3 - Preference Shares | 25 |
| 2.3.4 - Ordinary Shares | 26 |
| 2.3.5 - Second Ordinary Share Market | 26 |
| 2.4 - THE WORLD BANK LENDING TO SMALL FIRMS | 27 |
| 2.4.1 - Objectives of the World Bank Programme | 27 |
| 2.4.2 - The Impact of the World Bank Programme | 28 |
| 2.4.3 - Non-financial Assistance | 32 |
| 2.5 - OTHER SOURCES OF FINANCE | 32 |
| 2.6 - SMALL BUSINESS FINANCING PROBLEMS | 33 |
| 2.6.1 - Internal Problems | 33 |
| 2.6.2 - External Problems | 35 |
2.7 - RISK ANALYSIS .................................................................................................. 38

2.8 - PERFORMANCE MEASURES ............................................................................... 41
  2.8.1 - Management Team ...................................................................................... 43
  2.8.2 - Number of Managers .................................................................................. 45
  2.8.3 - The Role of Size ........................................................................................... 45
  2.8.4 - The Role of Profit ........................................................................................ 45
  2.8.5 - Size and Profit ............................................................................................... 47
  2.8.6 - Growth ........................................................................................................... 48
  2.8.7 - Profitability and Growth .............................................................................. 48
  2.8.8 - The Role of Age ............................................................................................ 49
  2.8.9 - Risk as a Measure of Performance ............................................................... 50

2.9 - REFERENCES ...................................................................................................... 51

CHAPTER THREE

THE LEBANESE ECONOMY.

INTRODUCTION ........................................................................................................ 58

3.1 LEBANESE ECONOMIC HISTORY ................................................................... 58
  3.1.1 The Silk Industry ........................................................................................... 59

3.2 CHARACTERISTICS OF THE MODERN LEBANESE ECONOMY ................... 60
  3.2.1 Statistical Difficulties ..................................................................................... 61

3.3 NATIONAL INCOME AND ECONOMIC TRENDS ........................................ 62
  3.3.1 The Period 1948-1964 (pre-war period I) ..................................................... 63
  3.3.2 The Period 1965-1974 (pre-war period II) ..................................................... 65
  3.3.3 The War Period 1975 -1986 ........................................................................ 67

3.4 NATIONAL INCOME, SECTORAL ANALYSIS ............................................. 71
  3.4.1 Agricultural Sector .......................................................................................... 71
  3.4.2 Industrial Sector ................................................................................................ 74
  3.4.3 Services Sector ................................................................................................ 79
  3.4.4 Trade Sector ..................................................................................................... 81

3.5 REFERENCES ......................................................................................................... 84

CHAPTER FOUR

FIELD RESEARCH METHODOLOGY

INTRODUCTION ......................................................................................................... 87

4.1 OPERATIONALIZING THE MODEL ..................................................................... 88
  4.1.1 Parameters of the Research ............................................................................. 89
    4.1.1.1 Working Power .......................................................................................... 89
    4.1.1.2 Financial Management ............................................................................. 90
    4.1.1.3 Structure .................................................................................................... 90
    4.1.1.4 Finance ....................................................................................................... 91
    4.1.1.5 Profit and Growth ..................................................................................... 91
    4.1.1.6 Environment ............................................................................................... 92

4.2 THE RESEARCH DESIGN ..................................................................................... 92
  4.2.1 The Purpose of the Study ................................................................................ 93
  4.2.2 Type of Investigation ....................................................................................... 93
  4.2.3 Degree of Interference .................................................................................... 93
  4.2.4 Units of Analysis ............................................................................................. 94
  4.2.5 Time Horizon .................................................................................................. 94
4.3 MEASUREMENT OF VARIABLES AND DATA COLLECTIONS

4.3.1 Measurement of Variables

4.3.2 Data Collection Methods

4.3.2.1 Applied Methods in Data Collections

4.3.2.2 Procedures of Data Collections

4.4 TECHNIQUES OF ANALYSIS

4.4.1 Data Preparation

4.4.2 Techniques of Analysis

4.4.2.1 Quantitative Techniques

4.4.2.2 Qualitative Techniques

4.5 REFERENCES

CHAPTER FIVE

SMALL BUSINESS MANAGEMENT PERFORMANCE.

INTRODUCTION

5.1 MANAGEMENT AND MANAGERS OF SMALL BUSINESS FIRMS

5.1.1 Directors Background

5.1.1.1 Types and number of managers

5.1.1.2 Small business motives and objectives

5.2 PERFORMANCE OF SMALL BUSINESS MANAGEMENT

5.2.1 Organizational structure and span of control

5.2.2 Financial activities and the decision maker

5.2.3 Financial structure of the small business

5.2.4 Effect of managers on the business performance

5.3 CONCLUSION

5.4 REFERENCES

CHAPTER SIX

GOVERNMENT POLICY ON THE FINANCING OF SMALL FIRMS.

INTRODUCTION

6.1 THE GOVERNMENT POLICY ON THE FINANCING OF SMALL FIRMS

6.1.1 The NBITD: Functions & Purposes

6.1.2 Evaluation of the NBITD Credit Experience

6.1.3 Small Firms and Government Credit Policy

6.2 PRIVATE SOURCES AND THE FINANCING OF SMALL FIRMS

6.2.1 Small Firms and Personal Finance

6.2.2 Small Firms and Commercial Banks

6.2.3 Why Small Firms Do Not Deal With Banks

6.2.4 Why Small Firms Cannot Obtain Bank Loans

6.3 DISCRIMINANT ANALYSIS AND TEST OF LIQUIDITY

6.4 LIMITATIONS OF THE FINANCIAL MARKET OF SMALL FIRMS

6.5 CONCLUSION

6.6 REFERENCES

CHAPTER SEVEN
## INTRODUCTION .................................................................................................................. 186

### 7.1 PROFITABILITY OF SMALL FIRMS ........................................................................ 186
  7.1.1 Profitability and Size Measures ........................................................................ 187
  7.1.2 Size and Profitability in Lebanese Small firms ................................................ 190
     7.1.2.1 Some expectations .................................................................................. 191
     7.1.2.2 The period 1976-1986 ......................................................................... 192
     7.1.2.3 The periods 1976-81 and 1982-86 ......................................................... 196

### 7.2 RISK AND SMALL FIRMS ...................................................................................... 204

### 7.3 THE GROWTH OF SMALL BUSINESS FIRMS ........................................................ 205
  7.3.1 Characteristics of Growth ............................................................................... 205
  7.3.2 The Effect of Profitability on Growth ............................................................... 213

### 7.4 THE EFFECT OF AGE ON THE PROFITABILITY AND THE GROWTH OF SMALL FIRMS ................................................................................................................. 215
  7.4.1 The Effect of the Age of the Firm on Profitability ............................................ 216
  7.4.2 The Effect of Age of the Firm on Growth .......................................................... 217

### 7.5 CONCLUSION .......................................................................................................... 219

### 7.6 REFERENCES .......................................................................................................... 223

## CHAPTER EIGHT

CASE STUDIES and LESSONS FROM THE WAR ......................................................... 225

### 8.1 CASE No.1; ENTREPRENEURSHIP, MODERNISATION and GOD ......................... 225

### 8.2 CASE No.2; THE CANDY FACTORY and THE FAMILY REPUTATION ................. 227

### 8.3 CASE No.3; THE RELATIONSHIP BETWEEN THE OWNER and HIS SUBORDINATE ......................................................................................................................... 229

### 8.4 CASE No. 4; FAMILY BUSINESS and MARKET COMPETITION .......................... 231

### 8.5 CASE No. 5; THE PLASTIC FACTORY AND FINANCING GROWTH ...................... 232

### 8.6 CASE No.6; THE PRINTING, PUBLISHING AND THE DISTRIBUTION LINE ....... 234

### 8.7 REFERENCES .......................................................................................................... 237

## CHAPTER NINE

THE RESEARCH FINDINGS, RECOMMENDATIONS AND FURTHER RESEARCH.

### 9.1 FINDINGS ................................................................................................................. 238

### 9.2 RECOMMENDATIONS FOR POLICY FORMULATION ............................................ 242

### 9.3 LIMITATION OF THE RESEARCH ......................................................................... 247

### 9.4 SUGGESTIONS FOR FURTHER RESEARCH ......................................................... 248

### 9.5 REFERENCES .......................................................................................................... 250

BIBLIOGRAPHY ........................................................................................................... 251

APPENDICES ................................................................................................................ 257
ABBREVIATION TABLE

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMEXP</td>
<td>Administrative expenses in the business.</td>
</tr>
<tr>
<td>AP</td>
<td>Accounts payable.</td>
</tr>
<tr>
<td>AR</td>
<td>Accounts receivable.</td>
</tr>
<tr>
<td>ARGM</td>
<td>The mean of growth of accounts receivables.</td>
</tr>
<tr>
<td>BANKL</td>
<td>Bank loans.</td>
</tr>
<tr>
<td>BLD</td>
<td>Buildings.</td>
</tr>
<tr>
<td>BUSAGE</td>
<td>The age of the business.</td>
</tr>
<tr>
<td>CAMINB</td>
<td>Cash and money in bank.</td>
</tr>
<tr>
<td>CAPGM</td>
<td>The mean of growth of owner capital.</td>
</tr>
<tr>
<td>CGS</td>
<td>Cost of goods sold.</td>
</tr>
<tr>
<td>DAILYWHS</td>
<td>Daily working hours.</td>
</tr>
<tr>
<td>DEP</td>
<td>Depreciation.</td>
</tr>
<tr>
<td>EDULEVEL</td>
<td>The educational level of the manager.</td>
</tr>
<tr>
<td>EMPLG</td>
<td>Employment growth.</td>
</tr>
<tr>
<td>GPERFORM</td>
<td>General performance index of the firm.</td>
</tr>
<tr>
<td>GROWTHM</td>
<td>Growth mean.</td>
</tr>
<tr>
<td>INT</td>
<td>Interest rates.</td>
</tr>
<tr>
<td>LAND</td>
<td>Land.</td>
</tr>
<tr>
<td>LIAB</td>
<td>Liabilities.</td>
</tr>
<tr>
<td>MNGS</td>
<td>Total number of managers.</td>
</tr>
<tr>
<td>NOM</td>
<td>Non owner-manager(s).</td>
</tr>
<tr>
<td>OEXP</td>
<td>Other expenses in the business.</td>
</tr>
<tr>
<td>OMNGS</td>
<td>Owner managers.</td>
</tr>
<tr>
<td>PASTEXPR</td>
<td>Past experience of the manager.</td>
</tr>
<tr>
<td>PEXP</td>
<td>Preliminary expenses.</td>
</tr>
<tr>
<td>PLAEQ</td>
<td>Plant and equipment.</td>
</tr>
<tr>
<td>ROI</td>
<td>Return on investment.</td>
</tr>
<tr>
<td>PRODM</td>
<td>The mean of productivity in the business.</td>
</tr>
<tr>
<td>PROF</td>
<td>Profitability.</td>
</tr>
<tr>
<td>PTP</td>
<td>Pre-tax profit.</td>
</tr>
<tr>
<td>SPECIALI</td>
<td>Specialization of the manager.</td>
</tr>
<tr>
<td>SR</td>
<td>Sales revenues.</td>
</tr>
<tr>
<td>TAGM</td>
<td>The mean of growth of total assets.</td>
</tr>
</tbody>
</table>
Chapter One

INTRODUCTION

1.1 INTRODUCTION TO THE TOPIC.

It has long been realized that small businesses have a vital part and role to play in any country's economy: they are "well placed to have important economic, social and political roles".\[1\] They provide employment for a substantial proportion of the labour force, they utilize resources; they generate income; they account for a large proportion of all economic establishments. Also they play "an important role in the industrialization process in both developed and developing countries".\[2\]

Growing recognition of these facts has stimulated widespread interest in the role of small businesses, either as individual concerns or groups of firms. For example, the International Labour Organization has been actively involved in developing small firms for more than 30 years.\[3\]

Studies of the role of small firms have focused on two aspects; individual performance and sector performance. On the level of individual performance, concentration has been on management performance, productivity, profitability and growth of the firm. On the level of sector performance, concentration has been on economic performance, increase of employment, utilization of national resources, contribution to national income and government contribution to help small businesses.

This research is concerned primarily with the individual performance of small firms. In particular it deals with the financial performance of small manufacturing firms in Lebanon during the war period (1975-1986). The main core of enquiry is to measure the financial performance of small firms in Lebanon and to measure the extent to which the principles of finance and financial management have been applied by those small firms.

Theoretical and practical considerations underline the researcher's choice of topic. From the perspective of theory, the importance of finance and financial management to any business firm cannot be denied since it is "directly concerned with production, marketing, and other functions..." and "... various decisions taken within a firm".\[4\] Secondly, the absence of any system of financial performance model responds to or reflects the functions of finance and financial management. Thirdly, the relative importance of financial performance determines the longevity of a business firm. Fourthly it is important to relate the principles of finance and financial management to the financial activities of small businesses in an area with a cultural background totally different to that in which the theory was born and developed.
There were several practical reasons for the choice of topic. Firstly, since the last conference on small firms of the Arab Middle East countries in 1968, no significant study has been carried out in this field, at least in Lebanon.[5] Secondly, there is a big difference between small firms in Arab Middle Eastern countries and those in the west (Europe and America) especially in terms of cultural background, management style, employment numbers, and the size of firms according to the definitions of small firms. Thirdly, it is important to compare socio-economic changes in Lebanon brought about by the war circumstances with the prosperity of the country in the previous period. Finally, the interest of the researcher and the experience that he may have acquired in this field were important motives behind the choice of topic.

1.2 PURPOSE AND IMPORTANCE OF THE RESEARCH.

The purpose of this study is to analyze the financial performance of small industrial firms in Lebanon between 1975 and 1986, a time when the country was in a state of almost continuous civil war or invasion.

On the theoretical level there is no comprehensive financial performance model in the literature. Methods to evaluate performance use a wide range of variables and measuring techniques, but there is no consensus about what should be involved, or how the measurement should be undertaken. This present study suggests one practical approach, which worked with the firms surveyed in Lebanon and which may work in other developing countries with similar types of small businesses.

Some exceptional recent studies have gone some way to filling the gap, namely those carried out by Storey, D. et. al. in 1987 and 1989. The present study aims to close the gap further, by proposing several comprehensive financial performance models. Hopefully such models will be found applicable by further researchers in the field of small businesses.

Technically speaking, this study will use the cause and effect techniques to understand the causal relationship between performance variables; including management decision making, policy making, public and private finance, profit, growth and the effect of the war on the business performance. For this purpose three different methods will be used; namely, exploratory, descriptive and predictive techniques.

From the practical point of view, there has been virtually no research on small businesses in Lebanon since the 1968 United Nations conference held in Beirut on small firms in the Arab World. This means there is a 24 year information gap a period which includes 17 years of civil war which devastated the economy and profoundly affected numerous small businesses. The findings of the study may prove of
considerable value in the reconstruction phase of the economy, with the government and outside funding organisations and consultants keen to enhance the role of small businesses during this period.

One obstacle facing the small business sector in Lebanon is the lack of formal incentives it has been given so far. In this, Lebanon lags behind the many other developing countries (including some Arab countries) which have in recent years paid special attention to small firms by providing them with specialised services. Such services range from general advice to government guarantee schemes, export credits, financial assistance including long-term credit and training programmes.

Not only have the Lebanese government or private sector not provided such services, nor have international organisations such as the International Labour Organisation (ILO) and the World Bank institutions offered such services to Lebanese organisations - although this may be attributed to the war conditions that prevailed in Lebanon for so long. The study propose various incentives that could be given to small businesses.

In short, this study bridges the gap which exists in the theoretical and the practical fields.

The following is more in depth discussion on the rational of the research:

a - There is a clear absence of a comprehensive financial performance model on which one can rely for the purpose of evaluating the financial performance of an organisation. For example in the literature of performance evaluation, very few writers have considered a performance model a priori. In spite of the fact that the lion's share of financial performance was attributable to big firms, most of the studies used financial ratios analysis such as those by Wittington, G. (1980); Elliot, J.W. (1972); Eugene F. Fama. (1972); Norburn, D. and Birley, S. (1987), (1988).[6] In the field of small businesses the art of performance evaluation has been more or less a copy of a technique used in big business studies. This can be seen clearly in the work of Edmister, R.O (1972); the Wilson Report (1979); Cooly, Philip L. (1979); Steele, P. (1984) Robinson, Richard B. et al (1984); Tamari, M. (1980); Khan, G.M. (1988); Storey, D et al. (1987), (1989).[7] However, the most recent studies have used more sophisticated techniques in their analyses. In most of the aforementioned studies there was a clear absence of any endeavour to contribute in this direction since most of them relied mainly on the well known conventional measures of performance: see Storey, D. et al. (1987), (1989). The lack of contribution in this field might be due to the relatively small size of the studies available but this surely is not a good enough reason for such an absence. An exception to this were the studies of Storey, D. et al. (1987), (1989).

The present research meets the need for the establishment of such a performance model
and puts it in the form of an operational framework.

b - The research will be able to add to the body of knowledge a further conceptual understanding of the meaning of financial performance.

c - Once the financial performance model is established, there will be an opportunity to test it empirically within the area of small businesses and achieve specific results in this respect.

d - There is a growing tendency towards financial performance evaluation by many groups such as finance houses, banks and governments for the purpose of financing small firms or introducing improvement measures in this field. For example, the Wilson report (1979) in the United Kingdom played a very important role in the introduction of various measures in the field of financing small businesses.

e - Since 1968 there has been no significant research carried out on small firms in Lebanon. This research will thus revive interest in this field at many levels such as government, the private sector and the academic world. Furthermore it covers a very critical period of Lebanon's economic history, namely the recent war period. Therefore it should result in a remarkable well-documented lesson of the experience of small manufacturing firms, (sample surveyed), in this critical period.

f - Observations from the field may also confirm the importance of this research. Before the war, the very smallest firms, (those who employed between 1 and 5 employees), were on the increase: the later trend, however, was towards those small firms who employed between 5 and 49 employees. See table 3.1 for further information.

Another observation from the field is that the size of the industrial sector in general has decreased in terms of the total number of manufacturing firms, primarily, because of the war and other economic or natural causes. One recent estimate is that only 8180 industrial firms (59 % of the total industrial power) are active. Of these 5953 (72.7 %) are small firms (with between 5 and 49 employees). See table 2.2 for more details of the status of the industrial firms.

The workforce has decreased by at least one third, most of whom were killed during the war or forced to emigrate. In addition, thousands of Lebanese and foreign financial enterprises withdrew their invested capital from the Lebanese financial market.

g - There has been "increased attention given to entrepreneurship and small enterprise development by the government and private sector organizations since the late
This research will examine the extent to which the Lebanese government and the private sector organizations (i.e., the commercial banks) have considered small business firms within their objectives.

The research will endeavour to benefit from the theories of other disciplines in the area of Social Sciences such as statistics, economics, accounting, research methods and so forth.

In brief, the present research will examine various issues related both to the theory of finance and financial management and also to some economic and financial observations in the context of small firms. These observations will be presented in this chapter in the form of two major hypotheses. In the chapter on methodology they will be operationalized and presented in the form of several parameters, each one tested by several questions. At the end of the research, based on its findings, a group of recommendations for policy makers will be given, along with suggestions for further research issues.

1.3 THE CONCEPT OF THE RESEARCH.

1.3.1 Small Manufacturing Firms:

There is no typical definition of a small firm: the definition varies according to the purpose of the study, the sector under study, the country with which the study is concerned, and available data and statistics which may favourably serve the purpose of the definition. For example The Georgia Institute of Technology has found at least 60 different definitions used in 75 different countries. [9] In Britain a study reported that:

"Cross (1983) shows, there are more than 40 different definitions used by the government of a small firm in the U.K. alone. These differences multiply at an international level (Ganguly, 1985; Hertz, 1982)." [10]

In Malaysia an establishment which has fixed assets of less than $500.000 or employs less than 50 full-time workers is a small firm. [11] Another study in Singapore reported that: "in the USA, firms which employ less than 500 workers are considered small. In Japan, firms which have less than 300 workers are considered small for the manufacturing sector.... In Singapore, firms which employ less than 100 workers for manufacturing are considered small and firms which employ less than 50 workers for commerce and services industries are considered small firms. [12]

The definition of a small firm in the Middle East faces the same difficulties as in
other countries, if not more so. In 1968 the Expert Group Meeting of six Arab countries of the Middle East, (Iraq, Lebanon, Syria, Kuwait, Saudi Arabia and Jordan), concluded that:

"the quantitative data has led to the definition of small-scale manufacturing industry in the six countries as that group of manufacturing establishments which employ from 5 to 49 persons each".[13]

Since then there has been no significant definition of the small firm in the Arab Middle Eastern countries. Individual studies such as that of Al-Sharqawie, M, (1981) [14] accepted the above definition for small firms in Egypt and added the definition of the Industrial Development Bank in terms of the firm’s fixed assets which amounted to no more than 100,000 E.Pounds, excluding buildings, lands and real estates. In other countries such as Jordan, Morocco, Kuwait, Iraq and Syria, the definitions of what constitute a small firm is not different from that of the I.L.O definitions of a small firm. In Lebanon there is no official definition of small firms as the subject has not been studied since the last conference on small firms by the Expert Economist Group in Beirut in 1968. Distribution of Lebanese manufacturing firms according to the number of workers in each firm support the aforementioned definition of the Expert Economist Group. (see tables 3.7 and 3.8 in chapter 3). According to the group's definition, small manufacturing firms in Lebanon account for 72.7 % of the total number of active industrial firms. [15]

1.3.2 The Performance Model:

In order to pursue the objectives of the research, a model of financial performance in an operational framework must be provided that might assess and evaluate the financial performance of a business organization. However, it is expected that the feasibility and appropriateness of the model should show its ability to contain most, if not all, of the key issues identified in the literature, as well as in practice. This model is presented in some detail in chapter 2.

1.4 THE CENTRAL HYPOTHESES.

Two major hypotheses are proposed for testing as the major objective of this research. The first hypothesis is that most, if not all, of the financial activities presented in the performance model are applied by the management (owners or managers) of small manufacturing firms in Lebanon. The second hypothesis is that the fundamental change in the economic and financial fields such as in the working power sector, financial sector, industrial sector, as well as in other sectors as a result of the war, were the major incentives for the management (owners or managers) of surviving small manufacturing firms to obtain more finance and attain higher profits and higher growth rates.
The first hypothesis is a fundamental theoretical axiom but the extent to which these theories have been applied is the main question. The second hypothesis, however, is based on three observations in the field. Firstly, most economic sectors, including the industrial sector, lost a great share of their working force. Nasr, S. (1989) [16] estimated that the loss amounted to the total of 73,000 employees, 50,000 of them were in the industrial sector, equivalent to 75% of this sector's work force. 15,000 employees of the total were lost in the tourism sector, equivalent to 75% of this sector's work force. Therefore, such serious damage is believed to be reflected in the performance of each individual firm. Directly, it is expected that the firm's organizational and financial structure were affected and changed.

Secondly, thousands of industrial firms as well as firms in other sectors were completely damaged or went out of the market. In the industrial sector there were about 15,669 industrial firms in 1970, in 1988 there were only 7764 industrial firms still active. [17] Therefore, the disappearance of 41.3% of industrial firms and in other sectors led to a kind of market expansion of the surviving (active) firms. Consequently, the surviving industrial firms had to meet a higher level of demand and therefore attained high rates of profits and growth.

Thirdly, the opportunities of surviving (active) industrial firms to obtain additional finance from banks and other financial institutions had increased due to the disappearance of 41.3% of the industrial firms. This additional finance is expected to have come mainly from Lebanese commercial banks and the state development banks since a great number of financial institutions had withdrawn substantial amounts of money outside Lebanon.

In order to test these hypotheses, a study was undertaken in Lebanon covering two geographical areas. Questionnaires were distributed and several interviews were conducted with owner-managers of the firms: 75 firms responded and 19 of them provided us with their financial records. Major findings of the research validate the concept of the financial performance model and the ability of the firm, even in war circumstances, to perform their financial activities and to survive and attain high profits and growth rates. The existence of financial management was represented by the owner-manager, who shoulders heavy burdens (i.e. most of the financial activities in addition to all management functions). In this sense it is suggested that the existence of financial management as described by the theory, along with the performance model, could be more applicable to, and found in, larger firms.

1.5 PLAN OF THE RESEARCH AND AN OUTLINE OF THE THESIS.

In presenting the plan of the research, the author is attempting to show the conceptual
path and strategies followed to accomplish this task. For this research, the well known hypothetico-deductive method of management has been adopted. This method (model) involves a seven step process. Sekaran, U (1984) reports that,

"The foundation on which the hypothetico-deductive method of Scientific research could be called the building blocks of scientific inquiry. ..., they are as follows:
1 - observation.
2 - preliminary information gathering.
3 - theory formulation.
4 - hypothesizing.
5 - further scientific data collection.
6 - analysis of data.
7 - deduction."[18]

This adopted method is represented in figure 1.1 below.
Although the figure is self-explanatory, many steps of this method are explained in detail in the methodology chapter, where they are more relevant. However, the outlines of each individual chapter of the thesis may demonstrate the practical application of the adopted method.

![Fig 1.1 The building block of Science](source).

Chapter 1 introduces the topic of the research and justifies the need for, and purpose in, conducting it. It defines small manufacturing firms as well as the financial performance model. Two major hypotheses were concluded from several theoretical and practical (in the field) observations and chapter one ends with the plan of research. It also provides a general outline of each individual chapter in the thesis.

Chapter two reviews the literature of the principles and issues represented in the financial performance model. This chapter is a discussion of the form of financial
decisions and procedures, investment and financing decisions, and information system and techniques of performance evaluation.

Chapter three reviews the Lebanese economy. Particular emphasis is given to the contribution of socio-political factors to the recent war, and the effects of the war itself are outlined. It also discusses the modern economy of Lebanon (1949 - 1986), concentrating on four important economic sectors: agriculture, industry, services and trade sectors.

Chapter 4 discusses the methodology of the research and surveys undertaken in Lebanon. It discusses the operationalization processes of the model and the issues and arguments behind the choice of research strategy.

The analysis and findings of the field data are presented and discussed in chapters five, six and seven. Each of these chapters discusses a major research issue. Chapter five examines the extent to which financial management and its functions are applied by the financial management of small firms. Chapter six examines the extent to which small firms are able to obtain finance from outside and inside the firm. The experience of the National Bank for Industrial and Tourism Development (N.B.I.T.D.) in financing small firms is one of the major topics of this chapter. Chapter seven examines the profit and growth rates attained by small firms during the war period. It also examines the profitability and the degree of risk associated with profits. The relationship between profit and growth is also discussed.

Chapter eight analyses six case studies to cover issues which cannot be explored on a quantitative basis. The thesis concludes (in chapter nine), by highlighting the important findings of the research, and, for the benefit of future projects, suggests some ideas that may be taken up. It also proposes further outstanding issues for research.
1.6 REFERENCES.


16 - Nasr, S., in Politics and the Economy in Lebanon, p. 46.

17 - Industry in Lebanon: its establishment and development, op. cit., p. 94.

INTRODUCTION.

Since the beginning of the Sixties the financing of small businesses seems to have taken a new direction and found itself a new image within the theory of finance. Writings on this particular issue have increased significantly. Such studies date back to 1958 in the U.S.A. and in Britain, since 1971, many significant works have highlighted the importance of the role of small business. In Australia the upsurge occurred much later when the first investigation (The Wiltshire Report) was released in 1971. The small firm Research Group of the University of Newcastle began its investigations into the financing of small enterprises in 1973. In the Middle East or Africa, where very little research has been done in this respect, the United Nations programmes’ limited budgets were very important in those parts of the world for small businesses.

Over a period of time these studies have traced the effect of changing economic conditions on the availability of finance. For example the clearing banks in England extended over a quarter of a million new facilities (including an increase in existing facilities) to small firms within one year only, amounting to a total of about L.L 2.8 billion, this in the knowledge that many firms had little need to turn to their banks for finance. A large number of sources of finance are hardly used at all by small firms. The same situation probably exists in all the developed countries. In the developing and the less developed countries, however, small businesses lack such facilities. Professor Harper, M. (1984) describes the small businesses in such countries as being "unfamiliar with financial institutions of any sort, and it is unrealistic to expect them to develop banking relationships with two or more sources of finance". This statement highlights the importance of the World Bank experience in financing small firms.

Financing small firms will be discussed in this chapter in the light of the hypothesis of the growth model of a small business (the life-cycle concept). However, the purpose is to correlate these two variables in such a way that the financing process can be easily understood.

The life cycle concept is a relatively simple idea which provides a useful framework for looking at the development of a small business and its financing. According to this, any product or service, and therefore any business tied to just one product or service, has a life cycle of five stages, shown in figure 2.1.

The financial life-cycle of the small firm, as found in the work of Weston, J.F. and Brigham, E.F.(1978), is more simple than that of Dewhurst, J. and Burns, P. It describe 3 stages of growth in a business firm which might be referred to as i) the early stage.
(start-up or take off), ii) the maturity stage, and iii) the levelling off stage [6].

**Figure 2.1 The life-cycle curve**

<table>
<thead>
<tr>
<th>Stage</th>
<th>Sources of Finance</th>
<th>Potential Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inception</td>
<td>Owners' resources</td>
<td>Under capitalisation</td>
</tr>
<tr>
<td>Introduction (growth I)</td>
<td>As above plus: retained profits, trade credit, bank loans and overdrafts, hire purchase, leasing.</td>
<td>&quot;overtrading&quot;, liquidity crisis</td>
</tr>
<tr>
<td>Take-off (growth II)</td>
<td>As above, plus: longer term finance from financial institutions.</td>
<td>Finance gap ?</td>
</tr>
<tr>
<td>Slow down (growth III)</td>
<td>As above, plus: new issue market.</td>
<td>Loss of control.</td>
</tr>
<tr>
<td>Maturity</td>
<td>All sources available.</td>
<td>Maintaining ROI</td>
</tr>
<tr>
<td>Decline</td>
<td>Withdrawal of finance: firm taken over, share repurchase, liquidation.</td>
<td>Falling ROI</td>
</tr>
</tbody>
</table>

The financial life-cycle passes through at least three stages of growth. Each stage comprises different types of financing from different sources. These various types of financing are not all utilized at once when the business is established. They evolve gradually as the firm grows and develops. When the business reaches the maturity stage, most of these types of finance which can be utilized are based on the financial needs of the firm and primarily on the financing decision. There might be other factors which prevent businesses from utilizing these sources, such as constraints from the business itself or from the market. These problems will be discussed in a special section in this chapter.

Given the above view of the life cycle of the business and the financial life cycle, it may be said that the financing of a small business evolves in stages, together with the growth and development of the business. However, as the business moves from one stage to another and gradually grows, many factors can represent the performance of the business. These factors include the management size, the growth rate, and profitability of the business.

We can now consider the stages of the financial process through which the firm reflects its financial activities and its financial position as it moves from one stage to another. The development of the financial activities respond to the growth stages of the firm itself. These activities grow in a very systematic way. It is suggested, therefore, that these activities pass through five stages of development starting with the birth of the firm up to the stage of any possible end it may reach. It might be worth mentioning here that the development and moving from one stage into another mainly depends on the ability of the firm to grow and expand. This financial process is shown in Fig 2.2.

Following the above arguments that the discussion may be divided into five main issues:

1 - Saving and internal finance.
2 - Short-term financing.
3 - Long-term financing.
4 - Experience of the World Bank in lending to small firms.
5 - Other sources of finance.
6 - Small business financing problems.
7 - Risk analysis.
8 - Measuring the performance of small firms.

2.1 - SAVINGS and INTERNAL FINANCE:

Internal finance has always been, and still is, one of the most important sources of funds for business firms and doubtless it will remain so. Savings are a source of funds for the typical small firm, and they derive from profits. Other internal sources of
STAGE ONE
1. Financial Motive (owner/s objectives) What or Why?
   - Survive (Satisfaction)
   - Break Even
   - Decided or Undecided Amount of Profit.
   - Growth and Development; desired income;
     (dividends + retained earnings)

2. Financial Ability.
   - Financial Experience and Knowledge.
     (University Degree, Working Experience)
   - Financial Skills.
     (Technical Skills & Training Programmes)

3. Idea and Market:
   - Idea Position in the Market.
     - ordinary idea (existent in the market)
   - new idea (new product or service - new innovation)
   - market survey (possibility of success & failure)

4. Attractiveness of the Product (Idea)
   - expected cost
   - expected price
   - expected profit
   - quality
   - quantity
   - the degree of need for the product (demand)
   - the degree of utilization (daily, weekly, monthly, seasonality)
   - competitors

5. Financial Resources:
   - Existing Resources (owner/s, family, group involved)
     - cash (personal savings)
     - land
     - plant (equipment)
     - employee
     - other assets.

* Stage one is developed from the start-up model by Gibb, Allen & Ricke, "Understanding the Process of Starting Small Business", European Small Business Journal, 1, 1, 1968, pp. 36-45.

STAGE TWO
1. Estimated Start-up Budget (Required Start-up Finance)
   - Estimated Income Statement
   - Estimated Balance Sheet
   - Estimated Cash-Flow
   - Estimated Working Capital (Current & Capital Liabilities)
2. Financial Ability (Degree of Self-sufficiency): Estimation
   - Existing Resources (owner/s, family, group involved)
     - Cash on hand (personal savings)
     - Land and buildings
     - Employee (self-employment) any available workers
     - supplies (of the owners involved) - who are ready to
     - Other available assets
3. Needed Amount of Finance
   - Needed Assets and Liabilities in exact amount of funds
     - Expected Sources of Funds (bank, trade credit, savers)
     - Expected Amount from Each Source and Time Availability
     - Expected Flow of Finance (short-term loan, savings and
       retained earnings, etc.)
     - Expected Cost of Finance (fixed and variable)
4. Financial Advice & Case Presentation
   - Source of Financial Advice (bank manager, solicitor,
     financial advisor, accountant, counsel, etc.)
   - Type of Financial Advice (irates & TP sources of
     finance, financial information, business plan, budget,
     form, etc.)
   - Case Presentation (for financing the firm, this step
     needs a well-organized and deep concentrating business
     plan and annuity of the budget)
5. Expected Problems.
   - Undercapitalization
   - Lack of Financial Knowledge (financial planning,
     accounting)
   - Risk (systematic and unsystematic)
   - Tax Increase
6. Business Identity
   - Business Form
   - Paid Capital

STAGE THREE
1. Choose Among alternatives (ideas, investment projects)
   - Evaluation process (criteria)
     - price
     - cost
     - profit
     - cash flow
     - risk (systematic and unsystematic)
     - needed finance and its cost
     - payback period
     - net present value
     - internal rate of return
   2. Decision Making (Choice)
     - financial target
     - search for alternatives
     - compare and evaluate alternatives
     - choose among alternatives
     - implement decisions
     - follow up and control
   3. Capital Formation
     - equity
     - liabilities
   4. Cash Inflows
   5. Profitability
     - pre-tax profit
     - return on investment
     - profitability
   6. Risk Analysis
     - systematic
     - unsystematic
   7. Working Capital
     - cash
     - short term liabilities
     - inventory
   8. Accounting System

STAGE FOUR
Sources of Finance Application
1. Owner/s Resources:
   - personal savings
   - family, friends & relatives or partners.
   - depreciation
   - finance machinery price
   - maintenance
   - cash inflow
   - meet day-to-day expenses
   - retained earnings
   - growth
2. Short term loan
   - trade credit
   - overdraft
   - bank loan
   - hire purchase
   - leasing
   - meet expenses
3. Long term loan
   - venture capital
   - Debentures
   - machinery and equipment
   - preferred
   - ordinary

STAGE FIVE
1. Outputs
   - Finished Goods
   - Sales
   - Receivables
2. Reporting
   - Statement of Cash Flow
   - Balance Sheet
   - Income Statement
   - Sources and Application of Funds Statement
3. Evaluation
   - Ratio Analysis
   - Regression Analysis (historical data)
   - Management performance
   - Work force efficiency
   - Effect of external factors on the business performance:
     - risk
     - inflation
     - other variables
financing such as depreciation, taxes etc. are widely recognized.

The process of saving and internal finance does not start as soon as the small business is established, although it is possible for some savings to be made at that early stage, depending on the ability, energy and character of the individual in charge (usually the owner). The owner obtains his initial finance (start-up capital) mainly from his own savings, together perhaps with a small legacy left to himself or his wife. He may, at that start-up stage or even later, be able to obtain help from others such as relatives or friends.

At this particular stage (start-up), the internal financing process cannot begin at all unless the newly formed business receives returns on its sales. When the business starts to receive its returns, which usually takes time at the initial stage, then the business cycle starts and cash begins to flow in and the process of internal financing starts.

Internal funds consist of amounts retained from past earnings and are closely analogous to the personal savings of private individuals. Bates, J (1964) argues that, "any income transferred to reserves over and above what is necessary for the maintenance intact of the net worth of earning capacity of the firm is retained profit" [8]. On the question of internal finance there are at least two factors to be discussed here: profit and depreciation.

2.1.1 - Profits

Profit has various functions, especially in the modern business enterprise, and there are various factors which increase the profitability of the firm. Profit can be used for payments rewards in the form of dividends; for special drawings or personal (owner) withdrawals; and as savings for the purpose of provision of funds in the form of retained profits.

The availability of this source of funds depends on many important factors. Some of these are directly related to the structure of the process by which profit arrives at its final stage, such as expenses (cost) and taxes. Other factors are related to the whole business structure and its goals, such as the policy on dividends distribution, growth and the development phases of the business.

Savings have always been one of the biggest factors that can affect the existence and growth in general and day-to-day operations in particular of the small business.

There are two sources of internal financing. The first source, as mentioned previously, is profit after tax which is generally a source of funds calculated annually (at least officially in financial statements to government representatives). The second source is cash flow movement and mobility.
Profit after tax is one of the essential sources of funds for a small business. It is much cheaper than other sources such as short-term loans or long-term loans, or indeed any other external source. Increases in the expenses, dividends and personal withdrawals always reduce the profit because the greater the expenses, the lower the profits. Such retained profits could be utilised for further growth of the business.

Retained profits are the amount remaining after costs, tax, and dividends have been deducted from revenues. This profit usually goes into equities to contribute to the capital of the firm. The importance of retained earnings and their role in financing the business internally is now clear. However, this depends on dividend policy rather than on tax rate because the dividend payments policy is formulated generally by the Directors and is subject to their control under the advice of the financial manager. The tax rate is, however, part of government policy and thus outside the control of the directors.

One important factor which affects profitability is gearing or leverage (as it is known in the U.S.A.). The gearing of a firm may be represented by the ratio of the amount payable annually on prior charges and fixed interest (i.e. the fixed payment on preference shares and long term debts) to the annual income for disposal.

<table>
<thead>
<tr>
<th>Table 2.3 Gearing Level in Company X.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Gearing</td>
</tr>
<tr>
<td>Capital Structure</td>
</tr>
<tr>
<td>Share Capital</td>
</tr>
<tr>
<td>Loan Capital (12%)</td>
</tr>
<tr>
<td>Total capital</td>
</tr>
<tr>
<td>Operating Profits</td>
</tr>
<tr>
<td>Less Interest on Loan</td>
</tr>
<tr>
<td>Net Profit</td>
</tr>
<tr>
<td>Return on Share</td>
</tr>
<tr>
<td>Capital</td>
</tr>
<tr>
<td>16.6 %</td>
</tr>
</tbody>
</table>

Source: Table is compiled from Barrow Collin., Financial Management for Small Business, P.60.

If no profits are generated, the owner and other shareholders or partners do not receive dividends. Debt capital is money borrowed by the business from outside sources: it puts both business and lender at risk. High gearing occurs when a business has a high proportion of external money compared with its internal money. Gearing matters less when profits are high than when they are low. The following table may
explain this more clearly.

From the table (2.4), we can see that the return on share capital (ROSC) grows from 16.6 to 30.7% by virtue of the changed gearing. If the interest on the loan is lower, the ROSC would be improved further by high gearing: the higher the interest the lower is the improvement in ROSC. In times of low interest, therefore, a business is advised to increase borrowing rather than raise more equity, i.e. money from shareholders. [10]

2.1.2 - Cash flow:

In the early stages of the firm as a whole, customers are few and each new one means a considerable increase in sales. However, an increase in sales means an increase in raw materials and perhaps an increase in wages and other expenses. These expenses have to be met before anything is sold. Until money comes in, the business has to find cash to meet its obligations (bills and other expenses). If there is no cash to meet day-to-day expenses the business is starved of finance and very often goes bankrupt.[11] Such is the outcome of overtrading.

Cash outflow includes labour costs, maintenance costs, raw material costs and various expenses associated with the production. Cash is used for small payments and receipts from customers. However, financial management is concerned more with large sums that will be received through the firm's current account at its bank. Two important points will be discussed concerning cash in the context of small business practice.

The first point is that there may well be a difference between the balance as shown in the cash book and the balance at the banks; this discrepancy is commonly referred to as the "float". A float occurs because of the time lapse between the writing of the cheque and the crediting of the cheque to the firm's bank account. There is a difference between the bank's ledger balance and the available cash balance. In such a case, small business firms may have to resort to overdraft facilities.

The second point concerns surplus of cash. Small businesses sometimes have substantial sums of money at their disposal. Surplus cash may be invested in fixed deposit accounts, building society accounts, stocks and shares.

From the above argument it can be concluded that a good technique which can be utilized concerning cash and disbursement, and by which cash availability can be maximized, is "playing the float". If the size of float can be estimated accurately, the balance can be reduced and the funds can be invested to earn a positive return [12]. Payment should be made on the date it is due and not before. Depreciation is not to be included either in these outflows, since it is a non-cash expense.

The illustration below shows that cashflows are very important since they represent
the information that the firm needs in order to judge the attractiveness of its products and the progress of the whole business in general.

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash inflow</td>
<td>-</td>
<td>30,000</td>
<td>50,000</td>
<td>75,000</td>
<td>125,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Cash outflow</td>
<td>20,000</td>
<td>25,000</td>
<td>40,000</td>
<td>60,000</td>
<td>75,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Net Cash</td>
<td>-20,000</td>
<td>5,000</td>
<td>10,000</td>
<td>15,000</td>
<td>50,000</td>
<td>50,000</td>
</tr>
</tbody>
</table>

The cash flow statement acts as a kind of warning sign for the firm highlighting periods of cash surplus and cash deficit that occur according to seasonal variations. Deficit is usually countered by recourse to an overdraft, which offsets the balance of cash. Absence of surplus suggests that the business is under-capitalized, and so more money has to be invested or introduced from other sources by borrowing or by taking on new partners who are prepared to put money into the business.

Cash budgeting is an important factor in the control of cash (in-out) movement. However, the more precise and accurate the information on cash flow is, the greater the accuracy with which business will know when the cash is received and when it will be paid. The purpose here is to forecast when the business's need for cash is at its greatest. Then it will be able to demonstrate what its funding requirements are, how much of the surplus can be invested and for how long.

2.1.3 - Depreciation:

Depreciation with regard to internal finance has two facets: firstly, it is an expense reducing profits otherwise available for distribution; secondly, it releases funds during the life of the asset which may be used for other purposes. It is much more likely to be used for the purchase of other revenue-earning assets. Thus it can be classed as a source of finance.

Depreciation provisions have an opportunity cost. Company law permits the company to distribute such provisions if it so wishes [13]. The opportunity cost may therefore be regarded as being the same as the opportunity cost of retained earnings [14].

Other policies, such as decreasing costs and expenses can prove most effective in the case of the small business. For example, the employment of family members and relatives is an effective way of cutting costs. The issue of how to cut down cost and expenses is too complicated to be discussed in a few lines. However, all these factors can, in the hands of a competent owner-manager, contribute to savings and provide more funds for investment and growth.

Savings and internal financing are only one of the ways of financing a business. The
method to which we now turn is short-term financing.

2.2 - SHORT-TERM FINANCING.

In the early stages of its life, a small business is financed mainly by the owner's initial capital (start-up capital) and other savings. As the business grows and becomes more successful the possibility of obtaining funds from other sources increases.

The first growth stage (see Exhibit 2.1), that of rapid growth, sees the firm begin to establish a good record and a favourable position in the market, which makes it possible to obtain bank credit and allows it to obtain term-loans for a 2-3 year period. The business becomes eligible for different types of financing, which can be termed short-term financing.

Small firms rely heavily on short-term financing in the form of various types of loans from banks, trade creditors, hire purchase companies and so on. Short-term finance frequently has the advantage of flexibility and may in some cases be easier to obtain than other forms of finance. However, it is often expensive and may carry a risk.

Many factors should be taken into consideration when a small business embarks on short-term borrowing, such as payment value, interest rates and borrowing maturity. With a hedging approach to financing, the borrowing and payment schedule for short-term financing is arranged to correspond to the expected swings in current assets [15]: maturity of debts, in relation to risks involved, highlights the many important factors which may affect payment, e.g. net cash flow variations, inflation levels and profitability. Taking these factors into account, it may be said that generally, "the longer the maturity schedule of a firm's debt in relation to its expected net cash flow, the lesser the risk."[16]. Moreover, short-term loans tend to lead to self-liquidation within less than a year; they are able to finance the requirements of the business for seasonal and temporary funds.

Within this general framework, we shall examine specific forms of short-term financing. First of all distinguish should be made between unsecured and secured short-term financing. After we have defined each of them, we shall examine the various types of short-term financing.

An unsecured short-term loan is a "debt which is backed by the general credit of the corporation and without pledge of any specific asset." [17]. A secured short-term loan is a "debt which is secured by pledge of specific assets - such as real estate or inventory." [18].

However, three groups will be examined as sources of financing small businesses, with the main focus being on banking facilities.
2.2.1 - Trade credit financing.

Trade credit is one of the principal sources of short-term funds for both small and big businesses, although it is much more important to a small business than to a big one. Suppliers are generally more liberal in extending credit than financial institutions are. Therefore, a small business should take advantage of this and rely extensively on trade credit.

There are three types of trade credit; open account, note payable, and trade acceptance. Open account is the most common, deriving its name from the fact that the buyer does not sign a formal debt instrument evidencing the amount owed to the seller. Other types are not so commonly used.

As a source of finance, the type carrying the lowest risk is cash before delivery. Dating also carries a low risk since the seller does not have to store any inventory. If the firm pays its bills within a certain number of days after the date of the invoice, trade credit becomes a built-in source of finance. As the firm increases its sales, its ability to pay its expenses increases and the sales provide part of the funds needed to finance the increase in production.

As a form of short-term financing, trade credit has several advantages. Its major advantage is its ready availability. Accounts payable represent a continuous form of credit; there is no need to arrange financing formally; as it is there at hand. There is no need to negotiate the payment policy with the supplier since the decision is entirely up to the firm. Trade credit is an easier and more flexible means of financing. The firm does not have to sign a note, pledge collateral or keep to a strict payment schedule stipulated on the note.

The advantages of using trade credit must be weighed against the cost; when all factors are considered this may be very high. If no cash discount is given, there is no explicit cost if the buyer pays the invoice during the discount period or during the net period. However, someone must bear the cost of trade credit for the use of borrowed funds over any length of time, however brief, is not free. The burden may fall on the supplier, the buyer, or both. The supplier is usually able to pass the cost on to the buyer in the form of higher prices.

Bates, J. (1964) points out some disadvantages of excessive trade credit. "If a firm gives too much in pursuit of sales (as is not uncommon in the early phases of a company's life), it is in danger of overtrading and also runs the risk of acquiring bad debts; if it receives too much credit it is acquiring short-term liabilities, frequently without the current assets with which to pay them off (i.e., it is becoming highly illiquid). Both of these are dangers to which small firms are more prone than large firms." [19]
An efficient owner-manager with a systematic control and financing of trade credit can make a significant contribution to the solution of some of the financial difficulties of the small firm.

Accounts receivable are an extremely important investment. Credit and collection policies may be the best yardstick against which good financial management may be examined, chiefly, because account receivables are considered a source of funds - cash or semi-cash - to finance future investment activities in the firm; at the same time it is associated with high risk when bad-debts losses are counted. One of the axioms in the business world is, "if you sell on credit you will increase sales, even to the same customers to whom you previously sold for cash only" [20]. This policy has great appeal for small business firms.

Financial managers/owners always want to be sure that the account will be paid. Studies show that small firms which exercise inadequate control over their credit extensions incur losses on bad debts often in excess of 5% of their credit sales. To minimise the risk of bad debts, one must adopt secure policies and credit means such as discount given, credit period, increasing the use of credit cards and checking the applicants' records with special references. A small firm which is able to collect its credit sales in full within a period of time which is less than, or within, the cycle of the working capital is considered to be on the road to success.

Accounts receivables turnover reveals the relationship of the credit sales made during the year with the average amount of accounts receivables carried on the books. It is computed as follows:

\[
\text{Accounts receivable turnover} = \frac{\text{Credit sales for the year}}{\text{Average accounts receivables}}
\]

2.2.2 - Money market credit.

Money-market instruments such as commercial papers are another source of financing. Because these notes are unsecured and are money-market instruments, only the more credit-worthy are able to use them as a source of short-term financing.

The main advantage of commercial papers as a source of financing is that they are generally cheaper than a short-term business loan from a commercial bank; they are a supplement to bank credit, which is why commercial paper dealers require borrowers to maintain lines of credit at banks in order to backstop the use of commercial papers, thus ensuring that they can be paid off.
2.2.3 - Short-term loans.

For the sake of convenience, business loans can be divided into two categories: unsecured loans and secured loans. Most finance companies do not offer unsecured loans simply because a borrower who deserves unsecured credit can borrow at a lower cost from a commercial bank. Banks now provide a wide variety of business loans tailored to the specific needs of the borrower in general. There is much evidence to show that such facilities are becoming extensively available to small businesses.

One survey reveals that in the six months from October 1981- April 1982, the clearing banks in England extended over a quarter of a million new facilities (including increases in existing facilities) to small firms, amounting to a total of about 2.8 billion Pounds. Clearing banks such as Lloyds are organised into 18 regions, supervised by regional managers who control some 2300 branches and sub-branches [21].

One of the most widely accepted classification of banking facilities as a source of financing small businesses has been reported by each of the following; Economic Advisory Group (1971), Collin, Barrows (1984), and Sara Williams (1987). Our discussion will cover a selection of the types which are common among banks as short-terms loans [22].

- Overdrafts
- Factoring and bill discounts
- Hire purchase and leasing
- Export finance.

2.2.3.1 - Overdrafts:

Bank overdrafts are the most common type of short-term finance for small businesses. It is one of the simplest ways of obtaining funds from banks. There is relatively little formality and it is still comparatively cheap, especially since repayment can be made at any time and interest is charged only on the debit balance outstanding. There is no lower limit either to the size of the firm or to the loan.

In terms of procedures and conditions, this type of short-term loan is very simple. The business owner negotiates the terms with his local bank manager. Sometimes "banks may be wary of taking stocks as a security for overdraft. The manager may insist on property or debtors as the only acceptable security"[23].

This short-term loan is taken in order to cover a temporary shortage of cash or to cover the start-up requirements if these are minimal. The costs of overdrafts are, relatively speaking, very little and of course the rate fluctuates. It is not advisable to use overdraft to finance long-term requirements such as buying a lease, a plant or equipment.
Overdrafts are usually used to finance working capital needs.

The overdraft is the source of finance which is always there to cover the shortage of cash during the tight cash flow cycle. Small business guide books offer advice on this matter which can be followed by the owner of a small business.

2.2.3.2 - Factoring and Bill Discount.

As a service and a source of finance, this can be particularly helpful for the small business. Factoring is an arrangement between the business and a factor in which the factor buys, (or the business sells), the business debts (accounts receivables) in return for an immediate cash payment.

By factoring, a firm frequently relieves itself of the expense of maintaining a credit department and making collections. After the required arrangements have been made, the factor takes over the day-to-day work of invoicing and sending out reminders and statements. Factoring arrangements are governed by a contract between the particular business and the factor; this can be cancelled only with prior notice of 30 to 60 days or according to the conditions of the signed contract.

As a source of funds, factoring automatically guarantees the business receivables. This eliminates the uncertainty associated with the collection cycle. Consequently, the cash flow of the firm can be predicted more accurately.

On the other hand, in return for bearing risks and servicing the receivables, and suffering loss through debts, the factor receives a commission. This is usually between 1/2 % and 3 1/2 % of the turnover, depending on the volume of work, the number of debtors, the average invoice amount and other related factors. Consequently this source of financing is significantly more expensive than the overdraft, but it does provide the business with faster cash inflow.[24]

Discount houses vary in their willingness to deal with small firms [25]. In Britain invoice discounting is a variation in factoring which is open to businesses with a net worth of 30,000 Pounds [26]. With this service only selected invoices are offered, unlike factoring where all debts are sold to the factor. Up to 75 % of the value of the invoice can be advanced but the business remains responsible for collecting the money from its customers.

This service is much more expensive than factoring. There are two basic reasons for that: firstly, interest must be paid on the cash advanced for the period between the date of the advance and the business's refunding the amount to the discount company; secondly, a factoring charge of between 1/4% and 3/4% has also to be paid. The major problem with this service is that if the customer (the business customer) does not pay
up, the business has to repay their advance to the discount house. This is probably the reason why "invoice discounting is relatively less important for the small firm" [27].

2.2.3.3 - Hire Purchase and Leasing:

It has been reported that up to 50% of small firms have at some point used leasing finance (Peacock, R.W.1977). This source of finance allows a small business to cover a wide range of assets such as plants, machinery and vehicles at reasonable expense. Hire purchase can be defined as follows:

"The business hires the equipment from a bank or a finance house (or any source of finance), for a fixed period and has the option to buy the asset at the end of the period for a nominal sum " [28].

Although leasing seems very similar to hire purchase, the main difference is that under a hire purchase agreement, ownership of the assets eventually passes to the user, while a leased asset remains the property of the lessor.

In this case, it is clear that hire purchase is an expensive form of finance chiefly because the premium interest-rate is above the hire purchase company's own base rate [29]. Thus leasing is usually more appropriate for small firms.

2.2.3.4 - Export Finance:

The clearing banks can play a major role in helping firms to finance their export sales to overseas markets. The services provided by banks include bills of exchange and documentary credits, and advice on the services available from the Export Credit Guarantee Department (ECGD) in the U.K. [30]. Finance can be made available to cover the whole cycle of production, shipment and payment by the overseas buyer. The basic ECGD policy is a comprehensive short-term guarantee and provides cover against the risk of non-payment, mainly due to "political" causes.

Concerning the ECGD in relation to small businesses, the impression of the Economic Advisory Group in its report No 4 is that "the greater proportion of small firm exports carry an ECGD guarantee and are financed by the London clearing banks". However, an explicit description of the ECGD can be found in the above mentioned report [31].

2.3 - LONG-TERM FINANCING:

Small business firms which are in the stage of rapid growth and are achieving some success need more funds to make further strategic progress, depending again on the degree of success already achieved and the expected (or planned) growth phases. Short-term funds may suffice temporarily but may provide insufficient amounts of
money for growth. Long-term loans are clearly the answer in this case.

According to the financial life-cycle, two stages of growth can be realised (growth II and III). In both stages a long-term loan is the important causal factor behind such growth. At these stages it is expected that a small business will be facing radical changes. Change may be made for different reasons.

Thus the need for financial growth is a potentially important motive for the formation of a company; however, many small firms are reluctant to become public companies because of the prohibitive costs involved.

There are different types of long-term finance available on the financial market, although not all of these are available to, or can be utilised by, small businesses. The different types reviewed in this section are:

- equity finance (venture capital)
- debentures (loan stock)
- ordinary shares
- second share market

2.3.1 - Equity Finance (venture capital):

The popularity of venture capital companies is increasing, particularly with regard to the advanced small business sector. However, it represents funds invested in a new enterprise. It is the hope of the investors that the company will grow after a period of time, 4-5 years; likewise venture capitalists hope to sell their stock for many times as much as they paid for it. With such a type of finance there are many risks involved and the probability of failure is high. On the other hand the expected profit is very high also. Failure may mean that the investor loses everything. [32]

There are several sources of venture capital; high-risk individuals are the traditional source. Bank holding companies and building societies may have venture capital groups or divisions for providing such finance or arranging services for whoever may require them [33].

In seeking finance the owner must be able to convince any of the various sources that his returns will offset the substantial risk involved. In short, venture capital is a source of finance associated with high risks, with loss as well as profit.

2.3.2 Debentures (loan stock):

The holder of a debenture of loan stock is a creditor of the company who has the right to a fixed annual return with the promise of repayment of a fixed money sum either after a set term or on the closure of the company [34].
Debentures may be secured or unsecured. Secured debentures are secured by a "floating" charge or a "fixed" charge. Unsecured debentures are usually described as unsecured loan stock. In the first case, no particular asset forms the security but the debenture holders have a prior claim on all the company's assets. In the second case, the security offered is usually in the form of the company's premises.

If the company does not pay the interest, a "Receiver for Debentures holders" is appointed usually to sell off the assets of the company and thus recoup both the capital sums lent to the company and also the unpaid interest. If the company, however, also has issue debentures secured by a fixed charge, the receiver for the debentures secured by a floating charge has no power to sell or dispose of any mortgage assets.

The cost of debentures is the discount rate which equates the net proceeds of the debenture issue with the present value of interest payment and capital payment, adjusted for the tax-deductibility of the interest payments [35].

Tax deductibility is one of the advantages which significantly reduces the cost of a debenture issue compared with an issue of preference share; this is because interest on debentures is deducted as a cost against tax, whereas dividends on preference shares are not. The great disadvantage of debentures is that they represent a charge on the company's assets and affect its short-term borrowing from banks and trade creditors.

However, for a small firm "it is not always easy to raise fixed interest finance, particularly in the form of debentures" [36]. Therefore, "only well-established and credit-worthy companies are able to issue debentures" [37].

There are other types of debentures such as "convertible" debentures but because they are not strictly relevant to our research they shall not be mentioned here.

2.3.3 - Preference Shares:

The raising of further capital for the purpose of growth is closely associated with the issue of shares. Preference shareholders become members of the company after buying company shares. They rank after debentures in their rights to income and capital but before ordinary, or deferred ordinary shareholders.

On the question of the source of financing, both small and big businesses prefer to issue preference shares, since they provide more money to contribute to the capital than ordinary shares. The cost of preference shares is closely related to the stated dividend; thus preference shares dividends are an appropriation of, rather than a charge against, profits and as such are not allowed as a reduction from corporation tax payable.
2.3.4 - Ordinary Shares:

Ordinary shares are the second type of shares which the firm may issue. These are also known as "common stock" (in the U.S.A.), or "equity" shares. They carry a voting power proportionate to the number of shares and receive their reward in the form of a dividend paid out of the income of the firm after tax and prior charge. Ordinary shareholders have no right to a fixed return but they do have a right to any profit remaining after all senior claims have been met. However, there is no guarantee that all of the remaining profits will be distributed among the ordinary shareholders; it is usual in fact for some of the remaining profits to be retained in the company.

When dividends are not paid, the implication is that the company is reinvesting its earnings on a profitable project thus pushing up the value of the shares to compensate for the non-payment of the dividend.

Ordinary shares are generally cheaper than preference shares. Comparatively speaking then, the ordinary share usually provides less funds (financing) than the preference share does. The cost of ordinary share financing differs from debt financing in that there is no fixed cash outlay involved other than the actual cost of issue.

This type of long term financing is not widespread among small businesses. Restrictions may come from the firm itself and its ability to go public and there are other factors such as size, generation of profit and types of production. Other restrictions may come from the market, such as competition from large businesses. Finally the market in which these shares are circulated is an important factor which may greatly affect the financing of the company by increasing or decreasing the price of the shares.

2.3.5 - Second Share Market:

Small businesses face many difficulties and obstacles when using the financial market. These obstacles are caused mainly by financial institutions such as banks. Santomero, A. (1984), Pettit, R. and McConnell, J. (1984) in their studies noticed that banks have been shown to "discriminate" against some types of smaller firms by the implementation of prohibitive usury laws or the practice of uniform pricing for loan services.

Many small businesses have been prevented from going public in the past by regulations which govern the listing and conduct of public companies. These regulations are designed to protect the investor (H.D.Griffiths, 1986) [38]. One way of permitting a small business to raise funds on the public market is to establish a second share market. This is a new trend which, as Hutchinson (1984) puts it, "allows smaller companies to raise capital and create an investment pipeline for venture capitals" [39].
Although this method has not yet gathered momentum, it is gradually becoming more popular and achieving a certain amount of success in the market. An unlisted securities market (U S M) was established in Britain in November, 1980. In the United States an over-the-counter (OTC) market has been operating for more than fifteen years. It indicates measure of its success. Similar developments have taken place in France (Deuxieme Marche), the Netherlands, Germany, and, since about 1970, in Australia too.

Very little is known about this trend in the less developed and developing countries. Presumably, this source of financing is not generally available for small businesses for a variety of reasons, such as the inability of small businesses to turn to the market in complete confidence or the experience of the finance market in backing small businesses in competition with bigger enterprises.

2.4 WORLD BANK LENDING TO SMALL FIRMS.

Discussions in the World Bank during the 1975-77 period focused on how the World Bank would help SMEs (Small and Medium Enterprises). Although little specific effort was made to direct World Bank lending to smaller enterprises prior to 1975, many small firms obtained some of the finance through the DFC's (Development Finance Companies) supported by the World Bank. However, following the new initiative, from July 1977 until June 1984, the World Bank lent US$ 1.97 billion in 63 projects to support SMEs in 35 countries.[40]

2.4.1 Objectives of the World Bank Programmes.

The World Bank lending programme was initiated after taking into consideration certain desirable economic and social objectives. The following are the most commonly stated objectives.

1 - Employment was the primary objective of the programme so that more job opportunities can be created in view of growing population and widespread poverty throughout the world.

2 - Entrepreneurship talent is scarce in the developing world so helping small firms could effectively develop this talent especially among workers who are skilled in the manufacturing process but weak in management and marketing.

3 - The programme also aims towards a greater decentralization of industry. The small firms are able to function easily in various conditions and locations with a different degree of reliance on the infrastructural facilities.

4 - It is hoped that this programme will enable the small firms to obtain foreign
exchange by exporting some of their products, and to enable them to import required raw materials to produce high quality products.

5 - Small firms in their first years depend heavily on personal savings and the financing of their owners and the latter's family. However, utilising the credit available through the World Bank would both complement and mobilize personal and family savings.

6 - The World Bank programme hopes that a simple and appropriate technology can be skillfully adopted by small firms.

7 - Small firms will be directed to contribute towards the development of indigenous materials and thereby create more job facilities.

8 - Assistance to small firms ultimately helps other firms in industrial development through the linkage between small and big firms together as each supplies the other with inputs. [41]

It was important for the World Bank to understand the conditions under which small firms operate so that it can intervene effectively. There was at least three sets of underlying conditions that would justify some form of intervention.

i) Price distortions: the prices of labour, capital and foreign exchange are distorted in many developing countries. These distortions are caused by such policies as interest rate ceilings, investment incentives, public sector lending, trade barriers, overvalued currency exchange and relatively cheap labour which affects small firms. Therefore, it is better to correct such policies since intervention by financial markets are likely to have only a limited impact on real sector distortions. ii) Market failure is another factor for intervention. Most small firms bear the risk of failure and they are thus deterred from making investment. However, a lending programme can correct market failure by helping small firms based on well designed programme so that the assistance they get does not shield them from the discipline of the market. iii) Income inequality is a major problem in many developing countries. Lending to small firms can be seen as schemes to reduce this gap. Other policies such as taxation and welfare programme are very effective in this direction. However, if these distortions are reduced, then there will be less need to assist small firms in order to offset the tendencies of larger firms to adopt superficial capital intensive methods.

2.4.2 - The Impact of the World Bank Lending Programme.

In the process of achieving its objectives, the World Bank provided several types of financial and non-financial facilities in many countries through its various projects. The review of these facilities will show the extent of their success.
Several World Bank SSE loans have resulted in higher costs per job than originally projected by the Bank's appraisal, mainly those financed by the DFC (Development Finance Companies). One explanation is that the low skill level in these countries encourages investment in automatic machinery, rather than relying on available skills. However, in most cases, the actual number and cost per job created was different from the estimates in project appraisals.

The DBP (Development Bank Project) reported that there was in practice 31% more employment at about 15% lower cost than that projected in subloan applications. In Morocco the 214 subprojects financed generated 8500 direct jobs which is substantially higher than the 5000 estimated when the Moroccan project was appraised.

Different results were obtained in the entrepreneurship area. Analysis shows that less than 10% of the subprojects in Colombia, Mexico and IGLF (Industrial Guarantee and loan Fund) of the Philippines loan, involved new enterprise development. In contrast, more than 50% of the subprojects in Bangladesh, Camerons, Kenya and Morocco involved the establishment of new enterprises.

It was found that the lending from the World Bank to small firms shows that merely giving credit to subprojects outside metropolitan centres is not sufficient to insure industrial decentralization: Such a policy did not in fact result in subprojects being established away from the overcrowded regions. Exception were in Mexico, Sri Lanka and Columbia. Unless efforts are made to decentralize government banking and technical services, there will be a serious delay to widen geographical distribution of small firms.

It is evident that more long-term programming is needed to achieve a greater degree of the self-financing of the lending schemes of small firms. Moreover, the degree of financial dependence of some institutions on the World Bank as a continuous source of funds, (such as in Colombia and Egypt), should be a cause of concern.

The World Bank has initiated discussions with governments on how to improve the general policy framework for small firms especially those governing foreign trade, the encouragement of investment and the regulation of environment and credit policies. [42]

Financing arrangements made by the World Bank were through intermediary financial institutions such as DFC, commercial banks and promotional agencies. Although they financed small firms, the DFCs were centrally located and had few branches. The DFCs lacked resources for working capital - the major financial requirement of small firms.

Compared to the DFCs, the commercial banks provide more financial services to small firms and, possessing a large network and a greater variety of financial resources,
they respond more quickly to the need of small firms. They are also more experienced in debt collection. However, experience has shown that the commercial banks are reluctant to have specialized staff who could assist small firms in the preparation of their projects. Commercial banks prefer to rely on the creditworthiness of a client and on collateral rather than on project appraisal and are less likely to engage in extensive supervision of a client, as long as repayment records are satisfactory.

The World Bank is still facing the challenge of overcoming the reluctance of commercial banks to participate in lending programmes to SSE in any form. Levitsky. J. (1986), writes that "various approaches will be needed including offering increased spreads for the lending institution, risk sharing or guarantee schemes where feasible, and assistance by promotional agencies in project preparation and technical assistance to sub-borrowers to improve operations and sub-loan repayment capacity". [43]

The promotional agencies inevitably become paramount and result in over-optimistic projections. These institutions attempts to combine, within a single agency, the tasks of promoting new small firms and providing the necessary technical and financial assistance for subproject implementation. One of the weaknesses of such agencies is their continuous dependence on government support which makes them subject to, and victims of, abrupt government change. Such institutions face considerable difficulties in becoming reliable financial intermediaries.

Rediscounting programmes proved to be an attractive way for commercial banks to increase their loans portfolios without using their own resources. Jointly with Development banks and under their supervision, commercial banks were encouraged to make loans available to small firms to ensure that loans were made in keeping with the programme's objectives and the eligibility criteria. In contrast, in some countries like Portugal commercial banks refused the supervision and control of the development bank. Only in Morocco did the development bank play the role of a rediscounting agency, which worked well.

Besides the difficulty of ensuring repayment of loans, rediscounting schemes tend to create an overdependence by commercial banks on special funding through a SSE lending and make little use of the central bank's own resources for this purpose.

To overcome the risk aversion of commercial banks some countries have used guarantee mechanism. The first project with guarantee schemes was in the Philippines organised by the Industrial Guarantee Loan Fund (IGLF) which guaranteed 60% of the loans refinanced through commercial banks and other financing institutions. Guarantee schemes were also tried in Bank projects in Jamaica, Camerons, Sri Lanka, Morocco and Portugal, although in Jamaica collateral requirements were still 100 -130 %. The scheme achieved success in several countries such as in Sri Lanka, Indonesia, Portugal and Korea but there was evidence of a lack of confidence in claims for repayment in

32
Jamaica and Morocco.

Guarantee schemes of a limited nature were introduced recently in Colombia, Peru and Mexico to increase lending facilities to the very small firms. There is little evidence, however, that they have produced any increase in commercial bank lending to small firms.

Therefore, it is important for governments in planning a guarantee scheme to make sure that enough funding and staff are available to handle claims efficiently and that the scheme represents a binding commitment. They also need to maintain incentives for collection.

The World Bank has tried very hard to keep interest rates to the ultimate borrowers at a positive level in real terms in relation to the inflation rate and close to the prevailing commercial bank lending rates. Agreements were reached with governments that the interest rates would be adjusted in accordance with changes in the commercial rates. In many cases, due to high inflation rates and government policies favouring subsidization, the interest rates did not remain positive in real terms over the duration of the project. On some occasions they fell below deposit rates.

In several countries such as Indonesia, Jamaica and Colombia, there is some evidence that the subsidized rates of subprojects encouraged investment in different forms. In countries like Mexico and Indonesia, heavily subsidized rates led to distortion in the selection of beneficiaries and sources of funds.

As a result the World Bank has not succeeded completely in achieving positive real interest rates in all cases, but there has been success in narrowing the gap and reducing subsidies. Other factors such as the speed of loan disbursement, the duration of grace and repayment periods, and collateral requirements were at least as important for potential small borrowers as interest rates.

All evidence points to the fact that small firms are neither able nor willing to assume the foreign exchange risk, knowing that subloans are made in local currency. In addition to that, the maturity of the loan on average for all projects was in the range of 4 to 6 years, while the World Bank expected it to be between 7 and 15 years. The short duration of loans contributed to arrears rising from cash flow problems and restricted the use of bank loans for productive fixed capital investments which would have required longer pay back periods. A long term loan would have a grace period of 2 - 3 years; in reality the grace period given in many cases was only one year. Such factors affected the debt servicing capacity of the subborrowers as well as the cash flow.
2.4.3 - Non-financial Assistance:

In addition to financial assistance, the World Bank agreed to provide other needed technical and managerial assistance. The World Bank offered foreign advisers, specialized service centres in industrial states, extension services, public and financial institutions.

The World Bank has found recruitment of consultants for longer assignments difficult, time-consuming and highly expensive, and does not have any comparative advantage in providing foreign advisors to help small firms. In many cases advisors could not cope with the new environment and owners of small firms did not benefit even after the projects were finished.

Established specialized centres were delayed several years and costly investments were under-utilized. Sadly there were few cases where technical assistance arrangements achieved great success. In Mexico and Portugal, however, with the assistance of the regional office of PAI (Programa Apoyo Integral) and other financial institutions they achieved some success as referral centres for directing small firms with problems to various specialized and financial institutions and developed a good relationship with banks.

There is some evidence that most of the Bank's technical assistance programme took much longer to implement than the credit programme they were supposed to support. It was difficult to achieve any coordination between the lending and technical assistance aspects of the programme. This might lead us to the conclusion that there is no single design suitable for providing technical assistance to small firms in all countries.

2.5 - OTHER SOURCES OF FINANCE.

Obviously, sources of financing are not the same everywhere. They vary from society to society, and region to region, according to the particular political system or economic policy which a government believes in and is trying to promote.

It is difficult to find a yardstick by which this trend can be measured and tested. Nevertheless, we shall review here a few other sources as they are practiced in various countries regardless of the system of government.

Firstly, government-sponsored schemes. Most governments now sponsor quite a wide range of capital schemes which are already designed to encourage the growth of small businesses. Such schemes may be open to all businesses or only certain types of industry. However, not all businesses which are eligible can expect to draw on this source of finance, especially in the developing and less developed countries. These
schemes are much more sophisticated in the industrial world. The Small Business Loan Guarantee Scheme was introduced in Britain in 1981. Under the scheme the government guarantees repayment of 80% of medium-term (2-7 years) loans up to 75,000 Pounds. The commercial banks appraise applications according to their normal procedure, and have only to submit a simple, one-page form to the government department. This department gives its approval within ten days at the most, and guarantees 80% of the loan in return for a 3% fee which is paid by the borrower. The same policy is followed in the United States of America by the Small Business Administration (SBA). In some developing countries, like the Philippines and India for example, the central banks operate a special "small business window", from which lenders can borrow money to be lent to small businesses at a concessional rate. [44]

Secondly, development banks. The government may introduce a development bank under its own control and supervision. Through this bank the small business owner may receive financial help in the form of a medium or long-term loan. Development banks are based on sectoral activities such as agriculture, tourism and industry.

Other sources of finance to small businesses are given by local authorities (municipalities and councils), in which grants and loans are given based on "Assisted Areas" or other considerations. With the cooperation of governments, the United Nations agencies have set up special programmes for small businesses, such as the ILO office which offers special services for small-scale industries [45].

Finally, small businesses still suffer from lack of finance for many different reasons, both internal and external. The following section will discuss the underlying causes.

2.6 - SMALL BUSINESS FINANCING PROBLEMS.

Finance is a problem for all businesses, regardless of their size. However, the problem of finance is almost always the most pressing problem that small firms will face.

The Wilson Committee Report (1977) states that, "... many of the financial difficulties of small firms are caused by other factors than the way in which the financial institutions operate". Many such committees throughout the world have been formed to investigate finance problems of small businesses.

Sources of financing problems can be classified as internal or external, bearing in mind that both sources are interchangeable and interrelated. However, the source of the problem may indicate the problem itself and vice verse.

2.6.1 - Internal Problems

The "internal source" of financial problems is that cause which can be located
Causes can be; (i) the entrepreneur/owner, (ii) the management, (iii) the type of company (industry) and (iv) the size of the company.

As stated above, the entrepreneur or the owner-manager could be a major source of problems. His level of business education may be low or his decision-making power may be at fault. If he is the only one who takes the financial decisions in the firm, only a limited knowledge of finance and its techniques on his part could cause very serious problems and may even lead to the collapse of the business; this hypothesis highlights the role of management in the firm specifically the manager's qualifications, experience, level of educational, and so forth.

The type or nature of the company and the industry to which it belongs may be another source of financial problems. The market of this industry itself may also be a source of problems. If the number of firms linked with a particulars industry exceeds the absorption capacity of the market, it may cause a large number of small businesses to fail. Size may prevent expansion of the firm which may thus incur high expenses. For example, the cost of producing the goods of a smaller firm may be higher than that of other firms who are producing similar goods, the result being that the smaller firm is unable to market its product at competitive prices. Consequently, financial problems will appear and even threaten the firm's existence.

It is clear that small firms face difficulties in obtaining capital. In Middle Eastern countries the owner must rely on his personal savings or on the largesse of his friends which is no longer a good source of finance in the west.

In recognition of this fact, the government of the U.S.A. has set up the Small Business Administration (SBA) [46]. In the developing countries this problem had previously been noticed. Harper (1984) saw the effect it had on businesses, and wrote: "closer investigation reveals that substantial sums lie unused in unproductive assets". He also argues that:

"... although capital scarcity is indeed a problem for the owners of some of these enterprises, it forces them to employ people rather than machinery, and thus to contribute more effectively to alleviating the universal problem of unemployment" [47].

The capital problem can lead us to another financial problem, that of cash flow and its management. Argenti, F. (1976), Dewhurst, J. and Burns, P. (1983) and Storey, D. et. al (1987) note that most small businesses that are "stillborn" go into bankruptcy because they have no cash-flow plans and no cost control.

Dewhurst, J. and Burns, P. (1983) noticed that only 30% of their bankruptcy samples had sufficient capital. Cash investment alone can be recouped for launching new products and covering expenses for the short-run period of activities [48]. That is why
cash flow planning is so important.

2.6.2 - External Problems:

Many financial problems are external rather than internal and related to causes which are beyond the firm's control. The cost of bank loans and inflation are but two examples, more details concerning which will be discussed below.

Banks are the most highly responsive source among financial institutions in financing businesses. Therefore, some small business financing is expected to come from banks who derive benefits from them. Some say that a small business pays too much, while others say that the rates are very fair. Between these two viewpoints, writers on small-and big-business finance have noticed what is commonly called a "gap". This has been called the "credit gap", the "long-term financing gap", the "small business finance gap", and various other names.

According to one report,

"A finance gap for a small business is believed to exist if the cost of money to small enterprises exceeds the cost of the same funds to large concerns" [49].

If this is so, then writers and small businesses are right to complain against it. If not, then any complaint sounds illogical and would be, as explained by Major (1980), an "artificial" or information gap on the part of a small business [50].

Nevertheless, this does not mean that the gap does or does not exist. It may exist in one country and not in another. For example, in the UK in 1931, the Macmillan Committee [51] reported that small businesses did suffer from a shortage of long-term capital funding. Several attempts have been made by various committees and writers also have expressed their concern about this gap [52]. Until 1971 the information gap was obviously still a problem. For this reason the Bolton Committee Report recommended the establishment of the Small Firms Advisory Bureaux.

However, a study by the Economist Advisory Group (1971) reported that;

"...there is no single major defect in financial facilities for small firms that call for a radical action. In short, there is no "Bolton gap".

The study committee found that:

"...small firms are at a disadvantage relative to large firms in a number of significant ways. In particular, they are hit hard by credit restriction and taxation; they are faced with investigation and other costs that are proportionally higher for small loans" [53]

If we consider Watson's (1986) definition of the gap, we may argue, in opposition to the EAG central conclusion, that there is a gap, be it called the "Bolton gap", the
"finance gap" or the "information gap" [54].

The gap is not peculiar to Britain: it has been clearly recognized in many other countries such as the United States of America and Australia. For instance, Peacock (1981) asserts that a finance gap exists in Australia while views on the subject in the United States of America tend to vary. Nevertheless, some writers do not deny the gap itself as much as they deny the discrimination against small borrowers, mainly by banks.

In fact as far as the fundamentals of capitalism are concerned, it can be said that such a gap is found naturally in financial markets where it is believed that capital, like all other resources, is scarce. Consequently the market is unable to supply to all entrepreneurs, especially to small business borrowers. This view is supported by most economists, who agree with the bankers that a small business loan should generally bear a higher interest rate than a big business loan.

In response to this view, banks in Britain expressed enthusiasm for small businesses by arguing that:

"...if the government wanted to alleviate the position of the small firm, the best thing it could do would be to abolish the ceiling on banks advances" [55].

Friends, relatives, and what are known as "informal credit" or "loan sharks" as mentioned by Harper (1984) are informal sources of finance. The role of the latter is an important and competitive one, which aims to make life easier for their customers (borrowers).

"In one part of Megetan, a town in East Java, almost every house is occupied by an individual shoemaker. They take their day's production of two or three pairs of shoes to the money lender every evening and collect sufficient materials for the following day's work. The money lender, who is also the supplier and customer, pays each shoemaker a small sum for each pair of shoes he delivers." [56].

This demonstrates the role and importance of those money lenders who, to a great extent create no gap, but rather serve those very small businesses who have no chance whatsoever of getting their business financed by banks or government schemes, etc.

The reasons why small enterprises in such countries are unable to get money from financing institutions are many. They include: the poor relationship between the small business and the financing institutions; the high cost of capital in relation to profit generated; and difficulties in risk avoidance. Most of these problems are unavoidable yet they lessen the small business's chances of obtaining financial backing even when there is no indication of the firm itself not being a viable concern.
A good indicator of the problems of the small business is the number of loan applications which are turned down. This in fact shows the two sides of the coin: the small business problem itself and the conditions imposed upon the borrower by the bank (whatever institution is providing the funds).

In the U.S.A. during the period 1961-1966, some 83,292 small businesses applied for loans from the SBA. 59% of them were accepted and the remaining 41% were either rejected or withdrawn. The reason for such a high failure rate could be, as the agency itself asserted, a result of the inability of the applicants to demonstrate sustained earning power or the insufficiency of collateral and undercapitalization of the business venture.

In order to make credit available to small businesses which apply for finance, banks require that a record of successful operations be presented. This immediately dashes the hope of a great number of small businesses. As Murphy says, "that is where venture capital is needed."[57].

An attempt has been made by the Export Advisory Group (EAG) to list, in order of importance the reasons why banks refuse finance to small firms. They are as follows:

1. Credit restraints- a non-ability to finance, either the firm or project not falling within the exempted categories as defined by the Monetary Authorities. Although in many cases this must be genuine, it is also clear that credit restraint sometimes provides bankers with a good excuse to refuse finance that they would have not given any way.

2. The purpose of the loan or overdraft is unsuitable for bank finance, either because it is medium-term or too speculative.

3. The bank does not have confidence in the management ability of the proprietor and manager of the firm, especially in relation to financial control.

4. The firm is undercapitalised and overtrading and the proprietor has too small a stake in the business.

5. The firm is asking for too much and the bank would be too heavily committed to the firm. Sometimes in such cases the bank is prepared to be part of a package deal involving other institutions and will often be of assistance in arranging the package.

6. The accounts are out of date and inadequate.

7. There is too heavy a reliance on a small range of uncertain products or a small number of possibly unreliable customers.

8. Insufficient security is offered [58].

Some other sources may cause financial problems for small businesses, e.g. inflation, taxes, and the prevailing market conditions.

Inflation is one of the chief factors that can affect the small firm financial's position. Therefore any small business must take this factor into consideration for reasons concerning the value of money or its purchasing power, stocks and prices etc.
As inflation rises, the value of money falls and prices increase. In this event, the money lender consider variations such as the future value of his money or its future purchasing power. Consequently, the rate of interest is expected to rise. If the rate is fixed and inflation goes up, the interest that the business will pay will be low compared with future rates, and vice versa. Furthermore, high rates of inflation may lead to high taxes caused by "unreal" profit, such as was seen in Britain in the 1970's. Stocks were valued at substantially higher prices from one year to the next [59].

Responding to price rises, production costs will automatically increase because of the higher price of raw materials. This creates more serious financial problems for the small business and will affect its financial structure. Consequently, cash estimates for future activities will be difficult to make.

Taxes, as mentioned earlier, are one of the internal source of expenses for the small business. The fact is that the more tax that is paid, the more expense there is, and the less financing throughout retained earning. Tax exemptions, especially on retained profits, help the small business to be more self-financing (as discussed earlier in this chapter).

The size of the market in which the company operates is another important factor which may affect the small business. Factors considered important for the small business are: the size of the market; marketing capacity; number of competitive firms in relation to the market capacity; prices of the competitive products and their quality; and the turnover period. All businesses are affected by these factors. For instance, any decrease in sales (which will be reflected in sales revenues) may be attributed to competition of goods from rival companies, whether big or small. Consequently, insufficient cash may jeopardize daily business activities, causing further financial problems and affecting the whole business.

2.7 - RISK ANALYSIS.

In recent years, the high degree of uncertainty in global markets has meant that there is much greater emphasis on risk. Uncertainties are caused by many factors such as inflation, high interest rates and tax changes. These interrelated factors form complex financial problems in the market and often have serious consequences. For instance, the highly fluctuating rate of inflation has had a great influence not only on financial decision making in the firm, but on the market as a whole, which in turn has an affect on the entire world market. The fluctuating behavior of inflation has caused interest rates to rise dramatically prompting lenders to avoid long-term fixed-rate loans in favour of variable-rate loans, the return on which are responsive to change in inflation. Companies began to face many difficulties and predicting future trends became a tricky job.
Any environment is full of events with different possible outcomes. Some events are known; others are not. The businessman about to make an investment decision is worried mainly about unknown events and the variability of possible returns on his investment. Risk is involved. Harrison, P. (1975) defines risk as follows:

"A common state or condition in decision making characterized by the possession of incomplete information related to a probabilistic outcome."[60]

Risk, however, is created by the combination of a wide range of events. These include acts of God (earthquakes, floods, storms and hurricanes); acts of government (tariffs, nationalization, privatization); of competitors; of technological innovations; of market conditions; of labour conditions, etc.

Generally, risk estimation depends on reliable information being available. The small business is more likely to avoid risk by substituting one asset for another. The limited choices in the small business manager's portfolio mean that although risk cannot be diversified, it can sometimes be avoided and eliminated.

The decision maker in a small or big firm naturally worries about the possible outcome of his proposal or project. Expected returns derived from past experience, or from any other information or probability distribution of possible returns, are important factors which throw light on possible outcomes. Thus risk can be defined as the possibility that the actual return from a certain investment will deviate from the expected return. The greater the magnitude of deviation and the greater the probability of its occurrence, the greater is the risk of investment.[60] The following figures can explain more about risk.

Figure 2.3 shows that project B carries a greater risk than project A, because the actual return of project B has a greater likelihood of deviating from its expected return than that of project A. How can we understand this more simply and measure it technically? The following example may help.

Let us suppose that the possible returns on investment in a particular common stock for one year are as follows:

<table>
<thead>
<tr>
<th>Probability Distribution of Possible Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probability: .15 .15 .20 .35 .15 Possible Return: -.20 -.10 .10 .15 .20</td>
</tr>
</tbody>
</table>

The probability distribution can be represented by the two parameters: expected value of returns and standard deviation. The expected value of return is the possible return multiplied by the probability of this outcome. For the whole range of events, it is the summation of all. Or,
\[ R = R_i \pi \]

Where \( R_i \) is the expected value of return for the whole project.

\( R \) is the expected return of one possible outcome (event).

\( \pi \) is the probability of that possible outcome (event).

The standard deviation is;

\[ \sigma = (R_i - R)^2 \pi \]

Where \( \sigma \) is (Sigma) standard deviation.

and \( \sigma \) is the variance of the distribution.

In our example

\[ R = -0.20(0.15) -0.10(0.15) + 0.10(0.20) + 0.15(0.35) + 0.20(0.15) = 5.75 \text{ percent}. \]

The standard deviation

\[ \sigma = [(-0.20 -5.75)^2 0.15 + (-0.10 - 5.75)^2 0.15 + (0.10 - 5.75)^2 0.20 + (0.20 - 5.75)^2 0.15]^{1/2} = 208 \]

Fig 2.3 Expected Return From Project A & B

The dispersion of the probability distribution of possible returns reflects in fact the degree of the investors' uncertainty. A distribution with a small standard deviation relative to its expected value indicates little dispersion and a high degree of confidence in the outcome. Thus, the high degree of uncertainty is associated with distribution, with large standard deviation relative to its expected value.

Many types of risk, systematic and unsystematic, are recognized by writers such as Van Horn, J. (1986), and Franks, J. and Broyles, J. E. (1979), while Paish, F.W., (1965) mentions three other types of risk: the physical, the technical, and the economic.[62]

Most of these risks are similar in content. The first two types will be taken into consideration here and clearly defined. Systematic risk is that unavoidable risk which affects all investors. This risk cannot be diversified by investing in more projects (or assets or stocks), because it depends on factors such as changes in the economy and in the political environment - inflation, deficit in government accounts and so on - which affect all investments. Unsystematic risks are those which can be avoided and diversified, they are unique to a particular company, and do not depend on economic or political factors which affect investments in a systematic manner. One example of
unsystematic risk is the appearance of a new competitor who is trying to produce, and market, essentially the same product. However, not all the risks involved can be reduced and diversified because the total risk is the combination of the two types of risk. In other words;

\[
\text{Total risk} = \text{Systematic risk} + \text{Unsystematic risk}.
\]

Risks may vary according to the size of the firm, the amount of the invested capital, employment, and the combination of investment and financing structures. To be specific, a small firm is characteristically less able to absorb losses from risks. It is therefore important that every small firm should understand the risks to which it is subject.

Whatever the size of the business it is important to know which type of risk the business is facing; as mentioned previously, all businesses face at least systematic risks. Any investment decision must take risk into consideration in order to evaluate and choose projects or proposals.

2.8 - MEASURING THE PERFORMANCE OF BUSINESSES

The measurement of business performance is not a new topic. Developments in the theory of finance and financial management have gone hand-in-hand with developments in techniques of business control and performance measurements, and in the way such techniques should be used. However, there is a clear absence of a comprehensive performance model that can show the important variables that can be measured and give a satisfactory assessment of the business performance. The existence of such a model would definitely leave no gap in the performance structure.

New trends and techniques have recently emerged in this field, with different models and approaches employed for measuring business performance. Two such approaches are the quantitative and the qualitative. Although qualitative data can be quantified, few researchers have relied on this approach to determine the effect of qualitative variables on business performance. There are several reasons for this, but the nature of each approach itself is the predominant influence. For example, the quantitative approach makes it very easy to understand variables usually expressed in numbers such as sales, profits or assets. However, nominal variables such as educational level, administrative level, degree of span of control, or degree of concentration of the decision making are not so easily measured and analyzed. Despite the fact that statisticians have developed techniques which have resulted in several models for both approaches, the quantitative approach, comparatively speaking, has been the more attractive approach in the field of finance since it is easier to build and develop models by using mathematical equations.

Storey, D. et. al. (1987) says:
"most studies concerned with aspects of company performance have generally relied solely upon financial ratios, not merely to provide measures of indicators of performance, but also as predictors of the future performance of the companies studied. This is understandable in terms of data availability, costs, objectivity and previous empirical success."[63]

Writers such as Horrigan J. O., (1968) argue that we are much nearer the "theory of financial ratios" [64] In his study of financial ratios, Barnes, P. (1989) refers to at least 80 researchers who have completed over 100 research works on financial ratios.[65] Horrigan, J.O., (1966) uses correlation analysis. Beaver, W.H (1966) and Altman, E.I (1968) used financial ratios as predictors of business failure. Altman developed the multivariate model instead of the univariate by using the multiple discriminate analysis (MDA) popularized as the Z-Score model; later in 1977 he developed the "Zeta - analysis" model. Rege (1984) used financial ratios to identify characteristics of takeover targets. So, financial ratios have been used as major inputs for advanced statistical models to forecast many kinds of business events and to identify financial and other characteristics and mainly financial problems and can hardly be overstated. [66]

In the field of small firms, the limited extent of the literature has minimized the opportunity of developing a possible comprehensive performance model. Therefore, there is no clear picture for the direction of measuring the performance of small firms. However, there is some evidence to say that recent studies in this particular area have followed conventional parameters without breaking new ground, except for the study of Storey, D. et. al. (1987) as several variables and new techniques were used.


Bates, J. (1964) used in his study five variables: size of assets, growth of employment, sales turnover, ratio of turnover on assets and the sales turnover per employee. The techniques used for measuring these variables were ratio analysis and percentage growth. Gibb, A. and Scott, M.(1982) used several variables such as: return on capital liquidity ratio, gearing ratio, net profit, net worth, gross and net contribution, product and departmental contribution and the value added. It is clear that the predominant technique used in this study was the ratio analysis [70] However, in the study of Chee Peng Lim (1986) the growth of sales was the only variable of measuring the performance of Malaysian small- scale firms. [71]

The study of Storey, D, et. al. (1987) can be considered as the most significant in the area of measuring the performance of small - scale firms. Several variables covering different sides of the firm structure were used. The number of employees, assets (net assets and total assets), pre-tax profit and growth were all used as a measure of size.
The techniques used for these variables to measure the business performance were simple correlation, regression analysis, multiple regression analysis, multiple discriminate analysis, factor analysis and growth rate. The age of the business was also regressed with other variables and is important in order to understand the business performance. Management of the firm, represented by the directors/owners, was another important variable, but it was treated as a qualitative variable. In this sense the director's/owner's profession, experience, education and number were covered.

The study of Chew Soon Beng of small-scale firms used four major variables to measure business performance: rate of output, rate of return on capital, value added and the directors of the business. The directors/owners of the business were examined in terms of their background, age, education, know-how and training.

This study will try to cover several areas in the firm which are believed sufficient to give an adequate view of the performance of the business. These areas cover the working power, management, structure of the business (organizational and financial structure), finance, profit, growth and other external variables such as risk and the effect of war. The effect of war is applied in the case of Lebanon or to any other country under similar conditions. Issues such as the management team, size, growth and age are given special attention.

Fig 2.4 shows the components of the performance model in a business firm. To simplify the understanding of the structure of the performance model, each of the individual parameters can be broken down into very specific variables. The management team of the small firm (or big firm) can be tested in terms of the age of the manager/owner, educational background, number of years of experience, motive and the number of the management team (size). The working power can be tested in terms of their number, education, turnover per employee and number of working hours. The structure of the business can be examined in terms of two issues: organizational structure which includes the form of the firm, span of control, degree of delegation of authority and responsibilities, and concentration of decision making; while the financial structure includes the structure of assets and the structure of liabilities.

The profitability of the business may include the turnover, assets turnover, net profit and profit index. Growth of the business can include assets, net assets, profit, employment, management team and growth index. Age of the business is discussed later in this chapter.

2.8.1 - Management Team / Managers.

Most existing studies concentrate on big business, such as those conducted by Lieberson S. and O'Connor, J.F. (1972), Birley, S. and Norburn D. (1987) and (1988).[69] Studies in the small business field are very limited but include those by Gibb, A. et. al. (1983) and Storey, D. et. al. (1987).[70] These studies have examined the issue of directors or owner-managers as a qualitative. The characteristics of the
owner-manager / entrepreneur / director (as was appropriate in these studies) and his qualifications were the focus of these studies.

Several issues can form the characteristics of small business managers as well as their effect on the business performance, such variables are: educational level, degree of specialization, past experience, motives, objectives, their type (managers or owner managers) and their number (size). These issues are important since they are variables which contribute to the character of the manager and affect his financial decisions, which may in turn affect the performance of the business. On the other hand, these variables are not connected directly with the effect of war on business performance. They can, however, affect the performance positively, negatively or in opposite directions. The obvious and clear connection is the manager alone. Another important point is that some of the variables which may influence business performance are nonfinancial in nature.

Education and specialization are the vehicles of development and progress. They have been found by many researcher such as Gibb, A. et. al. (1983), and Routamaa, V. (1985), to indicate the potential for development, and to play an important role in the organizational structure of the business. Education and knowledge can reach businessmen via school, university, official and private technical assistance schemes, training and vocational programmes and also through experience and practice.

The manager's/owner's background is an important factor which contributes to his character and makes its presence felt on the process of decision making and policy formulation. Four major variables were chosen for this discussion: types and number of managers; educational level; degree of specialization; and past experience.

It is useful to examine the manager's background for two reasons: firstly, it will provide more data about his managerial skills and experience which are both of great importance importance when he manages and directs his firm. Secondly, it will tell later whether his background has a positive or negative effect on business performance as compared with other financial variables.

In industry, specialization and skills are crucial for success. This is because in a competitive market success depends mainly on the pattern of cost, price and quality. Knowledge and skills are therefore invaluable.

Specialist skills which managers should possess are another important factor which can be introduced into the discussion. For any job to be done professionally and successfully, a high level of technical knowledge is necessary. However, this does not mean that others who have no schooling nor a university degree cannot do their job successfully. Nevertheless, Sayigh, Y. (1962) says that: "the illiterate, however, entrepreneur who can hardly sign his name but who deals in millions of pounds generally makes sensational news but is not the prototype of entrepreneurs in Lebanon".

46
The classification of managers/owners helps us to understand the influence of each type of manager on business performance. Non-owner managers do not take high risk investment decisions; they play it safe in order to keep their jobs secure. Owners, on the other hand, are ready to take high risks on their investments. To understand their role it is important to classify them in terms of type and number, their personal qualities and their managerial style.

2.8.2 - Types and Numbers of Managers (management team).

One may ask why the number of managers is important? There are two reasons. The first is that the number of managers was not given enough attention in the measurement of small business performance, and was not treated as a predictor variable; while several variables are found in most studies, such as those dealing with assets, equities, growth and employment. The second reason is that we wish to test the effect of managers on small business performance as an internal variable of the small business environment. However, if we discuss the effect of war as an external variable without seeing the effect from inside, a big gap will be left in the study. Thus the major purpose of choosing this variable is to test the effect and power of its predictability on business performance.

2.8.3 - The role of Size:

Size is found to play an essential role in the relationships of the structure, of profit and of growth in many studies. Several variables were also chosen as the size variable. For example Hickson et. al. (1969), Hickson et. al. (1970), Hinings and Lee (1971), Child, F. (1973), Hall, R. et. al. (1967) Terrien, F. and Mills, D. (1955), Hymer, S., and Pashigan, P. (1983) Storey et al. (1987), and many other studies throughout the world have used size in relation to the structure of the firm, its profit and growth. However, none of these studies examined the number of the management team and its effect on business performance. Most of these studies examined this variable as a qualitative variable, as we mentioned early.

2.8.4 - The role of profitability:

According to financial management theory, profitability is the determinant of investment and financing decisions, whereas in the economic theory it is seen as the determinant of a firm's size.[73] Economists may also be interested in the direction of the relationship between profitability and size for at least two reasons: its likely effect on industrial concentration and its possible implications for returns to scale and monopoly power.[74]

However, both theories highlight the significance of the relationship between profitability and growth in which profitability plays the leading role in determining the firm's growth potentiality, its future and its ultimate destiny. Support for this argument comes from Whittington, G. (1980), who writes:

"Profitability is positively related to growth, and it seems likely that high
### Parameters:
- Management.
- Workforce.
- Business Structure.
- Growth.
- Profitability.
- Age of the Business.
- External Factors.

### Components of Parameters:
- Education - Experience - Age - Motive
- Number of Management Team/Owners
- Type of Managers (partner or nonpartner)
- Locus of control
- Concentration of decision making (decision maker)
- Financial activities
  - Number of employee (size)
  - Number of working hours
  - turnover per employee (productivity)
  - Concentration of technology (skill)

Financial Structure:
- structure of assets - structure of liabilities
- sources of finance - accounts payables
- accounts receivables.

Organisational structure:
- span of control - organisational chart
- degree of change - type of management
- over a period of time in relation of business size
- Assets (net assets, machinery)
- employment - Profit - Management - Growth index.
- Turnover - Assets turnover - Net profit - Gross profit - Profit index.
- Age
- Risk analysis - Market competition - effect of war

### Techniques of Measurements:
- Ratio analysis.
- % growth.
- Simple moment product correlation.
- Factor analysis.
- Regression analysis.
- Multiple regression analysis.
- Discriminant analysis.
profitability will lead to a high rate of growth, since higher profits provide both the means (greater variability of finance from retained profits or from the capital market) and the incentive (a high rate of return) for new investments."[75]

2.8.5 - The role of size and profitability:

Various measures of profitability and size have been used in several studies and for different purposes in different industries. In studies on large firms, the measure of asset size generally used was net assets while in studies on small firms the measure used was total assets, this being thought more appropriate given the differences between each asset structure as well as the structure of the balance sheet.

In works on large firms such as those by Singh and Whittington, G. (1968), Steckler (1963) and Whittington G. (1980) financial assets were used as the prime indicator of size.[76] Storey et al. follow the same pattern in their study on small firms; however, they used the number of employees as a nonfinancial indicator of size, testing this against financial assets, although they did not use this in their major analysis of profitability.[77]

Whittington G. (1980) uses four measures of size and four measures of profitability. His measurement of size were: net assets; gross assets; sales and value added. His profitability measures were: rate of return on net assets; rate of return on gross assets; profitability margin; and sales/assets ratios. Eventually, however, he was to rely on all measures of size, using a single profitability measure: the rate of return on net assets.[78]

Elliott, J.W. (1972) uses the average sales volume as a proxy for the more theoretically pleasing value-added measure, [79] while the average return on equity, the percentage change of profits and the percentage change of discretionary income were used as measures of profitability.[80] Horngren C.T. emphasizes the return on investment and its innate appeal. His argument is that it unites in one number all the major ingredients of profitability, and its statistic by itself may be compared with opportunities inside or outside the company.[81] The dissertations of Alnes, Edmister and Cru conclude that the return on sales was a more powerful measure of profitability than return on investment in smaller firms.[82]

"Return on sales" as a measure of profitability has usually been preferred to "Return on investment" for small firm research. Edmunds, S.W. (1979) urges its use, arguing that specification of "investment" is not suited to small firm balance sheets.

Abdelsamad M.H. (1977) agrees with Edmunds, arguing that "sales" figures are more easily obtained, while Ellis and Ward suggest that the "sales" figures of small firms provide greater accuracy and standardization than "investment" figures.[83]

Storey, D. et. al. (1987) used total assets and net assets as a measure of size, and in their study "The Performance of Small Firms", pre-tax profit divided by total assets and
pre-tax profit divided by net assets were used as measures of profitability.[84] Rajeswazrzo C. and Radharzo C. (1983) use the ratio of profit to total assets.[85] Bearing in mind the above views and the different measures of size and profitability, it is quite difficult to determine which of these measures precedes its counterparts, since each writer has chosen the measure which best suits the purpose of his particular analysis.

In this study the following variables; total assets, net assets, sales revenue, working capital, employees, managers and total employment represent the firm's size; return on sales, return on assets, return on investments, return on equity, net profit margin and gross profit margin represent the firms' profitability.

2.8.6 - Growth and Size:

It is argued that profit is the major cause of growth. This argument is backed by many statements, and it is useful to note here Whittingtons', G.(1980) opinions on the matter. He states that;

"Profitability is positively related to growth, and it seems likely that high profitability will lead to a high rate of growth, since higher profits provide both the means (greater availability of finance from retained profits or from the capital market) and the incentive (a high rate of return) for new investment".[86]

Many studies have examined the issue of growth in small and large businesses from different angles. Several definitions were used in these studies. Renfrew. K.M. et. al. (1985) and Storey, D. (1989) define growth in terms of employment increase. Renfrew, K.M. et. al. define it "..by the average annual percentage change in its employment (the firm), including working proprietors".[87], Storey, D. et. al. define it by the increase of employment for the past five years.[88] Golam, M.K. (1988), Elliott, T.W. (1972) and Robinson, R. (1983) define growth by growth in sales, while some argued that it is one of the "most easy to obtain in small firm data bases".[89]

Others use different measures, such as growth of total assets or net assets. Most of the above studies examine the relationship between size measures and their growth, where the size measures used were total assets, sales revenues, net assets etc. In this section we shall examine the relationship between the growth and profitability of small business firms.

2.8.7 - Profitability and Growth.

Most of the early studies on growth concentrate on the relationship between size and growth.[90] These studies conclude different relationships (positive and negative) between the size of the firm and its growth. Very few studies have tested growth with the profitability of the firm. Hart, P.E. (1962) uses profit as a surrogate for size, his results were so ambiguous that he left no room for the kind of firm conclusions drawn by Storey, D. et. al. (1987). However, several points can be mentioned regarding growth.
Droucopolous (1982) concludes that the growth of a firm in one period cannot be used to predict its growth in the next. Singh, A. and Whittington, G. (1975) reach the conclusion that "the past growth record of the firm cannot be regarded as a good predictor of its future growth". Another argument suggests that growth should be regarded as a statistical phenomenon resulting from the cumulative effects of the chance operation of a large number of forces, each of which operates independently. The chances of growth or shrinkage of individual firms depend on their profitability and upon other factors such as access to new markets and finance.

Concerning the size measure, four variables were chosen: total assets, net assets, sales revenues and the total number of directors.

2.8.8 - The Role of Age:

Whether the business is small or large, profit making and growth are the main objectives that the firm tries to achieve. These objectives are subject to many internal and external factors such as invested capital, the number of employees and their management, the firm's market, economic conditions, technology, etc. With the interaction of these factors and the passing of time, the firm starts its life trend. The importance of the age of the firm is that it works as a catalyst, helping the firm to show its effectiveness and efficiency through its acceleration towards its targets.

Gibb, A. et. al. (1983) consider the age of the firm as one of the four bases of their "Base potential for development" model. This base includes the experience of borrowing, the experience of product development, the different types of market and the use of external agents. In another study conducted by Peterson, R and Shulman, J. (1987) which covered 4000 interviews in 12 countries, (Brazil, Colombia, Spain, Kenya, Cameron, Indonesia, U.S.A., Canada, West Germany, United Kingdom, the Netherlands and Japan), the age of the firm was an important element that distinguished high growth levels from low growth levels, as well as profits. However, it was reported in this study that "...young firms are more likely to perceive themselves as being profitable and having high growth levels compared to older firms".

Storey, D. et. al (1987) argued also that

"age could be an important factor which was affecting growth independent of size. A similar argument can be presented for the effect of age upon profitability".

The above arguments present strong evidence of the effect of the age of the firm on its performance and development. In addition to these arguments, we found earlier in this research that age played an important role in business performance and acted as an indicator of the users of banking facilities.

2.8.9 - Risk as a Measure of Performance
It was discussed earlier that several kinds of risk may confront a business firm. Measuring risk was also noted as "the possibility that the actual return from holding a security will deviate from the expected return. The greater the magnitude of deviation and the greater the probability of its occurrence, the greater is said to be the risk of the security". [95] This probability distribution can be measured simply by the expected value of return and the standard deviation.

Sharpe, W.F. (1970) argues that the investor has the opportunity to construct a diversified portfolio and is interested in the relationship between variations in the returns of the individual firm and those obtainable elsewhere on the market. [96] Van Horn, J (1986) takes a similar view and explains this relationship by the \( \beta \), which is the slope of the characteristic line. [97] John Guerarol, and H.T. Vaught (1989) argue that "beta as a measure of risk may be applied to a firm's assets, its debt, its equity, or its entire financial capital structure". [98]

However, risk can be measured in different ways as shown above and could be associated with different financial aspects: for instance risk of cash flow over time, portfolio risk, or risk of the firm's operating leverage.

To simplify matters we shall use only the standard deviation information, used by Van Horn, J. (1986) among others. This method will enable us to measure the variability of the profit indicators and the return on investment and profitability index. The following must, however, be kept in mind:

"the dispersion of the probability distribution of possible returns reflects the degree of the investor's uncertainty. A distribution with a small standard deviation relative to its expected value indicates little dispersion and a high degree of confidence in the outcome. A distribution with a large standard deviation relative to its expected value indicates a high degree of uncertainty about the possible return on investment". [99]

We shall use a computer to calculate the expected value and the standard deviation, the rest will be done manually.

The expected value of return is the mean of the observations \( \mu \) or \( E(R) = E[R_i P_i = R] \) where \( R \) is the return at \( i \) period, and \( P_i \) is the probability of \( R \) occurrence at that particular time. [100] The standard deviation will be

\[
\sigma = \sqrt{(R_i - R)^2 P_i}
\]

The techniques deployed to assess the performance of the firm through the above mentioned variables mainly dependent upon the nature of each individual variable be it is a quantitative or a qualitative, and the limits of its use within such boundaries. This issue is extensively discussed in the methodology chapter.
2.4 - REFERENCES

1 - The first report is the Bolton Report, (as it is commonly known), and the second is the report of the Wilson's Committee. The first paragraph of the interim report of the Wilson's committee states that: We were appointed by Treasury Minutes on 5 January, 1977, with terms of reference which required us "to enquire into the role functioning at home and abroad of financial institutions in the United Kingdom and their value to the economy; to review...". The financing of Small Firms, Interim Report of the Committee to review the functioning of Financial Institutions, March 1979, London.


10 - In general, banks and other sources of finance tend to favour 1:1 gearing as the maximum for a small business, although they have been known to go much higher. Lenders are interested in gearing which enable them to understand the firm's capacity to pay interest. They do this by using "time interest earned", which is the ratio of operating profits to the loan interest. This shows how many times the loan interest is covered and gives the lenders an idea of the safety margin in the firm.

11 -Barrow, Collin., op. cit., p. 12.


16 - Ibid, p.434.


18 - Ibid, pp.544 and 352.
22 - See Financial Facilities for Small Firm s - a study by the Economists Advisory Group directed by Dennis Lees. Research Report No.4, p. 90. This shows financial facilities common to the clearing banks.
23 - Williams, Sara., Small Business Guide, Lloyds Bank, 1987, p.285. Sometimes the bank manager asks the owner to give a personal guarantee if there are no assets such as debtors to be taken as a security for the overdraft.
24 - For more about factoring see: Van Horne, James., 1986, pp. 458-9; Dewhurst and Burns, 1983, p.90; Barrow, Collin., 1984, pp. 176-8; Williams, Sara. 1987, pp. 312-3. In the latter the reader will find some advice and recommendations.
25 - This is based on the Economic Advisory Group's implications on such financing facilities. See: Report No.4. 1971, p. 22.
29 - Ibid, p. 91; more details are provided in Report No.4 of the Economic Advisory Group, pp. 28-30.
30 - Checkley, Keith. (1984), op. cit., p. 81.
31 - The discussion on the ECGD can be found in the Economic Advisory Group (1971), Report No.4, pp. 42-9.
35 - The formula which illustrates the cost calculation can be found in John Freear's book, Financing Decisions in Business , 1973, pp. 80-1.
36 - Bates James, 1964, op. cit., p.62.
41 - Ibid., p. 5.
42 - Ibid., pp. 18-19.
43 - Ibid., p. 43.
48 - For further information see Dewhurst and Burns, 1983, pp. 51-3.
52 - One such committees is the Radcliffe Committee in 1959 in the U.K. In the United States the (SBA) was established in 1953, and another supportive agency called the Small Business Institute (SBI) was formed in 1972.
54 - In the same Report of the (EAG) it is mentioned that their "central conclusion is that there is no single major defect in financial facilities for small firms that calls for radical action. In short there is no 'Bolton Gap'". See the same report of the committee p. v.
56 - This story was recounted by Professor Malcolm Harper, 1984, p. 29.
59 - Ibid., p. 93.
72 - Sayigh, Yusif A., Entrepreneurs of Lebanon, the role of the business leader in a developing economy, 1962, p.72.
77 - Storey, D. et. al. op.cit., p 90.
80 - Ibid., p. 1313.
83 - Ibid- p 27


90 - Storey, D. et. al., (1987) have listed most of these studies in their work. Financial Performance of Small Firms, Croom Helm, pp. 85-7.


97 - The characteristic line describes the historical relationship between excess returns for the stock and excess returns for the market portfolio. This line is known as the characteristic line, and is used as a proxy for the expected relationship between the two sets of excess returns: Van Horn, J. (1986), op.cit., p.67.


Chapter Three

THE LEBANESE ECONOMY

INTRODUCTION.

The Lebanon has always been of interest to the rest of the world on account of its strategic location, the role it has played in international trade and its location at the cross-roads for Europe, Africa and Asia. All of this has made Lebanon a great asset and at the same time a dangerous political liability.

At the same time it has been argued that the sensitivity of the Lebanese economic system to domestic political crisis and internal political decisions is very high, and "it (the Lebanese economy) is very dependent on the economic health of the other countries" (Wilson, R.1979) [1]. On the other side Harvey Smith says; "Friction between religious groups has been a recurrent theme in the country's (Lebanon's) history, and the consequence of deeply rooted religious loyalties is still strongly evident in national life".[2] To a certain extent both of these observations are valid.

Thus it is the purpose of this chapter to discuss the Lebanese economy, its structure, its sensitivity to domestic political developments and its dependence on external factors. This is discussed firstly in the context of the prewar period, secondly in the context of national income (sectoral analysis). The position of small business firms will be discussed within this frame work. Therefore, the discussion will be divided into four sections as follows:

1 - Lebanese Economic History.
2 - Characteristics of the Lebanese Economy.
4 - National Income, Sectoral Analysis.

3.1 - Lebanese Economic History.

Lebanon's economic history spans several significant historical periods through which Lebanon played a leading commercial and trading role. For example, during the Phonecian period the Lebanese coastal cities such as Beirut, Sidon, Tyre and Jubayl served as outlets for merchandise from foreign lands in which both land and sea routes were utilized.[3]

The active role of the Lebanese merchant continued significantly throughout the following periods of the Roman, Christian and Muslim rule.[4]

During the period of Prince Fakhr al-Din, who ruled Lebanon during the Ottoman period, Lebanon showed significant economic development mainly in the agriculture
and industrial sectors. The prince encouraged the cultivation of olive, mulberry and other types of trees and promoted the silk industry which later developed as one of the widespread family small-scale business sector. As this research is mainly concerned with small business it is worth discussing the silk experience because it is a unique small scale industry and accompanied a civil war like the one Lebanon has experienced during the past two decades.

3.1.1 - The Silk Industry.

Silk-manufacture was widespread in Lebanon, mainly in the mountains, to the extent that the Lebanese economy depended mainly on its revenues along with the external trade. It became essential to the economic life of the country and to the development of the financial resources of the people who profited from it considerably. Silk was produced in the traditional manner, in factories fuelled by wood. New factories were introduced in the early eighteenth century: probably the oldest was the French silk-spinning factories established around 1810 in Qrayye, (a village of the Matn district). [5] From then onwards the number of silk factories increased steadily. Table 3 charts the development of the silk industry in the period 1810-1913.

<table>
<thead>
<tr>
<th>Year</th>
<th>No</th>
<th>Cum. No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1810</td>
<td>1</td>
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</tr>
<tr>
<td>1838</td>
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</tr>
<tr>
<td>1900</td>
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<td>150</td>
</tr>
<tr>
<td>1913</td>
<td>45</td>
<td>195</td>
</tr>
</tbody>
</table>

The development of the silk industries had various effects on the country in general and on the people in particular. The size of the labour force employed by the silk industrial sector amounted to some 14,000 in its factories, most of them women. [7] Agriculture was affected too: around 60% of the cultivated area of Mount Lebanon and the coastal plains around Beirut, Tripoli, Sidon, the Beka Valley and Akkar were given over to mulberry trees. [8] The effect on the country's finances was also marked; the contribution of silk to the total GDP in the year 1918 was about m.80 piasters out of a total amount of m.130: i.e. a contribution to the GDP of about 61.5% for that year. The average production of silk was approximately 4,000 metric tons; 6,000 tons were produced in 1910, but production decreased to 100 tons in 1970 and then to 80 tons in 1980. [9]
As a result, the silk industry gave birth to the financial market, with the new banks and rich families in the country beginning to finance the export of silk and other items through big investment deals and credit transactions.

"This trade necessarily involved large scale credit transactions,...the Ottoman Bank established with the backing of some of the largest financial houses in Europe as the bank of Ottoman government and the trustee of the Ottoman public debt. In addition to financing the export of silk, banks helped pay for the silk-spinning factories."[10]

Unfortunately, during the civil war between the Druze and the Maronites in 1860, most of the silk factories were either damaged or destroyed. Consequently, the industry suffered severe problems: owners lost their factories, labours faced a large scale of redundancies or simply lost their jobs or died in the civil war. In 1890, the Lebanese silk industry began to feel the adverse effects of competition from Chinese and Japanese silk, especially in the French market.

Towards the end of Ottoman rule in Lebanon the situation became critical. Lebanon was stricken with hunger, poverty, disease (e.g. the plague) and locusts. During this period approximately one quarter of the population perished and the silk industry suffered considerably. Lebanon came under the French mandate after Turkey was defeated. The economy was in tatters, and most people had to make a choice: either to stay in Lebanon and adapt to the circumstances under the French mandate, or emigrate, a situation very similar to that which exists today. [11]

The French raised taxes from 11% to 25%, and sometimes the figure even reached 80%. The silk industrialists were unable to bear both taxes and losses as many of them were almost bankrupt, facing liquidity problems or failure as a result of the economic recession and absence of sufficient sale turn-over.

3.2 - Characteristics of the Modern Lebanese Economy:

Lebanon has been a liberal country by tradition. It has been a leading trading and agricultural power. Its economy displays all the characteristic of a "free enterprise economy": its economic system can be classed as "Laissez faire", with entrepreneurs unhampered by restrictions on establishing and running new businesses.

Among Middle Eastern countries in general, and Arab countries in particular, Lebanon has had one of the most progressive economies, especially in the pre-war period. The economy of pre-war Lebanon is characterized by a free foreign exchange market; a professionally run, secret banking system, comparable with that in Switzerland; and free in-and-out capital mobility, (in other Arab countries most facilities of this kind are totally controlled and monopolized by the state). Accordingly, Lebanon has managed to attract large amounts of money from abroad, notably from the
oil-producing states, such as Kuwait and Saudi Arabia, or countries such as Syria, Iraq and Egypt, once the nationalization policies in these countries had come into effect.

Thus the prevailing liberal economic ethos and the healthy financial climate in Lebanon, together with the skill of the Lebanese in trade and commerce, have provided a favourable environment for the establishment of a new financial market in the Middle East. It was this that attracted Arab and foreign business men, and a great number of the world's biggest institutions, to Beirut which became the major financial market of the Middle East.

On the other hand, this liberal economic system has always acted as the other face of a basically 'confessional' political system which still exists today. This system is led by political figures who are in fact representatives of only five percent of the Lebanese population [12]. An economic system of this type is in fact no longer acceptable in either the developed or developing countries. In this context an expert commented, "we have eaten of the fruit of knowledge and, for better or worse, there is no returning to laissez faire capitalism"[13]

In short, the characteristics of the Lebanese economy are attributed to many internal and external factors. The internal factors are:- agriculture, trade, location, climate, the educational system (private educational institutions), the Lebanese entrepreneurial personality, immigration and lack of government intervention. The external factors are:- the creation of the state of Israel, the Arab-Israeli war, Arab nationalization policies, the oil boom and foreign investments in the country. Therefore, the Lebanese economy is unique among Middle Eastern states. There have been many important entrepreneurial groups, a long established tradition of business enterprise, and a history of openness.

3.2.1 - Statistical Difficulties.

Before and during the war there has been no consistent method of producing statistics on the national level by the Lebanese government. Before the war an international economic expert visiting Lebanon was reputed to have said: "I don't know how it [the economy] works; but it does, so leave it alone". He also said that, "not only is the economy geared to quick returns, but any one attempting to analyse it is doomed to failure" [14]. To a certain extent his comments were valid for various reasons, not least there being few statistics available on the national level.

The first attempt to produce a systematic or regular account of national income by the government was in 1964. Although many attempts were made by certain institutions and specialists before that date it is still evident, however that, "...analysis of the economy is hampered by a lack of essential statistics. The only official set of national accounts was completed in 1967 for the year 1964. Balance of payments information is published with several years' delay. These and other published statements are largely
based on estimates, because basic data are not being collected. The economic statistics are therefore to be considered only as approximations".[15]

In 1964 the Ministry of Planning and the Directorate of Statistics became responsible for the issue of information on national income on an annual basis, producing four seasonal bulletins a year. Interestingly enough, the Ministry of Planning uses the "value-added approach", to statistical information, first suggested by Bader.[16]

The industrial census of 1988 (quite a miraculous accomplishment) indicates how difficult it was to produce statistics by the government on the national level after 16 years of no-statistics production. In 1976 the Lebanese government in cooperation with the Centre for Industrial Development of the Arab World decided to conduct an industrial census to assess the impact of the damage caused by war on industrial firms. [17]. In 1980 the government faced a strong rejection expressed by the industrialists who claimed that the census was aiming for details that might jeopardize their position in the market.[18]

Later in 1982 the Phalanges party, in a press release, opposed the completion of the industrial census considering its cost a waste of money. [19] In 1986, Al-Joumhoriah Newspaper reported that "After 21 years since the last industrial census the Ministry of Industry and the Council for Development and Reconstruction and the European Countries started an industrial census which took 8 years to produce".[20] Finally, in 1988 the Minister of Industry and Oil announced both the completion of the industrial census and its preliminary results.[21]. So, after almost 13 years the industrial census was accomplished. Therefore, this research will be only able to report the position of small manufacturing business and sadly leave an unavoidable gap of the state of small trading firms and handicrafts in the Lebanese economy, despite the fact that the majority of the businesses are of the latter type. However, hopefully, the view of the small firms in the industrial sector may give an indication or a reflection of the position of small firms in other sectors.

3.3 - National Income and Economic Trends:

In the light of the above findings one can say that, the evolution of the Lebanese economy was subject to many factors, e.g. economic stability and the liberal nature of its economic system as compared with the systems in other Arab countries. Consequently, the evolution of its income, which was subject to these factors, and thus its economic cycles cannot be determined arbitrarily without reference to the national income and its economic performance.

The approach here will concentrate more closely on the impact of political events, their developments and their effect on the economy.
3.3.1 - The period 1948-1964 (pre-war period 1).

1948 saw the beginning of a new economic phase, characterized by an increase in the number of business activities, and a substantial rise in investments, unequaled in the Arab world at that time. It was the beginning of the greatest economic and business boom the country had ever seen. (see Fig 3.2; national income trends).


National income in this era showed a rapid fluctuating movement. This rapid fluctuation was due to both external and internal factors; external such as the Palestine crisis and the Lebanese-Syrian economic split; internal such as the political crisis of 1958, the Intra bank crisis of 1966, and the Lebanese army clashes with the Palestinian military in 1973.

The expansion of 1949-50 which saw the national income increase by 11.8%, from 932 m.L.L to 1042 m.L.L, was a result of the contribution of the agricultural sector which accounted for 50% of the annual growth rate of the national income in that year: the remaining 50% was contributed by other sectors.[26] The recession of 1950-52 was prompted by the political crisis which followed the assassination of the Prime Minister Riyad Al-Solh, and the resignation of the President of the Republic, Bsharah Al-Khoury. The contribution of the government sector decreased from 72 m.L.L in
1950 to 64 m.L.L in 1952. This was also a consequence of the economic split between Lebanon and Syria in 1950.

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<th>A.Badn (m.LL)</th>
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<th>R.Mallat (m.LL)</th>
<th>M.of Fin (m.LL)</th>
<th>M.of Pla (m.LL)</th>
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<td>1949</td>
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<td>2243</td>
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<td>1975</td>
<td></td>
<td></td>
<td>4443</td>
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Table 3.3, National Income Performance (1948-1963)

<table>
<thead>
<tr>
<th>Year</th>
<th>N.I (M.LL)</th>
<th>% Growth</th>
</tr>
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<td>1948</td>
<td>919</td>
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</tr>
<tr>
<td>1963</td>
<td>2243</td>
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In 1958 the Lebanese economy faced a deep recession resulting from six months of civil war.[27] In many sectors - agriculture, industry, construction, trade, transportation and services - production dropped dramatically or even stopped completely. As a result national income decreased from 1503 m.L.L in 1957 to 1325 m.L.L in 1958, registering a percentage drop of -11.84 .(see table 3.3 for the national income performance).

The national income for the following year showed a great improvement, recovering
rapidly and recording an increase of 14.71%, thanks to the contribution of the following sectors: agriculture (66 m.L.L), industry (14 m.L.L), construction (32 m.L.L) and trade (55 m.L.L). A remarkable contribution was made by the services sector, which registered 116 m.L.L for the first time in its history. President Fu'ad Shihab in a determined effort to improve the economic situation, initiated a five year development plan with a budget of some 800 m.L.L. However, his plans were thwarted by the political crisis of 1961, and the economy was pushed once again into a period of recession.[28]

In 1960, the national income increased by 18.42%, generating some 270 m.L.L more than the 1959 figure, before dropping to 11.11% in 1961. As a result of the unsuccessful coup attempt by the Syrian National Party (SNP), the national income declined even further by 5.8%. The output of the agriculture, trade and services sector fell from 380 m.L.L to 360 m.L.L, 560 m.L.L to 530 m.L.L, and 280 m.L.L to 233 m.L.L respectively. A remarkable figure however was achieved by the finance sector whose contribution increased from 60 m.L.L in 1961 to 148 m.L.L in 1962.

It can be concluded therefore, that in the period 1948 - 1964 the Lebanese economy underwent significant developments reflecting its sensitivity to political crisis, but displaying its ability to recover and progress.

3.3.2 - The Period of 1964 to 1974 (pre-war period II).

The ten years pre-war period II compared with I was characterised by a tremendous economic expansion. The average yearly rate of growth was around 6% and the national per capita income increased from US$ 400 in 1965 to US$ 647 in 1970, to US$ 1415 in 1974.

This period shows a boom in Lebanese investments, especially in the private sector, with business firms on the whole exhibiting a continuous growth in production; supply of Lebanese products was great, especially for Arab export markets. In fact, when business firms earn more than their current expenses for production, they will certainly increase their production and, as a result, their business will grow. This investment feedback causes the GNP to rise.

The National Income showed significant growth and development during this period. It increased steadily from 3154 m.L.L in 1964 to 5724 m.L.L in 1974. This is due to the effect of the high amount of money supply and the aggregate investments in the country.

With the influx of emigrants into the Gulf area, millions of Lebanese pounds flowed into the country. Remittances increased sharply from 750 m LL ($251 m) in 1970 to 2736 mLL ($912 m) in 1974-75, i.e. about four times that of 1970. This increase was
one of the major factors which ameliorated the living standards of the poor and the economic situation of the whole country.

Furthermore, it is clear that large amounts of money, such as remittances, were excluded from the GNP. Many reports have shown figures completely different from those reported by the government. For instance, about 632 m.L.L are missing from the government's disposable income figure, while they are reported by Tabarah (1982).[29] Therefore it can be said that the fluctuating values of the multiplier mirrored the real situation which national income and its components of saving and consumption were experiencing in this period (1964-1974).

High investment was thus established. Money flowed into the country in considerable amounts, both from investors in foreign currencies and from immigrants, to the extent that deposits in banks rose excessively.

Subsequently the Lebanese market was unable to meet investors' needs, mainly because of market limitation, rigidity and lack of development. Then, money started to flow out from the country in search of other markets; there was an average outflow of 459 m.LL ($153 m) in 1974-75 before the start of the war [30].

The private sector heavily dominated the economy with private capital formation acting as the main engine of growth. There was insignificant government intervention in the economy except for the increased regulation of the banking sector following the Intra crisis in 1966.

The major trend of agriculture showed a decline in the area allocated to many types of products such as cereals, pulses, tobacco and sunflowers. Such products were replaced with vegetables and hashish which sold for higher prices and raised income. Cultivation of basic food declined while intensive highly mechanised fruit flourished. Citrus fruits rose 250% between 1955 and 1971. Poultry farming followed a similar direction of growth, but many small farmers were pushed out of the market when modern farms established control. By 1974 the poultry and livestock output succeeded in contributing 30% to the agriculture sector.

A study conducted by the FAO published in 1981 indicated that Lebanon has 400,000 hectares of total arable land, of which 225,000 hectares were actually cultivated before the war. Of this area only 17% or 67,000 hectares was irrigated in 1970 and increased to 25% by 1975. Tobacco cultivation produced 7,000 tons on 8,100 hectares in 1970, but the monopolistic policy of the R'egie des Tabacs led to a rapid decline in the tobacco cultivation to some 4,000 tons by 1972.

The industrial sector contributed a remarkable share of 20.8% of the GDP in 1973 compared to 20.5% in 1960 and 20.6% in 1964. The manufacturing sector grew in the
late 1960s and early 1970s with leading industries established prior to the civil war in food processing, textiles, furniture, printing, chemicals and many other areas.

A survey carried out by the Direction Central des Statistiques in 1975 reported that there were 18,118 industrial firms which employed more than 130,000 employees compared to 80,000 in 1968. The total amount of nominal capital invested in industrial establishments had risen from L.L1 bn in 1968 to L.L 2.5 bn by 1974, while industrial exports had risen from 54% of the total exports to 75% over the same period.

The factors that helped manufacturing to increase in Lebanon can be listed as follows: relative stability in the country, cheap labour, subsidies of fuel and electricity, the stability and the strength of the Lebanese pound, government protection of some industrial products such as textiles and garments, reduced import costs and the increased demand on Lebanese industrial products mainly from the neighbouring Arab countries.

In banking, Lebanon was clearly known as the commercial and banking centre of the Middle East and the number of the commercial banks grew from 23 in 1950 to 92 in 1966. The Intra crisis of 1966 forced a wide ranging restructuring of the banking sector. This crisis caused political instability in the region and had triggered massive withdrawals of capital from Beirut.

Consequently the state intervened in the form of setting up financial regulations to protect small investors within the framework of a state-sponsored bank. The number of banks by then was reduced to 72 institutions through forced liquidation and mergers to prevent a similar crisis. Confidence was restored and deposits in commercial banks rose sharply from 2,566 m.L.L in 1967 to 8,220 m.L.L in 1974.

The lending of commercial banks focussed on trade and real estate and accounted for 65.6% of the total credits of 1972, while industry received 15.9% and agriculture 3.8%. Consequently, the economy faced the paradoxical situation of a surplus of money in the banks but insufficient funds for essential long term investments.

The role of the tourist sector was highly significant in easing the trade deficit and income from tourism contributed more than 15% to the national income before the war period. A private survey conducted in 1972 estimated that revenues had risen from 275 m.L.L in 1964 to 357 m.L.L in 1966, 580 m.L.L in 1971 to 750 m.L.L in 1972. Furthermore, the foreign exchange earned from tourism in 1974 was 880 m.L.L compared to 573 m.L.L in 1973: the number of visitors reached 2.19 mn in the first three quarters of 1974, a 50% increase over 1973.

3.3.3 - The War Period (1975 -1986)
Over the period of 1975 - 87 the Lebanese economy shifted from a state of high growth and low inflation, to a state of stagflation with stagnant real growth accompanied by high and rising inflation rates. The large rise in inflation rates was accompanied by a rapid depreciation of the Lebanese pound (L.L) on the foreign exchange market. Indeed, as the domestic and external purchasing power of the currency declined, Lebanon experienced the 'dollarisation' phenomenon: foreign currencies rapidly became a substitute for the L.L as a store of value and as a medium of exchange. The degree of currency substitution has become more extensive in Lebanon than in other countries - mainly in Latin America - that have experienced episodes of hyper-inflation.

The Lebanese pound also lost its external purchasing power over the 1975-87 period. The average depreciation of the L.L against the US$ was similar in magnitude to the inflation rate, in excess of 35% per year. However, depreciation did not occur at a steady rate over the period: by the end of 1983 the L.L stood at about twice its 1974 average with respect to the dollar; by the end of 1987 the L.L was rating 544 or about 83-fold its 1983 value. Indeed, there was a collapse of the exchange-rate over 1985-87. But, the evidence for 1987 and 1988 indicates that the peak real depreciation of the L.L occurred in 1986, and the domestic inflation has been running at a higher rate than the depreciation of the nominal exchange rate. This is consistent with the dynamics of inflation and exchange depreciation observed in other countries experiencing inflationary episodes.

The wartime period has reversed the pre-war trend in real economic growth, to a sharp level of real domestic economic activity. Unofficial estimates of real GDP and indicators of activity, show a sharp fall in real income during 1975-76, with some recovery over 1978-81, though output has not recovered its 1974 level and saw a downward spiral in 1982 resulting from the Israeli invasion. There was a recovery in 1983 but this was followed by a downward spiral over 1984-87.

It is clear that the major movements in real domestic activity are directly related to the degree of war activity and extent of hostilities. Saidi. N.[31] concluded that the war period is characterised by three factors which imply a permanently lower level of real GDP and lower production possibilities: i) the large decline in investment expenditures and lower resulting capital stock; ii) the structural change implied by the forced segmentation of product and labour markets between the 'Eastern' and 'Western' sectors of the country with a resulting decline in the internal mobility of factors of production and misallocation of resources, and iii) the destruction of the physical capital stock and emigration of a substantial population of the skilled labour force,(see note 31)

In sharp contrast to the pre-war period which did not display an upward trend in the size of the public sector, the 1975-87 evidence shows a persistent increase in expenditures relative to GDP since 1977, and a peak in 1985. The sources of the
increase in the relative size of the public-sector can be summarised as being: i)persistence in the size of the public-sector labour force; ii) government price subsidies of a number of commodities, mainly petroleum products, wheat and sugar; iii) a sharp upsurge in central government defence spending and 'reconstruction expenditures' starting in 1983; and iv) a dramatic increase in interest payments on the public debt, which became the single largest budget item over the 1985-87 period.

<table>
<thead>
<tr>
<th>Year</th>
<th>RGDP</th>
<th>RER</th>
<th>BTDEF</th>
<th>DEFY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974</td>
<td>8137</td>
<td>100</td>
<td>868</td>
<td>-0.4</td>
</tr>
<tr>
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<td>7651</td>
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<tr>
<td>1976</td>
<td>4270</td>
<td>100.5</td>
<td>116</td>
<td>12.9</td>
</tr>
<tr>
<td>1977</td>
<td>6401</td>
<td>95.9</td>
<td>848</td>
<td>6.4</td>
</tr>
<tr>
<td>1978</td>
<td>6579</td>
<td>90.2</td>
<td>1167</td>
<td>10.1</td>
</tr>
<tr>
<td>1979</td>
<td>6984</td>
<td>89</td>
<td>1927</td>
<td>7.2</td>
</tr>
<tr>
<td>1980</td>
<td>7468</td>
<td>86.5</td>
<td>2782</td>
<td>11.4</td>
</tr>
<tr>
<td>1981</td>
<td>7550</td>
<td>100.5</td>
<td>2663</td>
<td>14.2</td>
</tr>
<tr>
<td>1982</td>
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<td>1983</td>
<td>6997</td>
<td>89.7</td>
<td>2970</td>
<td>25.1</td>
</tr>
<tr>
<td>1984</td>
<td>6501</td>
<td>112.6</td>
<td>2366</td>
<td>31.6</td>
</tr>
<tr>
<td>1985</td>
<td>6510</td>
<td>208.3</td>
<td>1721</td>
<td>42.1</td>
</tr>
<tr>
<td>1986</td>
<td>6135</td>
<td>247.7</td>
<td>1703</td>
<td>26.9</td>
</tr>
<tr>
<td>1987</td>
<td>4139</td>
<td>225.8</td>
<td>990</td>
<td>27.1</td>
</tr>
</tbody>
</table>

NOTES: RGDP denotes real GDP at constant 1974=100 prices in m.LL; RER is the bilateral F.S.S real exchange rate; BTDEF is the trade deficit in m.USS; DEFY is the budget deficit as % of GDP. Source: Saidi, N., "Deficit, Inflation and Depreciation: Lebanon's Experience, 1964-88", in Politics and the Economy in Lebanon. Edited by Nabil Shehadi & Bridget Harney, 1989, p.13.

Tax and non-tax revenues fell over 1975-87 in real terms as a fraction of the GDP. The sources of the decline in revenues are well-understood and can be summarized as follows: i) due to the fall in aggregate income which is a prime determinant of the tax base; ii) the inefficiency and breakdown in the tax collection and enforcement process; iii) lags in the collection of taxes and the inelasticity of nominal revenue to inflation in the absence of any indexation of tax payments, which imply a fall in real revenue as inflation rises. However, it should be noticed as well that, after 1983, central political power eroded, and various militias and political parties took control of sources and/or diverted government revenue to finance their own spending. Along with the acceleration of inflation, the outcome was a rapid decline in real tax revenue, so that by 1986 and 1987, real revenue had fallen to less than a third of the 1983 level.

The economy also had begun to be affected by the continuing internal strife. The number of Lebanese migrant workers in the different Gulf states rose from 50,000 in 1970, to 89,000 in 1975, to 210,000 in 1979-80.[32] The migrant workers, who represented 13% of the national workforce in 1975, reached the level of 34.6% in 1980. Their transfers and remittances rose from US$ 250 million in 1970, to US$ 910 in 1975, to US$ 2,254 millions in 1980.[33]
On the other hand, the prolonged 14 year war situation has led to structural changes, characterised by a separation of labour market, migration of human capital, migration of market capital and increase of the share of the public sector.

The economic role of the Palestinian state - within - a state in Lebanon should be also noticed. It was estimated that by 1981, the Palestinian economy generated more than 15% of the Lebanese GDP. The Palestinian institutions under the control of the PLO created around 10,000 jobs and, indirectly, 30,000 jobs. The 15,000 fighters were spending their salaries in Lebanon and substantial deposits were kept in the banks of Beirut. The incoming political money was also estimated at US$ 300 m. a year, which represented around 6% of the GDP.[34]

The departure of the PLO and its infrastructure led to a major shrinkage of the contributing Palestinian presence and, subsequently, a loss of its economic activities in Lebanese territory. The "political money" resources also shrunk. Countries like Saudi Arabia, Libya, Iran and the superpowers maintained active relations with one or several local factions. New sources of income in Iran transferred US$ 150m yearly contributing to a significant socio-economic leverage within the sharply declining economy.[see note 34]

However, despite a situation that allowed Lebanon to have both butter and guns, as well as maintain a high level of imports and consumption, the economy had already undergone structural changes that only came to be fully felt during the second phase of the war. Many significant economic sectors during the war period witnessed a considerable reduction in their level of activity and manpower during the period 1975-1985. The most affected sectors have been the following:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Share in GDP in 1974</th>
<th>Est. decline in activity (1974-81)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td>20%</td>
<td>-50,000</td>
</tr>
<tr>
<td>Tourism</td>
<td>19%</td>
<td>-15,000</td>
</tr>
<tr>
<td>Rexports</td>
<td>6%</td>
<td>-3,000</td>
</tr>
<tr>
<td>Trade</td>
<td>5%</td>
<td>-3,000</td>
</tr>
<tr>
<td>Education and Health</td>
<td>4%</td>
<td>-2,000</td>
</tr>
<tr>
<td>Total</td>
<td>45%</td>
<td>-73,000</td>
</tr>
</tbody>
</table>

Source: Nasr, Salim in *Politics and the Economy in Lebanon*, p.46.

The direct causes which can be linked to this structural change were the following: physical destruction, (scores of factories, hotels, hospitals, telecommunications, etc) lack of communication with Arab markets, increase of inflation, rapid development in the Arab Gulf states and lack of stability.
3.4 - National Income, Sectoral Analysis:

Having looked at the structure of the whole economy and the main national income
trends over the last twenty five years, it is worth looking at the sectors that have
contributed to the national income.

3.4.1 - Agriculture Sector.

The contribution of the agricultural sector to the national income underwent no real
change between 1948 and 1974, except for a slight increase in certain years. Its
contribution was 18.4% of the national income in 1948 and 9.34% in 1973, (see table
3.4 and Fig 3.2). This sector employed more than 50% of the total working population
in the early sixties: in 1969-70 the estimated number of people working in this sector
was only about 102,000, half the number estimated in 1959-60. This continued to
decrease until in the early seventies no more than 10% of the total working population
was engaged in the agriculture sector. This decrease can be attributed to a number of
causes. Continuous Israeli raids on southern villages, where most of the inhabitants are
peasants dependent mainly on agriculture for their living, forced wave after wave of
people from southern Lebanon to emigrate from the area after each raid towards Beirut.
Secondly, the absence of government programmes for agricultural development and the
lack of financial support for peasants, forced the inhabitants of other agricultural areas
(such as the Beka valley and Akkar in the North) to emigrate towards the big cities,
leaving behind them thousands of hectares of productive land.

Nevertheless, the Green Plan went some way towards reforming land and cultivation.
One more point should be mentioned before we proceed, namely the problem of
agricultural finance, its form and extent.

There are two sources of finance for the agriculture projects which operated both on a
private and a government basis: the Green Plan for promoting and increasing
agriculture output, and the Banque de Crédit Agricole, Industriel et Foncier
(B.C.A.I.F), created specifically by the government to meet the medium and long term
financial needs of the agricultural sector.

The Green Plan budget, approved in 1965 by the Lebanese Government, provided for
70 m.L.L to be spent over twenty years (30 m.L.L the first ten years and 40 m.L.L in
the final ten years) [35]. Many farmers (about 24,000) actually benefited from the plan.
By 1973, the total value of loans advanced had risen to m.L.L 44.9, 28% of this going
to farmers.[36] However, the budget was woefully insufficient, averaging at no more
than 3.5 m.L.L a year for the whole sector. When inflation and depreciation are taken
into account, the sum is a paltry one - sufficient neither to fulfil the goals of the green
plan, nor to feed the people.
### Table 3.4. Net National Product at Current Value by Industrial Origin
(1948-1971 in millions of L.L.)

<table>
<thead>
<tr>
<th>Year</th>
<th>Agr</th>
<th>Ind</th>
<th>Con</th>
<th>Tra</th>
<th>Fin</th>
<th>Tran</th>
<th>Serv</th>
<th>Adm</th>
<th>N.N.P</th>
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<tbody>
<tr>
<td>1948</td>
<td>169</td>
<td>19.4</td>
<td>134</td>
<td>14.5</td>
<td>35</td>
<td>3.8</td>
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<tr>
<td>1949</td>
<td>159</td>
<td>17.1</td>
<td>136</td>
<td>14.6</td>
<td>32</td>
<td>3.4</td>
<td>278</td>
<td>30.0</td>
<td>128</td>
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<tr>
<td>1950</td>
<td>206</td>
<td>19.7</td>
<td>141</td>
<td>13.5</td>
<td>43</td>
<td>4.1</td>
<td>300</td>
<td>28.8</td>
<td>136</td>
</tr>
<tr>
<td>1951</td>
<td>211</td>
<td>19.4</td>
<td>147</td>
<td>13.5</td>
<td>35</td>
<td>3.2</td>
<td>337</td>
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<td>143</td>
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<tr>
<td>1952</td>
<td>216</td>
<td>19.3</td>
<td>155</td>
<td>13.9</td>
<td>48</td>
<td>4.3</td>
<td>333</td>
<td>29.8</td>
<td>148</td>
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<tr>
<td>1953</td>
<td>221</td>
<td>18.9</td>
<td>161</td>
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<td>47</td>
<td>4.0</td>
<td>343</td>
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<td>783</td>
</tr>
<tr>
<td>1973</td>
<td>664</td>
<td>9.4</td>
<td>1021</td>
<td>14.5</td>
<td>310</td>
<td>4.4</td>
<td>2300</td>
<td>32.7</td>
<td>n.a</td>
</tr>
</tbody>
</table>

**Note:** Agr= Agriculture; Ind= Industry; Con= Construction; Tra= Trade; Fin= Finance and real Estate; Tran= Transport; Serv= Services; Adm= Administration; and N.N.P= Net National Product.

Between 1965 and 1973 some 1,183 villages received assistance from the plan, many benefiting two or three times" [37].

If this statement is true, the number of farmers who benefited from the Plan was less than the 24,145 reported by the Green Plan and quoted by John Bridge in his dissertation (1975) and his paper "Development in the Lebanese Economy 1950-1973". Therefore we suspect that no more than 10,060 farmers were able to benefit from the Plan, an average of 8 or 9 farmers in each village.

The other source of finance for this sector is the B.C.A.I.F. However, this too has its problems. Firstly, only 40% of its total working capital of 85 m.L.L was provisionally allocated to agriculture and furthermore the bank does not accept deposits from the public. Secondly, its ability to raise credits depends on the total finance made available by the government, the result being that relatively prosperous landowners can take advantage of the bank's services. Finally, it has been estimated that the B.C.A.I.F accounts for no more than 16% of all loans to the agricultural sector [38].

In short, the lack of credit on reasonable terms from both the private and government sectors, has limited the efficiency of agricultural production. Consequently it has hampered land improvement and prevented the introduction of new technology, materials and machinery, such as pesticides, fertilisers, seeds, tractors, and spreading-equipment. The working population in this sector has decreased while the wages of those remaining rose, putting a great strain on this sector.

It is not all gloom and doom, however. The development of the water resources of the Litani river in southern Beka is the most encouraging aspect of agricultural advance in the Lebanon. As a result of this, agriculture showed a significant improvement, contributing about 10% to the national income in the seventies (see table 3.4 and Fig 3.3). Even so, there is much more that the Lebanese government and the private sector can do to develop this sector, to make it contribute more to the national income and thus create more investment and job opportunities.

During the period 1975-85 agriculture production was not harmed directly by the civil war. The major problems were caused by the continuous Israeli military activities in South Lebanon and during the invasion period. Also some of the Arab countries refused to import Lebanese products in an attempt to avoid Israeli products that might have filtered through to their countries across the Lebanese borders during the invasion period.[39]

The pattern of development of this economic sector is not clear since the data is insufficient. Tables 3.4 and 3.6 show the development of yearly estimated production at current and fixed prices. As the tables show, agricultural production, at the current prices, increased significantly from m.L.L 382 in 1964 to m.L.L 534 in 1971 (prewar
period); during the war period, however, it increased dramatically from m.L.L 3,140 in 1981 to m.L.L 18,585 in 1986. At fixed prices, therefore, the war period showed a better performance; yet it was a consistent performance that exhibited no significant growth, varying between m.L.L 769 in 1981 and m.L.L 701 in 1986. (see table 3.7 and Figs. 3.6 and 3.7). The role of the "Green Plan" was not clear during the war period mainly because of a lack of information which resulted probably from the inactive role of the government plan.

<table>
<thead>
<tr>
<th>Year</th>
<th>At current prices</th>
<th>At fixed prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964</td>
<td>382</td>
<td>382</td>
</tr>
<tr>
<td>1965</td>
<td>444</td>
<td>431</td>
</tr>
<tr>
<td>1966</td>
<td>468</td>
<td>443</td>
</tr>
<tr>
<td>1967</td>
<td>492</td>
<td>449</td>
</tr>
<tr>
<td>1968</td>
<td>464</td>
<td>425</td>
</tr>
<tr>
<td>1969</td>
<td>494</td>
<td>434</td>
</tr>
<tr>
<td>1970</td>
<td>479</td>
<td>421</td>
</tr>
<tr>
<td>1971</td>
<td>534</td>
<td>462</td>
</tr>
<tr>
<td>1982</td>
<td>3140</td>
<td>769</td>
</tr>
<tr>
<td>1984</td>
<td>5039</td>
<td>774</td>
</tr>
<tr>
<td>1985</td>
<td>7650</td>
<td>692</td>
</tr>
<tr>
<td>1986</td>
<td>18585</td>
<td>701</td>
</tr>
</tbody>
</table>


3.4.2 - Industrial Sector.

In 1948 the industrial sector accounted for 14.4% of the national output. This has since fluctuated between 12% and 14% or, if we include the construction industry, between 16% and 18%. The important growth period started at the beginning of the sixties when the industry made an average contribution to the national income of 503 m.L.L between 1960 and 1974 (see table 3.4). If this average contribution is compared to that for the period 1948-1959, which was 163.5 m.L.L, the difference is striking (see Fig 3.4).

In fact there are many factors at play here, both internal and external. The main internal factors are the development of the infrastructure - mostly electricity - and Lebanese government facilities. As regards electricity, many factories relied on their own generators rather than on the unreliable public supply. The improvement of the hydro-electric and thermal power station facilities encouraged the industrial sector, especially the factories, and production increased accordingly.

Government legislation has recently been invoked to assist the process of industrialisation through the establishment of a Ministry of Industry and other institutions such as the Bank of Credit and Agriculture and Industrial Finance (B.C.A.I.F), the National Bank for Industrial and Tourism Development (N.B.I.T.D) and the Chamber of Commerce and Industry. These in turn have supplied this sector with research work and technical and management advice. Other legislation has granted
Fig 3.1 National Income Trends 1948-75 (m.LL)

Fig. 3.2 Agriculture Production 1964-86 (m.LL)

Fig. 3.3 Agriculture Production 1964-86 (m.LL)
tax exemptions to certain new industries whose products were not manufactured in Lebanon prior to 1971. Tax exemption has also been granted for imported industrial machinery.

In addition, the B.C.A.I.F and the N.B.I.T.D and the commercial banks were another source of money for industrial investment. "By 1971 total credits granted had risen to 435 m L.L (16.6% of total advances in that year), and by 1973 to m L.L 760.2 (20% of total advances)." [40] Average lending by the B.C.A.I.F in recent years has been estimated at some 5 m.L.L a year, which is insignificant in comparison with the lending rate of the commercial banks. The contribution that was made by the B.C.A.I.F will be discussed later in this dissertation with particular concentration on the experience of the National Bank for Industry and Tourism Development.

The external factors are both an increased demand from Arab markets for Lebanese products and capital investments coming from outside which face no obstacles when establishing new business in the country.

Foreign demand for Lebanese industrial products increased heavily, especially between 1964 and 1974: as shown previously, this was primarily the effect of investment returns on business growth and on factors of production. The high quality and low prices of Lebanese industrial products tended to increase the demand for market products, which put the whole industrial sector in a better situation in terms of production and financial position. Industries such as food processing and beverages, textiles and derivatives, metal products and cement, developed at a remarkable rate.

As regards foreign investments in the industrial sector, many joint ventures were set up: beer, cement, fertilisers, electricity production and petroleum refining companies, to name but a few.

As far as small firms are concerned, it is only possible to show the importance of small firms in the industrial sector. This is mainly because of the absence of statistics on the national level. However, despite the absence of the real position of small firms in the Lebanese economy, the position of small industrial firms in the industrial sector give a projection of the position of small firms in other sectors despite the fact that it is commonly known that the majority of the Lebanese firms are small businesses.

Table 3.7 shows the size of the industrial sector at several periods of time from 1955 up to 1985. In general there was a clear decrease in terms of total number of manufacturing firms, primarily, because of the war and other economic or natural causes. During the whole period, industrial firms had reached a peak in 1970 and the number of firms increased from 7946 firms to reach 15669 firms in 1970, then showed a dramatic decline during the war period to reach 7764 firms only in 1985.
Table 3.7. Historical Development of Manufacturing Firms and Employment

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Firms</td>
<td>%</td>
<td>Firms</td>
<td>%</td>
<td>Firms</td>
</tr>
<tr>
<td>Less than 5</td>
<td>6153</td>
<td>77.5</td>
<td>7450</td>
<td>78</td>
</tr>
<tr>
<td>More than 5</td>
<td>1793</td>
<td>22.5</td>
<td>2199</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>7946</td>
<td>100</td>
<td>9558</td>
<td>100</td>
</tr>
</tbody>
</table>


In reality, there had been two opposite directions of growth for business firms if we consider this development in terms of the number of employees. First, the number of firms employing less than 5 employees had dropped dramatically from 12,700 firms in 1970 to 1,652 firms in 1985, a drop from 78% of the total number of industrial firms to represent only 27% in 1985. Inversely, the number of firms who employ more than 5 employees was sharply increased from 2,968 firms in 1970 to reach 6,112 firms in 1985 representing 73% of the total industries compared to 19% in 1970.

As far as small firms are concerned, one recent estimate shows that only 8180 industrial firms (59% of the total industrial power) are active. Of these active firms 5953 (72.7%) are small firms (with between 5 and 49 employees). These figures are shown in table 3.8. More details on the small industrial firms will be discussed later in this dissertation.

Table 3.8 Status of Industrial firms in Lebanon (1985).

<table>
<thead>
<tr>
<th>Firm Status</th>
<th>No of Firms</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Does not exist any more</td>
<td>2486</td>
<td>17.8</td>
</tr>
<tr>
<td>2 - Not industrial any more</td>
<td>368</td>
<td>2.6</td>
</tr>
<tr>
<td>3 - Destroyed</td>
<td>348</td>
<td>2.5</td>
</tr>
<tr>
<td>4 - Closed because of the war</td>
<td>2556</td>
<td>18.3</td>
</tr>
<tr>
<td>5 - Active firms (&lt; than 5 )</td>
<td>1652</td>
<td>11.9</td>
</tr>
<tr>
<td>6 - Active firms (5-49 Emp)</td>
<td>5953</td>
<td>42.7</td>
</tr>
<tr>
<td>7 - Active firms (&gt;than 49 )</td>
<td>159</td>
<td>1.2</td>
</tr>
<tr>
<td>8 - In different status</td>
<td>416</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13,938</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>


However, both before and during the war the industrial sector suffered many problems: the small size of the enterprises; the low level of capital and finance; the lack of raw materials and skilled labour - the unskilled workers were mainly peasants who had emigrated from rural areas to the main cities; and competition with imported goods as well as with the commercial lobby, both in parliament and from within the financial
Fig. 3.4. Growth oflndustrial Firms/Empl.

1955-19~5

20000~--------------------------------~

•

>than 5 Employee

~

<than 5 Employee

(I)

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10000

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(I)

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c

-

0

1964

1955

1970

1905

Year

Fig 3.5. Commercial Banks Deposits in m.LL & $
300000 ~--------------------------------~
~

•

Deposits in m. L.L
Deposits in m. S

.,;. 200000
~

~

~ 100000

.,&

Q

o~~~~~~~~~~
1975

1970

1980

1985

1990

Year

Fig. 3.6.Leb. Imports & Exports 1975-87 (b.LL)
400~----------------------------------,

Exports (b.LL l

Ill

Imports (b.Lll

300

200

100

o~~~~~~~~~~~
1970

1975

190C

Year
7X

1905


sector, who believed that industry and commerce are by nature rivals [41]. The Lebanese government and the banking sector can do little to tackle these problems in the absence of a comprehensive and advanced development plan. All of these issues will be discussed in more detail later in this dissertation.

3.4.3 - Services Sector.

The most significant contribution to the national income in Lebanon within the services sector comes from tourism and banking. Their contribution in 1948 stood at about 126 m L.L or 13.7% of the national income, if we exclude the real estate contribution (See table 3.4).

Tourism was a major source of foreign exchange earnings, while banking was important in terms of the financial services it provided to other sectors of the economy. A report on the tourist industry prepared in 1963 stated that;

"...Lebanon has natural tourism assets and other advantages which offer rich prospects of tourism becoming its major single industry and the largest and most stable contributors to its balance of payments...".[42]

From 1960 to 1966 the average annual growth in the number of tourists was 20%. After 1968 the growth rate dropped to about 10% after reaching its peak in 1967 which registered approximately 1,000,000 visitors (That excludes some 1,200,000 Syrians who may in some cases be tourists but are normally classed as workers).[43]

The rapid rise in tourist numbers especially in the early sixties, helps to explain the considerable construction boom, most notably in the building of new hotels.

Growth of tourism was clearly very important for the financial sector, since a great deal of financial assistance for construction came from the banking sector, and many commercial banks in Lebanon have become involved in financing hotels and office development. It may be that this type of financing is not normally a major element in the portfolio of banks in the west but it is the general case for those countries who are economically dependent on tourism. For instance, about 10% of all commercial bank loans went to the construction industry in the early seventies.

The long-term prospects of tourism, however, were uncertain. The experience of 1967 and the open hostilities between the Lebanese army and the militant Palestinian groups who came to Lebanon in 1967 and 1973 show that whenever open conflict occurs in the Middle East the number of tourists declines. The Arab-Israeli War and the continuous Israeli raids on Lebanese cities have damaged the tourist industry severely and made it a volatile element in the national output.

The Hotel Owner Association claims that 145 hotels have suffered war damage
amounting to L.L 70 m; it is estimated that 80% of those hotels are small hotels which employ less than 10 persons with a capacity of 50 to 15 rooms each. The greater, invisible damage caused to this sector is to the unregistered summer houses and mansions which were spread all over the villages and towns of the mountains. Thousands of houses were used as bed and breakfast businesses but the war was enough to demolish this small private enterprise. Although there were no statistics produced to indicate the size and the impact of the damage, the absence of this business however is very clear and significant. The return of this business in particular and the tourist sector in general is conditional upon political stability in Lebanon.

The contribution of this sector during the war has declined dramatically to the extent that it is no longer included in the sectors which contribute to the national income.

As regards banking and insurance, indications are that this sector is quite different from tourism. Banking and insurance services contributed about 3.8% to the national income in 1948, 7% in 1962 and an average of 5% at the beginning of the seventies, yet these services have a more fundamental importance than is indicated by percentages. It is reckoned that the facilities of this sector are sufficiently well developed to encourage both net capital inflows and net earnings on banking and insurance. Thus the real benefits of these facilities may show up more clearly in the balance of payments account than in the national income accounts, providing an efficient financial system consistent with a given growth in real output.

In other words, the ability of the financial sector to finance private sector investment activities such as industry, trade and agriculture, is of paramount importance, and has deep effects on national output.

### Table 3.9 Deposits in Lebanese and Foreign Currencies at Commercial Banks during 1975-1986 (in m.L.L.)

<table>
<thead>
<tr>
<th>Year</th>
<th>Deposits in L.L.</th>
<th>Deposits in F.Currency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974</td>
<td>6664</td>
<td>- 2785</td>
</tr>
<tr>
<td>1975</td>
<td>6593</td>
<td>1.1 3058</td>
</tr>
<tr>
<td>1976</td>
<td>6612</td>
<td>0.3 2710</td>
</tr>
<tr>
<td>1977</td>
<td>9316</td>
<td>40.9 3590</td>
</tr>
<tr>
<td>1978</td>
<td>11504</td>
<td>23.5 3610</td>
</tr>
<tr>
<td>1979</td>
<td>12971</td>
<td>12.7 7073</td>
</tr>
<tr>
<td>1980</td>
<td>16129</td>
<td>24.3 10589</td>
</tr>
<tr>
<td>1981</td>
<td>21321</td>
<td>32.2 17608</td>
</tr>
<tr>
<td>1982</td>
<td>32152</td>
<td>50.8 13287</td>
</tr>
<tr>
<td>1983</td>
<td>41129</td>
<td>27.9 16841</td>
</tr>
<tr>
<td>1984</td>
<td>48386</td>
<td>17.6 25224</td>
</tr>
<tr>
<td>1985</td>
<td>72631</td>
<td>50.1 44837</td>
</tr>
<tr>
<td>1986</td>
<td>92146</td>
<td>26.9 244539</td>
</tr>
</tbody>
</table>

Source: Bank of Lebanon.
During the war period, the finance sector has undergone a gradual structural change as a result of the lack of trust in, and the depreciation of, the Lebanese pound. Table 3.9 shows the deposits and their percentage change in Lebanese and foreign currencies with the commercial banks. Several conclusions can be reached from this table. Firstly, there was a strong tendency and desire on the part of people towards saving and dealing with banks during the war period. This much is clear from the increased amounts of deposits placed with commercial banks in Lebanese pounds and foreign currencies. (see table 3.9 and Fig 3.5 in the next page). Secondly, there was a higher propensity to deposit money in foreign currencies than in Lebanese currencies especially after the Israeli invasion, when the purchasing power of the Lebanese pound depreciated against foreign currencies, and also as a result of the capital outflow from the country. (see table 3.9 and Fig 3.5)

3.4.4 Trade Sector.

Since 1948 the trade sector has been among the most important: its activities have enriched the Lebanese national income more than any other sector. In 1948 it contributed about 261 m.L.L. or 28.4% of the national income. Its lowest contribution was 25% in 1962 and 1963, mainly due to the political crisis in Lebanon at that time. Thus it has always been the greatest contributor to the national income. Growth continued steadily and its contribution rose to an average of 31.5% throughout the late sixties and early seventies (see Fig 3.6).

It is interesting to note here that ever since statistical data has been collected, the balance of trade has shown a continuous gradually increasing deficit. This can be explained as follow. From 1951 to 1964, imports increased by 400% and exports by 100%. Imports from Western Europe and North America increased by 5%, amounted to 65% of total imports in 1970, whereas imports from the Arab world declined by about 5%, reaching a mere 10% of the total value of imports in 1970. The country had become dependent on imports and seemed unable to offset this deficit by increasing its exports. Nevertheless, the deficit has been offset over the years by several invisible export items such as transit and triangular trade (re-export), tourism, remittances and capital transfer.

What is surprising is that the government took no serious decisions nor set up any development plan to offset the deficit in the trade balance. Even in the last six-year development plan of 1972-77 only the following recommendations were mentioned regarding the trade sector;
Table 3.10 The Balance of Trade 1975-1987

<table>
<thead>
<tr>
<th>Year</th>
<th>EXPORTS b.LL</th>
<th>EXPORTS m.$</th>
<th>IMPORTS b.LL</th>
<th>IMPORTS m.$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>1.4</td>
<td>611</td>
<td>3.8</td>
<td>1659</td>
</tr>
<tr>
<td>1976</td>
<td>0.8</td>
<td>277</td>
<td>1.8</td>
<td>623</td>
</tr>
<tr>
<td>1977</td>
<td>2.4</td>
<td>789</td>
<td>4.5</td>
<td>1466</td>
</tr>
<tr>
<td>1978</td>
<td>2.2</td>
<td>746</td>
<td>5.1</td>
<td>1729</td>
</tr>
<tr>
<td>1979</td>
<td>3.0</td>
<td>926</td>
<td>7.5</td>
<td>2315</td>
</tr>
<tr>
<td>1980</td>
<td>4.2</td>
<td>1221</td>
<td>10</td>
<td>2900</td>
</tr>
<tr>
<td>1981</td>
<td>5.4</td>
<td>1253</td>
<td>12.5</td>
<td>2900</td>
</tr>
<tr>
<td>1982</td>
<td>5.3</td>
<td>1121</td>
<td>13.1</td>
<td>2769</td>
</tr>
<tr>
<td>1983</td>
<td>2.7</td>
<td>596</td>
<td>15.5</td>
<td>3422</td>
</tr>
<tr>
<td>1984</td>
<td>2.5</td>
<td>384</td>
<td>14.8</td>
<td>2273</td>
</tr>
<tr>
<td>1985</td>
<td>5.0</td>
<td>305</td>
<td>23.0</td>
<td>1410</td>
</tr>
<tr>
<td>1986</td>
<td>6.2</td>
<td>162</td>
<td>72.9</td>
<td>1900</td>
</tr>
<tr>
<td>1987</td>
<td>8.0</td>
<td>350</td>
<td>1250</td>
<td></td>
</tr>
</tbody>
</table>

Source: Chamber of Commerce and Industry.

"I- Strengthening of the directorate of standards and measurements (specification); II-Conclusion of trade agreements; III-Establishment of permanent industrial fairs in Africa. IV-Appointment of qualified trade attach' es in Lebanese embassies abroad."[44]

Fig 3.7. Leb. Imports & Exports 1975-87 (m.$)

These recommendations cannot be said to represent a systematic and comprehensive programme of action for export promotion and development.

Nevertheless, so far as the balance of trade is concerned, the war period has been no better than the prewar period. The gap between the level of imports and exports has continued, widening considerably in 1987 in Lebanese currencies at current prices. If
we consider the performance in the Dollar currency at constant prices, the trend appears to be completely different. Fig 3.7 shows that in the period between 1975 and 1978, both imports and exports increased. However, exports continued to grow rapidly, contrasted with a sharp fall in imports. This was caused primarily by the closure of the port of Beirut and the airport which prevented a great deal of export merchandise from entering Lebanon. Imports rose dramatically in 1980 and peaked in 1983. A continuous sharp fall followed in the period 1984-1988. Similarly, exports fell sharply after the Israeli invasion of 1981-82, declining from $M 1253 in 1981 to $M 350 in 1987, (see Fig 3.7 and table 3.10)

With reference to the Lebanese economy and the conditions of war, the present research will endeavour to examine the financial performance of small industrial firms. The following chapters will clarify and discuss this and other relevant issues.
3.5 - REFERENCES:

1 - Wilson, Rodney. *The Economics of the Middle East.*, 1979, p.152.
6 - Ibid, pp. 64-5.
11 - The French illegal activities in the country are reported in Mezher, Y. which angered the Maronite Patriarch Antouan Aridah and led to his protest against them: p. 985.
15 - Smith, Harvey H, *Area Hand Book of Lebanon*. Washington, U.S.A, Government Printing Office,, 1969. pp. 213-4; A.Y.Badre, "The National Income of Lebanon", Middle East Economic Papers, (Beirut: Economic Research Unit, American University of Beirut), 1956. Bader's figures reveal a compound real growth rate of national income of just over 6% from 1954-1957, whereas the American Embassy cites a growth rate of 14 % for the same period. Over the longer period estimated by Badre, the growth rate dropped to 5.5%, while the American Embassy's figures gave a rate for the same period of 4.1%. In Mallat's estimate for the period from 1958-1963, the growth rate was 13.6%, while the American Embassy's figures mention a rate of 5.07% over the same period. The estimates of the overall growth rate are contradictory and perhaps inaccurate. It is quite clear that each researcher approached the matter from a completely different angle but unfortunately we have no record of the methods they used.
16 - For more details about the value added technique used by the Ministry of Planning, see any of the statistical year books of the Lebanese government. For more information about the employed techniques in these series, see the above mentioned references and John Bridge in his thesis p. 92.
20 - See Al-Jumhuriyyah newspaper, issue of 13/1/1986.
21 - See Al-Safir newspaper, issue of 15/12/1988.
22 - Professor Issa, Najeeb (1985), divides the prewar Lebanese economy into two periods;
the first beginning with Independence Day and continuing up to the end of the fifties, the second running from the beginning of the sixties and ending in the mid-seventies (1975). Professor Makdisi, S, another Lebanese economist, followed a different approach. His financial findings were based largely on the evolution of the national economic performance, in which context he said, "Consistent official estimates of national income for Lebanon begin in 1964. Estimates for previous years reach back to 1950. There is, however, no one continuous series which could be used for the period prior to 1964 as a whole. Although consistent estimates are available for the period 1950-58". From this, it can be seen that Makdisi postulates three prewar period, 1950 to 1958, 1958 to 1964, and 1964 to 1974. Raymond Mallat (1977) takes a similar approach to that of Professor Makdisi, based on the remarkable growth of national income with allowances for political factors. According to Mallat, the most important economic period in the Lebanese economy began with the political economic split between Lebanon and Syria in March, 1950.

23 - See note 22.
24 - See note 22.
26 - There is no information which might explain better more why this contribution of agriculture is this amount, or how it was achieved.
27 - This crises ended with a compromise between the rebels and the government through the election to the presidency of the army commander-in-chief Fouad Chehab who enjoyed considerable Muslim and Christian support. The state was preserved but national unity remained precarious, (see Middle East Review, 1974, p.113.)
28 - An unsuccessful coup in December 1961 by the S.N.P (Syrian National Party), which favoured the creation of a Greater Syria. Then the Plan was postponed.
29 - Tabarah, Ryad, "Arab Development and Lebanese Human Resources": a paper presented at the 2nd National Conference population policies. 1982. pp.30-1. Tabarah argues that a great amount of money flows into the country (Lebanon); for instance, remittances amounted to 753 m.LL ($ 251 m) in 1970 and 7236 m.LL. ($ 9112 m) in 1974. Disposable income reported by the government in 1970 was 4561 m.LL. An amount of 632 m.LL was the difference between the two sources.
30 - Ibid., p. 30.
31 - Saidi, Naser, in Politics and the Economy in Lebanon, eds Nadim Shehadi and Bridget Harney, the Centre for Lebanese Studies, Oxford, the Centre of Near and Middle Eastern Studies, SOAS, University of London, 1989. p. 38.
32 - Tabarah, Ryad. op. cit., see also Nasr, Salim. in Politics and the Economy in Lebanon, op.cit. p. 44.
33 - Nasr, Salim. in Politics and the Economy in Lebanon, op.cit., p. 44.
34 - Ibid., pp. 44 & 47.
36 - Loans were given under the Green Plan. They were concentrated in three main areas; i) land reclamation. ii) reservoir construction, and iii) wall constructions. Ibid. p.15.
37 - Bridge, John. (1975), op.cit, p. 110.

85

4.1 INTRODUCTION.

It is very important at this stage to define and classify the type of this research. In the field of research, different names and classifications have been given to different types of research. One of the simplest classification is that made by Sekaran, U. (1984) which takes as its starting point the purpose of the research. She reports that; "Research can be undertaken for two different purposes. One is to solve a currently existing problem in the work setting; the other is to add or contribute to the general body of knowledge in a particular area of interest to the researcher. Where research is done with the intention of applying the results of its findings to solving specific problems currently being experienced in the organisation, it is called applied research. However, when research is being done chiefly to improve our understanding of certain problems that commonly occur in organisational setting, and how to solve them, the research is called basic or fundamental research, it is also known as pure research. The findings from such research contribute to the building of knowledge in the various management areas" [1]

According to the above classification, the present study can be defined as basic or fundamental research, which attempts to understand and explain the financial performance of small manufacturing firms in Lebanon during the war period.

The purpose of this chapter is to discuss the methodology -the processes and the procedures of the conceptual framework of the financial performance model presented earlier in the research. It examine the issues and arguments behind the choice of the perspective adopted for the research.

If we present again the whole research plan (the hypothetico-deductive method), we see that four topics are be involved: parameter and hypotheses (operational definitions);
research design; data collection; and techniques of analysis. (see figure 4.1)

4.2 OPERATIONALISING THE MODEL: RESEARCH PARAMETERS AND HYPOTHESES.

The overall purpose of the research is to contribute to a better understanding of the financial performance (financial activities) of small firms in Lebanon during the war period (1975-86). In other words, the aim is to provide a clearer picture and greater understanding of those issues and elements which have influence, and continue to influence, the financial process and sub-processes within the financial and nonfinancial structure and environment of the small firm.

In the light of the above objective, there are two major hypotheses to be tested in this research. The first is directly related to the body of the financial management theory, while the second is related more to the economic and financial field in which the small manufacturing firms operate.

The first hypothesis questions the extent to which financial management exists and is applied by small business management. The theoretical model which was developed from the body of the theory of financial management as a conceptual framework presented earlier in this research will be used to test the first hypothesis. The model in its five stages/steps suggests that complete financial processes and activities are carried out by the financial management of the firm.

The second hypothesis is based on the observation of three interrelated effects of the war on the Lebanese economy. The first is that the industrial sector lost around 41.3% of its industrial firms. The second is that the labour market lost more than one third of its working power/capacity. The third is that the outflows of capital from the financial market reduced the financial power of the Lebanese economy, shaking its whole financial system and its position in the world.

However, the hypothesis is that the fundamental change in the three economic and financial areas as a result of the war are major incentives for the financial management of surviving small manufacturing firms to obtain more finance from national sources and to attain higher profits and growth rates. In other words, the effect of the war has been a major incentive for obtaining finance and for endeavouring to attain high rates of profits and growth.

These hypotheses provide the components of the theoretical framework, presented in the conceptual model of financial performance. The parameters of the research helps us to define further, in specific terms, the related sub-hypotheses.
4.2.1 PARAMETERS OF THE RESEARCH.

There are six basic parameters in this research:

1 - workforce.
2 - financial management.
3 - structure.
4 - finance.
5 - profit and growth.
6 - environment.

These parameters must now be translated into a very specific hypothesis in which we shall formulate precisely what should be tested. All of these parameters are discussed in detail in the theoretical part of the research; these individual hypotheses highlight the testable issues of the whole research.

However, there might be some hypotheses, issues or questions uncovered in the theory which were not tested in the field. Such specific questions may be derived in detail from the hypotheses, and they will be also subject to testing.

Let us now present the hypotheses of the research in terms of each individual parameter.

4.2.1.1 Workforce (number of employees)

It is proposed to test the hypotheses that;

a - the decrease in the number of employees in the small manufacturing firms led to imbalance in the structure of those firms;
b - the decrease in the number of employees in the small manufacturing firms led to major changes in the organisational structure and, relatively, its management size to total employment will increase.

The above hypotheses are concluded from the overall hypotheses of the research and reflect one of the major observations of the changes which have taken place in economic environment as a result of the war. In particular, they question some fundamental issues in the organisation and its management. In this context, the following questions may be raised; the number of employees before the war and after the war; the effect of change (decrease or increase) on the business organisational structure and its relationship to management size, i.e. span of control, and the form of
the organisational structure and type of management controlling this structure.

4.2.1.2 Financial management.

It is proposed to test the hypotheses that:

- the extent to which the financial management in its modern (recent) structure (functions and administration) is applicable by small firms; (presumably it existed and was applied by small firms).

- the number of directors and staff involved in financial management (financial department) in the small firm is insufficient to carry out the functions of financial management.

- the extent to which decision making is spread over (decentralised) or condensed (centralised) within the financial management size and the small firm management size (presumably that the decision is divided among the managers).

- the number of directors (owner-managers and non-owner-managers) is a key factor in the structure of a small firm and in its financial performance.

The above hypotheses question several issues related to the principles of financial management and its application in the context of small firms with special reference to small manufacturing firms in Lebanon.

The following issues will be examined: investment decisions; financing decisions; dividend decisions; accounting and profit analysis; financial analysis; planning (budgeting); price analysis; cash management; risk analysis; credit and collections; information systems; ratio analysis; ... etc. These variables were discussed in the theoretical part of this research.

As regards the directors of the small firms, the following issues will be examined: type of directors (owner-manager or non-owner-managers); age; gender; past experience; educational and academic attainments; specialisation and the number of directors. The author wishes to focus the attention of the reader on the importance of the number of directors a firm has, and the effect this has on the financial performance of the small firm. It is expected, however, that there will be a significant role and effect which could be quantified in terms of the number of directors of the firm. This will be tested extensively in this research.

4.2.1.3 Structure.

It is proposed to test the hypotheses that:

- the number of employees in the small firms controlled by non-managers is different from those in the small firms controlled by non-owner-managers (or firms who employ
non-owner-managers);  

b) the organisational structure of the small firm varies in its form according to the number of directors it has and the type of ownership (mainly control) of the firm;  
c) the financial structure of the small firm under the control of owner-managers is different from that under the control of non-owner-managers (or who employ non-owner-managers).

These hypotheses question in depth the effect of the management team size on the organisational and financial structure, an issue which has been given little attention in the literature on finance and the field of small firms. The researcher hopes to be able to provide some answers to the above questions. Issues to be discussed in this context are as follows: the form of the organisational structure; span of control; and financial structure (sources and uses of funds as well as income).

4.2.1.4 Finance.

It is proposed to test the hypotheses that;  
a) In spite of the war and the outflow of capital from Lebanon, finance has been available to small firms from external sources;  
b) Small firms are expected to depend on internal sources of funds more than on external sources.

The above two hypotheses raise the question of the financing of small firms and the availability of funds for them. The issues that will be questioned and tested in this area are as follows: the role of the Lebanese government in the financing of small manufacturing firms - in particular, the role of the National Bank for Industrial and Tourism Development; commercial banks; equity finance; and family, relatives and friends as sources of finance. Internal sources such as retained earning and depreciation allowances will be also examined.

4.2.1.5 Profit and Growth.

It is proposed to test the hypotheses that;  
a) the increase in market demand as a result of the disappearance of 41.3% of the industrial firms (supply power) is a major reason why small firms have made substantial profits during the war period.  
b) These profits might be the major cause of the high growth rate;  
c) Profit and growth are related to the size of the firm. Therefore, profit and growth are expected to be positively associated with the size of the firm.  
d) The number of directors in a small firm is positively associated with the profit and
growth rate attained by the firm.

To operationalise the above hypotheses, financial statements -in particular those of the small firms- must be obtained, and the profit and growth figures examined.

To test the hypotheses, several methods and techniques of computation and statistical analysis will be used to reach a satisfactory conclusion. The results may be positive or negative, significant or nonsignificant, the point is for us to understand the direction of the relationship between the variables concerned. Other issues in this area will also be examined, particularly the degree of risk associated with profit and the effect of age of the business firm on profit and growth rates.

The techniques of analysis will be discussed in detail later in this chapter.

4.2.1.6 Environment.

By environment we mean the variables that exist around the business organisation, in particular the war conditions, the social system, the economic system, etc. Thus it is proposed to test the hypotheses that:

a) the effects of war were one of the important variables that positively affected the firm's profit and growth rates.

b) the effect of the environment (apart from the direct effect of the war, either positive or negative) in which the firm operates, and which was in a state of turbulence, might have had a negative effect on the business performance.

These hypotheses question certain qualitative variables such as the effects of religion; the work environment; the civil war with fighting in streets and districts; the effects of political parties, and so on. The variable "the effects of the war" will be dealt with quantitatively by special methods suggested in the theory of quantitative analysis. The variable will be expressed and treated as a dummy variable and will have a value of measurement.

Other variables and their effects will be treated as qualitative variables and will be examined in the form of "value judgments" and "observations", or in the case studies chapter. Tyler, R. (1956) and Walker, R. (1985) support this approach.[2]

4.3 THE RESEARCH DESIGN.

Within the adopted research process model (Fig 4.1) the step that follows the formulation of the hypotheses is the research design stage. At this stage the researcher
has to formulate and structure the dimensions of the research design. According to Sekaran, U. (1984):

"The design decision involves several aspects, including the purpose of the study. The type of investigation, the extent to which the researcher would interfere with the normal flow of events, which should be the unit of analysis, the time horizon for the study...".[3]

In this section we shall attempt to discuss that which the researcher has used to draw the dimension of the research design. It is worth noting here that in the research field there is no "perfect" design, since it "is difficult to come up with a clear and nonoverlapping distinct categorisation".[4] This problem has been discussed by Emory C.W (1980).[5]

Each of the research design issues will now be presented separately.

4.3.1 The Purpose of the Study.

A piece of research can be exploratory, descriptive, or conducted to test hypotheses; this present study is a combination of all three, with the emphasis on hypothesis testing. It is a combination of the three in a sense that it tries at times to explore new areas of organisational research, and is descriptive in that it attempts to describe certain characteristics of the phenomenon under examination. It is also a predictive study because it 

"...would go beyond the analytical study as much as it would analyse not only what, how, or why something is happening in a particular situation, but also what, how, or why something could happen in several other situations with respect to the same problem. In other words, we would be aiming at broader generalisability in predictive studies, where solutions to a problem in a particular study will be applicable in similar cases in other organisational settings".[6]

4.3.2 Type of Investigation.

Two types of investigation will be used alternatively whenever required; correlational and causal. When we seek to delineate the important variables that are associated with the problem, this is called correlational investigation, when we wish to delineate the cause of a problem, this is called a causal investigation.

The difference between these two approaches dependent mainly on the extent of the researcher's interference with the flow of events and/or the time frame of the study; if it is a causal study, then the variables may have to be manipulated and others controlled; if the study is correlational, the researcher will not interfere with the flow of events. In this research both approaches will be used for testing the hypotheses proposed earlier.

4.3.3 Degree of Interference.
The process of data collection, inevitably involves a certain degree of interference no matter how scientific and objective the approach. There may be varying degrees of interference by the researcher in the manipulation and control of variables in the research, either in the natural setting or in the artificial research setting. As a rule interference takes place in experimental designed studies rather than in the field of designed studies.

The degree of interference in the present research is not so great as to affect the normal flow of events. The interference of the author will be limited to the necessities of data organisation and refinement and test requirements. For example, the variables "total employees" and "total number of directors" can be added together to give another variable called "total employment". Similarly the variable "total directors" can be split into "owner-managers" and "non-owner-managers"; or a variable in its numeric form could be lagged or logged according to the specification and requirements of the test itself.

4.3.4 Units of Analysis.

In general "the unit of analysis refers to the level of aggregation of the data during the subsequent analysis".[7] In particular, the units of analysis depend on the question or the hypothesis to be tested. It could be the business organisation as one unit, or source of data, or as a group. However, if the problem statement is related to group effectiveness, then obviously the unit of analysis would be at group level. Thus the unit of analysis of this research will be the small firm as a source of data; other units of analysis will be derived from the small firm or directly related to it.

4.3.5 Time Horizon.

With regards to the type of data collected, time is of great importance. There are several ways of collecting data; this determines and controls the techniques of analysis and may affect the way in which the results of the research can be interpreted.

Two famous types of time horizon are cross-sectional and longitudinal studies. A study can be conducted in such a way that data are gathered just once, perhaps over a period of days or weeks or months or years, in order to answer the study questions. Such studies, in common with the present work, are called one-shot or cross-sectional studies. Studies in which data are gathered at two or more points in time are called longitudinal studies.
4.4 MEASUREMENT OF VARIABLES AND DATA COLLECTION.

This section deals with the techniques of collecting data on variables that constitute the units of the theoretical framework, those which will enable us to test the hypotheses of the research. Two points will be covered to this end: measurement of variables and methods of data collection.

4.4.1 Measurement of Variables.

Any material object can be measured; the type of instrument with which we measure it depends on the kind of information required. A table, for example, can be measured in several ways, i.e. in terms of weight, volume or height. Each of the physical attributes of the table has its own scale of measurement, e.g. kilos, cubic meter, ...etc.

In the study of business organisations there are a host of variables open to examination: attitudes; concepts; social and behavioural attributes; group characteristics; individual characteristics; business performance variables; and so on. It is the objectivity or subjectivity of the variable concerned that determines whether it is easy or difficult to measure.

The best and easiest way of making subjective or abstract concepts measurable is to operationalise the concept, or to so define it that it becomes measurable; in other words, to put it into an observable, measurable frame of elements.[8]

Some examples from our conceptual variables may help to demonstrate the whole process in the research. With regard to the objective concepts, it is very easy to operationalise the characteristics of the director of the business by asking simple, straightforward questions such as age, educational level and past experience. Likewise, from the financial records of the business we can know the profit, loss, ...etc.

With regard to subjective concepts, our aim is to determine the degree of concentration of the financial decisions in the firm's management. For this purpose we first had to define the financial decision and/or its attributes, and to ask who takes the decisions concerning daily payments, monthly payments, wages and salaries, financing decisions, ...etc. We made out a list of all the possible financial decisions and decision makers according to the dictates of the theory of finance and financial management. Answers to these questions will allow us to know whether decision making is concentrated (centralised or decentralised) in the firm's management.

Another important factor in the measurement of operationalised concepts is that of
scale; knowing how to operationalise and define the concept is half way to knowing the scale required for the measurement procedure. Researchers in the field of statistics—and in particular specialised statistics such as quantitative analysis for business decisions and quantitative concepts for management and econometrics—have enriched the library of social sciences with a substantial number of specialised books on the subject.[9]

Fortunately, certain scales have been devised that allow us to measure our variables in either quantitative or qualitative form:

"There are four basic types of scales: nominal, ordinal, interval, and ratio. The degree of sophistication to which the scales are fine-tuned increases as we move from the nominal to the ratio scale"[10]

Sekaran, U (1984) defines these scales as follows:

a - "A nominal scale is one that allows the researcher to assign subjects to certain categories or groups", such as gender (male or female).

b - An ordinal scale "would also rank-order the categories in some meaningful way..., according to some preference..., ranked and numbered 1, 2, and so on." Thus it helps the researcher to determine the percentage of each preferred rank of the respondents, thus adding a new dimension and providing more information than the nominal scale can provide.

c - The interval scale, in addition to that which the nominal and ordinal scales provide, "introduces an arithmetical element to the measurement,..., adds a quantitative dimension to the categorical or quantitative data..., it also measures the magnitude of the difference in the preference among the individuals". Thus it helps the researcher to determine among the variables the differences, the order, and the equality of the magnitude of the differences.

d - The ratio scale, in addition to that which the interval scale measures, "also taps the properties in the differences. It is the most powerful of the four scales because it has a unique zero origin (not an arbitrary origin) and subsumes all the properties of the other three scales".[11]

The data of this research will rely on the four scales of measurements, since they contain all types of questions that need such scales.

4.4.2 Data Collection Methods.

In theory, data can be gathered from various sources and in many different ways. The following methods are the most common methods: interviewing, administering questionnaires, and observation of people and phenomena.

In this research, three methods have been applied with different levels of reliance. The main method was the administration of a questionnaire, followed by interviews and
personal observations.

The questionnaire was administered personally; the mailed questionnaire, however, was not successful as a result of the war. As a member of a team of three, the researcher had the chance to collect most of the questionnaires himself, meet the directors of the firms and other staff members, introduce the topic of the research, and encourage the respondent to give honest answers, as well as clarifying any questions. Being in the field also enabled the author to take notes and record many observations and comments outside the questionnaire. The author was also able to choose the people for the interviews.

The questionnaire included two types of question; open-ended and closed. The former allowed the respondents to answer the questions in any way they liked, while the latter required the respondent to choose from a list of alternatives given by the researcher. The questionnaire also included an introductory page explaining the purpose of the research and its necessity, assuring the confidentiality of the information provided by the respondent, and thanking them for their cooperation.

The interview technique was planned with several directors of the firms and with others such as bank managers and civil servants. The interview technique is able to explore several factors in the situation that might be central to the broader problems, and can lead to several critical factors in the situation. It allows in-depth information on certain selected factors to surface. Observational data allows the researcher to deduct conclusions from being with people in their natural work environment, and to record their behaviour. However, observational data must be used with care so as to avoid any judgment bias which might contaminate the results.

4.4.2.1 Applied Methods in Data Collections.

There are several issues to be discussed in this area: sampling, sources of data, procedures of data collection and the limitation of the field work.

a - Sampling.

One of the most critical steps the researcher has to take is to decide how and from where the data is to be collected. Clearly in any social setting or field work it is impossible to observe and interview everyone and everything related to the phenomena under investigation mainly because of the cost, time and amount of data involved. In such circumstances a sample is used.
There are several points that should be clarified by the researcher before data is collected.

- **Population:** This is the whole group of events, or people, or organisations that the researcher wishes to study and examine. The population of this study comprise those manufacturing firms employing between 5 and 50 employees. [12]

- **Site (geographical area):** This is the geographical area which contain the members of the groups from which the sample is to be drawn. Two geographical areas were chosen: Beirut and Mount-Lebanon. In addition to the fact that these two areas are home to 56.2% of the total number of small manufacturing firms, there is theoretical support for the choice of more than one location. Strauss, A. L. et al. (1964) argue that,

  "... if researchers select one location, it provides them with a particular perspective of the institution... However, this approach may provide the researcher with a limited perspective,... researchers should, therefore, select research sites where they make comparisons between different groups. In this way the different perspectives that are employed by participants can become the subject of study."[13]

<table>
<thead>
<tr>
<th>TABLE 4.1 CHARACTERISTICS OF FINANCIAL STUDIES OF SMALL FIRMS</th>
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<tr>
<td>Study Characteristics</td>
</tr>
<tr>
<td>Source of Data</td>
</tr>
<tr>
<td>% of Companies in Manufacturing</td>
</tr>
<tr>
<td>Geographical coverage</td>
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<tr>
<td>Sample Selection</td>
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- **Sample:** As Hoivville, G. et al (1983) put it, a sample is "... a small-scale representation -a kind of miniature model- of the population from which it was selected".[14] In this research the sample is the number of cases (organisations/small firms) covered by the survey.

- **Case (subject):** A case or subject is a single member of the sample. In this research it means a business firm (small firm).
Once these parameters have been defined, the data can be collected according to the sampling rules. The theory of sampling suggests that a proper sample should fulfil certain conditions and exhibit certain characteristics. According to Blalock, H. and Blalock, A. (1968):

"... a proper sample must give a precise picture of the population from which it is drawn. ... must be obtained by a probability process. ... should be as small as precision considerations permit, as economical as possible, and gathered as swiftly as its various measurement techniques permit".[15]

Cochran, W.G. (1977) adds that "any completed sample is potentially a guide to improve future sampling...".[16]

The methodological literature distinguishes between two types of sampling; probability sampling and nonprobability sampling. A clear distinction was drawn between them by Chein (1976):

"... probability sampling is that one can specify for each element of the population the probability that it will be included in the sample. ... in nonprobability sampling there is no way of estimating the probability that each element has of being included in the sample and no assurance that every element has some chance of being included."[17]

It is of vital importance to select a sufficient number of cases to represent the population. The more representative of the population the sample is, the more generalizable are the findings of the research. Two important factors decide the degree to which the sample is representative: the size of the sample, and the way in which it is collected.

The sample in this research was selected by an unrestricted (simple) random probability sampling method.[18] This method means theoretically that "each of the (N n) possible sample has the same probability, 1/(N n), of being selected."[19]

As a result of the survey, 75 firms were covered, 19 of which provided financial records (financial statements). If the total number of small manufacturing firms is considered, a sampling proportion of 1:68 was taken. If the total number of small manufacturing in the two geographical areas of the study is considered, a sampling proportion of 1:45 was taken.

Is the number of firms sampled a number on which we can rely to generalise our findings? If not, how much of the total percentage of the small manufacturing firms will the sample represent?
In practice, it is quite acceptable to compare like with like. The point here is to compare our sampling representation with those of similar financial studies. The Business Monitor in 1982 published the first results of a new analysis of the accounts of what it called "a fully representative sample of companies". In their work, Storey, D. et al. (1987) summarised these samples and how much each study represented. Those studies samples and their proportion of representation in comparison with our sample are presented summarily in Table 4.1.

Although these studies were concerned with different aspects of finance in small firms which may have affected the selection method, a comparison with our study is quite useful in the context of our argument. If we rank those studies based on their sample per firm representation, the following is obtained. Storey, D. et al. (1987) 1:7; ICFC (The Industrial and Commercial Finance Corporation) 1:42; this study 1:45; and 1:176, if we include only firms which provided financial records; MA3 (Business Monitor) 1:360; Hay and Moris 1:787; and The Wilson Committee 1:1428. All of these studies have claimed national representation save for that of Storey, D. et al., which was regional; this point supports the higher relative representation provided by this study compared with others.

In theory, testing can prove better whether such a sample is representative or not. We present here three different ways of testing the sample representation: firstly, measures of dispersion; secondly, interval of confidence; and thirdly, required sample size.

a - Measures of Dispersion.

There are at least three measures of central tendency which can be used for the purpose of comparing our sample with the population from which it was drawn; the mean, the standard deviation and the skewness of the sample. The mean of the population (\( \bar{X} \)) was very close to the sample mean (\( X \)), while the first reported equal to 12.54, the second calculated equal to 15.28 in a range of 5 to 50 employees. The standard deviation of the sample from its mean was higher than that of the population; the first was 12.3 as compared to 2.6. This difference is due to the bulk data of the population compared to the sample. The last measure which is very important, is the coefficient of skewness; this shows how symmetrical the two groups of data are in terms of their distribution. In the results, both were positively skewed and yielded quite close coefficients; for the sample it was 1.37 as compared with 1.19 for the population.

b - Interval of Confidence.

Since the sample numbers come to 75 firms, we would now like to test whether our
sample size is acceptable or not in terms of its mean variability and accuracy. Therefore, the interval of confidence can ensure the relative accuracy of the population parameter. However, if the population mean \( (\mu) \) is found to be within this confidence interval the sample is then considered to be a representative sample of the population. If \( (\mu) \) is outside the interval, then the sample does not represent the whole population. Therefore, we consider that,

\[
\mu = \bar{X} \pm K S_x
\]

where,
- \( \bar{X} \) = sample mean, which is a point estimate of \( \mu \)
- \( S \) = sample standard deviation
- \( \mu \) = population mean (given, or can be estimated)
- \( S_x \) = standard error of the mean
- \( K \) = \( Z \) statistics for the level of confidence desired.

This will determine the width of the interval of confidence, and supposedly \( \mu \) should be within the limits of the interval, otherwise it is not accepted.

So,

\[
S_x = \frac{S}{\sqrt{n-1}}
\]

where, \( n \) = the number of the collected sample.

\[
S_x = 15.397 = \frac{1.79}{\sqrt{75-1}}
\]

We desire a 95% confidence level, or 5% of error is accepted, then the \( Z \) value of the confidence level is 1.96.\[22\]

\[
\mu = \bar{X} \pm K S_x \text{ at 95% level of confidence.}
\]

\[
= 15.3 \pm 1.96 (1.79) = 18.8 \text{ and } 11.78
\]

while \( \mu = 12.53 \) (see note 22)

\[
11.78 < 12.54 < 18.8
\]

for the 19 firms which submitted their financial records.

Note that \( \mu \) this time is the sample size mean. This is in order to see whether these firms are representative of the 75 firms.

\[
S_x = \frac{S}{\sqrt{n-1}} = \frac{10.69}{\sqrt{18}} = 2.5
\]

then, \( \mu = \bar{X} \pm K S_x \) at the 95% level of confidence.

\[
= 17.8 \pm 1.96 (2.5) = 22.7 \text{ and } 12.9
\]

\[
12.9 < 15.3 < 22.7
\]

Therefore in both cases the value of \( \mu \) falls within the interval of confidence, but the interval is wider when the sample decreases to 19 firms.

c - Sample Size.

This method is summarised by the following statistical formula:

\[
E = Z \cdot \frac{\sigma}{\sqrt{n}}
\]
\[ E = X - \mu \] is the maximum deviation of \( X \) from \( \mu \).

So \( E = 15.3 - 12.5 = 2.8 \), as \( Z \) accepted at the 95% of confidence.

\[
E = Z \cdot \frac{\bar{\sigma}}{\sqrt{n}} = 2.8 = 1.96 \cdot \frac{12.3}{\sqrt{n}}
\]

\[
n = \left( \frac{1.96}{2.8} \right)^2 \cdot \left( \frac{12.3}{2.8} \right)^2 = 74 \text{ cases are required.}
\]

Thus it can be confirmed from the comparisons and statistical tests above that the sample of this study can be considered representative of the population from which it was drawn.

- Sources of Data.

Data can be gathered from various sources. Gary, D. E. et al. (1979) assert that, "data may come from records of the past... may be generated by making direct observation..., in the present".[23] John E. F. et.al (1988) classify sources of data as "...,internal and external. Internal data are generated from the activities within a firm. External data are obtained from courses outside the firm"; they also classified external data into two types, "sometimes as primary, or secondary".[24] Primary data are gathered by one organisation and published by the same organisation, while secondary data are gathered by one organisation and published by another.

Our research data are a combination of both types. However, all the data in the questionnaire are external and primary data. Other primary sources of data are the interview data and observational notes. The remainder of the data used was collected from the records of the firms, e.g. financial records, or from banks files such as credit files.

4.4.2.2 Procedures of Data Collection.

Having chosen the geographical area of the research and defined our sample, the next step was to find out how to select individual targets within this area. To obtain a list of the individual firms we approached the Chamber of Commerce and Industry, the N.B.I.T.D., the Industrial Unions and the Ministry of Finance (Tax Authority). The first two sources were extremely kind and helpful, providing us with a list of names, addresses, telephone numbers and special letters to their members and clients. The third source provided a list of the names and addresses of their union members. After ten days of meetings and negotiation with officials of the Ministry of Finance and the head of the tax authority, approval was given to provide the required data. Earlier, ministry employees had totally refused to cooperate and allow access to their files.[25]

Three hundred questionnaires were distributed. 60 of these were sent to east Beirut,
but were lost in the post. Of those remaining, 75 were filled in during direct visits or by appointment.

Several directors were interviewed for over three hours each for more in-depth information. Other interviews with bank managers provided very useful outside views on finance and credit policies.

d - Limitation of the Field Work.

Several constraints may hamper the choice of data-collection methods. For example, the extent of available facilities and help from the business organisations (small firms) covered; the expertise of the researcher; the time span of the study; and the costs and resources available for data gathering. However, these constraints did not limit the data-collection as much as the war conditions did.

Bearing in mind the geographical area of the study and the date of the field work (May - Aug 1988) the following examples might enlighten our reader about the conditions faced by the researcher during the collection of data.

One of the specialised reports on Lebanese affairs reported that,

"Some of the most ferocious fighting of the Lebanese war, which commenced in earnest between the rival Shi'it factions Amal and Hizbollah in the southern suburbs of Beirut on 6 May, was brought to an end on 27 May,... The fighting caused massive displacement, destruction and casualties. Over half of the 500-600,000 inhabitants of the suburbs fled during the fighting,... It is believed that nearly 500 people were killed during the three week of fighting, and over 1,000 wounded."[26]

At the same period of time,

"On 30 May a 150lb car bomb exploded in Ashrafiyeh (East Beirut),...killing at least 16 people and injuring more than 80. Eight days later, on 7 June, a car bomb exploded... in the Ousai district of Beirut, killing at least three people and wounding well over 20."[27]

Later,

"on 18 June one person was killed in an explosion in East Beirut, and on 21 June a car bomb...in Karantina, East Beirut, injuring 17 people. On 1 July a car bomb in Hamra (West Beirut).... killed one person and injured 30 people."[28]

After a month,

"on 22 July a 33lb bomb blew up,..., killing at least seven and wounding 74..., A car bomb in west Beirut on 21 August injured 16 people. On 30 August a car bomb exploded in the town of Chtawra. On 28 September a car bomb killed four people and wounded 18 when a bomb exploded during the rush hour at crossroads between south and west Beirut. In addition to the reported explosions, a number of car bombs have been defused by the Syrian army in west Beirut."[29]

On each of these days the team was unable to work at all, because when such events
take place all businesses close for at least two days.

4.5 TECHNIQUES OF ANALYSIS.

The techniques for analysing the collected data depend primarily on two interrelated factors: firstly, the degree to which the researcher wishes to penetrate the issues in hand; secondly, the nature of the research, i.e. whether it is quantitative or qualitative. This also applies to the variables involved in the study.

Concerning the first of the above factors, the researcher is able to widen or narrow the scope of the study depending on the time available, the cost, the purpose of the research, and the degree of his skill. All these variables play a major role in the process of completing the research.

This research involved measuring and evaluating the financial performance of small business firms. The data collected encompasses the quantitative and the qualitative. The questionnaires were designed to extract both two types of data, and to allow two types of data analysis, quantitative and qualitative evaluation. Thus, the techniques of data evaluation correspond to the type and the form of the variables being tested and the relevant scale by which they can be measured.

Development in the research field has led to a clear direction in the use of multiple methods of evaluation and their techniques including combinations of quantitative and qualitative methods. Although there is much debate between theorists in the literature about quantitative and qualitative methods, we do not propose to become involved in the discussion; we will simply present the advantages of each method, and at the same time contrast the difference between them.

Patton, M (1987) states that:
"The advantage of the quantitative approach is that it measures the reactions of a great many people to a limited set of questions, thus facilitating comparison and statistical aggregation of the data. This gives a broad, generalizable set of findings. By contrast, qualitative methods typically produce a wealth of detailed data about a much smaller number of people and cases. Qualitative data provide depth and detail through direct quotation and careful description of program situations, events, people, interactions, and observed behaviours."[30]

He adds that,
"...the purpose and functions of qualitative and quantitative data on questionnaires are different, yet complementary. The statistics from standardised items make summaries, comparisons, and generalizations quite easy and precise. The narrative comments from open-ended questions are typically meant to provide a forum for elaborations, explanations, meaning, and new ideas."[31]
It is clear from these comments that what cannot be provided by one method might be covered by the other.

4.5.1 Data Preparation.

Once the data are collected, they undergo two types of "refinement" procedure. One is the aggregation and disaggregation of data; the other is to put the data in the correct form. For example, financial statements provided by the small firms differed in format over the years. We thus had to formulate a standard statement form on which we organised all the financial data. For example, we had yearly data on total sales volume for several number of firms, but for our analysis we required average sales per firm over the whole period under study. To obtain the figures, we performed simple algebraic manipulations on the existing data. The computer played a major role in this process.

The data were coded in a special format on special coding computer sheets for the purpose of transformation onto the computer. The SPSS-X (The Statistical Package for the Social Sciences) was the main software programme used for the data analysis.

4.5.2 Techniques of Analysis.

4.5.2.1 Quantitative Techniques Several techniques of data analysis were used: statistics, case studies, observational notes, and direct quotations. The first was used extensively in response to the quantitative data, while the others were used to cover the qualitative side.

- Statistics.

Two types of statistics were used; descriptive and analytical statistics (inductive). Descriptive statistics included the averages such as the mean, variance, standard deviation and skewness. Analytical statistics included the Pearson product moment correlation, factor analysis, discriminant analysis and regression analysis.

Descriptive statistics are "confined to the treatment of data for the purpose of describing their characteristics ..., inductive statistics, which involves making forecasts, estimations, or judgments about some large groups of data than that actually observed or about some future happening based on a study of historical data."[32]

Table 4.2 is a classification of the types of tests appropriate for the kind of data collected.
### Table 4.2 Statistical Techniques and Tests Classified According to Type

<table>
<thead>
<tr>
<th>ONE VARIABLE</th>
<th>TWO OR MORE VARIABLES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nominal</strong></td>
<td><strong>Ordinal</strong></td>
</tr>
<tr>
<td>Chi - Square test for independence</td>
<td>Sign Test</td>
</tr>
<tr>
<td>Test of dependence</td>
<td>Median test</td>
</tr>
<tr>
<td>Contingency Coefficient</td>
<td>Mann-Whitney test</td>
</tr>
<tr>
<td>Cochran Q test</td>
<td>Kruskal - Wallis One-way analysis</td>
</tr>
<tr>
<td>Fisher exact Prob.</td>
<td>Analysis of Variance with trend analysis</td>
</tr>
<tr>
<td>Spearman's rank correlation</td>
<td>Kendall's Corr.</td>
</tr>
<tr>
<td>Analysis of Variance</td>
<td>Regression analysis (Multi-coefficient correlation)</td>
</tr>
<tr>
<td></td>
<td>Analysis of Variance (factorial design)</td>
</tr>
<tr>
<td></td>
<td>Analysis of Variance</td>
</tr>
<tr>
<td>Multiple Discriminant analysis</td>
<td>Multiple-regression analysis</td>
</tr>
<tr>
<td></td>
<td>Multiple Discriminant analysis</td>
</tr>
<tr>
<td></td>
<td>Canoical Correlation</td>
</tr>
</tbody>
</table>


It will be useful to review in brief the reasons for using the following statistical inductive techniques: Pearson correlation, factor analysis, discriminant analysis and regression analysis.

- **Pearson correlation.**

Pearson's product-moment correlation is considered highly appropriate as an indicator of the strength of an association for variables measured at the interval level. Although some of the variables - location, educational level, etc. - can be measured at the ordinal level, Pearson's product-moment correlation is able to do this job. It is preferable to other simple correlation tests for two main reasons: firstly, no great difference between the coefficients has been detected and so conclusions would be the same on the whole; secondly, partial correlation analysis has yielded interesting results, and it seems that the presentation of these results would be more comparable to the results of bivariate correlation analysis, mainly in relation to qualitative variables.

Partial correlation coefficient corresponds to Pearson's bivariate product-moment correlation coefficients adjusted for the impact of a third variable, and both kinds of correlation coefficient are generated under the assumption of linear relationships.
among the variables.[33]

- Factor Analysis.

Factor analysis is another statistical technique used in our study. The ability of factor analysis to show the degree of association between different variables is relatively strong. Basically, this technique is able to discover the structural dimensions of the variables involved in the analysis. One of the aims of this technique is to represent relationships among sets of variables parsimoniously. The varimax criterion will be applied in the factor rotation.[34]

- Discriminant Analysis.

Discriminant analysis is the statistical tool which helps us decide which prospective group is to be accepted or rejected on the basis of some independent variables. Dependent variables must also be determined. It is hoped that this analysis will help us to determine the predictive value of independent variables for the behaviour of the dependent variable, whether the group is accepted or rejected. At the end of the analysis it is hoped that we can reach a discriminant score for each group based on the following linear mathematical model equation:

\[ D = B_0 + B_1 X_1 + B_2 X_2 + B_3 X_3 + \ldots + B_p X_p \]

This linear discriminant equation is similar to the multiple linear regression. The Xs are the values of the independent variables, the Bs are coefficients estimated from the data, B0 is a constant value, while p is the last number of variables. The Bs are chosen so that the values of the discriminant function differ as much as possible between the groups, or so that for the discriminant score the ratio (between-groups sum of squares divided by within-groups sum of squares) is a maximum.[35]

- Regression Analysis.

Regression analysis is one technique with which to analyse quantitative data in order to make forecasts. More specifically, the objective of regression analysis is to find the "line of best fit" which summarises the relationship between regressed variables. The equation of the line takes the following mathematical form:

\[ Y = a + b X \] equation(1)

where
- Y is the dependent variable.
- X is the independent variable (explanatory variable)
- a is the intercept point
- b is the slope of the line. [36]

Equation (1) assumes that absolute variation in the dependent variable are linearly
related to absolute variations in the independent variable. The logarithmic and/or the
semi-logarithmic equation(s) hypothesis is that "a given proportionate change in the
independent variable causes the same absolute change in the dependent variable for all
values observed".[37] These models have been used by several researchers for similar
purposes of analysis. Among these researches were Summers H.B. (1932), Stekler H.W.
al. (1987).[38]

4.5.2.2 Qualitative Techniques.

It was mentioned earlier that to cover the qualitative side of the research, case studies,
observational notes and direct quotations were used.

In contrast to what statistics and quantitative methods may yield, qualitative methods
of analysis provide an interesting set of options. They can be expanded or can give very
little information (abstract); They can provide different options through their
presentation. Strauss, A.L (1987) stated that, illustrative data can,

"..., give a sense of reality to the account,...convey the viewpoint of actors,... can
be used to lend added credence to the author's theoretical commentary -or argument-
in short, giving evidence."[39]

Mitchell, M. (1983) suggested that,

"an illuminating case may make theoretical connections apparent which were formerly
obscure."[40]

In case studies, on the other hand, "the possibility of generalizations is minimal"[41]

Therefore, according to this view, the role of the case study should not be
underestimated as an important research technique and detailed source of data. As
Glockman, R. (1985) put it "..., not in the hope of proving anything, but rather in the
hope of learning something."[42]

In this sense the case study approach was used in our research. Furthermore, the
observational notes and direct quotations in the text to were useful to expand an idea or
to provide evidence by a director or banker,... etc.

So, through the qualitative methods another dimension will be added to the research; a
dimension without which, the quantitative data would present an incomplete view.
4.6 - REFERENCES.


4 - Ibid., p. 68.


7 - Ibid, p. 74.


10 - Sekaran, U. op.cit, p.128.

11 - For further detail of these scales, see A.W. "Transmitted Information and the Length of Rating Scales". Journal of Experimental Psychology. 1254, 47, pp. 303-308; Emory. C.W. (1980); Sekaran. U (1984) op.cit, pp. 128-135.

12 - The rationale for studying this industrial portion is discussed in chapter one of this study.


18 - For further techniques or methods of sampling, see: Cochran, W.G. (1977), op.cit. chapters; 2,5,8,9 and 10. Sekaran. U (1984), op.cit, pp.183-190.

19 - For this factorial equation see Freund, J.E. et al. (1988), op.cit., p.100 and p. 288.

20 - The mean of the population was reported in the NBITD book; The Industry in Lebanon; Its Establishment and Development , 1988. op.cit., p.96.


22 - The reader may refer to the table of critical value of t in any statistics book. As regards the equations used, most statistics books mention them; in particular, see: Clark and Schkade. (1969), op.cit., Hoinville and Jowell, (1983), op.cit.


25 - See the approval of the director of the Tax authority on the university official letter in the appendix, as well as other letters by the Chamber of Commerce and Industry and the NBITD Director.
27 - Ibid., p.3.
28 - Ibid., p.3.
29 - Ibid., p. 4.
31 - Ibid., p. 11.
35 - Ibid., pp. 75-122.
37 - Storey, D. et al., op.cit., pp. 103-4. In their statement the word profitability was not used, we used it to replace "the rate of return" which is the adopted profitability ratio in their analysis.
41 - Ibid., p. 91.
Chapter Five

SMALL BUSINESS MANAGEMENT PERFORMANCE

INTRODUCTION:

This chapter presents and discusses the important findings of the research carried out in Lebanon. At this point it is important to recall the overall objective of the research, which is to measure the financial performance of small businesses in Lebanon. The war is believed to have affected big and small businesses in several ways. At least two examples of direct physical damage to big and small businesses can be mentioned in the context of production; labour and capital.

This chapter will examine the extent to which financial management exists and is applied by the small business management; the performance of small business management will be examined in the light of the financial performance of the business.

In specific terms, this chapter examines the financial decision maker and his effect on the financial performance of the small business. Thus it will examine the business leader and the management he is directing and leading. Although there seems to be some agreement about what functions are performed by managers and organisations, there is disagreement on the question of the skills, styles and techniques needed for accomplishing such functions. It is worth noting here that for the past thirty years, scholars and researchers have been engaged in a debate over the extent to which western - usually American - management principles, practices and know-how are exportable to other cultures.[1]

Managerial functions are usually defined as the basic "classical" ones of planning, organising, controlling and directing, staffing and coordinating. At the same time business organisations appear to specialise in one particular area such as production, marketing, finance, personnel, and so on. Moreover, the question is applicable to the functions of financial management and the financial manager. In the context of the second part of our main hypothesis, the crucial question is whether or not such managerial and financial functions exist within the managerial framework of the Lebanese small business, and within what kind of financial organisational structure are they working.

The financial management of small businesses will be examined, and types of managers will be classified. The decision maker, functions (responsibilities and authorities) of the managers, concentration of power, locus of control, and the objectives and motives of the business leader will be discussed. Several overlapping areas and issues will be examined.

These questions will be discussed in two main sections as follow:

1 - The management and managers of small business.
5.1 MANAGEMENT AND MANAGERS OF SMALL BUSINESS FIRMS

5.1.1 Managers Background.

From the data obtained from a survey of 75 firms in two geographical areas in Lebanon (Beirut, and Mount Lebanon), it emerges that there are three types of managers in small firms, distributed non-normally with a 2.833 skewness value (+ vely skewed)(see table 5.1).

The above table shows that there are three types of manager in the small business firm: owner managers (OMNGS), non-owner managers (NOM), and assistant managers. 90 of the respondents were owner-managers, distributed throughout 65 firms, i.e. 86.7% of the total number of firms covered in the study, representing 67.6% of the total number of managers. Of these, 27 are shareholding managers spread across 18 firms (23.9% of the total firms). There are also 41 non-owner managers distributed amongst 18 firms(23.9% of total firms), representing 30.1% of the total number of managers. The third type is the assistant manager; only 3 of these figure in our study. Although these managers are very important on the organisational level as a link between top management and lower levels, in terms of the size of small business their limited presence is to be expected. There are also 25 partners distributed among 10 firms who have no role at all in the business except as that of partner. The effective role of these partners is limited to their contribution to the invested capital of the firm. However, owing to the paucity of data available about these partners, their role will be not discussed in our study, although it would be an interesting subject for further research.

<table>
<thead>
<tr>
<th>Title</th>
<th>No</th>
<th>% of Total Firms</th>
<th>Firms No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner Manager</td>
<td>90</td>
<td>96.0</td>
<td>72</td>
</tr>
<tr>
<td>Non-Owner Mng</td>
<td>41</td>
<td>24.0</td>
<td>18</td>
</tr>
<tr>
<td>Assistant Mng</td>
<td>3</td>
<td>2.6</td>
<td>2</td>
</tr>
</tbody>
</table>

Distribution of small business managers by geographical location among different types of industries and businesses constitutes another interesting aspect which may warrant attention.

In the survey covering two geographical areas in Lebanon, distribution of managers was almost equal in both areas: 45.1% of managers were situated in Beirut, and 54.9% in Mount-Lebanon. The firms' distribution was similar to that of the managers; with 42.5% in Beirut and 57.5% in Mount-Lebanon.

Among types of industries, textile firms yielded the highest percentage of managers (38.1%), followed by paper and printing firms (14.9%), chemical and plastic firms (14.9% each), the wood industry (13.4%) and the nonmetallic industries (9%); if we combine all metal
industries they account for the remaining of 5.9%.

As far as the legal form of small businesses is concerned, the whole perspective changes. Private family companies have about 52.6% of the total number of managers; limited liability companies have 24.1% followed by partnerships with 19.5%. The remaining 4.4 % were in public limited companies.

Family relationships figure prominently at management level. 32 partners are brothers; of these 19 are managers. This relationship is significant when we consider the owner managers as a proportion of the total number of managers. There are about 77 owner managers out of 133, representing some 70% of the firms (almost 93.3% of the total firms in the study.) The vast majority of those owner-managers are made up of brothers and, (in two firms only) spouses.

The role of women as managers is very limited. However, their contribution is quite effective whenever they are present in a firm. Only two female managers figured in the survey, both in the textile and fashion business. Two other spouses play a major role alongside their husbands, while another one helps her brother in his furniture factory. The limited role of women in business industries is mainly due to the general atmosphere in the Middle East which generally does not motivate and encourage women to involve themselves in business activities. There are, however, a lot of women who work in textile factories and chemical laboratories.

Managers of the Lebanese small business firms have made use of these resources along with their own natural entrepreneurial nature. According to Mills, A.E (1959), Lebanon has the distinction of having the most literate people in the region.[3]

Little information was given concerning educational levels by the interviewe managers, only 43 of whom responded to the questions concerned, as represented in table 5.2.

As shown in table 5.2, educational background was divided into 5 levels; technical degree (equivalent to high school); high school; bachelor degree; masters degree; and Ph.D. Since the vast majority of our managers are owner managers, correspondingly any judgment will be concerned with them only, thus leaving unknown any views about managers who are not partners.(see table 5.2)

The main reasons for having no answers from the rest is that some managers have only a basic or elementary education, and in some cases no formal schooling at all. During the interview they explained the cause of this educational gap in their life.

According to one, "I had no chance to continue my school education and get a good degree like my friends. I had to go and find a job in a factory and help my father to feed us and educate my brothers. I thought at the same time that although I had no choice, it would be better to learn a profession in the factory and save money for the future-and then open my own
Thus as shown in table 5.2, it can be seen that managers of small business firms in Lebanon in general attain high educational standards, both academic and technical. Higher postgraduate degrees - Masters and Ph.Ds - are significant in the study despite their small number. Higher degrees such as these are rarely found in the society as a whole, and thus the number is significant in a sample of 75 industrial firms and 43 respondents. It is worth noting that a higher educational level does not necessarily mean a better performance, especially if the specialisation is not related to the type of business involved. For example, the two Ph.D holders are involved in a business far removed from their own subjects: the law professor has a printing business and the social science professor runs a shoe factory with his father.

<table>
<thead>
<tr>
<th>Edu Level</th>
<th>OMNGS (%)</th>
<th>NOM (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tech. School</td>
<td>11 (26)</td>
<td>0 (0)</td>
<td>11 (25)</td>
</tr>
<tr>
<td>High School</td>
<td>10 (23.8)</td>
<td>0 (0)</td>
<td>10 (23.25)</td>
</tr>
<tr>
<td>B.A. Degree</td>
<td>15 (35.7)</td>
<td>1 (100)</td>
<td>16 (37.2)</td>
</tr>
<tr>
<td>M.A. Degree</td>
<td>2 (4.8)</td>
<td>0 (0)</td>
<td>2 (4.65)</td>
</tr>
<tr>
<td>Ph.D. Degree</td>
<td>4 (9.5)</td>
<td>0 (0)</td>
<td>4 (9.3)</td>
</tr>
<tr>
<td>Total Response</td>
<td>42 (100%)</td>
<td>1 (100%)</td>
<td>43 (100%)</td>
</tr>
<tr>
<td>%</td>
<td>(97.7%)</td>
<td>(2.3%)</td>
<td>(100%)</td>
</tr>
</tbody>
</table>

These results become more significant when they are compared with those of previous studies. Mills, A.E. (1959) says: "educational institutions in Lebanon, then, have been quite ineffective as a channel for the flow of technical information into industry and agriculture. Their influence will grow year by year, now that the universities have begun to produce an annual stream of graduates in engineering and agriculture, but it will be relatively feeble as long as there is simply a form of advanced technical training grafted on to an educational system whose spirit remains essentially unrelated to that of the modern scientific world ".[4]

In his research on Lebanese entrepreneurs, Sayigh, Y. (1962) covers about 207 business leaders, 130 of whom were industrialists with big businesses, 40 % of whom had had supplementary or no schooling at all, 3.8 % and 24.6% of whom had had elementary and secondary educational level respectively, and 31.5 % of whom had university degrees. Muna, Farid, A. (1980) in his study "The Arab Executive", interviewed 53 Arab business executives. Of these 8 were Lebanese, seven of whom held university degrees.[5]

Relatively speaking, therefore, it is believed that small business managers in Lebanon are highly educated, academically and technically.

In industry, specialisation and skills are crucial for success. This is because in a competitive market success depends mainly on the pattern of cost, price and quality; knowledge and skills are therefore invaluable.
Most of the particulars specializations of the managers' seem to be directly related to their kind of business, and are highly technical when compared with the level of technical assistance required, be it at the top or at the workshop level of the factory. This observation is confirmed by the simple coefficient of correlation between the business type (BUSTYPE) variable and the specialisation (SPECIAL) of managers, which was (.2205); although the result is not highly positively correlated, relatively speaking it was highly significant statistically (90%).

Past experience is another factor which cannot be underestimated, especially in the case of managers who lack educational qualifications but whose past experience permits them to be in the market like others, and who actually might be much more successful. 66 managers (88 % of the total sample) exhibited the following levels of experience: 24.2 % had between 4 and 10 years, 31.8 % between 11 and 20 years, 28.7 % between 21 and 30 years, 13.6 % between 31 and 40 years, and 1.5 % between 41 and 50 years. Thus it can be seen that the vast majority of managers - mainly owner managers - have considerable experience, the majority registering between 11 and 40 years. This represents about 74.1 % of all the respondents.

Moreover, in relation to variables such as the age of the business (BUSAGE), educational level (EDULEVEL), and past experience (PASTEXPR) of managers, the following degree of associations were produced by the Pearson Product-moment coefficient of correlation respectively; (.3386), (.2266), and (.2790). These variables were positively correlated with the specialisation of the manager (SPECIAL) except for PASTEXPR, which means that the highly specialised managers in small businesses are the least experienced.

Factor analysis was able to give some directions about the Lebanese small business managers and give the difference between owner manager and non-owner managers. This is shown in tables 5.3, 5.4 and 5.5 which describe the dimensional structure of each type of managers. As these tables show, managers of small business are strongly associated with high motives and higher educational levels, but not with long experience as a first factor principle and heavy loaded one. NOM seems to be closely associated with the same variables as with MNGS plus the effect of productivity. OMNGS seems totally different; their structure was exhibited in five factors and different combination instead of four factors such as NOM.

The following conclusions can be made. In general, the results suggest that there are two major types of manager in the Lebanese small business: the owner manager and the non-owner manager. This highlights the absence of middle management and its role in small business firms. The relationship between these types of managers can be expressed in different ways. In terms of ownership, a ratio of 2:1 is demonstrated, showing that power and control is in the hands of owner managers rather than non-shareholding managers. There is a ratio of 3:1 for total partners against non-owner managers. However, the general impression is that owners are the epitome of management power and control over the small businesses.

In specific terms, the strong relationship between managers and ownership demonstrates the desire of the Lebanese manager for independence. This may suggest that the owner carries a heavy burden of responsibility alone, a notion which will be discussed extensively later. Because of the limited role of women in the Middle East as leaders and business figures, this
was very obvious and clearly reflected in the research.

<table>
<thead>
<tr>
<th>Table 5.3 Rotated Factor Matrix:</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACTOR 1</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>EDULEVEL</td>
</tr>
<tr>
<td>MOTIVE</td>
</tr>
<tr>
<td>MNGS</td>
</tr>
<tr>
<td>SPECIAL</td>
</tr>
<tr>
<td>BUSAGE</td>
</tr>
<tr>
<td>LOCATION</td>
</tr>
<tr>
<td>PASTEXPR</td>
</tr>
<tr>
<td>BUSTYPE</td>
</tr>
<tr>
<td>FAMBUS</td>
</tr>
<tr>
<td>DAILYWHS</td>
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<tr>
<td>PRODM</td>
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</table>

<table>
<thead>
<tr>
<th>Table 5.4 Rotated Factor Matrix:</th>
</tr>
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<tbody>
<tr>
<td>FACTOR 1</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>EDULEVEL</td>
</tr>
<tr>
<td>MOTIVE</td>
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<tr>
<td>MNGS.NPRT</td>
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<tr>
<td>PRODM</td>
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<td>SPECIAL</td>
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<td>LOCATION</td>
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<tr>
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<td>PASTEXPR</td>
</tr>
<tr>
<td>BUSTYPE</td>
</tr>
<tr>
<td>DAILYWHS</td>
</tr>
</tbody>
</table>

Highly educated individuals and higher degree holders had a high profile. Compared with earlier trends it can be said that there has been a great improvement in the field of small business. A significant relationship between educational level and specialisation and business type is very clear, namely among managers who hold BA's and technical degrees only. In contrast, there is an inverse relationship between postgraduate degree holders (mainly Ph.D's) and business types.

Specialisation has proved to be slightly spread over positions of top or senior entrepreneurial authority, a quite different trend compared with the result of past research which reflected a situation probably no different from that in most other underdeveloped countries.[6]

5.1.2 Small Business Motives and Objectives.

Admittedly, a well organised business firm is one that has a clear set of written or unwritten goals; every body in the firm works to attain them. Therefore, by its nature, any business firm must have strategic goals which are expected to serve the interests of society. Accordingly it must provide a flow of goods and services to the public which permits its existence. In this
view it is expected that a general goal must exist and that some sub-goals will be spread under its umbrella. Behind this goal there must be a motive which works as a dynamic stimulator to achieve those goals. However, an interchangeable role between goals and motive is very likely. The motive to stay in the market can sometimes replace the idea of the survival of the business as a goal. A 10% profit can be easily replaced by a motive of 2% of the sales revenue to be distributed among employees when the 10% of profit level is achieved.

Table 5.5 Rotated Factor Matrix:

<table>
<thead>
<tr>
<th>FACTOR 1</th>
<th>FACTOR 2</th>
<th>FACTOR 3</th>
<th>FACTOR 4</th>
<th>FACTOR 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDULEVEL</td>
<td>.79390</td>
<td>-.06555</td>
<td>.21563</td>
<td>-.04755</td>
</tr>
<tr>
<td>SPECIAL</td>
<td>-.70469</td>
<td>-.07931</td>
<td>-.10792</td>
<td>-.11821</td>
</tr>
<tr>
<td>MOTIVE</td>
<td>.69631</td>
<td>-.28510</td>
<td>-.37921</td>
<td>.04775</td>
</tr>
<tr>
<td>FAMBUSNS</td>
<td>.01867</td>
<td>.86263</td>
<td>.06181</td>
<td>.19253</td>
</tr>
<tr>
<td>BUSAGE</td>
<td>.15216</td>
<td>-.72820</td>
<td>.03270</td>
<td>.45377</td>
</tr>
<tr>
<td>OMNGS</td>
<td>-.03682</td>
<td>-.06166</td>
<td>.78069</td>
<td>-.05668</td>
</tr>
<tr>
<td>BUSTYPE</td>
<td>-.16167</td>
<td>-.08590</td>
<td>-.66106</td>
<td>-.18675</td>
</tr>
<tr>
<td>PASTEXPR</td>
<td>.148597</td>
<td>.05046</td>
<td>.18474</td>
<td>.85305</td>
</tr>
<tr>
<td>DAILYWHS</td>
<td>.25897</td>
<td>.10882</td>
<td>.35509</td>
<td>-.51822</td>
</tr>
<tr>
<td>LOCATION</td>
<td>-.19193</td>
<td>.34773</td>
<td>-.00433</td>
<td>-.08406</td>
</tr>
<tr>
<td>PRODM</td>
<td>-.21342</td>
<td>.33456</td>
<td>-.04601</td>
<td>-.03736</td>
</tr>
</tbody>
</table>

For small businesses, as for others, profit is a vital goal, and it is typically for this purpose that a business is founded. Even more important is the need for profit to assure business continuity. It should be clear then that profit making is not a short-range concern but rather a long-range strategic goal.

Furthermore, the philosophy that concerns the existence of the business transcends mere profit making and the provision of economic services; it must also be concerned with growth and development. In fact it is a rather aggressive and ambitious goal. Business growth envisages the need for additional production facilities and thus calls for retained earnings or involvement of more investors and wider investments. There must be a readiness in the business itself for growth, and a readiness to utilise the new services or products by market customers.

Profit making and the growth of the business are not the only objectives and stimuli for small businesses. Many other nonfinancial goals exist and are recognised by most of the management theory writers.

The above discussion is not only a theoretical view; our findings confirm the existence of such objectives and motives. A question was asked about the motive behind establishing and keeping the business. Three possible answers were suggested: survival, profit and growth, and other reasons. Table 5.6 shows the answers of 74 business managers. 15 managers (20%) believe that their major objective is the survival of their business. 47 managers (63.5%) are
looking for profit from their investments and also for more growth. The other twelve managers (16.2%) express alternative motives and goals.

Managers who would like to keep their business alive seem to have problems in their businesses such as liquidity, undercapitalised or marketing problems. This was clearer in the food and wood industries than in the others. The most aggressive business type is the textile industry, followed by chemical products. Other goals and motives were expressed by different types of businesses such as the paper and printing industries, and the chemical and nonmetallic mineral industries. Such goals and motives can be summarised as follows: self-actualisation; improving the quality of national industry compared with that imported products; employing and training more employees; love of business; maintaining and keeping the good will of the business; and, above all, introducing new ideas to the market (innovations). Most of these goals show the awareness of the owner manager and other managers of nonfinancial goals such as social responsibility, innovation, and customer consideration.

Table 5.6 Motives & Goals of Small Business

<table>
<thead>
<tr>
<th>OBJECTIVE</th>
<th>Owner.Mng</th>
<th>N.O.Mng</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURVIVE</td>
<td>15</td>
<td>-</td>
<td>15</td>
<td>20.5</td>
</tr>
<tr>
<td>PROFIT &amp; GROWTH</td>
<td>46</td>
<td>1</td>
<td>47</td>
<td>63.5</td>
</tr>
<tr>
<td>OTHER GOALS</td>
<td>11</td>
<td>1</td>
<td>12</td>
<td>16.2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>72</td>
<td>2</td>
<td>74</td>
<td>100.0</td>
</tr>
</tbody>
</table>

5.2 PERFORMANCE OF SMALL BUSINESS MANAGEMENT

Before discussing the performance of small business management it may be useful to bring back the conclusion drawn from table 5.1, which confirms that the dispersion of managers among the number of firms is extremely in favour of owner managers. Table 5.1 also suggests that owner managers seem to be the locus of control in small firms; most financial decisions are seen to be made by them. If this is true, then two important points emerge: firstly, the importance of managers, their role in managing small business firms and their performance, which influences the whole business performance; secondly, the relative importance of our hypothesis about the number of managers in the management of small business firms. Therefore this should be tested in this section in order to be proved true or false. For the purpose of this argument four major interrelated areas will be covered as follows:

1. Organisational structure and span of control
2. Financial activities and the decision maker

5.2.1 ORGANISATIONAL STRUCTURE AND SPAN OF CONTROL

Generally speaking, one of the interesting and most important points related to organisational structure is the size of the organisation. Size can be any measurable and quantitative issues believed to have their own conceptual identity and position in the firms' structure, such as total
assets, invested capital, equity, employment, management etc. This relationship, which has been expressed at both inferential and empirical levels, has not resulted in a definitive set of propositions or findings [7].

However, it is commonly noted that the size of an organisation somehow "makes a difference". Caplow, F. (1957) and Crusky, L. (1961), among others, have assumed that large organisations are, by definition, more complex and formalised than small organisations. Others such as Blau, J. and Scott, R. (1962) and Zelditch, P. and Hopkins, M. (1961) argue that size may not be such a critical factor. [8] It is believed that the issue of size is quite important. However, it depends mainly on which item of size we are discussing and the uses of such size items.

In the small business world this is quite critical, especially if we bear in mind that the size of a small business in one country is not necessarily the same as the size of a small business in another. Therefore, generally speaking, organisational structure must differ; as a result, consequent financial structure and span of control will also differ especially if we compare financial resources in the markets of the industrial countries to those in the developing world, or in a country at war.

The relationship between organisational structure and performance is not so clear. The obvious link between them, according to our hypothesis, is the manager; so far as the organisational structure is concerned, it is also the number of employees. These two variables are believed to provide evidence to support the importance of the number of managers and their effect on small business performance.

Table 5.7 shows that two types of organisational structure for small businesses in Lebanon were detected before and during the war period. Both types were explained by the variables, employees and managers. The most interesting factor used to distinguish between those two types of organisational structure were the type of manager, as this showed up clearly the difference between the two periods.

However, the effect of war can be seen clearly on the number of employee in the firm, and in turn on the number of managers in each type for each period. The direct effect of war was a decrease in the work force. Empl/firm for example during the war in type one was 36.6, whereas during the war this average dropped dramatically to 20.7 worker/firm, or 15.9 worker/firm. In type two Empl/firm dropped by just 1.2 worker/firm. Moreover, before the war the span of control in type one was 12.2, during the war it decreased to 6.4, which means that the number of managers in the firms increase as the number of employees decrease. In type two there is not that much difference before and after the war when compared with type one.

These findings increase the degree of feasibility of our hypothesis; at the same time they suggest figures 5.1 and 5.2.

As table 5.7 and these figures show, the Pearson product-moment correlation seems to point to this phenomenon in our sample. Table 5.8 shows the degree of association between the number of different types of managers and the number of employees before and after the war.
Each diagram can be interpreted in a completely different way. For instance, in terms of financial performance and financial activities, type 2 suggests that in the presence of the 2nd organisational level, owner managers may delegate them more authorities and can allow them to participate in financial decisions. But if owner managers of this type are monopolising the power of decision making, then non-owner managers are doing marginal jobs and are expected to cost the firm highly, or their power is located elsewhere in the firm. For example, they are expected to be much more effective in controlling the working capital as line managers and controllers of the production process. In this case their effect is operational rather than strategic. Type 1 suggests that owner-managers are seen to be responsible for all administrative and financial activities, a notion suggested earlier in this chapter.

Table 5.7 Small Business Organisational Structure in Lebanon 1975-86

<table>
<thead>
<tr>
<th></th>
<th>BEFORE WAR</th>
<th></th>
<th>DURING WAR</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Type 1</td>
<td>Type 2</td>
<td>Type 1</td>
<td>Type 2</td>
</tr>
<tr>
<td>Firms</td>
<td>10</td>
<td>24</td>
<td>18</td>
<td>57</td>
</tr>
<tr>
<td>Owner-manager</td>
<td>9</td>
<td>33</td>
<td>17</td>
<td>73</td>
</tr>
<tr>
<td>Non-owner manager</td>
<td>21</td>
<td>0</td>
<td>41</td>
<td>0</td>
</tr>
<tr>
<td>Employee</td>
<td>366</td>
<td>356</td>
<td>373</td>
<td>773</td>
</tr>
<tr>
<td>T.Employment</td>
<td>396</td>
<td>389</td>
<td>431</td>
<td>846</td>
</tr>
<tr>
<td>Empl/Mngr (span of control)</td>
<td>12.2</td>
<td>11.8</td>
<td>6.4</td>
<td>10.5</td>
</tr>
<tr>
<td>Mngs/firm</td>
<td>2.7</td>
<td>1.4</td>
<td>3.2</td>
<td>1.3</td>
</tr>
<tr>
<td>Empl/firm</td>
<td>36.6</td>
<td>14.8</td>
<td>20.7</td>
<td>13.6</td>
</tr>
<tr>
<td>T.Emp/firm</td>
<td>39.6</td>
<td>16.4</td>
<td>23.9</td>
<td>14.8</td>
</tr>
</tbody>
</table>

In short, it is very clear from the above discussion that type and number of managers allow us to distinguish between two types of organisational structure, each with different characteristics and in different periods of time under different circumstances.

5.2.2 Financial activities and the decision maker

It was stated earlier that financial management involves the resolution of three major financial decisions: investment decisions, financing decisions, and dividend decisions. In this section we shall discuss two points in relation to this; firstly, the different types of financial activity performed by small businesses in Lebanon; and secondly, the degree of concentration of decision making.
It is one of the main purposes of the research to compare financial activities performed by small businesses and those financial activities that are suggested by the theory of financial management. Concentration on financial planning was presented in the form of several questions in the survey.[9] These questions cover the most important and basic financial activities that provide help for the financial manager or the business manager before any financial decision is taken.

Table 5.8 Simple Coefficient Correlation between types of managers and employment.

<table>
<thead>
<tr>
<th>EMPLONO1</th>
<th>OMNGS(FIRMS)</th>
<th>NOM(FIRMS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MNGS(FIRMS)</td>
<td>.3669 (75)</td>
<td>.3335 (75)</td>
</tr>
<tr>
<td>*Sig=99%</td>
<td>Sig=60%</td>
<td>*Sig=98%</td>
</tr>
<tr>
<td>EMPLONO2</td>
<td>.4627 (36)</td>
<td>.5499 (36)</td>
</tr>
<tr>
<td>Sig=89%</td>
<td>Sig=80%</td>
<td>*Sig=100%</td>
</tr>
</tbody>
</table>

*aSig=Significant statistically at 95% level.
(xx)=Number of firms included in the analysis.

In planning for new products or new ideas in the business, managers are believed to cover the most important financial and nonfinancial activities necessary for the task. Table 5.9 shows the degree of financial planning for new products in small firms. In general the degree of response is quite high, which is a positive indicator for small business. On the other hand, small businesses do not take into consideration the importance of financial advice and choosing from among alternatives (see table 5.9). There could be two major reasons for this; firstly, the lack of such technical services among enterprise agencies and banks in Lebanon; and secondly, the limited nature (small size) of the Lebanese market.

The average number of firms who estimate the cost of production are about 55 (73.3%) firms out of 75. This covers estimating the cost of raw material, selling prices, cash inflow, profit, number of customers, number of competitors and other expenses. (See table 5.10). Cash inflow and cash outflow estimations are shown in table 5.10. Looking at the daily and monthly expectations, the results are not very promising and give the impression that there is a gap between cash inflow and cash outflow, and that therefore small businesses are expected to have cash problems. This could be reflected in their statements as a gap mainly between account receivables and account payable.

Financial statements such as income statements (profit and loss accounts), balance sheets (sources and uses of funds), and cash flow statements are important for several reasons. Story, D. et. al. (1987) note that the non-production of statements is one of the signs of the business failure. Contrary to the general impression that small businesses do not produce financial statements, the great majority of Lebanese small businesses do produce them. 97.2% of the respondents produce statements (out of 54 firms, only 2 do not). This result is very important, especially when compared with other results in the Middle East countries. For example, Malallah, Dahhan, Abu-Jbarah, Gharaibeh, Sheikh Salem, Ramadan, and Khasawneh (1976) report that 95% of the firms covered by their study in Jordan do not produce financial statements.[10] Table 5.12 shows more details about the time and the number of firms who produce these statements. The frequency with which these statements are produced reflects
Table 5.9 Degree of Planning for New Products.

<table>
<thead>
<tr>
<th>Type of Financial Activity</th>
<th>Degree of Response</th>
<th></th>
<th>% YES  (Firms)</th>
<th>% No  (firms)</th>
<th>Total Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Estimated Starting Budget</td>
<td></td>
<td></td>
<td>59.5</td>
<td>40.5</td>
<td>73</td>
</tr>
<tr>
<td>2 - Confirming Personal Ability to Meet the Project</td>
<td></td>
<td></td>
<td>83.8</td>
<td>16.2</td>
<td>74</td>
</tr>
<tr>
<td>3 - Estimated Required Finance.</td>
<td></td>
<td></td>
<td>78.4</td>
<td>21.6</td>
<td>74</td>
</tr>
<tr>
<td>4 - Taking Financial Advice.</td>
<td></td>
<td></td>
<td>12.3</td>
<td>87.7</td>
<td>73</td>
</tr>
<tr>
<td>5 - Expected Problems.</td>
<td></td>
<td></td>
<td>58.1</td>
<td>42.9</td>
<td>74</td>
</tr>
<tr>
<td>6 - Chose Among alternatives.</td>
<td></td>
<td></td>
<td>23.9</td>
<td>76.1</td>
<td>71</td>
</tr>
<tr>
<td>Average Response:</td>
<td></td>
<td></td>
<td>52.7</td>
<td>47.3</td>
<td>73.2</td>
</tr>
</tbody>
</table>

Table 5.10 Degree of Estimating Cost of Production.

<table>
<thead>
<tr>
<th>Type of Activity</th>
<th>Degree of Response</th>
<th></th>
<th>% Yes  Firms</th>
<th>% No  Firms</th>
<th>Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Cost of Raw Materials.</td>
<td></td>
<td></td>
<td>100</td>
<td>-</td>
<td>72</td>
</tr>
<tr>
<td>2 - Selling Price</td>
<td></td>
<td></td>
<td>84</td>
<td>16</td>
<td>63</td>
</tr>
<tr>
<td>3 - Expected Income(Cash Flow).</td>
<td></td>
<td></td>
<td>66.7</td>
<td>33.3</td>
<td>55</td>
</tr>
<tr>
<td>4 - Expected Profit.</td>
<td></td>
<td></td>
<td>82.7</td>
<td>17.3</td>
<td>62</td>
</tr>
<tr>
<td>5 - Expected No of Customers.</td>
<td></td>
<td></td>
<td>60</td>
<td>40</td>
<td>45</td>
</tr>
<tr>
<td>6 - Expected No of Competitors.</td>
<td></td>
<td></td>
<td>60</td>
<td>40</td>
<td>45</td>
</tr>
<tr>
<td>7 - Other Expenses.</td>
<td></td>
<td></td>
<td>56</td>
<td>44</td>
<td>42</td>
</tr>
<tr>
<td>Average Response</td>
<td></td>
<td></td>
<td>72</td>
<td>25</td>
<td>55</td>
</tr>
</tbody>
</table>

Table 5.11 Cash Flow Estimation by Small Business in Lebanon 1975 - 1985

<table>
<thead>
<tr>
<th>Time of Estimation</th>
<th>Sales Returns (Cash in flow)</th>
<th>Payment Expenses (cash out flow)</th>
<th>Cash Flow Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% No of Firms</td>
<td>% No of Firms</td>
<td>% No of Firms</td>
</tr>
<tr>
<td>Daily</td>
<td>21.6</td>
<td>24</td>
<td>52.7</td>
</tr>
<tr>
<td>Monthly</td>
<td>32.4</td>
<td>22</td>
<td>52.7</td>
</tr>
<tr>
<td>Seasonally</td>
<td>29.7</td>
<td>22</td>
<td>10.8</td>
</tr>
<tr>
<td>Semiannually</td>
<td>2.7</td>
<td>2</td>
<td>2.1</td>
</tr>
<tr>
<td>Annually</td>
<td>12.2</td>
<td>9</td>
<td>4.1</td>
</tr>
<tr>
<td>Don't Estimate</td>
<td>1.4</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>74</td>
<td>100</td>
</tr>
</tbody>
</table>

Many factors such as government requirements (annually required), and demands by partners or others with interests in and out the firm. Consequently, most of the firms produce them annually or semi-annually.

Other reports and statements are also produced by small business firms in Lebanon. Sales and purchase records are frequently issued. Such records are produced monthly and seasonally, although for analysis purposes daily and weekly records are much preferable. However, it seems that daily records are kept for accounting purposes and are adjusted to a monthly record later, although this cannot be completely confirmed; some of the managers were unable to show us such records. (See tables 5.12 and 5.13)

Ratio analysis reports were, surprisingly, undertaken by 36 firms; 9 firms responded
Table 5.12 Time of Producing Financial Statements by Small Business Firms in Lebanon 1975 - 1985

<table>
<thead>
<tr>
<th>Time</th>
<th>Balance Sheet</th>
<th>Income Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>Firms</td>
</tr>
<tr>
<td>Monthly</td>
<td>5.6</td>
<td>3</td>
</tr>
<tr>
<td>Seasonally</td>
<td>11.1</td>
<td>6</td>
</tr>
<tr>
<td>Semi-annually</td>
<td>7.4</td>
<td>4</td>
</tr>
<tr>
<td>Annually</td>
<td>74.1</td>
<td>40</td>
</tr>
<tr>
<td>Don't Produce</td>
<td>1.9</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>54</td>
</tr>
</tbody>
</table>

Table 5.13 Time of producing records by Small Business Firms (for record and analysis) in Lebanon 1975 - 1985

<table>
<thead>
<tr>
<th>Time</th>
<th>Purchasing Record Analysis</th>
<th>Purchasing Record</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>Firms</td>
</tr>
<tr>
<td>Daily</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Monthly</td>
<td>36</td>
<td>18</td>
</tr>
<tr>
<td>Seasonally</td>
<td>36</td>
<td>18</td>
</tr>
<tr>
<td>Semi-annually</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Annually</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Don't Produce</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>50</td>
</tr>
</tbody>
</table>

Table 5.14 Small Business Firms who Produce Financial Ratio Analysis and Reports in Lebanon 1975 - 1985

<table>
<thead>
<tr>
<th>Time</th>
<th>Number of Firms</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly</td>
<td>6</td>
<td>13.3</td>
</tr>
<tr>
<td>Seasonally</td>
<td>6</td>
<td>13.3</td>
</tr>
<tr>
<td>Semi-annually</td>
<td>7</td>
<td>15.6</td>
</tr>
<tr>
<td>Annually</td>
<td>17</td>
<td>37.8</td>
</tr>
<tr>
<td>Don't Produce</td>
<td>9</td>
<td>20.0</td>
</tr>
<tr>
<td>Total</td>
<td>54</td>
<td>100.0</td>
</tr>
</tbody>
</table>

negatively (see table 5.14). But in the course of the interviews, some of the owner managers pretended that they produced this type of report, even though they did not know what it was until we explained it to them; they were too embarrassed to admit that they were unaware of it. There were 5 or 6 cases like this. Other producers of the ratio analysis report were Business, Accounting, and Economics degree holders, and in three cases owner managers produce it daily if necessary by using the Lotus 1-2-3 software (English version). All of these cases were confined to the highly automated firms - two in the printing industry and the third in the electronics industry.

The basic reasons for producing financial statements and other reports can be listed in terms of their importance for the small business according to their answers as follows:

(a) government requirements
(b) keeping records
(c) analysis purposes
(d) partners demands,
(e) administrative purposes. (See Table 5.15 for more details).

Reasons for not producing them were as follows:

(a) such statements are not important (18 firms)
(b) lack of time (8 firms)
(c) no one to produce them (3 firms)
(d) no one knows how to produce them (2 firms)
(e) no specific reason for not producing them (3 firms).

Responsibility for producing financial statements and reports was referred to different people and divisions inside and outside the business. The information given in table 8.16 is quite confusing. It is hard to believe that there are 13 accounting departments, since the evidence indicates that there are only 6 firms with 4-5 managers and maximum of 50 employees in each; for if an accounting department existed in the business, other specialised departments such as marketing, finance, personnel are also expected to exist.

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Number of Firms</th>
<th>% of Total Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keeping Records</td>
<td>24</td>
<td>45.3</td>
</tr>
<tr>
<td>Analysis</td>
<td>32</td>
<td>42.7</td>
</tr>
<tr>
<td>Government</td>
<td>47</td>
<td>62.7</td>
</tr>
<tr>
<td>Finance</td>
<td>29</td>
<td>38.7</td>
</tr>
<tr>
<td>Partners</td>
<td>28</td>
<td>37.3</td>
</tr>
<tr>
<td>Administration</td>
<td>21</td>
<td>28.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Responsible</th>
<th>Number of Firms</th>
<th>% of Total response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Manager</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Owner-Manager</td>
<td>31</td>
<td>41.3</td>
</tr>
<tr>
<td>Accounting Dept</td>
<td>13</td>
<td>17.3</td>
</tr>
<tr>
<td>Accounting Compy</td>
<td>25</td>
<td>33.3</td>
</tr>
<tr>
<td>Public Accountant</td>
<td>19</td>
<td>25.3</td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
<td>2.7</td>
</tr>
</tbody>
</table>

The second point here concerns the decision maker in the small business. Knowing who controls the business and who has the power to making financial decisions is very important. It is important because it enables us to know who the policy maker is, who formulates the business strategies, who should be rewarded when the business succeeds, and who should be blamed when it fails. The high number of owner managers in our data and the two types of organisational structures in small business clearly support our assumption that the degree of concentration of power and decision making is highly centralised and lies in the hands of the
owner manager, although it could be less centralised in business type 2 than that in business type 1.

The typical and the most specialised and organised business, as the theory suggests, is the one in which each person at the level of top management is responsible for a certain job. Although it may vary from one business to another, the operational level of the business is made up of the followings managers: financial manager; accounting manager; marketing manager; personnel manager; and production manager. These are the people who formulate the business policy and take the decisions. This argument is totally at variance with our assumption; nevertheless we shall see how it works in the context of Lebanese small businesses.

We added the owner to the theoretical model above and presented it to our interviewees; they had to answer ten questions and tell us who is responsible for making each particular financial decision (Refer to question No. 10 in the questionnaire.)

Table 5.17 presents the degree of concentration of decision making. As shown clearly in the table, the decision making power is firmly in the hands of the owner manager. This is the case in 58 firms out of the 67 firms which replied. Although this offers clear proof of what our assumption is presuming above, there are two other points that can be concluded from table 5.17. The first concerns the poor position of non-owner managers at the level of decision making; the second concerns the stronger role of employees in the decision making process in firms with owner managers. However, the role of non-owner managers seems to be much more marginal than that of employees in business type one compared to business type two. The strong position of employee may be attributable to the type of business itself or to the absence of the second organisational level in the firm.

Non-owner managers are delegated in businesses such as food and beverages, printing and paper production; whereas the sharing of decision power with employees was found in the textiles and weaving businesses, in chemicals and plastics, non metallic minerals and the fabricated metal industries.

Assuming that the higher the degree of productivity (PRODM) of any business member, the closer the relationship is between him and higher organisational levels, and the more willingness there is to share the decision making power, it is possible to understand the problem at hand.

It is believed that productivity (PRODM) in relation to the size of the workforce (NOM and EMPLONO1) is the major variable which is interfering in this matter. The Pearson-product correlation supports this assumption. The degree of association between productivity (PRODM) and non-owner managers (NOM) was represented by the -.3463 coefficient of correlation and a 92% degree of significance. PRODM with employee has a -.8221 coefficient of correlation and 100 per cent significance, while with owner managers a .0455 coefficient of correlation was observed with a 57 % level of significance. So the fewer the number of managers and employees the higher the productivity, a case which was fully represented in the small businesses with owner managers and few employees. In our case it is business type 1.
organisational structure.

5.2.3 Financial Structure of the Small Businesses.

The financial performance of small firms reveals both the strengths and the weaknesses of this sector of the economy. It is not surprising therefore that in many countries the analysis of financial structure has become an integral part of the research conducted into the behaviour of small firms, in addition to the various social, political and psychological aspects of the subject.[11] Although this highlights the importance of the financial structure of small businesses, to find a link between this issue and other related questions to prove the existence of an assumption, could be very hard to make testable and meaningful.

In the previous sections we were able to relate some of the issues to the organisational structure under the hypothesis of number and type of managers, such as span of control, employment size, and concentration of decision making. In this section we shall try to examine the type and number of managers in different small business organisational structure in relation to financial structure. Specifically we are trying to find a pattern of interchangeable response between types and numbers of managers and the financial structure of the small firm. This is to be examined under the following assumptions: first the number and types of managers (owner managers or non-owner managers) have their own effect on the financial structure, which is thus different from the financial structure under the management of non-owner managers. This is because small firms have limited access to the capital and money markets, and consequently suffer from chronic undercapitalization.

In order to examine this hypothesis we had to split the financial statements of firms (19 firms) into two groups: one group made up of firms under the control of owner managers (13 firms), the other containing firms under the control of non-owner managers (6 firms). Financial statements are mainly income statements (profit and loss account) and the balance sheets (sources and uses of funds). The statements of each firm averaged as follows: for example, company A submitted financial statements for five years, company B for three years. We added all items in each statement of each company for all years together and divided them by the number of years covered by the statements; or for company A we added year one, year two ... year five and then divided them by five. The same was done with Company B and the rest of the companies in the sample. After splitting the data into two groups we consolidated each group’s accounts together and ended up finally with two averaged groups of accounts by years and by groups.

A series of proportional calculations was carried out on each statement, and also across statements, in order to allow a clear comparison. Tamari, M. (1980), uses a different approach to find differences in the financial structure of small business in several countries. His study concentrates on the leverage ratio, structure of equity and profitability. He also used different incompatible size measurements. While he uses the number of employees in small businesses for four countries in his study (U.K, France, Israel, and Japan), for the U.S.A in the same study the criterion is the assets size.[12]

The well known traditional ratios will be used in the next chapter in a further analysis, while
the number of managers and their type, which are not separate in our case, will be used for the discussion.

Three tables were drawn up from the statements comparing the financial structure of small business controlled by the variables owner managers (OMNGS) and non-owner managers (NOM). Firms with NOM will be called business type 2, and firms with OMNGS will be called business type 1.

Table 5.18 shows the income and expenses position of the small business firms. The distinction between the two types of management in relation to the firm's income/expenses position is very clear. Firms with OMNGS don't attain as much profit as those firms with NOM: there is a difference of at least 10% in the net profit margin. This could be a result of the higher cost of goods sold (CGS) in business type 1, which is 14% higher than that in type 2. Administrative expenses where very low in type 2, whereas in type 2 they were higher by 13.8% (see table 5.18). Interest paid by type 1 is much higher than that paid by type 2, a difference of 14.8%.

The asset structure is another area related to the financial structure of the firm. Table 5.19 shows the financial structure of assets (uses of funds) controlled by type of managers. Given the difference in the source of funds, it is quite surprising to find this structure of sources of funds where usually it is expected that, in companies managed by professional managers (non-owners) the chance for getting finance from the market (bank loans) is usually higher than firms directed by owners who rely mainly on equity finance. More about financial resources will be discussed in the next chapter. It can be concluded from table 5.19 that the number and type of managers are unable (according to our data) to make any significant distinction between different types of organisational structure, apart from the equal division of the uses of funds.

It may be worth noting that the higher degree of automation is correlated with, relatively, the greater the number of managers (in this case type 2). In his study Hickinson et al (1969, p 395) noted that:

"The smaller the organisation the wider the structural effects of technology; the larger the organisation, the more effects are confined to particular variables, and size and dependance and similar factors make the greater overall impact."[13]

In another study by Woodward 1965, the results show technology to have a more significant and stronger impact than size, i.e. the chief executive's span of control. In this particular matter our data confirms that the number of managers has no obvious effect on, or not related to, the degree of automation in small firms.

Table 5.20 presents the structure of funds (sources of funds) in small business firms. Contrary to the effect of the type of manager on assets structure as mentioned above, sources of funds are strongly affected by management type. Equity structure and liabilities move in totally different directions. Business firms of type 1 rely more highly on equity finance than type 2: almost 38% of the total available funds compared to 74% in business type 2, a difference of 36%. In his 1980 study, Tamari shows a similar financial structure of equity to total funds in the small businesses in France, a situation which exists in our study in business type 1. The structure of the capital to the total funds in type 2 was almost 61 %, a similar structure was
### Table 5.17 Degree of concentration of Decision Making in the Lebanese Small Business Firms, 1975 - 1985.

<table>
<thead>
<tr>
<th>DECISION MAKER</th>
<th>A Prod Mgr</th>
<th>B Fin Mgr</th>
<th>C Acc Mgr</th>
<th>D Mark Mgr</th>
<th>E Own Mgr</th>
<th>F Part &amp; Emp Mgr</th>
<th>E + B</th>
<th>A + E</th>
<th>E + C</th>
<th>E + D</th>
<th>Number of Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Decision</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.4</td>
<td>88.4</td>
<td>5.8</td>
<td>2.9</td>
<td>1.4</td>
<td>-</td>
<td>-</td>
<td>69</td>
</tr>
<tr>
<td>Required amount of investment</td>
<td>-</td>
<td>1.4</td>
<td>1.4</td>
<td>-</td>
<td>87.2</td>
<td>7.2</td>
<td>-</td>
<td>1.4</td>
<td>1.4</td>
<td>-</td>
<td>69</td>
</tr>
<tr>
<td>Form of investment</td>
<td>1.5</td>
<td>1.5</td>
<td>-</td>
<td>-</td>
<td>86.8</td>
<td>7.4</td>
<td>1.5</td>
<td>-</td>
<td>-</td>
<td>1.5</td>
<td>69</td>
</tr>
<tr>
<td>Size of working capital</td>
<td>-</td>
<td>1.4</td>
<td>1.4</td>
<td>-</td>
<td>88.4</td>
<td>7.2</td>
<td>-</td>
<td>1.4</td>
<td>-</td>
<td>-</td>
<td>69</td>
</tr>
<tr>
<td>Borrowing</td>
<td>-</td>
<td>1.6</td>
<td>1.6</td>
<td>-</td>
<td>88.9</td>
<td>7.9</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>68</td>
</tr>
<tr>
<td>Wages and salaries</td>
<td>-</td>
<td>1.5</td>
<td>1.5</td>
<td>-</td>
<td>82.4</td>
<td>10.2</td>
<td>-</td>
<td>-</td>
<td>2.9</td>
<td>-</td>
<td>63</td>
</tr>
<tr>
<td>Finance form and source</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>88.1</td>
<td>9.0</td>
<td>-</td>
<td>-</td>
<td>3.0</td>
<td>-</td>
<td>68</td>
</tr>
<tr>
<td>Required amount of finance</td>
<td>-</td>
<td>1.5</td>
<td>-</td>
<td>-</td>
<td>89.4</td>
<td>9.1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>65</td>
</tr>
<tr>
<td>Profit distribution &amp; R.E</td>
<td>-</td>
<td>-</td>
<td>1.5</td>
<td>-</td>
<td>90.8</td>
<td>7.7</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>69</td>
</tr>
<tr>
<td>Payment of daily expenses</td>
<td>-</td>
<td>8.9</td>
<td>4.4</td>
<td>-</td>
<td>79.4</td>
<td>5.9</td>
<td>-</td>
<td>1.5</td>
<td>1.5</td>
<td>-</td>
<td>64</td>
</tr>
</tbody>
</table>
Table 5.18 Financial Structure of Small Business Income in Lebanon by Type of Managers. 1975-1985.

<table>
<thead>
<tr>
<th>Business Type</th>
<th>NP/SR</th>
<th>CGS/SR</th>
<th>ADM EXP/T.EXP</th>
<th>T.EXP</th>
<th>INT/GP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Type 1</td>
<td>16.3</td>
<td>61.3</td>
<td>6.9</td>
<td>L.L2360</td>
<td>39.5</td>
</tr>
<tr>
<td>Business Type 2</td>
<td>26.3</td>
<td>47.3</td>
<td>20.7</td>
<td>L.L1740</td>
<td>27.4</td>
</tr>
</tbody>
</table>

Total number of firms used for this analysis was 19 firms, those who provided financial statements for the above mentioned period. Where, NP=Net profit, SR=Sales Returns, CGS=cost of goods sold, ADM EXP=administrative expenses, T.EXP=total expenses, INT=interest rate, GP=gross profit. The figure of total expenses is expressed in 1000's of Lebanese L.

Table 5.19 Financial Structure of Lebanese Small Business Assets in 1976-1986 Controlled by Type of Managers

<table>
<thead>
<tr>
<th>Business Type</th>
<th>TFA/TA</th>
<th>TCA/TA</th>
<th>Degree of Automation/TA</th>
<th>AR/TA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Type 1</td>
<td>56.0</td>
<td>44</td>
<td>32.4</td>
<td>21.1</td>
</tr>
<tr>
<td>Business Type 2</td>
<td>50.2</td>
<td>49.7</td>
<td>33.6</td>
<td>17.57</td>
</tr>
</tbody>
</table>

Total number of firms used for this analysis was 19 firms, those who provided financial statements for the above mentioned period. TFA=total fixed assets, TA=total assets, TCA=total current assets, AR=accounts receivables.

Table 5.20 Financial Structure of Sources of Funds of Lebanese Small firms in 1976-1986 Controlled by Type of Managers.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Type 1</td>
<td>60.98</td>
<td>12.96</td>
<td>73.93</td>
<td>18.0</td>
<td>69.1</td>
<td>4.65</td>
<td>26.0</td>
</tr>
<tr>
<td>Business Type 2</td>
<td>28.0</td>
<td>10.12</td>
<td>38.18</td>
<td>38.6</td>
<td>62.4</td>
<td>18.24</td>
<td>61.8</td>
</tr>
</tbody>
</table>

Degree of Differ 32.9 2.8 35.75 20.6 6.4 13.6 35.8

Total number of firms used for this analysis was 19 firms, or who provided financial statements for the period 1976/86. CAP=capital, T.F=total funds, RE=retained earnings, BKL=bank loans, AP=accounts payable, TL=total liabilities.

reported by Tamari, M. (1980) in the United States. In business type 1 the percentage of capital to total funds was similar to that in Japan and the United Kingdom in the same study. However, the proportion of internal finance (retained earning) to total funds is almost the same in both types. A structure similar to this was found by Tamari, M. (1980) in the United States.

Total liabilities constitute another contrasting area within the sources of funds. Like the equity capital, liabilities were completely different in both types. The total liabilities to the total funds in business type 1 were higher by 35.8% than that in type 1. Although bank loans to total liabilities were quite close in both business, the ratio of bank loans to total funds in business type one was 38.6%, compared with 18% in type two. Thus one can say that small business firms under the control of owner managers are dependent more on the availability of market
finance and trade credit than that on equity finance. Yet it can also be said that small business firms under the control of non-owner managers are as much dependent on equity finance as they are on market finance. However, this does not mean that market finance is available to any one of them openly. This question, along with many other financial issues, will be discussed in the next chapter.

As discussed earlier in this chapter, a cash flow gap exists in both types of business, although individually it varies a great deal. This gap means that the expected amount of cash-inflow is much higher than the expected amount of cash-outflow, or vice versa. In our case the problem is one of receivables. It is specifically the problem of business type two, table 5.21 summarises this problem.

<table>
<thead>
<tr>
<th>Problem type</th>
<th>AR</th>
<th>AP</th>
<th>Type 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1</td>
<td>17.57</td>
<td>18.24</td>
<td>0.7 Ac.P</td>
</tr>
<tr>
<td>Type 2</td>
<td>21.10</td>
<td>4.06</td>
<td>16.5 Ac.R</td>
</tr>
<tr>
<td>Difference</td>
<td>3.50 Ac.R</td>
<td>13.60 Ac.P</td>
<td></td>
</tr>
</tbody>
</table>

To conclude, it can be said that our hypothesis has been able to put into perspectives the financial structure of the income and expenditure of the small business in Lebanon. It was also able to distinguish between businesses who rely mainly on equity finance and those who rely on market finance. However, the hypothesis has proved unable to discriminate the structure of uses of funds (assets structure). In other words, it was able to find a common point between these two types of small business organisations. On the one hand this may be a measure of its limitation and the nature of the financial structure of small business in Lebanon; on the other hand it could be because the data were collected under adverse conditions.

5.2.4 The Effect of Managers on the Business Performance.

Size plays an essential role in the relationships between different concepts and variables in the fields of business and economics. It was found to be a good predictor of many variables in different studies. In relation to structure in the studies of Hickson et al (1969), Child (1973); in relation to financial structure in the study of Tamari (1980); and in relation to profit, employment, net assets, total assets in the studies of Hart (1962), Hymaer and Pashigan (1962), Sing and Whittington (1968), Storey, Keasy, Watson and Wynarczyk (1987).

So far as our study is concerned - and particularly in this chapter - the total number of managers as a primary measure of size is argued here. The effect of managers on the organisational and financial structure is very clear. The effect of different types of managers in the study proved to be a strong enough measurement unit. For such reasons we shall use the number of managers as a measure of size and examine its effect on the financial performance (general performance and growth) of the small business. Thus the major purpose of this section is to test the effect and power of the predictability of managers on business performance.
To make this test, our data has to undergo various procedures of creating and computing new variables. The fact is that there must be some standard variables which can be used as standard measures of performance. These variables had to be created since the raw data is not advised to be used directly as standard measures, mainly because of the non-normality of the distribution of the data in most of the variables. The financial data is preferable for relative values rather than absolute values, as this may standardise the data and unite the units of measurement. Two standard variables of measure were created: one is general performance (GPERFORM) which is the mean of all the means of the general performance of all performance variables of the firms in the study; the second is growth (GROWTHM) which is the mean of all the means of growth of all growth variables of the firms in the data.(see index 5.1 and 5.2 at the end of the chapter for the components of these variables). These two variables are more or less similar, for both of them contained many of the performance measures. But in the GROWTHM some of the variables, such as the ratios of performance, are excluded because the degree of growth of these ratios are by their nature very small and vary sometimes between 1 and 3 mainly liquidity and inventory ratios (Wilson, R.M.S, 1974) p 89.[14] However, the GROWTHM variable is better more revealing; it would be difficult to hide anything behind it. For example profit can be easily hidden in one way or another; assets, equities, sales revenues and bank loans - all of these are much more difficult to conceal. Therefore if GPERFORM is to a certain extent unhelpful, there will be much more concentration on the GROWTHM variable which will be treated in a special chapter later in this study.

Table 5.22 summarises the results of the statistical analysis of the relationship and degree of association between the managers (MNGS, OMNGS and NOM) of small businesses and the variables; GPERFORM and GROWTHM.

<table>
<thead>
<tr>
<th></th>
<th>MNGS</th>
<th>OMNGS</th>
<th>NOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPERFORM</td>
<td>-.0778</td>
<td>.0630</td>
<td>-.2835</td>
</tr>
<tr>
<td>P=.376</td>
<td>P=.399</td>
<td>P=.120</td>
<td></td>
</tr>
<tr>
<td>GROWTHM</td>
<td>-.2908</td>
<td>.4268</td>
<td>-.6158</td>
</tr>
<tr>
<td>P=.114</td>
<td>*P=.034</td>
<td>*P=.002</td>
<td></td>
</tr>
</tbody>
</table>

MNGS=Total No of managers. OMNGS=Owner managers, NOM=non-owner managers. No of firms= 19. *=Significance statistically at 95% level

Let us first discuss the relationship between managers and GPERFORM. Table 5.22 shows that the correlation coefficient between GPERFORM, MNGS for the 19 companies providing financial data for the period 1975-1986 was -.0778. This degree of association between these two variables is almost zero, meaning no association at all. This seems to be at variance with our hypothesis, showing that the probability of obtaining such a coefficient of correlation by chance is (0.376). What does this mean? Is our hypothesis false or is there something affecting this relationship? The nonexistence of a relationship between top management and the businesses performance is highly doubtful. Therefore the probability of intervention by other variables is acceptable logically and statistically. Pearson's correlation has spotted several
variables which are negatively interrelated with both GPERFORM and MNGS. Three major areas are thought to be interfering: types of manager in the business; financial variables, which are part of the financial structure of the firm; and nonfinancial variables, which are mainly part of the managers or the business character.[15]

Table 5.22 shows that in terms of type of manager the relation with GPERFORM has changed completely. It says that the greater the number of owner managers, the higher the performance of the business; and the greater the number non-owner manager, the lower the performance of the business. This change is interesting; it implies that our hypothesis is probably true. However, because of the negative association with the GPERFORM we had to exclude managers who are non-owners from the analysis and concentrate on owner managers [16]

In order to discover the extent to which those variables are affecting this degree of association between the variables concerned, partial correlation analysis was introduced.

Table 5.23 shows the zero-order partial correlation between all the variables thought to be interfering. As a result of this analysis, it can be said that concerning the degree of association between MNGS and GPERFORM controlled by the variables shown in the table, there is almost 24% association between these two variables. Although this correlation is not highly significant (70 %), it does prove the feasibility of the hypothesis in general, and directs us towards specific sources of variations. From this point the hypothesis seems to become more conditional, which is very natural.

Since there is an opposite relationship between the two types of management in small business with the variable GPERFORM, it might be a good idea to detect the behaviour of each type of managers with GPERFORM. This will tell us more about the kind of problems each type of business manager faces and what constraints hamper his business performance.

Table 5.24 shows that the lowest number of controlled variables in relation to the association between GPERFORM and NOM is the Zero-order Partial correlation between those variables.[17].

The analysis shows that the degree of association between GPERFORM and NOM was able to reach (.3025) as controlled by the above mentioned variables in the table, and was not highly significant statistically (.75). Compared with MNGS's association with GPERFORM this result is better in general terms for two main reason: firstly, it improved from a negative association to a positive association with the variable GPERFORM; secondly, a smaller number of firms contains NOM compared with those which include all MNGS. It is worth noting that the controlled variables in this test are the same as those in the analysis with MNGS. This is why a further analysis would not be fruitful since this variable exhibits the same behavioural trend as MNGS in general, which is why they are affected by the same variables and have almost the same degree of coefficient of correlation and level of significance. It can be also said that non-owner managers are relatively important in terms of the whole body of top management, at least in the cases involved in this analysis. (19 cases).
As far as GROWTHM is concerned, it is a fact that the higher the growth, the larger the business becomes, and so the larger the business, the greater the workforce and the larger the number of top management. In other words it will have the greatest number of managers. This is the basic assumption we rely on in order to proceed further with our analysis.

Table 5.25 also shows the coefficient correlation between managers (MNGS) and growth (GROWTH) for the companies providing financial and nonfinancial data for the period 1975 - 86. However, the correlation coefficient between MNGS and GROWTHM was -.2908. Therefore the impression given is that there exists a negative relationship between the number of managers in small businesses and growth. This result is totally at variance with the assumption stated above. However, we believe that some variables are interfering in this relationship and causing this negative association between MNGS and GROWTHM.

Variations are believed to come from the management body itself. This is because of the higher negative association between GROWTHM and N.P.M. When this variable was controlled by isolating its effect, the coefficient of correlation between MNGS and GROWTHM jumped to (.3124). This dramatic change from -.2908 to .3124 is very interesting. It also help to explain why the NOM are constraining growth in small businesses instead of helping.

It is obvious that there are several variables which are interacting and associating with N.P.M in order to affect growth negatively. These variables could be financial or nonfinancial. Table 5.25 shows the zero-order partial correlation between six different variables, three of them introduced as controlled variables in addition to N.P.M. Introducing the controlled variables (daily working hours [DAILYWHS], past experience [PASTEXPR], and administrative expenses [ADMEXP] ) has greatly reinforced the observed association between MNGS and GROWTHM by raising the corresponding correlation coefficient from .3124 to .7616, and to 98 % statistically significant.

This result shows that our hypothesis is true and acceptable within the conditions and the assumptions raised, at the same time it clears up the problem of constraints on growth in small businesses. It can therefore be said that non-owner managers are one of the growth delayers in small business firms in Lebanon. A further investigation is required to define the problem precisely in the NOM sphere or the business firm itself. In order to discover the basic dimensions of structure of the situation, the factor structural variables are examined. For a clear interpretation of the factors, the varimax criterion was applied in the factor rotation. The three factors obtained (see table 5.26) accounts for 42, 22.7, and 18.4 percent of the variance after rotation. The first factor is based on managers performance, the second on production time and administrative expenses, while the third factor is very much independent from the whole community (i.e. a mentally ill variable).[18]

In short it can be said that the components of the different variables in each factor form a linear combination. Factor one is the first principle component which accounts for the largest amount of variance in this community of variables. NOM constitute highest loadings among those variables. Factor two is the second principle component, where administrative expenses is the highest loadings variable. It is clear from the table that there is a high linear correlation
between MNGS and GROWTHM, even though it is negative, but the highest variations come from the NOM.

Table 5.23 Partial Correlation Coefficients. (ZERO ORDER PARTIALS).

<table>
<thead>
<tr>
<th>GPERFORM</th>
<th>MNGS</th>
<th>EMPLO</th>
<th>DAILYWHIS</th>
<th>ADMEXP</th>
<th>FANBUSNS</th>
<th>EDULEVEL</th>
<th>MOTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MNGS</td>
<td>-0.833</td>
<td>1.000</td>
<td>( 0)</td>
<td>( 0)</td>
<td>Pa=.371</td>
<td>Pa=</td>
<td>Pa=</td>
</tr>
<tr>
<td>EMPLO</td>
<td>-0.3346</td>
<td>0.5583</td>
<td>1.000</td>
<td>( 16)</td>
<td>( 16)</td>
<td>( 0)</td>
<td>Pa=.087</td>
</tr>
<tr>
<td>DAILYWHIS</td>
<td>-0.2298</td>
<td>0.1747</td>
<td>0.0089</td>
<td>1.000</td>
<td>( 16)</td>
<td>( 16)</td>
<td>Pa=.180</td>
</tr>
<tr>
<td>ADMEXP</td>
<td>-0.1785</td>
<td>-0.1558</td>
<td>0.3282</td>
<td>-0.3504</td>
<td>1.000</td>
<td>( 16)</td>
<td>Pa=.239</td>
</tr>
<tr>
<td>FANBUSNS</td>
<td>0.1029</td>
<td>0.2148</td>
<td>-0.0605</td>
<td>-0.1902</td>
<td>-0.6311</td>
<td>1.000</td>
<td>Pa=.342</td>
</tr>
<tr>
<td>EDULEVEL</td>
<td>0.0830</td>
<td>0.2229</td>
<td>0.3200</td>
<td>0.2344</td>
<td>-0.0275</td>
<td>-0.008</td>
<td>1.000</td>
</tr>
<tr>
<td>MOTIVE</td>
<td>-0.5433</td>
<td>0.0401</td>
<td>0.0600</td>
<td>-0.3119</td>
<td>0.4367</td>
<td>-0.4472</td>
<td>0.908</td>
</tr>
</tbody>
</table>

Several problems were located within the business and the NOM sphere. Among these variables were: the growth of employment; the mean of productivity of each employee; the mean of total asset growth; the mean of the account receivables growth, and the mean of capital growth. Table 5.27 shows those variables with their coefficient correlation with NOM.

However, the following results do not necessarily imply that high number of NOM causes more problems for the business. There are many areas in which NOM are making a very useful contribution to small business; one notices for instance, the lower average of administrative expenses in firms with a higher number of non-owner managers. Within the framework of our analysis NOMS, however, were a major problem.

5.3 CONCLUSION.

This chapter yields the following broad conclusions:

1 - The direct loss of manpower throughout the country as a result of war is reflected in the
Table 5.24 Partial Correlation Coefficients (ZERO ORDER PARTIALS).

<table>
<thead>
<tr>
<th>GPERFORM</th>
<th>EMPLOY</th>
<th>DAILYWHS</th>
<th>ADMEXP</th>
<th>FAMBUSNS</th>
<th>EDULEVEL</th>
<th>MOTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPERFORM</td>
<td>1.000</td>
<td>0.1090</td>
<td>-0.046</td>
<td>-0.082</td>
<td>0.0984</td>
<td>0.084</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0.046</td>
<td>0.082</td>
<td>0.0984</td>
<td>0.084</td>
<td>0.084</td>
</tr>
<tr>
<td>MNG.NPRNT</td>
<td>-0.046</td>
<td>1.000</td>
<td>-0.046</td>
<td>-0.082</td>
<td>0.0984</td>
<td>0.084</td>
</tr>
<tr>
<td>16</td>
<td>0</td>
<td>0.046</td>
<td>0.082</td>
<td>0.0984</td>
<td>0.084</td>
<td>0.084</td>
</tr>
<tr>
<td>EMPLOY</td>
<td>-0.334</td>
<td>-0.082</td>
<td>1.000</td>
<td>-0.148</td>
<td>0.148</td>
<td>0.148</td>
</tr>
<tr>
<td>16</td>
<td>0</td>
<td>-0.082</td>
<td>0.148</td>
<td>0.148</td>
<td>0.148</td>
<td>0.148</td>
</tr>
<tr>
<td>DAILYWHS</td>
<td>-0.229</td>
<td>-0.082</td>
<td>-0.148</td>
<td>1.000</td>
<td>-0.148</td>
<td>-0.148</td>
</tr>
<tr>
<td>16</td>
<td>0</td>
<td>-0.082</td>
<td>-0.148</td>
<td>0.148</td>
<td>0.148</td>
<td>0.148</td>
</tr>
<tr>
<td>ADMEXP</td>
<td>0.180</td>
<td>0.046</td>
<td>0.082</td>
<td>0.0984</td>
<td>1.000</td>
<td>-0.046</td>
</tr>
<tr>
<td>16</td>
<td>0</td>
<td>0.046</td>
<td>0.082</td>
<td>0.0984</td>
<td>0.046</td>
<td>1.000</td>
</tr>
<tr>
<td>FAMBUSNS</td>
<td>0.102</td>
<td>0.046</td>
<td>0.082</td>
<td>0.0984</td>
<td>-0.046</td>
<td>1.000</td>
</tr>
<tr>
<td>16</td>
<td>0</td>
<td>0.046</td>
<td>0.082</td>
<td>0.0984</td>
<td>-0.046</td>
<td>0.046</td>
</tr>
<tr>
<td>EDULEVEL</td>
<td>-0.039</td>
<td>-0.322</td>
<td>0.322</td>
<td>-0.322</td>
<td>-0.322</td>
<td>1.000</td>
</tr>
<tr>
<td>16</td>
<td>0</td>
<td>-0.322</td>
<td>0.322</td>
<td>-0.322</td>
<td>-0.322</td>
<td>0.322</td>
</tr>
<tr>
<td>MOTIVE</td>
<td>0.043</td>
<td>0.119</td>
<td>-0.119</td>
<td>0.119</td>
<td>-0.119</td>
<td>0.119</td>
</tr>
<tr>
<td>16</td>
<td>0</td>
<td>0.119</td>
<td>-0.119</td>
<td>0.119</td>
<td>-0.119</td>
<td>0.119</td>
</tr>
</tbody>
</table>

COEFFICIENT / (D.F.) / SIGNIFICANCE: "C" IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED.
PARTIAL CORRELATION COEFFICIENTS

CONTROLLING FOR: EMPLOY, DAILYWHS, ADMEXP, FAMBUSNS, EDULEVEL, MOTIVE

workforce structure of small businesses. This has led to a radical change in the organisational structure of these businesses. Different areas within the firm have also been transformed, namely the span of control, the average number of employees, and the average number of managers to total employees.

2 - Two different types of organisational structure under different types of management in different periods of time (before and after the war) were discovered.

3 - The personality of the Lebanese small business manager was portrayed and structured in the form of different factors.

4 - Small business owner/managers were found to be the locus of control of the business, and all financial decision making. The NOM seems to play an operational role rather than one of planner and decision maker.

5 - Financial functions (budgeting, forecasting, producing financial reports, financing, etc.) were seen to be the major responsibilities of owner managers. In a few cases other specialised managers perform these functions.

6 - Most Lebanese small businesses produce financial statements and other financial reports for several purposes and uses. Compared with their counterparts in the regions of the Middle
Table 5.25 Partial Correlation Coefficients. (ZERO ORDER PARTIALS).

<table>
<thead>
<tr>
<th></th>
<th>GROWTHM</th>
<th>MNGS</th>
<th>DAILYWHS</th>
<th>MNG.NPRT</th>
<th>PASTEXPR</th>
<th>ADMEXP</th>
</tr>
</thead>
<tbody>
<tr>
<td>GROWTHM</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>( 0)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MNGS</td>
<td>-.4588</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>( 16)</td>
<td>( 0)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>P=.028</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DAILYWHS</td>
<td>-.3775</td>
<td>.1747</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>( 16)</td>
<td>( 16)</td>
<td>( 0)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>P=.061</td>
<td>P=.244</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MNG.NPRT</td>
<td>.1152</td>
<td>.3314</td>
<td>.1819</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>( 16)</td>
<td>( 16)</td>
<td>( 0)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>P=.002</td>
<td>P=.000</td>
<td>P=.303</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PASTEXPR</td>
<td>.1152</td>
<td>.3314</td>
<td>.1819</td>
<td>.4774</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>( 14)</td>
<td>( 14)</td>
<td>( 14)</td>
<td>( 0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>P=.105</td>
<td>P=.250</td>
<td>P=.031</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADMEXP</td>
<td>.1287</td>
<td>-.1658</td>
<td>-.3504</td>
<td>-.0498</td>
<td>-1.638</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>( 16)</td>
<td>( 16)</td>
<td>( 16)</td>
<td>( 16)</td>
<td>( 0)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P=.305</td>
<td>P=.255</td>
<td>P=.077</td>
<td>P=.422</td>
<td>P=.272</td>
<td>P=.</td>
</tr>
</tbody>
</table>

COEFFICIENT / (D.F) / SIGNIFICANCE) ('.' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED) PARTIAL CORRELATION COEFFICIENTS CONTROLLING FOR ...

Table 5.26 Rotated Factor Matrix:

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>MNG.NPRT</td>
<td>.96251</td>
<td>.01431</td>
<td>.18590</td>
</tr>
<tr>
<td>MNGS</td>
<td>.87874</td>
<td>-.09027</td>
<td>.23590</td>
</tr>
<tr>
<td>GROWTHM</td>
<td>-.77480</td>
<td>.21247</td>
<td>.33124</td>
</tr>
<tr>
<td>ADMEXP</td>
<td>.00312</td>
<td>.38400</td>
<td>-.26559</td>
</tr>
<tr>
<td>DAILYWHS</td>
<td>.23253</td>
<td>-.72926</td>
<td>-.41727</td>
</tr>
<tr>
<td>PASTEXPR</td>
<td>.15521</td>
<td>-.04996</td>
<td>.89919</td>
</tr>
</tbody>
</table>

Table 5.27 Areas of trouble with NOM causing less growth

<table>
<thead>
<tr>
<th></th>
<th>GROWTHM</th>
<th>PRODM</th>
<th>EMPLG</th>
<th>TAGM</th>
<th>ARGM</th>
<th>CAPGM</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOM</td>
<td>-.6158</td>
<td>-.3463</td>
<td>-.4681</td>
<td>-.2532</td>
<td>-.2201</td>
<td>-.2764</td>
</tr>
</tbody>
</table>

*P=.002  P=.073  *P=.046  P=.155  P=.190  P=.133

* Significant statistically at the 95 % level.

East, Lebanese small businesses are highly professional in their performance of financial activities.

7 - The number of managers as a size issue was shown to be relatively important as a predictor factor. The number and type of managers allowed us able to differentiate between two
types of organisational structure, and to portray different images of the financial structure of each type of business (type 1 and type 2) as well as the common structures of the uses of funds.

8 - In some areas of the financial structure our results were very similar to those found by researchers in other countries such as France, Japan, the United Kingdom, and the United States of America.

9 - A positive relationship between owner managers and the GPERFORM variable was evident. This relationship was negatively associated with NOM.

10 - A positive relationship between owner managers and the GROWTHM variable was also evident. With NOM this relationship was highly negatively associated, and the causes of this problem were discussed and set out individually.
5.4 - REFERENCES.


2 - The terms manager and director will be used interchangeably throughout the study.


4 - Ibid, p.38.


8 - Ibid.

9 - See questions 6, 11, 12, 13, 14, 15 in the questionnaire.


11 - Tamari, Dr. Meir, "The financial structure of the small firm - An International Comparison of Corporate Accounts in the U.S.A, France, U.K, Israel, and Japan. *American Journal of Small Business*, Vol. IV, No. 4, Spring (April-June), 1980. *It is worth noting here that although Tamari has mentioned the importance of studying and analysing financial structures of the firms in many countries, there were no clear guidance as to which specific studies or research papers can be referred to on this very specific point.

12 - Ibid.


15 - The variables thought to be interfering in the relationship between MNGS and GPERFORM were spotted by Pearson's product-moment correlation as follows; NOM, employment, business type, daily working hours, family business, motive, educational level, and administrative expenses.

16 - It was proved that even when we take the effect of non-owner managers from the equation, the coefficient of correlation is still negative when we consider owner managers instead of the total number of managers. Partial correlation analysis has given a -.0183 when NOM were taken away. However, Pearson's Coefficient Correlation between GPERFORM and OMNGS was .0630, which is better even before the effect of N.P.M is taken.


18 - Ibid., p. 145.
GOVERNMENT AND PRIVATE POLICY ON THE FINANCING SMALL FIRMS.

INTRODUCTION:

The previous chapter discussed several issues covered by the survey of 75 small business firms in different industrial activities. The financial management of the small business as decision maker was discussed. The effect of war on the organisational and financial structure in terms of the damage caused to labour and capital was another area upon which several assumptions were tested.

The following conclusions were reached: The theoretical framework of financial management in small businesses was conspicuous by its total absence. In practice, most of the functions of financial management were performed by owner managers rather than non-owner managers, despite their significant number. The number of managers and their type was successful as a discriminant variable to distinguish between two types of organisation with completely different organisational and financial structures. The consequent effects on the firms’ general performance and growth was another issue discussed.

In addition, the preceding chapter examined the decision maker and financial performance in terms of the change and the damage caused to the labour structure. In this chapter we shall examine further hypotheses and the findings of the research. It was argued before that war has caused great damage to capital as a factor of production and source of finance. Nevertheless we have argued that war actually works in favour of survival small businesses.

First we will enlarge this view and explain the rationale behind this part of the hypothesis before proceeding to test it according to the data available.

Since capital is scarce in developing countries, it is essential that however much is available should be deployed as efficiently as possible, in order to maximise a firm's production and increase its economic contribution. The opportunities of obtaining capital from financial institutions vary from one country to another, and from one business to another. This matter was discussed in some detail earlier on. Suffice it to say that differences between countries in terms of the type of financial facilities available, financial market techniques, and the amount of capital available are very important and should be taken into consideration. These differences are clearly related to the different types of economic system, the available economic resources, investment opportunities and the size of available funds. In the financial markets of industrial countries for example, the banking sector as a source of finance cannot be compared with those in Asian or African countries so far as types of loans, deposits, investment schemes and levels of interest rates are concerned. Therefore, financial markets and financial facilities available to small business are expected to vary each responding in its own way to the economic structure and availability of funds of the market itself.
This does not mean that funds or capital are available only from the financial markets. Harper, M. (1984) writes:

"In both industrialised and developing countries, the vast majority of initial venture capital and subsequent funds for expansion is provided from 'informal' sources. These include the entrepreneur himself, his business and his family, suppliers and customers, and money lenders or other investors who provide capital in innumerable ingenious ways, often linked to supply, machinery, employment or customers". [1]

So far as the small business is concerned, the question of finance is a serious one. Many researchers have discussed this problem, positing different hypotheses and coming up with different results. Tamari, M. (1980) argues that small firms have limited access to capital and money markets and therefore suffer from chronic undercapitalisation. As a result, they are likely to have excessive recourse to expensive funds which act as a brake on their economic developments.[2] According to Tamari, M (1980), "small firms have greater difficulty in obtaining funds and that they are less profitable".[3] The Bolton Report (1971) notes that "there is no single defect in financial facilities for small firms..." It also reports that "...our evidence shows that small firms are at a disadvantage relative to large firms in a number of significant ways that relate to financing".[4]

Harper, M. (1984) argues that,

"Most small business people believe that shortage of capital is their major if not their only problem; at the same time they often have substantial resources uneconomically employed and are not likely to make optimum use of additional capital if they can obtain it".

He also adds that,

"... and those who had received loans merely accumulated an even larger stock of slow-selling goods, with no effect on their profits".[5]

In short there are two main views. One concentrates on market finance in the shadow of capital scarcity, a situation which is wide spread in the industrial countries. The other view concentrated on the uneconomic use of available resources and the desire for loan seeking, which is the situation in the majority of third world countries. Accordingly, small firms have less equity and enjoy less liquidity, or enjoy more equity and more liquidity. This view highlights the effect of sources of finance on the profitability and growth of the small firm.

We shall first review the capital situation and the industrial share for the period before and during the war in Lebanon. We shall then move on to formulate our hypothesis clearly that it may be tested later on.

The general impression one forms of the Lebanese economic situation in the pre war period is that the country enjoyed a rapid economic growth represented by significant prosperity in the economic sectors and a rapidly rising GNP.[6] In general, three major sectors contributed to the growth of the GNP, namely trade, services and industry. So far as our research is concerned the banking sector and industry are of interest, in particular the role of banks in financing industrial
firms. The rapid growth of this sector and its dynamic role have enabled it to attract large amounts of foreign capital, which in turn has tended to increase the number of banks in the country to absorb this capital, most of which comes from oil funds. This situation resulted in the provision of an extra source of funds in the financial market during the prewar period.

The above conclusion on money availability in the Lebanese financial market - mainly the banking sector - suggests that banks had substantial amounts of deposits, mainly time deposits, most of which were deployed as loans. Therefore loans and credit facilities are provided extensively for economic sectors and industry in particular. Table 6.1 shows the development of loans to industrial sectors compared with the total loans to economic sectors during the prewar period.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td>129.2</td>
<td>148.1</td>
<td>150.2</td>
<td>145.2</td>
<td>153.4</td>
<td>193.7</td>
<td>227.6</td>
<td>337.9</td>
<td>430</td>
</tr>
<tr>
<td>All Sectors</td>
<td>1019.2</td>
<td>1003.2</td>
<td>896.9</td>
<td>901.1</td>
<td>926.3</td>
<td>1161.6</td>
<td>1429.5</td>
<td>1634.7</td>
<td>2426</td>
</tr>
<tr>
<td>% of Ind/All</td>
<td>12.6</td>
<td>14.8</td>
<td>16.7</td>
<td>16.1</td>
<td>16.6</td>
<td>16.7</td>
<td>16.9</td>
<td>20.7</td>
<td>17.7</td>
</tr>
</tbody>
</table>

Growth rate=16.2%
Source: Central Bank of Lebanon.

Table 6.1 shows that loans to economic sectors fell from 1019.2 million US$ in 1966 to 901.1 million US$ in 1969, and then rose sharply from 926.3 million US$ in 1970 to a significant peak of 2426 million US$ in 1974. Loans to industrial sectors continued to rise steadily from 12.6% of total loans in 1966 to 17.7% in 1974, an average growth rate of 16.2%. Fig 9.1 shows graphically the development of loans to economic and industrial sectors. While loans were increasing rapidly, the number of industrial firms was also rising sharply, with a major shift in the size of the firms (mainly in terms of employment). The number of industrial firms increased dramatically from 9558 in 1964 to 15669 in 1970, an increase of 64% in just 6 years. Therefore the prewar period witnessed a significant increase in the number of industrial firms and the availability of substantial loans to these firms, or, in other words, a parallel movement between the demand for and the supply of, funds.

Table 6.2 shows the loans available to the economic sectors - and to the industrial sector in particular - during the war period. Loans to the economic sectors reached a peak in 1983 and then began to decline sharply until 1986. In early stage of the war, loans dropped from 2930 million US$ in 1975 to 2462 million US$ in 1976, before rising to no less than 7376 million US$ in 1983 before dropping to 2944 million US$ in 1986. Loans to the industrial sector followed the same trend, but with a very different average growth rate, approaching -4.5% if compared to that of the prewar period.

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td>582</td>
<td>489</td>
<td>525</td>
<td>560</td>
<td>683</td>
<td>908</td>
<td>843</td>
<td>923</td>
<td>1165</td>
<td>1038</td>
<td>480</td>
<td>351</td>
</tr>
<tr>
<td>All Sectors</td>
<td>2930</td>
<td>2462</td>
<td>2580</td>
<td>3343</td>
<td>4658</td>
<td>4936</td>
<td>5388</td>
<td>7376</td>
<td>6609</td>
<td>3487</td>
<td>2944</td>
<td></td>
</tr>
<tr>
<td>% of Ind/All</td>
<td>19.9</td>
<td>19.9</td>
<td>20.4</td>
<td>16.7</td>
<td>17.2</td>
<td>19.5</td>
<td>17.1</td>
<td>15.8</td>
<td>17.5</td>
<td>13.8</td>
<td>11.9</td>
<td>11.9</td>
</tr>
</tbody>
</table>

Source: Central Bank of Lebanon.

However, the amount of loans to the industrial sector decreased - as a direct result of the war - from 582 USMS$ in 1975 to 489 USMS$ in 1976. Then the trend reversed, registering 1165 USMS$ in 1983 before dropping to 351 million US$ in 1986, an amount similar to that given to industries in 1973. As a percentage of the total amount of loans, loans for the industrial sector dropped drastically from 19.9 in 1975 to 11.9% in 1986, or two thirds below the level of 1983. Fig 6.2 presents graphically the development of loans to both economic and industrial sectors during the war period.

Although the market performance shows that credit to industrial firms increased during the war period, this does imply that small businesses enjoyed access to these financial facilities. The financial statements of small firms can tell us whether such credit facilities were available.

Table 6.3 Averaged Balance Sheet of a Sample of Small Firms in Lebanon, 1976 - 1986.

<table>
<thead>
<tr>
<th>TOTAL ASSETS (USES)</th>
<th>TOTAL LIABILITIES (SOURCES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAND</td>
<td>CAPITAL</td>
</tr>
<tr>
<td>9919</td>
<td>43646</td>
</tr>
<tr>
<td>BUILDINGS</td>
<td>RETAINED EARNINGS</td>
</tr>
<tr>
<td>9244</td>
<td>12015</td>
</tr>
<tr>
<td>PLANT &amp; EQUIPMENTS</td>
<td>TOTAL EQUITY</td>
</tr>
<tr>
<td>38235</td>
<td>55661</td>
</tr>
<tr>
<td>PRELIMINARY EXPENSES</td>
<td>DIVIDENDS</td>
</tr>
<tr>
<td>685</td>
<td>-4971</td>
</tr>
<tr>
<td>ADMIN EXPENSES</td>
<td>BANK LOANS</td>
</tr>
<tr>
<td>4693</td>
<td>33091</td>
</tr>
<tr>
<td>TOTAL FIXED ASSETS</td>
<td>ACC PAYABLE</td>
</tr>
<tr>
<td>62776</td>
<td>14037</td>
</tr>
<tr>
<td>ACC RECEIVABLES</td>
<td>BILLS OF EXCHANGE</td>
</tr>
<tr>
<td>17254</td>
<td>2928</td>
</tr>
<tr>
<td>INVENTORY</td>
<td></td>
</tr>
<tr>
<td>21705</td>
<td></td>
</tr>
<tr>
<td>OTHER C. ASSETS</td>
<td>OTHER C. LIABILITIES</td>
</tr>
<tr>
<td>6277</td>
<td>7322</td>
</tr>
<tr>
<td>TOTAL C. ASSETS</td>
<td>TOTAL C. LIABILITIES</td>
</tr>
<tr>
<td>45292</td>
<td>52407</td>
</tr>
<tr>
<td>TOTAL ASSETS</td>
<td>TOTAL EQUITY &amp; LIAB</td>
</tr>
<tr>
<td>108068</td>
<td>108068</td>
</tr>
</tbody>
</table>

The financial statements of small businesses provide useful information which helps us to determine whether finance comes from debt or from equity sources. Table 9.3 shows the averaged balance sheet of 19 small business firms for the period 1976-1986. Most statements do not identify specific sources such as commercial banks, development banks, saving and loans, venture capital, or friends and relatives. The average leverage was 1:1, thus providing almost 50% of external finance. Bank loans comprise 30.6% of the total sources of funds, and 63% of the total external finance. This item comprises all types of bank loans - mainly short term - from both commercial and development banks. 7 of the firms had had rehabilitation loans and 4 had a long-term loan from the National Bank for Industrial and Tourism.
Development (NBITD). The rest of the firms had credit facilities from commercial banks.

![Fig. 6.1 Loans to Industry and Economic Sectors in Lebanon 1966-74](image)

![Fig. 6.2 Loans to Industry and Economic Sectors in Lebanon 1975-86](image)

Other sources of finance are accounts payable and bills of exchange. These account for about 15.7% of the total sources of funds. Therefore it can be said that in general, funds for investment were available from different sources during the war period. This does not mean, however, that all small business firms had the same opportunity to avail themselves of financial facilities.

Meanwhile, industrial firms were witnessing a radical change in the industrial sector. This change took two directions. The first was a dramatic change in the number of surviving industrial firms; the industrial census of 1985 shows that 5758 industrial firms are no longer active. Subtracting this from the number of firms in the 1970 census, we see that out of a total of 15669, no more than 9911 firms (63.25%) have survived. Taking the number of inactive
firms (5758) from the 1985 industrial census figures, we see that out of 13938 firms there are only 8180 which are active, i.e. some 58.7% of the total. The other direction of change is the dramatic structural transformation that has taken place in the size of industrial firms. There has been a drastic shift from firms who employ 5 persons to firms who employ more than 5 persons. In 1970, the firms which employed less than 5 persons accounted for about 81% of the total number of industrial firms, with firms employing 5 persons or more constituting 19%; in 1985, firms employing less than 5 persons accounted for no more than 27% of the total number of industrial firms, while the remaining 73% were firms employing 5 persons or more.

In short, the war period has witnessed an increase in the availability of funds, together with a sharp fall in the number of industrial firms who employ less than 5 persons, and the rapid rise in the number of firms who employ more than 5 persons. The sharp fall in the number of firms has widened the financial market in general and lowered demand. Within the surviving industrial firms, however, the increase in the number of firms which employ more than 5 persons has led to a greater the number of corporate firms (going public) and resulted in a higher propensity to seek external finance. In both the above cases there was a simultaneous response from the banking sector in the form of more loans to industrial firms.

Thus one may hypothesise that the war, which caused the disappearance of 41.3% of industrial firms and a vast outflow of local and foreign capital, has allowed the surviving industrial firms to dominate a bigger market (higher demand) and has prompted banks to invest their available funds by increasing their loans and financing facilities to the industrial sector, as well as to other sectors.

Is it true, as our hypothesis states, that the war has given surviving small businesses higher opportunities to obtain more funds from external sources such as banks? Was there enough finance for small business, given the fact of capital outflow? Governments in these decades are more concerned about, and responsible for, providing credit guarantee schemes or establishing special development banks which mainly provide capital for investment in the form of long term loans or working capital loans. What was the role of the Lebanese government in financing small firms? What size of capital investment was provided for those surviving industrial small businesses? The number of Lebanese banks with at least 5 branches each reached 92 in 1985; there was also a large number of private financing institutions. What is the role of these private financing institutions, and what kind of facilities do they offer to small businesses? Are government and the private sector (mainly banks) the only sources of finance, or is there another source too? if an alternative source exist, how big is it and what is its role in the financing of small businesses?

In the light of the above, the following four subsections will be discussed:

1 - The government's role and policy in financing small firms.
2 - Private sources of finance for small firms.
3 - Discriminant analysis and tests of liquidity.
4 - Limitation of the small firms' financial markets.

6.1 THE GOVERNMENT ROLE & POLICY ON FINANCING SMALL FIRMS.

Modern economic thought gives more attention to the role of government in the process of economic development and growth. Financing the small business is included in this role, although the commitment to small businesses by government remains a relatively new concept. Governments offer different kinds of help to both small and big business firms.

The role of government in financing small business firms can be divided for the purpose of this research into two major areas: direct and indirect finance. Direct financing includes the role of government financial institutions which provide direct finance to small industries. In our study we shall be discussing in particular the role of the government bank - the National Bank for Industrial & Tourism Development - (NBITD). Indirect financing is channelled through other government financial facilities and assistance, which may include for example tax exemptions, the protecting of national industries, and customs relief.

In the prewar period two government credit banks were active. The first was the Socie'te' de Cre'dit Agricole et Industriel au Liban (SCAIL), inaugurated on 31 March 1939. The second was the Agricultural, Industrial and Real Estate Bank (AIREB) which was approved in 1953 and began operations in 1954-55. The role of both banks in financing industrial firms was very critical.[7] Neither the size of capital, nor the rules and procedures adopted, permitted either bank to play a role of significance. Nowadays, their activities are limited in relation to the financial needs of the market, their role is marginal when compared with any commercial bank or with their counterpart, the NBITD, which was established on December 10th 1971.[8]

The role of SCAIL and AIREB has been evaluated by many researchers, but the role of NBITD -especially its experiences in war conditions- has never been studied. In this section, therefore, we shall endeavour to examine the role of the NBITD. Two other development Banks also deal with long term financing: the Bank AI-AHLI, which played an important role as supervisor of government loans to industries; and the Housing Bank, which deals with long term investments in real estate projects.

6.1.1 The NBITD; Functions and Purposes.

The purpose of the NBITD is "to contribute to the development of the industrial and tourism sectors of the Lebanese economy by ways of financing investment projects, encouraging the investment of local and foreign capital and rendering whatever services may be necessary for the achievement of this objective within the framework of the government's economic policy, and its development plans".[9] The bank is authorised to employ funds entrusted to it in any sector of the economy and to perform all operations permitted to investment banks, as well as those permitted to medium and long term credit banks in the private sector, and to enjoy all the privileges accorded to the aforementioned banks.

145
The bank is a semi-public institution with 51% of its capital (266 million pounds) owned by the State and 49% owned by the private banking sector.[10] In addition to its net worth, the Bank's resources include the following:
- Receipts from the sale of bond issues, and term funds loaned to the bank by the State or raised in local and foreign money markets, with or without the guarantee of the State.
- Loans and rediscount facilities accorded to it by the Bank of Lebanon.
- Term deposits in Lebanese or foreign currencies.
- Monetary grants it may receive.

The bank adopts a 'middle' policy between development and profit making, a policy which takes into consideration the "adherence to economic development objectives laid down by the State on one hand, and the attainment of a suitable rate of return on its capital on the other".[11] As regards the industrial sector, the bank will give preference to the following:

1. Local industries that are viable and produce import-substituting goods, in particular industries that are able to compete with foreign products without being accorded special protection.
2. Industries that produce goods for export, thus ensuring new sources of foreign exchange.
3. Industries in which the value-added is relatively high, relying considerably on local raw materials, local skills and manpower.
4. Industries outside the big cities and their suburbs, thus helping to develop rural areas and limiting migration to urban centres.
5. Industries financed by both national and foreign participation, thus encouraging the entry of foreign capital and technology into Lebanon.

The Bank offers three types of loans:
1. Long-term loans up to 12 years for industrial projects and 15 years for tourism projects.
2. Medium-term loans up to 5 years.
3. Rehabilitation loans with maturity of 3 years.[12]

The term of the loan is specified by the bank after consideration of the projected cash flow generated by the project, the financial standing of the owner(s), and the life of the fixed assets. The Bank is authorised to extend credit for a maximum period of 12 years.[13] The interest rate charged on loans is between 5% and 8% and the maximum ceiling of the loan is L.L 10 million. The bank is also authorised to perform all operations permitted to investment banks including the following: credit investment; equity participation; the purchase and sale of financial instruments for the accounts of the Bank or for the account of others; the issue of medium and long-term guarantees against adequate security; and the issue of short-term guarantees provided they are related to medium and long-term operations.

In short, "the bank's overall policy would be to synchronise the maturity of its resources and that of its assets in such a way that the credit it extends will be of a shorter maturity than that of loans
granted to it. Thus the bank will always be sufficiently liquid to meet its obligations promptly".[14]

6.1.2 Evaluation of the NBITD Credit Experience:

Since the establishment of the NBITD, the state has given the bank, in addition to its net worth, an amount of L.L 900 million up to 1985, plus L.L 400 million which was given to Bank Al-AHLI in 1977 to provide long term loans to the industrial sector.[15] According to a credit source in the bank, in addition to what was given previously by the State, the bank had received L.L 750 million from the Central Bank up to 1988.[16] The credit manager added that the bank asked the state to provide L.L 2 billion to meet the market demand for finance. Therefore the bank had a credit facility amounting to L.L 400 million. Table 9.4 shows the development of credit facilities by the NBITD since 1976.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>AMOUNT OF CREDIT</th>
<th>CUMULATIVE AMOUNT</th>
<th>BANK NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976</td>
<td>400</td>
<td>400</td>
<td>AL-AHLI</td>
</tr>
<tr>
<td>1983</td>
<td>200</td>
<td>600</td>
<td>NBITD</td>
</tr>
<tr>
<td>1984</td>
<td>200</td>
<td>800</td>
<td>NBITD</td>
</tr>
<tr>
<td>1985</td>
<td>500</td>
<td>1300</td>
<td>NBITD</td>
</tr>
<tr>
<td>1988</td>
<td>500</td>
<td>1800</td>
<td>NBITD</td>
</tr>
<tr>
<td>1990's</td>
<td>2000</td>
<td>3800</td>
<td>NBITD</td>
</tr>
</tbody>
</table>

It is clear from the table that money was available for most of the time from the government banks; however, this does not answer the question of whether this amount was effectively and efficiently utilised.

Regarding the L.L 400 million pounds given to Al-AHLI Bank, the Association of Industrialists complained about the bad management of this loan after discovering that only 25% had been used as loans by only 10% of industrialists who applied. As the bank itself reports, the remaining 75% of the money was frozen; it is doubtful, however, that so large a sum of money (L.L 300 million, equivalent to 100 million US$) would have been frozen in the bank.[18] Moreover there was no information released about the distribution of the numbers or amounts of loans among industrial firms or among geographic districts (Muhafazat), a fact which to a great extent justifies the attitude of the Association of Industrialists.

The NBITD credit policy is much more coherent than that of the AL-AHLI bank.[19] In its early stages, however, neither public nor industry was clear as to how the policy worked. Strong criticism came from different directions concerning management of the bank credit even though substantial amounts of money were being received from the State for distribution among industrial firms. This is shown in table 9.4 and projected to 1990. To our knowledge, insufficient information was published by the bank for the period 1977-1982 concerning the number of loan applications, loans accepted and the amounts budgeted for them.
The bank began to publish information for the public in local newspapers. Published data we have is totally different to that in the bank's documents. For example, the bank's documents show that up to 30/04/1987 there were 220 development loan applications, while published information up to 31/12/1987 states that the total number of applications for development loans was 212. Not only does the published information contradict the bank's document, internal data and special reports confirm that the bank information is inaccurate. For example, in a special book published in 1988 the bank register 214 development loan applications with a value of L.L 2,343,426 up to 31/01/1988, 72 of which were accepted with the value of L.L 545,850 thousands. In document no. 11 of the NBITD, it is stated that there were 220 loan applications with a value of L.L 602,827 thousand up to 30/04/1987. 171 of which were accepted to a value of L.L 398,812 thousand. However, despite this inaccuracy problem the only reliable source of information is the bank's records. Therefore, it is preferable to rely on them rather than on that which is published in newspapers.

The NBITD started its activities by giving development loans to industrial, tourist and medical institutions. After 1976 the bank introduced the working capital loan, a medium-term loan for three years with an interest rate of 7%. The budget allocated to this type of loan was L.L 50 million, to be distributed among 41 industrial firms.

The bank adopted a different credit policy to face the reality of the industrial crisis caused by the civil war and the Israeli invasion. Another type of loans (rehabilitation loans) was introduced by the bank in place of the working capital loan, with an interest rate of between 5% and 7% to be calculated in the first three years, and loan payable over 10 years. Industrial firms located 3 Km from the coast pay only 4% interest with an extra year to pay back the loan as a development incentive. This policy ran from 1979 until 1985. In 1986 the bank's management changed, then the loans ceilings was raised from L.L 8 million to L.L 14 million. In 1987-88 the bank raised the ceiling for development loans to L.L 25 million. The interest rate on this type of loan is from 12.5 to 13.6 actual. The loans should be invested 80% in fixed assets and 20% in raw materials (working capital). Let us now discuss the bank credit policy through the loans given to industrial firms and see the share of small businesses among them.

Table 6.5 shows the distribution of industrial development loans on industrial activities. A total of 214 loans were distributed normally among all activities with an average of 26.8 for each type of industry, for L.L 11 million per loan amounting to a needed amount of L.L 293 million for each type of activity. The view is somewhat different if we look at what the bank has given to the industrialists. Out of the 214 applications for development loans, 72 were accepted, accounting for only 33.7% of the total number of applications for development loans, and almost L.L 546 million out of the total demand (L.L 2343 million) or 23.3% of the total. An average of 9 loans were given per industrial activity, amounting to L.L 68.2 million for each industrial activity, an average of L.L 7.5 million per accepted development loan. Table 9.6 shows that the distribution of development loans by geographical location is another face of the adopted credit policy by the bank.
It is obvious from table 6.6 that applications for loans and approved loans are not equally and normally distributed. Mount-Lebanon had the greatest share; 66% of the applications, 72% of accepted loans, and 75% of the total amount given. Approved loans to other geographical areas were as follows: 11% was the share of the Beka; 9% to South Lebanon and 8% to Beirut; the North of Lebanon received nothing at all. The average amounts per loan to each district vary quite a lot: L.L 7.8 million for Mount Lebanon, L.L 4.4 million for Beirut, L.L 5.5 million for South Lebanon and L.L 6.6 million for the Beka.

The distribution of rehabilitation loans completes the picture of the bank's credit policy. This
type of loan was introduced to help industrial firms recover from the consequences of civil war. Table 6.7 shows the distribution of loans applications and accepted loans by industrial activity as of April 30th, 1987.[24]

The average number of applications for each industrial activities is 27.5; however, the distribution is quite normal among all activities. The average number of approved applications per industrial activity is 21.4, or an average of 6.1 applications less than the average number of loan applications. The total numbers of accepted rehabilitation loans is 171 out of 220, or about 77.7 %, whereas signed contracts account for 70% (153 loans). The higher percentage of approved loans does not reflect the value of the loans. The value of approved credit amounted to L.L 398,812 thousand out of L.L 602,827 thousand, or 61%, whereas the signed value is about L.L 344,526 thousand, 57.16% of the total credit demand.

The highest number of loans were given to the textile and leather industry, followed by the food industry and the chemical industry; the rest were given less than 19 loans (12%). As for the value of each loan per industrial activity, the food and chemical industries received, L.L 79.325 million and L.L 60.230 million respectively, followed by the textile & leather industries, paper and printing industry, and wood & furniture industries (see table 9.6 for the rest of industries). The average amount per loan for each industrial activity is quite variable. The category "other industries" had the highest amount per loan, an average of L.L 3.53 million, while food industries had the lowest average, or L.L 1.8 million per loan. The rest varied between L.L 2.8 million and L.L 2.1 million per average loan. Unfortunately, no information has been released by the bank on the distribution of rehabilitation loans by geographical location. This may be in order to avoid the kind of criticism faced by the bank over development loans.

| Table 6.8 Development & Rehabilitation loans given by NBITD as of Jan 31st, 1988 distributed by industrial activities. (L,000 LL) |
|-----------------|--------------------|------------------|--------------------|------------------|--------------------|------------------|--------------------|
| Loan Applications | ACCEPTED LOANS |
| Ind activity     | No          | %          | Amount   | %          | No            | Amount   | %          | Average/Loan |
| Food & Beverage  | 66          | 15.2       | 412705   | 14          | 6253.1        | 41       | 16.9       | 175325       | 18.5         | 4276.2          |
| Textile & Leather| 69          | 15.9       | 536490   | 18.1        | 7775.2        | 44       | 18.1       | 152895       | 16.18        | 3474.8          |
| Wood & Furniture | 47          | 10.8       | 244611   | 8.3         | 5204.5        | 29       | 11.9       | 72970        | 7.72         | 2516.2          |
| Paper & Printing | 44          | 10.1       | 279787   | 9.5         | 6358.8        | 27       | 11.1       | 111166       | 11.76        | 4117.2          |
| Chemical & Petro-Chemi | 79     | 18.2       | 568291   | 19.3        | 7913.5        | 41       | 16.9       | 183730       | 19.44        | 4481.2          |
| Nonmetallic Industry | 51      | 11.8       | 358627   | 12.2        | 7031.9        | 26       | 10.7       | 117150       | 12.4         | 4505.0          |
| Metallic Industry | 62          | 14.3       | 404380   | 13.8        | 6522.2        | 29       | 11.93      | 110280       | 11.67        | 3802.7          |
| Other Industries | 16          | 3.7        | 106080   | 3.6         | 6630          | 6        | 2.47       | 21146        | 2.23         | 3524.3          |
| TOTAL            | 434         | 100%       | 2946253  | 99.9%       | 6788.6        | 243      | 100%       | 944662       | 100%         | 3887.5          |

If we combine table 6.5 and 6.7, we are able to see the overall credit facilities made available by the NBITD to industrial firms during the war period. Table 6.8 shows the distribution of applied and approved industrial loans to industrial activities up to Jan. 31st. 1988. The NBITD, as the table shows, gave 243 out of a total of 434 loans, or an approval rate of almost 56% of the total applications. The value of loans given was only 32% of the total credit demanded, equal to 52.5% out of available funds in the NBITD up to 1988 (see table 6.4). The overall
average amount per application was L.L 6.78 million, compared to L.L3.88 million for each approved loan, a difference of L.L2.9 million per loan (or per firm). However, this does not mean there is a gap in the financial market; rather, there is a gap between the demands of industrial firms for government financing facilities and its real supply. This may be all that the government can offer to the industrial sector under war conditions.

What was the position of small businesses within the whole framework of government credit policy?

6.1.3 Small Firms and Government Credit policy:

Since small businesses lack recognition at the national level, evaluation of government and nongovernment small business credit policy is not an easy task.

In one of its publications concerning small projects the NBITD made the following statement:

"The bank will not lay down a floor to its loans in cases where a small project is judged to be viable both economically and financially".[25]

It is clear from the above statement that the bank, theoretically speaking, does not discriminate between big and small industrial projects so far as they are judged to be both economically and financially viable. This statement does not assure that in practice there will be no discrimination and bias against small business industries. Examining the bank's small business credit policy will show how much weight is given to small businesses by the government.

While reviewing the bank credit files and loans applications we have learned that many small business firms have applied for loans. (This is, of course, according to our definition of small business.)[26] Cases were found in the files of both, development and rehabilitation loans, there was not enough information about the latter on which to base our analysis. Data was available on loans applications but not approved ones. Much more data was available on development loans. Table 6.8 shows total loan applications, both development and rehabilitation, by small business firms.

As table 6.9 shows, 61 development and 95 rehabilitation loans applied for by small businesses up to 1988, an average of 19.5 loans per industrial activity. This represents 36.7% of the total loans applications, and an average amount of L.L 1079 million.[27] The highest percentage of applications for loans were in the textile and chemical industries (20% each), followed by the paper and printing firms (16%), the nonmetallic industries (14%), and less than 11% each and 0.7% for the 'other industries' category. The required amounts of credits were distributed similarly. (see table 6.9).

We shall discuss each type of loan individually, starting with development loans. Table 9.10 shows the distribution of small businesses applied and approved development loans by geographical location (Beirut & Mount Lebanon). It presents the actual number and estimated
Table 6.9 Distribution of Applied Small Business loan application to the NBITD by industrial activities and geographical location up to 1988 (US$ 1000’s)

<table>
<thead>
<tr>
<th>Ind activity</th>
<th>Beirut Exp.</th>
<th>Mount-Lebanon Exp.</th>
<th>Beirut Exp.</th>
<th>Mount-Lebanon Exp.</th>
<th>Devp %</th>
<th>Reh %</th>
<th>Subtotal %</th>
<th>T.Exp. Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
<td>Exp.Amount</td>
<td>No</td>
<td>%</td>
<td>Exp.Amount</td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>Food &amp; Beverage</td>
<td>4</td>
<td>11.7</td>
<td>25012.4</td>
<td>5</td>
<td>18.5</td>
<td>31265.5</td>
<td>7</td>
<td>13.7</td>
</tr>
<tr>
<td>Textile &amp; Leather</td>
<td>6</td>
<td>17.7</td>
<td>46651.2</td>
<td>8</td>
<td>29.6</td>
<td>62201.6</td>
<td>8</td>
<td>15.7</td>
</tr>
<tr>
<td>Wood &amp; Furniture</td>
<td>2</td>
<td>6.0</td>
<td>10409</td>
<td>1</td>
<td>3.7</td>
<td>5204.5</td>
<td>9</td>
<td>17.6</td>
</tr>
<tr>
<td>Paper &amp; Printing</td>
<td>6</td>
<td>17.7</td>
<td>38152.8</td>
<td>1</td>
<td>3.7</td>
<td>6358.8</td>
<td>10</td>
<td>19.6</td>
</tr>
<tr>
<td>Chemical &amp; Petro-Ch</td>
<td>8</td>
<td>23.5</td>
<td>57548</td>
<td>7</td>
<td>26.0</td>
<td>50354.5</td>
<td>5</td>
<td>9.8</td>
</tr>
<tr>
<td>Nonmetallic Industry</td>
<td>8</td>
<td>23.5</td>
<td>56255.2</td>
<td>1</td>
<td>3.7</td>
<td>7031.9</td>
<td>6</td>
<td>11.7</td>
</tr>
<tr>
<td>Metallic Industry</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>4</td>
<td>14.8</td>
<td>26088.3</td>
<td>5</td>
<td>9.8</td>
</tr>
<tr>
<td>Other Industries</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>TOTAL</td>
<td>34</td>
<td>100%</td>
<td>234028.6</td>
<td>27</td>
<td>100%</td>
<td>188505.6</td>
<td>51</td>
<td>99.9%</td>
</tr>
</tbody>
</table>

Source: NBITD, private document.
amounts of small business development loans as applied for and approved. Estimated amounts are based on the actual average per loan (applied and approved) in each industrial activity (see table 6.8). There were only 20 small business loans accepted out of a total of 61 loans applied for, almost 33% of those applied for by small businesses. If this is compared with the total of applied for and accepted development loans, then accepted small business loans comprise 3.3% of the total applied for and 14% of the total accepted development loans. The highest number of loans was given to textile and leather (7 firms) followed by chemical & petrochemical industries (4 firms), paper & printing industries (3 firms), with 1 or 2 of each of the rest of the industrial activities. (see table 6.9 for more details).

Detailed information concerning rehabilitation loans was not available. We were able to discover only a number of applications made by small businesses for this type of loan, and their distribution among industrial activities by geographical location (Beirut & Mount Lebanon). It is still possible, however, to form some idea of their position among the total applications for loans (rehabilitation) in terms of their number and the amounts applied for.

Despite the fact that the total number of accepted rehabilitation loans is relatively higher than accepted development loans, the amount of approved applications for development loans is almost twice the total amount of small businesses applied for rehabilitation loans. Furthermore, the average amount of approved development loan (L.L3.8 million) is 40% higher than the average amount of rehabilitation loan (L.L 2.7 million), applied for.

| INDUSTRIAL ACTIVITY     | APPLIED DEVLP.LOANS | ACCEPTED DEVLP.LOANS | RATIO OF ACC/APP
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No Exp.Amount</td>
<td>No Exp.Amount</td>
<td>% of No</td>
<td>% of Amount</td>
</tr>
<tr>
<td>Food &amp; Beverage</td>
<td>9 56277.9</td>
<td>1 4276</td>
<td>7.5</td>
</tr>
<tr>
<td>Textile &amp; Leather</td>
<td>14 108852.8</td>
<td>7 24323</td>
<td>30</td>
</tr>
<tr>
<td>Wood &amp; Furniture</td>
<td>3 15613.5</td>
<td>2 5032</td>
<td>33.3</td>
</tr>
<tr>
<td>Paper &amp; Printing</td>
<td>7 44511.6</td>
<td>3 12351.6</td>
<td>16.0</td>
</tr>
<tr>
<td>Chemical &amp; Petro-Chemi</td>
<td>15 107902.5</td>
<td>4 17924.8</td>
<td>23.0</td>
</tr>
<tr>
<td>Nonmetallic Industry</td>
<td>9 63287.1</td>
<td>2 9010</td>
<td>15.5</td>
</tr>
<tr>
<td>Metallic Industry</td>
<td>4 26088.8</td>
<td>1 3802.7</td>
<td>4.9</td>
</tr>
<tr>
<td>Other Industries</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>TOTAL</td>
<td>61 422534.2</td>
<td>20 76720</td>
<td>32.8</td>
</tr>
</tbody>
</table>

Table 6.11 NBITD's Small Business Loans Policy.

<table>
<thead>
<tr>
<th>Type of Loan</th>
<th>Applied for Approved</th>
<th>Approved</th>
<th>Appr/Appro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development Loan</td>
<td>214 72</td>
<td>61</td>
<td>33.65 %</td>
</tr>
<tr>
<td>Rehabilitation Loan</td>
<td>220 171</td>
<td>95</td>
<td>73 %</td>
</tr>
</tbody>
</table>

Source: NBITD, special records.

The ratios of approved to total loans in addition to the average approved loans to total loans could be an accepted method of estimating the number and amount of approved small business loans. Table 6.11 represents the bank (NBITD) loans policy which we have used to estimate approved small business rehabilitation loans.
Presumably, if we accept the estimated figure of approved small business rehabilitation loans, then we could estimate the distribution of these loans among industrial activities according to the number applied for and the estimated percentage of approval.

Accordingly, table 6.11 shows the distribution of applied for and approved (estimated) rehabilitation loans for industrial activities. 95 small businesses applied for this type of loan (disaster loan), accounting for 43.2% of the total rehabilitation applications and 43% of the total amount required. It is clear that the number of small business applying for rehabilitation loans was greater than that for development loans. There are several reasons for this. One reason is the relatively small size of the required amount of the rehabilitation loans compared with the development loans. The amount required by the 95 rehabilitation loans was L.L 259 million, or 61.49% of the amount required by the 61 development loans, which is L.L 422. Another reason is that the need for rehabilitation loans on the part of the industrial firms during the war period is a genuine need for surviving and staying in the business rather than a need for growth. This is a point which the bank should consider when formulating its credit policy in the war period, and for businesses who rely on external sources of finance which are very expensive and hardly obtainable. Table 6.12 estimates the approved number of loans and their distribution among industrial activities.

Table 6.12 Small Business Rehabilitation Loans Distributed on industrial activities.

<table>
<thead>
<tr>
<th>Ind activity</th>
<th>No</th>
<th>%</th>
<th>Exp Amount</th>
<th>%</th>
<th>S/B/T.R</th>
<th>No</th>
<th>%</th>
<th>Amount</th>
<th>%</th>
<th>Appr No/T Appr</th>
<th>Appr %</th>
<th>RATIOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food &amp; Beverage</td>
<td>8</td>
<td>8.4</td>
<td>25573.6</td>
<td>7.9</td>
<td>22.2</td>
<td>6</td>
<td>8.2</td>
<td>20693.4</td>
<td>11.3</td>
<td>16.7</td>
<td>18.1</td>
<td>18.0</td>
</tr>
<tr>
<td>Textile &amp; Leather</td>
<td>18</td>
<td>19.0</td>
<td>41281.2</td>
<td>22.0</td>
<td>60.0</td>
<td>14</td>
<td>19.0</td>
<td>26380.2</td>
<td>14.5</td>
<td>46.7</td>
<td>38.4</td>
<td>38.4</td>
</tr>
<tr>
<td>Wood &amp; Furniture</td>
<td>13</td>
<td>13.5</td>
<td>35275.5</td>
<td>10.5</td>
<td>50.0</td>
<td>10</td>
<td>13.5</td>
<td>25721</td>
<td>14</td>
<td>38.5</td>
<td>36.5</td>
<td>36.5</td>
</tr>
<tr>
<td>Paper &amp; Printing</td>
<td>17</td>
<td>18</td>
<td>52297.1</td>
<td>17</td>
<td>74.0</td>
<td>13</td>
<td>18</td>
<td>34323.9</td>
<td>18.8</td>
<td>56.5</td>
<td>48.5</td>
<td>48.5</td>
</tr>
<tr>
<td>Chemical &amp; Petro-Chem</td>
<td>17</td>
<td>18</td>
<td>49131.1</td>
<td>19.2</td>
<td>47</td>
<td>13</td>
<td>18</td>
<td>35590.1</td>
<td>19.5</td>
<td>36.1</td>
<td>34.2</td>
<td>34.2</td>
</tr>
<tr>
<td>Nonmetallic Industry</td>
<td>12</td>
<td>12.6</td>
<td>31890</td>
<td>13.2</td>
<td>44.5</td>
<td>9</td>
<td>12.5</td>
<td>22012.2</td>
<td>12</td>
<td>33.34</td>
<td>30.7</td>
<td>30.7</td>
</tr>
<tr>
<td>Metallic Industry</td>
<td>9</td>
<td>9.5</td>
<td>20630.7</td>
<td>9.7</td>
<td>29.0</td>
<td>7</td>
<td>9.5</td>
<td>14448</td>
<td>7.9</td>
<td>21.9</td>
<td>20.3</td>
<td>20.3</td>
</tr>
<tr>
<td>Other Industries</td>
<td>1</td>
<td>1</td>
<td>3025.5</td>
<td>1</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>3524.3</td>
<td>1.9</td>
<td>9.0</td>
<td>10.5</td>
<td>10.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>95</td>
<td>100%</td>
<td>259105</td>
<td>100%</td>
<td>43.2%</td>
<td>73</td>
<td>100%</td>
<td>182702</td>
<td>99.9%</td>
<td>33.2</td>
<td>30.3</td>
<td>30.3</td>
</tr>
</tbody>
</table>

Comparatively speaking, the estimated number of approved loans is quite high, while in real terms the estimated number of approved amounts is quite small. Moreover, the 73 loans represent 42.7% of all approved rehabilitation loans and 30% of all approved loans. Conversely, the estimated approved amounts of loans are very low and represent a very small proportion. They represent 30% of the total amount of rehabilitation loans applied for, and 19.3% out of the total amount of approved loans, comprising 6.2% of the total amount of loans applied for by the bank. The distribution of the estimated approved amount corresponds to its percentage representation in each industrial activity.

Let us now compare the experience and level of achievement of the NBITD with the performance of its international counterparts.

Table 6.13 shows the credit facilities provided by various government banks to small business industries in several countries. As shown in the table, by all standards of comparison, the NBITD ranks bottom. In terms of numbers of loans for the period under study, the bank's
position is quite critical. The amounts of the loans approved by the NBITD in comparison with other banks are among the lowest when one takes into consideration the range of the period of each credited amount.

The average number of loans approved each year is another area of performance in the Lebanese Industrial Development Bank which does badly compared to other government banks. The NBITD approves on average 7.2 loans a year, compared with 1200 loans a year by the Malaysian Bank, 374 loans a year by the Jordanian Bank, 8.3 by the Kuwaiti bank, 221 loans per year by the Bank of Costa Rica, 158 loans per year by the Singapore Bank, 14.5 by the Australian Bank, 4425 by the U.K banks and 9792 by the U.S.A banks. So it is clear from the table that the efficiency of the bank in terms of supplying Lebanese small business industries with enough credit is questionable. Apart from failing to provide adequate access to credit, the NBITD appears to lack proper management and lags LL2001.5 million behind the financial needs of the industrial firms, or 68% of the total finance required. Concerning small business, the bank is still LL422 million behind their financial needs, providing only 62% of the total finance they require. Despite this criticism of the bank in terms of its ability to satisfy the financial needs of industry and small business in particular, the following should be taken into consideration:

1 - the young age of the bank.
2 - the continuous change of bank management.
3 - the war conditions endured by the bank such as;
   a) the high level of uncertainty which may delay decisions
      and make the process highly volatile,
   b) the high risk involved as a consequences of the high uncertainties surrounding inability of
      loan repayment and rescheduling.
4 - the reduced flexibility, inefficient decision making and lack of follow up by the Lebanese
   government which reflects a slow response to the bank's financial needs.
5 - the high rate of industrial disaster, caused mainly by the government and other military
   parties who have destroyed hundreds of industrial firms with the help of the Lebanese Army
   and militia leaders [30].

<table>
<thead>
<tr>
<th>Country</th>
<th>Period</th>
<th>No.</th>
<th>Amount</th>
<th>No.</th>
<th>Amount</th>
<th>No.</th>
<th>Amount</th>
<th>Avg. No./Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lebanon</td>
<td>1975-88</td>
<td>155</td>
<td>L.LM 681.64</td>
<td>93</td>
<td>L.LM 259.4</td>
<td>60%</td>
<td>38%</td>
<td>7.2</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1984</td>
<td>n.a</td>
<td>SM 4746</td>
<td>1200</td>
<td>SM 226</td>
<td>n.a</td>
<td>4.7%</td>
<td>1200</td>
</tr>
<tr>
<td>Singapore</td>
<td>1976-83</td>
<td>12000</td>
<td>SS n.a</td>
<td>1110</td>
<td>SS 325</td>
<td>9.3%</td>
<td>n.a</td>
<td>158</td>
</tr>
<tr>
<td>Kuwait</td>
<td>1974-88</td>
<td>n.a</td>
<td>n.a</td>
<td>117</td>
<td>KDM 15.8</td>
<td>n.a</td>
<td>n.a</td>
<td>8.3</td>
</tr>
<tr>
<td>Jordan</td>
<td>1982-86</td>
<td>n.a</td>
<td>n.a</td>
<td>1497</td>
<td>JDM 4477</td>
<td>n.a</td>
<td>n.a</td>
<td>374</td>
</tr>
<tr>
<td>Australia</td>
<td>1976-78</td>
<td>n.a</td>
<td>n.a</td>
<td>29</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
<td>14.5</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>1989</td>
<td>1186</td>
<td>n.a</td>
<td>221</td>
<td>n.a</td>
<td>18.6%</td>
<td>n.a</td>
<td>221</td>
</tr>
<tr>
<td>U.K</td>
<td>1981</td>
<td>6676</td>
<td>#UKM 233.1</td>
<td>4425</td>
<td>#UKM 154.2</td>
<td>66.3</td>
<td>66.15</td>
<td>4425</td>
</tr>
<tr>
<td>U.S.A</td>
<td>1961-66</td>
<td>83292</td>
<td>n.a</td>
<td>48981</td>
<td>n.a</td>
<td>58.8</td>
<td>n.a</td>
<td>9792.2 [29]</td>
</tr>
</tbody>
</table>

The constraints have definitely affected the bank's performance. It cannot be said, however,
that for a bank with five branches and over a hundred employees to manage no more than an average of 8 loans a year constitutes a successful achievement and satisfactory performance.[31] Nevertheless, the government does provide other financial facilities through its several economic and financial or administrative institutions. It is to these facilities that we now turn our attention.

We have discussed the government's credit policy mainly in terms of the performance of its financial institutions. Apart from these extended financial facilities, the government offers other facilities which are able improve the financial position of industrial firms. These facilities provide indirect financial help to industrial firms. We will cite below, in chronological order of establishment, types of the indirect financial or nonfinancial assistance of the State on offer to industrial firms during the war period. We do not intend to repeat the findings of works on the prewar period; this will be described in a separate appendix.

- In 1979 the government offered industrial firms income tax exemptions for a period of between 8 and 10 years if they met the conditions set out in its Legislative Decree No. 3018, dated 25/03/1972. This decree concentrates mainly on firms located a few kilometres from the coast line and away from tourist districts.[32]

- In 1982 the Cabinet amended its legislative decree no 131 dated 02/11/1977 to include industrial firms damaged during the war, whether established during or before the war 26/02/1975.[33]

- In 1983 the Cabinet authorised the National Council for External Economic Reduction to establish "free customs zones" for export purposes, in an attempt to attract foreign capital to the Lebanese industrial market.[34]

- In 1983, in an attempt to encourage industrial firms (factories) to move towards rural areas, the Cabinet decided to reduce the interest rate on industrial loans.[35]

- In 1984 the Minister of Industry allowed the payment of outstanding debts of 1984 to be deferred until the following year, while the outstanding debts of 1983 to be paid to the National Scheme of Social Security were allowed to be paid by instalment. The Ministry also allowed customs relief on imported raw materials for items which cannot be produced in Lebanon, and advised the Lebanese army institutions to buy Lebanese goods whenever possible. It also allowed industrial firms to pay electricity bills for 1984 & 1985 at the pre - Sept. 1982 rate.[36]

- In 1985 the joint committee of the Ministry of Industry and Power and the Ministry of Labour recommended postponement of the payment of instalments due at an interest rate of only 9%. The Ministry gave the NBITD L.L 500 million for working capital loans under the guarantee of the State and with low interest rates. The joint committee improved the loan conditions by increasing the ceiling of working capital loans from L.L 1.6 million to L.L 3.2 million, allowing firms who already had a loan to increase the duration of repayment from 8 to 11 years, and three extra years for those firms with repayment difficulties.[37]

These were the most important steps taken by the State to help industrial firms during the war period. In addition there were several institutions which specialised in helping industrial firms. None of them focused solely on small businesses but provided services regardless of the size of
the firm. Most of these institutions were established before the war. Their role is more fully described in appendix 6.1.

Government policy designed to promote the growth of industrial firms is shown in Fig 6.3. In this policy chart we have tried to summarise the endeavours of the Lebanese government to promote industrial firms through legislation and other measures.

As Fig 6.3 shows, three major policy directions have been followed by the Lebanese government: direct financial aid; indirect financial aid; and national protection. Each policy is described in terms of its positive and negative effects on industrial firms, its shortcomings, and suggestions for improvements. The figure is clear and self-explanatory.

6.2 PRIVATE SOURCES AND FINANCING SMALL FIRMS.

The previous section discussed the role of the Lebanese Government in financing small businesses directly or indirectly through the NBITD and other institutions. This section covers private sources of finance for small industrial firms.

Several sources and types of finance are available and are utilised by small business. These were extensively discussed earlier in this research.

In this section we shall examine the extent to which such sources and types of finance are utilised by small businesses. In other words, the importance of these sources and types of finance will be evaluated.

Before proceeding, it is worth noting the difficulties faced by the researcher in presenting this section. As mentioned earlier in the research, small businesses have never been treated fairly, either by the public sector or the private sector. The absence of such a category at national level has hampered us when approaching public and private financial institutions. With the NBITD we were able to go through the files and loan application forms of the bank.

With the commercial banks, the case was completely different. We were only allowed to go through some of the feasibility studies in one bank, and interview the credit manager of another. No useful information was gained from the feasibility studies. The credit manager was unable to give any figures about small business in his commercial bank, since he is unfamiliar with this classification of business firms. His comments on the size of credit to small business were unreliable in the absence of clear cut statistics.

As this research constitutes a genuine attempt to construct a clear picture of the financial position and performance of small businesses, we will rely on the data collected from the small business firms themselves rather than from commercial banks.

Nevertheless, the interviews with credit managers - NBITD and commercial banks - will be
### FIGURE 6.3 GOVERNMENT POLICY AND INDUSTRIAL FIRMS IN LEBANON.

<table>
<thead>
<tr>
<th>TYPE OF POLICY</th>
<th>POLICY</th>
<th>+VE EFFECT</th>
<th>-VE EFFECT</th>
<th>LACK OF</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIRECT FINANCIAL AID: Loan Guarantee Scheme</td>
<td>a: Development loan</td>
<td>-&gt; Increase Sources of Ext.Funds</td>
<td>a: Investment in F.Assets &amp; Low Int.Rate</td>
<td>Including all policies by government &amp; firms</td>
</tr>
<tr>
<td></td>
<td>b: W.Capital loan</td>
<td>-&gt; Investment in W.C &amp; low Int.Rate</td>
<td>b: Financial relief (war conditions)</td>
<td>a: Insufficient amounts of finance or money use.</td>
</tr>
<tr>
<td></td>
<td>c: Disaster loan</td>
<td>-&gt;</td>
<td>c: Inappropriate distribution of loans (bias)</td>
<td>b: Limited access to small firms.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>d: High risk in paying back the loans</td>
<td>c: Enough amounts of grants &amp; credits</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>e: Expenses increase; debts &amp; Int.Rate</td>
<td>d: Research and statistics on small firms</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>f: Unbalanced growth opportunities</td>
<td>e: Government credit institutions; guarantee scheme, industrial financial plan, market share, ... etc.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>g: Misusing the loans</td>
<td>f: Skills in accounting &amp; finance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>h: Unaccepted collaterals</td>
<td>g: Legal position of collaterals, (factory, real estate and buildings)</td>
</tr>
</tbody>
</table>

| INDIRECT FINANCIAL AID: 1- Reducing Corporate and Income Tax Liability | a: Increase profit margins | a: Does not include all business legal forms | a: Knowledge of the legislative man on |
| | b: Increase equity finance | small business needs | a: Classification of required raw materials to be imported |
| | c: Increase dividends | | b: Encourage the use of national resources |
| | d: Increase business capability | to pay its debts | |
| | | | |
| 2 - Customs Relief | a: Reduce cost of finished goods | a: Compete national products | a: Classification of required raw materials to be imported |
| | b: Increase sales returns | b: Kills innovative ideas | b: Encourage the use of national resources |
| | c: Increase profit margins | c: Decrease the degree of self reliance and using national resources |
| | d: Market satisfaction (customer needs) | d: Increase prices of finished goods | |
| - Reduce Cost of Machinery | a: Investment in long term assets (modern and moderate technology) | a: Limited skills, know how and technical knowledge | a: Wide application of national protection |
| | b: Increase market supply | b: Lack of maintenance and accessories parts | |
| | c: Better quality of products | | |
| | d: Less cost of product on the long run | | |
| | e: Increase employment of skilled people | | |

3 - National Protection

| a: Higher preferability of national products | a: Less market choices |
| b: Increase capability of national production and use of national resources | b: Lower quality of product |
| c: Increase sales returns of firms who use national resources | c: Low level of competition |
| d: Increase profits of firms who use national resources | | |
| e: Decrease levels of competition (firm side) | | |

| c: Decrease levels of competition (firm side) | | | | |
given due consideration and referred to when necessary.

It is obvious in all countries that any attempt to describe the position of small firms in the capital market is exacerbated by at least three problems. One problem is the fact that "information about transactions in the capital market as a whole is inadequate." Another problem is that "... such information is classified in a way that does not correspond at all closely with the definition of a small firm". The third problem is the lack of information of the actual number of small firms, or the absence of small business firms as a separate sector in the economy.[38] Given the war conditions, such problems are to be expected.

The private capital market is a financial system through which assets are accumulated by their original savers and owners and transmitted for use by others in the creation of real capital.[39] However, it might be reasonable to divide private sources of finance into two categories: "institutional sources", which include commercial banks, finance companies, stock market and other sources; "informal sources" which include personal sources such as savings and income, and non-personal sources such as family, friends, suppliers, customers, money lenders and others.

6.2.1 Small Firms and Personal Finance.

It is commonly known and agreed by many researchers that "personal" sources of finance for starting or expanding a business are more important than institutional sources of finance. It is argued that this phenomenon is found "in both industrialised and developing countries".[40] "Informal" personal sources of finance are not organised like "institutional" sources. Information and statistics on the amounts of money and the pattern of transactions between suppliers and industrial firms are not readily available and are not subject to any official record control.

Owners and managers of business firms simply gave some financial statements (19 firms). Within the limits of available data some analysis can be done. Here, we will discuss only the general characteristics of the personal sources of finance in small firms, while their effect on profit and growth will be analysed in the next chapter.

Owners' capital is the most important source of finance for the Lebanese small business. It is used for new plants and equipment, acquiring other assets, and relieving cash-flow crises. 52% of total funds available are equity funds. 40.4% are owners' capital and 11.1% come from retained earnings. (see table 6.3). The equity finance percentage increases to an average of 82% for businesses which do not deal with bank loans (2 firms out of those firms who gave financial statements).

Lebanese small business capital is not shared by many owners and managers in general. Size of capital was positively correlated with owner managers who are highly specialised with a 0.4740 Pearson correlation and was 93% statistically significant. Capital was found to be
negatively correlated with all types of managers (owner/managers and non-partner managers). Simple product moment correlation varied between -0.4338 and -0.2764 and all were significant statistically between 91 % and 87 % (18 firms). Conversely, owner capital increased with the increased number of owners; the Pearson correlation statistics was 0.3203 and this was 90 % statistically significant. Small firms in Lebanon are capital rather than labour intensive. A negative correlation was obtained between the size of employment and size of owner capital, giving a value of - 0.4913 for the Pearson correlation statistics which was significant at a 98 %. Even when owners and managers are excluded from the total employment figures, this result hardly changes.

Although it is highly correlated with the GPERFORM variable, owner capital was found positively correlated with GROWTHM but not significant statistically. The Pearson correlation statistics indicated a value of 0.3208 for the relationship between GPERFORM and the size of owner capital which was 90 % statistically significant. When tested against GROWTHM, the Pearson correlation statistics was 0.1103, significant statistically at the 66 % level.

The above result reveals the characteristics of owners' capital of small business. These results confirm the negative effect of the size (number) of managers of small firms in Lebanon and the importance of shared capital among owners. It also highlights the role of recently established business firms or those businesses which started up during the war. More emphasis will be given to the effect of capital and retained earnings on the business performance, especially profitability and growth, in the next chapter.

<table>
<thead>
<tr>
<th>TYPE OF FINANCE</th>
<th>LOCATION</th>
<th>BEIRUT %</th>
<th>MOUNT LEBANON %</th>
<th>TOTAL RESPONSE/FIRMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Savings</td>
<td></td>
<td>22</td>
<td>33</td>
<td>60</td>
</tr>
<tr>
<td>Family Source</td>
<td></td>
<td>6</td>
<td>33.3</td>
<td>12</td>
</tr>
<tr>
<td>Friends</td>
<td></td>
<td>4</td>
<td>40</td>
<td>6</td>
</tr>
<tr>
<td>Commercial Banks</td>
<td></td>
<td>7</td>
<td>50</td>
<td>7</td>
</tr>
<tr>
<td>Creditors (Lending Companies)</td>
<td></td>
<td>2</td>
<td>33.3</td>
<td>4</td>
</tr>
<tr>
<td>Creditors (Lenders)</td>
<td></td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Specialist Banks</td>
<td></td>
<td>1</td>
<td>50</td>
<td>1</td>
</tr>
<tr>
<td>Other Sources</td>
<td></td>
<td>1</td>
<td>33.3</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 6.14 shows the direction of sources of financing small industrial firms distributed by geographical location. There were eight alternatives for business managers to choose from when deciding the source of financing for their business activities. The vast majority of businesses (73% or 55 firms) depend upon their own savings to finance their activities. The family is the next most popular source of finance used by 18 firms (24% of total firms) in our sample. Commercial banks were used by 14 firms (18.7% of total firms), while friends were the source of finance for 10 firms (13.4% of total firms). Creditors (financing and insurance companies) were used by 6 firms (8% of total firms), whereas money-lenders, specialised banks and other sources were used by three firms or less (4% of total firms or less).
Taking geographical location into consideration, Mount Lebanon firms make up almost 60% of the users of these sources, with commercial and specialised banks being equally utilised by business firms in both areas. This reflects the better personal financial position of Mount Lebanon's business owners.

A much more important view appears if we consider "informal" and "institutional" sources of finance. The table confirms that "personal" sources are more important than "institutional" sources for business owners, whether in the early stages of financing and operating their businesses or later on. Thus the role of personal savings, relations and friends are highly significant when compared with that of commercial and specialised banks. This also confirms that a risk is taken by the business owner which institutional sources do not contemplate; even if they help to finance the start up period, they are protected by insuring their credit with collateral.

Taking the age of the business into consideration, it can be said that the war generation firms less than 15 years old use a wider variety of sources. Businesses which are more than 15 years old are much more conservative and in outlook, using mainly their own savings and commercial banks rather than other sources.

As "personal" sources in general are not organised like "institutional" sources in terms of information and statistics, they are notoriously difficult to research. All the researcher can do is to use financial statements where they are available, especially statements of sources of funds. This is the best method of examining the several sources of funds although classification within the "personal" sources cannot be made in the same way as for "institutional" sources. We shall discuss this question in more detail in the next section.

6.2.2 Small Firms and Commercial Banks

Earlier in this chapter we examined the position of small business firms in government policy, and in particular vis-a-vis the National Bank for Industrial and Tourism Developments (NBITD). Commercial banks are the most important "institutional" sources of finance for all types of business activities. The extent to which commercial banks and their financial facilities are used by small firms emphasises the importance of such financial sources.

Several research studies have shown that there is an obvious discrimination on the part of banks against small business. This has been confirmed in several countries, including the U.K., the United States, Australia, Malaysia, and Singapore.[41] The writer is of the opinion that this situation occurs in countries with liberal economic systems where capital is scarce and the risks associated with the payment of loans by small business is high. This is not however an attempt to justify discrimination; nevertheless, the caution of the bank is not surprising. Banks can help improve the situation in many ways; as British banks argue, "if the government wanted to alleviate the position of small firms, the best thing it could do would be to abolish the ceiling on banks advances".[42]
Given the war conditions and the high risks involved, Lebanese small businesses face many difficulties in obtaining finance from the capital market. This is supported by the following conditions which may exist in circumstances of war or other highly uncertain environments: Firstly, capital outflows towards stable markets causing scarcity of capital; secondly, high interest rates on available capital for borrowing; thirdly, higher security measurements on collateral; fourthly, high risk on credit worthiness; fifthly, fewer chances of giving long-term credits. All of these are in agreement with the conditions of the financial market of small businesses in Lebanon in war time. Let us see how valid such conditions are in the context of our data.

TABLE 6.15 FREQUENCY OF LEBANESE SMALL BUSINESS AGE-GROUPS BY STARTING YEARS OF DEALING WITH BANKS 1975-1986

<table>
<thead>
<tr>
<th>YEAR</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>5</th>
<th>6</th>
<th>9</th>
<th>TOTAL</th>
<th>ROW TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE GROUP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8</td>
<td>12.9</td>
</tr>
<tr>
<td>6-10</td>
<td>13</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>20</td>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-15</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>9</td>
<td>14.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16-20</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>9.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-25</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>9</td>
<td>14.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26-30</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td>8.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31-35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36-40</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>4.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-101</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>3.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>44</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>62</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

TABLE 6.16 RELATION BETWEEN SMALL BUSINESS AGE & STARTING YEAR BUSINESS WITH BANKS

<table>
<thead>
<tr>
<th>YEAR RANGE: (1-2) (3-6) (7-9) TOTAL RESPONSE/T.FIRMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE GROUP</td>
</tr>
<tr>
<td>1 - 15 (WAR GENERATION) 31 4 2 37 60 %</td>
</tr>
<tr>
<td>16 - 30 (MODERATE) 14 4 2 20 32 %</td>
</tr>
<tr>
<td>31 AND ABOVE 5 0 0 5 8 %</td>
</tr>
</tbody>
</table>

To deal or not to deal with commercial banks is the fundamental question which all small businesses have to ask themselves. In fact, a very positive answer was given to this question by the firms in our survey, which yet may turn the whole assumption of conditions on its head. Surprisingly, 62 firms of the 75 firms dealt with banks, almost 83% of the total sample, or 88% of the firms who answered this question. There were 9 firms which did not deal with banks, or 12% of the total sample. If this is compared with small businesses in other countries in the Middle East such as Jordan for example, Lebanese small businesses are in a better position in dealing with commercial banks. A study conducted by Mallah, M., Dahhan, O., Abu-Jbaiah, H., Ghaaribeh, F., Sheik Salem, F., Ramadan, Z. and Kasawneh, S. on Jordan in 1976 has shown that 66% of their sample do not deal with banks.[43]

Let us divide our discussion into two areas. The first covers businesses which deal with banks, the other covers those which do not. In this respect the banking sector in Lebanon
Table 6.17 BANKS FACILITIES BY BUSINESS AGE GROUPS

<table>
<thead>
<tr>
<th>AGE GROUP</th>
<th>OVRDR</th>
<th>S.T.L</th>
<th>L.T.L</th>
<th>F &amp; B.D</th>
<th>EXP.FIN</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 5</td>
<td>4</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6 - 10</td>
<td>12</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>11 - 15</td>
<td>7</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>16 - 20</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>21 - 25</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>26 - 30</td>
<td>3</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>31 - 35</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>36 - 40</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>50 - 101</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>41</td>
<td>8</td>
<td>4</td>
<td>12</td>
<td>10</td>
<td>2</td>
</tr>
</tbody>
</table>

OVRDR=OVERDRAFTS, S.T.L=SHORT-TERM LOANS, L.T.L=LONG-TERM LOANS, F & B.D=FACTORING AND BILL DISCOUNT, EXP.FIN=EXPORT FINANCING.

Table 6.18 BANK FACILITIES DISTRIBUTED ON INDUSTRIAL ACTIVITIES

<table>
<thead>
<tr>
<th>INDUSTRIAL ACTIVITY</th>
<th>OVRDR</th>
<th>S.T.L</th>
<th>L.T.L</th>
<th>F &amp; B.D</th>
<th>EXP.FIN</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food &amp; Beverage</td>
<td>4</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Textile &amp; Leather</td>
<td>16</td>
<td>2</td>
<td>-</td>
<td>7</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Wood &amp; Furniture</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Paper &amp; Printing</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Chemical &amp; Petro-Chemi</td>
<td>4</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Nonmetallic Industry</td>
<td>5</td>
<td>1</td>
<td>-</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Metallic Industry</td>
<td>4</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fabricated Metal</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>41</td>
<td>8</td>
<td>4</td>
<td>12</td>
<td>10</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 6.19 OVERDRAFT USES BY SMALL BUSINESS ACTIVITIES

<table>
<thead>
<tr>
<th>INDUSTRIAL ACTIVITY</th>
<th>RAW MATERIALS</th>
<th>CURRENT EXPENSES</th>
<th>FINANCE NEW F. ASSETS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food &amp; Beverage</td>
<td>6</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Textile &amp; Leather</td>
<td>24</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>Wood &amp; Furniture</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Paper &amp; Printing</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Chemical &amp; Petro-Chemi</td>
<td>8</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Nonmetallic Industry</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Metallic Industry</td>
<td>5</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Fabricated Metal</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>59</td>
<td>33</td>
<td>41</td>
</tr>
</tbody>
</table>

provides five major financial services: overdraft, factoring and bills discount, short-term loans, long term loans, and export financing. Of these, the overdraft facility appears to be most frequently used, followed by factoring and bill discounts, export financing, short-term loans and long-term loans. However, this does not mean that this type of banking facility is ultimate financial requirement of small businesses.

Table 6.17 shows banking facilities for small business by age groups. Table 9.18 shows banking facilities used by business type. The young business firms seem to be more interested in bank overdrafts than in dealing with factoring and bill discounts and short and long term loans. Within this class (1 to 15 years old) the most disadvantaged firms are those which are less than 5 years old. Business firms more than 16 years old are in a better position; relatively
speaking, they enjoy all types of bank credit facilities. Of the 61 firms dealing with banks, 41 firms were using bank overdrafts, i.e. 66.13% of the total. These were distributed normally among all business types, except for the textile and weaving group which utilised this service more than other firms, (see Table 6.18).

12 firms (19.4% of the total) deal with banks to collect their debts. Most of them are between 5 and 25 years old; 7 of them are textile businesses, 3 are nonmetallic mineral business. Export financing is available only for 10 business firms (16.1%), 8 of which are between 5 and 25 years old; three are textile and weaving firms and three are nonmetallic mineral businesses. Out of the total number of businesses dealing with banks, 8 firms had short-term loans (13%), and 4 firms had long term loans (6.5%).

Short-term loans were given to business firms between 11 and 25 years old and were equally distributed among business types.

Long-term loans were given to business firms more than 16 years old, and were equally distributed among textile and weaving firms, paper and printing, chemical and plastic and fabricated metal business firms. (See tables 6.17 or 6.18 for more information).

In the light of the above it can be said that a large number of firms had access to overdraft facilities while a small number of firms had access to other term-loans facilities. We examined this situation further by looking at the uses of overdrafts in the absence of other types of bank financing.

Table 6.19 show the uses made of overdrafts by small business firms. These were: to buy new raw materials, to meet current expenses, and buy new machines. Overdraft use in concept and in practice is an "on demand" finance facility used by business owner-managers to meet or cover any temporary shortage of cash or working capital needs. Nonetheless, it is not advisable to use an overdraft for the purpose of long-term finance.

There are at least three reasons why small firms use overdrafts to finance equipment and machinery.

Firstly, there is a high probability that some of the owners-managers do not know how or why an overdraft can or should be used safely. This is especially the case of businesses run by the young and inexperienced, under the control of one owner, and located mainly in the Mount-Lebanon area. Secondly, overdrafts are available on request and are cheap compared with other types of credits which are difficult to obtain. Thirdly, the stringent conditions of term loans, both short and long, might push loan seekers to accept the cheapest alternative. Although these reasons are different, they all indicate the absence of short and long term-loans. Consequently the opportunity for a small business to obtain a term loan is very difficult.

It can be concluded from the above discussion that small businesses were in general unable
to benefit from the financial facilities offered by the commercial banks. Moreover, it is a policy clearly followed by commercial banks that loans are given only on the most exacting conditions. This policy was clearly reflected in our sample. The banks are less restrictive with overdrafts, since they are not risky compared to other types of loans and are limited in duration and in the lending supplied. They are very flexible, comparatively cheap, and can be obtained without complex formalities. Repayment can be made at any time where interest is charged on the debit balance outstanding. The policy of commercial banks as reflected in the small business data can be summarised as follows:

1. Overdraft financing is available to a great number of small industrial firms, and is taken up mostly by firms which are more than 5 years old.
2. Factoring and bill discounts, as well as export finance, are made available to very limited numbers of small industries. When they are available, they are given to small firms which are between 5 and 30 years old, or to "expert" firms rather than young starters (1 to 5 years old).
3. Long term loans are available only to very few firms, mainly those between 10 and 30 years old or "expert" firms.

Bearing in mind that profit making is one of the major goals of a commercial bank, banks cannot be blamed totally for giving few loans to small firms. They can, however, be censured for being biased against small business by charging small businesses more than big businesses for the same amount and duration of loan. They must also take the blame for stipulating difficult loan conditions for small businesses, which are not required of larger concerns. In an environment full of uncertainties, banks certainly wish to secure their investments. Their credit policies must be carefully planned in terms of given amounts and time limits. This is very important for them since the purchasing power of the Lebanese pound is depreciating dramatically against foreign currencies.

On the other hand, one may argue that some small businesses may not need such finance from banks and that they are conducting their business satisfactorily without external finance from commercial sources.

Two pieces of evidence confirm that small businesses need external finance from banks as much as from other sources. Firstly, the high number of firms who deal with banks is certainly proof of the need of small businesses for external finance. 80% of these prefer long-term finance if they can obtain it. Secondly, financial statements made available by 19 firms confirm that 17 of these had bank loans; the other firms do not deal with bank loans on the ground that interest (usury) is forbidden according to Islamic Law (Shari'a).

6.2.3 Why Small Businesses Do Not Deal With Banks:

At least 9 firms in our sample did not deal with banks. Four main reasons were given for this: the slow pace of bank procedures; high interest rates; the prohibition of interest on
religious grounds; and the high risks involved when dealing with banks. Table 6.20 shows the relationship between the age of business and the reasons for not dealing with banks. The table concludes that young small businesses are the most likely to complain about routine procedure and high interest rate: they were 77.8% and 67.5% respectively. Firms between 16 and 30 years old represent 57.2% of those firms which do not deal with interest rates, followed by new firms (28.5%), and the remaining 14.3% comprising old firms (over 31 years old). Firms who do not deal with interest rates (usury) believe that they are unlawful according to the Islamic Law (Sharia'). Two firms in our sample do not deal with interest rates for this specific reason. Only two firms complained about the high risks involved when dealing with banks: one of them new, the other of moderate age.

<table>
<thead>
<tr>
<th>AGE GROUP</th>
<th>ROUTINE</th>
<th>HIGH I.R</th>
<th>D.D.W.INT</th>
<th>HIGH RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 15 (WAR GENERATION)</td>
<td>7</td>
<td>5</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>16 - 30 (MODERATE)</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>31 AND ABOVE</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>17</td>
<td>14</td>
<td>13</td>
<td>4</td>
</tr>
</tbody>
</table>

If we disregard the advantage of the overdraft facility given to small business, according to the findings of our survey, then the whole picture changes. This means that 83.3% of the total sample do not have access to financing facilities. This conclusion seems unrealistic given the evidence that 23.6% of the firms in the sample show bank loans in their financial statements. Therefore, one is tempted to suggest that small business owner-managers have exaggerated the extent of their dealings with banks; this can be understood in the light of their inability to obtain a cheaper or longer term loan or the procedures involved with loans applications. In the case of commercial banks these reasons are more valid than in the case of the NBITD. This leads us to a discussion of the difficulties that small firms face when applying for a loan to development or commercial banks.

6.2.4 Why Small Firms Cannot Obtain Bank Loans:

Some researchers believe that small businesses are convinced that their major problem is shortage of capital, while at the same time having substantial resources uneconomically employed. On the other hand, other businesses are using a tiny amount of capital effectively [44]. Small business owner-managers prefer additional amounts of money even if they do not use them economically. Earlier we showed how many small businesses were able to obtain credit loans from commercial and development banks. Yet although money is available, the great majority of small businesses were unable to obtain such credit facilities, whether from commercial banks or development banks.

There are several reasons why small businesses are unable to obtain bank loans. Some of these are related to the economic conditions of the country, or to the banking institutions, or to
small business firms themselves. At the same time these reasons are very much interrelated.

Inflation and currency substitution are two of the most serious problems caused by the economic deterioration resulting from the war.

Inflation in terms of the Lebanese pound means the depreciation of its value against foreign currencies. The dramatic rise of inflation from 9.9% in 1975 to 731% in 1987 has frightened almost every single firm and businessman in the country, pushing them to change their savings in banks into foreign currencies or, attracted by Eurodollar interest rates, to transfer them out of the country. This has led to a complete change in the structure of bank deposits which in turn is reflected in the credit system and policies. In 1985, total bank deposits consisted of 62% of the total in Lebanese pounds and 38% of the total in foreign currencies, whereas in 1986 28% were in Lebanese pounds and 72% were in foreign currencies.[45]

This situation may increase credits in Lebanese pounds, but the value of such credit amounts cannot provide enough profitability for banks and does not satisfy the financial needs of industrial firms, while small firms cannot afford 25-30% interest rates on short-term loans.[46]

The effect of high inflation is reflected in another financial phenomenon prevalent in the country: currency substitution. The use of the U.S. dollar in business transactions has made the recovery of the Lebanese pound difficult proposition. Money speculators and the central bank's policy of buying and selling U.S.$, has made the situation more complex. Therefore, credit-worthiness in Lebanese pounds is incomparable with that in foreign currencies; nevertheless very few industrial firms can obtain or afford it. This state of affairs caused credits in foreign currencies to decrease from $856 U.S. million in 1985 to $782 U.S. million in 1986.[47] Furthermore, the monetary authorities - mainly the central bank - put a `ceiling' on bank credits in an experiment to improve the exchange rate of the Lebanese pound. This `ceiling' was reconsidered by the central bank later; consequently banks were able to increase their credits 28% above the 1979.[48]

The positive effects of inflation on small firms is that they are able to pay their outstanding debts which have accumulated since 1975. This has a negative effect on banks, since they receive repayments worth only 10% of their real value.

There are at least five major reasons why banks prevent small firms from obtaining loans: the unwillingness of banks to lend; credit worthiness; interest rates; credit conditions (application formalities); and administrative costs.

Banks plan and budget their investments according to their own financial ability and market potentiality. Thus the unwillingness of any bank to give credit is dependant on a combination of indicators (positive - negative) resulting from an evaluation of factors such as security, risk, profit and loss, returnability, and duration of loan. The more positive the indicator, the more willing the bank is to lend, and vice versa. High interest rates which have risen dramatically
from 10% to 30% are another factor that frightens all business sectors who deal with banks. This increase put heavy pressure on small firms at a time when they had a sluggish cash flow and a low level of liquidity. This situation might have pushed small firms to use overdraft facilities as an alternative, as was obvious in our sample (see table 9.18). The administrative cost of loans could be another variable that banks take into consideration. In this respect large businesses are preferable since they generally ask for bigger loans and they are less than small firms in number. For example the administration of a small loan would cost almost the same as a big loan in terms of time, advice and control. Therefore, the fewer the number of small firms who obtain loans from banks, the less the administration and the lower the cost for the bank. The final reason concerns the credit conditions set up by banks. Stringent conditions attached to the loan are believed to be the most effective way of deterring small firms at the application stage. Commercial banks and the NBITD request on average 33 documents from those applying, 26 of which have to be obtained from government sources. Even more documents and information are requested by the NBITD. There are at least 8 documents which are extremely difficult - and often impossible - for small, or even large businesses to obtain. These are:

1 - Registration form in the government Trade Record
2 - Certificate of registration in the Trade Record
3 - General insurance policy and investment insurance policy from the National Institute for Investment Insurance
4 - Real Estate certificate
5 - Copy of the application form for a building and construction licence
6 - Copy of the building and construction licence
7 - Copy of the firm's tenancy agreement stamped by the municipality under whose authority the firm's building falls.
8 - Certificate of the real estate ownership to be submitted within a month of its issue date.

Under normal circumstances, each of these documents takes at least 2-3 weeks to obtain, since each requires an application form which in turn calls for the other documents, and so on.[49] Small firms in particular find it impossible to provide a certificate of registration in the Trade Record because many of them are not registered. Firms in certain area are unable to provide a real estate certificate or building and construction licence because the building in the area - the southern suburb of Beirut is a perfect example - have been constructed illegally on state land to house refugees from the war zones in south Lebanon. Thus a fixed asset collateral in the form of real estate or factory building would be insufficient.

The application "trap" is not confined to Lebanon; many researchers have attested to its existence all over the world, including the USA, the UK, Australia, Jordan, Kuwait, Malaysia, and Singapore.[50]

Small business firms can themselves be the cause of having no loan. One of the following reasons will suffice:
1 - Failure to provide financial statements
2 - Inability of the applicant to demonstrate a good case with a sustained earning power
3 - Insufficiency of collateral
4 - Under capitalisation of the business venture
5 - Inability of the applicant to provide a plan of what the credit is to be used for.

These are all, of course, characteristic of relatively poor credit risks. The presence of any of them is a valid reason for the bank to turn down the application.

Given these reasons, it is quite normal for banks to have all their loans secured to assure repayment. Turning down an application for reasons which would be considered a problem in the case of large firms is not fair. Many business firms in our sample have shown a tremendous improvement in performance as a result of having a bank loan after 2-3 years of continuous loss.

Bearing in mind all the economic and financial troubles, we believe that banks have adopted this policy with business firms who were unable to meet their financial obligations.

6.3 DISCRIMINANT ANALYSIS AND TEST OF LIQUIDITY.

One of the most important performance indicator for creditors is the liquidity ratio, which assures the company's ability to pay. Liquidity tests can show whether banks were following the right policy toward small businesses or not. They can also reveal the ability or inability of small business firms to meet their financial obligations. In fact there are two methods of distinguishing between bad and good accounts, or accepted and rejected accounts, through their liquidity position. The first is by rule of thumb, which gives the current ratio an accepted value not less than two, and not less than 1 for acid test ratio (Quick ratio). The second is to accept the average of the means of the ratio in the market in the sample under test. In our case we will try both in order to discover if there are any differences, and to provide more alternatives of choice and several levels of performance.

Discriminant analysis is one proper statistical tool which helps us to decide which accounts to accept or reject on the basis of both income statement and balance sheet variables as independent variables. Both liquidity ratios, acid and current, will be used individually as dependent variables. Ultimately we wish to determine the predictive value of independent variables for the behaviour of the dependent variable, whether the account is accepted or rejected. (see Chapter 7 for this technique). At the end of the analysis it is hoped that for each account we shall have reached a discriminant score based on the following linear mathematical model equation:

\[ D = B_0 + B_1 X_1 + B_2 X_2 + B_3 X_3 + \ldots + B_p X_p \]

This linear discriminant equation is similar to the multiple linear regression. The X’s are the
values of the independent variables, the B's are coefficients estimated from the data, and B₀ is a constant value. The B's are chosen so that the values of the discriminant function differ as much as possible between the groups, or so that for the discriminant score the ratio (between-groups sum of squares divided by within-groups sum of squares) is a maximum, while p is the (n) number of explanatory variables in the mathematical model.[51]

Discriminant analysis was applied to firms who submitted financial statements covering several years over the period 1975-1987. If there is any reason to accept or reject any credit applicants, then it must be according to the following assumptions.

1 - The acid ratio (Quick ratio) of the firm should be <1 (rule of thumb), or <0.65 (sample average of the ratio) to be rejected.  
2 - The current ratio of the firm should be < 2 (rule of thumb), or < 0.94 (sample average of the ratio) to be rejected.

Let us start with an evaluation of our sample taking the acid ratio first, and then the current ratio.

Tables 6.21 and 6.22 show how many firms were rejected and accepted for both rule of thumb and market average (sample average) according to their discriminant score of acid ratio. Table 6.21 (rule of thumb assumption) shows that 15 (83.4%) out of 18 firms were rejected, while 3 firms (16.66%) were accepted.

Table 6.22 (sample average) suggests different results. It shows (table 6.22) that 13 firms (72.3%) were rejected, and 5 firms (27.7%) accepted; 2 firms (11.11%) more were accepted than that in the rule of thumb case.

<table>
<thead>
<tr>
<th>TABLE 6.21 NUMBER OF CASES BY GROUP</th>
<th>TABLE 6.22 NUMBER OF CASES BY GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER OF CASES</td>
<td>ACIDM</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>18</td>
</tr>
</tbody>
</table>

The best separation between the groups can be obtained through a score that distinguishes the rejected from the accepted firms. Fourteen financial variables were chosen automatically by the computer to be involved in the discriminant equation, including the "inventory variable" (INV) in the rule of thumb case. This is replaced by the "other credit" variable (OCR) in the sample average case. (See tables 6.23 and 6.24 for a list of unstandardized canonical discriminant coefficients). Based on the coefficients in table 9.23 and 9.24, the linear discriminant equation for the acid test ratio can be read as follows:

$DISCRIMINANT \text{ QRDr} = -0.0011*SR + 0.0016*CGS + 0.005*DEP - 0.0014*ADMEXP + 0.0013*OEXP + 0.0003*INT + 0.0005*LAND + 0.0002*BLD -$
DISCRIMINANT \( QRDr = -0.1099806 \times 0.004 \times PEQ + 0.1074666 \times \text{SR} + 0.1847032 \times \text{CGS} + 0.1447679 \times \text{DEP} + 0.1447679 \times \text{ADMEXP} + 0.1447679 \times \text{OEXP} + 0.5017838 \times \text{INT} + 0.1847032 \times \text{LAND} + 0.1847032 \times \text{BLD} + 0.1847032 \times \text{PLAEQ} + 0.1847032 \times \text{PEXP} + 0.1847032 \times \text{ADEP} + 0.1847032 \times \text{CAMINB} + 0.1847032 \times \text{AR} + 0.1847032 \times \text{INV} - 1.348169 \) \( \text{EQUATION (1)} \)

\( QRDr = \) Quick ratio Discriminant score of rule of thumb.

\( QRDr = \) Quick ratio Discriminant score of sample average. \[52\]

**TABLE 6.23 UNSTANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS**

| FUNC 1 | SR          | 0.0199806E-02 |
|        | CGS         | 0.1684858E-02 |
|        | DEP         | 0.5017838E-02 |
|        | ADMEXP      | -0.1393509E-02 |
|        | OEXP        | 0.1447679E-02 |
|        | INT         | 0.3294604E-03 |
|        | LAND        | 0.5226241E-03 |
|        | BLD         | 0.2319845E-04 |
|        | PLAEQ       | -0.5424937E-03 |
|        | PEXP        | -0.4629723E-02 |
|        | ADEP        | 0.1005552E-02 |
|        | CAMINB      | 0.1043958E-01 |
|        | AR          | 0.3441151E-03 |
|        | INV         | -0.7354745E-03 |
| (CONSTANT) | -1.348169 |

**TABLE 6.24 UNSTANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS**

| FUNC 1 | SR          | -0.1074666E-02 |
|        | CGS         | 0.1847032E-02 |
|        | DEP         | 0.2692977E-01 |
|        | ADMEXP      | -0.1861812E-03 |
|        | OEXP        | -0.5140288E-03 |
|        | INT         | 0.4751626E-02 |
|        | LAND        | 0.7878519E-03 |
|        | BLD         | -0.1247026E-02 |
|        | PLAEQ       | -0.2019931E-02 |
|        | PEXP        | 0.1039495E-02 |
|        | ADEP        | -0.4930479E-02 |
|        | CAMINB      | 0.1420944E-01 |
|        | AR          | -0.2391998E-03 |
|        | INV         | 0.6561067E-03 |
| (CONSTANT) | -1.847941 |

Equation 1 can be used for any case in the sample (rule of thumb assumption) to tell whether it belongs to group 1 or to group 2. Equation 2 (sample average case) works in a similarly way. From this formula (1) or (2) a prediction of any other case can be calculated, based on the rule of conditional probability, or what is known as Bayes' Rule in this specific statistical technique. \[53\]

Tables 9.25 and 9.26 show the number of correct and incorrect classifications of results. In table 9.25 all 15 cases in group 1 were predicted correctly to be members of group 1 (100%). Similarly, 3 (100%) cases in group 2 were 100% correctly identified (see tables 9.25 and 9.26). The overall percentage of cases in both assumptions was 100% classified correctly (18 out of 18).

The group means (the group centroid) in the rule of thumb assumption were -11.34 and 6.967.
for the rejected and the accepted group respectively. In the sample average assumption case the group means were -3.117 and 8.1 respectively. This can be seen more clearly from the combined distribution (all groups histogram) of the scores for the two groups in each case of the two assumptions. Figures 6.4 and 6.5 are all groups stacked histograms canonical discriminant of function 1. Both histograms show a perfect discrimination function between groups; figure 6.5 is the better example. This is confirmed by the eigenvalue, which is larger in the average market ratio than the rule of thumb. Eigenvalue is simply the ratio of the between-groups to within-groups sums of squares. A 'good' discriminant function is one that has much between groups variability when compared with that of within-groups. Thus the large eigenvalue is associated with the "good" function. The canonical discriminant function is represented in table 6.27 for both cases. The table show a larger eigenvalue for the market average of 28.42, compared with 10.92 for the rule of thumb. The percent of variance and cumulative percentage are always 100 for the two-group situation in both cases. The canonical correlation is simply the usual Pearson correlation coefficient between the discriminant score and the group variable which is equivalent to eta from one-way analysis of variance, in which the discriminant score is the dependent variable and group is the independent variable. [54]

<table>
<thead>
<tr>
<th>TABLE 6. 27 CANONICAL DISCRIMINANT FUNCTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERCENT OF CUMULATIVE CANONICAL : AFTER</td>
</tr>
<tr>
<td>FUNCTION EIGENVALUE VARIANCE</td>
</tr>
<tr>
<td>---------------------------------</td>
</tr>
<tr>
<td>1* 10.921</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1* 28.419</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

* MARKS THE 1 CANONICAL DISCRIMINANT FUNCTIONS REMAINING IN THE ANALYSIS.

Wilks' Lambda enables us to test the null hypothesis that in the population from which the sample is drawn there is no difference between the group means. Table 9.27 shows that Lambda of 0.0838 is transferred to a chi-square value of 22.305 with 14 degrees of freedom, with an observed significance level of 0.0726. Assuming that our accepted level of significance would be 0.10, thus it is unlikely to say that applicants who have been rejected and accepted, based on the rule of thumb method of measuring the quick ratio, have the same mean on the discriminant function. Based on the sample average, lambda was 0.033, smaller than that of the rule of thumb, transferred into 30.43 chi-square value with 14 degrees of freedom. This provides a level of significance equal to 0.006, concluding the same result of the rule of thumb on the discriminant function.

Current ratio is another test of the liquidity of a business firm. Procedures similar to that of quick ratio were followed for the current ratio test. Tables 9.28 and 9.29 show the number of firms rejected and accepted for both cases -rule of thumb and sample average of the concerned ratio-. Table 9.28 (rule of thumb assumption) shows that 15 firms (83.4 %) were rejected and 3 firms (16.66 %) accepted. The same results were obtained by the quick ratio test (compare table 9.21 with table 9.28). Table 6.29 shows a completely different discriminant classification.
characterised by giving more possibilities for applicants to be accepted. Table 6.29 shows that 9 firms (50%) were rejected and 9 firms (50%) were accepted, 6 more (33.33%) than in the rule of thumb assumption.

Furthermore, 14 financial variables were selected for the discriminant equation of rule of thumb, whereas for the sample average, the bank loans variable (BANKL) was added to the formula. (see tables 6.30 and 6.31, list of unstandardised canonical coefficients). The discriminant equation of current ratio for each individual assumption can be read as follows:-

\[
\text{DISCRIMINANT CR} = -0.0011 \times \text{SR} + 0.1116 \times \text{CGS} + 0.005 \times \text{DEP} - 0.0014 \times \text{ADM} + 0.0014 \times \text{OEXP} + 0.0033 \times \text{NT} + 0.005 \times \text{LAND} + 0.003 \times \text{BLD} - 0.003 \times \text{PLAEQ} - 0.004 \times \text{PEXP} + 0.001 \times \text{ADEP} + 0.004 \times \text{CAMINB} + 0.0063 \times \text{AR} - 0.0007 \times \text{INV} - 1.348
\]
DISCRIMINANT CRDm = -0.0006 * SR + 0.011 * CGS + 0.007 * DEP + 0.011 * ADMEXP + 0.006 * OEXP + 0.002 * INT + 0.003 * LAND - 0.01 * BLD - 0.006 * PLEAEQ + 0.002 * PEXP - 0.002 * ADEP + 0.002 * CAMINB - 0.003 * AR + 0.008 * INV - 0.003 * BANKL + 0.1797

(EQUATION (4).

CRDm = current ratio discriminant score based on rule of thumb.)

CRDn1 = current ratio discriminant score based on sample average.)

<table>
<thead>
<tr>
<th>NUMBER OF CASES</th>
<th>CRM</th>
<th>UNWEIGHTED</th>
<th>WEIGHTED</th>
<th>LABEL</th>
<th>CRM</th>
<th>UNWEIGHTED</th>
<th>WEIGHTED</th>
<th>LABEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>15</td>
<td>15.0</td>
<td>REJECTED</td>
<td>1</td>
<td>9</td>
<td>9.0</td>
<td>REJECTED</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>3.0</td>
<td>ACCEPTED</td>
<td>2</td>
<td>9</td>
<td>9.0</td>
<td>ACCEPTED</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>18</td>
<td>18.0</td>
<td></td>
<td>18</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is possible to predict any case by using Bayes' rule or the rule of conditional probabilities. Tables 6.32 and 6.33 show the correct and incorrect classified results of applicants. All cases (100%) were correctly predicted in groups 1 and 2 in table 6.32, whereas in table 6.33 there were 8 cases (88.9%) correctly classified and one (11.1) beyond the group range. However, 9 accepted applicants were 100% correctly classified. The average percentage of grouped cases correctly classified was 94.44%, or 17 cases out of 18.

The group means (the group centroid) for the rule of thumb assumption were -1.39 and 6.96 for rejected and accepted groups respectively; whereas for the sample average, means were -2.7 and 2.7 for rejected and accepted groups respectively. These means can be seen on the combined distribution (all groups histogram) for the two assumptions. Figures 6.6 and 6.7 are all groups stacked histograms canonical discriminant of function 1. The first shows 88.9% for the rejected group, and 100% for the accepted one: a total of 94.44% for grouped cases correctly classified. (see histograms and the classified results on table 6.32 and 6.33) Fig 6.7 shows that a small overlap is affecting the eigenvalue of this particular assumption, making it 8.22 (sample average) compared to 10.92 for the rule of thumb assumption.

Eigenvalue seems to be higher in the rule of thumb current ratio case than in that of its counterpart. However, lambda seems to be less in the rule of thumb case than in the sample

174
average case, reflecting higher errors in the decisions taken regarding credit applicants. Therefore, despite the lower predictability in the sample average case, it appears very likely that rejected and accepted applications have the same means on the discriminant function (see table 6.34 canonical discriminant function). It is unlikely that rejected and accepted applications have the same means on the discriminant function for the rule of thumb, despite the 100% correct classification grouped cases.

To conclude it may be said that our opinion of the banks' conservative credit policy towards small business firms is totally confirmed. This is clear from the evidence of the very low number of applicants accepted by the test as a result of their liquidity ratios, whether based on rule of thumb or the sample average. Nevertheless this does not mean that all small businesses in Lebanon were unable to meet their financial obligations. For example, the figures in the balance sheet do not show the cash flow movement of the firm during the whole year, since some businesses depend on seasonal selling which cannot be shown clearly in a yearly
statement. The low liquidity ratios of small businesses in Lebanon confirm the wise policy of holding less liquid assets and, comparatively speaking, higher amounts of stocks to avoid losses caused by inflation, slow turnover and the high accounts payable. However, the reason why some small firms were able to obtain bank loans is the presence of securities in the form of fixed assets such as land, buildings and equipment as much as their trustworthiness as assessed by the credit managers.

<table>
<thead>
<tr>
<th>TABLE 6.32 CLASSIFICATION RESULTS</th>
<th>TABLE 6.33 CLASSIFICATION RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTUAL GROUP</td>
<td>PREDICTED</td>
</tr>
<tr>
<td></td>
<td>CASES</td>
</tr>
<tr>
<td>GROUP 1</td>
<td>15</td>
</tr>
<tr>
<td>REJECTED</td>
<td>100%</td>
</tr>
<tr>
<td>GROUP 2</td>
<td>3</td>
</tr>
<tr>
<td>ACCEPTED</td>
<td>0%</td>
</tr>
</tbody>
</table>

PERCENT OF "GROUPED" CASES CORRECTLY CLASSIFIED: 100.00% PERCENT OF "GROUPED" CASES CORRECTLY CLASSIFIED: 92.41%

<table>
<thead>
<tr>
<th>TABLE 6.34 CANONICAL DISCRIMINANT FUNCTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUNCTION EIGENVALUE VARIANCE</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1*</td>
</tr>
<tr>
<td>2*</td>
</tr>
</tbody>
</table>

* MARKS THE 1 CANONICAL DISCRIMINANT FUNCTIONS REMAINING IN THE ANALYSIS.

6.4 LIMITATION OF THE SMALL BUSINESS FINANCIAL MARKET.

In contrast to its past golden age, in which it was likened to that of industrial countries, the Lebanese financial market is now very limited in terms of ability to provide sufficient financial resources and investment opportunities. The exodus of thousands of Arab, non-Arab and Lebanese business headquarters from the country to Syria, Cyprus, Turkey, Greece, Jordan and Egypt has handicapped the Lebanese financial market. Venture capitalists - risk individuals - no longer see the Lebanese market as one of their investment targets, thus depriving many existing and new businesses of such valuable sources of finance. There are no more than one hundred companies listed on the stock exchange, and no foreign or international traded companies stocks are listed. The stock exchange market became very inefficient after the war, and thus has not been able to become the instrument for mobilising long term funds for investment in the community. In addition, in Lebanon unlike the situation in many countries, there is no second share market where small businesses might have the golden opportunity to go public.

In the absence of top line companies, the opportunity of getting finance through franchising is very small. None of our firms has reported the use of the above sources of finance, since these sources are either inactive or nonexistent.
Trade credit is used widely. The advantage of this type of finance is its ability to pass with ease from one firm to another. This has been very clearly shown in the financial records we received. Trade credits can be seen through accounts payable or in the form of credit facilities to customers which can be seen through accounts receivables.

The average percentage of trade credit to small firms is 13% of the total sources of funds, almost 1/2 of the bank loans. Accounts receivables have reached an average of 16% of the total assets (uses of funds). One reason for the large debts outstanding to small firms is possibly that they are inefficient in the collection of their debts, and many are in a rather weak position to ask debtors to pay quickly.

The relationship between trade credit and bank loans is quite complex. Bates, J., (1964) was unable to test this relationship statistically in his work because of the absence of statistical testing, but he argues "that small firms receiving large trade credit tend both more likely to receive large bank credit as well". [55] This assumption is strongly confirmed by our data. The Pearson correlation reflected this strong positive relationship by a 0.8 coefficient of correlation between bank loans and trade credit (accounts payable), and was 100% statistically significant. Trade credit was also observed as an important factor to finance part of the firm's inventory. A 0.5 coefficient of correlation between trade credit and inventory is viable evidence of its relative importance, which was 95% statistically significant.

6.5 CONCLUSION:

Examination of the conditions of both the financial market and financial position of small firms during the war in Lebanon yielded the following conclusions:

1 - Generally speaking, credits to economic sectors and industry in particular were available and growing at an average of 16.5% in the prewar period. (see table 6.1)

2 - Credit facilities increased substantially during the war period from 1975 until 1983, when they reached a significant peak. There was a sharp downward trend during 1985-1986. This was due to the rapid deterioration of political and economical conditions resulting from the heavy fighting in the country during this particular period.

3 - Although it is still insufficient, more attention has been paid by the government to the industrial sector over the last 15 years. This is reflected in several measures and legislative decrees enhanced by the government.

4 - The establishment National Bank for Industrial and Tourism Development was a remarkable achievement by the government, despite its limited role in the financial market.

5 - As regards the role and performance of the N.B.I.T.D. and credit policy in particular the
following points were discovered.

5.1 - The role of management in the loans administration is both very limited and inefficient given the ratio of approved loans per year, i.e. 7.2 loans for the period 1975 - 1988.

5.2 - The bank was unable to create money or attract and mobilise other sources of funds, despite its dual role as a public (development) and commercial bank.

5.3 - There was no justifiable explanation of the unfair distribution policy of loans among geographical districts (Muhafazat). In these circumstances there is no need for five branches, one in each district.

5.4 - Gathering the preliminary documentation required by the loan application form is one of the most difficult things about obtaining the loan. Some of the documents required bear no actual relevance to the loan and are of no real concern to the bank. However, many firms were given loans without having fulfilled these conditions among them firms belonging to political leaders.

5.5 - Small firms covered by the N.B.I.T.D. credit policy were given a small proportion of the total approved amounts of loans. The performance of the N.B.I.T.D. is quite poor when compared with the achievements of development banks in other countries such as Singapore, Malaysia, U.K, U.S.A, Jordan and Australia. (see table 6.13)

6 - Government policy on small firms does not pay sufficient attention to this sector. It lacks any kind of extension service, special guarantee schemes, advisory services and vocational training programmes. (see figure 9.3)

7 - Sources of funds were shared almost equally by owners and external suppliers (banks). Owners provide 52 %, commercial and development banks 30.6 %, while trade credits provide the remaining 18 % of the total funds.

8 - Owners who had no bank loans provide 82 % of total funds as their financial statements demonstrate. Other sources include family and friends.

9 - Owner capital was negatively correlated with the variable total "managers": it was highly positive correlated with owner managers, indicating the importance of share capital, whereas owner capital was negatively correlated with the number of employees, indicating that small business firms in Lebanon are capital rather than labour intensive.

10 - The vast majority of our sample (75 %) confirmed that their own savings were and remain the major source of financing their business activities, followed by family sources and friends. (see table 6.14)
11 - The importance of institutional source of finance such as banks was shown clearly in the financial statements of small firms. This is also supported by the evidence that 83% of the sample deal with banks for several reasons. In this regard, compared with other Middle Eastern countries such as Jordan and Saudi Arabia, Lebanese small firms are much more advanced in dealing with banks.

12 - In general, new small firms (war generation) use bank facilities more than their counterparts.

13 - The sample results show that overdrafts are the most frequently used kind of finance for small firms. It also reveals an absence of medium and long term loans. The textile and leather industries were the most frequent users of all types of financial facilities provided by banks. Over 70% of overdraft users reported misusing this source of finance; 17 of these were in the textile and leather industries.

14 - There are two major reasons why some small businesses do not deal with banks: the complexity of banks procedures, and the prohibitively high interest rate. Other reasons include the unlawfulness of interest in Islamic Law and high risk; however, neither of these was significant in our sample.

15 - During 1975 and 1986 many small businesses were unable to obtain bank loans. The following reasons were reported: inflation; money speculation; currency substitution; high interest rates; stringency of application requirements; loan conditions; lack of collateral; and poor case presentation (including the absence of financial statements).

16 - The statistical technique of Discriminant Analysis was employed based on the liquidity ratios as predictors of accepted and rejected cases. The technique provided several choices and levels of performance upon which decision makers could base their choice. However, the more realistic liquidity ratio was the current ratio based on the sample average, for two reasons. The first is that the current ratio included the firm's inventory, which it is not included in the quick ratio. Its presence improves the real image of the liquidity position of the firm. The other reason is that the market average ratio is more representative of business trading conditions, and ignores several differences such as type of activity, management style and other variables. However, if the sample is quite big, differences are important.

17 - The financial market of small firms is very limited and provides few alternative sources of finance. The limitation of government sources of finance and extension services for small firms are important factors discovered by our research. The absence of the second share market and other sources of finance was conspicuous in the financial market. In addition to this, the absence of commercial bank statistics highlights a gap finance and an information gap. Similar financial market deficiencies have been reported in several countries including the United Kingdom, the United States, Australia, and Middle Eastern countries such as Saudi Arabia and Jordan.
The following chapter will examine the effect of various sources of finance on the profit and growth of small businesses.
6.6 REFERENCES:

3 - Ibid. p. 22.
6 - The reader may refer to the chapter on the Lebanon's economy (Chapter 6) in the present study.
7 - In terms of SCAIL's role in credit financing, out of 41 ML Pounds only 22 ML Pounds were used. The reason for this is mainly the political criteria adapted by the agency for granting or withholding loans. Public criticism was long and sustained. This led the government to establish the (AIREB) in 1953-54. See Arthur E. Mills, *Private Enterprise in Lebanon*. The American University of Beirut, 1959, p.27.
8 - It is worth noting here that this bank (NBITD) was established by a special decree No.2351, dated December 10th, 1971, not 1973 as Sayigh Yusif has reported in his book, *The Economies of the Arab world, development since 1945*, p. 297. See also *The National Bank of Industrial and Tourism Development*, A booklet of general information produced by the bank - expected publication date is 1988 (as the general director of the Bank mentioned in the researcher presence). p. 5.
10 - Ibid., p. 5.
11 - Ibid., p. 6.
12 - The reason for granting rehabilitation loans is difficult, this is due to the political and economic conditions prevailing in Lebanon as a result of the war, which make it imperative for the bank to pursue a flexible policy in meeting the intermediate needs of the industrial sector. The bank grants these loans for use in enhancing production. The repayment terms of the loans are as follows:
   1 - 15% one year after signing the loan agreement.
   2 - 35% two years after signing the loan agreement.
   3 - 50% three years after signing the loan agreement.
14 - Ibid. p. 7.
16 - The interview with this credit manager took place in August 1988 in the presence of the writer in Lebanon as part of the research survey. The loan of $L750 million was divided as follows; $L500 to industry and $L250 million to the tourist sector with an interest rate of 5% discounted or reaching 15.2% to 13.6% accumulated.
17 - The amount for 1990 is an amount which, it is estimated, will be given to the bank in the coming years, based on the proposal made by the N.B.I.T.D. to the central Bank of Lebanon in...

19 - Permission was given by the Director General of the bank, Dr Talhat Al-Yafi (who died just a month after the survey finished) for the writer to diagnose the loan files of the bank under the supervision of the credit department.
20 - The figure of 220 loans applications is taken from the bank documents dealing with distribution of loans to the industrial sectors, form No 11. The other figure is taken from Al-Safir newspaper Feb. 8th.1988.
22 - See notes 20 and 21.
23 - Internal documents of the N.B.I.T.D. show a difference of 42 extra loan applications for development loans, the same documents show a difference of one accepted loan only. This was confirmed also by one of the interviewed credit managers at the N.B.I.T.D.
24 - Information in this table is taken directly from the bank documents (Form No. 11).
26 - Our definition relies primarily on the number of employees, which is between 5 and 50 per firm.
27 - See table 6.8 concerning the method of calculating the averages and the percentage proportions.
28 - The number of approved rehabilitation loans is an estimation based on the bank approval behavioural policy presented by the figures in the table. So the figure 73 is calculated as 77.7% of the applied 95 small firms to the N.B.I.T.D., where the bank, whether deliberately or accidentally, has chosen this policy, it could be the most logical accepted estimate for our case.
29 - Data in the table are collected from different references - sources:-
30 - See Lebanese newspapers for Feb., March, April 1984.
Bombardment by the Lebanese Army has concentrated on commercial and industrial zones in west Beirut and the industrial zone of Al-Shouaifat, while other militia have destroyed hundreds of industrial firms in east Beirut and other areas.

31 - See Al-Safir newspaper, Feb. 1988, Beirut. This inefficiency is confirmed by the central bank's decision to freeze a cheque of L.L 250 million for reasons to be discussed with the bank management concerning its whole credit policy and the conditions which should be met for giving loans and assuring that the loans are properly used in industrial investments.

32 - See Al-Safir newspaper, 5/6/79.

33 - See Al-Anwar newspaper, 16th Dec. 1982.

34 - Al-Safir, 09/07/83. p. 6.


36 - Al-Safir, 1st April, 1984.

37 - Al-Nahar, 22nd April, 1985.


39 - Ibid. p. 6.


41 - Readers are advised to see (in chapter 3: Financing small business), the section 3.7.2 on small business financing problems, entitled "external problems", where this issue is discussed extensively.


47 - Ibid.


49 - For example, to get a certificate of ownership of real estate, the owner needs an original birth registration and a Justice record. However, each of those in turn needs two photographs and an application form signed by the district officials. Those must be produced from the place of birth.

50 - For example, in the U.S.A during the years 1961-66 some 83,292 applications for regular business loans were received by the Small Business Administration; of these, only 48,981 loans were approved. 41% of all loan applicants either were turned down or they withdrew their applications voluntarily. See Michael Chesterman, Small Business, 2nd editi., Sweet and Maxwell Ltd, London, 1982. p.105.

52 - SR = Sales Returns; CGS, = Cost of Goods Sold; Dep = Depreciation in the Income Statement; ADMEXP = Administrative Expenses; OEXP = Other Expenses; INT = Interest; LAND = LAND; BLD = Buildings; PLAEQ = Plant & Equipments; PEXP = Preliminary Expenses; ADEP = Accounts Depreciation in the Balance Sheet; CAMINB = Cash and Money in Bank; AR = Accounts Receivable; INV = Inventory; OCR = Other Credits; The last figure in each equation is the constant variable.

53 - Marija Y. Noursis, (1988), op. cit., p. 82.
54 - Ibid., p 91.
56 - Information in the appendix is based on two major sources. The first is, Ladiki, M. Nabil, "Organs for the provision of Industrial services in Lebanon", United Nations Industrial Development Organisation, Seminar on the Organisation and Administration of Industrial Services in Asia and the Middle East. Tashkent, USSR, 12-16 October, 1970. The second source is, Industry in Lebanon, its establishment and development , op. cit., 1988, see note 19.
Appendix 6.1

In the past, industrial activities were under the control and supervision of the Ministry of Economy. The industry services were headed by a senior civil servant of the second category. However, in August 1967 the government, through a legislative decree, established an Industrial Bureau, directly accountable to the Minister of National Economy. The job of this Bureau included the study of ways and means of fostering industrial development, proposals of assistance to existing industries, industrial protection as well as deciding on feasibility studies for establishing new firms.

In 1953 the Industry Research Institute was established with the assistance of U.S.A id; it is known as the point IV. The main job of this institute ranges from conducting simple laboratory tests on manufacturing goods to preparing feasibility studies and the designing of new products. It is also the technical secretariat of the Lebanese Norms and Standards Association.

In 1954 the government established the Agricultural, Industrial and Real Estate Bank (AIREB) known also as BCAIF (French abbreviation). Its main job is to provide credit extension to industrial, agricultural and real estate projects in the form of long and medium-term loans.

In 1960 in collaboration between the Lebanese government and the Association of Lebanese Industrialists and the International Labour Office, the Vocational Training Centre for Adults was set up. It provides training for industrial workers in the field of welding, mechanics and electricity.

In 1962 LEBNOR was established in response to the need for an objective basis on which to assess the quality of manufacturing goods, thus promoting further international confidence in Lebanese goods.

The Association of Lebanese Industrialists is another organization which seeks to create and maintain an atmosphere conducive to the growth of industry, using scientific methods. It also looks after national industry and both national and international by seeking to facilitate financial and nonfinancial facilities through international economic missions abroad.

The Chamber of Commerce and Industry is the institute which provides the certification of export invoices and commercial references when needed. The Chamber has four branches in Lebanon and enjoys direct links with international organizations such as the British-Arab Chamber of Commerce and Industry.

In 1970 the Lebanese Association for the Advancement of Technical Education was established through the initiative of some members of the Association of Lebanese Industrialists and various intellectuals. The main objective of the Association is to provide advanced specialized educational facilities to workers who have not had the opportunity to pursue their technical education.

The Lebanese Management Association is one of the private organizations which organizes special management courses oriented to the requirements of industrial management.

1971 saw the birth of the National Bank of Industrial and Tourism Development. The bank's main function is to provide credit extension to industrial firms in the form of long and medium-term loans with low interest rates.

After two years the government established the most important institution for industrial firms, the Ministry for Industry and Oil. The Ministry was established in accordance with legislative decree law No 973 to support and look after the industrial and oil sector, and to provide all necessary assistance and facilities for industrial firms. After two months the state established the National Investment Insurance Scheme against noncommercial risk. The Scheme was established under the legislative decree No 3/77.

In addition, the state signed several economic and financial agreements with Arab and European countries. These are as follow:
- The Lebanese - Jordanian economic agreement (14-2-1966)
- The Lebanese - Iraqi economic agreement (8-6-1967)
- The Lebanese - Saudi economic agreement (6-1-1968)
- The Lebanese - Qatari economic agreement (24-4-1968)
- The Lebanese - Morrocan economic agreement (10-3-1972)
- The Lebanese - Tunisian economic agreement (28-4-1972)
- The Lebanese - Kuwati economic agreement (22-8-1972)
- The Lebanese - ECC financial protocol (1968)
- The Lebanese - Saodi Industrial agreement (1986 - 1987)

In addition there are several economic and financial agreements between the Lebanese government and the COMECON countries such as Bulgaria, Czechoslovakia, Romania, Hungary and Yugoslavia. [56]
Chapter Seven

PROFITABILITY AND GROWTH OF SMALL BUSINESS FIRMS

INTRODUCTION.

The preceding chapter examined the question of financing small businesses in Lebanon. Several hypotheses and assumptions were applied to examine the effect of war on capital and its availability in the financial market. The role of the Lebanese Government in financing small business industries was discussed extensively; the discussion centred firstly on the National Bank for Industrial and Tourism Development's (N.B.I.T.D) credit policy, and secondly on the government's credit policy and other available facilities.

In this chapter we shall examine other financial issues in the context of small businesses in Lebanon. Two major issues reflecting further financial performance will be examined: profitability and growth. In fact, there is a point of confusion here: is profit the cause of growth, or growth the cause of profit? Or is there a non-causal relationship between them?

Growth in a firm, for example, can be determined by an increase in either the number of employees, assets or liabilities. Growth should occur as the result of an increase in equities and/or more liabilities. In turn, the business financial and employment size will expand automatically, reflecting the addition of financial or human resources. Yet this expansion of financial and human resources does not necessarily lead to greater profit; it cannot be considered real growth in the sense of being a result of the firms' natural capability for growth. Therefore it can be argued that any profit made by the business will eventually form the business's growth, so long as it is not distributed as dividends between owners or shareholders.

The purpose of this chapter is to investigate the link between the financial performance and the growth of small firms. This will hopefully be achieved through empirical research into two issues: profitability and growth. Our investigation is based on a hypothesis which was stated earlier, namely that small firms which have survived the war have, in the face of great adversity, been able to achieve high rates of profit and, as a corollary, high rates of growth. Within the ambit of this hypothesis there are several other hypotheses to be tested on the basis of various assumptions. Apart from the major issue of profit and growth, other factors which are believed to have an effect on profit and growth -the age of the business, for instance- will be dealt with. Our discussion unfolds in four sections with the following headings:

1- The profitability of small business firms
2- Risk and small business performance
3- Growth of small business firms
4- The effect of the age of the business on profit and growth.

7.1 Profitability of Small Firms:
In this section we shall ascertain the direction of the association between profitability and size in small businesses with the help of financial data made available. The analysis will look for a measure of gross profitability to reflect the financial performance of small firms in the market. We should therefore discuss the possible definitions of profitability and size measures which are to be used in this analysis. In order to clarify the profitability picture it is necessary to broach several related questions. These questions are: what measures of profitability and size are we to use in our analysis? What is the general direction of association or significance in the relationship between profitability and related financial and nonfinancial size measures? We can then proceed to analyse the relationship between the measures of profitability and size.

7.1.1 Profitability measures

At this stage we must decide which measures of profitability are to be used, and which size variable would be the most appropriate in order to normalise profits. Bearing this in mind, the following measures of profitability were chosen: firstly, gross profit; secondly, return on investment; and finally, profitability index - which we developed ourselves. Gross profit is the real reflection of the firm's financial performance in absolute values; return on investment is a relative measure; and profitability index serves as the mean value of four representative profitability ratios in relative performance.[1]

One may question the structure or the components of the build up index and its effectiveness in the analysis. The relative effect of such an index in general on the analysis cannot be denied. Firstly, if there is any doubt about this new structured variable, it follows that there must be even greater doubt about the reliability and validity of other individual indexes and their use in financial analysis. Secondly, since the reliability of financial ratios techniques in financial analysis is generally accepted, this gives more credibility to the structured index. Thirdly, with this index variable all inclusive ratios are standardised to the extent that the expected bias or error would be less than the errors anticipated when using a single ratio, which may leave other financial variables out of its component.

Concerning the size measure, four variables were chosen: total assets, net assets, sales revenues and the total number of directors.

It would be useful at this stage to show the direction of the relationship between the chosen variables of profitability and size. Several early studies have tested the degree of correlation between profitability and size, e.g. Dewing, L. (1921), Crum, A. (1934,1939), Summers, H.B. (1932), Stekler, H.W. (1963), Singh, A. and Whittington, G.(1968), Whittington G. (1980) and Storey D. et. al. (1989). These studies reach different conclusions and considerable variation between industries was in evidence.

Table 7.1 is the simple product moment correlation which demonstrate the direction of this relationship. As shown in the table, the relative profitability measures are correlated
negatively with the size measures and are significant statistically at 95% level, except in the case of sales revenues, which were positively insignificant correlated at the 95% level.

The absolute measure of profitability reveals a completely different direction of relationship with size measures. Gross profit strongly correlates with sales revenues (highly expected - see note 15) followed by net assets, total assets and the number of directors. They were statistically significant at the 95% level except for total assets (see table 10.1).

<table>
<thead>
<tr>
<th>Table 7.1 Simple Correlation between profitability and size measures.</th>
</tr>
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<tbody>
<tr>
<td><strong>T.ASSETS</strong></td>
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<tr>
<td>PROF</td>
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<td>ROI</td>
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<td>PTP</td>
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Note: T.Asset = total assets, N.Assets = net assets, MNGS = total number of directors in the firm (owner or non-owner managers), PROF = Profitability index, ROI = return on investment, and PTP = pre-tax profit.

* Significant at 95% level. One tailed sig. The number of firms used in this analysis is 19.

Return on investment was tested and a negative correlation was found with total assets and net assets, whereas a positive correlation was found with sales revenues and the total number of directors. However, none of the results was significant statistically.[2]

Testing the relationship between profitability and size can be explained further by using linear regression analysis.

Regression analysis is one technique with which to analyse quantitative data to make forecasts. More specifically, the aim of regression analysis is to find the "line of best fit" which summarises the relationship between regressed variables. The equation of the line takes the following mathematical form:

\[ Y = a + b \, x \]  

\[ \text{where} \]

Y is the dependent variable.

x is the independent variable (explanatory variable)

a is the intercept point

b is the slope of the line.  

The specification of the relationship between profitability and size, which was used for the most comprehensive analysis, was the same model in two functional forms:

\[ P = a + b_1 \, S + e \]  

\[ P = a + b_1 \, \log S + e \]  

where P is the measure of profitability variable

S is the size measure

e is the stochastic error term, with zero mean
a is the intercept parameter
b is the slope parameter

Equation (2) assumes that absolute variation in the profitability variable is linearly related to absolute variations in the size variable. Equation 3 is the semi-logarithmic equation, the hypothesis of which is that "a given proportionate change in opening size causes the same absolute change in the profitability for all sizes of firms".[4] These models were used by several researchers for similar purposes of analysis, e.g. Summers H.B. (1932), Stekler H.W. (1963), Singh A. and Whittington G. (1968), Whittington G. (1980 and Storey D., Keasy K., Watson R. and Wynarczyk P. (1987).[5]

These studies revealed different results. Singh and Whittington found that the degree of explanation of the rate of return by size was very low. The coefficient (b) was statistically significant in one out of four industries, while most of (b's) coefficients were not statistically significant. The fact that the majority had negative values suggests that profitability tended to decline with size. The equation was improved significantly when the sample was restricted to include only growing and profitable companies. When the post-tax profitability was tested on equity assets, the results tended to offer weaker confirmation of earlier results.[6]

When the semi-logarithmic model was applied (The logarithm of size) the results seemed to present a better explanation of profitability than the absolute value of size. When this equation was tested on post-tax profitability on equity assets the result was that "the rate of profit is independent of the size of the firm".[7] Stekler's (1963) findings were completely different to those of Sing and Whittington, since he found a strong positive relation between size and profitability. Storey D., Keasy K., Watson R. and Wynarczyk P. use total assets with absolute pre-tax profit, and divide the time into two periods (1971-75 and 1975-80). They conclude that the b coefficient for all manufacturing firms as well as at sectoral level firms shows significantly positive coefficients for the first period. The second period, i.e. 1975-80, yielded similar results, "...although it has a lower value (of b coefficients) than for the 1971-75 period... and none of the b coefficients is significantly positive" to those of the 1971-75 period.[8]

A weaker relationship appeared when they excluded unprofitable firms, and the following was reported:

"The exclusion of unprofitable firms therefore appears somewhat to weaken the observed relationship between profitability and size in terms of total assets in both time periods. Furthermore the relationship of size and profitability appears weaker in the 1975-80 period with an all industries b coefficient of only 0.0008 compared with 0.0028 for the earlier period".[9]

They also report that:

"Using the net assets measure of size there is no evidence of any relationship between size and profitability, either at the aggregate level or for any sector, with the exception of the timber and furniture industry".[10]
When they used the logarithmic model for the two periods with both total assets and net assets measures of size they reported that:

"The table (results of the test) confirms earlier results with the linear model that when the net assets measure of size is used only companies in the timber and furniture sector in the 1971-75 period shows a positive relationship between size and profitability. For the total assets measure of size, profitability and size are positively related at an aggregate level for both time periods, although this relationship appears weaker in the 1975-80 period than in the earlier period".[11]

For Story D., Keasy K., Watson R. and Wynarczyk P. there appears to be a clear contrast. The results of the studies of large firms were reported as follows:

"...profitability increases with size, with large firms in this sample showing higher rates of profit than smaller firms".[12]

7.1.2 Size and Profitability in Lebanese Small Firms:

Moving from the second level data and results to the first level data, some critical points should be clarified before reporting our findings. These can be summarised as follows: the number of firms; the period of time over which the analysis is to be conducted; and the critical variables. In terms of the number of firms, the tests will deal with 19 cases of our sample, i.e. those who supplied us with the necessary financial records, i.e. statements of sources and uses of funds (balance sheet) and profit and loss account (income statements).

Without any doubt, the smaller the number of firms, the less the amount of information available. However, despite the fact that information is limited we shall employ appropriate statistical techniques to avoid such a problem. Therefore, the t-students test of significance will be used as advised by all statisticians (this will be discussed in the methodology chapter in details). The paucity of available data has confined the writer to one level of analysis, i.e. the all-industries analysis, and has obviated any type of sectoral analysis.

However, there is a high risk that the results may be insignificant because the decrease of the sample size within the tests of individual industries. Thus the disaggregate analysis by industry has been dropped.

As regards the time period over which the analysis was to be conducted, limited choices were available especially considering the absence of any data for the prewar period. For the purpose of comparison we decided to consider several options. The first option was to take the whole war period (1975-87) and treat it as we would a period of normality, mainly because hostilities have persisted throughout without any significant interval of peace. The second option was to divide the whole period under study (1975-87) into two periods: 1975-1981 and 1982-1987. The rational behind this is that the Israeli invasion, which took place on June 5th 1981, and was the most significant factor to intervene in the whole war period on account of the terrible destruction it wrought at all levels.
The third point is the presence of critical variables in the analysis. We shall introduce the number of directors in the firm as a size variable, and discover its relative relationship to profitability. The risk associated with this size measure variable is its limitations to change which does not always correspond to the same degree of change as other variables. In addition to this limitation, there are a few limited studies which concentrate on the effect of the number of directors on the profitability of the business and its growth.

In addition to issues examined in our research, a new dimension to this variable has been added in that it has been used as a size measure in view of the limited results that may be obtained, even with the evidence of moderate positive and significant simple correlation between the number of managers and other profitability measures (see table 7.1 for these results). In addition to the factors mentioned above, another source of variation is expected from business firms who are managed and directed by one owner-manager, which may make our argument about using the number of managers as a size measure highly volatile. If a nonlinear correlation is found as a result of the regression analysis between profitability and the number of managers in general, another alternative might be able to justify our expectations. And this is that business firms who have non-owner managers may be able to facilitate our assumption with a stronger proof or a better linear relation between managers and profitability.

Some Expectations:

Apart from the limitations of our study, in the context of the analysis undertaken there are several assumptions which may lead a better understanding of our expected findings.

1) All size measures are positively related to profit measures.
2) "If there were a linear relationship between absolute variations in profitability and absolute variations in size we should expect that very large companies would typically exhibit drastically higher (in the case of positive coefficient) or lower profitability than the rest of the company population,...., and, moreover, the distribution of profitability would be highly skewed".[13]
3) Considerable differences between using absolute values and relative value measures of profit which may affect the results of regression and its coefficient (b), and may result on a completely opposite direction of linear correlation especially when ratios are used.
4) When semi-log models are used different results may be obtained as a consequence of the transformation process carried by the logarithmic function, i.e, any small value equal to one or less than one will give a zero log and below (-ve), values which may affect the results.
5) Precautions should be taken when bias appears and threatens to affect the results. In taking this view Whittington G. (1980) says; "the results using sales as an explanatory variable" when regressed with profit (profits being a component of sales) show that "there may be a slight bias in the direction of a positive value of b, and the appropriate preliminary conclusion would be that there is relatively little association between profitability and size".[14]
The semi-log model will be used only when there is no linearity between concerned variables.

As discussed earlier in this chapter, there are two forms of regression model which take the form of this mathematical equation (equations (2) and (3) represent the equation (1)) and which were chosen for the analysis:

\[ P = a + bs + b1W + E \]
\[ and \ P = a + \log S + b1W + E \]

Where \( P \) is the measure of profitability variable
\( S \) is the size measure
\( W \) is the Dummy variable representing the external effect of war.[15]
\( E \) is the stochastic error term, with zero mean.
\( a \) is the intercept parameter (constant)
\( b \) is the slope parameter and \( b1 \) is the dummy parameter (coefficient).

The analysis yielded results for several profitability and size measures for three different periods of time. One represents the war period, i.e. 1976 to 1986. The second covers the period of the war before the Israeli invasion, i.e. 1976 to 1981; the third represents period after the invasion, from 1982 until 1986.

The period 1976-1986:

Results of the regression analysis to test the relationship between profitability and size measures are shown in three separate tables for the whole war period 1976-1986. Each of these tables deals with only one profitability measure across all size measures. The multiple linear regression model has been used to produce these results; in the event of the non linear correlation failing, the semi-log model has been used, as mentioned earlier. Each table shows all coefficients in the equation and their significant level; they also show the values of the dependent and independent variables.

Table 7.2 gives the result of fitting the multiple regression equation between pre-tax profits and several alternative measures of size. From the earlier analysis of simple product-moment correlation, the \( b \) coefficient for all size measures is expected to be significantly and positively correlated with profits. However, total assets and net assets did not support this argument when tested with returns on investment and the profitability index. The results suggested that the greater the assets, the less likely is the rate of return on net assets and the profit rate in general.

Preliminary expectations were confirmed by table 10.2, and the validity of the negative correlation above disappeared when regression analysis was used. Table 10.2 confirms the significant and positive association of all explanatory variables with pre-tax profits, as well as the relatively high \( R^2 \) of all equations. Total assets with pre-tax profits yielded a positive (b) coefficient, although a better explanation was provided by the significant coefficient (b2) of the
dummy variable, which represents the war effect in the equation. The net assets variable behaved in a similar way but yielded a higher $R^2$. Sales returns were the best fit significance compared to total assets and net assets, where the effect of war was statistically insignificant. However, the presence of the war variable has lowered the (t) value and its significance to the sales revenues coefficient (b1) from (3.747) to a (2.79); on the other hand, however, it leveraged the $R^2$ by almost .09 points.[16]

The number of managers as a size measure gave the best performance in the whole equation and supported our argument that the number of directors (owner-managers and non-owner managers) in small businesses is just as important as in large ones. In spite of the positive insignificant coefficient for the number of directors, the significance of the whole equation at the 98% level encourages further investigations and tests. The interference of the war effect variable with the number of directors was consistent with its behaviour with other variables in other equations.

In businesses managed by non-owner managers, the number of directors as a size measure receives better support from the results of this equation. Pre-tax profit was better explained in this test by the number of owner-managers in businesses controlled by non-owner managers than any other size measure after sales revenues in the period 1976-86, (compare equations in table 7.2).

Using the return on investment profitability ratio with size measures gave lower results and many insignificant equations and coefficients. The fact that these results are highly expected is due to bias produced by the analysis on some asset variables such as net assets. Whittington G. (1980) reports that,

"... there is an important advantage to using a measure of size other than net assets. Since net assets is the denominator of the dependent variable, using it also as the explanatory variable will mean that any error of observation will lead to a downward bias in the estimate of the slope coefficient b (i.e. it will be less

<table>
<thead>
<tr>
<th>SIZE</th>
<th>a</th>
<th>b1</th>
<th>b2</th>
<th>R²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>T.A</td>
<td>1126.5</td>
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<td>-1427</td>
<td>.3796</td>
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</tr>
<tr>
<td></td>
<td>(2.859)*</td>
<td>(1.208)</td>
<td>(2.427)*</td>
<td>(*)</td>
<td></td>
</tr>
<tr>
<td>N.A</td>
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<td>-1389.6</td>
<td>.4172</td>
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<tr>
<td></td>
<td>(2.59)*</td>
<td>(1.609)</td>
<td>(2.453)*</td>
<td>(*)</td>
<td></td>
</tr>
<tr>
<td>S.R</td>
<td>725.9</td>
<td>.170</td>
<td>-971.7</td>
<td>.5454</td>
<td>5.99</td>
</tr>
<tr>
<td></td>
<td>(2.048)*</td>
<td>(2.79)*</td>
<td>(-1.810)</td>
<td>(*)</td>
<td></td>
</tr>
<tr>
<td>MNG</td>
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<td>2086.6</td>
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<td>5.441</td>
</tr>
<tr>
<td></td>
<td>(2.09)*</td>
<td>(2.35)*</td>
<td>(-2.658)*</td>
<td>(*)</td>
<td></td>
</tr>
<tr>
<td>NOM</td>
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<td>.4967</td>
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<tr>
<td></td>
<td>(4.270)*</td>
<td>(2.35)*</td>
<td>(-2.658)*</td>
<td>(*)</td>
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</table>

NOTE: T.A = Total Assets. N.A = Net Assets. S.R = Sales Revenues. MNG = Total number of managers in all firms included in the analysis. 19 firms. NOM = The total number of managers in Business firms who employ non-owners managers. 7 firms.

(*) means the whole equation is significant statistically at 95% level.

* means that the coefficient is significant statistically at 95% level.
positive or more negative) because an erroneously observed lower measure of size".[17]

Table 7.3 shows the results of regressing return on investment and size measures for the period 1976-86. With assets size measures, return on investment yielded in both cases - total assets and net assets - a significant negative coefficient (b1) and a high intercept (constant 2) as well as nonsignificant negative coefficient (b2) of war effect which added more effect with (b1) on R² to be .3631 and .343 respectively. Such results, contrary to what pre-tax profit shows with size measures, say that the larger the firm, (defined in terms of total assets and net assets), the lower the return on investment; or the smaller the firm, the greater the return on investment.

<table>
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<tr>
<th>SIZE</th>
<th>a</th>
<th>b1</th>
<th>b2</th>
<th>R²</th>
<th>F</th>
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<td>(-1.697)</td>
<td>(*)</td>
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<td>N.A</td>
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<td>.3437</td>
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<tr>
<td></td>
<td>(4.90)*</td>
<td>(-2.77)*</td>
<td>(-1.69)*</td>
<td>(*)</td>
<td></td>
</tr>
<tr>
<td>S.R</td>
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<td>.00094</td>
<td>-6.12</td>
<td>.0440</td>
<td>.376</td>
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<td>(.528)</td>
<td>(-.388)</td>
<td>(N.S)</td>
<td></td>
</tr>
<tr>
<td>LOG</td>
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<td>2.092</td>
<td>-7.36</td>
<td>.0437</td>
<td>.366</td>
</tr>
<tr>
<td></td>
<td>(-1.81)</td>
<td>(.509)</td>
<td>(-.492)</td>
<td>(N.S)</td>
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</tr>
<tr>
<td>S.R</td>
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<td>-4.54</td>
<td>.11167</td>
<td>1.005</td>
</tr>
<tr>
<td></td>
<td>(1.20)</td>
<td>(1.22)</td>
<td>(-.317)</td>
<td>(N.S)</td>
<td></td>
</tr>
<tr>
<td>MNG</td>
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<td>9.69</td>
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<td>.1276</td>
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</tr>
<tr>
<td></td>
<td>(-1.033)</td>
<td>(.35)</td>
<td>(-.394)</td>
<td>(N.S)</td>
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<tr>
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<td>.0487</td>
<td>.409</td>
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<tr>
<td></td>
<td>(2.87)*</td>
<td>(.586)</td>
<td>(-.556)</td>
<td>(N.S)</td>
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<td>LOG</td>
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<td>.0193</td>
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<td>(.174)</td>
<td>(-.060)</td>
<td>(-.182)</td>
<td>(N.S)</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: T.A = Total Assets. N.A = Net Assets. S.R = Sales Revenues. MNG = Total number of managers in all firms included in the analysis, 19 firms. NOM = The total number of managers in Business firms who employ non-owners managers, 7 firms.

(*) means the whole equation is significant statistically at 95% level.

* means that the coefficient is significant statistically at 95% level.

With sales revenues and the number of directors, all equations were insignificant at the 95% level. The sales revenues coefficient was +0.0094 with a value of R²=.0449, suggesting that there is no linear correlation between sales revenues and return on investment. As the table shows, the semi-log transformation of sales revenues was not helpful, although it did increase the coefficient (b1) drastically from +0.0094 to +2.092, while doing nothing to improve the significance of the coefficients or the whole equation. Thus, while confirming the non-existence of a linear correlation between returns on investment and sales revenues, in fact it suggests that the return on investment is totally independent from sales revenues.

The number of total managers had a high positive insignificant coefficient and a value of R²=.11167; the whole equation was also insignificant. The same results were also demonstrated by the number of managers in business who employ non-owner managers. None of the semi-log models of both variables was able to improve this relationship. In fact, the logarithmic transformation has turned the relationship with the number of managers in businesses who
employ non-owner managers into a negative one, which we believe was the effect of the logarithmic transformation as was mentioned earlier.

Thus it is apparent that return on investment can be explained by two size measures - total assets and net assets - although a downward bias in the slope coefficient ($b_1$) of net assets was highly expected.

<table>
<thead>
<tr>
<th>TABLE 7.4 PROFITABILITY (PROFIT INDEX) AND SIZE: SIGNIFICANCE OF EQUATIONS AND COEFFICIENTS. Period: 1976 - 1986</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIZE</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>T.A</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>N.A</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>S.R</td>
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<tr>
<td></td>
</tr>
<tr>
<td>MNG</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>NOM</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

NOTE: T.A = Total Assets. N.A = Net Assets. S.R = Sales Revenues. MNG = Total number of managers in all firms included in the analysis, 19 firms. NOM = The total number of managers in Business firms who employ non-owners managers, 7 firms.

( * ) means the whole equation is significant statistically at 95% level.

* means that the coefficient is significant statistically at 95% level.

This produced results similar to those obtained from the return on investments, i.e. by the profitability index with measures of size. Table 10.4 shows these results. Total assets and net assets coefficients ($b_1$'s) were also negative and the significant coefficient was the net asset coefficient. The war effect variable was positively coordinated with all variables in the equations and all coefficients improving the $R^2$.

However, the small values of ($b_1$'s) coefficient of assets and sales revenues - despite the fact that the sales revenues coefficients is significant - indicate the existence of a nonlinear correlation with the profitability index. The number of directors variables were better in term of their coefficient ($b_1$'s) values, but both were nonsignificant. Applying the semi-log model has dramatically changed the whole equation and a different view has been obtained.

Table 7.5 presents the results of fitting the semi-logarithmic equation with the profitability index on size measures. There is clearly a strong relationship between the profitability index and assets size compared to the one previously mentioned, and it is statistically significant. There is also a considerable enhancement of the coefficient values, which improved from -0.0015 for total assets to -6.28 and from -0.003 to -7.20 for net assets. This was incorporated with the war effect coefficient, which was significant with and without the logarithmic equation, thus indicating its important positive effect.

Although the logarithmic equation improved the coefficient of sales revenues, it could not provide any improvement towards a linear correlation with the profitability index, as was the
case with the return on investment. The effect of the war coefficient changed by -1.13, compared with a change of +7.629 points in the sales revenues coefficient. A similar effect occurred with the number of directors variables. This has resulted in a nonsignificant coefficients, while a lower proportion of the variance was explained by size ($R^2$).

<table>
<thead>
<tr>
<th>TABLE 7.5 PROFITABILITY (PROFIT INDEX), SIZE AND EFFECT OF WAR: SIGNIFICANCE OF EQUATIONS AND COEFFICIENTS, PERIOD: 1976-1986</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIZE</td>
</tr>
<tr>
<td>LOG</td>
</tr>
<tr>
<td>T.A</td>
</tr>
<tr>
<td>LOG</td>
</tr>
<tr>
<td>N.A</td>
</tr>
<tr>
<td>LOG</td>
</tr>
<tr>
<td>S.R</td>
</tr>
<tr>
<td>LOG</td>
</tr>
<tr>
<td>MNG</td>
</tr>
<tr>
<td>LOG</td>
</tr>
<tr>
<td>NOM</td>
</tr>
</tbody>
</table>

NOTE: T.A = Total Assets. N.A = Net Assets. S.R = Sales Revenues. MNG = Total number of managers in all firms included in the analysis, 19 firms. NOM = The total number of managers in Business firms who employ non-owners managers, 7 firms. 


When comparing the two periods in terms of the relationship between profitability of the firm and measures of size, it is vital to detect any similarities and differences which are independent of each other. The advantages of this kind of comparison may be outweighed by certain disadvantages. These are: the decrease in the number of firms in the period tested; the decrease in the quantity of data; and the shorter period of time. All of these factors are important and may affect the statistical tests and limit their outcomes. Without doubt this will increase the probability of nonsignificant results and few explanations from the data available.

It is worth noting here that for the first period (1976-1981) data was provided from 10 firms, while for the second period the number was 18 firms. The reason for this was that some of the firms that provided data for the second period did not exist before 1980.

Tables 7.6, 10.7 and 7.8 present the results of the regression test for the three profitability measures on all size measures. Each table shows the results for the two periods concerned. The pre-tax profit and size measures are shown in Table 7.6. From our earlier analysis it is expected that the greater the size of assets, the higher the profit; similarly, effect of war is expected to be greater and its (b2) coefficient is expected to be significantly and positively associated with profit.(see table 7.2). In fact the two periods exhibit different trends of effect on profit. For the first period (1976-81), there was a clear positive significant coefficient (b's) of assets and sales revenues associated with profit. The war effect variable for this period was negatively associated with profit and its (t) values were insignificant. In the second period (1982-86) - i.e.
the period of the Israeli invasion - the above trend with assets variable completely shifted from significant asset coefficients to the war effect significant coefficients, indicating the greater loading of war effect in our equation. With sales revenues there was no significant change in the equation apart from a lower $R^2$.

The number of directors variables are expected to be positively associated with profit, and results for the whole period confirm this. Two different results were obtained for the two periods concerned. The second period (1982-1986) was more consistent with the whole period. Negative insignificant coefficients were associated with profit in the first period, while positive significant coefficients were associated with profit in the second, even though the coefficient of the war effect was higher in the second than in the first. The logarithmic model fitting did not improve either the equation's coefficients of the first period or the net assets significance of the second, in fact, it rather weakened most of these results.

The results of return on investment with size measures is shown in Table 7.7. The left hand side shows the results of the first period (1976-1981). All variables of size show nonlinear correlation with the return on investment. All the equations and their coefficients (b's) were insignificant statistically. Assets size measures and sales revenues yielded very small negative coefficients. Comparatively speaking, the war effect was better explained by its relationship with return on investment. The logarithmic model improved all coefficients (b's) of equations and the values of $R^2$. The coefficient of the total assets was the only significant one amongst them.

The right hand side of Table 7.7 shows the results for the second period (1982-86) of return on investment and size measures. Compared to the previous period size measures, this explained better the relationship with the return on investment ratio. Coefficients of total assets were very small and negative; however, they were very significant with higher $R^2$s.(see table

| TABLE 7.6 PROFITABILITY (PRE-TAX PROFIT) AND SIZE: SIGNIFICANCE OF EQUATION AND COEFFICIENTS |
|----------------------------------|------------------|------------------|-----------------|------------------|------------------|
| SIZE   | a   | b1  | b2  | R^2  | F    | a   | b1  | b2  | R^2  | F    |
| T.A    | 147.5 | .109 | -42.2 | .607 | 5.42 | 1154.7 | .1369 | -2709 | .314 | 3.44 |
|        | (.528) | (3.22)* | (-.102) |     | (*) | (1.42) | (1.38) | (-2.22)* | (*) |     |
| N.A    | 207   | .147 | -125.9 | .732 | 9.60 | 1087.6 | .262  | -2714 | .316 | 3.47 |
|        | (.935) | (4.30)* | (-.374) |     | (*) | (1.30) | (1.40) | (-2.34)* | (N.S) |     |
| S.R    | 189.03 | .112 | -111.09 | .833 | 17.46 | 443.5  | .350  | -1789 | .461 | 6.43 |
|        | (1.07) | (5.82)* | (-.418) |     | (*) | (1.30) | (2.55)* | (-1.57) | (N.S) |     |
| MNG    | 545.11 | -69.42 | -110.47 | .076 | .288 | 81.99   | 714.5 | -1885.6 | .461 | 6.43 |
|        | (1.387) | (-.622) | (-.164) |     | (N.S) | (0.92) | (2.55)* | (-1.675) | (*) |     |
| NOM    | 392.4  | -143.91 | 76.39  | .2003 | .876 | 1061.9 | 747  | -2018 | .601 | 11.3 |
|        | (1.040) | (-1.239) | (.119) |     | (N.S) | (2.099) | (3.75)* | (-2.13)* | (*) |     |

**NOTE:** T.A = Total Assets. N.A = Net Assets. S.R = Sales Revenues. MNG = Total number of managers in all firms included in the analysis, 19 firms. NOM = The total number of managers in Business firms who employ non-owners managers, 7 firms. (*) means the whole equation is significant statistically at 95% level. * means that the coefficient is significant statistically at 95% level.

The logarithmic model fitting did not improve either the equation's coefficients of the first period or the net assets significance of the second, in fact, it rather weakened most of these results.
7.7) The coefficient of sales revenues was minimal, negative and insignificantly associated with return on investment. The war effect coefficient demonstrated greater colinearity with return on investment, it was also negative and significant. This variable also demonstrated its effect on the managers equations and was negative and significant. Both (b’s) coefficients were, however, positively correlated with profit although their (t’s) were nonsignificant statistically.

### TABLE 7.7 PROFITABILITY (R.O.I) AND SIZE: SIGNIFICANCE OF EQUATIONS AND COEFFICIENTS

| Period         | SIZE | a   | b1  | b2  | R²  | F    | a   | b1  | b2  | R²  | F    |
|---------------|------|-----|-----|-----|-----|------|-----|-----|-----|-----|------|------|
| T.A          | .314 | -.00006 | .1918 | .392 | 2.2 | (.887) | (-2.0) | (.366) | (N.S) | (.519) | -.000058 | -.435 | .535 | 8.67 |
| N.A          | 209  | -.000088 | .2852 | .289 | 1.42 | (.565) | (-1.55) | (.509) | (N.S) | (.519) | -.000058 | -.435 | .535 | 8.67 |
| S.R          | .159 | -.00004 | .305  | .179 | .763 | (.401) | (-1.06) | (.508) | (N.S) | (.282) | -.00002 | -.403 | .319 | 3.52 |
| MNG          | -.049 | .186  | -.058 | .379 | 2.3 | (.153) | (2.02) | (-1.06) | (N.S) | (.181) | .059  | -.367 | .389 | 4.77 |
| NOM          | .059 | .042  | .270  | .0597 | .222 | (.142) | (.328) | (.379) | (N.S) | (.2966) | .0331 | -.405 | .342 | 3.91 |
| Period: 1982 - 1986 |      |     |     |     |     |      |     |     |     |     |      |      |
| T.A          | .495 | -.000028 | -.437 | .508 | 7.7 | (5.214)* | (-2.49)* | (-3.05)* | (*) | (.519) | -.000058 | -.435 | .535 | 8.67 |
| N.A          | 209  | -.000088 | .2852 | .289 | 1.42 | (.565) | (-1.55) | (.509) | (N.S) | (.519) | -.000058 | -.435 | .535 | 8.67 |
| S.R          | .159 | -.00004 | .305  | .179 | .763 | (.401) | (-1.06) | (.508) | (N.S) | (.282) | -.00002 | -.403 | .319 | 3.52 |
| MNG          | -.049 | .186  | -.058 | .379 | 2.3 | (.153) | (2.02) | (-1.06) | (N.S) | (.181) | .059  | -.367 | .389 | 4.77 |
| NOM          | .059 | .042  | .270  | .0597 | .222 | (.142) | (.328) | (.379) | (N.S) | (.2966) | .0331 | -.405 | .342 | 3.91 |

**NOTE:** R.O.I = Return On Investment; T.A = Total Assets; N.A = Net Assets; S.R = Sales Revenues; MNG = Total number of managers in all firms included in the analysis, 19 firms; NOM = The total number of managers in Business firms who employ non-owners managers, 7 firms.

(*) means the whole equation is significant statistically at 95% level.

* means that the coefficient is significant statistically at 95% level.

It is clear from all these equations for the second period (1982-86) that the effect of war was negative and significant statistically associated with the return on investment. This can also be explained by the trend of the ratio from one year to another, which moved gradually upwards from 28% in 1976 to 32% in 1978, and then gradually downwards to 0.08% in 1982, upwards again to 0.13% and downwards once more to 0.02% in 1985.[18]

The attempt to improve the (b’s) coefficients by using the logarithmic model was successful, but the significance of those coefficients disappears. For the second period, coefficient (b’s) increased substantially to -.087, -.133, .04 for total assets, net assets and sales revenues respectively. No significant change was noticed in the manager variable, while the war effect coefficient increased to -.4 in all equations. Only total assets and the war effect became significant in the log-model.

The profitability index for both periods demonstrates results slightly similar to those for the return on investment. Table 7.8 shows these results. In the first period (1976-81) there was only one significant coefficient (b2) in the first equation of managers, while the rest of the coefficients showed a nonlinear, insignificant association with the profitability index. The semi-log model was able to raise the coefficient of total assets to -.1 and the war effect (in the equation) to -.17; net assets to -.09 and war effect to -.07; and sales revenues to -.06, war effect to -.04. None of those results was significant statistically.
The second period (1982-86) is totally incomparable with the first. All of the equation was significant statistically (see the F column in part b of table 7.8). The war effect showed its significance throughout its coefficients which were significant statistically in all equations of this period. The size measures were too weak to demonstrate any linear relationship with the profitability index, save for the total asset. The log-model was able to raise the coefficients only by almost half a point, but they were totally nonsignificant statistically. The coefficients of determination improved slightly; the number of managers in businesses who employ non-owner managers which increased from .386 to .789, but the significance of the equation disappeared.

<table>
<thead>
<tr>
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<th></th>
<th></th>
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</tr>
</thead>
<tbody>
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<td></td>
<td>(986)</td>
<td>(2.41)*</td>
<td>(-.869)</td>
</tr>
<tr>
<td>NOM</td>
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<td>.033</td>
<td>-.0598</td>
</tr>
<tr>
<td></td>
<td>(1.01)</td>
<td>(38)</td>
<td>(-.127)</td>
</tr>
</tbody>
</table>

**TABLE 7.8 PROFITABILITY (PROFIT INDEX), SIZE AND WAR: SIGNIFICANCE OF EQUATIONS AND COEFFICIENTS**

|   | Note: T.A = Total Assets. N.A = Net Assets. S.R = Sales Revenues. MNG = Total number of managers in all firms included in the analysis, 19 firms. NOM = The total number of managers in Business firms who employ non-owners managers, 7 firms. (∗) means the whole equation is significant statistically at 95 % level. * means that the coefficient is significant statistically at 95 % level. |

In the above sections we tested the degree of association between size and profitability. Different results were obtained under different conditions. Factors contributing to the difference in results were: the different variables included in the test; the time period and the types of models applied in the test. Under the conditions in which the tests were conducted and the results obtained (negative or positive or no relationship detected), one may ask, for example, whether profitability will increase or decrease with the increase or decrease of total assets? Is it that the more the business owner-manager increases assets size, the more (or less) the profits become?

In fact, under the conditions of the regression model, prediction is possible and the relationship can be clearly detected. The regression model enables us to estimate how much profit can be made if an investment of x amount of money is put into asset size, for example.

However, although in detecting the direction of the relationship we have achieved much, nevertheless we are unable at this stage to determine the form of assets (if assets represent the size variable) or the sources of financing such assets, factors which it is more important for the analyst to discover. Which of the financial and/or nonfinancial variables contributes most to the
increase - or decrease - in profitability? On the operational level this will enable both us and the business owner-manager to make a better decision about the forms and the size of assets, or the forms and size of the sources of funds that are needed for an investment.

To achieve this goal a decision should be made concerning the most representative significant relationship between size measure and profitability. The specification of such a fully representative significant association can be defined simply by the equation which might be significant statistically and which has significant coefficients. A model should then be built in accordance with both the decision we reach, and with the size measure which might fit the conditions above that are to be examined.

Table 7.9 summarises all regression equations in terms of their statistical significant specifications. The rectangles in the table indicate the best equation in terms of significance and repetition in more than one period. In the upper section of the table the equations of the whole period show that three significant equations meet the above conditions. The first is the total assets with the profitability index; the second is the net assets with the profitability index; and the third is the number of managers in the firms who employ non-owner managers with pre-tax profit.

| TABLE 7.9 PROFITABILITY AND SIZE: SIGNIFICANCE OF EQUATIONS AND COEFFICIENTS |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Period: 1976 - 1986             |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |                                 |
| SIZE                            | PBT                             | b1 b2                           | ROI                             | b1 b2                           | PROF                           | b1 b2                           |                                 |                                 |                                 |
| T.A ( )                         | n.s                             | * ( )                           | n.s                             | *                                | n.s                             | ( )                             | *                                | *                                |                                 |
| N.A ( )                         | n.s                             | * ( )                           | n.s                             | ( )                             | n.s                             | ( )                             | *                                | *                                |                                 |
| S.R ( )                         | n.s                             | *                                | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             |                                 |
| MNG ( )                         | n.s                             | *                                | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             |                                 |
| NOM                             | * ( )                           | *                                | n.s                             | **                              | *                               | n.s                             | *                                | *                                |                                 |
| SIZE                            | b1 b2                           | ROI                             | b1 b2                           | PROF                           | b1 b2                           |                                 |                                 |                                 |                                 |
| T.A (*)                         | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             |                                 |
| N.A (*)                         | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             |                                 |
| S.R (*)                         | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             |                                 |
| MNG                             | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             |                                 |
| NOM                             | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             | n.s                             |                                 |

NOTE: T.A = Total Assets. N.A = Net Assets. S.R = Sales Revenues. MNG = Total number of managers in all firms included in the analysis. 19 firms. NOM = The total number of managers in Businesses firms who employ non-owner managers, 7 firms.

* means the whole equation is significant statistically at 95 % level.

In the lower part of the table the equations of both periods are presented. However, the first period showed nonsignificant association between size measures and profitability, while several were shown in the second period. Four statistically significant equations fit the above conditions, and two of those equations were significant for the whole period, in addition to total assets and net assets with the return on investment ratio.
Therefore two equations were chosen: total assets with the profitability index, and the total number of managers in business firms who employ non-owner managers with pre-tax profit. The reasons for this choice are that:

a) they were significant statistically in two periods of time and under different conditions of war;

b) the total assets variable includes net assets; alternatively, if we want to investigate financing sources, total assets can be replaced by owner equities and liabilities.

c) profitability index include the return on investment ratio.

d) the managers equation was also significant in two periods of time and under different conditions of war.

The model mentioned above will later show the significant financial variables which affect positively or negatively the firm's profit. It will show these variables from two financial perspectives: the source of funds, and the type of assets. We will deal with them in this order.

To discover which are the important sources of funds which are positively associated with profit increase, we regressed the profitability index with all sources of funds mentioned in the balance sheet (see this statement in the previous chapter) of small firms by using different methods such as forward, backward, stepwise and enter methods.[19] All these methods, except the enter method,

"chose (add or eliminate to the equation) variables with the largest (or smallest in case of elimination) positive or negative correlation with the dependent variable....., the minimum value of the F statistic that a variable must achieve... a default value of 3.84.... with a (probability of F - to enter) default of 0.05 ".[20]

Table 7.10 shows the important equations or regression models that represent the relationship between sources of finance and profitability. As shown in the table, the best representative source of finance which was positively statistically significant in its association with profit was retained earnings. The presence of this variable highlights the important financial strategy of growing and overcoming any form of loss; it also underlines the importance of internal financing for profit making, growth and further profit.

If one wishes to consider other sources of finance which may give more realistic and significant association with profit, model number 2 (equation) represents this relationship. Model number two emphasises once more the importance of increasing the size of retained earnings; at the same time the smaller size of bank loan should be obtained by the firm. In other words the firm with the highest retained earnings and the smallest size of Bank loan enjoys a higher profit rate (profitability). If this phenomenon is tested with the pre-tax profit, the result should show that the larger the size of retained earnings and owner capital and the smaller the bank loans, the higher the pre-tax profit obtained by the firm.[21]

It was shown above that the greater the size of retained earnings, the higher the profitability of the firm. Our task at this stage is to determine the type or form of assets that can be associated with the profitability of the firm.
Table 7.11 shows equations (regression model) that represent a statistically significant relationship. Model number one is composed of four types of uses of funds (assets) in addition to one nonfinancial variable: plant and equipment; cash and money in the bank; preliminary expenses; and inventory and the war effect. Of these variables, only cash and money in the bank was statistically significant and positively associated with profitability, the rest were nonsignificant. In model number two, some of the lowest nonsignificant variables were eliminated from the equation. Consequently this led to a significant coefficient of the inventory variable. Therefore the second equation may be considered representative of the relationship between profit and the uses of funds (Assets).

### TABLE 7.10 PROFITABILITY AND SOURCES OF FINANCE

<table>
<thead>
<tr>
<th></th>
<th>a</th>
<th>b1</th>
<th>b2</th>
<th>R²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model No.1:</td>
<td>20.297</td>
<td>.0051</td>
<td>-</td>
<td>.322</td>
<td>8.07</td>
</tr>
<tr>
<td>(N.S)</td>
<td>(N.S)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model No.2:</td>
<td>25.03</td>
<td>.005</td>
<td>-.0029</td>
<td>.459</td>
<td>6.8</td>
</tr>
<tr>
<td>(* )</td>
<td>( )</td>
<td></td>
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<table>
<thead>
<tr>
<th></th>
<th>a</th>
<th>b1</th>
<th>b2</th>
<th>R²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model No.1:</td>
<td>32.34</td>
<td>-.002</td>
<td>.04</td>
<td>-16.09</td>
<td>.076</td>
</tr>
<tr>
<td>(* )</td>
<td>(N.S)</td>
<td>( )</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model No.2:</td>
<td>36.06</td>
<td>.027</td>
<td>-17.8</td>
<td>-.0079</td>
<td>.38</td>
</tr>
<tr>
<td>(* )</td>
<td>(N.S)</td>
<td>( )</td>
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</table>

**NOTE:** The method used for the first model was stepwise method on the SPSS-X. While b1 is the coefficient of retained earnings and b2 is the coefficient of bank loans. (* ) means the whole equation is significant statistically at 95 % level, and an asterisk "*" means that the coefficient is significant statistically at 95 % level.

### TABLE 7.11 PROFITABILITY AND USES OF FUNDS

<table>
<thead>
<tr>
<th></th>
<th>a</th>
<th>b1</th>
<th>b2</th>
<th>b3</th>
<th>b4</th>
<th>b5</th>
<th>R²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model No.1:</td>
<td>32.34</td>
<td>-.002</td>
<td>.04</td>
<td>-16.09</td>
<td>.076</td>
<td>-.005</td>
<td>.55</td>
<td>3.19</td>
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<tr>
<td>( * )</td>
<td>(N.S)</td>
<td>( * )</td>
<td>(N.S)</td>
<td>(N.S)</td>
<td>(N.S)</td>
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<tr>
<td>Model No.2:</td>
<td>36.06</td>
<td>.027</td>
<td>-17.8</td>
<td>-.0079</td>
<td>.38</td>
<td>3.06</td>
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<tr>
<td>( * )</td>
<td>(N.S)</td>
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</tr>
</tbody>
</table>

**NOTE:** b1 is the coefficient of retained earnings and b2 is the coefficient of capital, b3 is the coefficient of accounts payable, b4 is the coefficient of bank loans and b5 is the coefficient of the effect of war. (* ) means the whole equation is significant statistically at 95 % level, and an asterisk "*" means that the coefficient is significant statistically at 95 % level.

To draw a conclusion from the above discussion we present the relationship between the firm's profitability and its liabilities, as well as its assets, in two mathematical models.

**Model 1:** The relationship between profitability and sources of funds.

\[ y = a + b1(R.E)-b2(BLY)+e \]

where

- \( y \) = profitability,
- \( a \) = constant (slope),
- \( b1 \) = coefficient of retained earnings
- \( b2 \) = coefficient of bank loans
- \( e \) = the stochastic error term, with zero mean.

and, \( R.E \) = retained earning and \( B.L\) = bank loans.

202
Model 2: The relationship between profitability and Uses of funds

\[ y = a + b_1 \text{CMBANK} - b_2 \text{INV} + e \]

where \( y \) = profitability
\( a \) = constant (slope)
\( b_1 \) = coefficient of Cash and Money in bank
\( b_2 \) = coefficient of bank loans,
\( e \) = the stochastic error term, with zero mean..
and, CMBANK= cash and money in bank, and INV= inventory.

These models are represented in a diagram (Fig. 7.1), which explain the direction of the relationship between profitability and sources and uses of funds.

The figures explain, according to the findings of models, the mechanics of the relationship between profitability and size measures, be it in the form of sources of funds or uses of funds.

If we consider this mechanical relationship from the perspective of sources of funds, one can say that the policy of raising internal funds such as retained earnings was accompanied by the low size of bank loans. Given the war conditions, this seems realistic. The reasons for this in terms of retained earning are as follows:

a) the availability of retained earnings.
b) the very low risk associated with retained earnings.

c) the fact that they are easily obtained, i.e. when profit is obtained, of course.

In terms of bank loans, the reasons are that:

a) they are difficult to obtain

b) their cost is too high, especially short and medium-term loans.

c) the high risk associated with bank loans

d) the pay back obligation in maturity date.

The view seems to be more complete when seen from the perspective of uses of funds. The increase in the firm's cash in war conditions compared with a low required inventory level may bring into question first of all the main source of the firm's cash, namely its sales revenues. Owing to the war conditions, the firms' customers were unable to meet their financial obligations, thus weakening the cash position of the firms.

It is not surprising then to find high levels of inventory in the conditions of war. Although this has its advantages, it may nevertheless weaken the cash position, because cash serves the inventory in the production cycle and by selling the inventories they are turned into cash again. This alternative role of cash and inventory should be carefully controlled, especially under the weak collection policy. However, this remains variable when we take in consideration the duration of the production cycle, types of products, sales turnover and collection periods,...etc.

The cash and inventory alternative role is more meaningful in the presence of the war variable among the ingredients of the equation. The effect of war, as explained before, may be one of the most important factors influencing the firm's cash position. This effect can be a result of a combination of several factors caused by war, such as price increases, scarcity of raw materials due to lack of imports, depreciation of local currency, insolvency and the inability of customers to pay back their suppliers (i.e. retailers), market shrinking ...etc.

However, the most important effect which could be demonstrated by the war variable and others such as bank loans is the weight of pressure from outside the firm, which cannot be easily controlled by the firm's management. Such uncontrolled variables affecting the firm from outside can simply be expressed as the degree of risk that the firm has to face in its financial and economical environment. The variability of the firm is another dimension that we should now examine.

7.2 RISK AND SMALL BUSINESS.

Using the SPSS-X computer program for the risk measures of observations i.e. both profitability index and return on investment, the following results were obtained:

For the profitability index;
Expected value of profitability = $E(R) = 23.8\%$

The Standard deviation of profitability = $\sigma = 12.783\%$

The probability of actual profitability less than zero is as follow:

Standardised deviation from the mean = $\frac{23.8\% - 1.87 \times 12.78\%}{12.78\%} = 1.87 \text{ S.D}$

Turning this value into probability distribution (see table Z, the normal probability distribution table), we find that there is approximately a 3.22% probability that the actual profitability will deviate by more than 1.87 standard deviation from the mean distribution. Therefore there is a 3.22% likelihood that the actual profitability will be zero or less.

For the return on investment;

Expected value of return on investment = $E(R) = 20.556\%$

The standard deviation of ROI = $\sigma = 17.054\%$

The probability of actual ROI less than zero is as follows:

Standardised deviation from the mean = $\frac{20.556\% - 1.2 \times 17.054\%}{17.054\%} = 1.2 \text{ S.D}$

Turning this value into probability distribution, (see table of Z values in any statistics text book) we find that there is approximately a 11.51% probability that the actual return on investment will deviate by more than 1.2 standard deviation from the mean distribution. Therefore there is a 11.51% likelihood that the actual return on investment will be zero or less.[22]

7.3 THE GROWTH OF SMALL BUSINESS FIRMS.

It was argued earlier that profit is the major cause of growth. This argument is backed by many statement, and it would be enlightening to note here Whittingtons', G.(1980) opinions on the matter. He states that;

"Profitability is positively related to growth, and it seems likely that high profitability will lead to a high rate of growth, since higher profits provide both the means (greater availability of finance from retained profits or from the capital market) and the incentive (a high rate of return) for new investment".[23]

7.3.1 CHARACTERISTICS OF GROWTH:

For the purpose of our study we will use a different measure of growth. This measure is called the 'growth index'. It is a combination of different financial and nonfinancial variables which have both the potentiality and the ability to grow or decline as a result of profit or loss. It is the grand mean of all means of those variables for the firms who submitted financial statements. (see note[24] for more details).

The graphs below show the growth trends of ten major variables in 19 small business firms
over the period 1976-1986. The sales revenues growth is shown in figure 7.1. Sales growth decreased during the early stage of the war, rising dramatically in 1979 and then falling sharply in 1981-82 during the Israeli invasion. After that it fluctuated around the mean (the mean = .50%) rising to over 100% in 1986. The most critical sales growth period for all businesses in the sample was that of the Israeli invasion, in which sales growth dropped below zero level. The standard deviation of sales growth equalled 64.3%, which was close to the mean.

The growth of cost of goods sold is shown in figure 7.2. This has increased sharply since the beginning of the war, peaking at over 200% in 1980, dropping between 1981-82, and increasing once more over the mean after 1983. The cost of goods sold fluctuated in accordance with the sales revenues growth. However, the mean was 59.94%, with great variations represented by a standard deviation of 0.81%.

Total assets growth is shown in Fig 7.3. Total fixed assets and total current assets are shown in figures 7.4 and 7.5. Total fixed asset growth summarises the growth movement in both types of assets, which behaved differently during the war period. With a mean of 33.7% and a standard deviation of 35.6, total assets showed different peaks and troughs during the war period, with a low level of variability around the sample mean.

The growth of total assets can be interpreted in several ways. One might say that this growth is only the growth resulting from the revaluation accounting policy of the firms. Another interpretation would be to say that this is real growth resulting from the real profit generated by firms and retained for reinvestment purposes. A third way would be to interpret the assets growth in terms of the finance obtained by those firms during the war period.

Unfortunately, owing to the absence of information on accounting policies used by auditors or accounting companies, we cannot rely on the revaluation policy to explain the growth of assets. But relying on other arguments, such as the retained earning policy and availability of bank loans and trade credit, there is clear evidence that growth of assets is real growth and not simply the effect of revaluation and inflation. The greater growth of total fixed assets than that of the current ones is further support for this assertion. (see figures 7.4 and 7.5).

Growth of equities and liabilities is another facet of growth in the firm which is subject to finance availability, internal or external. Figures 7.6 and 7.7 show both trends. Equity growth rose during the early period of the war and fluctuated heavily between 1980 and 1986, demonstrating the ability of the firms to retain their profit or raise more equity funds. However, equity growth averaged 31.36 % for the whole period (1977-86) with a standard deviation of 33.12. The growth of liabilities declined after the Israeli invasion, in sharp contrast to its previous dramatic rise to a peak of over 130 %. However, this trend clustered around the mean, indicating the presence of common trend policy among all industrial firms of the study. The trend policy also shows the ability of the business firms to decrease their liabilities in comparison with the higher rate of equity growth: practically and relatively speaking, this means higher growth of retained profit compared with a lower dependency on external finance.
for growth purposes by small business firms.

The growth of accounts receivable and accounts payable is shown in figures 7.8 and 7.9. Accounts receivable were growing steadily over the whole period, except during the Israeli invasion when receivables increased to almost 750%, mirroring the inability of small businesses to collect their money from their creditors. This, also explains the drop in sales revenues for the same period from 210 % to -25% and the sharp decline in profit before tax from 110 % to -120 %, also for the same period (see figure 7.10 for profit before tax).

The growth of accounts payable behaved differently. During the first three years of the war, small firms were able to pay their debtors easily. However, since 1978 their payable started to grow until 1981, dropped between 1981 and 1982, then rose sharply to over 190 % before declining once more to -25% in 1986. It is believed that the sharp decline in accounts payable was due to the reluctance of the suppliers to provide raw materials on credit to small business firms, and also to market shrinkage during these periods which froze the production and sales revenues of individual firms. As shown in figure 7.10, profits declined as a result and most probably stunted the firms' growth. In terms of profit before tax, the most critical period was between 1978 and 1982, when it dropped from 110% to -100% in 1980 and rose to -30% in 1982.

Figure 7.11 shows the growth trend between 1977 and 1988. The mean growth was 15.9%, with a standard deviation of 54.5 % for all firms. As shown in the figures, the growth of small firms fluctuated from one year to the next, a phenomenon that can be explained by the intermittent hostilities which took place mainly in our sample geographical area (Beirut and Mount-Lebanon).

To understand whether growth was subject to war conditions or other characteristics of small firms such as the age of the business, a further step has to be taken. We divided firms who submitted their financial statements into two groups. Group one comprises those firms (8 in all) which started early i.e. before the war or established their business after 1975, or during the war period. Two different growth trends were detected from this separation of firms shown in figures 7.12 and 7.13. Comparatively speaking, the firms which set up business during the war years were achieving better growth rates than old established business firms.

For the whole period new business firms were achieving above the mean growth rate except for the period 1982-1989. The rate of the mean growth for the period 1982-1984 went below the mean of the period, while old firms showed an opposite growth trend with a better performance in 1982-1984 (the Israeli invasion period). Sources of variation which may have caused problems for old business firms were spotted in six major areas. These can be seen in Table 7.12.

As shown in table 7.12, old firms were facing problems of increasing liabilities, uncollected sales revenues, debts, and decreasing working power. Comparatively speaking, these variables
Fig 7.7 Growth of Total Liability 1977-86

Fig 7.8 Growth of Acc. Rec. 1978-86

Fig 7.9 Growth of Acc. Pay. 1977-86

Fig 7.10 Growth of Profit Before Tax 1977-86
Fig. 7.11 Growth of Lebanese Small Firms 1977-1986

Fig. 7.12 Growth of Old Lebanese Small Firms 1977-86

Fig. 7.13 Growth of New Lebanese Small Firms 1977-86
were growing at different rates. In new firms they were growing at a relatively lower level than that of old firms. Interest rate growth was less than 1%, compared with 8.3% in old firms, equities were increasing at an average of 43.3%, compared with 27.5% in old businesses. Receivables of new firms were at a rate of 77% compared with a 211.8% for old businesses. Payables of new firms were declining at an average rate of 7.95% compared with an increasing trend by old firms at an average rate of 32.7%. Finally, working power in new firms was increasing at an average of 38.4%, whereas it was declining at an average of -24.2% in old businesses.

<table>
<thead>
<tr>
<th>Table 7.12 Causes of growth differences between Lebanese old and new small firms during the war.</th>
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<tbody>
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<td>Intr</td>
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<tr>
<td>-------</td>
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<tr>
<td>Old firm's</td>
</tr>
<tr>
<td>New firm's</td>
</tr>
</tbody>
</table>

Other major differences between the old and the new firms were found in four areas: total assets, total equities, plant and equipment, and profit size. In old businesses the group average of total assets was one third less than that of the new firms. Owner equities of old firms were 40% of the total equities of new firms. Plants and equipment of the old firms averaged 28.5% of those new firms. Finally, the profit size of group one was half of that of the new firms' group. There were similarities, however, in areas such as sales revenue, lands and buildings values, and management size.

Types of preferable growth and sources of financing such growth constitutes another issue for discussion. Two major questions were posed to test this. Table 7.13 ranks the types of growth that small businesses in Lebanon wish to follow during the war period. The majority prefer to grow in direct production areas. This is followed by an expressed interest in expansion, an increase in machinery, employing more workers, purchasing raw materials, producing new products, moving to a better place and, finally, constructing another branch.

If we can rely on table 7.13 to understand the steps of growth, then a six-step systematic model in structure and priorities can be developed. This model is presented in figure 7.14, showing the preferences reported by the directors of Lebanese small firms.

Table 7.14 ranks the preferred sources of financing growth in small firms. Personal savings were the most preferable source of financing growth, followed by government sources (namely the Industrial Bank), hire purchase (because it is an instalment payment), long-term loans from commercial banks and, finally, short-term loans. Other sources such as lease finance do not show any significant presence on the table as much as in the market, owing to its narrow spread in the whole country as a source of finance.

The preferences exhibited by small businesses show a tendency towards less risky sources of finance, as well as cheap and long-term ones. This trend underlines the importance of personal
<table>
<thead>
<tr>
<th>TABLE 7.13 FORMS OF GROWTH IN LEBANESE SMALL BUSINESS FIRMS DURING THE WAR PERIOD.(1975-1986)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREQUENCY</td>
</tr>
<tr>
<td>PURCHASING NEW MACHINERY</td>
</tr>
<tr>
<td>EMPLOYING MORE PEOPLE</td>
</tr>
<tr>
<td>PURCHASING RAW MATERIALS</td>
</tr>
<tr>
<td>PRODUCING A NEW PRODUCT</td>
</tr>
<tr>
<td>MOVING TO A NEW PLACE</td>
</tr>
<tr>
<td>CONSTRUCTING A NEW SHOP</td>
</tr>
<tr>
<td>RENTING ADDITIONAL SPACE</td>
</tr>
<tr>
<td>OTHERS ALTERNATIVES</td>
</tr>
</tbody>
</table>

**FIG 7.14 GROWTH MODEL IN LEBANESE SMALL BUSINESS FIRMS DURING THE WAR PERIOD.(1975 - 1986)**

Step one
- NEW MACHINE PURCHASE

Step two
- EMPLOY MORE PEOPLE

Step three
- RAW MATERIALS PURCHASE

Step four
- PRODUCE NEW PRODUCT

Step five
- MOVE TO A NEW AREA

Step six
- CONSTRUCT A NEW SHOP

Step seven
- RENT ADDITIONAL SPACE

<table>
<thead>
<tr>
<th>TABLE 7.14 SOURCES OF FINANCING GROWTH IN LEBANESE SMALL BUSINESS FIRMS DURING THE WAR PERIOD.(1975-1986)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOURCE OF FINANCE</td>
</tr>
<tr>
<td>PERSONAL SAVINGS</td>
</tr>
<tr>
<td>GOVERNMENT SOURCES</td>
</tr>
<tr>
<td>HIRE PURCHASE</td>
</tr>
<tr>
<td>LONG-TERM BANK LOANS</td>
</tr>
<tr>
<td>SHORT-TERM BANK LOANS</td>
</tr>
<tr>
<td>LEASES</td>
</tr>
<tr>
<td>OTHER SOURCES</td>
</tr>
</tbody>
</table>
sources of finance such as owner's capital and retained earnings, at the same time it highlights the importance of the profit effect on growth. It is to this question that we now turn.

7.3.2 EFFECT OF PROFITABILITY ON GROWTH:

It was concluded earlier in this chapter that retained earnings as an internal source of finance was one of the most important variables affecting the profitability of small firms. It was also shown in table 7.14 that personal sources of finance are an essential source of financing the growth of the firm, thus highlighting the importance of profit, retained earnings, and other less risky and less costly sources. In this section the effect of profitability on growth is our focal point.

Our expectation as regards growth depends on the firm's profitability and other variables or forces.

Based on the direction of the relationship between profit and growth, the regression model which represents this relationship in its mathematical model is expected to have the following characteristics: 1) R^2 must be positive; ii) the coefficient(s) "b" of the independent(s) variable(s) must be positive, and iii) the correlation between residuals must be dependent. Therefore, a linear relationship is to be expected. Since the growth variable adopted in this study is an index (i.e. the grand mean of all means of growth variables) the above conditions will not be fulfilled without certain difficulties. If this index proves unable to explain the relationship with profitability of the firm, individual growth variables may be substituted for growth index.

As with profitability and size measures, the relationship between profitability and growth will be examined by using regression analysis technique.

\[ y = a + bx + e \text{ or, in case of non-linearity; } \]
\[ y = a + \log x + e \text{ or, the complete log model } \]
\[ \log y = a + b \log x + e \]  

The analysis provided results for three profitability measures with growth index. The whole war period is used since in this way the growth trend is more apparent.

Table 7.15 gives the results of fitting a simple regression equation between growth and several measures of profitability. The table shows different results for each profit measure. However, in all cases the value of R^2 was very low, indicating that there is no linear relationship between profit and growth. Coefficients (b's) of profit before tax and profitability index were positive, whereas the return on investment coefficients were negative, suggesting an inverse association with growth. All coefficients were nonsignificant statistically.

In the light of these results, the null hypothesis is to be accepted unless the logarithmic
specification may adjust the results and provide a better direction of association, if there is any. This is also confirmed by the effect of other variables outside the equation. This is indicated by the low $R^2$ and the proportion of the variance explained by it. For example the highest value of $R^2$ was .0037, implying that 0.37% of the variance of growth could be explained by return on investment.

The results obtained from testing the semi-logarithmic and logarithmic model show that the null hypothesis (the presence of positive statistically significant association between profit and growth) cannot be rejected; indeed, a stronger negative association was experienced in some cases. Table 7.16 presents both specification results. As shown in the table, only the profitability index maintained positive coefficients; however, they were insignificant statistically in all cases. Return on investment, in the semi-log test was significant statistically at the 95% level, confirming the negative association with growth, whereas in the logarithmic model the value of $R^2$ dropped from 0.333 to 0.185.

The results suggest that there is no linear association between profitability and growth of small firms in Lebanon during the war.

Firstly, the positive insignificant statistically coefficient of profitability with growth might be a result of the variability of the small firms' performance during the war conditions (i.e. data source, or the small sample itself). Secondly, one is probably justified in saying that, with reference to the return on investment as a profit measure, small firms tend to grow more with a lower return on investment, or that return on investment is not a satisfactory measure of profitability of small business firms. Thirdly, one may say that variables outside the equation, or individual growth, could be better explained by profitability. We tested this assumption by regressing the individual growth variable rather than the growth index. The results obtained were no better than the previous ones. (See note 52 for more details). As a way of discovering other effects on the relationship between profit and growth, war generation firms and old firms might provide a fertile ground. From the testing of our variables on these two groups of firms, two interesting results appeared.

The first was obtained from applying the semi-log model. The semi-log model of the profit index of the prewar group of firms showed a very strong positive bond with growth, represented by an $R^2 = 0.83$, but with a nonsignificant statistically coefficient. The second result was obtained by applying the logarithmic model. The logarithmic model of the return on investment of the war generation firms demonstrated a strong negative bond with growth, with $R^2$ value equal to 0.62, and a significance statistically coefficient "b". Generalisation of these results is restricted to the sample size of this research.

In the light of the results obtained, it can can be argued that growth was insignificant statistically when associated with profit. It can also be said that from the data covering the period under study it is likely that the profit and growth of small businesses are totally independent of one another. This in turn might suggest that growth could be better explained on
an individual rather than on an all-sample industries level.

If there is a hidden association between profit and growth on the whole sample level, individual cases may demonstrate this relation - if there is one - in a special case study to be presented in the coming chapter. The following section will examine the effect of age on profitability and growth in small business firms.

### 7.4.1 THE EFFECT OF AGE ON PROFITABILITY AND GROWTH OF SMALL FIRMS:

In this section we shall test further effects of the age of the firms, in particular the effect of age (as an independent variable) on the profitability and growth of the small firms as dependent variables.

For the purpose of testing this relationship linear, log and semi-log models will be used.

\[ P = a + b_1 + b_2 A + e \]

\[ P = a + b_1 \log S1 + b_2 \log A + e \]

and,

\[ G = a + b + b_2 A + e \]

\[ G = a + b \log P + b_2 \log A + e \]
or the logarithmic model if necessary.

Where $S =$ size measure, $P =$ profit, $G =$ Growth, and $A =$ Business Age.

7.4.1 THE EFFECT OF AGE AND SIZE ON PROFITABILITY:

Let us first examine the business age with the effect of the size and profitability. Measure of size and profit will be obtained from table 10.9, which shows significant equations for the whole period of the war (1976-86). Therefore, total assets and net assets with profitability index will be used in the equations.

Table 7.17 shows the results of the linear regression model for assets size (total assets and net assets) and the age of the firm with the profitability measure. Obviously there is no evidence from these results to support the view that the age of small firms as an independent variable can explain variations in profitability during the war period in Lebanon, despite the positive coefficient (b2) that was obtained. The size variables in the equations became insignificant statistically when compared to those results that are present in the same equations in table 10.9. When the semi-log model was applied, different results were obtained.

Table 7.18 shows the semi-log model for assets size (total assets and net assets) and the age of the firm with the profitability measure. The semi-log model produced significant statistically equations and improved their linearity in both assets size measures.

The coefficients of assets (b1) in both equations were significant statistically, whereas age coefficient (b2) remained insignificant but improved positively and appeared to play a stronger role than it did in the equations of table 7.17. However, in these two semi-log equations the assets size and the age of the firm explained a higher percentage of the variance of profitability compared with the results of the equations in table 7.17. For example, the total assets and the age of the firm in the linear model were able to explain 28.1% of the variance of profitability, whereas in the semi-log model they were able to explain 33% of the variance of profitability.

Compared to a similar test conducted by Storey, D et al in 1987, on small firms in the north of England different signs of all independent variables were obtained. For example, a negative coefficient of the age of the firm for all sectors was obtained in their study, whereas in ours this coefficient has a positive sign. A stronger association between profitability and assets and age was obtained by this study than was obtained by that of Storey et al. This was represented by the higher value of $R^2$ of these equations. For example the highest value of $R^2$ of all sectors assets equations in Storey's study of 1987 was .069, which means that the independent variables in the equation (asset size and age of the firm) can explain almost 7% of the variance of profitability. In our study, the $R^2$ of the similar asset size equation was equal to .27, explaining about 27% of the variance of profitability.[26]
7.4.2 THE EFFECT OF AGE OF THE FIRM ON GROWTH.

This chapter has made it quite clear that the growth of small firms is totally independent of its profitability. Here we will try to test the degree of association, or the relationship, between the growth of the firm and its age. The logical expected result is that growth is positively associated with the age of the firm.

Table 7.19 shows important growth variables with business age; both form simple linear and semi-logarithmic equations. These results show that, except in the case of bank loans, there was no significant association between the growth of the firm and its age. The only significant statistically relation was between other growth variables. The age of the firm was unable to explain more than 1% of the growth index variance. The age coefficient was insignificantly negative in both simple and log-model equations.

Individual growth variables were better correlated with the age variable, although two out of three variables were nonsignificantly negative in both models. The growth of the firm’s capital was negatively associated with the age of the firm. Age was able to explain about 16% of the capital growth variations.

The same trend was also shown by age with employment growth. In this particular case it could be the effect of war which has contributed to the fall in employment numbers thus yielding a negative association between age and employment growth. This can also be confirmed by the opposite trend (real employment growth) before the war period, shown earlier.
in this research by the rapid growth of small firms during the early seventies.

One interesting result was the growth of bank loans with the age of the firm, which was positive and significant statistically. The age of the business in both models (simple and semi-log) had a positive coefficient \( b \) and \( R^2 \) equal to .22 and .23 respectively. The semi-log model improved \( R^2 \) by only .01 point and improved the significance of the constant (a or the intercept) of the equation. Bank loans in this equation were confirmed as a primary source of finance for small firms in Lebanon during the war period.

Nevertheless, the increase in bank loans was negatively associated with the firms' profitability. (See Fig 7.1). Bringing these views together it can be said that businesses with fewer bank loans tend to enjoy higher profitability and lower growth. This means that the new established business firms who are regular bank users tend to enjoy lower profitability and higher growth, bearing in mind that growth and profits are independent of one another.

In a further investigation into the characteristics of growth we found that growth was

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\* SIGNIFICANCE AT 95% LEVEL.

NOTE: P = PROFITABILITY, S = SIZE MEASURE AND A = AGE.
negatively associated with daily working hours and with the incorporation of the firm. It can be understood that growth is related more to elements beyond the control of the management of the firm, such as market conditions (economic factors), the war, and various other political factors. It would be interesting to test the effect of these variables but unfortunately it is beyond the scope of the present study.

7.5 CONCLUSIONS:

The central aim of this chapter was to examine the relationship between profitability and growth of small firms in Lebanon during the war period. It was argued that profitability and growth are positively associated and that a firm's growth is a direct result of profit making and profit retention. To examine this relationship two major hypotheses were made under certain assumptions. The first hypothesis was that size measures such as total assets, net assets, sales revenues and the number of managers are positively associated with profitability measures of the firm. The second hypothesis was that growth is a natural consequence of profit making and profit retention. Thus the profitability of the firm was expected to be positively associated with the growth of the firm. Regression analysis, which is one of the most convenient and popular statistical techniques, was used to examine this relationship. The following results were obtained:

1 - For the whole war period 1976-86:

a) With pre-tax profit all size measures yielded positive coefficients, (b's), two of them were significant statistically: sales revenues and the number of non-owner managers. The effect of war was negatively associated with pre-tax profit, especially during periods of heavy fighting. The total number of managers was positively but nonsignificantly associated with profit, whereas this relationship was significant statistically when we isolated owner-manager and kept non-owner managers. This indicates the importance of the number of directors in the firm as a size measure. However, results for total assets were in line with the results obtained in the U.K. by Storey, D. et al. (1987).

b) With return on investment, size measures yielded different results, with only one negative, significant statistically association with net assets. This confirms the findings of Singh and Whittington (1968) and Whittington, G (1980). Sales returns and other size measures were unable to show any linear correlation with return on investment.

c) Similar results were obtained with the profitability index as a profit measure. The semi-log model yielded better linear correlation between the profitability index and size measures with different signs of coefficients (b's)


Different results were obtained for each period, although some were similar to those for the whole period.
a) In the first period total assets, net assets and sales revenues were positively significant with pre-tax profit; they were insignificant with the rest of the profit measures. The total number of directors was positively significant with the profitability index. The war effect was negative in all the equations in the two periods, except with non-owner managers in the first period and with pre-tax profit and return on investment. (See table 7.9) Similar results were obtained in the U.K by Storey, D et al (1987) for the period 1975-80.[27]

b) The second period yielded more interesting results. A higher number of significant statistically equations and coefficients was obtained, (see table 7.9). The total assets were very significant with return on investment and the profitability index, whereas the net assets were significant negatively with return on investment. Sales returns with pre-tax profit showed a performance similar to that for the previous period, while the war effect was significant variable in some equations. The total number of directors in period two compared to period one showed a positive, significant statistically correlation with pre-tax profit, whereas the war effect was the significant variable in other equations. The same result was obtained when owner-managers were excluded from the equation, with the effect of war also significant, while both types of directors variables were insignificant with return on investment and profitability index.

c) The difference in the result for the two periods may be attributable to the following:

c.1 - There were fewer firms in the first period; most of the firms were established during or very shortly before, the second period. Therefore the number of statements submitted was greater for the second period than for the first.

c.2 - There is a high probability that, owing to war conditions, the firms in one period were totally unrelated to their performance in another. This was clear from the dispersion of performance measures in each period which resulted in a different relationship between size and profit measures.

c.3 - The types of variables used in the analysis represent different compositions of both financial and nonfinancial variables. Therefore, different results were obtained at different times.

c.4 - Variations which might have resulted from the small sample size have restricted the analysis of individual or sectoral levels of industries.

3 - In a further analytical step a model was built representing the relationship of the small firm's profitability. This model was constructed from the results of the multiple regression analysis undertaken earlier in this chapter. The model represents the firm's financial structure and the trade-off movement between both sides of the firm's sources of funds and uses of funds. On the one hand it was found that an increase in retained earnings and a decrease in bank loans leads to an increase in the firm's profitability. On the other hand, the model is based on increasing the firm's cash and decreasing the level of inventories, (see figure 10.1). The war
variable seems to have played an important role as an external factor during difficult and heavy periods of fighting.

4 - The war effect and bank loans as external variables seem to have played an important role in the financial system of the small firms. These two variables were maintained as environmental pressure which tended to affect the internal performance of the small firm if left uncontrolled by the management or decision maker(s).

5 - The risk on the small firm's profitability was measured by the standard deviation from the mean of the profitability of the firm, (return on investment or any profit measures). For example, the risk associated with the mean of the return on investment of small firms was 11.5%, with the actual return on investment at zero or less.

6 - Growth of small firms was shown in several financial and nonfinancial forms, representing different characteristics and types of growth in the firm.

7 - Individual growth variables exhibited several financial and nonfinancial growth trends in the small firm, i.e. assets growth, employment growth, sales revenues growth, bank loans growth... etc.

8 - As a result of the division of businesses into prewar and postwar starters, different growth trends were obtained. More variations in the growth of prewar firms were found as their liabilities and receivables increased and their working power decreased. Lower variations were found to come from variables in those firms which were established during the war. (see table 7.12) Other financial variables are believed to affect the growth of these two groups. The technology of the firm, size of profit, the total assets and total equities were greater in new firms than in old ones.

9 - The growth preferable process and the sources of financing this were built up in a model, (see Fig 7.14). This model shows the tendency of small firm owner-managers towards more easily obtainable and less risky sources of finance.

10 - Contrary to our hypothesis was the discovery that the growth index was not significant statistically when associated with the firm's profitability: in fact it behaved independently. This result, suggests that profit cannot be used to predict growth in the firm. In particular, there was a very low positive association ($R^2 = 0.0004$) between growth and pre-tax profit, the same result being obtained with the profitability index. With return on investment there was a negative, significant statistically association with an $R^2$ which was able to explain 33% of the growth variance. The log model was able to push the pre-tax profit equation in a negative direction.

11 - In a further analysis, and in the hope of finding a firm relationship between profit and growth, the semi-log profitability of before-war firms demonstrated a strong, nonsignificant statistically association with an $R^2$, which explains 83% of the growth variance. At the same
time, the logarithmic return on investment showed a strong negative, significant statistically coefficient (b and \( R^2 \) equal to .62).

12 - The effect of age as an independent variable in the size equation with profit was able to show its linearity only in the semi-log model. Although it was nonsignificant statistically at the 95\% level, it was positively correlated with profit.

13 - The effect of age on the growth of the firm was not clear in our study. The only significant relationship was associated with the growth of bank loans at the level of the individual firm's growth variables.

Finally, there are many factors believed to exert influence on the financial performance of small firms in Lebanon, e.g. the economic conditions of the country; the political situation; external pressures such as customs restrictions on Lebanese industrial products; competition of foreign products, etc. - all of which are important. However, to test these qualitative and quantitative variables is beyond the scope of this study.
REFERENCES:

1 - The profitability index is the mean value of four selected profitability ratios which are as follows; return on investment, return on assets, net operating profit; and gross profit margin.

2 - Correlation between gross profit and sales revenues is expected to be high because profit is one of the component variables of sales revenues, thus any increase or decrease in sales revenues will be reflected in the variations in profit and variations in sales revenues.


4 - Storey, et al., op.cit., pp. 103-4: in their statement the word profitability was not used, we have used it to replace "the rate of return" which is the adopted profitability ratio in their analysis.


8 - Storey, D,(1987) et al. op.cit., p. 113.

9 - Ibid p. 113.

10 - Ibid. p. 130.

11 - Ibid. p. 118.

12 - Ibid. p. 129.


15 - A dummy variable is a qualitative important variable which can not be easily quantified and cannot be left out of the analysis. Therefore the value representing its presence in the formula is mainly dependent on its effect, positive or negative. Usually it gives one of two values, 0 and 1. In our case a 0 value is given to the period of no heavy war effect, and 1 to the period with heavy war effect.

16 - A separate test was run for the purpose of comparing the results with and without the war effect variable. When the war effect variable is dismissed from the equation $R^2$ of sales revenues was .452 compared to 0.5454. The semi-log showed less colinearity and yielded a high significant fit with $F = 6.8$ at the 98% level.
18 - The ratio movement was detected through the mean of the ratios of those firms who submitted financial statements in the year of the whole period under study. It should be noted that the number of firms has increased from 10 firms in the first period to 18 firms in the second period, which means the size of assets in the equation have increased also probably affecting the return on investment in a different way in both periods. This may explain the positive sign of the war effect in the first period and the negative sign in the second one.
20 - Ibid., p. 45.
21 - A test of this relationship shows that when retained earnings, capital and accounts payable are high, bank loans and the negative effect of war is low, the firm's pre-tax profits will be high. The equation was significant at the .98 level, but only retained earnings and capital coefficients were significant statistically. The $R^2$ of the equation was 0.749. When the backward method of the SPSS-X system eliminated the insignificant variables, only retained earnings and owner capital remained in the equation and the coefficient of determination $R^2$ hardly changed from 0.749 to 0.735.
22 - For more details about the calculation process and explanation see Van Horn, J. (1986), op.cit., pp. 31-4.
24 - The growth index is composed of the growth of the following 12 variables: sales revenues growth, cost of goods sold growth, profit before interest growth, total fixed asset growth, total current asset growth, total assets growth, total equity growth, total liabilities growth, accounts receivable growth, accounts payable growth, bank loan growth, interest growth and employment growth. Each of these variables is the mean growth of all cases for the whole period (1976-1986). However, for the purpose of analysis the growth of profit before interest will be replaced by the variable profit after interest and before tax. This is on account of the realistic picture of growth in the firm when gross profit after interest is used.
25 - For growth purposes, many researchers have preferred the Logarithmic and/or Semi-Logarithmic specification on a priori grounds. However, some statisticians say that the logarithmic model (exponential growth model) is designed to meet these growth specifications because it responds to the relative change in the dependent and independent variables, or because of change in Log X or relative change in X itself as well as Y. For further details, see: Thomas H. Wonnacott and Ronald J. Wonnacott, *Introductory Statistics for Business and Economics*. John Wiley & Sons, New York, 1984, 3rd edit., pp. 409-14.
26 - It should be noted here that the sample size in Storey, D. (1987) varies between 257 and 310 firms depending on the equation used of that study, whereas our sample for this test was only 19 firms. Another difference is that we used the semi-log model whereas in that study the log model was used. Incidentally, the log-model was not able to provide a better relationship between independent and dependent variable.
Chapter Eight

CASE STUDIES AND LESSONS FROM THE WAR.

This chapter deals with six case studies from the sample collected during the field work. It is the purpose of this chapter to present through these cases some "information that helps the readers to understand what is going on, at the site studied and in the phenomena being analysed, otherwise what is being presented would be more or less incomprehensive".[1] It is a method that can be used to illustrate some kind of reality, so that our reader will know what has been going on, and what business firms, businessmen, and the author himself, have been through during the war and the field work process.

To this end, six cases were carefully selected and each was discussed as a model of a small firm under the war conditions. The importance of these case studies is that they present many important qualitative variables which can not easily be quantified and calculated in a table or presented in a graph.

These case studies illustrate the interaction between the business firm structure (labour, capital, owner-managers, technology, ..etc.) and the texture of the society (social structure, economic structure, political and technological structure) in which this firm operates. It must be said at this point that any generalisations made concerning any situation illustrated here should be seen in the light of the limitation of the data.

8.1 CASE No.1, ENTREPRENEURSHIP, MODERNISATION and GOD.

Bargou - Tex is a family textile business which was established by Mr Bargouth in 1970. Mr Bargouth has an intermediate technical engineering degree and 25 years experience behind him. He began his working life as a maintenance worker in a textile factory. After working there for five years he realised that he could rectify all types of mechanical faults in the factory, he had also become acquainted with many machine suppliers as well as the channels of distribution to customers. His knowledge and experience prompted him to start his own business. He began with two sewing machines and three female workers. During the next five years his business grew moderately; his machines increased to six, his employees to eight, and he was becoming well-known in the business centre of the capital (al - aswaq al - tejariah). When the war broke out in 1975, Mr Bargouth and his workers were unable to go to the factory for several months. Taking advantage of cease-fire day Mr Bargouth went to check his factory; it was in ruins, and he had no chance of recovering any of his assets. His loss was estimated to be about L.L 500,000 or $ 150,000. For several weeks he could not bear to think about it. Finally, however, he realised that waiting desperately every day beside the radio or reading the newspaper would solve nothing; certainly it would not be conducive to rebuilding his business and making money. He decided to take up any work that would satisfy his family's needs. His initial idea was simple. With only L.L 9, which was then worth only $ 3, he bought a big bag of
sawdust, some small paper bags, and a litre of diesel. He mixed the diesel and the sawdust together and filled 17 small paper bags with the new combination (nareet). Nareet is used as fuel for boilers to heat water. At the end of the day he had sold his product for L.L 34, making a profit of L.L 25. He decided to buy more raw materials for the next day and found another shop where he could sell his product. After a couple of months he was able to supply more than 20 shop retailers with his product.

He continued in this manner for a couple of years, at the end of which he had saved enough money to buy two sewing machines. With his wife, his eldest son and his daughter, he started afresh a new business on the same lines as his previous enterprise. However, his tactics were different this time; having decided to avoid all types of risk, he started to work as a subcontractor, making children's wear for several shops in the city. They provided him with the raw materials he required and he and his family finished the work according to the requirements of his suppliers.

After a couple of years, Mr Bargouth rented a one-room shop in the building in which he lived, bought more machines and employed more girls to work there. When he was interviewed in July 1988 he showed us his new factory. Situated in a large basement next to his house, it contained at least 22 different modern sewing machines, and a large electric generator in a separate room to avoid electricity cuts, a frequent occurrence in west Beirut. His work force now stood at 24 employees.

He recently conceived a plan to expand his business in a new garment line. His major worry concerns management and the control of the business when it grows, as well as the maintenance of the modern complex machinery as he is unable to understand the system. This was very serious. He therefore kept two of his sons working with him in the factory. His third son had almost finished his Electrical Engineering degree and his daughter had just started her MBA at Beirut University College.

With the involvement of his family members he believes that the business will be totally under his control, and will be modernised from the point of view of management and technology. He and his two other sons will maintain the production line, sales and customers in the market. When asked about the secret of his success, his answer was "effort and dependence on Allah" (God).

COMMENTS:

This case study describes a business owner, a typical entrepreneur, who used personal initiative, ability and an understanding of opportunities to start up his own business. It also shows a typical entrepreneur in an environment full of uncertainties and uncontrolled risks, such as war, which ended his business brutally, along with thousands of other businesses in the country. It also presents a model of high quality, characterised by creativity, simplicity, planning for the future, quality of decision making and awareness of modern development, and
care and concern for the future of the business when it eventually passes into other hands.

The spiritual power in which Mr Bargouth believes is undoubtedly another factor which may have motivated him and given him hope during times of crisis. This unseen factor serves to highlight the cultural differences between countries, especially when we consider that Mr Bargouth believes that any crisis which might happen is ultimately a test for him as a Muslim believer; a test which, if met with forbearance, will be rewarded by Allah (God) either on earth or in the hereafter.

8.2 CASE No.2, THE CANDY FACTORY and THE FAMILY REPUTATION.

Middle Eastern candy is delicious and is made in a special way. The confectioner guards jealously the recipe of his candy which in time becomes a family secret, handed down from generation to generation. Candy businesses in Lebanon, as elsewhere in the Middle East, depend mainly on the name of the family which started them. Thus the relationship between business of this kind and the family name is such that items of confectionary are often named after the family that produce them.

The Al-Sayecl family has been in the confectionary business for some thirty years or more. The business was established by the father of the present director of the business who became a Mu'allim (master or expert).[2] The director of the business, who started to help his father almost 26 years ago, holds a BA degree in Economics from the American University of Beirut and is also a Mu'allim. Before the present branch opened, their factory and sales shop were situated in the city centre of Beirut. Their customers came from all over the Middle East.

During the 1975-76 war the father lost both the sales shop and the factory. The estimated loss was over L.L 400,000 or more ( $ 120,000 at that time). The building, was destroyed and whatever was left was looted. Their business stopped completely and the father became very worried about his family's reputation. If they did not start again soon, other candy makers would attract their customers and eventually absorb them. Thus they had to find another place to set up their business, revive its reputation and maintain the high standard of their goods.

They approached their bank and discussed a long term loan for this purpose. Their reputation made it easy for them to obtain the loan. Adding to this their personal savings, they were able to buy a very expensive shop in a good location in the capital and a factory on another site.

However, given the difficulties in the city centre, most of the businesses were spread all over Beirut. Commercial centres were established in every part of the city. This structural change in commercial areas was one of the effects of the persistence of war in the centre of the city. Fighting continues when the case was being investigated. It is no longer safe for people to drive everywhere for their shopping, therefore businessmen have had to change to meet their customers' needs.
This situation posed serious problems for the director of the candy business. Other businesses were opening branches all over Beirut and so he had to follow their lead. In five years they were able to open four branches in the capital and another factory to meet the demand of the new sales shops. They also opened several branches in Jordan, Saudi Arabia, Kuwait and in European capitals such as London and Paris. The secret of this success was mainly the family’s reputation; this is what the director was able to invest besides the capital they paid for this growth.

The director of the business is assisted by only two people, a newly qualified graduate accountant and another foremen (also a Mu’allim) who moves between the factories to control the production and check its quality. The major goal of the director was to rescue the business and his family name. The tactic he used to achieve this goal was to approach some venture capitalists and convince them on the strength of his reputation, to invest their money in his business. The idea was successful beyond their expectation.

Outside Lebanon, however, there are none of the serious problems that confront their business in their own land. In Lebanon, most of the problems faced by the business are caused by the war. The director has mentioned two types of problems: direct and indirect financial problems. The direct financial problem is related to the economic and financial conditions of the country.

In the first category, four major problems have been reported: increase in the price of machinery and equipment; the cost of production; fluctuation of sales turnover; and the depreciation of the Lebanese pound. With regard to indirect financial problems, two major obstacles were reported. One concerns infrastructure: the closure of most of the capital’s roads, the shortage of electricity and telecommunication facilities, etc. The other problem is the militia tax collected every month by various political groups as a “kind of voluntary contribution”.

The director was able to avoid some of these problems by adopting alternatives such as electric generators for electricity and Civil Bands frequency systems for communication. The cost of these is passed on to the customers through price rises. Other problems cannot be so easily avoided and cannot be passed on to the customer. The family has to endure these problems as best it can; otherwise it is not only the business that might cease to exist, but the family itself.

COMMENTS.

This case illustrates four important features of the Lebanese business environment during the war period. The first is the importance of the family business in the market and the extent to which a businessman will go in order to keep his reputation intact by maintaining the quality of his goods at acceptable prices. The second is the special attention given by the owner of the business to this objective even in wartime. The third is how an asset such as good will can be
invested in an entrepreneurial way in difficult times. The fourth feature is the hardship undergone by businesses when faced with other factors of risk emanating from wartime conditions such as electricity cuts, the absence of telephone services and the militia tax.

However, the director of the business has emphasised the importance of development banks and government schemes which may enable many business owners to rescue their businesses in such difficult times. They have urged the government and other industrial concerns to find new markets to encourage exports.

8.3 CASE No.3, THE RELATIONSHIP BETWEEN THE OWNER AND HIS SUBORDINATE.

In 1967 Mr Glayinie moved from the cement-blocking and pavement-making business into the garment trade, manufacturing mainly women’s clothes. He had many problems both inside and outside the firm. Internally, he was unable to control and manage the climate of the business with his workers. Problems arose from the heavy effort involved in his cement business, and the demoralising climate of a country at war. Externally, large scale competitors had contributed to his decision to change his business line. From 1967 until 1975-76 his factory was in an area of Beirut known as Bab-Idris in the commercial centre. In the late 1974 he had 60 employees in his factory and enjoyed his work immensely.

In 1975-76, Mr Glayinie’s factory, like thousands of others in the commercial centre of Beirut, was destroyed. Fortunately he was able to save some of his raw materials and finished goods because they were stored in a different area. However, his loss was estimated to be at what was then the equivalent of $100,000. Undaunted, he started another small factory with 10 sewing machines and 30 employees. He decided to expand his business, but the Israeli invasion destroyed the factory and all of stock was burned. This time the loss was estimated at $150,000.

He started his business once again from his own and his brothers’ savings. He then employed 15 girls using 7 sewing machines. The owner refused to employ any males in his business because he had a very bad experience with young males during the war period. He reported that,

"young workers are the product of the war: they are totally unpredictable, unreliable, unproductive and they complain most of the time. Most of them belong to political parties and militias and are employed by them. They go and fight during the night on the green line and in the morning come back tired to work. They produce poor quality goods and delay the production cycle in the firm. Once you accept any of them in your firm, they try to win you over with their ideologies and beliefs; they try to convince you to back their social and political programmes and to support their cause. This means that you have to pay financial support. Sometimes they clash at work, turning the business climate into an atmosphere charged with tension and stress. If you dismiss any of them he complains to his party labour representative who in turn comes to you and "convinces" you that you "have to" take him back to work. It is a
So Mr. Glayinie decided to replace all the males with females and solve his problem regardless of the cost. It took approximately six months to do this but it was far from easy. He was able to convince the males that he would be changing his business line after a while and that it would be better for them to take 3 months' compensation in advance and look for another job.

After six months all his employees were females: they were not all highly skilled, but at least he could now guarantee full control over his business. He still complains about unskilled employees, but this cannot be helped for several reasons. One is that a great number of skilled workers were either killed during the war or emigrated from Lebanon. Another reason is that skilled workers ask for high wages.

Despite all of these problems, Mr Glayinie feels better about the atmosphere in his firm and his relationship with his employees. The problems he complains about in his business environment could be solved in several ways, as he himself suggested. Of course this requires the involvement of the industrial unions, the government and other industrial representatives.

In practical terms, the director of a business (owner-manager) should build a very close and trusting relationship between himself and his employees which can be supported and encouraged by providing a social atmosphere at work, frequent contact between management and staff, increases in wages, ...etc. As regards the involvement of the government and industrial unions, the problem can be solved by establishing industrial training and apprenticeship schools and programmes, increasing the number of technical schools which teach students some skills and labour education based on mutual respect between the manager and his staff. Industrial unions and the government, he adds, should clarify the legal relationship between the owner and his employees, and specify their rights, as well as their duties, at work.

COMMENTS:

This case illustrates some important factors in the business environment, concentrating mainly on the morale of the firm and the relationship between the owner-manager and his employees. It also shows the destructive effects of the war as they are reflected in the business climate. Furthermore, it demonstrates clearly the absence of government control and the significant role played by the militia and other political parties which have replaced the government and taken over its responsibilities.

As an owner, Mr Glayieni was able to solve his business organisation problem easily, while others might not have been able to do so and could have risked their businesses. The need for social order and control seems to be one of the most important factors which can stabilise many sources of trouble and variations in the business environment and would certainly help both
the owner of the business and his employees.

8.4 CASE No 4. FAMILY BUSINESS AND MARKET COMPETITION.

Bader Electronic company, an electronic communication and telecommunications business firm, was established by Mr Khalil Bader in 1970. The firm's working power was 17 employees with an administrative manager and a part-time accountant. The main work of the firm is to assemble different types of communication and telecommunication equipment such as telephone exchangers, telephone sets, electric and electronic devices and inter-phones, ...etc. The owner is an electronic engineer with 30 years experience in this field. He has travelled extensively to many countries, including France and Britain, for training courses and business deals.

His business became prosperous between 1970 and 1976. He had many competitors in this line of business, most of which were large companies. His products were cheap and of a high standard. In addition he provided maintenance. In 1976 the business was destroyed as a result of fighting on the business site and all the remaining equipment and electronic accessories were looted. Losses were estimated at what was then the equivalent of $6,000.

The owner was able to change his business location and start up a new business from his own savings. In two years everything began to normalise in his business. However, the fighting in the capital had by this time spread to the location in which Mr. Bader had established his new business. After a few days of fighting, his business was partially destroyed: he lost $3,700 at 1979 prices.

Once again he was forced to change his business location: this time, however, the lease was very expensive and he started to come up against several problems. The most serious of these were his liquidity position and competition from other firms. His liquidity position was weak because of the substantial loss of his working capital and the size of the lump sum he had paid for his new shop lease. He also had to pay his employees whether they were working or not during closure days.

Another problem was Mr Bader's stock organisation. He kept at least 8 thousand items of stock which had to be well organised, shelved, and ordered in advanced in case of shortages. Thus his position was critical, in the presence of these factors.

The owner adopted several strategies in his effort to eliminate the risks to his business. The first was to cut the number of employees and replace some of them with members of his own family -such as his three sons- on the assembly line. This tactic reduced the bulk of his direct expenses. The second strategy was to approach his suppliers and convince them to provide him with more stock on a longer credit basis. The third strategy was to make most of his customers pay in cash: some 25 % to 30 % of orders were to be made in advance and on some orders full payment had to be made. His fourth plan was that he and his son (a computer engineer) would
computerise all of their stock and accounting procedures in the firm. This they did with a second hand Tandy P.C and LOTUS software, saving a great deal of time and money in the process. Computerisation did away with the part-time accountant's job and thus a saving was made on his wages. The fifth strategy was to employ his wife, (who has a BA degree in Business Administration), in place of the existing administrative manager, making another saving on wages.

A long-term strategy adopted by the owner involved opening a direct line with electronics and telecommunications companies abroad rather than dealing with local suppliers. He was finally able to make a deal with three big electronic companies, who agreed to supply him with their products and promised to provide him with credit facilities in the future if he could meet his financial obligations with them within a period of two years. This was a very successful tactic which resulted in the direct shipment of required stock at a lower price than that changed by market suppliers.

Now the owner is not concerned about his competitors in the market any more in the way that he was a few years ago. The price of his product is almost similar to theirs, but the advantage of his product is that it makes more profit per item thanks to the lower cost of production. It was the family cost strategy that allowed his business to survive.

COMMENTS.

This case demonstrates the importance of the effort of the family to prevent its business from failing, despite continuous crises and the brutal conditions of war. The struggle of the business owner and his family in these conditions has cost them most of their savings and has involved them personally in production and management like never before. This case also shows how environmental factors can change an independent, formally organised business into a family concern. It shows the extent to which such external factors may lead to change in the business management factor.

The changes forced on the firm by such external factors may have been a blessing in disguise, but the pressures on the firm are still very much in evidence. In the beginning there was an involuntary response from inside the firm which was quite impossible to resist. However, the six strategies followed by the owner, with the cooperation of his family and other flexible external factors (suppliers, customers,...etc) strengthened the firm's resolve to resist outside pressures. This case illustrates an ideal model of family cooperation and sacrifice which has enabled their business to survive in war conditions.

8.5 CASE No 5, THE PLASTIC FACTORY AND FINANCING GROWTH.

Nawaf-Plast is a plastics firm belonging to three brothers: one of them is the director assisted by an administrative manager. The firm was established during the war in 1979 and is located
in the southern suburb of Beirut. The area was stable until 1981-82 when, during the Israeli invasion, it was heavily bombarded by the Israeli army. Since then the area has become very unstable. In 1983, 1984 and 1985 the Lebanese army bombarded the whole of this suburb and most of the commercial and industrial zone was badly damaged. Another source of trouble is the frequent clashes which occur between local militia. Fortunately, however, the factory has not been badly damaged.

The director of the firm is a mechanical engineer with 10 years experience in this field. He is also qualified in public relations. The firm produces plastic bags for the local market. There are two melting machines to melt the plastic grains (P.F.S), a printing machine and several plastic cutting and joining machines. It employs 20 employees working two shifts. The firm's assets increased from L.L 770,000 to L.L 1,336,000 (or from $ 48,000 to $ 66,000) between 1981 and 1984, while the liabilities decreased from L.L 663,000 to L.L 343,000 (or from $ 41,430 to $ 17,150) during the same period. The profit reached an average of 10 % of the total sales revenues.

In 1985 the director decided to expand his business, but considering the degree of risk involved he decided that he was unable to use his own savings for this purpose. Therefore, he approached the National Bank for Industrial and Tourism Development (NBITD) for a long-term loan.

A feasibility study of the growth plan was carried out in cooperation with the bank. The main plan was to establish a new factory building with new equipment and machinery for larger scale production. Three cost phases were to be finished in one and a half years as follows:

Phase one,
Building constructions L.L 1,750,000 ~ $ 97,225

Phase two,
Equipment, Furniture & Fixtures L.L 350,000 ~ $ 19,500

Phase three,
Machinery;
Production line $ 67,400
Plastic film unit $ 96,500
Printing machine $ 25,350
Printing frames (2) $ 1,100
Cutting Mach., Air compressor, and other machines $ 96,800
TOTAL $ 287,050

The expected cost of growth was estimated as follow;

Factory plant L. L 1,750,000
Machinery L. L 5,477,000
Equipment & Furniture L. L 315,000
TOTAL L. L 7,542,000

The director requested a loan of L. L 5M. secured by real estate (first degree security), while
the rest of the money for the project was to come from the owners. The bank agreed to give a long-term (8 years) loan equal to L. L 4,000,000 to be withdrawn two years later at an interest rate of 5%. The loan was to mature in two and a half years after the contract had been signed and was semi-annually payable in 12 instalments. The N.B.I.T.D. scheduled the loan and the withdrawals were to be read as follows:

<table>
<thead>
<tr>
<th>Uses of the loan</th>
<th>L. L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factory building</td>
<td>1,300,000</td>
</tr>
<tr>
<td>Equipment &amp; Machinery</td>
<td>2,200,000</td>
</tr>
<tr>
<td>Fixtures &amp; Furniture</td>
<td>200,000</td>
</tr>
<tr>
<td>Working Capital</td>
<td>300,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>4,000,000</td>
</tr>
</tbody>
</table>

The bank's purpose in setting up the loan in this way was to ensure that the loan was used solely for the expansion plan, and not for any other purpose. The bank also requested the owners to insure all their new fixed assets with the National Investment Guarantee Scheme, as well as insuring all their employees.

**COMMENTS:**

This case illustrates several important points. The first point is the ability of the new firm to grow rapidly despite war conditions, successfully exploiting the market potential and drawing on its own aggressiveness (its ability to grow). Another point is the ability of owners to finance their growth through both external and internal sources.

External sources of finance came mainly via the NBITD long-term loan; the internal source was the owners savings, profits and cash flow. Another point is the importance of keeping financial records, making a strong case for financing purposes, and providing acceptable securities to guarantee the loan.

From another perspective, the case illustrates the NBITD's concentration on secured and profitable businesses. This policy allows only profitable businesses to grow, although some other needy firms might be rescued from failure if they were offered a long-term loan. Compared with the "Family Business and Market Competition" case, this case highlights the importance of financing needy firms under government security and the Bank control. It also illustrates the extent to which the bank goes to secure its investment, even with profitable business firms, which confirms the fact that there is no room for needy firms. Most of the directors in our sample complain of the bank's credit policy in this respect, a matter which was discussed earlier in this research.

8.6 CASE No.6, THE PRINTING, PUBLISHING AND DISTRIBUTION LINE.

Al-Karm is a printing press, publishing and distribution business, established in 1978, and located in the southern suburb of Beirut. In 1981-82 the firm were badly damaged ( during the
Israeli invasion), the roof of the building and many machines being hit in the shelling. The roof was unable to protect the remaining machines from the winter rain.

The owner was able to repair the roof and his damaged machines at a cost of L. L 5,000,000. Business began again and he was able to communicate with all his customers in Lebanon. It was not so easy, however, to communicate with overseas customers and it was difficult to meet their demands as quickly as usual.

In 1984, in an attempt to take control of the southern suburb of Beirut, the Lebanese army launched a full scale attack of at least one week of continuous shelling, the heaviest the suburb had ever experienced. As a result of the military operation, Mr Hussien, the director and the owner of Al-Karm, had to spend another L. L 4,000,000 to repair his printer. Over a period of three years he had spent a substantial amount of cash without any significant returns to show for it. He finally decided to sell the business firm.

Mr Jawad, who had 20 years experience in this line of business, became the owner and director of Al-Karm printing, accepting all the risks of the business and the consequences of its past history. The new owner held a diploma in printing from West-Germany and was very familiar with the world of printing, but the problems he inherited were not easy to solve.

To overcome his direct production problem he decided to increase the productivity of the firm in order to satisfy his customers and speed up his cash flow cycle. Increasing his productivity necessitated the employment of three employees, a printer (second hand) and some working capital. These were budgeted for as follows;

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost (L. L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printer (second hand)</td>
<td>150,000</td>
</tr>
<tr>
<td>Working capital</td>
<td>150,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>300,000</td>
</tr>
</tbody>
</table>

In addition to this he had to pay an outstanding debt of L. L 150,000, making the total budget L. L 450,000.

Implementing this plan without a bank loan or any other external source of finance put the owner in a critical financial position; lack of communications, the closure of the airport, the increase in the price of raw materials and the lack of technical skilled workers all exacerbated the problem.

To attain his goal in these adverse conditions he approached the commercial banks and presented his case to them. The business's past performance appeared to be one of the major obstacles in his case: losses had been made in the previous 3 years, and bank loans had increased from L. L 175,000 to L. L 234,000. Not surprisingly, the commercial banks turned down his application.
The owner realised that it would not be easy to obtain a loan without first improving the business's performance. Working hours were increased to two shifts and he began to meet his customers' orders. In two years the business was showing a profit of L. L 109,000. He then applied to the N.B.I.T.D. for a long-term loan. After the bank had reviewed his case, a new obstacles had emerged: the price of the machinery needed for the business had increased from L. L 150,000 to L. L 257,000.

However, the bank agreed to give him a rehabilitation loan based on the previous year's good performance and his personal commitments with other banks. Instead of L. L 4,000,000 the bank gave him L. L 4,950,000 to be withdrawn within six months of his signing the loan contract. The duration of the loan was 6 years with an interest rate of 5 %. Its maturity was two years from the signing the loan contract, and was to be paid semi-annually in 9 instalments.

COMMENTS:

This case illustrates two major points. Firstly, the difficulties and risks involved in buying-out a business by one person who would be able to avoid a lot of troubles if he had partners to help him; and, secondly, the fact that non-profitable businesses cannot easily obtain loans from commercial banks and the N.B.I.T.D., despite the latters' significant role in filling the gap for long-term loans.

As regards the first point, it is clear that while it is easy enough for a businessman to buy a business, it is not so easy to make a profit out it. Of course, market conditions determine the business's destiny to a certain extent but many problems may be avoided if the probabilities of success and failure are studied in the light of past performance and market conditions. For example, Mr Jawad could have shared the cost of the printer with a number of partners, who might have added extra cash to the business and leveraged its financial position with their own capital instead of bank loans. It could be argued that one of the characteristics of Lebanese small business owners is their love of independence when taking decisions. On the other hand, when the business is hit by problems it is the owner who bears the loss; the problem of risky environment is, as we have already seen, inordinately high in the case of Lebanon.

It is clear that, initially, a loan for Mr Jawad was out of the question, highlighting the financial difficulties that small firms encounter in the financial market. It also shows how commercial banks prefer profitable and risk-free business firms. Also highlighted here is the relative importance of the N.B.I.T.D. in filling the gap of long term finance in the market; without the rehabilitation loan from the N.B.I.T.D., Al-Karm could have had many financial troubles.
8.7 - REFERENCES:


2 - The name of the business is a fictitious one while the data is based on interviews with the directors of the businesses whose real names and the names of their businesses might not necessarily appear in the research. Mu'alem in Arabic means teacher, master or any person who is expert in his job.
Chapter Nine

THE RESEARCH FINDINGS, RECOMMENDATIONS AND FURTHER RESEARCH

The subject of small firms is a relatively new one, both theoretically and empirically, and this brings into question its ability to be framed in a theory. Its location within other disciplines - economics, finance, accounting, industrial economics, or policy studies - is also unclear.

Although it is difficult to predict the future of this subject at the moment, there is no doubt that it is growing in stature and is supplied by different disciplines such as those mentioned above. Nevertheless, this research focuses on the financial performance of the firm in a period of time full of uncertainties because of the war. Such research has not been carried out for at least 24 years in Lebanon.

9.1 FINDINGS.

- The change in the employment size of the small firm as a result of the war has led to a radical change in management and organisational structure.

- There are two different types of organisational structures found with two types of management team (owner-managers control and non-owner managers control).

- The importance of these findings is that each management type and their number was associated with the management of different types and sizes of resources. In turn it was found that each type of management in these various small firms follows different management strategies and policies. (see chapter 5)

- Although over 30% of the managers of small firms are non-owners, the majority of the small firms covered in this research are controlled by owner-managers and they are independent.[1] Although these owner-managers are highly qualified both academically and technically, some of them, however, are qualified in fields which are unrelated to the business they are running. The influence of family ties is reflected in the fact that most partnerships consist of two or more brothers, fathers and sons, husbands and wives etc.

- Most of the financial activities presented in the financial process were practised by most of the small firms studied in the survey. This result is completely different from results reported on small firms in other Middle Eastern in countries such as Egypt, Jordan and Saudi Arabia.

- Most of these financial activities were found to be performed by the owner-manager
and not by a group of managers or the management team. The financial process in its systematic structure as representative of the principle of financial management seems to be practised more by large size firms and according to the cultural backgrounds of the management (managers) of the firm. This phenomenon may be the effect of the following: a) the relatively small size of Lebanese small firms compared with those in the United States of America and the United Kingdom, the birth place of western management theory. b) the relative size and non-complex financial activities and transactions in the Lebanese small firm; and c) the sensitivity of the issue of finance, which is the key to control for the owner of the small firm.

- It can be concluded that responsibility and authority in the firm are not delegated to other managers (professional) which would tend to make their role a marginal one. As a result the owner-managers have to shoulder a heavy burden.

- It was shown (in chapter 5) that lower performance levels, lower profits and growth rates were associated with small firms who employ non-owner-managers. Storey, D. et al. (1987) reported that failed companies had a higher percentage (34%) of professional directors than successful companies had (20%). Fast growth firms had an average of 4.5 directors compared with an average of 0.9 directors in the non-fast growth firms. [2]

- The number of the management team (owner and non-owner-managers) has been given ample attention in this research. In many areas of tests of performance the type and the number of the management team showed a significant presence in several regression models and proved to be as important as other measures of performance such as the growth and profitability of the firm. The findings of the present study prove that it is an issue well worth pursuing: the results obtained are more than encouraging for further research.[3]

- In financial terms, the typical Lebanese small manufacturing firm can be described as follows: it has high profitability, of which it retains a considerable proportion (11.1% of total sources of funds) and it relies heavily on its own sources (savings and internal finance) of finance (51.1% of total sources of funds); it makes little use of long-term external sources; it relies fairly highly on borrowing from banks (30.6% of total sources of funds); it both gives and receives considerable trade credit.

- Small manufacturing firms rely fairly equally on their own resources (savings and retained profits, 51.5%) and external short term borrowings (bank loans and trade credit, 48.5%).

- The most striking fact to emerge from the survey is that the vast majority of small firms of the sample (75%) confirmed that their own savings were, and still are, the major source of finance for their business activities, followed by family resources.
- Credits to the economic sectors were growing at an average of 16.5%, whereas credits to the industrial sector to all economic sectors were growing at an average of 17.2%. As a result, small firms in Lebanon were able to obtain no more than 3.3% of the total applied for, and no more than 14% of the total number of loans approved by the government industrial bank. Of the total number of manufacturing firms which applied for loans, 156, or 36.7%, were small businesses. (see tables 6.8 & 6.9).

- The credit policy of the National Bank for Industrial and Tourism Development (N.B.I.T.D.) was discussed extensively in chapter 6. Reasons for refusing loans were not given by the N.B.I.T.D.. Several possible reasons have been listed (chapter 6). One of these was the stringent conditions laid down in the application form set up by the N.B.I.T.D., which were virtually impossible to fulfil in war conditions. It is believed that the N.B.I.T.D. gives loans only to profitable firms while ignoring the rest: if so, its industrial development role is open to question.

- Further questions arise concerning the size and number of loans. Since 1971, the N.B.I.T.D. has accepted on average no more than 7.2 loans a year in its five branches (one in each district of the country). In the light of this performance, the N.B.I.T.D. compared with other industrial development banks in the world was ranked bottom. We therefore question the efficiency and effectiveness of the bank: one may assume that it is costing the government more than it is expected to contribute to the development of the industrial sector.

- The use of discriminant analysis as a statistical technique was of great help in evaluating the credit worthiness of those firms which provided us with their financial statements (see chapter 6) based on their liquidity ratios.

- The application of this discriminant model meant that we were able to forecast which group of firms would be credit worthy and which group would not. The objective value of this linear model is that it can be employed by financial institutions (private or public) to predict which firms will be successful in their application for loans, based on certain characteristics of the firm set up by the creditor concerned. This enables financial institutions to avoid investing in firms which are unlikely to meet their obligations.

- The value of this model is that it enables financial institutions to evaluate new applications and old clients and identify risky companies at an early stage. This technique is cheap and saves time compared with the time and cost of the finance institution staff. However, it should be noted here that this model is not a substitute for the judgment of officials: rather it is a supplementary analytical tool which helps a final decision to be taken with greater confidence.

- In general, the government is expected to spare no effort in the promotion of the
economic and business sectors. The small business sectors, from the government's point of view, are sources of new jobs, economic and business dynamism, value added, and new wealth and social stability; this is of particular value in a country ravaged by war. Small business owners in return expect a clear public policy to be followed by the government and the private sector i.e. financial institutions which will contribute to their performance and make life easy and longer.

- The last small business conference was held in Beirut in 1968; since then there has not been a single initiative taken concerning small business firms in Lebanon. The present research has revealed the extent to which government and private sector alike have neglected this sector. There are no specialised institutions in this field (private or public) such as extension services, special guarantee schemes, advisory services or vocational training programmes.

- It is crucial that this sector be given now proper attention.

| Table 9.1: Characteristics of High and Low Profitable Small Firms in Lebanon 1975-1986 |
|------------------|---|---|---|---|---|---|---|---|---|---|---|
| EMPLO | EMPLOG | TEMP | PROD | MNGS | P.EXP | B.A | DWH | SR | TA | NA | AR | AP | RE | CAP | BANKL |
| H.P.FIRMS | 15.5 | -16.4% | 17.7 | 7.5% | 2.22 | 23.7 | 27 | 7.66 | 3222 | 2777 | 1722 | 773 | 276 | 994 | 1035 | 1394 |
| L.P.FIRMS | 20 | 16.8% | 22 | 5.9% | 1.9 | 15.0 | 16 | 10 | 2450 | 6200 | 3300 | 1030 | 960 | 655 | 2349 | 2050 |

**NOTE:** EMPLO=Employment without managers, EMPLOG=Employment growth, TEMP=Total Employment with managers, PROD=Productivity of the firm, MNGS=Total No of managers, P.EXP=Past Experience of the manager, B.A=Business age, DWH=Daily working hours, SR=Sales revenues, TA=Total Assets, NA=Net Assets, AP=Accounts Payable, AR=Accounts Receivables, RE=Return on Earnings, CAP=Owner Capital, ROI=Return on Invest. BANKL=Bank loans. H.P.FIRMS=High profit making firms which are above the profit mean (9 Firms); L.P.FIRMS=Low profit making firms which are below the profit mean (11 Firms).

| Table 9.2: Characteristics of Fast and Slow Growth Small Firms in Lebanon 1975-1986 |
|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EMPLO | EMPLOG | TEMP | PROD | MNGS | MNP | P.EXP | B.A | DWH | SR | TA | AR | AP | RE | CAP | ROI | BANKL |
| F.G.FIRMS | 14.2 | 25.13% | 16.1 | 7.2% | 1.87 | 0.5 | 21 | 15 | 8 | 2437 | 2625 | 1625 | 821 | 287 | 1075 | 875 | 23% | 1281 |
| S.G.FIRMS | 20.4 | -9.9% | 22.6 | 6.3% | 2.2 | 0.9 | 18.3 | 25.7 | 10 | 2450 | 6200 | 3300 | 1030 | 960 | 655 | 2349 | 18% | 2072 |

**NOTE:** EMPLO=Employment without managers, EMPLOG=Employment growth, TEMP=Total Employment with managers, PROD=Productivity of the firm, MNGS=Total No of managers, MNP=Managers non-owners, P.EXP=Past Experience of the manager, B.A=Business age, DWH=Daily working hours, SR=Sales revenues, TA=Total Assets, NA=Net Assets, AP=Accounts Payable, AR=Accounts Receivables, RE=Return on Earnings, CAP=Owner Capital, ROI=Return on Invest. BANKL=Bank loans. F.G.FIRMS=High growth making firms which are above the growth mean (8 Firms); L.G.FIRMS=Low growth making firms which are below the growth mean (11 Firms).

It must be clearly defined and investigated at a national level: special policies must be formulated through legislation to meet its particular needs. We are confident that the government and the private sector institutions eventually will come to realise that any step taken in this direction will be of great value to this sector. Several proposals and steps are suggested later in this respect.
- Investigation into the profitability of the small firms that were surveyed revealed that the greater the profitability of the firm, the higher was the retained earning and the lower were the bank loans. The higher the profitability of the firm was also correlated with a very low inventory and with highly experienced managers. Table 9.1 shows the characteristics of the firms with high and low profits.

- The low risk level detected in the profitability of the small firms was further evidence in support for our hypothesis that higher profit rates were achieved during the war period.

- Statistical analysis of the effect of war on the business performance has shown different results. There was no direct effect shown on the business sales returns or on the variable return on investment in the analysis of pre-tax profit. But in the case of profitability analysis (profit index) the war effect variable showed a positive coordination with several variables such as net assets and total assets and sales returns, demonstrating its positive effect on the business performance. (see pp. 192 - 95).

- Growing firms are of particular and significant interest. The hypothesis with which the research started was that profit is the cause of growth. The results suggest, however, that there is no clear relationship between profit and growth and that the two issues are totally independent of each other (see chapter seven). The difference between firms in respect to their varying stages and degrees of growth was extremely interesting. Fast-growth firms were found to have different characteristics in several areas compared with slow growth firms. The most striking characteristics of the fast growth firms were: the lower number of directors; the lower number of professional managers; the lower bank loans and higher retained profits. Table 12.2 shows some of the differences between fast-growth and slow-growth small firms.

- Owing to the paucity of information on firms which have failed, the researcher was unable to examine this issue (failed firms) which might have contributed to a broader view and greater understanding of the performance of small firms during the war period. There were no records of failed firms collected by the government of Lebanon during the war period. A central register of bankrupt companies is not maintained. The division of Lebanon meant that any records in particular commercial bank offices of failed client were not consolidated into overall reports of bankruptcies by the banks concerned.

9.2 RECOMMENDATIONS FOR POLICY FORMULATION.

Any policy formulation regarding small firms has to meet the ultimate needs of this sector. This requires detailed information about the sector and a deep understanding of how it works. There are at least three parties focusing their attention on small business firms; the management of the firm itself, the government and financial institutions.
Bearing this in mind, the author makes the following recommendations:

In the area of small business management:

1 - If small business owners employ professional managers, they are strongly advised to delegate some authority to them, to share with them their ideas, and invite them to take part in any important and vital decisions concerning the firm.

2 - Attention should be given to the ratio of professional managers to the size of the business and the number of employees, (span of control). If the business is not growing, owners should examine the size of the management team which is directing the firm's operations, work out how much they are costing the firm and match them with the required number of employees.

3 - Owner-managers are advised to encourage members of their family to become involved and share in the business management of the firm. It has been proved in many of the cases studied in this research that family involvement helps to cut costs and also to keep things going in difficult conditions, (see chapter eight).

4 - When making financial plans, owner-managers can assess their business performance better if they keep regular records of their business activities. Financial records and legal documents are very helpful in the process of evaluating any application for a loan. Thus owner-managers are strongly recommended to build up and use an efficient information system in their business.

5 - As regards the internal business environment, owner-managers should take into account the difficult circumstances of their employees - war conditions, the high cost of living, and so forth. Incentive rewards, a friendly social atmosphere and other benefits can create a better work environment and will certainly elevate the morale of the employee. (see chapter eight).

6 - Small firms who feel they lack market power are strongly advised to build up connections with the Chamber of Trade and Commerce and the Association of the Lebanese Industrialists since a wide range of connections and extensive marketing experience are invaluable. Alternatively, they may join the industrial unions of their industrial zone or the area in which they operate.

7 - Owner-managers rarely seek financial advice. Accounting companies and/or auditors do not give any sort of recommendations or financial advice to their customers (owner-managers) about the financial position of the firm. On the contrary, they sometimes falsify the accounts to satisfy the tax authorities and hide the real financial position of the firm. Therefore, the understanding and interpretation of financial
accounts is an important skill which the owner-manager should acquire. This can be achieved by his joining part-time technical courses in this field.

8 - Unsecured short-term credit such as overdrafts should be used carefully; it may be used during temporary cash shortages, but not for financing assets such as the purchasing of machinery, (as was reported in some cases of this research, see chapter five and six), unless cash inflow is expected.

9 - Given the difficulties involved in obtaining long-term secured loans and also the conditions of the Lebanese financial market, other sources of finance should be considered. Personal savings, directors loans and family resources are dynamic sources of finance and are also very cheap when compared with loans from banks and other institutions.

In the area of financing institutions (banks in particular), this study has revealed that there is no clear evidence of any special effort at all being directed to the needs of small firms. This was also confirmed by two credit managers. Financial facilities must not be withheld from small firms. It is suggested that the following steps should be taken in consideration.

1 - In order to build up a network of data base/information on small firms, financial institutions should prepare as many specialised studies as possible which survey, and concentrate on, small firms - at least within the ambit of their control (clients). In collaboration with universities and graduate schools, i.e. The American University of Beirut, Beirut University College and the Faculty of Business Administration of the Lebanese University, they should be able to finance several research projects in this field. The encouraging of lectures, seminars and conferences is another way of furthering this aim.

2 - Setting up a small business division, equipped with specialised staff and advice and a special financial package for small firms, is a vital step. For this, the study of past experience is most important. For example, models from the small business experience of the British clearing banks could be used as a basis for the establishment of similar divisions in each Lebanese bank.

3 - Banks such as the N.B.I.T.D. should seriously reconsider the conditions they stipulate on their loan application forms. Loan applications should be judged on merit and there should be equal opportunities for business of all sizes.

4 - The administration of the N.B.I.T.D. needs urgent re-evaluation in the light of its performance in developing the industrial sector. The absence of accurate data, i.e. the number and the amounts of loans given, should give clear evidence of the bank's achievements and why its administrative role is open to question.
5 - To the growing number of firms which are using short-term loans at high interest rates, banks should give additional medium and long-term sources of funds.

It is clear that with the situation in Lebanon being what it is, the Lebanese government lacks power over its own resources and hence can contribute in only a very limited way to the amelioration of Lebanese society. However, given even a limited role and presence, the government might be able to help the small business sector in the following ways:

1 - In order to group the real value of small firms and their contribution to the national economy, the government must conduct a survey of all small business firms in the economic sectors. An extensive survey will reveal the characteristics of small firms and also identify many parameters such as the management of small firms, financial resources, employment, etc.

2 - A team of experts should be formed to study how and when this survey should be started and completed. The experience of countries all over the world could be a useful source of information and guidance for such a step.

3 - The government must try its best to put an end to the road-tax on vehicles which is collected by the various militia groups at checkpoints on all sections of the country's roads.

4 - The government must endeavour to stamp out smuggling, which is seriously affecting Lebanese products, in particular those which pass through the Lebanese-Israeli border.

5 - Decreasing the customs rate for small firms which import raw materials for their products would effectively reduce the cost of the firm's finished goods.

6 - Income tax relief - especially on retained incomes - would provide another source of funds for financing the growth of small firms. Law No.38167, issued on May 22nd., 1967 deprived many small firms of any tax exemptions and reductions. This law must be reconsidered in the light of the monetary, economic and industrial changes which have taken place in the country.

7 - National protection against imported products will increase demand for Lebanese products if the latter are of a similar or better quality, or cheaper in price. An increase in both government purchases of a local product and large scale contracts with producers would provide a substantial amount of capital to subsidize many small firms.

8 - The government clearly has little control over the Electricity company of Lebanon.
which distributes electricity power discriminantly, and so it should introduce and support other cheap sources of electricity such as wind-powered electric generators and solar power systems. These projects should be subsidized by the government. Other services and utilities such as telephones could be replaced by wireless telecommunication equipment, licensed by the government.

9 - Since the government owns 51% of the Development Banks, it should put more pressure on them to give more loans to industrial firms, (rather than keeping 75% of the capital of these institutions (banks) frozen in their treasuries), to mobilise and dynamise their development role. The Housing Development Bank should provide long-term loans to small firms to be invested in industrial building and in reconstruction projects.

10 - There is a genuine need for a special governmental bureau to look after the needs and supervise the development of small firms in the country. The experience of the Small Business Administration in the United States of America and similar organisations in many developing and developed countries may be drawn on in this respect.

11 - The government should establish some permanent industrial marketing offices throughout the world. These would be able to stage industrial exhibitions and offer marketing advice to promote and market Lebanese industrial products. New open markets in the Middle East - Egypt for example, and the new united Yemen republic are ideal competitive outlets for Lebanese industrial products. There are great advantages to be gained by Lebanese industrialists in marketing their products or establishing new industrial projects in these countries.

In this context it is worth noting that the Lebanese-Saudi agreement of 1987 which allowed the industrial firms to export their products to Saudi Arabia, has led to a monopoly of Lebanese exports to that country by a handful of industrial firms who are members of the Association of Lebanese Industrialists. This agreement must be reviewed in the light of new developments in the Lebanese industrial market.

12 - There is a strong case for adopting certain systems of technical and managerial advice and education for Lebanese firms and their staff. This could be more conveniently applied as part of a general technical education plan. Throughout the education system there is a great need to increase and promote intermediate technical schools in order to supply the industrial sector with high calibre technical skills. To this end, the Al-Qalamoun Vocational Training Institute should be ready to take an active part in training industrial and managerial staff.

13 - Social legislation which offers employment protection; better conditions of employment, health and safety; along with employee representation and participation, must be improved or, where it is absent, introduced. Such legislation plays a vital role
in stabilising social conditions and enriching the lives of employees of small and large firms, especially under the war conditions of Lebanon. [4

9.3. LIMITATION OF THE RESEARCH:

Note should be taken of the lack of sufficient literature available with regard to small businesses within the period from 1975 to 1986, and as a result, it should be acknowledged that this research has certain methodological limitations related to overall design, techniques of measurement, sample and data collection. Limitations existing in research design are attributed to the unavailability of an ideal layout design in field research, due to the presence of unclear and overlapping district categorization. In accordance with the preceding factors, the study becomes a combination of exploratory, descriptive and predictive research, whereby each method has its own confined capability that supplies full explanatory information of an event or even a relationship between variables.

The degree of interference in the research outline was limited through the need for data organization, refinement and test requirements (see page 94).

With respect to the measuring techniques for small company performance, the analytical models contained in this research should be carefully recognized, so as to avoid allocating such elements in other studies that may fall under different conditions and data collection, unless it is convenient and safe to use them. However, the technique limitation contained in the analysis, should be seen in accordance to the nature of each variable, be it quantitative or qualitative, and to the limitation of their respective uses. With this in mind, our results showed that some variables were successfully fitted into mathematical models for forecast purposes. Other variables failed to do so, even when we used the semi-log techniques. For instance, the research results suggests that profit cannot be used to predict growth as proposed, hence, both variables, profit and growth, were totally independent of one another.

Problems which arose with the sampling and data collection, including the following. Firstly, a pilot questionnaire was unable to be distributed as a result of the time limitation of the field work and due to the war conditions in Lebanon. Secondly, the field work was limited to various factors, which included: the extent of available facilities, the amount of co-operation from small businesses, expertise of the researcher, the time span of the study, expenses, and resources available for data gathering. All this was in addition to the problems created by a war environment.

Thirdly, prewar information was unobtainable, therefore, the business performance of small firms that existed before the war were established as a control group against new companies that were established and were operating during the war period. Fourthly, the limited number of firms that supplied their financial records had minimised the
opportunities for extending the statistical tests, such as in semi-log regression models, which leads to an explanation of the higher variations and insignificant results that were sometimes obtained.

Finally, the limitation of the sample, although it was statistically representative, covering two geographic areas, along with the absence of other sectors and national statistics, have produced their effects and coloured the research results with interesting characteristics. A large sample of companies collected from different sectors and from wider geographic selections, might have given a more intense understanding of the dimensions of the performance of small firms in Lebanon.

9.4 SUGGESTIONS FOR FURTHER RESEARCH.

Since this research is merely the amalgamation of one person's thoughts, ideas and observations, it obviously hence has its limitations. Nevertheless, it is suggested that further study along similar lines is both possible and desirable, viz:

1 - An extension of the present study to encompass different geographical areas and industries would be complementary and would perhaps provide different results. The larger the sample of firms, the better our understanding of the dimensions of the problems and the wider the generalisability of the results.

2 - Further research should ideally cover other economic sectors, i.e. trading firms, services firms, tourism firms, ... and so on.

3 - With regard to finance, the role of the commercial banks in financing small firms is another area in need of research.

4 - The role of business partners who are not managers and the extent to which they contribute from outside the firm, financially and non-financially, needs to be clarified.

5 - Classification of bank loans, equity finance, family sources, personal savings, trade credit, and duration and cost of credit, all require in-depth research.

6 - The present study has naturally suffered from insufficient data, lack of national statistics and interruptions caused by the tragic Lebanese civil-war. This accounts for the absence of analysis of the detailed causes of failure of small firms and the kinds of damage associated with the failure of small firms. Such a gap can only be filled if the government takes serious steps to obtain relevant information on failed companies and the causes of their failure. In view of the information deficiencies, such a step is highly recommended as it may significantly contribute to a study of causes of business failure and other public interests. A study of these issues would be extremely useful.
7 - As far as qualitative variables and parameters are concerned, the behavioral aspects of small firm management, employment and the interaction between a small firm and the external environment have not been adequately studied.

8 - The financial performance of large businesses is another area which should be covered. Large firms supposedly provide detailed information on this. A study in this area might answer the question whether or not the model of financial performance and the principles of financial management are related to the size of the firm and its cultural roots.

In the view of the writer, the research topics and issues suggested above are of considerable importance. These are among fundamental questions which require adequate answers and there are many areas to be covered which were beyond the scope of the present work.
9.5 - REFERENCES.

1 - These two characteristics have been reported by Bolton Committee (1971), Storey, et. al., (1987).

2 - Storey, D. et. al., (1987), report that failed companies had a higher percentage (34%) of professional directors than in successful companies (20%). Fast-growth firms had an average of 4.5 directors compared to an average of 0.9 directors in nonfast-growth firms.


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QUESTIONNAIRE

SECTION ONE: GENERAL INFORMATION.

1 - General Information:
Location of the firm  Beirut .................. Mount Lebanon ............... 
Type of economic activity ..................
No. of employees between the period 1975 - 1985 .............
No. of working hours ............... 
Date of establishing the firm ............... 

2 - Qualifications of the owner/s
Technical degree ................ Specialisation ............... 
High school ................................................................................. 
University Degree............. Specialisation ............... 
No. of years in the work ............... 
Other qualifications ...........................................................................................................

3 - Legal form of the firm
Sole trader ............... 
Partnership ............... 
Corporate (private limited) ............... 
Corporate (public) ............... 

4 - Is the firm a family business?
Yes ............... 
No ............... 
If NO, did you start this firm? Yes ............... NO ............... 

5 - What was your motive when you start this firm?
For living ............... Profit making ............... 
Other reasons (please specify) ...........................................................................................................

6 - What were the steps that you followed when establishing the business?: (list them)
a- ................ b- ................ c- ................ d - ............... 
e- ................ f - ............... g - ............... h - ............... 

7 - From the list below, what steps did you follow when preparing for a new business or product. Please list them
in terms of priority.
  a - prepare a budget a - ............... 
b - prepare the required money b - ............... 
c - financial advice c - ............... 
d - feasibility study d - ............... 
e - chose among alternatives e - ............... 

SECTION TWO: FINANCIAL INFORMATION.

8 - What is the No of managers in the business ............... 

9 - Is the business run by more than one manager/owner?
Yes ............... No ............... 
Are they partners Yes ............... No ............... 

10 - Which of the following tale listed below took decisions?
1 - owner 2 - financial manager 3 - accounting manager 4 - personnel manager 5 - production manager.
Please put the proper number of the manager next to the decision.
  a - Investment decision ............... 
b - Amount of required finance ............... 
c - Size of working capital ............... 
d - Type of investment ............... 
e - Amount of external finance ............... 
f - Wages and salaries ............... 
g - sources of finance ............... 
h - Distribution of dividends ............... 
i - Paying daily expenses ............... 

11 - Do you plan when producing a new item of product?
Yes ............... No ............... 
If Yes, do you take any of the below in consideration? Please tick next to those you consider.
a - cost of raw materials ............... 
b - selling price ............... 
c - turn over ............... 
d - profit ............... 

259
e - No of expected customers ...............  
f - No of competitors ...............  
If your answer is No can you specify why? 

12 - Do you plan for the following financial activities:  
Sales turnover ............ Monthly ............ Seasonally ............ Annually  
Expenses ............ ............ ............ ............  

13 - Do you produce financial statements / reports?  
Yes ............ No ............  
If Yes please tick next to those you produce.  
a - profit and loss account ............  
b - balance sheet ............  
c - cash flow statement ............  
d - sales report ............  
e - purchasing report ............  
f - ratio analysis ............  
If No, why?  
a - not important ............  
b - cost more than their benefits ............  
c - no time to produce them ............  
d - no one knows how to produce them ............  
e - other reasons ............  

14 - If Yes, who produces them?  
a - financial Dept. ............  
b - accounting Dept. ............  
c - the firm's accountant ............  
d - external accountant ............  
e - others ............  

15 - For what purpose/s do you produce such reports?  
a - documentation ............  
b - analysis ............  
c - finance ............  
d - decision making ............  
e - partners / shareholders ............  
f - others ............  

SECTION THREE: FINANCING INFORMATION.  

16 - Which of the below-listed sources of finance did you use when you started your business?  
a - personal savings / sources ............  
b - family sources ............  
c - friends sources ............  
d - commercial banks ............  
e - specialised banks ............  
f - other sources ............  

17 - Do you deal with banks?  
Yes ............ No ............  

18 - If Yes, how many years after starting your business?  
a - one year ............  
b - two years ............  
c - three years ............  
d - more than three years ............  

19 - If No, then what are the reasons?  
a - high interest on loans ............  
b - do not deal with interest ............  
c - routine procedures ............  
d - involved risk ............  

20 - If you deal with banks, which of the following facilities does the bank provide?  
a - overdraft ............  
b - short term loan ............  
c - long term loan ............  
d - factoring ............  
e - trade finance ............  

21 - If you plan to expand your business, which of the following finance sources would you prefer to use?  
a - personal savings ............  

260
b - business profits

c - relatives and friends

d - developing companies

e - commercial banks

f - specialised banks

g - other sources

22 - If you have an overdraft facility, which of the following business activities is utilised for?
   a - purchasing new activities
   b - purchasing raw materials
   c - daily expenses
   d - other uses

23 - If you had the opportunity to expand your business, which of the following would you prefer?
   a - produce a new product
   b - the purchase of raw materials
   c - the purchase of new premises
   d - the rent of new premises
   e - the purchase of new premises
   f - move to another location
   g - increase the work force

24 - If you are seeking a loan, which of the following type of loan would you prefer?
   a - trade credit
   b - short-term loan
   c - long-term loan

SECTION FOUR: THE EFFECT OF THE WAR ON THE FIRM

25 - Did the war affect your business? YES NO

26 - How many times was your business affected by this war? Times.

27 - Which of the following damages did your business incur?
   a - damage to buildings
   b - destruction of machinery
   c - loss of working power
   d - loss of inventory
   e - loss of business location
   f - theft

28 - Did you change your business location because of the war? YES NO

29 - If yes, relist the following reasons (if appropriate) in order of priority.
   a - religious
   b - market conditions
   c - security
   d - forced to leave
   e - cease of finance
   f - the division of Beirut

30 - Due to the war, state briefly the most devastating financial problems facing your firm, and how can they be solved?

31 - State the most devastating financial problems facing your firm for non-war reasons, and how can they be solved?

32 - What kind of assistance would be of help in your business development?