Geir Øvensen and Pål Sletten

The Syrian Labour Market Findings from the 2003 Unemployment Survey



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Preface

In 2004-2006, cooperation between Syria's State Planning Commission (SPC) and Fafo enabled the Central Bureau of Statistics (CBS) and Fafo to implement a project aimed at enhancing the capacity of the CBS and some of her Syrian partner institutions to collect, and in particular analyse, comprehensive household survey data. A second main objective of the project was to provide high-quality labour market and living conditions' statistics to serve as input into Syrian decision-making and policy formulation processes.

A core element of the CBS-Fafo cooperation was a series of training workshops that Fafo conducted in Damascus in 2004. At those workshops, Geir Øvensen of Fafo gave theoretical lectures as well as hands-on practical training in data analysis to almost 30 professionals of different backgrounds (e.g. economics, sociology, statistics, and computer science) and representing the CBS, the SPC, Damascus University, Teshreen University, and the Agency for Combating Unemployment (ACU). The data used were those generated by the 2003 Unemployment Survey, designed by the ACU and implemented by the CBS. In the course of this work, Øvensen also lectured on the measurement of long-term wealth and constructed an asset index for the 2003 Unemployment Survey (this material can be found in a Fafo-paper at http://www.fafo. no/pub/rapp/792/792.pdf).

The survey results and workshop discussions formed the basis of Øvensen's comprehensive report for the CBS and SPC describing Syria's labour force. In order to make the material available to a larger set of users, Fafo's Pål Sletten shortened and partially re-wrote Øvensen's larger volume into the present report, *Characteristics of the Syrian Labour Market*, which is also published in Arabic by the CBS.

Fafo would like to thank Dr. Ibrahim Ali, Director General of the CBS, and all those who participated in the 2004 workshops. Many subsequently carried out additional labour force analyses for use by Syrian decision-makers, and did so partly in dialogue with Fafo. The experience has been one of mutual learning for which we are very grateful. By way of thanks, we have included a list (overleaf) of their names and institutions. I would like to thank the two authors for their efforts in writing the current report and Åge A. Tiltnes of Fafo who, as a project manager, shepherded the project, and the writing of *Characteristics*, to a positive conclusion. Finally, we would like to

express our gratitude to the Norwegian Ministry of Foreign Affairs for the financial support which made possible the CBS-Fafo cooperation and this report.

Oslo, September 2006 Mark B. Taylor Managing Director

1 Introduction

The 2003 Unemployment Survey

This report is the output of a series of workshops held in Syria during 2004 for the purpose of analysing the data from the 2003 Unemployment Survey. The initiative to carry out this survey was taken by the Syrian Agency for Combating Unemployment (ACU), and the survey was carried out by the Central Bureau of Statistics (CBS) between 15 March and 10 April 2003. A representative sample of 30,000 households covering all 14 mohafazat¹ was selected. Of these, successful interviews with 27,611 households were achieved.

In 2001 and 2002, the CBS carried out labour force surveys, but in 2003 the Unemployment Survey replaced the labour force survey. After 2003, the CBS has produced additional labour market data through the 2004 census, the 2004 census of public sector employment and the 2005 establishment survey. Therefore, there is now a range of data sets available for analysing the Syrian labour market.

The purpose of all this data production is not only to produce tables but also to provide data that can be used for in-depth analysis of the labour market. This report is an attempt at such analysis. A second attempt is a recent paper by Huitfeldt and Kabbani (2005), which uses data from the 2001 and 2002 labour force surveys to investigate the economic benefits of education. Notwithstanding such efforts, additional research is needed. In particular, analysis that compares the findings of the different surveys would be indispensable, not least to increase the understanding of trends in the labour market. Without doubt, such analysis will be forthcoming the next years, and will hopefully provide policymakers with new insights that can help improve the labour market situation in Syria through good policies.

Why measure labour activity?

In Syria, as in almost every other country, labour activity is the most important source of household income. It is also more uniformly distributed than other income types.

¹ Mohafazat is the plural of the Arabic word mohafaza, meaning governorate or province.

The economic importance of employment is particularly great because Syria, although being a mid-income developing country, has relatively few universal public social welfare arrangements. When alternative sources of income are scarce, lack of employment represents a serious threat to people's welfare. In a living conditions and poverty perspective, particular attention must thus be given to the nature and manifestations of unemployment and underemployment

The labour market is also an important social arena, and on-the-job training is an important complement to formal education. Skills learnt at work significantly increase workers' human capital, and hence improve their productivity. People are shaped as social beings by their work-life experiences. Work becomes part of people's identity, and the social networks they acquire through their jobs may yield rich benefits in a range of other settings.

Employment is, of course, not only interesting from a perspective of micro-level living conditions, but also from a macro-economic perspective. Particularly in the less developed countries short of capital and technology labour activity is a major determinant of the total economy's production of goods and services. Hence, the key indicators for the availability and input of labour with different characteristics into the economy are essential input factors in macro-economic planning models.

The ILO labour force framework

For measurement of supply and utilisation of labour in household surveys, the United Nations has, through the International Labour Organization (ILO), endorsed application of the so-called "labour force framework" (Hussmanns et al. 1990). This classification system uses standardized employment definitions to allow for consistent comparison of data, across countries and time. Figure 1.1 gives an overview of the main categories in this classification.

Based on a person's activities in the week prior to the interview (the so-called "determinant week") the labour force framework divides the population, 15 years or older, into three exhaustive and mutually exclusive categories. The category "employed" (box Ia, Ib and Ic) comprises all persons who worked at least one hour in the reference week, or persons who were temporarily absent. Next, the "unemployed" (box II) comprises persons who did not work even one hour, but who at the same time *actively* sought, and were available for work. Employed and unemployed persons together make up the "currently economic active population" or "labour force". Persons 15 years or older who are not "currently economic active" and persons outside the survey population together make up the residual, "not in the labour force" category (box III and IV).

In the international statistical standards, there is a close connection between the definitions of "work" and "production". The main guideline is that when labour input goes into "production" it is considered as "work". The reader should note that accord-

ing to these definitions, the concept of "work" does not refer to paid work or work outside the home exclusively, as is commonly thought. Non-market activities, like unpaid work in family farms or businesses, and several types of home production, are also included. Unpaid housework, like childcare, cleaning, washing and cooking are, however, generally not considered as work, and, hence neither included in a country's Gross Domestic Product (GDP).

Although formally defined as "work", a range of economic activities that take place in, or near the home, and in particular those economic activities conducted by women, children and old persons are still not sufficiently covered by most household surveys. The ILO definitions may be correctly criticized for a lack of attention given to typical female tasks related to family care and household maintenance. However, a just as important challenge is to adequately measure the labour activities actually covered by the ILO labour force framework definitions.

Readers should also keep in mind the likely strong and biased effect of measurement methods and definitions in the field of labour market statistics. In all household surveys, respondents immediately tend to understand "work" as regular employment only. The underreporting of labour activity is thus usually highly biased. Many kinds of labour activity typical of the irregular sectors of the labour markets are not covered, such as casual work, unpaid work, and work rewarded in kind. By and large the poor, women and children, and other persons, whose attachment to the labour market is relatively loose, carry out these tasks. Hence, the composition of the measured labour force is most probably biased towards middle-aged men with regular employment.

Key indicators of the labour market

Based on these definitions, the ILO defines a series of key indicators of the labour market. The two most well-known and often used are the *labour force participation rate*, which is the number of economically active persons divided by the working-age

igure 1.1 Labour survey deminitions used in the 2003 Offeniployment survey							
	Total population						
Persons included in the labour force Adults							
Employed persons			Unemployed	not in the labour	Persons		
Full time (>35 hrs per week)	Part time (<34 hrs per week)	Temporarily absent	persons (Not employed. Sought, and available for work)	force (Not employed, not unemployed. Did not seek work)	younger than 15		
la	Ib	lc	II	III	IV		

Figure 1.1 Labour survey definitions used in the 2003 Unemployment Survey

population, and the *unemployment rate*, which is defined as the number of unemployed persons divided by the number of economically active persons (i.e. the sum of the employed and the unemployed). In addition to using these two indicators, we will discuss the so-called *underutilisation rate*, which measures the prevalence of underemployment.

The process of writing this report

The report is the outcome of three workshops co-organised by the CBS and Fafo in Damascus during 2004. Participants were some 30 experts from Damascus University, Teshreen University, the ACU, the State Planning Commission and the CBS. The first author of this report was the main organiser of the workshops, and the report is based around discussions that took place there.

The structure of the report

This report has four main parts. In Chapter 2 we investigate labour force participation, which represents the supply side of the labour market. Chapter 3 deals with employment, which is one possible outcome of the matching of labour supply with the demand for labour. The matching of the supply and demand sides has, of course, a second possible outcome, which is unemployment. Hence, in Chapter 4 we discuss unemployment, both as defined by the ILO, but also other manifestations. Chapter 5 takes a brief look at some of the characteristics of the economically "inactive", that is to say people outside the labour force. Finally, Chapter 6 attempts to encapsulate the main findings of the previous chapters, and put them into a context relevant to Syrian politics and planning.

The weights estimated for the CBS Unemployment Survey allow us to present all results both in terms of the number of persons, and as percentages. Results as *person counts* primarily serve as input into macro-economic models. It is for example very useful for planners to know the composition of the labour force in terms of gender, age and formal education. Results in percentages are useful for explaining why labour force participation varies strongly by other characteristics, such as gender and education, and across the life cycle.

Because gender is a fundamental factor in explaining individual labour market behaviour we have chosen to conduct the analysis for men and women along two separate, but parallel lines. Except for gender, age is probably the most important factor explaining labour force participation². One reason is that it is strongly correlated

²When results are presented as percentages, the reader should keep in mind the general "tree-shape" of the population "age pyramid". As a thumb's rule, the 15-30 year age cohort is almost twice as large as the 30-45 year cohort, which again is almost twice as large as the 45-60 year cohort.

with other key explanatory factors such as marital status, relation to the household head, and education.

Although the ILO labour force framework is defined on the basis of individual activities, it is reasonable to assume that most labour activities are determined by some kind of a household decision mechanism. We may rightly assume that most households optimise their welfare by allocating their members' time to activities where they have a comparative advantage. Therefore, in each chapter we have included a section presenting findings in the household context. In a living conditions and poverty perspective, unemployment or inactivity is also much more severe if all adult household members are affected.

A note on background variables

As the purpose of the Unemployment Survey was to provide more detailed information on the situation of the unemployed, additional data on the characteristics of individuals and households were collected. As explained, these background variables will be used for explaining labour market behaviour. Most of these variables are self-explanatory, e.g. individual characteristics like gender, age, and marital status, and household characteristics such as household size and the demographic composition of the household.

In terms of geography, we will mainly report on the regional level. There are six regions: The Damascus region (Damascus city); the southern region (Rural Damascus, Sweda, Dara and Quneitra); the middle region (Homs and Hama); the coastal region (Tartos and Latakia); the northern region (Edleb and Aleppo); and the eastern region (Rakka, Der Elzor and Hasakeh). In all mohafazat except Damascus city and Quneitra, there are both urban and rural areas.

Unfortunately, the survey contained no questions about households' incomes and expenditures, nor did it collect data on wages. We have therefore developed an asset index based on questions asked about various household goods and amenities owned by the households. The index can be used as an indicator for the households' long-term wealth, and allows us to rank households by their economic status. It is not intended to be used as an independent welfare indicator, but only to serve as a background variable to consider how a household's economic situation interacts with the labour market behaviour of its members. For more details on the asset index, see Appendix B for a short overview, or Øvensen (2006) for a more detailed description of how the asset index is constructed.

2 Labour Force Participation (Labour Supply)

The labour force consists of the employed and the unemployed, and is also referred to as the "economically active population". By definition, any person can choose to become a labour force member: Although a person cannot alone decide to obtain paid employment, he or she can actively look for work, or start working for his own account (by starting an enterprise or becoming self-employed). In the first case the person will qualify as unemployed, in the second as employed. As the labour force comprises all persons wanting to work at a given moment, it represents the supply of labour immediately available to the economy.

The structure of the labour supply chapter

The Labour Supply chapter consists of four sub-sections. The first section deals with the geographical distribution of the Syrian labour force. The main geographic reference variables used are urban-rural locality, region and mohafaza (governorate/province) of residence. Section 2.2 highlights the relationship between labour force participation and individual characteristics such as age, education, marital status, and a person's place in the household as described by the relation to the household head. In Section 2.3 we investigate how individual labour force participation relates to characteristics of these individuals' households, namely the household's income and its size. Section 2.4 presents results for labour force participation at the household level in order to identify vulnerable households who have none, or only one member in the labour force. We also investigate how many persons who are the only person in the labour force in their respective households, and the share of persons that live in households with other labour force members, (regardless of their own labour force status). Furthermore, we present the main results from a logistic regression about participation *versus* non-participation in Appendix A.

2.1 Labour Supply and Place of Residence

The Syrian working age population is divided into four groups of roughly the same size: Male urban and rural residents, and female urban and rural residents, each comprising 2.5-2.8 million persons (Table 2.1). However, both in urban and rural settings the labour force is predominantly male. In Syria taken as a whole, less than one in five women are in the labour force – the labour force participation rate is 19 percent¹. The female labour force participation is highest in rural areas at 23 percent as compared with 15 percent in urban areas. For men, the labour force participation rates in urban and rural communities are very similar at respectively 76 and 78 percent. This yields a total labour force of nearly five million persons, consisting of just over four million men and just fewer than one million women.

It is noteworthy that the female labour force participation rate is lower in urban than in rural areas. Some of this difference could be explained by difficulties in measuring female employment in rural areas². However, there is probably also a real difference in women's labour market behaviour between cities and the countryside. There is usually a lower threshold for rural women to participate in agricultural activities close to their home, or in the vicinity of their village, than for urban women to work somewhere in a large city. The difference in urban-rural female participation rates is potentially very important for policy and labour force projections because modernization and economic development usually are associated with increased urbanization.

Table 2.1 Labour force status of working age population by gender and urban-rural place of residence, number of individuals in thousand and percent

	Male			Female			All
	Urban	Rural	Total	Urban	Rural	Total	
Individuals in thousand:							
In the labour force	2,090	1,930	4,020	400	562	962	4,982
Outside the labour force	677	558	1,235	2,274	1,874	4,149	5,384
Total	2,768	2,488	5,255	2,674	2,437	5,111	10,366
Percent:							
In the labour force	76	78	76	15	23	19	48
Outside the labour force	24	22	24	85	77	81	52
Total	100	100	100	100	100	100	100

¹The labour force participation rate is defined as the number of persons in the labour force divided by the working age population.

² In Chapter 1, we have already explained why it is more challenging to measure female employment in rural areas where agriculture dominates, than in the more formal labour market of the cities.

If urbanization leads to lower female labour force participation rates, Syria may face a difficult trade-off in its modernization process, which aims at expanding the labour force participation rate.

Regional variations

The male labour force participation rate fluctuates around 75 percent in all mohafazat. While it is somewhat higher in rural than urban settings in the northeastern mohafazat, it is higher in the urban areas of other regions. The relatively stable male participation rate across mohafazat implies a close relationship between the size of the male working age population and the number of male labour force members in the mohafazat.

In contrast, female labour force participation shows relatively large variations across mohafazat. In the coastal mohafazat of Latakia and Tartos it is as high as 35 percent for rural women, while it is well below 10 percent in Rakka and Dara. While the latter result perhaps may be ascribed to measurement problems, it is beyond doubt that the female labour force participation levels in the two coastal mohafazat are significantly higher than elsewhere in Syria.

Is labour force participation low in Syria?

The labour force in Syria comprises 31.5 percent of the total population. This figure is relatively low compared to many developed countries, but at the same time the share is one fifth higher than in neighbouring Jordan (26 percent)³. The reasons for the generally low participation in Syria are the same as in most Middle Eastern countries: A relatively young population due to past and current high birth rates (which means that the working-age population is small relative to the total population), and a low participation level among adult women.

The Syrian adult (15 years and older) labour force participation rates are 77 and 19 percent for respectively men and women (48 percent for all adults). This is also higher than in Jordan, where the corresponding percentages are 66 and 16 (41 percent for all Jordanian adults)⁴.

High Syrian birth rates and low participation levels among adult women are both rooted in the same set of socio-cultural factors: As in other Middle Eastern countries

³ Whenever we make comparisons with Jordan is this report, we use data from the 2003 Multi-topic Household Survey, implemented by Jordan's Department of Statistics in cooperation with Fafo.

⁴The Syrian population is younger than the Jordanian (34 percent of the population is younger than 15, compared to 30 percent in Jordan), but the higher adult participation rates gives higher overall participation rates in Syria.

there are relatively strong norms governing the places and types of work that can be considered "acceptable" according to sex, age and social status. Traditionally, married women are expected to render full-time care for the domestic needs of the family, rather than to engage in remunerated work outside the home. However, these norms are now increasingly challenged by modern society, in particular expressed by the labour market behaviour of highly educated women.

2.2 Labour Supply and Individual Characteristics

Labour force participation varies systematically with age

Both male and female labour force participation vary systematically with age. The "life cycle" pattern is strongest for men, where both urban and rural localities display the typical "inverse-U" shape that occurs for male labour force participation in almost every country (Figure 2.1).

Rural men join the labour force at a slightly younger age than urban men. At 25 years almost everyone have finished their education, while health problems and exhaustion from physically demanding labour has not yet started to take their tolls at 45 years. Hence, male participation increases to almost 100 percent in the 25 to 45 year age cohort. From the age of 45 onwards, men's participation decreases at a rapid rate, a

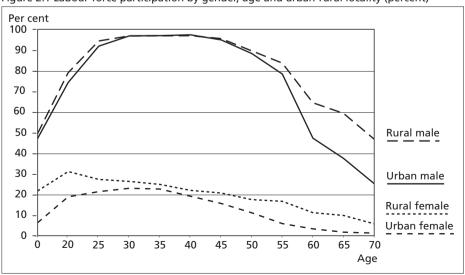


Figure 2.1 Labour force participation by gender, age and urban-rural locality (percent)

little faster in urban than in rural areas. A sharp drop in participation occurs at 60 years, which is the official retirement age in the government sector. However, even at 70 years of age, every third male is still employed. The male life-cycle participation pattern is basically similar in all six regions. However, men in the agriculture-dominated eastern region remain in the work force somewhat longer than men in other regions.

Do women return to the labour market when their children have grown up?

Childbirth and family obligations are the main determinants of female labour activity, and the life-cycle pattern of labour force participation is therefore more ambiguous for women than for men (Figure 2.1). Rural women join the labour force at a younger age than urban women, and have higher participation at all ages. While the urban female participation rate has a peak at around 35 years, the rural participation peaks at only 20 years. The rural pattern may indicate that many rural women leave the labour force when they give birth, but then return to working life again when their children grow older, or their daughters are old enough to substitute their mothers in the performance of household tasks. This distinction between the urban and the rural pattern may partially occur because it is easier to combine domestic tasks with agricultural work, and partially because rural women marry and give birth at a younger age than urban women. In a situation where fertility rates are declining, it is a key question how to pull more women back into the labour force when their children grow up and their domestic work burden is reduced. Women in the coastal region have higher participa-

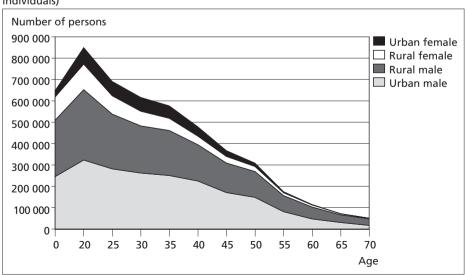


Figure 2.2 Labour force participation by gender, age and urban-rural locality (number of individuals)

tion rates than in other regions, except in the youngest age group, when most women pursue their education.

The combined effect of the population age structure and the male and female labour force participation rates is shown in Figure 2.2. The bulk of the Syrian labour force consists of men between 15 and 40 years of age.

Higher education positive for male, essential for female participation

Male labour force participation is highest at the highest education level, but does not increase systematically with increasing education (Figure 2.3). For women, higher education is decisive for participation, and there is a dramatic dualism in women's labour market behaviour according to their education level. While illiterate women hardly participate in the labour force at all, at least not in urban areas, women with intermediate education or a university degree have almost the same participation rate as men, both in urban and rural areas.

In addition to education-specific labour force participation rates, it is also useful to investigate the educational profile of the labour force (Figure 2.4). We observe that by far the largest group of labour force members is men with elementary education.

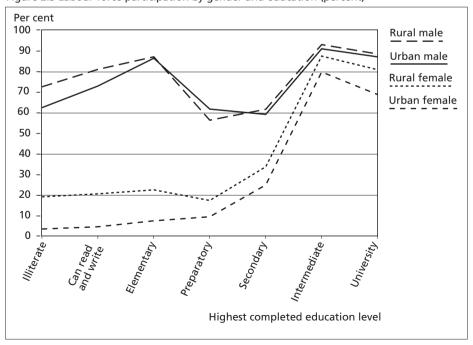


Figure 2.3 Labour force participation by gender and education (percent)

While women constitute a small fraction of the labour force among those with no more than secondary education, they make up as much as one third of the highly educated part of the labour force⁵.

Marriage increases male participation, but decreases female participation

Labour force participation depends strongly on marital status and relationship to the household head. It comes as no surprise that marriage has opposite effects on the labour force participation of men and women. For men, the labour force participation rate increases with marriage, for women it decreases (Table 2.2).

The strong effect of marriage is presumably also an effect of altered household composition: In contrast to Western countries, very few Syrian children are born outside of marriage, and marriage usually implies that the wife gives birth to one or

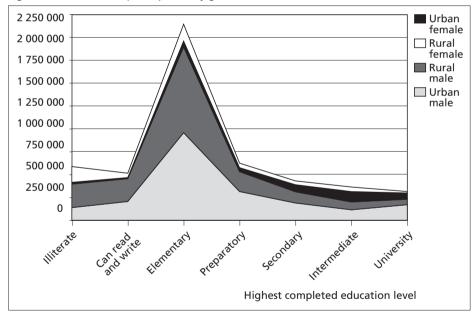


Figure 2.4 Labour force participation by gender and education (number of individuals)

Table 2.2 Labour force participation rates by gender, marital status and urban-rural residence

	Men Urban Rural		Wom	ien
			Urban	Rural
Never married	67	68	21	32
Married	84	87	12	18
Widowed/divorced	41	45	10	17
Total	74	75	14	23

⁵One exception is that there are many illiterate women employed in rural communities.

more children within a few years. Else, both widowed males and widowed females have lower participation than others, the main reason being that the majority among them are of old age.

Female labour force participation depends strongly on the relationship to the household head, and the effects are the same in urban and rural areas, although rural areas have a higher participation level for all relation types (Figure 2.5). The highest participation rates are found among women living with their siblings or parents. Spouses work less than the female average, in particular in urban areas. Unmarried female heads obviously have to work, because there is usually no able-bodied men in the household. To the contrary, married female heads work less, at least in urban areas. Some of these women may have a husband working abroad, and live from remittances.

Figure 2.5 Female labour force participation by relation to household head (percent) 35 Sister 30 Adult son /daughter Unmarried 25 female head Married 20 female head Spouse 15 Other 10 relative 5 Urban Rural

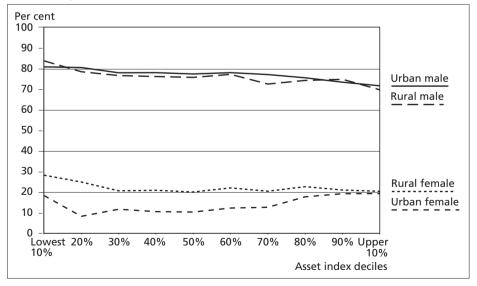
2.3 Labour Supply and Household Characteristics

Only urban female participation systematically correlated with economic situation

Male labour force participation seems only negligible correlated with household wealth, as measured by the asset index score (Figure 2.6)⁶. A reasonable explanation could be that there are strong social norms for men to work, and that male labour force membership in itself does not reflect households' incomes. The main difference between well-off and poor households would then be that men's hourly wages differ, rather than their labour activity (hours of work).

We find, however, an effect of wealth on the labour force participation of urban women: It increases systematically as their households' asset index score increases. This result is not surprising given the finding above that a considerable proportion of the few urban women in the labour force have acquired higher education. If we assume that higher education in most cases paves the way for comparatively well-paid jobs, it seems reasonable that households with both a working man and a working woman are

Figure 2.6 Labour force participation by gender, urban-rural locality and household asset index score (percent)



⁶ As already explained, the 2003 Unemployment survey did not collect information about income. Instead we rely on an asset index to differentiate households economically. See Annex B for details about the index.

economically better off than other households. The effect may also be a different one: Wealthier households may be more liberal towards female labour activity outside the home than poorer households.

In rural communities there is no positive relation between female labour force participation and the household's economic situation. The relation is rather negative. We believe this comes about because female labour force members in the countryside primarily work in the low-productivity agricultural sector, and because their work revenues (if they are paid at all) are too low to significantly affect the household asset score⁷.

There were relatively small differences in both male and female participation with respect to household size⁸. For men, labour force participation peaks at the household size of 4-5 persons. In general, there is little variation in labour force participation rates for the range of typical household sizes, i.e. from 2-10 persons. Male labour force participation drops sharply for household sizes of 1-2 persons, but these households represent only a tiny fraction of the total number of Syrian households. Female participation increases in very large rural households, probably as unpaid family labour.

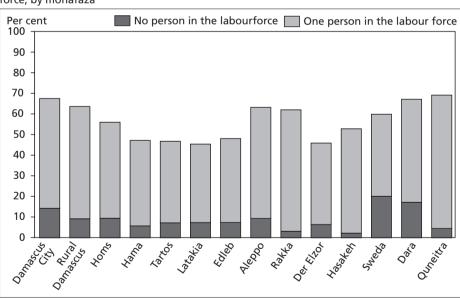


Figure 2.7 Share of households with respectively no member and one member in the labour force, by mohafaza

⁷There is also a possibility that the asset index has an urban bias. See Øvensen (2006) for details.

⁸ It was impossible to classify a simplified household type from the survey questionnaire. Data on the relation to the household head did not contain "grandchild" and "grandparent". These were classified as "other" relative. Moreover, for children below 15 years of age, the relation to the head was unknown. In most cases the children would be the offspring of the household head, but the young ones would frequently also be the children of the head's adult son.

2.4 Labour Supply in the Household Context

Six out of ten households have only one, or no member in the labour force

Although the ILO labour force framework is both defined and measured on the basis of *individual* activities, it is reasonable to assume that labour force participation is at least partially a decision taken by the *household*. For example, the non-participation of one household member may be conditioned on the labour force participation of another member.

Employment income is the main type of household income in Syria⁹. Households without any labour force member have no potential of acquiring labour income (they do not even have an unemployed member). Overall, nine percent households have no labour force member¹⁰, but regional variations are large, from a high of 20 percent in Sueda to merely two percent in Hasakeh. Most of these households are probably dependent on transfers: The 2004 income and expenditure survey found that transfers accounted for 11 percent of all household income, with pensions being the most important component, followed by remittances (El Laithy and Abu-Ismail 2005:33).

Almost 60 percent of the households have only one, or no labour force member. This share varies substantially across mohafazat, from 45 percent in Latakia to 63 percent in Aleppo. One in ten households have only one or no member in the working age. This share also varies significantly, from two percent in Hasakeh to 20 percent in Sueda.

Although the household size and composition is given at the time of the survey, changing the household's composition is an important coping strategy in the long term. Hence, in many cases, households are created, or cease to exist, as a direct consequence of changes in the economic situation of their individual members. For example, a surprisingly large share of households with 10 or more members contains only one labour force member. Although most members are below 15 years of age, we must assume that many of these households exist precisely because many of their adult members cannot join the labour force for various reasons, including old age and health failure. When the labour market prospects improve, previously "discouraged workers" may join the labour market. Some of them will become employed and move out of their father's home to form their own households.

⁹The 2004 income and expenditure survey found that employment income made up 89 percent of all household income (El Laithy and Abu-Ismail 2005:33)

¹⁰ The corresponding figure for Jordan is 14 percent.

Female headship is associated with a scarcity of labour force members

Households with a female head suffer a substantial risk of having no labour force member compared to male-headed households (Figure 2.8). The gender of the head seems to be a much more important factor than the region of residence¹¹. The share of households without labour force members varies from two percent among male-headed households in the eastern region to above 70 percent among households with married female heads in the southern region. For all male-headed households the share is six percent. For households with a married female head, it is 60 percent, while it is 38 percent for households with an unmarried female head.

One in four men is the only labour force member in their households

Households with only one labour force member are vulnerable and could face dramatically reduced income and living standards should something happen that prevents this person from working. The total share of men who are the only labour force member

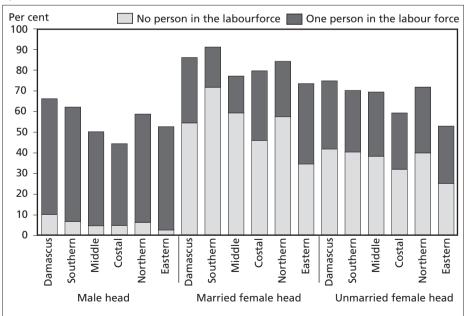


Figure 2.8 Share of households with respectively none and one member in the labour force, by mohafaza

¹¹ As elsewhere in this report, we have distinguished between married and unmarried female heads, because the former often have husbands working elsewhere in Syria or abroad. Households headed by married women, most of them fairly young, often contain only one person in working age. In contrast, the group of unmarried female heads consist of older, and often widowed, women, and their households typically do not have a single working-age member other than the woman herself.

in their household is 26 percent. This is approximately the same as the corresponding figure for Jordan (27 percent). Male figures vary from 18 percent in rural Latakia to 33 percent in urban Aleppo. With a national figure of one percent, women are hardly ever the sole labour force members of their households. The highest share, at four percent, is found in urban Sueda. Almost all women live in households with at least one other labour force member to support them economically. At least partly, this explains why the female labour force participation rate can remain at such a low level.

3 Employment and Work Conditions

A person's employment may be characterized in numerous ways. First, employment may be classified by legal arrangements, of which there are three main types: employees, self-employed and employers. Among employees some work for companies in the private sector, others work for the government in public administration or they can be found in state-owned enterprises. This distinction is important not only from the workers' perspective with respect to working conditions, but also because the government has direct control over the size of the public sector. Hence, changes in the number, composition and work conditions of the government sector employees are important tools for public labour market policy. A particular group of employees is the unpaid workers in a family farm or enterprise. Their labour activity stands out as the result of a household decision to an even larger extent than for other workers. We will therefore classify persons in three groups: (i) Public sector employees; (ii) Private sector employees and employers; (iii) Self-employed or unpaid family workers.

Second, employment may be classified by industry (such as "agriculture" or "manufacturing") and by occupation (such as "agricultural worker" or "clerk"). These classifications follow the international classification systems of the United Nations and the ILO, namely the International Standard Industrial Classification (ISIC) for industries and the International Standard Classification of Occupations (ISCO) for occupations¹.

Finally, employment is associated with certain work conditions, hereunder hourly wage and work time. Working conditions vary across occupations and industries, as well as between the private and public sectors. For example, while both employers and self-employed may be relatively free to decide upon their own work hours, employees usually must accept more regulated conditions both with respect to work hours, payment scales and other rights and benefits associated with their jobs.

¹ The ISIC list of industries can be found at http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=17 and the ISCO list of occupations at http://laborsta.ilo.org/applv8/data/isco88e.html.

The structure of the employment section

This chapter is divided into four sections. Section 3.1 deals with the distribution of the employed across the main economic sectors mentioned above, and the distribution of employment in these sectors according to selected geographical, individual and household characteristics. Section 3.2 and 3.3 present the workers' distribution across industries and occupations in a similar manner. Finally, section 3.4 deals with two key conditions of people's work, namely their weekly work hours and whether their employment is in regular, full-time positions, or is intermittent or seasonal.

3.1 Private Sector, Public Sector, and Self-employment

Employed persons belong to one of the three main types of employment arrangements: employee, self-employed or employer. As stated above, it is also useful to distinguish whether people work in the private or public sector². In principle, at least in the long term, the government has direct control over public sector employment. (Of course, such control may be divided between different government agencies and between central and local authorities.) The "unpaid workers" deserve particular attention as their work usually takes place under non-market conditions within a household setting. The largest category is self-employment and unpaid work, with 1.7 million workers or 37 percent of the total, followed by the private sector (1.6 million, 35 percent of

Table 3.1 Sector of employment by gender and urban-rural residence (number of individuals in thousand and percent)

	Male		Female		All
	Urban	Rural	Urban	Rural	
Individuals in thousand:					
Public sector employee	504	433	207	93	1,237
Private sector employee or employer	859	583	53	79	1,574
Self-employed or unpaid	578	755	37	294	1,664
Total	1,941	1,771	297	466	4,475
Percent:					
Public sector employee	26	24	70	20	28
Private sector employee or employer	44	33	18	17	35
Self-employed or unpaid	30	43	13	63	37
Total	100	100	100	100	100

²Employment in the government/public sector includes employment in central and local administration as well as in state-owned enterprises.

the total), and public sector employment comes third (1.2 million workers, making up 28 percent of total employment) (Table 3.1)³.

The public sector is more important for women, but there are significant regional differences

The government sector is somewhat larger in urban than rural areas both in absolute and relative terms. However, there are important differences between men and women. While the government sector has about the same relative importance for men in urban and rural areas (26 and 24 percent, respectively), public employment is much more important for women in urban as compared with rural areas, accounting for a high 70 percent of urban female employment (Table 3.1).

Private sector employment is also more prominent in urban areas, but again, there are clear gender differences. While 44 percent of employed men in urban centers work in the private sector, only 18 percent of employed women do the same. In rural areas, a large proportion of workers are either self-employed or unpaid. This is particularly

Table 3.2 Sector of employment by region for men and women (percent)

		Men		
	Public sector employee	Private sector employee or employer	Self-employed or unpaid	Total
Damascus	28	46	26	100
Southern	31	41	28	100
Middle	30	37	33	100
Coastal	40	25	35	100
Northern	14	43	43	100
Eastern	21	35	44	100

Women					
	Public sector employee	Private sector employee or employer	Self-employed or unpaid	Total	
Damascus	68	24	8	100	
Southern	55	21	24	100	
Middle	40	18	42	100	
Coastal	58	9	33	100	
Northern	21	13	66	100	
Eastern	24	24	52	100	

³Note that the International Monetary Fund (IMF) reports that government employment in Syria makes up only 20 percent of overall employment (IMF 2005:12). We have not investigated the possible causes of this discrepancy.

so for women. Close to two out of three women in rural Syria are self-employed or unpaid family workers.

A regional, gender-specific breakdown of the main types of employment reveals important differences (Table 3.2). Looking first at male employment, the public sector is most important in the coastal region (where it employs 40 percent of all men) and least important in the northern and eastern regions (where it employs 14 and 21 percent, respectively). These two regions, on the other hand, have the largest concentration of self-employed or unpaid men at 43 and 44 percent, respectively. Regional differences are even larger for women. Once again the northern and eastern regions have the lowest share of public employees, and the highest share of self-employed or unpaid people. However, public sector employment is even more essential for women in Damascus (68 percent) than for women in the coastal region (58 percent).

Different urbanisation levels explain some of the variation across regions, but not all of it. Looking first at women, we find that the level of public sector employment in urban areas is surprisingly equal across all mohafazat, at approximately 70 percent. On the other hand, in rural areas many women work in the public sector in the coastal mohafazat, while there are virtually none in the eastern mohafazat. For men, we find that the importance of the public sector varies more across the mohafazat, in both urban and rural areas. In rural areas, the highest level of male public sector employment is found in Latakia, the lowest in Aleppo. In urban areas, Der Elzor has the highest level and Aleppo again has the lowest.

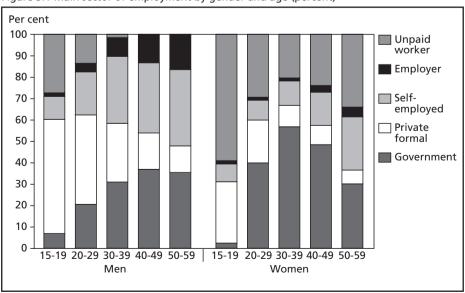


Figure 3.1 Main sector of employment by gender and age (percent)

The government sector employs the middle-aged; the formal private sector employs the young

The formal private sector absorbs most young men and many young women. The government sector employs a large share among those who have finished higher education (Figure 3.2). Government sector employment peaks in the age group 40-49 years for men, and 30-39 years for women, at 37 percent and 57 percent, respectively (Figure 3.1)⁴. For both men and women, private sector employment becomes less pronounced with age, while the importance of self-employment increases.

Most likely, the observed age pattern is a generation rather than a lifecycle effect. Historically low education levels, in particular among women, makes many old persons less qualified for the formal private and government sectors. In particular, it seems reasonable that the peak of government sector employment for women aged 30-39 years is due to a generation effect, as it runs counter to the overall age profile of female labour force participation.

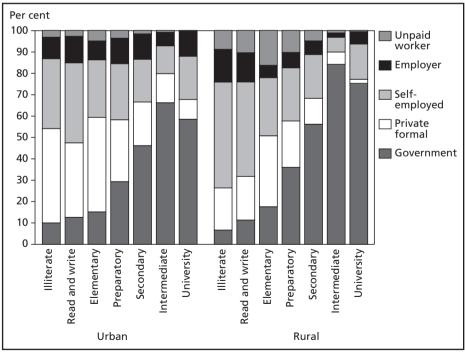


Figure 3.2 Sector of employment by education and urban-rural residence, men (percent)

⁴Note that because of the higher participation rate for men, there are about three times as many men as women in the public sector.

Higher education is associated with public sector employment, in particular for women

For men, the importance of public sector employment increases with higher education (Figure 3.2). In urban areas, 58 percent of employed university graduates work in the public sector, in rural areas 75 percent do⁵. This may be either because university graduates seek public employment due to better work conditions (shorter hours, better retirement benefits, job security) or because the private sector does not want the graduates (because university education does not provide the required skills). Both explanations almost certainly play a role. However, the dominance of the public sector among well-educated men is arguably one of the key labour market challenges for Syria, as the government would like to see a faster-growing private sector.

The main alternatives for highly educated men are to become self-employed (which presumably is the case for professionals such as lawyers and doctors) or employers. For men with less than secondary education, self-employment and the private formal sector is more important than the public sector, with self-employment being most important in the rural areas.

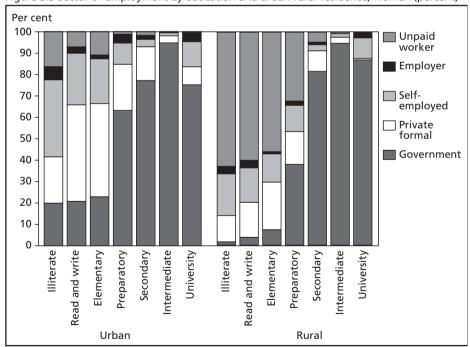


Figure 3.3 Sector of employment by education and urban-rural residence, women (percent)

⁵Note that the groups are small: There are 166 thousand economically active men with university education in urban areas, and 57 thousand in rural areas.

For women, the relationship between government employment and higher education is even stronger than for men (Figure 3.3). In urban areas, 75 percent of employed university graduates receive public salaries, in rural areas 87 percent do. There is a clear distinction between rural and urban areas. Women with little education tend to be unpaid workers in rural areas, while they more often are self-employed or work in private enterprises in urban areas. One should bear in mind that the groups are small: There are only 297 thousand employed women in urban areas and 466 thousand in rural areas, and there are extremely few employed women in urban areas without a certificate from secondary schooling. (Taken together there are 89 thousand employed women with less than secondary education in urban areas as compared with 392 thousand in rural areas.) It is an open question why urban educated women end up in the government sector. One reason might be that the public sector offers better conditions for those women who have to combine work outside the home with domestic tasks.

Government sector employment is associated with high wealth for women and medium wealth for men

Among men, the correlation between main sector of individual employment and household income is modest (Figure 3.4). A higher proportion of men from affluent households are employers. Else, government employment is somewhat more prevalent among men from mid-income households than at the extremes.

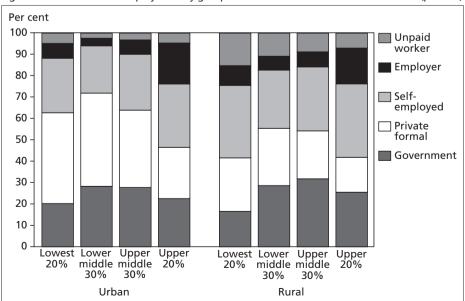


Figure 3.4 Male sector of employment by grouped asset index and urban-rural residence (percent)

Among women, the relationship between main sector of individual employment and household income is more systematic (Figure 3.5). As could be expected, the highest share of unpaid female workers is found among poor households, and in particular in rural settings. In contrast to the situation for men, government employment is of greater importance for women in more affluent families.

In the coastal region, one in two households has at least one person in public employment

Finally, we investigate the variation in the share of *households* with no members employed in respectively the government, and the formal private sector. This is important because employment in either the public or the private sector provides households with a stable income source, making them less vulnerable than households that have to rely on income from self-employment only.

For public sector employment, there is a apparent difference between the coastal and southern mohafazat on the one hand, and the northern mohafazat, in particular Aleppo, on the other. In Aleppo only 20 percent of the households have as a minimum one household member employed by the government, compared to more than 50 percent of the households in the coastal mohafazat of Tartous and Lattakia (Figure 3.6).

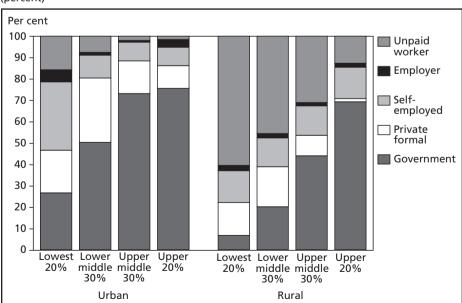


Figure 3.5 Female sector of employment by grouped asset index and urban-rural residence (percent)

Then again, just above 20 percent of households in the coastal mohafazat have at least one household member employed in the formal private sector, while the corresponding figure for Aleppo is 40 percent. It is in particular the high female labour force participation rate in the coastal region, and the fact that many of these women hold governmental jobs that explains the regional differences. Twenty percent of the households in Latakia have two or more members employed in the government sector. In Aleppo this figure is no more than three percent.

3.2 Employment by Main Industry

People's industry of employment is determined by the preferences of individuals, households and employers, but also, of course, by the types of economic activity available in the areas where they live. Perhaps the most decisive factor, except for gender, is whether the person resides in an urban or rural locality. In Syria, an employed person living in the countryside, and in particular if female, has a high probability of being employed in agriculture. The reason is the shortage of alternative forms of employment in most rural settlements.

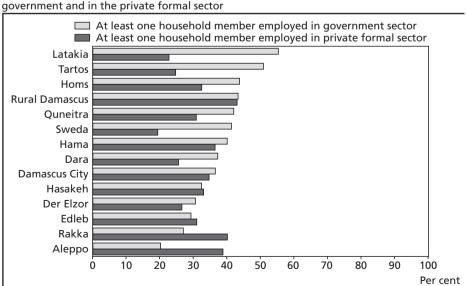


Figure 3.6 Share of households with at least one household member employed in the government and in the private formal sector

It is a complex challenge to present the workers' main industry of employment. An interpretable graphical presentation is only possible if the number of categories is reduced. This is not least true because a full picture of the industry distribution also must take people's occupation and main sector of employment (public, private) into consideration. Moreover, while it is essential to distinguish by gender, it is just as important to distinguish between urban and rural localities, because of the pivotal role of agriculture in rural areas. Hence, with the exception of Table 3.3 we have chosen to collapse the original nine main industry categories into five still relatively homogenous categories First, typically male and physically demanding industry types such as construction and infrastructure have been grouped together with mining and manufacturing. Next, we have grouped trade, hotels and restaurants together with transport, communications and "other" services into one comprehensive group of services. Finally, because domestic or household work (for pay for *others*) is of so little importance (less than 0.1 percent), we have added the few cases in our data set to the services category. Out of the original nine major industry types, only health and education, public administration and police, and agriculture have been kept unchanged.

Table 3.3 Main industry by region (percent)

	Damascus	Southern	Middle	Coastal	Northern	Eastern	Syria
Agriculture/ forestry/ fishing	1	13	27	23	30	51	26
Mining and manufacturing	18	16	11	10	18	4	13
Construction and infrastructure	8	14	14	8	12	8	11
Trade/ hotel/ restaurants	25	15	13	12	17	9	15
Transport and communications	8	7	6	7	5	4	6
Public administration and police	21	20	17	22	8	12	15
Health and education services	10	9	8	14	5	8	8
Other services	9	6	3	4	4	3	5
Domestic/ household work	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100

Services most important in the southwest, agriculture dominates in the northeast

With respect to main industry of employment, there is a clear geographical distinction between areas close to Damascus in the south-western part of the country and areas towards the northeast (Table 3.3). In the capital and neighbouring mohafazat, services dominate the economy while in the northeast agriculture employs the majority.

The regional pattern of main industry of employment is strongly determined by the relative size of the rural population of each region. The re-classification of industries into five categories provides a clearer picture of gender and urban-rural differences in the Syrian labour market (Figure 3.7). Agriculture is the single largest industry in rural areas, in particular among women⁶. In urban areas, services and manufacturing/construction dominate among men, while health and education, and public administration are key industries for women.

There are important gender differences (Table 3.4). The share of men employed in the typical government sectors of health and education, and public administration and police is relatively stable across regions, except a slightly larger role for the latter sector in the coastal mohafazat. Services, and construction and manufacturing are

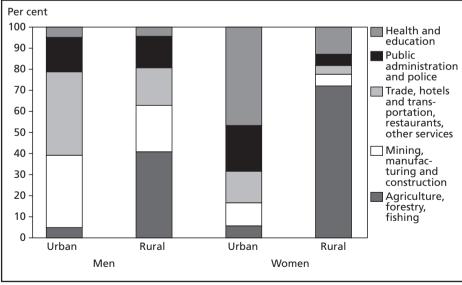


Figure 3.7 Main industry by gender and urban-rural residence (percent)

⁶ It may seem strange that people in urban settings are employed in agriculture. However, some areas classified as "urban" are in reality semi-urban, with agricultural land close to people's houses. Moreover, some people in urban areas commute to their farmland in the same way as rural residents may commute to towns and cities in order to work.

key sectors for Damascus and the Northern region (i.e. Aleppo), while agriculture is particularly important in the eastern part of Syria.

Among women, employment in health and education plays an essential role in the capital and the coastal region, but less so in the middle, northern and eastern regions, where agriculture is much more important. Except for areas to the south of the capital, services, construction and manufacturing are of little importance for female employment.

Agriculture is concentrated in certain mohafazat, and here women's share of agricultural employment is higher than that of men. The middle region is heterogeneous: Agriculture is very important in Hama, but not in Homs. In Aleppo, agriculture is imperative for women, but not so for men. The essential factor in explaining agriculture's significance for employment is a mohafaza's degree of urbanisation.

Table 3.4 Main industry by region, men and women (percent)

Men							
	Damascus	Southern	Middle	Costal	Northern	Eastern	
Agriculture, forestry, fishing	1	12	23	22	22	47	
Mining, manufacturing and construction	28	31	30	21	35	16	
Trade, transport, hotels and restaurants, other services	45	30	25	27	31	19	
Public administration and police	20	21	17	24	8	14	
Health and education	5	5	5	7	3	5	
Total	100	100	100	100	100	100	

Women								
	Damascus	Southern	Middle	Costal	Northern	Eastern		
Agriculture, forestry, fishing	0	15	46	29	70	72		
Mining, manufacturing and construction	11	19	7	9	4	1		
Trade, transport, hotels and restaurants, other services	22	14	9	9	4	2		
Public administration and police	27	12	14	16	7	5		
Health and education	40	40	25	37	14	19		
Total	100	100	100	100	100	100		

The government plays a marginal role for employment outside public administration, health and education

Contrary to what many people would believe from the influence of socialist thinking on Syrian society, the government does not play an important part in employment outside public administration, and health and education. The government employs around 10 percent of men in service industries, manufacturing and construction, and employs just two percent of men in agriculture (Table 3.5).

For men, formal private-sector employment dominates in construction and manufacturing, but is also found in services. Self-employment is important in agriculture

Table 3.5 Main sector of employment by industry (percent)

Men							
	Agriculture, forestry, fishing	Mining, manufacturing and construction	Trade, transport, hotels and restaurants, other services	Public administration and police	Health and education		
Government	2	13	7	97	83		
Private formal	16	56	34	1	5		
Self- employed	45	20	42	1	9		
Employer	14	8	13	0	3		
Unpaid worker	24	3	4	1	0		
Total	100	100	100	100	100		

Women							
	Agriculture, forestry, fishing	Mining, manufacturing and construction	Trade, transport, hotels and restaurants, other services	Public administration and police	Health and education		
Government	1	29	24	98	89		
Private formal	17	41	28	1	7		
Self- employed	15	23	34	1	3		
Employer	3	2	7	0	1		
Unpaid worker	65	6	7	0	0		
Total	100	100	100	100	100		

and services, and to some extent in construction and manufacturing. There are even a number of self-employed men in health and education, mainly as independent professionals (medical doctors, dentist, pharmacists, etc). Unpaid male workers are primarily found in agriculture. For the most part this group consists of young family members. Among women, a similar pattern applies. Two differences stand out: First, public sector employment is more common among women in construction and manufacturing than among men in the same industries. However, one should bear in mind that there are very few women in these industries. More important is the second difference: Two thirds of women employed in agriculture report being unpaid. This suggests that men receive the family's economic benefits from agriculture, something that is reflected in men reporting to be self-employed.

Government-dominated industries employ the middle-aged and the educated

Age seems to be of some albeit not essential importance in explaining the main industry of employment (Figure 3.8). Government-dominated employment types, such as health, education, public administration and police mainly employ the middle-aged, while physically demanding work in mining and construction attracts young men. Agriculture is crucial for the very young and the very old. In all probability, the importance of agriculture for the oldest age groups is partly due to a generation effect

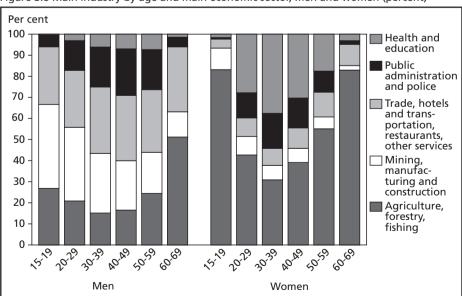


Figure 3.8 Main industry by age and main economic sector, men and women (percent)

– agriculture was more important 30 years ago, when these cohorts entered the labour market. However, it is also caused by a public sector retirement age of 60 years, which increases the relative importance of other industries. For the younger age groups, the importance of agriculture may partly reflect the fact that agricultural workers have less education and begin working at a younger age, and may partly reflect a life cycle effect, with youth in rural areas helping out at the family farm before finding other work and forming their own households.

Education is of greater significance than age in explaining both male and female industry of employment, although the two variables are strongly correlated. Among men, there are virtually nobody employed in health and education with less than intermediate education (Figure 3.9). A small number of people with very low education are employed in public administration. They would in most cases be working as guards, serving tea and coffee, or conducting similar manual jobs.

The female labour market is clearly segmented. Two thirds of working women with low education (elementary or below) are employed in agriculture while two thirds of those with intermediate or university education have jobs in health and education (Figure 3.10). Hence, any cutback in public health and education services will severely affect the employment opportunities of urban educated women, whereas a reduction in the agricultural sector will negatively influence the employment of rural, less educated women.

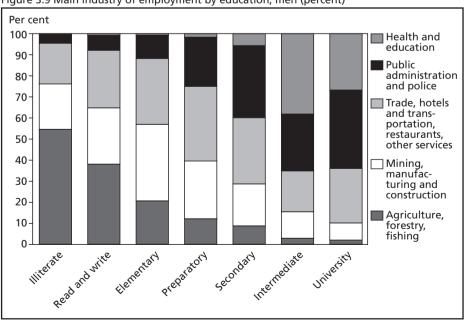


Figure 3.9 Main industry of employment by education, men (percent)

Agricultural employment is associated with low asset index score

The relation between industry of individual employment and the household's economic welfare (as measured by the asset index score) is weaker than between industry of employment and other individual characteristics. The main finding is that for working men, agricultural employment is associated with a low asset index score, while there is little variation between the other industry types. For women, agricultural employment is also associated with a low asset index score, but in addition, employment in public administration as well as in the health and education sectors is associated with a high asset index score.

3.3 Employment by Main Occupation

As with industry, a worker's individual preferences, the acceptance of these by his household and employers, coupled with the economic activities in the place of residence determine his occupation. Thus, the most decisive factor, except for gender, is whether the person lives in an urban or rural setting. Reflecting the predominant industry of the countryside, the most common rural occupation is agricultural worker,

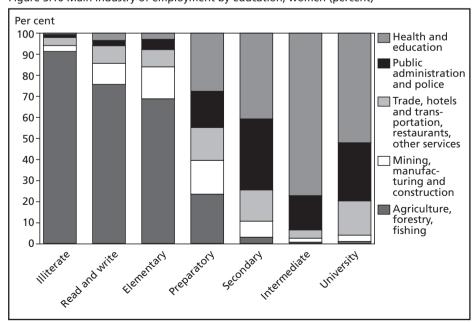


Figure 3.10 Main industry of employment by education, women (percent)

particularly among women. As mentioned above, the reason is that alternative forms of employment scarcely exist in most of Syria's rural settlements.

As with industry, we have chosen to regroup the occupation categories, collapsing the original seven categories into five relatively homogenous ones. In line with our approach for industry, the typical male and usually physically demanding occupations like construction workers and workers engaged in mining and manufacturing have been grouped together. Moreover, we have grouped managers and professionals together, noting that the former group is much smaller than the latter. Out of the original occupations, agricultural workers, sales and service personnel, and clerks have been kept unchanged.

The five occupational groups display the same gender and urban-rural variation as found for industry types (Table 3.6). Agricultural worker constitutes the largest occupation in rural areas, in particular among women. In urban areas, service and sales personnel, and manufacturing and construction workers dominate among men, while almost 60 percent of women are managers and professionals, primarily employed as nurses and teachers in the health and education sectors. Furthermore, a considerable proportion of urban women work as clerks in public administration.

The gender-specific regional occupation pattern is strongly determined by the rural population share in each region. In the southern region and Damascus, two thirds of all men are employed as sales and service personnel or manufacturing, technical, or construction workers. Other significant occupations in this region are clerks and professionals, mainly in public administration and the police. The eastern region is significantly different from the capital. Here almost half the men are agricultural workers.

Table 3.6 Main occupation by urban-rural residence, men and women (percent)

		Men		Women		
	Urban	Rural	Total	Urban	Rural	Total
Managers and professionals	12	8	10	57	14	31
Clerks	9	6	8	16	4	9
Sales and service personnel	29	14	22	11	4	7
Manufacturing, technical or construction workers	46	31	39	10	6	8
Agricultural workers	5	41	22	6	72	46
Total	100	100	100	100	100	100
Total number of individuals	1,941,000	1,770,000	3,711,000	297,000	466,000	762,000

Among women, the share of professionals is 50 percent in Damascus, dropping to 20 percent in the northern and eastern regions. The share of professionals relative to the share of clerks is fairly stable across regions.

The government sector is the largest employer of both male and female managers, professionals and clerks. (Table 3.7.) Else the relation between people's occupation and sector of employment resembles the relation between industry and sector of employment so closely that we shall refrain from commenting any further on it here. The same applies to the relation between people's occupation and age.

Table 3.7 Employer by occupation, for men and women (percent)

Men	Managers and professionals	Clerks	Sales and service personnel	Manufacturing, technical or construction workers	Agri- cultural workers	Total
Govern- ment	76	93	16	17	2	25
Private formal	7	5	27	50	15	30
Self-						
employed	10	1	39	23	45	28
Employer	6	0	13	7	14	9
Unpaid worker	0	0	5	3	24	8
Total	100	100	100	100	100	100
Total number of individuals	365,000	281,000	809,000	1,441,000	815,000	3,713,000
Women						
Govern- ment	88	89	28	29	1	39
Private formal	6	10	26	41	16	15
Self- employed	4	0	35	23	15	12
Employer	2	0	5	2	3	2
Unpaid worker	0	1	7	6	64	31
Total	100	100	100	100	100	100
Total number of individuals	236,000	65,000	50,000	58,000	354,000	762,000

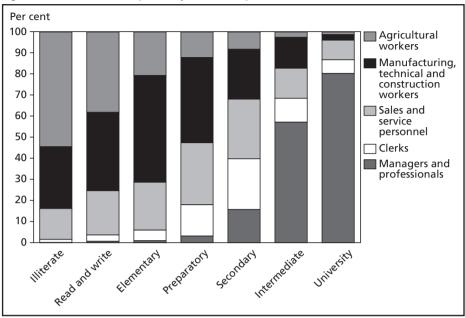
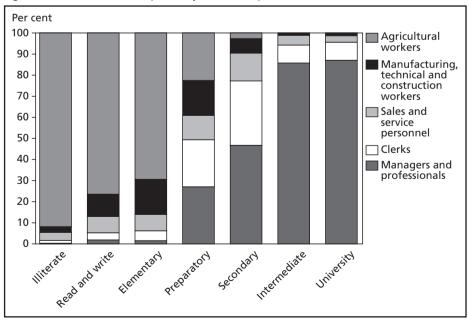


Figure 3.11 Main male occupation by education (percent)





Professionals have the highest education; agricultural workers have little or no education at all

As with industry, education is more important in explaining both male and female occupation than age, although age and education are systematically correlated. The main new feature, relative to the discussion in the previous section (and to the strong correlation between industry and occupation), is that people with a university degree are predominantly managers and professionals, while the largest share of clerks are found among persons with secondary education. This applies to both men and women alike (Figure 3.11 and Figure 3.12).

Agricultural workers are poor; male service workers are almost as well off as professionals

As with industry, the relation between individual occupation and the household's economic situation as measured by the asset index score is less direct than between occupation and other individual characteristics. However, while there was little systematic variation between industries (except for agriculture) and economic status, there are differences across occupational groups – for women.

As expected, being an agricultural worker is associated with a low asset index score, both for men and women. Male service workers have almost as high a score as male managers and professionals. Consequently, the differentiation between occupation groups is not particularly pronounced for men⁷. However, female clerks or managers/professionals live in wealthier households than women working in sales or services. Moreover, they belong to wealthier households than men working in the same occupations. On the other hand, female agricultural workers are relatively more deprived than male agricultural workers.

3.4 Work Time and Type of Job

This section presents the distribution of weekly work hours, and the regularity of employment (full-time, seasonal, or intermittent). The two phenomena are closely related: Full-time employment usually implies six weekly workdays, and at least 40 weekly work hours. The number of weekly work hours and type of employment in this

⁷This does *not* imply that earnings are the same. The asset index measures the household's situation and is influenced by factors such as the number of employed household members.

section refer to the main job only. This is because we want to relate these to people's occupation, and their sector and industry of main job.

The employer and the employees usually determine the work time jointly

It is reasonable to assume that both employers and self-employed are relatively free to decide upon their own work hours. For employees, however, the employer and the employee determine the work hours jointly. Some employees want to work long hours; others prefer short hours. Some employers want their employees to work long hours, while others prefer short hours. When trade unions are lacking, such outcomes are determined by individual bargaining. However, people may also "vote with their feet" and find other jobs, leave the labour market altogether, or decide not to enter the labour force in the first place⁸. Likewise, employers may dismiss their employees and hire others. It is a realistic assumption that, in the long term, a gradual adaptation takes place, where employees find employers and employment that fit their desired number of work hours and other work conditions, and vice versa.

A particularly attractive employer is the government, where working conditions to a larger degree than elsewhere are regulated with respect to hours, wages, protection against unjustified dismissal and retirement pensions. These regulations make public employment attractive to many workers. In particular, women may find government

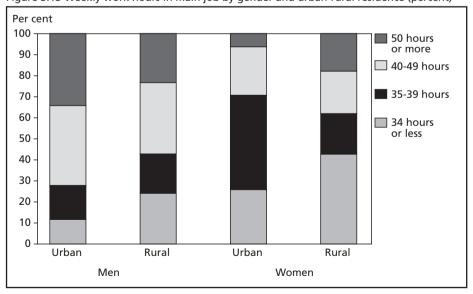


Figure 3.13 Weekly work hours in main job by gender and urban-rural residence (percent)

⁸Note that job satisfaction is included in the definition of invisible underemployment. Consequently, the topic will be discussed in the next chapter about unemployment and underutilisation of labour.

jobs advantageous because more regulated work conditions make it easier to combine work and family obligations, and because the government sector usually provides better protection against discrimination in the labour market.

The situation for unpaid workers is more difficult to entangle. This group seems to represent a pool of reserve labour that is called upon when special events occur, such as e.g. harvest season in the countryside. People in this group are mainly poorly educated women, and it is unclear to what extent they are able to influence the duration of their work, as well as other work conditions.

Urban men work a higher number of weekly hours than rural men, for women the picture is the opposite

Men work more hours than women, in both urban and rural areas, and men in urban areas work more hours than men in rural areas (Figure 3.13). Men work particularly long hours in Damascus, where almost half the men have 50 or more weekly work hours (in their main job).

For women the picture is the opposite: Few urban women work more than 50 hours per week, and three out of four have less than 40 weekly work hours. Working more than 50 hours per week is obviously not compatible with most women's pivotal

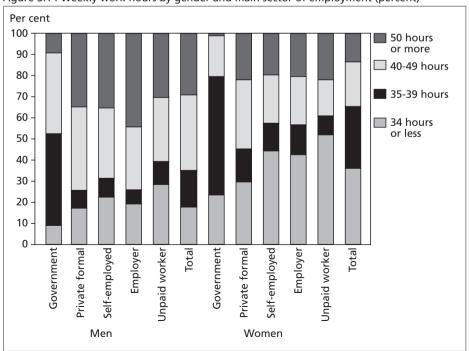


Figure 3.14 Weekly work hours by gender and main sector of employment (percent)

role in childcare and other domestic work. Among rural women, and particularly in the agriculture-dominated eastern region, the situation is different, with a very high share of women working more than 40 hours a week (in the main job), and one third even working 50 hours or more. In all probability, many women in the latter group are in a position to combine work with childcare.

Work hours are shorter in the public sector

For both men and women, work hours are shorter in the public sector than in all other sectors: Over half of all men and a high 80 percent of women in the public sector work less than 40 hours a week. In the formal private sector, on the other hand, almost three in four men and over half of the women work more than 40 hours a week. (Figure 3.14.)

Seasonal work is primarily a rural phenomenon

As mentioned above, agriculture provides work to a large share of the labour force in rural areas. Many agricultural workers, in particular women, are engaged on a seasonal basis, and seasonal work is widespread in rural areas (Figure 3.15). In contrast, urban employment consists almost solely of full-time jobs, although as we shall see in Chapter 5, the concept "full-time" has somewhat different meanings for different occupations and industries. Approximately 15 percent of working men in the cities have episodic

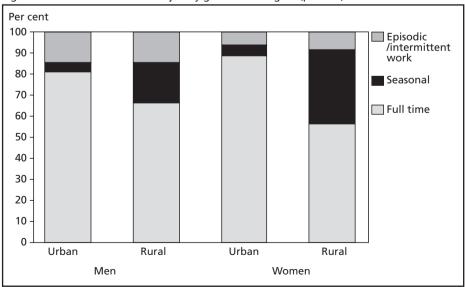


Figure 3.15 Classification of main job by gender and region (percent)

or intermittent work only. The regional distribution of employment types reflects the regions' share of agricultural employment, with a higher number of seasonal workers in the northeast of the country, and virtually none in Damascus.

The importance of seasonal work implies that employment levels in Syria probably fluctuate quite a lot throughout any given year, which means that both the number of employed persons and the number of unemployed (and associated participation and unemployment rates) may depend on the timing of the labour force survey. This in turn implies that the CBS should consider carrying out the labour force survey on at least a quarterly basis (if not monthly), rather than annually.

Intermittent and seasonal work is also found in the formal private sector

Unsurprisingly, the government sector is also different from the other sectors in that almost all employees have regular full-time jobs. Furthermore, seasonal employment is, as could be expected, highest among unpaid family workers. (Figure 3.16.)

What is somewhat more surprising is the relatively high importance of intermittent and seasonal work in the formal private sector. Even among men, over one third in this sector report having seasonal or intermittent work, with the majority in the

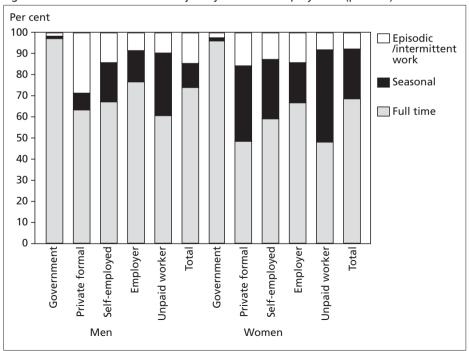


Figure 3.16 Classification of main job by sector of employment (percent)

latter category. (Figure 3.16.) Syrian labour laws are relatively strict, and easy dismissal and temporary contracts should not be common if the laws were applied. The finding probably indicates that even those that are classified as part of the "formal" private sector in this survey, in reality are in a precarious situation with respect to job security. This is a point we will return to in the next chapter, in the discussion of unemployment and underemployment.

4 Unemployment and Underutilisation of Labour

The title "CBS 2003 Unemployment Survey" indicates that measurement and documentation of the unemployment situation in Syria is one of the main purposes of this survey. There are several reasons to be concerned with unemployment. First, unemployment implies a loss of welfare for the unemployed and their households. Not only is potential household income lost, but also skills and experience that are usually acquired at work. Lasting unemployment among persons expected by society to work may also bring about irreversible negative social and health effects. Second, unemployment represents a waste of human resources that could otherwise be gainfully used in the economy. Third, the difficult situation of the unemployed may be a source of social frustration and unrest.

Unemployment has many causes. A simplified explanation is that unemployment occurs when, at a given wage level, there are more persons supplying labour, than there is demand for workers. Although various wage rigidities that keep wages above the market-clearing level do exist, this is only a partial explanation of unemployment.

At any time the labour market will have a certain level of "frictional" unemployment caused by individuals changing their jobs in search for better opportunities. Unemployment may also be structural. In reality there is not one single labour market, but a range of markets separated by geography, skills, gender and other socio-economic factors. Sudden economic changes, whether occurring for domestic reasons or imported from abroad, and whether caused by policy changes or being outside the control of the authorities, may alter the balance between supply and demand in one or more of these markets. If the modification of the market forces is of a permanent nature, it often takes time to restructure the labour market in terms of transferring people employed in sectors, industries or regions that suffer a relative decline in demand for labour, to other labour markets.

Furthermore, unemployment may also be caused by business cycles setting in motion a general decline in the demand for labour in the whole economy. The effect is usually of a temporary nature. Some labour markets, in particular weather-dependent industries, are characterized by seasonal unemployment. In peak seasons, which occur at regular intervals, labour is relatively short in supply, while in low seasons, many "peak-season" workers are employed elsewhere, or become unemployed. Typical examples of sectors

facing high seasonal unemployment levels are agriculture, fisheries, and some types of services, in particular tourism.

In addition to the above-mentioned causes of unemployment, one has also identified that an important component of unemployment in other Arab countries is queuing for jobs in the public sector (Assaad 1997, Rama 1998). As these jobs for a large part of the population are more attractive than jobs in the private sector, many graduates will stay unemployed as long as they can afford to, hoping to gain entry into the public sector. In a recent paper, Huitfeldt and Kabbani (2005:4) argue that "unemployment in Syria is very much a labor market insertion problem involving young first-time job seekers", a view that is confirmed by the data from the unemployment survey.

From a policy point of view, it is necessary to understand what causes unemployment in order to design policies that can reduce the problem. In this report, we will not try to classify the unemployed by the various unemployment types described above. The survey data provide some information about the unemployed, such as the duration of unemployment and why those who were previously employed ceased working. However, we lack time series data for aggregate unemployment levels in various labour markets, and we lack panel data, which could have shed light on movements into and out of unemployment. We will therefore primarily be concerned with giving an overview of how unemployment affects various demographic and socio-economic groups differently. In doing so we shall show that the unemployed is a fairly heterogeneous group. We will not go far in exploring the causes of unemployment in Syria. Hence, it is imperative that others study this topic further.

The structure of the unemployment chapter

We have chosen to divide the unemployment chapter into five sections. We begin by some remarks on how unemployment should be measured and propose using two different measures. One is the ILO standard definition of unemployment; the other is a wider measure of underutilisation. Section 0 deals with the geographical distribution of unemployment and underutilisation of labour in Syria. Our main reference variables are people's place of residence in terms of urban-rural locality, region and mohafaza. Section 0 highlights the relationship between unemployment and *individual* characteristics such as age, education, marital status, and relation to the household head. Section 4.4 sheds light on how individual unemployment relates to characteristics of these individuals' *households*, such as the household's size and composition, its wealth and other household features. Section 0 pictures how unemployment is manifested at the household level. Of particular interest is to identify vulnerable households where all adult members are unemployed or underutilised. Moreover, we investigate how many persons are the only unemployed or underutilised person in their households, and the share of persons that live in households with other unemployed and underutilised

(regardless of their own status). In addition to the findings presented here, the main results from a logistic regression on employment *versus* unemployment in the group of labour force members are presented in Appendix A.

4.1 The Measurement of Unemployment

As mentioned in Chapter 1, the ILO labour force framework divides the working-age population into three groups: the employed, the unemployed, and the inactive (Figure 4.1.) The concept of unemployment relates to involuntary inactivity, and is defined by the ILO as all persons of working age who were at the time of the interview without work, currently available for work, and seeking work. The definition was originally developed for use in the industrialised economies of North America and Europe, but is today used as the standard way for measuring unemployment in most countries around the world.

The ILO provides specific guidelines on how this definition should be implemented in a household survey such as the unemployment survey, and we present our approach in some detail in Appendix C^1 . In a household survey, the classification of a person's status as e.g. "unemployed" is neither done by the interviewer nor by the interviewee, but made by the analysts depending on answers to a range of questions – normally around ten – about work, availability, and job seeking during a period of up to four weeks before the interview. Specifically the ILO recommends that the notion of being "without work" should be interpreted strictly, classifying a person that worked for pay or profit as little as one hour during the week prior to the interview as employed rather than unemployed.

The ILO points out that depending on local circumstances, these guidelines may be too strict, and one might also include the *discouraged workers* – those who were not seek-Figure 4.1 Definitions used in the Unemployment Survey

Total population						
Work	Working age population 15 years or older					
Persons include	d in the labour force	Inactive persons	Persons below			
Employed persons	Unemployed persons (Not employed, sought work, and available for work)	(Not employed, not unemployed, did not seek work)	15 years of age			
I	II	III	IV			

¹See Hussmanns et al. (1990) for the ILO guidelines.

ing work because they believed there was none to be found – among the unemployed. Furthermore, among the employed there might be persons who are *underemployed*, which means that they lack work but are not unemployed. (In this category one might include persons who worked more than one hour but less than a full workweek.) We will soon return to the discouraged and underemployed, but first we will introduce the many adults who are voluntarily inactive.

Voluntary inactivity is not necessarily a problem for the individual or the household

Chapter 2 showed that 52 percent of all Syrian adults (aged 15 years or older) are voluntarily inactive, insofar as they are not employed, nor do they fulfil the ILO unemployment criteria. In this connection, it is necessary to comprehend that the term "inactive" does not imply that these people are not engaged in useful activities. The point is rather that the international "System of National Accounts" (SNA), does not classify these activities to be "production"². Although the Syrian economy would generally benefit if a higher number of inactive people joined the labour force, it is essential that from a perspective of household and individual welfare, voluntary lack of labour activity among Syrians should not be considered to be a welfare loss.

Although we shall discuss the characteristics of the inactive population in Chapter 5, we mention the most important groups here: Housewives constitute the largest group of inactive. Even though their role in maintaining the household and taking care of children and other needy is indispensable, their domestic tasks are still not considered as "production" by the international standards for economic statistics. A second large group of inactive, mostly consisting of persons below 25 years, consists of pupils and students. Other inactive groups are the old, the sick, and the retired.

Inactive or unemployed? The "discouraged workers"

To be classified as "unemployed" in the labour force framework, a person must not only have had no labour activity during the determinant week, but also actively have sought work. Originally developed for Western labour market conditions, the application of the "seeking work" criteria is less straightforward in developing countries³. Although

² The System of National Accounts is the international statistical standard for the measurement of the market economy. For this measurement, it is necessary to define what is production and what is not. Details about the SNA can be found at the web page of the UN Statistics Division: http://unstats.un.org/unsd/sna1993/introduction.asp.

³ In most Western countries "seeking work" by registering at the labour exchange office is a pre-requisite to receive unemployment benefits.

we to some extent will discuss the findings with respect to seeking work below, at this stage a few general observations should be sufficient to illustrate this point: The absence of good and timely information on available jobs, the seasonal nature of much work, and the high incidence of self-employment are all factors that complicate the meaning of "seeking work" in the context of developing economies. Many unpaid family workers do not seek work outside the family enterprise, even though they would like to work more. "Seeking work" is often understood as seeking paid employment only. It may also be difficult to draw the line between seeking work as self-employed, and the activity of actually being self-employed.

To cope with these challenges, ILO recommends a less strict, "relaxed" seeking work criterion in situations where "the conventional means of seeking work are of limited relevance, where the labour market is largely unorganised or of limited scope, [...] or where the labour force is largely self-employed" (Hussmanns et al. 1990:106). Persons not seeking work for reasons of lack of hope or similar may be classified as "discouraged workers", and be moved from the "inactive" to the "unemployed" (from category III to II in Figure 4.1). Consequently, the number of unemployed persons increases when the "relaxed definition" is used.

Employed or unemployed? The "underemployed workers"

By contrast to the extreme situation defined as "unemployment", "underemployment" refers to situations of *partial* lack of work. Citing ILO, "[u]nderemployment exists when a person's employment is inadequate, in relation to specified norms or alternative employment, taking into account the occupational skills of the person" (Hussmanns et al 1990:121). ILO distinguishes between two main types of underemployment: visible and invisible underemployment. *Visible* underemployment refers to insufficiency in the volume of employment. *Invisible* underemployment refers to misallocation of labour resources, for example in the form of low productivity and underutilisation of a worker's skills.

Statistical measurement of visible underemployment is challenging. A visibly underemployed person must both be working less than normal duration, and seeking and being available for additional work. However, it may be difficult to determine the normal weekly working hours in a person's usual type of activity. The tendency of self-employed and unpaid family workers to structure their work by tasks at hand rather than by fixed work hours, makes the concept of "normal working hours" ambiguous. The many possible reasons for working less than normal hours also make it difficult to assess the possible involuntary nature of such labour activity.

Measuring invisible underemployment is even more challenging. Invisible underemployment characterized by low productivity is probably the most typical form of labour underutilisation found in many Middle Eastern countries. Measurement

requires, however, information on the economic productivity of individual economic units. Furthermore, such data must be supplemented by information on the characteristics of individual workers. Thresholds below which income is considered abnormally low, skills under-utilized, or productivity insufficient, must be established. Use of low income as criterion for invisible underemployment is problematic because low income may reflect the institutional set-up rather than low labour productivity. This problem is perhaps most clearly exemplified by unpaid family labour among women and children. In family enterprises it may be particularly difficult to trace the individual income components required to measure invisible underemployment. This undertaking is so demanding that statisticians, even after years of experimentation, have been forced to give up their efforts to give clear recommendations for how to measure invisible underemployment exactly.

Which definition should be used in Syria?

It follows from the above that one can identify at least four different groups of people in some kind of involuntary activity: (i) the *unemployed* (according to the standard ILO definition, i.e. not working even one hour, seeking work, and available for work); (ii) the *discouraged workers* (not working even one hour, available for work, but not seeking work because they believe there is none to be found); (iii) the *visibly underemployed* (working, but less than normal duration/full time, and wanting to work more) and finally (iv) the *invisibly underemployed* (working in a job characterised by low productivity or underutilisation of skills).

For standard analysis and for the purpose of international comparison, we would argue that the standard ILO definition of unemployment should be used, i.e. considering only the unemployed. This yields an unemployment rate of 10.3 percent for Syria at the time of the 2003 Unemployment survey.

However, we believe this to be an underestimation of the "true" extent of the labour market problems facing the Syrian population. We will therefore define as *underutilised* the four groups listed above – the unemployed, the discouraged workers, the visibly and the invisibly unemployed. We do this because we think this will give the most useful description of the challenges facing Syria's labour market. However, it should be stressed that this is an *ad hoc* approach for use in this report, a definition reached during the analytical workshops at the CBS in 2004. The concept is not used by the ILO, nor can one expect to find an equivalent measure of "underutilisation" applied in other Syrian statistics or in the statistics of other countries.

The use of the concept of underutilisation allows us to introduce the concept of "underutilisation rate". The unemployment rate is defined as the share of unemployed in the total labour force, the labour force being defined as the employed plus the unemployed

(Figure 4.1). Reflecting this understanding, we suggest to define the "underutilisation rate" as the share of the population aged 15 years or older who are underutilised, relative to those who are either in the labour force or underutilised, or both⁴.

Our key assumption is then that although the ILO defined unemployment rate correctly captures the unemployment situation in Syria in a technical sense, the suggested "underutilisation rate" is closer to the popular understanding of "true unemployment". There are three reasons for this: First, many underutilised workers are neither able to provide economically for themselves nor their families in spite of formally being classified as "employed" by the ILO standards. Second, being underutilised implies that one's labour resources are not adequately used in the economy. Third, and most important, while it is generally accepted that many unemployed people may become socially frustrated from their employment situation, we assume that this also applies to the underutilised.

The relationship between the unemployment and underutilisation rates

Somewhat surprisingly, it is commonly observed that when a country moves towards industrialization, the ILO unemployment rate, as calculated according to the labour force framework, tends to increase, rather than to decrease. In line with this observation, many poor developing countries face very low levels of recorded unemployment. While there is general consensus that overall underutilisation of labour probably is the greatest in very poor countries, labour force surveys in these countries often yield lower unemployment rates than for more prosperous countries. The main reason is that during a process of economic development, the manifestation of underutilisation of labour tends to change from underemployment and "discouragement" to regular, ILO defined "unemployment". In highly developed countries, unemployment benefits provide an additional incentive for workers to register themselves as unemployed, rather than to take on low-paid jobs, which may be far below their qualifications.

⁴The reason we cannot simply continue to use the labour force as the percentage base, is that the group of underutilised also comprises the "discouraged workers". This group of "inactive" is by the formal (ILO) definitions outside the labour force. By using as the percentage base those who are either in the labour force or underutilised, or both, we include the group of "discouraged workers", both in the nominator and in the denominator. Of course, the regularly unemployed are also included among the "underutilised".

4.2 Unemployment and Underutilisation by Place of Residence

As mentioned in Chapter 1, the overall ILO defined unemployment in Syria stood at 10.3 percent at the time of the survey. Contrary to what many may have expected, the male unemployment rate is slightly higher in rural than in urban areas, at 8.3 percent as compared with 7.2 percent. Furthermore, the female unemployment rate is much higher than the male at 20.9 percent. Female unemployment rates are highest in urban areas (26.0 percent, *versus* 17.3 percent in rural areas). One reason for the gender disparity

Table 4.1 Labour force status of working age population by gender and urban-rural place of residence (absolute numbers and percent)

	All		
	Urban	Rural	Syria
All employed	2,235,000	2,234,000	4,469,000
Unemployed	255,000	258,000	513,000
Inactive	2,952,000	2,432,000	5,384,000
Total working-age population	5,442,000	4,924,000	10,366,000
Underutilised	790,000	783,000	1,572,000
Unemployment rate	10.2	10.3	10.3
Underutilisation rate	31.1	30.7	30.9

	Men		•
	Urban	Rural	Syria
Employed	1,939,000	1,769,000	3,708,000
Unemployed	151,000	160,000	312,000
Inactive	677,000	558,000	1,235,000
Total working-age population	2,768,000	2,488,000	5,255,000
Underutilised	648,000	615,000	1,262,000
Unemployment rate	7.2	8.3	7.8
Underutilisation rate	30.4	31.2	30.8

Women						
	Urban	Rural	Syria			
Employed	296,000	465,000	761,000			
Unemployed	104,000	97,000	201,000			
Inactive	2,274,000	1,874,000	4,149,000			
Total working-age population	2,674,000	2,437,000	5,111,000			
Underutilised	142,000	168,000	310,000			
Unemployment rate	26.0	17.3	20.9			
Underutilisation rate	35.0	29.0	31.5			

is probably the previously mentioned norms governing the places and types of work that can be considered "acceptable" according to sex, age and social status.

Looking at absolute numbers, we find that there are 513,000 unemployed persons in Syria -- 312,000 men and 201,000 women. (Although the female unemployment rate is nearly three times the male, in absolute terms there are fewer unemployed women than men, the reason for this being the small size of the female labour force.) The number of unemployed persons in urban and rural areas is roughly equal, for both men and women.

The number of underutilised is of course much higher, as this group includes the unemployed, the discouraged workers (part of the group of inactive) and the underemployed (part of the group of employed). There is more than one and a half million underutilised, three times as many as the unemployed. There are four times as many underutilised men as women, 1,262,000 as compared with 310,000.

The "underutilisation rate" for men is 30.8 percent, almost four times as high as the unemployment rate⁵. The difference between male and female underemployment rates is much smaller than the difference between the unemployment rates, in both urban and rural areas.

Both male and female unemployment and underutilisation rates vary significantly between mohafazat, and also between urban and rural localities within each mohafaza

Table 4.2 Male and female unemployment and underutilisation rates by mohafaza

	Men				Women			
	Unemploy- ment rate		Underutili- sation rate		Unemploy- ment rate		Underutili- sation rate	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Damascus city	7		31		23		34	
Rural Damascus	4	4	26	28	17	10	26	17
Homs	9	12	36	40	35	38	43	50
Hama	4	7	36	26	32	16	39	27
Tartos	10	11	37	36	24	34	34	46
Latakia	10	10	32	28	35	37	45	47
Edleb	2	2	30	31	9	3	17	13
Aleppo	6	8	26	31	19	7	26	20
Rakka	9	3	21	15	18	4	20	12
Der Elzor	10	2	32	12	22	1	27	4
Hasakeh	17	19	31	43	40	31	48	51
Sweda	12	12	40	50	22	22	42	45
Dara	16	16	46	48	36	35	43	54
Quneitra		21		53		56		56

⁵The underutilisation rate was defined as the number of underutilised divided by the number of employed plus the number of underutilised.

(Table 4.2). There is a possibility that measurement problems, and slightly inconsistent implementation of the survey definitions at the mohafaza level, may have caused some of the extreme values. Bearing this in mind, we note that male unemployment and underutilisation rates are both highest in the eastern mohafazat, in some areas higher than 50 percent. Female unemployment and underutilisation rates follow the same pattern as the male, but with female unemployment rates at a higher level than male.

4.3 Unemployment and Underutilisation by Individual Characteristics

Male underutilisation is dominated by underemployment, female by unemployment

Male underutilisation of labour manifests itself as invisible underemployment, rather than as (complete) unemployment (Figure 4.2). In other words, rather than being unemployed and hence completely out of work, underutilised men are formally classified as employed by the ILO standards, but their work is not adequate according to their skills and competence.

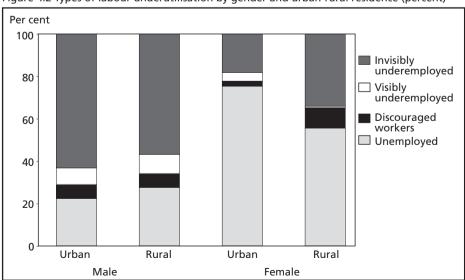


Figure 4.2 Types of labour underutilisation by gender and urban-rural residence (percent)

To the contrary, underutilised women are less frequently invisibly underemployed. It seems women prefer to stay unemployed rather than taking up "unacceptable" forms of work. Usually, they can also rely on economic support from a male household member. Most underutilised women are therefore also ILO unemployed, in particular in urban areas.

Middle-aged men become underemployed rather than unemployed

The age distribution of unemployment and underemployment among men reveals that labour market problems are clearly age specific. The bulk of (ILO) unemployed male labour force members are below 40 years of age (Figure 4.3). However, when we add the underutilised, a somewhat different pattern emerges. Although there are, by definition, more underutilised than unemployed, and although also the underutilised are relatively young, we observe that underemployment is much more prevalent among the middle-aged men than unemployment⁶.

Based on discussions during the analytical seminars at the CBS, we interpret this as a result of a life-cycle effect. As men become middle-aged, and their family's economic requirements grow, unemployment is an increasingly untenable state for most. Instead, they must take any job available to them. This is a result of strong social norms requiring that men work and provide for their families. Able-bodied men who have completed their education, but who have difficulties finding jobs matching their qualifications, may stay unemployed for some time. However, when they get older and need to provide for their families, they will have to work, and thus may end up changing their status from unemployed to underemployed (rather than fully employed).

Female underutilisation consists primarily of unemployment

Women, in contrast, do not face the same social expectations to become breadwinners. Hence, for many women who want to work but cannot find an acceptable job, unemployment is a more viable state, and comparatively fewer women than men end up as visibly underemployed. Giving up work-life ambitions and becoming instead a "housewife" is also an option for many women, including among those who worked prior to marriage.

⁶ In the introduction we stressed that the unemployment rate is defined as the share of the *labour force members* who are unemployed, not the share of unemployed among *all* adults. Hence, the age/life-cycle variations in the unemployment rates also depend on the life-cycle variations in labour force participation, which is why we include the inactive population in our figures.

Unemployed women are also predominantly young, but the group of "inactive", dominated by housewives, constitutes a majority of women in all age groups (Figure 4.4).

As was the case among men, underutilised women have a somewhat higher mean age than unemployed women (Figure 4.4). However, the main picture is that both employed and unemployed women are marginal groups, relative to the vast majority of inactive women. This highlights an important factor when attempting to explain

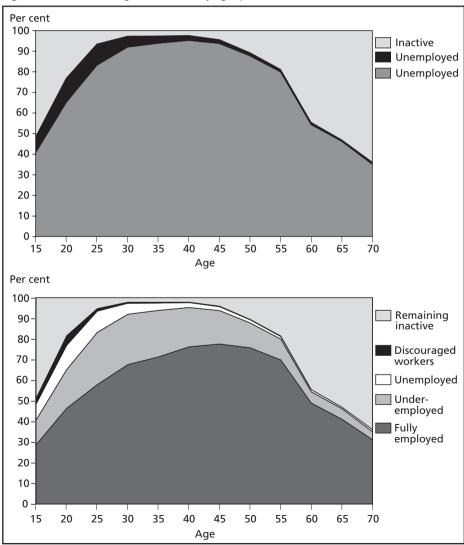
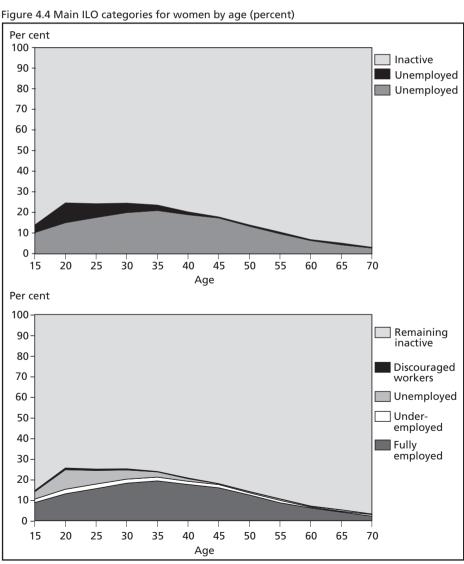


Figure 4.3 Main ILO categories for men by age (percent)

female unemployment and underutilisation of labour: The main separation line for adult women is whether they are in the labour force or not. Whether female labour force members are unemployed or employed may be more "accidental".



Both the unemployed and the underutilised are young, but the unemployment rate decreases more abruptly with age

Male labour force participation is lower among the young than the middle-aged. This is mainly because a relatively high number of young men are classified as "inactive" while they are students. Increasing male labour force participation up to 40 years, coupled with

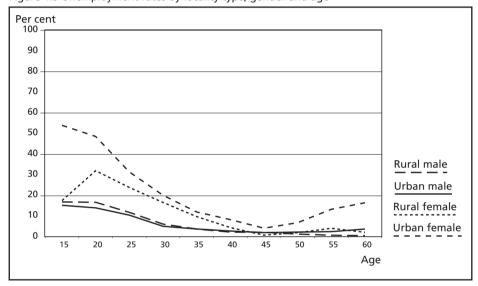
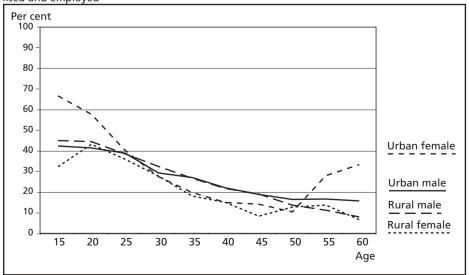


Figure 4.5 Unemployment rates by locality type, gender and age

Figure 4.6 Underutilisation rates by locality type, gender and age, as share of the underutilised and employed



a steadily reduced share of unemployed, cause male unemployment rates to drop dramatically with age (Figure 4.5). A similar pattern is found for women (Figure 4.6).

At the age of 20 years, 15 percent of men and 40 percent of women are unemployed. The corresponding underutilisation rates for the same age are 45 and 55 percent, respectively. It goes without saying that the high rate of underutilisation among young people, and the economic and social frustration commonly associated with being in this situation, represents a substantial challenge for Syria.

The regional pattern of male unemployment and underutilisation by age is roughly similar to the national pattern. For women, the coastal region stands out as different from the other regions, with higher female unemployment and underutilisation rates. As mentioned earlier, female labour force participation is also higher in this region. Hence, it appears that the high female unemployment rates might be explained by work outside the home constituting a more realistic option for women in this area.

The dominance of young adults among the unemployed and underutilised is even higher in absolute numbers

The concentration of unemployment among the young is even higher in terms of absolute numbers than it is when considering the percentages, something that is explained by the rapidly diminishing size of the age cohorts at higher age (Figure 4.7).

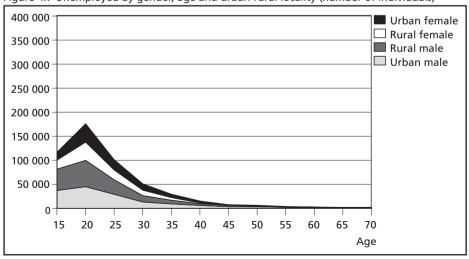


Figure 4.7 Unemployed by gender, age and urban-rural locality (number of individuals)

⁷The corresponding unemployment rates for men and women in Jordan were 30 and 45 percent, and the (somewhat otherwise defined) Jordanian underutilisation rates were 50 and 65 percent, respectively.

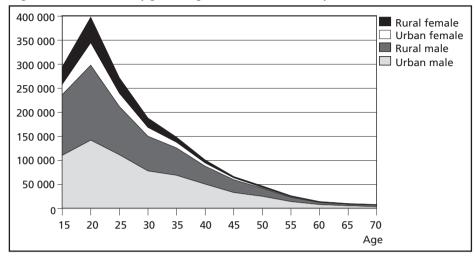


Figure 4.8 Underutilised by gender, age and urban-rural locality (number of individuals)

For example, the 25-30 year age group is almost twice the size of the 40-45 year age group. From the age of 50 years onwards, reduced male labour force participation contributes further to the high unemployment rates, relative to the actual number of unemployed men of this age.

Although female unemployment rates are higher than male unemployment rates in all age groups, in absolute numbers there are many more unemployed men than women. The large number of underemployed men makes the male dominance even larger in the group of underutilised workers (Figure 4.8).

With increasing age, underutilised men "move" from the unemployed to the visibly underemployed

Figure 4.9 shows the composition of the group of underutilised by gender and age. The graph clearly displays how the manifestation of underutilisation of labour for men is affected by their social obligations to supply economic resources to their families.

When they are young, men tend to reside with their parents and can "afford" to stay unemployed. However, as they marry and form their own separate households, male underutilisation manifests itself as visible and invisible underemployment, rather than as the complete "inactivity" implied by unemployment. For women, the pattern is clearly different, as already discussed. The majority of underutilised women are unemployed, including among the middle-aged. Moreover, female labour force participation drops from the age of 30. This suggests that at this stage in their lifecycle, many women become housewives and display low job aspirations and, as a consequence, give up the active job search required to be classified as (ILO) unemployed.

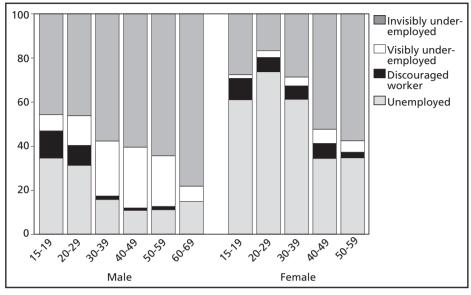


Figure 4.9 Types of underutilisation by gender and age (percent)

Female unemployment increases with improved education while male unemployment does not

Male unemployment rates are relatively insensitive to education levels (Figure 4.10). Although education is an asset when searching for a job, highly educated men tend to be younger than those with little education. Because unemployment strikes harder among the young, in total, the two effects seem to outweigh each other.

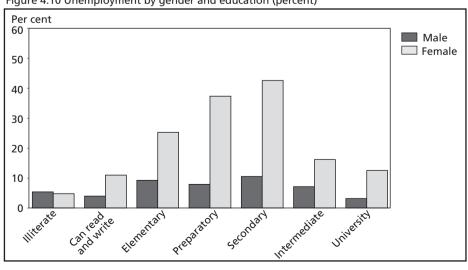


Figure 4.10 Unemployment by gender and education (percent)

Among women, unemployment rises strongly with increasing education until the secondary level. Then, female unemployment contracts for the intermediate and university levels. This somewhat surprising pattern can probably be understood as the interplay between female labour supply and female employment opportunities. First, it is reasonable to assume that women's desire for employment increases with improved education. Second, many women seem to aspire for jobs in the government sector, not least because relatively short work hours may be combined with childcare and other domestic tasks. Then again, in many government jobs there is an educational threshold, for example for teachers or nurses, or administrative work. When women have obtained intermediate or university education, they can pass this threshold. Although female labour supply is even higher in this group than among women with secondary education, most of them are successful in obtaining employment. Hence, the female unemployment rate is lowest at the highest education levels.

Underutilisation varies with education just as does unemployment, but at higher levels

Underutilisation of male labour, among which the regularly unemployed are included, shows the same pattern as unemployment across educational groups, albeit at a higher level (Figure 4.11). It does not seem that male underutilisation levels are particularly high among those with university education. For women the educational pattern of

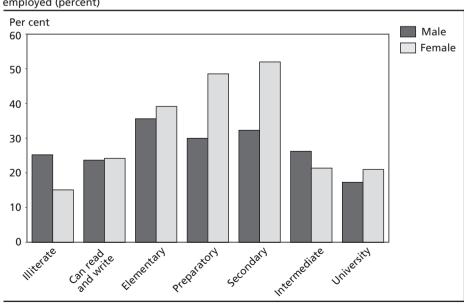


Figure 4.11 Underutilisation by gender and education, as share of the underutilised and employed (percent)

underutilisation is the same as for unemployment: A strong increase in underutilisation of labour with enhanced education until the secondary level, then a reduction for the intermediate and university levels.

The national pattern of unemployment by education is basically repeated in the six Syrian regions, both for men and women. For women, the sample size is relatively small, but unemployment peaks at the secondary education level in all regions. The coastal region stands out with the highest incidence of female unemployment.

The higher the education the larger the share of the female underutilised who are unemployed

The major types of male underutilisation (measured as the share of the underutilised) do not vary systematically with education (Figure 4.12). However, among women one trend is noticeable: The higher the education level, the higher the proportion of the female underutilised who are unemployed. One obvious explanation is that numerous jobs available to illiterate women are low-paid, low-productivity jobs - typical candidates for invisible underemployment. Moreover, it is also highly likely that many visibly underemployed women work out of necessity. In contrast, well-educated women usually marry men with correspondingly high education, and who hold well-paid jobs.

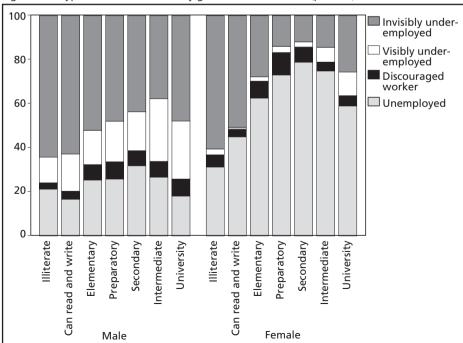


Figure 4.12 Type of underutilisation by gender and education (percent)

Hence, these women to a larger extent can "afford" to remain unemployed rather than taking up any job. As stated earlier, and by definition, to be unemployed implies that an active job search is conducted. Rather than having given up hope ("discouraged workers") or just letting "fate" decide, women with university education apparently know that they have passed the educational threshold set by employers. Very few are "discouraged workers".

The assumption of stronger selectiveness among well-educated women is also supported by a higher mean number of months looking for work among the unemployed. For women there is an increase in the duration of unemployment with increasing education. For men, this is not the case, which is consistent with the moderate change in the manifestation of male underutilisation with increasing education (Figure 4.12).

Among the unemployed, higher education levels seem to bring about more varied job search. The share of unemployed who used at least two different ways of finding work generally increases with improved education both for men and women. People with at least some education also use the employment office more often than the illiterate and those lacking formal education, who primarily rely on their social and family networks in their job search.

Heads of household cannot afford to become unemployed

Heads of household rarely are unemployed. This applies both to male and female heads, in urban as well as rural areas. Moreover, unemployed household heads make up a tiny share of underutilised households heads, except for female heads in urban areas. The explanation is the social obligations entrusted on household heads. Few heads can afford to remain completely out of work. In most cases they must accept the best (paid) employment available to them, regardless whether the work fits their skills and education or not.

For men who are not household heads the situation is significantly different, and a much larger share of the underutilised is also regularly unemployed. The same holds for women who are not household heads, and in particular for adult daughters of the household head. This indicates that these groups have relatively fewer and/or weaker social and familial obligations pushing them into income-generating activities, but are instead allowed to search for an appropriate and socially acceptable job.

A related pattern of low unemployment relative to underutilisation can be observed among married men, who are often heads of the household. This is also the case for married women: when they become underutilised, they are more unemployed. The reason is that when a wife joins the labour force, it is frequently due to economic need, implying that she has to work. The opposite holds for never-married men and never-married women: a higher percentage of them can afford to stay unemployed (rather than underutilised) because they live from their father's incomes.

Most underemployed are invisibly underemployed

Above, we have seen that underutilisation mainly manifests itself as underemployment for groups of persons that have to take any job available to them because they are economically and socially obliged to work. This typically applies to middle-aged men, especially when married or being the household head. As could be expected, underemployment also varies with people's occupation, and sector and industry of employment.

We observe that underemployment mainly manifests itself as invisible underemployment (low wage/productivity and/or a job not matching the worker's skills) rather than as visible underemployment (insufficient hours) (Figure 4.13). Underemployment is by far most prevalent for men in the formal private sector, which also has the longest work hours. Except for this sector, underemployment is at a fairly moderate level. Else, men in the government sector are the only group of workers with visible underemployment higher than invisible underemployment.

It is interesting that even among unpaid workers, more than four out of five do not consider themselves to be underemployed. The explanation is that their aspirations for a different kind of employment are modest, and that their competence in most cases is adequate for the (low-productivity) job they currently hold. The same argument applies to the relatively low share of underemployed in agriculture (Figure 4.14).

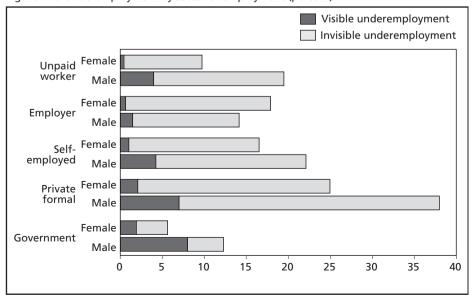


Figure 4.13 Underemployment by sector of employment (percent)

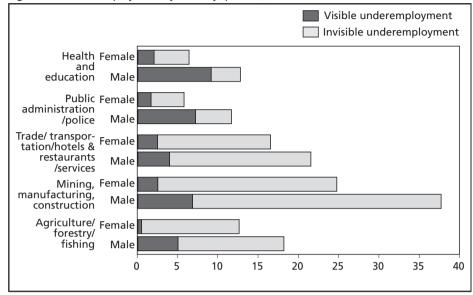


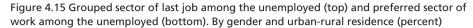
Figure 4.14 Underemployment by industry (percent)

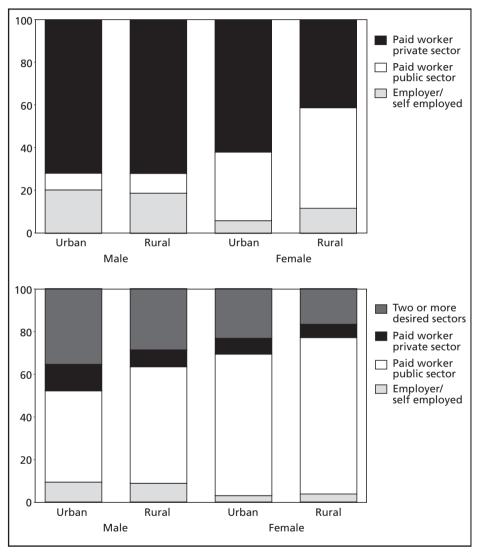
Most unemployed with employment experience worked in the private sector, but would prefer a job in the public sector

Among those who are currently unemployed and who were previously employed, the vast majority of men worked in the private sector. For rural women in this group public jobs were most common. However, if we compare unemployed female and male job seekers with respect to desired sector of work, we see a disparity (Figure 4.15)⁸. A majority of those with a clear preference for one sector wanted a public job. Among two thirds of the women, this was the only sector in which they wanted a job⁹.

⁸ Not all of these persons had worked before.

⁹An analysis of *how* the unemployed have sought work is of limited interest. By definition, their job-search has been unsuccessful. More interesting, but impossible to do with the Unemployment survey data, is to compare the job search of the unemployed with how those currently employed obtained their work. It may well happen that restricted access to important arenas for finding employment is a key characteristic of the group of unemployed persons.

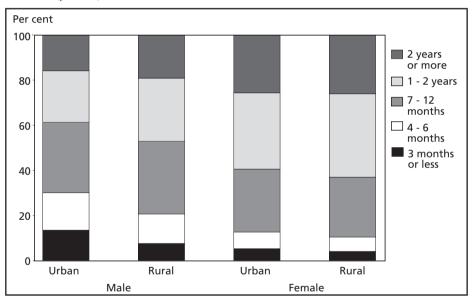




Women stay unemployed longer than men

The majority of the unemployed have been seeking work for more than half a year, and a large minority has been unemployed for more than a year. For both men and women, the duration of unemployment is longer in rural than in urban areas. However, women seem to remain unemployed for a longer time than men, regardless of type of locality (Figure 4.16).

Figure 4.16 Duration of seeking work among unemployed by gender and urban-rural residence (percent)



4.4 Unemployment and Underutilisation by Household Characteristics

Male unemployment is not affected by household wealth, while male underutilisation declines with increasing wealth

The relationship between individual unemployment on one hand, and household income on the other, reflects two main effects. First, the obvious fact is that while most employed household members provide income, unemployed members do not. We would, therefore, expect unemployment to *decrease* with increasing income. However, high household income, be it from other members' work or from other sources (remittances, capital income, etc.), enables in particular young household members to stay unemployed. The latter effect is even more decisive if high household income also raises its members' requirements for what is considered an "acceptable" job.

The observed pattern in Figure 4.17 indicates that for men, the two causal chains between individual unemployment and household economic resources described above balance each other out. Looking instead at underutilisation, we see that underutilisation drops with increasing wealth (Figure 4.18)¹⁰. This is evidently attributable to the

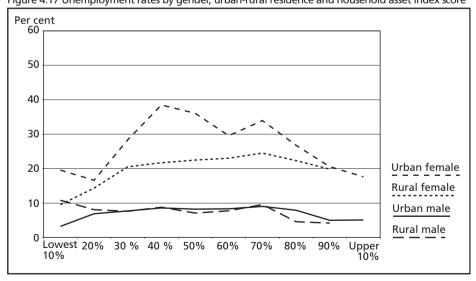


Figure 4.17 Unemployment rates by gender, urban-rural residence and household asset index score

¹⁰ As explained in Chapter 1, the asset index is used as an indicator for the households' long-term wealth, as we lack household income and wage data. See Annex B for a short overview.

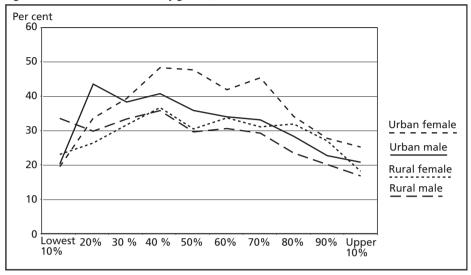


Figure 4.18 Underutilisation rates by gender, urban-rural residence and household asset index score

fact that the group of underutilised men is dominated by the underemployed, who typically have lower incomes.

Both female unemployment and underutilisation are systematically affected by household wealth

For female unemployment, the "acceptable job" effect is apparently stronger than the loss of potential income at lower asset index levels, while the opposite seems to be true for the higher asset index groups. Hence, female unemployment first increases somewhat with household wealth, and then falls again.

For female underutilisation and household wealth the situation is the same as for female unemployment, because the unemployed constitutes a larger group among underutilised women than among underutilised men. However, the composition of female underutilisation also varies with female education (and hence wealth) (Figure 4.12).

Male unemployment grows with household size

The same complex relationship as for household wealth, applies for the association between unemployment and underutilisation on the one hand, and household size on the other. Men's unemployment increases with growing household size. The reason is obviously that the larger the household size the larger the likelihood that *another*

person in the household is employed and thus enables "our" person to stay unemployed. For male underutilisation the level is more stable across household sizes. For women, there is a clear urban-rural differentiation in the relation between unemployment and underutilisation on one hand, and household size on the other. Among urban women, the unemployment rate seems more positively related to household size than among rural women. However, there are few large urban households, so these results may also be due to statistical errors. With this in mind, we cannot conclude with a systematic association between female underutilisation and household size.

Living in a large household gives an "insurance" against suffering economic hardship from individual labour market difficulties. The larger the household size the stronger the likelihood that at least one household member is gainfully employed. To form, or to maintain, a large household is thus a way of pooling the risk of losing employment income. To form a large household, or to postpone the break-up of the household upon marriage, may also be a way of coping with economic problems and hardship.

4.5 Unemployment and Underutilisation in the Household Context

Household level unemployment reflects individual unemployment patterns

In the three previous sections we dealt with unemployment and underutilisation of labour measured exclusively at the individual level. However it is usually not up to the individual alone to decide whether to stay unemployed or take less acceptable jobs. As previously mentioned, it is reasonable to assume that individual unemployment or underutilisation in effect is determined by some kind of a household decision mechanism. This is particular the case for women, who often may need approval from their husbands (when married) or from their fathers and brothers (when unmarried). Hence, it is also useful to analyse the unemployment situation for the household.

As with individual unemployment, household level unemployment is highest in mohafazat with large rural populations, such as Dara, Sweda and Hasakeh (Figure 4.19)¹¹. However, it is also high in the coastal region (Latakia, Tartos), but in contrast to the three former mohafazat, here it is mainly caused by high female unemployment. Household unemployment is apparently lowest in Aleppo, which has a strong formal

¹¹Note that there are no "rural" areas in Damascus City, and no "urban" areas in Quneitra.

private sector. Overall, nine percent of Syrian households have one unemployed member while three percent have two or more unemployed members. Above all the latter group of households faces a difficult situation¹². Except for coastal mohafazat, geographic variation in household unemployment and underutilisation levels seems closely related (compare Figure 4.19 and Figure 4.20).

Three percent of men and two percent of women are the only unemployed person in their households¹³. The corresponding percentages for being the only underutilised are 16 and 15 percent, respectively¹⁴. For both men and women, the coastal region and some rural-dominated mohafazat like Hasakeh and Sweda are above the national average with respect to the share of people who make up the only unemployed in their households.

 $^{^{12}}$ In the 2003 Jordan Multi-purpose Household Survey these numbers were 14 and four percent, respectively.

 $^{^{13}}$ In the 2003 Jordan Multi-purpose Household Survey, the corresponding figures were eight percent of men and eighteen percent of women

¹⁴ In Jordan, the figures are 12 and 22 percent, respectively (2003 Jordan Multi-Topic Household Survey).



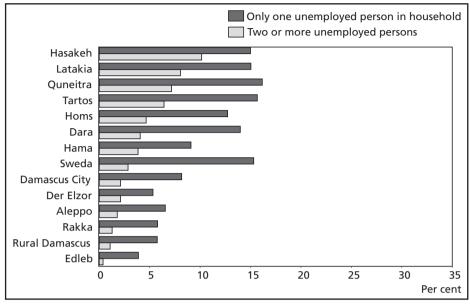
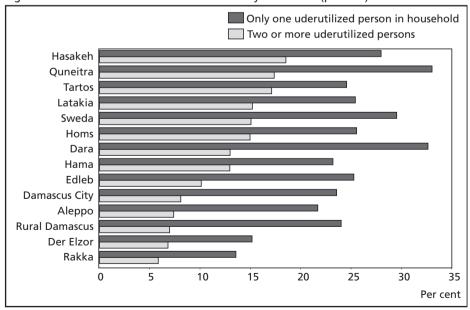


Figure 4.20 Household level underutilisation by mohafaza (percent)



5 The "Inactive" Population

This chapter deals with persons outside the labour force: the inactive persons¹. In Chapter 2 we saw that the overall labour force participation in Syria is low, at 31.5 percent. This is partly because the population is young, with a comparatively large share below working age. However, the labour force participation among the working age population is also relatively low, not for men (77 percent), but for women (19 percent). The decision that a particular individual should stay "inactive" is often taken by the household, or by other family members on basis of which activities can be considered "acceptable" according to sex, age and social status. As argued previously, the outcome of decisions taken by other people than the individual in question particularly affect women, and may often result in their staying out of the labour force.

A main purpose of this chapter is to display the characteristics of the inactive adult population in Syria, and its various sub-groups, by the reasons for inactivity. The first section provides a geographical breakdown of men and women's causes for inactivity. Section 5.2 highlights the relationship between various forms of inactivity and individual characteristics such as age, education, a person's relation to the household head and marital status. In section 5.3 we investigate how individual labour force participation relates to household characteristics such as household income, its size and composition. Finally, section 5.4 presents results for labour force participation at the household level.

¹ As stated elsewhere in this report, the term "inactive" does not imply that the inactive are not engaged in useful activities. Housewives, the largest group of inactive, carry the indispensable burden of childcare and household maintenance. Pupils and students, the second largest group of inactive, invest in their future human capital. Other groups of inactive cannot work because they are sick or disabled. The retired and most of those who live from means have had a long work life already.

5.1 Inactivity by Place of Residence

Surprisingly similar situation for men and women when housewives are excluded

Just as labour force participation is fundamentally different for men and women, so are the reasons for being inactive. Among women, housewives dominate the group of inactive (Figure 5.1). Among men, the dominant explanation for inactivity is education. For women and men alike there are rather modest urban-rural differences. There is a higher proportion of housewives living in households with young children in rural as compared with urban areas, and inversely, more housewives living in households without small children in urban than in rural areas. This partially follows from the fact that rural households are larger than urban ones and that, consequently, it is a higher likelihood of finding household members below 15 years in rural settings.

The large number of housewives makes all other groups of female inactive seem small. For example, it appears from Figure 5.1 that Syria has a higher number of male than female students. In order to correct for this false impression, we present the distribution of inactive by gender and urban-rural residence but excluding the housewives from the female inactive (Figure 5.2). The "new" conclusion is that there is a surprisingly similar percentage distribution across gender and urban-rural residence for reasons of inactivity other than being a housewife. The largest disparity is found

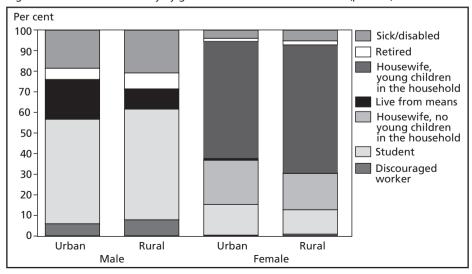


Figure 5.1 Reason for inactivity by gender and urban-rural residence (percent)

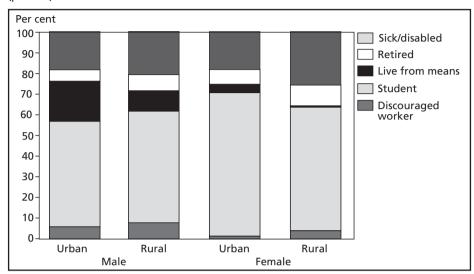


Figure 5.2 Reason for inactivity, by gender and urban-rural residence – housewives excluded (percent)

in the proportion of inactive living from means (e.g. savings), where urban inactive men have the highest share.

The share of male inactive students is relatively similar across mohafazat as well as across urban-rural localities within each mohafaza. It should, however, be noted that the vast majority of these persons are students below the university level, something which explains the modest urban-rural variation. It comes as no surprise that the share of female inactive housewives from households with children below 15 years is highest in the northern and eastern regions, and higher in the rural than in the urban areas. The reason is partially higher fertility rates and partially a higher prevalence of extended (non-nuclear) households, which increases the chance of having household members below 15 years.

5.2 Inactivity by Individual Characteristics

The reason for inactivity varies with age

An overview of the reasons for being inactive by age for all Syrian inactive is given in Figure 5.3. We note that there are substantial differences by age, with reasons tied to lifecycle rather than to generation effects.

The inactive are young, and younger than the general population. However, as already stated the large number of inactive young people is mainly due to a large number of students and pupils. The group of students comprises somewhat more men than women, and a higher number of urban than rural residents for both genders. In particular rural women are under-represented. This is partly caused by a lack of educational facilities in many rural areas, partly a result of less emphasis put on higher education for women here, and not least due to "alternative activities" open to young rural women in the forms of farm work and/or marriage.

A second large group of inactive is made up of housewives with young children, typically at a relatively early stage in the life cycle. Due to higher fertility rates, there are more rural than urban inactive housewives, and there is also a tendency for rural inactive housewives to be slightly younger than their urban sisters. As children grow up, women increasingly become housewives in households without children below 15 years. As many of these women are still fairly young when domestic duties, as a consequence of having adult children, are reduced, this group is a particularly interesting target group for attempts to increase the female labour force participation.

Persons "living from means" and persons who are "retired" are typically male, and above 50 years of age. "Living from means" may in most cases be understood as having saved money during one's work life, while people who are "retired" have been employed in the public sector or had an employer with a formal pension scheme. The number of retired is smaller than the number of persons living from means.

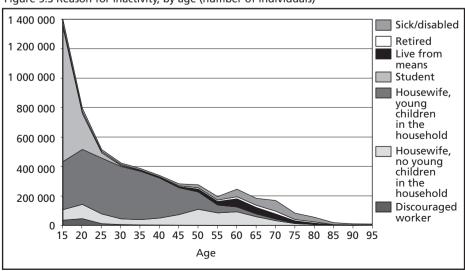


Figure 5.3 Reason for inactivity, by age (number of individuals)

The reason for inactivity varies less with education

Type of inactivity varies by education, but the variation is less significant than by age, indicating that age has a stronger influence than level of education (Figure 5.4). This is primarily because the largest group of inactive, namely the housewives, are inactive because of their family situation (i.e. marital status and number of children) rather than their level of education.

There are, however, some effects of education. More or less by definition, inactive adult students have formal education at the elementary level or higher. Furthermore, while the educational profile of housewives without children in the household resembles that of all inactive, younger housewives with children below 15 years of age are more educated. In some measure this reflects historical circumstances, as younger generations have received more education.

Persons who "live from means" are found at all educational levels, but have a higher share of university graduates than other groups of inactive. Retired people have a surprisingly low education level, and many are illiterate. The group of inactive with the poorest education are the sick and disabled. There is probably a close relation between their lack of education and their health status. First, being illiterate is a risk factor for being sick, due to meagre knowledge and understanding of factors affecting health. Second, illiteracy is typically associated with low material standards, something that is commonly related to bad health. Third, most disabled and sick are of old age, and their weak education reflects historical deficits in the Syrian education system. Finally, many

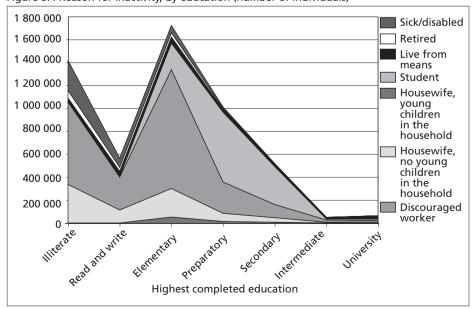


Figure 5.4 Reason for inactivity, by education (number of individuals)

illiterate persons have held manual jobs during their entire work life, which increases the risk of acquiring handicaps and chronic illness.

Overall, the result is that the inactive are somewhat less educated than the general population. Although the largest group of inactive are those with elementary education, inactivity is most common among illiterate persons: The labour force participation rate for this particular group is only 29 percent.

Type of inactivity varies with household position, which is closely tied to lifecycle

Type of inactivity is closely knit to people's position in the household. However, in most cases there is a strong relation between a person's position in the household and his or her lifecycle. For example, the inactivity type of male heads is almost never "student", or "discouraged worker", because the head would in most cases not have become the head if he or she could not provide economic means to the household. This fact also explains the large proportion of inactive heads living "from means". When the household head lives from means more often than not *all* household members live from these savings. The inactivity profile of the brother(s) of the household head resembles that of adult sons. The reason is that brothers in most cases are younger than the head.

Among women, married female heads are often old². Hence their types of inactivity are typically those forms found among old women, e.g. housewife without young children, sick or disabled, or retired³. The inactivity profile of unmarried female heads resembles that of spouses, while adult daughters or sisters to a larger extent attend school.

As with people's position in the household, there is by and large also a close relation between a person's marital status, and his or her lifecycle. People never married, both men and women, are often students. The group of inactive married men comprises a large number of elderly, and the reasons for being inactive are those typically found among older people such as illness or disability, retirement, or living from means. Many young unmarried women are grouped as "housewives with children below 15 years in the household", not necessarily because they have own children, but because they support their mother in the daily care for younger brothers and sisters. Married, inactive women are for the most part housewives. An interesting implication is that while men retire, or live from means, women continue to be (classified as) "housewives" even at

²The reason they are heads is often that they are married to (even older) men, who are too sick or disabled to be in charge of the household.

³ If the household could live from means, the (former) male head would almost certainly be considered the head.

a high age. Among divorced or widowed women, many are sick or disabled, mainly because they are of old age, and health deteriorates with increasing age.

5.3 Inactivity by Household Characteristics

Housewives with children aged below 15 years in the household tend to live in smaller households than those with older children (Figure 5.5). This is, of course, due to the typical lifecycle of households: first a nuclear household with young children is formed; later some of them transform into extended families when children grow up. Households with inactive, adult students are approximately of average size.

Persons living from means typically live in smaller households. Many are elderly people, whose children have already moved out. Since household income by definition is pooled, we can assume that "living from means" usually implies that all household members live from savings, and that there is a limited number of persons who can depend on this income source. Retired people also live in smaller households than average. Finally, on average sick or disabled people also reside in rather small households, but they are more evenly distributed across household sizes than the retired and people living from means.

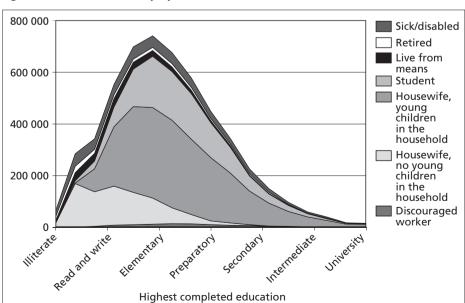


Figure 5.5 Reason for inactivity, by household size (number of individuals)

Overall, the sex of the household head does not explain men's inactivity, although more men live from means in male-headed households. For inactive women, on the other hand, the sex of the head seems to play a larger role in defining inactivity. Women living in households headed by a man and in households headed by a married inactive woman give the same reasons for inactivity. The explanation is presumably that households headed by a married inactive woman often include a man working abroad. Women living in households with unmarried females in charge, on the other hand, give reasons for inactivity typical among the elderly. This is so because many of these unmarried female heads are old widows.

Reasons for inactivity are not associated with household wealth, neither for men nor women. The only obvious observation is that a larger share of people from wealthy households lives from means. Our data also suggest that a relatively higher number of inactive persons are students in rich as compared with poor households.

5.4 Inactivity at the Household Level

Most persons live in households with other inactive members; one in four women but hardly any men are the only inactive person in their households

Less than 10 percent of households suffer a situation where all adult household members are inactive, implying a complete lack of labour force members (employed or unemployed) in the household (Figure 5.6). In such cases, the household has no potential for earning employment income. A substantial proportion of households contain more than one inactive member. The "typical" household of this kind includes a housewife and one or more adult children (i.e. persons above 15 years of age) who are studying. Few households totally lack inactive members; these are usually households consisting of single men, married couples, or nuclear families where both parents are labour force members.

Most adult men are in the labour force, and most adult women are inactive. Hence, the share of persons being the only inactive in their households varies significantly between men and women. Hardly any man is the only inactive in his household, while roughly one quarter of women are the only inactive in their households. Due to variations in household size, the share of individuals being the single inactive in their respective households is smaller than the share of households having one inactive member.

In line with the above, just about every man and three out of four women live together with *other* inactive household members (Figure 5.7). Der Elzor has a lower share of people in households with at least one other inactive person, a situation produced by a comparatively high female labour force participation rate (mostly in agriculture).

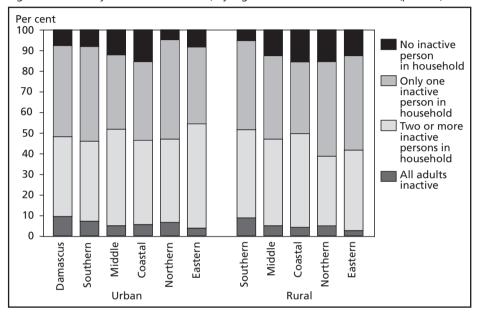
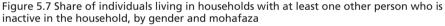
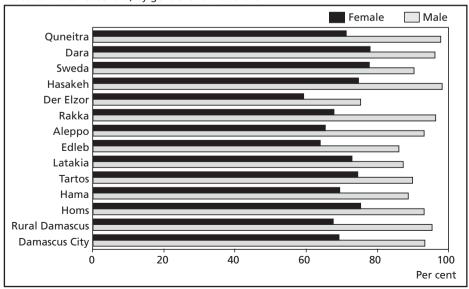


Figure 5.6 Inactivity status of households, by region and urban-rural residence (percent)





A majority of (inactive) housewives live in households with other housewives

Ninety percent of men live in households with at least one inactive person classified as a housewife (Figure 5.8). This is also the case for as many as half of the women, i.e. every second woman has somebody else being housewife in her household⁴. These numbers are high partly because there are many young women whose mothers are housewives, and partly because variation in household size produces higher figures for individuals than for households. The economic implication is that many women are potentially available for tasks outside the home, although many are already students, but formally defined as "inactive".

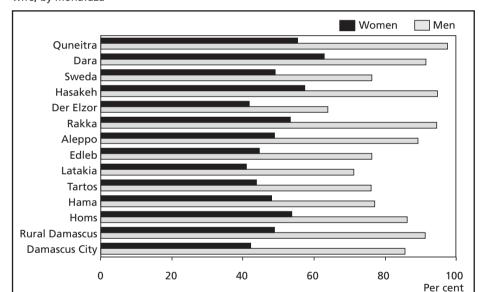


Figure 5.8 Share of individuals living in households with other person (also) being a housewife, by mohafaza

Other types of inactivity evenly distributed across regions and locality types

Almost one fourth of Syrian households have an inactive member who is studying. The proportion is lower in the northern region, and in rural parts of the eastern region. Households with at least one inactive member "living from means" are most common in Damascus and at the coast, but virtually absent in rural areas to the north and east of the country. Approximately 15 percent of Syrian households have at least one inactive member due to disability. This share is relatively uniform across every type of locality.

⁴ In cases with two or more housewives, this is usually the mother and one or more adult daughters.

The number of households with a chronically ill or disabled member is probably higher, though, as some people work in spite of deteriorated health.

6 Labour Markets and Economic Reforms

In the previous chapters of this report we have primarily been concerned with presenting the findings from the 2003 Unemployment Survey. In this chapter, we want to see how these findings translate into policy challenges for the Syrian government. We shall do this by following the structure of the report and ask three questions all related to how a larger proportion of the population can be moved into (more) productive work.

We began by discussing labour force participation (Chapter 2) and moved on to employment (Chapter 3), before documenting unemployment and underutilisation of labour (Chapter 4). Chapter 5 served as a complement to Chapter 4, by investigating those who are "inactive", i.e. outside the labour force. In accordance with this structure, and while utilising the terminology of previous chapters, the policy challenges facing the Syrian government in respect to the domestic labour markets are as follows:

- How can the labour force participation be increased?
- How can employed people become more productive?
- How can as many labour force members as possible be moved from the group of unemployed and underutilised to the group of satisfactorily employed?

Below, we will discuss each of these challenges in turn, while referring to empirical findings of previous chapters. Our discussion is in many cases based on input received during the analytical workshops that were held at the CBS in 2004.

Before proceeding, we would like to point out that the past decade has seen a number of economic reforms, and the stated goal of the ruling Baath party is to move towards a "social market economy". We shall not discuss these reforms in this report, but an interesting question is what impact they will have on the labour market¹. An alternative way of structuring this chapter would thus have been to begin with a list of the ongoing and proposed policy reforms and try to assess their impact. However, as this report is the outcome of a series of workshop on a specific dataset, such an ap-

¹ See e.g. IMF (2005) or European Commission (2005) for an overview of the reform process.

proach was not suitable. Nevertheless, we hope the reader can use some of the results and arguments presented in this chapter to assess policy options.

6.1 How Can the Labour Force Participation be Increased?²

Overall labour force participation in Syria is low

In Chapter 2 we found that the labour force in Syria comprises 31.5 percent of the total population, which is rather low compared to industrialised countries. As in most Middle Eastern countries, the low labour force participation rate has two main causes: first, the large share of persons below working age (an effect of past and current high birth rates), and second, the low labour force participation rate among women. The high birth rates and the low female participation rate are, of course, related.

Little room for expansion of male labour force participation

There is little room for an increase in men's labour force participation. In the 25-45 years age cohort, male participation is close to 100 percent in all regions. Almost all men below 25 years of age and outside the labour force are full-time students (Chapter 5). Although certain forms of education are more beneficial for economic growth than others, education is generally of such a great advantage to the individual and society that one does not want these students to enter the labour force.

Health problems and fatigue from physically demanding labour start taking its toll on men from the age of 50 years onwards, and a rapid decrease in male participation sets in at age 55. Although there could be some potential for increased participation among older men, it will have moderate effect on overall labour force participation since the age cohorts rapidly diminish in size with increasing age.

²The findings reported in this section are primarily extracted from Chapter 2 and Chapter 5, except for the discussion on female employment, which is taken from Chapter 3.

Women have the largest potential for increased labour force participation

The major potential for increased labour force participation rests with women. Female participation is fairly low, at 19 percent, and is low in all age groups. Female participation is lowest in urban areas. Interestingly, the coastal region has a higher female participation rate than other regions, regardless of urban-rural residence, age, household wealth, and household size. It would be very useful to learn why this is the case, and whether such a high female participation level can be achieved elsewhere without inflicting large welfare losses on other sectors of society.

What are the reasons most women remain outside the labour force? Traditionally, married women are expected to spend all their time looking after the domestic needs of the family, rather than engaging in remunerated work outside the home. However, such norms are now increasingly being challenged by modern society³.

Just as young men, the bulk of young women are inactive because of studies, and the same argument as for men regarding the individual and collective welfare benefits of their education applies. From a welfare perspective, there might be too many employed women in rural areas, and too few women who take education. However, many inactive women also become housewives at a young age.

In the report, we have distinguished between two kinds of housewives: (i) housewives in households with children below 15 years of age, and (ii) housewives without young children in their homes. The assumption is that, on the average, the workload for housewives in households with children below 15 years of age is higher than in households without young children. Furthermore, households with children are usually larger than other households, something that adds to the burden of housewives here.

Given the high birth rates in Syria, we believe that the largest manpower reserve is found among housewives whose youngest child is older than 15 years of age. Interestingly, for a considerable proportion of women in households without children below 15 years, there is already *another woman* who is inactive and classified as a housewife. In general, every second woman in Syria lives in a household where another person is (also) a housewife (Figure 5.8). Hence, even without challenging the usual distribution of tasks between men and women in Syrian society, there should be possible to mobilise some surplus female domestic labour into the labour force.

One should, however, keep in mind that the housewives whose youngest child is older than 15 are predominately middle-aged or older and on average have a somewhat lower education than the Syrian labour force. This may make it harder to enter the labour market, in particular for those without prior work experience.

Housewives in households with children below the age of 15 (usually their own) constitute a much larger group than those without little children. They are also younger,

³ See Kawar (1997) for a discussion of this process in Jordan.

and tend to have higher education. However, because housewives with little children often live in larger households, a majority of them would probably be available for part-time work only.

What characterizes female employment?

The government sector is the most important for *urban* female employment. Although there are substantial regional variations in the share of women employed in the public sector, such differences are primarily explained by degree of urbanization. Removing the effect of urban-rural locality, the significance of the government sector for the employment of urban women is roughly the same in all mohafazat.

Rural female employment, on the other hand, is concentrated in agriculture. Also here, there are large regional differences. Again however, after controlling for urban-rural status, the importance of agriculture for rural female employment is identical in all mohafazat. In those mohafazat where agriculture is essential for overall employment, its employment share is even higher for women than men.

Notwithstanding their differences, the government and agriculture sectors have one important feature in common, as seen from a female perspective: both sectors allow for combining work (as defined by the ILO) and domestic duties. In the government sector the main factor is the length of the workday (work hours are shorter than in the private formal sector), and perhaps also *when* during the day work takes place. In agriculture, the essential factor is that work is usually carried out in the vicinity of the home, is flexible, and to some extent can be performed even with children present. However, the flexibility of agricultural work is somewhat offset by low remuneration (with women frequently not receiving payment at all).

Reducing the public and agricultural sectors will threaten women's employment

It is an aim for Syrian economic policy to reduce the dependency on both government employment and work in agriculture. Employed women are predominantly found in just these two sectors. Given our findings above, this may pose a threat to the objective of increasing Syrian labour force participation in general, and women's participation in particular. However, if a reduction in the government sector is confined to public administration (including army/police), rather than the education and health sectors, females will be less affected.

It seems that urbanisation, which is usually associated with economic modernisation, may reduce Syrian female labour force participation, at least in the short term. While employment in agriculture is an option available to many rural women, the formal private sector in general terms employs few women, and particularly few urban women.

The absence of women in the formal private sector may result from their preference for public sector jobs, and/or there might be discrimination against women by private sector employers. The survey did not gather any data about possible discrimination against women, and it is therefore impossible to assess whether such negative attitudes exist or are important factors in explaining the limited presence of women in the formal private sector. We note, however, that weekly working hours are much longer in private enterprises than in the public sector. Such long hours can not easily be matched with married women's domestic obligations, a fact that might explain (married) women's weak or non-preference for the private sector⁴.

An important aspect of economic reforms is to increase labour force participation. This is unlikely to be achieved without an increase in the adult female labour force participation, i.e. by changing the status of some women from housewives into workers. It is a significant challenge for the Syrian authorities to design and govern the labour market in such a way that the barriers to female employment are lowered. A core issue is finding ways for housewives to combine employment outside the home with domestic tasks, and above all establishing conditions and systems that enables mothers with young children to combine work and childcare.

Are all women free to choose to join the labour force?

An important, but sensitive question is whether male family members allow women to work outside the home. This may particularly be an issue in towns and cities, where the ability to exert control over female relatives for the sake of family honour is more limited than in the countryside. Regrettably, the survey did not contain explicit references to this factor in explaining women's work-seeking behaviour.

However, attitudes are usually flexible: when the status of a woman's work is reasonably high and her wage is fairly good, attitudes towards female employment outside the home tend to be more sympathetic.⁵ In general, increased wages for females will increase the opportunity cost for the family of having women staying at home as housewives. The fact that higher education gives access to well-paid jobs may explain why the labour force participation of highly educated women is almost at the level of highly educated men.

Putting emphasis on female education is usually considered as an important tool in stimulating female labour force participation. There is both a direct effect on the educated woman and an indirect effect on female relatives: Multivariate analysis of the 2003 Unemployment survey data shows that daughters of highly educated women have

⁴Note that labour market behaviour is often a household decision – i.e. it is not necessarily only the woman's decision to look for a particular type of work.

⁵Kawar (1997) describes how female employment is negotiated in the Jordanian context.

an increased chance of becoming labour force members compared to other women.⁶ In contrast, there is no such effect of fathers' education on their daughters' employment. However, an alternative explanation for this finding may be that men with liberal attitudes marry highly educated women with a similar positive attitude toward their daughters' work outside the home.

Women's labour force participation is likely to increase in the future

In spite of the obstacles to female labour force participation pointed out above, the prospects for a future increase in the female participation in Syria are positive. If female school enrolment remains at a high level, the average female education level will increase more or less "automatically", as older women, who frequently did not receive any formal education, are being replaced by young, literate and well-educated women. In the long term, the current trend of falling fertility in combination with an mounting number of highly educated women is likely to cause an increase in female labour supply. Falling fertility levels will also generate an economically favourable "population tree", with comparatively few very young and very old persons, and a very large share of the population in working age (15-64 years). Taken together, these two factors may enhance significantly the overall labour force participation in Syria.

6.2 How Can the Employed Become More Productive?

An industry's share of unpaid and self-employed workers, and the workers' average education is used as an indicator for productivity

People's wages usually reflect the productivity of their work. Since the 2003 Unemployment Survey did not ask about wages, we cannot directly assess which sectors, industries and occupations that are characterized by low productivity. However, the prevalence of unpaid and self-employed people in a sector and the sector's average education levels may give us some sense of its productivity. At the household level, we assume that the household asset index to a certain degree reflects the remuneration from the employment of its individual members. Measures like 'the share of underemployed workers

⁶The results of the multivariate analysis are reported in Appendix A.

⁷The findings reported in this section are primarily from Chapter 3.

in a sector' have to be used with care, since it includes a strong component of people's subjective aspirations and expectations about their employment potential.

Agriculture has the highest use of unpaid workers, and employs people with the lowest education from the poorest households

Agriculture stands out as the industry with the least qualified workers and the most extensive use of unpaid and self-employed labour. It also tends to employ the very young or the very old, as well as rural women in mohafazat with few other employment opportunities. Households with members employed in agriculture are strongly overrepresented in the lowest household asset index group. However, subjective labour underutilisation in the form of visible and invisible underemployment is not particularly widespread. The reason is that most people in this sector cannot have realistic aspirations about acquiring other types of employment, given their low formal skills. Almost all seasonal workers are employed in the agricultural sector.

Services and manufacturing/construction contain a mixture of low and high-productivity workers

Services⁸ and manufacturing/construction⁹ stands out as typically "mixed" sectors with respect to our indicators. The workers have a varied educational background; there is some use of unpaid labour; and self-employed labour is extensively used. People working here are mostly men, and the sector tends to employ relatively young persons in urban areas. Households with members employed in services and manufacturing/construction belong to all wealth categories, but with households with members conducting services being slightly wealthier. Work hours are very long. It is likely that improved education would significantly increase the productivity in these sectors. Services and manufacturing/construction are the sectors with the worst mismatch between people's aspirations and their actual employment, as expressed by the share of (both visibly and invisibly) underemployed workers.

The government sector scores highest on our indicators, but since it does not operate under market conditions, it may still have low productivity

The government sector in general, and above all the health and education parts of it, has the highest score on our indicators. People working here often have a post-sec-

⁸The service industries are: trade, transportation, hotels and restaurants, and other services.

⁹ Including mining.

ondary degree, and there is no use of unpaid or self-employed labour. Most workers are middle-aged. Households with public employees are over-represented among the wealthiest households, in particular households with female public employees. Work hours are shorter than in other sectors. The government sector has the lowest share of underemployed people, although the number of visibly underemployed people is higher here than elsewhere.

However, since both the quantity of government positions and working conditions, such as wages, are determined directly by the government, we cannot use the high wealth (asset index score) of families with members in public employment as an indicator of high productivity in this sector. Instead, excessive government employment may well be associated with unproductive well-paid workers in public administration. Working more directly with clients, representing to a certain extent a demand side, people in the health and education sectors are somewhat less likely to have low-productive jobs.

The public sector may crowd out the formal private sector

As we have pointed out several times, the government sector attracts people with the best education. An interesting question is whether public employment "crowds out" the private formal sector through superior work conditions for the highly educated, or whether the government sector rather compensates for a weakly developed private sector unable to employ those with high education. The unemployed were asked about their desired sector of employment, and we have compared this with where the respondents worked before. ¹⁰ The comparison reveals that many of those previously employed in the private sector now look for a job in the government sector, while hardly anybody looks for work in the formal private sector. It may also turn out that the "white collar" type of education typical for government employees is less useful for many high-productivity businesses in the formal private sector.

Productivity and distribution of work sectors reflect substantial regional imbalances

Closely related to the discussion above is the problem of a regional economic imbalance in Syria. Households' economic situation varies greatly across regions, mohafazat, and urban-rural localities within each mohafaza. The 2003/2004 household income and expenditure survey found that per capita household expenditure varied from 2,470

 $^{^{10}}$ Keep in mind that these people only make up a minority of the unemployed; the majority of the unemployed have never worked before.

Syrian pounds in rural areas in the northeastern region to 4,650 Syrian pounds in urban areas in the southern region (El Laithy and Abu-Ismail 2005:30).

This regional disparity is not caused by variations in the male labour force participation, which is at the same high level in urban and rural areas in all mohafazat. Furthermore, the share of individuals living in households with somebody else in the labour force is equal across urban and rural areas in all mohafazat.

The main difficulty is the concentration of low-productivity employment in certain regions and mohafazat. For example, the eastern region, as well as certain mohafazat in other regions (Hama, Edleb), has a large share of people employed in agriculture, the least productive of all industries. In rural areas in certain mohafazat, agriculture is almost the only available employment option. Due to the extraordinary prevalence of agriculture, the eastern region also has the highest share of seasonal workers.

Another important issue is the extremely skewed geographical distribution of government sector employment, where Damascus and the coastal region have the highest shares of public sector employment. For men, the share of the public sector in total employment ranges from a low of 14 percent in the northern region to a high of 40 percent in the coastal region. For women, the range is from 21 percent in the northern region, to 68 percent in Damascus. A part of this variation is explained by different urbanisation levels, but far from all of it. In the coastal region, for example, the public sector dominates both urban and rural areas.

It is a goal for the Syrian government to strengthen the private sector. This sector is presently strongest in Aleppo and Rakka, and weakest in the coastal region. The coastal region has the highest share of households without any person working in the private sector. Urban Aleppo, on the other hand, has an extraordinary high share and a large number of men employed in the formal private sector, and may hence serve as a model for future formal private sector growth.

Given the geographical pattern of government employment, we may conclude that a general, gender, and geographical-neutral streamlining of the government sector will affect women relatively more than men, urban more than rural areas, and have a particularly negative impact on the capital and the coastal region. It is an open issue whether and to what extent the Syrian government can or should use the government's resources to cope with the regional economic imbalances. One option at hand is to locate an additional number of government institutions and enterprises in the weakly developed, northeastern part of the country.

6.3 How Can the Unemployed and Underutilised Become Employed?¹¹

Definitions matter

On the surface, the current unemployment situation may not appear to constitute a big challenge to the Syrian government. At 10 percent, the Syrian unemployment rate is not higher than in many European countries. However, as we have argued previously, one should look more broadly at the underutilisation of labour rather than simply considering the regular unemployment rate. The unemployed make up a subgroup of the underemployed.

ILO unemployment mainly strikes the young

In all regions, in both rural and urban areas and for both men and women, unemployment rates are highest among the young. Almost three in five (57 percent) of all unemployed Syrians are less than 25 years old. Women have higher regular unemployment rates than men. However, since fewer women are economically active, there are fewer unemployed women (201,000) than unemployed men (312,000).

Unemployment is the outcome of a complex interaction of the preferences of employers and job seekers

The interpretation of variations in unemployment rates between groups is far from straightforward. For one, the unemployment rates are calculated in percent of the labour force rather than the adult population. Hence, when the labour force is small, as is the case for women, it is typically the same factors that make both the employed and the unemployed differ from the rest of the adult population.

Secondly, whether a person ends up as employed or unemployed is not only about an employer's preferences for people with this or that background and qualifications, but also what a job seeker considers as "acceptable work". Which places and what types of work that the individual considers as "acceptable", is again strongly influenced by the opinions of other family members, and by more general societal attitudes. What is considered appropriate depends on a number of factors and varies according to the individual's sex, age and social status. For example, higher education increases the statistical risk of female unemployment. This probably results from a combination

¹¹The findings reported in this section are primarily from Chapter 4.

of enhanced job aspirations and increased selectiveness with respect to the kind of employment. It appears that the latter mechanism is strong and more than outweighs the highly educated woman's increased attractiveness to potential employers.

The underutilisation rate is in many situations a more appropriate unemployment measure

Looking at the underutilisation of labour, we observe that some individuals cannot "afford" to stay unemployed, but are "forced" to take any type of employment, regardless of the prevailing working conditions. Population groups with a small share of unemployed among the underutilised are: men in general; middle-aged and older persons; people with low education, particularly women; household heads; and married persons.

As a measurement of the lacking ability to cater economically for their families, and as a source of social frustration, we find the underutilisation rate to capture more appropriately those facing serious labour market problems than the regular ILO unemployment rate¹². In this respect the "underutilisation rate" is much closer to the popular understanding of "unemployment", and what is sometimes labelled (although erroneously so) the "true" unemployment rate.¹³

At 31 percent, the Syrian underutilisation rate is more worrisome than the fairly low national unemployment rate would suggest. Except for being a much larger group, the underutilised share many of the same features with the unemployed (which follows by definition for those groups of underutilised, e.g. women, where the unemployed represent a large segment). The proportion of underutilised is roughly equal for men and women, in both urban and rural areas. The underutilised are young, but include more middle-aged than the unemployed. In the youngest age groups the rate is as high as 50 percent, and for urban females 70 percent. The picture applies to all regions.

Population groups with low unemployment rates caused by an obligation to work (e.g. household heads and married men) demonstrate significantly higher underutilisation rates than other groups. While most households cannot afford to have more than one ILO unemployed member, a substantial number of households have two or more underutilised members.

¹² We have defined the "underutilisation rate" as the share of the population 15 years or older who are underutilised, relative to those who are either in the labour force, underutilised, or both. See Chapter 4 for details.

¹³ In the media, there are sometimes references to an "unofficial estimate" of a Syrian unemployment rate of 20 percent (e.g. Daily Star 6 June 2005). The source of these estimates are never stated, and probably just reflect a general feeling that crucial aspects of labour market problems are not reflected in the standard unemployment rate.

Unemployment is not a reliable indicator of household economic deprivation

By no means is individual unemployment always a sign of economic deprivation (see Figure 4.17). The reason is that to become unemployed (rather than to take an inappropriate job) might be a deliberate choice for many people. Moreover, what matters economically is not primarily ones own unemployment, but rather alternative sources of income, including the employment income earned by other household members. Underutilisation is more negatively correlated with household wealth than unemployment is, because the concept of underutilisation includes low-productivity, low remunerated work.

Even if unemployment is virtually uncorrelated with household wealth, and even if the underutilisation of labour is rather weakly negatively correlated with household wealth, these phenomena represent a great challenge for Syrian policy makers. The main reason is that they cause individual social frustration, in particular among young men, who are socially expected to earn income, and who can often neither marry nor move out from their father's household without an independent economic base. This private frustration may easily translate into general social and political frustration. Frustration tends to increase the longer a person remains without acceptable work. Already, half the unemployed have been seeking work for more than one year.

Unemployment may increase in spite of economic growth

Dealing with the problems of unemployment and underutilisation in Syria is obviously a great challenge. First, economic reforms are to a large extent concerned with removing unproductive jobs that in reality covers "hidden" unemployment. In the process of uncovering such hidden unemployment, many people holding unproductive jobs today will become unemployed tomorrow. Moreover, many of those loosing their jobs in a reform process will have too low formal skills, be too old, or will live in the wrong areas to be re-employed in sectors with rising employment shares. That is why underutilisation is more often than not transformed from underemployment to regular ILO unemployment during a process of economic reform.

Second, there is the problem that improved labour market conditions easily leads to increased aspirations among labour force members. This in turn may make many people increasingly reluctant to accept jobs that they would previously have accepted.

Third, while we have envisaged that female labour supply may increase in the future due to more positive attitudes towards female employment, improved education and decreased fertility, economic growth and a corresponding increase in people's wages is also likely to contribute to raising the female labour supply. Not all of these new entrants to the labour market will find jobs, and as a result, the female unemployment rate may increase.

All of these factors imply that Syrian unemployment rates may increase substantially in the coming years, even if economic growth is strong.

The fruits of economic growth should be distributed to all groups and sectors

At the national level, there is no doubt that economic reform will improve welfare. However, the problem is that particular groups, e.g. the young and those with less than average human capital, may be asked to carry the heaviest burdens of the economic restructuring process. It is imperative that the Syrian government carefully designs its policy in a way that ensures a distribution of benefits of economic growth to all sectors and groups of society.

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Appendix A: Multivariate Analysis

Multivariate analysis of factors influencing labour supply¹

We regard the labour force participation of an individual as a decision that is taken jointly by the individual and his or her household. The decision has only two possible outcomes: either the individual does, or does not join the labour force². The outcome of the decision may be explained by a range of characteristics pertaining to that individual, or to characteristics of the household. We explore the relationship between these characteristics by running a binary logistic regression, with labour force participation as the dependent variable. Regression outputs are reported in Table 1 and Table 2.

We use both individual and household level variables as independent, explanatory variables. However, one should keep in mind that the dependent variable (labour force participation) may in the long run affect the independent variables. For example, having a job gives income, which again may allow a son to marry, move out from his father's family, and to create his own household. In this case, both the relation to the household head, marital status, and most of the household variables will be affected.

Two separate models, one for men, and one for women

The fundamental gender divide in the Syrian labour market behaviour compels us to apply two separate models, one for men and one for women. The gender difference is not simply one of contrasting male and female participation levels. The whole mechanism associated with labour force participation seems to be different for men and women, partially generating opposite effects of some explanatory variables when we make separate equations for each sex. For example, while marriage has a positive effect on male participation, the effect is negative for women. A joint model for men and women gave an odds ratio of 0.1 for female labour force participation, against a

¹ All results (tables) are found at the end of the appendix.

² Hence, this appendix contains no regression about probabilities of becoming "inactive", since these are just the inverse of the probabilities of joining the labour force.

male odds ratio of 1.0. In other words, men are almost 10 times as likely to participate in the labour force as women.

An odds ratio of 1 means neutral effect relative to the reference group, above 1 implies positive effect on participation

Below we present our results in terms of *odds ratios*. By odds, we here refer to the estimated probability of being in the labour force as opposed to not being in the labour force for an individual belonging to some particular category, e.g. living in a given region of Syria. By odds ratio we mean the ratio of these odds between two categories – e.g. our given region, and a prior chosen reference region. An odds ratio of 1 implies equal participation propensities between two categories (regions). An odds ratio above 1 implies a higher participation propensity in the given region than in the reference region, and *vice versa* for an odds ratio below 1.

The variable "age" is associated with a range of other factors

In addition to gender, age represents a "classical" independent variable in the sense that it cannot be affected by our dependent variable. It is common practice to use both age, and squared age as independent variables. For men, the effect of age is strongly positive. It is positive also for women, but to a lesser extent than for men.

Squared age has a neutral coefficient for both for men and women. It seems somewhat strange that the variable "age squared" has a "neutral" effect, even though there is a strong and clear curvature, above all for men³. (The bivariate relationship between age and labour force participation was shown in Figure 2.1.) However, the coefficients on age and age squared may be deceiving because the bivariate relationship between age and labour force participation is "polluted" by the strong correlations between age and other explanatory variables, such as education, marital status and family relation to the household head. Another important factor is the systematic difference in the size of the age cohorts. Although male labour force participation drops sharply above 45 years, the fact that the vast majority of adult men are relatively young reduces the effect of the participation behaviour of older men relative to that of young men⁴.

³ The curvature should imply a strong negative coefficient for "age squared" among men.

⁴Constant, high fertility rates and low mortality rates, makes the 15-30 year cohort almost twice as large as the 30-45 year cohort, which again is almost twice the size of the 45-60 year cohort, and so on.

Urbanisation reduces labour force participation

For both men and women, living in urban areas reduces the likelihood of being in the labour force. However, the effect is much stronger for women (odds ratio of 0.39) than for men (odds ratio of 0.91). Hence, to the extent that economic modernisation generates a strong rural-to-urban migration, one may expect that the national female labour force participation rate may suffer. The rural dominated Eastern region has higher participation than elsewhere. The main exception is that female participation is highest in the coastal region, regardless of the urban-rural dimension.

Marriage increases male participation, decreases female participation

The effects of relation to the household head on labour force participation are measured relative to the labour force participation associated with being the household head. The odds ratio for sons of the head is 3.58, while it is only 0.06 for "other male relatives" (than in the direct family line). The former result can probably be explained by the fact that many "sons" are not only above 15, but also to a large extent also being middle-aged sons (of retired male heads). The latter result is probably because "other male relatives" are included with the household exactly because they are not able to care for themselves economically. As expected, being a (female) spouse, and implicitly being provided for economically by the (male) head lowers the participation prevalence strongly relative to being the household head.

As could be expected, marriage has dramatically opposite effects on male and female labour force participation. For women, the married-unmarried odds ratio is 0.86, for men it is 1.35. In Syria, as well as in other countries in the region, marriage implies that the man must work to provide for his family. His wife may, in most families, expect to be catered for economically by her husband. The same mechanism is also documented in the effect of a household having children below 15 years in the household: Male participation increases, while it decreases for women, probably because the man must provide for the family⁵.

Both male and female labour force participation decrease slightly with household size. More important for men is the number of children in the household. For men, a high number of children is an impetus to work, while for women it has little effect. The likelihood of female labour force participation is reduced with the (usually more traditional) "extended" family type, while it increases for males.

⁵We cannot from the survey questionnaire identify which of the women in the household that is the (biological) mother of the registered children below 15 years of age. In most cases it will be the spouse of the Head. Nevertheless, even in those cases where the children's mother is not the spouse, we assume that all women above 15 years in the household to some extent participate in child care-taking.

As expected, we did not find a significant effect of (accumulated, past) income, measured by the asset index. The explanation is that the distinction between poor and rich households is not whether their members work or not, but the size of remuneration received in their jobs.

Female headship is associated with low male participation. Obviously, female headship occurs primarily due to the absence of able-bodied men in the household.

Higher education is the single most important factor for female participation

Finally, the regressions also allow us to isolate the effect of education on male and female labour force participation. First, we observe that the effect of own education, relative to being illiterate, is slightly positive although very varying for men. For women it is extremely high. This confirms our previous finding that higher education seems to enable women to cross a kind of an entry threshold to the labour market.

Furthermore, we identify the effect of the (usually male) head's and the (female) spouse's education on respectively male and female labour force participation. For men, there is no apparent effect of the head and the spouse's education on participation. However, for women, there appears to be a systematic positive effect of the spouse's education, but not of the head's education. We may interpret this as partially being a "role model" effect. Highly educated mothers seem to be conducive for younger women's participation. Many, perhaps most, highly educated women may also be married to men who are inclined to support women's labour force participation, including that of their own daughters.

Multivariate analysis of factors influencing unemployment and underutilisation of labour

In this section we present two gender-specific logistic regression models in order to identify the factors that are associated with unemployment and underutilisation of labour. The dependent variables in the two models are, respectively, individual unemployment, and individual underutilisation of labour. The results of the unemployment regressions are reported in Table 3 and Table 4, the underutilisation regressions are reported in Table 5 and Table 6.

The labour force is the relevant population base for unemployment regressions

The regression equation for labour force participation in section 6.5 was based on all individuals in the sample who were 15 years or older. However, for investigating unemployment, it is more appropriate to restrict the population base to the labour force members only. The reason is that we may consider the job search process as a two-step procedure, where individuals first decide that they want to work (i.e. they decide to join the labour force) and then either manage to find work or do not (i.e. they become employed or unemployed). Hence, the unemployed represents a sub-group selected from amongst labour force members.

In particular for women, it is more relevant to examine who among the economically active women end up as unemployed rather than which women of working age do. As the female labour force participation rate is low, it is likely that employed and unemployed women share many of the same characteristics. Hence, comparing the unemployed to all women of working age may lead us to (mistakably) identify traits associated with being economically active as traits associated with unemployment.

A similar argument applies to the analysis of underutilisation of labour. However, we must keep in mind that "discouraged workers" are regarded as being outside the labour force by the standard ILO definitions. Consequently, we have to use the group of adult individuals that are in the labour force, underutilised, or in both groups, as the basis for our analysis. Among men, the unemployed constitute roughly 25 percent of underutilised people. For women the rate is much higher, at 65 percent. Because the two groups overlap so strongly for women, we expect the two female equations to yield fairly similar, although not identical results. For men, the overlap is less severe, and more variation between male unemployment and male underutilisation equations should therefore be expected.

Women have higher risk of unemployment, lower risk of underutilisation

Before going to the separate regressions, we note that a joint male-female regression for unemployment shows that the odds ratio for being unemployed is much lower for men than for women⁷. Hence, among the labour force members, being female is in itself a risk factor for unemployment. For underutilisation of labour (among the employed and/ or underutilised) the effect of gender is almost neutral. The reason

⁶ The population basis for this equation consists of five groups: Those who are employed without expressing dissatisfaction, the unemployed, the invisibly unemployed ("discouraged workers), the invisibly underemployed, and the invisibly underemployed."

⁷ The odds ratio is approximately 0.41 vs. 1. This is almost the same result as found for Jordan, using data from the 2003 Jordan Multi-topic Household Survey.

is that regular ILO unemployment is higher among women, but underemployment is more widespread among men. (The results from the joint regression are available from the authors.)

Urban residence reduces the unemployment risk for women, increases it for men

We notice that urban residence slightly increases the risk of unemployment for men in the labour force, but decreases the risk for women. The explanation is probably that the urban labour markets are better for educated women, *if* they decide to join the labour force. Rural men may usually find employment in the informal agricultural sector. The regional risk of male unemployment is highest in Damascus, and then in the eastern region. Among women it is much higher in the coastal region. The reason may, as earlier mentioned, rather be that more women here supply labour (i.e. join the labour force), than that the labour market in the region is particularly meagre for women.

Young age increases the unemployment risk for women, not so for men

Being young is a risk factor for unemployment among women, but not for men. This may seem somewhat surprising given our previous bivariate diagrams (e.g. Figure 4.5). However, the variable "age" in bivariate settings in effect contains several other factors, which are highly correlated with biological age. Among these are education, marital status, household size and type, the relation to the household head, and so on and so forth. When we enter the variable "age" into a multivariate regression, these other variables will deprive "age" of some of its bivariate effects.

Household heads are required to find work

Being household head implies an obligation to provide for the household economically, and the status is partially acquired due to an ability to do so. Hence, for both men and women, being the household head implies a lower risk of unemployment than other positions in the household. Given that they are in the labour force, spouses face a higher risk of unemployment, because they due to their husband's income generation can afford more selectiveness with respect to places and types of work. Both adult sons and daughters have higher risk of unemployment than have male or female head of households (remember that in this analysis, "sons" and "daughters" are at least 15 years old, many are middle-aged).

"Household type" did not render any significant impact, possibly because its effect is covered by other variables. One such variable is the "dependency ratio", which is 0 when

there are no household members below 15, and above 64 years, and 1 when there are no working-age household members. While men are not affected by the dependency ratio (they are supposed to work anyway), women are affected, with the risk of unemployment increasing with the number of children under 15 in the household.

The bearing of marital status of the (male) head on the risk for unemployment is such that any other marital status than "Never married" increases the risk of unemployment. This is possibly so because never-married heads would not become heads if they were unemployed? If the household has a female head the risk of unemployment increases for other women in the family, conceivably because many of these women are required to join the labour force without the necessary qualifications.

The high unemployment risk for "other male relatives" is probably caused by the social fabric of Syrian society. One may ask why these adult males do not have their own household? The most likely reason is that they are taken into the household precisely *because* they are unemployed, or face some serious employment obstacle (disease or handicap) that disqualifies them from work. In contrast, single female family members will often be allowed into households for matters of family honour, also when they can provide for themselves economically.

Marital status is insignificant for male unemployment. The situation is different for women. Divorced women usually cannot afford to be unemployed and thus have to work. The risk of unemployment for widowed women is very high, perhaps because they need employment for economic reasons but are unattractive in the labour market due to high age (and, as a consequence poor education?).

Secondary education increases the risk of female unemployment

Given labour force membership, there is a reduced risk for unemployment the more education men have. For women the risk grows, especially for those with secondary education. At least part of the explanation is that the desire for employment among women increases with education, but that secondary education does not suffice to pass the entrance to government jobs, for example as nurses and teachers. This suggests that, at least those women who are not pressured to seek employment for economic reasons may allow themselves more freedom of choice with respect to which type of employment to accept. It may be that the group of unemployed women in fact is composed of two very different strands of women: (a) those women where unemployment is a sign of strong deprivation, and (b) those women who are not forced to work for economic reasons, but can "afford" to sit and wait for an "acceptable" job matching qualifications, aspirations and societal norms.

Interestingly, high education among spouses affects the risk for unemployment among women positively. There is no such effect for men. The effect that is being picked up here is probably an increase of the unemployment risk of daughters when

their mother (who is, in most cases, the "spouse" in the household) is educated. Mothers are role models for their daughters, and daughters of educated women may be more likely to aspire to work outside the home. The majority of highly educated spouses come from well-to-do households, and their daughters are conceivably more selective with respect to the type and place of employment, and end up unemployed.

The effect of the labour force status of "other household members" on individual unemployment was somewhat unexpected: If other members are employed, there is a lower chance of unemployment both for men and women. We would have expected that some persons' labour activity would give room for "unemployment as convenience" for other household members. Correspondingly, if there is another unemployed household member, there is a higher chance of unemployment for "our" individual.

The underutilisation risk is difficult to interpret

Because the group of underutilised people is composed of four different sub-groups, it is very difficult to give clear interpretations of the mechanisms at work. Due to the complexities involved in interpretation, we will only make a few observations here.

There is apparently a higher risk for being underutilised among urban residents of both sexes. A possible explanation is that many low-productivity invisibly underemployed persons in rural areas (e.g. in agriculture) lack other expectations for their work life, while in cities the menu of possible employment choices is more apparent, and larger. For both women and men, the eastern region has the lowest risk of all regions, perhaps due to the factors just mentioned.

Having another underutilised household member strongly increases the risk for male underutilisation. Hence, labour market problems seem to cluster in households. For women, the strongest effect is that of female headship. A female head often faces economic hardship, and therefore must take any job available to her.

Regression outputs

Table 1: Labour force participation, men

Linkson	β	S.E.	Wald	Sig. level	Exp(β)
Urban	-0.09	0.008	126.78	0.000	0.91
Eastern	0.25	0.015	1757.20	0.000	0.70
Damascus	-0.25	0.015	293.35	0.000	0.78
Southern	-0.21	0.012	300.87	0.000	0.81
Middle Coastal	-0.15 -0.19	0.012	145.26	0.000	0.86
Northern	-0.19 0.16	0.014 0.011	189.83 196.95	0.000 0.000	0.82 1.17
Head of household	0.10	0.011	2882.41	0.000	1.17
Spouse	-1.14	0.126	81.06	0.000	0.32
Adult son	1.27	0.120	1714.86	0.000	3.58
Brother	-0.15	0.031	20.07	0.000	0.86
Other relative				0.000	
Non relative	-2.83 1.18	0.094 0.065	904.96 331.12	0.000	0.06 3.24
	0.52	0.003	64091.98	0.000	1.69
Age Age squared	-0.01	0.002			0.99
	-0.01	0.000	84691.81	0.000	0.99
Never married Married	0.20	0.022	1411.13	0.000	1 25
	0.30	0.022	178.43	0.000	1.35
Divorced Widowed	-1.40	0.059	567.18	0.000	0.25
Widowed	-0.78	0.048	265.60	0.000	0.46
Illiterate	0.61	0.010	48290.13	0.000	1.04
Can read and write	0.61	0.018	1174.48	0.000	1.84
Elementary	0.87	0.016	2783.37	0.000	2.39
Preparatory	-0.73	0.018	1650.44	0.000	0.48
Secondary	-1.61	0.020	6619.86	0.000	0.20
Intermediate institute	0.82	0.030	746.06	0.000	2.27
University and above	0.02	0.027	0.32	0.573	1.02
Asset index score	0.01	0.001	56.88	0.000	1.01
Number of children in household	0.08	0.003	691.85	0.000	1.08
Other household members working	-0.07	0.012	32.27	0.000	0.94
Single person household			1710.19	0.000	
Single parent, children below 15	-0.86	0.056	234.83	0.000	0.42
Single parent, youngest child 15 or older	-1.10	0.056	387.44	0.000	0.33
Couple with children below 15	0.43	0.057	56.08	0.000	1.53
Couple, youngest child 15 or older	0.22	0.057	14.49	0.000	1.24
Couple, no children living in household	-0.06	0.060	0.91	0.340	0.94
Extended family (outside core)	0.28	0.056	24.39	0.000	1.32
Household of unrelated members	-2.17	0.099	482.22	0.000	0.11
Household size	-0.09	0.002	1844.00	0.000	0.92
Female head of household	-0.47	0.034	188.74	0.000	0.62
Age of household head	-0.31	0.003	9762.68	0.000	0.73
Age of household head squared	0.00	0.000	9422.91	0.000	1.00
Household head never married			1759.18	0.000	
married	1.40	0.053	714.32	0.000	4.07
divorced	1.00	0.055	332.68	0.000	2.73
widowed	2.20	0.054	1648.36	0.000	9.04
Household head is Illiterate			4258.48	0.000	
can read and write	-0.50	0.014	1358.03	0.000	0.60
elementary	-0.62	0.014	2018.74	0.000	0.54
preparatory	-0.41	0.017	589.92	0.000	0.67
secondary	-0.02	0.019	1.14	0.286	0.98
intermediate institute	-0.82	0.024	1146.03	0.000	0.44
university and above	-0.79	0.023	1180.03	0.000	0.45
No spouse in household	0.82	0.056	215.89	0.000	2.26
Spouse is illiterate			874.57	0.000	
can read and write	-0.14	0.011	140.40	0.000	0.87
elementary	0.12	0.011	121.72	0.000	1.13
preparatory	-0.13	0.017	60.66	0.000	0.88
secondary	-0.08	0.020	14.66	0.000	0.93
intermediate institute	-0.07	0.024	8.33	0.004	0.93
university and above	-0.33	0.032	107.90	0.000	0.72

Table 2: Labour force participation, women

	β		S.E.		Wald	Sig. level	Εχρ(β)
Urban	-0.94		0.009		9747.03	0.000	0.39
Eastern					13433.51	0.000	
Damascus	-0.41		0.017		594.48	0.000	0.66
Southern	-1.11		0.013		6994.35	0.000	0.33
Middle	-0.22		0.012		347.23	0.000	0.80
Coastal	0.38		0.013		799.41	0.000	1.46
Northern	-0.30		0.011		743.55	0.000	0.74
Head of household					3432.34	0.000	
Spouse	-1.49		0.036		1756.67	0.000	0.23
Adult daughter	0.25		0.041		37.28	0.000	1.28
Sister	-0.03		0.045		0.53	0.467	0.97
Other relative	-1.73		0.057		903.89	0.000	0.18
Non relative	-0.83		0.040		433.84	0.000	0.44
Age	0.23		0.002		13933.93	0.000	1.26
Age squared	0.00		0.000		13910.70	0.000	1.00
Never married					218.82	0.000	
Married	-0.15		0.031		22.58	0.000	0.86
Divorced	0.00		0.041		0.00	0.961	1.00
Widowed	-0.57		0.040		207.53	0.000	0.56
Illiterate					33495.59	0.000	
Can read and write	0.19		0.016		135.33	0.000	1.21
Elementary	0.04		0.013		8.97	0.003	1.04
Preparatory	-0.02		0.017		1.90	0.168	0.98
Secondary	0.41		0.019		485.46	0.000	1.51
Intermediate institute	3.79		0.026		20805.00	0.000	44.45
University and above	3.13		0.030		10569.57	0.000	22.86
Asset index score	-0.08		0.001		3155.47	0.000	0.92
Number of children in household	0.00		0.003		1.19	0.274	1.00
Other household members working	-0.52		0.017		991.10	0.000	0.59
Single person household					735.58	0.000	
Single parent, children below 15	-1.07		0.050		453.65	0.000	0.34
Single parent, youngest child 15 or older	-1.27		0.051		632.36	0.000	0.28
Couple with children below 15	-0.86		0.061		196.58	0.000	0.42
Couple, youngest child 15 or older	-0.96		0.062		241.03	0.000	0.38
Couple, no children living in household	-1.03		0.067		240.09	0.000	0.36
Extended family (outside core)	-0.89		0.062		208.28	0.000	0.41
Household of unrelated members	-19.46		993.3		0.00	0.984	0.00
Household size	-0.02		0.002		105.93	0.000	0.98
Female head of household	-0.04		0.029		1.72	0.189	0.96
Age of household head	-0.03		0.002		199.76	0.000	0.97
Age of household head squared	0.00		0.000		202.51	0.000	1.00
Household head never married	0.40		0.040		1333.35	0.000	0.00
married	-0.19		0.049		14.30	0.000	0.83
divorced	1.39		0.057		592.67	0.000	4.03
widowed	0.62		0.052		141.35	0.000	1.86
Household head is Illiterate	0.24		0.013		1344.39	0.000	0.70
can read and write	-0.24		0.012		407.10	0.000	0.78
elementary	-0.45		0.013		1256.25	0.000	0.64
preparatory	-0.27		0.016		279.60	0.000	0.76
secondary	-0.32		0.019		288.08	0.000	0.73
intermediate institute	-0.28		0.021		181.57	0.000 0.000	0.75 0.82
university and above No spouse in household	-0.19		0.020		88.67		U.0Z
Spouse is illiterate	-0.28		0.052		2304.01	0.000	0.7E
			0.053		27.79	0.000	0.75
can read and write	0.17	0.00	0.015		129.16	0.000	1.18
elementary		-0.08		0.014	29.24		0.93
preparatory		0.25		0.021	146.18	0.000	1.28
secondary intermediate institute		0.94 0.34		0.024	1514.43 149.96	0.000	2.56
				0.028		0.000	1.41
university and above Constant		0.55 -2.14		0.035	244.03 429.59	0.000	1.74 0.12
A AMERICAL III		~L.14		U. 1U.	429.39	0.000	U. I Z

Table 3: Unemployment, men

	β	S.E.	Wald	Sig. level	Exp(β)
Urban	0.11	0.015	55.56	0.000	1.12
Eastern			667.96	0.000	
Damascus	0.13	0.026	24.93	0.000	1.14
Southern	-0.30	0.020	226.88	0.000	0.74
Middle	-0.16	0.020	67.25	0.000	0.85
Coastal	-0.22	0.023	91.10	0.000	0.80
Northern	-0.34	0.018	357.86	0.000	0.71
Head of household			2558.65	0.000	
Spouse	-16.66	2116.344	0.00	0.994	0.00
Adult son	1.19	0.046	668.54	0.000	3.28
Brother	1.05	0.050	438.52	0.000	2.86
Other relative	5.48	0.164	1123.56	0.000	240.71
Non relative	1.08	0.089	145.33	0.000	2.94
Age	0.00	0.004	1.23	0.267	1.00
Age squared	0.00	0.000	216.07	0.000	1.00
Never married			4.72	0.193	
Married	0.02	0.025	0.45	0.504	1.02
Divorced	0.21	0.101	4.44	0.035	1.24
Widowed	-16.06	592.030	0.00	0.978	0.00
Illiterate	10.00	332.030	864.09	0.000	0.00
	-0.61	0.021		0.000	0.54
Can read and write		0.031	401.66		0.54
Elementary	-0.37	0.025	218.25	0.000	
Preparatory	-0.56	0.031	338.93	0.000	0.57
Secondary	-0.08	0.035	5.23	0.022	0.92
Intermediate institute	-0.74	0.040	335.65	0.000	0.48
University and above	-0.50	0.053	86.92	0.000	0.61
Asset index score	-0.09	0.002	1353.27	0.000	0.91
Number of children in household	0.12	0.005	578.54	0.000	1.13
Other household members employed	-0.30	0.018	292.34	0.000	0.74
Other household members employed	2.46	0.014	31805.62	0.000	11.76
Single person household			686.79	0.000	0.605.07
Single parent, children below 15	18.28	716.488	0.00	0.980	8.68E+07
Single parent, youngest child 15 or older	18.49	716.488	0.00	0.979	1.07E+08
Couple with children below 15	17.90	716.488	0.00	0.980	5.95E+07
Couple, youngest child 15 or older	18.31	716.488	0.00	0.980	8.96E+07
Couple, no children living in household	18.28	716.488	0.00	0.980	8.65E+07
Extended family (outside core)	17.72	716.488	0.00	0.980	4.99E+07
Household of unrelated members	20.07	716.488	0.00	0.978	5.21E+08
Household size	-0.07	0.004	324.12	0.000	0.93
Female head of household	0.37	0.058	40.98	0.000	1.45
Age of household head	0.03	0.005	28.12	0.000	1.03
Age of household head squared	0.00	0.000	18.22	0.000	1.00
Household head never married			1097.81	0.000	
married	-0.70	0.102	46.77	0.000	0.50
divorced	-0.57	0.125	21.12	0.000	0.56
widowed	-2.33	0.107	479.15	0.000	0.10
Household head is Illiterate			1027.52	0.000	
can read and write	0.28	0.019	216.56	0.000	1.32
elementary	0.09	0.021	19.90	0.000	1.10
preparatory	0.55	0.021	390.84	0.000	1.74
secondary	0.33	0.028	33.73	0.000	1.21
intermediate institute	0.19	0.040	251.75	0.000	1.90
university and above	-0.50	0.040	95.11	0.000	0.60
No spouse in household	-0.30	0.032	566.02	0.000	0.00
Spouse is illiterate	0 11	0.100	1.10		1 17
	0.11	0.108		0.295	1.12
can read and write	-0.17	0.021	64.56	0.000	0.84
elementary	0.11	0.019	36.60	0.000	1.12
preparatory	-0.08	0.033	6.27	0.012	0.92
secondary	-0.52	0.049	112.85	0.000	0.59
intermediate institute	-0.21	0.059	12.77	0.000	0.81
university and above	1.06	0.072	216.68	0.000	2.88
Constant	-20.70	716.488	0.00	0.977	0.00

Table 4: Unemployment, women

Table 4. Offeniployment, women	β	S.E.	Wald	Sig. level	Exp(β)
Urban	-0.12	0.026	20.43	0.000	0.89
Eastern			2412.33	0.000	
Damascus	-0.02	0.044	0.16	0.686	0.98
Southern	0.02	0.039	0.35	0.552	1.02
Middle	-0.06	0.035	3.19	0.074	0.94
Coastal	1.07	0.035	956.62	0.000	2.92
Northern	-0.29	0.037	61.34	0.000	0.75
Head of household			731.58	0.000	
Spouse	1.12	0.145	59.23	0.000	3.06
Adult daughter	2.74	0.140	381.04	0.000	15.46
Sister	2.35	0.153	235.76	0.000	10.51
Other relative	-10.89	1240.187	0.00	0.993	0.00
Non relative	2.24	0.150	221.92	0.000	9.40
Age	0.24	0.012	411.67	0.000	1.27
Age squared	-0.01	0.000	854.20	0.000	0.99
Never married	0.57	0.055	769.47	0.000	4.70
Married	0.57	0.055	109.59	0.000	1.78
Divorced	-1.65	0.171	92.99	0.000	0.19
Widowed	2.88	0.119	583.30	0.000	17.88
Illiterate	0.05	0.075	3782.65	0.000	0.05
Can read and write	-0.05	0.075	0.45	0.501	0.95
Elementary	1.02	0.051	391.11	0.000	2.76
Preparatory	1.18	0.059	403.04	0.000	3.27
Secondary	2.51	0.060	1758.38	0.000	12.29
Intermediate institute	0.89	0.061	214.46	0.000	2.43
University and above	0.36	0.075	23.01	0.000	1.43
Asset index score	0.03	0.004	44.54	0.000	1.03
Number of children in household	0.13	0.010	196.47	0.000	
Other household members employed	-1.01 1.91	0.033 0.025	972.01	0.000	0.36 6.72
Other household members employed Single person household	1.91	0.025	5944.55 1307.65	0.000	0.72
Single person nousehold Single parent, children below 15	15.93	690.024	0.00	0.982	8.27E+06
Single parent, children below 13 Single parent, youngest child 15 or older	15.39	690.024	0.00	0.982	4.85E+06
Couple with children below 15	17.02	690.024	0.00	0.982	2.46E+07
Couple, youngest child 15 or older	16.70	690.024	0.00	0.981	1.79E+07
Couple, no children living in household	17.81	690.024	0.00	0.979	5.45E+07
Extended family (outside core)	18.41	690.024	0.00	0.979	9.86E+07
Household of unrelated members	10.41	090.024	0.00	0.979	9.00L+07
Household size	-0.17	0.007	584.00	0.000	0.84
Female head of household	1.28	0.077	274.94	0.000	3.61
Age of household head	0.09	0.007	136.07	0.000	1.09
Age of household head squared	0.00	0.000	140.17	0.000	1.00
Household head never married	0.00	0.000	141.89	0.000	1.00
married	1.26	0.150	70.99	0.000	3.53
divorced	1.48	0.141	110.50	0.000	4.40
widowed	1.56	0.147	111.63	0.000	4.74
Household head is Illiterate		0,	1289.57	0.000	
can read and write	0.09	0.036	6.38	0.012	1.10
elementary	0.51	0.037	190.19	0.000	1.66
preparatory	-0.65	0.049	175.05	0.000	0.52
secondary	0.03	0.050	0.47	0.493	1.04
intermediate institute	-0.64	0.057	125.35	0.000	0.53
university and above	0.11	0.053	4.36	0.037	1.12
No spouse in household			1544.75	0.000	
Spouse is illiterate	0.08	0.153	0.25	0.616	1.08
can read and write	0.70	0.035	403.45	0.000	2.02
elementary	0.54	0.035	243.19	0.000	1.72
preparatory	1.72	0.047	1347.99	0.000	5.59
secondary	0.52	0.056	87.18	0.000	1.68
intermediate institute	0.82	0.059	195.98	0.000	2.27
university and above	0.94	0.089	111.53	0.000	2.56
Constant	-26.46	690.024	0.00	0.969	0.00

Table 5 Underemployment, men

	β	S.E.	Wald	Sig. level	Exp(β)
Urban	0.05	0.008	47.92	0.000	1.05
Eastern			1797.67	0.000	
Damascus	0.51	0.014	1329.68	0.000	1.66
Southern	0.36	0.011	1067.94	0.000	1.44
Middle	0.37	0.011	1075.04	0.000	1.45
Coastal	0.23	0.013	305.10	0.000	1.26
Northern	0.25	0.010	588.15	0.000	1.28
Head of household			1543.95	0.000	0.70
Spouse	-0.33	0.144	5.32	0.021	0.72
Adult son	0.79	0.026	904.40	0.000	2.19
Brother	0.79	0.028	789.63	0.000	2.19
Other relative	1.81	0.155	136.16	0.000	6.08
Non relative	0.44	0.055	64.41	0.000	1.56
Age	-0.04	0.002	352.12	0.000	0.97
Age squared	0.00	0.000	4.05	0.044	1.00
Never married			355.55	0.000	
Married	0.04	0.016	7.48	0.006	1.04
Divorced	0.51	0.051	100.59	0.000	1.67
Widowed	0.89	0.054	272.71	0.000	2.44
Illiterate	0.07	0.017	1762.45	0.000	4.07
Can read and write	0.07	0.017	16.65	0.000	1.07
Elementary	0.03	0.016	4.98	0.026	1.04
Preparatory	-0.31	0.019	266.47	0.000	0.73
Secondary	0.39	0.022	312.80	0.000	1.48
Intermediate institute	-0.09	0.025	12.98	0.000	0.91
University and above	-0.13	0.028	21.17	0.000	0.88
Asset index score	-0.05	0.001	1548.39	0.000	0.96
Number of children in household	0.08	0.003	813.89	0.000	1.08
Other household members fully employed	-1.19	0.009	17719.09	0.000	0.31
Other household members underemp.	1.52	0.008	36503.79	0.000	4.59
Single person household	0.14	0.064	515.66	0.000	1 15
Single parent, children below 15	0.14	0.064	4.80	0.028	1.15
Single parent, youngest child 15 or older	0.15	0.066	5.04	0.025	1.16
Couple with children below 15	0.01	0.051	0.06	0.805	1.01
Couple, youngest child 15 or older	0.12	0.052	5.12	0.024	1.12
Couple, no children living in household	0.38	0.054	48.78	0.000	1.46
Extended family (outside core)	0.18	0.050	13.53	0.000	1.20
Household of unrelated members	1.26	0.121	107.94	0.000	3.52
Household size	-0.04	0.002	387.55	0.000	0.96
Female head of household	0.04	0.032	1.82	0.178	1.04
Age of household head	-0.02	0.002	63.70	0.000	0.98
Age of household head squared	0.00	0.000	82.37	0.000	1.00
Household head never married	0.22	0.047	513.35 21.77	0.000	0.90
married	-0.22 0.65	0.047		0.000	0.80
divorced widowed	0.65 -0.64	0.060 0.054	114.28	0.000 0.000	1.91 0.53
	-0.64	0.054	141.97		0.53
Household head is Illiterate	0.02	0.013	396.94	0.000	0.07
can read and write	-0.03	0.013	4.16	0.041	0.97
elementary	-0.10	0.013	58.62 0.13	0.000	0.91
preparatory	0.01 -0.32	0.017		0.720 0.000	1.01
secondary intermediate institute		0.021	244.63		0.72
termediate institute	-0.04	0.026	2.87	0.090	0.96
university and above	0.02	0.027	0.46	0.496	1.02
No spouse in household	0.06	0.047	2613.92	0.000	0.94
Spouse is illiterate	-0.06	0.047	1.72	0.190	
can read and write	-0.15 0.16	0.011	182.43	0.000	0.86
elementary	0.16	0.010	257.42	0.000	1.18
preparatory	-0.02	0.015	1.55	0.214	0.98
secondary	-0.41	0.021	379.32	0.000	0.66
intermediate institute	0.57	0.024	579.56	0.000	1.76
university and above	0.69	0.030	538.58	0.000	2.00
Constant	0.48	0.085	31.23	0.000	1.61

Table 6: Underemployment, women

		S.E.	Wald	Sig. level	Exp()
Urban	0.12	0.020	38.81	0.000	1.13
Eastern			1695.17	0.000	
Damascus	0.58	0.033	310.66	0.000	1.79
Southern	0.55	0.029	358.87	0.000	1.74
Middle	0.57	0.026	489.59	0.000	1.76
Coastal	0.96	0.028	1197.53	0.000	2.61
Northern	0.06	0.026	4.92	0.027	1.06
Head of household			1266.25	0.000	
Spouse	0.98	0.071	191.68	0.000	2.67
Adult daughter	2.18	0.073	897.29	0.000	8.87
Sister	1.35	0.077	303.80	0.000	3.84
Other relative	1.91	0.124	236.64	0.000	6.76
Non relative	1.47	0.079	345.19	0.000	4.36
Age	-0.16	0.004	1669.02	0.000	0.86
Age squared	0.00	0.000	871.96	0.000	1.00
Never married			787.21	0.000	
Married	0.60	0.045	175.84	0.000	1.82
Divorced	-0.36	0.083	18.85	0.000	0.70
Widowed	1.91	0.074	672.39	0.000	6.73
Illiterate			3214.28	0.000	
Can read and write	0.17	0.034	25.73	0.000	1.19
Elementary	-0.07	0.027	6.68	0.010	0.93
Preparatory	0.12	0.035	12.29	0.000	1.13
Secondary	1.13	0.037	927.35	0.000	3.11
Intermediate institute	-0.41	0.037	120.29	0.000	0.67
University and above	-0.80	0.048	276.89	0.000	0.45
Asset index score	0.06	0.003	377.18	0.000	1.06
Number of children in household	0.14	0.007	415.98	0.000	1.15
Other household members fully employed	-0.77	0.019	1577.37	0.000	0.46
Other household members underemp.	1.81	0.013	11250.34	0.000	6.12
Single person household	1.01	0.017	1201.43	0.000	0.12
Single parent, children below 15	-1.02	0.088	133.27	0.000	0.36
Single parent, children below 15 Single parent, youngest child 15 or older	-1.56	0.089	309.03	0.000	0.21
Couple with children below 15	-0.94	0.101	85.27	0.000	0.39
Couple, youngest child 15 or older	-1.31	0.101	162.50	0.000	0.33
Couple, no children living in household	-0.43	0.103	14.75	0.000	0.27
Extended family (outside core)	-0.43	0.113	2.24		0.86
Household of unrelated members	-0.15	0.102	2.24	0.135	0.00
Household size	0.16	0.005	022.40	0.000	0.05
Female head of household	-0.16 1.59	0.005 0.058	933.40	0.000	0.85 4.90
			745.92	0.000	
Age of household head	-0.02 0.00	0.005 0.000	15.89	0.000 0.000	0.98 1.00
Age of household head squared Household head never married	0.00	0.000	50.18 399.09		1.00
married	0.61	0.002	55.76	0.000 0.000	1 0 /
divorced	0.61 -0.27	0.082	8.53		1.84
	-0.27 -0.57	0.094	8.53 42.16	0.003	0.76 0.57
widowed	-0.57	0.088		0.000	0.57
Household head is Illiterate	0.20	0.026	784.94	0.000	1 22
can read and write	0.20	0.026	61.65	0.000	1.23
elementary	0.60	0.027	511.21	0.000	1.83
preparatory	0.11	0.034	11.03	0.001	1.12
secondary	0.06	0.038	2.56	0.109	1.06
intermediate institute	0.38	0.042	79.88	0.000	1.46
university and above	0.22	0.041	28.94	0.000	1.24
No spouse in household	0.03	0.000	968.65	0.000	1.03
Spouse is illiterate	0.03	0.092	0.08	0.782	1.03
can read and write	0.27	0.027	95.60	0.000	1.31
elementary	0.36	0.028	169.60	0.000	1.44
preparatory	0.68	0.038	321.10	0.000	1.97
secondary	-0.19	0.045	18.24	0.000	0.83
intermediate institute	-0.43	0.044	93.91	0.000	0.65
LIBITORIST AND	-0.07	0.063	1.22	0.269	0.93
university and above Constant	0.70	0.181	14.98	0.000	2.01

Appendix B: Construction of the Asset Index

Information on the economic situation of households is useful for analysing both the labour supply decision as well as the effect of different labour market adaptations for household welfare. The 2003 Unemployment Survey contained no questions about households' incomes and expenditures, nor did it collect data on wages. However, it did ask questions about the type of dwelling, land ownership, and ownership of different household amenities¹. Hence, it was decided to use an asset index as an indicator for the households' long-term wealth.

The simplest type of an asset index would be one that just sums up the household assets, giving all assets equal weights regardless of their value and type. We instead weigh the different assets with weights estimated by the statistical procedure of *principal components*. The (weighted) sum of assets owned by a household constitutes this household's score on the index. The mean value of the index is zero by definition, and some households will have negative index scores.

The index is a measure of the household's "long-run household wealth", following the terminology used by Filmer and Pritchett (1998). However, the purpose of the index is to serve as a reference for employment data, and we warn strongly against using the asset index as an independent indicator of welfare. The aim of the asset index is to rank households according to long-term economic resources, and it is not defined at the scale measurement level.

For a detailed description of the construction of the asset index, as well as performance and reliability tests, see Øvensen (2006).

¹There are 7 variables about ownership of various consumer durables, three questions about households' land ownership, and 8 ordinal or scale level variables about the quality and characteristics of the dwelling and its infrastructure. See Appendix D containing the Questionnaire for the 2003 Unemployment Survey.

Appendix C: Implementation of Survey Definitions

A labour force survey usually comprises a standardized sequence of questions relating to both to labour inactivity, and labour inactivity. It is essential to remember that in a household survey about unemployment, the classification of a person's status as e.g. being "unemployed" should neither be conducted by the interviewer nor by the interviewee himself, but should made by the analysts on the basis of the answers given, according to standard procedures.

The 2003 CBS Unemployment Survey questionnaire contained several problematic skips implying that some respondents were not asked all questions that it would have been useful to ask in an ideal world. The weakness of the design also meant that the sequence of questions that it is required to follow if one wishes to adhere to the ILO definition of "unemployment" was not followed 100 percent. The most serious error was that people not working and who were seeking part-time employment only, were *not* asked about availability for work. We have still chosen to classify them as unemployed.

Visibly unemployed (ILO unemployed)

The unemployed consists of three categories:

- 1. The by far dominant group of unemployed persons are those who were not working the preceding week, were actively seeking full-time work, and were available for a job within the next month (see, questionnaire in Appendix D, questions in the "Household Roster" section, 9, 10, 11, 13).
- 2. A small group of persons (mostly women) who were not working the preceding week, and were actively seeking *part-time* work. (Due to the skip, these persons were not asked about availability, as they should have been.) If these persons are not included among the unemployed the national Syrian unemployment rate drops by 1.6 percent, from 10.8 to 9.2 percent) (questions 9, 10, 11).

3. A very small number of persons not working the preceding week, and who did not seek work because they already had a job contract to start working within a short while (questions 9, 10, 11, 12).

Invisibly unemployed ("discouraged workers")

The invisibly unemployed workers consists of those who neither worked the preceding week nor actively sought work, and gave the reason "temporarily stopped seeking work" as reason for not seeking work (in contrast to e.g. being in school, being a housewife, being old/ sick etc). It is reasonable (given the lack of an alternative activity) to assume that these persons would have sought work if they thought they could obtain it, and hence they are classified as "discouraged workers" (questions 9, 10, 11, 13).

Visibly underemployed

The visibly underemployed are employed, but involuntarily works fewer hours than the standard. There were three ways of being classified as visibly underemployed:

- 1. If the person was employed, expressed a desire for additional work, and worked 39 weekly work hours or less. The reason 39 hours have been chosen as the cut-off point is that the usual weekly work hours in the public sector is approximately 40 hours. In contrast, the standard private sector work time is about 50 hours, so the definition is most applicable to the public sector. (Alternative cut offs are 44, or 49 weekly hours respectively.) (Questions 9, 10, 29, 38.)
- 2. Persons who are not currently employed (last week), and did not seek work, and are available for work, but have been employed before, and left this job because the establishment ceased work. Many of these persons are seasonal workers, who are *usually* employed. Hence they are classified as having insufficient volume of work over the year. (Questions 9, 10, 26.)
- 3. Persons who are not currently employed (last week), and did not seek work, and are available for work, but have been employed before, and left this job because of low pay. This group is a borderline case to "discouraged workers". (Questions 9, 10, 26.)

Invisibly underemployed

The invisibly underemployed are employed, but involuntarily suffer one of the following characteristics: low income, non-optimal use of skills and qualifications, and low worker productivity. A person was classified as invisibly underemployed if he/she was employed last week, without being visibly underemployed (questions 9, 10, 26, 29, 38), and at least one of the following:

- 1. He/she thought that the nature of main work is not suitable or does not meet his/her qualifications (question 30)
- 2. He/she had episodic/intermittent work (question 27)
- 3. He/she was looking for a substitute for the main job (question 38)
- 4. He/she was looking for a substitute for a secondary job (question 38)
- 5. He/she was looking for an additional job when already working at least "normal" (>39, 44, or 49) hours, and hence not being visibly underemployed (i.e. having too little volume of employment) (questions 29, 38)

Appendix D: The Survey Questionnaire

The 2003 Unemployment Survey

Agency for Combating Unemployment and Central Bureau of Statistics

Introductory (administrative) information

- Mohafaza
- 2. Mantika
- 3. Nahia
- 4. City/village
- 5. Block/Farm
- 6. Name of street
- 7. Block no.
- 8. Cluster no.
- 9. Household no. in cluster

Survey team

- 1. Name and signature of supervisor
- 2. Name and signature of interviewer
- 3. Date of filling the questionnaire
- 4. Name and signature of editor
- 5. Date of supervising
- 6. Name and signature of coder
- 7. Date of coding
- 8. Name and signature of data entry operator
- 9. Date of data entry

Household information

- 1. Name of household head
- 2. No. of household members
- 3. No. of household members contributing to the household income

Information about the dwelling

- 1. Type of dwelling
 - (1) Apartment /flat
 - (2) Dar (traditional house) made of cement
 - (3) Dar (traditional house) made of clay (mud)
 - (4) Villa
 - (5) Other
- 2. No of rooms used for sleeping
- 3. Infrastructure: Is the household ...
 - (1) Connected to water network
 - (2) Connected to sewerage network
- 4. Household amenities:
 - (1) No. of telephone lines
 - (2) No. of mobile phone lines
 - (3) No. of private cars
 - (4) No. of rooms with air-conditioner
 - (5) No. of automatic washing machines
 - (6) No. of freezers
 - (7) No. of computers

Agriculture

Does the household own agricultural land?

- (1) No
- (2) Yes, cultivated land irrigated. No. of *dunums* (1,000 sq. meters)
- (3) Yes, cultivated land not irrigated. No. of dunums
- (4) Yes, but not cultivated. No. of dunums

Business

Does the household own commercial, industrial or service establishment?

- (1) Yes
- (2) No

Questionnaire not completed

If the questionnaire could not be completed, write down the reason why

Household Roster - For persons aged 15+ Serial no. 1. Name 2. Relation to household head of [...]: (1)Head of household (2)Spouse (3)Son/daughter (4)Brother/sister (5) Father/mother Other relative (6) (7)Non relative Sex of [...]: 3.

- (1)Male

 - (2)Female
- 4. Age in years of [...]:
- 5. Marital status of [...]:
 - (1)Single (never married before)
 - (2)Married
 - Divorced (3)
 - (4)Widowed
- 6. Educational status of [...] (highest education that the person has completed)
 - (1) Illiterate

→ Skip to question 8

(2)Read and write → Skip to question 8

(3)Elementary → Skip to question 8

(4)Preparatory

→ Skip to question 8

- (5)Secondary
- (6) Intermediate institute
- University (7)
- (8)Diploma
- (9)Master
- (10) PhD
- 7. Educational specialization of [...] [Post-coding] > Skip to question 9
- 8. Is [...] totally dedicated to study in the secondary stage and before?
 - Yes → STOP, go to next person (1)
 - No (2)
- 9. Did [...] work at least 1 hour the past week?
 - Yes → Skip to question 27 (1)
 - (2)No

10. Is [...] engaged in a work? /Does [...] work? (1) Yes → Skip to question 27 No (2)11. Was |...| looking for work during the month prior to the interview? Yes, looked for full-time work → Skip to question 13 (1) (2)Yes, looked for part-time work → STOP, go to next person No, did not look for work 12. What was the main reason [...] did not look for work? → STOP, go to next person (1) Housework → STOP, go to next person (2)Study → STOP, go to next person (3)Not capable of working (4) Recipient (of benefits) → STOP, go to next person (5)Retired → STOP, go to next person (6)Waiting to commence work → Skip to question 27 Temporarily ceased looking for work (7)13. If [...] got suitable work today, would (s)he be ready to start next month? (1) Yes (2)No → STOP, go to next person 14. By what means did [...] look for work? [Multiple answers allowed] (1)Contacting the employment offices (2)Friends/relatives (3)Applying directly for work by him/herself (4) Media (5) Attempting to set up a business/self-employment Sitting entry-level exams for job in the public sector For how many months have [...] looked for work? 15. 16. Did [...] take any training course past year? Multiple answers allowed (1)Yes, IT course (2)Yes, vocational course (3)Yes, in other field (4)No 17. What occupation would [...] like to work in? [Post-coding] 18. What employment status would [...] desire to have as a work? [Multiple answers allowed] (1) Own account/employer (2) Paid worker – public sector

Has [...] ever been offered a job and refused it during the period of being

Paid worker – private sector

19.

unemployed?

(1)	Yes	
(2)	No → Skip to quest	tion 21
20.	What was the reason for refusing that work?	
(1)	Wages too low	
(2)	Hard work	
(3)	Work does not fit his/her qualifications (not suitable	le)
(4)	Work not permanent	
(5)	Place of work far from residence	
(6)	Place of work abroad	
(7)	For continuing education	
(8)		
21.	Has [] ever been a paid worker or an own account	worker?
(1)	Yes, full time	
(2)	Yes, part time work → STC	P, go to next person
(3)	No → STC	P, go to next person
22.	Where was the place of []' last work?	
(1)	In Syria	
(2)	Abroad	
23.	What was the last occupation [] worked in? [Post-	coding]
24.	What was the last industry that [] worked in? [Pos	st-coding]
25.	What was the employment status of [] in the last j	ob?
(1)	Employer	
(2)	Own account worker	
(3)	Paid worker – public sector	
(4)	Paid worker – joint sector	
(5)	Paid worker – private sector	
(6)	Paid family worker	
26.	What was the reason that made [] cease working l	ast time?
(1)	The establishment ceased work → Skip	to question 39
(2)	Contract expired → Skip	to question 39
(3)	Health reasons → Skip	to question 39
(4)	Family reasons (married, pregnant) Skip	to question 39
(5)	Military service → Skip	to question 39
(6)	Not satisfied due to low salary → Skip	to question 39
(7)	Other Skip	to question 39
27.	How does [] classify his main job?	
	(1) Working all year	

- (2) Seasonal work
- (3) Episodic/intermittent work
- 28. No. of days [...] normally works during the week
 - (1) One day or less
 - (2) Two days
 - (3) Three days
 - (4) Four days
 - (5) Five days
 - (6) Six days
 - (7) Seven days
- 29. What is the total no. of usual weekly work hours at all jobs if more than one?

[The following questions relate to the main job only]

- 30. Does [...] think that the nature of main work is suitable and meets his/her qualifications?
 - (1) Yes
 - (2) No
- 31. How many people are employed at the establishment of [...]'s main job?
 - (1) Less than 10
 - (2) 10+
 - (3) Does not work in an establishment
- 32. What is the occupation that [..] is doing in his/her main job? [Post-coding]
- 33. What is the economic activity (industry) of [...]'s main job? [Post-coding]
- 34. What is the employment status of [...]'s main job?
 - (1) Employer
 - (2) Own account worker
 - (3) Paid worker public sector
 - (4) Paid worker joint sector
 - (5) Paid worker private sector
 - (6) Unpaid worker
- 35. Does [...] have one or more additional or minor jobs?
 - (1) Yes
 - (2) No Skip to question 38
- 36. What is the average no. of weekly work hours at all minor jobs?
- 37. What is the occupation that [...] is doing in his second job? [Post-coding]

- 38. Is [...] looking for additional work? Multiple answers allowed
 - (1) Substitute for the main job
 - (2) Substitute for a minor job
 - (3) An additional minor job
 - (4) No
- 39. What was the age (in years) when [...] started his first main full-time work?

Appendix E: Tables for Figures

Table for Figure 2.1 Labour force participation by gender, age and urban-rural locality (percent)

	Urban male	Rural male	Urban female	Rural female
15-19 years	47.2	49.6	6.2	21.7
20-24 years	74.6	79.3	18.8	31.1
25-29 years	92.3	94.8	21.4	27.3
30-34 years	97.3	97.3	23.0	26.3
35-39 years	97.4	97.3	22.6	24.9
40-44 years	97.8	97.4	19.1	22.0
45-49 years	95.3	96.0	15.6	20.7
50-54 years	88.7	90.0	11.0	17.4
55-59 years	78.7	84.0	5.7	16.6
60-64 years	47.4	64.7	3.2	11.1
65-69 years	37.6	59.5	1.6	9.7
70-74 years	25.3	46.9	1.1	5.7

Table for Figure 2.2 Labour force participation by gender, age and urban-rural locality (number of individuals)

	Urban male	Rural male	Urban female	Rural female	Total
15-19 years	245416	264381	30495	108264	648557
20-24 years	322813	329956	78456	119083	850308
25-29 years	281471	256567	67764	85673	691475
30-34 years	262005	220708	65115	68554	616382
35-39 years	250405	210877	59025	56827	577134
40-44 years	224739	170112	44255	39786	478893
45-49 years	170572	138389	27575	30753	367289
50-54 years	148278	121269	16590	23046	309183
55-59 years	81249	75440	5703	13079	175471
60-64 years	47180	55935	2912	9205	115232
65-69 years	30480	36001	994	4965	72440
70-74 years	16844	31247	527	2217	50836
75-79 years	5749	11758	1	555	18062
80-84 years	1444	4283	101	333	6162
85-89 years	699	986	-	1	1684
90-94 years	123	546	-	-	669
95+ years	851	1117	128	-	2096
Total	2090317	1929571	399643	562341	4981871

Table for Figure 2.3 Labour force participation by gender and education (percent)

	Urban male	Rural male	Urban female	Rural female
Illiterate	62.3	72.4	3.6	19.2
Can read and write	72.8	80.8	4.6	20.6
Elementary	86.3	86.9	7.5	22.5
Preparatory	61.6	56.2	9.5	17.4
Secondary	59.1	61.5	24.9	33.7
Intermediate	90.8	92.8	79.6	87.3
University	86.9	88.3	68.7	80.7

Table for Figure 2.4 Labour force participation by gender and education (number of individuals)

	Urban male	Rural male	Urban female	Rural female	Total
Illiterate	138680	257083	18757	173369	587889
Can read and write	205266	249853	12292	47385	514795
Elementary	958090	938299	65259	183717	2145365
Preparatory	314404	217374	43623	49412	624812
Secondary	188934	122420	77476	41817	430647
Intermediate	114448	85036	113750	50724	363958
University	170496	59506	68486	15918	314406
Total	2090317	1929571	399643	562341	4981871

Table for Figure 2.5 Female labour force participation by relation to household head (percent)

	Urban	Rural
Sister	26.1	32.3
Adult son/ daughter	20.8	32.1
Unmarried female head	20.4	22.4
Married female head	15.5	27.1
Spouse	11.7	17.4
Other relative	1.8	4.5
Total	14.9	23.1

Table for Figure 2.6 Labour force participation by gender, urban-rural locality and household asset index score (percent)

	Urban male	Rural male	Urban female	Rural female
Lowest 10%	80.6	83.6	18.3	28.2
20%	80.3	78.3	8.2	24.9
30%	77.8	76.4	11.7	20.6
40 %	77.8	76.0	10.5	20.8
50%	77.2	75.6	10.3	20.0
60%	77.8	77.0	12.2	22.0
70%	76.9	72.3	12.6	20.4
80%	75.4	74.1	17.7	22.6
90%	73.2	74.6	19.2	21.0
Upper 10%	71.5	69.5	19.3	20.4

Table for Figure 2.7 Share of households with respectively no member and one member in the labour force, by mohafaza

	No person in the labour force	One person in the labour force
Damascus City	14.3	53.2
Rural Damascus	9.2	54.5
Homs	9.5	46.5
Hama	5.7	41.5
Tartos	7.2	39.5
Latakia	7.4	38.1
Edleb	7.4	40.7
Aleppo	9.3	53.9
Rakka	3.2	58.8
Der Elzor	6.4	39.5
Hasakeh	2.2	50.6
Sweda	20.1	39.8
Dara	17.2	49.9
Quneitra	4.5	64.7
Total	9.2	48.9

Table for Figure 2.8 Share of households with respectively none and one member in the labour force, by region, gender and civil status of household head

	Male head		Married fe	male head	Unmarried female head	
	No person in the labour force	One person in the labour force	No person in the labour force	One person in the labour force	No person in the labour force	One person in the labour force
Damascus	9.9	56.3	54.5	31.8	41.7	33.2
Southern	6.5	55.6	71.8	19.5	40.3	29.9
Middle	4.5	45.7	59.3	17.9	38.3	31.2
Costal	4.5	39.8	45.9	33.9	31.9	27.4
Northern	6.1	52.7	57.5	26.9	39.9	31.9
Eastern	2.4	50.2	34.4	39.1	25.0	27.9
Total	5.7	50.9	59.9	25.0	38.1	30.8

Table for Figure 3.1 Main sector of employment by gender and age (percent)

	Govern- ment	Private formal	Self- employed	Employer	Unpaid worker	Total
Men						
15-19 years	6.8	53.4	10.7	1.7	27.4	100.0
20-29 years	20.5	41.8	20.1	4.0	13.6	100.0
30-39 years	30.9	27.4	31.3	8.8	1.6	100.0
40-49 years	36.8	17.0	32.8	13.0	0.4	100.0
50-59 years	35.4	12.4	35.7	16.2	0.4	100.0
Women						
15-19 years	2.4	28.7	8.3	1.5	59.1	100.0
20-29 years	39.8	20.0	9.3	1.4	29.5	100.0
30-39 years	56.7	10.0	11.4	1.4	20.5	100.0
40-49 years	48.3	9.0	15.6	3.1	24.0	100.0
50-59 years	30.0	6.5	24.9	4.5	34.1	100.0

Table for Figure 3.2 Sector of employment by education and urban-rural residence, men (percent)

	Govern- ment	Private formal	Self-em- ployed	Employer	Unpaid worker	Total
Urban						
Illiterate	10.0	44.1	32.7	10.0	3.2	100.0
Read and write	12.6	34.8	37.4	12.4	2.8	100.0
Elementary	15.2	44.1	26.9	8.8	4.9	100.0
Preparatory	29.3	28.9	26.2	11.9	3.6	100.0
Secondary	46.2	20.4	20.0	11.8	1.6	100.0
Intermediate	66.2	13.6	13.0	6.3	0.9	100.0
University	58.5	9.2	20.2	11.7	0.4	100.0
Rural						
Illiterate	6.7	19.7	49.5	15.3	8.9	100.0
Read and write	11.3	20.4	44.2	13.7	10.4	100.0
Elementary	17.6	33.2	27.2	5.7	16.3	100.0
Preparatory	36.0	21.7	24.8	7.2	10.3	100.0
Secondary	56.1	12.1	20.5	6.4	4.9	100.0
Intermediate	84.1	5.8	6.9	2.1	1.2	100.0
University	75.3	1.9	16.5	5.7	0.6	100.0

Table for Figure 3.3 Sector of employment by education and urban-rural residence, women (percent)

	Govern- ment	Private formal	Self-em- ployed	Employer	Unpaid worker	Total
Urban						
Illiterate	19.8	21.7	36.0	6.1	16.4	100.0
Read and write	20.7	45.1	24.1	3.0	7.2	100.0
Elementary	22.8	43.5	20.9	1.7	11.0	100.0
Preparatory	63.2	21.5	9.9	4.1	1.3	100.0
Secondary	77.1	15.8	3.4	1.9	1.8	100.0
Intermediate	94.7	3.3	1.5	0.4	0.1	100.0
University	75.1	8.4	11.8	4.2	0.6	100.0
Rural						
Illiterate	1.5	12.4	19.7	3.5	63.0	100.0
Read and write	3.6	16.4	16.2	3.5	60.2	100.0
Elementary	7.2	22.3	13.3	1.0	56.1	100.0
Preparatory	37.9	15.4	12.3	2.0	32.3	100.0
Secondary	81.6	9.7	2.9	1.2	4.6	100.0
Intermediate	94.8	2.9	1.7	-	0.6	100.0
University	87.0	0.7	9.6	2.6	-	100.0

Table for Figure 3.4 Male sector of employment by grouped asset index and urban-rural residence (percent)

	Govern- ment	Private formal	Self-em- ployed	Employer	Unpaid worker	Total
Urban						
Lowest 20%	20.2	42.5	25.5	6.9	4.8	100.0
Lower middle 30%	28.3	43.6	22.1	3.6	2.4	100.0
Upper middle 30%	27.8	36.2	26.2	6.7	3.2	100.0
Upper 20%	22.6	24.0	29.6	19.2	4.6	100.0
Rural						
Lowest 20%	16.6	25.0	33.9	9.3	15.2	100.0
Lower middle 30%	28.6	26.8	27.3	6.5	10.8	100.0
Upper middle 30%	31.8	22.4	29.9	7.1	8.7	100.0
Upper 20%	25.6	16.3	34.4	16.8	7.0	100.0

Table for Figure 3.5 Female sector of employment by grouped asset index and urban-rural residence (percent)

	Govern- ment	Private formal	Self-em- ployed	Employer	Unpaid worker	Total
Urban						
Lowest 20%	26.6	20.0	32.0	5.7	15.8	100.0
Lower middle 30%	50.3	30.1	10.7	1.3	7.6	100.0
Upper middle 30%	73.1	15.3	8.8	0.8	2.0	100.0
Upper 20%	75.5	10.7	8.6	3.6	1.6	100.0
Rural						
Lowest 20%	6.7	15.4	14.9	2.5	60.5	100.0
Lower middle 30%	20.1	18.7	13.4	2.0	45.6	100.0
Upper middle 30%	44.0	9.6	13.8	1.5	31.1	100.0
Upper 20%	69.3	1.5	14.7	1.8	12.7	100.0

Table for Figure 3.6 Share of households with at least one household member employed in the government and in the private formal sector

	At least one household member employed in government sector	At least one household member employed in private formal sector
Aleppo	20.2 %	38.8 %
Rakka	26.9 %	40.1 %
Edleb	29.2 %	31.0 %
Der Elzor	30.5 %	26.5 %
Hasakeh	32.4 %	33.0 %
Damascus City	36.5 %	34.6 %
Dara	37.2 %	25.5 %
Hama	40.0 %	36.4 %
Sweda	41.3 %	19.3 %
Quneitra	42.0 %	30.8 %
Rural Damascus	43.2 %	42.9 %
Homs	43.7 %	32.4 %
Tartos	50.8 %	24.6 %
Latakia	55.2 %	22.7 %

Table for Figure 3.7 Main industry by gender and urban-rural residence (percent)

	Men		Women		
	Urban	Rural	Urban	Rural	
Agriculture, forestry, fishing	4.9	40.8	5.7	72.1	
Mining, manufacturing and construc- tion	34.3	22.0	10.9	5.6	
Trade, transportation, hotels and restaurants, other services	39.6	17.9	15.0	4.1	
Public adminis- tration and police	16.3	14.9	21.7	5.3	
Health and education	4.9	4.4	46.7	12.9	
Total	100.0	100.0	100.0	100.0	

Table for Figure 3.8 Main industry by gender and age (percent)

3	Agricul- ture/ forestry/ fishing	Mining/ manufac- turing/ construc- tion	Trade/ transport/ hotel/ restau- rants/ other services	Public adminis- tration/ police	Health/ education	Total
Men						
15-19 years	26.9	39.7	27.3	5.5	0.5	100.0
20-29 years	20.9	34.9	26.9	14.1	3.1	100.0
30-39 years	15.2	28.2	31.4	18.9	6.2	100.0
40-49 years	16.6	23.4	30.9	22.1	7.0	100.0
50-59 years	24.5	19.5	29.6	19.0	7.4	100.0
60-69 years	51.2	12.0	30.7	4.5	1.5	100.0
Women						
15-19 years	83.1	10.2	4.3	0.7	1.7	100.0
20-29 years	42.7	8.7	8.8	11.9	27.8	100.0
30-39 years	30.9	6.9	8.1	16.6	37.6	100.0
40-49 years	39.1	6.7	9.7	14.1	30.3	100.0
50-59 years	55.1	5.6	11.7	10.0	17.6	100.0
60-69 years	82.9	2.1	10.0	1.8	3.2	100.0

Table for Figure 3.9 Main industry of employment by education, men (percent)

			Trade/			
			transport/			
		Mining/	hotel/			
	Agricul-	manufac-	restau-	Public		
	ture/	turing/	rants/	adminis-		
	forestry/	construc-	other	tration/	Health/	
	fishing	tion	services	police	education	Total
Illiterate	54.6	21.5	19.4	4.2	0.4	100.0
Read and write	38.0	26.7	27.3	7.1	0.8	100.0
Elemen- tary	20.6	36.3	31.3	11.1	0.7	100.0
Prepara- tory	12.1	27.4	35.5	23.4	1.7	100.0
Secondary	8.7	19.9	31.5	34.2	5.7	100.0
Intermedi- ate	2.8	12.6	19.4	27.0	38.2	100.0
University	1.9	8.1	25.9	37.2	26.8	100.0

Table for Figure 3.10 Main industry of employment by education, women (percent)

	Agricul- ture/	Mining/ manufac- turing/	Trade/ transport/ hotel/ restau- rants/	Public adminis-		
	forestry/ fishing	construc- tion	other services	tration/ police	Health/ education	Total
Illiterate	91.3	2.8	3.8	1.4	0.7	100.0
Read and write	75.6	10.0	8.5	2.5	3.5	100.0
Elemen- tary	68.8	15.2	8.2	4.9	3.0	100.0
Prepara- tory	23.4	16.1	15.6	17.2	27.7	100.0
Secondary	2.9	7.6	14.9	33.8	40.8	100.0
Inter mediate	0.5	1.9	3.9	16.3	77.3	100.0
University	0.9	3.0	16.3	27.6	52.2	100.0

Table for Figure 3.11 Main occupation by education, men (percent)

	Managers and profession- als	Clerks	Sales and service personnel	Manufac- turing, technical and construc- tion workers	Agricul- tural workers	Total
Illiterate	0.1	1.4	14.7	29.3	54.4	100.0
Read and write	0.7	3.0	21.0	37.2	38.1	100.0
Elemen- tary	1.0	5.1	22.7	50.6	20.6	100.0
Prepara- tory	3.2	14.9	29.4	40.4	12.1	100.0
Secondary	15.8	24.0	28.4	23.6	8.2	100.0
Intermedi- ate	57.2	11.3	14.3	14.7	2.5	100.0
University	80.4	6.5	9.4	2.6	1.2	100.0

Table for Figure 3.12 Main occupation by education, women (percent)

	Managers and profes- sionals	Clerks	Sales and service personnel	Manufac- turing, technical and construc- tion workers	Agricul- tural workers	Total
Illiterate	0.4	1.3	3.8	2.7	91.8	100.0
Read and write	1.9	3.4	7.7	10.6	76.4	100.0
Elemen- tary	1.6	4.7	7.7	16.6	69.4	100.0
Prepara- tory	27.1	22.3	11.5	16.6	22.6	100.0
Secondary	46.8	30.4	13.2	6.9	2.7	100.0
Intermedi- ate	85.7	8.5	4.6	0.9	0.3	100.0
University	87.0	8.6	3.1	1.1	0.3	100.0

Table for Figure 3.13 Weekly work hours in main job by gender and urban-rural residence (percent)

	М	en	Women	
	Urban	Rural	Urban	Rural
34 hours or less	11.7	24.1	25.9	42.7
35-39 hours	16.2	18.7	44.8	19.3
40-49 hours	37.9	33.9	23.0	20.2
50 hours or more	34.2	23.3	6.3	17.9
Total	100.0	100.0	100.0	100.0

Table for Figure 3.14 Weekly work hours by gender and main sector of employment (percent)

	34 hours or less	35-39 hours	40-49 hours	50 hours or more	Total
Men	•				
Government	8.9	43.5	38.5	9.2	100.0
Private formal	17.2	8.3	39.7	34.8	100.0
Self-em- ployed	22.5	8.8	33.4	35.3	100.0
Employer	19.1	6.8	29.7	44.4	100.0
Unpaid worker	28.3	10.9	30.4	30.4	100.0
Total	17.6	17.4	36.0	29.0	100.0
Women					
Government	23.3	56.3	19.5	1.0	100.0
Private formal	29.6	15.6	33.0	21.8	100.0
Self-em- ployed	44.3	13.2	22.7	19.8	100.0
Employer	42.5	14.3	22.7	20.5	100.0
Unpaid worker	51.9	9.0	17.2	21.9	100.0
Total	36.1	29.2	21.3	13.3	100.0

Table for Figure 3.15 Classification of main job by gender and region (percent)

	M	en	Women		
	Urban	Rural	Urban	Rural	
Full time	81.2	66.2	88.7	56.3	
Seasonal	4.4	19.4	5.2	35.3	
Episodic/ intermittent work	14.4	14.4	6.1	8.5	
Total	100.0	100.0	100.0	100.0	

Table for Figure 3.16 Classification of main job by sector of employment (percent)

			Episodic/ intermittent	
	Full time	Seasonal	work	Total
Men				
Government	97.5	1.1	1.4	100.0
Private formal	63.3	7.9	28.7	100.0
Self-employed	67.1	18.7	14.1	100.0
Employer	76.7	14.8	8.5	100.0
Unpaid worker	60.5	29.9	9.6	100.0
Total	74.0	11.6	14.4	100.0
Women				
Government	96.1	1.7	2.2	100.0
Private formal	48.5	35.7	15.8	100.0
Self-employed	59.2	28.2	12.6	100.0
Employer	66.9	19.0	14.1	100.0
Unpaid worker	48.2	43.9	7.8	100.0
Total	68.9	23.6	7.6	100.0

Table for Figure 4.2 Types of labour underutilisation by gender and urban-rural residence (percent)

		Men		Women		
	Urban	Rural	Total	Urban	Rural	Total
Unem- ployed	22,4	27,6	25,0	75,4	55,6	64,5
Disco- uraged workers	6,6	6,6	6,6	2,4	9,7	6,4
Visibly underem- ployed	7,8	9,0	8,4	4,0	0,7	2,2
Invisibly underem- ployed	63,2	56,8	60,0	18,2	34,1	26,9
Total	100,0	100,0	100,0	100,0	100,0	100,0
n	924	976	1900	204	267	471

Table for Figure 4.3 Main ILO categories for men by age (percent)

	Employed	Unemployed	Inactive	Total
15-19 years	40.7	7.8	51.5	100.0
20-24 years	65.1	11.7	23.1	100.0
25-29 years	83.2	10.3	6.5	100.0
30-34 years	92.0	5.3	2.7	100.0
35-39 years	93.8	3.5	2.6	100.0
40-44 years	95.2	2.4	2.4	100.0
45-49 years	93.7	1.9	4.4	100.0
50-54 years	87.7	1.5	10.7	100.0
55-59 years	79.9	1.2	18.8	100.0
60-64 eyars	54.4	1.1	44.6	100.0
65-69 years	46.2	0.7	53.1	100.0
70-74 years	35.1	1.0	63.9	100.0
75-79 years	27.2	0.7	72.1	100.0
80-84 years	15.0	0.3	84.7	100.0
85-89 years	14.1	-	85.9	100.0
90-94 years	9.2		90.8	100.0
95+ years	31.2	1.7	67.0	100.0
Total	70.6	5.9	23.5	100.0

Table for Figure 4.3 (right) Main ILO categories for men by age (percent)

	Fully employed	Underem- ployed	Unem- ployed	Discouraged workers	Remaining inactive	Total
15-19 years	28.8	11.9	7.8	2.8	48.8	100.0
20-24 years	46.4	18.7	11.7	4.6	18.5	100.0
25-29 years	57.9	25.3	10.3	1.2	5.3	100.0
30-34 years	67.6	24.4	5.3	0.5	2.2	100.0
35-39 years	71.3	22.5	3.5	0.4	2.2	100.0
40-44 years	76.2	19.0	2.4	0.2	2.2	100.0
45-49 years	77.5	16.2	1.9	0.3	4.1	100.0
50-54 years	75.7	12.0	1.5	0.2	10.6	100.0
55-59 years	69.8	10.1	1.2	0.2	18.6	100.0
60-64 eyars	48.9	5.4	1.1	0.0	44.6	100.0
65-69 years	41.1	5.1	0.7	0.0	53.1	100.0
70-74 years	31.2	3.9	1.0	0.0	63.9	100.0
75-79 years	24.9	2.3	0.7	0.0	72.1	100.0
80-84 years	13.6	1.4	0.3	0.0	84.7	100.0
85-89 years	10.6	3.5	-	0.0	85.9	100.0
90-94 years	9.2	0.0	-	0.0	90.8	100.0
95+ years	29.2	2.0	1.7	0.0	67.0	100.0

Table for Figure 4.4 (left) Main ILO categories for women by age (percent)

	Employed	Unemployed	Inactive	Total
15-19 years	10.4	3.6	86.0	100.0
20-24 years	15.2	9.5	75.3	100.0
25-29 years	17.7	6.6	75.7	100.0
30-34 years	20.1	4.5	75.4	100.0
35-39 years	21.1	2.6	76.3	100.0
40-44 years	19.0	1.3	79.7	100.0
45-49 years	17.5	0.4	82.1	100.0
50-54 years	13.5	0.5	86.0	100.0
55-59 years	9.8	0.7	89.4	100.0
60-64 eyars	6.5	0.4	93.1	100.0
65-69 years	4.5	0.7	94.8	100.0
70-74 years	2.9	0.3	96.8	100.0
75-79 years	1.5	-	98.5	100.0
80-84 years	1.4	0.4	98.2	100.0
85-89 years	-	-	100.0	100.0
90-94 years	-	-	100.0	100.0
95+ years	2.5	-	97.5	100.0
Total	14.9	3.9	81.2	100.0

Table for Figure 4.4 (right) Main ILO categories for women by age (percent)

	Fully em- ployed	Underem- ployed	Unem- ployed	Discouraged workers	Remaining inactive	Total
15-19 years	8.7	1.7	3.6	0.6	85.5	100.0
20-24 years	13.0	2.2	9.5	0.8	74.5	100.0
25-29 years	15.5	2.2	6.6	0.7	75.0	100.0
30-34 years	18.1	2.0	4.5	0.5	74.9	100.0
35-39 years	19.2	1.8	2.6	0.2	76.2	100.0
40-44 years	17.5	1.5	1.3	0.3	79.4	100.0
45-49 years	15.9	1.6	0.4	0.0	82.1	100.0
50-54 years	12.4	1.1	0.5	0.1	85.9	100.0
55-59 years	8.6	1.2	0.7	0.0	89.4	100.0
60-64 eyars	6.1	0.4	0.4	0.1	93.0	100.0
65-69 years	4.1	0.4	0.7	0.0	94.8	100.0
70-74 years	2.1	0.8	0.3	0.0	96.8	100.0
75-79 years	1.2	0.3	-	0.0	98.5	100.0
80-84 years	1.4	0.0	0.4	0.0	98.2	100.0
85-89 years	0.0	-	-	0.0	100.0	100.0
90-94 years	-	-	-	0.0	100.0	100.0
95+ years	2.5	0.0	-	0.0	97.5	100.0

Table for Figure 4.5 Unemployment rates by locality type, gender and age

	Urban male	Rural male	Urban female	Rural female
15-19 years	15.2	16.8	53.9	17.4
20-24 years	13.9	16.6	48.5	31.9
25-29 years	10.4	11.7	31.3	23.8
30-34 years	5.0	6.0	20.0	16.5
35-39 years	3.7	3.6	11.9	9.7
40-44 years	2.7	2.2	8.2	4.4
45-49 years	1.9	2.0	4.1	0.7
50-54 years	2.2	1.2	6.7	1.9
55-59 years	2.4	0.6	13.2	4.0
60-64 eyars	3.6	0.4	16.4	2.1
65-69 years	2.6	0.7	53.6	6.5
70-74 years	3.4	2.6	42.4	-

Table for Figure 4.6 Underutilisation rates by locality type, gender and age, as share of the underutilised and employed

	Urban male	Rural male	Urban female	Rural female
15-19 years	42.5	45.1	66.7	32.5
20-24 years	41.5	44.6	57.8	43.3
25-29 years	39.1	38.7	40.4	36.1
30-34 years	29.4	32.6	27.7	28.0
35-39 years	27.3	26.9	20.0	18.3
40-44 years	22.3	21.9	15.2	15.2
45-49 years	19.0	19.2	14.3	8.5
50-54 years	16.6	13.8	10.6	12.9
55-59 years	16.8	11.4	28.1	13.9
60-64 eyars	15.9	8.1	33.5	6.8
65-69 years	16.7	8.7	64.8	12.4
70-74 years	18.8	10.8	62.7	25.8

Table for Figure 4.7 Unemployed by gender, age and urban-rural locality (number of individuals)

	Urban male	Rural male	Urban female	Rural female	Total
15-19 years	37183.2	44369.6	16442.2	18842.2	116837.3
20-24 years	44899.0	54839.7	38071.1	38021.4	175831.2
25-29 years	29186.5	30108.3	21227.4	20388.8	100911.0
30-34 years	13052.6	13317.8	13041.7	11330.3	50742.5
35-39 years	9162.4	7628.4	7030.2	5495.5	29316.5
40-44 years	6023.7	3673.6	3629.7	1737.0	15064.0
45-49 years	3242.8	2835.2	1119.3	208.0	7405.2
50-54 years	3202.7	1460.3	1115.8	436.2	6215.0
55-59 years	1935.4	473.4	753.7	524.0	3686.4
60-64 eyars	1716.7	242.8	476.7	189.4	2625.5
65-69 years	794.3	251.5	532.4	322.4	1900.6
70-74 years	577.5	819.3	223.4	-	1620.1
75-79 years	230.2	205.4	-	-	435.6
80-84 years	109.1	-	101.5	-	210.6
85-89 years	-	-	-	-	0.0
90-94 years	-	-	-	-	0.0
95+ years	-	103.3	-	-	103.3
Total	151316.1	160328.6	103765.2	97495.1	512904.9

Table for Figure 4.8 Underutilised by gender, age and urban-rural locality (number of individuals)

	Urban male	Rural male	Urban fe- male	Rural female	Total
15-19 years	109971.5	126478.0	21386.5	36475.9	294311.8
20-24 years	141754.5	156303.0	46739.6	53256.5	398053.6
25-29 years	111347.5	100607.0	27617.1	32233.1	271804.7
30-34 years	77568.3	72323.6	18398.7	19574.9	187865.5
35-39 years	68507.1	56981.0	11847.7	10506.1	147841.8
40-44 years	50115.9	37393.3	6736.9	6194.4	100440.4
45-49 years	32562.1	26687.6	3942.8	2634.5	65827.0
50-54 years	24688.0	16829.6	1770.4	2991.7	46279.7
55-59 years	13720.0	8633.3	1605.1	1819.3	25777.7
60-64 eyars	7508.5	4553.2	1010.1	633.0	13704.8
65-69 years	5099.7	3138.2	644.6	616.9	9499.4
70-74 years	3165.8	3383.9	331.0	571.0	7451.7
75-79 years	1105.0	788.7	-	107.2	2001.0
80-84 years	235.9	382.4	101.5	-	719.8
85-89 years	235.2	186.8	-	-	422.0
90-94 years	-	-	-	-	0.0
95+ years	-	222.4	-	-	222.4
Total	647584.9	614892.0	142131.9	167614.6	1572223.4

Table for Figure 4.9 Types of underutilisation by gender and age (percent)

Male						
	Unemployed	Discouraged worker	Visibly un- deremployed	Invisibly un- deremployed	Total	
15-19 years	34.4	12.3	7.3	45.7	100	
20-29 years	31.1	9.0	13.4	46.2	100	
30-39 years	15.6	1.6	24.9	57.7	100	
40-49 years	10.7	1.1	27.5	60.5	100	
50-59 years	11.0	1.5	22.9	64.4	100	
60-69 years	14.8		6.9	78.2	100	

Female						
	Unemployed	Discouraged worker	Visibly un- deremployed	Invisibly un- deremployed	Total	
15-19 years	60.9	9.6	1.6	27.6	100	
20-29 years	73.6	6.5	3.0	16.8	100	
30-39 years	61.1	6.0	4.0	28.7	100	
40-49 years	34.3	6.8	6.4	52.4	100	
50-59 years	34.5	2.5	5.1	57.6	100	

Table for Figure 4.10 Unemployment by gender and education (percent)

	Male	Female
Illiterate	5.4	4.8
Can read and write	4.0	11.0
Elementary	9.3	25.3
Preparatory	7.9	37.3
Secondary	10.5	42.5
Intermediate	7.1	16.2
University	3.2	12.5
Total	7.8	20.9

Table for Figure 4.11 Underutilisation by gender and education, as share of the underutilised and employed (percent)

	Male	Female
Illiterate	25.2	15.1
Can read and write	23.7	24.2
Elementary	35.6	39.2
Preparatory	30.0	48.6
Secondary	32.3	52.0
Intermediate	26.3	21.4
University	17.3	21.0
Total	30.8	31.5

Table for Figure 4.12 Type of underutilisation by gender and education (percent)

				Men				
	Illite- rate	Can read and write	Elemen- tary	Prepa- ratory	Secon- dary	Inter- medi- ate	Univer- sity	Total
Unem- ployed	21,2	16,7	25,4	25,8	31,9	26,7	18,1	24,7
Disco- uraged worker	2,9	3,6	7,0	7,8	6,8	7,2	7,8	6,5
Visibly un- derem- ployed	11,7	16,9	15,5	18,4	17,7	28,5	26,3	16,8
Invisibly un- derem- ployed	64,2	62,8	52,1	47,9	43,6	37,7	47,8	52,0
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
n	947	1022	6513	1525	958	493	359	11817

				Women				
	Illite- rate	Can read and write	Elemen- tary	Prepa- ratory	Secon- dary	Inter- mediate	Univer- sity	Total
Unem- ployed	31,3	45,0	62,6	73,0	78,9	74,9	59,0	65,0
Disco- uraged worker	5,5	3,6	7,7	10,2	6,9	4,0	4,7	6,9
Visibly un- derem- ployed	2,7	0,7	2,0	2,8	2,3	6,7	10,7	3,2
Invisibly un- derem- ployed	60,5	50,7	27,7	14,0	11,9	14,4	25,6	24,9
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
n	279	141	976	464	613	340	160	2973

Table for Figure 4.13 Underemployment by sector of employment (percent)

		М	en		
	Government	rernment Private Self-em- Ei formal ployed		Employer	Unpaid worker
Visibly un- dermployed, want more hours	8,0	7,0	4,2	1,5	3,9
Invisibly underemployed, low wage	4,3	31,0	17,9	12,7	15,5
Employed OK	87,7	62,0	77,9	85,9	80,5
Total	100,0	100,0	100,0	100,0	100,0

	Women										
	Government	Private formal	Self-em- ployed	Employer	Unpaid worker						
Visibly un- dermployed, want more hours	1,9	2,1	ı	0,6	0,4						
Invisibly un- deremployed, low wage	3,7	22,9	15,5	17,3	9,3						
Employed OK	94,4	75,0	83,5	82,1	90,3						
Total	100,0	100,0	99,0	100,0	100,0						

Table for Figure 4.14 Underemployment by industry (percent)

		Men			
	Agriculture/ forestry/ fishing	Mining, manufactur- ing, con- struction	Trade/ transporta- tion/ hotels & restau- rants/ services	Public administra- tion/ police	Health and educa- tion
Visibly underem- ployed, want more hours	5,0	6,8	3,9	7,2	9,1
Invisibly under- employed, low wage	13,2	30,9	17,6	4,5	3,6
Employed OK	81,8	62,3	78,5	88,4	87,3
Total	100,0	100,0	100,0	100,0	100,0

	Women									
	Agriculture/ forestry/ fish- ing	Mining, ma- nufacturing, construction	Trade/ trans- portation/ ho- tels & restau- rants/ services	Public administra- tion/ police	Health and educa- tion					
Visibly under- employed, want more hours	0,5	2,5	2,4	1,6	2,0					
Invisibly underemployed, low wage	12,1	22,3	14,0	4,1	4,3					
Employed OK	87,4	75,3	83,5	94,3	93,6					
Total	100,0	100,0	100,0	100,0	100,0					

Table for Figure 4.15 (left) Grouped sector of last job among the unemployed, by gender and urban-rural residence (percent)

		Men		Women			
	Urban	Rural	Total	Urban	Rural	Total	
Employer/ self-em- ployed	20,4	18,8	19,6	6,0	11,8	8,6	
Paid wor- ker, public sector	7,8	9,2	8,5	32,1	47,1	38,8	
Paid worker, private sector	71,9	71,9	71,9	61,9	41,2	52,6	
Total	100,0	100,0	100,0	100,0	100,0	100,0	
n	334	292	626	84	68	152	

		Men			Women	
	Urban	Rural	Total	Urban	Rural	Total
Employer/ self-em- ployed	9.3	8.7	9.0	3.0	3.7	3.4
Paid wor- ker, public sector	42.7	54.6	49.3	66.3	73.3	70.2
Paid worker, private sector	12.5	8.0	10.0	7.4	6.3	6.8
Two or more desired sectors	35.5	28.7	31.7	23.3	16.7	19.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
n	1107	1383	2490	674	832	1506

Table for Figure 4.16 Duration of seeking work among unemployed by gender and urbanrural residence (percent)

		Men		Women			
	Urban	Rural	Total	Urban	Rural	Total	
3 months or less	13,4	7,5	10,2	5,2	4,0	4,5	
4-6 months	16,7	13,1	14,7	7,4	6,4	6,8	
7-12 months	31,2	32,3	31,8	27,9	26,6	27,2	
1-2 years	23,0	28,1	25,7	33,9	37,1	35,6	
2 years or more	1 15.8 I		17,6	25,6	26,0	25,8	
Total	100,0	100,0	100,0	100,0	100,0	100,0	
n	1098	1374	2472	667	827	1494	

Table for Figure 4.17 Unemployment rates by gender, urban-rural residence and household asset index score

	Lowest 10%	20%	30 %	40 %	50%	60%	70%	80%	90%	Upper 10%	Total
Male, urban	3,2	6,9	7,7	8,6	8,2	8,3	9,0	7,9	5,0	5,1	7,2
Male, rural	10,8	8,1	7,6	8,8	7,1	7,8	9,6	4,6	4,2	-	9,4
Female, urban	19,6	16,6	28,4	38,5	36,1	29,6	33,9	26,8	20,6	17,6	26,6
Female, rural	9,5	14,3	20,5	21,7	22,5	23,0	24,5	22,3	19,9	-	17,0

Table for Figure 4.18 Underutilisation rates by gender, urban-rural residence and household asset index score

	Lowest 10%	20%	30%	40%	50%	60%	70%	80%	90%	Upper 10%	Total
Male, urban	20,3	43,6	38,4	40,8	35,9	34,1	33,2	28,4	22,8	20,9	30,4
Male, rural	33,6	29,9	33,4	35,9	29,7	30,7	29,3	23,5	20,2	16,9	31,2
Female, urban	19,6	33,7	39,4	48,4	47,7	41,9	45,4	34,2	27,8	25,3	35,0
Female, rural	23,1	26,5	31,7	36,7	30,5	33,8	31,1	32,0	27,1	18,2	29,0

Table for Figure 4.19 Household level unemployment by mohafaza (percent)

	Edleb	Rural Damascus	Rakka	Aleppo	Der Elzor	Damascus City	Sweda
Two or more unemployed persons	0,4	1,1	1,3	1,8	2,1	2,1	2,9
Only one unemployed person in household	3,9	5,8	5,8	6,5	5,3	8,2	15,3

	Hama	Dara	Homs	Tartos	Quneitra	Latakia	Hasakeh	Total
Two or more unemployed persons	3,8	4,1	4,6	6,4	7,2	8,0	10,2	3,2
Only one unemployed person in hou- sehold	9,1	14,0	12,7	15,7	16,2	15,0	15,0	9,0

Table for Figure 4.20 Household level underemployment by mohafaza (percent)

	Rakka	Der Elzor	Rural Damas- cus	Aleppo	Damascus City	Edleb	Hama	Dara
Two or more underutilized persons	5,8	6,8	7,0	7,4	8,1	10,1	12,9	13,0
Only one underutilized person in household	13,5	15,1	24,0	21,7	23,5	25,2	23,2	32,6

	Homs	Sweda	Latakia	Tartos	Quneitra	Hasakeh	Total
Two or more underutilized persons	14,9	15,0	15,2	17,1	17,3	18,5	10,5
Only one underutilized person in household	25,5	29,5	25,4	24,5	33,0	27,9	23,6

Table for Figure 5.1 Reason for inactivity by gender and urban-rural residence (percent)

		Men			Women			
	Urban	Rural	Total	Urban	Rural	Total		
Discouraged worker	5,8	7,7	6,7	0,3	0,8	0,5		
Student	50,7	53,6	52,0	14,9	11,9	13,5		
Housewife, no young children in the household	-	-	-	21,6	17,7	19,8		
Live from means	19,3	9,8	15,0	0,9	0,1	0,5		
Housewife, young children in the household	-	-	-	56,9	62,4	59,4		
Retired	5,5	7,7	6,5	1,5	2,0	1,7		
Sick/ disabled	18,4	20,7	19,4	3,9	5,1	4,5		

Total	99,7	99,4	99,6	100,0	100,0	100,0
n	6 120	5 340	11 460	20 618	17 724	38 342

Table for Figure 5.2 Reason for inactivity by gender and urban-rural residence - housewives excluded (percent)

		Men		Women			
	Urban	Rural	Total	Urban	Rural	Total	
Discouraged worker	5,8	7,8	6,7	1,3	4,0	2,5	
Student	50,9	53,9	52,2	69,2	59,5	65,0	
Live from means	19,3	9,8	15,0	4,1	0,7	2,6	
Retired	5,5	7,8	6,5	7,1	10,0	8,4	
Sick/ disabled	18,5	20,8	19,5	18,3	25,8	21,6	
Total	100,0	100,0	100,0	100,0	100,0	100,0	
n	6102	5305	11407	4429	3592	8021	

Table for Figure 5.3 Reason for inactivity, by age (number of individuals)

	_				_		_	_	_	_
Total		103946	821443	2462725	1203481	207512	152481	426302	5377890	49740
95+	years	,	1079	1553	393	295	311	5397	9028	98
90-94	years	-	582	91	97	550	1725	6983	10029	94
85-89	years	-	1223	492	93	1146	1897	13341	18191	172
80-84	years	1	5451	2013	140	7363	8814	31146	54928	512
75-79	years	-	11925	3556	619	14342	9197	43287	82927	774
70-74	years	-	31835	11326	883	33344	18860	72477	168725	1555
69-59	years	-	58367	19362	436	43274	14806	47116	183361	1689
60-64	years	203	91851	33070	802	54366	13997	51275	245565	2256
55-59	years	446	83743	53638	1002	23130	9644	23809	195412	1796
50-54	years	727	108178	117755	646	18987	9345	19584	275221	2546
45-49	eyars	954	71686	182755	841	6719	5899	12949	281803	2591
40-49	years	2003	47285	271797	1734	2688	3648	9209	338365	3122
35-39	years	2733	35762	328980	3310	868	3796	10840	386320	3575
30-34	years	5364	38602	355643	6673	409	6466	10346	423503	3916
25-29	years	11175	96036	379755	35623		8825	13137	514551	4757
20-24	years	45478	96447	373738	242972	-	13594	23255	795485	7302
5-19	years	34863	71390	327200	907217	-	21658	32149	1394476	12997
		Discouraged worker	Housewife, no young children in the house- hold	Housewife, young chil- dren in the household	Student	Live from means	Retired	Sick/ disabled	Total number	د

Table for Figure 5.4 Reason for inactivity, by education (number of individuals)

	Illite- rate	Read and write	Elemen- tary	Prepa- ratory	Secon- dary	Inter- medi- ate	Uni- versity	Total
Discouraged worker	4517	4488	56586	17675	11456	5259	3966	103946
Housewife, no young children in the house- hold	335758	113505	248188	71369	39235	5866	7522	821443
Housewife, young children in the house- hold	718003	286977	1035787	272205	115165	19279	15308	2462725
Student	8174	5786	229746	608719	329886	9107	12064	1203481
Live from means	27698	44127	55269	23743	18217	12481	25976	207512
Retired	64241	34283	36448	9762	4193	1654	1899	152481
Sick/ disabled	263057	80756	63773	11467	5257	641	1352	426302
Total number	1421448	569922	1725798	1014941	523410	54287	68086	5377890
n	13405	5236	15962	9325	4732	485	595	49740

Table for Figure 5.5 Reason for inactivity, by household size (number of individuals)

П			\neg																		
	Total	103389		821443					2433890				1200061	207091		150330	422526		5338730		49372
	17	283		,					11689				2371	162		407	1048		15960		152
	16	289							11929				3058	121		402	1423		17570		172
	15	939		1					25570				8959	435		2235	4279		40027		385
	14	1974							38395				12300	1003		873	5138		28969		552
	13	4290		,					57469				23339	2039		2370	7740		97246		906
	12	4437		630					88675				35190	2055		5206	13710		149903		1407
ĺ	11	7334		3273					129696				58360	3758		6199	17556		226175		2132
	10	8256		9015					193424				100005	7090		6581	20505		344875		3272
	6	10676		14311					244944				134990	8641		8692	27776		449036		4232
	8	13698		35766					291310				175826	13558		10909	36660		577727		5383
Ì	7	14266		61475					338707				188152	17765		12746	43035		676146		6317
Ì	9	12434		101005					350186				198220	22452		12256	44368		740921		6795
	5	10285		125329					331605				144827	26665		12263	47271		698245		6989
ľ	4	8736		150854					229299				75912	32838		14567	40292		552498		5029
Ì	3	4134		133607					88772				30183	29878		15382	40646		342601		3091
	2	805		168721					2221				8441	31502		24599	48442		284732		2584
	1	207		17457					-				2318	7129		15637	22637		98539		594
		Discoura-	ged worker	Housewife,	no young	children in	the house-	ploq	Housewife,	young chil-	dren in the	household	Student	Live from	means	Retired	Sick/disab-	led	Total	number	L

Table for Figure 5.7 Share of individuals living in households with at least one other person who is inactive in the household, by gender and mohafaza

	Men	Women
Damascus City	93	69
Rural Damascus	95	68
Homs	93	75
Hama	89	69
Tartos	90	74
Latakia	87	73
Edleb	86	64
Aleppo	93	65
Rakka	96	68
Der Elzor	75	59
Hasakeh	98	75
Sweda	90	78
Dara	96	78
Quneitra	98	71

Table for Figure 5.8 Share of individuals living in households with other person (also) being a housewife, by mohafaza

	Men	Women
Damascus City	86	42
Rural Damascus	91	49
Homs	86	54
Hama	77	48
Tartos	76	44
Latakia	71	41
Edleb	76	45
Aleppo	89	49
Rakka	95	53
Der Elzor	64	42
Hasakeh	95	58
Sweda	76	49
Dara	92	63
Quneitra	98	55

The Syrian Labour Market

In 2004–2006, Fafo and the Central Bureau of Statistics (CBS) of Syria cooperated in a project aimed at enhancing the capacity of the CBS and some of her Syrian partner institutions to collect, and in particular analyse, comprehensive household survey data. In addition, the project was to provide high-quality labour market and living conditions' statistics to serve as input into Syrian decision-making and policy formulation processes.

This report is the result of analyses made in conjunction with a series of training workshops that Fafo conducted in Damascus in 2004 for professionals from the CBS, the SPC, Damascus University, Teshreen University, and the Agency for Combating Unemployment (ACU). While the ILO framework was the foundation of the analysis, a more «popular» understanding of work and unemployment is also presented here. Accordingly, the report presents comprehensive, descriptive labour force data covering core themes such as labour force participation, employment, unemployment, and underemployment.

