

This report is presented as received by IDRC from project recipient(s). It has not been subjected to peer review or other review processes.

This work is used with the permission of Economic Research Forum.

© 2003, Economic Research Forum.

FEMISE RESEARCH REPORT
*Project on "Promoting Competitiveness in
Micro and Small Enterprises in the MENA Region"*

MSES POTENTIALS AND SUCCESS DETERMINANTS IN EGYPT 2003-2004: SPECIAL REFERENCE TO GENDER DIFFERENTIALS

Research Report Series No.: 0418 (FEM 21-31)

Principal Investigator:

Alia El-Mahdi

Survey Team:

Magued Osman, Ramadan Hamed, Faten AbdelFattah, Ali El Hefnawy,
Mohamed Abou El-Ela, Hanan Girgis

This research has been produced with the financial contributions of the European Commission (EC) through the FEMISE II project and the USAID, Egypt, also contributions from the Arab Fund for Economic and Social Development (AFESD), and the International Development Research Center, Canada (IDRC) are acknowledged. The content of this publication is the sole responsibility of the authors and can in no way be taken to reflect the views of those donors.

The production of this publication has benefited from the European Union funding (through the FEMISE program). Contributions from other donors are also gratefully acknowledged. The content of this publication is the sole responsibility of the authors and can in no way be taken to reflect the views of the European Union.

Table of Contents

ACKNOWLEDGEMENT	5
PREFACE	6
PART ONE: LITERATURE REVIEW	8
1.1 INTRODUCTION	8
1.2 A SYNOPSIS OF THE MAIN LITERATURE	8
1.3 THE APPROACHES USED IN STUDYING THE MICRO AND SMALL ENTERPRISES	12
1.4 DEFINITIONS OF THE SMALL ENTERPRISE AND THE INFORMAL ENTERPRISE	13
1.5 MAIN RESULTS FROM PREVIOUS RESEARCH (2002).....	14
1.6 THE AVAILABLE DATA SETS.....	15
INTRODUCTION TO THE STUDY	19
PART TWO: METHODOLOGY	21
2.1 SAMPLE DESIGN	21
2.2 LISTING	21
2.3 TRAINING	23
2.4 DATA COLLECTION	23
2.5 OFFICE EDITING	23
2.6 DATA PROCESSING ACTIVITIES	23
2.7 QUALITY CONTROL MEASURES.....	23
2.8 STATISTICAL ANALYSIS	23
PART THREE: THE MAIN FINDING OF THE COMPREHENSIVE MSES SURVEY 2003	25
3.1 A BRIEF PROFILE OF THE MSES AND THE ENTREPRENEURS	25
3.1.1 <i>The regional distribution of the MSES</i>	25
3.1.2 <i>The year of starting the business</i>	26
3.1.3 <i>The distinctive features of the entrepreneur/manager</i>	27
3.2 <i>The Main characteristics of the economic units</i>	31
3.3 <i>Extent of informality of economic activity</i>	36
3.4 ASSESSMENT OF PERFORMANCE	37
3.4.1 <i>Growth index (Index 1)</i>	37
3.4.2 <i>Future prospects index (Index 2)</i>	40
3.4.3 <i>Determinants of success/failure</i>	42
3.5 <i>Women entrepreneurs, societal, institutional and economic constraints</i>	45
3.6 <i>The characteristics of the household</i>	47
3.7 <i>Cases of Closed-down Enterprises</i>	50
CONCLUSION	53
PART FOUR: THE RE-LISTING AND FOLLOW-UP PHASES (2004)	55
SECTION 1: THE RE-LISTING PHASE: THE OBJECTIVES, THE METHODOLOGY, AND THE MAIN RESULTS	55
FIELDWORK ACTIVITIES:	55
1-Recruitment of staff.....	55
2-Training.....	55
3-Main Fieldwork	56
4-Data Processing.....	56
5-Quality Control Measures:.....	56
FINDINGS OF THE RE-LISTING PHASE:.....	56
1-Status of MSES	56
2-Transition of Activities	56
3-Change in the Number of Workers:.....	57
4-Comparing the Characteristics of the Exiting and Entering MSES in the Re-listing Phase:	59
SECTION 2: THE FOLLOW-UP PHASE: THE OBJECTIVES, THE METHODOLOGY, AND THE MAIN RESULTS.....	60
METHODOLOGY	61
FIELDWORK ACTIVITIES:	61
1-Training of Interviewers	61
2-Data Collection.....	61

<i>3-Data Processing Activities</i>	61
SECTION 3: CONCLUSION.....	66
PART FIVE: POLICY RECOMMENDATIONS.....	68
REFERENCES.....	70
APPENDIX 1	71
APPENDIX 2	75
APPENDIX 3	81
APPENDIX 4	85

List of Figures

Figure 1: The MSEs distribution according to region and area	26
Figure 2: The gender of entrepreneurs and the respondents of the survey	28
Figure 3: Mean years of education by gender and area.....	29
Figure 4: The distribution of EU by economic activities.....	32
Figure 5: The distribution of EU according to economic activities and formality.....	37
Figure 6: Value added per worker by size of EU (No. of workers).....	43
Figure 7: Value added per worker by value of assets	44
Figure 8 Distribution of HHs by area and family size	48
Figure 9: Distribution of HHs by area and number of rooms in their housing units.....	48
Figure 10: Distribution of HHs by location and ownership of housing units.....	48
Figure 11:	49
Figure 12: Distribution of closed-down enterprises by gender and area	50
Figure 13: Mean of survival years of closed-down EUs enterprises	50
Figure 14: Percent of closed-down enterprises by educational attainment	51
Figure 15: Years of starting the business.....	51
Figure 16: Years of closing down the business.....	52
Figure 17: Median survival duration of closed-down EU by year of starting the business	52
Figure 18: Median survival duration (in years) distributed according to educational levels.....	53
Figure 19: Distribution of the closed-down enterprises according the number of survival years	53
Figure 20: Distribution of the closed-down enterprises according the number of survival years	56
Figure 21: The transition of the eus between economic activities in 2003 and 2004	57
Figure 22: The change in some characteristics of EUs	57
Figure 23: The number of workers in listing and re-listing	58
Figure 24: Mean number of workers per enterprise in listing and re-listing	58
Figure 25: Change in the no. of workers in the listing and re-listing phases	58
Figure 26: Change in some economic variables in three time points	63
Figure 27: Change in some economic variables in three points of time.....	63
Figure 28: Change in the production costs in three time points.....	63
Figure 29: Future prospects of assets, employment and size of enterprise in two years.....	65
Figure 30: Future prospects of output and revenues in two years	65

List of Tables:

Table 1: Distribution of enterprises employing formal/informal workers in Egypt according to size, 1998	14
Table 2: The number of non-agricultural employers, own account workers and non-paid family workers and the number of total wage-workers in the population census 1996.....	16
Table 3: The employed individuals in the establishment census 1996.....	16
Table 4: Distribution of listed MSEs by governorate and sex of owner/manager	22
Table 5: Distribution of listed MSEs by governorate and density	22
Table 6: Distribution of listed MSEs by number of employees and sex	22
Table 7: The distribution of EU by years of establishment and location	26
Table 8: The distribution of EU by years of establishment and gender	26
Table 9: the distribution of EU by years of establishment and economic activity.....	27
Table 10: Enterprises by gender and age of entrepreneurs	28
Table 11: Entrepreneurs distribution compared to household members distribution by gender and marital status	29
Table 12: Entrepreneurs by gender & number of years of education	29
Table 13: Access to training by entrepreneurs according to different criteria	30
Table 14: Sources of training provided to entrepreneurs	30
Table 15: Enterprises by gender of entrepreneur & number of workers	31
Table 16: Enterprises by gender of entrepreneur & capital	31
Table 17: Enterprises by economic activity & gender of the entrepreneur	32
Table 18: Enterprises by economic activity & gender of the entrepreneur	32
Table 19: Enterprises by economic activity & number of workers	32
Table 20: Enterprises by economic activity & value of invested capital(LE).....	33
Table 21: The estimated monthly output/labor & capital/labor ratios in MSEs.....	33
Table 22: Technology used in the industry process	34
Table 23: Using the latest technology in business	34
Table 24: Sources of initial capital by size of enterprises.....	36
Table 25: Sources of credit in the last 12 months by size of enterprises.....	36
Table 26: MSEs distributed according to the rate of change in the four growth variables (% of EUs)	38
Table 27: Enterprises by region & categories of growth index (Index 1) (% of EUs).....	39
Table 28: Enterprises by economic activity & categories of index 1 (% of EUs).....	39
Table 29: Enterprises by number of workers & categories of index 1 (% of EUs).....	39
Table 30: Enterprises by value of invested capital & categories of index 1 (% of EUs).....	40
Table 31: Enterprises by formality & categories of index 1 (% of EUs).....	40
Table 32: Enterprises by region & categories of index 2 (% of EUs)	41
Table 33: Enterprises by economic activity & categories of index 2 (% of EUs).....	41
Table 34: Enterprises by number of workers & categories of index 2 (% of EUs).....	41
Table 35: Enterprises by value of invested capital & categories of index 2 (LE) (% of EUs)	41
Table 36: Enterprises by formality & categories of index 2 (% of EUs).....	42
Table 37: The logistic analysis of the success determinants.....	43
Table 38: Do women entrepreneurs face special problems?.....	45
Table 39: Special problems that encounter females (%).....	46
Table 40: The need for permission to work from the household.....	46
Table 41: Source of granting permission to females by area	46
Table 42: Community role in granting permission to work.....	47
Table 43: Conflicts between house and work duties.....	47
Table 44: Empowerment of women by earnings.....	47
Table 45: Distribution of HHs according to monthly income (LE).....	49
Table 46: Distribution of MSEs income to total HH income	49
Table 47: Distribution of closed-down enterprises by gender of owner and number of workers.....	50
Table 48: Closed-down enterprises by reason for closing down & gender	51
Table 49: The characteristics of the entering and exiting MSEs	59
Table 50: The Total and average number of workers in the exiting and entering enterprises	60
Table 51a: The Number of successful versus unsuccessful enterprises during 2003/2004	67
Table 51b: The percentage of successful versus unsuccessful enterprises during 2003/2004	67

Acknowledgement

This is the third report of a series of four, reporting on the results of the project on “Promoting Competitiveness in Micro and Small Enterprises” carried out by ERF.

The report is based on the extensive research undertaken by Dr. Alia El Mahdi, Cairo University and her team to whom ERF is grateful for the great efforts and the time they devoted to accomplish this project. Special thanks to Magued Osman, Ramadan Hamed, Faten AbdelFattah, Ali El Hefnawy, Mohamed Abou El-Ela and Hanan Girgis. Also ERF is grateful to the contributions of Dr. Mona El-Baradei, Cairo University and Dr. Kathly Powell. Dr. El Mahdi’s leadership of the work on the field survey, data collection and analysis and preparation of the country report, policy brief and data files is greatly acknowledged. The outcome of this project will make a significant contribution to the knowledge of the micro and small enterprises in Egypt.

Moreover, ERF is grateful to Dr. Heba Handoussa who launched this project, to Dr. Nader Fergany who directed the overall project, and to the project’s Advisory Committee: Dr. Jacques Charmes, ORSTOM, France; Dr. Donald Mead, Michigan University, USA; Dr. Ferhad Mehran, International Labor Office, Switzerland; Dr. Saad Nagi, Ohio State University; and Dr. Hernando de Soto, Institute for Liberty and Democracy, Peru.

Special thanks are due to Dr. Charmes, Dr. Mead and Dr. Mehran for their continued support and advice to the projects’ team. Without their help, the project would not have been accomplished.

The report has undergone several phases of review, and was the subject of discussions from policy makers, academics and specialists.

ERF greatly acknowledges the generous financial support by the MSE project donors. The Country study of Egypt has benefited from the financial contributions of the European Commission (through the FEMISE 2 Project), the USAID Egypt, the International Development Research Center, Canada (IDRC) and the Arab Fund for Economic and Social Development.

ERF is grateful to Dr. Samir Radwan, ERF Managing Director, for his continued and systematic support and advice for the whole duration of the project. Without his persistence this project would not have been accomplished. ERF also acknowledges the efforts done by its former staff member Azza El-Shinnawy for coordinating the project in its initial phase and by Maryse Louis for coordinating the project in its final phase.

The report has benefited from the contributions of many institutions and individuals from within and outside Egypt. Also appreciated is the work of editing, design and printing of the report.

Preface

This is the third country report carried out under the project on “Promoting Competitiveness in Micro and Small Enterprises” (MSE). In the past few years, Egypt has made substantive progress in ‘apprehending’ and ‘appreciating’ its MSE sector. Accounting for 97% of the enterprises in Egypt (formal and informal), the informal ones constitute 81% of this share. This sector employs 62% of formal and informal workers (where 88% are in the informal market). Given the considerable size of this sector, it holds a great potentials, if special designed polices are put in place that would satisfy its needs.

This report on Egypt represents the outcome of a large and extensive research process. The field survey gathered 5,000 micro and small enterprises. This study comes to fill this gap, and to shed some light on the basic needs of this sector in order to further enhance its growth. It is incontestable that promoting this sector, could be the solution of several economic and social problems, i.e. unemployment, illiteracy, low productivity, ..etc.

The project was initiated in 2000 by the Economic Research Forum, with the main objective to expand the knowledge on this sector in the Middle East and North Africa region, with the ultimate aim of designing relevant policies and specific programs to help this sector fulfill its enormous growth potentials. Constituting an average of 95% of the number of enterprises in the region, it is presumed that promoting this sector will have a positive spill-over effect on the economies of the region.

Discussions on the results of the project have pointed to an emerging consensus that it will be filling a knowledge gap related to the micro and small enterprises sector in the MENA region. Policies and strategies designed to promote this sector have not been adequately targeting their needs, and thus this project is considered to be of great relevance to the policy making process.

Specifically, the main contributions may be summarized as follows:

- The database gathered through the project based on field surveys is considered unique, as to the number of enterprises covered (18,000), and the information produced, including information on the enterprise, the entrepreneur and the household. A special focus on women entrepreneurs have been made throughout the survey. This mine of data will undoubtedly provide background information that enables policy makers to design relevant policies.
- The “Policy Briefs” gives a concise summary of the outcome of each country study and highlights the recommendations reached based on the analysis.
- The current Country reports series is prepared based on the findings of the surveys, detailed information about the performance of the enterprises, determinants of success and prospects for the future are given. Special focus on the status of women entrepreneurs is also made.
- The Synthesis report will have a comparative analytical approach of the case studies of the four countries. This report will asses the MSE sector in the four countries and will draw relevant policy recommendations for the region.

The Government of Egypt has taken seriously the aim of promoting this sector evidenced by the issuance of the new “Small Enterprise Development Law no. 141/2004” that has been considered as a “milestone in the development of Egypt’s small and micro enterprises”. The new law has defined the role of the Social Fund for Development to be the main institution responsible for the development of this sector in Egypt. It has also offered incentives and outlined the forms of support for start-up and existing small and micro enterprises. The law is an evidence of the country’s consent to promote this sector and to respond to the needs of this sector.

According to the national Implementation Report of Egypt: the Charter for Enterprise presented to the European Commission states that: *“small projects have proven to be the most effective development tool in creating real and productive employment opportunities and triggering community and individual potential towards private investment and self-employment, thus reducing unemployment and also poverty. Small projects are particularly efficient in using local technology and materials, and employing semi-skilled as well as non-skilled labor, thus maximizing the economy’s benefit from these resources. They also serve directly and indirectly as a means for mobilizing domestic savings for developmental purposes. Thus, the promotion and support of small & micro enterprises allow for the realization of both economic as well as social development”*.

There is no doubt that the database gathered on the MSE sector in Egypt will make a substantial contribution and would fill a gap at the national and regional level.

The analysis of data and the background research undertaken by Dr. El-Mahdi and her team was the subject of a national debate during the Micro and Small Enterprises final conference that took place in December 2005. Representatives of the Egyptian government, private sector, academics, banking, social funds, consultants and media participated in the conference and expressed their interest in the outcome of the project and the database in particular.

By presenting this unique, serious and up to standard work, ERF is hoping to have satisfied two important objectives of its own mission: to contribute to filling a knowledge gap in the region by providing a unique set of data that remains in the public domain; and to have contributed to drawing targeted policies by reaching out to the policy makers.

Samir Radwan
Managing Director

Part one: Literature Review

1.1 Introduction

The interest in MSEs is of a relatively recent nature. Several reasons led to the current concern about the issue of small and micro-enterprises. The small firms make various indispensable contributions to the economy. They act as major job providers, produce a significant part of the total value added, feed the larger industries with their needed inputs of production and after-sale services, as well as act as distributors/buyers of their products. In addition, small firms provide a large segment of the poor and middle-income population with low priced consumption goods and services.

Small firms also represent a useful channel through which small savings are being translated into investments. Finally, small enterprises could become major sources of constant innovation and experimentation and could thereby in some cases change the market structure.

The continuous influx of small firms, in all sectors of the economy by all segments of the society, is considered a healthy phenomenon and a crucial barometer for social and economic well-being¹. It reflects the extent of dynamism and movement in the market. The entry of new enterprises carries the possibility of the emergence of a group of dynamic, efficient, and ambitious entrepreneurs, who have the potential for growth, development, and expansion. Since informal economic units constitute the main bulk of small and micro enterprises, researchers were interested in studying the main characteristics of the informal enterprises.

The current economic developments that took place during the last decade in Egypt strengthened the concern in the actual and possible role of the SME/informal economic units. These changes include:

- 1- The declining contribution by the government and public sector to employment.
- 2- The emphasis of the privatisation policy on augmenting the economic capabilities of the private sector, whether as a job provider, an efficient and technically competent producer, or an exporter.
- 3- The realization that the MSEs play an essential role in the economic activity in Egypt. The estimates of the magnitude of this contribution differ according to the source of information, but there is an understanding that the MSEs represent more than 90% of the total number of enterprises in Egypt and that the informal units represent nearly 80% of the total MSEs².
- 4- The interest in reducing the hostile practices strongly imbedded in government bureaucracy that is responsible for issuing permits and overseeing that the economic activities are operating in a way that conforms with the existing legal and institutional framework.
- 5- The need to understand more about the home-based activities, that are usually practised by females to supplement the family income.
- 6- The necessity to support and restructure the small firms/activities to become more capable and efficient in facing the challenges resulting from the continuous developments in technology and the advent of the globalisation tide.

1.2 A Synopsis of the Main Literature

In response to these changes, several studies were conducted over the last two decades, with the intention to study more about functioning of SME/informal economic units. Objectives and therefore the scope of the studies varied according to the researchers' interests, research questions, and hypotheses.

Some of the available literature was of purely economic nature, while others dealt only with social, anthropological, demographic, housing, gender, poverty-related, or basic needs coverage issues.

Most of the studies were confined to certain geographical locations, social or economic issues, or particular groups. Few studies were of more comprehensive nature in terms of geographical and social

¹ Glover, J.W. (1998) *The New American Evolution: the Role and Impact of Small Firms* Office of Advocacy, p.3.

² El Mahdi, A., (2002) *The Labor Absorption Capacity of the Informal Sector in Egypt*, in R. Assaad, Ed. *The Egyptian Labor Market in an Era of Reform*, American University in Cairo Press.

coverage, as well as the incorporation of a multi-disciplinary approach in dealing with and comprehending the phenomenon of the small/micro firm.

However, if we restrict our discussion to the previous economic research that was conducted in Egypt, one could classify the studies into the following categories:

1-The Desk Studies: that are based on the analysis of the available data produced on a regular basis by CAPMAS, such as the population or establishment census (every 10 years) results and the yearly Labor Force Sample Surveys LFSS. These studies include studies by Birks and Sinclair (1982, *Employment and Development in Six Poor Arab States*), Abdel-Fadil (1980, *Informal Employment In Egypt*), Diab (1983, *The Hidden Economy in Egypt: A Social Accounting Matrix Approach*), Handoussa and Potter, (1992, *Egypt's Informal Sector: Engine of Growth?*) Hafez (1986, *Small Enterprises and Problems of Industrial Location and Regional Development in Egypt*).

In the following part we will try to pinpoint the main area of research on which the main studies concentrated their focus:

M.Abdel Fadil (1980) *Informal Sector Employment in Egypt*³

This study tried to estimate the size of the informal labor force based on several statistical data sets, namely, the Establishment Census 1972, the Census of Industrial Production 1966/67, the Population Census 1976, the Survey of Small Producers 1974. The Study classified informal workers into two groups: workers in handicrafts, trade, and services; and unemployed who undertake various odd jobs.

Birks and Sinclair (1982) *Employment and Development in Six Poor Arab States: Syria, Jordan, Sudan, South Yemen, Egypt and North Yemen*⁴

This study tried to estimate the size of the informal sector in Egypt based on the Population and Establishment Census 1976. The analysis concluded that the informal sector enterprises represented nearly 7% of the total enterprises in Egypt.

Charmes (1991) *Employment and Income in the Informal Sector of the Machrek and Maghreb countries*⁵

Contrary to Birks and Sinclair's results, Charmes' estimate revealed that the informal sector represented nearly 43.5% of the private enterprises. He also acknowledged the fact that the real figures may be higher because of the high cost of living, the low wage levels, and several circumstances that lead people to practice extra jobs to make ends meet. All these changes are usually difficult to track in the standard statistics.

Diab (1983) *The Hidden Economy in Egypt: A Social Accounting Matrix Approach*⁶

The emphasis in this study was on trying to establish the main sources of illegal (hidden) income. The researcher depended on several data sources such as the Public Security Authority, the Division for Tax Evasion, the Division of Registered Properties and the report of the District Attorney.

The research provided an estimate of the illegal sources of income, though it mentioned that the real illegal income is certainly far higher than the estimated.

Handoussa and Potter, (1992), *Egypt's Informal Sector: Engine of Growth?*⁷

The study attempted to evaluate the development, which occurred in the number and weight significance of those working in the informal sector (excluding the agricultural sector) through the

³ Abdel Fadil, M.(1980) *Informal Sector Employment in Egypt*, ILO/UNDP Geneva.

⁴ Birks,J.S. and Sinclair, C.A. (1982) *Employment and Development in Six Poor Arab States: Syria, Jordan, Sudan, South Yemen, Egypt and North Yemen* in *Journal of Middle East Studies*, 14, pp.35:51

⁵ Charmes, J. (1991)*Employment and Income in the Informal Sector of the Machrek and Maghreb Countries*, in Hopkins, Nicholas, ed. *Informal Sector in Egypt*, Cairo Papers in Social Science, Vol 14, No4, 1991, pp21:45.

⁶ Diab,J. (1983) *The Hidden Economy in Egypt: A Social Accounting Matrix Approach*, MA Thesis, Dept. of Economics, AUC, Cairo.

⁷ Handoussa and Potter, (1992), *Egypt's Informal Sector: Engine of Growth?* Paper presented to MESA conference, Portland, Oregon.

utilisation of data available in the Population Census (1976,1986), the Employment and the Wages and Hours of Work Bulletins (1985,1986).

The study also assessed the development in the number of small sized establishments and the workers therein during the years 1976, 1986, based on the data in the Establishments Census.

Finally, the study attempted to interpret the reasons for the evident contradiction in the numbers of workers in the informal sector using the previous two methods.

Hafez (1986), Small Enterprises and Problems of Industrial Location and Regional Development in Egypt⁸

In his study the researcher looked into the historical development of small enterprises in Egypt and how the process of change was affected by the phases of prosperity or decay that affected the economic and social environment.

2.Empirical studies: that include certain segments of the economy (economic activities or economic issues, sectors, groups of people, geographical locations ... etc.). These studies took either the enterprises, the household, or the individual as their unit of study.

The enterprise based approach was the most commonly used approach:

Mead (1982), Small Industries in Egypt: An Exploration of the Economics of Small Furniture Producers⁹

He conducted field research covering a sample of establishments engaged in the manufacturing of furniture. The questionnaire was applied to 25 establishments.

He also held interviews with the workers in 50 establishments in Cairo and Alexandria.

The objective of the study was to compare the small and large units competing with them from a number of different angles: like capital, size of labor, specialization, incomes, the contribution by the different factors of production, and the links between small and larger enterprises. Units having less than 10 workers were considered as being small sized.

Hoffman (1985), The Informal Sector in an Intermediate City: A Case in Egypt¹⁰

He conducted a study about the non-organized sector in the city of Fayoum in cooperation with the National Planning Institute.

The research combined the characteristics of both a theoretical and field studies. First, an analysis took place of the published official data regarding the study area, it was followed by a field study that covered 120 small sized establishments in the city of Fayoum.

The study aimed at depicting the present and future of the informal sector, its achievements, and potential in the labor market, especially regarding its ability to create new job opportunities.

Meyer (1988) Employment in Small Scale Manufacturing in Egypt¹¹

Meyer carried out a survey on the small sized establishments operating in the manufacturing industry in the city of Cairo. He chose six quarters characterized by a relatively high concentration ratio of workshops. During the period extending from September 1985 to April 1986, he held interviews with 4749 work proprietors and workers in 1149 enterprises. He did not clearly define the small sized establishment although he indicated that it is characterized by a low average number of workers, a labor intensive production operation and the low value of the capital utilized in the purchase of machines and equipment.

⁸ Hafez (1986) Small Enterprises and Problems of Industrial Location and Regional Development in Egypt, in conference on "Local Development in Egypt : Present Problems and Future Aspirations, Mansoura University, December 1986 pp:1:20.

⁹ Mead (1982, Small Industries in Egypt: An Exploration of the Economics of Small Furniture Producers), International Journal of Middle East Studies, 14, pp159:171.

¹⁰ Hoffman (1985, The Informal Sector in an Intermediate City: A Case in Egypt), in Economic Development and Cultural Change, 34, pp.263:277

¹¹ Meyer (1988) Employment in Small Scale Manufacturing in Egypt, British Society for Middle Eastern Studies, Bulletin 1989, Vol.14, No.2.

El-Mahdi and Mashhour (1989), Informal Sector in Urban Egypt: Case of Maarouf¹²

This study was regarded as a pilot study for a larger future research project that would encompass a large sample for Cairo. The intention was to try and test research tools such as the listing operations, the definition and its complexities, and the questionnaire forms which were applied to both the localized and non-localized economic units.

It was also intended as an attempt to identify the characteristics of the entrepreneurs and the enterprises working in the area.

One of the main results was the intensity of the informal enterprises in the area, though it is considered one of the most central quarters in the capital. It was thus revealed that 35% of the economic units were of an informal nature.

The second result was pertaining the definition, which proved first to be applicable and second to be indicative of the degrees of informality that existed or co-existed in the area.

El-Mahdi and EL Said, (1996) Small Industries Complex in the Tenth of Ramadan City 1996¹³

This study was conducted at the request of the Association of Small and Medium Investors of the Tenth of Ramadan City. It covered the entire complex of small enterprises, which included 54 enterprises.

The aim of the study was to try and identify the community of the members of the Association and their basic characteristics. There was also interest in knowing the kind of problems that were encountered by the small entrepreneurs, which could be helpful in future policy recommendations.

El-Mahdi and Powell (1999) Small Entrepreneurs in the Greater Cairo Community¹⁴

This study was conducted in May 1998. It was part of a household sample survey that covered Greater Cairo. One of the main goals of the study was to analyse the differentials between formal and informal enterprises, and between male and female entrepreneurs.

The study covered 3300 households and 577 economic units, which belonged to the members of the household.

3.The wide-scoped empirical studies: that tend to include representative sample surveys, and the questionnaire forms in these studies are usually designed to cover different perspectives of the studied population. In this context, three major studies were conducted through CAPMAS (1985, 1988, 1998) and the goal was to conduct a comprehensive study that reflects the main characteristics of the Egyptian labor market. Three studies on the informal sector in Egypt were the products of these surveys:

- (a) [1985] CAPMAS, A Study on the Labor Market in Egypt: the Informal Sector;
- (b) [1993] Rizk, The Unorganised Economic Sector: Definitions and Main Characteristics;
- (c) [2002] El-Mahdi, The Labor Absorption Capacity of the Informal Sector in Egypt.

Firstly, the CAPMAS Study on the Labor Market in Egypt: the Informal Sector was split into two parts:

The First part of the study is of a theoretical nature, covering the features of the problem understudy, the definition of the non-organized sector, the study assumptions, and the study approach. Next, a theoretical study was undertaken to analyse the available data, which gave some indicators regarding the informal sector, and lastly, the previous studies concerning the sector were reviewed.

The first part aimed to understand the main characteristics and capabilities of the sector and assess the missing or unavailable data so that it may be completed through the field survey.

¹² El-Mahdi and Mashhour (1994) The Informal Sector in Maarouf, the Center of Social and Criminal Studies, Cairo.

¹³ El-Mahdi, A. and H. ElSaid (1996), The Small Industries Complex in the 10th of Ramadan City, Friedrich Ebert Stiftung, Cairo.

¹⁴ El-Mahdi and K. Powell (1999) Small Entrepreneurs in the Greater Cairo Community, SRC, AUC, Cairo.

As for the second part of the report, it was comprised of a field study. It included a fieldwork questionnaire of 50 questions; the sample size reached 5000 cases with nearly 1000 cases (establishment) in each of the governorates of Cairo, Alexandria, Damietta, Assuit and Giza. The economic units under study represented the study unit, whether it was a localised unit where work is conducted, or non-localized units.

Secondly, Rizk, *The Unorganised Economic Sector: Definitions and Main Characteristics*¹⁵:

This study was conducted as a part of the labor force sample survey of October 1988. A special individual questionnaire was designed with the objective of investigating the general framework of the non-organized sector.

The questionnaire was administered to those who have reached the age of six or more and who have performed a job during the research week. Those working for the government, the public sector, the corporations, the limited partnership companies, and those with limited liability did not answer the questionnaire. The household was considered as the unit of study and the questionnaire was applied to 4464 individuals.

The economic units operating in the private sector were divided into three groups: those affiliated with the non-organized sector, the organized sector, or the semi-organized sector. The non-organized sector was defined as that which comprises units that are not administratively registered, include less than 5 workers, and the invested capital was less than L.E. 1000. As for the units affiliated with the organized sector, they are registered units where more than 5 workers operate, and where the invested capital exceeds L.E. 1000. Categories other than those two previously mentioned will fall under the semi-organized sector.

Thirdly, El-Mahdi, *The Absorption Capacity of the Informal Sector in Egypt ELMS98*)¹⁶:

This study was part of a household sample survey that was undertaken in October 1998. ELMS 98 included a sample of households (4800HH). The ELMS98 study included three modules, one of which was on the small households' enterprises.

Whenever any of the members of the HH proved to be the owner of a small enterprise (in legal terms such as a sole-proprietorship or a partnership) he was asked to answer the special "Enterprise" questionnaire. As a result, data for 1614 enterprises were collected and split in a further step into formal and informal economic units.

1.3 The approaches used in studying the micro and small enterprises

The approaches used in the previous studies were either household-based surveys [in the more comprehensive studies] or enterprise-based surveys. Each approach has its merits. Whereas, the HH approach enables the researcher to detect some of the home-based economic activities, it is not of particularly use in capturing the details of the economic units that work outside home, which represent the main bulk and the more dynamic part of the small and micro economic units (whether formal or informal).

The enterprise approach, on the other hand, avoids the previous difficulty and therefore is more beneficial -in case the goal was to understand more about the small enterprise in order to improve the setting in which it functions- in providing a wholesome picture of the way the small/informal unit operates and deals with its surroundings. It enables the researcher to look closer into the way the small firm copes with the changing market conditions, competitors, and suppliers, with the workers and with the rules and regulations. However, its main drawback is in its inability to reach the entrepreneurs working at home, since almost all the studies using this methodology tend to get their sample from the "visible" economic units, which could be found without having to knock on the household doors.

¹⁵ Rizk, S. (1993) *The Unorganised Economic Sector: Definitions and Main Characteristics*, CAPMAS, Cairo.

¹⁶ El-Mahdi, A. (2002) "The Absorption Capacity of the Informal Sector" in Assaad, R. Ed, *The Egyptian Labor Market in an Era of Reform*, the American University Press, Economic Research Forum Edition, Cairo.

1.4 Definitions of the small enterprise and the informal enterprise

Definitions of the SME in a certain country and between countries vary according to the concerned institution strategies, policies, and goals. In the case of Egypt there are several definitions that differ from one authority to the other (Ministry of Planning, the Ministry of Foreign Trade and Industry, the Egyptian Industrial Development Bank ... etc.). However, the recent Micro and Small Establishments Law(2005) has defined the micro enterprises as the ones that employ less than 10 workers, while the small enterprise employs 10-49 workers.

The researchers disagree amongst themselves on the cut-off point between micro and small on one-hand, and small and medium enterprises on the other hand. The variance in definitions depends on the research needs and objectives concerning the segment of enterprises it intends to target, investigate, and analyse. Therefore the cut-off point between the MSE and the medium-sized enterprise could be set high or low, using different criteria such as employment, size of capital, type of organisation or technology etc.

Before we go into the definitions of the informal sector, it has to be made clear that there is a distinction between the informal employment and the informal sector. The informal employment usually refers to wage-workers or non-paid family workers who are working either in the formal or informal sectors. The basis for difference between formal and informal workers is usually based either on the availability of a work contract, social security coverage, or the degree of permanency in work. Accordingly, a worker could be working on an informal basis in a formal company or even in the government if he/she is not covered by social insurance or bound by a contract. At the same time he would be working on a formal basis in a small enterprise if those conditions were existent.

As to the definitions of the informal enterprise, they seem to be more complex due to their variability. J. Charmes tried to capture the most widely-accepted definition, which is based on the international definition of the informal sector, and adopted as a resolution by the 15th International Conference of Labor Statisticians 1993, as follows:

“For statistical purposes, the informal sector is regarded as a group of production units which form a part, within the System of National Accounts (SNA), of the household sector as unincorporated enterprises owned by households.

Household enterprises (or unincorporated enterprises owned by households) are distinguished from corporations and quasi-corporations on the basis of their legal status and the type of accounts they hold. Accordingly, household enterprises are not constituted as separate legal entities independently of the household or of household members that own them, and no complete set of accounts are available that could permit a clear distinction between the production activities of the enterprises and the other activities of their owners.

The informal sector is defined, irrespective of the kind of workplace, the extent of fixed capital assets, the duration of the activity of the enterprise, and its operation, as a main or secondary activity comprising:

1) Informal self-owned enterprises which may employ family workers and employees on an occasional basis. For operational purposes and depending on national circumstances, this segment comprises either all self-owned enterprises, or only those which are not registered under specific forms of national legislation (factories or commercial acts, tax or social security laws, professional groups, regulatory or similar acts, and laws or regulations established by national legislative bodies).

2) Enterprises of informal employers which may employ one or more employees on a continuous basis and which comply with one or both of the following criteria :

- *size of the establishment below a specified level of employment (defined on the basis of minimum size requirements embodied in relevant national legislation or other empirical or statistical practices : the choice of the upper size limit taking account of the coverage of statistical enquiries in order to avoid an overlap),*

- *non-registration of the enterprise or its employees.*¹⁷

Researchers chose for the sake of studying the informal enterprises, several definitions, which were usually either based on the number of workers (enterprises employing less than 5 or 10 workers...etc), the size of capital, a combinations of the two previous variables, or certain legal rules and regulations such as the availability of license, registration, and social security coverage.

The variations in the choice of the defining criteria led to the existence of a number of studies and results that were not possible to compare with each other, especially where the role of the informal sector over time was concerned.

1.5 Main results from previous research (2002)

All previous research work seems to point out to the fact that the role of small private sector enterprises, especially in employment creation, was essential:

1- The working population of the Egyptian economy was estimated by 16.1 million persons in October 1998. The number of non-agricultural wage-workers (NAWW) in 1998 was estimated by nearly 9.8 million individuals. Out of this number, 4 million individuals worked in the private sector, representing 41% of the total NAWW. The informal workers constituted 81% of the private NAWW and the majority of them work in small and micro enterprises.

2- As to the weight of the small and micro enterprises within the structure of enterprises in Egypt, it could be best shown using the ELMS98 data of 1998. It is quite evident that small enterprises (less than 50 workers) represented more than 90% of the all private sector enterprises, while the informal enterprises constitute around 81% of the small enterprises.

The data also indicate that some of the informal enterprises (around 12%) employ more than 10 workers, which means, among other things, that informality does not denote inability to grow and expand.

Informality is more a case of no-acceptance of the on-going complicated laws of becoming formal (licensing, registering the enterprises, social security, taxes... etc), and therefore non-conforming by them, and at the same time forgoing the chance of being able to use any benefits attached to formality.

3- By looking at the data of the distribution of enterprises –formal and informal- according to the gender of the workers (see statistical appendix Table 1) one could notice that the informal female workers represent only 14% of the whole informal workers community, which is a relatively modest share given that females constitute 50% of the population.

Furthermore the highest concentration of informal female workers is in the enterprises employing 50+ workers.

Table 1: The Distribution of enterprises employing formal/informal workers in Egypt according to size in 1998¹⁸

Number of Workers	Formal Workers			Informal Workers		
	Male Col%	Fem Col%	Tot. Col%	Male Col%	Fem Col%	Tot. Col%
0-	2.0	2.7	2.1	60.5	54.3	60.0
5 -	5.6	5.5	5.6	20.5	13.9	19.8
10 -	15.7	17.9	16.0	8.4	12.6	8.8
30 - 49	10.7	12.6	11.0	1.9	4.3	0.0
50+	61.1	53.7	60.1	4.9	13.6	5.7
Don't know	4.9	7.5	5.2	3.8	1.4	3.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: El-Mahdi, A. , Ibid.

1- The size of capital is one of the limitations that face small and especially informal enterprises. As can be seen from the following table several characteristics could be concluded:

¹⁷ Charmes, J., (1998) Informal Sector, Poverty and Gender: A Review of Empirical Evidence, a background paper for the WDR2001.

¹⁸ Ibid, p.13

- the invested capital is rather small in both formal and informal economic units, however the latter suffers more from this constraint.
- the prevalence of female entrepreneurs is quite limited in both the formal and informal enterprises.
- the share of informal female entrepreneurs at each capital size indicates that enterprises owned by females are concentrated in the capital sizes less than LE100 and between LE100 and less than LE500. This result is a clear reflection of the poor financial conditions surrounding the female entrepreneurs.
- the formal female entrepreneurs seem to be faring better in comparison to their informal counterparts, since all of them are gathered in the highest capital category.

2- Despite the existence of numerous organizations (Ministry of Social Affairs, Ministry of Local Development, SFD, NGOs, Banks, Businessmen Associations, and Cooperatives) that are concerned with providing different types of support through financial, technical, marketing, and administrative assistance packages, the impact of these programs is quite limited according to the fieldwork results. The major source of finance is still through personal resources and informal channels. The formal sources of finance constitute but a mere minor percentage of total finance.

1.6 The available data sets

Before starting any new research, a look into the available data sets that offer information on the micro and small enterprises was necessary since it could shed some light on the available and missing information.

This insight was of help in designing the questionnaire in a way that could include questions that are pertinent to the new study and which were not tackled in previous data sets.

The existing data sets could also be useful for future comparisons; they may help in showing the areas where progress or deterioration may have happened.

In the following part, the main available data sets, which cover MSEs information, will be presented.

In this context there are four data sets that should be mentioned:

1. The Establishment and Population Census 1996
2. The Survey of Small Enterprises and Handicrafts 1996
3. The Economic Census 1997,2001
4. The Egyptian Labor Market Survey 1998

Firstly, Establishment Census 1996 and Population Census 1996 (CAPMAS):

This EC census is conducted every 10 years. The EC 1996 is the third following those of 1976 and 1986. Whereas, the first EC 1976 focused on the total number of Establishments, the second EC 1986 focused on the active ones, and the third EC 1996 included the distinction between the active and temporary, closed and empty units, and those under construction and to be opened soon.

The three censuses were based on a comprehensive survey of all existing establishments. A look at the kind of data provided in the last EC shows the type of classification available:

1. the establishments distributed according to work status
2. the establishments distributed according to number of workers
3. the establishments distributed according to economic sector and starting date
4. the establishments distributed according to legal status
5. the establishments distributed according to type of work location
6. the establishments distributed according to type of economic activity

Table 2: The number of non-agricultural employers, own account workers and non-paid family workers and the number of total wage-workers in the population census 1996

Economic Activity	Own Acc.	NPFW	Employers	Wage Workers	Total
Mining	434	57	994	61605	63090
Manufacture	172300	231	100313	1895413	2168257
Electricity	1509	121	717	156823	159170
construction	328602	53	48035	883362	1260052
Trade	483795	204	243411	695462	1422872
Hotels	32553	83	18081	153695	204412
Transport	214881	86	2548	691798	909313
Finance	1997	12	450	192395	194854
Services	38017	36	27086	446261	511400
Education	2708	75	711	1504748	1508242
Health	4907	36	5660	361951	372554
Commercial Services	38621	640	13267	241773	294301
Other	3242	1056	3008	89466	96772
Total	1,323,566	2,690	464,281	7,374,752	9,165,289

Source: CAPMAS, Population Census 1996.

One of the main positive points about the last EC is that it could be helpful in drawing an enterprise sample for the purpose of this study, as the information available in CAPMAS includes both the names and addresses of the enterprise owners. However, one of its drawbacks is the lack of information regarding the capital size of the establishment.

As to the Population Census, it is also conducted every ten years. It helps in shedding light on the different aspects related to the population size, gender, age, geographical distribution, employment, and unemployment...etc. But it does not provide us with sufficient information on the distribution of employment according to the size of the enterprises they work in –as is indicated in the table 2. Therefore it is not indicative where the size of economic units and the employment engaged in them is concerned. However, the PC includes all employment whether they worked inside or outside establishments.

Table 3: The employed individuals in the establishment census 1996

Economic Activity	Employers		Employees		Total Employment		Av No of Workers		Total
	1. Est. <10	2. Est. >10	3. Workers <10	4. Workers >10	5. Employed <10	6. Employed >10	In EU<10	In EU>10	
Mining	339	286	1379	23131	1762	23417	5.2	81.88	25179
Manufacture	181970	13051	424770	1011700	691641	1024751	3.8	78.52	1716392
Electricity	397	475	1494	33055	2002	33530	5.04	70.59	35532
construction	6910	1561	18016	97660	28416	99221	4.11	63.56	127637
Trade	392933	7461	666913	226011	1660244	233472	4.23	31.29	1893716
Hotels	54385	1751	107811	65284	190321	67035	3.5	38.28	257356
Transport	15226	1867	35248	78546	74421	80413	4.89	43.07	154834
Finance	2137	2400	7982	92791	10695	95191	5	39.66	105886
Services	35870	1194	63052	39113	115484	40307	3.22	33.76	155791
Education	3301	1400	9295	54559	14766	55959	4.47	39.97	70725
Health	42649	1594	68155	41241	118114	42835	2.77	26.87	160949
Commercial services	43521	1107	69478	31764	184493	32871	4.24	29.69	217364
Other	505	211	1377	4208	1882	4419	3.73	20.94	6301
Total	780,143	34,358	1,474,970	1,799,063	3,094,241	1,833,421	3.97	53.36	4,927,662

Source: CAPMAS, Establishment Census 1996.

The previous table reflects several of the most important features of the EC 1996:

1. The small establishments (less than 10 workers) represent the main bulk of establishments in Egypt. The average size is around 4 workers per establishment.
2. Small establishments employ 63% of the total employment and represent 95.8% of the total number of establishments.
3. Establishments employing more than 10 workers are also small since their average size does not exceed 53 workers per establishment.
4. The largest concentration of workers is in the mining and manufacturing establishments.

Secondly, the Survey of Small Enterprises and Handicrafts (SSEH) 1996 (CAPMAS & SFD)

This survey was conducted upon the request of the SFD with an aim to establish a wide and accurate database of small enterprises (less than 10 workers) that are working in manufacturing, maintenance, and repair activities. The database would thus be useful in getting information on several pertinent variables such as:

- Workers and wage levels
- Intermediate inputs of production (goods or services)
- Other expenditures
- Production, sales and exports
- Unutilized capacities
- Techniques of production (manual, semi-automatic, automated)
- Marketing and related problems
- Expansion possibilities
- Invested capital (fixed and variable)
- Sources of finance
- Loans if available, and reasons for not getting them if not available
- Other information

The survey used the data of the EC 1996 records and was conducted during April-July 1997. It revealed that the number of establishments was 344556. The establishments employing 2-4 workers represented 56% of the total sample. The manufacturing establishments accounted for 72% of the total number. The most prevalent manufacturing activities - in terms of the total number of workers - were furniture and ready-made clothes manufacturing. As to the largest enterprises in terms of average employment, data shows that the chemical industry was the leader in this context.

Thirdly, the Economic Census 1997, 2001 (CAPMAS)

The census was conducted in 1997 and 2001 based on the framework provided by the Establishments Census. It covered all establishments, whether governmental, public sector, or private (organized and unorganized) sector, as well as investment companies. A complete survey resulted in getting information on 1.5 million establishments working in 24 main economic activities including agricultural ones. The survey used 7 specialized questionnaire forms.

The information provided by this census include the following variables:

- Number of establishments in every economic activity
- Net fixed assets
- Intermediary inputs, wages, social insurance, and depreciation allowance
- Total value of production and revenues
- Net value of production and revenues

The information available in this census is valuable. However, due to the fact that the names and addresses of the entrepreneurs were not included as part of the data entered into the dataset, it would be difficult and time consuming to draw a sample of enterprises out of this dataset.

Fourthly, the Egyptian Labor Market Survey 1998

The ELMS98 was a special round of the labor force sample survey. The preparation started in mid 1997 and the fieldwork was conducted in October-November 1998. The household sample included 4800 HH. The study encompassed 5 modules on employment/unemployment, earnings, mobility, and household enterprise. Every household member, who proved to own an enterprise was asked to answer the questions of the HH enterprise module. The last module included data on the household enterprises(1614 enterprises). The questions covered information on the following variables:

1. The economic activity
2. The HH members working in the economic unit (EU)
3. Starting date of activity
4. Partnership with others
5. Description of the workplace
6. Number of workers and their relationship to the EU owner(s)
7. Value of capital and sources of finance
8. Loans, lending conditions, and use of loans
9. Main buyers of the product and marketing conditions
10. Legal procedures: license, registration, and keeping regular books
11. Other varied questions

The enterprise module in the ELMS98 study, though it included several important questions, had its drawbacks. The two most important of which are:

- a) It was part of a large Household sample survey, which included other modules. The target of covering several labor market issues left less room for a more comprehensive enterprise questionnaire.
- b) The enterprise sample was quite limited in size and thus results were difficult to be generalized.

Despite the fact that there are several datasets which shed some light on the micro and small enterprises sector, there is quite a long list of issues that need to be investigated and analysed in order to help the different stakeholders design the appropriate policies in support of such a vibrant and vital sector. The MSEs research whose results will be discussed in the following sections of the document, is a major tool in this respect.

Introduction to the study

The undertaking of a survey of such magnitude is almost a dream come true for several reasons. Firstly, this survey is considered to be the largest one covering micro and small enterprises in Egypt, at least during the last two decades; secondly, the design of the questionnaire forms and the questions included are more comprehensive in terms of their coverage of policy-relevant issues than most of the previous surveys that were conducted; thirdly, the methodology adopted in choosing the sample and the listing techniques has been seriously tested; and fourthly, the inclusion of a number of study approaches such as the comprehensive literature review, the base studies, the case studies, and the focus group discussions analysis add richness and depth to the results, and finally, the main emphasis of the study is on examining the MSEs situation from a close perspective so as to come up with practical and action-oriented policy solutions.

The following hypotheses are tested and their implications on policy are elaborated in the study¹⁹:

Size matters

The size of the enterprise is positively related to its performance. Evidence on this hypothesis is provided by a number of studies in developed and developing countries (Kihlstrom and Laffont, 1979, and Javamovic, 1982). For the purpose of this research project, the question is what are the cut-off points that determine discreet changes in productivity, and how important are the improvements in productivity that are observed as one moves from one size category to the next?

Age and experience matters

Older enterprises perform better and have a better capacity to survive, grow, and promote human capital formation. The question is: What is the length of the vulnerable infancy period and the relative importance of various skill, technology, and other dynamic variables responsible for improved performance of older firms?

Clusters matters

Enterprises working in clusters do better than those without these linkages. In dynamic networks and clusters, subcontracting contributes to efficiency and hence competitiveness at the enterprise levels. Upward and downward linkages in and across related activities and industries increase coordination and cooperation to enhance productivity and exploit market niches and demand. Additionally, size, access to infrastructure, transportation and services are related factors which feed into efficiency and competitiveness.

Management organization and entrepreneurship matters

They explain large discrepancies in Total Factor Productivity across enterprises.

Gender matters

Women entrepreneurs are concentrated in the one-person sized category. Women are faced with additional and specific difficulties compared to their male counterparts. Women work more hours, earn less, and generally have less education than their male counterparts. They have less access to training, credit, and markets. They are frequently homebound and have to divide their time between their work and their household chores. The question is: What are the socio-economic constraints that condemn them to dead-end marginal activities?

Youth matters

Young new entrepreneurs with a formal education experience higher failure in their start-up activities than their trained on-the-job counterparts. The question is: What are the main variables that determine failure inspite of higher educational attainment?

¹⁹ ERF, Promoting Competiveness In The Micro And Small Enterprise Sector In Mena, Annex 1, Description of Operations, p.16.

Institutions Matter

Policies towards micro enterprises and their implementation do not present an enabling environment. Current policies work against the development of micro and small entrepreneurs and their integration into formality - and unless reforms are introduced, globalization and trade liberalization are likely to threaten the survival of a large segment of MSEs. Existing discrimination against these in the incentives and institutional framework presently raises transaction costs and reinforces market failure (illiquid assets, contract enforcement, poor access to infrastructure, and information asymmetry). Laws and regulations inhibit the development of contractual labor relations, the provision of safety standards, access to social security benefits.

The study is comprised of three main parts:

Part one includes the introduction which states the main hypotheses of the research project.

Part two describes the different phases of the study and the methodology used in each phase.

Part three presents the main findings of the survey and offers explanation to certain issues or phenomena that appear to be of relevance. Special emphasis is put on gender differences. It will also try to test the previous hypotheses and find out which conditions actually make a difference and distinguish between a losing and a successful company.

Part two: Methodology ²⁰

The Small and Micro Enterprises Survey (MSES) – Egypt 2003 is a sample survey designed to provide estimates for the key indicators related to the activities, manpower structure and the financial characteristics of MSEs. This report describes the methodology applied in the MSES including listing of enterprises, sample design, training of interviewers, data collection, and data entry and processing.

2.1 Sample design

The primary objective of the sample design of MSES was to provide estimates on the national level and 3 major administrative regions (Metropolitan areas, Lower Egypt, and Upper Egypt). Eight governorates were selected from the 3 regions. The selection was based on an attempt to represent governorates with different economic characteristics.

The sample for the MSES is a multi-stage probability sample. In the first stage, primary sampling units (PSU) were randomly selected from each governorate. The PSU's are shiakha/towns in urban areas and villages in rural areas. Information from the 1996 census was used in constructing the frame from which the PSUs were selected. A total of 120 PSUs were selected from the chosen governorates; 84 in urban areas and 36 in rural areas. Selected governorates and PSU's are listed in appendix 1.

The second stage was based on the results of the listing of enterprises within PSU's. Enterprises were classified into 3 categories in terms of MSEs density. Density was designated according to the mean number of MSEs per building and PSUs were divided into 3 equal groups; the lowest third (Low), the medium third (Medium) and the highest third (High). A stratified random sample of enterprises was selected from the list of enterprises within each PSU.

In the third stage, a stratified random sample was selected from each density category within the PSU. The two strata include male and female owner/manager. Female owners/managers were over sampled (double-weighted) in order to maintain a sufficient number of female respondents. The sample size was predetermined by 5000 private MSEs to provide statistical reliable estimates for indicators at the region level. The sample size was inflated to 5400 to compensate for a possible 8% of non-response, and was assigned to Governorates and to PSUs proportional to the number of listed MSEs.

2.2 Listing

To implement the third stage, a listing of all MSEs in the chosen PSUs was compiled. Fifteen listers were chosen and trained. The listing operation consisted of the following activities:

1. Listing all the MSEs in each PSU block by block.
2. Recording (on a special form prepared for this purpose) for each SME, name of SME, name of owner or manager, sex of owner or manager, number of workers, activity, sector, address and telephone number. Drawing a rough map for the PSU and record some important information and/or landmarks to help reaching the PSU in the Data Collection Stage.

Around 26,000 MSEs were Listed in the 120 PSUs. Nearly 3000 were excluded for not being a private enterprise (not eligible for data collection). The Listing Phase took 3 weeks (during March 2003). An ACCESS database was developed and all the information of the listing was entered in this database using 10 data entry clerks.

Distribution of listed MSEs by governorate and sex of owner/manager, by governorate and density, and by number of employees and sex of owner/manager are presented in Tables 4 to 6.

²⁰ This part was prepared by Professors Magued Osman and Ramdan Hamed.

Table 4: Distribution of listed MSEs by governorate and sex of owner/manager

Governorate	Sex of Owner /Manager		Total
	Male	Female	
Cairo	4934 94%	306 6%	5240
Giza	4737 94%	318 6%	5055
Alexandria	2134 95%	113 5%	2247
Damietta	1336 94%	80 6%	1416
Gharbia	2075 90%	225 10%	2300
Fayoum	1234 93%	94 7%	1328
Assiut	2750 94%	184 6%	2934
Souhag	2335 94%	141 6%	2476
Total	21535 94%	1461 6%	22996

Table 5: Distribution of listed MSEs by governorate and density

Governorate	Density			Total
	Low	Med	High	
Cairo	532 10%	1974 38%	2734 52%	5240
Giza	0 0%	1439 29%	3616 71%	5055
Alexandria	1892 82%	367 16%	38 2%	2247
Damietta	336 23%	476 34%	604 43%	1416
Gharbia	809 35%	1090 47%	401 17%	2300
Fayoum	88 7%	312 23%	928 70%	1328
Assiut	1763 60%	1171 40%	0 0%	2934
Souhag	210 9%	725 29%	1541 62%	2476
Total	5580 24%	7554 33%	9862 43%	22996

Table 6: Distribution of listed MSEs by number of employees and sex

Number of Employees	Male %	Female %	Total %
1	42	51	43
2	37	34	37
3	12	9	12
4	4	3	4
5+	4	3	4
Total number	21535	1461	22996

2.3 Training

Around 70 university graduates with previous experience in data collection were recruited for interviewing, supervising, editing, and data entry. All candidates attended training for two weeks. The training Included:

1. Lectures on the objectives of the survey and definition of terms used in the survey.
2. Lectures on how to conduct interviews.
3. Practical sessions to improve interviewing skills using role playing and mock interviews.
4. Specific sessions with visual aids on how to fill out questionnaires.
5. Field practices.

Trainees who failed to show interest in the survey were terminated. Forty interviewers, 6 supervisors and 2 general supervisors were selected for data collection operations.

2.4 Data collection

The Field Staff was divided into 6 teams; each team has a supervisor and 6-7 interviewers. The fieldwork for the MSES began on April 1st, 2003 and was completed on May 15th, 2003. In addition to leading the team, supervisors were responsible for field editing of the questionnaires. To assure quality, 2 general supervisors were responsible for checking the collected data by re-interviewing a randomly selected sample from each interviewer's work. The number of completed interviews reached 4962 with 92 percent response rate (see the Appendix 1 for response rate by governorate and PSU).

2.5 Office editing

Office editors reviewed questionnaires for internal consistency and completeness. Coding was conducted at the office prior to data entry. Office editors were instructed to report any problems detected while editing the questionnaires, which were reviewed by one senior staff. One senior staff, one assistant, and 10 office editors were recruited for these purposes.

2.6 Data processing activities

Data were entered on PCs using the Integrated System for Survey Analysis (ISSA), a software package developed for large scale multi-level surveys. Around 10 data entry personnel were recruited and trained to process the MSES data. During data entry, 50 percent of the questionnaires were re-entered for verification. Data processing was completed by the last week of May 2003.

2.7 Quality control measures

The Quality of data was confirmed using several measures such as:

1. Selecting and training qualified field staff,
2. Field editing (by supervisors),
3. Field checking (by general supervisors),
4. Office editing, and
5. Re-entry of 50 percent of questionnaires.

Enterprise Weight: The weight assigned to each enterprise is a combination of the EU weight in Region, Governorate, Area (urban/rural) and size group (number of workers).

The following weights were calculated:

$$W_i = \frac{N_i}{N} \times \frac{n}{n_i}$$

where $i = 1, 2, 3$ such that 1 represents Metropolitan areas, 2 represents Lower Egypt and 3 represents Upper Egypt,

N is the number of EUs in the selected regions in the population,

N_i is the number of EUs in the region i in the population,

n is the number of EUs in the Sample,

n_i is the number of EUs in region i in the sample.

$$W_{ij} = \frac{M_{ij}}{M_i} \times \frac{m_i}{m_{ij}}, \quad j = i_1, i_2, i_3$$

where,

M_i is the total number of EUs in the selected governorates in region i in the population,

M_{ij} is the number of EUs in governorate j in the population,

m_i is the total number of EUs in region i in the sample,

m_{ij} is the number of EUs in region i and governorate j in the sample.

$$W_{ijk} = \frac{R_{ijk}}{R_{ij}} \times \frac{r_{ij}}{r_{ijk}}$$

where $k = 1, 2$, such that 1 represents Urban areas and 2 represents Rural areas,

R_{ij} is the number of EUs in governorate j in region i in the population,

R_{ijk} is the number of EUs in area k in the governorate j in region i in the population,

r_{ij} is the number of EUs in governorate j in region i in the sample,

r_{ijk} is the number of EUs in area k in the governorate j in region i in the sample.

$$W_{ijks} = \frac{L_{ijks}}{L_{ijk}} \times \frac{l_{ijk}}{l_{ijks}}, \quad s = 1, 2, \dots, n$$

where,

L_{ijk} is the total number of EUs in the selected sizes groups in area k in governorate j in region i in the population,

L_{ijks} is the number of EUs in the size group s in area k in governorate j in region i in the population ,

L_{ijk} is the total number of EUs in area k in governorate j in region i in the sample,

l_{ijks} is the number of EUs in the size group s in area k in governorate j in region i in the sample.

$$W_{ijkst} = W_i \times W_{ij} \times W_{ijk} \times W_{ijks}$$

Weights were calculated based on the population census of 1996 and the economic census of 2001.

Household Weight: The assigned weight was calculated based on the population census of 1996 within each region, government, and area.

Part Three: The main finding of the comprehensive MSEs survey 2003

In the planning for this research several issues were raised by the coordinator of the project, the principal investigators, and the consultants of the team at various phases of preparation.

The main topics - aside from methodology - that captured discussion were:

- How do the micro and small enterprises fare in the market?
- What kind of constraints do they encounter?
- Do the surrounding institutions matter to their survival and performance?
- Does education and training affect the ability of entrepreneurs to develop and expand?
- Do MSEs get a chance to graduate to larger sizes? And under which circumstances do they become more capable to do so?
- Does the existence in a cluster community or an industrial zone help in spreading knowledge and improving efficiency?
- Do females encounter special problems in the market due to their gender? What kind of difficulties are gender-oriented?

The research tries to answer most of these questions through the discussion of the results.

Since one of the main goals of this research was to investigate the situation of female entrepreneurs in the Egyptian market, the distinction according to gender will help in shedding light on the differences between males and females, and on the areas where females face special constraints. The paper will try to answer the previous questions in the next five sections:

The first section deals with the main characteristics of MSEs and the entrepreneurs;

The second section will describe the prevalence of informality;

The third section will discuss the growth status, the perception of the entrepreneurs with regards the future, and the determinants of success;

The fourth section deals with household characteristics and the failing enterprises;

The last section will present the main conclusions.

3.1 A brief profile of the MSEs and the entrepreneurs

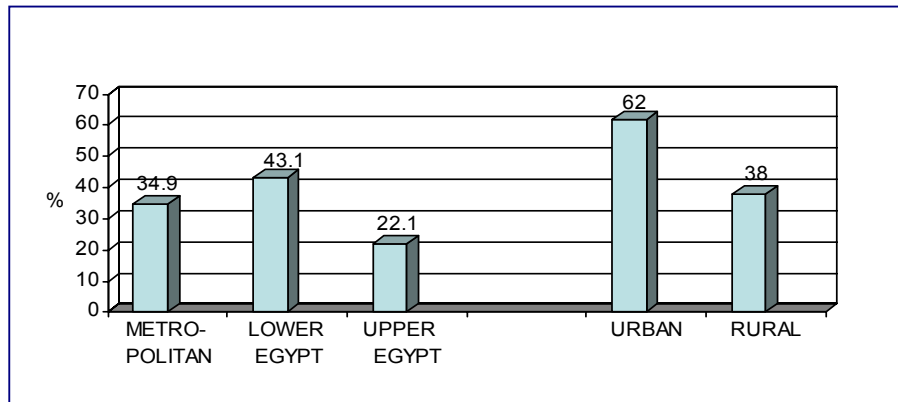
Before going into the details of the size distribution of economic activity, a brief description of the MSEs profile is necessary to help understand further characteristics.

3.1.1 The regional distribution of the MSEs

The geographical distribution of the MSEs shows that the EU are relatively concentrated in Lower Egypt, where 43% of the EU are situated, as opposed to 35% in Metropolitan Areas, and 22% in Upper Egypt. However, given the distribution of population (44% in Lower Egypt, 37% in Upper Egypt, and 19% in the Metropolitan areas in 2002) in the three areas, it becomes evident that the distribution of enterprises is relatively concentrated in the Metropolitan areas.

Fig. 1 also indicates that most of the EU (62%) are based in urban areas, which reflects a clear bias towards economic activity concentration. This distribution is not justified by the division of population between urban areas (47%) and rural areas (53%) in 2001, though it could be linked more to the distribution of wealth and investment, which are more concentrated in the urban areas.

Figure 1: The MSEs distribution according to region and area



3.1.2 The year of starting the business

The screening of EU according to the years of establishment shows that the great majority of the enterprises were established during the nineties and onward. However, it is also evident that a small percentage of the EU have been operating for over thirty years. This information defies the common notion that MSEs are usually an answer to temporary problems, or a solution that has a limited survival duration.

There is also a steady rise in the numbers of EU in the rural areas, which concurs with the new trend of decline in the net migration from rural to urban areas. The net migration of rural inhabitants is moving towards becoming close to Nil in the recent years.

Table 7: The distribution of EU by years of establishment and location

Year of Establishment	Urban	Rural	Total
Before 1950	1.0	0.0	0.6
1950 to 1959	2.4	0.3	1.6
1960 to 1969	5.4	1.4	3.9
1970 to 1979	9.6	3.6	7.3
1980 to 1989	18.0	11.0	15.3
1990 to 1999	36.6	40.8	38.2
2000 +	27.0	42.8	33.0
Total Number	3041	1867	4908

Data also reveal that the role of female-owned enterprises has been growing at rates similar to those of male-owned enterprises, except during the nineties, when the increase in female owned enterprises became more pronounced. This upsurge during the nineties could be taken as a response to the concern and actions taken by the government's authorities and the specialized NGOs to target females and encourage them to become own-account workers or employers.

However, the main factor that played a driving role in the females' decision to act independently, is the economic factor. The recent reluctance or refusal of the GOE to offer work opportunities limited the females' chances to find work. The large and small private sector companies' resort to hiring females is much less than that of the public sector.

Table 8: The distribution of EU by years of establishment and gender

Year of Establishment	Male	Female	Total
Before 1950	0.7	0.3	0.6
1950 to 1959	1.8	0.3	1.6
1960 to 1969	4.0	3.3	3.9
1970 to 1979	7.4	6.7	7.3
1980 to 1989	15.3	15.4	15.3
1990 to 1999	37.7	42.0	38.2
2000 +	33.2	32.0	33.0
Total number	4293	615	4908

Another point became apparent in the historical retrospect, namely that the share of industrial (manufacturing and mining) EUs was relatively higher during the sixties, compared to the following decades. The economic activities pursued by the MSEs changed to reflect a steady growth in the number of EUs working in trade and service activities.

Table 9: the distribution of EU by years of establishment and economic activity

Year of Establishment	Industry	Trade	Services	Total
Before 1950	1.0	0.6	0.5	0.7
1950 to 1959	1.0	1.5	2.5	1.6
1960 to 1969	4.1	3.9	3.6	3.9
1970 to 1979	10.2	7.2	5.6	7.3
1980 to 1989	18.6	15.6	11.5	15.3
1990 to 1999	30.4	41.0	35.4	38.2
2000 +	34.5	30.3	40.8	33.0
Total number	773	3169	965	4907

3.1.3 The distinctive features of the entrepreneur/manager

Gender

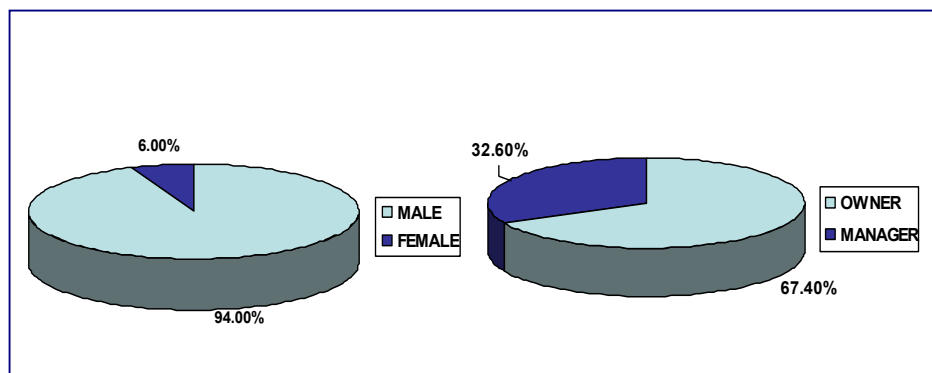
The previous Egyptian Labor Market Survey 1998, indicated that female entrepreneurs in small enterprises represented 18.5% of the total number of small entrepreneurs. However, the present results indicate a smaller share of female entrepreneurs (6%) in the community of MSEs²¹.

This evident difference between the results of two extensive surveys on MSEs could have different explanations, one of which could be due to the difference in the size of the two surveys, where the present survey encompasses a larger sample. Another reason could be due to the time difference, which is five years; and a third explanation of the difference could be due to the different nature of the methodology adopted in the two surveys, for while the ELMS98 included enterprises working inside and outside establishments, the MSE2003/2004 covered enterprises working inside establishments only. This approach meant that a sizeable percentage of female entrepreneurs were excluded by definition.

Furthermore, during the last years, several economic changes took place. The recession that affected the Egyptian economy led to a case of wide scale bankruptcies among the large companies, and the disappearance of a large number of micro and small unfit enterprises. The new incoming EU tend to be larger in size, whether measured in terms of workers or by the size of invested capital. This development excludes or diminishes the possibilities in front of the female entrepreneurs, whose ability to acquire sufficient capital is limited, and whose educational background still presents a barrier to venturing into new small industries or modern and advanced economic activities. Another reason for the size difference could be due to the adopted methodology in this survey, which took the “establishment” as an entry point, in contrast to the previous ELMS98 survey which took the enterprise-inside and outside establishment– as an entry point. The inclusion of “outside-establishment enterprises” means a large number of marginal extremely micro enterprises, which reduces the average number of workers per enterprise.

²¹ It has to be remembered that this figure is an over weighted estimate for female representation, the reality is closer to 6%.

Figure 2: The gender of entrepreneurs and the respondents of the survey



The data show similarity in the age distribution of the entrepreneurs, the majority are older than 40 years old. This result conforms with previous -though recent - survey results, in that the age of the entrepreneurs is becoming older compared to the seventies and the eighties of the previous century. This phenomenon could be explained by the new market-based prerequisites and conditions for establishing a small enterprise, namely, knowledge, technology, capital, and experience. Despite the existence of a large number of EUs that are still primitive in all respects, this does not preclude the fact that new types of more efficient MSEs are emerging.

In addition, there seems to be a slightly higher concentration of females in the age brackets of less than 25 years, compared to males. This phenomenon will be investigated in later parts of the study, as it could be due to the source of initial capital, which is usually inheritance in the case of females.

Table 10: Enterprises by gender and age of entrepreneurs

Age	Male	Female	Total
<18 years	0.6	1.8	0.7
18 to < 21 years	2.7	3.7	2.8
21 to <25 years	7.2	5.7	7.0
25 to < 30 years	11.3	8.9	11.0
30 to < 40 years	28.3	27.6	28.2
40 years or more	49.9	52.2	50.2
Total number	4343	615	4958
Mean	40.39	41.40	40.52

Marital Status

By looking into the marital status of the entrepreneurs, a striking feature appears to characterize the females, namely, that there is quite an outstanding percentage of them who are either widowed or divorced. Table 11 shows that the prevalence of widows and divorcees is twice as much in this survey compared to the DHS data set. This phenomenon has appeared in previous studies, and still persists. A possible explanation to this phenomenon is the need of a divorced or widowed woman to earn a living and thus support the members of her HH. It could be also explained by the low and ineffectual pensions that are awarded to HH which lose their bread earners.

A closer examination of this group of widows and divorcees reveals several distinctive features: Firstly, the majority (83%) of their enterprises are 1 worker enterprises, which is relatively higher than the other groups (50%). Secondly, the highest frequency of their enterprises is in the lowest invested capital category (less than LE 1000). Thirdly, the degree of informality of their enterprises is higher (81%) as opposed to other groups (70%).

Another feature appears to follow an existing trend, namely that females start earlier in age, work more as long as they are not married, then the share of married females declines as opposed to males and in contrast to their overall marital-status distribution in the population data. Marriage, at least in its early years, deters females from pursuing their work, as their social responsibilities grow and usually prevent them from dedicating sufficient time outside their homes.

Table 11: Entrepreneurs distribution compared to household members distribution by gender and marital status

Marital Status	Male		Female	
	MSEs	DHS	MSEs	DHS
Never Married	20.2	41.2	19.9	26.3
Married	78.1	56.9	54.6	60.9
Widowed	1.1	1.6	22.5	11.5
Divorced	0.6	0.3	2.9	1.3
Total number	4342		612	

Education

The level of education shows a significant difference between male and female entrepreneurs. Females' education attainment levels are inferior to those of their male counterparts. Whereas 21% of the male entrepreneurs are illiterate, this percentage doubles and reaches 43% in the case of females. The percentage of both sexes that completed secondary education lies in a close range (31% for males and 27% for females). The number of years of schooling show a significant difference in favor of male entrepreneurs. Whereas the average years of schooling reach 8.44 years for males, and are estimated at 5.73 years for females.

Figure 3: Mean years of education by gender and area

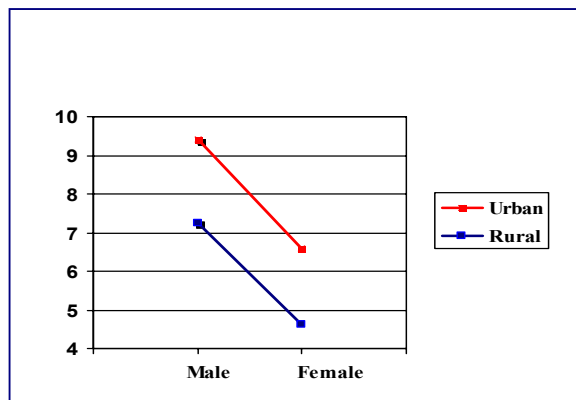


Table 12: Entrepreneurs by gender & number of years of education

Number of years of education	Male	Female	Total
Illiterate	21.2	43.3	24.0
1 -6 years	18.4	14.9	17.9
7 -9 years	10.5	7.3	10.1
10 - 12 years	30.8	26.5	30.2
13 - 16 years	18.8	7.6	17.4
17 years or more	0.4	0.3	0.4
Total number	4343	616	4959
Mean # of years	8.44	5.73	8.10

Related to education are issues such as technical education and acquiring training prior to becoming entrepreneurs. Data in this survey reveal that the percentage of entrepreneurs who received technical education was 3.4% for males and 2.9% for females. This result indicates that only a minor fraction of the entrepreneurs are graduates of technical schools. As to getting training related to the pursued economic activity, data indicated that 32% of male entrepreneurs, as opposed to 10% of females, had previous training.

Table 13: Access to training by entrepreneurs according to different criteria

Access to training	Classification	Male	Total number	Female	Total number
Area	Urban	34.7	2725	13.9	350
	Rural	26.7	1617	5.0	266
	Metropolitan	35.2	1539	14.2	190
Region	Lower Egypt	34.6	1828	7.8	308
	Upper Egypt	21.0	975	9.1	118
	1 worker	23.6	1751	5.2	359
Number of workers	2 to 4 workers	37.1	2348	14.0	239
	5 to 9 workers	43.5	131	46.1	11
	10 to 49 workers	32.3	113	73.3	6
	< 1000	25.9	617	1.2	202
Value of assets	1000 to <5000	32.6	1591	12.1	202
	5000 to < 20000	30.7	1231	13.0	137
	20000 or more	35.7	903	22.8	75
Economic activity	Industry	59.6	767	44.5	14
	Trade	23.4	2682	5.1	526
	Services	32.9	893	37.8	76
Formality	Informal	30.4	3041	4.4	444
	Formal	34.9	1292	24.7	171

The previous table represents a map showing the distribution of entrepreneurs who got training. It is obvious that:

- Training is offered on a limited scale to the small entrepreneurs in general.
- Females are in a disadvantaged position with respect to their access to training.
- Entrepreneurs in Metropolitan areas and Lower-Egypt have more access to training.
- Training is associated with owning or running larger enterprises –in terms of number of workers or the size of assets.
- Operating manufacturing activities is highly associated with previous training.
- One quarter of all female entrepreneurs owning formal enterprises had received training compared to females operating informal enterprises.

It is also apparent from the following table that the role of the specialized training facilities, public sector, and NGOs is quite limited. Private companies, whether small or large, are the main training providers.

Table 14: Sources of training provided to entrepreneurs

Source of training	Male	Female	Total
Family enterprise	32.5	6.5	31.4
Domestic NGO	0.1	-	0.1
Private firm	62.9	71.0	63.2
Public firm	0.9	3.2	1.0
Training centre	0.6	12.9	1.1
Other	2.9	6.5	3.1
Total number	1358	62	1420

In the same way the entrepreneurs gained their own skills, all the interviewees in the case studies explained that they, in turn, train their own workers, stating that places for training outside of the workplace are largely unavailable. The training of workers on the job is regarded as an integral part of the enterprise's activity, and no budget is set aside for this purpose. Half of the interviewees noted that retention of workers once they are trained can be problematic, as they cannot necessarily offer the most competitive wages.

This intergenerational convention of on the job training constitutes a de facto apprenticeship system and provides a useful service for young workers to gain skills and experience. However, this system is limited in that it tends largely to reproduce current levels of expertise; new skills are introduced in an ad hoc manner, subject to technological constraints. The lack of available training outside the

workplace severely limits both owners and workers' ability to acquire more specialist levels of skills associated with advances in technology, which leaves the enterprise relying on technology and skills that have been superceded, inhibiting its current and future ability to compete with larger enterprises and with imported goods.

3.2 The Main characteristics of the economic units

The size

The EU in the sample are relatively small, whether in terms of the number of workers or in terms of the size of the invested capital. The following two figures indicate that 42% of the small enterprises (less than 50 workers) employ one person only, whether the own-account worker himself or a hired worker. In addition, 52% of the EU employ between 2 to 4 workers, almost 3% employ 5 to 9 workers, and only 2.4 % of the EU hire 10 or more workers.

As to the distribution of EU according to the invested capital, it is clear that the highest concentration of enterprises (36%) is in the capital bracket LE 1000 to LE 5000. However, this distribution does not preclude the fact that 20% of the MSEs have a capital size that exceeds LE 20,000. In all cases, these numbers indicate that the size of capital of MSEs is relatively small. The guess is that the values of invested capital are under-reported due to the "culture of hiding information" in case it might be used for tax purposes.

Female-owned enterprises are relatively small compared to male-owned, whether measured in terms of number of workers or value of invested capital.

The average size of the female-owned enterprise is 1.73 workers, which is smaller than male-owned economic units (2.33 workers). The average value of assets is significantly smaller (LE 12,800) in case of females compared to males (LE 44,000).

Table 15: Enterprises by gender of entrepreneur & number of workers

Size of enterprise	Male	Female	Total
1 worker	40.3	58.4	42.6
2 workers	34.9	29.8	34.3
3 workers	14.6	5.2	13.4
4 workers	4.5	3.9	4.4
5 to 9 workers	3.0	1.8	2.9
10 to 49 workers	2.6	1.0	2.4
Total number	4343	615	4958
Mean	2.33	1.73	2.26

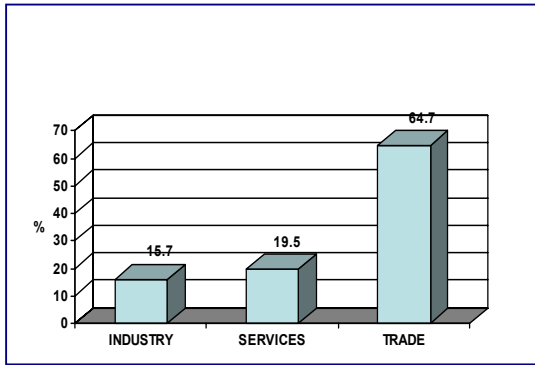
Table 16: Enterprises by gender of entrepreneur & capital

Size of enterprise	Male	Female	Total
< 1000	14.2	32.8	16.5
1000 to <5000	36.6	32.8	36.2
5000 to < 20000	28.4	22.2	27.6
20000 or more	20.8	12.2	19.7
Total number	4342	616	4958
Mean	43959.8	12828.1	40093.3

The distribution of EU by economic activity

The distribution of the EU according to economic activity indicates a pattern that has been apparent in various previous researches, namely that trade activities are the most prevalent, as almost 65% of the EU units worked in this sphere, followed by service activities (19.%) and finally the INDUSTRY of various types of goods (16%). It is also apparent that the urban areas caputre more than 50% of the enterprises regardless of the type of economic activity pursued.

Figure 4: The distribution of EU by economic activities



It is also apparent from Figure (4) that the concentration of industrial EU is slightly *higher* in urban areas rather than rural areas compared to other activities.

This *result* is consistent with the fact that the markets for raw materials, imported industrial inputs, skillful labor, and distribution of industries are wider in the urban areas. Whereas, trade and service activities are usually based on serving the local small communities.

In comparing the type of economic activities pursued by males and females a distinct *difference becomes* apparent. Firstly, the role of female entrepreneurs in the industrial activities is quite minimal compared to males, and compared to other types of activities of the female entrepreneurs, the trade activities are definitely dominant. The explanation of this concentration is that simple or trivial trade activities do require neither large capital, nor special training, education, or experience.

Table 17: Enterprises by economic activity & gender of the entrepreneur

	Industry	Trade	Services	Total
Male	98.2	83.6	92.2	87.6
Female	1.8	16.4	7.8	12.4
Total number	781	3208	969	4958

Table 18: Enterprises by economic activity & gender of the entrepreneur

	Male	Female	Total
Industry	17.7	2.3	15.8
Trade	61.8	85.4	64.7
Services	20.6	12.3	19.5
Total number	4342	616	4958

Looking at the size distribution of economic activities according to number of workers and invested capital reveals that:

1. The INDUSTRY activities are significantly larger -whether measured in terms of workers or capital- than service or trade activities.
2. The service activities are larger than trade activities in terms of employment generation.

Table 19: Enterprises by economic activity & number of workers

Size	Industry	Trade	Services	Total
1 worker	20.9	50.7	33.2	42.5
2 to 4	68.5	46.3	58.5	52.2
5 to 9	6.4	1.7	3.9	2.8
10 to 49	4.2	1.4	4.4	2.4
Total number	781	3208	970	4959

Table 20: Enterprises by economic activity & value of invested capital(LE)

Size	Industry	Trade	Services	Total
< 1000	8.7	18.3	17.0	16.5
1000 to <5000	35.6	34.5	42.1	36.2
5000 to < 20000	25.9	29.0	24.5	27.6
20000 or more	29.8	18.3	16.4	19.7
Total number	781	3208	969	4958

Another perspective of looking at the MSEs is through linking capital and labor by examining the capital/labor ratios and their distribution and concentration in the economic units. The question arose whether there is a connection between Capital/Labor and the output/labor ratios or not. The following table shows in the last two columns the average values of the two variables (C/L and O/L).

Table 21: The estimated monthly output/labor & capital/labor ratios in MSEs

Variable	Classification	Mean O/L	Mean C/L
Area	Urban	1621.5	12927.8
	Rural	500.1	5389.9
	Metropolitan	1484.0	11966.8
Region	Lower Egypt	1280.3	10843.8
	Upper Egypt	573.6	5535.5
Gender	Male	1273.6	10459.0
	Female	647.2	7284.5
Number of workers	1 worker	698.7	8475.1
	2 to 4 workers	883.5	8070.1
	5 to 9 workers	1429.9	49061.0
	10 to 49 workers	16443.6	35168.9
Value of assets	< 1000	228.7	398.7
	1000 to <5000	459.9	1635.1
	5000 to < 20000	837.2	6472.7
	20000 or more	3857.2	38639.6
Formality	Informal	598.5	7653.5
	Formal	2616.1	15796.3
Economic activity	Industry	2382.9	7325.8
	Trade	1095.6	11559.8
	Services	571.0	7326.9
	Total	1195.8	10064.8

The previous table shows some important characteristics:

Firstly, with regards to C/L ratios in MSEs, a pattern of concentration becomes obvious in:

- Urban areas especially in Metropolitan centers
- Male-owned enterprises
- 5-9 workers' enterprises
- EU with invested capital => LE20,000
- Formal EU

Secondly, with regards to O/L ratios in MSEs, they follow a pattern of concentration similar to that of the C/L ratios, with limited exceptions. Although the highest C/L ratios are witnessed in trade activities, the highest O/L ratios are apparent in the industrial activities. In addition, where the highest C/L ratio is obvious in the EU employing from 5-9 workers, the highest O/L ratios are in EU with 10-49 workers.

What conclusions could be drawn from the previous distribution?

High productivity enterprises are usually capital intensive and larger in terms of workers or invested capital. These enterprises are mostly male-owned, situated in metropolitan centers, operating formally, and mostly engaged in industrial activities.

MSEs and technology

The entrepreneur or the manager of the small enterprises was asked to describe the kind of technology he/she uses in the industrial process. Their answers revealed the modesty of the technology they usually resort to using as can be noticed from tables 22 and 23. The tables ascertain the traditional and sometimes primitive nature of the used technology, which leaves a strong impact on the competitiveness of the MSEs, their efficiency, and their ability to expand and develop their operations. Only a minor fraction of the MSEs are in a position to acquire and use the latest technology.

Table 22: Technology used in the industry process

Variable	Classification	Traditional	Modern	Up-to-date	Total
Area	Urban	80.4	16.3	3.3	3060
	Rural	90.4	8.2	1.3	1867
	Metropolitan	73.6	21.2	5.2	1718
Region	Lower Egypt	92.9	6.4	.7	2118
	Upper Egypt	84.1	14.0	1.9	1090
Gender	Male	83.6	14.0	2.4	4318
	Female	88.4	8.1	3.5	608
Number of workers	1 worker	90.4	7.9	1.7	2091
	2 to 4 workers	82.2	15.4	2.4	2579
	5 to 9 workers	59.8	32.2	8.0	141
	10 to 49 workers	46.1	37.9	16.1	115
Value of assets at interview time	< 1000	95.6	3.5	1.0	807
	1000 to <5000	88.3	10.0	1.6	1790
	5000 to < 20000	80.8	16.6	2.6	1358
	20000 or more	71.9	22.6	5.4	971
Economic activity	Industry	74.8	22.3	2.9	779
	Trade	88.5	9.4	2.2	3182
	Services	77.7	18.8	3.5	965
Formality	Informal	89.4	9.6	1.0	3460
	Formal	72.0	21.9	6.1	1456

Table 23: Using the latest technology in business

Variable	Classification	Yes	Total
Area	Urban	10.7	3068
	Rural	7.6	1868
	Metropolitan	15.6	1723
Region	Lower Egypt	4.6	2120
	Upper Egypt	9.5	1093
Gender	Male	9.9	4329
	Female	6.9	608
Number of workers	1 worker	5.8	2094
	2 to 4 workers	10.4	2586
	5 to 9 workers	21.6	141
	10 to 49 workers	43.4	115
Value of assets	< 1000	3.6	809
	1000 to <5000	6.9	1793
	5000 to < 20000	12.8	1361
	20000 or more	14.9	973
Economic activity	Industry	9.6	780
	Trade	8.1	3192
	Services	14.2	963
Formality	Informal	6.6	3467
	Formal	16.5	1458

The question remains: How could the used technology be improved? And how could the MSEs get more access to the latest technology?

The case studies revealed that 7 of the 10 cases were aware of newer, more advanced technology in their field that would help expand, or improve their productivity or quality of service, but stated that

the cost prohibited them from acquiring this equipment. They were confident that they would be able to upgrade their skills to the level required by newer equipment with no difficulty, if the training were available. (The window manufacturer and leather clothing manufacturer stated that they did not need new equipment at the moment, while the paint and steel wholesaler was so discouraged by the steep downturn in his business that he had not given any thought to upgrading equipment for some time.)²²

Access to finance

Finding the necessary finance to start up a business is one of the enabling factors for any entrepreneur. However, for the small investors, access to finance is difficult to achieve. Financial institutions are not apt to lend small enterprises due to the high risk associated with lending small unknown entrepreneurs, and the high transactions cost linked with small loans from their point of view. Therefore, formal loans do not represent more than 3.5% of all main sources of initial capital. The entrepreneurs rely mainly on own savings or inheritance as their sources of initial capital.

The entrepreneurs of the 10 case studies stated that:

Lack of financial support stands out as a major constraint in these cases. The interviewees hold little or no cash capital, and stated that current loan conditions (high interest rates and short-term repayment schedules) represented burdens to be avoided, if indeed loans were available to them at all. This means that they must rely upon profits on a week to week, or month to month, basis to keep the business going which, again, in a context of reduced demand, adds to their vulnerability. It also means that they cannot invest in new fixed capital which might expand production, or product range or quality, nor pursue new market opportunities when they present themselves. In such a climate it is extremely difficult to devise any kind of strategic business plan, anticipate market movements, or consider significant investment. One crucial ingredient, therefore, in a climate supportive of MSEs, would be a designated financial support system including medium to long-term loan availability with low interest rates and less onerous guarantees. As other studies have indicated, however, this would need to be coupled with other forms of business support and advice, and particularly for start-up businesses with little or no previous experience; the experience of the bread sales and delivery man is instructive in this regard.²³

Even in the case where the entrepreneurs manage to get the loan there are problems sometimes:

Mr. Z applied for a Social Fund loan to buy a small pick-up truck, with the intention of selling gas bottles. However, he was told that the only pick-ups available were for the distribution of bread, a field in which he had no experience. Loans for vehicles seem to be given on the basis that they will be used and licensed for a single specified purpose only. Social fund officials effectively chose the field in which he could operate, which was unfortunately very oversubscribed, and one in which profit margins are very low. When he could not keep up repayments, social fund officials refused to provide him with a letter to the vehicle licensing authority to enable him to renew his licence, which meant that he could not work.

He applied on several occasions to change his status with the social fund, to be able to sell gas bottles instead, but could not afford the 5,000 fee for this. The vehicle has lost about 75% of its value. He still owes 21,000 on the truck, having repaid 5,000. His wife is being threatened with court proceedings, as she acted as guarantor for the loan; this has prompted them to move around to avoid arrest. The family is very unstable, and there is the possibility of a prison sentence for his wife. This is a case where timely and sound advice for a young man starting his first business was crucial, but absent. On the one hand he may have been better advised not to proceed with a loan - or, indeed, it may be better not to extend loans - in an already crowded field. On the other, it is not easy to see the logic of furnishing loans and licences for vehicles on the basis of a single specified use, unless it is simply to recover fees for changing the vehicle's status.²⁴

²² Powell, K. 'The MSEs in Egypt : Potential and Constraints', background paper, ERF, 2004.

²³ Powell, K. 'The MSEs in Egypt : Potential and Constraints', background paper, ERF, 2004.

²⁴ Powell, K. 'The MSEs in Egypt : Potential and Constraints', background paper, ERF, 2004.

Table 24: Sources of initial capital by size of enterprises

Sources of Initial Capital	1 Worker	2 To 4 Workers	5 To 9 Workers	10 To 49 Workers	Total
Inheritance	22.0	19.1	33.3	30.0	21.0
Own savings	63.3	70.7	61.0	64.2	67.1
Liquidation of assets	5.1	2.5	0.7	4.2	3.6
Formal loans	3.2	4.1	0.7		3.5
Informal loans	3.5	2.2	0.7		2.6
Own remittances	.4	.5	2.1		.5
Others remittances	1.2	.6	0.7		.9
Other	1.3	.3	0.7	1.7	.8
Total Number	2107	2579	141	120	4947

Informal loans (2.6% of all sources of capital) play a role similar to that of the formal loans in terms of their relative limited contribution. However, there is a difference between the two types of loans. Formal loans are usually offered to larger sized MSEs (in terms of capital and workers), while the informal loans serve mainly the micro entrepreneurs.

When the entrepreneurs were asked whether they received loans during the previous year, their responses revealed that only 5% of them did so. Out of those 5% of entrepreneurs, banks, informal loans from family members, friends, neighbors and the SFD offered 42%, 40% and 10% of total loans respectively. The same pattern of behavior and distinction between the small and micro entrepreneurs persists. Bank loans go more to larger firms, while informal loans provide the necessary financial means of support to micro entrepreneurs.

Table 25: Sources of credit in the last 12 months by size of enterprises

Sources of Loans	1 worker	2 to 4 workers	5 to 9 workers	10 to 49 workers	Total
Bank	23.6	55.0	80.0	100.0	42.6
SFD	8.2	13.7			10.8
Domestic NGO	8.2	3.1			5.2
Government Agencies	.9				.4
Family and Relatives	12.7	4.6	20.0		8.4
Friends	16.4	4.6			9.6
Neighbours	10.0	9.2			9.2
Business Associates	19.1	7.6			12.4
Other	.9	2.3			1.6
Total number	110	131	5	5	251

3.3 Extent of informality of economic activity

When we discuss MSEs, some confusion arises about their relationship to informality. Some scholars try to distinguish between MSEs and informal enterprises based on the notion that informal enterprises are marginal unorganized home-based activities as opposed to MSEs, which are organized, productive...etc.

However, reality and empirical inspection ascertain that a small enterprise could be organized, productive, efficient, employing a number of workers ranging from 1 to 50 workers or more, and at the same time informal. And the opposite could be also true. A formal enterprise could be small, less efficient, and unorganized. The dividing line remains thus in the compliance with the formal rules and regulations.

In order to consider the degree of formality of the EU, three main indicators were included, whose existence reflects that the EU is operating on a formal basis, namely, being registered, having a license and keeping regular accounts. If the three conditions were satisfied, the EU would be formal. In case any of the three conditions was missing, then the EU would be operating on an informal basis.

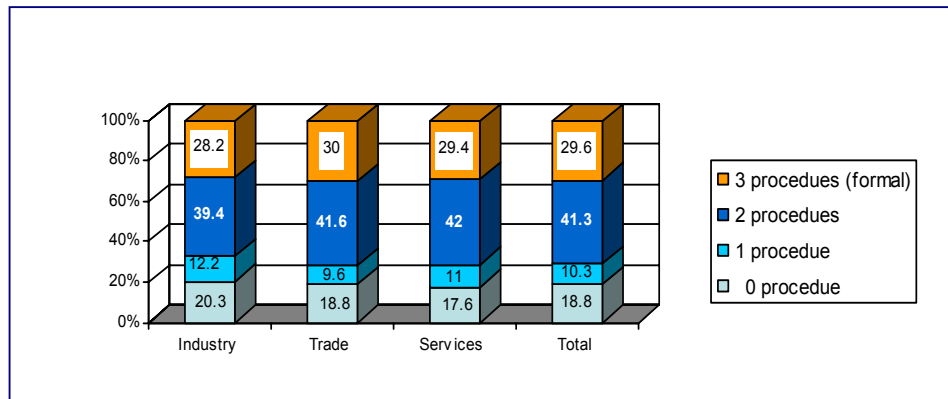
Accordingly, the results reveal that 29.6% of the EU are formal units, while the rest are informal units.

The result conforms with previous estimates of informality. In the ELMS98, the informality among the MSEs was estimated at 81%. However, the previous survey measured both units working within a fixed location and a non-fixed location, while the current survey included only EU working within fixed locations. The itinerant street vendors, who were an integral part of the ELMS98, raised the level of informality, since they constituted almost 40% of the EU.

The profile of informality as described by the results could be summarized in a few aspects:

- Informality is higher in rural areas (81%) compared to urban areas (63%).
- Informality is highest in Upper-Egypt (80%), followed by Lower-Egypt (76%), and then Metropolitan areas (57%).
- Informality is highest among the own-account one-man-worker enterprises (82.6%) and declines as the number of workers increases (17.5 % in EU employing 10-49 workers).
- Informality declines as the value of invested capital increases.
- There are no significant differences in the level of formality of enterprises according to the gender of the owner.

Figure 5: The distribution of EU according to economic activities and formality



With respect to the relationship between the economic activity and formality, data reveal that there is no significant difference in the degree of formality by economic activity.

This result needs more investigation, since industrial operations usually take place in larger workshops, that are visible and thus prone to more official inspections than other activities, and therefore are more likely to conform with legal procedures.

3.4 Assessment of performance

3.4.1 Growth index (Index 1)

One of the main goals of this project was to try and assess whether the MSEs achieve growth or decay over time. Some of the MSEs specialists noticed that micro and small enterprises prosper and grow in number in times of recession, as they act as a last resort for the unemployed. As times change, and as the economic situation improves, small enterprises of marginal nature disappear and only the units with potential continue to grow.

In order to trace the change that took place over the last year in the life of the MSEs in Egypt during May 2002-May 2003, an index was constructed –using the available data - to monitor this prospect. It has to be remembered that during this period Egypt was, and still is, going through a recession, which strongly reflected on the performance of MSEs, and on their tendency to expand their operations.

Index 1 was derived based on the average growth rate in the values of the combined four chosen variables at the present time compared to the previous year. The growth-indicating variables, the value of invested capital, the space of enterprise, the number of workers, and the value of used raw materials help in shedding a light on the kind of change that occurred during the last year.

$$Index1 = \frac{1}{4} \sum_{i=1}^4 \left(\frac{f_{ai} - f_{bi}}{f_{bi}} \times 100 \right)$$

where,

f_{ai} = the value of factor i at the interview time

f_{bi} = the value of the factor i one year ago

Since Index 1 is a variable that is derived by using the information of the four previously mentioned variables, it was important to examine the main source of change among the four variables. The following table shows the trend of change in the four variables during the last year:

Table 26: MSEs distributed according to the rate of change in the four growth variables (% of EUs)

% growth rate	Number of workers	Space	Capital	Raw materials
<0%	3.6	0.3	17.1	17.5
0%	90.6	99.2	71.0	75.2
>0%	5.9	0.5	11.9	7.3
Mean	3.8%	2.5%	6.4%	-3.9%

It is evident –using the mean results- that most of the growth occurred in the size of capital, and to a lesser extent in the number of workers, while the value of raw materials witnessed evident decline.

It has to be mentioned in this respect that the Egyptian economy has been going through a recession in the last two years, which kept the inflation rate at a relatively low level (2-3%) during the time in question (March 2002-2003).

Therefore, if the inflation rate is taken into consideration, the capital will still remain the fastest growing production input.

The use of raw materials witnessed a decline that could only be justified by the on-going recession, which affected the aggregate demand in Egypt during the last four years.

Nevertheless, when that change between the two years was measured using the Median data, the results revealed that the change for all four variables was Nil.

The case studies revealed that the interviewees unanimously saw the current economic and business climate as extremely unfavorable. The devaluation of the currency coupled with recession, price inflation of inputs (particularly when these were imported materials), and a generalized drop in consumer demand have conspired to reduce sales while sharply increasing the costs of production. Responses to this have been limited to reducing or even eliminating profit margins, which is difficult to sustain in the longer term.

In the following paragraphs the paper will try to link and show the relationship between Index 1 and the essential characteristics of the MSEs.

Growth index and the geographical distribution of enterprises

The following table shows that:

- The MSEs showed a growth rate that did not exceed 2.2% during the year 2002-2003.
- 52.5% of the EUs remained stagnant without change during the previous year. The tendency to stay “unchanged” was particularly higher in EUs operating in Upper-Egypt.
- EUs operating in Lower Egypt experienced more decline during the year 2002/2003 compared to enterprises operating in Metropolitan areas and Upper-Egypt.
- EUs working in Upper-Egypt showed the highest tendency to grow during the period in question. The previous years witnessed a strong interest by the government and NGOs in offering finance and support to MSEs in the area. At the same time, migration of citizens living in Upper-Egypt to urban centres diminished due to difficulties in finding jobs and the high cost of living there. The

alternative was to remain home and try to earn a living. Upper-Egypt has been deprived of investments for a long time. And thus new MSEs found a thriving market in the local communities.

Table 27: Enterprises by region & categories of growth index (Index 1) (% of EUs)

Index 1 (% growth rate)	Metropolitan	Lower Egypt	Upper Egypt	Total
< -5 %	14.2	26.3	4.2	17.1
-5 TO < 0 %	9.4	16.5	4.9	11.4
0 %	58.8	39.4	67.2	52.5
> 0 TO 5 %	6.0	5.5	12.0	7.1
>5 %	11.6	12.3	11.7	11.9
Total number	1440	1722	900	4062
Mean Growth Rate	2.09	0.85	4.96	2.20

Index 1 and Economic Activities

Another factor that shows variability when related to index 1 is the type of economic activity that pursued by the economic unit.

Table 28: Enterprises by economic activity & categories of index 1 (% of EUs)

Index 1(% growth rate)	Manufacturing	Trade	Services	Total
< -5 %	17.2	16.7	18.5	17.1
-5 TO < 0 %	9.3	12.2	10.1	11.4
0 %	58.9	51.5	50.1	52.5
> 0 TO 5 %	4.8	7.8	6.4	7.1
>5 %	9.8	11.6	14.9	11.9
Total number	645	2670	746	4061
Mean Growth Rate	4.13	1.27	3.84	2.20

As can be noticed from the previous table, the manufacturing EU had the highest frequency of enterprises that remained unchanged in terms of growth and the lowest tendency to expand during the year in question.

The service activities witnessed the highest percentage of growth during a year of recession.

However, the average growth rate was higher in the manufacturing activities, followed by the service activities, and finally trade.

Index 1 and the size of enterprise

Data seem to indicate that small enterprises, where 10-49 workers were employed, have experienced the least decline in growth as measured using the four growth indicators. The micro enterprises -1 worker - suffered hardest by the recession.

On the other hand, enterprises employing 5-9 workers enjoyed the highest growth rate (4.75%) during the previous year.

Table 29: Enterprises by number of workers & categories of index 1 (% of EUs)

Index 1 (% growth rate)	1 worker	2 to 4 workers	5 to 9 workers	10 to 49 workers	Total
< -5 %	17.2	17.7	13.1	7.8	17.1
-5 TO < 0 %	13.6	10.0	11.5	4.9	11.4
0 %	53.1	50.8	50.0	79.4	52.4
> 0 TO 5 %	8.2	6.0	11.5	5.9	7.1
>5 %	7.9	15.5	13.8	2.0	11.9
Total number	1712	2119	130	102	4063
Mean Growth Rate	-0.47	4.37	4.75	-1.28	2.20

Another aspect of size is the value of invested capital owned by the MSE. The following table reveals that EU that operate using invested capital in the category LE 5000-20000 and higher included the enterprises with the highest increase in growth, whereas EU in the lowest invested capital category (<LE1000) witnessed the lowest (negative) growth rate.

Table 30: Enterprises by value of invested capital & categories of index 1 (% of EUs)

Index 1 (% growth rate)	< LE1000	LE1000 to <5000	LE5000 to < 20000	LE20000 or more	Total
< -5 %	16.4	13.9	19.0	20.8	17.1
-5 TO < 0 %	6.2	12.3	13.5	11.0	11.4
0 %	59.2	55.0	48.3	48.4	52.4
> 0 TO 5 %	5.0	6.8	7.7	8.6	7.1
>5 %	13.2	12.0	11.6	11.3	11.9
Total number	659	1444	1108	852	4063
Mean Growth Rate	0.43	1.81	4.37	1.41	2.20

However, one could only conclude that the growth achieved by the MSEs community in Egypt was relatively modest if not inconsequential.

Index 1 and formality

One of the interesting results that were derived using the growth index, was its relationship with formality.

Table 31: Enterprises by formality & categories of index 1 (% of EUs)

Index 1	Informal	Formal	Total
< -5 %	16.6	18.0	17.1
-5 TO < 0 %	11.7	10.6	11.4
0 %	52.6	52.3	52.5
> 0 TO 5 %	7.2	7.0	7.1
>5 %	11.9	12.0	11.9
Total number	2745	1306	4051
Mean Growth Rate	2.68	1.09	2.20

The percentage of EU that did not introduce any visible change in their size is similar in the formal and informal enterprises.

3.4.2 Future prospects index (Index 2)

Another goal of this project was to try and assess the perception of the entrepreneurs regarding the future prospects and their plans for the coming year. Are they going to expand the operations, employ more workers, increase the space of their establishments, or not?

In order to analyze their future prospects, an index was developed to reflect this intension. **Future Prospects Index (Index 2)** is meant to measure **the future prospects of the entrepreneurs based on some of the main economic variables** such as: employment, space of the economic unit, output, invested capital, revenues, domestic sales, exports, and introducing new products.

Index 2 was calculated by adding (1) for each variable that was expected to rise, (0) for the variable that would stay constant and (-1) for the variable that was expected to decrease. The score of each EU was standardized to range between (-100%) and (100%).

The results for index 2 could be summarized as follows:

Index 2 and geographical distribution

The expectations of the entrepreneurs vary according to geographical distribution of their EU:

Table 32: Enterprises by region & categories of index 2 (% of EUs)

Index 2 (% growth rate)	Metropolitan	Lower Egypt	Upper Egypt	Total
< - 50%	.3	.5	.4	.4
-50 to < 0%	7.4	18.9	9.5	12.8
0%	39.2	28.4	42.6	35.3
> 0 to 50%	27.6	30.6	33.6	30.2
More than 50%	25.5	21.6	13.8	21.3
Total number	1630	1990	999	4619
Mean future GR	22.72	19.82	15.39	19.88

Entrepreneurs residing in Metropolitan areas have the least negative expectations and the highest prospects for the future. On average, they have the highest future growth rate expectations (22.7%) if compared to Lower-Egypt (19.8%) or Upper-Egypt (15.4%).

Entrepreneurs in Lower-Egypt have among them the highest percentage of negative predictions regarding future expansions. They expect that their operations will witness a decline in the scope of work.

Index 2 and economic activity

On the average service activities have the highest positive future prospects in contrast to manufacturing and trade activities. Service activities have the lowest tendency to remain stable (32%) and 54% of those EU plan to enlarge their size of transactions.

Table 33: Enterprises by economic activity & categories of index 2 (% of EUs)

Index 2 (% growth rate)	Manufacturing	Trade	Services	Total
< - 50	.3	.6	.1	.4
-50 to < 0	8.8	13.6	13.6	12.8
0	40.4	35.0	32.2	35.3
> 0 to 50	25.1	31.2	31.1	30.2
More than 50	25.4	19.7	23.0	21.2
Total number	748	3003	867	4618
Mean future GR	22.23	18.79	21.63	19.88

Index 2 and the size of the enterprise

Using the two size indicators, namely the number of workers and the value of invested capital, it becomes clear that index 2 relates significantly and positively to larger sizes.

Table 34: Enterprises by number of workers & categories of index 2 (% of EUs)

Index 2	1 worker	2 to 4 workers	5 to 9 workers	10 to 49 workers	Total
< - 50%	.5	.3		1.8	.4
-50 TO < 0%	14.7	11.9	12.4	2.7	12.8
0%	35.5	36.4	22.6	21.2	35.3
> 0 TO 50%	33.0	27.8	35.0	29.2	30.2
More than 50%	16.3	23.5	29.9	45.1	21.3
Total number	1910	2461	137	113	4621
Mean future GR	16.83%	21.04%	26.85%	37.78%	19.88%

Table 35: Enterprises by value of invested capital & categories of index 2 (LE) (% of EUs)

Index 2	< 1000	1000 to <5000	5000 to < 20000	20000 or more	Total
< - 50%	.7	.4	.5	.3	.5
-50 to < 0%	9.6	12.9	13.4	14.2	12.8
0%	49.5	36.0	31.1	28.9	35.3
> 0 to 50%	29.0	30.8	31.2	28.7	30.2
More than 50%	11.3	19.9	23.8	27.8	21.2
Total number	728	1655	1298	941	4622
Mean future GR	12.64%	18.97%	21.94%	24.24%	19.88%

Data indicate that positive plans of the enterprises to grow are more evident in economic units employing 10-49 workers and owning invested capital equal to or higher than LE 20,000. Thus the larger size of the MSE is more associated with growth prospects and plans rather than the micro-enterprise. The one-man enterprise and the EU that owns limited invested capital (<LE1000) have the lowest growth or expansion plans.

Index 2 and formality

The formality status of the economic unit could be taken as a reflection of stability, at least with respects to the official authorities. How does formality relate to future planning for expansion?

Table 36: Enterprises by formality & categories of index 2 (% of EUs)

Index 2	Informal	Formal	Total
< - 50%	.5	.2	.4
-50 to < 0%	14.0	10.2	12.8
0%	35.8	34.4	35.3
> 0 to 50%	30.0	30.9	30.3
More than 50%	19.8	24.3	21.1
Total number	3200	1406	4606
Mean future GR	18.41%	23.07%	19.83%

There seems to be higher expected growth rates for formal enterprises. The percentage of informal EU that expect to reduce the size of operations is also higher than the formal EU.

3.4.3 Determinants of success/failure

The previous analysis showed us several relationships and characteristics of MSEs. However, it still does not answer in an accurate and reliable way some of the questions and test the hypotheses that were raised previously.

Therefore, it was decided to use the logistic analysis to try and answer the fundamental issues in question. The main objective of using the logistics analysis was to understand the underlying factors that distinguish between a successful and an unsuccessful MSE.

Success of the MSE was calculated based on classifying the units into successful units, which had a Value Added²⁵/Labor ratio above the community's mean, and the unsuccessful EU, that has Value Added/Labor ratio below the mean. Several variables were chosen as determinant factors and grouped into subgroups or common factors (See Appendix 2), such as:

The use of mechanical machines + the use of electric machines + the use of electronic machines--> sub-group = Machinery and equipments
Years of Education + Training + Technical Education--> sub-group = Education
Clusters--> Clusters
Access to clean water + electricity + sewage + roads + telephone + transportation-> subgroup Infrastructure
Degrees of difficulty in implementing the labor law + the labor cost + environmental requirements + finding qualified workers + retaining qualified workers + Competition of large and small companies + availability of financial services + availability of other business services----> sub-group Business setup
Commercial or industrial registration + Licensing + Regular accounts ----> sub-group Formality
Capital/Labor ratio----> sub-group Capital /Labor ratio
Area (Urban/Rural) ----> sub-group Area
Gender (Male/Female) ----> sub-group Gender

The sub-groups were then tested using the Logistic model, within the whole group of MSEs at first, and secondly, within the three main categories of MSEs after they were classified according to economic activity.

The results are presented in the following table²⁶:

²⁵ Value added = Value of Sales – (Raw materials costs + Energy costs + Rent + Other costs)

²⁶ See appendix 4.

Table 37: The logistic analysis of the success determinants

	Manufacturing	Trade	Services	All
1	Machinery & equipments	Clusters	Machinery & equipments	Clusters
2	Clusters	Capital\labor Ratio	Business Set-up	Machinery & equipments
3	Business Set-up	Gender	Capital\Labor Ratio	Capital\Labor Ratio
4		Machinery & equipments		Gender
5		Area		Business Set-up
6		Business Set-up		Area
7		Formality		Formality
8		Infrastructure		Infrastructure
Classification rate	61.5	63.3	64.7	63.5

The community of MSEs

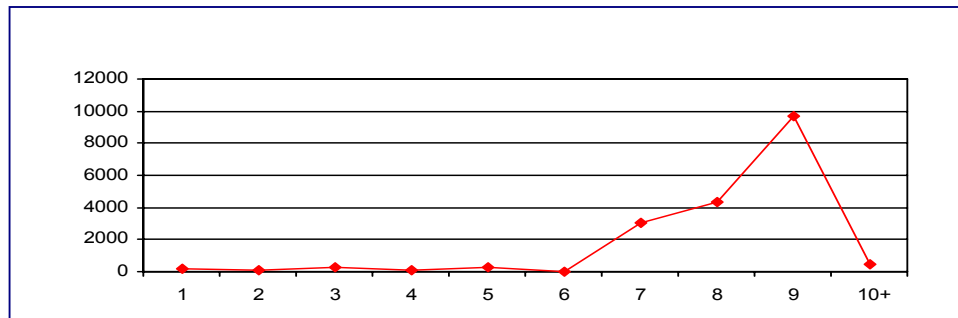
The logistic analysis²⁷ revealed that the 8 subgroups played a determining role in distinguishing the success from failure. As it stands, the existence within a **cluster** is more conducive to success. Being situated in a cluster community seems to matter significantly in determining success.

Having modern and up to date **technology** is a major ingredient to efficiency and high productivity.

The larger sized enterprises in terms of **capital/labor ratio** are the main factors behind productivity superiority. The following two graphs ascertain the previous phenomenon. They also pinpoint certain cut-off points, after which the value added per worker exhibits significant rise.

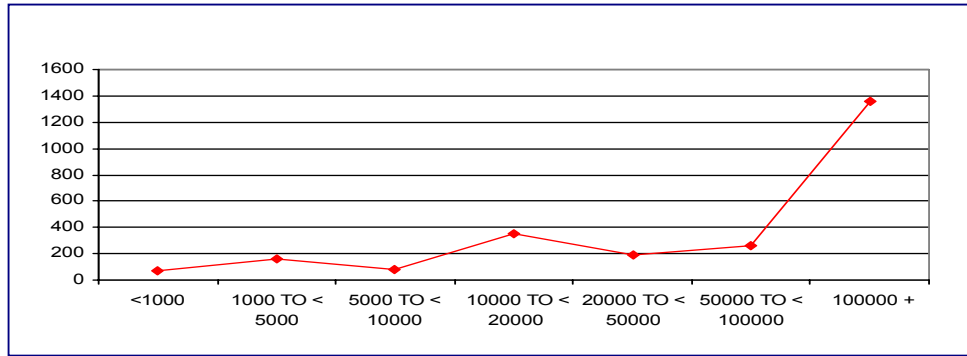
Once the number of workers exceeded 6 workers, the value-added per worker witnesses definite higher levels.

Figure 6: Value added per worker by size of EU (No. of workers)



²⁷ The same analysis was conducted using the output/labor ratio as a success indicator. The results were slightly different but more accurate in terms of their ability to predict. The classification rate was 70%. See Appendix3. However it was suggested that the value-added term could be more useful and indicative as it excludes intermediate spending on raw materials and other costs. However, it has to be remembered that in developing countries entrepreneurs tend to under-report information on production/sales and over-report cost items, which subjects the results to two possible types of data estimates.

Figure 7: Value added per worker by value of assets



Also, at invested capital levels that are equivalent to or higher than LE 10,000, productivity per worker becomes significantly higher in MSEs.

Being **male** matters, because females face more difficulties in the market, in getting education or training, and in getting access to finance and other support services.

Having an encouraging **business environment** where the cost and conditions of employing workers are not excessive, finding and retaining the skillful labor, having access to financial and non-financial business services, enjoying fiscal incentives, and facing limited competition from larger enterprises are regarded as essential success determinants.

Being established in an **urban area** is a factor that contributes to the success of the enterprise.

Formality plays a notable role in the ability of the EU to operate and to sustain success.

In addition, getting good access to basic **infrastructure** such as roads, transportation, electricity, water, sewage...etc is essential to the MSEs survival and ability to produce and market its products or services to a wider scope of clients²⁸.

Finally, the logistic regression results indicated that education and training did not seem to play a pivotal role in achieving higher productivity.

Therefore one could conclude that:

Clusters seem to matter, as they provide the EU with an enabling environment, where the exchange of knowledge, experience, and the business inter-linkages between the firms operating in the cluster community add value to the performance of the EU through the growing social capital.

The case studies of the success and failure stories of some Egyptian entrepreneurs revealed some interesting results in this respect:

The giving, receiving, and exchange of assistance through social networks is clearly very important to interviewees in establishing the foundations as well as ensuring the continuity of the business. Customer loyalty, attracting clients through associates and already established contacts, building and maintaining good reputation, and reciprocal flexibility with regard to payment, all represent valuable safety valves in times of economic stress. The dynamic of social capital, however, is context dependent. In the analysis of a very different context, Menjivar makes some illuminating observations in this regard, building on the concept of social capital as developed by Bourdieu and Coleman. As a means of theorizing the mobilization of social resources which reside in the relations between individuals in a group, social capital for Bourdieu is “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition... which provides each of its members with the backing of the collectivity-owned capital, a “credential” which entitles them to credit, in the various senses of the word.”²⁹

²⁸ For more details see Appendix 3.

²⁹ Powell, K., MSEs in Egypt: Constraints and Possibilities, MSEs project paper (under publication).

The implications of this last point are, I suggest, very relevant to the case studies: the networks in which they participate and which generate the funds of social capital upon which they can draw are limited in their scope, firstly in that they are “horizontal”, operating between social actors in similar positions, and secondly, relatedly, in that they are constrained by the larger structure of opportunities and resources in which they operate. The actors within these networks may well share amongst themselves the favors, flexibility, contacts, and information that are available to them to share, but what they have to share is restricted by their relatively marginal location within larger social and economic structures. Social capital in this context is therefore an important factor in survival during economic downturn, but with qualifications. Firstly, if an actor’s personal resources fall below a level at which he is able to participate in reciprocal exchange, he may then “exit” these networks and become isolated from the benefits of social capital: secondly, social capital is unlikely to assist in significant growth unless networks are extended to link the actors to more formally institutionalized sets of resources and support. It is, however, resources and support of precisely this nature which interviewees identified as unavailable. None of the interviewees had received any form of business support service from any agency, whether government, private or NGO; although several are members of chambers of trade, these organizations offer no form of business support. Moreover, policy measures which impact upon MSEs were found equally wanting.”

The use of better machinery and equipments helps in raising the productivity of workers.

Size - in terms of capital/labor ratio- matters; marginal and survival activities are not seen to enjoy success.

The provision of a supportive institutional set-up and a simplified regulatory framework make a significant difference to the MSE. Being able to establish the company with ease and operate formally helps the EU to perform without fear.

Being a female entrepreneur has a negative impact on the possibilities of success. The woman’s role in the household limits her ability to work longer hours. Her modest educational background does not help either in guiding her to new entrepreneurial ideas or methods of Manufacturing or in providing services or developing trade techniques.

The previous table also indicates that the success determinant factors vary according to the type of activity. The Manufacturing activities that have the modern machinery and equipments, the ones that are situated in clusters and which enjoyed the right business climate are more successful.

The trade and service activities, each one of them has its conditions for success as ranked in the previous table.

3.5 Women entrepreneurs, societal, institutional and economic constraints

The previous analysis revealed that women suffer from several disadvantages, the most important of which is the modest educational background and the limited financial and non-financial resources to start a business.

In addition to the previous characteristics of women entrepreneurs, a section in the questionnaire form contained several female specific questions, some of them were answered by the two sexes and some were directed to female entrepreneurs only.

When all the entrepreneurs were asked whether female self-employed or employers faced special constraints due to their gender the answer was as follows:

Table 38: Do women entrepreneurs face special problems?

	Male	Female	Total
No	69.9	62.0	67.0
Yes	30.1	38.0	33.0
Total number	834	495	1329

Table 39: Special problems that encounter females (%)

Type of problem	Male	Female	Total
Personal harassment	87.1	64.4	77.3
Setting-up enterprise	49.6	56.1	52.4
Marketing	35.1	68.1	49.3
Hiring workers	55.0	37.2	47.4
Managing business	53.8	36.7	46.5
Securing contracts	21.8	39.4	29.4
Benefiting from financial services	25.4	31.9	28.2
Benefiting from other business services	24.6	30.9	27.3
Joining business associations	22.2	24.5	23.2
Total number	248	188	436

The previous tables provide us with several important clues:

Firstly, that the perception of existence of female-specific problems is less emphasized among males than females. Female entrepreneurs have stronger negative convictions -based on their experience-about their problems and constraints since they have to deal with them regularly. Almost 40% of the female entrepreneurs felt that they were subjected to special negative situations or problems.

Secondly, according to female entrepreneurs, the three most important problems that confront them are:

Marketing problems:

Due to the limited technical capabilities of females, the small scope of their operations and their limited financial resources, they find it difficult to market their products, and they remain mostly confined to retail trade and usually in very small transactions.

Personal harassment:

Is one of the problems that are encountered on a regular basis, and could drive several females either to get out of business or to pay off the bullies by giving up part of their modest earnings to ensure protection.

Setting-up the enterprise:

Is another issue that is accentuated by the institutional barriers that complicate the process of licensing and registration.

Who influences the female's decision to start the business?

Against the common perception, data reveal that females in urban areas -as opposed to rural areas-face more social obstacles, as a larger fraction of them needs to get permission to work in the market. The most dominant figure in this respect is the husband, or in case the female was not married the father, and if the father was not alive, the brother, the mother, or other male relatives taking part in such a decision. Therefore, the male family members interfere in case there was no husband or father.

Table 40: The need for permission to work from the household

	Urban	Rural	Total
No	33.3	43.2	37.7
Yes	66.7	56.8	62.3
Total number	315	250	565

Table 41: Source of granting permission to females by area

	Urban	Rural	Total
Husband	54.3	82.4	65.7
Father	27.9	9.2	20.3
Brother	3.8		2.3
Mother	5.8	1.4	4.0
Other	8.2	7.0	7.7
Total number	208	142	350

Table 42: Community role in granting permission to work

	Urban	Rural	Total
No	74.8	80.5	77.3
Yes	25.2	19.5	22.7
Total number	314	251	565

The role of the community in deciding whether to start a business or not is also less stressed in the rural areas. The approval of the community heads is not as much required from female entrepreneurs in rural areas as in urban areas. Females thus enjoy more liberties in rural areas than in the urban centers, which could only be explained by the excessive restrictions imposed by the families and community in poor urban quarters.

Females in urban areas feel more burdened by the conflict between work and home obligations.

Table 43: Conflicts between house and work duties

	Urban	Rural	Total
No	77.1	83.1	79.7
Yes	22.9	16.9	20.3
Total number	314	248	562

One explanation of the difference in the perception of the conflict between house and work duties among females residing in urban and rural areas is due to the existence of nuclear families in rural areas. The female family members help each other if one of them goes out to work. This situation is not as effective or widespread in urban areas, where extended families are not a common phenomenon.

At the same time there are no sufficient nurseries or kindergartens to leave the children at, which puts a load on the working women in urban areas.

However, data reveal that working women enjoy more independence in spending their earnings in urban areas, whereas, 77% of urban female entrepreneurs feel empowered by their earnings, this percentage declines to 60% for rural entrepreneurs.

Table 44: Empowerment of women by earnings

	Urban	Rural	Total
No	22.6	39.5	30.1
Yes	77.4	60.5	69.9
Total number	314	248	562

Still it has to be remembered that almost 25% of female entrepreneurs are widows or divorcees, which lends them more independence in spending their incomes.

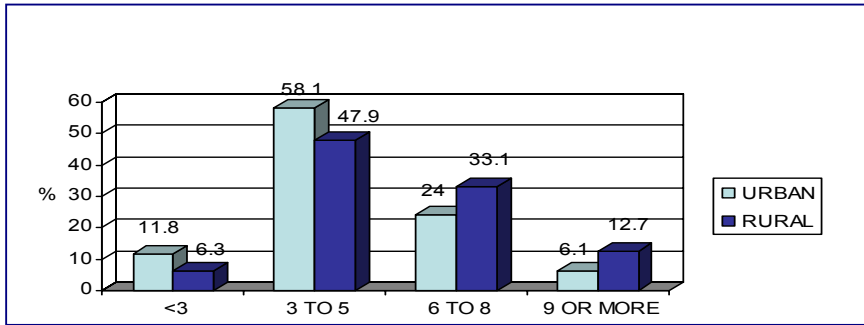
3.6 The characteristics of the household

Every entrepreneur was asked to answer a household questionnaire that included three main types of questions, which are related to:

- Characteristics of the members: the age, education, and employment status of the members, recent ownership of enterprises.
- Characteristics of the household: size of the family, the ownership of durable goods, the size of house/flat, its ownership, and the HH income and expenditures...etc.
- Current or previous ownership of enterprises by HH members: enterprise economic activity, number of workers, reasons for closing down ...etc.
- The results are numerous and I will only touch upon the most pertinent and revealing of them.

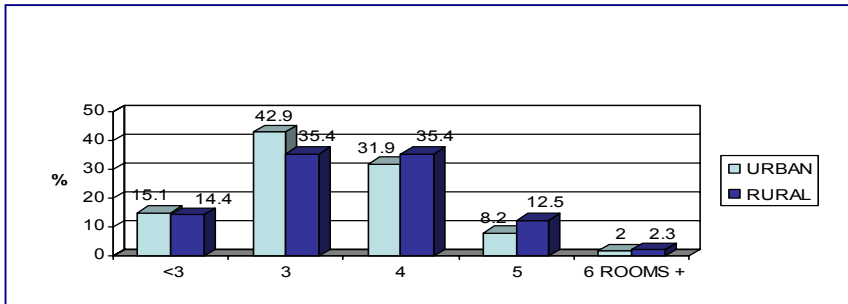
The HH size in terms of number of members was larger in rural areas. Average number of HH members was 4.9 in urban vs. 5.8 in rural areas.

Figure 8 Distribution of HHs by area and family size



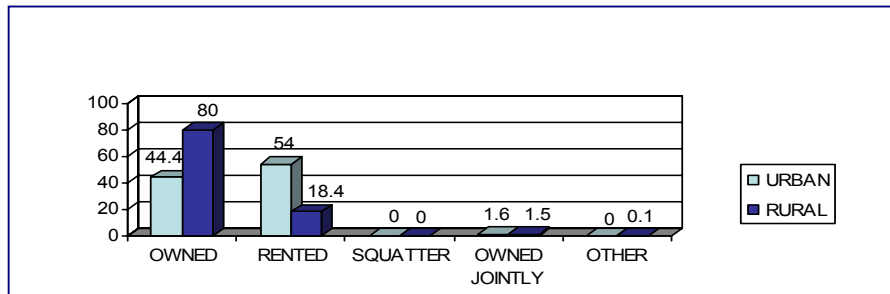
The urban HH however is almost as large if measured by the number of rooms they live in. Mean number of rooms was 3.4 in urban vs. 3.5 in rural areas.

Figure 9: Distribution of HHs by area and number of rooms in their housing units



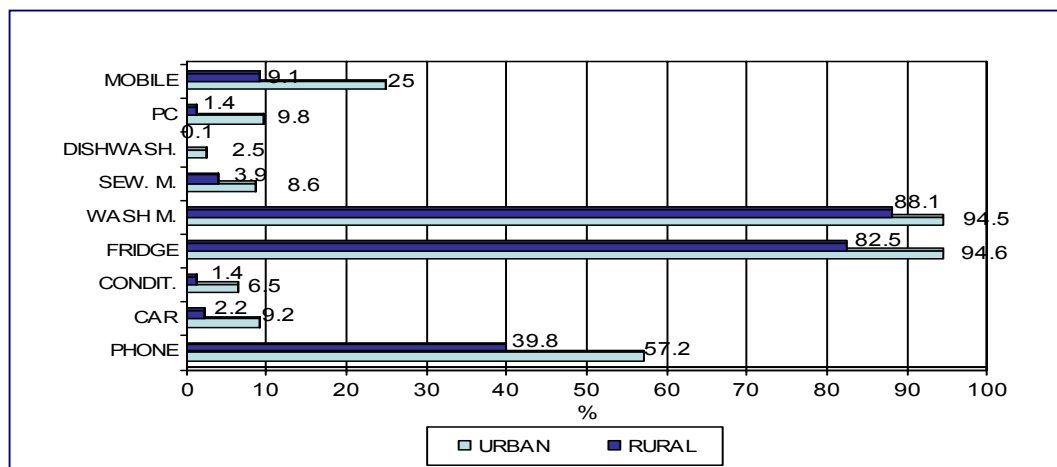
The ownership of the house/flat is higher among rural enterprise owners/managers.

Figure 10: Distribution of HHs by location and ownership of housing units



Percentages of owners of telephones, refrigerators and cellular phones differ obviously between rural and urban entrepreneurs in favor of urban entrepreneurs, while other percentages differ slightly.

Figure 11:



The urban HH generates a higher monthly income in comparison to rural HHs. Almost 6.2% of the urban vs. 3.3% of the rural HH belonging to the entrepreneur's family that earns more than LE2000 per month.

Table 45: Distribution of HHs according to monthly income (LE)

Level of HH'S income	Urban	Rural	Total
< 250 LE	4.8	8.8	7.0
250 TO < 500 LE	23.7	35.6	30.1
500 TO < 1000 LE	44.7	39.2	41.7
1000 TO < 2000 LE	20.6	13.2	16.6
2000 TO < 4000 LE	4.3	2.9	3.5
4000+ LE	1.9	.4	1.1
Total number	2274	2661	4935
Mean	945.8	657.9	790.6

The income generated from working in MSEs in urban areas represents a more substantial segment of the total family income in comparison to rural areas.

Table 46: Distribution of MSEs income to total HH income

% of MSEs income to total HH's income	Urban	Rural	Total
< 25%	43.3	48.0	45.9
25% to < 50%	10.8	12.7	11.8
50% to < 75%	12.0	13.9	13.0
75% to <100%	4.8	6.1	5.5
100%	29.1	19.3	23.8
Total number	2274	2657	4931
Mean	45.3	38.2	41.5

The previous table ascertains two facts:

First: It is obvious that the income generated from micro and small enterprises represents a minor fraction of the HH's income especially in rural areas. The MSEs income does not exceed 25% of the total HH income in 48% of rural families and 43% of urban families that have family members who own or run a MSE.

Second: MSEs income contributes 100% of the HHs income in 29% of urban HHs and 19% of rural HHs that have family members who own or run a MSE.

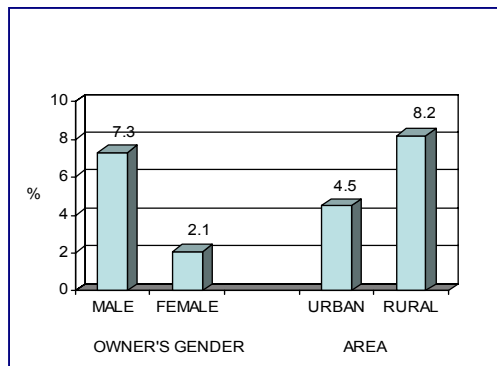
The indication of the previous results is that in general, the income generated from MSEs represents more than 25% of the HH's income in over one half of the households that have entrepreneurs within their members. This percentage rises in the case of the urban HHs, who depend in their livelihood on the income generated by managing a micro or small enterprise.

These observations lend the issues of strengthening the MSEs, raising their efficiency, and expanding their operations a priority, as they affect a large number of households in Egypt.

3.7 Cases of Closed-down Enterprises

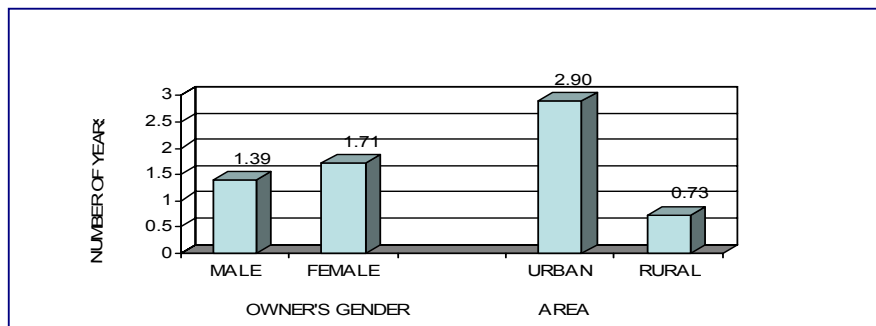
One of the main purposes of this survey was to try and detect the extent of prevalence of closed-down enterprises in the HHs of the entrepreneurs. The survey revealed that in 4958 HHs quite a few enterprises (6.5% of the total number of enterprises) closed down. The share of the rural HHs was higher (8.2% of total economic units) compared to the urban HHs (4.5% of total economic units).

Figure12: Distribution of closed-down enterprises by gender and area



The share of male-owned enterprises in failure (7.3%) was higher than female-owned enterprises (2.1%).

Figure 13: Mean of survival years of closed-down EUs enterprises



It is also clear that the ability to survive longer is more evident in the urban cases though the survival duration is rather short and does not exceed one year.

In addition, the closed-down enterprises, when measured in terms of number of workers, are more concentrated in small-sized enterprises (less than 5 workers).

Table 47: Distribution of closed-down enterprises by gender of owner and number of workers

	Male	Female	Total
1 worker	51.1	47.1	50.9
2 to 4 workers	45.9	52.9	46.2
5 to 9 workers	2.2	0	2.1
10 to 49 workers	.8	0	.8
Total number	249	12	261

The reasons for closures are various; however, marketing difficulties remain the most serious factors. In addition, other unspecified reasons were mentioned such as inexperience, burdens of loans...etc.

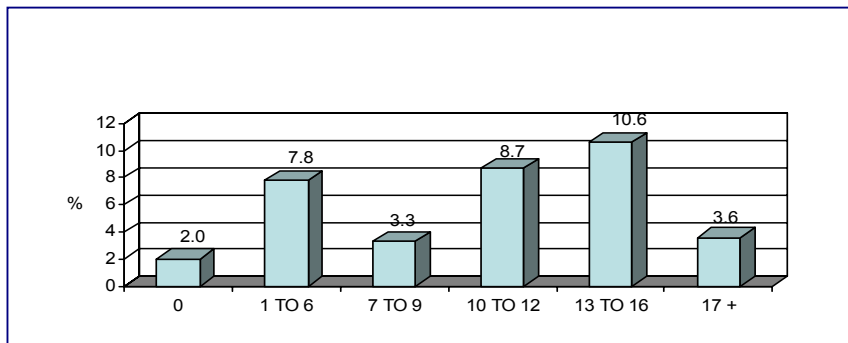
Table 48: Closed-down enterprises by reason for closing down & gender

	Male	Female	Total
Finance	25.6	42.1	26.4
Management	5.2	5.3	5.2
Marketing	46.6	36.8	46.1
Other	22.6	15.8	22.3
Total number	249	12	261

Closed-down enterprises and years of education

Another interesting feature that appears from the available data is the almost positive relationship between the high failure rate of enterprises and the level of educational attainment. Higher educational levels are associated with higher failure rate. This phenomenon could be explained by the fact that with time, more individuals with higher education try -under the pressure of unemployment- to work independently. But the lack of prior experience hinders their ability to continue operating successful.

Figure 14: Percent of closed-down enterprises by educational attainment



The rise and decline of MSEs over the last decades

In an attempt to trace the change that occurred in the life of the MSEs that opened and closed over time, the following three graphs will help us draw a profile of the type of change that took place:

Figure 15: Years of starting the business

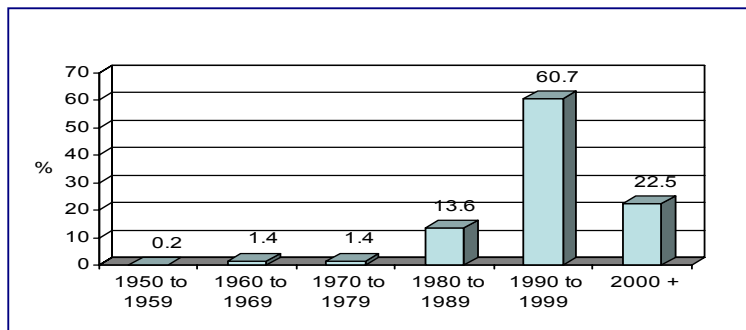


Figure 16: Years of closing down the business

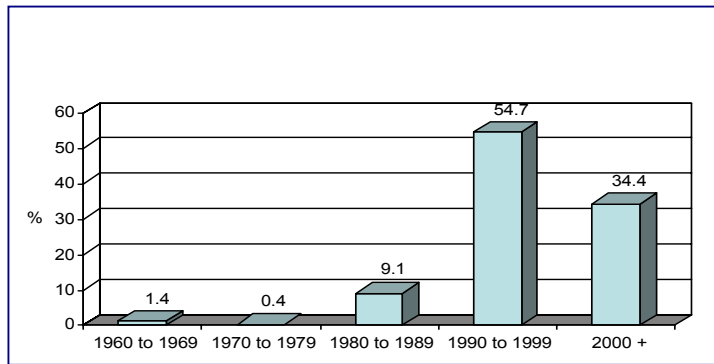
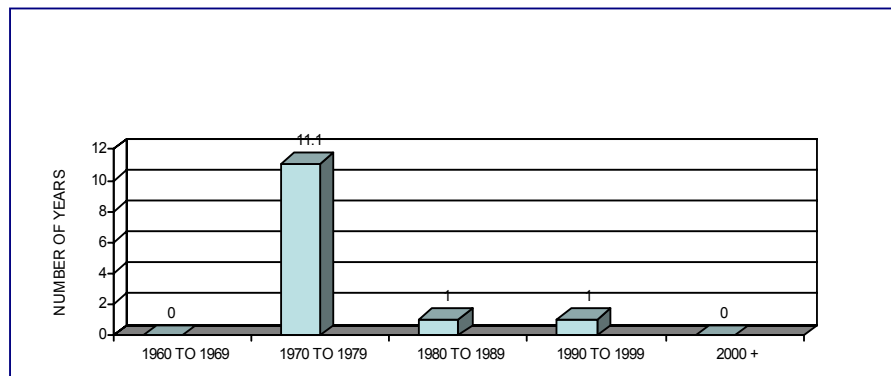


Figure 17: Median survival duration of closed-down EU by year of starting the business



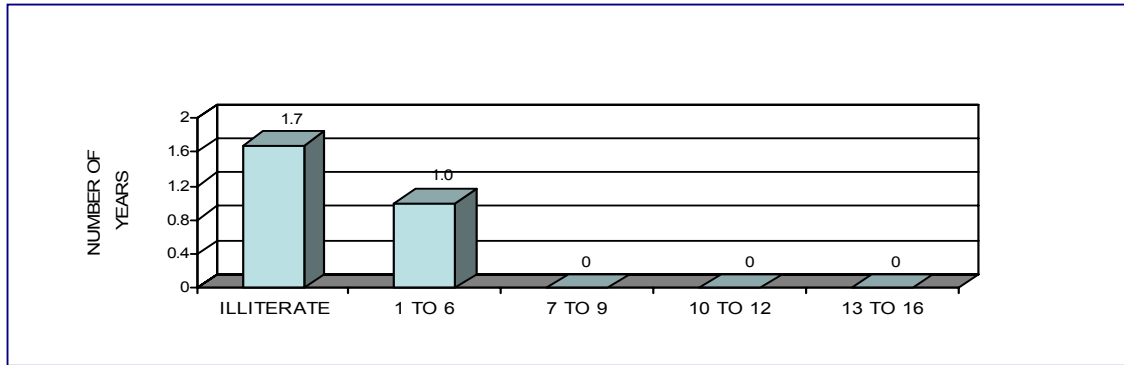
The previous three graphs tell us a short story of the entry and exit of the closed-down enterprises. But we have to remember that the previous description is that of enterprises that failed only.

1. It is apparent that the numbers of MSEs that opened increased slowly until the nineties of the previous century and the beginning of the new century, where they reached unprecedented levels of opening. Similar pattern applied to their time of closing.
2. The survival duration was around a few months during the sixties - at the time of central planning, when the private initiative was condemned. However, it was equally short during the time of supporting the private initiative and the MSEs by both the government and the civil society.
3. It is also evident that the seventies were the best years for MSEs, since their average survival duration reached as far as 11 years.

Therefore, it could be worth noting that many be the current efforts that aim at supporting MSEs are not moving in the right direction or not answering to the actual needs of the MSEs.

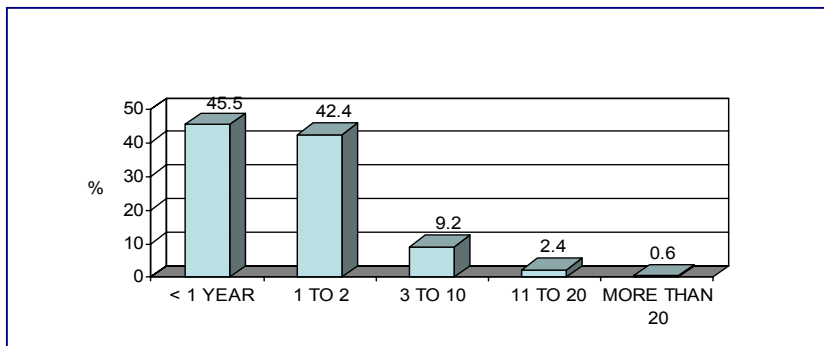
It is also worth considering that the duration of survival is higher among the illiterates compared to the educated.

Figure 18: Median survival duration (in years) distributed according to educational levels



Another pattern which appears to be of relevance is that the enterprises that closed down usually did so within the first two years of operations. Thus, the need for assistance is high during these years as the enterprises are more vulnerable then.

Figure 19: Distribution of the closed-down enterprises according the number of survival years



As to the enterprises that perish after more years, the reasons for closures vary, and some of them are due to structural reasons, such as the reduced demand on certain goods or services, or the fierce competition from more modern and larger industries of domestic or foreign nature, or the growing imports.

To conclude, data reveal that 6.5% of the HHs enterprises failed. The reasons for failure are numerous and should be understood to be able to suggest appropriate support policies. The failure of these enterprises means the loss of income, jobs, and security to the employers and the workers as much as it means a waste of limited resources and misuse of financial and non-financial services.

Conclusion

The main objective of this research is to understand the actual set-up in which the MSEs operate and the different constraints they are faced with, so as to identify what constitutes an enabling environment for the development of the sector.

The previous analysis revealed that the majority of MSEs were of micro size, with limited capital and limited access to finance. The entrepreneurs stated that the current loan conditions -high interest and short-term repayment schedules- represented burdens to be avoided.

The non-financial support services were minimal if not non-existent. Almost none of the entrepreneurs received any form of business support services from the government, the private sector, or NGOs.

The majority of entrepreneurs or workers received their training through the intergenerational convention of transferring knowledge to young apprentices or on job training. This system is limited in that it tends to reproduce the current levels of expertise. The lack of training outside the workplace

or its inappropriateness to market needs limits the ability of both the owners and workers to acquire more advanced levels of specialized skills.

The legal and institutional climate is inhibiting and drives the MSEs to operate informally to avoid the numerous obstacles they encounter. Having to deal with public officials in the different central or local government offices was one of the common complaints. Misinformation, unwillingness to explain or discuss certain issues, and refusal to accept the validity of accounts are all problems that account for the high prevalence of informality.

In addition, females encounter special unfavorable circumstances due to their gender as they venture into business. The most crucial issues include the need to get permission from male household heads and sometimes that of community heads. Another female-specific problem is that of being subject to personal harassment in the market place.

Other problems such as marketing difficulties and obstacles in setting-up the enterprise are shared among both sexes.

Finally, until now the government's role to support MSEs seems to fall short of the consensus that the MSE sector should be regarded as an engine of national development and competitiveness. The government's plan for MSEs – if existent - and the different organizations dealing with the factor that constrains their vitality and ability to expand and develop should be revised and restructured.

Part Four: The re-listing and follow-up phases (2004)

One year after the first wide-scale data collection of the 5000 enterprises, a re-listing of all the enterprises in the selected Shiakhas was conducted. Subsequent to the re-listing, a follow-up survey was conducted.

In the following sections the details of the main results of the two phases will be presented. The main objective of these two phases was to study the dynamics of MSEs.

Are the MSEs sustainable in their operations, or do they grow or shrink and disappear with time? Do they remain functioning in the same economic activity or is there a movement and change in economic activities and/or scope of operations? If there is change, what are the features of change? If there is growth, which factors of production are the most likely to expand?

This part will thus include three main sections:

Section 1: The re-listing phase: the objectives, the methodology, and the main results

Section 2: The follow-up phase: the objectives, the methodology, and the main results

Section 3: Conclusion

Section 1: The re-listing phase: the objectives, the methodology, and the main results

The objective of the re-listing phase was to study the basic changes in the enterprises' characteristics in the selected nationally representative sampling framework over a year.

Since the listing and re-listing phases cover a substantially large number of enterprises, the information gathered on each enterprise was limited to the necessary variables that help in the final sample selection. Therefore, the analysis of the re-listing phase will only cover the changes in activity, ownership, number of workers, the regional distribution...etc.

Methodology of the re-listing phase³⁰:

All the enterprises in the 120 Shiakhas and villages, which were listed during the listing phase (2003), were re-listed (2004). The interviewers in the re-listing phase were given some information (name of the enterprise, address, name of owner) on the listed MSEs in the first phase. They were instructed to pass by each listed MSE and record in a sheet the following characteristics:

- Name of the enterprise (if changed to record the new name).
- Name and gender of the owner of the enterprise (if changed to record the new name and gender).
- Activity of the enterprise (if changed to record the new activity).
- Number of workers.
- Year of establishment.

Fieldwork Activities:

1-Recruitment of staff

Twenty six listers for the re-listing phase were recruited from among those who participated in the first phase surveys. The interviewers were all highly qualified females and males. Supervisors and office editors were selected from those with good previous experience in such surveys.

2-Training

The training of listers lasted 3 days during the first week of March 2004. The training course consisted of instructions regarding interviewing techniques and field procedures and a detailed review of items on the questionnaires. The training consisted of theoretical lectures, role playing, and field practice.

³⁰ For details in the re-listing instrument see Appendix A.

3-Main Fieldwork

The field staff consisted of four teams; each team was comprised of one supervisor and four to five interviewers. During fieldwork, each team was regrouped as necessary. Two general supervisors were recruited for quality assurance. They were instructed to randomly select MSEs from each lister work and check the data collected. The Fieldwork started in the first week of March 2004 and continued for three weeks.

4-Data Processing

Fieldwork and data processing activities overlapped. After a week of re-listing, and after field editing of re-listing sheets for completeness and consistency, the re-listing sheets for each PSU (Shiakha or village) were packaged together. Special editors were recruited to carry out office editing and coding.

Data entry and verification started after one week of office data processing. The process of data entry, including one hundred percent re-entry, editing and cleaning, was done using PCs and a computer database program developed specially for these surveys. Data processing operations for the re-listing phase were completed by the mid April, 2004.

5-Quality Control Measures:

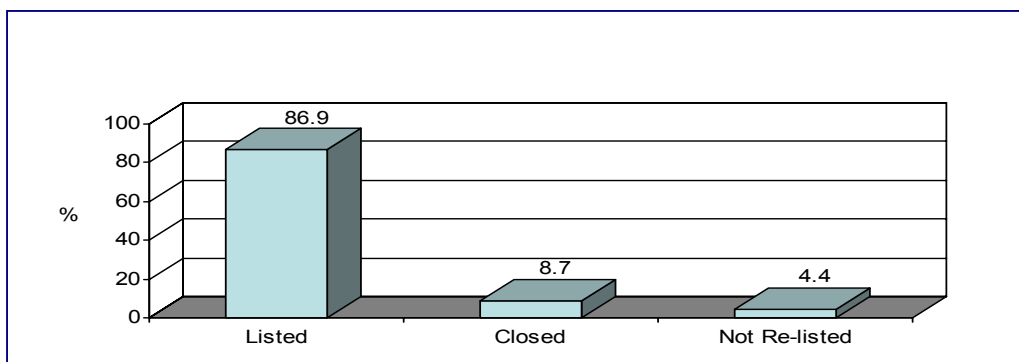
- The quality of the data collected was ensured by:
- Selecting Qualified Field Staff.
- Field Editing (By Supervisors).
- Field checks by general supervisors.
- Office Editing.
- Re-entry of 100 percent of Questionnaires

Findings of the Re-listing phase:

1-Status of MSEs

Figure 20 indicates that among the listed 26,435 MSEs, the listers succeeded in re-listing around 87 percent (23000 MSEs). The other 13 percent were either closed (9 percent) or not interviewed (4 percent) for different reasons such as the collapse of the building, the unit could not be identified, the unit merged with other units...etc. This result indicates that around 13% of the existing enterprises in 2003 seemed to have disappeared in the following year. However, the re-listing operations show that around 2100 new enterprises were established during the year 2003/2004.

Figure 20: Distribution of the closed-down enterprises according the number of survival years



2-Transition of Activities

The transition from one activity to another was one of the main aspects considered in the re-listing phase. Figure 21 represents the findings in this respect. The horizontal axis shows the activities of the listed EUs in 2003, while the columns reveal the activities of the same enterprises in the re-listing year (2004). The stability was more likely to occur among MSEs working in trade (95 percent), followed by services (92 percent), and manufacturing (81 percent). Where change was witnessed, most of the MSEs went into trade activities. Around 14 percent of manufacturing MSEs changed their

activity to trade and 5 percent changed to services, whereas 7.3% of the service activities changed to become trade activities. The percent of trade enterprises going into other activities did not exceed 5% (3% went to services and 2% got engaged in manufacturing activities).

Figure 21: The transition of the eus between economic activities in 2003 and 2004

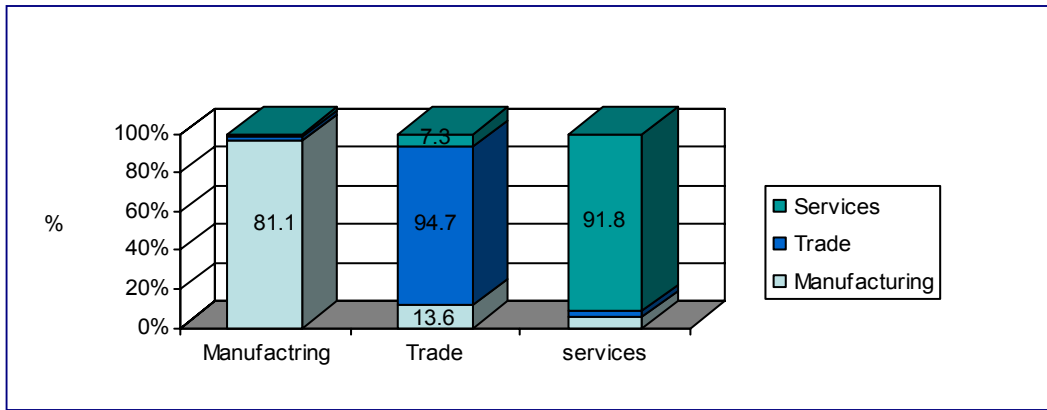
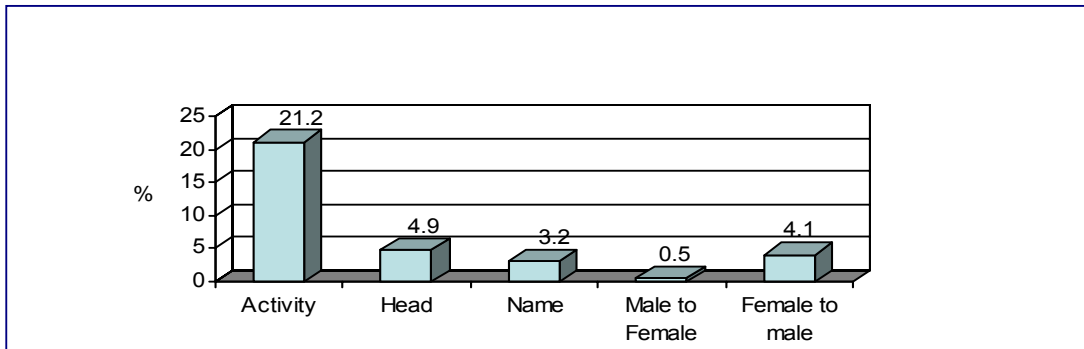


Figure 22 enumerates the main changes in the basic characteristics of MSEs; namely activity, head of MSE, name of MSE, female-headed enterprises to male-headed enterprises and vice versa. Slightly more than one fifth (21 percent) of MSEs changed their activity. The details in the transition of activities were discussed before. The change in the head of MSEs is around 5 percent. Only 3 percent of MSEs changed the name. Four percent of female headed MSEs changed to male headed MSEs compared to less than 1 percent change in the other direction.

Figure 22: The change in some characteristics of EUs



3-Change in the Number of Workers:

The findings of the re-listing phase indicate a change in the mean number of workers per MSE. On average, the number of workers per MSE became **2.6** in the re-listing phase compared to **2.3** in the listing phase. Figures 23 and 24 represent the changes in the number of workers. Figure 24 documented the change in the distribution of MSEs by number of workers. Whereas 40.3 percent of MSEs in the listing phase (2003) employed one worker, the re-listing phase showed a reduction in the percentage of enterprises in the one-worker category (38.9%). Slightly more than half of the units in listing and re-listing have 2 to 4 workers. The differentials in the mean number of workers among regions is presented in Figure 25. The metropolitan areas have the maximum mean of workers per MSE in both listing and re-listing followed by Upper Egypt then Lower Egypt.

Figure 23: The number of workers in listing and re-listing

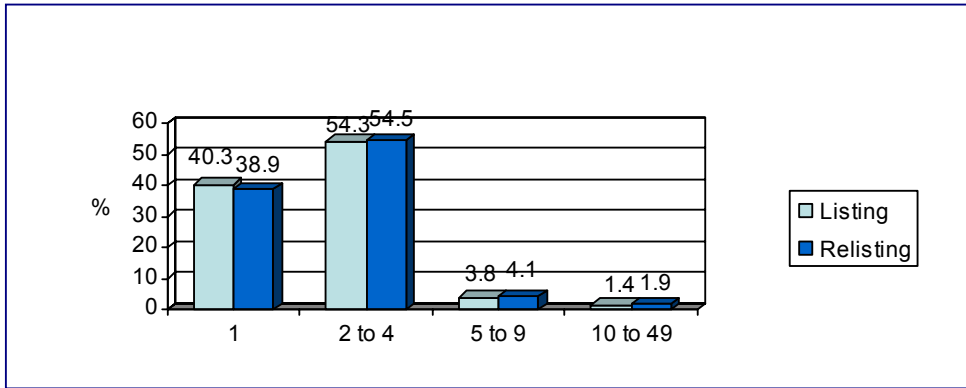
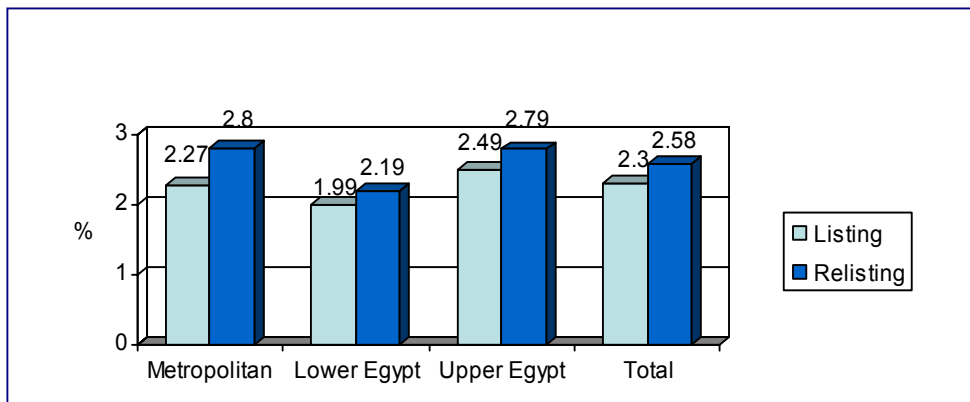
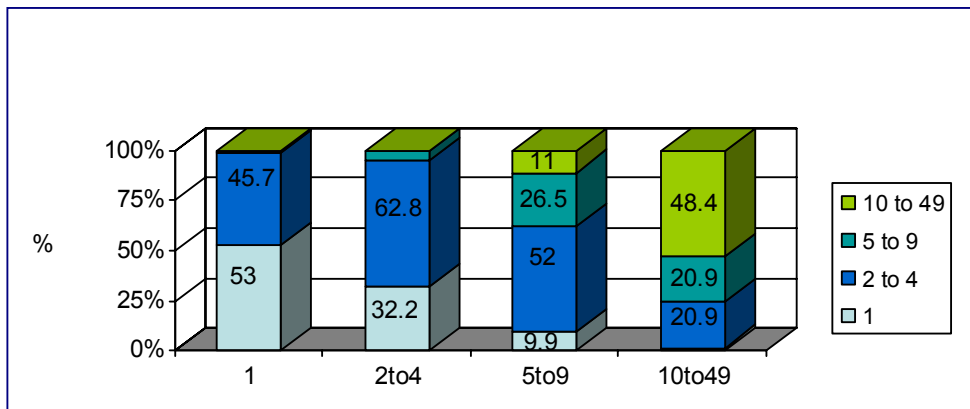


Figure 24: Mean number of workers per enterprise in listing and re-listing



Although the average and distribution of the number of workers did not change much, Figure 25 shows a change in a transition occurring from one size to another. Among the MSEs having one worker in the listing phase around half of them changed to a higher size category (mainly to 2 to 4 workers). Slightly less than two thirds of MSEs employing 2 to 4 workers (63 percent) stayed within the same size and the majority of the other third reduced the number of workers to one worker.

Figure 25: Change in the no. of workers in the listing and re-listing phases



4-Comparing the Characteristics of the Exiting and Entering MSEs in the Re-listing Phase:

One of the objectives of the re-listing was to study the features of the exiting and entering enterprises. The comparisons are demonstrated in the following table (49).

The table indicates that the movement of the enterprises is more concentrated in the urban areas (in and out), and in trade activities, the micro-sized enterprises are gradually diminishing as a percentage of total enterprises, thus giving way to relatively larger ones. Although one year could not be taken as a reliable indicator of a future trend, such a phenomenon should be closely monitored as it shows a structural change in the features of MSEs. Such a change -if proved sustainable- necessitates revising the ongoing policies that guide MSEs.

Table 49: The characteristics of the entering and exiting MSEs

Description	Exiting Units	New units
Urban	87.7	91.3
Rural	12.3	8.7
Total	100.0	2096
Metropolitan	53.7	58.0
Lower Egypt	8.3	9.5
Upper Egypt	38.0	32.5
Total	100.0	2096
Male	92.5	92.8
Female	7.5	7.2
Total	2547	2080
Manufacturing	11.7	10.2
Trade	53.8	55.7
Services	34.4	34.1
Total	2983	2096
0 workers	0.0	0.4
1 worker	46.6	39.5
2 workers	34.6	38.9
3 to 5 workers	16.1	17.9
6 to 9 workers	2.0	1.8
10 to 19 workers	0.5	0.7
20 to 49 workers	0.2	0.6
50+ workers	0.0	0.2
Total	2771	2071

One of the main apparent changes is that the number of 2984 enterprises -representing 13% of the total number of listed enterprises- exited from the market; those enterprises were employing 5461 workers (with an average of **1.97** workers per enterprise). At the same time 2096 new enterprises entered the market, employing 4984 workers with an average of **2.4** workers per enterprise. As a result, the decrease in the number of exiting enterprises compared to the number of entering enterprises was not associated with a similar relative decrease in the number of workers, since the average size of the new enterprise is becoming larger gradually. The following table shows the difference between the exiting and entering enterprises with regards to employment.

Table 50: The Total and average number of workers in the exiting and entering enterprises

Description	Exiting units		New units	
	Average no of workers	Sum of workers	Average no of workers	Sum of workers
Urban	1.98	4789	2.44	4622
Rural	1.89	672	2.01	362
Total	1.97	5461	2.41	4984
Metropolitan	2.00	2949	2.67	3204
Lower Egypt	1.68	356	2.04	400
Upper Egypt	1.99	2156	2.05	1380
Total	1.97	5461	2.41	4984
Male	1.95	4446	2.39	4550
Female	1.62	299	2.37	355
Total	1.92	4745	2.39	4905
Manufacturing	2.49	838	3.34	708
Trade	1.65	2513	1.84	2127
Services	2.31	2109	3.06	2149
Total	1.97	5460	2.41	4984

It is obvious that the relatively larger-sized enterprises are mainly concentrated in urban centers, especially Metropolitan areas, and in the manufacturing activities.

The phenomenon of the growing number of workers in the MSEs has been perceived over the years and in different surveys of MSEs. It is a reflection of the changing market structure of MSEs towards larger sizes. The openness of the market which gradually leads to the death of non-competitive firms was a primary factor behind the apparent development. However, there were other contributing factors such as improving the educational levels of the entrepreneurs, increasing the finance offered to them, and the growing demand in the market for cheap products and services.

Section 2: The Follow-up Phase: The Objectives, the Methodology, and the Main Results

The primary objective of the follow up study was to update the information of the initial sample survey. A modified smaller version of the MSE questionnaire was developed to be used in the follow up. The modified version collected information on:

- Main activity of the MSE, main products, and secondary activities.
- Other locations of the MSE.
- Working system including number of working hours per day, number of working days per week, number of working weeks per month, and number of working months per year.
- The gender of owner (manager).
- The performance level (in the current and previous years) measured by:
 - Number of workers.
 - Area (space) of the project.
 - Value of assets.
 - Value of final production (average per month).
 - Wages (average per month).
 - Raw materials and intermediate products (average per month).
 - Cost of consumed energy (average per month).
 - Other expenses such as rent, taxes, etc. (average per month).
 - Revenue (average per month).
 - Exports (average per month).
 -
- Future expectations in the next year for:
 - Number of workers.
 - Area (space) of the unit.
 - Products.

- Assets.
- Technology.
- Revenue
- Sales
- Exports

For more details see Appendix B.

Methodology

Fieldwork Activities:

1-Training of Interviewers

Around 25 university graduates with experience in data collection were recruited for interviewing, supervising, editing, and data entry. All candidates attended training for one week.

The training included:

1. General lectures related to basic interviewing techniques.
2. Sessions on the objective of the survey and definition of SMEs.
3. Specific Sessions with visual aids on how to fill out questionnaires.
4. Role Playing and mock interviews.
5. Field practices.
6. Quizzes.

Trainees who failed to show interest in the survey were terminated. Twelve interviewers, 3 supervisors and 2 general supervisors were selected for data collection operation.

2-Data Collection

The Field Staff was divided into 3 teams; each team had a supervisor and 4 interviewers. The fieldwork for the follow-up study began on the 1st of April 2004 and was completed on May 15th, 2004. The interviewers were responsible for conducting the interviews and completing the questionnaires with the owners or managers of the selected MSEs. In addition to leading the team, supervisors were responsible for field editing of the questionnaires. To assure quality, 2 general supervisors were responsible for checking the collected data by re-interviewing a sample from each interviewer's work (Quality Control). The number of completed interviews reached 4590 out of 4958 units in the base survey (with 93 percent response rate).

3-Data Processing Activities

Office editors reviewed questionnaires for consistency and completeness. Coding was conducted at the office prior to data entry. Office editors were instructed to report any problems detected while editing the questionnaires, which were reviewed by a senior staff, an assistant and 5 office editors recruited for these purposes.

Computer entry and editing began while interviewing teams were still in the field. Data were entered on PCs using a software program developed for the survey. Around 4 data entry personnel were recruited and trained to process the follow-up data. During data entry, 100 percent of the questionnaires were re-entered for verification. Data processing was completed by the last week of May 2004.

Quality Control Measures: Quality of data was assured using several measures such as:

- Selecting and training qualified field staff,
- Field editing (by supervisors),

- Field checking (by general supervisors),
- Office editing, and
- Re-entry of 100 percent of questionnaires.

The Main Findings of the Follow-up survey:

The FU questionnaire included, beside the basic descriptive questions, 16 questions that monitor the development of the enterprise after one year of operations. In addition, a section on the future prospects (9 questions) has been added to reflect the entrepreneurs' opinions with regards to future intentions and plans.

In the following sections the author will try to summarize the main results, while distinguishing between two sections, the first will cover the performance during the last year, March 2003-March 2004; and the second part will include a discussion of the future prospects of the entrepreneurs.

Firstly: The Economic Units' Performance:

In order to understand the results of the FU survey, one has to remember certain facts:

- The Egyptian economy has been undergoing a recession since the end of the nineties.
- The recession has affected the business sector, large and small.
- The implication of the recessionary climate on the small enterprises was less employment, less output and sales, and less expansion tendencies.
- The stagnation has been accompanied by rising price levels, as a consequence of a substantial devaluation of the Egyptian Pound (end of January 2003).

Due to this situation most of the results showed deterioration in performance rather than improvement. However, the deterioration was associated with improvements in some of the major variables such as mixed income, value added, and exports. This paradox of contradicting results deserves more investigation and analysis through focus groups.

The enterprise description: will include the results covering three main issues: **the number of employment, the size (space) of the economic unit, and value of assets** over three points in time: March 2002, 2003, 2004.

The following graph indicates the trend in change in the three variables. As it stands, all three variables witnessed decline. The most drastic decline has been in the value of assets.

The detailed data show some differentiations among regions, size, ownership (male/females), and economic activity.

Employment

The reduction in employment is more apparent in: urban and metropolitan areas, male-owned enterprises, construction activities, larger enterprises, in terms of employment and capital, and in the formal enterprises.

The increase in employment is more visible in the case of rural areas, Upper and Lower Egypt, enterprises employing 6-19 workers, and the informal enterprises.

Enterprise Size

The shrinking in size of the economic unit is more apparent in urban areas, metropolitan areas, lower-Egypt, male-owned enterprises, all economic activities, and less than 10 workers enterprises.

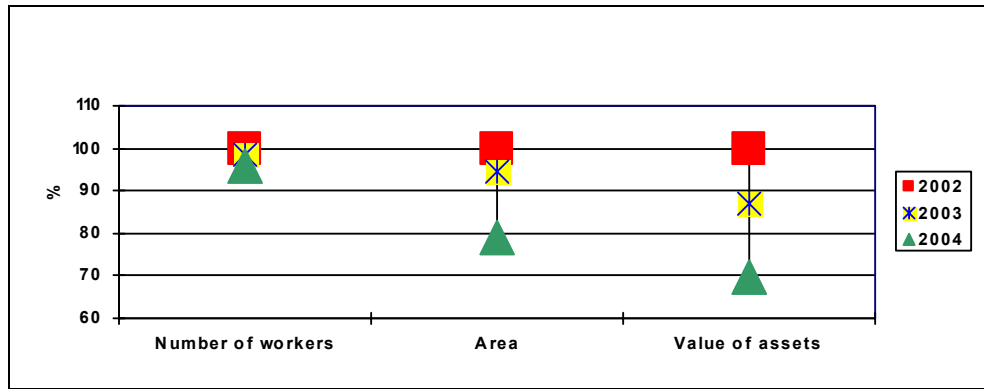
As to the growing economic units, they seem to be more visible in Upper Egypt and within larger enterprises (employing more than 10 workers).

The Assets Value

The decreasing assets value is witnessed in urban areas, metropolitan areas, Lower Egypt, male-owned enterprises, construction, trade and hotels, 6-19 workers enterprises, and economic units with more than LE 20, 000 capital.

The increasing assets value is witnessed in rural areas, Upper-Egypt, female-owned enterprises, manufacturing and service activities, less than 6 workers enterprises, and more than 10 workers enterprises.

Figure 26: Change in some economic variables in three time points



Secondly: The economic unit's production and value added:

During the last few years, several of the large enterprises had to close down or downsize the number of workers. In some manufacturing towns, the number of enterprises that had to downsize exceeded one third of the total number of industries. In the case of the MSEs, the reduction in the number of workers has been much less pronounced. The average number of workers per enterprise decreased from 2.3 to 2.2 persons.

However, the impact of stagflation was more evident when we look at the value of output and the different costs items.

Figure 27: Change in some economic variables in three points of time

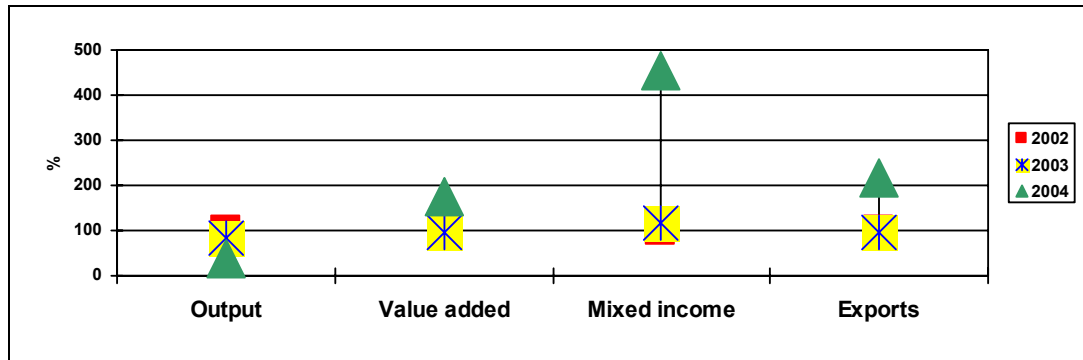
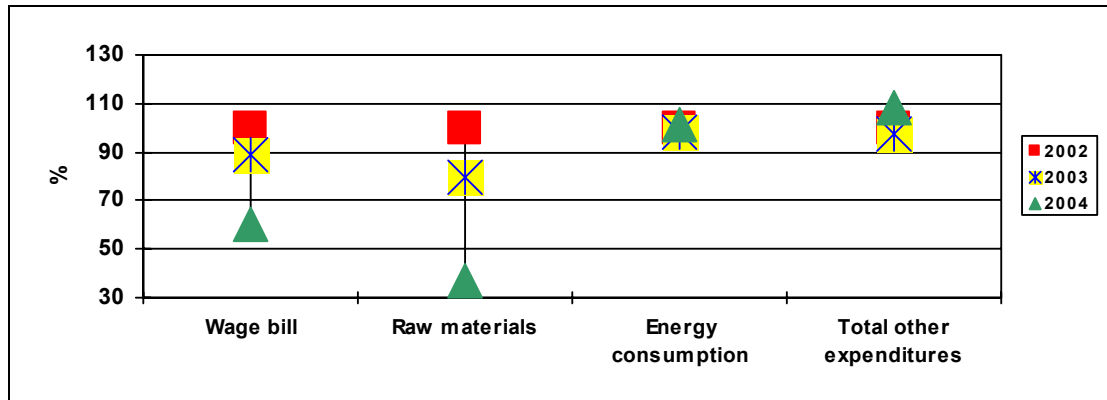


Figure 28: Change in the production costs in three time points



The general trend could be shown in the previous graphs, which depict the changes that took place during the last two years.

As can be seen, most **production-related components** have witnessed an unmistakable decline, except for some items such as the cost of energy consumption and rents, which have experienced rises in their values due to inflationary pressures and/or changes in the price of electricity and fuel.

In addition, some observations seem to repeat themselves, when we look at the variations within the different classifications:

- Rural areas seem to fare better than urban areas;
- Enterprises working in Upper-Egypt seem to be the winners despite the stagflation;
- Female-owned enterprises are relatively performing better than male-owned enterprises.
- Smaller sized enterprises are doing better in terms of the increase in their value-added.

Despite the generally bleak performance of the MSEs, the estimated value of the entrepreneurs' mixed income, which could be taken as a proxy of profits, shows improvement over the three points of comparison³¹. The growing mixed income values may be related to the efficiency in using the costly resources to respond to the limited demand, to reduced inventories of raw materials and other production inputs, as well as the diminishing real wages due to unemployment pressures.

The same pattern of positivism could be noticed in the value-added per worker.

One could conclude from the previous results that MSEs have been influenced by the recessionary climate (drop in the real values of output and assets and limited impact on the number of workers). However, some of the variables showed apparent increases in their values such as the value-added and the mixed income.

What does such a phenomenon indicate?

Several explanations could be presented:

Firstly, the number of workers is usually small in the MSEs, and is mostly comprised of the entrepreneur and another worker or two. The room for reducing the numbers is minimal; therefore the alternative is to reduce the value of output and the production inputs, and to try to make use of the available factors of production to the maximum limit.

The flexibility of the MSEs allows them to introduce the necessary changes in the production operations to meet with the changes in demand, without having to suffer from the large fixed costs of running a large business. Therefore, the output was reduced, in response to the lower demand, while incurring limited costs.

Secondly, the recessionary climate that is associated with inflationary pressures leads to obvious reductions in real wages, either due to no changes happening, or to the reduction, in nominal wages.

Thirdly, the prices of most goods and services witnessed upward changes to conform with the increase in the input prices, which led to the growth of mixed incomes.

Finally, the recessionary climate encourages more enterprises to work informally to forgo the costs associated with formality. Informality lasts until they feel that they could sustain their operations, secure sufficient demand and expand.

Only micro or small-sized enterprises could work on an informal basis. Larger investments can not afford to operate informally. Informality reduces the costs of investments and allows micro enterprises to enter the market in times of unemployment, and thus acts as a relevant buffer in the case of crisis in the market.

Thirdly: The Entrepreneurs' Future Prospects:

³¹ The negative figures in Appendix B that are visible in some of the data could be due to data of a limited number of construction firms -13 cases- which suffered severely. The negative values of their data affected the rest of variables.

The impact of the climate was nevertheless reflected in the entrepreneurs' answers with regards to their future prospects. In the main survey MSE2003, the entrepreneurs were asked about their future outlook. The same questions were posed one year later (2004). The comparisons between the two responses show a more negative attitude towards the future expectations.

The negative expectations are quite apparent in the following answers:

- The increase in the percentage of the entrepreneurs who intend to leave the business from 6.4% in 2003 to 11.4% in 2004;
- The increase in the percentage of the entrepreneurs who intend to decrease the number of workers, the value of assets, the output, the domestic sales and revenues; and a decrease in the percentage of entrepreneurs who wish to increase the same five variables.

The intention to keep the production-related variables stable or unchanged seems to be more prevalent.

The introduction of new technologies or new products is currently in a case of stand-still/no change from the entrepreneurs' perspective.

Figure 29: Future prospects of assets, employment and size of enterprise in two years

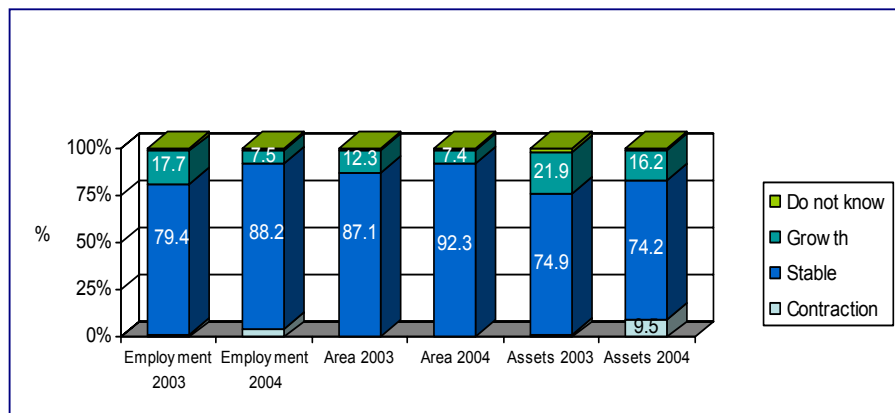
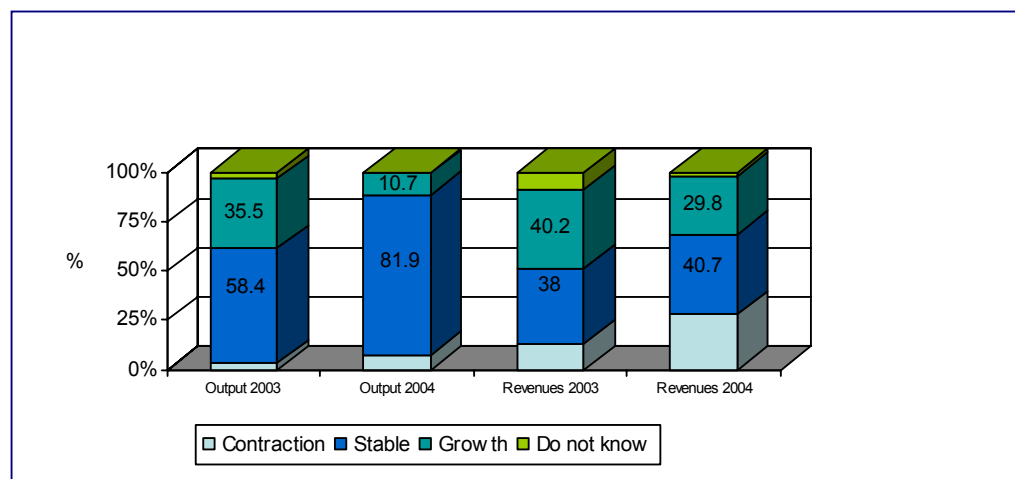


Figure 30: Future prospects of output and revenues in two years



All through the different answers of the entrepreneurs with regards to their future expectations certain features seem to stand out clearly:

Where employment creation is concerned, the highest percentage of enterprises that intend to decrease the numbers of workers are concentrated in the urban areas, especially metropolitan centers, male-

owned enterprises, manufacturing, in 3-19 workers economic units, in enterprises with capital of more than LE 20,000, and in formal enterprises.

Where future output is concerned, the highest percentage of enterprises that intend to decrease their output are concentrated in the urban areas, especially metropolitan centers, manufacturing, 2-19 workers economic units, enterprises with capital of more than LE 20,000, and formal enterprises.

Where future value of assets is concerned, the highest percentage of enterprises that intend to decrease are concentrated in the urban areas, especially metropolitan centers, male-owned enterprises, manufacturing, 6-19 workers economic units, enterprises with capital of more than LE 20,000, and formal enterprises.

Where future value of revenues is concerned, the highest percentage of enterprises that expect a decrease are concentrated in the urban areas, especially metropolitan centers, male-owned enterprises, manufacturing, 6-19 workers economic units, enterprises with capital of less than LE 5,000, and formal enterprises.

Section 3: Conclusion

1- The listing operations indicated several interesting results, the most important of which are:

a) The total number of MSEs decreased in the re-listing phase by around 1000 economic units. The original number of listed enterprises was 23000 units in 2003. Almost 3000 units (13%) listed in 2003 proved to have closed down or disappeared. However, around 2100 new enterprises entered the market during the period of March 2003 to March 2004.

A high degree of churning is taking place in the Egyptian market especially among the community of MSEs. The movement comes as a response to changing market needs, the influx of the cheap priced imported goods, the growing unemployment, and the growing access to finance...etc.

b) The average size of the MSEs increased from 2.3 workers per enterprise in 2003 and reached 2.6 worker/enterprise in 2004. This result conforms to previous surveys, that indicated a trend of increase in the numbers of workers per enterprise. This phenomenon could be due to the competitive open climate, which necessitates growth in the minimum size of the MSE.

However, this phenomenon is not perceived in all regions. It is quite apparent in the metropolitan areas and in Upper Egypt, while MSEs in Lower Egypt are still relatively smaller and have not shown the same tendency to increase in terms of number of workers.

2-In an attempt to measure success in the main survey, the mean of the value added per worker was taken as an indicator that distinguishes between successful and unsuccessful enterprises.

Success of the MSE was calculated based on classifying the units into successful units, which had a Value Added/Labor ratio³² equal to or above the community's mean, and the unsuccessful EU, that has Value Added/Labor ratio below the mean.

The same procedure has been replicated in 2004 to assess the kind of change that took place in the MSEs community between the two years.

The following tables demonstrate the change that occurred to the sample of enterprises in one year (April 2003-April 2004).

³² Value added = Value of Sales – (Raw materials costs + Energy costs + Other costs)

Table 51a: The Number of successful versus unsuccessful enterprises during 2003/2004

Mean VA/worker	Count	Mean value added per worker 2003 adjusted by 2002 prices		Total
		< MEAN	MEAN+	
Mean value added per worker 2004 adjusted by 2002 prices	< MEAN Count	2291	1032	3323
	MEAN+ Count	792	534	1326
Total	Count	3083	1566	4649

Table 51b: The percentage of successful versus unsuccessful enterprises during 2003/2004

Mean VA/worker	% of Total	Mean value added per worker 2003 adjusted by 2002 prices		Total
		< MEAN	MEAN+	
Mean value added per worker 2004 adjusted by 2002 prices	< MEAN % of Total	49.3%	22.2%	71.5%
	MEAN+ % of Total	17.0%	11.5%	28.5%
	% of Total	66.3%	33.7%	100.0%

The previous table indicates that the successful enterprises presented 33.7% of all MSEs in April 2003, while this percentage shrank to 28.5% in April 2004, which is a reflection of the recessionary environment.

However, not all enterprises experienced the same kind of change. While around 22% of the previously successful economic units changed positions and moved into the ranks of unsuccessful units; there were 17% of enterprises that were luckier as they progressed from being unsuccessful to become successful.

Therefore, despite the recessionary climate, a group of the MSEs managed to improve their performance. A result that is also ascertained by the previous responses whether with regards to the production related variables, the mixed incomes, or the future prospects.

3-It is also obvious that MSEs face some serious challenges in Lower-Egypt (especially urban areas) and in the urban metropolitan areas, in manufacturing activities, especially in small sized enterprises (in terms of workers and capital). The fierce competition, the discouraging business environment, the recession which hit a large number of large and small enterprises, and affected the incomes and thus the purchasing power of the urban population formed altogether obstacles in front of the MSEs.

The rural areas in contrast do not suffer with the same intensity. The possible explanations to such a difference may be that the role of MSEs is still emerging in these areas, the educated graduates are starting to venture into small business activities, the external competition is rather hampered by the modest highways and domestic routes, and the demand is available by the growing population. In addition a lot of finance is being poured into these virgin territories especially in Upper-Egypt. Therefore, such surroundings influence the entrepreneurs' responses.

To sum up, the on-going business climate has cast its shadows on both the performance and expectations of the small entrepreneurs. Some of the factors that helped sustain the majority of enterprises could be explained by their micro/small size, their ability to bend to changing market environment and their flexibility to respond to new market needs.

Part five: Policy recommendations

Based on the information derived from the survey and taking into consideration the fact that the GOE is concerned with developing MSEs through different tools, one could prescribe several policy recommendations.

Firstly, since there is a distinctive difference in terms of productivity between the micro and small enterprises, any policy directed towards the sector should not only recognize the difference but act upon it. By that it is meant that policy tools targeting micro units should aim -among other things- at helping the micro enterprise grow and raise its efficiency and productivity. Such tools should include technical assistance programs especially in cluster communities where the new knowledge is transmitted easily among the enterprises in the community through daily transactions and the need to meet the changing demand of other fellow entrepreneurs.

As to small enterprises, there is more need for more diverse packages of finance and technical support. In addition, in the case of manufacturing enterprises there is more need for intensive programs of export promotion, and for creating business networks with larger companies whether inside or outside Egypt. Until now the percentage of MSEs that have operational links with similar or larger companies is quite limited, which is an indicator that they do not act as feeding industries, or subcontractors, or maintenance/service providers to goods or services produced by the larger companies. The missing linkages could play an essential role in raising the efficiency of the MSEs if they could be created and strengthened.

Secondly, another aspect of change should consider that the small entrepreneur has a tendency to avoid growth beyond certain limits and or to prefer operating informally, based on the fear of having to deal with the tax authority and other government bodies. This fear could be gradually eliminated by using fiscal incentives and limiting subjective tax estimates by tax officials such as:

- Lowering the tax rate in the case of small enterprises to 50% of the normal profit tax rate.
- Allowing for special tax cuts in case the enterprise increases its socially insured workers for one continuous year. In some countries a 25% increase in the number of workers is rewarded by a similar drop in the tax rate in the following year. Such a policy could help in encouraging MSEs to increase the number of socially insured workers.
- In other countries micro enterprises are asked to pay lump-sum taxes, the amount of which is based on the size of enterprise measured in terms of square meters according to location, or the quantity of kwh electricity.....etc. In addition, the enterprises are allowed to pay the taxes on monthly instalments.
- Offering extensive tax cuts to the micro and small exporters that would amount to 75% of the value of profit taxes derived from exports.
- Offering simplified bookkeeping systems to small entrepreneurs.

Thirdly, as results reveal that the intra-firms linkages between large enterprises and MSEs are minimal if not negligible. The large enterprises that depend more on MSEs as sources of their inputs, semi-finished parts, or as channels of distribution or maintenance, should be offered special fiscal or non-fiscal incentives if their reliance on MSEs exceeds a certain level of their operations.

Fourthly, a unified tax system should govern the whole community. Accordingly, no special tax exemptions should be granted to SFD borrowers, while entrepreneurs who depend on their own resources are relatively punished. A better policy is to open a wider opportunity of finance for micro and small entrepreneurs, while reducing the conditions and required guaranties, especially for the already established enterprises.

Setting the interest rates at the commercial levels will be of benefit to micro and small entrepreneurs as it will be lower than the rates currently charged by the different financial institutions that lend money at higher effective interest rates (lower interest rates + different duties and provisions).

Providing special guarantee funds to commercial banks could encourage more banks to venture into small business credit, which until now is minimal.

Fifthly, the training component is also missing. The main source of training is the private sector, and to be exact, the small entrepreneurs themselves. They offer their knowledge and skills to co-workers and apprentices. However, if the entrepreneur's skills are not up to the certain acceptable national or international standards of the profession, the result would be extending the same low levels of efficiency to the workers. Therefore, a reassessment of the role and quality of programs offered by the public training centers as well as the private ones is essential to ensure higher efficiency of the workers and entrepreneurs. Encouraging NGOs and the private sector to invest in the establishment of new modern specialized training centers and/or finance renovation and management of the existing public training centers could help in raising the skills of the workforce in the MSEs.

Finally, despite the different efforts by several ministries, the SFD, the NGOs for over ten years, the impact of these initiatives is quite limited as is witnessed by the responses of the entrepreneurs. The question is why is it that the efforts did not bear the expected fruits?

The SMEs policy has been until now fragmented in the sense that several ministries and the SFD have been fighting for control and ignoring the main issue of substance: helping MSEs.

Similar support programs have been designed and implemented by different entities, which resulted in duplication. The problem with these programs was, and still is, the lack of monitoring and performance assessment, except in a few cases, where the assessments were either ignored or hidden, and no efforts were directed at improvement.

Along similar lines, the different programs were usually implemented in a limited number of governorates, while the rest of the governorates were mostly ignored.

As a result of these actions and due to the lack of strategic planning for the sector, the benefit to the MSEs was minimal.

It is thus suggested that an independent Higher National Council for MSEs should be established, whose role would be primarily to draw a long-term strategy, design the different necessary policies for MSEs, designate responsibilities to the different executing bodies (the different line ministries, the SFD), transmit the necessary indicators and directions to the donors, the leading NGOs, monitor regularly the performance of the MSEs in the market, and assess yearly the performance of the different ministries and agencies according to preset milestones. Success should be rewarded and failure should be penalized.

References

- Abdel Fadil, M.; (1980), *Informal Sector Employment in Egypt*, ILO, Geneva.
- Assaad , R.; (1995), The Effects of Public Sector Hiring and Compensation on the Egyptian labor Market, *The World Bank Economic Review* , Vol.11, No.1.:85-115.
- Assaad, R.; (1997), The Employment Crisis in Egypt: Current Trends and Future Prospects, *Research in the Middle East Economics*, Vol.2, JAI Press Inc.
- El Ehwany, N. and H. El Laithy, (2001), *Poverty, Employment and Policy Making in Egypt: A country Profile*, ILO office- Cairo.
- El-Mahdi, A.; (1992), Work Condition in an Urban Informal Setting, *L'Egypte Contemporaine*, Vol. 427, Cairo.
- El-Mahdi, A. ;(1995), *The Informal Sector in Egypt : A Brief Literature Review* , ERF , Cairo.
- El-Mahdi,A. and Kathy Powell, *Small Entrepreneurs in Greater Cairo Community*, SRC, AUC, Cairo,1999(under Publication).
- El Mahdi, A., (2002) “The Labor Absorption Capacity of the Informal Sector in Egypt”, in R. Assaad, Ed. *The Egyptian Labor Market in an Era of Reform*. American University in Cairo Press.
- Handoussa , H. and G. Potter ; (1992) , Egypt’s Informal Sector : Engine of Growth? , MESA Conference, Portland, Oregon.
- Institute of National Planning, *Egypt Human Development Report*, 1996, Cairo .
- Korayem,K.:(1993) “Structural Adjustment and Reform Policies” In *Egypt: Economic and Social Implications*, United Nations Economic and Social Commission For Western Asia.
- Mashhour, A. and A. El Mahdi (1994), *The Informal Sector in Maarouf District*, The National Institute for Social And Criminal Studies, Cairo.
- Soliman,S.;Ed., (1987), *The Right to Work in the Egyptian Economy*, The National Center for Social and Criminal Studies, Cairo .

Appendix 1

Number of listed SMEs, sample size, completed interviews and response rate for each PSU

Governorate	Shiakha	Number of Listed SMEs	Sample Size	Completed Interviews	Response Rate	
Cairo	Darb EL Hosr	82	18	16	88%	
	EL Kalifah	149	31	27	87%	
	Tolombat Ein Shams	54	13	11	85%	
	El Hanfy	272	61	56	92%	
	El Esma'iliah	131	34	27	79%	
	Manshiat El Bakry	301	78	63	81%	
	El Sarayat El Sharkiah	71	19	14	74%	
	El Waily El Kebeer Shark	283	64	57	89%	
	El Khoronfosh	388	173	156	91%	
	El Ottouf	315	125	112	90%	
	Ein El Seerah	246	57	50	88%	
	EL Abasiah El Sharkiah	275	56	49	88%	
	Kafr El Shourafah	181	37	32	88%	
	El Ameeriah	94	19	17	88%	
	Roud El Farag El balad	210	41	36	88%	
	El Shamashergi	343	70	61	88%	
	Kafr El Bashah	119	23	20	88%	
	El Sharabiah	345	71	62	88%	
	Meniat El Sereg	311	73	64	88%	
	El Faoualah	301	59	52	88%	
	Arab El Hesn	214	41	36	88%	
	El Zaytoon	266	57	50	88%	
	El Tamar	117	41	36	88%	
	Haret El Room	178	75	66	88%	
	Total		5246	1337	1170	88%

Governorate	Shiakha/ Village	Number of Listed Units	Sample Size	Completed Interviews	Response Rate
Giza	Madinat El Omal	370	192	191	99%
	El Kom El Akhdar	326	42	41	98%
	Ard El Loaa'	328	44	41	93%
	Oseem	301	71	68	95%
	El Moa'tamidiah	369	54	46	85%
	El Saf	315	46	40	87%
	Gezirat Imbahah	181	40	38	95%
	Mazghonah	168	22	21	95%
	Tamouh	271	36	34	95%
	El Moneeb	373	53	47	89%
	El Shorafah	219	48	46	95%
	Sakiat Meki	368	83	79	95%
	El Ayatt	360	46	44	95%
	Meet Okbah	383	80	76	95%
	6 th of October City	372	49	47	95%
	Abou El Nomrous	353	41	39	95%
	Total		5057	948	898

Governorate	ShiaKha	Number of Listed Units	Sample Size	Completed Interviews	Response Rate
Alexandria	El Thera' El Bahary	38	4	4	100%
	El Genenah El Kebeerah	109	24	22	92%
	El Betash	174	36	35	97%
	El Manshiah El bahariah	73	19	15	79%
	El Sabourah	49	15	11	73%
	Noubar	199	43	38	88%
	Fleming	196	42	39	93%
	El Ibrahimiah	319	70	65	93%
	El Gharbaniat	22	3	3	100%
	Imbrozo	297	60	60	100%
	El Haloagy	99	23	20	87%
	El Amod	81	16	16	100%
	Kom El Dekah	196	40	40	100%
	Abou El Noateer	99	20	20	100%
	Souk El Tork	76	16	16	100%
	El Soubhia	223	45	44	98%
	Total	2250	476	448	94%

Governorate	Town/ Village	Number of Listed Units	Sample Size	Completed Interviews	Response Rate
Gharbia	Wabour El Nour	53	13	11	85%
	El Dwaween	120	33	29	88%
	El Kafrah El Sharkiah	170	46	40	87%
	Kafr El Zayat	356	59	55	93%
	Kafr El Mansourah	23	5	5	100%
	Berma	142	32	30	94%
	Kafr Shamakh	31	9	7	78%
	Meshla	81	21	19	90%
	Kottour	310	67	65	97%
	El Santtah	179	38	38	100%
	Hoseen Sayed Ahmed	323	73	69	95%
	Mahalat El Borg	316	50	49	98%
	Kafr Faialah	41	9	9	100%
	Shobra Malakan	61	13	13	100%
	Houeen	39	6	6	100%
	Kafr El Danmeer	56	9	9	100%
	Total	2301	483	454	94%

Governorate	Town/ Village	Number of Listed Units	Sample Size	Completed Interviews	Response Rate
Demitta	Ezbat El Borg	336	87	70	80%
	El Tawfikiah	84	21	20	95%
	Kafr Saad	142	23	22	96%
	Karam & Rezk	63	12	10	83%
	Faraskour	271	45	42	93%
	Shatta	144	38	34	89%
	Kism Rabi' Damita	345	227	227	100%
	El Khalifah	31	7	7	100%
	Total	1416	460	432	94%

Governorate	Town/ Village	Number of Listed Units	Sample Size	Completed Interviews	Response Rate
Fayoum	Senoures	348	44	42	95%
	Kism Rabi' Fayoum	306	41	37	90%
	El Tawfikiah	18	6	6	100%
	El Lahoun	186	52	44	85%
	El Mahmoudiah	18	7	7	100%
	Kouhafah	126	30	27	90%
	Ettsa	275	40	34	85%
	Abgeeg	52	17	17	100%
	Total	1329	237	214	90%

Governorate	Town/ Village	Number of Listed Units	Sample Size	Completed Interviews	Response Rate
Souhag	Naser	198	44	41	93%
	Beet Khallaf	36	10	8	80%
	El Sheekh Makram	69	16	15	94%
	Koum El Saaidah	21	5	5	100%
	El Gabab	14	5	5	100%
	El Sheekh Rahoom	18	8	7	88%
	Sakoltah	143	34	31	91%
	Saleh	109	23	23	100%
	Fogly	42	18	16	89%
	El Balienna	347	88	78	89%
	El Shohadaa	24	10	9	90%
	El Maraghah	344	50	43	86%
	Aolad Yehya Bahry	112	11	11	100%
	Gerga	337	54	45	83%
	Mazen	332	33	33	100%
	Dar El Salam	331	49	41	84%
	Total	2477	458	411	90%

Governorate	Town / Village	Number of Listed Units	Sample Size	Completed Interviews	Response Rate
Assyout	El Khawaled	20	7	7	100%
	Shatab	81	33	31	94%
	Th 3rd Shiakhah	378	119	109	92%
	El Femah	73	10	8	80%
	Abnoub	323	122	122	100%
	Ank	4	3	3	100%
	El Swalem El Bahariah	23	5	5	100%
	El Nasriah	193	71	71	100%
	Sahel Seleem	338	79	73	92%
	The 7th Shiakhah	307	137	116	85%
	The 1st Shiakhah	356	133	133	100%
	El Hedaiah	29	12	11	92%
	El Medour	10	4	4	100%
	El Walidiah El bahariah	372	154	140	91%
	Sallam	68	28	24	86%
	Manfaloutt	359	85	78	92%
	Total		2934	1002	935

	Total Selected Governorates	23010	5400	4962	92%
--	------------------------------------	--------------	-------------	-------------	------------

Appendix 2

Variables Used In Logistic Regression

Several variables were examined to know their impact on the EU success but the results showed no difference between the <MEAN and the MEAN+ EUs. Those variables include: having links with other enterprises, receiving credits, leasing, venture capital, information, know-how technology-services, management, training, production, marketing, and exporting services.

For the logistic regression EUs with output/labor ratio more than LE 35,000 and the EUs with capital labor ratio with LE 200,000 or more were ignored. Variables examined in the logistic regression are gender, area, education and training, business setup, infrastructure, tools, formality, networking, and capital labor ratio. The next Table shows the variables examined in the logistic regression.

T-1 Variables used in Logistic Regression

VARIABLE	NEW VARIABLE
Q16: GENDER	SEX = 0 male SEX = 1 female
Q27: YEARS OF EDUCATION	$Q27ST = [Q27 - \text{MIN}(Q27)] / [\text{MAX}(Q27) - \text{MIN}(Q27)]$
Q28: TECHNICAL EDUCATION	Q28
Q30: TRAINING	Q30
Q57: NEIGHBOURING ENTREPRISES	Q57
Q99: USING MECHANICAL EQUIPMENT	Q99
Q100: USING ELECTRIC EQUIPMENT	$Q100M = Q100 * 1.5$
Q101: USING ELECTRONIC EQUIPMENT	$Q101M = Q101 * 2$
Q102: TECHNOLOGY USED IN THE PRODUCTION PROCESS	$Q102M = Q102 * 2.5$
Q194A: ACCESS OF WATER	Q194M = 0 IF Q194A = 0 Q194M = 1 IF Q194B = 0 Q194M = 2 IF Q194B = 1 Q194M = 3 IF Q194B = 2
Q195A: ACCESS OF ELECTRICITY	Q195M = 0 IF Q195A = 0 Q195M = 1 IF Q195B = 0 Q195M = 2 IF Q195B = 1 Q195M = 3 IF Q195B = 2

Variables used in Logistic Regression Continued

Q196A: ACCESS OF TELEPHONE	Q196M = 0 IF Q196A = 0 Q196M = 1 IF Q196B = 0 Q196M = 2 IF Q196B = 1 Q196M = 3 IF Q196B = 2
Q197A: ACCESS OF SEWAGE	Q197M = 0 IF Q197A = 0 Q197M = 1 IF Q197B = 0 Q197M = 2 IF Q197B = 1 Q197M = 3 IF Q197B = 2
Q198A: ACCESS OF ROADS	Q198M = 0 IF Q198A = 0 Q198M = 1 IF Q198B = 0 Q198M = 2 IF Q198B = 1 Q198M = 3 IF Q198B = 2
Q199A: ACCESS OF TRANSPORTATION FOR WORKERS	Q199M = 0 IF Q199A = 0 Q199M = 1 IF Q199B = 0 Q199M = 2 IF Q199B = 1 Q199M = 3 IF Q199B = 2
Q200A: ACCESS TO TRANSPORTATION FOR GOODS	Q200M = 0 IF Q200A = 0 Q200M = 1 IF Q200B = 0 Q200M = 2 IF Q200B = 1 Q200M = 3 IF Q200B = 2
Q204: SEVERITY OF LABOUR LAW	Q204M = 0 IF Q204 = 2 Q204M = 1 IF Q204 = 1 Q204M = 2 IF Q204 = 0 OR 3
Q206: SEVERITY OF LABOUR COST	Q206M = 0 IF Q206 = 2 Q206M = 1 IF Q206 = 1 Q206M = 2 IF Q206 = 0 OR 3
Q207: SEVERITY OF MEETING ENVIRONMENTAL REQUIREMENTS	Q207M = 0 IF Q207 = 2 Q207M = 1 IF Q207 = 1 Q207M = 2 IF Q207 = 0 OR 3
Q208: SEVERITY OF FINDING QUALIFIED WORKERS	Q208M = 0 IF Q208 = 2 Q208M = 1 IF Q208 = 1 Q208M = 2 IF Q208 = 0 OR 3

Variables used in Logistic Regression Continued

Q209: SEVERITY OF RETAINING QUALIFIED WORKERS	Q209M = 0 IF Q209 = 2 Q209M = 1 IF Q209 = 1 Q209M = 2 IF Q209 = 0 OR 3
Q210: SEVERITY IN FINDING RAW MATERIALS	Q210M = 0 IF Q210 = 2 Q210M = 1 IF Q210 = 1 Q210M = 2 IF Q210 = 0 OR 3
Q212: SEVERITY OF UNUTILISED CAPACITY	Q212M = 0 IF Q212 = 2 Q212M = 1 IF Q212 = 1 Q212M = 2 IF Q212 = 0 OR 3
Q214: SEVERITY OF STRONG DOMESTIC COMPETITION FROM MICRO ENTERPRISES	Q214M = 0 IF Q214 = 2 Q214M = 1 IF Q214 = 1 Q214M = 2 IF Q214 = 0 OR 3
Q215: SEVERITY OF STRONG DOMESTIC COMPETITION FROM SMALL ENTERPRISES	Q215M = 0 IF Q215 = 2 Q215M = 1 IF Q215 = 1 Q215M = 2 IF Q215 = 0 OR 3
Q216: SEVERITY OF STRONG DOMESTIC COMPETITION FROM LARGE ENTERPRISES	Q216M = 0 IF Q216 = 2 Q216M = 1 IF Q216 = 1 Q216M = 2 IF Q216 = 0 OR 3
Q218: SEVERITY OF FINANCIAL SERVICES	Q218M = 0 IF Q218 = 2 Q218M = 1 IF Q218 = 1 Q218M = 2 IF Q218 = 0 OR 3
Q219: SEVERITY OF OTHER BUSINESS SUPPORT SERVICES	Q219M = 0 IF Q219 = 2 Q219M = 1 IF Q219 = 1 Q219M = 2 IF Q219 = 0 OR 3
Q220: SEVERITY OF PROFITABILITY	Q220M = 0 IF Q220 = 2 Q220M = 1 IF Q220 = 1 Q220M = 2 IF Q220 = 0 OR 3
FORMALITY	FORMALITY
CAPITAL LABOR RATIO	capital labor ratio = capital / number of workers

- $TOOLS = Q99 + Q100M + Q101M + Q102M$
 $TOOLSST = [TOOLS - MIN (TOOLS)] / [MAX (TOOLS) - MIN (TOOLS)]$
 $TOOLSST$ ranges from 0 to 1.
- $INFRA = Q194M + Q195M + Q196M + Q197M + Q198M + Q199M + Q200$
 $INFRAST = [INFRA - MIN (INFRA)] / [MAX (INFRA) - MIN (INFRA)]$
 $INFRAST$ ranges from 0 to 1.
- $PROBLEM = Q204M + Q206M + Q207M + Q208M + Q209M + Q210M$
 $+ Q212M + Q214M + Q215M + Q216M + Q218M + Q219M$
 $+ Q220M$
- $BUSINESS SETUP = [PROBLEM - MIN (PROBLEM)] / [MAX (PROBLEM) - MIN (PROBLEM)]$
 $BUSINESS SETUP$ ranges from 0 to 1.
- $EDUCATION AND TRAINING = (Q27ST + Q28 + Q30) / 3$
 $EDUCATION AND TRAINING$ ranges from 0 to 1.

T-2 Enterprises Distribution by Value Added according to Different Dimensions

LE		<0	0 to < 250	250 to < 500	500 to < 750	750 to < 1000	1000 +	All
Area	Urban	61.8	53.2	66.6	77.8	73.7	78.4	61.9
	Rural	38.2	46.8	33.4	22.2	26.3	21.6	38.1
Gender	Male	83.8	85.7	92.5	90.0	92.0	94.3	87.5
	Female	16.2	14.3	7.5	10.0	8.0	5.7	12.5
Formality	Informal	67.6	78.9	70.6	59.4	63.8	47.0	70.7
	Formal	32.4	21.1	29.4	40.6	36.2	53.0	29.3
Economic activity	Industry	14.0	13.9	20.6	20.0	14.1	14.9	15.6
	Trade	69.6	63.2	57.9	59.0	71.8	76.6	64.7
	Services	16.4	22.9	21.5	21.0	14.1	8.5	19.6
Value of assets	< 1000	15.7	24.5	10.8	10.6	5.1	1.8	16.6
	1000 to <5000	32.7	42.2	37.6	33.2	30.4	16.7	36.3
	5000 to < 20000	28.6	23.7	29.5	33.9	37.4	30.1	27.7
	20000 or more	23.1	9.6	22.1	22.3	27.1	51.4	19.5
Number of workers	1 worker	38.7	46.1	42.7	35.4	53.3	37.2	42.7
	2 to 4 workers	55.9	50.7	52.9	55.9	41.6	49.3	52.3
	5 to 9 workers	2.7	2.0	3.0	5.5	2.8	5.3	2.8
	10 workers or more	2.7	1.2	1.4	3.2	2.3	8.2	2.2
Total number		1295	1897	942	311	214	282	4940

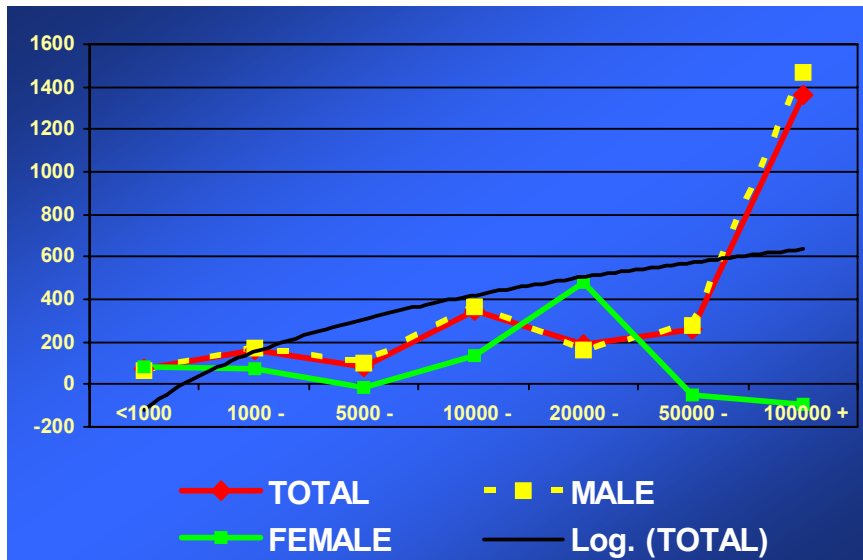
T-3 Distribution of Monthly Value Added / Worker Using Different Dimensions

LE		<0	0 to < 250	250 to < 500	500 to < 750	750 to < 1000	1000 +	Total
Area	Urban	-718.0	118.1	358.9	617.8	874.3	3531.6	274.1
	Rural	-438.3	107.6	340.9	614.6	907.0	2044.8	108.0
Gender	Male	-658.3	116.2	353.0	618.4	882.2	3221.8	227.6
	Female	-366.4	95.2	352.0	604.9	891.1	3038.5	92.6
Formality	Informal	-522.9	110.8	349.8	610.9	874.1	2374.3	139.7
	Formal	-796.1	122.4	360.0	626.0	898.5	3965.7	383.3
Economic activity	Industry	-396.2	123.6	358.9	612.2	884.1	3907.3	337.7
	Trade	-718.3	112.5	356.3	625.4	886.7	2746.1	164.1
	Services	-339.4	108.8	337.9	597.2	862.5	6193.0	263.3
Value of assets	< 1000	-272.8	95.5	324.9	593.9	861.7	1318.8	71.6
	1000 to <5000	-372.3	111.0	350.9	609.7	876.9	2533.2	163.8
	5000 to < 20000	-708.7	132.1	360.8	622.9	885.6	2818.5	199.4
	20000 or more	-1057.3	121.4	359.4	630.4	890.1	3728.9	433.1
Number of workers	1 worker	-492.1	111.8	345.6	615.7	883.1	2663.1	207.9
	2 to 4 workers	-673.0	114.7	357.2	616.5	887.7	3019.6	157.4
	5 to 9 workers	-749.9	94.6	366.7	588.7	886.1	9438.2	1053.4
	10 workers or more	-893.0	136.0	386.4	690.2	783.31	2730.6	457.7
Total		-611.1	113.2	352.9	617.1	882.9	3211.3	210.8

T-4 Logistic Regression Using the Output/Labor as Success Determinant

Predictor Variables	Production	Trade	Services	All
1	Infrastructure	Capital Labor Ratio	Capital Labor Ratio	Capital Labor Ratio
2	Business Setup	Formality	Tools	Formality
3	Networking	Business Setup	Business Setup	Business Setup
4	Tools	Gender	Infrastructure	Networking
5		Networking	Gender	Gender
6		Infrastructure		Infrastructure
7		Education & Training		Education & Training
8				Area (Rural / Urban)
Classification Rate	69.3%	68.4%	70.4%	68.4%

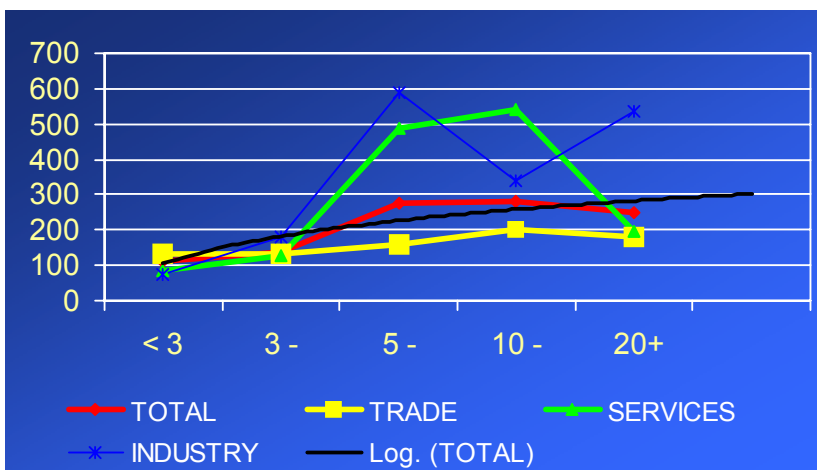
The EUs Distributed by the Mean VA/L and the Value of Invested Capital



Mean value Added per Worker by Size of Enterprise



Value Added per Worker by Age of EU & Economic activity



Appendix 3

Logistic Regression

All

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1(a)	Q57(1)	.893	.077	135.237	1	.000	2.442
	Constant	-.616	.034	324.542	1	.000	.540
Step 2(b)	Q57(1)	.877	.078	127.785	1	.000	2.404
	TOOLSST	1.447	.157	84.601	1	.000	4.251
	Constant	-.869	.045	379.365	1	.000	.419
Step 3(c)	Q57(1)	.854	.078	119.405	1	.000	2.350
	TOOLSST	1.366	.159	74.058	1	.000	3.921
	CAPPWST	3.311	.434	58.197	1	.000	27.421
	Constant	-.987	.048	429.774	1	.000	.373
Step 4(d)	SEX(1)	-.640	.104	38.236	1	.000	.527
	Q57(1)	.838	.079	113.881	1	.000	2.312
	TOOLSST	1.292	.160	65.622	1	.000	3.641
	CAPPWST	3.189	.434	53.998	1	.000	24.273
Step 5(e)	Constant	-.892	.050	323.549	1	.000	.410
	SEX(1)	-.668	.104	41.153	1	.000	.513
	Q57(1)	.833	.079	111.948	1	.000	2.300
	PROBLMST	.779	.152	26.353	1	.000	2.178
	TOOLSST	1.283	.160	64.331	1	.000	3.609
	CAPPWST	3.105	.438	50.196	1	.000	22.313
Step 6(f)	Constant	-1.237	.084	214.864	1	.000	.290
	AREA(1)	.216	.069	9.812	1	.002	1.241
	SEX(1)	-.665	.104	40.716	1	.000	.514
	Q57(1)	.758	.082	84.967	1	.000	2.133
	PROBLMST	.728	.152	22.771	1	.000	2.070
	TOOLSST	1.230	.161	58.458	1	.000	3.421
	CAPPWST	2.992	.440	46.322	1	.000	19.928
	Constant	-1.320	.089	221.383	1	.000	.267
Step 7(g)	AREA(1)	.192	.070	7.529	1	.006	1.211
	SEX(1)	-.671	.104	41.360	1	.000	.511
	Q57(1)	.765	.082	86.260	1	.000	2.148
	FORMAL(1)	.169	.072	5.538	1	.019	1.184
	PROBLMST	.742	.153	23.648	1	.000	2.101
	TOOLSST	1.154	.164	49.384	1	.000	3.170
	CAPPWST	2.856	.443	41.582	1	.000	17.394
	Constant	-1.343	.089	225.960	1	.000	.261
Step 8(h)	AREA(1)	.239	.072	11.028	1	.001	1.270
	SEX(1)	-.700	.105	44.497	1	.000	.497
	Q57(1)	.757	.082	84.317	1	.000	2.131
	FORMAL(1)	.210	.073	8.151	1	.004	1.233
	PROBLMST	.742	.153	23.569	1	.000	2.100
	TOOLSST	1.263	.169	55.533	1	.000	3.536
	INFFRAST	-.517	.191	7.309	1	.007	.596
	CAPPWST	2.998	.448	44.770	1	.000	20.046
Constant	-1.226	.099	153.094	1	.000	.294	

- a Variable(s) entered on step 1: Q57.
b Variable(s) entered on step 2: TOOLSST.
c Variable(s) entered on step 3: CAPPWST.
d Variable(s) entered on step 4: SEX.
e Variable(s) entered on step 5: PROBLMST.
f Variable(s) entered on step 6: AREA.
g Variable(s) entered on step 7: FORMAL.
h Variable(s) entered on step 8: INFFRAST.

Industry:

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1(a)	TOOLSST	2.042	.427	22.921	1	.000	7.709
	Constant	-.759	.145	27.594	1	.000	.468
Step 2(b)	Q57(1)	.688	.158	18.894	1	.000	1.990
	TOOLSST	2.145	.433	24.495	1	.000	8.545
	Constant	-1.085	.167	42.322	1	.000	.338
Step 3(c)	Q57(1)	.687	.159	18.660	1	.000	1.987
	PROBLMST	.903	.381	5.600	1	.018	2.466
	TOOLSST	2.190	.436	25.210	1	.000	8.939
	Constant	-1.466	.235	38.937	1	.000	.231

a Variable(s) entered on step 1: TOOLSST.

b Variable(s) entered on step 2: Q57.

c Variable(s) entered on step 3: PROBLMST.

Trade: Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1(a)	Q57(1)	1.105	.103	115.406	1	.000	3.019
	Constant	-.652	.042	242.624	1	.000	.521
Step 2(b)	Q57(1)	1.071	.104	105.502	1	.000	2.918
	CAPPWST	4.306	.566	57.900	1	.000	74.140
Step 3(c)	Constant	-.830	.048	296.710	1	.000	.436
	SEX(1)	-.794	.116	46.953	1	.000	.452
	Q57(1)	1.078	.105	104.558	1	.000	2.938
	CAPPWST	3.989	.563	50.218	1	.000	54.020
Step 4(d)	Constant	-.699	.051	186.926	1	.000	.497
	SEX(1)	-.760	.117	42.356	1	.000	.468
	Q57(1)	1.104	.106	108.691	1	.000	3.017
	TOOLSST	1.039	.222	21.972	1	.000	2.827
Step 5(e)	CAPPWST	3.913	.566	47.747	1	.000	50.056
	Constant	-.846	.061	194.577	1	.000	.429
	AREA(1)	.256	.084	9.231	1	.002	1.292
	SEX(1)	-.752	.117	41.355	1	.000	.471
	Q57(1)	1.005	.111	82.459	1	.000	2.732
	TOOLSST	1.005	.222	20.464	1	.000	2.733
Step 6(f)	CAPPWST	3.750	.568	43.527	1	.000	42.528
	Constant	-.974	.074	171.413	1	.000	.378
	AREA(1)	.244	.085	8.297	1	.004	1.276
	SEX(1)	-.765	.117	42.613	1	.000	.465
	Q57(1)	1.000	.111	81.400	1	.000	2.718
	PROBLMST	.507	.190	7.141	1	.008	1.660
	TOOLSST	.965	.223	18.761	1	.000	2.626
	CAPPWST	3.727	.571	42.589	1	.000	41.546
Step 7(g)	Constant	-1.193	.111	114.672	1	.000	.303
	AREA(1)	.220	.085	6.667	1	.010	1.246
	SEX(1)	-.764	.117	42.385	1	.000	.466
	Q57(1)	1.005	.111	81.954	1	.000	2.732
	FORMAL(1)	.188	.088	4.534	1	.033	1.207
	PROBLMST	.528	.190	7.720	1	.005	1.696
	TOOLSST	.877	.227	14.964	1	.000	2.404
	CAPPWST	3.593	.573	39.291	1	.000	36.349
	Constant	-1.229	.113	118.705	1	.000	.293
	Step 8(h)	AREA(1)	.260	.088	8.806	1	.003
SEX(1)		-.797	.119	45.150	1	.000	.451
Q57(1)		1.004	.111	81.782	1	.000	2.729
FORMAL(1)		.224	.090	6.182	1	.013	1.251
PROBLMST		.532	.190	7.827	1	.005	1.702
TOOLSST		.966	.231	17.443	1	.000	2.628
INFFRAST		-.485	.245	3.931	1	.047	.616
CAPPWST		3.738	.581	41.413	1	.000	42.022
Constant	-1.123	.124	81.473	1	.000	.325	

a Variable(s) entered on step 1: Q57.

b Variable(s) entered on step 2: CAPPWST.

c Variable(s) entered on step 3: SEX.

d Variable(s) entered on step 4: TOOLSST.

e Variable(s) entered on step 5: AREA.

f Variable(s) entered on step 6: PROBLMST.

g Variable(s) entered on step 7: FORMAL.

h Variable(s) entered on step 8: INFFRAST.

Services: Variables in the equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1(a)	TOOLSST	2.181	.322	45.901	1	.000	8.858
	Constant	-1.069	.104	105.254	1	.000	.343
Step 2(b)	PROBLMST	1.578	.359	19.353	1	.000	4.845
	TOOLSST	2.131	.324	43.217	1	.000	8.426
	Constant	-1.768	.195	82.179	1	.000	.171
Step 3(c)	PROBLMST	1.500	.361	17.263	1	.000	4.483
	TOOLSST	2.054	.326	39.572	1	.000	7.798
	CAPPWST	1.896	.867	4.786	1	.029	6.661
	Constant	-1.784	.196	83.215	1	.000	.168

a Variable(s) entered on step 1: TOOLSST.

b Variable(s) entered on step 2: PROBLMST.

c Variable(s) entered on step 3: CAPPWST.

Appendix 5

Abbreviations

Abbreviation	Descriptive
MSEs	Small and Micro-enterprises
CAPMAS	Central Agency for Public Mobilization And Statistics
HH	HouseHold
<i>SNA</i>	System of National Accounts
EU	Economic Unit
PC	Population Census
PSU	Primary Sampling Unit
NGO	Non Government Organization
C/L	Capital/labor
O/L	Output/labor