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Labour, Markets and Industrial Development - Garment Production in the City of Shubra El-Kheima

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I, Sameh Khairy Naguib, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis

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ABSTRACT

This study is an empirical comparison between statistically recorded and unrecorded garment establishments in Shubra El Kheima. The comparison covers three main areas: labour, marketing channels and forms of cooperation between establishments.

Within the area of labour, our findings suggest, firstly, that there are no significant differences in wages, working conditions and secondary terms of employment between workers in recorded and unrecorded establishments. Secondly, that both types of establishments recruit most of their labour from the same pool. And thirdly that differences in the technology used in the production process are limited. These findings challenge some of the assumptions of dual labour market theories.

In the area of marketing channels our findings suggest that there are significant differences between the unrecorded and the recorded establishments. The two kinds of establishments rely on different kinds of cloth and use different markets for dissemination. In both cases there was no evidence of links to export markets. These findings suggest that the two types of establishments are part of two different and distinct commodity chains. The unrecorded establishments are linked to a global commodity chain through imported cloth and import competition. The recorded establishments are part of a local commodity chain linking the large textile mills and local retail.

In the area of cooperation, our findings suggest that there is a significant level of horizontal cooperation between the unrecorded establishments. This type of cooperation was found to be lacking in the case of the recorded establishments. The findings also suggest that although Shubra El-Kheima has a concentration of firms at each stage of the textile and garment industry, there are no backward linkages between the private garment producers and the local textile industry.

Finally, our findings suggest that a combination of intense import competition coupled with policy restrictions on legally imported cloth, have prevented the emergence of an industrial cluster in Shubra El-Kheima, with the varieties of vertical and horizontal cooperation associated with successful clusters in other developing cities.

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Acronyms

Lower Middle Income (LMI)

Foreign Direct Investment (FDI)

Revealed Comparative Advantage (RCA)

Micro and Small Enterprise (MSE)

Import Substitution Industrialization (ISI)

International Monetary Fund (IMF)

Gross Domestic Production (GDP)

Multi Fiber Agreement (MFA)

Long Term Arrangement (LTA)

General Agreement for Trade & Tariffs (GATT)

European Community (EC)

Newly Industrialized Countries (NICs)

Agreement on Textiles and Clothing (ATC)

Rotating Savings and Credit Associations (ROSCAS)

Global Commodity Chains (GCC)

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CHAPTER ONE

INTRODUCTION

1. Research Project

This research project investigates the world of garment production in the Egyptian city of Shubra El Kheima. It involves an empirical comparison between formal sector factories and informal sector workshops. The main hypothesis of the project is that in developing economies such as in the Egyptian case, and with pressures of international market competition, the differences between informal and formal sectors are often exaggerated. To test this hypothesis, the research will focus on three main areas of comparison between formal and informal workshops: 1) labour market, labour costs and working conditions; 2) market channels for inputs and outputs; and 3) degrees and forms of cooperation and networking between units of production. The aim of this comparative study is to establish whether or not there are significant differences between the two types of establishments, and to describe and explain such differences if they exist. Through doing this, I will shed some light on the dynamics of garment production in Egypt.

In this introduction, I argue the case for three basic points that this research is built on. The first is the significance of the subject matter; the textile and garment industry in a developing country. The second is the type of comparison, between unrecorded "informal" production versus "formal" sector production. And the third is the choice of the areas of comparison (labour markets, marketing channels, and cooperation). Finally in the last section of the chapter I give an overview of the following chapters of this research.

2. Significance of the Industry

The textile and garment industry has played, and continues to play, an important role in the process of industrialization worldwide. The central role of the cotton textile and garment industry during the industrial revolution in Britain is well documented. Hobsbawm has shown how its rate of expansion closely parallels that of the British economy as a whole during the second half of the 18th century (Hobsbawm 1962). Braudel further describes how the British cotton industry began by imitating the Indian

industry, finally catching up and outstripping it. He demonstrates how the cotton industry was always aimed at export markets during the industrial revolution, representing, by 1800, a quarter of all British exports rising to fifty percent by 1850.

> The England of railways and steamships, of heavy equipment which required massive capital investment but yielded relatively low profits, surely owed its existence to the huge amounts of capital which had already accumulated in the country. So even if cotton did not directly influence the machine revolution and the coming of heavy metal industry, profits from cotton certainly paid the first bills. One cycle propelled the other on its way. (Braudel 2002, p.574)

The cotton textile industry has played a similar role in the process of industrialization in a number of developing economies too, acting as a leading sector especially in the early stages of industrialization. The creation of a mechanized textile industry requires relatively modest investments in capital. Its rapid expansion also generates demand for the output and development of other industries, such as engineering, coal, transport and construction. In this way, as the process of industrial development unfolds, capital intensive industries replace cotton as the leading sectors. Although the 'stages' of industrial development theory greatly simplifies the process and is not applicable to every developing economy, there is no doubt that, in a large number of cases, the textile and garment industry has played a central role in the early stages of industrialization.

This process has been particularly evident over the last three decades, as the rapid growth of world trade has further served to stimulate the growth of the cotton textile industry and, by extension, the garment industry, in a number of developing countries. In the 1970s and 1980s, a number of developing countries were able to begin the export of garments with considerable success. In some cases, this initiative then permitted countries to develop more general industrialization. In the 1970s, for example, Greece, Brazil, South Korea, Taiwan, Hong Kong, Singapore and Colombia greatly increased their export of garments, while in the 1980s several newcomers entered the field. In the last half of the 1980s, the growth rates of garment exports in the Philippines, Indonesia

and Malaysia were respectively 139, 110 and 78 percent. Others, such as Mauritius, Bangladesh, Pakistan, Sri Lanka, Jamaica, Vietnam, Morocco, and Madagascar, followed.

The most extraordinary performance, however, was that of China, which increased its garment exports in value six times over in the 1980s, finally reaching US$9.7 billion by 1990. In particular markets, other new entrants also had remarkable successes. Turkey, by 1995, was set to overtake China in the European market, while Mexico moved to displace China in the North American market) having expanded its exports from under half a million US dollars in 1970 to $82 million a decade later, $2.9 billion in 1990 and $6.2 billion in 1995.[1] In all these cases there was a correlation between extraordinary performance in the garment industry and increased industrialization in general. If the textile and garment industry plays such an important role, both in the industrialization process and in the integration of developing economies into the world market, then an empirical examination of this industry in Egypt can help us better understand the record of, and prospects for, economic development in that country.

9. 3. Peculiarities of the Egyptian Case

Two factors would suggest that Egypt should have been one of the developing countries to benefit from the boom in textile and garment exports. First, since the 1980s, a stated aim of economic policy in Egypt has been the promotion of exports and the attraction of foreign investment through a program of economic liberalization. Additionally, Egypt has a long history of textile and garment production, encompassing all stages of the production process and employing over half a million workers[2] with a large pool of skills and at internationally competitive wage costs. However, the actual record for textile and garment exports from Egypt suggests otherwise.

During the period from 1990 to 2001, the value of Egyptian textile exports as a percentage of world textile exports fell from 0.5 percent to 0.2 percent, while the value of garment exports as a percentage of world garment exports remained at the low level of 0.13 percent (Fawzy 2003, p.11). These results are in line with estimates of revealed

[1] Trends in the world textile and garment industry and trade are examined in more detail in chapter 2.
[2] This number only includes those that are statistically visible

comparative advantage (RCA) in the Egyptian textile and garments industry, which fell from 7 to 2.9 in the case of textiles and remained stagnant at 1.8 for garments (Fawzy 2003). The share of Egyptian textile exports in the European market fell from 2.2 percent in 1995 to 0.5 percent in 2000. The share of garment exports also fell from 0.4 percent to 0.3 percent in the same period (Fawzy 2003, p.11).

Thus, Egypt represents a special case that casts doubt on some of the generalizations concerning the role of this industry in the process of global integration. The realities of actual economic policies and their outcomes contradict their stated aims for a variety of reasons which include the previous structure and history of the industry, the national economic context and political and social obstacles. However, the failure of exports does not mean that the industry can remain isolated and protected from the world market. As will be shown in this study, import competition is an important catalyst in the Egyptian case. It is this factor rather than export markets that has forced change in the industry. The relevance of the Egyptian case, then, stems from these contradictions and peculiarities and helps to shed light on the limits and complexities of processes of global economic integration and development.

4. The Return of the Informal Sector Debate

Historically, a large part of the textile and garment industry has been undertaken in households or in statistically unrecorded workshops. For obvious reasons, the data covering this activity has always been defective. Some authorities have seen macro economic reform – or at least, increased global economic integration – as promoting, or coinciding with, a significant increase in statistically unrecorded or 'informal' activity. For example, the ILO (1996) notes in a report on the textile, clothing and footwear industry that 'the number of clandestine workshops has grown exponentially in recent years', and suggests that for the 24 million workers recorded as employed in these three industries in developing countries, there are five to ten times as many who are unrecorded (ILO 1996, p. 45).

In some activities, the phenomenon is more apparent than others: for example, sewing garments, attaching buttons, and hemming are activities often done by home-workers subcontracted by factories or brokers dealing with factories. In India, it is

officially estimated that there are seven to eight million rural household workers producing hand-woven cotton goods, an increasing volume of which are said to go to exports, sometimes leaking into official flows through subcontracting relationships. This is particularly true for specialized tasks which resist machine production, like embroidery in Delhi's kurta export industry which is said to engage 200,000 home workers (ILO 1996; Levy 1989; Laze 1992; Banerjee 1991).

Over the last decade, there has been a renewed interest in the role and nature of small-scale and 'informal' economic activities. This has rekindled the debates that took place in the 1970s and 1980s on the dynamics and nature of the 'informal sector' versus the 'formal sector' or what came to be known as *"dual labour market"*. The concept of dual labour market demarks the differences between the two sectors. In more recent literature on development, micro and small enterprise (MSE) are commonly seen as a key to, among other things, output growth, employment generation, poverty alleviation, and female empowerment (Rondinelli and Kasarda 1992). They have thus been, over the last three decades, the target of major development funding from public institutions, donor agencies, and non-government organizations. A vast, mostly empirical literature has developed covering several aspects of their behavior and anatomy. Their access to formal credit (as well as the efficiency and sustainability of purpose-built financial institutions that facilitate access) has attracted a good deal of research attention (see, for instance, Otero and Rhyne, 1994; Webster, 1991, and Yunnus, 1989). Substantial research has also been done on their access to physical inputs (Levy, 1993); activity-specific performance (Little, Mazumdar and Page, 1987); informality (De Soto 1989 & 2000); region-specific characteristics (Ghate, 1992; Page and Steel, 1984; Tokman, 1992); regulation (Stone, Levy and Paredes 1991); training (Harper 1989); and transaction costs and linkages (Levy 1991).

The World Development Report (1995), produced by the World Bank and entitled "Workers in an Integrating World," provides the Bank's analysis of the global state of labour towards the end of the twentieth century. The formal/informal divide is one of the main features discussed in this report, and due to the World Bank influence in the development arena the report signifies the rise of this divide within development thinking and practice on the issue of labour. The formal sector of the non-agrarian economy is

defined as including all enterprises, whether private or public, which hire workers under contract as wage- earning employees. In low income countries, those with a GNP per capita of $695 or less in 1993, the report estimates that not more than 15 percent of the total workforce outside agriculture has formal sector jobs (World Bank Report 1995, p.3). With rising incomes and industrialization, informal work arrangements and small-scale production tend to diminish. Consequently, formal sector employment increased in 1993 to 45 percent in middle income countries, i.e. those with GNP per capita of between $695 and $8,626 (World Bank 1995). The report maintains that as employment in agriculture declines, job opportunities simultaneously expand in services and industry. Economic diversification causes rural workers to move to urban areas and from the informal to the formal sector.

The authors of the report acknowledge that workers prefer to switch to a formal contract because of the security of a regular wage and the various forms of legal protection that go with it but they also point out that, in many Latin American, South Asian and Middle Eastern countries, labour laws establish onerous job security regulations, rendering hiring decisions practically irreversible. Additionally, they add, the system of dispute resolution is subject to often unpredictable government decision making, adding uncertainty to firms' estimates of future labour costs (World Bank 1995). For this reason, the report favours a shift in the opposite direction – i.e. towards informalization – since, the authors argue, formal labour markets are inherently distorted and biased against the working poor. The basic argument is that by dismantling the position of the small but privileged segment of the workforce employed in the formal sector, more jobs can be created. Labour market dualism, resulting from an erroneous policy towards the formalization of work arrangements, should be scrapped.

There are a number of questionable assumptions, however, in this argument. First, the authors state that, on leaving the countryside, self employed peasants first tend to become wage labourers in the urban informal sector, earning money and learning skills at the bottom of the urban economy with which they ultimately either set up their own business or join formal sector employment. This image is coupled in the report with praise for the maximum flexibility that is required to successfully make one's way up the labour hierarchy. Informal sector workers, whom the report categorizes mainly as the

self employed, have no real need for the security and protection which supposedly comfort the life of workers in the formal sector of the economy.

The authors go on to describe minimum wages and, other labour regulations, which aim to stifle market freedom, as both dysfunctional and inoperative. The implication is that labour should be willing to go where it is needed and to work as long as there is a demand for it. According to the authors, under these conditions, it would be counterproductive for workers to insist on secondary labour rights and work security.

The report also strongly suggests that informal sector workers are not really as vulnerable as is claimed. The authors maintain that the employer-worker relations in the informal economy continue to be governed by a wide range of social customs and traditions that mitigate the insecurity of the working poor. They posit that employers will extend loans to workers who face sudden expenses, support older workers or those unable to work on health grounds, and continue to wage payments despite seasonal fluctuations. They also claim that informal commitments by employers are an important element of socially sanctioned codes of conduct and that horizontal ties of solidarity along family lines further lighten the burden of the working poor.

The World Development Report 1995 also contends that financial help from relatives remains the principal form of income support and distribution in developing countries. The extended family system is an important way of providing extra income and security to individual workers and their immediate households. Private transfers play an important insurance function in addition to reducing income inequality, offering old age support and ameliorating the effect of disability, illness and unemployment (World Bank 1995).

Thus, in summary, the authors of the World Development Report 1995 argue that the formal-informal divide in the labour market is a result of false government policies that create artificial barriers through legal protection of jobs and minimum wages and thereby adversely affecting job creation and flexibility of the labour market in developing cities. The authors also argue that conditions in informal employment provide flexibility and forms of informal protection and security that balance the absence of legal protection. They therefore conclude that the liberalization of labour laws and removal of protective regulations will be a positive step in terms of job creation and long term growth.

It is clear that a significant portion of the textile and garment industry takes place in statistically unrecorded and small-scale establishments. Traditionally such activities have been analysed in terms of dividing the economy into 'formal' and 'informal' sectors. The World Development Report 1995, along with De Soto's (2000) *The Mystery of Capital*, have both helped to revive these theories of economic dualism, but with differing policy implications. In both cases the assumption is that there is a harmful dualism in the market leading to distortions that hamper economic development. In the case of the World Bank, however, the policy recommendation is to informalize the formal sector through scrapping protective labour legislation. In the case of De Soto, the argument is to formalize the informal sector by legally recognizing and statistically recording it. In this thesis, I will attempt to challenge some of these assumptions by comparing the statistically unrecorded garment workshops with the statistically recorded garment factories in Shubra El Kheima.

One of the merits of an empirical investigation of unrecorded economic activities is that it is able to shed light on the dynamics of activities that are statistically invisible. Generalizations based solely on available statistics are necessarily distorted since they ignore a significant section of the economy. By integrating empirical data gathered through research with data from the available statistics, it may be possible to overcome some of these distortions and provide a sharper and more accurate account of the economy as a whole.

5. From Economies of Scale to External Economies

One of the consequences of the increasing global integration of the textile and garment industry has been a separation of the different stages of the industrial process. Different parts of the finished product, as well as different processes in manufacturing, can now be undertaken in different specialized localities, thus lowering the final total cost. This process eliminates the advantage of having economies of scale through vertically integrated industrial complexes that combine the different manufacturing stages into one plant (from spinning and weaving to garment manufacture). The vertically-integrated mill became a casualty of this development, as processing and making-up became increasingly dissociated both by company and by country. Many of the new

producers of ready-made garments in developing countries did not need to have a local textile industry and, indeed, could bypass it altogether by using imported fabrics and yarn.

Another aspect of this separation process is the concentration of small- and medium-sized manufacturing establishments producing the same or complementary products in particular locations and, within these 'industrial clusters,' the development of external economies through both vertical and horizontal cooperation and networking. Research on industrial clusters has grown rapidly throughout the 1990s, showing that clusters exist in a wide range of countries and sectors. The wave of interest in this topic was triggered by the export success of Italian industrial districts and books such as *Industrial Districts and Inter-firm Co-operation in Italy* (Pyke et al. 1990). The emphasis in the literature on co-operation did not imply a lack of competition amongst clustering enterprises. On the contrary, the early accounts of the Italian experience stress that competition in product markets and co-operation for tackling common obstacles are not mutually exclusive.

Meyer-Stamer (1999), for example, examines how a ceramic tile cluster in Santa Catarina (Brazil) overcame a major crisis in the early-1990s. He concludes that an increase in inter-firm co-operation was a key factor. This took various forms, ranging from substantial but informal exchange of information, to benchmarking between local firms, to rejuvenating business associations. A similar conclusion emerges from Scott's comparison (1994) of the gem and jewelry clusters of Los Angeles and Bangkok. He attributes the greater dynamism of the Thai cluster to "remarkable collective activism...significant resources have been clustered to create an infrastructure of supporting services, ranging from training and educational programs to international marketing and information providing agencies" (Scott 1994, p.260). Swaminathan et al. (1996) reports more limited, but also important, joint action in their study of the cotton knitwear cluster in Tiruppur, South India. They stress that the Tiruppur Exporters Association (set up in 1990) played a major role in helping local producers to compete in increasingly demanding international markets and to press for the upgrading of poor local infrastructure.

A different kind of co-operation was found by Tewari (1999) in the knitwear cluster of Ludhiana, North India. She suggests that, in the course of overcoming a major crisis in the early-1990s, Ludhiana's manufacturers forged closer backward ties with local suppliers of inputs, as well as forward ties with distributors. A more pronounced increase in this kind of co-operation was found by Dei Ottati (1996) in industrial clusters in Tuscany, Italy:

> The successful implementation of product diversification and quality upgrading strategies calls for greater integration and closer co-ordination amongst the various activities of different firms than was necessary in the past, when product ranges were limited to the traditional articles, quality requisites were less cogent and delivery terms less strict (Dei Ottati 1996, p.55).

What forms of cooperation and interaction take place in garment production in Shubra el Kheima? Can we classify the concentration of garment producers in this location as an industrial cluster? If exports play an insignificant role, how do such clusters, if they exist, fit into the global commodity chain and how are they influenced by import competition? These are some of the questions that I attempt to answer and explain in this study.

6. Overview of Remaining Chapters

In the first half of this thesis, I discuss and analyze the historical, economic and policy factors influencing both the Egyptian and the international textile industries. Chapter Two, for example, describes the historical background underpinning three decades of Egyptian economic reform policies, examines their implementation and outcomes, and presents the economic context within which the textile and garment industry has developed. In Chapter Three, I present some of the major trends in the world textile industry, with a focus on the transformation of world trade, the growth of exports from developing countries and changes within the trade policy environment. In Chapter Four, I give a brief history of the Egyptian textile and garment industry, focusing on the distinguishing features of its development. In Chapter Five, I deal with the

theoretical issues involved in the study of small-scale establishments, focusing on the inadequacy of dualistic models explained above. I also address more recent approaches involving the study of economic clusters and global commodity chains. The second half of the dissertation focuses on the field data itself. Chapter Six introduces the methodology and research design used in the field research. It presents the argument that the case study approach is the most useful research tool to tackle the difficulties in gathering data on small and statistically unrecorded economic units. Chapter Seven presents the findings in the area of labour and, Chapter Eight, those in marketing channels and forms of cooperation. In Chapter Nine, I conclude by discussing the meanings and implications of the findings and sum up the main arguments presented.

CHAPTER TWO
THE FAILURE OF ECONOMIC REFORMS IN EGYPT

1. Introduction

In spite of its large size, long history and the implementation of an economic reform program explicitly aimed at export promotion, the Egyptian textile and garment industry has failed to penetrate export markets. In order to explain this anomaly, it is important to understand the nature, limits and historical context of the economic reforms carried out. This chapter will attempt to place these reforms in the context of the historical development of the Egyptian economy as a whole. The chapter begins with a discussion of the evolution of the state-led development project initiated by the Nasserist regime in the 1950s. I describe how that project ended in failure and crisis in the mid-1960s. I then go on to analyze the limited reforms initiated by the Sadat regime in the 1970s and to explore the subsequent deepening structural crisis of the Egyptian economy.

This is followed by sections looking at the performance of the neo-liberal reform program initiated in the early-1990s. I investigate the context of the program's stated aim of encouraging Egyptian integration into the world economy through export promotion and an increase in foreign investment. Finally, the chapter ends with a description of some of the main features of the urban labour market in Egypt.

2. Origins of the State Capitalist Project

It is often wrongly assumed that it was the Nasserist regime that first started state regulation and planning of the economy in the 1950s. In fact this process had started decades before. In a report by the Bank of Egypt in 1929, the state proposed a ten-year industrial development plan based on an import substitution strategy. Under this plan, the state would play a major role and a public industrial development bank would provide the finance. By the late-1940s, import substitution industrialization had become a major element of economic policy, and in the period between 1946 and 1951, the industrial sector grew by an average of ten percent annually. In 1949, the state established the Industrial Bank providing credit exclusively to the industrial sector (Waterbury 1983, p. 59).

In its early years, the Nasserist regime was not opposed to either private capital or foreign capital. For example, in 1953 a new law was issued allowing the entry of foreign capital in the petroleum sector. Similarly, in 1954 the conditions for foreign investment were made easier, with a law issued allowing for the transfer of profits overseas and for foreigners to own up to 51 percent of a company's capital (in contrast to the 49 percent allowed in the previous law of 1947) (Issawi 1963, p. 57). The regime also attempted to encourage private investors by issuing a law in 1954 giving a seven-year tax holiday for new private industrial projects (Mabro 1974). It was only the weakness of the private sector and the unwillingness – especially among foreign investors – to invest after the 1952 coup that led the new regime to a policy of state capitalist development and import substitution industrialization (ISI). Thus, the state had to introduce agricultural reforms in order to be able to embark on its ISI project.

3. Agriculture

One of the first reforms to be carried out by the new regime was land reform. Breaking the influence of the old landowning class was a political and social priority. The land reforms were carried out in three stages. In 1952, the maximum land area to be owned by an individual was set at 200 feddans. In 1961, this was reduced to 100 feddans and, in 1969, 50 feddans. By 1971, 822,000 feddans had been distributed to 342,000 peasant families, with an average of 2.4 feddans per family. 184,000 feddans of public land were also distributed between 1960 and 1967 (Waterbury 1983, p. 266). The main beneficiaries were not the poorest peasants but rather those with holdings between 10 and 15 feddans per family. Finally, by 1965, more than a third of total agricultural land was held by 148,000 families with an average of 13 feddans each (Richards 1982).

Most commentators concentrate on land distribution as the main aspect of the land reforms, trying to establish which sections of the peasantry benefited and in what ways they were linked to the Nasserist regime; however, a much more significant aspect of the transformations that took place in agriculture during that period was the changing role of the state. In fact, it could be argued that the state was the main beneficiary of the land reforms since, through reform, it was able monopolize the production of agricultural

inputs such as seeds and fertilizers, the sale and lease of agricultural machinery, the provision of credit and the whole marketing process.

Agriculture was nationalized in all but name. The peasants owned the land but had no control over what to produce or how to produce it. The state created cooperative councils, headed by a group of appointed officials at the village level. These councils controlled the production process and the marketing of agricultural products; decided on the crops to be produced and on the pattern of crop rotation. They policed the peasantry to make sure they complied with state directives. They were the only seller of agricultural inputs to the peasants, the only source of credit, and the only buyer of agricultural products from them. These councils were controlled and monitored by the General Agricultural Council which was, in turn, directed by the Ministry of Agriculture in Cairo.

Through this system of control the state was able to extract large surpluses from the peasantry. As the only seller of agricultural inputs, the state set prices far higher than cost. As the only buyer of crops, it set prices far lower than the world price at which it would export. For example, in the early-1960s, imported chemical fertilizers with an import price of 16 pounds per ton would be sold to the peasant at 25 pounds per ton. Likewise, in 1970, cotton was bought at 14.5 pounds per cantar from the peasant and exported at 20.5 pounds per cantar. In 1975, the total surplus extracted from the peasantry by the state amounted to 5.5 billion Egyptian pounds and represented 30 percent of that year's budget (Waterbury 1983).

4. Industry

The purpose of extracting a surplus from agriculture by manipulating the terms of urban-rural trade was to finance the rapid industrialization project that the regime wished to pursue. By the late-1950s, it had become clear that neither foreign capital nor private Egyptian capital would play a significant role in this process. The nationalization of the Suez Canal in 1956 had frightened off what remained of foreign capital and the state was forced to intervene. Hence, to complement the agricultural reforms and further support its industrialization project, in 1961, the state carried out a set of wide-ranging

nationalizations that included the whole of the financial sector, 70 percent of large- and medium-scale industries and all major retail outlets (Issawi 1963, p. 59).

A Soviet-style five-year plan was also put in place in 1961, which focused all investment capabilities on industrialization and the building of the Aswan high dam. The dam, in turn, was aimed at increasing agricultural production and acting as a major energy source for industry. The plan involved the investment of US $5 billion with $1.6 billion coming from loans from the Soviet Union, $300 million from loans from the US under the 'Food for Peace' program, and $840 million from loans from other countries (Mabro 19974). The remaining $2.2 billion was to come mainly from agricultural transfers. Industry represented 28 percent of the total investments in the plan, and the share of industry in GDP increased from 16 percent in 1956 to 24 percent in 1964 (Mabro 1974). The philosophy of the plan was to rapidly industrialize the country through an import substitution policy, thereby emulating the Soviet Union.

The plan, however, did not achieve its anticipated results. Indeed, instead of becoming the first in a series of five year plans that would industrialize and modernize the Egyptian economy, it soon ran into severe crises. As a plan for import substitution, in particular, it proved to be a total failure. Imports had been expected to fall from Egyptian LE 229 million to LE 215 million during the five years of the plan (1964 prices) (Mabro 1974). In practice, they rose to LE 413 million. By 1965, the trade deficit had reached LE 166 million, and the share of imports to GDP rose from 15 percent at the start of the plan, to 20 percent at its end (Mabro and Radwan 1976).

By 1962, there was a deficit of LE 417 million in the plan's various investment funds and the only way to solve this problem was to increase foreign borrowing. A major balance of payments crisis took place in 1962, followed by a more severe crisis which paralyzed the government in 1965 (Mabro and Radwan 1976). One factor deepening the crisis was the cotton harvest failure of 1962 which led to the reduction of foreign currency earnings from LE 121 million in 1960/61 to LE 75 million in 1961/62 (Toth 1999). Another factor was military spending which rose as a percentage of GDP from 8 percent to 12 percent during the period from 1963 to 1965. In 1965, it amounted to LE 575 million pounds (Hansen and Nashashibi 1976).

The foreign currency reserves fell from US $109 million at the beginning of the plan to $7 million in 1962, forcing the government into an agreement with the International Monetary Fund according to which it received loans of $20 million, in exchange for devaluing the Egyptian pound from 35.2 piasters/US dollar to 43.5 piasters/US dollar (Hansen and Nashashibi 1976). Moreover, in 1965, the value of wheat imports was LE 55 million, while the value of total Egyptian exports to the West was LE 52 million. When the US halted wheat transfers to Egypt that same year, the move created a severe food shortage and inflation. Hence, in 1966, the government entered new negotiations with the IMF, subsequently agreeing to a severe austerity program. And consequently, the investment budget was trimmed from LE 383 million in 1966 to LE 365 million in 1967, while imports were reduced from LE 465 million to LE 344 million. The plan had failed and no second five-year plan followed (Mabro 1974).

This dismal failure though did not mean that there was no growth in the economy during the years in which the plan was implemented. In fact, GDP increased by 6 percent annually during that period. This growth however, was financed by heavy borrowing and the government simply did not have the money to invest in its larger projects. Similar plans in other developing countries were financed either by export growth or by the expansion of a local market. In the Egyptian case, neither of these resources were created.

5. The Open Door Policy

This crisis created by the Nasserite regime endured, and was carried forward into the Sadat's era which started with his accession of power in 1970. Many accounts of the Egyptian economy during the 1970s see the policies of the Sadat regime – known as '*infitah*' or 'open door' – as the real beginning of the restructuring of the Egyptian economy. This policy which ended an earlier era of Import Substitution Industrialization (ISI) aimed at economic liberalization, unleashing of market forces, and the reduction of the role of the state, starting from 1974 onwards. In fact, while the Sadat regime did shift politically from reliance on the Soviet Union to closer links with the West – and while there was much rhetoric about liberalization and the need for a market economy – *infitah* actually led to very few substantial structural changes in the Egyptian economy. The

public sector remained intact and the state continued to be in full control of the agricultural sector. Even the banking sector, which experienced one the biggest changes with the establishment of private banks in 1974, continued to be dominated by the state; in 1979, five years after the *infitah* policy was started, the public sector banks continued to control 81 percent of total savings and 83 percent of total credit (Harek 1998).

The *infitah* policy was an attempt by the state to save itself economically by trying to attract foreign investment (especially from the Gulf after the 1973 boom in oil prices) in order to help solve the investment crisis that had plagued the regime since the mid-1960s. However, this attempt was unsuccessful and foreign investment remained limited. What saved the regime temporarily was not the *infitah* policy but two external factors: the inflow of Western loans and aid following the peace treaty with Israel, and the dramatic increase in oil prices after 1973 and its subsequent increase of state revenue through various kinds of rents.

American and other Western aid played a major role in the Egyptian economy during the 1970s and 1980s. In 1970, Egypt's foreign debt was $1.3 billion which represented 18 percent of GDP. The debt jumped to $13 billion in 1977 (95 percent of GDP), to $20.4 billion in 1980 (128 percent), to $42.2 billion in 1985 (159 percent) (Harek 1998). Foreign loans were obviously a temporary solution to the immediate problems facing the regime and, as the debts accumulated, the price of servicing them became extremely high. Similarly, an increase in oil prices saved the day, creating the three most important resources for the regime: 1) direct export of oil; 2) migrant workers remittances from the Gulf; and 3) Suez Canal revenues. In 1979, petroleum exports represented 66 percent of total export value, while Suez Canal revenues and workers remittances accounted for 50 percent of total visible exports (including oil) (Handoussa 1991).

These different sources of rents solved the immediate crisis facing the regime, but it also allowed the state to delay any serious structural reforms in the crisis-ridden industrial and agricultural sectors of the economy. The agricultural crisis, in particular, continued to deepen and in 1974, wheat production had reached 1.884 million tons, with wheat imports at 2.251 million tons. By 1979, production had only increased to 1.933 million tons while imports had soared to 3.56 million tons. In the period between 1950

and 1980, wheat production increased by only 71 percent, while wheat imports increased by 612 percent (Waterbury 1983).

Although the share of agriculture in the GDP fell from 33 percent in 1970 to 24 percent in 1980, there was no complementary increase in the share of industry. Indeed, by 1979, the share of industry in the GDP, excluding petroleum, had fallen to 14 percent from a high of 24 percent in 1965 (Hussein 1982, p. 479).[3] Although the rate of growth within the industrial sector rose in the 1970s, it did not match the level achieved during the previous high growth period (1960-1965) of around 6.6 percent (Hansen 1991, p.10). The percentage of agricultural exports in total also decreased from 88 percent in the year 1953 to 33 percent in 1978. As with the case of GDP, however, agricultural exports were not replaced by industrial exports, rather by oil. At the same time, the value of imports increased from LE 213 million in 1952, to LE 6.9 billion in 1980. The share of deficit in the trade balance, as a percentage of GDP, increased from one percent in the beginning of the 1950s, to six percent by the end of the Five Year Plan (1966), to 37 percent in 1975. In addition, the share of industrial investment in gross national investment declined from 29.3 percent in the year 1970-71, to 21.4 percent in 1979-80. The percentage of industrial exports declined sharply from 47 percent of the total exports in 1970, to 14.6 percent in 1979 (Suleiman 1999, p.38). This shows clearly the extent of the failure of import-substitution policies, and the fact that it was not replaced by an export-oriented model of growth, as in the case of other developing countries during the same era.

As the statistics demonstrate, the boom witnessed by the Egyptian economy in the second half of the 1970s on into the 1980s hid a deepening structural crisis in the Egyptian economy. The boom – a result of the increase in oil prices, Suez Canal revenues, and remittances from workers in the Gulf – was highly sensitive to the volatility of oil prices and political instability in the Gulf region. Nevertheless, the state capitalist system struggled along into the late-1980s, as *infitah* policies aimed at dismantling the system and shift to free-market policies were postponed, first, because of the 1977 demonstrations against the elimination of food subsidies and, second, because of oil revenues which allowed the regime to stall reform.

[3] Adel Hussein, in his study of the Egyptian economy during the 1970s, records the decline of the industrial sector in the 1970s relative to the 1960s. The share of industry in the GDP, according to Hussein, fell from 19 percent in 1973 to 14.9 percent in 1978 (Hussein 1982: 479).

6. A Continued Crisis

The economic crisis continued to deepen in the mid-1980s as external debt increased in an unprecedented way, and its service became a heavy burden on the budget. The oil price declined sharply, together with a decrease in Suez Canal revenues, oil exports, and the remittances of Egyptian workers in the Gulf. In addition, the crisis of the industrial public sector deepened, agricultural production declined, and the deficit in the balance of trade in agricultural commodities soared. By the late-1980s, the deficit in the balance of payments reached 24 percent of the GDP, inflation rates rose to 25 percent annually, the percentage of external debt to the GDP increased to 200 percent. In 1987, the percentage of external debt to total exports was 343 percent, and the percentage of debt service to the GDP increased from four percent in 1970 to 85 percent in 1987 (Kassem 1998).

The crisis also deepened in the industrial public sector, which needed more than a billion dollars annually to import its means of production at a time when its gross exports were only $500 million a year. The public sector banks financed $300 million of this deficit, while the rest was financed by the revenues received by the industries selling their products locally in dollars. The industrial institutions withdrew LE 2 billion without credit in the year 1986-87, an increase of LE 50 million from the previous year. The gross imports of the public sector for this year reached $1.3 billion, while exports were valued only at $671 million (Harek 1998). In 1986, the government presented LE 293 million as direct aid to the industrial public sector, compared with only LE 1 million in 1971. The number of loss-making public sector companies increased from four companies in 1974, to 60 companies in 1987, reaching 78 in the year 1988 out of a total of 116. The gross profit of the successful companies was valued at only LE355 million, while loss-making companies achieved a gross loss of LE581 million in the same year (Harek 1998, p. 43).

Similarly, the agricultural sector of the economy was not faring well. The system prevailing in the countryside prior to the start of the 1987 economic reform program was controlled by the state through peasants' obligatory handing over of crops and a state monopoly on agricultural inputs. The surplus extracted from the peasantry by the state

increased massively during the period from 1980 to 1985, from (in current prices) LE 1401.27 million to LE 2209.36 million (Mandour 1998). Until 1992, the government used to receive a surplus of around 58 percent of the value of the cotton crops from the difference between the price of handing over and the price of exporting. Before liberalizing the cotton trade, the state also used to receive 44 percent of the value of the international cotton price. Until 1973, in fact, the value of agricultural exports had exceeded that of imports, with net profits from the agricultural external trade more than half the inflow of foreign currency in the period 1970 to 1973, and constituting around one third of the total external trade in the period from 1973 to 1979.

During the 1980s, however, a rapid decline in agricultural exports occurred. As the contraction rate of agriculture exports reached 15 percent in the late-1980s, the deficit in the agricultural trade balance reached $ 3.16 billion, constituting around 13.7 percent of the total trade deficit (Fletcher 1998, p.55). The percentage of agricultural exports to total internal trade declined from 21.7 percent (1980 to 1985) to 14 percent (1986 to 1992). The share of agricultural exports coverage of agricultural imports declined from 24.8 percent on average (1980 to 1985) to 15.6 percent (1986 to 1992). The percentage of agricultural exports to gross exports decreased from 41.4 percent on average (1973 to 1979), to 15.5 percent (1980to 1985), then finally to 8.4 percent (1986-1992) (Fletcher 1998). The agricultural sector was suffering from a severe crisis and had begun to be a heavy burden on the state.

The crisis in Egyptian agriculture was caused by several factors, most notably, the limited investment in agriculture. The share of investment in agriculture to gross investment was less than 8 percent in the beginning of the 1980s, declining to 7 percent by the end of the decade. In spite of this lack of investment, however, the agricultural sector still constitutes a primary sector of the economy, as the sector – including production, marketing, and manufacturing – constitutes 40 percent of the GDP. Nevertheless, this continual shortage of investment in developing and expanding agricultural production led to increases in the cost of crops and, thus, to a comparative increase in the price of the Egyptian crops relative to that of other countries. One of the most important examples of this process is that of long staple cotton, which used to be, in the last century, Egypt's most important export crop, and the highest in return of foreign currency. Cotton exports

used to constitute 61.3 percent of gross agricultural exports in the period from 1980 to 1985. This percentage decreased to 43.9 percent by 1990. Egypt lost most of its cotton export markets to other brands of cotton, most notably, the American Pima cotton, which has become a substitute for Egyptian cotton in the northern European market. The price of Egyptian long staple cotton exceeded that of American Pima during the second half of the 1980s by percentages varying between 30 percent and 127 percent (Fletcher 1998).

Another more direct cause of the agricultural crisis of the 1980s was the collapse of Eastern European markets. These markets had absorbed a large part of Egyptian agricultural produce, mainly through bilateral trade agreements. These agreements were of a political nature and, thus, were never particularly affected by changes in world prices (nor did they do much to help improve the competitiveness of agricultural production in Egypt). When the guaranteed market in Eastern Europe collapsed, Egyptian agriculture was exposed to world market prices and standards against which it found difficult to compete.

7. Economic Reforms

Hence, by the late 1980s and early 1990s it had become increasingly clear to the Egyptian regime that it was no longer able to postpone reforming the system. A combination of pressure from international financial institutions, the strategic interests of local capitalists, and the fact that the system could not continue to finance its deficit, finally pushed the regime to accelerate reforms. The logic behind the reforms was an attempt to save the rates of profits, and to enable the state to pay its debts. The first step was a set of severe austerity measure. In some countries, the result of such measures has been economic stability matched by a period of rapid growth. In other countries, the reforms have led to rapid economic decline. The Egyptian experience has been somewhat mixed. It did not experience the sort of temporary success experienced by countries like Mexico, nor did it witness the swift implosion experienced by countries like Zambia and Zimbabwe.

The economic reform program started with the agricultural sector. In 1987, the state embarked on a reform program in agriculture with the aim of liberalizing crop prices, land tenure laws and input prices. The first stage of structural adjustment, between 1987

and 1989, involved the liberalization of prices and the ending of state control over the marketing of ten major crops. These changes were expected to increase cotton production by encouraging producers to move away from less profitable crops to cotton. The results, however, were quite the opposite. This was mainly due to several severe drops in world prices. In fact, dependency on unstable world commodity prices was a general feature and shortfall of the reforms in agriculture during the 1990s. Liberalization was taking place at a time when world agricultural commodity prices were falling. The reforms did not, therefore, lead to a boom in agricultural exports as had been hoped by the government.

A good example of the troubles facing the liberalization of agriculture is the case of cotton –which is directly related to the textile industry. In 1991, for example, the export price of cotton decreased by 30 percent and, in 1993, the price was again halved. In 1992, the price agreed upon between the government and the farmers was 14 percent above the world price. In 1993, the government paid 30 percent above the world price for the cotton harvest (Mandour 1998). Between 1990 and 1994, a major economic aim was the complete liberalization of cotton prices. In 1994, three laws were passed aimed at freeing the pricing and marketing of the crop (www.sis.gov.eg). Because of restrictions imposed on imported cotton, however, and the need for a domestic supply to Egypt's state-dominated textiles mills, this liberalization was not maintained. In 2000, the government set a minimum equivalent price of about 80 cents per pound for the standard cotton variety of Giza 75 at which farmers could choose to sell to state collection points or to private traders (www.sis.gov.eg). There was a rapid increase in price by approximately 75 percent. The price increase, in turn, led to a severe crisis in the textile industry which continued to be forced to use domestically-produced Egyptian cotton since the restrictions on the importing of cotton remained in place (Financial Times Survey 2001). At the beginning of October 2000, the government stepped back into the market. First, it froze all exports of cotton until domestic consumption needs had been met. Second, it changed the recommended price to a maximum price in order to stop further speculation. Although private traders could now buy cotton from the market and export it, most of the crop still went to six state trading companies all controlled by the same chairman (Financial Times Survey 2001). This inconsistency in handling cotton

production was a characterizing feature of the state policy towards agricultural sector reform as well as economic reforms in general.

The pace of the economic reform process began to accelerate in the early-1990s under the supervision of the International Monetary Fund (IMF) and the World Bank, which had become increasingly alarmed by the country's widening macroeconomic imbalances. An Economic Reform and Structural Adjustment Program was signed with the IMF in May 1991, followed by the granting of a structural adjustment loan worth $300 million by the World Bank in November of that year. A second agreement with the IMF, arranged under its Extended Fund Facility, was approved in September 1993. Additionally, the pro-American role played by the Egyptian military in the Gulf war led to the writing off of over $20 billion from the county's external debts (UNIDO 1994). The disbursement of IMF funds was made conditional upon the undertaking of economic reforms aimed primarily at stimulating a transition to a market economy in which private capital would play a greater role. Interest rates were gradually freed to encourage the repatriation of funds, while credit ceilings were imposed on bank lending to help ease inflationary pressures. By 1992, the country's exchange system had been completely reformed, resulting in both the devaluation of the Egyptian pound and the pegging of it to the US dollar, thus making it internationally convertible (UNIDO 1994). This was the first concrete sign of the state loosening its control over the economy, a process that was slow and pendulum-like.

8. The Development of Private Sector Industry

One of the developments that resulted from the loosening of state controls over the economy was the growth of private sector industry. The share of industry in GDP (excluding petroleum) rose from 13.5 percent in 1982 to 18 percent in 1996. In the period from 1982 to 1995, the average rate of growth for the industrial sector as a whole, excluding petroleum, was 7.5 percent annually. This compares to 3.2 percent for agriculture and 5.2 percent for trade (Suleiman 1999, p.17). The share of industry in total private sector investments increased from 15.9 percent in 1981, to 34.7 percent in 1990, to 45.9 percent in 1995, which was also due to the selling-off of public enterprise. With the acceleration of the privatization policy, the share of the private sector in total

industrial production increased from 36.9 percent in the early- 1980s, to 55.6 percent in 1990, to 75 percent in 1997 (Suleiman 1999, p.19).

In addition to this increase in private sector investments in the industry, other important changes took place in the structure of this sector's industry. Textiles and garments continued to be in the lead with an increased share from 27.1 percent in 1980-81 to 34.3 percent in 1996-97. In the meantime the share of the food industry decreased from 49.3 percent to 17.8 percent, while the shares of the engineering industry rose from 9 percent to 15 percent and the chemical industry from 8.1 percent to 23.9 percent (Suleiman 1999, p.25). An industry which has experienced unprecedented growth has been the car industry. Until the early-1990s, there was one major public sector car producer. By 1995, there were 15 major automobile producers with a combined capital value of LE 6.1 billion. Additionally, there were 123 car component producers with a capital value of LE 2 billion. The industry as a whole employed over 100,000 workers in 1999. Annual sales of locally manufactured cars increased from 20,000 cars in 1994 to 75,000 cars in 1996 (Suleiman 1999, p. 27).

All this might seem impressive if it were still the 1960s when the aim was to create an independent industrial base separated from the world economy and for the purpose of import substitution. However at a time when the stated aim of the government was and still is to integrate the Egyptian economy into the world economy and make Egyptian industry competitive internationally, it is clear that the Egyptian economy is not faring well. Rather, the private sector investments in industry are focused on more capital intensive industries in which there is no obvious comparative advantage. They rely on a heavily protected local market and state policy continues to be geared toward import substitution. For example, a four cylinder passenger car imported from Korea has a 100 percent tariff on it, yet the same brand of car produced locally would be sold for only 5 to 10 percent less than the imported one. Although targeting export-oriented growth, the state and the private sector still rely on protectionist practices suited for ISI, which appears to be more of a failure now than it was in the 1960s. The state and private capital can no longer prevent the entry of imports, either directly or indirectly. The trade imbalances suffered by the regime in the 1960s and 1970s have become even worse during the age of the supposed export-oriented growth and the structural problems of

Egyptian industry have not been solved and Egypt's track-record of exports remained insignificant, as I will show in detail in the next section.

9. Failure of the Economic Reform Program

Since the 1980s, the strategy of the Egyptian government has been to solve the economic crisis through integrating into the world economy. The old import substitution model had failed and a new model, one based on export promotion and the attraction of foreign investments, was to be followed. Paradoxically, by the beginning of the new century, the Egyptian economy is less integrated into the world economy than it was in 1990. From a comparative perspective, the Egyptian economy is one of the worst performers in terms of integration from among the group of lower-middle income economies in which it is classified by the World Bank (Table 2.1).

Table 2.1 Comparative performance of lower middle income (LMI) economies and Egypt, various indices, 1997, 2000, 2001

	1997		2000		2001	
	LMI	Egypt	LMI	Egypt	LMI	Egypt
GDP growth (annual %)	4.7	5.5	6.4	5.1	4.1	2.9
Exports of goods and services (% of GDP)	26.9	19.5	34.0	16.3	33.0	17.6
Imports of goods and services (% of GDP)	26.6	25.7	29.6	22.9	29.9	22.7
Trade in goods as share of GDP (%)	43.1	22.6	51.3	18.8	50.3	17.1
Trade in goods as share of goods GDP (%)	81.9	42.8	89.2	35.4	80.5	32.3
High-tech exports (% of exports of goods and services	13.0	0.2	16.7		---	0.8

Source: World Development Indicators Database, April 2003

As the indicators in Table 2.1 illustrate, the export performance of the Egyptian economy is significantly worse than average for lower middle income economies and the gap has significantly increased in the period between 1997 and 2001. Though there was significant growth in manufacturing exports, as shown in Table 2.2, when compared with the rate of growth and the final value of these exports to that of other lower middle income countries, it is obvious that the share of Egyptian manufactured exports is shrinking.

Table 2.2 Manufactured exports, selected low middle income countries, 1985-1998

	Manufactured exports per capita (millions $)		Total manufactured exports (millions $)	
	1985	1998	1985	1998
Egypt	**9.8**	**36.5**	**458**	**2242**
Brazil	130.3	234.4	17617	38882
China	5.8	135.4	6049	167681
Colombia	33.9	103.9	1073	4241
Morocco	55.4	111.9	1200	3108
Paraguay	11.2	66.4	40	347
Philippines	44.4	374.0	2429	28119
Thailand	71.5	731.4	3658	44760
Tunisia	115.1	554.1	836	5173
Turkey	115.1	360.7	5790	22885

Source: Selections from UNIDO statistical annex

Moreover, although Table 2.2 shows both the absolute and the per capita growth in Egyptian manufactured exports, the rate of growth for the whole period compared to the total value of exports in 1998 also demonstrates the limits of this performance. Similarly, the composition of merchandise exports has changed markedly in the past few decades. That is, in Egypt between 1965 and 1990, the share of agricultural commodities in total exports dropped from 71 percent to 20 percent, while that of fuel, minerals and metals rose from 8 percent to 41 percent, reflecting the increased importance of petroleum and petroleum products (Fawzy 2003). Manufactured goods also rose as a share of exports, mainly on account of greater output of textiles and clothing. A major thrust of economic reform has been to stimulate non-oil exports but, as is clear from Table 2.2, this has been a failure if Egypt is compared to many other developing countries. From 1995, Egypt began to register current-account deficits as imports rose rapidly. The deficit widened dramatically to US$2.4bn in 1998 (2.8 percent of GDP), up from US$600m in 1997, mainly owing to a sharp deterioration in the trade balance, a drop in tourism in the wake of the Luxor massacre and the negative effects of the Asian economic crisis. Similarly,

Table 2.3 presents another perspective on the relative integration of the Egyptian economy into the global economy of the 1990s, compared to other lower-middle income economies. The same indications are suggestive of an economy that is becoming relatively more isolated, not integrated.

Table 2.3 Integration with global economy, selected lower middle income economies

	Trade in Goods % of GDP				Change in Trade % of GDP	Growth in Real Trade less Growth in Real GDP % points	Gross Private Capital Flows % of GDP		Gross Foreign Direct Investment % of GDP	
	1990	2001	1990	2001	1990 to 2001	1990 to 2001	1990	2001	1990	2001
Egypt	**36.8**	**17.1**	**72.9**	**32.3**	**-40.5**	**-1.2**	**6.8**	**6.7**	**1.7**	**0.5**
Brazil	11.6	23.2	--	--	71.9	5.4	1.9	10.9	0.4	5.1
Bulgaria	48.9	98.1	70.8	186.7	--	5.4	39.2	16.6	0.0	5.2
China	32.5	44.0	47.4	66.3	--	6.2	2.5	10.4	1.2	4.9
Colombia	30.7	30.4	--	--	80.7	3.7	3.1	14.1	1.3	2.9
Ecuador	42.8	54.5	--	--	3.1	0.7	10.7	21.9	1.2	7.4
El Salvador	38.4	57.4	88.5	146.7	48.5	7.4	2.0	14.7	0.8	2.0
Guatemala	36.8	39.4	--	--	-12.9	3.4	2.9	29.7	0.6	12.0
Honduras	57.9	66.3	106.4	127.1	-21.6	-0.4	7.2	5.9	1.4	3.1
Jordan	91.1	80.8	205.2	224.2	-7.9	-2.8	6.3	8.0	1.7	1.2
Morocco	43.3	52.8	86.5	113.0	30.4	3.1	5.5	10.3	0.6	8.5
Paraguay	43.9	43.5	82.8	82.7	142.3	-2.4	5.4	5.2	1.5	2.3
Peru	25.5	29.1	--	--	45.9	3.9	3.2	5.1	0.2	2.2
Philippines	47.7	88.9	84.7	--	142.3	3.8	4.4	42.0	1.2	2.7
Syria	53.7	45.1	102.4	78.0	-29.8	0.1	18.0	16.9	0.0	1.5
Thailand	65.7	110.9	132.2	213.9	99.6	2.8	13.5	9.1	3.0	3.5
Tunisia	73.5	80.8	161.6	199.6	9.3	0.2	9.5	6.2	0.6	2.3
Turkey	23.4	48.6	44.5	101.8	--	7.1	4.3	15.1	0.5	2.5

Source: World Bank, World Development Indicators, 2003

Another measure of integration, the performance of foreign direct investment, is also indicative of Egypt's lack of economic progress (Table 2.4). One of the stated aims of the whole economic reform programme has been to attract foreign investment, particularly direct investment. The state has provided tax exemptions, new labour legislation, and free capital transfers supposedly towards this goal.

Table 2.4 Foreign Direct Investment (FDI), selected years (millions $)

	1985-1995 (annual average)	1998	2001
Egypt (inward)	**871**	**1065**	**510**
Egypt (outward)	**28**	**38**	**12**
Morocco (inward)	264	333	2658
Morocco (outward)	28	20	92
Turkey (inward)	529	940	3266
Turkey (outward)	24	367	497
Africa (inward)	3646	9021	17165
Africa (outward)	1297	2054	2544
Developing Countries (inward)	50912	187611	204801
Developing Countries (outward)	21512	50256	36571
World (inward)	181101	694457	735146
World (outward)	202481	684039	62071

Source: UNCTAD, World Investment Report 2002

However, as can be seen from Table 2.4, foreign direct investment actually decreased significantly during the 1990s, compared to large increases in other developing countries. Along the same lines, Table 2.5 shows, the level of foreign investment that Egypt attracts falls far short of the most successful developing economies. Owing to concerns over liquidity and the management of the exchange rate, as well as a dislike of the underlying constraint of bureaucracy, FDI declined to about US$500m in 2001, before rising slightly

to US$650m in 2002. This is down from more than US$1bn during the period of 1998 to 2000. As a result, Egypt is still dependent on capital inflows from multilateral and bilateral funding. Table 2.5 compares in more detail foreign direct investment in a selection of lower middle income countries.

Table 2.5 Foreign Direct Investment (selected lower middle income economies)

World Rank by Per Capita FDI inflows		Economy	Per capita (dollars)		Total value (billions of dollars)		Share of gross domestic investment(%)		Share of GDP (%)	
1998	1985		1993 to 1997	1981 to 1985	1993 to 1997	1981 to 1985	1993 to 1997	1981 to 1985	1993 to 1997	1981 to 1985
61	**32**	**Egypt**	**13.3**	**15.5**	**0.78**	**0.75**	**7.83**	**8.43**	**1.32**	**2.38**
39	33	Brazil	49.6	15.4	7.28	1.74	5.06	4.33	1.08	0.83
49	65	China	30.1	0.8	37.81	0.93	13.54	0.87	5.51	0.31
37	27	Colombia	62.2	18.6	1.98	0.44	11.29	6.19	2.54	1.33
55	54	Morocco	19.4	2.4	0.51	0.04	7.72	1.34	1.63	0.35
44	44	Paraguay	40.6	4.8	0.20	0.01	9.93	1.08	2.27	0.29
52	62	Philippines	20.1	1.2	1.54	0.05	8.46	0.67	2.01	0.18
45	42	Thailand	38.0	5.6	2.45	0.28	4.07	2.49	1.48	0.72
43	19	Tunisia	41.2	30.6	0.38	0.20	8.39	7.72	2.22	2.50
62	58	Turkey	12.0	1.7	0.74	0.09	1.76	0.75	0.43	0.13

Source: UNCTAD, World Investment Report 2002

In brief, as the various statistics presented above show, the Egyptian economic reform program, failed to significantly increase annual growth rates, not to mention further economic integration, attraction of FDI, and increase of manufactured exports. This failure was further magnified by the relative success of other developing countries that have embarked on the same growth path and global economic integration at the same time of Egyptian attempts. Moreover, the failure of the reforms to reach its most

important target –increased exports- points to the persistence of Egypt's structural economic problems.

10. Persistent Features of the Economy

The dismal failure of the economic reform program sketched above was a logical outcome of the inconsistency characterizing state reform policies (as shown in the agricultural sector) and its failure to shift away from the ISI vision. This inconsistency and hybridity of the reforms in place, is clear in two important aspect of the Egyptian economy; 1) the role of the state as the major employer and economic actor, through the public sector and the military, and 2) continued reliance on rents –from remittances, oil exports and tourism. Contrary, to the productive liberal economic model the state rhetoric was pushing for, its practices and policies continued to depend on the public sector as opposed to the private, and rents as opposed to productive output, as its main modes of economic intervention.

The public sector comprises four main categories in Egypt: central government, local government, public authorities and public enterprises. The sector covers a wide range of economic and social functions, with some engaged in productive undertakings and others in the delivery of social services. A public employment drive was undertaken after the extensive nationalization of the early-1960s. The share of government employment out of total employment was about 10 percent in 1960. Between 1960 and 1976, while the rate of growth of Egypt's labour force was 2.2 percent, that of government employment was 7.5 percent. The government provided an additional 1.1 million jobs over the 16-year period, a 46.2 percent of the total increase in employment. (Asaad 2002, p. 44). The crucial mechanism for generating public employment has been the employment guarantee for university and secondary school graduates. The employment guarantee gave university graduates the right to apply for public appointment two years after graduation, secondary school graduates after three years. The waiting period was designed to allow male graduates to complete their military service.

Despite liberalization attempts and privatization policies, the public sector still played an important role in the economy, accounting directly or indirectly for around one-third of

total GDP and employing some 30 percent of the total workforce up until the late 1990s. In the 1990s, government employment accounted for 7 percent of total employment in Africa, 6 percent in Asia, 9 percent in Latin America, and 17 percent in OECD countries. In contrast in 1998, government employment in Egypt accounted for 32 percent of total employment, and public enterprises another 7 percent, thus contributing to almost 39 percent to total employment and almost half of the GDP (Asaad 2002, p. 42). Although the economic reform program was initiated in the early-1990s, the transition rate from both the government and public enterprises to the private sector decreased almost by half in the 1990s compared with that of the 1980s. The overall public-private sector mobility rates were 4.8 percent in the 1990s, compared with 8.1 percent in the 1980s (Assaad 2002, p.46). After a decade of supposed liberalization policies, the fastest growing segment and the largest contributor to employment growth in Egypt continued to be the government (Table 2.6). In the period between 1988 and 1998, government employment grew at 4.8 percent per year –nearly twice as fast as total employment – and contributed 42 percent of net job creation. The public sector as a whole increased its share of total employment from 27.6 percent to 29.1 percent, despite the contraction in state owned enterprise employment by 2.6 percent (Assaad 2002, p. 40).

Table 2.6 Employment Growth in the Egyptian Economy, 1988-1998

	Share of Growth	**Annual Rate of Growth**
Government	41.8	4.8
State owned enterprises	-7.0	-2.6
Subtotal Public sector	34.7	3.0
Subtotal Private Agriculture	26.9	1.6
Subtotal Private Non Agriculture	38.4	3.0
Total	100	2.5

Source: Assaad (2002, p.40)

Another aspect of continuing state domination of the economy in the age of liberalization is the role of the military. The military developed into a major player in the Egyptian economy during the 1980s and 1990s. The arms industry, subsidized by the state and excluded from national economic accounts, is still the largest manufacturing sector,

producing not only military equipment but clothing, electrical appliances, construction goods, and pharmaceuticals. The military has also established itself as a dominant force in agriculture, setting up dairy, poultry and vegetable farms, land reclamation projects, and food processing industries. It has also played a leading role in the construction of bridges, roads, power lines and other civilian infrastructure projects. Among those countries classified as lower middle income, Egypt ranks near the top in terms of the proportion of central government expenditure devoted to the military. The Ministry of Defense has also built, during the past two decades, its own military cities, mainly around Cairo. By 2000, there were more than 20 military cities, complete with hospitals, shops, schools and mosques (Mitchel 2002, p.119). The National Organization for Military Production has 24 major plants and a contract to assemble the US's main battle tank, the M1-A1, under an arrangement with the US company, General Dynamics Corporation. Military spending, then, represents a significant and statistically unrecorded segment of the economy. If included in calculations, it would greatly increase the relative weight of the state sector and place important doubts on claims concerning the liberalization of the economy. For example, in the early-1990s, it was estimated that government spending on the armed forces reached 4.7 billion Egyptian pounds, or about 20 percent of government outlays, a figure that excluded foreign military assistance from the United States $ 1.3 billion), income from arms exports, and the army's civilian agriculture and manufacturing projects. Thus, one fifth of government spending and perhaps 10 percent of GDP is unmeasured and unreported (Mitchel 2002, p.119).

The final feature of the Egyptian economy that persisted during the economic reform decade and until, and the end of the 1990s, was its continued dependence on rents, because of which Egyptian economy was facing severe problems. Again, since the 1970s, Egypt's major sources of hard currency have been oil exports, workers' remittances and tourism. These sources were negatively affected by the downturn in oil prices, the subsequent recession in Gulf economies and the fallout in tourism because of the November 1997 terrorist attacks in Luxor, respectively. And even with the latter recovery of oil prices, the long term reliance on oil export revenues has a limited future, and thus the continued reliance on it is one of Egypt structural problems. At 3.7 billion barrels, reserves are modest while at the same time Egypt is facing depletion of its ageing

oilfields in the Gulf of Suez. Production fell to 628,153 barrels/day in 2002, down from an average of 639,478 barrels/day in 2001 and 700,000 barrels/day in 2000 (E.I.U. Egypt Country Report 2002). Export growth has been constrained by lower production as well as an increase in domestic consumption resulting from the high population growth rate. Domestic consumption stood at around 460,000 barrels/day in 2001, compared with 412,000 barrels/day in 1997. As a result, petroleum exports, the main export earner at US$3.1 billion in 2002/03, are set to decline, and Egypt may no longer be a net oil exporter within a decade (E.I.U. Egypt Country Report 2002).

As for remittances, the second source of Egypt's rents and a major contributor to the current account, those rose steadily from US$3 billion in fiscal year 1987/88 to over US $6 billion in 1993/94 as a response to the stable Egyptian pound, new opportunities for investment in financial instruments such as high- yielding Treasury bills, and attractive returns on local currency deposits. However, remittances dropped to US $3.3 billion in 1994/95 owing to the changed method of calculation, but rose again in 1998/99 to US $3.8 billion. Remittances have since fallen, dipping below US $3 billion in 2000/01, reflecting expatriate concern at the exchange rate regime, and a reluctance to send remittances through official channels when attractive informal market rates are available (E.I.U. Egypt Country Report 2002). These fluctuations are reflected on lack of stability in the Egyptian economy and its ability to make solid economic plans. Especially that the Egyptian emigrant workers are heavily concentrated in the Gulf region, a region where political instability and war have negatively affected the prospects for emigrant labour. For example, it is estimated that 2 million jobs held Egyptian workers in Iraq were lost during the 1990s.

Finally, tourism –the third biggest source of rents- continues to be the source of revenue with the best chance for long term growth. Overall hotel room capacity grew to 127,000 in 2002, compared with 117,000 in 2001 and a mere 19,000 in 1982. Capacity is expected to rise to 250,000 within the next few years as several major projects come on stream. The sector grew by an annual average rate of 12.5 percent between 1993 and 2000 (E.I.U. Egypt Country Report 2002). However, the tourism industry has also proven to be highly sensitive to political instability and terrorist threats. A minor attack

involving a small number of tourists has a disproportionately large effect on the number of tourists the following season.

The relatively slow growth and structural imbalances of the Egyptian economy, as well as the failed reform program, described above, have had significant effects on the structure and evolution of the urban labour market, which is one of the main issues of this research. The following section provides a summary overview of some of the main developments in the urban labour market in Egypt since the 1990s as a background to the detailed case study of labour in Shubra El-Kheima, which I provide in Chapter Seven.

11. Developments in the Urban Labour Market

A number of features characterized the labour market in 1990s and were indicative of the changes brought about by economic reforms. First, the majority of jobs created during that period were unprotected by legal contract. Irregular wage employment declined as a share of total employment, while unprotected regular employment grew rapidly. With the former referring to jobs that do not guarantee a regular income and the latter meaning jobs that provide regular income but are not protected by a legal contract. Table 2.7 clarifies this pattern that was witnessed in the labour market during the 1990s.

Table 2.7 Growth of Private Sector Non-agricultural Wage Work by Protection Status, 1988-1998

	Share of Growth	Annual Rate of Growth
Protected/Regular	17.8	4.8
Unprotected/Regular	65.8	7.0
Irregular	16.4	3.3
Total	100	5.5

Source: Assaad (2002 p.52)

The number of non-agricultural wageworkers in 1998 was estimated at nearly 9.8 million, of which 34.7 percent worked on an informal unprotected basis (Assad 2002, p.50). Private sector employment accounted for 41 percent of total employment, with informal employment representing 80.8 percent of total private non-agricultural wage

employment (Assad 2002). This increase in unprotected and informal employment was matched by an almost freeze in the distribution of labour between different industrial sectors. This is clear from Table 2.8, which shows changes in the distribution of wage employment by industry during the same period (1988-1998).

Table 2.8 Distribution of Private Non-agricultural Wage Employment By Industry Group, 1988-1998

Sector	1988	1998
Manufacturing, mining and utilities	32.5	34.0
Construction	22.4	21.2
Trade, Restaurants and Hotels	19.3	19.1
Transport, Storage and Communications	9.4	10.1
Finance, Insurance and Real Estate	2.0	3.2
Public and Personal Services	14.9	13.1
Undefined	0.5	0.3
Total	100	100

Source: Assaad (2002, p. 64)

Table 2.8 shows that there was very little structural change in the distribution of wage employment, another indication of the static nature of the economy, despite a decade of economic reforms.

In an important study, Moktar and Wahba (2002) measure the degree of informality in the Egyptian labour market and find that the proportion of nonagricultural workers over 18 years old engaged in informal jobs increased by 5 – 6 percentage points in the 1990s (p.135).[4] They also find that a substantial proportion of new entrants to the labour market in the 1990s have ended up in informal employment. In the early-1970s, 20 percent of workers used to start their working life with informal jobs, but by 1998, 69 percent of new workers have started in informal employment (Moktar and Wahba 2002, p.137). Thus, evidence suggests that, in the 1990s, the Egyptian labour market has experienced an increase in the informalisation of "*new*" workers. The probability of

[4] This is the case whether the proportion is measured using those workers lacking a job contract or those without social security coverage.

being informal worker was 5 percentage points more in 1998 than in 1990 (Moktar and Wahba 2002, p.137).

The main characteristics of informal workers are as follow. Informal workers are predominately male, though the share of female informal workers has risen by 3 to 4 percentage points between 1990 and 1998 (El-Kogali 2002, p.165). Although the probability of informality increased for both male and female workers, females experienced a bigger increase. Also young workers and those less than 40 years old have witnessed an especially large increase in the probability of being informal workers in 1998 compared to 1990 (Amer 2002, p. 225). Formal workers are on average older than informal workers reflecting the fact that during the 90s, the time spent queuing for public sector jobs was longer than before, extending in some cases up to ten years after graduation. The educational composition of informal workers seems also to have altered between 1990 and 1998. This is partly reflective of the changes in the educational composition of the total working population. The proportion of workers with no education who could read and write among the formal working population has fallen and so too has that of informal employment (Amer 2002, p.230). Nonetheless, the share of those with only intermediate education in informal employment has increased by more than for any other educational group. Finally, examining the region of residence of informal workers, by the end of the 1990s, the shares represented by Greater Cairo and Lower Rural in informal employment increased, while the shares of other regions fell (Wahba 2002, p.261).

Another feature of the labour market in Egypt during the era of reform in the 1990s, is that there was no substantial decrease in the public sector employment, that was absorbed in the private sector. Although this should have been the case if the state was truly initiating an economic liberalization program as they claimed. Rather, among those who were economically inactive in 1990, an equal proportion ended up in public formal jobs and in private informal ones (26 percent) (Wahba 2002). Only 8 percent managed to secure a formal private job by the end of the period. Younger individuals were more likely to move into a formal private job than older individuals. Males were more likely to end up with a private informal job than with public formal work, while the opposite was true for women. Also, only 4 percent of economically inactive women moved to formal

private employment by the end of the period. To sum up, there is no evidence of substantial exodus of public sector workers into private formal or informal employment during the 90s.

12. Summary

In this chapter, I provided an overview of the development of the Egyptian economy. Statist policies of development initiated in the 1940s, accelerated in the 1950s and 1960s and culminating in the five year plan of 1960-1965, failed to solve the main structural weaknesses of the Egyptian economy. The *infitah* policies of the 1970s, which were initiated to attempt to solve the economic crisis through liberalization of trade and deregulation, also did not lead to any significant liberalization of the economy. Only in the early-1990s, with the deepening of the economic crisis, was a policy of structural adjustment initiated with the stated aim of dismantling the state capitalist system and encouraging foreign investment and export-led development. These policies, however failed to significantly increase foreign investment or increase exports. In fact, through comparing the performance of the Egyptian economy with that of other developing countries, the relative performance of the economy has been negative in terms of attracting foreign investment, increasing exports and integrating into the world economy.

In the second part of the chapter, I described the current structure and performance of the economy, pointing out the continued reliance of the economy on bilateral aid, oil, migrant worker's remittances and tourism, and the continuing growth and hegemony of the state sector in the economy. I gave a brief description of recent developments in the urban labour market, concentrating on the effects of increasing informal employment, the persistence of government employment and the changing patterns of internal migration as the main features of the current market structure. In the next chapter we turn to developments in the world textile and garments industry in order to be able to place this sector in Egypt within its world-boundaries.

CHAPTER THREE
THE WORLD TEXTILE INDUSTRY

1. Introduction

The Egyptian textile and garment industry, despite being heavily protected and relatively isolated from the world economy until the 1990s, has not escaped the effects of the rapid and fundamental changes taking place over the past three decades in the global production and trade of textiles and garments. It is impossible to understand the development of the Egyptian textile industry without a clear understanding of the world textile and garment industry as a whole. This chapter will attempt to provide a brief introduction to major trends and developments in the world textile and garment industry. The chapter will start with a brief description of the imposition, history and complicated effects of protectionism and trade restrictions known as the Multi Fiber Agreement (MFA). Here I will show the effects that trade restrictions have had in shaping the growth of world trade and the relocation of production. The next section of the chapter will deal with of the major developments in world production and trade, followed by a discussion of the major relocations that have been taking place over the last three decades. The aim will be to demonstrate that the changes taking place are not simply a shift of production from the industrialized countries to the developing ones but, rather, represent the emergence of a more complex international division of labour. I will then discuss three significant shifts affecting textile industry and trade worldwide. The first of these shifts is the possible consequences of the termination of the MFA in 2005. The second is the acceleration of technological advances in the textile industry as firms face an increasingly competitive world market and attempted to cut costs through increasing productivity. The final section will briefly discuss the third shift, which is change in the concentration of production and the growth of the statistically unrecorded and small-scale sector.

2. The Development of Protectionism

During much of the last century, the protection of 'national' industries from 'foreign' competition has been the aim of policy makers. The tools used to achieve this

aim have been the imposition of trade restrictions such as tariffs on imports or bilateral and/or multilateral quota restrictions. The failure of such policies in reducing imports and preventing shifts in global industrial production cannot be more evident than in the case of the textile industry, which has simultaneously seen both the most restrictive protectionist trade policies and the most rapid increase in world trade. The glaring contradiction between the centrality of the issue of protection in the literature and the relative ineffectiveness of the actual policy necessitates a closer examination of the actual evolution of protectionist policies in the world textile industry.

In the 1950s, special trade agreements reduced trade restrictions between the US and Europe, while simultaneously tightened restrictions on Japan, Eastern Europe and developing countries. In 1957, Japan was pressured by the US into accepting a 'voluntary export restraint.' As a result, Japan's share of US imports of cotton textiles fell from 63 percent in 1958 to 26 percent in 1960. The outcome of these policies was a process of pushing exports from restricted areas to non-restricted areas (Hong Kong's share of US imports, for instance, increased in the same period from 14 to 28 percent).

Within the same vain, the GATT discussions of 1959 and 1960 under the leadership of the US developed the concept of 'market disruption.' This was defined as a situation arising from a sharp import increase associated with low import prices. In November 1960, GATT adopted the Decision on the Avoidance of Market Disruption, which stipulated that restrictions could be applied even if no actual loss had occurred to the producers in the importing market. The restrictions could be applied to the individual country responsible for the import surge. The decision also introduced a system by which the basis for determining the need for restriction would be a price differential between imports and competing domestic goods (Cline 1987, p.147). Hence, in July 1961, an international Short Term Arrangement established one-year restrictions on the basis of the 1960-1961 levels for 64 categories of cotton textiles in order to avoid market disruption until a more permanent agreement was reached.

In February 1962, 19 major importing countries adopted the Long Term Arrangement Regarding Cotton Textiles. This arrangement was renewed in 1967, 1970 and 1973. It allowed for bilateral consultations and automatic annual increases of 5 percent in restraint levels (Cline 1987, p.147). In spite of the Long Term Arrangement,

textile imports into the industrialized countries continued to increase dramatically. Between 1961and 1972, US imports of textiles rose from $1.02 billion to $2.4 billion, while imports of apparel rose from $648 million to $3.5 billion (at an average annual growth rate of 11.5 percent for the two sectors combined). A major part of the import growth was made up of man-made fiibre products that were not included in the arrangement. US imports of man-made fibre textiles rose by over 1000 percent between 1960 and 1970 (Cline 1987, p.148). The above figures do not actually tell us the effect of the Long Term Arrangement (LTA) on changes in the sources of imports, or in the types or qualities of goods imported. But they do show that total imports into the US continued to increase dramatically despite the Arrangement.

Bilateral quantitative restrictions were outside the control of the GATT or the LTA. In 1971 and 1972, the US negotiated bilateral agreements restricting imports of man-made fibres from Hong Kong, Japan, Korea and Taiwan. As the US was the main player in initiating bilateral arrangements, these may have translated into increasing import pressure on European countries as the affected exporters turned to Europe. This led the European governments to seek a new multilateral arrangement that covered man-made fibres and woolen goods (GATT 1984, p. 7).

Thus, in January 1974, the Arrangement Regarding International Trade in Textiles, also known as the Multi-Fibre Arrangement (MFA), was signed. This provided a general framework for determining the conditions under which the textile and apparel trade could be controlled. MFA provided for annual quota growth of 6 percent instead of 5 percent. It also allowed for transferring quotas across categories, borrowing against a future years' quota and adding unused quotas to subsequent years' imports. Although these allowances increased flexibility in trade, the cumulative effect of the MFA was restrictive because of the inclusion for the first time of woolen and man-made textiles in the arrangement (Goto 1988, p.15). The MFA was clearly inconsistent with GATT principles. It introduced quota protection which violated the GATT's aim of depending on tariff protection instead. It also established a precedent of imposing quantitative restrictions against a particular group of countries – in this case, mostly developing countries (Cline 1987, p.151). It must be noted that only imports from developing countries and Japan were affected by MFA. Trade between industrialized countries (with

the exception of Japan) was not bound by MFA even if the countries involved were signatories and accounted for about 43 percent of world trade in textiles and 35 percent in world trade in apparel. In spite of this loophole, the MFA was actually a cause of tension within the industrialized group, especially between the US and the EC. Whenever the US negotiated a bilateral agreement with a supplier, the EC complained that exports would be redirected towards the EC, and vice versa, resulting in mutual recriminations (Aggarwal 1985, p.170). The MFA covered nearly 25 percent of world trade in textiles and apparel and had significant effects on it.

Again as with the LTA, textile imports into industrialized countries continued to expand despite the MFA.[5] However, the MFA was renewed for another four years in December 1977 and implementation after the renewal led to much tighter restrictions as new definitions and allowances were made. Under this MFA-II the EC developed the concept of 'cumulative market disruption' in which a global ceiling on imports from 'low cost' countries was established in the sensitive groups. Instead of a bilateral approach, whereby action would be taken against a country only if its individual exports were the cause of losses, a new comprehensive approach was taken, in which even small suppliers would be restricted because disruption would be defined globally (Goto 1988, p.15). MFA was renewed again in 1981, producing even more trade restrictions. For the EC, there were clear cutbacks in quotas on the dominant suppliers (mainly, Hong Kong, Taiwan and South Korea) and limitations on quota growth for other countries to levels far below the annual 6 percent, imposed on the basis that demand in Europe was stagnant (Cline 1987, p.155). During the 1980s, the US had bilateral agreements with 34 countries under the MFA, and nearly 80 percent of US textile and apparel imports from developing countries were limited by quotas under these agreements. The EC had bilateral restrictions on imports from 25 countries together with unilateral restraints on Taiwan.

The effects of MFA quotas varied widely between different countries. In 1976, the three major East Asian exporters filled 99.8 percent of their combined quotas (Keesing and Wolf 1980, p. 86). This did not lead, however, to a reduction in their

[5] Between 1973 and 1976, total imports of textiles and garments increased by 49 percent in Europe, and by 40 percent in the US. Imports from non-oil developing countries to Europe also increased rapidly from $1.9 billion in 1973 to $3.9 billion in 1976. The increase in the US during the same period was from $2.1 billion to $3.6 billion (Cline 1987, p.152).

exports but pushed firms in these countries to shift to higher value goods and relocate mills to less-restricted countries. China and Japan had significantly lower shares of exports covered by quotas in the US market, and also lower utilization rates. Latin American suppliers had both low shares of exports covered by quotas and relatively low quota utilization rates (less than 50 percent in Colombia and Mexico) (Keesing and Wolf 1980, p.86).

Another indirect effect was the diversion of trade from the countries that filled their export quotas to the countries that were unrestricted by, or had underutilized, quotas. Less competitive exporters could make use of their quota advantage over more competitive exporters that had filled their quotas. Moreover, the countries with filled quotas had a strong incentive to move their textile projects to countries with under utilized quotas, through foreign direct investments and joint projects (Goto 1988, p. 27). The evidence suggests further that there has been such a shift in textile export capacity. In the 1980s, countries such as Thailand, Malaysia, Indonesia, Philippines and China began to replace Hong Kong, Taiwan and South Korea as the main exporters, while capital in the latter group of countries began making large investments in the textile industry in the former.[6] Wolf (1987) argues that this evidence helps to show that MFA has been a force in the further internationalisation of the textile industry. Another view argues that, because the MFA restrictions were based on quantitatively limiting trade, they have had an upgrading effect on the industry in exporting countries. Cline (1987) suggests:

> Because the MFA controls the physical volume of imports rather than their value, it introduces an incentive to upgrade products.... While controlled suppliers have an incentive to upgrade by moving up the ladder of processing stages, they have also faced an inducement to upgrade the quality of their exports within each product category. (57)

The MFA persisted into the 1990s, when agreement was finally reached in 1993 at the Uruguay round of GATT to phase out the MFA over a ten-year period. The decision to

[6] The best example of this process is when Hong Kong, Korea, Singapore and Taiwan displaced Japan and the share of Japanese exports in world textiles and garments fell from 28 percent to 4 percent in two decades (Harris 1986).

phase out the MFA was probably due to the reduced political significance of the textile industry in industrialized countries in terms of its ability to provide employment. In section four of this chapter I will look at the expected impact of this termination of MFA, as one of the major parameters affecting textile and garment industry and trade for decades. However, before I do that, we need to understand some of the general trends – other than protectionism- that have been characterizing world textile industry in the past two decades.

3. Trends in World Production and Trade

Total world exports in the textile industry amounted to $119 billion in 1982 or, more specifically, $52 billion in textiles, $41 billion in apparel, $16 billion in fibres and $10 billion in textile machinery. The textile complex thus accounted for 9 percent of world trade in manufactures and, over the next decade, it continued to rise to 9.3 percent (GATT 1994, pp. 79-83). By contrast, in 1970, the textile industry account for only 6 percent of total world trade in manufactures (Frobel et al. 1980, p. 56). International trade in textiles, too, has grown rapidly since the 1960s, from a rate of 11.5 percent annually between 1963 and 1973 to 4.8 percent between 1973 and 1982 (Cline 1987). Between 1990 and 2001, it grew at an annual rate of 6 percent (UNIDO 2003). Similarly, the growth in world apparel exports has also been phenomenal, amounting to 181 percent between 1973 and 1979, and 132 percent between 1979 and 1987. By 1991, it increased by another 22 percent (Chriterson and Appelbaum 1995, p.1363). Between 1990 and 2001, it again increased by another 30 percent (UNIDO 2003).

However, the growth in the world trade in textiles and apparel in the last three decades was not spread evenly across the globe. Tables 3.1 and 3.2 provide a rough picture of the distribution of shares of production and exports of textiles and garments from different countries. However, two difficulties must be taken into consideration before examining the figures contained in these tables. First, the figures are highly aggregate; they lump together a wide variety of sub-sectors and, therefore, only give us a general view of the changing location of production and trade in the industry. The second limitation is that the figures only cover the recorded sector of the industry and, thus, represent a fraction of the real total sizes of the industry in different countries.

Bearing these problems in mind, both tables provide a rough guide to some of the international shifts taking place in the world textile industry.

Table 3.1 Leading exporters of textiles, 2001 (billion dollars and percentage)

	Value	Share in world exports/imports		
	2001	1980	1990	2001
E.U.	50.54	49.4	48.7	34.4
China	16.83	4.6	6.9	11.4
Hong Kong	12.21	6.6	12.9	--
Korea	10.94	4.0	5.8	7.4
U.S.	10.49	6.8	4.8	7.1
Taiwan	9.92	3.2	5.9	6.7
Japan	6.19	9.3	5.6	4.2
India	5.90	2.1	2.1	3.8
Pakistan	4.53	1.6	2.6	3.1
Turkey	3.91	0.6	1.4	2.7
Indonesia	3.20	0.1	1.2	2.2
Canada	2.16	0.6	0.7	1.5
Mexico	2.09	0.2	0.7	1.4
Thailand	1.89	0.6	0.9	1.3
Switzerland	1.44	2.8	2.5	1.0

Source: UNIDO Industrial Development Report, 2002/2003

Table 3.2 Leading exporters of garments, 2001

	Value	Share in world exports/imports		
	2001	1980	1990	2001
E.U.	47.09	42.0	37.7	24.1
China	36.65	4.0	8.9	18.8
Hong Kong	23.45	17.8	27.8	--
Mexico	8.01	0.0	0.5	4.1
U.S.	7.01	3.1	2.4	3.6
Turkey	6.63	0.3	3.1	3.4
India	6.03	1.5	2.3	3.1
Bangladesh	5.11	0.0	0.6	2.6
Indonesia	4.53	0.2	1.5	2.3
Korea	4.31	7.3	7.3	2.2
Thailand	3.58	0.7	2.6	1.8
Romania	2.77	--	0.3	1.4
Dominican Rep.	2.71	0.0	0.7	1.4
Tunisia	2.60	0.8	1.0	1.3
Taiwan	2.48	6.0	3.7	1.3

Source: UNIDO Industrial Development Report, 2002/2003

As the tables demonstrate, major shifts in export shares have taken place, first, from the industrialized countries of the West and Japan to the newly industrializing countries of East Asia and, then, from them to less-developed countries in Asia and Latin America. This shift in world exports, however, is not simply a shift from the industrialized countries to the developing ones. The reality is far more complex. The share of exports of textile industries in Japan and the E.U. may have decreased, for example, but textile industries in the US sustained their share in the growing world market. And although the textile industries in South Korea, Hong Kong and Taiwan had the largest shares since the 1970s, the textile industries with the fastest growing share of world exports have been those in Indonesia, Pakistan and Turkey. In apparel, the pattern is quite similar (Table 3.2). Among the industrialized countries, the share of exports by the apparel industries in the E.U. decreased the most, but the apparel industry in the US actually increased its share. And although the main gains in exports were made by the

apparel industries of Hong Kong, China and South Korea, the fastest growing exporters were in Turkey, Thailand and Indonesia.[7]

If we look at the absolute comparative sizes of the textile industry in different regions, we will find that the main producers are in the US, Western Europe and Japan both for textiles and apparel. In textiles, 50 percent of world production in 1990 was concentrated in six countries: the United States, Japan, Italy, Germany, France and the United Kingdom. In apparel, the percentage share of these same six countries was 60 percent of world production (UNIDO 2003). At the same time, when examining the share of the fifteen leading producers in the world textile and apparel markets, it is clear that this concentration changed significantly between 1980 and 2001. The combined share of the newly industrializing countries among these 15 producers rose from, in textile production, from 18.5 percent in 1980 to 21.2 percent in 1990 to over 40 percent in 2001 and, in apparel production, from 8.8 percent in 1980 to 14.1 percent in 1990 to over 45 percent in 2001 (UNIDO 2003). Similarly, looking at US market, between 1980 and 1987, the percentage share of exports to the U.S. market by the three main exporters in the newly industrialized countries began to fall slightly. Hong Kong's share fell from 22.8 percent to 17.3 percent, Taiwan's share from 17.2 percent to 15 percent, and South Korea's share from 15.1 percent to 11.2 percent, although this is partially due to changes in relative currencies associated with the Plaza agreement of.[8] During the same period Turkey increased its share from 0.01 percent to 1.27 percent and Bangladesh from 0.02 percent to 1.66 percent. There is clearly a shift in favour of relatively new exporters (ILO 1991, pp. 72-73).

It is therefore an over-simplification to assume that the textile industry as a whole is shifting from the industrialized countries to the developing world. The process of relocation is much more complex. What is emerging is an elaborate international division of labour in which the textile firms in industrialized countries are focusing on more high value, capital intensive product categories, whereas firms in the developing countries are focusing on more low value, labour intensive, standardized product categories. This

[7] Turkey has the largest share (11.7 percent) of EU garment imports in 1995 and an increasing share of the US market. Between 1990 and 1996 the number of foreign investment firms increased from 58 to 114 (UNIDO 2003).

[8] An agreement between the US, UK, Germany, France and Japan to stabilize their exchange rates by acting together to overcome adverse market forces.

international division of labour is not only taking place between different product categories but also within categories as the more capital intensive stages of the production process become concentrated in the industrialized countries and the more labour intensive processes relocate to developing areas. For instance, the appearance of non-woven fibres in recent decades and their increasing penetration of the industrial textile market have provided new niches and enhanced the competitiveness of major textile firms in industrialized countries. The production of sophisticated fibres and fabrics required for specialized activities such as sports, fire fighting, and medicine (used in the replacement of blood vessels, for example) are product categories in which firms in industrialized countries specialize. Firms such as Toyobo in Japan and Dominion textiles in Canada are becoming more specialized in lines of sophisticated non-woven fibres (Singleton 1997, p.105). Also, in Scotland during the 1980s and early-1990s, there was a marked expansion of the high technology garment industry. Textile and clothing firms in the U.S such as Guilford Mills have been focusing since the early-1990s on specialized niches in the sportswear market (Hall 1994, p.282). The Shiloh cotton spinners in Britain became sharply focused in the late-1970s on areas such as healthcare and protective clothing.

Another important feature of the world textile industry, is that textile industries in countries lacking all the necessary raw materials have become major producers and exporters. Most notably, imports of natural fibres have been a crucial element in the growth of the East Asian textile industry. The combined natural fibre imports of Japan, Hong Kong, Taiwan, China and the ASEAN states went up from 24 percent of world imports in 1967 to 37 percent of world imports in 1987 (Anderson 1992, p.12). This disproves one of the persistent myths determining the policies of some states towards their textile industry, which is the assumption that the local production of cotton is an essential ingredient of a successful textile industry. In fact, international experience shows quite the opposite. When governments have heavily restricted imports of cotton fibres to force textile firms to buy local cotton, the result has often been disastrous for exports. This has been true both for industrialized countries that produce cotton (such as the U.S) and for developing cotton producers (such as India and Egypt). Of course this does not mean that lack of raw materials in itself leads to success in the textile industry

but, rather, that protective state policies in natural fibre-producing countries forced textile mills to buy higher cost local fibres of a limited range in quality, while other countries were able to buy internationally from the cheapest and most diverse producers.

Another myth that can be deconstructed by looking at the movement of world textile industry, is that of 'cheap labour'. It is often claimed that the availability of a large pool of cheap standardized labour plays an important role in providing a competitive advantage in the textile industry (Singleton 1997). However, cheap labour in itself is of limited significance when compared to labour productivity. Thus, although low waged labour played a significant role in the East Asian textile industries' success, it must be noted that the level of productivity and industrial efficiency was a decisive factor. In South Korea, for example, although the wage of a textile spinning operative was only 40 percent of that of Japan, the productivity of South Korean spinning mills was up 60 percent to that of Japan even as far back as 1965 (Singleton 1997, p.30). One example of a dramatic textile export failure despite extremely low wages has been that of Kenya. As in most countries, the textile industry was one of the earliest modern manufacturing industries to be established. Up until the mid-1970s, under the influence of export promotion policies, Kenyan government planners held the conventional view that the textile industry was an attractive industry because it was labour intensive and could compete on world markets by virtue of low local wages. Because the planners had not estimated correctly other important factors (such as the presence of local, protected competition affecting the competitiveness of the industry), 'the result was a failure and the collapse of the project' (Stopford and Strange 1991, p.132).

An increasingly significant factor in the internationalization of the textile industry is the expansion of foreign direct investment (FDI) and off-shore processing. This expansion is part of the emergence of a new international division of labour in which the more labour intensive aspects of the production process are shifted from industrialized countries to the developing world. For example, in the 1950s there was only one Japanese textile mill in South East Asia. By 1974, Japanese firms had established 275 fibre, textile and apparel projects in the region. Between 1967 and 1989, the Japanese were responsible for 80 percent of the total FDI inflow into the Indonesian textile and garment sector (Hill 1991, p.101). By 1988, Japanese FDI in textiles reached $2.35

billion, of which 52 percent was in Asia, 18 percent in Latin America, 17 percent in North America and 10 percent in Europe (Steven 1990, p.68). Another form of foreign investment that has grown rapidly has been offshore processing. This involves sending fabrics to another country to be made into garments either for re-importation or for export to third countries. This form of international subcontracting became particularly important for the German textile industry. In 1975, 14 percent of West Germany's textile exports and 6 percent of its clothing exports went to offshore processing. By 1992, offshore processing accounted for one third of German clothing imports (Singleton 1997, p.117). Additionally, Germany has been another major source of foreign direct investment in developing countries since the 1960s. German textile and apparel manufacturers have invested in Tunisia, Greece, Malta and Hungary. Large manufacturers in the industrialized countries, then, have maintained their position by transferring production to low wage economies. Similarly, the UK-owned company, Coates Viyella, cut its British workforce by 11 percent between 1992 and 1995, while its overseas workforce increased by 30 percent while it reduced by half the number of garments sewn in Britain (Singleton 1997, p.120). It is now these major retailers and brand-based companies which have become increasingly powerful players in the world market. Typically, they own no production facilities themselves but manage a global network of suppliers.

Another interesting development in FDI in textiles since the 1960s has been the emergence of newly industrializing countries (NICs) as growing foreign investors. Hong Kong textile manufacturers began investing in Singapore in the early-1960s to get around British and American import quotas, which did not apply to Singapore until 1965 and 1966. Hong Kong textile investments also became increasingly important in Malaysia and Indonesia in the 1970s and, on a larger scale, on the Chinese mainland since the 1980s (Singleton 1997). South Korean textile companies too made investments of over $5 million in 9 textile and clothing plants by the end of 1990, while Indian and Malaysian companies also expanded their foreign investment in the industry. For example, the Indian textile corporation, Birla, has opened joint venture plants in Thailand, Indonesia, Uganda and the Dominican Republic since the mid-1970s, and Malaysian firms have recently made direct investments in Vietnam (Singleton 1997, p.117).

Finally, the development of computer technology and improved transport facilities meant that large retailers were able to control production processes anywhere in the world. New technology at the point of sale has also enabled retailers to monitor fashion trends closely and to look for flexible responses from suppliers. Information, designs and orders can be communicated around the world 24 hours a day, and orders can be shifted from one production site to another. Companies operating at this global level clearly benefit from the free flow of capital and the removal of trade barriers that had prevented them from sourcing to the most profitable locations.

In brief, a number of features have characterized the production and trade of textiles. First, there is the internationalization of production in terms of the complex division of labour and specialization on the international level, and the subsequent relocation of production and investments in the textile industry. Related to this, is the revelation that the local production of raw materials is not a prerequisite for excelling in this industry, while the presence of efficient, trained labour –and not only cheap labour- is. Stemming from this overview of the recent trends in textile production and trade there seems to be three features that warrants closer examination; 1) the end of MFA, the influential protectionist agreement that has in place for almost three decades and the implementation of a new agreement; 2) technological changes in production and their dissemination to newly industrialized countries; 3) the deconcentration or informalization of production i.e. the shift from big plants to small informal workshops.

4. Effects of the Phasing Out of the MFA

The pattern of international trade is likely to change dramatically by the end of 2005 when the MFA will finally be phased out under the new Agreement on Textiles and Clothing (ATC). This is part of the global process of trade liberalization conducted within the framework of the World Trade Organization. The ATC is seen as working in the interest of poor countries since it increases their access to previously protected markets in the industrialized world. However, as with the MFA, the effects of ACT are likely to be more complicated. A closer look at the expected future of some of the notable producers within the world economy can demonstrate the unevenness of expected effects.

For example, as has been mentioned, China's textile and garment exports, especially the latter, have proven very competitive (Francois and Spinanger 2001). For this reason, they have faced more stringent restrictions under the MFA than exports from most other developing countries. In the case of China, one of the more optimistic projections foresees China dominating nearly half of global exports in apparel by the middle of this decade as trade barriers are progressively removed, as compared with only about 15 percent in 1997 (Abernathy et al 2002). Hong Kong and South Korean apparel manufacturers, which now scour the world for countries with unused quotas in which to base their factories, are already preparing to shift resources to the Chinese mainland to take advantage of the new rules. Some analysts predict that, by the end of the decade, China will be a net importer of about 17 per cent of textile products sold on the world market. Those imports, in turn, will feed into and buttress the growth of apparel exports.

This pattern is already apparent in China's textile trade, even with all the distortions of quotas and tariffs. At the same time, as China's apparel exports have expanded, Chinese imports of chemical fibre and raw materials for making synthetic fibre shot up from a mere $183 million in 1975 to $ 3.73 billion by 1995 (Financial Times Survey 2004). Du Pont has invested $700m in China and is continuing to look at further acquisitions in its core, fibres, plastics, paints and food ingredients businesses. It sells 95 per cent of its production to domestic buyers. Sales in China, which were $623 million for 2003, have almost doubled since 1998 (Financial Times Survey 2004). Thus, continuous liberalization of MFA quotas – culminating in the final elimination of all remaining quotas in 2005 – will lead to further expansion of Chinese exports, probably at the expense of some other developing countries.

Concomitantly, because of the Chinese challenge the effects of MFA phasing-out on Bangladesh are likely to be different. For example, in 2003, Canada removed cotton shirts from its list of items subject to quota restrictions under the Multi-Fibre Arrangement (MFA) which governs global garment trading and from the point of view of Dhaka, the effects were alarming. It was alarming because, while Bangladesh was superseded by competitors on the Canadian front, by 2005, all global quotas for garments should be phased out, lifting restrictions on Bangladesh's rival South and South-East Asian producers and freeing all of the global market. Under this competition, only the

fastest, least costly and best quality producers will prosper, and although Bangladesh's garments industry has already shown extraordinary vitality and resilience, there are fears the industry may not yet be sufficiently mature to cope with 2005. Since the 1980s, Bangladesh's thriving and mostly smaller-scale garments industry has boomed from nothing to earn 70 per cent of the country's hard currency, replacing a sinking jute industry which, by 1996, earned just 8 per cent of Bangladesh's foreign exchange, having fallen from 50% in the 1970s (Financial Times Survey 2004). To meet open competition after 2005, the Bangladesh industry must compete against China, India, Pakistan, Sri Lanka and South-East Asian countries which offer similarly cheap and productive labour, higher quality clothes and greater integration of their garments industries.

Another major player is India, which already exports $15 billion worth of textile products a year, more than two-thirds of which go to the US and the EU. In the past, Indian companies would have invested in other markets such as Bangladesh, Sri Lanka and Nepal to elude the ceilings on Indian exports. But now Indian companies are building new capacity at home in the expectation that they will snap up the former quota share of many smaller African and Asian economies after the termination of MFA. Overseas investors, including companies from Singapore, Italy and even Sri Lanka, are also setting up production units in India in anticipation. India is also expected to benefit overall, particularly in garment exports, although there remain sectors, such as fabrics, where India is still inefficient and could lose out to China (Singleton 1997). Scaling the value chain has been the experience of India's textile rivals, China, Taiwan and Thailand, where large-scale production has combined with light regulation. Yet, fears of dumping are worrying many in India, especially at the bottom end of the garments market, the fastest growing sector because of exports (Singleton 1997).

Hence, as these cases demonstrate the phasing-out of MFA, carries a lot of potentials as well as threats for key players in the textile industry among the developing countries. The threats and potentials are not equally distributed, so while China stands a higher chance than Bangladesh for example, India seems to be awaiting combined effects. However, the one clear implication that will be witnessed worldwide is that competition will be tougher.

5. Technology

Related to the toughened competition through the end of MFA, is another source of competition and huge impact on the textile industry and trade, that is technology. This is the second feature (in addition to phasing of MFA and deconcentration of production) that has had –and still has- a tremendous impact on textile and apparel production and subsequently on the trade competition. The main technological advances that have taken place in the textile industry have been in the spinning and weaving sectors of the industry and have had significant impact on the increase of production.

Spinning is the process by which fibres are transformed into standardized yarn threads. It involves three consecutive processes; drafting, twisting, and winding (Toyne et al. 1984, p.37). In the traditional spinning machinery, the three processes were interdependently linked by the same fibre flow. This meant that the productivity of the frame was limited to the most restrictive factor along this flow. The development of open-end rotor spinning made the three processes independent of each other, greatly increasing both the efficiency and speed of the spinning process (Toyne et al. 1984, p.38). Although, the early versions of open-end rotors that came into use in the late-1960s had problems removing trash and dust particles which greatly reduced their efficiency. However, during the 1970s, the development of automatic trash and dust removal mechanisms, automatic knotting and improved rotor design eliminated most of these problems (ILO 1991, p. 83). In the weaving process, which involves the transformation of yarn threads into woven cloth, a major development has been the replacement of the traditional wooden fly shuttle by shuttleless looms driven by air or water jets. The main aim of these technological developments in the weaving machinery has been to increase the speed and reliability of weft insertion systems. The introduction of shuttleless looms has more than tripled the speed of weaving and has also dramatically increased the possible fabric widths that can be processed (ILO 1991, p. 84).

Despite the importance of open-end rotor and shuttles looms and –as shown in Table 3.3- their increased use from 1975 to 1990 in different countries the dissemination and adoption of this seminal technology has not been equal between countries. As can be seen, Hong Kong was already extensively using open-end rotors in 1975, only surpassed in 1990 by Sweden. In this area, the more industrialized countries seemed to be trying to

catch up with Hong Kong rather than the other way round. Indeed, the US, the UK and Germany were relatively slow in adopting open-end rotors. However, in the case of shuttleless looms, all countries had increased their use significantly by 1990, with more dramatic increases seen in Germany, France and Italy (over 80 percent replacement), Hong Kong (over 70 percent), and Pakistan and Taiwan (over 30 percent) (Lucke 1993, p.1232-1235). By contrast, shuttleless technology is still not widely in use in India and Thailand. What these statistics show is that the international dissemination of new technology in the textile industry is very rapid, but also very uneven. Not all industrialized countries adopt the new technology to the same extent, and some newly industrializing countries make extensive and rapid adaptations whereas others do not.

Table 3.3 Open-end rotors and shuttleless looms as percentages of total spinning and weaving capacity in selected countries, 1975, 1990

Country	Open-end Rotors		Shuttleless Looms	
	1975	1990	1975	1990
France	2.4	29.2	---	83.2
Hong Kong	13.8	46.7	1.0	72.0
India	---	0.7	0.4	4.8
Italy	2.8	11.3	5.9	83.9
Pakistan	0.1	3.8	0.2	33.3
Sweden	7.6	55.6	---	---
Taiwan	1.2	11.0	3.5	36.5
Thailand	0.3	4.3	0.4	6.3
UK	3.4	17.0	18.3	51.0
US	2.6	17.4	6.9	61.8
Germany	3.9	18.0	---	86.6

Source: Lucke (1993 p.1232-1235)

As for technological developments in the apparel sector, they have been much slower. Unlike Mechanization and automation are much more difficult in this kind of production. The bulk of a machine operator's time is spent in loading and unloading fabric. Separating a single ply of cloth and guiding it through the sewing machine

remains almost completely manual, putting strict limits on the speed of the machines. While there have been important advances in the design and cutting stages of apparel production through the extensive use of computers (Cline 1987), apparel production continues to be a highly labour intensive process, relatively resistant to labour saving technologies. This has meant a continued comparative advantage to countries with more efficient labour.

However, another important technological factor in the struggle for comparative advantage in this sector, has been the introduction and rapid spread of the use of man-made fibres. Table 3.4 demonstrates that, between 1960 and 1980, the share of synthetic fibres as a percentage of total world fibre production rose from 5 to 36 percent. In the European Community, the percentage of yarn produced from synthetic fibre rose from 26 to 60 percent, in the United States from 36 to 74 percent, and in Japan from 43 to 74 percent (Clairmonte and Cavanagh 1981, p.29). However, this technology just as that of spinning and weaving was not equally disseminated. In 1983, 60 percent of the world's man-made fibre capacity was concentrated in the hands of 20 companies based in the US, Western Europe and Japan.

Table 3.4 World output of cotton, wool, cellulosic and synthetic fibres, 1955-79 (%)

Year	Cotton	Wool	Synthetics	Cellulosics
1955	69.9	9.8	2.1	18.2
1960	68.3	9.9	4.6	17.2
1965	62.2	8.1	11.3	18.4
1970	55.5	7.2	21.5	15.8
1974	52.2	4.9	29.1	13.8
1979	47.8	5.1	35.6	11.3

Source: Clairmonte and Cavanagh, (1981: 27)

In contrast, a different direction can be witnessed in changes within the textile machinery sector (Table 3.5). In 1970, all the leading exporters of textile machinery were industrialized countries. The machinery exports of countries such as South Korea were negligible. Between 1970 and 1993, major changes took place in world market

shares. US companies lost half of their shares and the UK three quarters, while Japanese companies' share of world exports nearly doubled and South Korea and Hong Kong joined the list of top ten exporters (Singleton 1997). Although the industrialized countries continued to be the main source of exports for spinning and weaving machinery, newly industrializing countries became major locations for the production of sewing machinery with Hong Kong, China, Brazil, South Korea and Singapore all among the top ten exporters (Singleton 1997).[9]

Table 3.5 World export-market shares of textile and leather machinery, 1970, 1993

Country	1970 (%)	Country	1993 (%)
West Germany	30.4	**Germany**	26.6
UK	12.3	**Japan**	22.5
Japan	11.4	**Italy**	12.4
Switzerland	11.3	**Switzerland**	7.8
U.S	9.7	**Hong Kong**	5.6
Italy	9.4	**U.S**	5.0
France	5.6	**France**	3.4
Belgium-Luxembourg	2.4	**UK**	2.9
The Netherlands	1.4	**Belgium-Luxembourg**	2.3
Sweden	1.1	**South Korea**	2.1

Source: Singleton, (1997: 79)

In summary, just as the erosion or decline of protectionism with the ending of MFA is not straightforward and equal in its impact on developing countries, so is technological advancement. Some of the leading players in the field of textile and garments, have benefited a lot from technological advancements, while other countries have been jeopardized by it or at least put under stress because of the same technologies.

[9] Indeed, China has become both a major exporter and a major importer of textile machinery. In 1993, China was the largest importer of textile machinery in the world with 19 percent of global exports. The Chinese government is currently attempting to create a modern competitive textile machinery industry. Major joint ventures with companies from Hong Kong, Taiwan and Japan are planned and Shanghai is to become a major producer of shuttleless looms (Singleton, 1997).

But in all cases, there has been significant technological changes that changed the kind and intensity of competition in that sector.

6. Informalisation and Changes in the Concentration of Production

Finally, the third trend that has deservedly received a lot of attention in the literature on the textile industry, has been the growth of the small-scale and unrecorded sectors of the industry compared to the relative stagnation of the large-scale and recorded sectors in some countries. Evidence shows that the small-scale sector continues to produce a large segment of the world's textile products, especially apparel. In 1990, establishments with between 4 and 19 workers produced 30 percent of value-added in textiles and 29 percent of value-added in apparel in Japan (UNIDO 1993, p. 550). In Hong Kong, there were 5,118 textile and 9,757 apparel establishments in 1989, and less than 2 percent of the total employed more than 200 workers (UNIDO 1993, p. 540).

Proving the relative growth of the unrecorded sector is extremely difficult. Although it can be shown statistically that the large-scale recorded sector is in decline and that there is a process of deconcentration within that sector, it is impossible to give accurate estimates for the growth of the unrecorded sector. Thus, it is the accumulation of case studies of unrecorded establishments and their relative success in particular regions that is provided as evidence for a trend of informalisation.

The case of the Indian cotton textile industry is a good example of the decline of the large-scale recorded sector and the growth of the small-scale unrecorded sector. According to one calculation, the period between 1960 and 1985 saw a clear decline in capital productivity (-3 percent), coupled with very modest increases in labour productivity (1.9 percent) (Ahluwalia 1991, p. 53). Value-added in the recorded sector of the cotton textile industry increased by only 2 percent between 1960 and 1985 compared to increases of above 10 percent in fertilizers, electrical generation equipment and telecommunications industries and an average 5 percent in manufacturing industries overall (Ahluwalia 1991, p.45). There has also been a dramatic decline in employment in the recorded large-scale sector of the textile industry in some of the main centers of textile production like Bombay and Ahmedabad. In Bombay alone, the cotton textile mills lost more than 100,000 jobs during the 1980s.

The crisis in the recorded large-scale sector compares with empirical evidence showing substantial regional growth in the production of small-scale and unrecorded establishments. Thus, in the district of Coimbatore, an empirical study of the cotton knitting industry in the Indian town of Tirrupur showed that total employment in small-scale units (less than 25 workers) increased from an estimated 3,000 in 1960 to 40,000 in 1985 (Cawthorne 1995, p.45). Research into the Tirruppur garment industry showed that there was a clear demarcation between large and small firms in terms of both the types of garments they produced and the markets to which they sold. The smallest establishments including homeworkers and workshops sold mainly to small local markets and made garments of simple design and variable quality. The largest firms concentrated on export markets, whereas medium-sized firms produced mainly for markets in other Indian states (Cawthorne 1995, p. 50).

Another example of a similar shift is the development of the Prato textile industry in Italy. In 1970, the Prato region was dominated by large, vertically-integrated textile mills, using capital intensive machinery. In the mid-1970s, some of the larger mills reacted to the economic crisis by adopting a strategy of splitting themselves up into smaller more specialized units, and abandoning vertical integration in an attempt to reduce labour costs and become more capable of reacting swiftly to changes in demand. Cooperation between the new, smaller firms at different stages of the production process became an alternative organizational structure. More advanced machinery was introduced and firms started producing higher quality goods. The transformation proved successful and the region grew into a cluster of small- and medium-sized firms producing not only for the Italian market, but increasingly for export markets as well. By 1987, Prato had 2,000 textile and clothing enterprises employing 60,000 workers (Singleton 1997, p.123).

A variety of explanations have been put forward for this phenomenon. Some analysts focusing on the industrialized countries claim that it is due to structural changes in the industry leading to the demise of Fordist mass production, which had been associated with a particular phase of capitalist development and the emergence of flexible specialization. Others focus on the changing role of the state following liberalization and structural adjustment and the pressures of the world market leading to the dismantling of

the state-protected, large-scale industrial sector. However, no matter which explanation one adheres to, the aspect relevant to this research is that there is a recorded shift towards smaller establishments being the bulk of textile and garment producers. This shift is directly related to one of the key questions of this research, which has to do changing working conditions of labour in the textile producing district of Shubra El-Kheima.

7. Summary

The world textile industry is a growing and highly competitive industry. Since the 1960s, there have been major shifts in production and trade, including the emergence of an increasingly complex international division of labour, and the newly industrialized countries have become major locations of production especially for the more labour intensive sectors of the industry. The governments of the industrialized countries attempted to control the process of relocation through protective measures, mainly through quantitative trade restrictions such as the MFA. However, these measures were not successful in themselves in halting the shifts in trade. In fact, they helped spread export capabilities to new, less-developed countries and forced restricted countries to upgrade their production.

The changes in the textile industry have put intense pressure on firms in different countries to restructure and change their industrial strategies. The constant attempt by firms in the industrialized countries to cut production costs has resulted in important technological developments, particularly in spinning and weaving and the use of man-made fibres. These new technologies disseminated rapidly to the newly industrializing countries, as labour costs in these countries increased and firms felt concomitant pressure to reduce overall costs. Another important trend in several industrialized and developing countries is the process of informalisation and deconcentration of production. Large-scale, recorded sectors are facing increasingly severe crises and are in the process of decline, whereas there is evidence showing that the small-scale, unrecorded sector is growing.

CHAPTER FOUR
THE EGYPTIAN TEXTILE AND GARMENT INDUSTRY: AN OVERVIEW

1. Introduction

The textile industry has played a central role in the development of the Egyptian economy since the 19th century. In this chapter, I provide a description of the development of this industry in Egypt and assess its current performance. First, I analyze the structure of the industry in the 19th century and describe the state's early attempts to initiate a modern, factory-based textile industry. Next, I discuss the birth of the modern textile industry, focusing on its links with the local cotton sector. I then chronicle the rapid expansion of the industry during the 1950s and 1960s and investigate the peculiarities of its dependence on 1) local, high-quality cotton; 2) bilateral Eastern European export markets; and 3) restrictive state policies. Finally, I present the effects of current liberalization, focusing on the relative performance of the Egyptian textile and garments industry in penetrating export markets.

2. The Traditional Industry

Upper Egypt was the center of cotton spinning and weaving during the 19th century, and the most-valued cotton was grown locally around the city of Esna. Weavers from the area supplemented these supplies with cotton imported from Syria. In Fayoum and the Delta, linen was the main material used, while silk brought from Syria was woven in Damietta, Mahalla, and Cairo. Cairo was also the main center for looms and dyes and, along with Mahalla, Damietta and Qalyub, was where the more sophisticated dyeing processes were carried out (Tignor 1989, p.10). Wool cloth, the most widely-produced textile during the 19th century, was woven in most villages. However, the 19th century also saw wool gradually replaced by cotton as the preferred textile, as well as an increased reliance on imported, rather than locally-spun, yarns (Owen 1969). A 1909 survey of the weaving industry in the southern town of Assiout, for example, notes that all the cotton yarn used there came from Europe, and particularly from Lancashire (Owen 1969).

Weaving continued to be a thriving handicraft industry during the first quarter of the 20th century. Mahalla retained its prominence in silk production while Akhmim emerged as a major cotton manufacturing region. In Qaliubia, Tignor (1989) estimates than an ordinary village of 300 inhabitants would usually have fifteen to twenty looms and the provincial capital, Qaliub, possessed workshops with up to thirty looms selling their finished products in Cairo. The weaving machines employed at the village-level were mainly simple, locally-made ones with only two warps operated by a pedal. At Qaliub itself, however, there were also more sophisticated looms with four to six pedals, imported from Cairo (Tignor 1989, p.10). In the Fayoum province, the textile industry was marked by a high degree of liberalization. Numerous villages had no weaving at all and traded with those communities in which weavers were concentrated (Tignor 1989, p. 10). The village of Fidimin, fourteen kilometers from the city of Fayoum, not only served the entire province but also exported garments to Tanta, Alexandria and Syria. Damietta also continued to be a major textile center – in this case, for silk production – with forty workshops housing a total of 200 looms. Processes of concentration were also apparent as one single factory contained thirty-seven looms producing 170,000 square meters of silk per year, roughly one third of the city's production (Tignor 1989, p.10). A 1918 report of the industry estimated that there were 2,455 looms in Mahalla, 450 in Akhmim, 390 in Damietta, 2,000 in Qalyub and 1,000 in Qena exporting south to the Sudan (Tignor 1989). After the end of World War I, the estimated number increased to a total of 13,000 looms producing 22 million square meters of cloth per year. However, Egyptian weavers continued their dependence on imported yarn with only about 4 million kilograms of yarn spun locally. Moreover, this growth of the traditional sector, within households and small establishments was not complemented and did not lead to the rise a of modern textile industry, despite early attempts in this regard.

3. Birth of the Modern Sector

Modern cotton textile manufacturing was first established in the early 19th century. Mohamed Ali established the weaving and trading of cotton textiles and introduced large-scale cotton spinning. Between 1818 and 1820, cotton spinning mills were set up with European machines, together with bleaching and dyeing establishments.

The introduction of long staple cotton cultivation gave stimulus to government investment in the industry. By 1833, thirty factories were operating employing 30,000 workers at their peak. Power was mainly generated by treadmills propelled by animals, although in a few cases steam engines were imported. Jennies and looms were mainly manufactured domestically by Egyptian carpenters under the supervision of French technicians (Owen 1969, p. 44). Nominal protection of the industry was insignificant, but the army provided a safe market and Mohamed Ali kept the industry alive by interfering in the importing of textiles and forcing people to buy domestic goods.

Towards the end of the Mohamed Ali period, the industry went into decline and the treaty of 1838 between the European powers and the Ottoman empire effectively removed all trade obstacles and abolished monopolies. Mohamed Ali was unable to continue financing the factories which were operating at a great loss and there was a large increase in cotton goods imports, mainly yarn and cloth. Weaving and dyeing of coarse cloth continued at the traditional handicraft level (Mabro 1974).

From the 1840s until the end of the 1920s, Egypt was a free trade area. There was an 8 percent tariff on imports but this was not strictly implemented and thus was ineffective. That is because during this period, the rulers of Egypt (whether the Khedives or the British) promoted the cultivation and export of cotton and the import of manufactures. Textiles were the major component of Egypt's import trade. They constituted about one third of the value of Egyptian imports during the last decade of the 19th century and about 30 percent between 1905 and 1914 (Mabro 1974). Britain was the main source of textiles for the Egyptian market, accounting for about 60 percent of the value of Egypt's textile imports between 1903 and 1913 (Owen 1969, p.309). Thus, the state –ruled by the British- neither provided serious tariff protection (international treaties forbade change until 1930), nor favorable railway rates (which gave advantages to the transport of agricultural products).

In the late 1890s, a brief financial boom saw the creation of a number of new joint stock companies. Among these companies were two modern textile firms, administered by foreign businessmen resident in Egypt: Anglo-Egyptian Spinning and Weaving Company and Egyptian Cotton Mills. Both companies rapidly entered severe crisis. Lord Cromer, Britain's Consul General, enacted an 8 percent excise tax on local

manufacturers signaling that the government would not encourage their efforts. On the other hand, the financial boom ended with a crash in 1907 that destroyed most of the newly formed companies. The Egyptian Cotton Mills went bankrupt, while the Anglo-Egyptian Cotton and Spinning Company managed to sell its assets, originally valued at £150,000 to a new group of foreign residential investors for £37,000. The new owners reorganized the firm under a new name, La Filiature Nationale d'Egypte, and it went on to play an important role in the subsequent development of the Egyptian textile industry. The First World War gave the company a boost and allowed it to expand. Cut off from traditional European suppliers, Egyptian consumers turned to local manufacturers. By 1918, the company had 20,000 spindles, 560 looms and its own power plant of 1,000 horsepower (Tignor 1989, p. 12).

A law was passed in 1916 prohibiting the importing of foreign raw cotton for domestic use. The reason given for this law was the protection of domestic cotton from foreign plant diseases. In retrospect, it seems clear that this was only a pretext for a protection measure, which served mainly the big landowners who were also the major cotton growers. This law dealt a severe blow to the textile industry as the domestic cotton was of too high a quality and, hence, too expensive for the mass production of cheap cloth to meet the significant domestic demand. As far back as 1898, Egyptian spinning mills had been importing Indian short staple cotton to produce such coarse cloth at competitive prices. The impact of the 1916 law made the industry unable to compete in foreign markets because of high raw material costs. The industry became restricted to a protected market, sheltered at first by the 8 percent tariff and, later, by higher rates when Egypt obtained tariff autonomy in 1930 (Mabro 1974, p.25).

During the war, the Filature Company had 900 employees and produced 9 million square meters of cotton piece goods per year. By 1922, the factory had increased its size to 1,500 workers and had 40 thousand spindles using mainly Egyptian, lower grade cotton. Its annual output was 4.25 million pounds of yarn and 9 million yards of gray cloth. By 1930, on the eve of the tariff reform, the company had increased its plant capacity to 60,000 spindles and 800 power looms (Mabro 1974). The presence of this massive company with its total vertical integration of spinning, weaving, bleaching, dyeing and printing works helped to establish cost of entry into the modern textile sector,

and the company's increasing political weight kept it afloat even during periods of inefficiency (Tignor 1989, p.14).[10] By the end of the first world war, Filature, which was heavily capitalized relative to Egyptian industry, served the domestic market by manufacturing only coarse and roughly woven gray cloth. Its technical capacity was limited and its output was relatively uncompetitive with imports from Britain, India, Japan and Italy. The state had helped Filature to survive by removing the excise on its manufactures between 1909 and 1918. It then reintroduced the tax at the reduced rate of 4 percent (Mabro 1974, p. 25). The domination of the industry by large, vertically-integrated firms was increased by the fact that tariff reforms were scheduled for the precise date of 1930, forcing such companies to expand capacity and encouraging leading businessmen to establish large and powerful firms. Thus, Filature expanded its capital in anticipation and purchased more machinery in the late 1920s. In 1927, it increased its preference share capitalization to LE 320,000, making it the sixth most heavily capitalized industrial company in Egypt (Tignor 1989, p.14).

At this time, a major new entrant into the modern textile industry was Bank Misr, founded in 1920 by Talaat Harb. The central aim of the bank was to diversify Egyptian capital from its agricultural base into the emerging financial and industrial sectors. The central effort in terms of industry was the establishment of the Misr Spinning and Weaving Company in Mahalla. The company began with a large capitalization of LE 300,000, equal to that of Filature. This changed quickly however as the new company increased its capitalization first to LE 500,000 in 1933, then to LE 800,000 in 1934 and, finally, to LE 1 million in 1936. The intention was to establish a massive vertically-integrated spinning, weaving and finishing establishment and to transform Al Mahalla al Kubra into a major textile center for the whole region. The strategy was successful and, by the 1940s, this textile establishment was one of the largest plants in the world (Tignor 1989, p.59). It marked the real start of a significant industrialized textile industry in Egypt.

[10] The one other modern textile company, the silk factory of the Lawzy family in Damietta, also began to vertically integrate its production. It spun and wove silk and had plans to create finishing works (Tignor 1989).

4. The Second World War and The Rise of State Intervention

World War II enabled the Egyptian textile industry to expand dramatically. The most obvious indication of this expansion lay in increased output. The war brought a sharp decrease in imports coupled with an increase in demand fuelled by the allied troops stationed in Egypt. In 1938, Egypt imported LE 3.34 million worth of cotton textiles, representing about 9 percent of the value of all Egyptian imports (Mabro and Radwan 1976, p. 63). By 1943, this amount had dropped to L.E 1.85 million, less than 3 percent of total imports. Egyptian imports of cotton fabrics fell from 13,270 metric tons in 1938-1939, to 3,880 metric tons in 1948-1950, to 860 metric tons in 1954-1956 (Mabro and Radwan 1976). Domestic output increased to fill the gap. Local firms, starting from a production of 93 million square meters in 1938, increased their output of woven cotton fabrics by 10 percent per year during the war so that, by 1946, domestic production stood at 195 million square meters per year (Mabro and Radwan 1976, p. 63).

During this period, there was a rise in five major vertically-integrated textile firms (Beida, SEIT, Filature, the Misr Spinning and Weaving Company and the Misr Fine Spinning and Weaving Company) which played a decisive role in this expansion. The total production of cotton yarn by the two Misr companies rose from 16.35 million kilograms in 1940 to 23.89 million in 1946. Their production of cotton piece goods increased from 93.39 million yards in 1940 to 135.36 million yards in 1946 (Tignor 1989, p.58). At the same time, the import of textile machinery rose from 1,100 tons in 1940 to an annual average of 11,500 tons in the period between 1946 and 1950 in order to support this increased production.

To satisfy domestic demand for cheap cotton cloth, large spinning and weaving mills were subjected to a system of government fixed prices on low-grade cloth in 1950. This measure was one of the first direct, large-scale government interventions into the price mechanism for manufactured products after the war. This trend of state intervention was continued after the Korean boom, when textile exports fell to nearly half the level reached in 1951. In 1953, two protective measures were taken. Custom duties on cotton textiles were increased and a fund for the consolidation of the spinning and weaving industry was established. The fund which was financed by export taxes on

cotton was aimed primarily at promoting exports by reorienting production towards the specifications of foreign demands and by granting subsidies to cotton textile exporters. After the elimination of the export tax on raw cotton at the end of the 1950s, export subsidies for textiles were financed by an excise tax of 2.5 to 5 percent, which was later increased to 6 percent on the value of the raw cotton consumed by the spinning mills (Mabro and Radwan 1976, p.212). Thus, the production of cotton yarn grew rapidly between 1950 and 1971 with an average rate of 5.5 percent per year.

Concomitantly, there was a growth of textile exports, particularly of yarn, but this was mainly due to the opening of a large market in Eastern Europe, which is another indirect form of state intervention, through politicized agreements[11]. Yarns were exported to Romania as early as 1954, and large exports of fabrics to Eastern European countries began in 1964. Of the roughly 30,000 ton increase in yarn exports from 1957 to 1966, almost 24,000 tons went to bilateral trade partners (roughly 48 percent of Egypt's total exports of cotton yarn and fabrics in 1970-71). The exports to multilateral partners between 1957 and 1967 also increased (Davies 1988). In 1955, the unit values obtained in the multilateral and bilateral markets were basically the same, but gradually a relative increase in the prices of yarn and cloth exported to bilateral Eastern European partners took place, particularly after the Soviet Union became a large-scale importer of Egyptian textiles in the early-1960s (Davies 1988). The Soviet Union was a major short staple cotton producer and wanted to supplement its own coarse yarn production with finer yarns from Egypt, particularly because its lagging production of synthetic fibers compelled it to use a relatively large proportion of long staple cotton. During the period 1964 to 1970, prices obtained in the Eastern European markets for cotton yarn were almost double those of Western markets.[12] By the mid-seventies, however, exports of cloth to bilateral trade partners stabilized at about 5,500 tons annually.

5. Cotton Production and the Textile Industry

[11] This was during the era of close collaboration and warm political relations between Egypt and the USSR from 1955 to 1973.

[12] It is important to note that the prices obtained were received in the form of commodities -- especially weapons -- in barter like agreements with Eastern Europe and the Soviet Union (Mabro and Radwan 1976: 219).

The textile industry in Egypt and Egypt as a major producer of premium-long and extra-long staple cotton, cannot be separated. Cotton is the country's largest agricultural export and was for many years the most extensively subsidized commodity. However, the sector has suffered from inconsistent state policy, inflexible export pricing and a government policy aimed at propping up the debt-ridden state-owned spinning and weaving industries through the provision of cheap cotton. In the 1960s, when the state nationalized the cotton trade and the spinning, weaving and textile industry, the government was determined regulate the areas and cotton varieties to be planted. The state bought the entire crop at a fixed price, supplied its own spinning mills and exported the remaining lint. Experts point out that the public-sector mills used local cotton varieties which were double the prices of imported Greek or Syrian cotton. However, because of state intervention, the mills were not allowed to import. Another reason why the mills did not import is that they were losing money and they did not have the liquidity to buy from abroad. Instead, they bargained with the state trading companies to get the inputs they needed.

From March 1996, the state began to allow import of lower grade short-staple cotton from all cotton producing countries, leaving higher value cotton strains free for export. In the 1998-1999 season, the government fully liberalized the cotton trade by refusing to set a cotton purchase price and by allowing private traders to participate. The harvest fell from 345,700 tonnes in 1996-1997 to 206,300 tonnes in 2000-2001, before recovering slightly to 285,000 tonnes in 2002-2003 (Financial Times Survey 2004). For the 2000-2001 season, the government set a ceiling of 50,000 tonnes each for exports of long staple and extra long staple. Although private traders could now buy cotton from the market and export it, most of the crop still went to six state trading companies all controlled by the same chairman. When the ceiling is reached, the dealers are told to stop exporting (Financial Times Survey 2004).

Moreover, overall cotton output has been constrained by the limited availability of cultivated land and adversely affected by the increasing diversification of crops to include more fruits and vegetables. Two and three year crop rotations meant that land sown for cotton production is limited to a maximum of 20 percent of the total cultivable land – a threshold reached by 1952. Cultivated areas for all varieties have since fallen; most

notably, by 17.2 percent during 1988-1992 (or 16 percent and 17.6 percent for long and medium staple, respectively) (Fletcher 1998), and Egypt's share of the world's extra long cotton staples also has fallen dramatically. In the 1980-1981 season, Egyptian output of this variety was 2.4 million bales, or about 59.2 percent of total world production. By the 1989-1990 season, Egyptian output was only 1.3 million bales at a time when world production had risen to 4.9 million bales and as a result the Egyptian share of the total fell to 27 percent (Fletcher 1998). Thus, cotton production and exports have declined, and the proportion of cultivated land sown to cotton has consequently dropped sharply, down from 924,000 ha in 1962 to 302,400 ha in 2002-2003.

For much of the period between 1952 and 1980, the cotton crop averaged about 10 million metric qantars, or 1.53 million bales. While 7 million qantars were produced in 1989/90, output fell to below 5.7 million qantars in 1990/91, before rising again the following year to 5.9 million qantars. Long staples initially dominated the output until the mid-1970s, when they accounted for about 40 percent of total production. By the end of the 1980s, however, medium varieties made up about 70 percent of output. And in 1992, medium staple production accounted for over 73 percent of total cotton output (Fletcher 1998). Table 4.1 shows production statistics for long and medium staple cotton varieties between 1952 and 1992:

Table 4.1 Cotton: cultivated area, production and yield, selected years[13]

ALL VARIETIES	1952	1987	1988	1989	1990	1991	1992
Cultivated Area	1967	980	1014	1006	993	851	840
Production	8233	6029	5422	5055	5169	5023	5992
Yield	4.19	6.15	5.35	5.02	5.21	5.9	7.13
LONG STAPLE							
Cultivated Area	965	233	237	253	253	252	199
Production	3830	1431	1454	1490	1490	1637	1586
Yield	3.97	6.14	6.14	5.89	5.89	6.5	7.97
MEDIUM							
Cultivated Area	278	747	777	753	740	599	640
Production	1081	4598	3968	3679	3679	3384	4396
Yield	3.89	6.16	5.11	4.97	4.97	5.65	6.83

[13] Area in thousand feddans, production in thousand metric qantars, yield in metric qantars per feddan

Source: Central Agency for Public Mobilisation and Statistics

The fact that the production of long staple cotton declined sharply during that period, meant that Egypt lost its niche both in cotton exports and the production of high-grade textile and garments, both of which are dependent on long-staple types. Thus, under both nationalized state-interventionist policies and liberalization, the Egyptian state did not manage to put in place conducive policies for dealing with cotton, which adversely affected the production and export of textiles.

6. Export Failure

As explained in Chapter Three, the last four decades of the 20th century saw an increase in the value of world trade in textiles and garments by 6,000 percent, from 6 billion dollars in 1962 to 342 billion dollars in 2001, representing 5.7 percent of total world trade. Trade in garments increased by a factor of 100 (Fawzy 2003, p.9). During the 1990s, China, the USA and the EU dominated the textiles and garments trade with an average of 59 percent and 84 percent of exports and 76 percent and 61 percent of imports, respectively (Fawzy 2003). Moreover, the current share of developing economies in the world trade in textiles and garments is 50 percent and 70 percent respectively (Fawzy 2003, p. 9). Unlike the trend in many other developing countries, however, the share of Egyptian textile and garment exports in world trade has been decreasing since the early 1990s. In the case of textiles, Egypt's share of world exports fell from 0.53 percent in 1990 to 0.2 percent in 2001. As for garments, the Egyptian share fell from 0.13 percent in 1990 to 0.12 percent in 2001 (Fawzy 2003, p.11).

This failure has already started in the 1980s after Egypt relations with the Eastern bloc have worsened –which as mentioned earlier in this chapter was the major importer. The country's textile exports stagnated during the first half of the 1980s, with knitted fabrics and terry fabrics declining dramatically and woven fabrics registering an average annual decline of 0.4 percent. Textile exports increased slightly in the second half of the 1980s, with cotton yarn exports reaching a peak of $396 million in 1989 mainly as a result of the flexible exchange rate policy introduced in 1987 (Fawzy 2003). However, this increase proved temporary, as shown in table 4.2. Also, cotton yarn exports declined dramatically in 1990 and the declining trend continued through 1992, registering an

average annual decline of 14.7 percent during 1989-1992 against a 5.7 percent decline suffered by textile exports in general (USAID 1993).

Table 4.2 Textile exports, 1980-1992, selected years (million $)

	1980	1985	Average growth per annum % 1980-1985	1989	1990	1991	1992	Average growth per annum % 1985-1992
Cotton yarn	181	197	1.8	396	340	271	245	-14.7
Woven fabrics	53	52	-0.4	77	79	88	65	-4.1
Knitted fabrics	15	9	-8.0	60	65	73	77	8.7
Terry fabrics	3	2	-6.8	6	4	5	6	26.1

Source: USAID, Cairo 1993

With the change of the political context, Egypt's trading partners change, with the USA and the EU replacing the Eastern bloc. As shown in table 4.3, the primary destinations for Egyptian textile and garment products became the European Union and the United States, with 51 percent and 42 percent respectively.

Table 4.3 Geographical distribution of Egyptian textile and garment exports

Destination	Average % (1998-2001)
USA	42
EU	51
Other Europe	1.7
Arab Countries	3.3
Non-Arab Asian	1.5
Other	0.5

Source: www.economy.gov.eg

However, the Egyptian portion of both those markets have been declining in both relative and absolute terms. So, in European Union the share of Egyptian textile and garment exports fell from 2.2 percent in 1995 to 0.5 percent in 2001 for textiles, and from 0.4 percent in 1995 to 0.3 percent in 2001 for garments (Fawzy 2003, p.12). Likewise,

the same trend is evident in exports to the United States, where the share of Egyptian exports between 1995 and 2001 fell from 0.9 to 0.8 percent in the case of textiles and remained stagnant at 0.6 percent in the case of garments (Fawzy 2003, p.13). This poor record becomes even clearer when compared to that of other developing countries. The following four tables compare market shares of a selection of developing lower-middle income countries in the EU and the USA markets for textiles and garments:

Table 4.4 Market shares of textile exports in EU market: Egypt and a selection of developing countries (2001)

Country	Market share (%)
China	10.15
Turkey	8.55
India	8.02
Pakistan	4.48
Indonesia	2.61
Thailand	1.56
Egypt	**0.5**

Source: World Trade Organisation, International Trade Statistics 2002

Table 4.5 Market shares of garment exports in EU market: Egypt and a selection of developing countries (2001)

	Market share (%)
China	14.48
Turkey	9.49
Tunisia	4.65
India	4.16
Morocco	4.14
Bangladesh	3.95
Indonesia	2.99
Thailand	1.82
Pakistan	1.47
Egypt	**0.3**

Source: World Trade Organisation, International Trade Statistics 2002

Table 4.6 Market shares of textile exports in US market: Egypt and a selection of developing countries (2001)

	Market share (%)
China	17.41
Mexico	9.86
India	7.42
Pakistan	6.16
Turkey	2.82
Thailand	2.24
Indonesia	1.25
Brazil	1.23
Egypt	**0.8**

Source: World Trade Organisation, International Trade Statistics 2002

Table 4.7 Market shares of garment exports in US market: Egypt and a selection of developing countries (2001)

	Market share (%)
China	18.61
Mexico	13.13
Dominican R.	3.80
Honduras	3.77
Indonesia	3.48
Thailand	3.31
Bangladesh	3.24
Philippines	3.10
India	3.08
El Salvador	2.44
Egypt	**0.60**

Source: World Trade Organisation, International Trade Statistics 2002

The above tables show how the Egyptian textile and garment industry have been unable to significantly penetrate the main export markets of the US and the EU, unlike other third world countries that have captured significant shares in those markets at the beginning of the 21st century. That is not to mention being able to penetrate other smaller markets within the Arab world or other regions. This failure in textile exports is in line with the general failure in creating an export-led economy described in Chapter Three,

and reflects the malfunctioning of the textile and garment industry described earlier in this chapter.

7. Summary

This chapter has attempted to provide an overview of the development and performance of the Egyptian textile and garment industry. The chapter provided a description of the traditional textile industry during the 19th century. This was found to be a thriving industry of home-based, small-scale establishments with a complex specialization between and within several towns in the Delta and Upper Egypt. An attempt to establish a modern factory-based industry during the first half of the 19th century could not be sustained due to a variety of internal and external factors. In the 1920s and 1930s, a number of large, modern, vertically-integrated textile mills were established that relied mainly on Egyptian cotton and served the growing local market. These large-scale establishments were expanded and several more were established after the nationalization of industry in the 1960s, but the industry continued to rely on high cost, high value locally-produced cotton, selling to a highly protected local market and exporting mainly to the USSR and other Eastern European markets. In the 1980s and 1990s, the industry went into severe crisis as the Eastern European markets collapsed. The industry was not able to compete in other export markets and cheaper imported textiles and garments began to penetrate the local market despite protection.

With the initiation of market liberalization and structural adjustment in the 1990s, the government hoped to improve the competitiveness of the industry. This, however, did not materialize and the industry was not able to partake in the rapidly growing export markets. In fact, the relative performance of Egyptian textile and garment exports was negative. Thus, after more than a decade of liberalization policies, the share of Egyptian textiles and garments in World trade continues to shrink.

CHAPTER FIVE
THEORETICAL FRAMEWORK

1. Introduction

The aim of this research project is to investigate the dynamics of small-scale garment production in an old industrial region north of Cairo. This subject lies at the crossroads between a number of important theoretical and research issues. What is the nature of the sector? How does it fit into the urban labour market? How does it relate to rural-urban migration? In what ways do small-scale enterprises, which dominate the industry, interact within the sector and with other sectors of the economy? What are the conditions of labour in such enterprises? Is the sector growing and how is this affected by changes in the national and global economy?

Each of these questions has been the focus of large amounts of research and theoretical debate. The following chapter will critically analyze some of the more influential interpretations. My aim will be, first, to show the inadequacy of dualist models which I will explain in the following section, and, then, to explain the growth of the informal sector through a critical review of a range of explanations. Finally, I will review some of the more recent literature on interactions within the sector, and between it and the rest of the economy, focusing on the phenomena of clustering and subcontracting.

2. Dualist Models and the Informal Sector Debate

In the first two decades after the Second World War, the fields of development theory and planning were dominated by an ideal-type model based on state-led growth. According to this model, overall economic growth would be achieved through a state policy of centralized planning for accelerated industrialization. This particular emphasis was based on the assumption that large-scale industrialization could create investment capital and save foreign exchange through import substitution at a rate much faster than any other policy. It was often assumed that a policy designed to maximize GNP would provide the resources needed to develop the whole economy. And accordingly, industrial expansion would result in increased wage sector employment on the basis that there was inevitably a positive relationship between the growth of output, employment and labour

productivity. Social aspects of rapid urbanization, which included such problems as squatter settlements and large-scale poverty and unemployment, were seen as temporary pressures that would pass with time. In the process of modernization, migrant workers from rural areas would gradually become absorbed into the city. With increased participation in the urban structure, they would shift from their marginal position towards integration, moving from peripheral occupations to industrial sector wage employment (Moser 1978, p.1042). However, by the 1970s this model proved a failure, with ISI not generating the expected economic growth, and those socio-economic problems related to urbanization and employment not fading away.

There are a variety of explanations for the subsequent failure of this model of modernization. Some analysts argue that the rate of population growth, aggravated by the migration of large numbers of peasants from the rural areas, has meant that the rate of urbanization has far outstripped that of industrialization under the prevailing conditions of capitalist economic development (for a review of this literature see Asaad 2002). Others state that the inability of the industrialization process to absorb the large numbers of unskilled workers into the productive urban labour force has resulted in immense poverty, underemployment and unemployment for a considerable proportion of the urban population (Moser 1978). Rural poverty and unemployment were, according to this theory, a result of insufficient access to land. This resulted in the large-scale migration of peasants to the towns, to enter the urban labour force. With an accelerated growth of import substitution policy, urban wage sector employment was limited by the nature of the capital intensive manufacturing industrial sector which incorporated only a small proportion of the labour force. Therefore most migrants found work in what was called the informal sector. This included economic activities largely escaping recognition, enumeration, regulation and protection by the state.

Thus it was assumed that the urban scene in developing countries was divided into two clearly demarcated sectors. Definitions as to the exact nature of the two sectors have varied depending on the particular criteria used. For example they have been seen as: two opposing systems of production, one derived from capitalist forms of production, the other from the peasant system. Or as two types of economy, a firm centered economy and a bazaar type economy. Or as two circuits, the upper and lower circuits. Or as two

sectors, a high profit / high wage international oligopolistic sector and a low profit / low wage competitive capitalistic sector. However, all of these models assumed a dualist typology.

Dualist models were first used to characterise rural subsistence areas as repositories of surplus labour that would be absorbed gradually into modern industry. As developing cities expanded, the modern sector could not keep pace with the influx of workers from the so-called traditional economy. Thus, the apparent permanence of large, poor populations in developing cities was accounted for only by suggesting that they were dedicated simply to surviving while queuing for entry into modern firms. An influential economic model for dual labour markets in developing cities was introduced by J.Harris and M.Todaro in the late 1960s. This model divides the urban labour market into two sectors: the first, a "formal" dominant modern capitalist sector, characterized by modern organizational structures, capital intensive technologies, and relatively high productivity. It includes firms with a corporate form and government enterprises with stable employment policies. Wages in this sector are kept high through the collusion of the government and labour unions. The second sector, is an "informal" traditional, small-scale, backward sector of the economy, characterized by simple technologies, little capital, low productivity and low wages (Kannappan 1985).

According to this model, the high wages of the formal sector are the major attraction pole for migrants from the countryside who migrate in search of jobs. However, the closed nature of the protected and slow growing formal sector means that the majority of migrants will not get jobs and will therefore end up swelling the ranks of the unemployed or take up the available low wage, low productivity jobs of the informal sector. Yet when migrants do take up jobs in the informal sector it is only, for them, a transitional period until they find a job opening in the formal sector. In this model a situation of severe labour surplus exists in rural areas due to over population and low investment in agriculture. Likewise, in the urban areas there is a severely limited demand for labour due to the dualistic division of the urban labour market. It is by this excess supply and limited demand for labour that the model seeks to explain the supposed high rates of unemployment and underemployment and the large size of the so called informal sector in developing cities.

Another version of this same model was developed by Mazumdar and others at the World Bank and is also based on a dichotomy within the urban labour market, and describes the informal sector as unprotected as opposed to the formal protected sector. This conception with its emphasis on urban labour markets, derives from a particular concern with the problems of labour absorption – the slow rate at which increase in the Third World city working age populations are being absorbed into productive employment. The existence of a highly fragmented labour market is attributed to a combination of market forces, institutional arrangements and public policies, and results in the inefficient utilization of labour resources. With its emphasis on restrictions on supply, the approach is based on the assumption that barriers exist to free labour mobility. These restrictions, generally are raised by coercive government regulations that include minimum wage regulations and rationing of public sector jobs. Mazumdar describes his dualist model as follows:

> The basic distinction between the two sectors turns on the idea that employment in the formal sector is in some senses protected so that the wage levels and working conditions in the sector are not available in general to the job seekers in the market, unless they manage to cross the barrier of somehow. This kind of protection may arise from the action of trade unions, of governments or of both acting together. (Mazumdar 1975, p.262)

Here it is argued that minimum wage legislation and the encouragement of collective bargaining stimulates real wages to increase independently of productivity gains, which retards the growth of employment by requiring producers to choose excessively capital intensive activities. Equally, the import substitution strategy, implemented through investment incentives and protection from imports, shields profits from the rising costs of labour. The result being the development of a protected sector whose participants are the main beneficiaries of the growth process, and of the majority of the population cut off from participation in the protected sector (Moser 1978, p.1054).

The informal sector as a sociological concept was introduced by Keith Hart in 1971. In fact his theory was entirely based on empirical data from Ghana, and was the

result of fieldwork carried out among urban workers outside the wage sector. Hart's dualist model of informal and formal sectors was based on a distinction between wage earning and self-employment. The informal sector in this model consists of economic activities characterized by ease of entry into the activity concerned, reliance on indigenous resources, family ownership of enterprises, small-scale of operation, labour intensive and adapted technology, skills acquired outside the formal school system, and unregulated and competitive markets. That is versus the formal sector which consists of the converse characteristics with entry by new enterprises difficult, operating on a large-scale in markets protected by tariffs, quotas and trade licenses, using capital intensive technology and with workers with formally acquired skills.

The informal sector was seen as providing a means of livelihood for new entrants to the urban labour force who, through lack of opportunities and training, were unable to obtain employment in the formal sector. The significant difference between Hart's approach and earlier dualist models was in the identification of new income generating activities in the informal sector. Thus "the semi-automatic classification of unorganized workers as underemployed shoe-shine boys and sellers of matches contrasts with a view which stresses the important part played by these workers in supplying many of the essential services on which life in the city is dependent" (Sethuraman 1976, p. 69). This gave the informal sector a lot of emphasis as part of the economy, versus the earlier versions that disregarded it as being simply a symptom of malfunctioning of the economy.

Despite this difference, the dual labour market model on which all these theories are based has many weaknesses. The first weakness is that there is very little evidence to support the claimed wage differential between so called formal and informal urban sectors. Thus in Peru, for example, it was found that nearly 60 percent of incomes in the informal sector were in the top urban quartile (De Soto 2000). Similarly, in Bombay, head load carriers and porters, typically informal sector jobs, had wages that were above those of unskilled workers in many of the formal sector establishments (Kannappan 1985). The assumption that unskilled migrants had particularly low wages or were unemployed has also had many empirical refutations. For example in Sao Paolo, unskilled migrants entered the labour market at a spectrum of wages ranging above and

below the legal minimum. Also in Casablanca, employers had difficulties recruiting unskilled labour at the legal minimum wage (Kannapan 1985). One of the least supported claims of the dual labour market theory is the existence of a commitment by governments to maintain high urban formal wages in collaboration with or under pressure from trade unions. Thus Richard Webb, in a study of 27 developing countries, found that there was no apparent correlation between political systems, labour union power and the level of urban wages (Webb 1991).

Another serious problem with the dual labour market model is its analysis of the rural-urban migration process. The idea that the impoverished rural population flows into the cities in search of jobs has been refuted by empirical research which has shown that migrants are usually better endowed in terms of education and skills and are rarely from the poorest section of the rural population. It has also been established that migration does not take place blindly but takes place in particular paths established by former migrants from the same village or region, and that migrants move to the city with a considerable amount of knowledge of their employment potential, also that a majority of migrants get jobs very soon after their arrival in the city (Berry and Sabot 1978).

The urban labour market in developing countries is much more complex and dynamic than is assumed in the simplistic dual labour market model. It cannot be divided into clearly demarcated sectors. The assumption that the functioning of a complex labour market can be reduced to any static model is very misleading. As Richard Webb explains:

> The labour market is like a jar of honey which is continually being rotated at different rates and angles. The position and shape of the honey will depend crucially on its own fluidity or stickiness, and on the movement of the jar ... In the urban labour markets there is a similar relationship between a continually changing environment and a continually adjusting supply of labour. (Webb 1991, p.121)

Thus, although there is clearly formal and informal urban labour sectors, it the difference in work conditions and characteristics of those two sectors is not necessarily as clear. Differences and similarities do exist between the two shedding doubt on the different dualist models adopted when studying the two sectors. Hence, this study –as

will be shown in through field work- will further question those models, and clarify the similarities between the two sectors. However, before doing this the following section will introduce another understanding of the two sectors, based on petty-commodity production, which is equally misleading and as widely-used as the dual model.

3. Petty Commodity Production

Recognition that considerable internal differentiation exists in the urban economy among small-scale enterprises in the manufacturing, services and transport sectors has led to the development of an alternative framework based on a continuum of economic activities rather than a two-sector dualist division. Correspondingly workers are seen to be employed in a number of different categories outside the well-defined wage sector of large-scale enterprises. These include wage and salaried labourers for small-scale operators, self employed owners and unpaid family labourers, as well as casual workers in wage sector employment. Equally the linkages between the small-scale and the large-scale sectors are numerous and diverse. These include direct incorporation through subcontracting and outworkers, as well as more complicated procedures such as the "utilization in retail distribution of agents who put up their own deposits thereby relieving the mother company of many of the risks involved" (Moser 1978, p.1056). However the theoretical underpinning to this approach is also based on dividing the economy into two categories.

In discussing the urban sector Bienfield has proposed an analysis which entails the identification of different modes of production and focuses on the articulation of these modes of production. The various modes adapt to each other, each becoming dependent on the other and each loosing its identity and independence to some degree (Bienefeld 1975). Under this model, in a given economy, more than one mode of production is identified. In the urban sector the modes of production referred to are; on the one hand the capitalist sector, deeply integrated in the international economy, and on the other hand, a variety of pre-capitalist modes each more or less transformed through its relation with the former. The form this symbiosis takes is historically specific in that it depends on the resource base and the level of the forces of production of the capitalist sector, on the socio-political framework within which capital operates, on the extent of its

accumulation and local growth, and on the nature of the non-capitalist mode of production within with which it interacts (Bienefeld 1975). According to this theory the vast majority of small-scale enterprises, of the type described as being in the informal sector, fit into the category of petty commodity production. In describing the nature of their relationships to the capitalist mode of production under the sectoral analysis articulated above, petty commodity production is identified as a transitional mode between feudal and other non-capitalist modes and the capitalist mode of production. There is an "articulation" between the capitalist and the pre-capitalist sectors in which the latter is exploited and "under developed" by the former (Lewin 1985).

This seems to be an extension of dependency theory with the large-scale sector playing the role of the center and the informal sector that of the periphery. There is very little difference between this theory and that of the dual labour market theory. Both see the large-scale sector as being protected and closed and detrimental to workers in the unrecorded sector. The former calls it capitalist, the latter calls it formal. Both view the small unrecorded sector as marginal, relatively unproductive, and transitional. The former calls it petty commodity production, the latter calls it informal sector.

4. Deconcentration of Production

Part of the interest in informal economy and the rise of both the dual and petty commodity models has been the growth of small-scale casual economic activities in developing cities, which has been an important issue of debate and research in the past three decades. This debate has been dominated by a particular model of industrialization which makes two basic assumptions. The first of these is that the process of industrialization that took place in Europe in the 18^{th} and 19^{th} centuries involved a continuous and linear concentration and centralisation of economic activities. The second claim is that industrialization in the developing cities should follow the same path. The growth and persistence of small-scale activities is seen to be a result of the failure and or difficulties of industrialization in developing countries. This model for economic development assumed that the ideal to which all economies should move and indeed were moving was towards large-scale units of production and employment organised by giant vertically integrated corporations.

The main ingredients of this model are firstly, a system of mass production of standardized products. Secondly, a constant market expansion to minimise costs and assure absorption of output. Thirdly, Keynesian type demand management policies and income stabilisation schemes to assure stable and continuous mass purchasing power. Fourthly, a Taylorist- Fordist type work organisation built on an extensive division of labour, narrowly defined jobs with a low work content, the separation of planning and execution of work, an wide managerial apparatus organised along hierarchical control, bureaucratic administration and close supervision. The actual developments until the early 1970s seemed to be in accord with this model, whether in advanced industrial countries both West and East, or in the developing countries. Most studies revealed that capital ownership was continuously concentrating, and enterprises and establishments were growing in size. Small firms were expected to gradually wither away, due to inferior organisation, poor management, and backward technologies.

A variety of explanations were provided for why this should happen. Industrial economics emphasised the principle of economies of scale and predicted a tendency towards larger units of production. Adam Smiths' famous example of the pin factory is repeatedly cited. This puts forward the theory of the digressive cost of increased production scale attributable to the specialization of labour, machines and equipment as well as the more profitable use of technology at higher capacity levels. In the Marxist tradition the predicted increasing scale of production was attributed to the process of growing capital concentration and centralisation that is inherent in the capital accumulation process under the capitalist mode of production. It is important to note here that Marx differentiated between concentration and centralization. The former meaning concentration of productive activities in large factories and industrial complexes, and the latter referring to a centralization of ownership (Marx 1959). The relation between the two processes is not necessarily a linear one. Thus there can be a process of centralization as with the mergers between large corporations without this necessarily leading to a concentration of production.

Since the early 1970s, however, the evidence suggests that there has been a worldwide shift in industry from large-scale to small-scale and from formal to casual forms of employment. This evidence presents a serious challenge to traditional

assumptions about industrialization trends. It has been asserted that the much increased turbulence in the international markets, the instability of demand, and more differentiated consumer tastes witnessed since the early 1970s, have rendered the mass production of standardised goods in large production units unprofitable or obsolete. In addition, the advent and diffusion of new technologies, based on micro-electronics, is seen to lower capital costs and permit the efficiency gap between long and short runs of production to shrink, thereby enhancing the cost competitiveness of small-scale production (Piore & Sabel 1984). Another assertion is that there is, within limits, a strategic choice of how to organise production. Which option is chosen is ultimately decided by 'politics'. In this view it is held that the victory of the mass production paradigm over the craft system earlier in this century was by no means inevitable. It was not based on an inherent technological superiority or greater dynamism. As a consequence, the course of industrial development can produce different results in different settings and periods, and it can be re-directed (Piore & Sabel 1984).

These theoretical assertions have been strengthened by the recent increase in the share of total employment in small and casual enterprises and establishments has been well documented. In general, the increase has been at the expense of large enterprises and establishments. While the magnitude of the increase varies considerably from country to country and across sectors, its significance rests mainly on the fact that it shows the reversal of a substantial downward trend that had prevailed for many decades. In Latin America, for example in 1950, informal activities occupied 30 percent of the urban economically active population (EAP); in 1980, with an industrial plant four times larger, informal employment still stood at 30 percent. Contrary to the experience of the advanced countries, self-employment did not decline with industrialization but remained essentially constant during thirty-year period (Castells, Portes, Benton 1989).

The trend was first studied in Italy and Spain. Thus in Italy, for example, efforts of large industries to control union power during the 1960s led to a process of decentralization which has acquired its own momentum. In Italy, artisan enterprises with less than 15 workers are exempted from certain provisions of tax code and of the statue of labour (Piore & Sabel 1984). These enterprises increased rapidly in the provinces most affected by the decentralization process. In Modena, they went from 4,970 in 1963 to

21,474 in 1975, a 430 percent increase at a time when the total population grew by just over 10 percent (Sabel 1982). Small northern enterprises rarely market finished goods, but instead work under contract for larger formal firms. Cooperatives of informal micro-producers under the putting-out system are found in knitwear, clothes, and ceramic tiles around Modena; and in motorcycles and footwear in Bologna. The following description illustrates how these arrangements work:

> the Morini motorcycle plant in Bologna has 100 employees and produces an average of 20 motorcycles per day. Most of the workers in the plant are engaged in assembly... Except for the camshaft and the engine mounting, all of the components are put out: the frame, the tank, the shock absorbers, the handlebars, the brakes, the gears, and the wheels; almost the whole machine is produced by subcontractors (Brusco 1982, p.172).

Similarly, since the mid 1970s, many Spanish industries have experienced a process of decentralization quite similar to that of northern Italy. As a result, Spain exports at present millions of dollars worth of shoes and other articles produced in factories that do not legally exist. Ybarra has presented evidence of this process in the form of employment and production statistics for the footwear industry, centered in the province of Alicante (Benton 1986). These data show that the value of production in the industry increased significantly during the 1970s at a time when the registered workforce was declining precipitously. Since no significant technological innovations were incorporated into production, the decline reflects indirectly the extent to which production was informalized or deconcentrated(Benton 1986).

Despite the near-sweatshop conditions that appear to be the norm in the informal plants, the Spanish experience of decentralization has not been based on immigrant labour, little of which is found in Alicante, but rather on domestic labour reserves. In the footwear industry, employment of women appears to have increased significantly along with the decentralization of production into small and informal shops (Benton 1986). Moreover, what is new in the current context is that the informal sector grows, even in highly institutionalized economies, at the expense of already formalized work

relationships (Tokman, 1986). Thus, it represents a novel social trend instead of being a mere "lag" from traditional relationships of production.

Several different explanations for this trend need to be examined. Firstly it may be a statistical illusion. The complexity and unreliability of much of the available statistics may have led many researchers to come to the wrong conclusions regarding industrial trends. A second explanation that needs to be examined is that the trend is a transitory shift due to the economic crises that have afflicted world economy since the early 1970s. Indeed a similar trend towards the small-scale and informal was documented during the Great Depression of the 1930s in the industrialised countries. If small unit shares of employment rise in recessionary periods as large firms reduce employment, there is an employment decline in industries like durable or capital goods which are produced primarily by large units, and new and small firm employment rises. This is a very different matter than if there is a trend increase in small firm employment. A third explanation is that the trend represents a search for cheaper labour costs, as a way to escape high wage, union protected labour. This may be a plausible argument for the shift in countries such as the U.K. with its historically powerful unions, or Germany with its very high labour costs, but it does not explain the universality of the process, or how it can be taking place in countries and sectors with weak labour organisations and relatively low wages. This idea is based on an untenable separation of wage levels and productivity levels. It is obvious that capital searches for cheap labour but it searches for it at given levels of productivity.

A fourth explanation has been that the universal liberalisation of trade and investments and the loosening of government economic restrictions and structural adjustment programmes are the main cause for the shift. In this view Fordist mass production was due to state policies and intervention and not to any inherent logic of capitalist development. Thus the relaxation of government intervention must naturally lead to the demise of mass production and the relative growth of small-scale production. Because of the growing integration of national economies into the international system, there is a tendency toward the diffusion of low labour costs across countries and regions. Manufacturers of consumer goods, such as garments and footwear, who cannot compete with cheaper Third World imports must either close down their plants or move them

underground. This international competition affects not only producers in advanced countries but those in the Third World as well, as they vie with each other to reduce labour costs in an endless downward spiral (Castells, Portes, Benton 1989). In sum, the newly industrialized countries informalize themselves, vis-a-vis their competitors as well as vis-a-vis their own formal laws, so as to obtain a comparative advantage for their production relative to the more regulated areas of world economy.

A fifth explanation is that a new division of labour is emerging with the changes of production. This new division is based on a much higher level of specialisation and flexibility, than was possible with the traditional vertically integrated production units. Many theories of 'flexible specialisation' and productive decentralization have been introduced claiming that a major structural shift is taking place in the world economy of which the trend towards deconcentration and informalization is central. According to this theory, this process greatly contributes to the formation of a decentralized model of economic organization. The large corporation, with its national vertical structure and the separation of its functions between the staff and line, does not appear any more as the last stage of a necessary evolution toward rationalized industrial management. Networks of economic activities, networks of firms, and coordinated clusters of workers appear to comprise an emergent model of successful production and distribution. Although firms engaging in such networks are not, by any means, exclusively informal, there is a tendency for the informal economy to rely predominantly on networks, and their connection with the formal economy, through subcontracting, is also network based. Linkages between different processes appear to be at the core of the new economy, so that we witness the reversal of the secular downward trend of small business as a proportion of overall economic activity (Piore & Sabel 1984). Despite multiple explanations, the fact remains that there is recorded growth of informalization and deconcentration of production in general, and as shown in Chapter Three in the case of textile and garment industry in specific. This trend that has been wrongly compared with the putting-out system of early industrialization, as I will show in the following section.

5. A Return to the Putting-Out System?

Comparisons have been made between small-scale unrecorded labour in developing cities today and industrial workshops in 19th century Europe. These comparisons fail to take into consideration two important points. The first point is that the putting out systems of early capitalism were fully capitalist in the sense that they were produced by, and did not precede the rise of 'classic' relations of production in the factory system, and were not remnants of previous artisanal forms of production. The second point is that the context is completely different. The expansion of capital, the role of the state in development and the relations between the so-called formal and informal sectors in modern developing economies make industrial development irreducible to one particular historical model. It is this expansion of informal activities in a new context that gives a new historical meaning to the current process of a rising informal economy. But it is precisely the development of sweatshops and of other unregulated activities after a long period of institutional control that causes the old forms of production to become the new ones. An old form in a new setting is, in fact, new, since all the social relationships can be defined in their specific historical context. This context is defined by the prior existence of institutionalized regulation, by which we understand the explicit, active intervention of the state in the process and the outcome of the income-generating activities, on the basis of a set of enforceable legal rules.

Furthermore, claims about the marginal nature of small-scale production in modern developing cities have been challenged by recent empirical studies. These have documented the dynamism of many 'marginal' activities and have shown that participants often viewed their occupations as stable and relatively rewarding, not merely as a means to survive while waiting for access to jobs in the 'formal' sector (Portes et al 1986). The studies also revealed that many of the seemingly marginal activities were in fact directly tied to modern production and distribution processes (Tokman 1992, Schmitz 1995). These activities were found not to be uniformly traditional, either in their origins or in the technology employed. Their growth clearly does not just depend on changes in the survival strategies of the 'surplus' population but also responds directly to producers' efforts to incorporate unregulated labour in modern industrial processes.

These activities cannot be viewed as a set of survival activities performed by destitute people on the margins of society. Studies in both advanced industrial and less

developed countries have shown the economic dynamism of unregulated income-generating activities and the relatively high-income of many informal entrepreneurs, sometimes above the level of workers in the formal economy (Portes et al 1986).

These discoveries have led to a re-appraisal of the growth of 'informal' economic activities. As mentioned earlier, theories of productive decentralisation and flexible specialisation have been introduced as a means of understanding the changing structure of industry both in advanced and developing economies. There has been a move away from the search for dualistic models or historical precedents in trying to explain the persistence and expansion of the unrecorded small-scale sector in developing economies. Instead, empirical investigations of the actual structure and dynamics of these sectors have come to dominate the literature. In the following sections some of the most important findings and generalizations of more recent literature, relevant to the research questions of this thesis are examined.

6. Clusters

Clusters may be defined as sectoral and spatial concentrations of firms. Such clusters have received increasing attention in research on advanced economies. These share the view of enterprises as connected entities and an emphasis on local factors for competition in global markets. Research on clusters in developing countries also grew, but out of the small-scale industry debate. The studies on small firm industrial districts in Europe, mainly in Italy and Spain, that emerged in the 1980s were soon translated into an agenda for research on developing countries which had two main questions: first, are there similar industrial clusters in developing countries; second, what are the conditions which either produce, modify or prevent their growth? Initial attempts at answering these questions, using the flexible specialization framework set out by Piore and Sabel (1984), largely examined data that had been collected for other purposes (for example, Pederson et al 1984). New empirical research explicitly undertaken to assess the relevance of clustering in developing countries came later, gradually leading to a substantial body of case material and substantive theoretical discussion (for example Das 1998).

Three main conclusions can be drawn from recent research. Firstly that clustering in developing countries is significant. The growing amount of case material shows that

clusters are common in a wide range of countries and sectors (Nadvi and Schmitz, 1994). Their statistical significance in industrial production is hard to determine however, because economic regions do not respect administrative boundaries, and industrial classifications often fail to capture the existing specialization. Secondly, the growth experience of these clusters, vary widely. At one end of the spectrum are artisanal clusters that show little dynamism and seem unable to expand or innovate (McCormick, 1998). At the other end, are clusters that have been able to deepen the inter-firm division of labour, raise their competitiveness and break into international markets (Cawthorne, 1995; Schmitz, 1995; Nadvi, 1999). Between those two poles, there are many intermediary cases. Thirdly, internal heterogeneity is pronounced. Except in the rudimentary clusters, medium and large firms have emerged and play an important role in the functioning of these clusters. In this respect the developing countries experiences are substantially different from the European model.

Clustering becomes significant because it facilitates specialization and effective investment in small steps. Producers do not have to get equipment for the entire production process; they can concentrate on particular stages leaving other stages to other entrepreneurs. Specialized workshops, that can repair and upgrade existing machinery, further help to reduce technological discontinuities. It follows that investment capital is needed in small rather than big bits. Also, working capital requirements are affected by clustering. Where specialized suppliers of raw materials and components are close by, there is less need to store inputs. Similarly small amounts of human capital can be made to count. One producer's investment in a specialized skill renders returns because others have invested in complementary expertise.

In addition, clustering makes it possible to advance by taking small and calculable, rather than large risks. This emphasis on small-risk steps (Schmitz 1997) is supported by observations on the industrial structure in developing countries, a frequent feature being the absence of a medium scale sector: some large enterprises at the top and many small enterprises at the bottom, unable to grow into the medium sized sector. They cannot grow because of informational and other market failures related to the provision of financial, technical and market support to small manufacturing enterprises (Levy 1994). One of the most striking aspects of much of the recent case material on clusters is

that it shows enterprises of all sizes, including a strong middle segment. It seems that growth constraints faced by individual small-scale manufacturers are less severe in clusters (Nadvi 1996). In summary the argument is that clustering facilitates the mobilization of financial and labour resources, that it breaks down investment into small riskable steps, that the enterprise of one creates the foothold for the other. It is a process by which enterprises create for each other possibilities for accumulating capital and skill.

The emphasis on local co-operation does not imply that it is the only advantage which clustering provides. There is a consensus in the literature that the most basic advantage which firms (especially small firms) derive from being located in a cluster lies in local external economies. In his 'Principles of Economics', Marshall (1920) showed why clustering could help small enterprises to compete. He noted that the agglomeration of firms engaged in similar or related activities generated a range of localized external economies that lowered costs for clustered producers. Such advantages included a pool of specialized workers, easy access to suppliers of specialized inputs and services and the quick dissemination of new knowledge. According to Marshall, such external economies help explain the growth of contemporary industrial clusters. Numerous analyses of contemporary clusters confirm the relevance of these local external economies (Schmitz 1995)

The literature on contemporary clusters also suggests that in addition to the incidental external economies there is often a deliberate force at work: joint action amongst the clustering firms. Levels of such joint action were examined for clusters in Pakistan (Nadvi, 1999a), India (Knorringa, 1999), Mexico (Rabellotti, 1999) and Brazil (Schmitz, 1999). All four clusters produce mainly for distant markets, with the Pakistani and Brazilian cluster producing mainly for export and the Mexican and Indian cluster mainly for the internal market. In the Mexican case (Guadalajara), import liberalization led to the closure of many firms and to reorganization of the survivors. In the Indian case (Agra), the crisis was caused by the sudden disappearance of the former Soviet market and gradual liberalization of imports. The Brazilian cluster (Sinos Valley) was forced to move up-market due to China's massive penetration of its main export market in the USA and Europe; and the Pakistani surgical instrument cluster (Sialkot) was confronted with

the sudden imposition of new quality standards due to fatal quality problems in previous deliveries to the USA.

The co-operation variables included changes in exchange of information and experiences, co-operation in improving quality, co-operation in speeding up delivery and a number of further variables which varied with the type of co-operation (horizontal/vertical) considered. In the Brazilian case, five associations (footwear manufacturers, tanners, component producers, equipment makers and export agents) responded to the Chinese threat with a joint programme for upgrading the entire chain from raw materials to the marketing of the end product-leather footwear. In the Indian case, a small number of export manufacturers with complementary product ranges passed on orders to each other (Knorringa, 1999). Similar small-group initiatives were found in the other clusters but they are not common. Involvement in associations tended to increase rather than decrease. Increases were, however, very uneven within clusters, ranging from 61 percent of firms in the Pakistani case to 25 percent in the Brazilian case. In the Indian case, Knorringa (1999) stresses that relationships in the high-quality market segments are more co-operative than in the low-quality segments. To some extent this was confirmed in the Mexican case where (the more demanding) export manufacturers have the closest relationships with suppliers (Rabellotti, 1999). Differentiation by size of firm was also found in both clusters: compared with large and medium-sized firms, small firms have less close relationships with suppliers. Cooperation does not only involve the horizontal and bilateral interaction of similar firms but also vertical interaction with suppliers, i.e. between different stages in the global commodity chain. The reason for increasing vertical co-operation is quite straightforward. The demands of the new global competition can only be met if the whole chain responds. Better product quality and greater speed cannot be attained by enterprises individually. The recognition of inter-dependence-even if it is at times asymmetrical-has led to more co-operative behaviour.

Despite these advantages, the idea that there is an increasing tendency of the growth and increasing export prospects of clusters of small enterprises in developing countries has not gone unchallenged. Harrison (1994), for example, suggests that the success of small enterprise clusters has been over-rated and the strength of the large corporation under-rated. In his view the dominant form of industrial organization is the

large company controlling networks of small enterprises. Here, it is important to note that successful clusters are unlikely to remain populated only by small firms. For example, in exporting clusters in Pakistan (Nadvi 1999) and Brazil (Schmitz 1995), a number of large firms have grown from within, occupying powerful positions vis-à-vis local suppliers. Some also seek new roles outside their cluster.

More generally, a shift is required in further research on industrial clusters. Over recent years it has privileged the study of local relationships and contributed substantially to understanding the local determinants of competitiveness. An increasingly frequent conclusion in these recent studies is that external relationships need greater attention in order to understand why some clusters succeed and others fail. It would be a mistake, however, if such a shift resulted in neglecting the local relationships. The key issue is how internal and external relationships interact.

7. Subcontracting

Another issue that has come forward from the research on the informal economy and has deserves equal attention to clustering, is that of subcontracting. The world-wide shift from large-scale vertically integrated industries to a system in which factories subcontract to large networks of small workshops and individual home-workers is the focus of many of these reconsiderations. The rapid growth of subcontracting, the increase in the numbers and varieties of home-based producers and the proliferation of small-scale firms are all trends that have been documented in settings in both advanced and developing cities. These trends challenge assumptions about the distinction and separation between formal and informal sectors of the economy; they also challenge assumptions about the concentration and centralisation of production.

The literature on industrial subcontracting has distinguished between two types of business arrangements: one in which production is contracted out but raw materials are not provided and another in which raw materials and other inputs are provided. The first system can be horizontal subcontracting, and this involves orders of goods regularly produced and sold by a firm to a variety of clients. The second arrangement, vertical subcontracting, amounts to producing orders specific to the firm that subcontracts out. Vertical subcontracting generally consists of processing work or production carried out

for another firm under very specific contract agreements, including exact specifications regarding design and other product characteristics. It affects mostly labour intensive tasks resulting from the ability to fragment the production process in such a way that different parts can be carried out by different firms (Beneria 1989). In most cases of vertical subcontracting, the system can be compared with a putting out system defined as: the transfer of work formally done within a firm to another firm, an artisan workshop, or a domestic outworker (Murray 1983).

Different patterns of subcontracting have been found to operate between casual and non-casual units of production. There can be a direct relation in which a regular firm sends production out to casual operations without the use of intermediaries. This pattern can be found among small firms that have direct contact with workshops or with home-workers. The relationship can also be indirect. This takes place through a jobber. In this case the mediators' function is to establish the connection between the formal and the informal operations. No production takes place at the jobbers' level, although in many cases the jobber has a supervisory role in the activities that are subcontracted or performs other functions such as distribution, transportation, and gathering of materials and goods produced.

The most prevalent reason given for subcontracting is the lowering of labour costs. Studies have a complex view of the reasons for subcontracting. Following Harry Braverman (1975), they argue that the process of decentralisation responds to the Babbage principle, namely, that costs of production are reduced through changes in the division of labour. This is made possible by the fragmentation of tasks in such a way that those subcontracted are associated with lower skills and lower wages. Although Braverman focuses on the division of labour within the capitalist firm, the approach is applied to an analysis of the division of labour between firms. The largest drop in wages takes place at points at which production goes underground, and particularly when the labour force is female. This is clearly the case with homework, but also true for other levels of subcontracting. Yet, it must be emphasized that the main cost-saving feature of informality is less the absolute level of wages than the avoidance of the "indirect wage" formed by social benefits and other employee-related payments to the state. By lowering the cost of labour and reducing the state-imposed constraints on its free hiring and

dismissal, the unrecorded sector contributes directly to the profitability of capital. It can be argued that productivity is lower at lower levels of subcontracting and that therefore wage ratios reflect productivity ratios. However, given the labour intensive character of subcontracting, there is no reason to believe that significant disparities in productivity exist for identical jobs performed at different subcontracting levels, particularly the more unskilled the task (Beneria 1989).

Other reasons that are usual for subcontracting, besides the lowering of labour costs, include: Firstly, when production of parts is highly specialized it can be obtained at lower costs by firms that concentrate on a few products. This is particularly the case when the number of parts required by the subcontracting firm is relatively small and does not justify the investment required by internal production. In other words, the objective in this case is the lowering of fixed costs. Secondly, when production is cyclical or unstable, subcontracting offers the possibility of transferring the risk and avoiding the problems associated with fluctuations of production, such as layoffs and costs associated with a temporary increase in production (Beneria 1989).

As for the impact of subcontracting, the growth of subcontracting leads, according to some studies, to the replacement of modern methods of production by others considered archaic. Obsolete tools are resurrected and the use of new technologies postponed. Labour conditions erode and wages shrink. The incentives for technological progress, innovation and investment are all reduced or eliminated. According to this view the increasing informalisation of industrial production leads to a degradation of social and productive relations, and takes place mainly in traditional economic sectors, slowing down the emergence of alternative growth models and the modernisation of production plants.

In contrast other views argue that subcontracting permits the shifting of production, toward the more unrecorded or underground segments of the economy, thereby providing a way to escape state regulations on production and market transactions, union contracts and fringe benefits. Hence, subcontracting provides for a great deal of flexibility in expanding and contracting productive capacity in the small business sector. For these reasons, it is often suggested that this flexibility may be very important in building an infra structure of small firms that would provide a basis for

growth. This would be the case particularly if productivity levels among these firms were comparable to larger units. It is argued that subcontracting stimulates the development of small business, which is more adaptable to the economic conditions prevalent in the Third World, and creates the basis for fostering and channeling entrepreneurial skills and developing productive forces in general. There are different versions of this view. Some see this sector as a way of facilitating the functioning of a free market and optimizing the results of a free enterprise economy in the face of excessive state regulation. Others see it as a way of fostering initiative and technological change in the Third World (Beneria 1989). In general, the impact of subcontracting can be seen as positive with regard to business growth, reduction of production costs, and manipulating state regulation in favor of business and market dynamics. However, there are huge negative impacts of subcontracting from the labour perspective, related to working conditions, the lack of protective regulation and the erosion of most of labour social benefits.

8. Child Labour

In addition to clustering and subcontracting, the third theoretical and practical issue that informal economy raises, is that of child labour. There is a claim made that the informal sector is where all child labour was employed. If the economy was really divided into a formal sector that is law abiding and regulated and an informal sector where anything goes, then one would expect child labour to be one of the clearest distinctions between the two sectors. The illegal use of child labour would be a monopoly of the informal sector. In fact, this argument is used repeatedly by those who see the main problem in the economy being the existence of this invisible and therefore unregulated sector. It is also used by those who wish to defend the state which claims that the phenomena of child labour exists only in areas that are not regulated by it.

However, child labour is not a new phenomenon, or one that is solely related to the informal sector. During the industrial revolution in Britain there was no dearth of apologists for child labour. E.P.Thompson quotes a statement by Andrew Ure in 1835:

> I have visited many factories...and I never saw a single instance of corporal chastisement inflicted on a child; nor indeed did I ever see

> children in ill humour. They seemed to be always cheerful and alert; taking pleasure in the light play of their muscles, enjoying the mobility natural to their age. The scene of industry, so far from exciting sad emotions in my mind, was always exhilarating... (Thompson 1963, p. 111)

There was also the economic argument by capitalists that regulating child labour would be detrimental to business, and the age old threat that the capitalists would have to move their businesses to other countries. When it was suggested, in the first factory act of 1802, that there should be supervision of the implementation of simple reforms proposed for the well being of children, the owners declared the following:

> The mills or factories will become a scene either of idleness and disorder, or of open rebellion; or the masters harassed and tired out of incessant complaints of their apprentices, and the perpetual interference of the visitors, will be obliged to give up their works; and some of them may become bankrupt, or be obliged to remove to a foreign country, leaving their apprentices a grievous load upon the parish where they are employed (Seabrook 2001, p.5).

Apologists for child labour in the West were not confined to the early industrial period. In 1908, Asa Candler, First President of Coca Cola, speaking in Atlanta at the fourth annual convention of the National Child Labour Committee to protest at the horrific conditions where women and children worked a sixty hour week, breathing cotton motes, for 50 cents a day or less, astonished his listeners when he said:

> Child labour, properly conducted, properly surrounded, properly conditioned, is calculated to bring the highest measure of success to any country on the face of the earth. The most beautiful sight that we see is the child at labour. In fact, the younger the boy began work, the more beautiful, the more useful his life gets to be. (Seabrook 2001, p.6)

However, the reality of child labour was of course far removed from the above description during the industrial revolution, and there are countless accounts of the horrors suffered by children during that age. E.P. Thompson, in the Making of the English Working Class, quotes a priest in Yorkshire who related the story of a boy whom

he had recently interred who had been found (in the mill where he worked), standing asleep with his arms full of wool and had been beaten awake. On that day he had worked for seventeen hours. He was carried home by his father, was unable to eat his supper, awoke at four a.m. the next morning and asked his brothers if they could see the lights of the mill as he was afraid of being late, and then died.

Apologists for child labour in the Third World, although not as blunt as their forefathers of the industrial revolution, are extremely vocal in their opposition to any laws or regulations abolishing child labour. There is the economic nationalist argument that whole industries depend on such labour and that these industries would collapse if such laws were actually enforced, and that although child labour might be cruel, one has to put the national interest above all else. In Egypt, industries such as leather tanning, an important export industry, are nearly completely dependent on child labour, most small-scale industries whether recorded, regulated and legal or not. The same is true of flower growing, especially jasmine, which is transported by air to Paris for the production of perfume. In the latter case, the flowers must be picked during the night, to conserve their freshness. Children are employed to work through the night to pick them in large-scale farms in the delta region. Egypt has one of the highest percentages of child labour in the world. Children below 14 years represent 11 percent of the total workforce. In a study carried out in 1991, it was found that there were 2,200,000 working children (below 14 years) representing 20 percent of the total age group population. Amazingly the law only makes it illegal to employ those under 12, however the above mentioned study reported that there were one million child labourers between the ages of six and eleven, which make up 44 percent of the total child labour force (Azir 1992).

In Bangladesh the ILO representative, accepts the gradualist position in the removal of child labour. The argument for gradualism being that even in the industrialized countries this process was gradual, requiring a combination of skill training, economic growth and development. The distinction is made between child work and child labour, the former being acceptable and the latter labeled intolerable. Thus a new acceptance of child labour under the banner of realism and a reduction in the urgency about eliminating it through vague distinctions between different types of child labour, has become part of the new NGO consensus on this issue.

At issue is the clash between those who see the model of a labour free childhood as a necessary prerequisite for a 'civilized' society and those who defend the 'right' of children to work. Some of the former, and this includes many trade unionists, say that the employment of children depresses adult wages, which makes people poorer and drives more children to work. They see legislation as the best means of combating it, as occurred in 19th century Britain. Abolitionists tend to see work and education as incompatible. Defenders of child work say that, despite conditions that are sometimes dangerous and damaging, children want to work. It offers them a chance for self-determination and responsibility. It gives them a function. The problem is the absence of suitable work, not work itself. In a study on child labour in Bangladesh, Theresa Blanchet (1996) notes the efforts to remove children from factory work in the early 1990s. In the local cigarette factories of Kustia, children under the age of twelve were dismissed. However, after their dismissal, many returned, either through bribery, bringing lunch for their older siblings and staying on, even climbing the factory fence to get in. Blanchet adds that those working illegally were paid less than those legitimately employed: they therefore subsidized their own illegality.

In brief, the problem or 'issue' of child labour, goes beyond formal or informal economies. Rather, it has to do with macro-economic dynamics as a whole –as in the case of the nationalist argument for economic development, or that of subsistence necessity. Consequently, the rise or demise of child labour is not solely correlated to the informal economy as many would like to argue, since a lot of child labour in countries like Vietnam or Cambodia is within the workshops of multinational corporations and a lot of the formal sector entities as in the case of agro-export companies in Egypt and Peru. Hence, it is part of the problem of labour markets, economies, and state policies of these counties, and not the informal economy per se.

9. Summary

In the above chapter it has been argued that the dual labour market model is not adequate in understanding the urban labour market in developing countries, and that therefore the segmentation based on this model of the urban labour market into "formal" and "informal" sectors, or "protected" and "unprotected" sectors, are based on false

assumptions and lead to false conclusions. It has also been argued that dividing the urban labour market into "petty commodity production" and "capitalist" production does not take us beyond the dualist theories.

Another argument made in this chapter has been that the undisputed growth of the small-scale unrecorded sector of the urban economy is the result of a number of interrelated causes, including the internationalization of capital and the search for cheaper labour power at given levels of productivity, and the emergence of a new international division of labour requiring a degree of flexibility not obtainable under the old vertically integrated industrial structures. And that the new growth of the unrecorded small-scale sector, although superficially similar to the putting out system of the 19th century, is actually a completely different and new phenomenon that is part of the modern capitalist economy and must be understood in that context.

Related to the rise of unrecorded sector are three issues; clustering, subcontracting, and child labour. The first two phenomenons present two forms of interaction both within the unrecorded small-scale sector and between it and the large-scale sector were investigated. Clustering and subcontracting were found to be common forms of interaction undertaken by this sector and recent research has shown that the forms of interaction are both complex and heterogeneous. Lastly, the question of child labour was discussed, as this is a widespread phenomenon in the garment industry in Egypt. Some of the more common arguments about child labour were presented. But the main point was child labour is not solely related to the so-called informal economy.

CHAPTER SIX
METHODOLOGY

1. Introduction

The previous chapters provided the general economic and industrial context within which the establishments studied in this project are situated, both nationally and internationally. The remaining chapters are devoted to the actual results of the fieldwork. The following chapters are based on material from research carried out in the city of Shubra El Kheima during 1998-1999. This chapter introduces in detail the research strategy and methods adopted in the study. The chapter is divided into five main sections. The first puts forward the research objectives and main questions. The second discusses and defends the research strategy, namely the choice of case-study approach and logic that guided the project. The third describes the selection of research units to be studied. The fourth section introduces the various methods used for data collection. The fifth section introduces the neighborhood and study sites. Finally, the chapter ends with a summary of the main points in the chapter.

2. Research Objectives

As mentioned in the introduction, this research project investigates the world of garment production in the city of Shubra El Kheima in Egypt. It involves an empirical comparison between recorded factories and unrecorded workshops. There are three main areas of comparison. The first includes the labour market, labour costs and working conditions. The second includes the market channels for inputs and outputs. The third includes a comparison and description of the degrees and forms of cooperation and networking between units of production. The aim of this comparative study is to establish whether or not there are significant differences between the two types of establishments in these three areas, and to describe and explain such differences if they exist.

The study examines both the economic and the social dynamics of the garment sector. It thus involves a study of markets and a study of work. Three main guiding

empirical questions, dealing respectively with the three main areas of study will be tested. The first question is how, if at all, is the garment sector linked to the world market. Is it simply a local traditional sector consuming locally produced raw materials and producing for the local market? The relations of the establishments with the outside market, both for production inputs and marketing of output, are investigated. This will involve information about the sources of raw materials- mainly cloth, information about the sources of work orders (subcontracting to traders or larger factories, single customer work whether individuals or shops, access to export markets and marketing in unregulated markets.)

The second question, which also involves the production and marketing process, is to what extent is there cooperation or networking between the different establishments? Do they make use of geographical proximity and the possibility of external economies? Do they form part of an industrial cluster, and are there significant differences between the recorded factories and the unrecorded workshops in terms of cooperation?

The third question involves the conditions of work in this sector. Do workers in the unrecorded sector enjoy self-employment, flexibility and greater control of the labour process, compared to those employed in the recorded sector? One of the main themes in the literature on the so called informal sector has been the relative sweatshop conditions in this sector and that unregulated lower cost labour is a main explanation for the persistence and growth of the informal sector. The study attempts to find out the validity of such claims. The investigation looks into the use of child labour, wages, working hours, work conditions and security, and methods of and sources for labour recruitment. Moreover, the research involves an investigation into the labour process, this involves the levels of specialisation, divisions of labour and technologies employed within the establishments. One of the explanations in the literature for the relative success of small-scale industry has been that of flexible-specialization, the less vertically integrated the establishment the more it is able to adapt to changes in the market and changes in the division of labour within the industry. Again we will attempt to find out to what extent this is applicable in our case.

3. Research Strategy

The general strategy guiding this research project has been the case study research strategy. Case study research has long been regarded as a relatively weak research method lacking in precision and objectivity. It is therefore necessary to explain why this strategy is the most suitable and useful for this particular research project. A key issue in deciding to undertake a case study is whether a holistic understanding of a phenomenon is required. Case studies by their nature, deal with complex relations within a unit as well as the interaction between the unit and its wider environment. Specifically, there are three main conditions or factors determining which research method and strategy to choose. The first factor is the type of research question posed. The second factor is the extent of control the researcher has on the research object. The third factor is the degree of focus on contemporary as opposed to historical events. For the case study it is best suited for when: A *"how" or "why"* question is being asked about a *contemporary* set of events over which the investigator has *no control.* Yin (1994:2) suggests that case studies lend themselves best to answering how and why questions. In other words they are most appropriate for examining the processes by which events unfold as well as for exploring causal relationships. In this research project we are dealing mainly with 'how' questions: How is small-scale garment manufacturing in Shubra linked to the local and global economy, and in what ways labour conditions differ in unregulated establishments from those in the more regulated large-scale factories. This is being asked for the contemporary situation of garment industry in Shubra El Khiema at the time of investigation, which is a situation, that the researcher has no control over.

A common concern about case studies is that they provide little basis for scientific generalizations. Case studies are generalizable to theoretical propositions and not to populations and universes. The case study does not represent a "sample" and the researcher's goal is not to enumerate frequencies (statistical generalizations). This is a particularly important factor for choosing a case study strategy for investigating economic activities that are mostly unrecorded. In what other way can we start to investigate the statistically unrecorded part of the economy? Economists are usually concerned about micro studies dealing with limited numbers of cases in the sense that they are non generalizable, relegating such studies to supposedly less scientific and

rigorous disciplines such as anthropology. But the growing evidence that suggests that significant portions of the economy of both developed and especially developing regions are not statistically recorded should change this attitude (ILO 1996). Only through the accumulation of direct empirical research on segments of these invisible economic activities, will the wider picture of what is happening in the economy as a whole become clear.

The case study inquiry: copes with the technically distinctive situation in which there will be many more variables of interest than data points, therefore: it relies on multiple sources of evidence. Here again we find that this research strategy suits the purposes of this research better than others. We are dealing with the contemporary phenomenon of garment manufacturing in Shubra, we are investigating, not simply a set of production units, but also the market context within which they act, and there is a need to deal with a variety of variables that cannot be sufficiently reduced as would be needed if we were to use a survey method by itself. Use of the case study method is particularly useful to cover contextual conditions- assuming they might be highly pertinent to the phenomenon of study. In the case of this research for example, it was required to investigate unrecorded markets where the garments produced were sold and to interview contractors to get to the details of the marketing process. These aspects could not have been covered sufficiently by relying only on quantitative survey methods. The case study as a research strategy comprises an all-encompassing method, with the logic of design incorporating specific approaches to data collection and to data analysis. In this sense, the case study is neither a data collection tactic nor a design feature alone, but a comprehensive research strategy. Case studies are a research strategy rather than a specific technique and as such can make use of a range of techniques. For example, in this study three techniques were used; survey interviews, in depth interviews and observations.

Stake (2000, p. 437) identifies three types of case study: the intrinsic case study, the instrumental case study and the collective case study.[14] Of relevance to this research is the "collective case-study", this means a joint-study of a number of cases in order to investigate a phenomenon, a population, or a general condition. In effect it is an

[14] For the difference between the three types see Stake 2000.

instrumental case study[15] extended to several cases. Individual cases in the collection may or may not be known in advance to manifest some common characteristics. They are chosen because the researcher believes that understanding them will lead to better understanding, perhaps better theorizing, about a still larger collection of cases. This study of garment manufacturing is an example of a collective case-study which aims at increasing the knowledge and understanding of small-scale garment manufacturing in Shubra El Kheima in particular and of the unrecorded sector of the economy in general. It also aims at questioning some of the prevailing theories about industrialization in developing countries and in particular, the role and nature of small manufacturing enterprises.

Thus, although case-study methodology is the best suited for this research endevour dealing with unrecorded sector the limitations of this study should be recognized. The study was undertaken mainly in one particular place, a neighbourhood and industrial district in the city of Shubra El Kheima. It involved a limited number of cases from a large and unknown universe (the total of small-scale garment establishments could not be defined, even in the neighbourhood by itself, let alone the city.) Also, the study took place in a particular time and did not have a long time-span. All this must be taken into account when dealing with generalizations. What is being proposed is that the knowledge and understanding gathered through this study can add to the accumulative research into the unrecorded sectors of the economy, thus helping provide a clearer picture of the economy as a whole. Thus, the group chosen for this study is not representative in the scientific sense, nor could it be. As these establishments are unrecorded there was no way we could even estimate the size of the relevant population nor any practical way to create a random sample. It is important to keep in mind that we are dealing with 60 workshops in one single neighborhood that are part of the statistically invisible segment of the economy and therefore generalizations from the study findings should be viewed with these limitations in mind.

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[15] Instrumental case studies, according to Stake, are those in which a particular case is examined mainly to provide insight into an issue or to redraw a generalization. The case is of secondary interest, playing mainly a supportive role. The case is still examined in depth, its contexts investigated and its activities detailed, but all because this helps the researcher to pursue the external interest. The case may be seen as typical of other cases or not.

4. Choice of Establishments

The most detailed typology of small-scale industries is contained in the early book by E. Staley and R. Morse. For them the most important distinction among small enterprises is between factory and non-factory production. They contrast factory work with artisan establishments as follows: "The factory, whether small or large, is distinguished from artisan industry by greater division of labour in production...Artisan industry we may define as manufacturing carried on by craftsmen working singly or with a few helpers or apprentices and without extensive division of labour" (Staley & Morse 1965, p.6). A second approach was followed by D.Anderson, who separates small enterprises into two categories: household activities, and small workshops and factories (Anderson 1982). Household enterprises are never defined analytically, they are defined in terms of the data as the residual that remains when information taken from "establishment surveys" (which cover only workshops and factories above a certain size) are subtracted from information from "labour force surveys" (which cover all types and scales of activities).

Throughout this study in general and in the discussion of the relevant theoretical background in particular, these abstractly imposed divisions of artisan/ factory, traditional/ modern and formal/ informal have been rejected. The only categorization used, and with caution, is that of scale and the extent to which economic activity is statistically recorded. This study investigates small-scale garment manufacturing establishments, ranging in size from those employing four workers to those employing more than forty. These have been divided into two groups, the first including those establishments that are statistically unrecorded small workshops, the second group including those establishments that are statistically recorded factories. The division is by definition simplistic since it is based simply on the question of whether an establishment is registered and tax paying or not. In fact most establishments are involved in at least some aspects of unrecorded, unregistered and therefore unregulated economic activities including employment practices and market transactions. However, in this study of garment manufacturers in Shubra El Kheima, I have deliberately not included home-workers. The reason for this is that the question of homework with its complexities of

self employment and unpaid family labour and all the related questions of gender would have distracted from the main tasks of the study.

The research project was faced with a number of difficulties that have led to a series of alterations and adjustments from the original plan. The first difficulty had to do with statistics. In the first plan for this project one of the aims was to attempt to measure the size of production in the unrecorded garment sector through a comparison of the total production in the statistically recorded sector with the total local consumption plus exports. The task turned out to be impossible for two reasons. The first was the inaccuracy of the statistical records, with different statistical compilations providing wildly varying estimations. The second reason was that one of the main sources of garments in the local market was that of illegally imported, and therefore statistically invisible, ready made garments from a variety of sources. A second source of difficulties was in the access to large-scale public and private sector factories. Again it was intended that a number of these factories would be included in the study. This also proved to be impossible. It required a research permit from the state security police, which was nearly impossible. It would take six months of paper work and police screening and in 99 percent of cases was refused. It did not matter what type of information the researcher was looking for, the whole concept of social research is treated with unlimited suspicion. Because of these difficulties, a group of 80 establishments was chosen. 60 unrecorded workshops in El Wehda neighborhood and 20 recorded factories in the old textile district in Shubra El Kheima. Still the choice of both the workshops and the factories was limited by different factors outside the control of the researcher as well as some research criteria.

The group of 20 factories was limited by several factors. Many owners would refuse to meet because I did not have any recommendations. The thought of wasting time with a researcher doing some obscure academic study and without any benefits in return was not particularly appealing. Others demanded a research permit, which, as explained above, was out of the question. The 20 factory cases I was able to get were obtained mainly through family contacts. This led to several advantages. The owners trusted the researcher and were therefore prepared to talk candidly. They were also prepared to give me some of their time and allowed me to interview their workers.

The group of unrecorded workshops was chosen according to a set of criteria were agreed upon between the researcher and a contact in Shubra. These included that the establishments had to be garment producers, using cotton cloth, not registered as an industrial or commercial activity. On this basis I set out through friends and relatives of who has lived in the area all their lives and has an extended family network, to create a list of 100 addresses of workshops in the neighbourhood. Of these we were able to visit only 60. The rest either refused to participate or had closed down for one reason or the other. From these 60 workshops a sub-sample of 20 workshops was chosen, in order to conduct more in-depth research. The basis of the choice was if the owners would allow further intensive research involving more detailed interviews with their workers.

5. Research Design and Methods of Data Collection

A research design is the logic that links the data to be collected and the conclusions to be drawn to the initial questions of a study. For case studies, four major types of designs are relevant. The first pair of categories consists of single case and multiple case designs. The second pair, which can occur in combination with either of the first pair, is based on the unit or units of analysis to be covered, and distinguishes between holistic and embedded designs. In this research I have used an embedded multiple case design looking not only at variables affecting the units as a whole but also separately investigating different components within the units. Thus in addition to investigating variables relating to a workshop as a unit of analysis, I have disaggregated the workshop unit and looked at aspects within it, as separate embedded entities.

A variety of methods were used for the collection of data. With a micro study of this type, this was a necessity in order to triangulate the data collected and ensure its validity. Thus, a combination of structured interviews, open-ended interviews, direct observations and auxiliary interviews were used during the research. The fieldwork was carried out mainly in the establishments themselves. Thus workshop owners and workers were interviewed in their workshops and factory owners and workers were interviewed in their factories. However, some of the more detailed interviews, especially those with workers were carried out in homes and coffee shops.

The research was undertaken in several stages. The first stage was a survey with a structured questionnaire which was administered to the 20 factory owners and the 60 workshop owners. This provided all the main quantitative information, which the basis for further stages. The second stage involved in-depth interviews with owners and workers in the factories and sub-sample workshops. The third stage involved direct observations of the production process, auxiliary interviews with brokers and traders, and direct observations of the marketing process. The details of the three main research techniques were as follows:

Stage 1: The survey

The interview was administered only to the owners of the factories and workshops. It covered the main quantitative characteristics of the establishment. The number of workers, the types of equipment and technology used, the production process, the labour recruitment process, the main problems faced by the establishment, basic information about working hours and other work related details.

Stage 2: In depth interviews and direct observations

In this stage open-ended interviews were carried out with factory owners and owners of the workshops, with workers in the factories and workers in the workshops. Questions were asked about the production process, the marketing process, the procurement of raw materials, and problems of regulation and state intervention. In order to confirm the findings I followed closely these processes in factories and workshops through on-site visits

Stage 3: Auxiliary interviews and marketing observations

In this stage my aim was to follow the post-production process, to follow the finished product after it leaves the establishment and until it reaches its final market place in order to understand the external market dynamics that those establishments have to deal with. Interviews with traders and brokers were carried out, these were of an open ended and exploratory nature. Direct observations were made in the main informal market of Attaba in central Cairo, to which much of the workshop products were destined.

6. Description of the Research Site

The research was conducted in a neighborhood and an industrial district in the city of Shubra El Kheima. The site was chosen for two main reasons. The first is that this city is one of the two main textile and garment centers in Egypt (the other being Mahalla El Kubra). The second reason has to do with contacts. As the research involves unrecorded establishments and as research in Egypt is viewed with considerable suspicion, the only way to get to such establishments and be able to extract information about their activity was through personal contacts. The contacts available to the researcher and willing to help in making the connection with the garment producers made this site the most practical to choose.

The city of Shubra El Kheima is part of the Qulyubia province to the North of Cairo. It is one of the largest and oldest industrial centers in Egypt. Its proximity to Cairo has meant that it is currently part of the greater Cairo region, accounting for eight percent of its population, or more than one million people. The city began to develop in the 1920s as a small urban center around a number of mainly foreign-owned textile mills. During the 1930s and 1940s, the town expanded as a number of large vertically integrated textile mills were established. The town was mainly inhabited by workers migrating from the nearby villages to work in the factories. The main expansion of the town took place on the surrounding agricultural lands. In the 1950s and 1960s, the main textile mills were expanded. Large housing estates were built to provide housing for workers. The public housing projects expanded through the 1980s, as a labyrinth of spontaneous settlements rapidly surrounded them.

The number of housing units in the city increased from 88,000 in 1976 to 180,000 in 1986, making Shubra El-Kheima the fastest growing urban settlement in the Greater Cairo region (compared, for example, with a 50 percent increase in housing units in Cairo over the same period, or an 85 percent increase in Giza) (CAPMAS 1976 & 1986). The population of the city also grew rapidly during this time. In 1976, the population was 394,000 people. By 1986, it was 711,000 and, by 1996, 870,000, representing a growth of more than 120 percent over two decades (CAPMAS 1976 & 1986). Shubra El-Kheima, moreover, also has had a far faster rate of population growth than that experienced by other cities in the governorate of Qalyubia. For example, Banha, the capital of the governorate, grew only by 64 percent, the city of Qalyub by 30 percent, and

the town of Qanater by 50 percent (CAPMAS 1986 & 1996). Over 50 percent of this increase in Shubra El Kheima's population is the result of migration and, unlike many other cities in Egypt, a large percentage of these migrants came from other urban areas, mainly from Cairo and Giza.

The structure of the city reflects its historical development. At the center are the old traditional weaving factories many of them still functioning with antiquated machinery. Around the center are a number of large-scale public and private textile mills, several of them vertically integrated and producing garments. Around this area are the big public housing estates, with a major commercial high street cutting through them. Around this sector, but mainly to the North and East, are vast areas of spontaneous settlements that have housed the main growth of the city's population since the 1970s.

It is important to note that there is a lot of socio-economic differentiation in these areas. Housing settlements that were considered 'spontaneous' in the 1970s have become something completely different over the last 30 years. The older settlements are now made up of four to five story buildings with electricity, sewerage and running water, and are arranged in long rows with narrow alleys separating them. These alleys, in turn, lead to a wider street which acts as the main commercial center. Though these settlements started out as slum areas decades ago, they could not necessarily be classified as slums today. By contrast, many of the more recent settlements are still without access to the sewerage system or running water. Some still remain without electricity or, alternately, are electrified via stolen cables. In the newer settlements one can also find tent settlements and huts.

A major feature of private sector, ready-made garment manufacturing in Shubra is the prevalence of small-scale enterprise; the 2,838 recorded establishments existing in 1996 employed only 10,730 workers. The average number of employees per establishment was 3.8. More than half of the recorded establishments (1565) had only one worker, and another 724 recorded establishments employed only two. Only one establishment had over 1,000 workers, and only three had about 500 (CAPMAS, 1996). By contrast, the recorded private weaving sector is made up of 1,154 establishments employing 21,000 workers. Four factories employ more than 1,000 workers, and fifteen

factories over 100 workers. Nearly a quarter of the establishments employed between 5 and 10 workers, and only 112 establishments had one worker.

This picture does not include the unrecorded sector. It is very difficult to estimate how large this sector is, but it seems likely that, for garment manufacturing, statistically recorded units of one or two workers represent only a small portion of the total. I make this assumption, first, because during my interviews it became clear that house-workers were extremely reluctant to reveal their economic activity for fear of government inspectors. Second, in the enterprises I was actually able to enter via my connections with friends and relatives, I found that very few buildings did not have at least one household involved in production.[16]

The structure of public sector companies is totally different. The public sector garment industry consists of large, vertically integrated industrial complexes with spinning, weaving and garment production all located within the same company. The largest of these in Shubra is ESCO. Currently employing 6,000 workers, up until the 1990s, ESCO had a workforce of 26,000. The company produces wool products as well as products made from viscose rayon and cotton. The company was established in 1940. In 1963, it was nationalized and combined with other smaller factories surrounding it. Until the early-1980s, ESCO was flooded with massive investments by the state, making it the third largest textile company after Mahalla and Kafr El Dawwar.

It is important to note the massive scale of the company and place it in the context of the predominantly small-scale nature of the rest of the manufacturing sector in Shubra El Kheima. ESCO currently has four cotton spinning mills with a total of 167,000 spindles for the production of combed carded and blended yarns as well as ply yarns. It also has 670 open-end spindles, a viscose-rayon plant of 1,248 spindles producing continuous filament yarns and a weaving mill with 1200 looms producing cotton fabrics. In addition, the company has added a spinning unit for processing wool and wool-blended yarns. This unit contains 2,640 spindles and 66 looms in addition to a finishing unit for processing woolen fabrics. Finally, a complete dye house was built for the

[16] The predominance of small-scale manufacturing in Shubra el-Kheima is a major feature of the city's economy in general, and not only in the textile industry. Thus, over 130,000 workers are employed in 16,000 manufacturing units, over 4,000 of which employ one worker and 92 percent employ less than 10 workers. Only 21 factories have over 1,000 workers and 12 have over 500 (CAPMAS 1996).

finishing and dying of cotton fabrics. The annual production of ESCO has a capacity of 10,000 tons of cotton yarn, 440 tons of viscose rayon, 27 million meters of cotton fabric and 570,000 meters of wool and wool-blended fabrics.[17]

As can be seen from the above description, the city of Shubra El Kheima has a large concentration of textile and garment producers ranging from large vertically integrated mills to unrecorded garment workshops and household producers. It is therefore an appropriate location to study the dynamics of garment production in Egypt. The neighborhood chosen for the unrecorded establishments is called El Wehda El Arabia (meaning Arab unity), it was started as a spontaneous settlement in the 1960s and grew rapidly until the 1980s. It lies to the North of the city, East of the delta railway track. It is important to note that in Shubra El Kheima, with the exception of the old industrial area, which is clearly demarcated as an industrial area, and the public housing estates which are clearly distinguished as residential areas, the rest of the neighborhoods have a varied mixture of residential, commercial and industrial activities. This is the case in El Wehda. The same building can have a grocery shop in the first floor, a plastics workshop in the basement, a garments workshop in the second floor, the rest of the apartments being residential, and a small chicken farm on the roof-top (there is sometimes also a small mosque in the first floor).

The workshops were found mainly in the first floor of residential, multi purpose buildings. The first floors of these building are more like basements in the sense that they were lower than the street level. This had a historical reason. As the neighborhood became settled the state had to introduce a sewage system. Probably due to cost, the pipes were fitted above ground level in the narrow streets separating the rows of houses. The pipes were then covered, raising the street level significantly. For this reason, many of the commercial and industrial activities in the neighborhood take place on the ground floor, since it becomes extremely difficult as a living area. However, other workshops were situated in apartments, in many cases extensions of the workshop owners residence.

[17] Another major textile factory in Shubra El Kheima is the Wooltex company. This was established as a private foreign company in 1937 and was nationalised in 1963. The company specialises in wool and has a spinning section, a weaving section and a garment production section. It employs 5000 workers.

The recorded factories chosen for the study are situated in the old industrial district of the city. This district includes both the large-scale textile mills and garment factories and a large concentration of small and medium sized weaving and garment manufacturing establishments. The latter, which include the garment factories investigated in this study, are situated in long rows of one and two story buildings. In some cases the ground floor would be occupied by a weaving establishment while the second floor would host a separate and independent garment factory or workshop. In other cases both floors would be occupied by one establishment with production in the first floor and the management office in the second.

7. Summary

This chapter provided the framework for the fieldwork conducted by this research. As indicated in the second section, the research is meant to compare recorded and unrecorded establishments, in terms of their labour, marketing channels and cooperation among each of the two kinds of establishments. It was shown why for this type of the research the case study approach is most suitable. I then explained the logic behind the choice of small establishments how they were defined and selected. Following that the chapter detailed the research techniques used; mainly survey, in-depth interviews and field observations. Finally, the chapter ends with a description of the research site, Shubra El Kheima, and where the two kinds of establishments are located within this site.

The next chapter, will investigate labour costs, the production process and working conditions in the unrecorded and recorded establishments. Factors such as recruitment, migration, skills, wages, working hours, child labour, secondary work conditions and labour regulations will be investigated.

CHAPTER SEVEN
LABOUR

1. Introduction

As was shown in Chapter Five, many theories that divide the urban economy into a formal and informal sector assume that one of the main dividing lines between the two sectors lies in the labour market. Thus, it is claimed that there are significant differences in labour costs and real wages, the pools from which labour is recruited, the skills and education of workers, and the working conditions under which work is carried out in the two sectors. In the following chapter a comparison is made between those employed in the unrecorded workshops and those employed in the recorded factories to test these claims. However, before delving into the findings about labour, a brief section will outline the basic findings about the studied establishments, in terms of type of production, years of work, and workforce. I will then start by investigating wages. Wages, however, by themselves do not reflect the real labour costs or real labour conditions. I therefore proceed to investigate work contracts, working hours, and working conditions. Following this, the question of child labour is investigated. As discussed earlier in Chapter Five, the issue is central to the discussion of labour conditions in the unrecorded sector, the research is an attempt to confirm whether child labour is only found in the unrecorded sector or is in fact endemic in the whole industry. I then proceed to compare the recorded factories and the unrecorded workshops in terms of the recruitment of workers, their levels of education and gender differentiation. Significant differences in these areas would suggest different labour market segments.

Finally, the seventh section of this chapter, tests the variance in technologies used by the two kinds of establishments. One of two claims is usually made about the types of technology that are characteristically used in unrecorded industrial establishments. The first, by proponents of the informal sector theory, is that these technologies are usually backward, traditional, non-modern and marginal to mainstream industrial technologies. The second, the exact opposite, by proponents of flexible-specialisation theories, is that they are, at least in some cases, in the vanguard of technological innovation. I will

describe some of the equipment used in the factories and workshops to see if any of this is applicable to garment manufacturing in Shubra.

2. Features of the Studied Establishments

This section presents four tables that summarize some of the basic facts about the 80 establishments that comprise the research's case study. Starting by the age of the establishment, tables 7.1 and 7.2 provide and interesting finding, and difference between recorded factories and unrecorded workshops.

Table 7.1 Age of establishment (workshops)

Less than 5 years	5-10 years	10-15 years	15 + years
32	15	11	2

As can be seen from the above table, most of the 60 workshops under study were established in the last ten years. This is a significant fact, given that the 1990s were the years of the most severe crises in the large-scale textile mills and garment manufacturers. Concomitantly, as table 7.2 shows, unlike the case of the workshops, most of the factories were established more than 10 years ago.

Table 7.2 Age of establishment (factories)

Less than 5 years	5-10 years	10-15 years	15 + years
2	3	6	9

Thus, this is a preliminary indicator to two main findings; the first, as discussed in the reviewed literature in Chapters Three and Five, Egypt is conforming to a worldwide trend of rise in small workshops and decline in factories. Second, that economic crisis that affect factories, do not necessarily affect smaller workshops the same why.

As for the workforce and type of production, tables 7.3 and 7.4 the characteristics of the in-depth studied sub-sample of 20 unrecorded workshops (from the original sample of 60 workshops, as mentioned in Chapter Six) and the 20 factories, respectively. From the two tables it is clear that factories tend a much larger workforce than workshops, so

while the sampled factories have a minimum of 15 workers and a maximum of 52, the workshops have a maximum of 15 and a minimum of 6. However, when it comes to the type of products it is clear that both kinds of establishments work in the same products, but it still remains to be seen whether they seek the same markets in terms of grade and location or not, an issue that will be revealed in Chapter Eight.

Table 7.3 Characteristics of sub-sample of unrecorded workshops

Workshop	Total Workforce	Main Types of Product
A	8	Men's shirts, t-shirts, galabiyas
B	10	Children's shorts, t-shirts, uniforms
C	12	Children's shorts, t-shirts uniforms
D	8	Women's dresses
E	14	Women's dresses
F	9	Islamic dress accessories
G	10	Children's shirts, t-shirts, pyjamas
H	11	Children's shirts, t-shirts, pyjamas
I	6	Men's Galabiyas shirts
J	12	Shorts, t-shirts
K	12	Children's shorts, t-shirts, school uniforms
L	15	Women's dresses, underwear
M	8	Women' s dresses, child garments
N	8	Children's trousers, pyjamas
O	10	Men's Shirts and galabiyas, pyjamas
P	10	Children's shirts, t-shirts, pyjamas
Q	13	Men's shorts, t-shirts, underwear
R	12	Women's dresses, underwear
S	8	Women's Islamic accessories
T	9	Women's dresses

Table 7.4. Characteristics of the recorded factories

Factory	Total workforce	Main Type of Products
A	28	Men's galabiya and shirts
B	52	Women's dresses
C	49	Women's dresses
D	43	Men's trousers, suits, shirts
E	25	Men's trousers, suits and shirts
F	37	Men's underwear and t-shirts, pyjamas, shirts
G	42	Child garments, mainly school uniforms
H	48	Women's dresses
I	32	Women's dresses
J	34	Men's shirts, trousers and school uniforms
K	22	Children's shorts, t-shirts, pyjamas
L	15	Children's shorts, t-shirts, pyjamas
M	20	Women's dresses, Islamic accessories
N	33	Women's dresses and underwear
O	20	Men's pyjamas, galabiyas, underwear
P	19	Men's shirts
Q	41	Men's trousers, shirts, suits
R	18	Children's clothing- mainly for school
S	22	Children's clothing- mainly for school
T	20	Women's dresses, Islamic accessories

3. Wages and Debt

As mentioned earlier, there is a common belief among observers that wages within the unrecorded sector tend to be less than those in the recorded sector, for the same job.

Table 7.5 compares the average daily wages for workers of the sampled factories to those who work in the unrecorded workshops.[18]

Table 7.5 Comparing total daily wage rates

Average daily wage (LE)	Recorded		Unrecorded	
	No. of Workers	%	No. of Workers	%
0-5	93	15	38	19
5-10	316	51	85	41
10-20	123	20	37	18
20-50	75	12	45	22
>50	13	2	0	0
Total	620	100	205	100

As can be seen from the above table, the only significant differences between the two samples are in the 5-10 LE category and the 20-50 LE category. In the former there is a higher percentage of workers in the recorded factories than the workshops (51 percent of workers compared to 41 percent), whereas in the latter category the unrecorded workshops have a higher percentage (22 percent of workers compared to 12 percent). Although this does not indicate that there are significant differences in wages as a whole, it does suggest that there are more workers at the higher end of the wage scale in the unrecorded workshops and more workers at the lower end in the recorded factories.

In order to understand these differences we need to take a closer comparative look at the distribution of wages according to different jobs, which is presented in the following table.

[18] In the tables presented above I used averages for wages. As is inevitable when workers are paid by piece, there were considerable differences among workers operating the same tools or carrying out similar tasks.

Table 7.6 Comparing average daily wage rates by job (approximate percentage of workers)

Av. daily wage (LE)	Cloth cutter %		Sewing %		Accessories %		Over %		Ironing %		Packaging %	
	Rec	Unrec	Rec	Unrec	Rec	Unrec	Rec	Unrec	Rec	Unrec	Rec	Unrec
0-5	0	0	0	0	20	10	30	40	0	0	80	85
5-10	0	0	75	60	80	90	70	60	0	0	20	15
10-20	45	10	25	40	0	0	0	0	40	20	0	0
20-50	55	90	0	0	0	0	0	0	60	80	0	0
Total	100	100	100	100	100	100	100	100	100	100	100	100

From table 7.6 it is clear that the main difference in wages was not that between workshops and factories but rather between different jobs within the establishment. The most skilled job in the garment industry is that of the cutters. These are usually experienced tailors, always male, and are the highest paid. However, the above table also shows that wages for cloth-cutting and ironing, which are the more skilled jobs, are significantly higher in the unrecorded workshops than in the recorded factories.

Thus, unlike the prevalent assumption in the literature, low wages are not an exclusive feature of the unrecorded establishments. Not only was this clear quantitatively from the above statistics, but also qualitatively from the workers I met with. The case of one sewing-operator in a recorded factory is exemplary and instructive. Mohamed has a monthly wage of 300 LE. He is married and has three children. Payments for food and tuition cost him more than 600 LE per month. Both his eldest son and his wife work bringing the total family income to 700 LE. As he explained, without the employment of his son and wife, the family would not have been able to survive on his income alone (Mohamed, *Personal interview*, Shubra 2/2/99). It is important to remember that this is not some unskilled worker in an informal basement sweatshop. On the contrary, this is

the supposedly privileged worker of the formal industrial sector. Sweatshop conditions are not an exclusive feature of the unrecorded sector; they are a feature of the industry as a whole.

Another common feature between workers in the recorded and the unrecorded sectors involved their relation to credit and debt, which is directly related to their wages. In the following table (table 7.7) comparison is made between workers in the unrecorded workshops and workers in the recorded factories in terms of their indebtedness to the owners. In the survey questionnaire, the workers were asked whether they had borrowed money from the owners during their employment and the amounts that were borrowed.

Table 7.7 Comparing workers indebtedness to employers

Amount	**Recorded**		**Unrecorded**	
(L.E.)	No. of Workers	%	No. of Workers	%
No loans	253	41	60	30
0-100	301	49	145	70
>100	66	10	0	0
Total	620	100	205	100

As can be seen from the above table, most workers, in both recorded and unrecorded establishments, had to borrow money from the owner at some point during their employment. In other words for both sectors, wages are not enough to cover financial needs. For both categories of worker they borrowed money to cover for times of particular event, it was during the feasts and Ramadan, at the beginning of the school year and at the time of marriages and deaths. The result of this situation is that the only credit these workers can get is from their employers in the form of advances on their wages. The labour power of the borrower is the only available collateral for any loan.

Work constrained by a debt relationship, is according to both employers and workers interviewed, a common phenomena in the garment industry. Employers incline to present such an arrangement as an advance on wages that is to be repaid with the

labour of the borrower. Such an advance payment, however, is intended to appropriate that labour, whether immediately or later.

However, although wages are slightly better in the unrecorded workshops than the recorded factories, and for both sectors pay wages are not enough during specific events, it seems that the latter provides more work stability than the former. Table 7.7 shows an important difference between the recorded factories and the unrecorded workshops in terms of the frequency and method of wage payment.

Table 7.8 Comparing means of wage payment

Payment by	**Recorded**		**Unrecorded**	
	No. of Workers	%	No. of Workers	%
Monthly wage	341	55	0	0
Weekly wage	29	5	15	7
Daily wage	173	28	63	31
Piece rates	71	12	107	62
Total	620	100	205	100

A majority of workers in the recorded factories (55%) received monthly wages, whereas a majority of workers in the unrecorded sector (93%) were paid piece rates or daily wages. Monthly wages are paid, regardless of the frequency of work orders. Daily wages are paid only when there is work to be done. Hence, monthly wages provide much more stability than daily wages or piece rates

Piece-rate is generally the customary method of payment of labour throughout the garment workshops. The amount is based on what a skilled worker can produce in twelve hours. If the output of a newcomer or an old hand remains below that norm, not incidentally but systematically, then he or she is discharged by the employer who thus puts an end to the underutilization of his capital investment. Furthermore, workers are not paid when production is interrupted. In this research this occurred frequently. There were a variety of causes for such interruptions. Power cuts, machines breaking down, cloth not being delivered, were all causes for short-term interruptions. Longer-term

interruptions were caused by declines in demand, which most owners described by the word "nassib", which means fate. The owner would send his workers away with instructions to report daily until there was work for them to do.

Within the piece-rate, differences in speed, efficiency, skill and experience all led to variations in wage rates. In the case of more skilled workers, especially cutters, the employer pays some of his workers a higher rate per piece than others. These are the more experienced workers who are thus discouraged from going over to a competitor willing to pay the same rate. Employers sometimes, also make use of another method leading to considerable wage differences, especially in the case of the less skilled workers, namely the arbitrary deduction from wages of an amount for damages. Deductions are made in the workers pay on account of damages to cloth or waste of material due to mistakes. Some workers claimed that the low quality of cloth, mechanical defects and problems in the old sewing machines were much more responsible for the waste and damages than mistakes on their part (Mohamed 2, Personal interview, Shubra 10/2/99; Mahmoud, personal interview, Shubra 10/2/99). The workers complained that the blame is always placed on them whatever the real cause for the damage was and their wages were deducted, sometimes severely (Group discussion, Shubra 10/2/99). Moreover, piecework wages are set at a low level and workers forced to work long hours to reach a level of income acceptable to them. One employer, talking about his wage policy, claimed that workers tend to be inflexible about the total amount of earnings but not about the time and effort spent to arrive at those levels (Employer 1, personal interview, Shubra 3/3/99). Workshop workers have very limited ability to reinforce their bargaining position in setting the piecework rate.

Thus, in conclusion, both the recorded and unrecorded sectors have advantages and disadvantages in terms of labour wages. So while the average wages within the unrecorded sector can be higher for the same job than in the recorded establishments, income stability seems much better within the recorded sector. That is, within the unrecorded sector workers' wages are more likely to be decreased or even stopped due to factors outside their control, than is the case within factories. Hence, overall, unlike who the dualist model discussed earlier in Chapter Five would like to claim, negative features in terms of wages and employment conditions, are common within both the 'formal' and

the 'informal' sectors. However, to further sketch out this conclusion we need to look into other aspects of employment. Thus, wages must be placed in the context of legally inscribed benefits, working hours and conditions and productivity if we are to get a more accurate picture of labour conditions in the garment industry. This is detailed in the following section.

4. Work Contracts, Secondary Terms of Employment, and Working Hours

The phrase 'secondary terms of employment' has acquired the meaning of conditions and benefits that the worker may be able to claim in addition to his/her wage. Derived from regulations applicable mainly to employment in the public sector, it is not surprising that such provisions are lacking in the unrecorded garment workshops. However, it is important to note that these secondary terms of employment only apply to workers who have a registered work contract. So what is interesting is that, being a worker in a registered and recorded factory does not guarantee having a work contract and therefore does not mean having automatic access to secondary terms of employment.

Table 7.9 Workers with and without contracts in factory sample

Job	Workers with contracts (%)	Workers without contracts (%)
Cloth cutting	80	20
Sewing	30	70
Accessories	15	85
Overall	10	90
Ironing	65	35
Packaging	10	90
Total	35	65

As can be seen from the above table, sixty-five percent of the total workers in the recorded factory sample do not have work contracts and are therefore not eligible for secondary employment. The main concentration of contracted workers is among the cloth cutters and ironers, since those are the highly skilled categories for which employers fear competition. This is followed by the sewing operators, from which thirty percent have

contracts, while and around ninety percent of the other categories of workers do not have contracts.

According to Egyptian law it is illegal to employ a worker for a period of more than three months without a work contract between employee and employer that is registered with the Work Office.[19] However, employers manage to overcome this provision of the law by pressuring labour to continue to work without a contract, which they accept because of lack of job opportunities, and through bribery of Work Office inspectors, which is the only way to ensure that workers have contracts.[20] Of the twenty factory owners interviewed, sixteen admitted to bribing Work Office officials. One factory owner explained how the salaries of the inspectors that came to check on his factory were in many cases lower than those of some of his workers (Employer 2, *personal interview*, Shubra 12/3/99). Thus, a small bribe would end the inspection to the owner's advantage. In another case, a factory owner paid a regular salary to a work office official, and therefore was never bothered with factory inspections (Employer 3, *personal interview*, Shubra 14/3/99). Although the level of corruption of the work office was not a surprise, the extent to which factory owners were prepared to talk openly about it was. There was no attempt to conceal the system of organized bribery of officials, in fact owners seemed to be proud of their ability to get around the state bureaucracy.

Only workers with a work contract are entitled to the legal rights that are stipulated in the labour law. These include: 1-medical and social insurance, contributed to by both employer and employee; 2-the right to file a legal complaint in case of unfair treatment; 3- the right to a yearly three week paid leave; 4- in case of a lay off, the right to get a hearing from a committee composed of a union representative, a work office representative and a judge who must all agree to the rightfulness of the employer's decision before the worker could be fired. These are just a few of the benefits that come with a work contract.

These benefits are denied to workshop workers, and equally lacking to the majority of labour in recorded factories. Medical facility, weekly holiday and statutory

[19] The Work Office was set up by the Nasserist regime in 1961 to make sure that the 'socialist' labour laws were implemented. Until now it is the only mechanism for the inspection of labour conditions.
[20] The office sends inspectors on both random and regular visits to factories and other registered workplaces.

leave are completely denied to the workshop workers. The only signs of secondary labour conditions do not concern rights but duties to which the workers have to adhere in order to get employment and then keep it. This system of unwritten rules lays down what the employer considers to be desirable work behaviour: to show maximum flexibility, to accept the wage, to work overtime when necessary, and to accept any interruption. It is important to note that the absence of any positive secondary terms of employment was not a feature only of the unrecorded workshops. The majority of workers in the larger factories suffered similar conditions, with no extra wage provisions or benefits. Only those with permanent job contracts had access to such provisions, and even these had to struggle in many cases to get their rights enforced.

Even with workers who do have contracts, the owners can circumvent the law. A worker in one of the factories with 30 workers described how owners made the workers sign an undated letter of resignation on their first day of work (Mostafa, *personal interview*, 3/2/1999). This tactic allows the owner to fire the worker whenever he/she wishes to, by putting in the date on the resignation letter, but also the worker would be constantly under threat and would be unwilling to complain to the Work Office in case of violations against him/her. According to the interviews, this tactic is quite common in the cases studied, although I could not get accurate numbers because not all workers were prepared to talk about their contracts and not all owners allowed us to interview all the workers. Another aspect concerning contracted work is that, according to the law, payments for medical and social insurance are to be divided between the owner and the worker. What happens in practice is that the employers' share is often subtracted from the worker's pay (Mikhail, personal interview, 3/2/1999; Raga, personal interview, 3/2/1999). In fact, for this reason, many workers prefer not to have a contract.

Take for example, the case of an owner of a garment factory employing 42 workers with only 15 contracted workers, who argued that for him the labour law was archaic. He alleged that no one in the garment industry could afford to follow this law. The problem, according to this owner, was not only that the benefits stipulated by the law were too expensive for employers, but more importantly that the law made it extremely difficult to fire workers with permanent job contracts (Employer 4, Personal interview, 9/3/1999). The employer wishing to get rid of a worker was required to take his case to

the Work Office, which would then appoint a committee including representatives from the general union for textile workers that would look into the matter. Only in cases of violence, sabotage or other serious offences would these committees agree to the request by an employer. He alleged that even in cases of long term absence by a worker, the employer would have to go through long term procedures of issuing a first and then second warning before bringing the case to the attention of a Work Office committee (Employer 4, Personal interview, 9/3/1999). But again, these rules applied only to workers with full time work contracts. In the same vain, another factory owner said, that the law was designed in a completely different era when the state owned most industries and could afford to give the workers what he considered to be lavish provisions (Employer 5, personal interview, 9/3/1999). He complained that the state had not yet changed the law after ten years of promises.

The current labour law stipulates the maximum hours to be worked by any employee is eight hours a day for six days a week. Any hours above the maximum should be counted as over time with from 1.5 to 2 times the hourly wage. These rules apply neither to the workshops nor to the factories in our study. In the case of the factories normal working hours were from nine in the morning to seven in the evening. This was the minimum. When there is a large order and a deadline to catch the workers could be kept until 10 in the evening. This, according to several owners happens throughout the busy season, before feasts, at the beginning of the school year, at the beginning of the summer season. There are no over time arrangements, workers put in whatever extra hours of work that are demanded of them by the employer. In the case of the workshops working hours are even worse. Work starts at eight in the morning and continued as long as there was work to be done, sometimes until midnight (with the exception of non-family female workers who were released at nine). Thus, for the factories the average daily hours out of busy-season was nine, while the average hours in the busy-season were thirteen. For the workshops the average hours of work, when there was work, ranged from 10 to 15 hours.

Even if we assume that the garment factory workers do only nine working hours a day, and they did this for six days, this would mean a working week of 54 hours, compared to the 48-hour week of the contracted public sector worker, (which is still high

by world standards). If we take the comparison one step further, we would find that the garments worker in this research works for 312 more hours per year than a public sector contracted employee. This means 39 extra eight- hour working days per year.

In conclusion, the above findings suggests that the effects of labour regulations on employment conditions in the factories was limited by the fact that most workers in these factories did not have work contracts and therefore their employment conditions were not affected by the law. Furthermore, many of those who had contracts did not benefit from the rights provided by the law. This challenges the aforementioned assumptions, detailed in Chapter Five, about labour regulations acting as a dividing line between the 'formal' and 'informal' establishments, raising labour costs in the former and reducing them in the latter, as well as 'protecting' labour in the former and 'unprotecting' it in the latter.

5. Child Labour

In a sociological study on child labour in the informal sector in Egypt, the focus was placed on why the child or his family 'choose' to go out to work i.e. on the supply of child labour. The only aspect of demand for child labour was that of the vices of 'informal workshops' and their employers who employ children from behind the back of the state and of legislation (Azir 1992). However, unlike this common understanding that was detailed earlier in Chapter Five, the findings of this research confirm that the whole garment industry seems to exploit child labour with the direct or indirect acquiescence of the state. The employment of children in the garment industry is a function of demand for low wage, low skill labour in some of its production stages, and is protected by a state which does not impose its labour legislation.

In terms of both number of children employed and the working conditions, the 'formal' sector factories did not fare better than the 'informal' sector workshops. Table 7.10 shows that child labour is a common feature of both recorded factories and unrecorded workshops. Both the factories and the workshops employed children below the minimum legal age. And although within the recorded factories the percentage of child labour was 9 percent of the labour force, as opposed to 16 percent within the unrecorded workshops, the difference in percentage is not that significant, especially that the absolute numbers of children employed in the 20 factories is much more than their

peers in the 20 sub-sample workshops featured in the table. In both kinds of establishments, the average age of child labourers was 10 years.

Table 7.10 Comparing age distribution of workers

Age group	**Recorded**		**Unrecorded**	
	No. of Workers	%	No. of Workers	%
6-14	59	9	33	16
15-19	31	5	29	14
20-29	122	20	68	33
30-39	208	33	50	24
40-49	156	25	19	9
50-59	44	7	6	3
Total	620	100	205	100

In terms of type of work in both the factories and the workshops child workers played a central role. They worked in a variety of occupations, moving tools, cloth pieces, threads, buttons and zippers between the different work positions. The only difference in type of work is that in seven of the factories there were girls less than 14 years old working on the sewing machines, and in all the factories the packaging process was carried out by young girls.

In the sub-sample of workshops, the abusive working conditions of child labourers were not significantly different from those in the factories. I was able to talk to ten children from the factories and ten children from the workshops (all boys). Only four of the twenty children had been to school and these had dropped out after the second year.[21] In both groups beatings by the employer and by older workers were often a regular occurrence. These would range from slaps and punches on the face to serious caning, depending on the perceived mistake. The child is sometimes beaten if he brings

[21] It must be noted that primary education is compulsory in Egypt.

the wrong tool, the wrong size of scissors for example, if he in any way answers back, if he is sent to the market to buy something and takes too much time...etc. In the case of workshops, employing a child is sometimes seen as a favour from the owner to a neighbouring family and the parents would be as harsh with the child as the employer.

Thus, it is clear from the above findings, that the supposedly ' formal' sector is not any different from the 'informal' in terms of being a safe haven for child labour. The violation of labour regulations prevalent in the two sectors with regard to adults –as shown in the previous section- is equally pertinent to child labour. Hence, the prevalent assumption within the "dualist model" literature regarding the demarcation of the two sectors even in respect to child labour is fallacious.

6. Features of Recruited Labour

The final hypothesis with regards to labour, is that of their origin. As noted earlied in Chapters Three and Five, dual model theories, assume that the ' formal' and 'informal' sectors tend to attract different pools of labour. Thus, if the sample factories of this research were part of the so called formal sector, as they are recorded, tax paying and regulated establishments, and if the workshop sample were part of the so called informal sector, then according to the dual labour market theory the two groups should be recruiting their labour from different markets. The former from the urban, relatively high wage labour market and the latter from the low wage marginal and migrant labour market. In this section I compare the recruitment of workers in terms of the place of their origin (migrant/non-migrant), their educational attainment and their gender distribution. Significant differences would suggest a division in the labour markets between the two types of establishments.

With respect to the origins of recruited labour, table 7.11 shows that only a small percentage of both workshop and factory workers are first generation migrants (15 percent and 25 percent respectively) and none are recent migrants. All the workshop workers were living in Shubra before being recruited to their current job, and 90 percent of the factory workers were also from Shubra. Thus, not only are the workers of workshops of the same origins, but moreover unlike the assumptions of the dualist model theories less of the 'informal' sector workers are first generation migrants.

Table 7.11 Comparison of labour origins

Origins	Recorded %	Unrecorded %
First generation migrant	25	15
Second generation migrant	70	60
Lived in Shubra before job	100	90

To further test the demarcation between the two sectors in terms of labour, the following table compares the previous employment of the workers of the two groups. The aim is to find out to what extent there is labour movement and fluidity within and between the recorded and unrecorded establishments.

Table 7.12 Comparing previous employment

Previous	Recorded		Unrecorded	
Employment	No. of Workers	%	No. of Workers	%
Recorded factory	280	45	60	30
Unrecorded workshop	154	25	103	50
Other	186	30	42	20
Total	620	100	205	100

Contrary to the basic premise of dual models theory, table 7.12 shows that there is significant movement both between and within the two types of establishments. For the factory workers, 45 percent had previously worked in other recorded garment factories and 25 percent were previously employed in unrecorded workshops. For the workshop workers, 30 percent were previously employed in recorded factories and 50 percent worked previously in other unrecorded garment workshops. These results strongly contradict the idea, put forward by dual labour market theory that labour mobility is only from the informal sector to the formal one, and that the informal sector is only a stepping-stone for migrants wishing to join the formal sector.

If both the factories and the workshops recruit from Shubra, and if there is movement from the workshops to the factories and vica versa, then it seems that we are dealing with a single labour market.

However there is, in Shubra El Kheima a dividing line in terms of labour recruitment, this does not distinguish between recorded and unrecorded sectors but between the public sector and the private sector as a whole in terms of skilled jobs. This division is based on education. Skilled workers in the public sector must be either graduates of the industrial secondary schools or the factory training schemes. A worker without such qualifications, however skilled, would not be recruited to the public sector. It is important to note that this division only involves the recruitment of skilled labour. In terms of unskilled labour the public sector recruits from the same pool as the private sector. It is also important to note that since the economic reform process began in the early 1990s the public sector factories have reduced their workforces significantly; hence this difference is gradually disappearing within the garment labour market. As for eductational attainment as a dividing line between the recorded and unrecorded sector, the results are complex. The following table compares the educational attainment of workers in unrecorded workshops and recorded factories of this study.

Table 7.13 Comparing educational attainment

Education	**Recorded**		**Unrecorded**	
	No. of Workers	%	No. of Workers	%
Illiterate	121	19	53	26
Read and write	162	26	93	45
Less than intermediate	184	30	48	23
Intermediate	66	11	7	3
Higher than intermediate	59	10	4	2
University	32	4	0	0
Total	620	100	205	100

As can be seen from the table 7.13, in general, workers in the recorded factories had a higher formal educational attainment than workers in the unrecorded workshops; 25 percent of the former had intermediate or higher education compared to only 5 percent for the latter. However, there were more workers who could only read and write within the workshops than in the factories (45percent versus 26 percent, respectively). The

percentage of illiterates was close in the two types of establishments (19 percent for the factories compared to 26 percent for the workshops).

In general, the degree of skill required for industrial work in the workshops and factories of our study varied considerably, but in general, access to a trade was not tied to formal education. While applicants for a public sector factory are expected to have at least a diploma from an industrial training institute, workshop and private factory workers have to pick up their skill on the job. Sometimes they follow an apprenticeship lasting a few months, but more usually they learn by helping an experienced worker. During this training phase newcomers are paid little if any wage.

As for difference in the supposedly two labour markets based on gender, table 7.14 shows that the majority of workers in both sectors are female with 76 percent for the unrecorded workshops and 60 percent for the recorded factories. The predominance of female labour in the garments industry is a general phenomenon in the private sector garments industry on a national level (CAPMAS, 1998).

Table 7.14 Comparing Gender distribution

Gender	**Recorded**		**Unrecorded**	
	No. of Workers	%	No. of Workers	%
Male	249	40	49	24
Female	371	60	156	76
Total	620	100	205	100

However if we compare these results with the percentage of female labour in the public sector garments industry, which is less than 30 percent on a national level (CAPMAS 1998), then we can see that there is a significant difference, not between recorded and unrecorded establishments in Shubra, but between the private and the public sector garments industry. In order to get a clearer picture of gender distribution in the establishments of our study, we need to disaggregate the data to find out how this distribution takes place according to the different jobs within the establishments.

Table 7.15 Comparing Gender distribution according to job

Job	Recorded		Unrecorded	
	Male %	Female %	Male %	Female %
Cloth cutter	100	0	100	0
Sewing	5	95	0	100
Accessories	25	75	10	90
Ironing	70	30	90	10
Packaging	15	85	5	95

The above table (7.15) shows a strong concentration of female labour in sewing, accessories and packaging, which is the same for the two types of establishments. High skilled jobs, cloth-cutting is an exclusively male job, and ironing is also male dominated in both workshops and factories.[22] Again, as with migration origins, the differences in gender distribution, even when disaggregated, between the recorded factories and the unrecorded workshops is insignificant.

7. Technologies and the Labour Process

Finally, another element that supposedly differentiates the 'formal' from 'informal' sector is the use of technology. As noted in Chapter Five, "dual models" assume that the formal establishments are more modern and technologically advanced in terms of their production process than the informal sector, which is supposedly 'traditional' and 'backwards'. Therefore, in this section I will describe and compare the three main processes in the recorded factories and unrecorded workshops. The aim is to find out whether there are significant differences in the technologies and tools used in both groups. The production of garments involves several basic stages. The first stage is

[22] If we relate these results with our previous results on wages, we find that females, although a majority of the workforce, are concentrated in the lower end of the wage and skill spectrum.

the cutting of the cloth on the basis of the particular pattern of the job order. The second stage, is the sewing of the cloth pieces, followed by the covering in which the cloth edges are pressed in, to prevent the cloth unraveling. The final is the ironing stage.

7.1. The cutting stage

Setting up the markers and cutting the garments is a relatively complex and skilled process. The general objective of the cutting is to get the most pieces out of the cloth possible. However the pattern of the cloth affects where to put the markers. The thickness of the stack of cloth will affect the difficulty of cutting as will how close markers are laid. A calculation must also be made about the thickness versus the length to make the quickest cut with the least possibility of error. The process includes spreading out, on top of each other, a number of lengths of cloth. The number of pieces in each garment and different sizes of garments must be known so that optimal length of cloth and number of layers can be determined. The key problem is to lay the cloth layer by layer, so that it is stretched neither too loose nor too tight. On the top layer, cut out templates of each piece are laid to guide the cutting and to minimize the excess cloth required to make the garments.

There are three methods used to cut the cloth into the required patterns. The first is using a manual cutter. A skilled worker would use a drawn pattern to follow and would manually cut the cloth to shape. This method is both time costly and produces the most waste in terms of cloth. The second method is using an electrical cutter. Again the method is similar to the manual one although much faster and more accurate. The third and most advanced method is the use of a computerized cutter. The pattern is fed into a computer programme and the machine basically sucks in the cloth from one side and produces the cloth cuttings with the desired patterns from the other side. This is the most efficient and rapid method for cutting the cloth.

None of the establishments studied in this research used a computerized cutter. As table 7.16 shows, the electric cutter is the standard used in the factories. In the workshops exclusively manual cutting is still used by a slight majority of establishments; 52 percent as opposed to 35 percent within factories. A significant minority of factories still use only manual cutting (15 percent), which is not far away from the percentage of

workshops using the same method (23 percent). However, while only half the factories use electrical cutting exclusively this percentage is reduced by half for workshops using this technology (Table 7.16).

Table 7.16 Comparing cutting technology

Type of establishment	Manual only		Electric only		Mixed	
	No. of Establishments	%	No. of Establishments	%	No. of Establishments	%
Recorded	7	35	10	50	3	15
Unrecorded	31	52	15	25	14	23

7.2. The sewing stage

After the cloth has been cut, it is sewn. Three production systems can be identified, which differ by the degree of labour specialization and capital use: the whole garment production system, the subassembly production system, and the progressive production system. In the whole garment system, one individual completes most of the garment. In the second system, the subassembly line system, different parts of the garments are processed with several workstations or assembly lines making pieces of the garment at the same time. Relative to the whole garment method, this method allows greater specialization of labour and requires more use of capital, such as conveyers, carts and more specialized sewing machines. In the third system, the progressive bundle system, different operations or jobs are never done simultaneously. In the second and third systems, the amount of specialization differs according to the type of clothes being made and the specialized machinery available. As Solinger puts it, " no definite answer can be given as to which production system is best unless the garment style, specifications, working force, and manufacturing policies are known" (Solinger,1980: 445)

As a generalization, the smallest firms use the whole garment production methods, the medium firms often use some version of the sub-assembly system, and the largest firms use the progressive bundle system. These are the best systems for each size of firm because the smallest firms can obviously not specialize, the medium firms often use several rooms in an older building and find it is better to split the production process

into separate parts, and the largest firms have fixed lines for long production runs and can use the very specialized and capital intensive progressive bundle systems.

In the sampled workshops and factories of this research, two types of sewing machines were found to be used. Mechanically driven Singer machines, which are half a century old and driven by a foot pedal. Or electrical sewing machines, much smaller in size and faster than their mechanical ancestors. The following table compares the use of each of the two types in both factories and workshops studied in this research:

Table 7.17 Comparing the use of mechanical and electrical sewing machines

	Mechanical only		**Electrical only**		**Mixed**	
	No. of Establish-ments	%	No. of Establish-ments	%	No. of Establish ments	%
Recorded	0	0	18	90	2	10
Unrecorded	10	17	35	58	15	25

As we can see from table 7.17, the majority of both factories and workshops use electrical sewing machines only (90 percent and 58 percent respectively), and a minority in both groups use both electrical and manual machines. Only 17 percent of the workshops did not use any electrical machines, while none of the factories did not have electrical machines.

7.3. The ironing stage

In this stage there are three basic technologies used. The most advanced and efficient are the large press irons in which the finished folded piece is pressed in one single stage. Another method is the simple electric iron, which is used manually. The third method is the stove iron, which is kept on a stove and used manually. The following table identifies the use of each type in the two sectors (recorded and unrecorded):

Table 7.18 Comparing types of irons used

	Press iron		Electric iron		Stove iron	
	No. of Establishments	%	No. of Establishments	%	No. of Establishments	%
Recorded	8	40	19	95	0	0
Unrecorded	0	0	42	70	18	30

The above table (7.18) shows that the majority of both factories and workshops use electric irons. However, while 40 percent of the factories also use press irons, only one of these factory uses solely this kind of advanced tool. On the contrary, 30 percent of the unrecorded workshops still use a stove iron exclusively, while none use press irons.

The above comparisons of the technologies used in factories and workshops suggest that the differences are minor. This contradicts dualist theories which place the former in the 'modern', 'formal' sector, and the latter in the 'traditional', 'informal' sector. In fact, if there is a technological advantage, such as in the ironing stage, it is in the larger scale of production in the factories compared to the workshops. Several economies of scale exist in the production of garments. The cutting process has substantial economies of scale, at least in the time involved per unit. Since few people and limited machinery is involved, even in the larger firms, the cost per unit of cutting probably drops dramatically as well. Because the skilled labour involved in cutting is scarce, larger firms are able to make better use of that resource. There are also economies of scale in the cloth usage in the garment cutting process because the amount of extra cloth required is minimized.

In the sewing process, there is a fixed lower limit in the production of a garment, which is a function of the speed of the sewing machine and the number of stitches. The limit is never approached because the garment must be repositioned and reinserted into the machine. A factory manager remarked that more than 75 percent of the time required to sew a garment was taken up by handling, and this is in a large relatively modern facility. The single worker using the whole garment production process needs several times the handling as in the larger modern facility. There are economies of scale because the production can be reorganized to reduce handling costs.

The economy of scale mainly occurs as a function of the size of a uniform order. The set up time for a line production operation is quite long, so down-time between production runs can be long, especially if the products being made are different. For small orders it is less costly for the whole garment method to be used. However, as we shall see in the following chapter, the advantages of the division of labour *within* the larger recorded factories is compensated in the case of the unrecorded factories through cooperation and division of labour *between* the different units.

8. Summary

Based on my fieldwork in Shubra El Kheima, this chapter compared labour and production processes in recorded and unrecorded garment establishments. In comparing wages in recorded factories and unrecorded workshops, the only significant difference is in the higher skilled jobs for which wages are higher in the workshops than in the factories. The main differences in wages are not between the recorded and the unrecorded establishments but between different jobs within the establishments. Piece rates and daily wages are the predominant means of wage payment in the workshops as opposed to monthly wages in the factories. In both cases it is common for workers to enter debt relations with their employer, and these debts are repaid with the labour of the borrower.

The majority of workers in the factories do not have work contracts. Those who did, were concentrated in the higher skill categories. Nevertheless, having a work contract does not guarantee the benefits stipulated by the labour law. Employers use various means to evade following the law, including the bribery of Work Office officials and forcing workers to sign undated letters of resignation. Average working hours are similar for both groups, far exceeding the eight-hour limit set in the labour law. Similarly, child labour is a common feature in both types of establishments with widespread mistreatment by employers, low wages and long working hours, despite supposedly strict laws prohibiting it.

In terms of recruitment, the majority of workers in both types of establishments are second and third generation residents of Shubra El Kheima, suggesting that both recruited from the same pool of labour and that recent migrants were not a significant

source of labour. There is significant mobility of labour between workshops and factories, and this does not only, or predominantly take place from unrecorded workshops to recorded factories. Many workers move from the latter to the former. There was also significant mobility within each category. In terms of education, a higher percentage of workers with formal education was found among the factory workers. However the percentage of those with less than intermediate education was similar in both cases. And lastly, female workers represented the majority of the workforce in both types of establishments. Female labour is concentrated in the lower skill, lower wage jobs. Sewing is predominantly a female job and cutting and ironing a predominantly male job.

In terms of technology used, the factories used a higher percentage of electrical equipment, although a majority of workshops had already turned to using modern electrical equipment. However, when aggregating the comparisons in the different stages of the production process- cutting, sewing and ironing- there was no qualitative difference in technology between the two types of establishments.

Overall, these findings disqualified the different premises made by dual model theories, in distinguishing 'formal' from 'informal' labour markets. In the next chapter I will move out of the workplaces and into the marketplace to find out how the establishments procure their raw materials and how they market their finished products. And if there are any major differences between the recorded and the unrecorded ones within the marketplace.

Interviews:

Employer 1. Owner of an Unrecorded Workshop. *Personal Interview*. Shubra El Kheima: 3 March 1999.

Employer 2. Owner of a Recorded Factory. *Personal Interview*. Shubra El Kheima 12 March 1999.

Employer 3. Owner of a Recorded Factory. *Personal Interview*. Shubra El Kheima 14 March 1999.

Employer 4. Owner of a Recorded Factory. *Personal Interview*. Shubra El Kheima 9 March 1999.

Employer 5. Owner of a Recorded Factory. *Personal Interview*. Shubra El Kheima 9 March 1999.

Mohamed. Worker in a recorded Factory. *Personal Interview*. Shubra El Kheima: 2 February 1999.

Mohamed 2. Worker in an Unrecorded Workshop. *Personal Interview*, Shubra El Kheima: 10 February 1999.

Mahmoud. Worker in an Unrecorded Workshop. *Personal Interview*, Shubra El Kheima: 10 February.

Mostafa. Worker in a Recorded Factory. *Personal Interview*. Shubra El Kheima: 3 February 1999.

Mikhail. Worker in a Recorded Factory. Personal interview. Shubra El Kheima: 3 February 1999.

Raga. Worker in a Recorded Factory. Personal interview, 3/2/1999)

N.B. For all interview entrees, only the first name of the interviewee was mentioned in order to guarantee anonymity.

CHAPTER EIGHT
PRODUCTION AND TRADE

1. Introduction

In the previous chapter, I attempted to show how the small-scale garment industry in Shubra El Kheima is characterized by sweatshop labour conditions with low wages, long working hours, no benefits or security and the systematic use of child labour. I also found that, although the unrecorded smaller establishments had bad labour conditions in general, the recorded larger establishments were also characterized by similar conditions and evaded labour regulations. These findings contradict the arguments put forth by advocates of dual model theories.

In this chapter, it will be argued that the small-scale garment establishments in Shubra El Kheima cannot be categorized in terms of modern/ traditional dichotomies – adhered to by theorists of the dual model- and that they are, in fact rapidly integrating into the global textile industry. In the following sections, I compare the sources of raw materials, marketing channel, level of cooperation and import challenges for each of the two types of establishments respectively to show the difference, and to what extent to these differences result from the recorded sector being more 'modern' or advanced. Although, there are differences between the recorded and unrecorded establishments in terms of sources of their raw material, marketing channels, and level of cooperation amongst each type of establishment, these differences do not fit the modern/traditional dichotomy Finally, the chapter ends with a summary of the findings in five sections of the chapter.

2. Comparing Sources for Raw Materials

As shown earlier in Chapters Two and Four, garment production in Egypt has been dominated by the state controlled sector and was heavily regulated through the control of cotton yarn. Also, although liberalization has been the main policy since the early 1990s, the cloth trade and production continue to be heavily regulated by the state. Bearing in mind those regulations, the owners of the sample of recorded and unrecorded garment producers were asked to give estimates of the proportions of cloth used during

the past year according to source. The results they gave were informative not only of the variance between workshops and factories, in terms of their raw material markets, but also of how the state regulations affect the garment sector in general. The results are summarized in the following table:

Table 8.1 Comparing main sources of cloth

Source of cloth	**Recorded %**	**Unrecorded %**
Egyptian cloth (wholesalers)	65	15
Egyptian cloth (brokers, retailers)	25	10
Imported cloth (legal-drawback system)	10	0
Imported cloth (illegal-through brokers)	0	75
Total	100	100

As can be seen from the above table (table 8.1) 90 percent of cloth used by recorded factories is Egyptian cloth bought either directly from wholesale markets, or indirectly through brokers, compared to only 25 percent in the case of unrecorded workshops. Legally imported cloth represented only 10 percent of input for the recorded factories. These quantities were procured through the drawback system, which allows factories to buy specific quantities of cloth only for use in the production of garments for exports. There are two main sources of cloth; cloth imported, either illegally or through the draw back system, and Egyptian cloth from the main textile companies. Egyptian cloth is sold to wholesale cloth traders or directly to the large-scale garment producers. The wholesale traders are the main source of cloth for the garment factories in our sample. The imported-cloth enters the market through two main channels, both illegal. The first is through smuggling, mainly from the free zone areas such as Port Said. The second is through large private sector garment producers, selling cloth that is allocated

for re-export. The imported cloth is purchased by traders and brokers who then distribute it to workshops and collect the finished products.

It is important to note that the above are only the main channels for the procurement of cloth. The cloth trade is more complex and involves other secondary channels and sources and mixtures of imported and local cloth. However, the evidence suggests that the unrecorded workshops and the recorded factories procure different cloth through different marketing channels. The former use illegally imported cloth procured through brokers and the latter use Egyptian cloth procured through legal wholesale traders and brokers for retailers.But the question remains as to why did these factories not make more use of the draw back system introduced by the government in the early 1990s? The whole idea of the drawback system was to get around the problem of the high prices of local cloth and to try to encourage garment producers to export.

In fact two of the factory owners had tried to export through the draw back system, but it turned out to be a negative experience for them. According to them, detailed and illogical demands by the government agency supervising the draw back system made it impossible to continue successfully (Owner of Factory A, personal interview, 13/3/99; Owner of Factory B, personal interview, 13/3/99). A factory owner who went through the experience explained how the officials would refuse to deduct wasted cloth from the total quantity of cloth used to produce the pieces for export, regardless of the cutting pattern used. Thus, the owner would end up paying the full tariff for cloth that was not and could not be used (Owner of factory A, personal interview, 13/3/99).

It seems that the only area of legislation and inspection that the government agencies actually imposed with any degree of strictness was those concerning the origins of cloth used in garment factories. In interviewing garment factory owners it was revealed that prices for locally produced cloth and the heavy restrictions on cloth imports were a major obstacle to the survival of the industry. According to one factory owner, the government was suffocating the industry by restricting their access to imported cloth and forcing them to use the more expensive Egyptian cloth, through import restrictive regulations (Owner of Factory B, personal interview, 13/3/99). In prioritizing the problems they faced, all 20 in our factory sample were unanimous in their view that this

was the main problem faced by the industry. The factories are put in an extremely difficult position. They are not allowed to use imported cloth except in very restricted quantities for exports. At the same time, the available Egyptian cloth is much more expensive than the imported cloth and the market is full of illegally imported cheap garments. Their products cannot compete.

According to factory owners, imported cotton cloth, without tariffs, can cost from 20 to 30 percent less than locally produced cotton cloth. This might seem peculiar, given that Egypt is a traditional cotton producer and has a well-established cotton textile industry, with relatively low labour costs. How can imported cloth, with all the added costs of transportation and storage be that much cheaper than the readily available Egyptian cloth?

As I have explained earlier in Chapter Four, this problem is of historical and structural nature. The cotton produced in Egypt is of high quality and cost and occupies a niche in the world market. However, the emergence of the US as a major competitor for high quality cotton, and the general instability of the world cotton market has meant that large quantities of Egyptian cotton must be consumed locally. This is achieved by a ban on the import of cheaper lower grade cotton so the Egyptian textile mills are forced to use the more expensive Egyptian cotton. The result of this, added to the general inefficiency and low productivity of the large-scale vertically integrated public sector textile mills, is that the cloth produced has prices that are 20 to 30 percent higher than imported cotton cloth. Again the government solves this problem through a ban on cloth imports, thus forcing garment factories to use the more expensive Egyptian cloth. This system worked fine as long as the Egyptian consumer had no choice but to buy Egyptian made garments. As long as he/she was forced to pay 20 to 30 percent more than world prices, the industry was kept afloat. But the influx of imported garments through illegal smuggling has meant that the consumer can find cheaper and in many cases better quality garments than what he or she was forced to buy previously.

The location from which factory owners get the cloth is also indicative of some aspects of the textile industry. In the survey conducted during fieldwork, 15 of our 20 factories procured cloth from Al Azhar wholesale cloth market in central Cairo, which seemed peculiar since some of the major cloth producers were situated in Shubra. A

factory owner in one of the interviews explained that they used to buy their cloth from the wholesale market in Shubra but that they now depended mainly on the Cairo markets. Although this costs them more in terms of transport costs, the difference in terms of variety and quality are, according to him, worth the expenses. The Cairo markets get cloth from all over the country, and some of the best available Egyptian cloth is now produced in the private sector companies of the new industrial cities. The Shubra market has a much narrower variety. Another factory owner complained about the quality of cloth produced in Shubra, explaining that it has been deteriorating for years (Factory Owner C, personal interview, 15/3/99). The textile companies have not changed or modernized their machinery for decades. The cloth they produce is full of imperfections and a lot of it goes to waste. A possible explanation for this problem is that the cloth producers have depended since the 1960s on stable non-competitive demand from the major public sector cloth wholesale traders and distribution centers. Therefore there was very little pressure on them to modernize their plants. The increasing import competition of recent years has suddenly exposed them to competitive pressures from which they had been protected for decades.

In contrast to the sources of cloth for factories, outlined above, the main source of cloth for the unrecorded workshops comes either from contractors with specific job orders or from individual customers, again with specific demands. Contractors provide the cloth and the design and agree on a deadline with the workshop owners. They then collect the finished products at a set date. In the study survey, 75 percent of cloth used by workshops was reported to be imported cloth. When asked how they knew it was imported cloth, a whole host of distinct characteristics were described, including the quality of dying, the density of the threads, and other more technical characteristics. As one workshop owner explained, the source of the cloth is irrelevant to them, as the contractor is in full control of that aspect of the business, but that imported cloth was of better quality, producing less waste and solves the problem of chronic shortages that used to occur with Egyptian cloth (Workshop Owner A, personal interview, 12/3/99).

The contractors are always from outside Shubra, either from Cairo or Giza. According to the workshop owners they get their cloth from Port Said. The city of Port Said was completely destroyed during the 1973 war with Israel and the population was

evacuated. In 1976 the city, one of the main trading ports in Egypt, was made a free trade area, in an attempt by the government to revive the economy after the 1973 war and lure the refugees back to their city. The decision also coincided with the beginnings of the economic liberalization programme initiated by the Sadat regime. The logic of the government was to make the city a re-export center where goods would be imported with no tariff, would be processed in Port Said, and then exported again directly from Port Said without entering the local market.

In practice a completely different process took place. It became the main entry point for luxury goods for the Egyptian elite. Starved from imported consumption goods since the 1950s, their demand for imports was insatiable. Traders began to devise ingenious ways of getting the goods past the tariff controllers at the borders of the city and into Cairo. A combination of corruption and turning a blind eye by the regime made this process into a booming trade. Because most of the items imported were luxury goods-electronic equipment, signature garments and exotic foods- they were not in direct competition with Egyptian industries, the process did not present any direct threat to the majority of local industries.

In the 1990s however cheap Asian cloth and garments became the major import items in Port Said. Since protectionist measures on other goods like foods and electronics were relaxed, traders turned to the last remaining bastion of protection, textile products. One of the contractors that I was able to interview explained that there was another important source of imported cloth, which was the drawback system (Sayed, personal interview, 15/3/99). As explained earlier, private sector companies are allowed to import cloth on the basis of the drawback system. This involves importing cloth, under government supervision, that must be used in the production of garments for export. It is not allowed to enter the Egyptian market. In reality what is said to happen is that through a combination of corruption, recording larger quantities of cloth as being wasted during the production process, the large garment producers are able to smuggle large quantities of imported cloth into the Egyptian market.

Another contractor said that he only dealt with workshops, and did not give work to the factories. He explained that the factories required papers for the quantities of cloth and even those who were prepared to take the risk, for the contractor the risk was too

great, since if the cloth was confiscated, the whole cost would have to be borne by the contractor (Ahmed, personal interview, 1/4/99). There was also the question of flexibility in terms of quantities required and the time required for production. The same contractor explained that the quantities of work required varied with the amount of cloth available and the demands of the garment market traders. He described how, with the workshops he was able to employ one or two workshops if the job is small, but if he had a big job, he could employ ten workshops at the same time.

In contrast, the factories require fixed and regular quantities, which reduces flexibility in a changing and highly competitive market. The factories needed work orders that matched their size and capacity which are fixed. With the workshops it is the size of the work order that determines the capacity. The workshops act as adjustable units of production that can be used at will by the broker. As positive as the flexibility of the workshops may be to the contractors, it has an obvious negative aspect for the workshop owners. It means that they can be very busy for some weeks and have no work from the brokers in other weeks. This needs some explanation. Historically the way people clothed themselves in popular urban neighbourhoods was through buying the cloth themselves and taking it to a tailor who would cut the cloth and make of it whatever the particular customer required. This system has to a large extent become extinct in poor neighbourhoods, especially since the state stopped selling subsidized cloth to poor families in the early 1990s.[23] The tailors have been replaced either by ready-made garments, or in the case of special clothing, by woman homeworkers sewing at home. The workshops also revert to this individual customer system, when not employed by brokers: clothes for weddings, special uniforms that workers have to provide for themselves, school uniforms that are too expensive on the market. Thus, as one workshop owner explained, when there is no work from the brokers, they turn to their neighbours:

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[23] One of the major government programs which affected the textile industry was the cloth rationing program, known as the Popular Supply program. By the late 1980s –before it was stopped- that program accounted for approximately 35 percent of the cloth sold by retailers domestically, which represented about 25 percent of the total recorded production of cloth (Davies 1988).

> of course we do not profit much from individual work, but we have to keep busy and it also helps keep our reputation in the area. Although work with the brokers has been good recently, you never know (Employer 1, personal interview, 3/3/99).

In brief, the evidence suggests that there is a significant difference in the procurement of raw materials between the recorded factories and unrecorded workshops. Legality and state control force the former to consume mainly Egyptian cloth and deprives them from the wider variety and cheaper prices of imported cloth. Flexibility and legal invisibility allow the latter to have access to illegally imported cloth.

This finding might seem to contradict the arguments made in the previous chapter about the inadequacy of dualistic models with clear divisions between formal and informal sectors. However, although the above findings point to significant differences between the two types of establishments, and as will be shown in the remaining sectors of this chapter, the differences point to a complex picture that does not fit the usually assumed dichotomies of such models. Thus, for example, the assumption of the modern formal sector versus traditional informal sector is in this case reversed. In the next section the marketing channels for the finished garments from the unrecorded workshops and the recorded factories are compared, to see if the same difference exists.

3. Comparing Marketing Channels

Contractors are the major buyers of the finished garments produced by the workshops and factories of this study. However, in order to investigate the markets of their finished products, there is a need for understanding the marketing channels which concomitantly, will require a comparative investigation of the subcontracting relationships. Subcontracting is the most common relation between the buyer, whether a broker, a retailer or a wholesaler, and the workshop or factory. The contractor can provide:

A) rolls of fabric that the subcontractors[24] cut themselves according to patterns or samples provided by the contractor.

B) pre-cut pieces of fabric that are assembled by the subcontractor.

[24] That is the factory or workshop.

C) instructions in the pattern or sample with the subcontractor procuring the inputs.

The main provisions given by the contractors to the two kinds of establishments (subcontractors) are compared in the following table (Again percentages refer to total quantities and not units of production.)

Table 8.2 Comparing main provisions from contractors

Provisions from contractor	Recorded %	Unrecorded %
A) rolls of fabric	50	70
B) pre-cut pieces	10	25
C) instructions only	40	5

As we can see from table 8.2, the largest percentage of materials provided by the contractors in both cases comes in the form of fabric rolls which are completely processed by the subcontractor i.e. both factories and workshops get the bulk of their jobs through the same means. However, in the case of the factories, 40 percent of the cloth they used was bought directly from wholesale markets and was not provided by the contractor who only provided instructions and specifications for the job. This contrasts sharply with the case of the workshops, which got 95 percent of their cloth from the contractors, and the exact pieces to be produced. This difference could be attributed to the lesser number of workers, especially skilled workers that workshops have, as shown earlier in Chapter Seven.

Both factories and workshops tend to seek relatively long-term contracting relations. The average duration of the subcontracting relationship was three years for the unrecorded workshops and five years for the recorded factories. In both cases a majority of owners said they would rather keep working regularly with one contractor than find new customers. The reasons given are summarized in the following table.

Table 8.3 Main reasons given for focusing on one contractor

Reason	Recorded %	Unrecorded %
Distrusting new contractors	60	70
Inability to simultaneously work with several contractors	35	20
Lack of knowledge in finding new contractors	5	10

Table 8.3 shows that trust is a major element in the subcontracting relationship in both the case of the workshops and the factories. There was no difference in this between the legal establishments (factories), versus the unrecorded ones (workshops), which one would assume to be less protected and consequently emphasize this aspect of trust. Moreover, both kinds of establishments did not have major difficulties finding new contractors, i.e. the lack of a legal status –in the case of workshops- was not an obstacle for workshops, nor was its presence a source of major advantage for the factories. Finally, the finding of the above section, regarding more flexibility of workshops, as compared to factories, was further confirmed, since only 20 percent of the earlier were not able to work simultaneously, versus 35 percent of the latter.

In terms of markets for their finished products, 60 percent of the sampled workshop owners named Attaba square market in Cairo as a major final destination for their products. There were of course other markets in Shubra and Giza in which their products were sold, but I decided to focus on Attaba, being the largest informal market place in Cairo, and on a national scale, and also because of the contrasts and contradictions it exposes being located in the very center of commercial Cairo.

Located between the Opera square in the European commercial center and Al Azhar square in the traditional commercial center, Al Attaba square is a complex maze of markets. There are the established shops on the main high streets of the square, each block of shops specializing in a line of products, thus there is a mall of electronic equipment, a main street with up market women's garments, a main street for engineering tools, another for home appliances, and so on. All these shops have proper window displays, pay rent and taxes, and display an array of both legally imported goods and locally produced goods. But all this only forms the borders, the lining surrounding a much bigger 'informal' market place on the streets, the alleyways, the public spaces and the gardens that lie between the shops and malls.

The informal market is also divided geographically according types of merchandise. Tools, ranging from screwdrivers and nails to electric drills are sold in one area, another area specializes in watches, toys, and small electronic gadgets, yet a third area specializes in plastic products from toilet slippers to toilet seats. However the largest

open space in the Attaba area is reserved for garments, women's accessories and shoes. Hundreds of vendors crammed next to each other, displaying their merchandise and constantly shouting out prices for items, and thousands of shoppers, meandering through the narrow walkways between the rows of vendors looking for the best buy. It is in this market and markets like it across the country that the poor buy most of their clothes and other requirements. It is here that both workshop produced garments and illegally imported garments are displayed and sold.

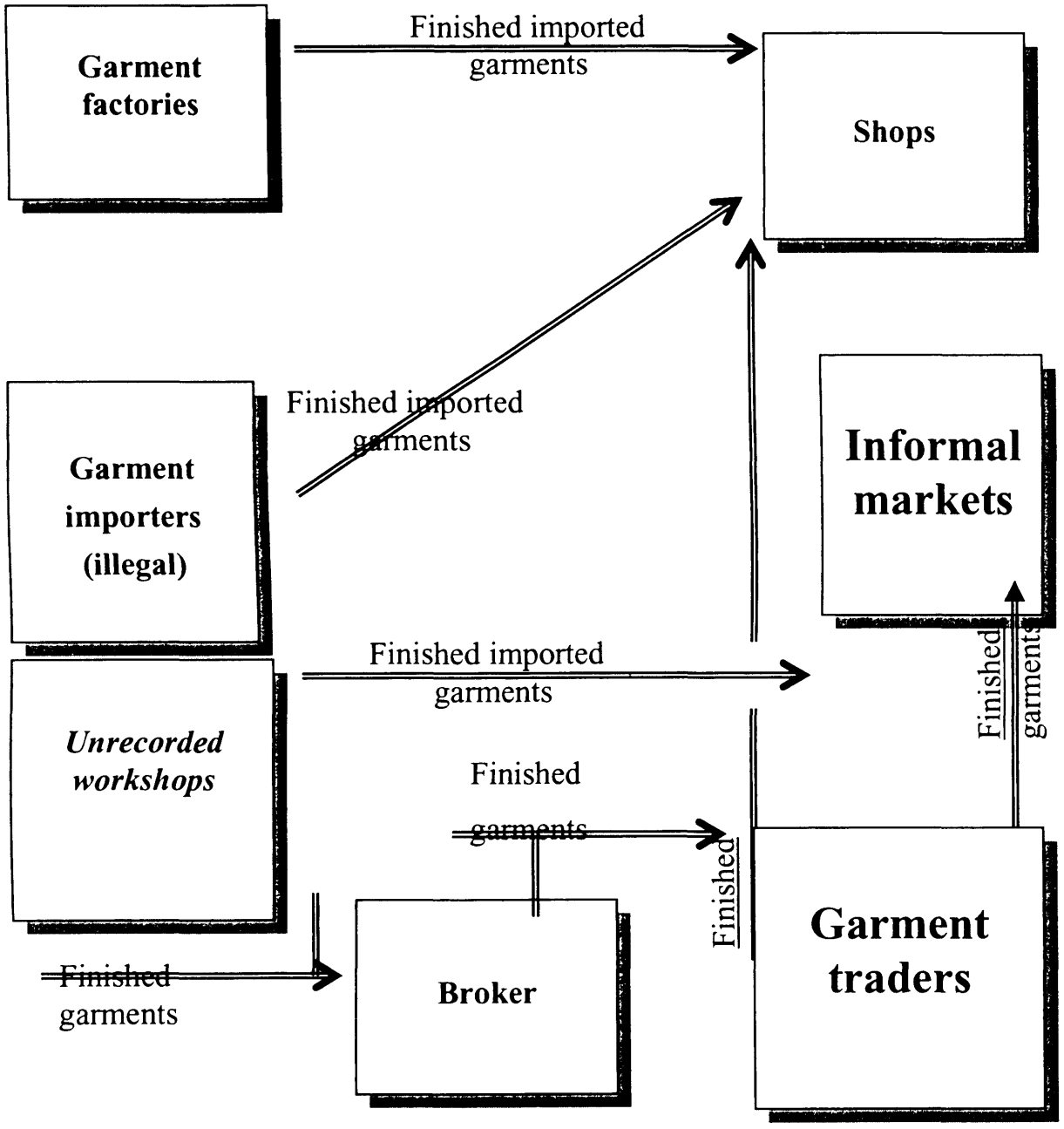
The market is completely illegal. Vendors do not have licensing, there are no verification papers for any of the items on sale, the grounds on which the items are displayed are not legal selling grounds and the vendors have no legal rights to use these grounds nor do they pay any rent or fee. The state's attitude towards these markets is peculiar. This market is in the center of Cairo, probably one of the most heavily policed areas in the world. If they wanted to prevent the market from assembling they could do so with ease. Yet they let this illegal market assemble on a daily basis. If that was the end of the story one would conclude that the benevolent Egyptian state was encouraging such informal markets.

However, on a daily basis, and at random times, usually at peak hours of the market, an amazing ritual takes place. Without prior warning, screams are heard and the vendors start hastily packing their merchandise into bundles using the cloth on which they place their displays, they throw their bundles on their backs and run as fast as they can into the alleyways surrounding the market place. In a matter of minutes the cause of panic becomes apparent. Several police cars appear on the scene and soldiers begin catching those vendors who were too slow or unfortunate to escape. Both these vendors and their merchandise are thrown into the back of the police cars, which speedily takes around a dozen vendors and their stuff to the Attaba police station. Meanwhile the vendors in the alley ways hide in the building entrances for at least 20 minutes until they are sure that the raid is over, then they slowly return to the market, spread their merchandise again and life returns to normal. The merchandise of the unfortunate vendors is confiscated and the vendors spend the night in the police station, get slapped around, and are then set free (one wonders what happens to all the confiscated merchandise!)

It seems that the state has realized that it cannot practically put an end to these informal markets, but at the same time it does not want to give them any sense of permanence and security. The police actions also seem to reflect a sense of insecurity on the part of the state. These bustling markets, in which absolutely nothing passes through the recorded economy, in which literally nothing has any legal visibility, seem to threaten the state's sense of control and planning, and it therefore cannot let it alone, at the same time realizing that it cannot successfully repress it completely.

The following diagram (Diagram 1) provides a simplified summary of the routes taken by the finished products and the linkages formed in the marketing process of the garments.

Diagram 1


Garment factories
Finished imported garments
Shops
Finished imported garments
Garment importers (illegal)
Informal markets
Finished imported garments
Finished garments
Unrecorded workshops
Finished garments
Finished garments
Broker
Garment traders

However, the most important finding in terms of marketing channels described in this section is that both factories and workshops depend on subcontracting as the major source of market provisions and jobs. This is in line with the international trend described earlier in Chapter Five. It also means that both the factories and workshops are equally experiencing the world-wide trends in the garment industry and that unlike the assumption of dual models theories, the recorded sector is not more modern or better linked to the international trends in this industry.

4. Forms of Cooperation between Units

As described earlier in Chapter Six, it is important to remember that in our sample, the 60 unrecorded workshops are all situated in one residential neighbourhood – *clustered*- in Shubra El Kheima, whereas the 20 recorded factories are scattered within the industrial district of Shubra El Kheima. The difference in location and size of the two kinds of establishments reflected in difference in levels of cooperation within the two sectors.

4.1 Cooperation between unrecorded workshops

A high degree of cooperation was found between the unrecorded workshops. Cooperation took place in financing, information and the sharing of orders. Within finance, 80 percent of the workshop owners depended on rotating saving schemes to finance their activity. Typically a rotating scheme is composed of a small group of individuals who contribute a given amount or share to a pot periodically with the pot being given in rotation at the time of collection to a member of the group. In its simplest form, the frequency of contributions is linked to income flows and the order of rotation is determined by lot. Contributions may be made daily or weekly or monthly in other cases. After all members of the group have received a pot the group may disband, may add or delete members and then continue, or simply recycle with the existing membership. These non-official self-help financial groups are given the generic name of rotating savings and credit associations (ROSCAS). ROSCAS are flexible and generate financial contracts that are tailored by the group. The size may vary from a handful of individuals

to several hundred people. Members may be all women, all men, or a mixture of both and the amount of each person's share can range from 10 Egyptian pounds to hundreds. Several individuals may divide a share by each paying for a fraction of a share and then splitting their pot proportionally. Informally, members may also renegotiate their position in the rotation to receive the pot in case of emergency.

In this research study, all the workshop owners (60) were members of Roscas, and 48 of them depended mainly on these schemes to finance their work. All of these Roscas had a monthly rotation that ranged between one hundred and three hundred pounds. The different Roscas membership ranged from eight to fifteen members (some splitting the monthly payment and the pot), with pots ranging from 500 pounds to 6000. Of the 48 workshop owners that depended on such schemes 41 (nearly 70 percent), said that their partners in these schemes included owners of other workshops in the neighborhood.

A second form of cooperation between workshop owners was sharing job orders. Workshop owners without job orders ask for orders from neighbouring workshops, while subcontractors who fear they will have problems meeting their deadlines ask others to help them complete the order on time. In all cases, owners who shared their orders declared imposing the same prices between their piece rate and the one applied to the workshops they shared the order with. In a number of cases, workshop owners admitted to taking more orders than their capacity allowed, so as to spread orders to different workshops.

In addition to finance and job orders, another form of cooperation between workshop owners involved the sharing of information. Owners shared information about potential contractors, the availability and location of new and second-hand machinery, labour problems and exchanging warnings about dishonest and unreliable contractors, which was the most important and frequently discussed issue. Table 8.4 outlines the different subjects of information shared between workshop owners, and the percentage they allocated to discussing each of these subject.

Table 8.4 Subjects discussed between owners of unrecorded workshops

Subject	Unrecorded workshops %
Potential contractors	30
Dishonest contractors	60
Machinery	40
Labour	40
Other problems	20

4.2 Cooperation between recorded factories

Unlike relations between workshop owners, a much lower level of cooperation was reported by factory owners. In contrast to unrecorded workshop owners, factory owners did not share in financing schemes. Instead, the main source of financing was self-financing from personal or family savings (50 percent), followed by loans from commercial banks (30 percent), or a combination of both (20 percent). Similarly, there was no evidence of job order sharing, which contrasts sharply with the widespread sharing found between unrecorded workshops.

There was however a limited degree of cooperation in terms of sharing information. This was done through the association of Shubra El Kheima garment producers. This association met on a monthly basis to discuss industry problems. The effectiveness of the association was limited however due to its composition and government intervention. The association included all the registered garment producers in the Shubra El Kheima industrial district. This meant that public sector producers, linked directly to the public sector spinning and weaving establishments, and large-scale private sector producers, together with smaller scale independent producers are all lumped together in the same association. This makes it highly ineffective for the small factories, since they have much less influence and their interests usually clash with those

of the large public and private producers. Another problematic aspect of the association is that it formed and controlled by the government, with representation from the ministry of industry. Hence, it is more representative of the governments' interests than those of its members.

Interestingly, in contrast to the assumption of dual model theories, the unrecorded workshops, are experiencing the world-wide trend of clustering described earlier in Chapter Five more than the recorded factories. In other words, the 'informal' sector is displaying more 'modern' features resembling the international trend within the industry more than its 'formal' peers.

5. Import Competition

Just like cooperation, import competition was another arena were workshops and factories differed. As explained previously, one of the main challenges faced by the garment industry in Egypt is the influx of illegally imported garments into the market. This challenge however was not perceived by the unrecorded workshops in the same way as the recorded factories. The following table (table 8.5) compares the views of owners in the two groups on which aspect of imported garments was most challenging to them.

Table 8.5 Main challenge from illegally imported garments

Challenge	Recorded %	Unrecorded %
Price	80	25
Design	0	50
Quality	20	25

As can be seen in the above table the majority of factory owners (80 percent) prioritised low prices as the main problem they faced from imported garments. However, only 25 percent of workshop owners viewed price competition as the main problem. Design and quality were the main challenges for them.

On the one hand, although Egyptian designs were becoming more flexible and varied, this was done mainly through a process of imitation. The imported new designs

would first make their appearance on the market and then the Egyptian producers would start imitating them, always depending of course on the availability of cloth. As one workshop owner explains, one of the problems with imported garments is not only their competitive prices but also the variety of patterns colours and designs that make the Egyptian products, according to him, of boring design and outmoded (Workshop Owner D, personal interview 1/4/99). The buyers are always asking them to imitate imported garments. On the other hand, the factory owners portray a contradictory position. As we have seen in section two of this chapter, one of their main problems is that of not being able to have direct legal access to cheap imported cloth. Yet, here we see that one of the problems for factory owners is competition from illegally imported garments (see table 8.6). They want the state to ease its restrictions on the importing of cloth but increase its restrictions on the importing of garments. However, a more detailed examination of the position of factory owners suggests that the difficulties in obtaining cheaper imported inputs are a more significant factor to them than import competition.

Table 8.6 Factory owners on comparing problems with trade policies

Problem	**Factory owners**	
	No.	%
Tariffs and bans on imported inputs as main problem	14	70
Ineffective protection from illegally imported garments as main problem	4	20
Both of the above have equal negative impact	2	10

As can be seen from the above table (table 8.6), when the owners are asked which was the more significant problem, 70 percent argued that it was restrictions on imported cloth and other inputs, and only 20 percent argued that it was the need for more protection from garment import competition. This suggests that the majority of garment producers do not want the state to protect them from import competition but to allow

them to compete fairly by removing restrictions on the procurement of the cheaper inputs available on the international market.

One factory owner argued that if they can import cloth and machinery freely then they can start to compete with the imported goods. According to him there is a long tradition of textiles in Egypt and cheap skilled labour, so there is no reason why they should not be able to compete with the Asian products (Factory Owner D, personal interview, 21/3/99). According to how he put it:

> If the government really liberalized the market without favouring particular interests, then not only will we be able to compete, but we could become major exporters. But you know how our government is. It is a very frustrating situation. Instead of producing and expanding we are going bankrupt

The problem, according to this owner, is that the government keeps protecting the big companies, and even when it liberalizes, it does so to help the big import and export companies. The owner found it illogical that the government turned a blind eye to the importing of cheap garments and then prevented them from accessing cheap cloth on the international market.

The usual stereotype is that textile and garment producers, especially the small-scale and traditional ones are ardent supporters of protectionism. This stereotype was either wrong to begin with or has been changing dramatically in the past years. In the case of those opposing liberalization, the main arguments revolved around the issue of inefficiency. Thus, one owner argued that the industry needed major upgrading in terms of machinery and skills, before becoming capable of international competition. According to him, there should be a transitional period, during which the state should intensify its protection of the industry and help develop the technology and infrastructure and then open the market for competition (Factory Owner C, personal interview, 15/3/99).

The above findings suggest that import competition is a major problem for both types of establishments. However the ways in which the recorded factories and unrecorded workshops were affected by import competition differed significantly. In the case of the former, being restricted in terms of raw materials and marketing channels

leads to inability to compete with low price imported garments. In the case of the latter, restricted access to a wide variety of designs and types of cloth leads to difficulties of competing with the varied and constantly changing imported garments.

6. Summary

Through the findings of this chapter, it was observed that the recorded establishments procured their cloth from whole sale cloth traders and that the bulk of cloth they use was local, whereas the workshops received their cloth through brokers who provided them mostly with illegally imported cloth. It was also observed that the reliance on local cloth was creating severe crises for the factory owners. This was found to be because of the higher prices of Egyptian cloth in comparison with imported cloths. The result of the exclusive dependence on Egyptian cloth was that they produced garments that were not price competitive, neither with the imported garments nor with the locally produced garments that used imported cloth.

Unlike the presumptions of dual-model theories, subcontracting proved a major source of work orders for both factories and workshops. Although, there were differences in terms of the kind of subcontracting, the fact remains that the two types of establishments were predominantly subcontractors. A larger percentage of factories are only provided with instructions and design by their contractors than workshops, while in the case of the majority of workshops, both instructions and rolls of fabric are provided. And in both cases the provision of pre-cut cloth is rare. Both factory and workshop owners preferred to deal with a limited number of contractors, with personal trust playing a major role in their choice. Hence, both kinds of establishments displayed the world-wide trend of subcontracting.

It was also observed that the destination of the finished garments produced by the factories was the recorded, legal retail stores in Cairo and Shubra, whereas the destination of the garments produced in the workshops was the unrecorded, unregulated street markets such as Attaba in Cairo. The attitude of the state to these unregulated markets was found to be contradictory. Whereas the state allowed them to function, it continually harassed the market vendors, it neither wanted to destroy such markets nor was it comfortable with their growth and dynamism.

There was a significantly higher level of cooperation between the unrecorded workshops, related to their clustered position. This included joint financing through ROSCAS, the sharing of job orders and the sharing of information. The difference in level of cooperation between workshops versus factories is related to the difference in size and location. Interestingly, the unrecorded 'informal' workshops were more in line with the global trend of clustering than the 'formal' factories.

As for import competition, for the factory owners, the main challenge from illegally imported garments was their low prices. In the case of the workshops, the main challenge was the superior design and quality. Although directly affected by the illegal entry of foreign cloth and garments to the market, most of the factory owners were not against liberalisation, although they did not think that this process would be implemented fairly by the government. However, although for different reasons for both kinds of establishments import competition was a major challenge that they were grappling with.

Interviews:

Ahmed. Contactor. Personal Interview. Shubra El Kheima: 1 April 1999.

Employer 1. Factory Owner. Personal interview. Subra El Kheima: 3 March 1999.

Factory Owner A. Personal Interview. Shubra El Kheima: 13 March 1999.

Factory Owner B. Personal Interview. Shubra El Kheima: 13 March 1999.

Factory Owner C. Personal Interview. Shubra El Kheima: 15March 1999.

Factory Owner D. Personal Interview. Shubra El Kheima: 21 March 1999.

Sayed. Contractor. Personal Interview. Shubra El Kheima: 15 March 1999.

Workshop Owner A. Personal Interview. Shubra El Kheima: 12 March 1999.

Workshop Owner D. Personal Interview. Shubra El Kheima: 1 April 1999.

CHAPTER NINE
CONCLUSIONS

Back to the Beginning

In the introduction to this study we set out several basic arguments defending the significance of our choice of subject and location. It was first argued that the textile and garment industry plays an important role in the process of industrialization and that in the last three decades, the role of garment production for exports in a number of developing countries has been central in their integration into the world market and in their subsequent industrialization. Secondly it was argued that the textile and garment industry in Egypt presents a special case. Despite an economic reform program explicitly aimed at promoting exports and despite a large textile industry with a long history, the relative performance of exports has been poor, garments and textiles included. Thirdly it was argued that an important aspect of the textile and garment industry is that a large portion of this industry takes place in small and statistically unrecorded establishments. This presents two challenges to research. The first is a practical challenge: only direct empirical research can shed light on the nature and dynamics of such establishments. The second challenge is theoretical: the study of small-scale and statistically unrecorded economic activities has been dominated by dualistic theories that divide economic activities into "formal" and "informal" sectors. However, during the 1990s new and more fruitful approaches to the study of small-scale industries were introduced focusing on the dynamics of economic clusters, networks and global commodity chains.

The above three points shaped the choice for the location of the study and types of establishments investigated in this thesis. Shubra El Kheima, as described earlier in Chapters One and Six, is a major textile centre, with a large concentration of textile and garment producers, ranging from the massive public sector integrated textile mills to home-workers producing garments in the spontaneous urban settlements around the city. The development of the textile and garment industry, in Shubra El Kheima and in Egypt in general, during the past two decades, is taking place in the context of a policy of economic reforms with the stated aim of liberalization, the promotion of exports and foreign direct investment.

However, as shown in Chapter Two the economic reform program was a failure. The historical context of the reform program was presented and the results, in terms of the promotion of exports and the attraction of foreign investments, were compared to those of other developing countries. The failure of economic reform and export promotion in Egypt, is in contrast to some of the major trends in the world textile and garment industry which were presented, in Chapter Three. These included changes in world trade, the growth of exports from developing economies and the changing trade policy environment were discussed. To explain the failure of Egyptian textile and garment industry, Chapter Four provided a brief history of the textile and garment industry in Egypt focusing on the special features of this development. It was argued that the role of cotton production, its links to the large public sector textile mills, and the economic dominance of the latter, created a vicious cycle shaping economic policy and preventing the emergence of an exporting garment sector.

In Chapter Five we turned to some of the theoretical issues involved in the study of small-scale production, focusing on the inadequacy of dualities of formal versus informal, modern versus traditional and segmented labour markets. More recent approaches involving the study of economic clusters and global commodity chains were found to be a more appropriate framework for understanding the dynamics of small-scale establishments that dominate garment production in the developing world.

Chapter Six introduces the methodology used in our empirical investigation. It was argued that the case study approach was the most useful research tool to tackle the difficulties of gathering data on small and statistically unrecorded economic units. The limitations and complexities of this approach were also discussed and a detailed research design was presented. The research aim was to compare statistically unrecorded workshops with statistically recorded factories in terms of labour, marketing channels and forms of cooperation. This comparison was done in detail in Chapters Seven and Eight. In which the main premises of dual-model theories were proved wrong. In addition, the findings of the two chapters revealed some of the latest trends in garment industry in Egypt.

In the following two sections of this concluding chapter we discuss the possible meanings, significance and implications of the main findings presented in Chapters Seven and Eight.

1. Labour

Our findings suggest, firstly, that there are no significant differences in wages, working conditions, working hours and secondary terms of employment for the majority of workers in both the recorded factories and unrecorded workshops. The idea that workers in the former group are some how protected by a wall of labour regulation, contractual arrangements and rights was found to be inaccurate. Secondly the findings suggest that both types of establishments recruit their labour from the same pool. There is no significant segmentation of the labour market, no clearly demarcated dividing line that would place the workers in each type of establishment in a different category. Further evidence of this was found in the extensive mobility of workers both within and between the two types of establishments. Thirdly, the findings suggest that, although the labour process in the recorded factories employs a higher percentage of more advances tools, the differences in technology between the two types of establishments are limited and cannot be categorized clearly into 'traditional' establishments using rudimentary tools versus 'modern' establishments using advanced tools.

Let us examine some of the possible theoretical implications. The findings challenge some of the dominant dualistic assumptions in the literature on the so-called "informal sector". The classical dual labour market model relied on several basic assumptions. Firstly, the existence of a clearly demarcated formal sector- a modern capitalist sector, legally registered, tax paying and most importantly, with a labour force that was registered, protected by labour laws and had access to social and security benefits. This sector, according to this model, contrasted with an informal sector- a marginal sector that was not registered, with a labour force that had none of the legal protection or benefits of the formal sector and had lower wages and productivity. The second assumption of this model was that the "informal sector" was seen as providing a means of livelihood for new entrants to the urban labour force who, through lack of opportunities and training, were unable to obtain employment in the "formal sector".

This means that the earlier sector acts as a transitional stage that allows workers to survive while waiting to get jobs in the formal sector. The informal enterprises were thus not depicted as a diverse and complex manifestation, but were interpreted as a simple survival mechanism. Informality, according to this model, became the term of reference for activities excluded from the modern sector and synonymous with marginality and poverty. The labour force of the informal sector was conceptualized in terms of excess supply of labour and not increasing demand for labour. Consequently, the limited ability of the formal sector to absorb the growing urban workforce was seen as explaining the proliferation of small informal enterprises in developing cities, which in turn explained how the urban poor managed to adapt and survive within the constraints of developing urban economies.

The findings of our research project contradict these assumptions, at least as they apply to the garment industry in Shubra El Kheima. As we have seen, most of the workers in the recorded factories (part of the "formal sector") did not have the benefits and protection that is assumed in the model. There was mobility between the recorded and unrecorded establishments suggesting that there was no dividing barrier. Recent migrants were not a main source of labour for the unrecorded establishments and both types of establishments had similar composition in terms of skill, gender, age distribution and were recruited from the same labour pool.

An alternative version of the informal sector was provided by Hernando De Soto (1989, 2000). In his book, 'The Other Path' (1989), he attributes the origins of informality not to excess labour supply but to excess regulation of the economy. According to this view, the "mercantilist" state in developing countries survives by granting the privilege of legal participation in the economy to a narrow elite, including a privileged and protected labour force. Informality is the popular response that tries to break down this legal barrier. In 'The Other Path' informality is described as economic activity whose ends are legal but whose means are currently proscribed by inefficient bureaucracy, unjust laws, or arbitrary administrative decisions.

The problem with De Soto's alternative approach is that it continues to cling to economic dualism, in this case idealizing the informal sector as the engine of market liberalization struggling against the mercantilist state. Whereas the classical model

overemphasized the marginal character of urban "informal" activities and the associated poverty, De Soto's analysis leaned in the opposite direction.

Our findings on the garment industry in Shubra El Kheima suggest that the legalistic division that De Soto focuses on is not a helpful tool in understanding the complexities involved. Thus, for example, how can we classify a factory that is legally registered yet most of its workers are illegally employed without contracts or benefits? The urban labour market in developing countries is much more complex and dynamic than is assumed in the simplistic dual labour market model. It cannot be divided into clearly demarcated sectors. The assumption that the functioning of a complex labour market can be reduced to any static model is very misleading. Dualistic constructions fail to appreciate that the zones of employment, as shown in our findings, are fluid and merge into one another.

The problem is not only of theoretical interest. There are important practical implications. Those who claim that there is a clear division in the urban economy between a 'formal' and an 'informal sector', including De Soto, call for the dismantling of state regulatory barriers. This call influences both international development agencies and governments. An important part of the economic reform program in Egypt is the dismantling of labour laws supposedly protecting workers in the 'formal sector'. Yet as we have seen in our investigation of garment workers in Shubra El Kheima, these laws affect a tiny minority of workers and do not act as a significant barrier between the different types of establishments. As noted earlier, labour laws only apply to workers with full time registered contracts. Even if we include the public sector industrial establishments, the laws apply to a small and shrinking minority of the Egyptian working class. The majority of workers are beyond the rule of law, not merely through their employment conditions: wage level, mode of payment, working hours, vacations, social provisions, etc., but also through the lack of any regulations to guarantee their safety and to prevent their health being affected during and by the production process. The unprotected nature of labour is closely linked to the inability of the workforce to reduce its vulnerability by forming trade unions or associations.

If it is true that a growing majority of workers are not protected by labour laws and if the conditions of work, wages and rights for most workers are similar to those

found in our investigation of garment workers in Shubra El Kheima, then there would also be important implications for the workers movement. Traditionally trade unionists and leftists in Egypt, as well as scholars, have focused exclusively on workers in the large-scale factories.[25] Influenced by dual labour market theories, they regarded other workers in small-scale and unrecorded establishments as marginal, backward and irrelevant to the struggle for worker's rights. This led to an emphasis on fighting (in the case of activists) and studying (in the case of scholars), limited defensive battles concentrated in the large factories, without any serious attempts to link these battles to the demands and needs of the majority of workers in small firms, workshops and households.

Thus, by refuting the dual-model theories and proving its faulty emphasis on 'formal' sector as a definite ending point within the development of labour markets, scholars and workers' organizers can move on to an understanding and a strategy that takes into account the changing structure of the Egyptian working class and the growing importance of the small and unrecorded producers. Those workers in the small workshops and households spread throughout the spontaneous settlements of urban Egypt, would finally receive the deserved attention both on a scholarly as well as an organizational level. Equally, this would tend to fill a gap in the literature on Egyptian labour as well as the developments within so many industries that depend on the so-called 'informal' labour.

2. Markets

The second area of research findings that is of utmost importance of in this thesis is the fact that the unrecorded workshops rely on illegally imported cloth whereas recorded factories rely on legally purchased Egyptian cloth. This finding suggests the existence of two relatively distinct systems within the Egyptian textile industry; the crisis ridden public sector system that produces Egyptian cloth, and the pervasive market of illegally imported cloth. The crisis ridden 'traditional' public sector system, is where the logic of import substitution industrialization and state control was taken to the extreme, with the aim of producing locally and under centralized control all the different stages of

[25] See for example; Posusney 2002; Assad 2002.

production from the cotton seed to the finished garment. This system has been in crisis since the mid 1980s. Its inability to compete internationally, not only in the production of garments, but even in the prices for cotton, cotton yarn and cloth, the collapse of the Eastern European bilateral markets, and bureaucratic management, all these factors have made it impossible for this system to succeed. The policies of structural adjustment in the textile industry came as attempts of the state to solve the above-mentioned crisis.

However, attempts to dismantle the old system proved politically impossible. The cotton growers depended on the state to buy their cotton at fixed prices and had no access to other markets. So the public sector spinning industry had to continue buying the cotton. The Spinning industry itself employed tens of thousands of workers and had to be kept floating, even if it meant draining millions of pounds in losses and debts. This meant that weavers, whether in the public sector or the private sector, had to be forced to absorb the cotton yarn produced by the spinning industry. This transformed the problem to the next stage, with garment producers being forced to use the cloth produced by the weaving industry to keep the whole system afloat.

The type of reforms carried out by the government exacerbated the problems of the industry. It dismantled the popular supplies system, removed subsidies from the textile industry, and dissociated the industry from state financing. At the same time it did not relax restrictions on the import of cheaper yarn and cloth and continued to force producers to use the products of the public sector industry. Thus, it removed the only secure market that the recorded garment producers had, while at the same time keeping in place the same controls over the raw material supplies. Hence, leading the industry as a whole into a state of chronic bankruptcy.

On the other hand, the demand for cheap clothing and cracks in the ability of the state to restrict the entry of imported cloth and garments, are two factors that have led to the emergence of a parallel system over which the state has practically no control. Illegally imported cloth that is smuggled into the market, and cloth imported through the drawback system has found its way, through brokers and traders, to small-scale, unrecorded, garment producers. The garments thus produced are sold in informal markets at prices competitive with those of illegally imported Asian garments sold in the same informal markets. However, the fact that competitively priced cloth is restricted by

its illegality, still meant that garments produced using it do not provide an internationally competitive bulk. Hence, between the overly-priced and often low quality Egyptian textile, and the illegality of imported cloth, the Egyptian garment industry has been facing major challenges both locally and internationally.

Thus, what this thesis has shown is that the timely and frequent questions about the peculiarity of the Egyptian case, in terms of not following the path of leading garment-producing developing countries like India, China, and some Latin American countries, can only be answered through tracing the development of the textile industry in Egypt. Looking at state regulations in the agricultural sector –affecting cotton- and in the industrial sector –affecting textile- one can deduce why Egypt has not been a global player within the garment industry.

3. Global and local commodity chains

Another area of research findings gives impetus to the more recent approaches to the study of industrial clusters in developing countries which is the global commodity chains perspective (GCC). The GCC perspective starts from the premise that analyzing the dynamics and structure of global industries is a useful way to understand the local consequences of global changes for firms and workers (Gereffi and Korzeniewicz, 1994). Commodity chains are composed of links that represent discrete, though interrelated, activities involved in the production and distribution of goods and services. In the case of the cotton garment industry, the focus of this thesis, the chain extends from the main raw material- cotton, to the production of textiles, then to the design, cutting, assembly and finishing of apparel, and, finally, to the distribution, marketing and retailing of garments (Appelbaum and Gereffi, 1994).

Our findings on garment production in Shubra El Kheima suggest that there are two distinct commodity chains involved. The recorded factories are involved in a mainly "local"[26] commodity chain starting with Egyptian grown cotton, spun and woven in public sector Egyptian textile mills producing cloth that is purchased by public and private sector wholesalers. The next stage in this local commodity chain is the purchase of cloth from the wholesalers, either directly by the factories, or indirectly by contractors,

[26] Local here refers to Egypt and not Shubra El Kheima

usually representing local retailers. The garments are then manufactured in the factories and then delivered to contractors or retailers and sold locally.

This commodity chain was found to be heavily protected at each of its stages. Thus, until 1994 the importing of cotton was prohibited and delivery prices set on a yearly basis by the state. The government determined the areas and cotton varieties to be planted and farmers had to follow orders. The state bought the entire crop at a fixed price, supplied its own spinning mills and exported the remaining lint. The public sector textile mills were guaranteed their supply of cotton at government controlled prices. Garment producers, both public and private had to use this textile. Similarly, the bulk of exports in the textile and garment sector were tied to long term bilateral agreements with the Soviet Union and Eastern Europe, uncompetitive markets as we noted earlier, and was in the main supplied by vertically integrated mills of the State sector (producing at this stage about a fifth of the output of ready-made garments (RMG)). It was still small - in the late 1980s- whereas Turkey's RMG exports rose rapidly to supply 45 per cent of the textile and garment exports, Egypt's provided 3 per cent.

The unrecorded workshops are involved in a different kind of commodity chain- a global commodity chain- starting with illegally imported Asian cloth, mainly from China, purchased by local contractors, subcontracted to the workshops. The finished garments are then collected by the contractors and sold in local "informal" markets and competing with illegally imported finished garments. This difference found within the garment industry in Egypt within pushes forward the GCC approach.

However in the case of our unrecorded workshops, although linked to the global market through illegally imported cloth, they lack many of the features that allowed similar clusters of garment producers in other developing countries to flourish. Firstly they do not have access to export markets. Their products are distributed exclusively in local markets. This curtails their potential for growth, especially if compared with producers in other developing countries who have access both to their local markets and to the growing and varied export markets. Secondly, their reliance on cheap illegally imported cloth, although allowing them to compete with illegally imported garments, is necessarily of a restricted nature. Pressure from the big textile mills results in repeated campaigns by the government to reduce the inflow of illegally imported cloth. A recent

example is the abolition of the free trading zone status of the city of Port Said in 2003. Although such campaigns do not succeed in halting illegal imports completely, they do have a negative effect on the variety, quality and price of illegally imported cloth, thus reducing the competitive abilities of the unrecorded garment producers. Thirdly, because they are only linked to the global market through illegal imports, they are deprived of the central role played by lead firms in developing design, quality control, technical information and other inputs. As we have seen, in other developing economies garment producers have successfully inserted themselves in global commodity chains that are governed and shaped by lead firms, thus having access to innovation and information in a rapidly changing world market.

In most studies on global commodity chains the focus is on export markets and the role of buyers in the industrialized countries in shaping and governing the commodity chain. In fact it is the success of a number of developing countries in rapidly increasing their exports and utilizing imported inputs that triggered interest in this phenomena. The GCC approach identifies the main features of the context in which export manufacturers from developing economies tend to operate. These export manufacturers feed into chains that are organized by lead firms that source globally (Schmitz and Knorringa, 1999). These lead firms govern the structure of the global commodity chain. To claim that every commodity chain has a governance structure is to say that each set of activities related to the design, production, and distribution of a finished good is controlled by a lead firm or set of firms that determine how the costs and benefits are distributed between the various actors involved in the chain. Governance refers to the way that power is exercised along the chain by the actors that define the terms under which other companies (i.e. suppliers, contractors) participate. It includes the criteria for accessing the chain and the rules governing participation, the process of auditing performance and checking compliance with the rules, and the type of assistance (if any) provided to companies to help them comply (Kaplinsky 2000).

The role of global buyers in the upgrading of manufacturers has been repeatedly demonstrated in recent literature (Schmitz and Knorringa, 2000; Humphrey and Schmitz, 2000). A recent empirical example of the role of global buyers was observed in the case of Ludhiana's woolen knitwear industry in India. In the early 1990s a number of foreign

buying houses began tapping into Ludhiana's production base building new decentralized sourcing networks for woolen and cotton knitwear purchases by European and North American retail chains (Tewari,1999). In the case of Egypt, as we have shown in the case of our unrecorded garment producers it is not the price of illegally imported garments that represents their main competitive challenge but the design and quality of the latter. Thus not being linked to export markets negatively affects their ability to compete locally. It is local contractors that provide design and instructions, based on a relatively limited variety of cloths and depending mainly on imitation of imported garments.

4. Economic clusters

Finally, our findings suggest that there is a significant level of cooperation between the unrecorded workshops, including the sharing of orders, information and financing arrangements. This type of cooperation was found to be lacking in the case of the recorded factories. These findings feeds into the important literature on clusters.

As noted earlier in Chapter Five, there is a consensus in the literature that the most basic advantage which firms (especially small firms) derive from being located in a cluster lies in local external economies. Where producers cluster, they attract specialized suppliers of inputs and buyers of their outputs; a pool of specialized workers emerges, and new ideas and practices diffuse rapidly. Numerous analyses of contemporary clusters confirm the relevance of these local external economies. The literature on contemporary clusters also suggests that in addition to the incidental external economies there is often a deliberate force at work: joint action amongst the clustering firms. The increase in cooperation between clustering firms is seen as a response to new competitive challenges, either in export markets or in import competition or a combination of export and import challenges.

One of the peculiarities of the Shubra El Kheima case is that although the city has a concentration of firms at each stage of the textile and garment industry- spinning, weaving, dying and garment production, our findings suggest that there are no backward links or vertical cooperation between the small garment producers and the local textile

industry. Even the contractors, both for the recorded and the unrecorded establishments, are usually from outside the city.

This is in sharp contrast with for example, the case of the knitwear producers in Ludhiana, who are linked to a local knitting machinery industry and a local spinning industry producing a wide range of raw materials used by the knitters (Tewari,1999). In fact it is precisely through avoiding the local sources of raw materials that the unrecorded workshops of our study were able to compete with imported garments. This contrasts clearly with the positive effects of vertical cooperation found in a number of industrial clusters in India (Knorringa, 1999), Pakistan (Nadvi, 1999), Mexico (Rabellotti, 1999) and Brazil (Schmitz, 1999).

Another peculiarity in the Egyptian case is that very limited horizontal cooperation exists between the larger garment factories of our study. Although there is an association of garment producers in Shubra El Kheima, and although the majority of these producers face severe pressures from import competition, which is a usual catalyst for the activation of such associations, in this case it plays no role in promoting cooperation between garment producers. Government control and the dominating interests of the large public sector companies, make such an association useless to the smaller private firms. Thus, we can observe a situation where there is no significant horizontal cooperation between recorded garment factories, no significant vertical cooperation within Shubra El Kheima, and significant horizontal cooperation between small-unrecorded garment workshops.

In the literature on clusters a distinction is made between simple horizontal cooperation, which takes place between individual firms, and forms of collective action through associations. In our study it was only the former that was found and even that is restricted to the small-unrecorded workshops. Thus, only some of the features associated with economic clusters can be found in our case. Firstly, external economies due to concentration of establishments in the same geographical area such as the availability of a pool of labour with a variety of skills within the area, are clearly present in Shubra El Kheima. Yet, as we have seen, the combination of intense import competition due to smuggling, coupled with the restrictions on legally imported cheap cloth for the recorded garment producers and the relatively low quality and high cost of the cloth produced by

the large textile mills, has prevented the emergence of an industrial cluster with the varieties of vertical and horizontal cooperation associated with successful clusters in other developing cities.

Further Research

Based on these findings and conclusions several areas that require further research become apparent. Firstly, in the area of labour, it seems clear that there is a world of academically, politically and statistically invisible workers who probably form the majority of the working class. Understanding the changing structure of the Egyptian working class, its living and working conditions, its culture and its traditions of resistance, all these aspects require an accumulation of research projects in the many and varied slum cities and industrial areas of urban Egypt.

Secondly, in the area of markets, in order to reach a deeper understanding of the economic dynamics of industrial production, distribution and consumption in Third World cities such as Cairo, a reliance on formal statistics will lead to inevitable distortions in the results and conclusions of research. A variety of case study research projects on the vast world of unrecorded small scale production and the links between this world and the global and local commodity chains within which it is embedded, will help economists in particular and social scientists in general reach a more accurate and useful understanding of the complexities and contradictions of Third World industrialization.

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