

Funded by the European Union





# Labour Force and Household Living Conditions Survey 2018-2019 Lebanon



## Labour Force and Household Living Conditions Survey (LFHLCS) 2018-2019 Lebanon

## Copyright © Lebanese Republic Central Administration of Statistics (CAS); International Labour Organization (ILO); European Union (EU) 2020

First published 2020

This publication enjoys copyright under Protocol 2 of the Universal Copyright Convention. Nevertheless, short excerpts from it may be reproduced without authorization, on condition that the source is indicated. For rights of reproduction or translation, application should be made to ILO Publications (Rights and Licensing), International Labour Office, CH-1211 Geneva 22, Switzerland, or by email to rights@ilo.org; or to CAS by email info@cas.gov.lb

Libraries, institutions and other users registered with a reproduction rights organization may make copies in accordance with the licences issued to them for this purpose. Visit www.ifrro.org to find the reproduction rights organization in your country.

Title: Labour Force and Household Living Conditions Survey 2018-2019 Lebanon, Beirut, 2020

ISBN: 978-92-2-031913-0 (Print)

ISBN: 978-92-2-031914-7 (Web PDF)

Also available in Arabic as Web PDF:

مسح القوى العاملة والأحوال المعيشية للأسر في لبنان للعام، 2019-2018، ISBN ،2019 -2019 (web pdf) بيروت 2020

The designations employed in this publication and the presentation of material therein do not imply the expression of any opinion whatsoever on the part of CAS, the ILO or the EU concerning the legal status of any country, area or territory or of its authorities, or concerning the delimitation of its frontiers.

The responsibility for opinions expressed in signed articles, studies and other contributions rests solely with their authors, and publication does not constitute an endorsement by CAS, the ILO or the EU of the opinions expressed in them.

Reference to names of firms and commercial products and processes does not imply their endorsement by CAS, the ILO or the EU, and any failure to mention a particular firm, commercial product or process is not a sign of disapproval.

Information on CAS publications and digital products can be found at: www.cas.gov.lb

Information on ILO publications and digital products can be found at: www.ilo.org/publns

Information on EU publications and digital products can be found at:

op.europa.eu/en/web/general-publications/publications

Printed in Lebanon.

The Labour Force and Household Living Conditions Survey 2018-2019 in Lebanon was fully funded by the European Union (EU) delegation in Lebanon.

The Lebanese Republic Central Administration of Statistics (CAS) staff oversaw all technical aspects of work relating to the survey.

The International Labour Organization (ILO) provided technical expertise throughout the Survey process and managed all contracting and budgeting aspects of the Survey work. It contracted over 140 fieldworkers and 37 office workers to handle administrative aspects, and data collection, entry, editing and coding.

The Human Resources Information Management System (HRIMS), an IT programme developed by CAS, was used to manage human resources and payments, and monitor the progress of office and fieldwork.

This publication was produced with the financial support of the EU. Its contents are the sole responsibility of the CAS and the ILO and do not necessarily reflect the views of the European Union.

### Table of contents

Table of	f cont	tents	4
List o	f table	es	8
List o	f figur	res	10
Acknow	vledg	ments	13
Key find	dings		14
Demo	ograph	nic characteristics of the residents	14
Educa	ation .		14
Labou	ur forc	ce	14
	Empl	loyment	14
	Labo	our underutilization	16
Living	, conc	ditions	16
	Healt	th	16
	Hous	sing	16
	Incor	ne	16
Introdu	ction		17
Chapte	r I: De	emography	18
	1.1.	Number of residents and their geographical distribution	18
	Resid	dents by nationality	21
	1.2.	Household structure and size	22
	Avera	age household size	23
	1.3.	Age pyramid and its characteristics	25
	1.4.	Age dependency ratio by region	27
	1.5.	Marital status and celibacy rates	29
	1.6.	Residents according to place of registration and place of residence	31
	1.7.	Residential density within the dwelling	33
Chapte	r II: E	ducation	35
	2.1.	School enrolment (3–24 years old)	35
	Scho	ool enrolment rates and nationality	35
	Scho	ool enrolment rates by region and nationality	36
	2.2.	School enrolment and age-grade delay rates	38
	Scho	ool enrolment	38
	Age-	grade delay	39
	2.3.	Educational attainment and illiteracy rates	39

	Educational attainment	.39
	Illiteracy rates	.43
	2.4. Type of educational institutions	.44
	2.5. Out of school and university	.48
Chapte	r III: Labour force	.50
	3.1. Main labour force and labour underutilization indicators	.50
	Labour force and unemployment trends	.51
	Employment by branch of economic activity	.52
	Changing structure of employment	.53
	Employment and production growth rates	.54
	Seasonal variations	.55
	Regional variations in labour force and unemployment	.56
	3.2. Informality of employment	.58
	Changing composition of status in employment	.58
	The informal sector and informal employment	.58
	Informal employment by level of education	.59
	Informal employment by occupation	.60
	Informal employment in non-agriculture employment	.60
	3.3. Working time and income from employment	.62
	Hours usually worked and hours actually worked	.62
	Multiple jobholding	.63
	Short and long hours of work	.63
	Average hourly earnings of employees at main job	.64
	Low-paid workers	.65
	3.4. Gender and the labour market	.65
	Labour force participation rates of women and men	.65
	Women in managerial positions	.66
	Occupational segregation	.66
	Gender wage gap	.67
	3.5. Youth and the labour market	.68
	Youth unemployment and labour underutilization	.68
	Long-term youth unemployment	.70
	Youth not in employment, nor in education or training (NEET)	.70
	Qualification mismatches by level of education	.71
	3.6. International migrant workers	.72

	Labour force participation and unemployment among migrant workers	72
	Employment of international migrant workers	73
	3.7. Labour market dynamics	74
	Labour force transitions since mid-year 2017	75
	Unemployment before and after moving to Lebanon	76
Chapte	er IV: Health insurance coverage, illness, chronic diseases and disability	78
	4.1. Health insurance coverage	78
	Type of health coverage	78
	Health insurance coverage by region	79
	Health insurance coverage and occupation	80
	4.2. Chronic health condition and illness	81
	4.3. Functioning of the body (disability)	82
	Disability by enrolment in education	83
	Disability and labour force participation	83
Chapte	er V: Housing conditions	85
	5.1. Main characteristics of primary residences	85
	5.2. Provision of services at primary residences	88
	Sources of drinking water	88
	Drinking water by governorate	89
	Sources of service water	90
	Wastewater and sewage systems	90
	Heating systems	91
	Sources of electricity	92
	Domestic waste	92
	5.3. Home appliances, means of transportation, and services in the vicinity	93
	Home appliances	93
	Means of transportation	94
	Services closer than a 10-minute walk from the dwelling	95
Chapte	er VI: Household income	96
6.1.	Sources of income	96
6.2.	Income categories	96
6.3.	Self-classification of wealth status	97
Chapte	er VII: Methodology	99
	7.1. Main concepts and definitions	99
	Measurement and classification frameworks	99

Regions	9
Disability	)0
Labour force	)0
Employment: A particular form of work10	)1
Unemployment: A component of labour underutilization	)2
Main labour force and labour underutilization indicators10	)3
Informality	)3
7.2. Sample design and sampling weights10	)5
Sample design	)5
Sampling weights	)6
7.3. Questionnaire design, field operations and data processing	)6
Questionnaire design and contents	)6
Field operations, data processing and resources management10	)8
7.4. Response rates and data quality10	)9
Response rates	)9
Rounding of numbers	0
Sampling errors	0

## List of tables

Table 1.1 Number of individuals and households by region	18
Table 1.2 Relationship with head of household (per 1,000 households) by governorate	23
Table 1.3 Distribution of sex and gender ratio by age group and year (percentages)	29
Table 1.4 Age dependency ratio by governorate and caza	28
Table 1.5 Marital status by sex, ages 15 years and above (percentages)	29
Table 1.6 Marital status by governorate (percentages)	29
Table 1.7 Male celibacy rate by governorate and age (percentages)	30
Table 1.8 Female celibacy rate by governorate and age (percentages)	31
Table 1.9 Place of residence by place of registration (percentages)	32
Table 1.10 Number of individuals per room	34
Table 1.11 Floor area (m2) per person by governorate (percentages)	34
Table 2.1 School enrolment rate by age group and sex	35
Table 2.2 School enrolment rates by nationality, governorate and age	36
Table 2.3 Raw school enrolment rate	38
Table 2.4 Net enrolment rate	38
Table 2.5 Age-grade delay by education level (percentages)	39
Table 2.6 Age-grade delay by class level (percentages)	39
Table 2.7 Highest level of education by sex, ages 3 years and above (percentages)	40
Table 2.8 Education level attained by age group (percentages)	40
Table 2.9 Education level attained by governorate, ages 3 years and above (percentages)	41
Table 2.10 Illiteracy rate by age group, nationality and sex	44
Table 3.1 Main labour force and labour underutilization indicators	50
Table 3.2 Employment and production growth in Lebanon, 2004, 2012 and 2018	54
Table 3.3 Main employment by type of production unit and type of job	53
Table 3.4 Informal employment (non-agricultural) by sex (percentages)	61
Table 3.5 Hours usually worked and hours actually worked per week by sex (percentages)	63
Table 3.6 Share of employment in managerial positions at main job by sex (percentages)	66
Table 3.7 Gender wage gap of employees at main job by level of educational attainmed         (percentages)	
Table 3.8 Youth unemployment rate compared with total	69
Table 3.9 Long-term unemployment rate by age group	70
Table 3.10 Working ≥50 hours at all jobs during the reference week by nationality (percentages	<mark>s)</mark> . 73
Table 3.11 Working in elementary occupations at main job by nationality (percentages	s)74

Table 3.12 Proportion of employees in informal jobs by nationality (percentages)	74
Table 3.13 Labour force flows, 2018–19 vs 2017–18	75
Table 5.1 Primary residences by type and governorate (percentages)	86
Table 5.2 Heating systems in primary residences by governorate (percentages)	91
Table 7.1 Regions in Lebanon (governorates and cazas)	99
Table 7.2 Structure of the questionnaire	107
Table 7.3 Sampling errors of estimates of main labour force aggregates	110
Table 7.4 Sampling errors of the estimates of main labour force rates and ratios	111

Annex: Detailed survey tabulations available exclusively online at the website of the Central Administration of Statistics (CAS) (http://www.cas.gov.lb/)

## List of figures

Figure 1.1 Residents by region (percentages)
Figure 1.2 Proportion of residents by governorate (percentages), 2004 & 2018–1921
Figure 1.3 Residents by caza and nationality (percentages)
Figure 1.4 Head of household by age group and sex (percentages)23
Figure 1.5 Average household size by caza24
Figure 1.6 Distribution of household size by year, 2004 and 2018 (percentages)25
Figure 1.7 Single-person households by age group and sex (percentages)25
Figure 1.8 Age pyramids (all residents in Lebanon) by nationality
Figure 1.9 Marital status by age group and sex (percentages)
Figure 1.10 Internal movement of Lebanese residents
Figure 2.1 School enrolment rate by nationality, age group and sex
Figure 2.2 Students (3–24 years) currently enrolled by caza (percentages)
Figure 2.3 Education level by nationality, ages 3 years and above (percentages)41
Figure 2.4 Average years of education by caza42
Figure 2.5 Average years of education by caza and nationality43
Figure 2.6 Enrolment by type of educational institution and nationality, ages 3-24 years (percentages)
Figure 2.7 Enrolment by type of educational institution and sex, ages 3–24 years (percentages)45
Figure 2.8 Enrolment by type of educational institution, sex and nationality (percentages)46
Figure 2.9 Enrolment by type of educational institution, age group and nationality (percentages) 46
Figure 2.10 Enrolment rate by region and type of educational institution (percentages)47
Figure 2.11 Reasons for non-enrolment, ages 3–24 (percentages)
Figure 2.12 Non-enrolment in education by nationality and reason, ages 3-24 (percentages) 49
Figure 3.1 Labour force and unemployment trends, 2004–2019 (percentages)
Figure 3.2 Employment by branch of economic activity (percentages)
Figure 3.3 Employment by branch of economic activity and sex
Figure 3.4 Structure of employment, 2004–2019 (percentages)
Figure 3.5 Seasonality of main labour force aggregates (percentages)
Figure 3.6a Labour force participation rate by caza (percentages)
Figure 3.6b Unemployment rate by caza (percentages)
Figure 3.7 Employment status in main job, 2011–12 and 2018–19 (percentages)58
Figure 3.8 Formal and informal employment by level of education (percentages)
Figure 3.9 Formal and informal employment by occupation (percentages)

Figure 3.10 Informal employment at main job by branch of economic activity (percentages) 6	1
Figure 3.11 Hours usually worked and hours actually worked by branch of economic activity (per week)	2
Figure 3.12 Multiple jobholding	
Figure 3.13 Average hourly earnings (LBP) of employees at main job	
Figure 3.14 Low-paid workers by sex and governorate (percentages)	
Figure 3.15 Labour force participation rate by sex and age group (percentages)	
Figure 3.16 Occupational structure of employment at main job by sex (percentages)67	
Figure 3.17 Youth unemployment rate 2004–201869	9
Figure 3.18 Unemployment rates by age group and level of education	
Figure 3.19 Youth (15–24 years old) in employment or NEET by sex (percentages)7	1
Figure 3.20 Qualification mismatch by sex and age group (percentages)72	2
Figure 3.21 Labour force participation and unemployment rates by citizenship status73	3
Figure 3.22 Economic sector of main job by nationality (percentages)	4
Figure 3.23 Labour force status before and after moving to Lebanon	7
Figure 4.1 Coverage by sex (percentages)	3
Figure 4.2 Type of health coverage (percentages)78	3
Figure 4.3 Source of health coverage (percentages)79	9
Figure 4.4 Health insurance coverage by governorate and caza (percentages)	)
Figure 4.5 Health coverage and occupation (percentages)8 <sup>-</sup>	1
Figure 4.6 Residents who received medical help by place of medical help (percentages).82	2
Figure 4.7 Residents by disability (percentages)	2
Figure 4.8 Disabled residents by type of disability (percentages)	3
Figure 4.9 Enrolment rates by disability and sex (persons aged 3-24 years)	3
Figure 4.10 Labour force indicators by disability status	4
Figure 4.11 Informality of employment by disability (percentages)	4
Figure 4.12 Labour force participation rate by disability status and sex (percentage)84	4
Figure 5.1 Primary residences by governorate (percentages)	5
Figure 5.2 Primary residences by caza (percentages)	5
Figure 5.3 Primary residences by age of dwelling (percentages)	3
Figure 5.4 Primary residences by age of dwelling and governorate (percentages)	7
Figure 5.5 Primary residences according to floor material (percentages)	7
Figure 5.6 Primary residences by area (m2) and number of rooms (percentages)	3
Figure 5.7 Main source of drinking water at the dwelling (percentages)	9
Figure 5.8 Source of drinking water by governorate (percentages)	9

Figure 5.9 Sources of service water for dwellings (percentages)
Figure 5.10 Households by type of sewage drainage by governorate (percentages)90
Figure 5.11 Households by number of heating systems (percentages)
Figure 5.12 Private electricity subscription/private generator by governorate (percentages)92
Figure 5.13 Waste disposal, primary residence (percentages)
Figure 5.14 Frequency of waste disposal (percentages)
Figure 5.15 Home appliances/services available (percentages)
Figure 5.16 Households owning a means of transport by caza (percentages)
Figure 5.17 Access to public transport by governorate (percentages)
Figure 5.18 Access to services within a 10-minute walk from the dwelling (percentages)95
Figure 6.1 Households by source of income (percentages)
Figure 6.2 Household income distribution by governorate ('000 LBP)97
Figure 6.3 Self-classification of wealth status by caza and governorate (percentages) 98
Figure 7.1 Measurement framework
Figure 7.2 Forms of work and the System of National Accounts, 2008
Figure 7.3 Joint classification of the employed population by informal employment and employment in the informal sector

#### Acknowledgments

The Labour Force and Household Living Conditions Survey (LFHLCS) was conducted by the Central Administration of Statistics (CAS) between 2018 and 2019 and entirely funded by the Delegation of the European Union to Lebanon, with the technical cooperation of the International Labour Organization (ILO), Regional Office for Arab States.

The LFHLCS is the first survey of its kind to produce estimates at the national, subnational governorate (*mouhafaza*) and district (*caza*) levels, covering a broad array of indicators on the labour market, educational characteristics and living conditions of residents in Lebanon.

With an unprecedented complete national sample size of more than 39,000 households, the survey covers people living in residential dwellings. This effort required lengthy preparation and execution phases, and CAS acknowledges the professional input and contribution of all the partners, experts, and staff who were involved in the preparation and the implementation of this survey and drafting of the final report.

Particular thanks are due to the ILO core team comprising Tariq Haq, Francois Farah, Nader Keyrouz, Rita Abou Jaoudeh and consultant, Farhad Mehran, for all of their technical and administrative support to the survey. Also gratefully acknowledged are the contributions of CAS staff Najwa Yaacoub and Lara Badre, who managed and coordinated all staff and activities related to the survey preparation, design, implementation, data collection, data preparation, and analysis of the survey outcomes; and Mayssa Daher and Ali Hamieh, who contributed significantly to the data quality assessment, sampling, data preparation, tabulations and drafting.

The Central Administration of Statistics would like to reiterate its gratitude for the important financial funding from the EU, the technical assistance of the ILO, and the cooperation of all households in answering the survey questionnaire.

Dr Maral Tutelian Guidanian Director General Central Administration of Statistics

#### **Key findings**

#### **Demographic characteristics of the residents**

- (1) In 2018–19 the estimated number of residents in Lebanon was around 4.8 million persons.
- (2) About 80 per cent of residents were Lebanese citizens (20 per cent were non-Lebanese).
- (3) Mount Lebanon is the largest governorate in the country, hosting around 42.0 per cent of residents. The capital, Beirut, hosts 7.1 per cent of residents.
- (4) The overall average household size in the country has declined from 4.3 in 2004 to 3.8 individuals in 2018–19.
- (5) Some 81.5 per cent of households were headed by a man; 18.5 per cent had a woman as head of household, an increase from 14.2 per cent in 2004.
- (6) The age dependency ratio was 53.9 per cent in 2018–19; it was 52 per cent in 2007.
- (7) Some 55.1 per cent of residents aged 15 and above were married.

#### Education

- Of residents aged between 3 and 24 years, 71.7 per cent were enrolled in an educational institution (74.4 per cent of females and 69.1 per cent of males). The rate for Lebanese (79.2 per cent) was much higher than for non-Lebanese (48.2 per cent).
- (2) The raw enrolment rate (the capacity of the system) at the elementary level was 98.9 per cent and 76.8 per cent at the secondary level.
- (3) The net enrolment rate at the elementary level was 87.2 per cent and 54.9 per cent at the secondary level.
- (4) Net enrolment rates of Lebanese at intermediate level were 78.5 per cent and 64.9 per cent at secondary; for non-Lebanese they were 28.7 per cent and 15.0 per cent, respectively.
- (5) The age-grade delay for male students was higher than for females; it also increased with education level, with large differences between Lebanese and non-Lebanese students.
- (6) The illiteracy rate among residents aged 10 years and above was 7.4 per cent at the national level (6.3 per cent for Lebanese compared with 12.5 per cent among non-Lebanese).

#### Labour force

#### **Employment**

- (1) Less than 50 per cent of the working-age population (15 years old and over) were participating in the labour force as of 2018–19.
- (2) Among women of working age, the labour force participation rate was 29.3 per cent.
- (3) A slow but steady change was observable in the structure of employment away from agriculture (under 4 per cent) and industry (about 21 per cent), in favour of services (about 76 per cent), most likely with increasing levels of informality.
- (4) Hours of work were generally higher in services, such as administrative and support service activities, accommodation and food service activities, and wholesale and retail trade, repair of motor vehicles and motorcycles. By contrast, hours of work were generally lower in education, own-use production work, and real estate activities.

- (5) On average, employees usually worked about 48.5 hours per week at their main job. Because of temporary absences, such as vacation or annual leave, illness or injury, or a reduction of economic activity, which affected about 2 per cent of the employed population in any given week, the actual number of hours of work at the main job was slightly lower – an average of 46.6 hours of work during the week.
- (6) The estimated number of persons reporting more than one job during the survey reference week was 55,100, representing about 3.5 per cent of total employment.
- (7) The average hourly pay from employees' main job was about 6,900 Lebanese pounds (LBP) or US\$4.56, corresponding to about 1,179,900 LBP (US\$779) on a monthly basis. The median monthly income of employees from their main job was 950,000 LBP (US\$627).
- (8) Average hourly earnings increased with level of educational attainment. The largest increase occurred when passing from secondary to university. The average hourly pay for those with secondary education was about 6,400 LBP, while for those with a university degree it was about 10,300 LBP.
- (9) For 21.8 per cent of all employees, monthly earnings from their main job was less than 633,300 LBP (US\$418), corresponding to two-thirds of the median monthly earnings of all employees. Relatively, there were less low-paid workers among women (18.5 per cent) than among men (23.2 per cent).
- (10) For Lebanese employees, 13.6 per cent could be considered low-paid workers (12.8 per cent of men and 15.2 per cent of women).
- (11) While the data show a relatively high degree of gender occupational segregation (index = 43.8 per cent), women in managerial positions (28.8 per cent) were broadly in proportion to their overall share of total employment (30.5 per cent).
- (12) Among young persons in employment, 31.5 per cent were in occupations with qualification requirements below their level of education (i.e. over-educated), and 21.3 per cent were engaged in occupations with qualification requirements above their level of education (i.e. under-educated).
- (13) Non-Lebanese workers made up about 21.3 per cent of the total labour force living in residential dwellings within the scope of the survey. Compared with Lebanese, non-Lebanese had a significantly higher labour force participation rate (60.8 per cent versus 46.3 per cent), and a lower unemployment rate (8.7 per cent versus 12.1 per cent). They were working longer hours at all jobs, with a higher concentration in household activities and the industrial sector of the economy, particularly construction, and highly disproportionate employment in elementary occupations for their main job (50.2 per cent versus 5.4 per cent for the Lebanese workers). Overwhelmingly, they were more likely than Lebanese to work in informal jobs, with no social security coverage, no paid sick leave and no paid annual leave (91.1 per cent versus 27.8 per cent for Lebanese employees).
- (14) Data from retrospective questions on residents' labour force status for the previous year show that job gains between mid-year 2017 and the survey period in 2018–19 were about 67,800, while job losses were about 87,200, representing a net loss of jobs of 19,400 between the two time periods.
- (15) About 29,000 persons aged 15 years old and over had been living outside Lebanon at mid-year 2017, representing less than 1 per cent of the total resident working-age population in 2018–19. The rate of unemployment of persons living outside Lebanon in mid-year 2017 was 22.2 per cent, but increased to 39.1 per cent after moving to Lebanon in 2018–19.

#### Labour underutilization

- (1) The youth (15–24 years old) unemployment rate (23.3 per cent) was more than double the general unemployment rate (11.4 per cent), and was even higher among youth with a university degree (35.7 per cent).
- (2) Taking into account time-related underemployment and the potential labour force, including discouragement from job-search, the survey revealed that 29.4 per cent of the extended youth labour force were in various forms of labour underutilization.
- (3) About 50 per cent of unemployed youth had been seeking employment for more than 12 months at the time of the survey.
- (4) The percentage of young people not in employment, education or training (NEET) was about 22 per cent, but significantly higher among young women (26.8 per cent) than young men (16.7 per cent).
- (5) In terms of seasonality, unemployment was higher-than-average in winter months and lower-than-average in summer months a general pattern consistent with the seasonality of unemployment in the northern hemisphere.

#### **Living conditions**

#### Health

- (1) Only 55.6 per cent of the population were covered by least one type of health insurance.
- (2) The main source of health coverage in Lebanon was the National Social Security Fund (NSSF), which covered 45.5 per cent of beneficiaries; this was followed by the Army and the Internal Security Forces, which provided coverage for a further 20.1 per cent, and then the United Nations High Commissioner for Refugees (UNHCR) with 11.5 per cent.
- (3) The majority of persons working as either "skilled agricultural, forestry and fishery", "craft and related trade workers" or in "elementary occupations" were not covered by any health scheme in Lebanon.
- (4) An estimated 24.1 per cent of Lebanon's residents had at least one chronic health condition that required regular spending on medical services or drugs.
- (5) People with a disability represented 4.0 per cent of the total resident population; almost half of them were elderly, and 52.0 per cent were women.

#### Housing

- (1) The number of primary residences in Lebanon was estimated at about 1,266,700.
- (2) Primary residences in Lebanon were mostly classified as an apartment in an independent building or in a residential complex (85.5 per cent).
- (3) Very few dwellings were constructed recently in Lebanon; 2.2 per cent were aged less than 5 years, and 66.2 per cent were constructed over 25 years ago.

#### Income

- (1) Around 18 per cent of households earned below 650,000 LBP (the official minimum wage in Lebanon was 675,000 LBP or US\$445) per month.
- (2) Some 26.3 per cent of households classified themselves as "poor or very poor", 67.5 per cent considered themselves "average or average to poor" and 6.1 per cent considered themselves as "wealthy or financially well-off".

#### Introduction

The data of the Labour Force and Household Conditions Survey (LFHLCS) were collected between April 2018 and March 2019, divided into four rounds and the average population estimates were considered to refer to the mid-year situation, i.e. 30 June or 1 July 2018.

Like any other household survey, the LFHLCS covers the population of Lebanon living only in residential dwellings and excludes persons living in non-residential units, such as construction and agriculture sites, shops, stores, factories, unfinished buildings, army barracks, refugee camps or adjacent gatherings and settlements, and so on.

Lebanon is comprised of eight governorates, called *mouhafaza*, which are further subdivided into a total of 26 districts, called *caza*. The governorates of Beirut and Akkar, however, are not subdivided into districts.

This report is organized according to major survey topics. The final chapter describes the methodology, and the technical and practical aspects of the survey.

#### **1.1. Number of residents and their geographical distribution**

The survey results show that in 2018–19 Lebanon hosted around 4.8 million residents, 79.8 per cent of whom were Lebanese and 20.2 per cent non-Lebanese. These shares contrast with the period 2004–05, when the mix was 93.4 per cent Lebanese and 6.6 per cent non-Lebanese.<sup>1</sup>

Mount Lebanon is the largest governorate in the country, hosting around 42.0 per cent of residents. The second largest governorate is North Lebanon, yet with only 13.2 per cent of residents, followed by the governorates of South Lebanon (12.1 per cent of residents), and Nabatieh (7.8 per cent of residents).

The capital, Beirut, hosts 7.1 per cent of residents despite its smaller geographical size; it is more populous than the governorates of Akkar (6.7 per cent of residents), Bekaa (6.1 per cent) and Baalbek-Hermel (5.1 per cent).

The caza of Baabda had the largest share of the population in the country, with 11.4 per cent of individuals, followed by Matn (10.6 per cent), and Beirut (7.1 per cent). Together, the remaining cazas host less than 7 per cent of residents, with five cazas hosting less than 1 per cent of the residents, namely Jezzine (0.7 per cent), Rachaya (0.7 per cent), Hasbaya (0.6 per cent), Hermel (0.6 per cent) and Bcharre, the smallest caza with only 0.5 per cent of residents.

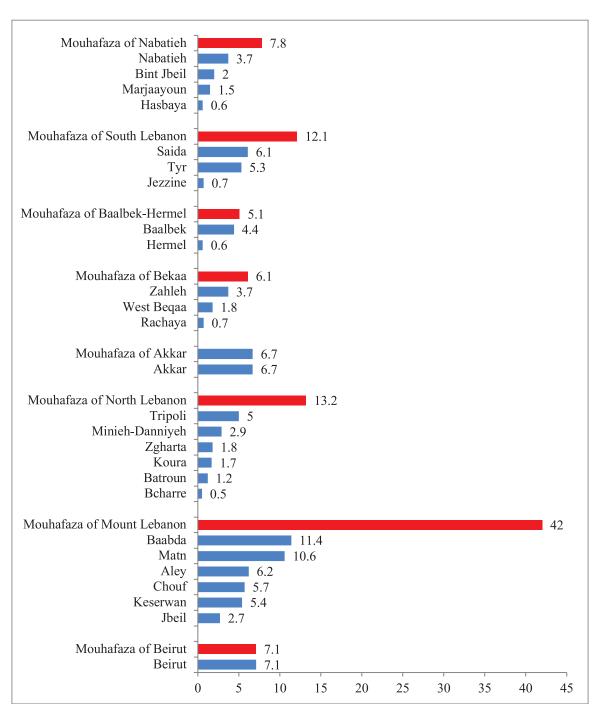
Caza and governorate	Number of individuals	Percentage of total	Number of households	Percentage of total	
Beirut	341 700	7.1	100 000	7.9	
Governorate of Beirut	341 700	7.1	100 000	7.9	
Baabda	553 800	11.4	151 600	12	
Matn	511 000	10.6	147 700	11.7	
Chouf	277 000	5.7	76 300	6	
Aley	300 800	6.2	74 900	5.9	
Keserwan	260 500	5.4	77 000	6.1	
Jbeil	129 500	2.7	35 100	2.8	
Governorate of Mount Lebanon	2 032 600	42	562 600	44.4	
Tripoli	243 800	5	55 600	4.4	
Koura	84 600	1.7	22 200	1.8	
Zgharta	87 700	1.8	21 800	1.7	
Batroun	58 900	1.2	17 500	1.4	
Bcharre	22 100	0.5	6 300	0.5	
Minieh-Danniyeh	140 800	2.9	29 800	2.4	
Governorate of North Lebanon	637 900	13.2	153 200	12.1	

#### Table 1.1 Number of individuals and households by region

<sup>&</sup>lt;sup>1</sup> Living conditions survey 2004–05, Central Administration of Statistics, Lebanon.

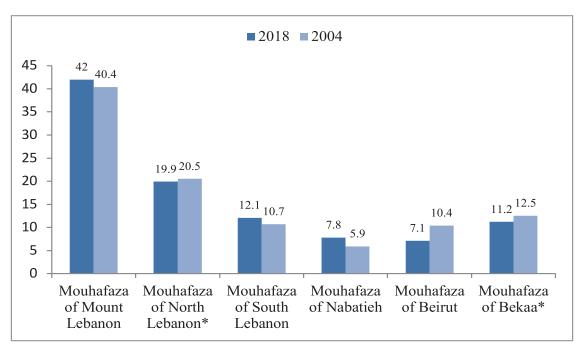
Lebanon	4 842 500	100	1 266 700	100
Governorate of Nabatieh	379 200	7.8	100 200	7.9
Hasbaya	28 700	0.6	8 100	0.6
Marjaayoun	74 000	1.5	20 600	1.6
Bint Jbeil	96 200	2	26 000	2.1
Nabatieh	180 200	3.7	45 500	3.6
Governorate of South Lebanon	584 400	12.1	147 800	11.7
Jezzine	32 100	0.7	9 800	0.8
Tyr	255 700	5.3	63 200	5
Saida	296 600	6.1	74 800	5.9
Governorate of Baalbek-Hermel	245 100	5.1	58 400	4.6
Hermel	30 500	0.6	7 200	0.6
Baalbek	214 600	4.4	51 200	4
Governorate of Bekaa	297 700	6.1	76 200	6
Rachaya	33 800	0.7	9 800	0.8
West Beqaa	86 400	1.8	20 400	1.6
Zahleh	177 400	3.7	46 000	3.6
Governorate of Akkar	324 000	6.7	68 200	5.4
Akkar	324 000	6.7	68 200	5.4

Note: Due to rounding, numbers presented may not add up precisely to the totals.



#### Figure 1.1 Residents by region (percentages)

Differences were seen between cazas (ordered from largest to smallest in figure 1.1) within their respective governorates in terms of their share of the population. The largest population difference was found in the governorate of Mount Lebanon between the caza of Baabda (11.4 per cent) and Jbeil (2.7 per cent). The smallest differences were in the governorate of Bekaa between the cazas of Zahleh (3.7 per cent) and Rachaya (0.7 per cent), and the governorate of Nabatieh, between the cazas of Nabatieh (3.7 per cent) and Hasbaya (0.6 per cent).



#### Figure 1.2 Proportion of residents by governorate (percentages), 2004 and 2018–19

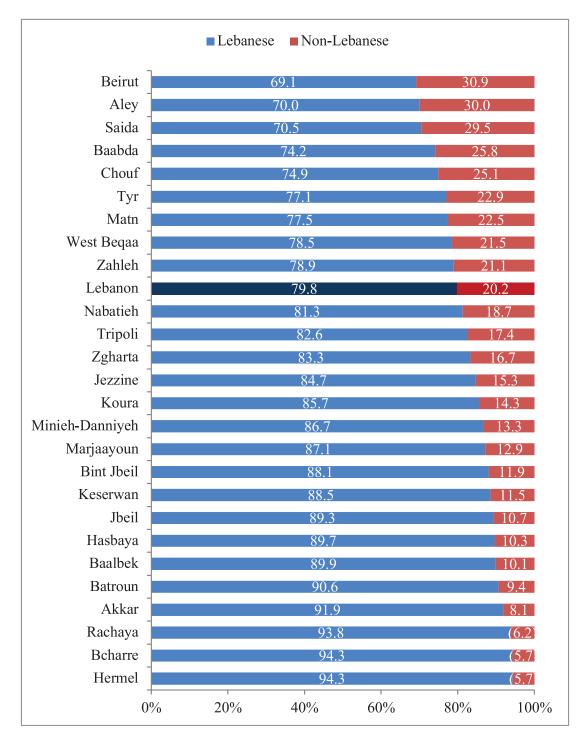
\*In 2004, the governorates of North Lebanon and Akkar were merged into the governorate of North Lebanon, and the governorates of Bekaa and Hermel-Baalbek were merged into the governorate of Bekaa.

Slight differences were observed between 2004 and 2018–19 in relation to the distribution of residents. Mount Lebanon, South Lebanon and Nabatieh witnessed a small increase between 2004 and 2018–19, while the remaining governorates witnessed a decrease in proportion – the largest decrease was in Beirut.

#### **Residents by nationality**

As the LFHLCS only covers residents and households living in residential dwellings, non-Lebanese residents in this context simply means all persons not holding Lebanese citizenship, regardless of nationality.

In 9 out of 26 cazas, the share of non-Lebanese was higher than their national share. For example, in the caza of Beirut the share of non-Lebanese was 30.9 per cent, followed by the cazas of Aley (30.0 per cent) and Saida (29.5 per cent). The largest share of domestic workers was also found in Beirut.



#### Figure 1.3 Residents by caza and nationality (percentages)

Note: (n.n) Figures are based on estimates with a standard error above 20 per cent.

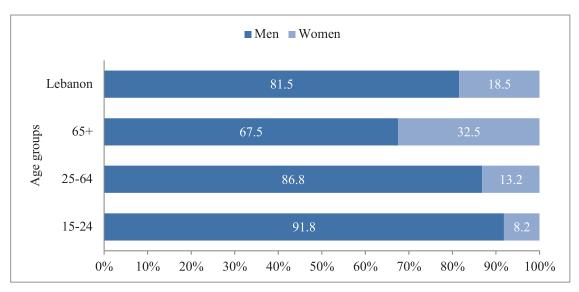
#### 1.2. Household structure and size

Table 1.2 shows the distribution of the population by relationship to head of household. The results show that for every 1,000 heads of households, there were 725 spouses (male or female) and 1,738 children. This shows a net decrease since 2004 (795 spouses and 2,259 children), reflecting a clear change in the family structure of households in Lebanon.

Relationship	Beirut	Mount Lebanon	North Lebanon	Akkar	Bekaa	Baalbek- Hermel	South Lebanon	Nabatieh	Lebanon total
Head of household	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000
Spouse	595	707	759	832	751	793	737	747	725
Child	1 238	1 540	1 970	2 685	1 817	2 132	1 906	1 814	1 738
Son- or daughter-in- law	34	26	52	33	42	25	30	14	31
Grandchild	107	58	131	74	93	61	83	39	75
Parent	57	52	66	35	53	47	35	40	50
Other relatives	200	116	115	63	97	84	77	81	110
No kinship	36	19	10	2	7	0	4	4	14
Domestic workers	149	95	61	25	45	58	83	43	81

#### Table 1.2 Relationship with head of household (per 1,000 households) by governorate

Household structure was relatively similar across governorates, except for Beirut, at one end, and Akkar, from the other. Akkar households had the largest share of children at 2,685 per 1,000 households heads (table 1.2). Across the country, the most common household structure was a husband, a wife and one or two children, but other relatives and domestic workers were more common in Beirut than in the other governorates. Akkar also had the largest share of spouses (832 per 1,000 households heads), while Beirut had the lowest (595 per households heads).



#### Figure 1.4 Head of household by age group and sex (percentages)

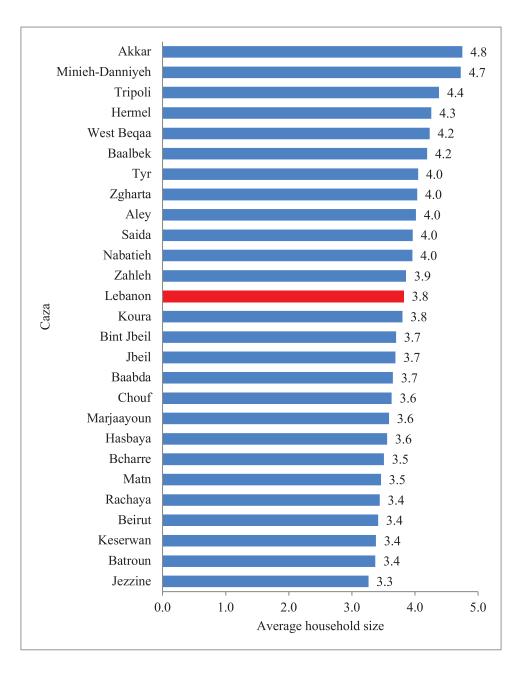
It was estimated that, overall, 81.5 per cent of households were headed by a man, while 18.5 per cent of households were headed by a woman, up from 14.2 per cent in 2004. Males predominated as heads of household in all three age groups, but the share of female heads of household increased with age (see figure 1.4).

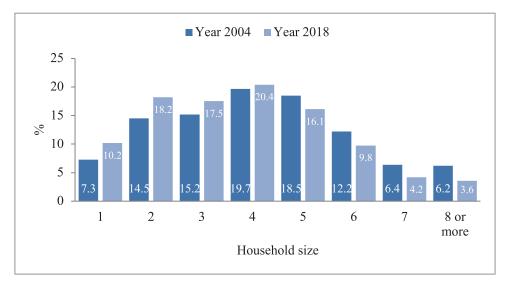
#### Average household size

The overall average household size in the country was 3.8 individuals, down from 4.3 in 2004. The average household size was 3.7 for Lebanese residents and 4.6 for non-Lebanese residents. Beirut had the lowest household size average among governorates with 3.4 individuals, while Akkar had the largest with 4.8 individuals.

At the caza level, Jezzine (3.3), Batroun (3.4), Keserwan (3.4), Beirut (3.4), Rachaya (3.4) and Matn (3.5) have the smallest households, while Akkar (4.8), Minieh-Danniyeh (4.7) and Tripoli (4.4) have the largest (figure 1.5).

#### Figure 1.5 Average household size by caza

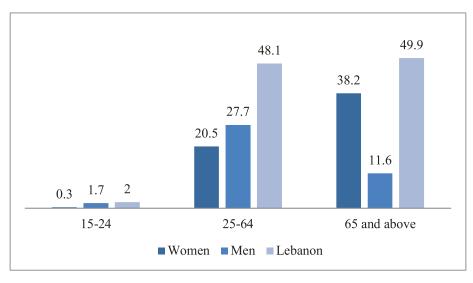




#### Figure 1.6 Distribution of household size by year, 2004 and 2018 (percentages)

In 2018–19 households were most commonly comprised of four members (20.4 per cent), followed by two (18.2 per cent) or three (17.5 per cent) individuals. Figure 1.6 shows that, overall, the size of households has decreased significantly since 2004, even if the modal value (4) is the same. It is worth noting that single-person households now make up to 10.2 per cent of total households; half of them older adults, mostly elderly women who are generally widows (figure 1.7).

#### Figure 1.7 Single-person households by age group and sex (percentages)



#### **1.3. Age pyramid and its characteristics**

Women represent 51.6 per cent of residents and men 48.4 per cent. The largest share of residents was found in the age group 20–24 years (9.1 per cent). Younger residents (0–24 years) represented 41.5 per cent of the total, and elderly residents (65+) represented 12.5 per cent. The working-age population (15–64 years) represented 64.7 per cent of the total.

#### Table 1.3 Distribution of sex and gender ratio by age group and year (percentages)

Age group	Female	Male	Male-to-female ratio 2004–2005	Male-to-female ratio 2018–2019
0–4	3.9	3.9	113.7	102.2
5–9	4.0	4.4	111.1	110.4

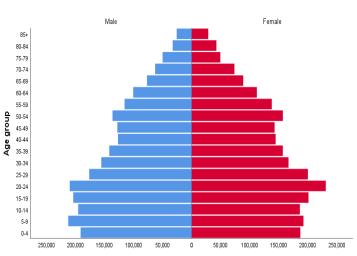
Total	51.6	48.4	99.0	93.7
85+	1.5	1.2	85.1	82.2
80–84	0.9	0.7	100.9	76.7
75–79	1.0	1.0	98.6	101.6
70–74	1.5	1.3	107.5	85.5
65–69	1.8	1.6	101.8	86.7
60–64	2.3	2.1	90.3	89.6
55–59	2.9	2.4	91.2	83.7
50–54	3.2	2.8	99.0	86.8
45–49	2.9	2.6	89.3	89.7
40–44	3.0	2.6	80.0	87.8
35–39	3.2	2.9	85.1	90.4
30–34	3.4	3.2	94.9	93.3
25–29	4.1	3.6	92.3	88.2
20–24	4.8	4.3	104.4	90.9
15–19	4.2	4.2	107.0	101.4
10–14	3.8	4.0	107.0	104.9

The distribution of age and gender, when compared across the two time periods, led to the following basic demographic observations:

- There was a decline in the number of children aged between 0 and 19 years old, compared with 2004–2005 survey results.
- A difference exists between the percentage of men in the 20–24 and the 25–49 age groups. This is more noticeable in the Lebanese residents' age pyramid, showing a sharp decline among Lebanese men between 25 and 49 years old, most probably due to out-migration.
- The ratio of the number of men to the number of women is referred to as the gender ratio.<sup>2</sup> At younger ages (0–19) the gender ratio is slightly biased towards males. This is followed by a decline in the gender ratio between ages 20 and 74, which may have been caused by the out-migration of men. The ratio is evenly distributed between the sexes (101.6 per cent) at age group 75–79, while after 80 years, the gender ratio again becomes biased towards women.
- There is a clear difference between Lebanese residents and non-Lebanese residents in their respective age pyramids. The non-Lebanese age pyramid is more youthful, with some asymmetries for women aged between 20 and 29, which might reflect the large number of migrant domestic workers in the country.

<sup>&</sup>lt;sup>2</sup> Male-to-female ratio = (number of males  $\div$  number of females)  $\times$  100.

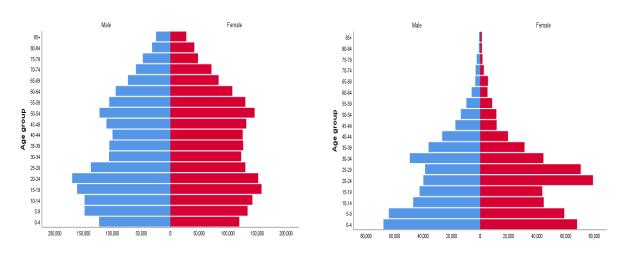
#### Figure 1.8 Age pyramids (all residents in Lebanon) by nationality



Total residents 2018–19

Lebanese residents 2018–19

Non-Lebanese residents 2018–19



#### 1.4. Age dependency ratio by region

Age dependency is expressed as a ratio of the number of dependents in a population to the number of people of working age. Dependents are defined as those aged 0–14 years and those aged 65 and older.<sup>3</sup> The ratio describes the degree to which the non-productive population is dependent on the working-age population. The age dependency ratio is used to measure the "pressure" on the productive population: the higher the ratio, the greater the burden, while a low dependency ratio means that there are enough people of working age to support the dependent population. In 2018–19, the age dependency ratio for Lebanon was 53.9 per cent; in 2007 it was 52.0 per cent.<sup>4</sup>

The age dependency ratio varied among governorates, between 51.1 per cent (Mount Lebanon) and 61.8 per cent (Akkar). At the caza level, Batroun (46.9 per cent), Keserwan (47.5 per cent), Matn (48.2 per cent), and Koura (48.5 per cent) had the lowest dependency ratios, while Bint Jbeil (62.5 per cent), Akkar (61.8 per cent), Minieh-Danniyeh (60.9 per cent), Marjaayoun (60.8 per cent) and Hasbaya (60.3 per cent) had the highest ratios.

Beirut witnessed a significant rise in its age dependency ratio from 43.5 per cent in 2004 to 55.4 per cent in 2018.

<sup>&</sup>lt;sup>3</sup> Total dependency ratio = [[(number of individuals aged under 15 years) + (number of individuals aged 65 years and above)]  $\div$  (number of individuals aged 64–15 years)] × 100.

<sup>&</sup>lt;sup>4</sup> "Population and housing in Lebanon", Statistics in Focus 2012 ,2, Central Administration of Statistics, Lebanon. Available at: www.cas.gov.lb.

#### Table 1.4 Age dependency ratio by governorate and caza

Governorate	Caza	Persons aged 0–14 and 65+ years	Persons aged 15–64 years	Dependency ratio
Daimut	Beirut	121 800	219 900	55.4
Beirut	Total	121 800	219 900	55.4
	Baabda	186 900	366 900	50.9
	Matn	166 100	344 900	48.2
	Chouf	100 300	176 600	56.8
Mount Lebanon	Aley	105 500	195 200	54.1
	Keserwan	83 900	176 600	47.5
	Jbeil	44 500	85 000	52.3
	Total	687 300	1 345 300	51.1
North Lebanon	Tripoli	85 500	158 300	54
	Koura	27 600	57 000	48.5
	Zgharta	31 100	56 600	54.9
	Batroun	18 800	40 100	46.9
	Bcharre	7 400	14 700	50.5
	Minieh-Danniyeh	53 300	87 500	60.9
	Total	223 800	414 200	54
Aldren	Akkar	123 700	200 300	61.8
Akkar	Total	123 700	200 300	61.8
	Zahleh	61 300	116 100	52.8
Bekaa	West Beqaa	31 300	55 100	56.7
Векаа	Rachaya	12 400	21 500	57.6
	Total	104 900	192 700	54.4
	Baalbek	76 700	137 900	55.6
Baalbek-Hermel	Hermel	10 400	20 000	52.2
	Total	87 100	158 000	55.2
	Saida	100 100	196 500	51
South Lebanon	Tyr	95 000	160 700	59.2
South Lebanon	Jezzine	12 000	20 100	59.7
	Total	207 100	377 200	54.9
	Nabatieh	65 100	115 100	56.6
	Bint Jbeil	37 000	59 200	62.5
Nabatieh	Marjaayoun	28 000	46 000	60.8
	Hasbaya	10 800	17 900	60.3
	Total	140 900	238 300	59.1
Lebanon		1 696 600	3 145 800	53.9

Note: Due to rounding, numbers presented may not add up precisely to the totals.

#### 1.5. Marital status and celibacy rates

Slightly more than half (55.1 per cent) of all residents aged 15 and above gave their status as "married" in 2018–19 and around one-third (36.4 per cent) stated they were "never married". The proportion of married women (53.4 per cent) was lower than for married men (57.0 per cent), while the share of widows (10.6 per cent of women) was much higher than for widowers (1.9 per cent of men). A further 2.1 per cent of residents were either divorced or separated.

Marital status	Women	Men	Lebanon
Never married	33.4	39.7	36.4
Married	53.4	57.0	55.1
Widowed	10.6	1.9	6.5
Divorced or separated	2.6	1.4	2.1
Total	100	100	100

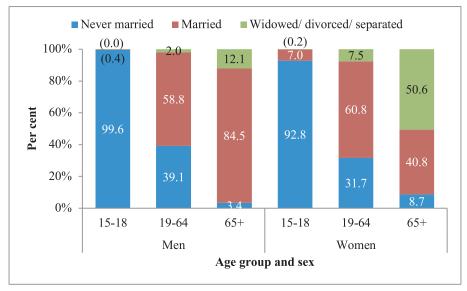
#### Table 1.5 Marital status by sex, ages 15 years and above (percentages)

Marital status varied greatly between governorates (table 1.6). Nabatieh (57.3 per cent) and Bekaa (56.4 per cent) had the highest rates of married residents, while the lowest share was found in Beirut (51.3 per cent). The share of residents who never married was highest in Akkar (40.1 per cent) and lowest in Nabatieh (33.9 per cent). The shares of widowed (8.9 per cent) and divorced/separated (3.4 per cent) were highest in Beirut, compared with the lowest in Akkar (3.9 per cent widowed and 1.1 per cent divorced/separated).

#### Table 1.6 Marital status by governorate (percentages)

Marital status	Beirut	Mount Lebanon	North Lebanon	Akkar	Bekaa	Baalbek- Hermel	South Lebanon	Nabatieh	Lebanon
Never married	36.4	36.3	36.9	40.1	35.5	38.4	35.8	33.9	36.4
Married	51.3	55.2	55.0	54.9	56.4	54.5	55.4	57.3	55.1
Widowed	8.9	6.6	6.1	3.9	6.4	5.6	6.2	6.8	6.5
Divorced /separated	3.4	2.0	2.1	1.1	1.6	1.5	2.5	2.0	2.1
Totals	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

#### Figure 1.9 Marital status by age group and sex (percentages)



Note (n.n) represent an estimation with a standard error above 20 per cent.

In terms of early marriage, by the time of the survey 7.0 per cent of girls and 0.4 per cent of boys aged 15–18 years had married. However, late marriage for both men and women is becoming increasingly prevalent, and men, in general, are older when they get married than women. With a female celibacy rate of 46.4 per cent for the age group 25–29, more than half of women were married by this age, whereas the same effect for men can be seen in the age group 30–34 (41.6 per cent celibate). Among women aged 65 years and above, around half were widowed, divorced or separated.

There were regional variations when comparing celibacy rates, especially for ages 25 and above for both men and women. For example, for the age group 35–39 the male celibacy rate was 31.5 per cent in Beirut and 30.3 per cent in Mount Lebanon, whereas it barely reached 13.9 per cent in Akkar. The same regional pattern was observed for women too. For instance, the female celibacy rate for the age group 25–29 was 58.2 per cent in Beirut, compared with 34.6 per cent in Nabatieh. Differences between regions and sexes become less evident in older age groups, with slightly higher rates of celibacy for women compared with men at older ages.

Age group	Beirut	Mount Lebanon	North Lebanon	Akkar	Bekaa	Baalbek- Hermel	South Lebanon	Nabatieh	Lebanon
15–19	99.2	99.1	99.3	99.8	98.7	99.8	98.9	98.7	99.1
20–24	89.7	91.7	92.5	91.9	90.6	92.7	93.0	92.2	91.9
25–29	71.3	75.1	71.5	70.7	73.1	78.3	70.4	66.3	72.8
30–34	49.4	45.3	38.6	34.3	38.1	40.6	34.8	32.9	41.6
35–39	31.5	30.3	20.4	13.9	21.8	21.4	18.7	17.2	25.1
40–44	23.4	17.3	13.3	6.1	17.3	9.9	12.7	4.6	14.6
45–49	14.4	14.8	10.7	7.3	13.1	7.5	5.2	4.5	11.4
50–54	15.2	12.8	10.5	3.7	10.5	5.9	5.1	5.0	10.2
55–59	15.8	7.8	6.8	1.7	6.4	8.9	6.4	4.8	7.4
60–64	7.0	5.7	4.3	2.3	6.0	2.9	3.8	3.3	4.9
65–69	4.4	6.7	6.1	0.0	1.1	4.4	1.0	2.0	4.8
70–74	6.2	5.2	3.0	0.4	5.3	2.6	0.8	0.5	3.9
75–79	3.0	2.8	5.0	0.0	2.5	0.0	0.0	0.9	2.4
80–84	3.2	2.9	2.0	0.0	0.6	0.0	4.1	0.0	2.4
85+	0.7	1.2	4.8	0.0	2.2	0.7	1.6	1.6	1.6
Average	39.0	39.7	40.8	43.3	39.3	40.9	38.5	37.2	39.7

#### Table 1.7 Male celibacy rate by governorate and age (percentages)

Age group	Beirut	Mount Lebanon	North Lebanon	Akkar	Bekaa	Baalbek- Hermel	South Lebanon	Nabatieh	Lebanon
15–19	92.1	90.1	91.3	91.3	92.5	93.6	92.3	91.9	91.3
20–24	71.7	76.7	74.4	68.8	67.2	71.3	69.9	68.8	73.3
25–29	58.2	49.6	43.7	37.7	36.2	48.4	44.0	34.6	46.4
30–34	35.7	30.4	22.7	29.6	20.6	24.3	22.2	19.2	27.2
35–39	22.3	19.1	15.7	16.6	18.9	20.0	17.5	12.3	18.1
40–44	25.3	13.1	11.8	19.9	16.2	17.5	17.9	15.7	15.4
45–49	15.8	14.4	13.6	14.6	18.2	19.4	16.0	11.3	14.8
50–54	20.2	16.2	14.8	12.4	13.1	18.8	14.8	15.7	15.8
55–59	17.5	13.0	14.6	9.0	15.7	10.9	9.8	18.7	13.4
60–64	16.1	13.6	13.9	10.2	15.8	9.9	9.5	15.1	13.5
65–69	10.6	15.7	9.7	4.4	11.1	13.4	4.9	7.9	12.0
70–74	12.8	9.2	9.9	5.8	7.4	5.6	8.2	6.6	9.0
75–79	13.3	5.4	6.5	2.4	7.3	7.1	4.3	3.0	6.2
80–84	9.6	5.8	9.4	16.2	1.7	3.0	5.1	4.1	6.5
85+	7.0	6.2	2.2	0.0	0.9	6.5	3.1	1.7	4.8
Average	34.3	33.1	33.3	36.9	32.0	36.1	33.5	31.0	33.4

#### Table 1.8 Female celibacy rate by governorate and age (percentages)

#### **1.6.** Residents according to place of registration and place of residence

A number of Lebanese do not actually reside in their registered place of residence (or place of birth). Table 1.9 presents the distribution of Lebanese residents according to their governorate of registration and governorate of residence. For example, of those registered in Beirut, 58.4 per cent of them resided outside Beirut. About 40 per cent of the populations registered in Nabatieh and Baalbek-Hermel were resident in another governorate. It is interesting to note that 95 per cent of people registered in Mount Lebanon remained in their governorate, which also attracted people from other governorates.

<b>a b c</b>		Governorate of residence										
Governorate of registration	Beirut	Mount Lebanon	North Lebanon	Akkar	Bekaa	Baalbek- Hermel	South Lebanon	Nabatieh	Lebanon			
Beirut	41.6	50.9	(0.6)		(0.3)	(0.2)	3.9	2.5	100			
Mount Lebanon	3	94.9	0.4	(0.0)	(0.3)	0.2	0.7	0.4	100			
North Lebanon	0.8	10.2	87.7	1.1	(0.0)	(0.1)	(0.1)	(0.1)	100			
Akkar	(0.2)	11.3	12.8	75.5	(0.1)	(0.1)	(0.0)	(0.0)	100			
Bekaa	2.1	19.9	(0.4)		76.2	(0.4)	(0.6)	(0.3)	100			
Baalbek- Hermel	1.3	34.1	(0.4)	(0.2)	2.9	60.5	(0.4)	(0.3)	100			
South Lebanon	3.9	19.4	(0.1)		(0.1)	(0.1)	75.2	1.2	100			
Nabatieh	6.8	26.7	(0.2)		(0.4)	(0.0)	6.3	59.6	100			

#### Table 1.9 Place of residence by place of registration (percentages)

Note: Figures in brackets represent an estimation with a standard error above 20 per cent.

Figure 1.10 shows that, overall, 32.4 per cent of Lebanese residents had moved from their original place of registration to their current place of residence. The highest percentage of internal movement was observed for Jezzine, with about 65 per cent of people registered in Jezzine but now resident in another region. The lowest level of inter-district movement was observed for those registered in Matn at 10.7 per cent. Beirut witnessed 58.4 per cent of its registered population moving to other regions, mostly Mount Lebanon.

#### Figure 1.10 Internal movement of Lebanese residents

■ Stayed ■ Moved									
Jezzine	35.1	64.9							
Beirut	41.6	58.4							
- Marjaayoun	46.1	53.9							
Bcharre	47.3	52.7							
Hasbaya	50.1	49.9							
Hermel	52.4	47.6							
Bint Jbeil	53.4	46.6							
Baalbek	60.2	39.8							
Aley	63.5	36.5							
Batroun	66.5	33.5							
Chouf	66.8	33.2							
Lebanon	67.6	32.4							
Jbeil	68.2	31.8							
West Beqaa	69.8	30.2							
Nabatieh	70.0	30.0							
Baabda	70.8	29.2							
Zahleh	73.4	26.6							
Minieh-Danniyeh	73.5	26.5							
Akkar	75.5	24.5							
Tyr	78.1	21.9							
Zgharta	78.9	21.1							
Tripoli	79.2	20.8							
Saida	79.9	20.1							
Rachaya	80.9	19.1							
Koura	83.8	16.2							
Keserwan	86.4	13.6							
Matn	89.3	10.7							
0	% 20% 40%	60% 80% 100%							

#### 1.7. Residential density within the dwelling

The number of persons per room is equal to the number of residents in a household divided by the number of rooms available in their primary dwelling (excluding bathrooms, toilets, storage rooms, etc.). This indicator provides a measure of residential crowding and occupancy. The distribution of households according to the number of individuals per room shows differences across governorates. Overall, 43.5 per cent of households had a density of less than one individual per room. This was the case for almost half of households in Beirut (48.7 per cent) and Mount Lebanon (47.5 per cent). Approximatively 40.8 per cent of households had an average density of between one and two individuals per room were Akkar (26.2 per cent), Baalbek-Hermel (21.9 per cent) and Bekaa (19.1 per cent), while Beirut (15.3 per cent), North Lebanon (15.2 per cent), South Lebanon (15.1 per cent), Mount Lebanon (14.1 per cent), and Nabatieh (13.5 per cent) had the lowest.

Individuals per room	Beirut	Mount Lebanon	North Lebanon	Akkar	Bekaa	Baalbek- Hermel	South Lebanon	Nabatieh	Lebanon
<1	48.7	47.5	44.6	27.4	37.4	30.7	41.0	40.9	43.5
1 to <2	36.0	38.4	40.2	46.5	43.5	47.4	43.9	45.5	40.8
≥2	15.3	14.1	15.2	26.2	19.1	21.9	15.1	13.5	15.7
Total	100	100	100	100	100	100	100	100	100

#### Table 1.10 Persons-per-room by governorate

Floor area per person is defined as the floor area (in square meters) of a housing unit divided by the number of its occupants. This indicator is often used as a measure of housing conditions. For each household, the average floor area per person was calculated by dividing the floor area by the number of people residing in the household. The average was then calculated for each governorate.

The average floor area per person in Lebanon was 46.6 square meters per resident, but more than half of all households (55.3 per cent) had less than 40 m<sup>2</sup> per resident, as the average was skewed by a smaller number of large homes. The distribution of households according to the average area per individual differed among governorates. Residents in Nabatieh had the highest average floor space (52.9 m<sup>2</sup> per resident), while those living in Baalbek-Hermel recorded the lowest (37.6 m<sup>2</sup> per resident). Households with less than 20 m<sup>2</sup> per individual comprised 24.3 per cent of households in Beirut, but only 10.5 per cent in Nabatieh. The share of households with 60 m<sup>2</sup> or more per resident represented 25.3 per cent, with the highest in Nabatieh (30.8 per cent) and the lowest in Baalbek-Hermel (16.6 per cent).

		Average floor					
Governorate	0 to <20	20 to <30	30 to <40	40 to <60	60 or more	Total	area per person (m²)
Beirut	24.3	17	14.8	17.6	26.2	100	46.4
Mount Lebanon	18.4	19.2	18.0	19.3	25.1	100	46.4
North Lebanon	19.0	19.8	16.1	20.3	24.8	100	47.5
Akkar	23.8	25.1	14.0	17.8	19.4	100	41.3
Bekaa	16.7	20.7	17.4	18.9	26.3	100	46.9
Baalbek-Hermel	23.4	25.2	16.9	17.9	16.6	100	37.6
South Lebanon	14.6	17.9	19.8	20.1	27.7	100	48.1
Nabatieh	10.5	17.8	18.8	22.1	30.8	100	52.9
Lebanon	18.3	19.5	17.5	19.4	25.3	100	46.6

#### Table 1.11 Floor area (m<sup>2</sup>) per person by governorate (percentages)

# 2.1. School enrolment (3-24 years old)

The LFHLCS shows that 71.7 per cent of residents aged between 3 and 24 years were enrolled in an educational institution, with a rate of 74.4 per cent for females and 69.1 per cent for males. School enrolment rates for age groups 5–9 and 10–14 in Lebanon, for both boys and girls, were high. However, overall rates of enrolment at both levels have witnessed a noticeable drop since 2004. The enrolment rate for the age group 5–9 years dropped from 98.6 per cent in 2004 to 92.7 per cent in 2018–19, and for the age group 10–14 years, from 95.2 per cent in 2004 to 92.4 per cent in 2018–19. This decline was possibly due to a higher number of non-Lebanese out-of-school children.

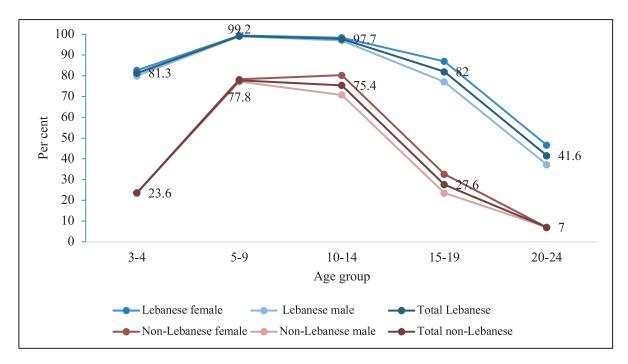
Age group	Female	Male	Total
3–4	61.7	61.2	61.4
5–9	92.9	92.4	92.7
10–14	94.1	90.7	92.4
15–19	77.1	65.9	71.4
20–24	38.8	31.5	34.9
Lebanon	74.4	69.1	71.7

#### Table 2.1 School enrolment rate by age group and sex

## School enrolment rates and nationality

School enrolment rates in 2018–19 differed between Lebanese (79.2 per cent) and non-Lebanese (48.2 per cent) students aged 3–24 years. Among Lebanese residents enrolment levels were 99.2 per cent and 97.7 per cent for age groups 5–9 and 10–14, but only 77.8 per cent and 75.4 per cent for non-Lebanese, respectively.

The gap was deeper in secondary education (ages 15–19), reaching 82 per cent for Lebanese residents but just 27.6 per cent for non-Lebanese residents. It is worth noting that enrolment rates for girls were slightly higher than those for boys.



## Figure 2.1 School enrolment rate by nationality, age group and sex

# School enrolment rates by region and nationality

Among Lebanese residents, overall school enrolment rates were highest in Beirut (80.8 per cent) and Mount Lebanon (82.0 per cent), and lowest in Akkar (75.8 per cent), Bekaa (76.3 per cent) and Baalbek-Hermel (76.5 per cent), mostly because enrolment dropped substantially after 15 years of age.

Looking at the totals, which include citizens and non-citizens (table 2.2), it would appear that, for example, Beirut had the lowest school enrolment among governorates (64.9 per cent), while Baalbek-Hermel (74.8 per cent) and Akkar (74.6 per cent) had the highest. However, the reason for these differences is that the enrolment rates of non-Lebanese residents in Beirut were much lower (41.9 per cent) than Baalbek-Hermel (60.8 per cent) or Akkar (61.3 per cent).

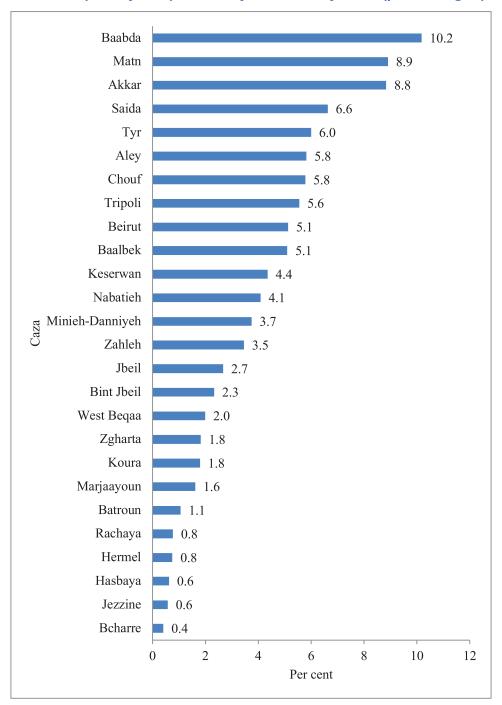
Nationality	Age group	Beirut	Mount Lebanon	North Lebanon	Akkar	Bekaa	Baalbek- Hermel	South Lebanon	Nabatieh	Total
	3–4	83.3	83.4	77.1	83.2	73.2	70.9	84.6	85.7	81.3
	5–9	99.0	99.2	99.2	99.3	99.4	99.1	99.4	99.0	99.2
	10–14	97.7	98.0	96.6	98.1	96.9	98.4	97.6	98.0	97.7
Lebanese	15–19	89.4	87.5	77.1	72.8	81.3	75.7	80.4	82.0	82.0
	20–24	46.0	49.3	41.1	25.9	34.6	33.8	38.3	37.1	41.6
	Total	80.8	82.0	77.4	75.8	76.3	76.5	78.8	79.2	79.2
	3–4	18.7	20.5	31.4	24.0	22.5	22.3	33.6	21.9	23.6
	5–9	72.4	77.2	78.5	84.5	84.0	88.0	80.3	67.2	77.8
Non-	10–14	72.1	73.3	79.6	89.8	81.3	89.1	78.5	59.9	75.4
Lebanese	15–19	20.6	19.6	26.5	44.9	32.3	46.3	49.4	14.3	27.6
	20–24	8.3	3.8	7.9	12.6	7.9	9.0	16.0	4.2	7.0
	Total	41.9	43.6	52.1	61.3	54.3	60.8	58.4	40.6	48.2

### Table 2.2 School enrolment rates by nationality, governorate and age

	3–4	46.7	55.9	65.0	78.8	57.6	64.1	65.6	67.4	61.4
	5–9	86.5	91.2	94.4	97.8	94.3	97.6	92.0	91.4	92.7
	10–14	87.2	91.5	93.5	97.2	92.7	97.3	91.8	90.1	92.4
Totals	15–19	66.9	71.7	69.8	70.9	72.0	72.8	72.4	72.6	71.4
	20–24	32.4	38.7	37.1	25.0	29.2	31.9	33.4	32.7	34.9
	Total	64.9	70.9	72.9	74.6	70.7	74.8	72.6	71.8	71.7

At the caza level, large differences were observable, with the highest share of currently enrolled students in Baabda (10.2 per cent), followed by Matn (8.9 per cent) and Akkar (8.8 per cent). The lowest shares were found in Bcharre (0.4 per cent), Jezzine (0.6 per cent), and Hasbaya (0.6 per cent), Hermel and Rachaya (0.8 per cent).

## Figure 2.2 Students (3–24 years) currently enrolled by caza (percentages)



# 2.2. School enrolment and age-grade delay rates

#### School enrolment

The raw enrolment rate<sup>5</sup> shows the level of participation within a specific level of education, and indicates the capacity of the education system to enrol students of a particular age group. A value approaching or exceeding 100 per cent indicates that the country is, in principle, able to accommodate all of its school-age population.

The net enrolment rate<sup>6</sup> shows the extent of coverage within a certain level of education for residents belonging to the official age group of this level. A high value indicates a high coverage.

Both raw and net school enrolment rates decreased with level. For example, the raw enrolment rate at the elementary level was 98.9 per cent while it was 76.8 per cent at the secondary level. The net enrolment rate at elementary level was 87.2 per cent, but decreased to 54.9 per cent at the secondary level.

There were high discrepancies in education levels among Lebanese and non-Lebanese residents, especially in the raw and net enrolment rates at the intermediate and secondary levels. For example, at the intermediate and secondary levels, net enrolment rates of non-Lebanese reached 28.7 per cent and 15.0 per cent, respectively, while for Lebanese the rates were 78.5 per cent and 64.9 per cent.

For Lebanese students there was no significant difference between females and males in terms of enrolment, in contrast with non-Lebanese, where the raw and net enrolment rates for females were much higher at the intermediate and secondary levels.

1		Lebanese			Non-Lebanese			Total		
Level	Female	Male	Total	Female	Male	Total	Female	Male	Total	
Elementary	101.3	103.3	102.3	91.7	89.0	90.3	98.5	99.2	98.9	
Intermediate	110.3	102.6	106.3	55.6	38.0	46.3	98.8	88.4	93.4	
Secondary	93.2	87.6	90.4	26.9	18.8	22.5	80.8	72.9	76.8	

#### Table 2.3 Raw school enrolment rate

## Table 2.4 Net enrolment rate

Level		Lebanese			Non-Lebanese			Total		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	
Elementary	92.6	92.3	92.4	75.9	73.1	74.4	87.7	86.7	87.2	
Intermediate	81.5	75.6	78.5	33.8	24.2	28.7	71.5	64.3	67.8	
Secondary	68.2	61.5	64.9	17.1	13.2	15.0	58.7	51.2	54.9	

<sup>5</sup> The raw enrolment rate for elementary level students = (total number of students at the elementary level of school  $\div$  total number of registered students aged 6 to 100 × (11. For intermediate levels, residents aged between 12 and 14 years are accounted for in the following equations and for secondary level, 15 to 17 years old.

<sup>6</sup> Net enrolment rate for elementary level students = (total number of students registered at the elementary level aged 6 to  $11 \div$  total number of students aged 6 to  $100 \times (11)$ .

## Age-grade delay

Age-grade delay<sup>7</sup> is a measure of the compatibility between age and education level, or class level. Such delays can be due to class repetition or delayed school entry.

Age-grade delay was, in general, higher for boys than girls, but it also increased with education level, and there was a great difference between Lebanese and non-Lebanese resident students. Age-grade delay figures by education level and by class for non-Lebanese were much higher than for Lebanese students.

Level	Lebanese			No	Non-Lebanese			Total		
Levei	Female	Male	Total	Female	Male	Total	Female	Male	Total	
Elementary	6.3	8.6	7.5	15.6	16.2	15.9	8.9	10.6	9.8	
Intermediate	20.8	21.6	21.2	34.3	32.6	33.5	22.4	22.6	22.5	
Secondary	22.2	26.0	24.0	31.2	24.8	28.3	22.8	25.9	24.3	

# Table 2.5 Age-grade delay by education level (percentages)

#### Table 2.6 Age-grade delay by class level (percentages)

Level		Lebanese			Non-Lebanese			Total		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	
Elementary	24.3	27.7	26.1	57.1	61.9	59.5	33.2	36.6	35.0	
Intermediate	34.8	39.1	37.0	58.9	57.6	58.3	37.7	40.9	39.3	
Secondary	40.3	44.9	42.5	47.4	49.8	48.5	40.7	45.2	42.9	

# 2.3. Educational attainment and illiteracy rates

## **Educational attainment**

Table 2.7 shows the highest level of education attained by residents aged 3 years and above at the time of the survey. For example, for 25.7 per cent of respondents their highest attainment was an elementary education level and 21.4 per cent had attained a university-level education or above – slightly higher for women (22.1 per cent) than men (20.6 per cent). However, illiteracy was higher among females (8.7 per cent) than males (4.4 per cent). See table 2.10 for further details on illiteracy rates.

<sup>&</sup>lt;sup>7</sup> Age-grade delay percentage at the elementary education level = (total number of students aged 12 years and above who are registered at the elementary level  $\div$  total number of students at the elementary level) × 100. Age-grade delay percentage by class at the elementary level = (total number of students registered in elementary-level classes who are above the supposed age of each relevant elementary class  $\div$  total number of students at the elementary level) × 100.

Table 2.7 Highest level of education	ation by sex. ages 3 ve	ears and above (	(percentages)
		and and abort of	por contagoo,

Level of education	Female	Male	Total
Illiterate	8.7	4.4	6.6
Not enrolled yet	1.6	1.8	1.7
Pre-school/read and write	7.5	6.6	7.1
Elementary	23.4	28.3	25.7
Intermediate	20.6	22.5	21.5
Secondary	15.6	15.3	15.5
University and above	22.1	20.6	21.4
Undefined education level	0.4	0.5	0.4
Total	100	100	100

The survey shows an inverse relationship between the level of education and age group: illiteracy increased and university attainment decreased with age. For example, 33.5 per cent of illiterate residents were 70 years old and over. In contrast, 2.0 per cent were between 5 and 9 years old, while 20.1 per cent of those with a university degree were between 20 and 24 years old and only 4.0 per cent were 70 years old or over.

# Table 2.8 Education level attained by age group (percentages)

				Attai	ned educatio	n level			
Age group	Illiterate	Not enrolled yet	Pre- school/ read and write	Elementary	Intermediary	Secondary	University and above	Undefined education level	Total
3–4		77.4	30.4					(1.8)	3.5
5–9	2.0	22.6	24.3	25.0				17.9	8.8
10–14	2.4	(0.0)	(0.3)	16.2	17.1	1.1		15.1	8.3
15–19	3.4		1.4	4.2	9.3	24.3	7.1	15.3	8.8
20–24	5.7		6.0	4.1	8.8	9.1	20.1	(12.0)	9.5
25–29	5.9		3.7	4.4	7.9	8.2	15.6	(8.2)	8.1
30–34	5.5		3.1	4.7	7.1	6.7	12.0	(5.0)	7.0
35–39	4.9		2.0	5.1	7.6	6.3	9.6	(4.1)	6.5
40–44	3.9		1.7	4.8	8.0	7.0	6.6	(3.5)	5.9
45–49	4.7		2.0	4.7	7.4	8.2	6.2	(1.8)	5.9
50–54	6.7		2.8	5.6	7.3	8.5	6.3	(2.9)	6.3
55–59	6.6		3.3	5.1	6.2	6.6	5.1	(7.4)	5.5
60–64	7.1		3.6	4.4	4.7	5.1	4.4	(1.3)	4.6
65–69	7.5		2.9	3.5	3.7	3.7	2.8	(1.3)	3.6
70 +	33.5		12.4	8.0	5.0	5.2	4.0	(2.4)	7.9
Total	100	100	100	100	100	100	100	100	100

Note: Figures in brackets represent an estimation with a standard error above 20 per cent.

At the governorate level, higher educational attainment levels were observed in Beirut and Mount Lebanon compared with other governorates. For example, 29.4 per cent and 25.4 per cent of residents in Beirut and in Mount Lebanon, respectively, reached university level education. In Akkar and Baalbek-Hermel the figures were just 11.5 per cent and 15.1 per cent, respectively. Some 9.1 per cent of residents in Akkar and Nabatieh were illiterate, compared with 5.5 per cent in Mount Lebanon.

Table 2.9 Education level attained by governorate, ages 3 years and above	
(percentages)	

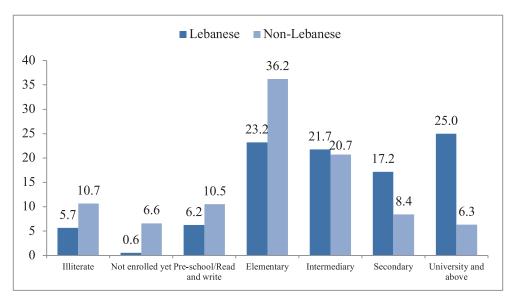
Attained education level	Beirut	Mount Lebanon	North Lebanon	Akkar	Bekaa	Baalbek- Hermel	South Lebanon	Nabatieh	Lebanon
Illiterate	6.4	5.5	6.1	9.1	7.9	8.0	7.0	9.1	6.6
Not enrolled yet	2.0	1.9	1.5	1.2	1.7	1.5	1.8	1.6	1.7
Pre-school/ read and write	6.3	6.8	7.0	8.9	5.7	6.5	8.1	7.6	7.1
Elementary	22.7	22.4	30.3	30.8	29.5	28.2	27.3	27.3	25.7
Intermediary	17.7	21.1	20.5	24.5	23.8	24.3	21.9	22.9	21.5
Secondary	15.4	16.4	15.0	13.7	14.8	16.1	14.1	15.3	15.5
University and above	29.4	25.4	19.2	11.5	16.0	15.1	19.2	15.6	21.4
Undefined education level	(0.2)	0.5	(0.4)	(0.2)	(0.6)	(0.2)	0.6	(0.5)	0.4
Total	100	100	100	100	100	100	100	100	100

Note: Figures in brackets represent an estimation with a standard error above 20 per cent.

Overall, Lebanese residents attained higher education levels than non-Lebanese residents. It was estimated, for example, that 17.2 per cent and 25.0 per cent of Lebanese residents had reached secondary and university levels, respectively, compared with only 8.4 per cent and 6.3 per cent for non-Lebanese.

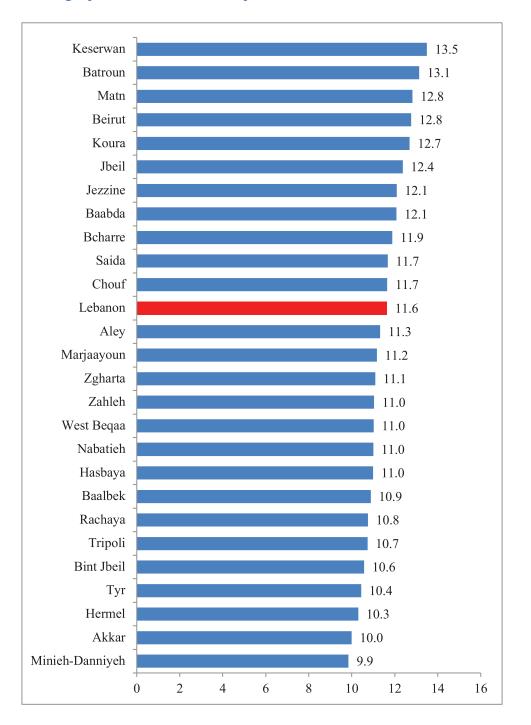
The percentage of illiterate non-Lebanese (10.7 per cent) was almost double that of Lebanese (5.7 per cent). Also, the level of late enrolment of children was found to be much higher among non-Lebanese (6.6 per cent) compared to Lebanese (0.6 per cent).

#### Figure 2.3 Education level by nationality, ages 3 years and above (percentages)



Note: Figures exclude non-standard curricula and special curricula for disabled.

Residents of Lebanon spent an average of 11.6 years in schooling. Differences were observed between cazas (figure 2.4), from the lowest in Minieh-Danniyeh (9.9 years) to the highest in Keserwan (13.5 years).



# Figure 2.4 Average years of education by caza

Note: Figures exclude non-standard curricula and special curricula for disabled.

In terms of nationality, figure 2.5 shows that Lebanese residents received an average of 12.1 years of schooling, with the highest average in Beirut and Keserwan (13.7 years) and the lowest in Akkar and Minieh-Danniyeh (10.0 years). Among non-Lebanese residents, the average number of years of schooling was 9.4 years, with the highest in Keserwan (10.5 years) and the lowest in Bcharre (7.3 years).

# Figure 2.5 Average years of education by caza and nationality

	Lebanese	Non-Lebanese	
Lebanon	12.1	9.4	
Beirut	13.7	1	0.0
Keserwan	13.7	1	0.5
Batroun	13.5	9.	5
Matn	13.4	1(	).2
Koura	13.1	9.1	
Baabda	12.8	9.3	
Jbeil	12.7	8.6	
Jezzine	12.6	8.8	
Chouf	12.4	8.8	
Saida	12.1	10.3	
Bcharre	12.1	7.3	
Aley	12.0	9.3	
West Beqaa	11.5	9.0	
Zgharta	11.5	8.5	
Zahleh	11.5	9.1	
Marjaayoun	11.4	8.7	
Nabatieh	11.4	8.9	
Hasbaya	11.3	7.9	
Baalbek	11.0	9.1	
Tripoli	11.0	9.2	
Tyr	10.9	8.4	
Rachaya	10.9	7.8	
Bint Jbeil	10.9	7.8	
Hermel	10.4	8.1	
Akkar	10.0	9.3	
/linieh-Danniyeh	10.0	8.8	
0	5 10	15	20
	Ave	rage years of sch	ooling

Note: Figures exclude non-standard curricula and special curricula for disabled.

#### **Illiteracy rates**

Nationally, the illiteracy rate among residents aged 10 years and above was 7.4 per cent (6.3 per cent for Lebanese compared with 12.5 per cent among non-Lebanese). In general, illiteracy rates were higher in older people – above the national average after the age of 55 – and reached 42.4 per cent after the age of 85.

Differences between Lebanese and non-Lebanese residents were large at all age groups, even at young ages, but also between sexes. Among Lebanese residents, the gender gap in illiteracy increased after the age of 50, where female illiteracy rates surpassed those of men, reaching more than double in some cases.

Among non-Lebanese residents, female illiteracy rates were larger than male illiteracy rates at all ages, except for the age group 10–14. An even larger gap was observed after the age of 50, with a rate of 80.4 per cent for women over 85 years of age.

# Table 2.10 Illiteracy rate by age group, nationality and sex

_	Lebanese			Non-Lebanese			Total		
Age group	Female	Male	Total	Female	Male	Total	Female	Male	Total
10–14	0.4	0.4	0.4	5.7	7.6	6.6	1.7	2.1	1.9
15–19	0.7	0.9	0.8	11.0	7.7	9.4	2.9	2.3	2.6
20–24	0.8	1.0	0.9	15.7	5.7	12.4	5.9	1.9	4.0
25–29	1.0	1.7	1.3	17.4	5.6	13.3	6.8	2.5	4.8
30–34	1.7	2.3	2.0	16.5	10.3	13.3	5.6	4.9	5.3
35–39	2.9	3.0	2.9	15.6	9.7	12.4	5.4	4.7	5.1
40–44	3.0	3.4	3.1	15.7	7.2	10.8	4.7	4.2	4.5
45–49	4.3	4.6	4.4	16.5	10.5	12.9	5.2	5.4	5.3
50–54	7.3	4.7	6.1	25.9	9.3	16.8	8.7	5.1	7.0
55–59	8.8	4.7	7.0	32.2	13.6	22.2	10.2	5.4	8.1
60–64	14.1	4.5	9.6	35.4	9.5	21.4	15.1	4.8	10.2
65–69	19.7	6.6	13.5	22.4	15.5	19.7	19.8	7.0	13.9
70–74	25.8	9.1	18.2	47.4	(19.1)	(31.5)	26.6	9.6	18.7
75–79	40.0	15.1	27.5	37.8	(13.4)	(22.9)	(39.9)	15.0	27.3
80–84	47.1	20.7	35.6	65.4	(30.7)	(49.9)	(47.6)	21.0	36.0
85 years +	52.7	29.9	41.8	80.4	26.8	58.0	53.8	29.8	42.4
Share of total residents	8.3	4.2	6.3	16.1	8.5	12.5	9.7	4.9	7.4

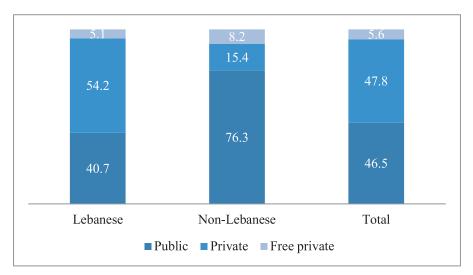
Note: Figures in brackets represent an estimation with a standard error above 20 per cent.

# 2.4. Type of educational institutions

Students (aged 3–24 years) who were currently enrolled were almost equally divided between public (46.5 per cent) and private (47.8 per cent) educational institutions in Lebanon, and a further 5.6 per cent were enrolled in free private schooling.

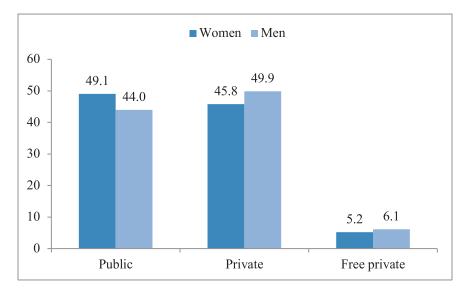
The dissimilarity between Lebanese and non-Lebanese students was very clear. More than half of the Lebanese students were enrolled in private educational institutions (54.2 per cent), while the majority of non-Lebanese resident students were enrolled in public institutions.

Figure 2.6 Enrolment by type of educational institution and nationality, ages 3-24 years (percentages)

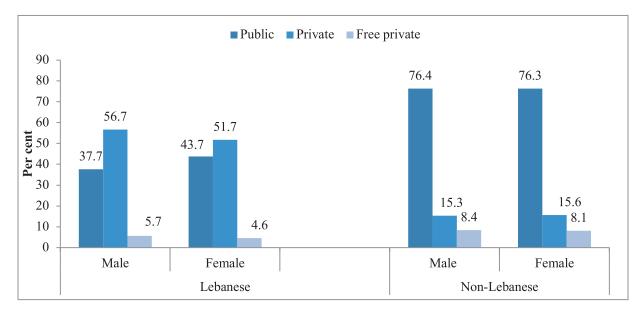


Note: Figures exclude non-standard curricula and special curricula for disabled.

# Figure 2.7 Enrolment by type of educational institution and sex, ages 3–24 years (percentages)



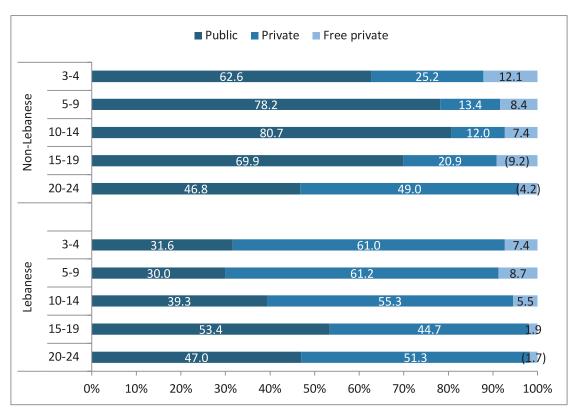
Small differences were seen between men and women in the type of educational institution they enrolled in. Generally, 49.1 per cent of women were enrolled in public institutions and 45.8 per cent in private, while it was the inverse for men, as 44 per cent were enrolled in public institutions while 49.9 per cent were enrolled in private institutions.



# Figure 2.8 Enrolment by type of educational institution, sex and nationality (percentages)

While enrolment differences in type of institution were seen by sex, the differences were greater between Lebanese and non-Lebanese students. Among Lebanese, males were more likely to enrol in private institutions, whereas among non-Lebanese, both sexes were much more likely to enrol in public, rather than private, institutions.

# Figure 2.9 Enrolment by type of educational institution, age group and nationality (percentages)



#### Note: Figures in brackets represent an estimation with a standard error above 20 per cent.

Among Lebanese resident students, schooling was mostly in the private sector up to the age of 14 years, and then, for age groups relevant for secondary and university studies, the trend changes.

There were 53.4 per cent enrolled in public institutions at ages 15–19 years, and 47 per cent enrolled in a public university for ages 20–24 years.

Among non-Lebanese, the pattern was different at all age groups except for ages 20–24, where 46.8 per cent were attending public institutions and 49 per cent private institutions.

Mount Lebanon Keserwan	34.3 21.7	60.9 72.4	4
Jbeil			
	24.6	64.6	10.8
Matn Baabda	28.6	66.9	4
	37.3	58.8	3
Aley	39.6	55.2	5
Chouf	46.4	50.5	-
Beirut	38.2	57.2	4
Baalbek-Hermel	41.4	49.8	8.8
Baalbek	37.9	52.4	9.6
Hermel	64.9	32.1	
Bekaa	48.2	40.7	11.0
Zahleh	43.2	45.2	11.6
West Beqaa	52.9	33.7	13.4
Rachaya	58.7	38.9	
North Lebanon	53.1	38.6	8.
Batroun	28.5	69.1	
Koura	35.4	58.5	6
Bcharre	42.3	48.0	9.7
Zgharta	49.4	44.7	6
Tripoli	58.6	31.0	10.5
Minieh-Danniyeh	63.6	27.6	8.9
South Lebanon	57.1	39.4	
Jezzine	42.2	56.8	
Saida	54.0	41.1	4
Tyr	62.0	35.7	
Nabatieh	57.8	39.9	
Marjaayoun	51.7	46.5	
Nabatieh	56.2	41.6	
Hasbaya	61.7	38.3	
Bint Jbeil	63.8	32.7	
Akkar	68.2	25.8	6

# Figure 2.10 Enrolment rate by region and type of educational institution (percentages)

At the governorate level, 68.2 per cent of students in Akkar, 57.8 per cent of students in Nabatieh and 57.1 per cent in South Lebanon were enrolled in a public educational institution. However, in the caza of Jezzine 56.8 per cent of students were enrolled in private institutions.

In contrast, 60.9 per cent of students in Mount Lebanon, 57.2 per cent in Beirut and 49.8 per cent in Baalbek-Hermel were enrolled in a private educational institution. Within the governorate of Baalbek-Hermel, 64.9 per cent of students residing in the caza of Hermel were enrolled in a public institution.

Regarding the North Lebanon and Bekaa governorates, almost half of students were enrolled in public institutions, though there was disparity at the caza level. For example, 69.1 per cent of students in Batroun were enrolled in private institutions while 63.6 per cent of students in Minieh-Danniyeh were in public institutions.

# 2.5. Out of school and university

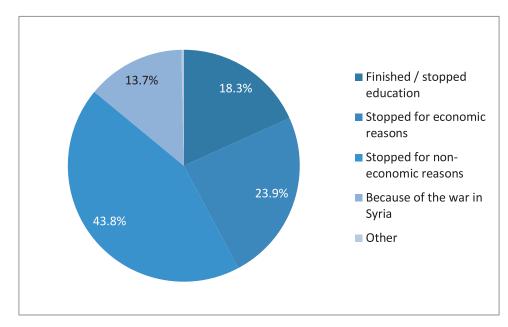
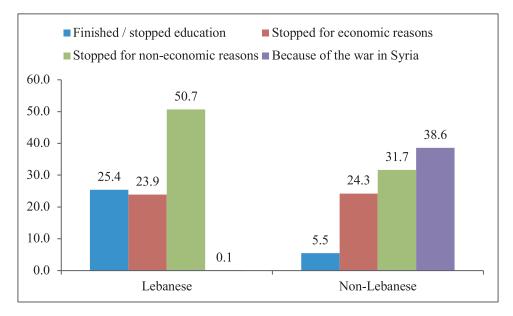


Figure 2.11 Reasons for non-enrolment, ages 3–24 (percentages)

Note: Figures in brackets represent an estimation with a standard error above 20 per cent.

About 43.8 per cent of persons aged 3 to 24 years were not enrolled in any education in 2018–19, mainly because they stopped because of non-economic reasons, such as getting married, learning difficulties, starting a job, etc., while about 24 per cent were unable to participate for economic reasons, and were not able to pay school tuition fees. In addition, 18.3 per cent declared they had either finished or completely stopped education, and 13.7 per cent were forced to stop because of the war in Syria, a reason that not only applied to Syrians but also other nationalities, including a small fraction of Lebanese who lived in Syria before the war.





While 50.7 per cent of Lebanese aged 3 to 24 years had stopped education for non-economic reasons, 23.9 per cent had stopped because of economic reasons. The situation was different among non-Lebanese, where 38.6 per cent were mainly not enrolled because of the war in Syria (see figure 2.12).

# 3.1. Main labour force and labour underutilization indicators

The main results of the LFHLCS are shown in the table below. Among the estimated 3,677,100 people 15 years old and over living in residential dwellings in Lebanon in 2018–19, about 1,794,000 people were in the labour force, either employed (1,590,400) or unemployed (203,600). The remaining 1,883,100 people were outside the labour force. The most common reasons for being outside the labour force were attending school or undergoing unpaid training, taking care of family responsibilities, in old age or retirement.

The labour force participation rate is the percentage of the working-age population engaged in the labour force. In 2019–19 it was 48.8 per cent, indicating that almost half of the working-age population were either working for pay or profit, or seeking employment. The male labour force participation rate was 70.4 per cent, significantly higher than the female rate of 29.3 per cent. The youth labour force participation rate (15 to 24 years old), was 39.1 per cent, considerably lower than the rate for adults (25 years old and above) at 51.7 per cent.

The employment-to-population ratio, i.e. the employed percentage of the working-age population, is often used as an indicator of the performance of the national economy in providing employment and currently stands at 43.3 per cent. Similar to the labour force participation rate, the employment-to-population ratio was higher among men (63.4 per cent) than women (25.1 per cent), and lower among youth (30.0 per cent) than adults (47.2 per cent).

	Total	Male	Female	Youth (15–24 years)	Adults (25+ years)
Population 15+ years	3 677 100	1 743 700	1 933 400	846 000	2 831 100
Labour force	1 794 000	1 227 700	566 300	331 500	1 462 500
- Employed	1 590 400	1 105 300	485 100	254 100	1 336 300
- Unemployed	203 600	122 400	81 200	77 400	126 200
Outside labour force	1 883 100	515 900	1 367 100	514 500	1 368 600
Labour underutilization	302 000	173 500	128 400	104 200	198 100
- Time-related underemployed	31 500	22 300	9 200	5 500	26 100
- Unemployed	203 600	122 400	81 200	77 400	126 200
- Potential labour force	66 900	28 800	38 000	21 300	45 800
Labour force participation rate	48.8%	70.4%	29.3%	<b>39.1</b> %	51.7%
Employment-to-population ratio	43.3%	63.4%	25.1%	30.0%	47.2%
LU1: Unemployment rate	11.4%	10.0%	14.3%	23.4%	8.6%
LU2: Combined rate of unemployment, time-related underemployment	13.1%	11.8%	16.0%	25.0%	10.4%
LU3: Combined rate of unemployment and potential labour force	14.5%	12.0%	19.7%	28.0%	11.4%
LU4: Composite measure of labour underutilization	16.2%	13.8%	21.3%	29.5%	13.1%

#### Table 3.1 Main labour force and labour underutilization indicators

Note: Due to rounding, numbers presented may not add up precisely to the totals. See Chapter 7 on methodology for definitions related to these concepts. The survey results further indicate that the unemployment rate, i.e. the percentage of the labour force that is unemployed, stood at 11.4 per cent. As expected, the female unemployment rate (14.3 per cent) was significantly higher than the male rate (10.0 per cent) while the youth rate (23.3 per cent) was more than twice that of the adult rate (8.6 per cent).

In addition to unemployment, the unmet needs for employment were reflected in the extent of timerelated underemployment and the potential labour force, including people who wanted and were available for employment, but who were not seeking employment during the reference period, as well as people who were seeking employment during the reference period but were not available for work at the time.<sup>8</sup> The LFHLCS 2018–19 results show that relatively few people were in timerelated underemployment (31,500) or in the potential labour force (66,900). Given that time-related underemployment and the potential labour force are, in a sense, on a continuum along the two sides of unemployment, these results suggest that the borderline between unemployment and its two labour underutilization neighbours are sharp in Lebanon, with most of the unmet needs of employment reflected in the centre as unemployment, and relatively few in the tail of the labour underutilization distribution in the form of time-related underemployment or the potential labour force.<sup>9</sup>

Consequently, the combined rate of unemployment and time-related underemployment (LU2=13.1 per cent) and the combined rate of unemployment and potential labour force (LU3=14.5 per cent) were not considerably higher than the general unemployment rate (LU1=11.4 per cent). The composite measure of labour underutilization covering all three components of labour underutilization was (LU4=16.2 per cent). Like unemployment, labour underutilization affected female workers more than male workers, and youth more than adults.

#### Labour force and unemployment trends

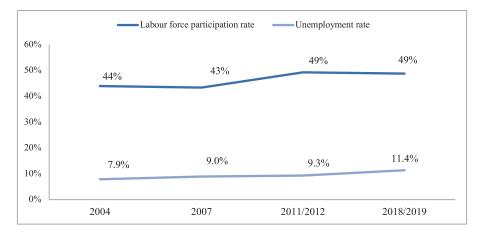
Figure 3.1 shows the trends of the labour force participation rate and the unemployment rate over time. The data were based on the corresponding surveys of household conditions conducted by CAS in 2004 and 2007, and the Household Budget Survey 2011–2012. The data show that the labour force participation rate increased by about 0.7 percentage points per year from 2004 to 2011–12, and then remained essentially flat at about 49 per cent during the period from 2011–12 to 2018–19. It is important to note that, by contrast, during the entire period the female labour force participation rate (not shown here) has increased steadily and faster, from 20.4 per cent in 2004 to 29.3 per cent in 2018–19, corresponding to an annual increase of about 1 per cent.

The bottom part of figure 3.1 shows the trend in the unemployment rate. As expected, we can see that the unemployment rate rose over time, from about 7.9 per cent in 2004 to 9.0 per cent in 2007, then 9.3 per cent in 2011–12, and then rising again to reach the highest level of 11.4 per cent in 2018, while the labour force participation rate increased from 44 per cent in 2007 to 49 per cent in 2011–12, and stayed at the same level in 2018–19.

<sup>&</sup>lt;sup>8</sup> ILO Resolution concerning statistics of work, employment and labour underutilization, Nineteenth International Conference of Labour Statisticians (19<sup>th</sup> ICLS), Geneva, 2013.

<sup>&</sup>lt;sup>9</sup> Another interpretation of these results is that survey respondents tended to lump together the different labour underutilization statuses and regarded a job with a few hours of work as "not in employment" and a job search undertaken a few months back as a recent job search and, therefore, "unemployment". The first type of response error is often called "omission", and the second is referred to as "telescoping", i.e. bringing the timing of an event towards the present.

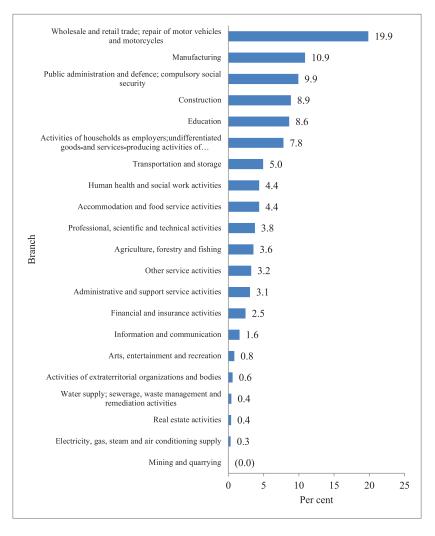
## Figure 3.1 Labour force and unemployment trends, 2004–2019 (percentages)



## Employment by branch of economic activity

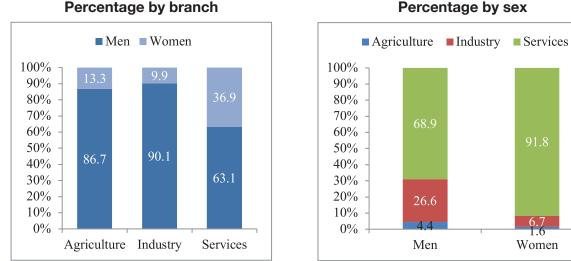
About 75.9 per cent of jobs in Lebanon were found in services, 20.5 per cent in industry and 3.6 per cent in agriculture. The largest branch (19.9 per cent) of employment was in wholesale and retail trade (including repair of motor vehicles), followed by manufacturing (10.9 per cent), and public administration and defence (9.9 per cent).

#### Figure 3.2 Employment by branch of economic activity (percentages)



Note: Figures in brackets represent an estimation with a standard error above 20 per cent.

## Figure 3.3 Employment by branch of economic activity and sex





Women

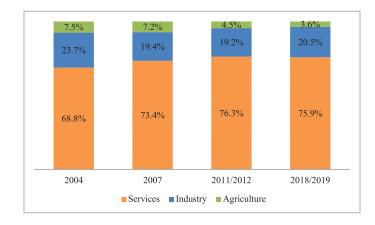
Note: Figures exclude non-responses.

The shares of women and men (per cent by branch) were different according to the broad branches of economic activity in Lebanon. For example, 90.1 per cent of industry workers were men but only 9.9 per cent were women. The situation was different in services, where the share of women was 36.9 per cent.

Looking at it from another perspective (percentage by sex), 91.8 per cent of working women were employed in services, 6.7 per cent in industry and less than 2 per cent in agriculture. Similarly, most men (68.9 per cent) were found in services, but 26.6 per cent worked in industry and 4.4 per cent in agriculture.

#### Changing structure of employment

A comparison of the LFHLCS 2018–19 results with those of the past surveys in 2004, 2007 and 2011–12 shows a remarkable stability of the structure of employment in terms of broad branches of economic activity, as shown in figure 3.4. The share of services in total employment remains dominant at about 76 per cent, industry at about 21 per cent and agriculture around 4 per cent. Within this overall picture one can, nevertheless, detect small but significant changes, notably a decrease in the share of agriculture employment (from about 7.5 per cent in 2004 to about 3.6 per cent in 2018–19), and also a slight decrease in the share of industrial employment (from about 23.7 per cent in 2004 to 20.5 per cent in 2018–19) in favour of an overall increase of the share of employment in services (from about 68.8 per cent in 2004 to about 75.9 per cent in 2018–19).



#### Figure 3.4 Structure of employment, 2004–2019 (percentages)

The changing structure of employment matched almost exactly the changing structure of production in the overall economy. According to the national accounts of Lebanon, the services and banking sectors accounted for 81.2 per cent of the country's gross domestic product at basic prices (GDP),<sup>10</sup> the industrial sector 15.7 per cent and agriculture accounted for the remaining 3.1 per cent in 2017. Trends between 2007 and 2017 show a decrease in agriculture (-2.2 per cent) and industry (-2.0 per cent) in favour of the services sector.

### **Employment and production growth rates**

A closer examination of the change in employment and production levels (as opposed to structure) showed an opposite direction in terms of changing growth rates of employment and production during the periods 2004 to 2012 and 2012 to 2018–19. Employment is a form of work, and work, by its definition, is intended to produce goods and services in the sense of the system of national accounts. Therefore, everything else remaining equal, an increase in employment should, in principle, be reflected by an increase in production. And, vice versa, an increase in production should, in principle, be accompanied by an increase in employment. The cause and effect of the relationship between employment and production may be realized, in practice, with a certain time lag, and the relationship may be affected by other factors, such as labour productivity.

Table 3.2 attempts to abstract some of these impediments and reflect the basic relationship between employment and production over time in terms of *change in direction* rather than the more demanding specification of *direction* and *amount*. The employment data were based on the three household surveys (2004, 2012, and 2018–19), and the corresponding production data were based on the System of National Accounts (SNA), and gross domestic product (GDP) 2004, 2012, and 2017, at constant prices referenced to 2010. According to these data, employment grew at an average annual rate of 2.3 per cent between 2004 and 2012 (line 1, column 1), and a much higher rate of 3.1 per cent per year between 2012 and 2018–19 (line 2, column 1). The growth rate of employment, therefore, accelerated during the two time-periods (line 3, column 1).

		Employment (surveys)	Production (SNA)
		Average annual g	rowth rate
1	r <sub>2004–2012</sub>	2.3 per cent	5.6 per cent
2	r <sub>2012-2018</sub> (r <sub>2012-2017)</sub>	3.1 per cent	1.4 per cent
	Ch	ange of average ani	nual growth rate
3	r <sub>2012-2018</sub> - r <sub>2004-2012</sub> (r <sub>2012-2017</sub> - r <sub>2004-2012</sub> )	0.8 per cent	-4.2 per cent
		Direction of c	hange
4	Total	+	-
5	Agriculture	-	+
6	Industry	+	-
7	Services	+	-

# Table 3.2 Employment and production growth in Lebanon, 2004, 2012 and 2018

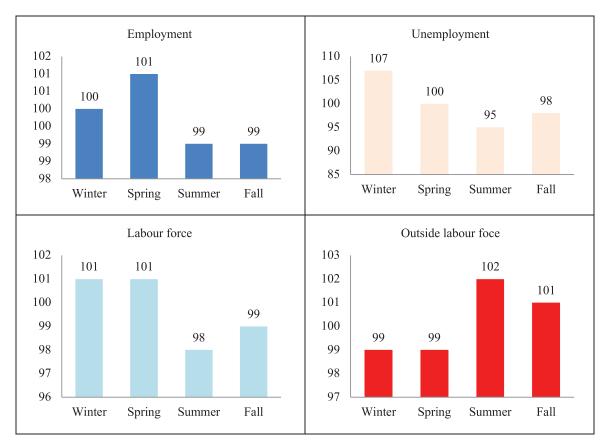
Source: Employment data are from the Living Conditions Survey 2004, 2012, and 2018–19, CAS. Production data are from the System of National Accounts, GDP 2004, 2012 and 2017, at constant prices referenced to 2010, CAS.

<sup>&</sup>lt;sup>10</sup> National Accounts Department, Central Administration of Statistics, Lebanon.

By contrast, the data show that production at constant prices grew on average at an annual rate of 5.6 per cent between 2004 and 2012 (line 1, column 2), and at a much lower rate of 1.4 per cent per year between 2012 and 2017 (line 2, column 2). Production, therefore, experienced a diminishing growth rate or deceleration during the period between 2012 and 2018–19, when compared with the earlier period from 2004 to 2012 (line 3, column 2). This pattern of accelerating employment growth during decelerating growth of production is marked with "+" and "-" in the employment and production columns, respectively (line 4, columns 1 and 2). The pattern is also observed for the broad branches of economic activity (lines 6 and 7 of columns 1 and 2), except for agriculture, which experienced the reverse pattern – acceleration of production growth but deceleration of employment growth (line 5, columns 1 and 2).

#### **Seasonal variations**

The sample design of the LFHLCS 2018–19 was based on four quarterly rounds with data collection spread over each quarter.<sup>11</sup> The quarterly results, therefore, permit the study of the seasonal variations of the main labour force indicators. Figure 3.5 shows the seasonal factors of the labour force aggregates, calculated on the basis of quarterly estimates obtained from the LFHLCS 2018–19. The seasonal factor of a given aggregate is the ratio of the quarterly estimate of the aggregate to the annual estimate of the same aggregate, multiplied by 100. Thus, for example, the top left panel of figure 3.5 indicates that the employment is generally higher than the annual average in winter (seasonal factor = 100) and spring (seasonal factor = 101), and slightly lower than the annual average in summer and fall (seasonal factor = 99).



## Figure 3.5 Seasonality of main labour force aggregates (percentages)

Note: Seasonal factor = 100 × the quarterly estimate/annual estimate.

<sup>&</sup>lt;sup>11</sup> Quarters referred to in this section are yearly quarters, but do not necessarily correspond to the survey calendar, as the first quarter (Q1) of the survey corresponds to April–June 2018, Q2 corresponds to July–September 2018, Q3 corresponds to October–December 2018 and Q4 corresponds to January–March 2019.

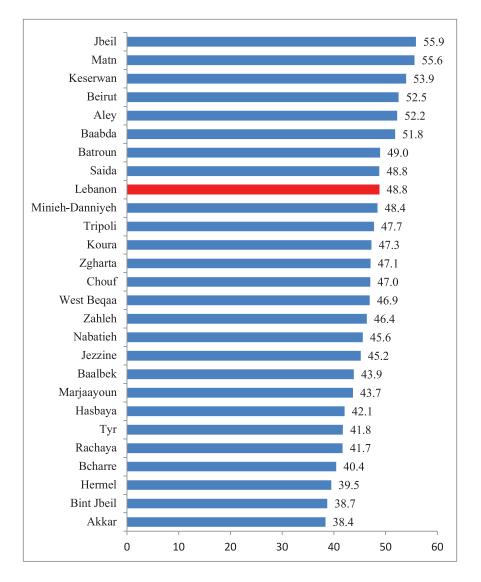
The right top panel shows the seasonal factor for unemployment. According to these results, with everything else held equal, the level of unemployment is highest in the winter (seasonal factor = 107), and lowest in the summer (seasonal factor = 95). In the months of spring and fall, the level of unemployment tends to be close to the annual average (seasonal factors = 100 in spring and 98 in fall). This seasonal pattern of unemployment is similar to those observed in the labour force surveys of many other countries across the world.

The bottom panels of figure 3.5 show the seasonal factors of the labour force and the population outside the labour force. It is instructive to note that the seasonal factors of the labour force are mirror images of the seasonal factors of the population outside the labour force. The seasonal factor of the labour force and the seasonal factor of the population outside the labour force add to 100 for any given season. This reflects the fact the working-age population has no seasonality.

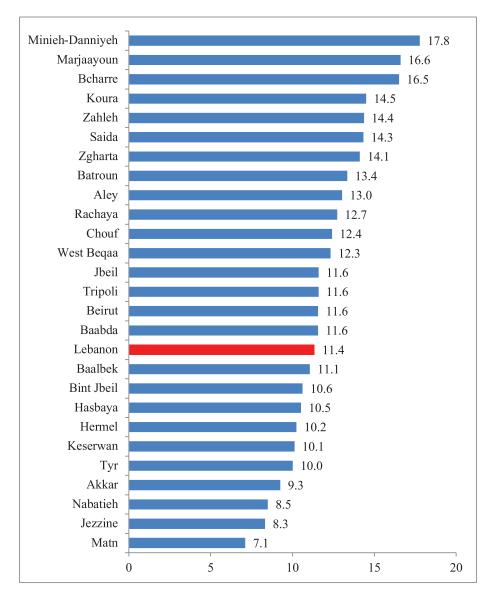
Finally, it should be stated that, to be considered statistically significant, an analysis of seasonality of the labour market should be carried out over a number years. Data from a single year should only be treated as indicative of the phenomenon, and an invitation for further analysis.

## **Regional variations in labour force and unemployment**

Figures 3.6a and 3.6b show the 2018–19 labour force participation rate and the unemployment rate, respectively, for all 26 cazas. In each graphic, the cazas are ordered from the highest to the lowest rates.



# Figure 3.6a Labour force participation rate by caza (percentages)



# Figure 3.6b Unemployment rate by caza (percentages)

Although the accuracy of the estimates at the caza level is impaired by the reduced number of sample observations within each caza, particularly the less populated ones, some general conclusions may be drawn from the survey data. Simply looking at the top and bottom of the graphics, it appears that the geographical spread of the unemployment rate was wider than that of the labour force participation rate, in the sense that the ratio of the highest to the lowest rate was greater for the unemployment rate than it was for the labour force participation rate. This was, in fact, in line with the observation made earlier regarding the relative stability of the labour supply when compared with the more erratic movements of the labour market, as measured by the unemployment rate. For example, Minieh-Danniyeh had the highest rate of unemployment at 17.7 per cent – more than double that of Matn, the caza with the lowest unemployment rate (7.1 per cent). By contrast, the relative difference between Jbeil, the caza with highest labour force participation rate (55.9 per cent) and Akkar, the caza with lowest labour force participation rate (38.4 per cent), was considerably less than two-fold.

Looking more closely at the graphic on unemployment, it can be observed that there were sixteen cazas with unemployment rates higher than the national average (11.4 per cent). Fourteen of them form two main geographical clusters:

- (1) in the north-west of the country (in geographical order: Minieh-Danniyeh, Tripoli, Zgharta, Koura, Bcharre, Batroun and Jbeil); and
- (2) in the centre-south of the country (in geographical order: Beirut, Baabda, Zahleh, Aley, West Bekaa, Chouf, and Rachaya).

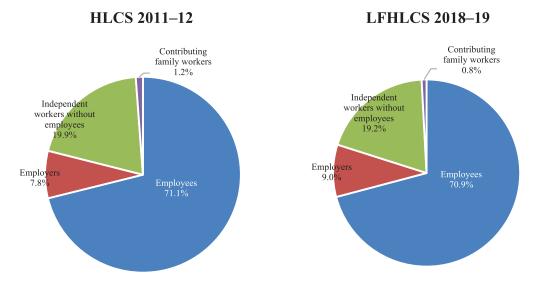
The remaining two cazas with higher-than-average unemployment rates were in the South (Saida and Marjaayoun), inside a cluster that otherwise had lower-than-average unemployment rates. Actually, three geographical clusters of cazas with lower-than-average unemployment rates may be distinguished:

- (1) in the south of the country (Jezzine, Hasbaya, Nabatieh, Tyr and Bent Jbeil);
- (2) in the centre-north of the country (Keserwan and Maten); and
- (3) in the north and north-east of the country (Akkar, Hermel and Baalbek).

# **3.2.** Informality of employment

#### Changing composition of status in employment

Status in employment classifies jobs according to type of authority and type of economic risk. The LFHLCS 2018–19 measured status in employment in terms of correspondence to the following categories of the International Classification of Status in Employment, according to type of authority (ICSE-18A):<sup>12</sup> employers; independent workers without employees; employees; and contributing family workers. In the survey, "employees" were sub-divided into: monthly paid employees; weekly, daily or on the basis of productivity paid employees; and trainees and apprentices. The classification of the employed population by employment status in main job. The results of the LFHLCS 2018–19 (right panel) is shown in comparison with the corresponding results from the HLCS 2011–12 (left panel).



## Figure 3.7 Employment status in main job, 2011–12 and 2018–19 (percentages)

The data show that the bulk of the employed population in 2018–19 were employees, just as in 2012. It is instructive to note that, while the relative positions of other status groups in employment have remained essentially unchanged, the share of employers has increased from 7.8 per cent of total employment in 2012 to 9.0 per cent in 2018–19.

## The informal sector and informal employment

The LFHLCS 2018–19 measured informality of employment in terms of both the characteristics of

<sup>&</sup>lt;sup>12</sup> ILO: Resolution concerning statistics on work relationships, 20th International Conference of Labour Statisticians, Geneva, 19–10 October 2018.

the workplace (informal sector),<sup>13</sup> and the characteristics of the job of the employed person (informal employment).<sup>14</sup> Table 3.3 cross-classifies employment in terms of type of production unit (inside and outside the informal sector) and type of job (informal and formal jobs). The results show that the majority of the employed population hold informal jobs at their main job (54.9 per cent) and more than a third of the employed population were working in the informal sector at their main job (35.2 per cent). It is also instructive to note that more than one-third of the employed population with informal jobs were also working outside the informal sector (314,800/873,800 = 36.0 per cent). This mostly included employees working in private or public formal-sector enterprises, or in public administration without social security coverage by their employers.

# Table 3.3 Main employment by type of production unit and type of job

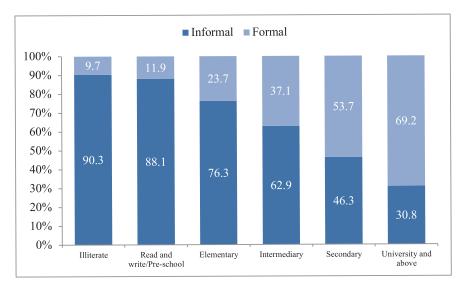
Time of an dustion with	Type of en	nployment	Tatal	0/	
Type of production unit	Informal Formal		Total	%	
Informal sector	559 000	400	559 400	35.2	
Outside the informal sector	314 800	716 200	1 031 000	64.8	
Total	873 800	716 600	1 590 400	100.0	
Percentage	54.9	45.1	100.0	-	

Note: Due to rounding, numbers presented may not add up precisely to the totals.

As comparable data on informal employment are not available from the earlier household surveys, it is difficult to draw conclusions on the recent trend of informal employment in Lebanon. The bulk of informal employment (57.5 per cent), however, was comprised of employees with no social security coverage by their employers.

# Informal employment by level of education

# Figure 3.8 Formal and informal employment by level of education (percentages)



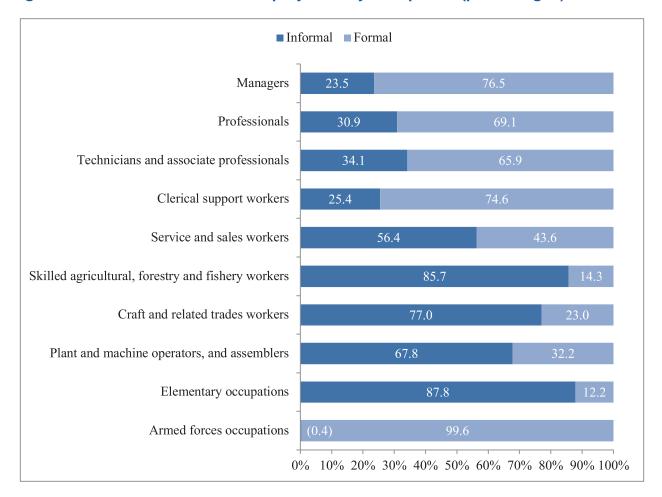
Note: Figures exclude domestic workers.

<sup>&</sup>lt;sup>13</sup> ILO: Resolution on the measurement of employment in the informal sector, Fifteenth International Conference of Labour Statisticians (ICLS), Geneva, 1993.

<sup>&</sup>lt;sup>14</sup> ILO: Guidelines concerning a statistical definition of informal employment, Seventeenth International Conference of Labour Statisticians, Geneva, 2003.

Data show that the percentage of informal employment decreases as the level of education increases, dropping from 90.3 per cent for illiterate people to 30.8 per cent for people holding at least a university degree.

# Informal employment by occupation



# Figure 3.9 Formal and informal employment by occupation (percentages)

Note: Figures in brackets represent an estimation with a standard error above 20 per cent.

Most people working as mangers, professionals, technicians and clerical support positons were holding formal jobs. The inverse was observed for the remaining occupations with the exception of the armed forces, where formality is virtually universal.

# Informal employment in non-agriculture employment

The proportion of informal employment in non-agricultural sectors, by sex, is one of the indicators of the UN Sustainable Development Goals (SDG Indicator 8.3.1). The lower the value of the indicator is for a given country, the closer the country is to the development goal. For Lebanon, the survey results show that the share of non-agricultural employment, which is classified as informal, was 53.7 per cent, slightly lower than the proportion of informal employment in total employment (54.9 per cent in table 3.3). Table 3.4 shows the results by sex.

# Table 3.4 Informal employment (non-agricultural) by sex (percentages)

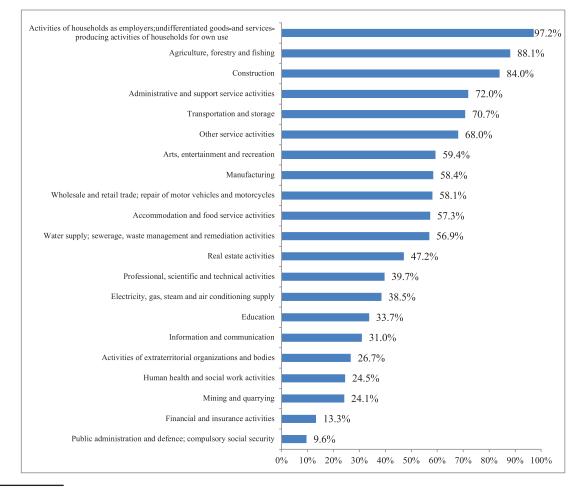
Male	Female	Total
53.3	54.8	53.7

Note: Figures are based on SDG indicator 8.3.1, where the numerator of the proportion refers to the total number of people with informal employment in non-agricultural activities as their main job and the denominator refers to the total number of people employed in non-agricultural activities as their main job.

For Lebanon, the proportion of informal employment in non-agricultural employment (53.7 per cent), was at mid-level among the nine countries for which harmonized data regarding SDG 8.3.1 were reported for the years 2016–2018 in the international database ILOSTAT. There are four countries with higher rates (Paraguay, 65.4 per cent; El Salvador, 63.2 per cent; Columbia, 55.8 per cent; and Costa Rica, 55.5 per cent) and five countries with lower rates (Palestine, 51.1 per cent; Panama, 41.2 per cent; South Africa, 34.6 per cent; Armenia, 24.9 per cent; and Serbia, 16.1 per cent).<sup>15</sup>

Figure 3.10 shows the proportion of informal employment in main job by branch of economic activity, sorted from the largest to the smallest. Activities of households as employers, corresponding mostly to domestic workers, had the largest proportion of informal employment (97 per cent), followed by agriculture, forestry and fishing (88 per cent), and construction (84 per cent). Public administration, defence and compulsory social security (9.6 per cent), and financial and insurance activities (13 per cent) recorded the lowest levels of informal employment, followed by mining and quarrying (24 per cent), and human health and social work activities (25 per cent).

# Figure 3.10 Informal employment at main job by branch of economic activity (percentages)



<sup>15</sup> ILOSTAT. Available at: <u>https://ilostat.ilo.org/</u>.

# 3.3. Working time and income from employment

The data on working time and income from employment of the LFHLCS 2018–19 were analysed in terms of hours usually worked and hours actually worked, multiple jobholding, employed people working short hours and those working long hours, average hourly earnings of employees, and employees with low pay.

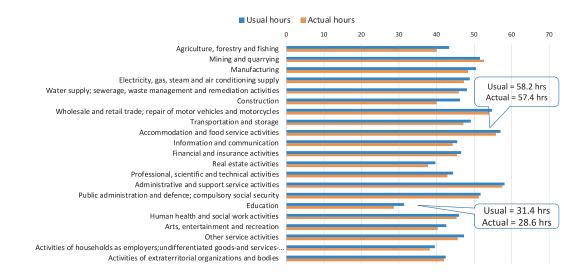
#### Hours usually worked and hours actually worked

Working time (i.e. hours of work) is the time associated with working activities in all forms of work (employment work, own production work, volunteer work and unpaid training work). Statistics on working time are useful in the analysis of both economic and social issues, particularly for the calculation of labour input and labour productivity in relation to the SNA production boundary, and for the measurement of time-related underemployment, wage rates, rates of occupational injuries, and other indicators of decent work. The current international standards on the measurement of working time are the Resolution concerning the measurement of working time adopted by the 18th ICLS in 2008.<sup>16</sup> It recognizes seven concepts of working time, each serving a specific objective. They include hours actually worked and hours usually worked, measured in labour force surveys, as well as hours paid for, normal hours of work, contractual hours of work, overtime hours of work and absence from work hours measured using other sources of data.

According to the results of LFHLCS 2018–19, the employed population, on average, usually worked about 48.5 hours per week at their main job. Because of temporary absences such as vacation or annual leave, own illness or injury, or reduction of economic activity, affecting about 2 per cent of the employed population in any given week, the actual hours of work at their main job was slightly lower, on average about 46.6 hours of work during the reference week. These figures did not include domestic workers for whom hours worked are generally higher. Figure 3.11 shows the average hours usually worked and the average hours actually worked during the reference week by branch of economic activity.

The data show that hours of work were generally higher in services, such as administrative and support service activities (usual hours worked 58.2; actual hours worked 57.4 per week), accommodation and food services activities (usual hours 57.1; actual hours 55.9), and wholesale and retail trade, repair of motor vehicles and motorcycles (usual hours 54.8; actual hours 53.9). By contrast, hours of work were generally lower in education (usual hours 31.4; actual hours 28.6), own-use production work (usual hours 39.5; actual hours 38.2), and real estate activities (usual hours 39.7; actual hours 37.8 per week).

# Figure 3.11 Hours usually worked and hours actually worked by branch of economic activity (per week)

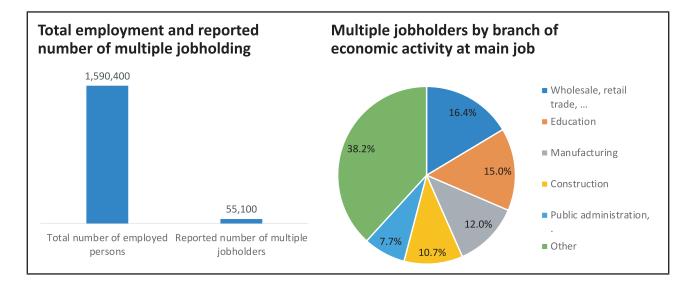


<sup>16</sup> ILO: Resolution concerning the measurement of working time, 18th International Conference of Labour Statisticians, Geneva, 2008.

# **Multiple jobholding**

The survey results in figure 3.12 show that very few people reported multiple jobholding. The estimated number of people with more than one job during the survey reference week was 55,100, representing about 3.5 per cent of total employment. Most of the reported multiple jobholders were people with their main job in wholesale and retail trade, repair of motor vehicles and motor cycles (16.4 per cent), education (15.0 per cent), manufacturing (12.0 per cent), and construction (10.7 per cent). It is instructive to note that the next branch of economic activity in the main job with the highest number of reported multiple jobholders was in public administration and defence, and compulsory social security (7.7 per cent).

#### Figure 3.12 Multiple jobholding



## Short and long hours of work

Because the international definition of employment is expansive and covers all durations of work – even one hour per week – it is important that employment is analysed in conjunction with data on the distribution of hours worked in order to distinguish the various intensities of employment. Table 3.5 shows the distribution of employed people according to hours usually worked per week and hours actually worked during the week at all jobs, for men and women separately. It can be observed that most employed people (57.2 per cent) usually worked between 30 and 59 hours per week, with a modal value of 40–49 hours. The number of people usually working less than 30 hours per week was relatively small (11.0 per cent), whereas the number of people usually working long hours – more than 60 hours per week – was relatively large (29 per cent). A similar result may be observed in terms of actual hours of work.

	Usual ho	ours worked	per week	Actual hours worked during week			
	Total	Male	Female	Total	Male	Female	
Less than 30 hours	11.0	7.9	20.0	15.1	12.3	23.2	
30–39 hours	13.0	10.5	20.3	12.8	10.6	19.1	
40–49 hours	31.9	30.1	37.3	30.3	28.3	36.0	
50–59 hours	15.1	16.4	11.1	14.1	15.3	10.7	
60+ hours	29.0	35.1	11.4	27.7	33.5	11.0	
Non-response	0.02	0.02	0.00	0.02	0.02	0.00	
Total	100	100	100	100	100	100	

## Table 3.5 Hours usually worked and hours actually worked per week by sex (percentages)

Note: Figures exclude domestic workers.

Both in terms of usual hours of work and actual hours of work, relatively more women were working less than 30 hours per week (about 20 to 23 per cent among women and about 8 to 12 per cent among men). To the extent that short hours of work are voluntary or for non-economic reasons, it is not regarded as time-related underemployment. At the other extreme, the survey results show that relatively more men were working long hours – 60 hours or more per week (about 33 to 35 per cent among men compared with about 11 per cent among women). Long hours of work, or excessive hours of work as termed in the framework of Decent Work, are considered a threat to physical and mental health, interfering with the balance between work and family life, reducing productivity and often signalling an inadequate hourly pay.<sup>17</sup>

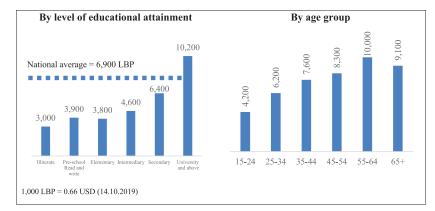
#### Average hourly earnings of employees at main job

The average hourly earnings of employees at their main job was about 6,900 LBP, corresponding to about 1,179,900 LBP on a monthly basis, with a noticeable difference between Lebanese residents, who earned an average of 7,900 LBP per hour and 1,303,400 LBP on a monthly basis, and non-Lebanese residents, who earned 3,100 LBP per hour and 663,400 per month.

The median monthly earnings of employees at their main job was 950,000 LBP (1,118,700 LBP for Lebanese employees and 600,000 for non-Lebanese employees). "Employees" included monthly paid employees and employees paid on weekly or daily basis, or on the basis of productivity, as well as paid trainees and apprentices. Income from paid employment included direct wages and salaries in cash for time worked and work done, remuneration for time not worked, cash bonuses and gratuities, and remuneration in kind and services, profit-related pay and employment-related social security benefits.<sup>18</sup>

Two main elements that determine the level of hourly earnings of a worker are their educational attainment and work experience. The higher the educational attainment of a worker, the higher one would expect their earnings would be. Similarly, the more work experience of the worker, the higher one would expect their earnings would be. The left panel of figure 3.13 shows the average hourly earnings of employees at their main job by level of educational attainment. It clearly shows that average hourly earnings increase with level of educational attainment. The largest increase occurs when passing from secondary to university level of education. Average hourly earnings of employees with secondary education were about 6,400 LBP, while those with a university degree were about 10,300 LBP.

The right panel of figure 3.13 shows the average hourly earnings of employees by age group, a proxy for work experience. It can be observed that average hourly earnings steadily increase with age and peaks at the age group 55–64 years old before dipping to generally lower values. This parabolic pattern of earnings was essentially consistent with the general observation that, after a certain point, productivity decreases with age.



# Figure 3.13 Average hourly earnings (LBP) of employees at main job

<sup>&</sup>lt;sup>17</sup> ILO: Measuring Decent Work, Discussion paper for Tripartite Meeting of Experts on the Measurement of Decent Work, Geneva, September 8–10, 2008.

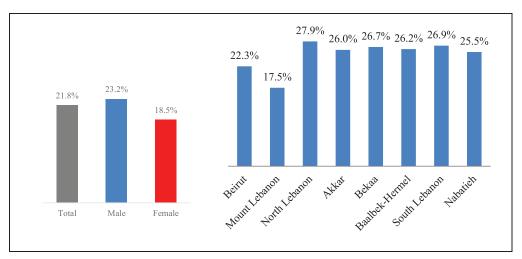
<sup>&</sup>lt;sup>18</sup> ILO: Resolution on the measurement of employment-related income, 16th International Conference of Labour Statisticians, Geneva, 1998.

### Low-paid workers

The distribution of earnings is an indicator of income inequality and, for many people, the most important element of employment is their pay. The proportion of employees on low pay is one of the indicators of the ILO framework on Decent Work.<sup>19</sup> It is defined as the percentage of employees whose hourly earnings in all jobs are less than two-thirds of the median hourly earnings of all employees. Formulating the indicator in terms of a percentage of the median makes it independent of national currencies and facilitates international comparison. The choice of two-thirds has the virtue of simplicity and wide applicability, including where there is no adopted minimum wage legislation, or where the statutory minimum wage is far below the prevailing market wage.

Based on data from the LFHLCS 2018–19, the median monthly earnings of employees at their main job was calculated to be 950,000 LBP, which makes the two-thirds threshold 633,300 LBP. Thus, employees with monthly earnings of less than 633,300 LBP were considered low-paid workers.

Figure 3.14 shows the percentage of low-paid workers by sex and governorate. According to these results (left panel), some 21.8 per cent of all employees were low-paid workers. There were relatively less low-paid workers among women (18.5 per cent) than among men (23.2 per cent). For Lebanese employees, 13.6 per cent were considered low-paid (12.8 per cent of men and 15.2 per cent of women). The right panel shows that the percentage of low-paid workers was different across governorates, varying between 17.5 per cent in Mount Lebanon and 27.9 per cent in North Lebanon.



# Figure 3.14 Low-paid workers by sex and governorate (percentages)

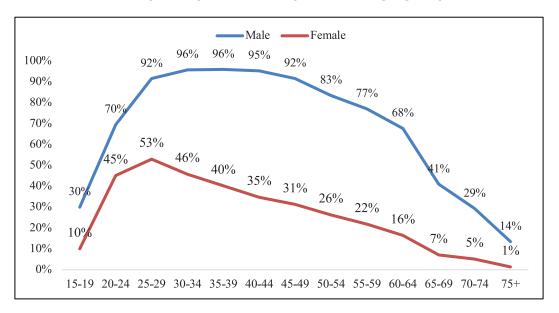
# 3.4. Gender and the labour market

The relationship between gender and the labour market is examined in this section by analysing the results of the LFHLCS 2018–19 on the labour participation of women and men, the relative number of women in managerial positions, and occupational segregation and the gender wage gap.

## Labour force participation rates of women and men

As observed in virtually all other countries, the labour force participation rates of women and men by age group in the LFHLCS 2018–19 have an inverted-U shape, more pronounced for men than for women. The male curve is above the female curve, reflecting the higher labour force participation rate of men at all age groups. For each sex, the curve increases at low ages as young people leave school and enter the labour market, reaches a peak in the age group 35–39 years old for men at 96 per cent and in the age group 25–29 years old for women at almost 53 per cent, before decreasing slowly for women, and more sharply for men, after 60–64 years of age, as people retire and leave the labour market.

<sup>&</sup>lt;sup>19</sup> ILO: Decent Work indicators: Guidelines for producers and users of statistical and legal framework indicators, ILO manual (second version), December 2013, pp. 76–78.



# Figure 3.15 Labour force participation rate by sex and age group (percentages)

## Women in managerial positions

Women are gradually increasing their numbers as managers. A recent global report prepared by the ILO states that women own and manage over 30 per cent of all businesses, ranging from self-employed (or own-account workers), micro and small enterprises to medium-sized and large companies.<sup>20</sup>Occupations in senior and middle management correspond to the International Standard Classification of Occupations (ISCO) sub-major occupational categories 11 (chief executives, senior officials and legislators), 12 (administrative and commercial managers), and 13 (production and specialized services managers). The results of LFHLCS 2018–19 show that about 14,900 women were in managerial positions as their main job, representing about 28.9 per cent of the total number of managerial positions (table 3.6).

# Table 3.6 Share of employment in managerial positions at main job by sex(percentages)

	Share of managerial positions
Women	28.9 per cent
Men	71.1 per cent

As women make up 30.5 per cent of total employment, the relative number of managerial positions occupied by women was almost proportional to women's share of total employment. The result seems to suggest that the difficulty experienced by women in many parts of the world in "breaking the glass ceiling" is not necessarily the experience in Lebanon.

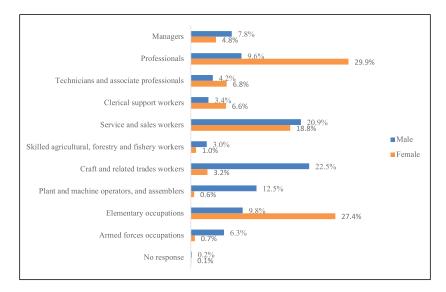
## **Occupational segregation**

Occupation refers to the kind of work performed (or previously performed, or sought after if the person is unemployed), irrespective of the branch of economic activity or the status in employment of the person. Figure 3.16 presents the distribution of employment by occupational category (main job) for men and women.

The bulk of employment for each sex was concentrated in three occupational categories, although the predominant occupational categories of men differed from those of women, except for service

<sup>20</sup> ILO: Women in business and management gaining momentum, Abridged version of the Global Report, Geneva, 2015.

and sales occupations, which were among the top three occupational categories of both men and women. For men, the occupational category with the highest frequency was craft and related trade workers (22.5 per cent), followed by service and sales workers (20.9 per cent), and plant and machine operators (12.5 per cent). In the case of women, the occupational category with the highest frequency remained professionals (29.9 per cent), followed by elementary occupations (27.4 per cent) and service and sales workers (18.8 per cent).



## Figure 3.16 Occupational structure of employment at main job by sex (percentages)

The degree of occupational segregation between men and women measured at the one-digit level of occupational classification was calculated by the segregation index as follows:

Segregation index = 
$$\frac{1}{2} \times \frac{|7.8 - 4.8| + |9.6 - 29.9| + \dots + |6.3 - 0.7|}{100} = 43.8 \text{ per cent}$$

This result may be interpreted to mean that if about 43.8 per cent of occupations changed from male to female, or from female to male, perfect gender parity would be achieved in the occupational structure of the country. A more accurate calculation based on four-digit occupational data gives the value of 65.6 per cent for the segregation index.<sup>21</sup>

#### Gender wage gap

The gender wage gap measures the extent to which the wages of men differ from those of women. The gender wage gap is defined here as the difference between the average monthly earnings of male and female employees as a percentage of the average monthly earnings of male employees:

Gender wage gap(per cent) = 
$$100 \times \frac{(E_m - E_w)}{E_m}$$

where Em is the average monthly earnings of men in any population group, and Ew is the corresponding average monthly earnings of women.<sup>22</sup> When the gender wage gap equals zero, it denotes equality of earnings. Positive values reflect the extent to which women's earnings fall short of those received by men, where a value closer to 100 denotes more inequality than a value closer to zero. Negative values reflect the extent to which women's earnings are higher than men (though these are rarely encountered in practice). The gender wage gap is generally calculated for employees, as earnings data are typically available only for employees, or where earnings data for workers of other status types are available. Table 3.7 shows the gender wage gap by level of educational attainment based on data from the survey, and covers employees at their main job, except domestic workers.

<sup>&</sup>lt;sup>21</sup> ILO: Decent Work indicators: Concepts and definitions, ILO Manual (Second version), December 2013, pp. 143–145. <sup>22</sup> ILO: Decent Work indicators: Guidelines for producers and users of statistical and legal framework indicators, ILO manual (second version), December 2013. (Gender pay gap defined in terms of gross average hourly earnings, p. 148).

# Table 3.7 Gender wage gap of employees at main job by level of educational attainment (percentages)

Laura Laf	Lebanon		banon Lebanese				Non Lebanese		
Level of educational attainment *	Men (thousands LBP)	Women (thousands LBP)	Wage gap (%)	Men (thousands LBP)	Women (thousands LBP)	Wage gap (%)	Men (thousands LBP)	Women (thousands LBP)	Wage gap (%)
Total	1 167	1 210	-3.6	1 334	1 248	6.5	670	593	11.6
Elementary	788	611	22.4	912	666	27.0	600	417	30.6
Intermediary	960	733	23.6	1 094	766	30.0	651	492	24.5
Secondary	1 214	1 017	16.3	1 311	1 045	20.3	728	584	19.7
University and above	1 722	1 414	17.9	1 785	1 424	20.2	1 052	953	9.4

\*Except below elementary education.

Note: Calculations are based on monthly earnings data obtained from responses to questions EA26b ("Income or net earnings in cash or in kind from main job last month") and EA27 ("monthly earnings by interval") replaced with the average of the interval calculated on the basis of EA26b.

1,000 LBP = 0.66 USD (10 October 2019)

According to these results, the gender wage gap was, in fact, negative in Lebanon (-3.6 per cent), i.e., women earned, on average, more than their male counterparts at their main job. This was due to the fact that non-Lebanese workers earned substantially less than Lebanese (almost half) and the majority of non-Lebanese employees were men.

When disaggregated by nationality, the monthly gender pay gap for Lebanese employees was 6.5 per cent, indicating that Lebanese men earn, on average, 6.5 per cent more than Lebanese women. The largest pay gap (30 per cent) was found for those with an intermediary level of education. For non-Lebanese employees, the overall monthly gender pay gap was 11.6 per cent, and the largest gap was found for those with only elementary education.

# 3.5. Youth and the labour market

The results of the LFHLCS 2018–19 provide a wealth of information on youth and the labour market. Certain aspects are highlighted below, namely youth unemployment and labour underutilization, long-term youth unemployment, youth not in employment, education or training (NEET), and qualification mismatches in terms of level of education.

## Youth unemployment and labour underutilization

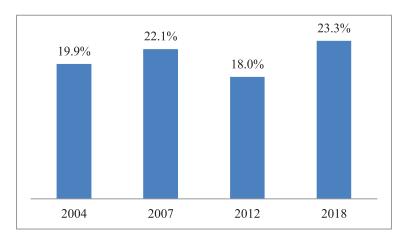
The youth population constitutes a vital part of a country's human capital and defines its potential labour supply. From an economic point of view, the youth population is a factor of production and its aptitude and skill level contributes to the productivity of the national economy. From a social point of view, the youth population is a group of particular concern, often being the most vocal and the most politically engaged group. In virtually all countries, the youth unemployment rate is significantly higher than the general national unemployment rate, as young people tend to have more difficulties entering the labour market for the first time than those moving from one job to another, or those reentering the labour market after a period of withdrawal. Recall that the youth unemployment rate, according to the LFHLCS 2018–19, was more than double the general unemployment rate.

## Table 3.8 Youth unemployment rate compared with total

	Unemployment rate
Youth (15-24 years old)	23.3%
Total working-age population (15+ years old)	11.4%
Ratio	2.1

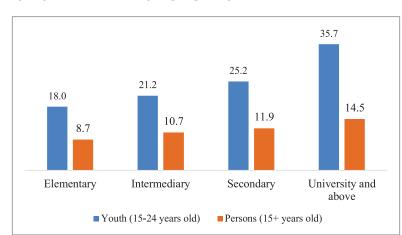
According to the survey results, there were about 77,400 people aged 15–24 years old who were unemployed at any given time in 2018–19. In addition, there were 5,400 young people in time-related underemployment and another 21,100 in the potential labour force, either as unavailable jobseekers or available potential jobseekers. The composite measure of youth labour underutilization was 29.4 per cent, indicating that the employment needs of almost one in three young people were not met by the economy.

According to figure 3.17, the youth unemployment rate in 2018 was the highest in comparison with previous years (2004–2012). It is important to note that the high unemployment rate in 2007 was calculated immediately after the war in 2006, when a large number of youth at that time lost their jobs because of the war. Yet the unemployment rate in 2018–19 remains higher than it was in 2007.



# Figure 3.17 Youth unemployment rate 2004–2018

Figure 3.18 shows that both general and youth unemployment rates rise as level of educational attainment increases. For youth, though, unemployment rates rise more steeply, from 18 per cent for those with elementary education to 35.7 per cent for those with a university-level education.



## Figure 3.18 Unemployment rates by age group and level of education

The pattern suggests that the higher the educational attainment of a young person, the higher their risk of unemployment. There are a number of reasons for this. First, the higher the educational attainment of a person, the higher their reservation wage, where jobseekers prefer to wait for suitable employment rather than accept a job they consider inadequate or the pay too low. Another reason may be a mismatch between the skill requirements of the jobs on offer and the qualifications of young jobseekers.

Note the significance of both scarcity and demand. The general unemployment rate also increases with the level of educational attainment. This is because adults with undergraduate university and higher degrees, though scarce, are relatively less in demand by employers.

#### Long-term youth unemployment

Long-term unemployment is defined by ILO guidelines as seeking employment for a duration of 12 months or more, including the reference period. The duration of job-search is to be measured from when the unemployed person began carrying out activities to seek employment, or from the end of the last job, whichever is the shorter. The long-term unemployment rate, calculated as the ratio of the number of unemployed people with long-term unemployment to the size of the labour force, is considered as a supplementary indicator of labour underutilization. Table 3.9 shows that young people (15–24 years old) had a much higher long-term unemployment rate than the general population (15 years and older).

#### Table 3.9 Long-term unemployment rate by age group

	Long-term unemployment rate
Youth (15–24 years old)	11.4%
Total working-age population (15+ years old)	6.3%

Because the ratio of the long-term unemployment rate to the unemployment rate is equal to the proportion of the number of long-term unemployed among the total number of unemployed people in a given age group, one can deduce that nearly half of unemployed youth were experiencing long-term unemployment (48.9 per cent), slightly less than for all unemployed age groups (including youth) at 55.3 per cent.

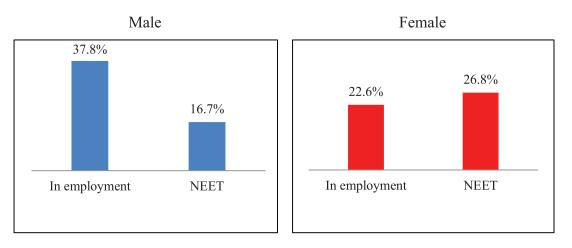
Finally, it should be mentioned that, in practice, what is measured in a labour force survey is the duration of unemployment up until the time of the survey. The actual duration of employment, called the completed spell of unemployment, can be generally longer, as the actual spell of unemployment continues beyond the survey week until either employment is found, or job-search ceases.

## Youth not in employment, nor in education or training (NEET)

Most young people are in the education system or in a training programme. Others are in employment. Still others combine school and employment. But there are also young people who are neither in employment, nor in education or training. The NEET indicator, is a measure of the percentage of youth (15–24 years old) who not in employment, education or training. The rate serves as a broader measure of potential youth labour force entrants than youth unemployment. It includes discouraged jobseekers, as well as those who are outside the labour force because of a disability or, say, engagement in household chores.

Figure 3.19 compares the proportion of employed youth with those who were NEET according to the results of the LFHLCS 2018–19. The total percentage of NEET youth was about 22 per cent.

# Figure 3.19 Youth (15–24 years old) in employment or NEET by sex (percentages)



The data show that the proportion of young men in employment (37.8 per cent) was considerably higher than the corresponding proportion for young women (22.6 per cent). By contrast, the relative number of young men not in employment, nor in education or training was 16.7 per cent, considerably lower than the proportion among young women (26.8 per cent).

The NEET rate remains essentially unchanged in comparison with data from the LCS 2007 (16.0 per cent for young men and 27.3 per cent for young women). Worldwide, 34 per cent of young women and 10 per cent of young men are NEETs. In the Arab states, these percentages stand at 27 per cent and 10 per cent respectively.<sup>23</sup>

# **Qualification mismatches by level of education**

The new international guidelines concerning the measurement of qualifications and skills mismatches of people in employment, endorsed by the 20th ICLS (2018),<sup>24</sup> recognize two main forms of mismatches – qualifications mismatch and skills mismatch:

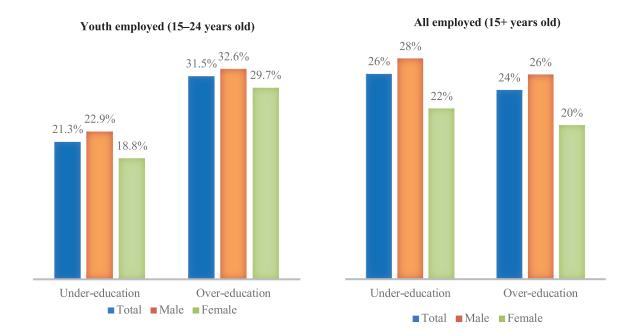
- Qualifications mismatch refers to a situation in which a person in employment, during the reference period, occupied a job whose qualification requirements did not correspond to the level and/or type of qualification they possessed. Qualifications mismatch includes:
  - (a) mismatch by level of education, when the level of education of the person in employment does not correspond to the level of education required to perform their job;
  - (b) mismatch by field of study, when the field of study of the person in employment does not correspond to the field of study required to perform their job.
- Skills mismatch refers to a situation in which the person in employment, during the reference period, occupied a job in which the skills requirements did not correspond to the skills they possess. Skills mismatch may refer to a mismatch of overall skills or to the type of skills. Mismatches by type of skills can include:
  - (a) mismatch of job-specific/technical skills;
  - (b) mismatch of basic skills;
  - (c) mismatch of transferable skills.

The available data from LFHLCS 2018–19 permits the analysis of qualification mismatches by level of education using a statistical approach, one of the methods proposed in the international guidelines. It consists of using the modal level of education of all persons in employment in an

<sup>&</sup>lt;sup>23</sup> ILO: Global employment trends for youth 2017, NEET. Available at: https://www.ilo.org/global/about-theilo/multimedia/maps-and-charts/enhanced/WCMS\_598674/lang--en/index.htm.

<sup>&</sup>lt;sup>24</sup> ILO: Guidelines concerning measurement of qualifications and skills mismatched of persons in employment, 20th International Conference of Labour Statisticians (ICLS), Geneva, 10–19 October 2018.

occupation or occupational group as a "threshold" that defines the boundary between matched and mismatched. In the present context, the thresholds were determined on the basis of the modal levels of education in each of the four-digit occupational codes of employed people in their main job. The results are shown in figure 3.20 for youth (left panel) and for all employed people (right panel), and in each case for men and women separately.



# Figure 3.20 Qualification mismatch by sex and age group (percentages)

The picture that emerges is one of qualification mismatches among young employed people (15–24 years old), as well as all employed people (15+ years old), in the form of over-education and to a lesser degree in the form of under-education. According to these results, the level of education and training of about 31.5 per cent of young employed people was higher than the requirements to perform their jobs. The rate of over-education was higher among young men (32.6 per cent) and lower among young women (29.7 per cent). Qualification mismatches in the form of under-education (i.e., the percentage of young people with level of education and training below that required to perform their jobs) was about 22.9 per cent among young men and slightly lower at 18.8 per cent among young women. The right panel of figure 3.20 shows a similar pattern for the employed population as a whole, including both young people and adults.

# 3.6. International migrant workers

Lebanon has experienced two great waves of in-migration in the last decades. In the early 1970s, many Palestinians were relocated to Lebanon and, more recently, from 2012 onwards, a large number of Syrians threatened by the Syrian civil war took refuge in Lebanon. The results show that the residential working-age population was comprised of about 17 per cent non-Lebanese and 83 per cent Lebanese citizens.

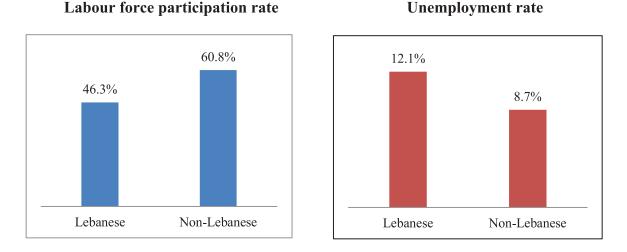
# Labour force participation and unemployment among migrant workers

Figure 3.21 (left panel) shows that the labour force participation rate of the non-Lebanese workingage population (60.8 per cent) was significantly higher than for the Lebanese working-age population (46.3 per cent). This result was line with ILO global estimates on migrant workers in 2017 of 70.0 per cent, 8 percentage points higher than the corresponding figure for non-migrants (61.6 per cent).<sup>25</sup>

<sup>&</sup>lt;sup>25</sup> ILO: Global estimates on international migrant workers. Results and methodology, Second edition, 2017, Labour Migration Branch, Conditions of work and Equality Department and Department of Statistics, Geneva, 2018.

The Lebanon LFHLCS 2018–19 labour force participation rates are closer, though, to those reported for the Arab states (75.4 per cent for migrants and 42.2 per cent for nationals).





The relatively higher labour force participation of migrant workers may be explained by the fact migration, in many cases, occurs for work-related reasons. When it takes place for other reasons, survival in another country requires a source of livelihood, which, for migrants, usually means the need to work. Similarly, one observes in figure 3.21 (right panel) that the unemployment rate for non-Lebanese workers (8.7 per cent) was lower than for Lebanese workers (12.1 per cent).

# **Employment of international migrant workers**

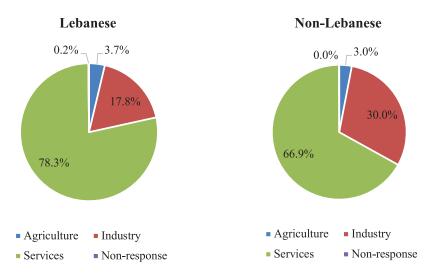
The tendency for higher labour market involvement of non-Lebanese workers may also be observed with respect to the volume of work. The survey results show that non-Lebanese workers in employment tended to work more hours at all jobs than Lebanese workers (table 3.10).

# Table 3.10 Working ≥50 hours at all jobs during the reference week by nationality (percentages)

	Proportion working 50 hours or more at all jobs
Lebanese	39.5%
Non-Lebanese	53.5%

Figure 3.22 compares the structure of Lebanese employment with that of non-Lebanese. While for both populations, services was the dominant broad branch of economic activity, the results of the survey show that the percentage of non-Lebanese engaged in services (66.9 per cent) was lower than the corresponding percentage among Lebanese workers (78.3 per cent). By contrast, the proportion of non-Lebanese workers engaged in industry (30.0 per cent), mostly construction (18.0 per cent), was significantly higher than the corresponding figure (17.8 per cent) for Lebanese workers (construction 6.3 per cent).

# Figure 3.22 Economic sector of main job by nationality (percentages)



A striking difference between Lebanese and non-Lebanese workers may also be observed in terms of the occupational classification of their main jobs. While only 5.4 per cent Lebanese workers were engaged in elementary occupations (e.g. cleaners and helpers, street and related sales workers, etc.), the percentage among non-Lebanese workers was almost ten-fold at 50.2 per cent.

# Table 3.11 Working in elementary occupations at main job by nationality(percentages)

	Working in elementary occupations at main job				
Lebanese	5.4%				
Non-Lebanese	50.2%				

Another striking difference was the highly disproportionate number of non-Lebanese employees with informal jobs, with no social security coverage by employers, no paid sick leave and no paid annual leave.

# Table 3.12 Proportion of employees in informal jobs by nationality (percentages)

	Employees in informal jobs			
Lebanese	27.8%			
Non-Lebanese	91.1%			

# 3.7. Labour market dynamics

The LFHLCS 2018–19 collected data on the place of residence and the labour force characteristics of the working-age population in the same month during the year preceding the date of visit (considered as mid-year 2017).<sup>26</sup> Data included labour force status, status in employment, occupation and branch of economic activity at main job, and main source of livelihood at mid-year 2017. The resulting set of data allowed the analysis of labour migration and labour force dynamics of the working-age population.

<sup>&</sup>lt;sup>26</sup> This is considered as mid-year for ease of analysis and in reference to the average population estimation at 30 June or 1 July 2018. For more details please refer to the chapter on methodology in this report.

However, a word of caution should be made regarding the limitations of survey data obtained from retrospective questions. First, there are memory errors, such as omissions and mistiming of events. There is also the difficulty of maintaining the same definitions of terms when comparing past with present events. For example, the determination of the current labour force status of an individual as employed, unemployed or outside the labour force was based on responses to a sequence of structured questions involving more than ten questions. The determination of the past labour force status was based on a single question: "What was your labour force situation last year?"

## Labour force transitions since mid-year 2017

Table 3.14 (left panel) shows the transition matrix formed by a cross-classification of the labour force status at mid-year 2017 of the working-age population with the current labour force status in 2018–19. The diagonal elements of the transition matrix give the estimates of the number of people whose labour force status did not change between the two reference periods. For example, an estimated 1,419,500 people who were employed at mid-year 2017 were also employed during the survey reference period in 2018–19. Similarly, there were 98,700 people who were unemployed at mid-year 2017 and also unemployed during the survey reference period in 2018–19. Likewise, there were 1,807,700 people outside the labour force at mid-year 2017 and who were also outside the labour force during the survey reference period in 2018–19.

# Table 3.13 Labour force flows, 2018–19 vs 2017–18

		018–19							
		E	U	N	Total				
2017–18	Е	1 419 500	46 700	40 500	1 506 800				
s 2017	U	29 200	98 700	34 900	162 800				
Status 3	N	38 600	58 200	1 807 700	1 904 500				
То	Total 1 487 400		203 600	1 883 100	3 574 100				

Transition matrix

#### Transition probabilities (%)

		Curren								
		Е	U	Ν	Total					
7–18	Е	94.2	3.1	2.7	100					
Status 2017-18	U	17.9	60.6	21.5	100					
Status	N	2.0	3.1	94.9	100					

E = Employed

U = Unemployed

N = Outside the labour force

Note: Figures exclude domestic workers. Due to rounding, numbers presented may not add up precisely to the totals.

The off-diagonal elements of the transition matrix show the estimates of the number people whose reported labour force status changed between the two reference periods. In particular, according to the first row of the table, there were 46,700 employed people at mid-year 2017 who lost their job and became unemployed at the survey period in 2018–19, and another 40,500 employed people at mid-year 2017 who lost their job or retired, and were thus out of the labour force at the survey period 2018–19. By contrast, according to the first column of the table, there were 29,200 unemployed people at mid-year 2017 who found employment and were employed at the survey period in 2018–19, and another 38,600 people outside the labour force at mid-year 2017 who also found employment and were employed at the time of the survey in 2018–19. These results may be summarized in terms of job gains, job losses, and net job creation as follows:

Job gains	= 29,200 + 38,600	= 67,800
Job losses	= 46,700 + 40,500	= 87,200
Net job creation (loss)	= 67,800 - 87,200	= (19,400)

To the extent that off-diagonal elements are generally overestimated in labour force flow data, one may assume that the negative estimate of net job creation calculated above is perhaps exaggerated and the negative value is in fact lower.

The transition matrices also provide a basis for calculating transition rates of changes in labour force status. Transition rates describe the probabilities of moving from one labour force status to another in a dynamic labour market. The right panel of table 3.13 shows the transition rates corresponding to the transition matrix in the left panel of the table. The transition rates are calculated row by row, with each cell giving the probability of moving from one labour force status to another. The total probabilities for each row, therefore, equal 100 per cent.

The cells read diagonally represent the probabilities of remaining in the same labour force category in 2018–19 as it was at mid-year 2017. Thus, 94.2 per cent of employed people at mid-year 2017 were reported to be still employed a year later, and 60.6 per cent of unemployed people at mid-year 2017 were still unemployed a year later. The third diagonal element indicates that 94.9 per cent of the working-age population outside the labour force in mid-year 2017 remained outside the labour force a year later. Thus, the diagonal elements, in a sense, indicate the degree of stability of the labour market.

The off-diagonal elements of the probability matrix may be interpreted as employment opportunities and unemployment risks. Thus, the off-diagonal cell in the first column of the matrix shows that the employment opportunity of an unemployment person at mid-year 2017 to have found employment a year later was 17.9 per cent. The off-diagonal cell of the second column of the table gives the unemployment risk of an employed person at mid-year 2017 losing their job and becoming unemployed a year later at 3.1 per cent. The off-diagonal elements of the third column give the probabilities of leaving the labour force for those who were employed or unemployed at mid-year 2017 (2.7 per cent and 21.5 per cent respectively). The transition probabilities may be used to obtain, under steady conditions, estimates of a range of other labour market indicators, such as the expected duration of completed spells of unemployment of a newly unemployed person, or the expected duration of employment of a newly employed person, school-to-work transition rates, etc.<sup>27</sup>

# Unemployment before and after moving to Lebanon

According to the results shown in figure 3.23 (left panel), about 29,000 people (aged 15 years and over) were living outside Lebanon at mid-year 2017, representing less than 1 per cent of the total working-age population residing in the country in 2018–19. Of them, 12,300 were employed, 3,500 were unemployed and 13,100 were outside the labour force at mid-year 2017. An estimated 1,500 people who were unemployed outside Lebanon at mid-year 2017 found employment when moving in Lebanon in 2018–19. By contrast, 3,700 people who were employed in mid-year 2017 lost their job and became unemployed when moving in Lebanon. Overall, the rate of unemployment of people who were living outside Lebanon in mid-year 2017 was already high at 22.2 per cent, but increased to 39.1 per cent among those moving in Lebanon in 2018–19 (right panel).

In parallel, the employment-to-population ratio of people living outside Lebanon in mid-year 2017, decreased from 42.4 per cent before moving to Lebanon in mid-year 2017 to 34.1 per cent after moving to Lebanon in 2018–19. Given the limited scope of the underlying data, these results should be analysed more carefully, particularly the exclusion of domestic workers, many of whom were likely living outside Lebanon in mid-year 2017.

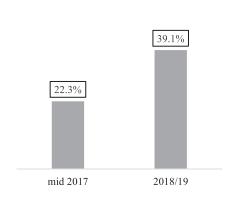
<sup>&</sup>lt;sup>27</sup> ILO: Youth labour market analysis: A training package on youth labour market information, Geneva, 2013.

# Figure 3.23 Labour force status before and after moving to Lebanon

## **Transition matrix**

		Curren	t status 20	018–19	
		E	U	Ν	Total
nid-	Е	6 200	3 700	2 400	12 300
Status in mid- 2017	U	1 500	1 600	400	3 500
Statu	N	2 200	1 000	9 900	13 100
Tot	al	9 900	6 400	12 700	29 000

#### Unemployment rate by year



#### E = Employed

U = Unemployed

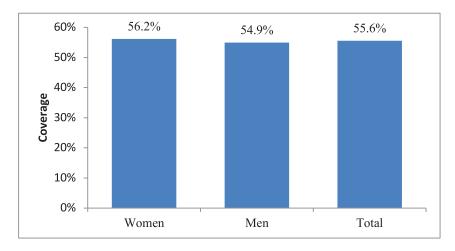
N = Outside the labour force

Note: Figures exclude domestic workers. Estimation below 2,500 has a standard error above 20 per cent. Due to rounding, numbers presented may not add up precisely to the totals.

# 4.1. Health insurance coverage

Only 55.6 per cent of the population residing in Lebanon were covered by at least one type of health insurance.<sup>28</sup> This proportion has increased somewhat since 2004, when it was 44.9 per cent, mostly because of health programmes for refugees and displaced persons, which cover non-Lebanese residents, as shown in the figures below. Yet, an estimated 44.4 per cent of Lebanon's residents were still without any health coverage as of 2018–19.

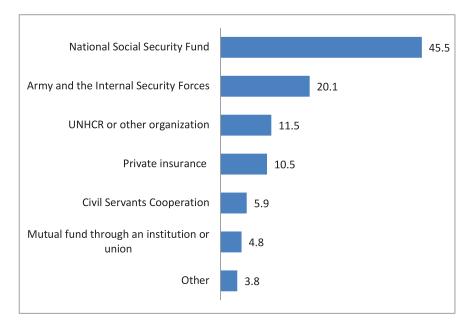
A small gender difference was found, with slightly higher health coverage for women (56.2 per cent) than for men (54.9 per cent). Some 33.6 per cent of elderly (65 years and above) were not benefiting from any type of coverage.



# Figure 4.1 Coverage by sex (percentages)

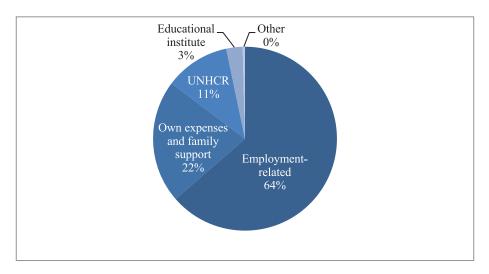
#### Type of health coverage





<sup>28</sup> Figures reported in this chapter exclude domestic workers.

The main source of health insurance coverage in Lebanon was the National Social Security Fund (NSSF), which covered 45.5 per cent of beneficiaries. Private sources of health insurance coverage provided protection for 15.3 per cent of beneficiaries either through private insurance (10.5 per cent) or mutual funds (4.8 per cent). The Civil Servants Cooperative (CSC) provided coverage for 5.9 per cent of beneficiaries.



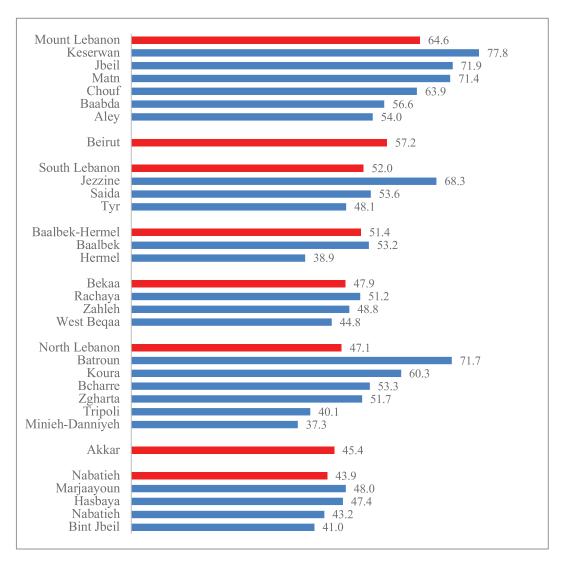
# Figure 4.3 Source of health coverage (percentages)

Current or previous employers provided the main source of health insurance coverage for 64 per cent of beneficiaries in Lebanon. Yet, 22 per cent of beneficiaries were either paying for their own personal health coverage or were a beneficiary of a relative's scheme. The UNHCR provided about 11 per cent of total coverage, and schools and universities were the source of coverage for 3 per cent of beneficiaries, who were enrolled in education.

# Health insurance coverage by region

Disparities between governorates, as well as between cazas within their respective governorates, were observed. Only two out of eight governorates had a proportion of residents covered above the national level (55.6 per cent), namely Mount Lebanon (64.6 per cent) and Beirut (57.2 per cent). The least coverage was found in Nabatieh (43.9 per cent).

At the caza level, Minieh-Danniyeh not only had the lowest coverage within the governorate of North Lebanon, but also nationally, with only 37.3 per cent of its residents covered. Figure 4.4 displays health insurance coverage by governorate and caza. In some cases, regional disparities within the same governorate were as large as 34 per cent, as in the comparison of Batroun (71.7 per cent) with Minieh-Danniyeh (37.3 per cent). Large differences were also found in Mount Lebanon, where, for example, 77.8 per cent of residents were covered in Keserwan, but only 54 per cent were covered in Aley. Smaller differences between cazas were found in the governorates of Bekaa and Nabatieh, yet below the national level in all cases. Minieh-Danniyeh and Hermel were at the lowest end in terms of health coverage; Keserwan and Jbeil recorded the highest.

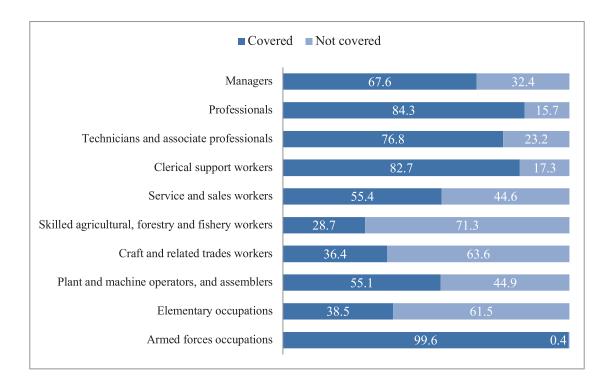


# Figure 4.4 Health insurance coverage by governorate and caza (percentages)

# Health insurance coverage and occupation

With the exception of the armed forces, where coverage is almost universal, health insurance coverage varies between major groups of the ISCO-08. Data show that the majority of people working as "skilled agricultural, forestry and fishery", "craft and related trade workers" and "elementary occupations" were not covered by any health insurance scheme in Lebanon. On the other hand, people working as "professionals", "technicians and associate professionals" and "clerical support workers" were mostly covered.

# Figure 4.5 Health coverage and occupation (percentages)



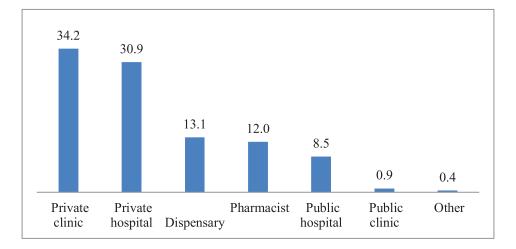
# 4.2. Chronic health condition and illness

An estimated 24.1 per cent of Lebanon's residents had a chronic health condition requiring regular spending on medical services or medications. The needs of 19.2 per cent of these people for regular medications or medical services went unmet: 6.8 per cent for medicines, 4.7 per cent for medical services and 7.7 per cent for medications and services. The majority of those who did not get medicines (91.9 per cent) or medical services (95.1 per cent) declared that they could not afford them.

Some 83.1 per cent of residents were neither sick nor injured during the three months prior to data collection (i.e. 16.9 per cent experienced sickness or injury during the same period). Of those sick or injured, 91.3 per cent visited the doctor or received medical help, while the remaining 8.7 per cent did not receive any help. Out of those sick and not receiving any assistance, 30.6 per cent declared they could not afford to pay for medical help.

The results show that around two-thirds of residents who received medical help went to a private clinic (34.2 per cent) or private hospital (30.9 per cent). Less than 10 per cent were treated in a public hospital or clinic, and it is notable that 12.0 per cent received medical help from a pharmacist, and 13.1 per cent from a dispensary.

## Figure 4.6 Residents who received medical help by place of medical help (percentages)

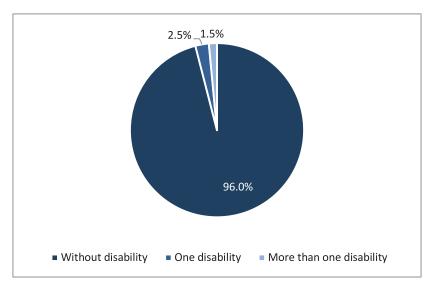


# 4.3. Functioning of the body (disability)

The definition of disability in this survey is based on the Washington Group on Disability Statistics. The survey aimed to measure functioning difficulties that restrict participation in one or more of six domains: (1) seeing; (2) hearing; (3) walking or climbing stairs; (4) remembering or concentrating; (5) self-care; and (6) communicating in one's own language. The module measures severity of functioning using four categories: (1) no difficulty; (2) some difficulty; (3) a lot of difficulty; and (4) cannot do it at all. The classification system doesn't apply to infants below one year of age. People having "a lot of difficulties" or "cannot at all" were considered disabled.

People with a disability represented 4.0 per cent of total residents in Lebanon in 2018–19. Almost half of them were elderly, 48.0 per cent were men and 52.0 per cent were women.

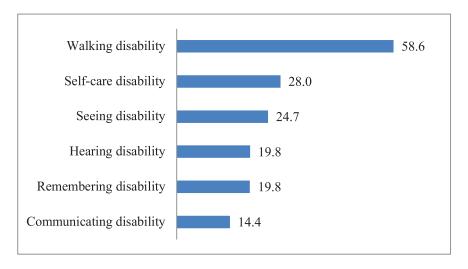
Acknowledging that individuals may suffer from more than one disability at the same time, 2.5 per cent of residents were suffering from only one disability, and 1.5 per cent suffered from two or more kinds of disability.



# Figure 4.7 Residents by disability (percentages)

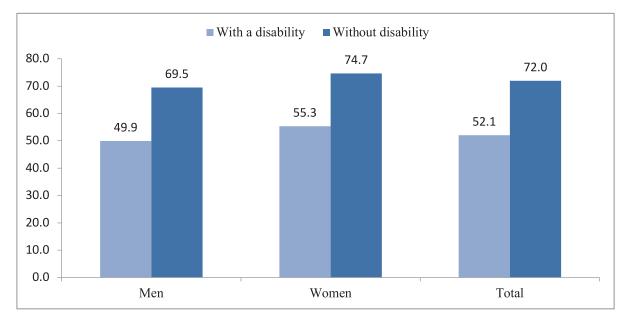
Walking-related disabilities were found in 58.6 per cent of cases, followed by self-care (28.0 per cent), sight (24.7 per cent), hearing (19.8 per cent), remembering (19.8 per cent), and communication (14.4 per cent).

## Figure 4.8 Type of disability (percentages)



Note: People with a disability can have more than one disability at the same time.

# Disability by enrolment in education Figure 4.9 Enrolment rates by disability and sex (persons aged 3–24 years)

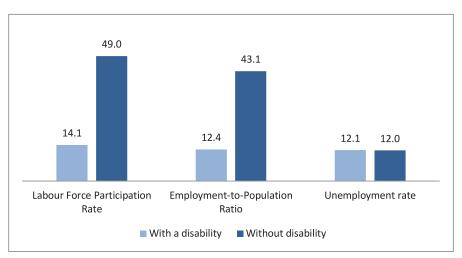


Note: Figures exclude domestic workers.

The total enrolment rate in Lebanon, for people aged 3-24 years, was 71.7 per cent -72 per cent for people without a disability and 52.1 per cent for people with a disability. When disaggregated by sex, lower enrolment rates were observed for men than for women (figure 4.9).

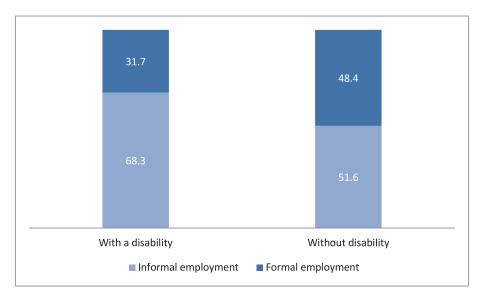
# **Disability and labour force participation**

Persons aged 15 years and above who suffered from at least one type of disability were less engaged in the labour market. This was observed in the employment-to-population ratio when comparisons were made with those without a disability. However, unemployment rates were very similar among all residents. The proportion of informal employment for residents with a disability (68.3 per cent) was much higher than for residents without a disability (51.6 per cent).

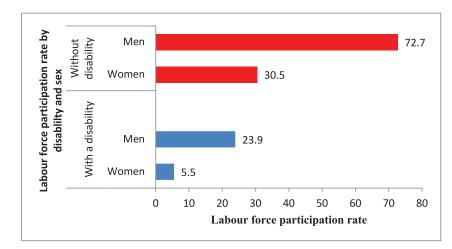


# Figure 4.10 Labour force indicators by disability status

# Figure 4.11 Informality of employment by disability (percentages)



Men's participation in the labour force in Lebanon was 2.4 times higher than women's participation for persons without a disability. The gender gap in labour force participation becomes 4.3 times higher among people with a disability.

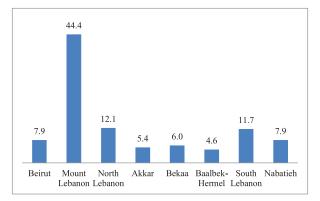


#### Figure 4.12 Labour force participation rate by disability status and sex (percentage)

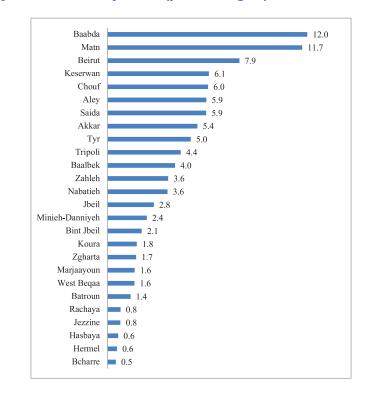
# 5.1. Main characteristics of primary residences

The number of primary residences in Lebanon was estimated at about 1,266,700 residences in 2018–19. Figure 5.1 shows that Mount Lebanon had the highest concentration of primary residences, with 44.4 per cent of all residences, followed by North Lebanon (12.1 per cent), and South Lebanon (11.7 per cent).

# Figure 5.1 Primary residences by governorate (percentages)



Great differences in the distribution of primary residences were found at the caza level, ranging from 12 per cent in Baabda to less than 1 per cent in Bcharre, Hermel, Hasbaya, Jezzine and Rachaya. The distribution of primary residences by caza reflects exactly the distribution of residents by cazas (see Chapter 1 on demographic characteristics).



# Figure 5.2 Primary residences by caza (percentages)

Primary residences in Lebanon mostly consisted of an apartment in an independent building or within a residential complex (85.5 per cent), followed by an independent houses or villa (12.2 per cent),

or a janitor's room (concierge's room) (2.1 per cent). Inappropriate dwellings such as unfinished buildings, and improvised dwelling type were very rare (0.2 per cent).

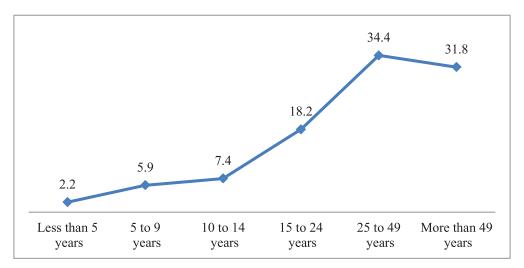
	Type of dwelling							
Governorate	Apartment	Independent house or villa	Janitor's room	Inappropriate dwellings	Total			
Beirut	92.7	(0.2)	7.1	(0.1)	100			
Mount Lebanon	91.4	5.5	2.9	0.2	100			
North Lebanon	86.2	13.0	0.8	(0.1)	100			
Akkar	79.1	20.0	(0.3)	(0.6)	100			
Bekaa	79.8	19.4	(0.3)	(0.5)	100			
Baalbek-Hermel	59.4	40.2	(0.2)	(0.2)	100			
South Lebanon	85.0	14.5	(0.4)	(0.1)	100			
Nabatieh	69.1	30.5	(0.3)	(0.1)	100			
Total	85.5	12.2	2.1	0.2	100			

#### Table 5.1 Primary residences by type and governorate (percentages)

Note: Figures in brackets represent an estimation with a standard error above 20 per cent.

Governorates with the largest share of apartments had the lowest share of individual independent houses. In Beirut, 92.7 per cent of residences were apartments and less than 1 per cent of households lived in a house or villa. Households in Mount Lebanon predominantly lived in apartments (91.4 per cent) and 5.5 per cent in houses or villas. On the other hand, Baalbek-Hermel, Nabatieh, Akkar and the Bekaa had a distinctly larger share of independent houses and villas.

# Figure 5.3 Primary residences by age of dwelling (percentages)



In general, construction appears to have decreased over time, as very few dwellings were constructed recently. Just 2.2 per cent were aged less than 5 years, but 66.2 per cent were constructed at least 25 years ago.

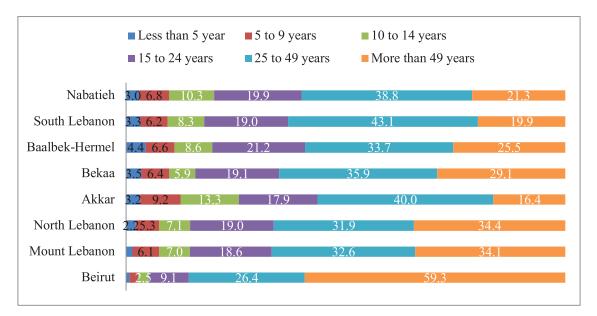
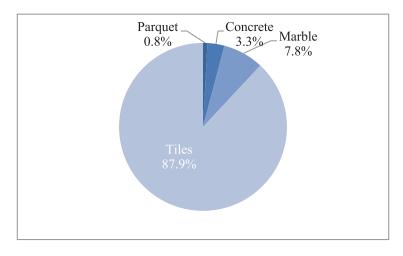


Figure 5.4 Primary residences by age of dwelling and governorate (percentages)

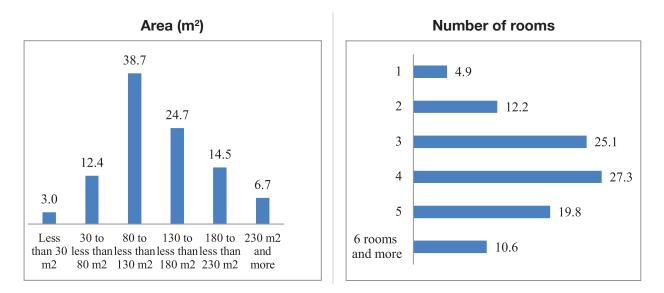
At the governorate level, Beirut had the oldest dwellings, with 59.3 per cent of primary residences aged at least 49 years and 26.4 per cent aged between 25 and 49 years. For the remaining governorates, data show that between 32 per cent and 43 per cent of dwellings were at least 25 years old. Almost the same pattern was seen for dwellings aged between 15 and 24 years in most governorates, as their proportions varied between 18 and 20 per cent.

Figure 5.5 Primary residences according to floor material (percentages)



Of the total dwellings in Lebanon, tiles were used in 87.9 per cent of residences as the primary floor material, marble in 7.8 per cent, concrete in 3.3 per cent, and parquet flooring in 0.8 per cent.

# Figure 5.6 Primary residences by area (m<sup>2</sup>) and number of rooms (percentages)



Note: Number of rooms per residence excludes kitchens and WCs.

The largest share (38.7 per cent) of primary residences in Lebanon were between 80 and 130 square metres. Small residences of less than  $30 \text{ m}^2$  were not very common – just 3.0 per cent of the total. Large residences of 230 m2 and over comprised 6.7 per cent of the total.

About 27.3 per cent of primary residences in Lebanon consisted of four rooms, not including kitchens, bathrooms or toilets. Very large residences of at least six rooms comprised 10.6 per cent of the total, and single-room residences comprised 4.9 per cent of the national total.

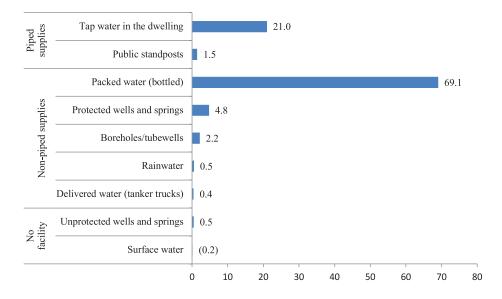
The results show that 69.5 per cent of primary residences were owner-occupied, while 30.5 per cent were rented. Among owner-occupied primary residences, 89.1 per cent were owned by one household member only, 6.3 per cent were jointly owned by two or more members of the household, and 4.6 per cent were jointly owned with relatives or others.

# 5.2. Provision of services at primary residences

# Sources of drinking water

Drinking water for households can be divided into three types of source: (1) piped supply; (2) non-piped supplies; and (3) no water facility at the dwelling.

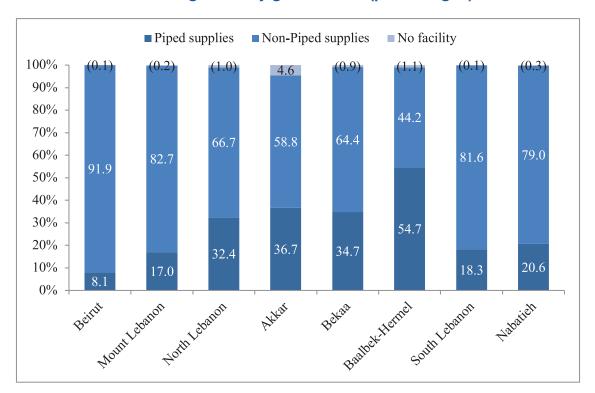
# Figure 5.7 Main source of drinking water at the dwelling (percentages)



For 22.5 per cent of households, drinking water was in the form of a supply piped directly to the residence; non-piped supplies represented 76.9 per cent, and less than 1 per cent of dwellings had no drinking water facility.

#### Drinking water by governorate

Differences between governorates were observed. Within Beirut, around 92 per cent of dwellings rely on non-piped drinking water – mainly packed or bottled mineral or purified water. At the other end of the range, piped water represented 54.7 per cent of supplies in Baalbek-Hermel. In Akkar, 4.6 per cent of dwellings lacked any drinking water source whatsoever.

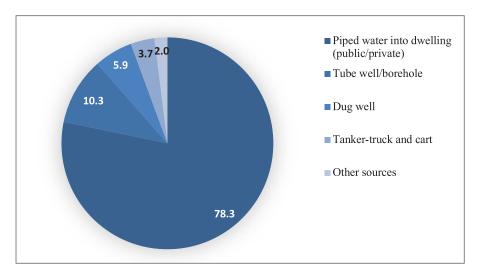


#### Figure 5.8 Source of drinking water by governorate (percentages)

Note: Figures in brackets represent an estimation with a standard error above 20 per cent.

#### Sources of service water

At the national level, the largest source of service water used by households was piped water reaching the dwelling (78.3 per cent), followed by tube wells or boreholes (10.3 per cent), while 5.9 per cent relied on a dug well, and 3.7 per cent used tanker trucks or carts to deliver service water. About 2.0 per cent of households collected rain water or surface water, including river or lake water.

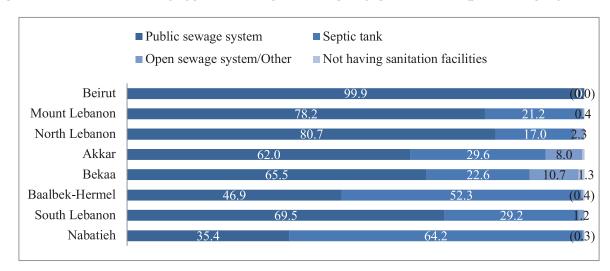


#### Figure 5.9 Sources of service water for dwellings (percentages)

# Wastewater and sewage systems

The largest share of dwellings in the country (72.7 per cent) reported that they were connected to a public sewage system, while almost a quarter of dwellings used septic tanks (25.3 per cent). Few households relied on open sewage system or other modalities (1.7 per cent), or did not have any kind of sanitation system (0.2 per cent).

At the governorate level, large differences were found. For example, Beirut has a universal public sewage system, while in Nabatieh septic tanks were common (64.2 per cent). Mount Lebanon and North Lebanon both enjoy a large share of public sewage systems. It is worth noting that, in Bekaa and Akkar, open sewage represented 8 per cent of sewage drainage systems.

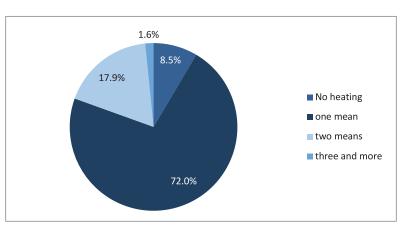


#### Figure 5.10 Households by type of sewage drainage by governorate (percentages)

Note: Figures in brackets represent an estimation with a standard error above 20 per cent. The category "no sanitation" represents an estimation with a standard error above 20 per cent in all regions.

#### **Heating systems**

Some 8.5 per cent of primary residences in Lebanon did not use any means of heating, but the majority (72.0 per cent) relied on one heating system, while 17.9 per cent reported using two means of heating, and less than 2 per cent used three means or more.



# Figure 5.11 Households by number of heating systems (percentages)

The results show that non-central heating systems were the most common, ranging from electrical systems (35.8 per cent), followed by kerosene or fuel oil (25.5 per cent), and gas (25.4 per cent), to firewood or charcoal (14.2 per cent). Regarding central heating systems, 7.8 per cent of residences used fuel oil, 2.8 per cent were electric, and only 0.5 per cent of households used a shared heating system for the entire building. Other heating systems represented just 0.9 per cent.

At the governorate level, the most common heating systems were non-central kerosene or fuel oil in Baalbek-Hermel (90.0 per cent) and Bekaa (78.9 per cent), and non-central electrical heating systems in Beirut (66.4 per cent).

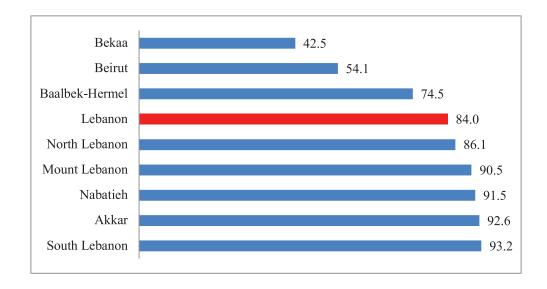
	Governorate									
Heating system	Beirut	Mount Lebanon	North Lebanon	Akkar	Bekaa	Baalbek- Hermel	South Lebanon	Nabatieh	Lebanon	
Shared central heating for the building	(0.7)	0.7	(0.3)	(0.5)	(0.3)	(0.2)	(0.3)	(0.4)	0.5	
Individual electrical central heating	5.8	3.5	2.4	(0.7)	(1.0)	(0.3)	2.6	(0.6)	2.8	
Electrical non- central heating	66.4	43.7	41.2	8.7	7.8	1.7	39.2	6.8	35.8	
Individual central heating using fuel oil	1.7	11.3	7.3	2.9	11.4	1.7	3.7	5.1	7.8	
Non-central heating using kerosene or fuel oil	1.2	17.7	12.6	37.6	78.9	90.0	8.5	51.6	25.5	
Non-central heating using gas oil	15.7	29.1	31.8	18.1	2.3	(1.1)	40.3	19.5	25.4	
Non-central heating using firewood or charcoal	1.2	9.8	22.4	33.7	14.3	15.2	13.8	25.4	14.2	
Other heating means	1.0	1.0	2.2	(0.0)	(0.0)	(0.1)	1.3	(0.2)	0.9	
No heating	17.7	10.3	5.5	10.5	1.8	0.4	8.3	2.3	8.5	

#### Table 5.2 Heating systems in primary residences by governorate (percentages)

Note: Figures in brackets represent an estimation with a standard error above 20 per cent.

## **Sources of electricity**

While connection to the public electricity network is universal in Lebanon (99.7 per cent), 84.0 per cent of households were subscribed to a private electricity source or have their own private generator. In four governorates, more than 90 per cent of dwellings had subscribed to a private source of electricity, while the figures were 54.1 per cent for dwellings in Beirut and 42.5 per cent in Bekaa.

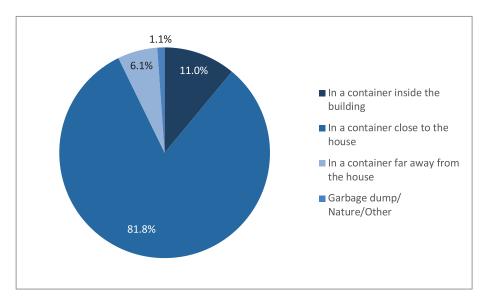


# Figure 5.12 Private electricity subscription/private generator by governorate (percentages)

#### **Domestic waste**

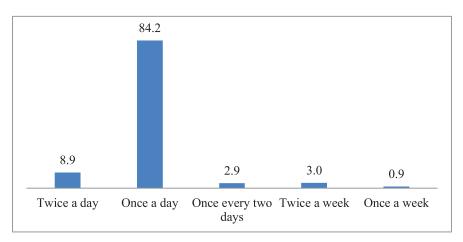
The largest share of primary residences dispose of their waste in a container close to the house (81.8 per cent), followed by those who use a bin inside the building (11.0 per cent), a container far away from the house (6.1 per cent), or either throw their garbage in a river, the sea or a garbage dump (1.1 per cent).

#### Figure 5.13 Waste disposal, primary residence (percentages)



In all governorates, most dwellings used a container close to the house; only in Beirut (33.0 per cent) and Mount Lebanon (16.9 per cent) did a significant proportion of dwellings dump their waste in a container inside the building.

# Figure 5.14 Frequency of waste disposal (percentages)



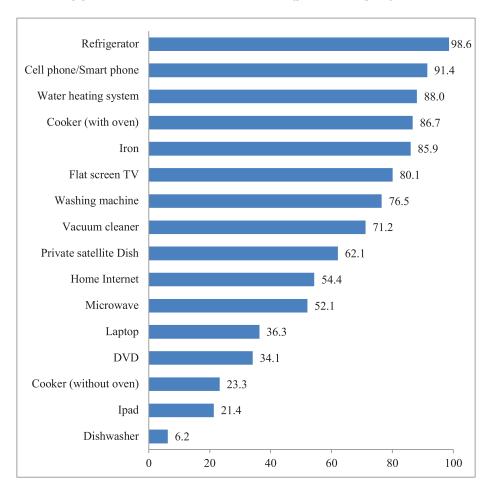
Among those disposing of their waste in a container inside the building, the vast majority (84.2 per cent) disposed of their waste once a day.

# 5.3. Home appliances, means of transportation, and services in the vicinity

#### **Home appliances**

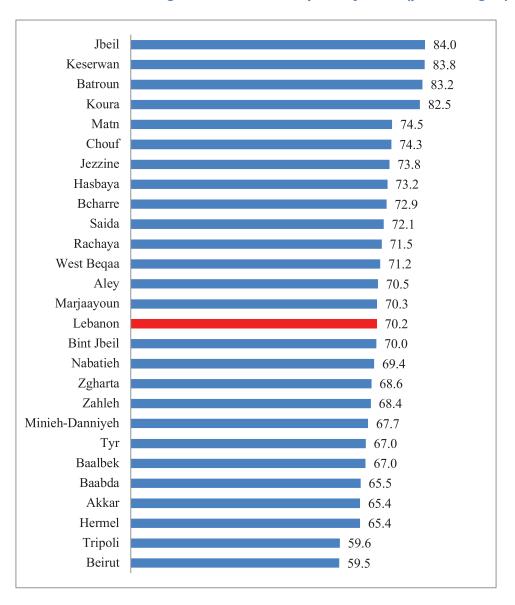
Figure 5.15 shows that refrigerators (98.6 per cent) and smart phones (91.4 per cent) were the most common appliances; dishwashers were the least common (6.2 per cent of households).

# Figure 5.15 Home appliances/services available (percentages)



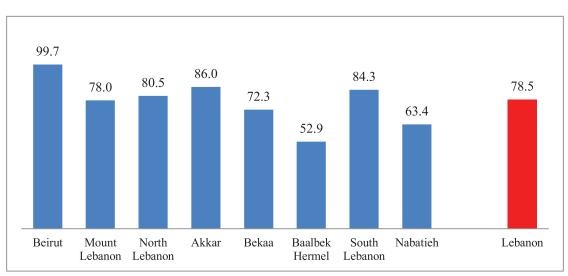
## Means of transportation

The results show that 70.2 per cent of households owned at least one means of transport, such as car, motorcycle, bus, mini-bus, or pick-up. Large differences were observed at the caza level, ranging from almost 60 per cent in Beirut and Tripoli to 84 per cent in Jbeil.



## Figure 5.16 Households owning a means of transport by caza (percentages)

On the other hand, almost all households in Beirut had access to public transport close to their living address (less than a 10-minute walk), compared with only 52.9 per cent of households in Baalbek-Hermel.



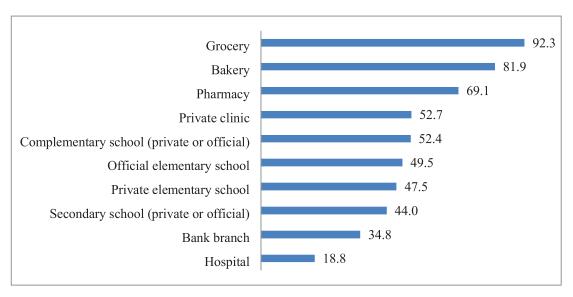
# Figure 5.17 Access to public transport by governorate (percentages)

# Services closer than a 10-minute walk from the dwelling

The vast majority of primary residences (92.3 per cent) reported having at least one grocery store, a bakery (81.9 per cent), or a pharmacy (69.1 per cent) within a 10-minute walk from home. About half of all dwellings lived within reach of a private clinic (52.7 per cent) or a complementary school (private or public) (52.4 per cent).

Around half of all households (49.5 per cent) lived within reach of an official elementary school or secondary school (44 per cent), but only 18.8 per cent of primary residences were within a 10-minute walk to a hospital from their dwelling.

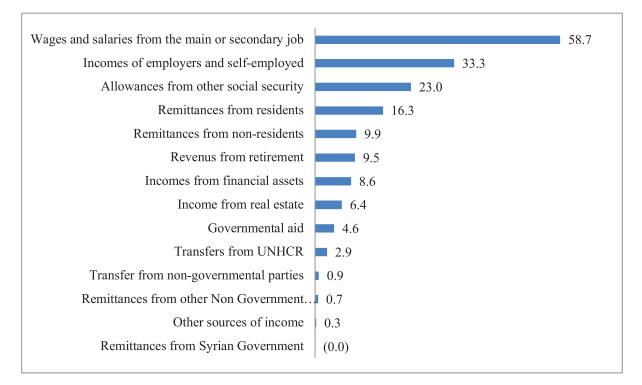
# Figure 5.18 Access to services within a 10-minute walk from the dwelling (percentages)



# 6.1. Sources of income

Income sources include all amounts received by any household member during the previous 12 months (figure 6.1), and households may have had multiple sources of income during this reference period. The LFHLCS findings reveal that 58.7 per cent of households derived income from wages or salary from the main or secondary job of a household member, while 33.3 per cent of households derived income from self-employment or running a business, and 23.0 per cent received allowances from social security (family, retirement, health, education, insurance). Remittances from residents (16.3 per cent) and non-residents (9.9 per cent) were not insubstantial, and income from financial assets (interest on deposits, bonds, loans, dividends, etc.) and real estate was received by 8.6 per cent and 6.4 per cent of households, respectively.

# Figure 6.1 Households by source of income (percentages)



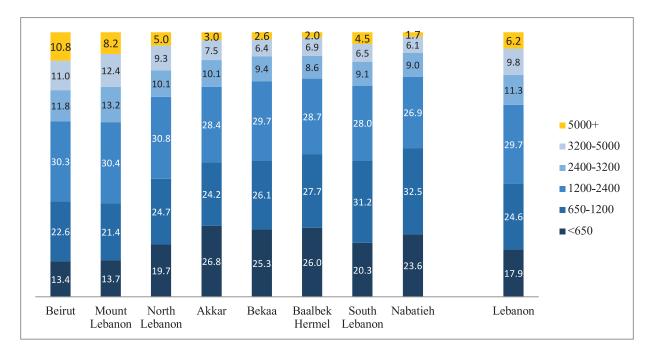
Note: Figures in brackets represent an estimation with a standard error above 20 per cent.

# 6.2. Income categories

Households reported their income category based on the total of all sources over the previous month. Results show that, on a national level, about 18 per cent of households earned below 650,000 LBP,<sup>29</sup> 24.6 per cent earned between 650,000 and 1,200,000 LBP, almost 30 per cent had incomes between 1,200,000 and 2,400,000 LBP, and 6.2 per cent of households earned 5 million LBP or more.

The same distribution pattern was perceivable at the governorate level (figure 6.2), but with noticeably higher incomes in Beirut and Mount Lebanon. Akkar (26.8 per cent), Baalbek-Hermel (26.0 per cent), and Bekaa (25.3 per cent) recorded the highest shares of households with incomes of less than 650,000 LBP per month. The governorate of North Lebanon was closest, in terms of income distribution, to the national average.

<sup>&</sup>lt;sup>29</sup> The minimum wage in Lebanon is 675,000 LBP per month.



# Figure 6.2 Household income distribution by governorate ('000 LBP)

# 6.3. Self-classification of wealth status

Households classified their wealth status from their own subjective point of view. Figure 6.3 shows the distribution across governorates and cazas. Nationally, 6.1 per cent of households considered themselves "wealthy or financially well-off", 67.5 per cent classified themselves as "average or average to poor", and 26.3 per cent as "poor or very poor".

South Lebanon (9.1 per cent), Beirut (7.6 per cent) and Nabatieh (6.3 per cent) expressed the highest levels of wealth perception. Baalbek-Hermel (41.4 per cent), Akkar (38.4 per cent), and Bekaa (31.4 per cent) expressed the lowest levels of wealth. Mount Lebanon (23.1 per cent) had the smallest share of "poor or very poor" households.

Large differences were also found between cazas of the same governorate. For example, within North Lebanon, Minieh-Danniyeh hosted the highest share nationally (48.6 per cent) of "poor or very poor" households, as well as the lowest in the caza of Batroun (5.5 per cent).

# Figure 6.3 Self-classification of wealth status by caza and governorate (percentages)

Poor or very poor	Average or average to poor	• Wealthy or financially	well-off
Lebanon	26.3	67.5	6.1
Governorate Nabatieh	25.6	68.1	6.3
Bint Jbeil	22.9	66.8	10.4
Hasbaya	23.9	67.0	(9.1)
Marjaayoun		71.3	4.5
Nabatieh	28.2	67.5	4.3
Governorate South Lebanon	24.1	66.8	9.1
Saida	19.1	70.6	10.3
Jezzine	21.9	68.9	9.2
Tyr	30.3	62.0	7.7
Governorate Baalbek-Hermel	41.4	54.6	4.0
Baalbek	40.6	55.4	3.9
Hermel	47.1	48.2	(4.7)
Governorate Bekaa	31.4	63.0	5.6
Rachaya	16.0	80.5	(3.5)
West Beqaa	25.5	66.6	7.9
Zahleh	37.3	57.7	5.0
Governorate Akkar	38.4	58.3	3.3
Governorate North Lebanon	27.8	67.1	5.1
Batroun	5.5	88.0	6.5
Bcharre	13.4	80.9	(5.7)
Koura	14.3	78.5	7.2
Zgharta	25.0	71.2	3.7
Tripoli	31.7	63.2	5.1
Minieh-Danniyeh	48.6	47.8	3.6
Governorate Mount Lebanon	23.1	71.0	5.9
Jbeil	12.7	81.9	5.4
Keserwan	18.5	74.6	6.8
Matn	20.4	73.3	6.3
Chouf		70.6	5.2
Baabda	26.8	67.5	5.7
Aley	29.4	65.0	5.6
Governorate Beirut	25.5	66.9	7.6
	0% 10% 20% 30% 40%	60% 50% 60% 70% 80%	90% 100%

Note: Figures in brackets represent an estimation with a standard error above 20 per cent.

# Chapter VII: Methodology

This chapter is dedicated to the survey methodology. The main concepts and definitions of the survey are presented with a specific focus on labour; this is then followed by the sample design. Subsequently, the questionnaire content and the main elements of the field operations and data processing are described. Finally, the quality of the survey results is assessed.

# 7.1. Main concepts and definitions

#### Measurement and classification frameworks

The main concepts and definitions of the Labour Force and Household Living Conditions Survey (LFHLCS) were designed to be in line with the latest international statistical standards on their respective subjects, when applicable, and reflecting national needs. For example, the labour part of the survey is based on the international standards adopted by the International Conference of Labour Statisticians (ICLS). The International Standard Classification of Occupations (ISCO-08) and the International Standard Industrial Classification of All Economic Activities (ISIC 4) were also used in this survey. The module on disability and body functioning was based on the Washington Group on Disability Statistics recommendations.

#### Regions

Lebanon has eight governorates subdivided into 26 districts, called *caza*. The governorates of Beirut and Akkar are not subdivided.

Governorate and caza		
Governorate of Beirut	Governorate of Akkar	Governorate of Baalbek-Hermel
Beirut	Akkar	Baalbek
Governorate of Mount Lebanon	Governorate of North Lebanon	Hermel
Baabda	Tripoli	Governorate of South Lebanon
Matn	Koura	Saida
Chouf	Zgharta	Tyr
Aley	Batroun	Jezzine
Keserwan	Bcharre	
Jbeil	Minieh-Danniyeh	
Governorate of Nabatieh	Governorate of Bekaa	
Nabatieh	Zahleh	
Bint Jbeil	West Beqaa	
Marjaayoun	Rachaya	
Hasbaya		

#### Table 7.1 Regions in Lebanon (governorates and cazas)

## **Disability**

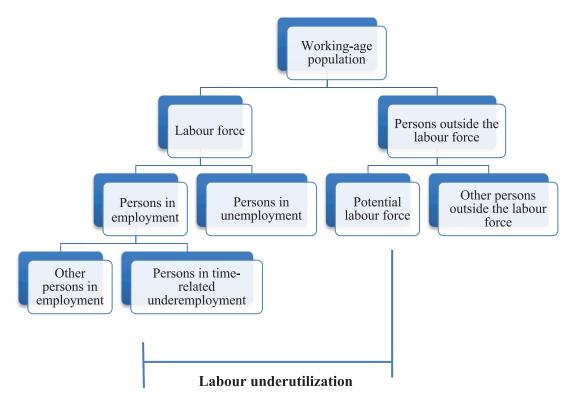
Functioning (or disability) for the purpose of this survey was based on the Washington Group on Disability Statistics, with the aim of measuring functioning difficulties that restrict participation in one or more of six domains: seeing, hearing, walking or climbing stairs, remembering or concentrating, self-care and communicating in one's own language. The model measures difficulties and their respective severity across the six domains. The module was administered to all household members of all age groups, except domestic workers. Infants up to 1 year of age were classified as "not applicable" in this survey, and they were not assessed.

The module measures severity of functioning using four categories: "No difficulty"; "Yes, some difficulty"; "Yes, a lot of difficulty"; and "Cannot do at all". People having "a lot of difficulties" or "cannot at all" were considered as having a disability.

#### Labour force

The main concepts and definitions of the labour part of the LFHLCS may be schematically represented into the following measurement framework in line with the 19th ICLS Resolution concerning statistics of work, employment and labour underutilization.<sup>30</sup> According to this framework, the working-age population is divided into the labour force and people outside the labour force. The labour force is composed of people in employment and people in unemployment. People in time-related underemployment are a subset of people in employment. Similarly, the potential labour force is a subset of people outside the labour force. The sum total of time-related underemployment, unemployment and the potential labour force all fall under the rubric of labour underutilization.

## Figure 7.1 Measurement framework



<sup>&</sup>lt;sup>30</sup> ILO: Resolution concerning statistics of work, employment and labour underutilization, para. 19 ,27th International Conference of Labour Statisticians, 2013.

# **Employment: A particular form of work**

## Work

The 19th ICLS Resolution defines work as:

- "Any activity performed by people of any sex and age to produce goods or to provide services for use by others or for own use" in line with the general production boundary defined in the System of National Accounts, 2008.<sup>31</sup>
- Work is defined "irrespective of its formal or informal character or the legality of the activity."
- It excludes "activities not involving production of goods or services (begging, stealing), self-care (personal grooming, hygiene) and activities that cannot be performed by another person on one's own behalf (sleeping, learning, own recreation)."

## Employment

*Employment* is particular form of work. It is work performed for others in exchange for "pay or profit". In line with the definition adopted by the 19th ICLS, people in employment includes "all those of working age who, during a short reference period, were engaged in any activity to produce goods or provide services for pay or profit."

Pay or profit are considered as payment in wages or salaries for work done or time worked, as well as profits from market transactions. People in employment consist of people "at work" and those "not at work" due to temporary absence from a job or to working-time arrangements, such as shift work, flexi-time and compensatory leave for overtime.

In the LFHLCS, working age is defined as 15 years of age and over, although data were collected for all household members aged 10 years and above. The short reference period refers to the 7 days prior to the interview date.

#### Other forms of work

It should be noted that the 19th ICLS recognizes other forms of work for separate measurement:

- Own-use production work, which comprises production of goods and services for one's own final use;
- Unpaid trainee work, which comprises work performed for others without pay to acquire workplace experience or skills;
- Volunteer work, which comprises non-compulsory work performed for others without pay;
- Other work activities not presently defined by the international standards, including such activities as unpaid community service and unpaid work by prisoners, when ordered by a court or similar authority, and unpaid military or alternative civilian service.<sup>32</sup>

Although the different forms of work are mutually exclusive, a person may be engaged in one or more forms of work in parallel or consecutively. Thus, a person may be employed while also doing volunteer work in another activity, or combining employment and own-use production work, or any other combinations of forms of work in different work activities.

#### Forms of work and the System of National Accounts

The relationship between the different forms of work and the production boundaries of the System of National Accounts (SNA) is schematically represented in the figure below. It can be observed that

<sup>&</sup>lt;sup>31</sup> EC, IMF, OECD, UN & World Bank: System of National Accounts, 2008, European Commission, International Monetary Fund, Organization for Economic Co-operation and Development, United Nations, World Bank, New York, 2009.

<sup>&</sup>lt;sup>32</sup> Despite the fact that all these cases are part of the international definition itself, the following groups are not relevant to this survey: prisoners, unpaid military and alternative civilian service.

all forms of work are included within the SNA general production boundary. However, certain kinds of work are excluded from the more restricted SNA production boundary. The more restricted SNA production boundary is the framework within which the national accounts and the gross national product (GNP) of a country are generally calculated.

Intended destination of production	for own final use		for use by others						
Forms of work	Own-use production work		Employment (work for pay or profit)	Unpaid trainee work	Other work activities	Volunteer work			
	of of services goods	in market and				in households producing			
					units	goods	service		
Relation to	Activities within the SNA production boundary								
2008 SNA		Activities inside the SNA General production boundary							

## Figure 7.2 Forms of work and the System of National Accounts, 2008

Source: ILO: Resolution concerning statistics of work, employment and labour underutilization, 19th International Conference of Labour Statisticians, 2013, para. 10.

## **Unemployment: A component of labour underutilization**

According to the 19th ICLS Resolution concerning statistics of work, employment and labour underutilization, *labour underutilization* refers to "mismatches between labour supply and demand, which translate into an unmet need for employment among the population."

#### Unemployment

Unemployment is a particular component of labour underutilization, reflecting an active job search by people not in employment who are available for this form of work. People in unemployment are all those of working age who were: (a) not in employment during the reference period; (b) carried out activities to seek employment during a specified recent period; and (c) were currently available to take up employment given a job opportunity.

In the LFHLCS, the recent period for seeking employment was specified to be the four weeks before the interview date, and activities to seek employment included seeking assistance of relatives or friends, applying directly to employers, enquiring at work places, registering with a national employment office, or private employment agencies, placing or answering job advertisements in newspapers or the Internet, and setting-up or establishing a business, such as searching for land or building, arranging for financial resources, and applying for permits or licenses. Current availability to take up employment was assessed in terms of availability to start work during the past 7 days or within the next two weeks.

The definition of unemployment provided for an exception in the case of future starters, i.e. people "not in employment" and "currently available" who were not "seeking employment" as defined above, because they had already found a job and were waiting to start. In line with the 19th ICLS, future starters were included as unemployed, even though they had not carried out activities to seek employment during the recent period specified.

Other components of labour underutilization measured in the survey were:

 Time-related underemployment. This covered all people in employment who, during the previous 7 days: (a) wanted to work additional hours; (b) whose working time in all jobs was less than 40 hours during the previous 7 days; and (c) who were available to work additional hours had there been an opportunity for more work.

Potential labour force. This included all people 15 years and over who, during the previous 7 days, were neither in employment nor in unemployment, but were: (a) seeking employment but not currently available (unavailable jobseekers); or (b) wanting employment and were currently available to work, but did not carry out activities to seek employment during the previous 4 weeks (available potential jobseekers, including discouraged potential jobseekers).

# Main labour force and labour underutilization indicators

In addition to headcounts, the following main labour force and labour underutilization indicators were calculated based on the results of the LFHLCS.

The labour force participation rate is an indicator of the level of labour market activity. It measures the extent of a country's working-age population that is in the labour force. It is defined as the ratio of the labour force to the working-age population expressed in percentage terms:

LFPR (Labour force participation rate) =  $\frac{100 \times Labour force}{Working-age population}$ 

Aggregate employment generally increases with a growing population. Therefore, the ratio of employment to the working-age population is an important indicator of the ability of the economy to provide employment to its growing population. A decline in the employment-to-population ratio is often regarded as an indicator of economic slowdown and a decline in total employment indicates an even more severe economic downturn. The employment-to-population ratio, sometimes also called simply the employment-population ratio, is defined in percentage terms as:

 $LEMP (Employment-to-population ratio) = \frac{100 \times Persons in employment}{Working-age \ population}$ 

The first measure of labour underutilization (LU1) is the unemployment rate. It represents the percentage of the labour force that is unemployed. The other indicators of labour underutilization (LU2, LU3 and LU4) combine in various ways unemployment and time-related underemployment and the potential labour force.

 $LU1 (Unemployment \ rate) = \frac{100 \times Persons \ in \ unemployment}{Labour \ force}$ 

LU2 (Combined rate of time-related underemployment and unemployment) =

 $(100 \times (Persons in time-related underemployment + Persons in unemployment))/(Labour force)$ 

 $LU3 (Combined rate of unemployment and potential labour force) = \frac{100 \times (Persons in unemployment + Potential labour force)}{Extended labour force}$ 

LU4 (Composite measure of labour underutilization) 100 × (Persons in time-related underemployment + Persons in unemployment + Potential labour force) Extended labour force

where the "extended labour force" is the sum of the "labour force" and the "potential labour force".

# Informality

Informality of employment may be measured in terms of the characteristics of the production unit or the place of work of the employed person, or in terms of the characteristics of the job of the employed person. When measured in relation to the place of work, the concept is called employment in the

informal sector. When measured in relation to the job, the concept is called informal employment. Both concepts are measured in the LFHLCS.

## Employment in the informal sector

According to the international standards adopted by the 15th International Conference of Labour Statisticians, the informal sector is a subset of unincorporated enterprises not constituted as separate legal entities independent of their owners.<sup>33</sup> They are typically owned by individual household members, or several members of the same or different households. Typically, they operate on a small scale at a low level of organization, and with little or no division between labour and capital as factors of production.

The operational definition of "employment in the informal sector" in the LFHLCS includes all employed people engaged in a private business, farm or private household that is not registered and does not keep an account of assets and expenditures distinct from that of its owner. In case the enterprise is in the process of registration or the respondent does not know about the registration status or the accounting feature of the enterprise, the classification in the informal sector relies on information regarding the size of the establishment (less than 5 workers), and the particular nature of the workplace (home, transport vehicle, no fixed location, etc.).

#### Informal employment

According to the international guidelines of the 17th ICLS, the concept of "informal employment" refers to jobs that do not provide employees with legal or social protection, thus exposing them to greater economic risks than other employed people.<sup>34</sup> This concept differs from the above concept of employment in the informal sector, which was based on the characteristics of the enterprise.

The operational definition of "informal employment" in the LFHLCS includes:

- all employees where, in their main or secondary jobs, the employer does not pay social security contributions on the employee's behalf (if information on social security contributions is not available (i.e. the person does not know or social security schemes do not exist), the classification relies on whether or not the person is entitled to paid annual leave (or compensation in lieu of it) and paid sick leave);<sup>35</sup>
- all contributing family workers;
- all employers, own-account workers or members of producers' cooperatives of informal sector enterprises.

Figure 7.3 shows the joint classification of the employed population in terms of informal employment and employment in the informal sector. The sum of the first row of the table (A+B) gives the total number of people employed in informal sector, while the sum of the first column (A+C) gives the total number of people with informal employment. The corner cell (C) refers to people not employed in the informal sector, but who nevertheless work in informal jobs (e.g. a cleaner working in a bank with no social security).

<sup>&</sup>lt;sup>33</sup> ILO: Resolution concerning the measurement of employment in the informal sector, Fifteenth International Conference of Labour Statisticians (ICLS), Geneva, 1993.

<sup>&</sup>lt;sup>34</sup> ILO: Guidelines concerning a statistical definition of informal employment, 17th International Conference of Labour Statisticians, Geneva, 2003.

<sup>&</sup>lt;sup>35</sup> ILO: Women and men in the informal economy: A statistical picture (third edition), Geneva.

# Figure 7.3 Joint classification of the employed population by informal employment and employment in the informal sector

Production units	Informal jobs	Formal jobs				
Employment in the informal sector	A	В				
Employment outside the informal sector	С	D				
Employment in the informal sector: A + B						
Informal employment	A + C					
Informal employment outside the informal sector C						
Employment in the informal economy: A + B + C						

Source: ILO: Resolution concerning the measurement of employment in the informal sector, Fifteenth International Conference of Labour Statisticians (ICLS), Geneva, 1993.

# 7.2. Sample design and sampling weights

# Sample design

#### Scope

The scope of the LFHLCS covered the population of Lebanon living in residential dwellings in the time period from April 2018 to March 2019, divided into four rounds. Like any other household survey, it excluded the population living in non-residential units, such as construction and agriculture sites, shops, stores, factories, unfinished buildings, army barracks, refugee camps and adjacent gatherings, and informal settlements, etc.

#### Sample size

The survey was conducted on the basis of a stratified two-stage sample design, with a total sample size of about 53,000 sample dwellings in about 2,700 geographical areas called *ilots*. An "ilot" is a geographical area with clearly defined boundaries used as a primary sampling unit (PSU) by the Central Administration of Statistics (CAS). The sample design was extended to "empty" and "near-empty" ilots on the basis that these areas, empty or near empty in 2004, may have grown in population and dwelling units may have formed since 2004. Near empty ilots were defined to be ilots with 1 to 9 housing units, according to the Census of Buildings, Dwellings and Establishments (CBDE). Accordingly, four additional ilots were randomly selected from the "empty" and "near-empty" ilots per caza, one for each of the four survey rounds. The sampling was carried out with equal probability. To avoid double counting, the "near-empty" ilots were deleted from the CBDE frame before selecting the sample ilots under the basic design.

#### Sample allocation

The total number of ilots were allocated to the administrative districts of the country (cazas), and spread almost equally over the four quarters of the survey year. The cazas formed the strata and domains of the survey for which separate estimates were required to be reported at the annual level. The allocation of sample ilots among cazas was based on a square-root allocation with a minimum allocation of 68 sample ilots for each caza. In practice, after field operations, the number of sample ilots in a few cazas turned out to be slightly less than the specified minimum.

## First-stage sampling of "ilots"

In the first stage of sampling, the allocated number of sample ilots or PSUs were drawn with probabilities proportional to size, size measured in terms of the number dwellings as recorded in the CBDE conducted by CAS in 2004. The dwellings in the sample ilots (PSUs) were then freshly listed to take into account any new building developments or other changes since 2004.

#### Second-stage sampling of households

At the second stage of sampling, a fixed number of sample dwellings were selected from the updated list of dwellings in each sample ilot, with equal probability. This formed the final sample of households for interviewing. In dwellings with more than one household, the practice of CAS was to interview all households in the dwelling. The sample design provided for a non-response rate of about 21 per cent of the sample households, due to absence, refusal or other reasons.

# Sampling weights

The sampling weights were calculated on the basis of a three-step procedure:

- (a) **Calculation of the design weights.** The design weights were calculated as the inverse of the probability of selecting the sample households.
- (b) **Adjustment for non-response.** The procedure consisted of multiplying the design weights by the inverse of the response rate, calculated over homogeneous response groups.
- (c) Calibration to mid-year population estimates. The population estimates were calculated by the arithmetic average of the adjusted weights (i.e. the sampling weights prior to calibration) obtained from the first and second rounds of the survey. The first round of the survey referred to the time period from April to June 2018, and the second round to the time period from July to September 2018. Thus the average population estimates were considered to refer to the mid-year situation, i.e. 30 June or 1 July 2018.

# 7.3. Questionnaire design, field operations and data processing

This section describes the questionnaire design and its structure, and the main steps involved in field operations and data processing.

# **Questionnaire design and contents**

#### **Questionnaire design**

The questionnaire design incorporated a number of socio-economic dimensions of household members residing in Lebanon. It drew extensively on previous CAS experience in designing household survey questionnaires, particularly the modules on demographic characteristics, education and living conditions, and took into account international definitions and guidelines, but also national needs. The module on the labour force was based on the experience of the ILO in developing survey questionnaires, particularly the methodological work carried out following the adoption of the 19th ICLS Resolution concerning statistics of work, employment and labour underutilization. The module on labour was prepared in collaboration with ILO experts.

#### **Questionnaire contents**

The LFHLCS questionnaire contained a total of 227 questions organized into 13 modules, in addition to the cover page and the end page. There were 49 questions on household variables, as well as 45 questions on labour force participation, and 133 questions on living conditions. The structure of the questionnaire is presented in table 7.2.

# Table 7.2 Structure of the questionnaire

	Questionnaire module	Question sequence	Number of questions
0	Household information (cover page)	-	19
-	Household identification	HH1-HH4	4
-	Address	AD1-AD7	7
-	Interview timing	HH5-HH6	2
-	Respondent information	HH7-HH10	4
-	Contact information	HH11-HH12	2
1	Household membership listing	-	12
-	Demographic characteristics	HL1-HL7	7
-	Residency and citizenship	HL8-HL12	5
2	Education	-	8
-	School attendance	ED1-ED2	2
-	Educational attainment	ED3-ED8	6
3	Employment and unemployment	-	45
-	Employment	EA1-EA8	8
-	Multiple jobholding and working time	EA9-EA11	3
-	Search and availability for additional employment	EA12-EA14	3
-	Characteristics of main job	EA15-EA29	15
-	Search and availability for employment	EA30-EA37	8
-	Past work experience	EA38-EA44	7
-	Source of livelihood	EA45	1
4	Chronic health	HE1-HE10	10
5	Insurance	IN1-IN3	3
6	Main functioning of the body	DI1-DI6	6
7	Primary dwelling	PR1-PR21	21
8	Durables in primary dwelling	DA1-DA33	33
9	Means of transportation	MT1-MT12	12
10	Availability of services near dwelling	SE1-SE21	21
11	Animals and livestock	LI1-LI7	7
12	Land holding	LA1-LA2	2
13	Household income and financial situation	RF1-RF18	18
-	Survey interview information (back page)	HH12-H22	10
-	Total	-	227

Not all questions were addressed to every household member. The demographic part was addressed to all household members, the education part collected information about household members aged 3 years and above on school attendance, and then for members aged 3 to 24 on educational attainment. The labour force part was addressed to household members 10 years old and over. Questions on primary dwelling and other elements of living conditions were addressed to a single household member, identified as the respondent in questions HH8-HH9 of the questionnaire. Domestic workers, living on a regular basis with their respective households were counted in this survey, yet in terms of analysis they were only reflected in chapters on demography, education and labour in a partial way. A note on this matter was added where relevant.

#### Field operations, data processing and resources management

#### Survey organization

In addition to CAS permanent staff directly involved in the survey (a statistician, a sociologist, an economist, two mathematical statisticians and three statistics assistants), the project also contracted short-term external collaborators to work on the survey. These included one IT expert, one associate statistician, nine survey assistants, 16 editing and coding assistants, nine data entry operators, 12 supervisors, around 130 interviewers and one archiver.

The Human Resources Information Management System (HRIMS), developed by CAS, was used to manage the human resources and payments, and monitor progress in the field and in the office.

#### Updating of sample ilots

A fresh listing of sample ilots was undertaken before the start of the household visits for data collection. Listing operations were designed to account for the creation of new dwellings and other changes that may have occurred since the CBDE in 2004. A fresh listing of sample ilots was essential to remove units not eligible for interview, such as "demolished" sample units that had existed at the time of the census, but had since been demolished or destroyed, or were in the process of being demolished, and also took into account new units since 2004. Similarly, the listing permitted the removal of unoccupied sample units that had been condemned, or units that were never intended as living quarters, or situations where the permit for construction was withdrawn. Specific forms were designed for the purpose of the listing and appropriate training was given to staff.

#### Training

Field and relevant office staff were trained before commencing work on the survey. The survey management anticipated a number of fieldworkers withdrawing. Therefore, it was decided that continuous training and recruitment of fieldworkers would be conducted during the implementation phase. Ten rounds of training were held following the initial training until the termination of data collection. This strategy helped to overcome certain regional shortages and replace drop-outs, and helped to maintain the number of interviewers at between 104 and 130.

Specific training material was prepared, consisting of a training manual for fieldworkers and supervisors. It covered all the aspects related to updating the ilots and the interviewing process, including concepts and definitions, questionnaire skip patterns, eligibility criteria, practical examples, pictures and other types of material to help staff understand their role. In addition, a comprehensive PowerPoint presentation was conducted during training.

#### Survey interviewing

Survey interviewing was conducted by paper-and-pencil interviewing (PAPI). The survey allowed for proxy responses (i.e. one knowledgeable adult member of the household responds to survey questions about himself or herself personally, and about others in the household by proxy). The proxy respondent was generally the household member who responded to the survey modules regarding the primary dwelling and follow-up modules on durables, means of transportation, services available near the dwelling, etc.

# Coding

Questions with written responses were coded in the office. These included the questions on nationality, occupation and branch of economic activity at current jobs, and jobs held a year prior to the visit. Occupation was coded using the ISCO-08. Branch of economic activity was coded using the ISIC Rev 4.

#### Editing and cleaning

Staff were trained on editing and cleaning rules. A manual on editing and cleaning was prepared for this purpose. The survey questionnaires were first verified with regard to completeness and coherence within and between modules. Consistency checks were continuously applied manually at the first stage, and then, after data entry, automated control and cleaning were applied to questionnaires in the dataset. Finally, a third round of data checks was performed from an analysis point of view using SPSS. As a general rule, responses were edited for blanks, missing values, out-of-range values, and inconsistencies.

Edit specifications and rules applied to all survey questionnaire content and modules; they were generally based on the edit rules developed by CAS in past surveys. Corrections were mostly made after consultation with interviewers and, in some cases, households were directly contacted by the team to clarify or correct any errors.

#### Data entry

After the questionnaires were edited and coded, they were manually entered into the programme that was developed by CAS. Other team members double checked the data after entry into the system, making sure no duplicated records were found and that no records were missing, in addition to checking other variables for data entry accuracy.

#### **Derived variables**

As part of data processing, the data file was augmented by adding a field on sampling weights (weight), and a series of additional fields on derived variables constructed on the basis of the edited responses for each record. The main derived variables on the labour force corresponding to the concepts and definitions were: employment, unemployment, time-related underemployment, potential labour force, employment in informal sector, and informal employment. Other variables were also added, such as disability, nationality, income, and age.

# 7.4 Response rates and data quality

The quality of the results of the survey in general, and those related to the labour market, may be assessed with respect to a number of different dimensions. The EU task force on the quality of the labour force survey identifies five main concerns: accuracy, coherence, comparability, timeliness and response burden.<sup>36</sup> This last section focuses on the first dimension – "accuracy", which refers to the wide range of errors that may affect survey estimates. Some reflect random errors that affect the variability of the estimates and some are systematic and affect the bias of the estimates.

#### **Response rates**

The theoretical sample size<sup>37</sup> of the survey was 53,000 households. The effective sample size of the survey was comprised of "completed questionnaires", "partially completed questionnaires", "refused questionnaires", and "absent". The effective sample size was, therefore, 50,000 households. The response rate was calculated with regard to the effective sample size, providing a rate of 79 per cent for all the survey quarters. (The non-response rate was, in this case, 21 per cent.)

<sup>&</sup>lt;sup>36</sup> European Union, Task force on the quality of the Labour Force Survey, Final report, 2009 edition. Eurostat Methodologies and Working Papers, Luxembourg, Publication of the European Union, 2009.

<sup>&</sup>lt;sup>37</sup> The theoretical sample is made of the effective sample plus "vacant dwellings" and "unknown addresses".

#### **Rounding of numbers**

Numbers were rounded to the nearest hundred at the latest stage of the analysis in order to ease their readability and dissemination to users. Therefore, details in lines and rows may not correspond to their respective totals due to rounding. This applies to all tables and graphs in this report.

#### Sampling errors

As with all sample surveys, the results of labour force surveys are subject to sampling errors. Sampling errors arise because surveys do not cover all elements of the population, but only a selected portion – the sample. The sampling error of an estimate was based on the difference between the estimate and the value that would have been obtained on the basis of a complete count of the population under otherwise identical conditions. In principle, sampling errors may be decomposed into two components: (1) sampling bias; and (2) sampling variance.

#### Sampling bias

Sampling bias reflects the systematic error that may occur due to the failures of the sample design. For example, certain elements of the population had a zero probability of selection.

#### Sampling variance

The sampling variance, on the other hand, reflects the uncertainty associated with a sample estimate due to the particular sample used for its calculation, among all possible other samples that could have been selected from the frame with the same sampling design. In complex sample designs, the joint probabilities of selection of the ultimate sampling units are generally difficult to compute. So, the calculation of the sampling variance of the survey estimates for complex multi-stage designs is generally based on the principle that the variance contributed by the later stages of sampling is, under broad conditions, reflected in the observed variation among the sample results for first-stage units. Thus, the sampling variance of a variety of statistics, such as totals, means, ratios, proportions, and their differences can be obtained on the basis of totals calculated for primary sampling units.<sup>38</sup> The procedure has been applied to the LFHLCS data and the resulting standard errors for the main labour force estimates are presented in table 7.3.<sup>39</sup>

#### Table 7.3 Sampling errors of estimates of main labour force aggregates

Indicator	Estimate	Standard error	Relative standard	Confidence interval (at 95 per cent level)	
			error	Lower	Upper
Population 15+ years	3 676 400	31 829	0.09%	3 614 000	3 738 800
Labour force	1 793 300	10 900	0.6%	1 771 900	1 814 700
Employment	1 589 900	10 600	0.7%	1 569 200	1 610 500
Unemployment	203 500	4 900	2.4%	193 800	213 100
Time-related underemployment	31 500	1 900	5.9%	27 900	35 200
Potential labour force	67 000	3 100	4.7%	60 800	73 100

Source: Labour Force and Household Living Conditions Survey (LFHLCS), 2018–19, Central Administration of Statistics (CAS), Beirut, Lebanon.

<sup>38</sup> Verma, Vijay: Sampling Methods: Manual for Statistical Trainers Number 2, Statistical Institute for Asia and the Pacific (SIAP), Tokyo, Revised 2002.

<sup>39</sup> In fact, in the present context, the sampling variances were calculated directly using estimates of the joint selection probabilities obtained on the basis of the method of Deville (1993) computed with the "varest" (variance estimation) function of the R-contributing package. "sampling."

Deville, J.-C., Särndal, C.-E. and Sautory, O. (1993). Generalized Raking Procedures in Survey Sampling, JASA, Vol. 88, No. 423, pp.1013-1020.

One use of the standard error is to assess the level of precision of survey estimates. A low relative standard error indicates a high precision of the estimate. In general, the lower the relative standard error of an estimate, the higher is the precision of the estimate. The relative standard error of an estimate is the ratio of the standard error to the size of the estimate. Thus, according to the results in the table above, the labour force was estimated with a higher precision than employment, and employment was estimated with a higher precision than unemployment, and so on.

Another use of the standard error is for the calculation of confidence intervals. For example, under certain broad assumptions, it can be stated that, for 95 per cent of the time, when we calculate a confidence interval in this way, the true total number of unemployed people will be between 193,800 and 213,100 (based on the estimate shown in table 7.3). However, 5 per cent of the time, it will be outside this range.

The next table gives the standard errors of the main labour force rates. It shows that the precision of the survey estimate of ratios, such as the labour force participation rate, the employment-to-population ratio and the rates of labour underutilization are about the same, reflecting the fact that the standard errors of the ratios depend, in effect, on the denominator of the ratio, but not so much on its numerator.

Indicator	Estimate	Standard error	Confidence interval	
Indicator			Lower	Upper
Labour force participation rate	48.8%	0.30	48.2%	49.4%
Employment-population ratio	43.2%	0.29	42.7%	43.8%
LU1 Unemployment rate	11.3%	0.26	10.8%	11.9%
LU2 Combined unemployment and time-related underemployment	13.1%	0.29	12.5%	13.7%
LU3 Combined unemployment and potential labour force	14.5%	0.30	13.9%	15.1%
LU4 Composite labour underutilization	16.2%	0.33	15.6%	16.9%

# Table 7.4 Sampling errors of the estimates of main labour force rates and ratios

Source: Labour Force and Household Living Conditions Survey (LFHLCS), 2018–19, Central Administration of Statistics (CAS), Beirut, Lebanon.

#### **Generalized variance**

As it was not practical to calculate and report sampling variances for every published statistic of the survey, approximate sampling errors were computed using the approximate relationship between the variance of an estimate and its size.

#### Overall assessment

Overall, the quality assessment of the results of the LFHLCS shows acceptable levels of sampling error and non-sampling error. It is instructive to note that calculations show that the precision of the estimates of employment and unemployment of the LFHLCS at the national level are almost equal to the precision requirements of the European Union for estimates of employment and unemployment based on labour force surveys at national levels.<sup>40</sup>

<sup>&</sup>lt;sup>40</sup> European Commission, Eurostat, *Final report on the task force on EU LFS precision requirements, Luxembourg, 24–25 June 2014.* 



Central Administration of Statistics Atwe building, Boulevard Camille Chammoun Beirut, Lebanon Phone: +9615462880 | www.cas.gov.lb

ILO Regional Office for Arab States Aresco Center, Justinien Street Beirut- Lebanon Phone: +961 (0)1 752 400 | www.ilo.org/beirut

