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

Acknowledgements

The follow-up Labour Force Survey (LFS) was conducted by the Central Administration of Statistics (CAS) of Lebanon in January 2022 with the technical and financial support of the International Labour Organization (ILO), Regional Office for Arab States.

It provides up-to-date estimates of a broad array of labour market and demographic indicators concerning the residents of Lebanon at national and governorate levels.

With a sample of 5,444 households, the survey covers people living in residential dwellings. A significant effort was needed to conduct the follow-up Labour Force Survey in light of the current challenging socio-economic situation in Lebanon. The Central Administration of Statistics acknowledges the professional input and contribution of the partners, experts, and staff involved in the preparation and implementation of the survey and in drafting the final report.

Particular thanks are due to the ILO core team, comprising the late Nader Keyrouz (Regional Labour Statistician), Grace Eid (Project Coordinator), Yves Perardel (Senior Econometrician), Iulian Pogor (Statistical Knowledge Management Officer), Mustafa Hakki Ozel (Statistical Consultant) and Michel Hankach (Project Administrator), and to the ILO experts, Farhad Mehran (Labour Statistician), Moni Nehme (CsPro expert), Mohammad Tarraf (Associate Statistician) and Chantal El Hajj (Survey Assistant), for their technical support.

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This report was prepared by Farhad Mehran, Mayssaa Daher, Ali Hamieh and Grace Eid, and benefitted from valuable comments by Tariq Haq.

CAS would like to pay tribute to the late and much admired Nader Keyrouz, whose leadership and tireless efforts were instrumental in the conception, design and implementation of the survey.

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Executive Summary

The follow-up Labour Force Survey (LFS) 2022 is the product of a partnership between the International Labour Organization (ILO) and the Central Administration of Statistics (CAS) of Lebanon. It was conducted by CAS in 2022 with the financial and technical assistance of the ILO, Regional Office for Arab States.

The follow-up Labour Force Survey provides up-to-date estimates of a broad array of labour market and demographic indicators concerning the residents of Lebanon at the national and governorate levels. In view of the more than challenging socio-economic situation in Lebanon, reliable survey results are of critical importance to enable the real impact of the crisis on the labour market to be quantified and understood, and to inform evidence-based policies and response strategies.

The survey adopted a methodology aligned with the latest statistical standards established by the International Conference of Labour Statisticians (ICLS) at its 19th Session and that followed the recommendations made at its 20th Session.

The sample for the follow-up survey consisted of all the households that reported a valid telephone number, whether landline or mobile, in the fourth quarter round of the previous survey, the Labour Force and Housing Living Conditions Survey (LFHLCS), carried out by CAS between 2018 and 2019 with funding from the Delegation of the European Union to Lebanon. The data for the follow-up LFS were collected in January 2022. The effective sample size was 5,444 households, with a total of 22,046 household members (representing an average household size of about 4.07 persons) and including both Lebanese and non-Lebanese residents.

The follow-up LFS covers the population of Lebanon living in regular 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 settlements, and so on.

The follow-up survey questionnaire maintained the basic structure of the previous survey, but was adapted for telephone interviewing, and incorporated additional questions and specific answer categories to measure the impact of the main events that occurred in Lebanon during the period 2019-2021: the October 2019 Revolution; the total lockdown in response to COVID-19 in mid-March 2020: and the Port of Beirut blast in August 2020. It included the following themes: demographic characteristics (description of household members, nationality, education, and access to health insurance); labour force status; main job characteristics; job search; previous employment status; household income; and intention to migrate. The data were collected by telephone, using computer-assisted questionnaires (Computer Assisted Personal Interviewing – CAPI model).

The overall objective of the survey was to provide a rapid and reliable assessment of the changes in the employment situation in Lebanon resulting from the recent financial and economic crisis the country has faced, in addition to the COVID-19 pandemic. The survey findings make it possible to quantify the impact of the crises and provide up-to-date nationally representative statistics on selected key labour market indicators of particular interest that were previously captured by the LFHLCS in 2018-2019. Thus, the survey provides current data on the size and characteristics of the labour force, employment, unemployment and other labour market characteristics, including hours of work, income from employment of employees at their main job and informality of employment, paying particular attention to the changes in these key labour force indicators since the earlier survey conducted in 2018-2019. The survey was also designed to measure different components of labour underutilization, including time-related underemployment and

the potential labour force, in line with the latest international standards adopted by the 19th International Conference of Labour Statisticians.

The survey presents estimates disaggregated by governorate, covering the eight governorates (Beirut, Mount Lebanon, North Lebanon, Akkar, Bekaa, Baalbek-Hermel, South Lebanon and Nabatieh). The main findings are presented below.

The national labour force participation rate (LFPR) has declined by more than five percentage points, from 48.8 per cent in 2018-2019 to 43.4 per cent in 2022.[2] The male participation rate was 66.2 per cent, significantly higher than the female rate of 22.2 per cent. Between 2018-19 and 2022, the labour force participation rate for both males and females decreased for all age groups and in all governorates, with the possible exception of Baalbek-Hermel, where it has remained more or less unchanged: 43.3 per cent in 2018-2019 and 43.9 per cent in 2022. The greatest decrease in the labour force participation rate was in Beirut governorate, where it has fallen by about 10 percentage points, from 52.5 per cent in 2018-2019 to 43 per cent in 2022.

The employment-to-population ratio, often used as an indicator of the performance of the national economy in providing employment to its population, stood at 30.6 per cent in 2022, more than ten percentage points lower than the 43.3 per cent recorded in 2018-2019. The ratio was higher for males (47.4. per cent) than for females (15 per cent), and lower for youth (17.9 per cent) than for adults (34.2 per cent).

According to the survey findings, the unemployment rate increased from 11.4 per cent in 2018-2019 to 29.6 per cent in 2022, indicating that almost one third of the labour force was unemployed in January 2022. The female unemployment rate (32.7 per cent) was somewhat higher than the male rate (28.4 per cent), while the youth unemployment rate (47.8 per cent) was almost twice the adult rate (25.6 per cent). At the governorate level, the unemployment rate increased in all governorates without exception. The largest increase was in Baalbek-Hermel, where it rose by a staggering 30 percentage points, from 11 per cent in 2018-2019 to 40.7 per cent in 2022. This was followed by South Lebanon, where the rate increased by 24 percentage points, from 12.3 per cent in 2018-2019 to 36.5 per cent in 2022.

In addition to unemployment, the unmet needs for employment are reflected in other indicators of labour underutilization. The January 2022 data show that, when time-related underemployment is taken into account, the combined rate of time-related underemployment and unemployment reached 43.2 per cent. The combined rate of unemployment and potential labour force was 38.1 per cent. The composite measure of labour underutilization, which includes all three elements – unemployment, time-related underemployment and potential labour force – increased enormously, from 16.2 per cent in 2018-2019 to 50.1 per cent in 2022, indicating that about half of the labour force and the potential labour force in Lebanon was underutilized in some form or other in 2022. The highest rate of labour underutilization was among the youth population (15-24 years old), for whom the composite measure of labour underutilization was 64.2 per cent (compared with 29.4 per cent in 2018-2019), and among women, for whom it was 57.1 per cent (compared with 21.3 per cent in 2018-2019).

According to the survey findings, in 2022, about 29.6 per cent of the unemployed had been seeking employment for two years or more and another 19.2 per cent had been seeking employment for between one and two years. Thus, in total, about 48.8 per cent of the unemployed were in long-term unemployment in 2022.

[2] The reference month for all 2022 data is January.

According to the survey findings, about 56.6 per cent of the total working age population were outside the labour force in 2022. The great majority of persons outside the labour force were women (77.8 per cent) compared to 33.8 per cent of men.

The data collected on employment characteristics also covers the branch of economic activity. Between 2018-19 and 2022, the basic structure of employment remained essentially unchanged. The branch of economic activity with the highest share of employment remains wholesale and retail trade (between 19 and 20 per cent), followed by public administration and defence (between 10 and 12 per cent) and manufacturing (between 10 and 12 per cent). Some shift was observed in the activities of households as employer, the survey findings showing a more than five per cent drop in the share of employment in this activity, from 7.8 per cent in 2018-2019 to 2.5 per cent in 2022. Another significant change concerns the share of employment in public administration and defence, which increased by 2.1 percentage points, from 9.9 per cent in 2018-2019 to 12 per cent in 2022. Furthermore, the distribution of the employed population by occupation category at main job is also observed on the basis of the International Standard Classification of Occupations (ISCO-08). For men, the largest change in the share of employment occurred in the occupation group "managers", which dropped from 7.8 per cent in 2018-2019 to 2.5 per cent in 2022. By contrast, the share of male employment of "technicians and associate professionals" increased by 3.3 percentage points from 4.2 per cent in 2018-2019 to 7.5 per cent in 2022. In the case of women, the largest change in the share of employment occurred in "elementary occupations", which fell drastically from 27.4 per cent in 2018-2019 to 13.6 per cent in 2022.

In this follow-up labour force survey, the distribution of the employed population by employment status is observed on the basis of ICSE-18.[3] According to the findings, 74.5 per cent of the employed population were employees and 6.3 per cent were employers, 17 per cent were own-account workers and 1.4 per cent were contributing family workers. The survey also makes it possible to present the distribution of the employed population by sector of employment at main job. The survey results show that the basic structure of employment by sector of employment has remained essentially unchanged, with more than 90 per cent of the employed population engaged at main job in either the public sector or the private sector. Employment in the public sector was 12.4 per cent in 2018-2019 but reached 16.1 per cent of total employment in 2022.

The survey measures the informality of employment both in terms of the characteristics of the job type of the employed person (informal employment) and in terms of the characteristics of the establishment in which the person works (informal sector). The findings show that employment in the informal sector has increased by 13.1 percentage points, from 35.2 per cent in 2018-2019 to 48.3 per cent in 2022. Similarly, informal employment has increased by 7.5 percentage points, from 54.9 per cent in 2018-2019 to 62.4 per cent in 2022. Informal employment in the non-agricultural sectors (SDG indicator 8.3.1) also increased during the period, from 53.7 per cent in 2018-2018 to 60.3 per cent in 2022.

According to the survey findings, 1.7 per cent of the employed population was engaged in more than one job or activity in 2022, down from the survey estimate of 3.5 per cent in 2018-2019.

The employed population is analysed in terms of working time and income from employment, in order to distinguish the various intensities of employment, and to differentiate between the different categories of employed persons. The survey findings show that the average number of hours usually worked per week

[3] ILO, International Classification of Status in Employment (ICSE-18), *Resolution concerning statistics on work relationships*, 20th International Conference of Labour Statisticians, Geneva, 10-19 October 2018.

at main job of the employed population was 44.4 hours in 2022, considerably less than the corresponding figure of 48.5 hours in 2018-2019. Similarly, the average number of hours actually worked during the reference week at main job was significantly lower in 2022: 41 hours as opposed to 46.6 hours in 2018-2019. The main reason that the hours usually worked per week were generally higher than the hours actually worked during the reference week was temporary absence from work.

The data reveal that most employed persons (58.4 per cent) usually worked between 30 and 59 hours per week at their jobs in 2022, only slightly less than the corresponding percentage in 2018-2019 (60 per cent). The number of persons usually working short hours, that is, less than 30 hours per week, remained relatively low (11 per cent in 2018-2019 and 16.8 per cent in 2022), but was significantly higher among women (20 per cent in 2018-2019 and 25.5 per cent in 2022) than men (7.9 per cent in 2018-2019 and 13.9 per cent in 2022).

The proportion of persons usually working long hours – more than 60 hours per week – has fallen from 29 per cent in 2018-2019 to 18.7 per cent in 2022. The fall in the proportion of persons working long hours is observed for both men (from 35.1 per cent in 2018-2019 to 22.5 per cent in 2022) and women (from 11.4 per cent in 2018-2019 to 7.6 per cent in 2022).

The analysis of the data on income from employment in the report is limited to cash earnings of employees at their main job, excluding remuneration in kind and services. According to the survey findings, the average monthly earnings of employees at their main job were about 2,284,100 Lebanese pounds (LBP) in 2022, slightly lower among male employees (about 2,205,600 LBP) than female employees (2,492,000 LBP). The comparison and analysis with the corresponding data from 2018-2019 is complicated by the fact that, during the period between the two surveys, Lebanon experienced a very high rate of inflation and a large fall of the value of its currency in relation to the United States dollar (US$). This complication is compounded by the fact that some people received their earnings in dollars, while most received it in the local currency, Lebanese pounds.

The survey data allowed the computation of the employees with low pay rate indicator which is one of the indicators of the ILO framework on decent work[4] and thus an indicator of income inequality. As in LFHLCS 2018-2019, the calculations were also made for monthly rather than hourly earnings, and on the basis of the main job rather than all jobs. According to the survey findings, 23 per cent of employees were earning less than 1,066,700 LBP in 2022 (which corresponds to two thirds of the 1,600,000 LBP median monthly earnings of employees at their main job) and were thus considered to be low-pay workers. This compared with 21.8 per cent in 2018-2019. Among female employees, the proportion with low pay increased much more than the average, from 18.5 per cent in 2018-2019 to 27 per cent in 2022. It is surprising that, among male employees, the proportion with low pay has actually fallen, from 23.2 per cent in 2018-2019 to 21.5 per cent in 2022. Further survey estimates of the share of employees with low pay at main job by governorate are set out in the report.

The survey findings on the overall share of women in managerial positions record a fall of about 2 percentage points, at 26.7 per cent in 2022, compared with 28.9 per cent in 2018-2019. The share of men in managerial positions rose by a corresponding 2 percentage points, from 71.1 in 2018-2019 to 73.3 per cent in 2022.

The survey also allows analysis of youth not in employment, education, or training (NEET), which is an

[4] ILO *Decent Work Indicators Guidelines for Producers and Users of Statistical and Legal Framework Indicators*, ILO Manual, Second Version, December 2013, pp. 76-78.

indicator of the Sustainable Development Goals (SDG 8.6.1). According to the findings, almost one third of the female youth population was not in employment, education, or training in 2022 (32.1 per cent), a net increase from 2018-2019, when the NEET rate for young females was 26.8 per cent. A similar change can be observed in the case of the male youth population, for whom the NEET rate increased from 16.7 per cent in 2018-2019 to 26.1 per cent in 2022.

Chapter 1: Introduction

In 2018-2019, the Central Administration of Statistics of Lebanon conducted a labour force and household living conditions survey with the technical support of the International Labour Office and the financial support of the European Union (EU). The main objective of the survey was to produce estimates, at the national, governorate (*mohafaza*) and district (*caza*) levels, of a broad array of indicators on the labour market, and the educational characteristics and living conditions of the resident population of Lebanon, in line with international standards, in particular, the ILO Resolution concerning statistics of work, employment and labour underutilization (19th ICLS, 2013).[5] The survey covered a probability sample of more than 39,000 households, spread over the four quarters of the reference year. The results were published in early 2020 in both English and Arabic,[6] and micro-data were made available free of charge on the CAS website.[7]

It was decided to conduct a follow-up labour force survey to measure the changes in the main characteristics of the labour force resulting from the impact of the COVID-19 pandemic in 2020 and the economic crisis that Lebanon experienced the same year. The sample for the follow-up survey consisted of all the households that reported a valid telephone number, whether landline or mobile, in the fourth quarter round of the previous survey. The questionnaire of the follow-up survey maintained the basic structure of the one used for the previous survey, but was adapted for telephone interviewing and incorporated additional questions and specific answer categories to measuring the impact of the main events that occurred in Lebanon during the period 2019-2021: the October 2019 Revolution, which was triggered by the economic crisis; the total lockdown in response to COVID-19 in mid-March 2020; and the Port of Beirut blast in August 2020. The data were collected using computer-assisted questionnaires (Computer Assisted Personal Interviewing – CAPI model).

The purpose of this report is to present the main findings of the follow-up survey conducted in January 2022, paying particular attention to the changes in key labour force indicators since the earlier survey conducted in 2018-2019. Following this introductory chapter (Chapter 1), Chapter 2 presents the main labour force and labour underutilization indicators obtained from the survey and attempts to assess the impact of the major events of 2020. The subsequent chapters present the findings on the changes in the composition of employment (Chapter 3), hours of work and income from employment (Chapter 4), duration of unemployment and methods of seeking employment (Chapter 5) and situation of particular groups of workers (Chapter 6). The survey methodology is described in Annex A; information on the questionnaire design is provided in Annex B and the main concepts and definitions in Annex C.

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[5] ILO, *Resolution concerning statistics of work, employment and labour underutilization*, adopted by the 19th International Conference of Labour Statisticians (19th ICLS), Geneva, 2013. https://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_230304/lang--en/index.htm

[6] CAS, Labour Force and Household Living Conditions Survey (LFHLCS) 2018-2019 Lebanon. http://www.cas.gov.lb/images/Publications/Labour%20Force%20and%20Household%20Living%20Conditions%20Survey%202018-2019.pdf

[7] http://www.cas.gov.lb/index.php/economic-statistics-en/9-uncategorised/221-labour-force-and-household-conditions-survey-lfhlcs-2018-2019-microdata-files

Chapter 2: Main survey results

In this chapter, the main findings of the follow-up labour force survey are presented and then compared with the findings of the previous survey in 2018-2019, at the national and governorate levels. The impact of the major events of the intervening years is analysed in the final part of the chapter.

Main survey results, January 2022

The main results of the follow-up labour force survey are shown in Table 1. The first row gives the labour force participation rate for the total working age population (15 years old and above) and, separately, for male and female, and for youth (15 to 24 years old) and adults (25 years old and above). The labour force participation rate is a measure of the labour supply of a country. It is defined as the percentage of the working-age population engaged in the labour force. In January 2022, the rate was 43.4 per cent in Lebanon, indicating that less than half of the working-age population was either working for pay or profit, or seeking employment. The male labour force participation rate was 66.2 per cent, significantly higher than the female rate of 22.2 per cent. The youth labour force participation rate was 34.3 per cent, considerably lower than the rate for adults at 46 per cent, as young people tend to be at school, while adults are in the labour market.

Table 1: Main labour force and labour underutilization (LU) indicators, LFS 2022 (%)

	Sex			Youth (15-24 years old)	Adults (25+ years old)
	Total	Male	Female		
Labour force participation rate	43.4	66.2	22.2	34.3	46.0
Employment-to-population ratio	30.6	47.4	15.0	17.9	34.2
LU1: Unemployment rate	29.6	28.4	32.7	47.8	25.6
LU2: Combined rate of time-related underemployment and unemployment	43.2	42.5	45.0	57.6	40.1
LU3: Combined rate of unemployment and potential labour force	38.1	34.1	47.5	55.9	34.1
LU4: Composite measure of labour underutilization	50.1	47.1	57.1	64.2	46.9

The second row shows the employment-to-population ratio, that is, the employed percentage of the working-age population. The employment-to-population ratio is often used as an indicator of the performance of the national economy in providing employment to its population. The ratio stood at 30.6 per cent in 2022,[8] as expected, lower than the labour force participation rate. Similar to the pattern of the labour force participation rate, the employment-to-population ratio was higher for males (47.4. per cent) than for females (15.0 per cent), and lower for youth (17.9 per cent) relative to adults (34.2 per cent).

The third row gives the unemployment rate, that is, the percentage of the labour force that is unemployed. According to the survey results, the rate stood at 29.6 per cent, indicating that almost one third of the labour force was unemployed in 2022. The female unemployment rate (32.7 per cent) was somewhat higher than the male rate (28.4 per cent), while the youth rate (47.8 per cent) was almost twice the adult rate (25.6 per cent). In addition to unemployment, the unmet needs for employment are reflected in the extent of time-related 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,

[8] The reference month for all 2022 data is January.

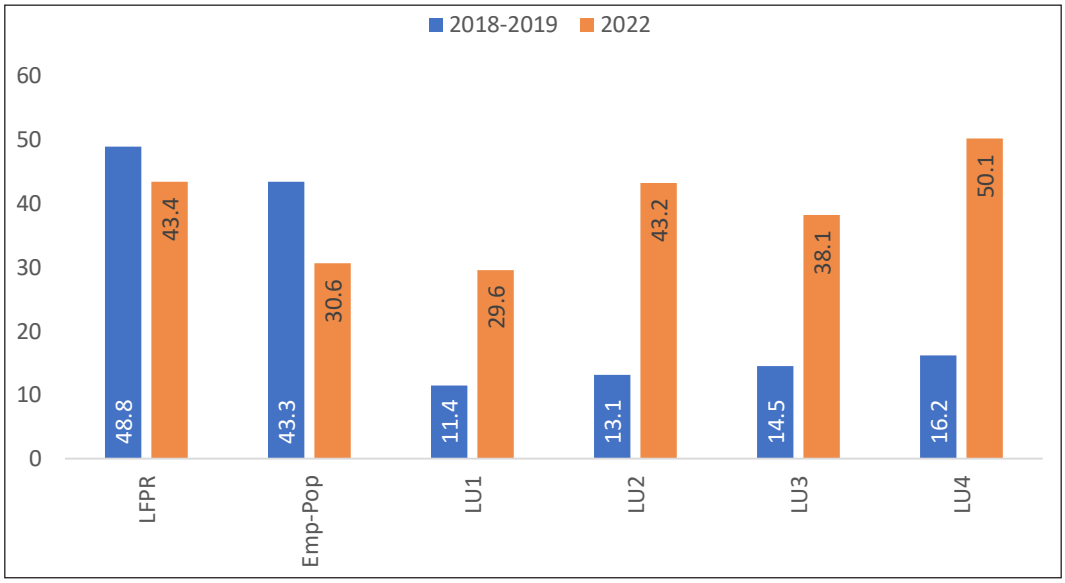
as well as people who were seeking employment during the reference period but were not available for work at the time.

The survey results show that, when time-related underemployment is taken into account, the combined rate of time-related underemployment and unemployment (LU2) reached 43.2 per cent, which means that, for every five persons in the labour force, more than two were either unemployed or in time-related underemployment. The rate was even higher if the potential labour force, which includes discouraged potential jobseekers, is taken into account. According to the survey results, the combined rate of unemployment and potential labour force (LU3) was 38.1 per cent and the composite measure of labour underutilization (LU4) which includes all three elements – unemployment rate (LU1), combined rate of time-related underemployment and unemployment (LU2), and combined rate of unemployment and potential labour force (LU3) – was 50.1 per cent, indicating that about half of the labour force and potential labour force in Lebanon was underutilized in some form or other in 2022. The highest degree of labour underutilization was among the youth population (15-24 years old), for whom the composite measure of labour underutilization (LU4) was 64.2 per cent, and among women, for whom LU4 was 57.1 per cent.

Comparison with 2018-2019

Figure 1 compares the main labour force and labour underutilization indicators obtained from the labour force and household living conditions survey conducted in 2018-2019 with the results of the follow-up labour force survey of January 2022. The LFHLCS 2018-2019 data are shown in blue and those of the follow-up labour force survey in orange. It can be observed on the left side of the figure that the labour force participation rate (LFPR) declined by more than five percentage points, from 48.8 per cent in 2018-2019 to 43.4 per cent in 2022. The decline was substantially higher for the employment-to-population ratio, which fell by more than ten percentage points, from 43.3 per cent in 2018-2019 to 30.6 per cent in 2022. This decline is particularly alarming as it reflects a large proportion of persons who lost employment between 2018-2019 and 2022.

Figure 1: Comparison of main labour force and labour underutilization indicators, LFHLCS 2018-2019 and LFS 2022 (%)



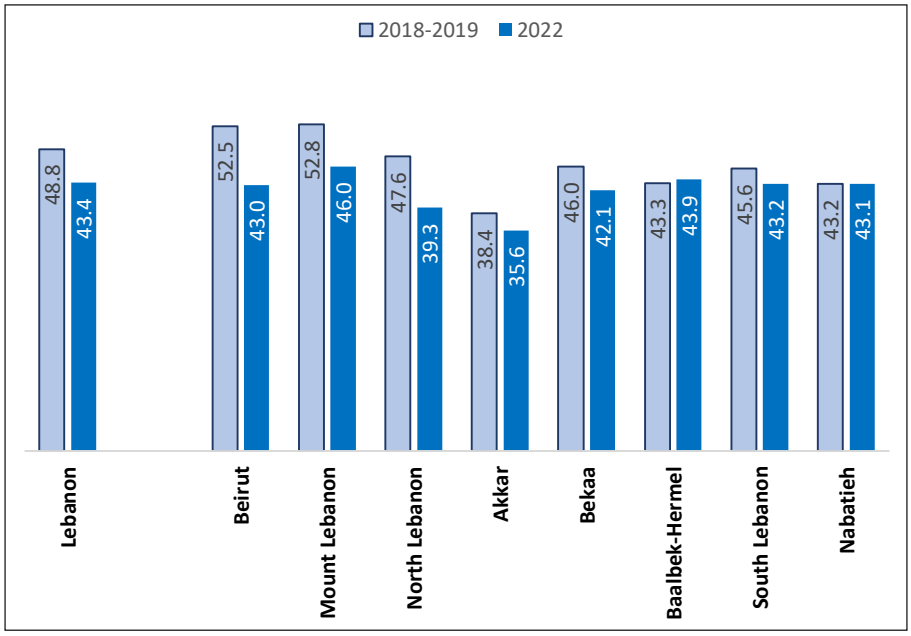
Notes: LFPR = Labour force participation rate; Emp-Pop = Employment-to-population ratio;
LU1 = Unemployment rate; LU2 = Combined rate of time-related underemployment and unemployment;
LU3 = Combined rate of unemployment and potential labour force; LU4 = Composite measure of labour underutilization.

The right side of the figure shows the change in the labour underutilization indicators. The unemployment rate (LU1) increased substantially, from 11.4 per cent in 2018-2019 to 29.6 per cent in 2022. The changes in the other indicators of labour underutilization are even higher. The combined rate of time-related underemployment and unemployment (LU2) increased from 13.1 per cent in 2018-2019 to a staggering 43.2 per cent in 2022. The combined rate of unemployment and the potential labour force (LU3) increased from 14.5 per cent in 2018-2019 to 38.1 per cent in 2022. The largest increase was registered by the composite measure of labour underutilization (LU4), which rose from 16.2 per cent in 2018-2019 to 50.1 per cent in 2022.

Changes at governorate level

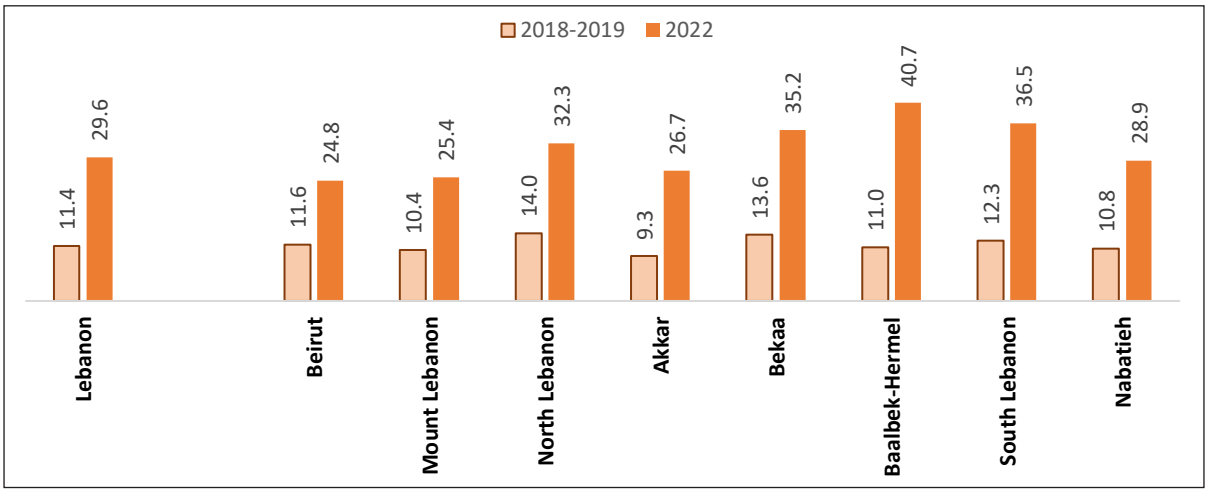
The changes at the governorate level are reflected in Figure 2 for the labour force participation rate and in Figure 3 for the unemployment rate. The data on the labour force participation rate by governorate are presented in light-blue for 2018-2019 and in dark-blue for 2022. It can be observed that the labour force participation rate has decreased in virtually all governorates, with the possible exception of Baalbek-Hermel, where it has remained more or less unchanged: 43.3 per cent in 2018-2019 and 43.9 per cent in 2022. By contrast, the largest decline was in Beirut governorate, where the labour force participation rate decreased by almost 10 percentage points, from 52.5 per cent in 2018-2019 to 43.0 per cent in 2022. The next largest decline was in North Lebanon, where the labour force participation rate fell by 8 percentage points, from 47.6 per cent in 2018-2019 to 39.3 per cent in 2022.

Figure 2: Labour force participation rate by governorate, LFHLCS 2018-2019 and LFS 2022 (%)



In Figure 3 on unemployment rate by governorate, the light orange columns present the data for 2018-2019, and the dark orange columns the data for 2022. It can be observed that the unemployment rate increased in all governorates without exception. The largest increase was in Baalbek-Hermel, followed by South-Lebanon and Bekaa. The unemployment rate of Baalbek-Hermel increased by a staggering 30 percentage points, from 11.0 per cent in 2018-2019 to 40.7 per cent in 2022, while that of South Lebanon increased by 24 percentage points, from 12.3 per cent in 2018-2019 to 36.5 per cent in 2022. In Bekaa, the unemployment rate increased by 22 percentage points, from 13.6 per cent in 2018-2019 to 35.2 per cent in 2022.

Figure 3: Unemployment rate by governorate, LFHLCS 2018-*2019* and LFS 2022 (%)

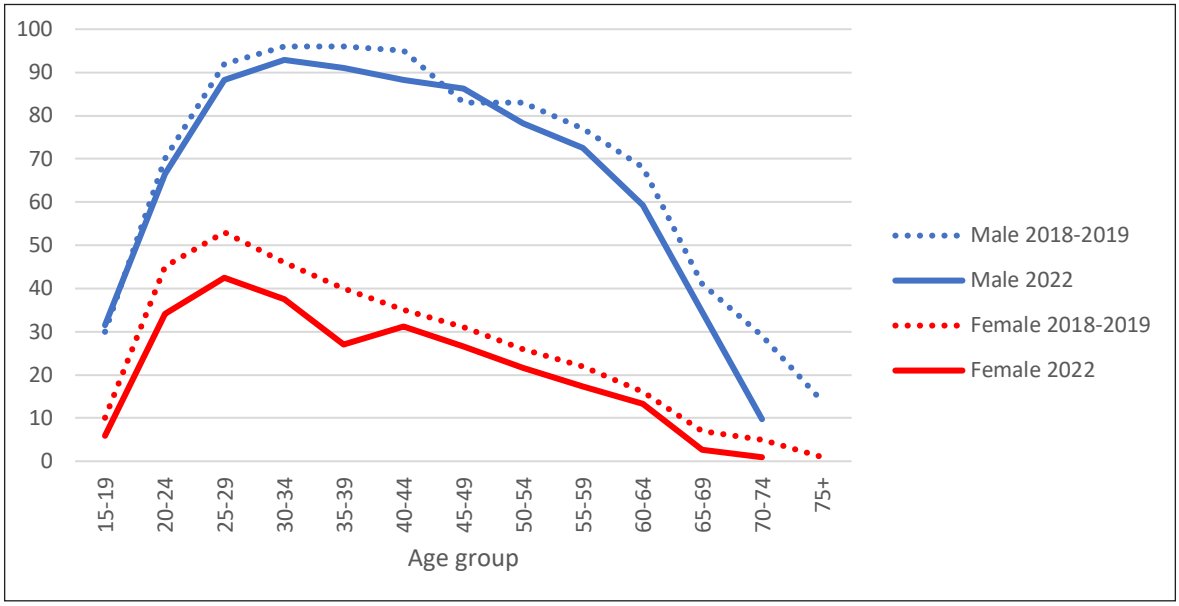


Comparing Figure 2 and Figure 3, it can be observed that the change in labour force participation rates of governorates over time has been much milder than the change in unemployment rates. This reflects the fact that the labour force participation rate is a much steadier concept than the unemployment rate, which is more volatile over time, especially, during major economic events. Also clear is the relatively strong correlation of the labour force participation rates of governorates for the two periods. The governorates with relatively higher labour force participation rates in 2018-2019 tend also to be those with relatively higher labour force participation rates in 2022. For example, Beirut and North Lebanon had the highest labour force participation rates in 2018-2019, at 52.5 per cent for both, and continued to have the highest rates in 2022, albeit at a lower level. The same observation cannot be made of the unemployment rate: the governorates with the lowest unemployment rates in 2018-2019 were not those with the lowest rate in 2022. For example, Akkar, which had the lowest unemployment rate in 2018-2019, at 9.3 per cent, registered a higher unemployment rate than Beirut and Mount Lebanon in 2022.

Changes in labour force participation

Figure 4 compares the curves of labour force participation rates by sex and age group in 2022 (solid lines) with the corresponding curves in 2018-2019 (dotted lines). The general inverted U-shape of the curves remains unchanged: increasing labour force participation rates at young ages when the youth population leaves the school system to enter the labour market, and declining labour force participation rates in old age when the elderly population leave the labour market for retirement or other reasons. Within this general pattern, significant changes can be noted for the male and female population. The male labour force participation rate decreased for virtually all age groups between 2018-2019 and 2022, the solid blue line representing the male labour force participation rate by age group in 2022 being almost everywhere below the dotted blue line representing the corresponding rates in 2018-2019. In addition, the male labour force participation rate, which was at its maximum value at the age group 40-44 years old in 2018-2019, reached its peak at the age group 30-34 years old in 2022. This suggests that the labour supply is shifting to younger persons among the male population.

Figure 4: Labour force participation rate by sex and age group, LFHLCS 2018-2019 and LFS 2022 (%)



The change in the female labour participation rate is also instructive. As in the case of male, the female labour force participation rate decreased for all age groups between 2018-2019 and 2022. The solid red line representing the female labour force participation rate by age group in 2022 is uniformly below the dotted red line representing the corresponding rates in 2018-2019. In the case of female labour force participation, the peak did not shift over the period, remaining at the age group 25-29 years old. But a dip can be noticed in the 2022 curve, which was not present in the earlier curve for 2018-2019. It suggests an accentuated retreat of women aged 25-29 years old from the labour market at the birth of a child, and a return to the labour market at 40-44 years of age, albeit at a lower rate, when the child has reached adolescence.

Impact of major events

In the period between the LFHLCS 2018-2019 and the follow-up labour force survey 2022, significant events occurred that had a substantial impact on the Lebanese economy. The three major events were:

(a) The "October 2019 Revolution": a series of protests triggered by the economic crisis that emerged in Beirut and across the country. The protestors took to the streets on 17 October 2019 following the announcement of new tax measures, and the movement quickly spread nationwide.

(b) The COVID-19 total lockdown: the announcement and application of total lockdown measures following the spread of COVID-19 in mid-March 2020.

(c) The Port of Beirut blast: on 4 August 2020, the explosion of a large amount of ammonium nitrate stored at the Port of Beirut caused thousands of deaths and injuries and billions of dollars-worth of damage and destruction of property, adding to the woes of an already devasted economy.

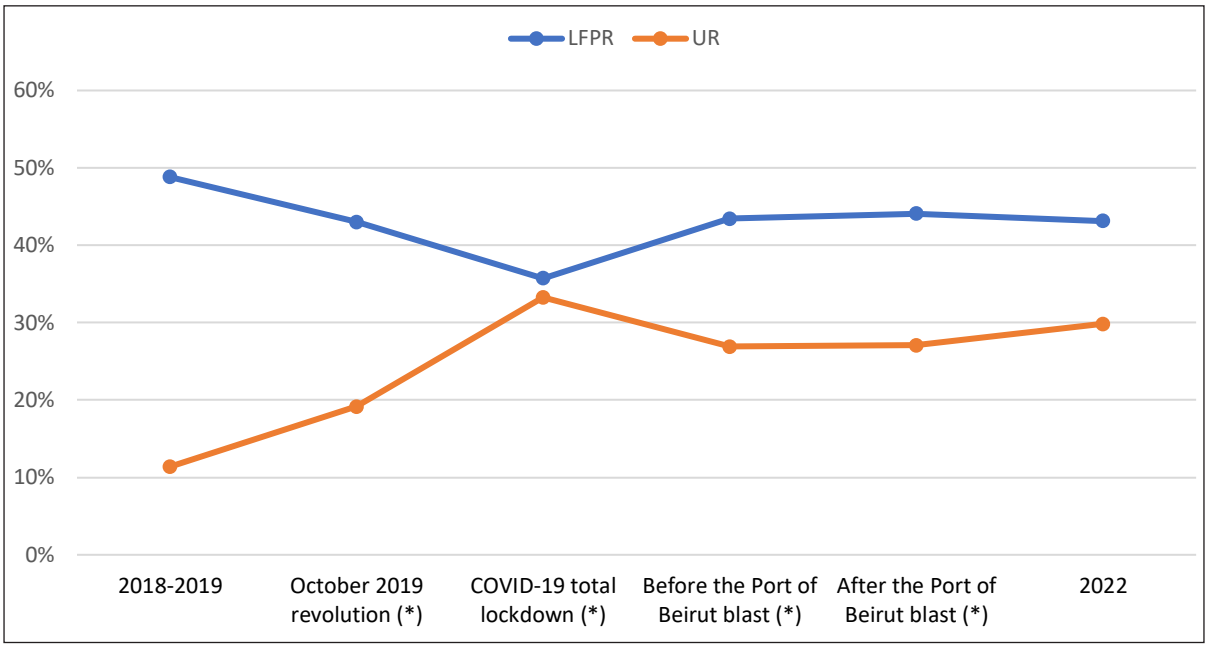
In an attempt to measure the impact of these major events on the labour market, the follow-up labour force survey 2022 incorporated a number of additional questions in the survey questionnaire, asking respondents to recall their labour force situation before and after these major events. It should be noted that retrospective questions are often subject to recall errors and omissions resulting from memory failure and telescoping bias due to perceiving recent events as being more remote, or distant events as being

more recent than they are. Nonetheless, the immense seriousness and significance of these events to all Lebanese make it reasonable to assume that respondents tended to recall their labour force situation at the time of these major events correctly. The survey results indicate that almost all respondents replied to these questions and that there were no refusals or blanks. The survey responses are analysed below using two different approaches.

1. Time series approach

The data obtained from the retrospective questions permit the construction of a time series of the labour force participation rate and of the unemployment rate at six points in time, including the reference dates of the two surveys in 2018-2019 and 2022. The results are shown in Figure 5 below. The blue curve represents the reconstructed time series on the labour force participation rate. It shows a large drop in the labour force participation rate between the 2018-2019 LFHLCS and the October 2019 revolution triggered by the economic crisis, and a continuous decline until the COVID-19 total lockdown. Since then, the labour force participation rate appears to have been slowly picking up, but it has not yet reached the pre-protests level. It is instructive to note that the Port of Beirut blast seems to have had little effect on the labour force participation rate, as it was 43.5 per cent before the blast and just above 44.1 per cent after it.

Figure 5: Labour force participation rate and unemployment rate before and after major events in Lebanon (%)



Notes: LFPR = Labour force participation rate: UR = Unemployment rate; (*) Calculated based on retrospective questions asked in the follow-up LFS 2022.

The orange curve in Figure 5 shows the reconstructed unemployment rate at the corresponding six points in time. It can be seen that the movement of the unemployment rate is almost a mirror image of that of the labour force participation rate. The orange curve shows a large increase in the unemployment rate from the 2018-2019 LFHLCS to the October 2019 revolution, and a steady increase until the COVID-19 total lockdown in mid-March 2020. Since then, the unemployment rate appears to have stagnated, after a slight fall before the Port of Beirut blast in August 2020. A remarkable feature of Figure 5 is that the

unemployment rate and the labour force participation rate almost intersect at the time of the COVID-19 total lockdown. This means that at that point the labour force participation rate was almost equal to the unemployment rate, which is a rare phenomenon. Straightforward calculation indicates that this phenomenon may occur when the population outside the labour force is much larger than the employed population, which in turn means that the employed population has to provide not only for itself, but also for an additional population much larger than itself.

2. Job losses approach

Another approach to assessing the impact on the labour market of the major events is to estimate the number of job losses. Table 2 gives the labour force gross flows calculated on the basis of the retrospective data on the labour force situation before and after the major events. The top matrix of the table shows the transition between the reported labour force status at the 2019 October Revolution when the series of protests triggered by the economic crisis started, and the labour force status at the time of the follow-up labour force survey in 2022. Thus, of the persons who were employed at the time of the 2019 October Revolution, 72.3 per cent were also employed at the time of the follow-up survey reference period in 2022. Another 17.0 per cent lost their job and became unemployed, and the remaining 10.7 per cent left the labour force, either to retire or for other reasons. The total job losses since the start of the street protests triggered by the economic crisis in October 2019 may thus be estimated at 27.7 per cent of the initial size of total employment. The matrix also provides information on other labour force flows; for example, it indicates that 52.5 per cent of the unemployed in October 2019 remained unemployed in 2022.[9]

Table 2: Labour force status in 2022 compared with labour force status at major events in 2019-2020 (%)

Major events		Labour force status 2022			
		Employed	Unemployed	Outside labour force	Total
October 2019 revolution triggered by the economic crisis	Employed	72.3	17.0	10.7	100.0
	Unemployed	29.3	52.5	18.2	100.0
	Outside labour force	4.7	4.5	90.7	100.0
	Not resident in Lebanon	29.4	33.4	37.1	100.0
COVID-19 total lockdown	Employed	80.8	11.4	7.8	100.0
	Unemployed	32.1	52.1	15.9	100.0
	Outside labour force	11.2	6.1	82.7	100.0
	Not resident in Lebanon	34.7	27.0	38.3	100.0
Before the Port of Beirut blast	Employed	81.5	11.8	6.7	100.0
	Unemployed	20.1	61.2	18.7	100.0
	Outside labour force	3.6	3.5	92.9	100.0
	Not resident in Lebanon	35.9	27.0	37.1	100.0
After the Port of Beirut blast	Employed		10.7	6.3	100.0
	Unemployed		64.0	19.1	100.0
	Outside labour force		3.2	94.0	100.0
	Not resident in Lebanon		27.3	35.2	100.0

[9] It should be noted that gross flow data measure the status at the start and at the end of a period. They do not measure any changes that may have occurred within the two time periods. Thus, an unemployed person at the start who is also unemployed at the end may have obtained employment and lost it or may have left the labour force and returned to it in the intervening periods.

Similar calculations give the number of job losses from each major event to date as shown in the lefthand section of Table 3. The results show a declining percentage of job losses as the date of the event gets closer to the present. This trend is expected and should not be regarded as the impact of the events. The impact of the events should be assessed after correcting for job losses that would occur under "normal" conditions during any given period of time. "Normal" conditions means the labour market conditions that existed at the time of the follow-up survey. For this purpose, an appropriate model should be formulated to separate the impact of the event from that of the elapsed time since the event. The formulation and estimation of such a model is beyond the scope of this report but, for the sake of illustration, the use of a simple model is presented in the section on the right.

Table 3: Survey results on job losses since major events and model estimate of excess job losses over and above "normal" conditions, LFS 2022

Survey results		Model		
Major event	**Job losses (%) x_t**	**Duration since major event (months) $t-t_o$**	**Job losses under "normal" conditions (%) $\hat{x}_t$**	**Excess job losses (%) $\hat{x}_t - x_t$**
Since 17 October 2019, when protests triggered by the economic crisis started	27.7	26	26.1	1.6
Since mid-March 2020, when COVID-19 lockdown started	19.2	21	21.7	-2.4
Since 4 August 2020, before the Port of Beirut blast	18.5	17	17.9	0.6
Since 1 September 2020, after the Port of Beirut blast	17.0	16	17.0	0.0

Let x_t denote the percentage of job losses since time t. It may be decomposed into two parts, one representing the unknown percentage of job losses that would occur under "normal" conditions since time t, and the other representing the excess or shortage of job losses that may be attributed to the particular conditions during the time period. In mathematical terms, the two components may be expressed as,

$$x_t = \mu_t + e_t$$

where denotes the percentage of job losses that would occur under "normal" conditions since time t, and the excess or shortage of job losses attributed to the particular conditions that occurred since t.

$$\mu_t = 1 - exp^{-a(t-t_o)}$$

where a is an unknown parameter representing the rate of job losses under "normal" conditions over a unit of time, t is the date of the particular event and t_o the reference period of the survey, set here at December 2021. The parameter, a, may thus be estimated as

$$\hat{a} = \frac{-\log(1 - x_{t_1})}{t_1 - t_o} = 0.01163$$

where t_1 refers to 1 September 2020, the date after the Port of Beirut blast. This gives the estimated excess job losses that have occurred since major event at time t, as the difference between the observed job losses since the event and what they would have been under "normal" conditions,

$$\hat{e}_t = x_t - \hat{\mu}_t$$

The calculations are shown in the right-hand section of Table 3. The data confirm the earlier result that the event that had the greatest impact on the labour market was the economic crisis that was manifested by street protests starting on 17 October 2019.

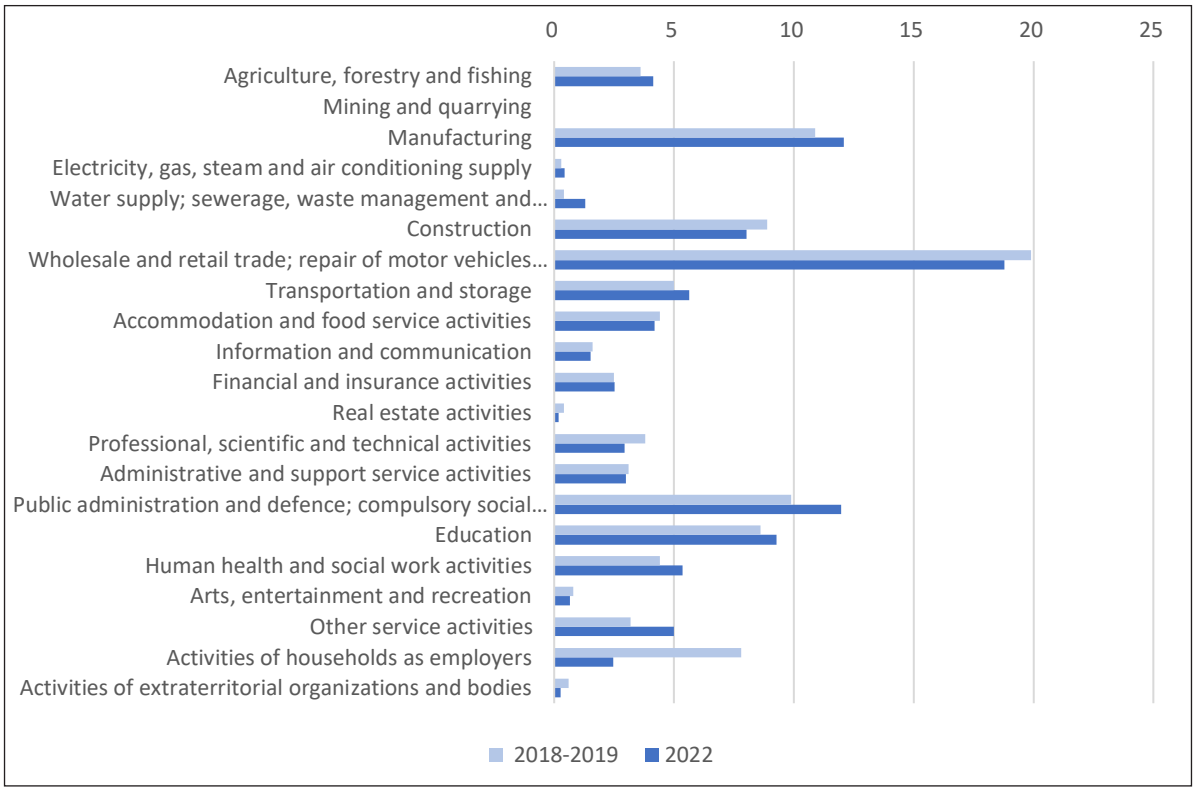
Chapter 3: Composition of employment

The survey findings on the composition of employment at main job are now examined in terms of various classification variables, including branch of economic activity, occupational category, status in employment, sector of employment, informality of employment, qualification mismatch by level of education, and multiple jobholding. In each case, the findings of the 2022 survey are compared with the corresponding findings of the LFHLCS 2018-2019 survey.

Branch of economic activity

Figure 6 shows the composition of employment by branch of economic activity at main job according to the 2022 survey findings and compares it with the corresponding values obtained from the earlier survey, LFHLCS 2018-2019. The branch of economic activity refers to the activity of the establishment in which the employed person worked during the survey reference week. It describes the activity of the establishment, not the type of work that the individual does when working in that establishment. Thus, for a person working as a security guard in a department store, the branch of economic activity is determined by the activity of the department store, not the task and duties of a security guard. The findings set out in Figure 6 show that the basic structure of employment remained essentially unchanged between 2018-2019 and 2022. The branch of economic activity with the highest share of employment remains wholesale and retail trade (19 to 20 per cent), followed by public administration and defence (10 to 12 per cent) and manufacturing (10 to 12 per cent).

Figure 6: Employment by branch of economic activity at main job, LFHLCS 2018-2019 and LFS 2022 (%)



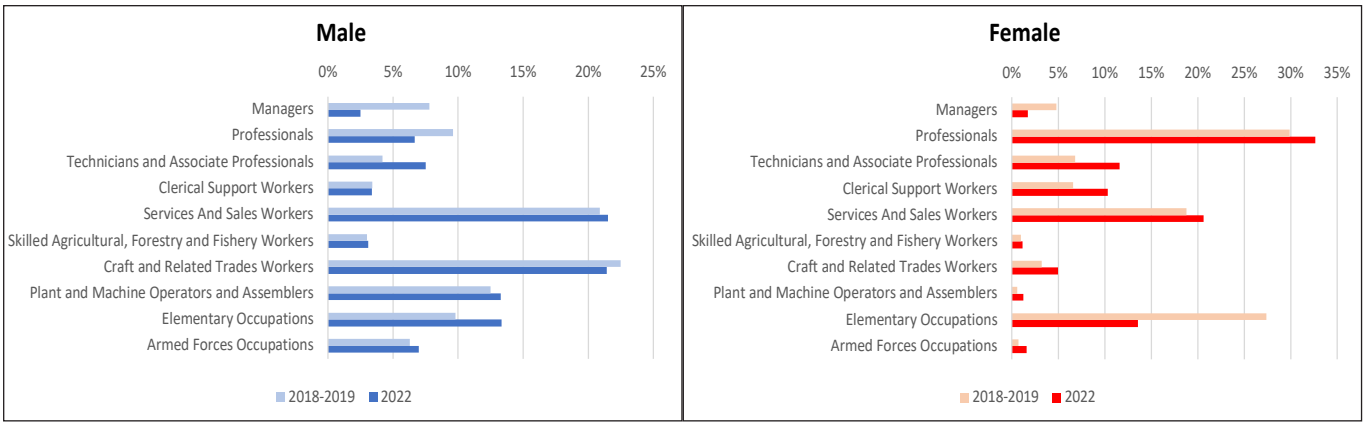
Closer attention to the details indicates some shift in the composition of employment by branch of economic activity, however, particularly in the case of activities of households as employer. Activities of households as employer refer to the activities of persons engaged as domestic workers by households. The survey results show a more than five per cent fall in the share of employment in this activity, from 7.8 per cent in 2018-2019 to 2.5 per cent in 2022. This result suggests that one effect of the major events that occurred between 2018-2019 and 2022 was a lower reliance on domestic workers by households, or possibly out-migration of a significant number of domestic workers following the events.

Another significant change (referring to changes of more than 2 percentage points between 2018-2019 and 2022) concerns the share of employment in public administration and defence, which increased by 2.1 percentage points, from 9.9 per cent in 2018-2019 to 12.0 per cent in 2022. This suggests that public administration and defence, which was already a large employer in the country, became relatively still larger following the major events. This does not necessarily mean that employment in public administration and defence grew during the period, but that its relative share of employment increased due, for example, to a lower rate of dismissal than in other branches of economic activity.

Occupation

Figure 7 presents the findings of the follow-up survey on the composition of employment by sex and occupation at main job, and a comparison with the corresponding data from LFHLCS 2018-2019. Occupation refers to the tasks and duties performed by an employed person at their job, irrespective of the branch of economic activity or status in employment of that person. Thus, referring to the example given earlier of the security guard at the department store, the occupation of the person is "security guard". In terms of the international standard classification of occupations (ISCO-08), it is coded in the unit group 5414, as part of major group 5 (Services and Sales Workers). Figure 7 gives the findings by sex separately, because the composition of employment by occupation generally differs significantly for men and women.

Figure 7: Employment by sex and occupation at main job, LFHLCS 2018-2019 and LFS 2022 (%)



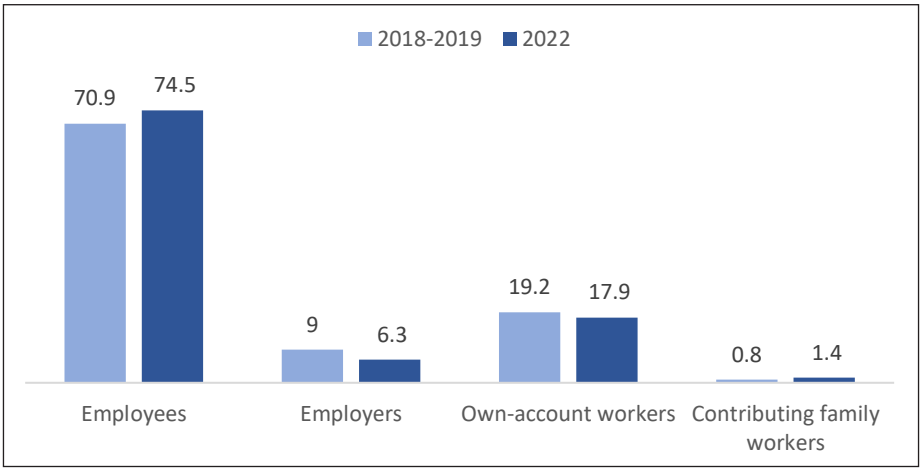
For men, the largest change in the share of employment occurred in the occupation group "Managers", which fell from 7.8 per cent in 2018-2019 to 2.5 per cent in 2022. The next largest fall occurred in the occupation group "Professionals", from 9.6 per cent in 2018-2019 to 6.7 per cent in 2022. By contrast, the share of male employment of "Technicians and Associate Professionals" increased by 3.3 percentage points, from 4.2 per cent in 2018-2019 to 7.5 per cent in 2022. A similar rate of increase is observed in the share of male employment in "Elementary Occupations", which was 9.8 per cent in 2018-2019 and increased to 13.3 per cent in 2022.

In the case of women, the largest change in the share of employment occurred in "Elementary Occupations", which fell drastically from 27.4 per cent in 2018-2019 to 13.6 per cent in 2022. By contrast, the share of female employment in all other occupational categories increased during the period, except for "Managers", where the share of female employment decreased from 4.8 per cent in 2018-2019 to 1.7 per cent in 2022.

Status in employment

Figure 8 shows the follow-up survey findings on the composition of employment in terms of status in employment at main job, and a comparison with corresponding data from LFHCS 2018-2019. Status in employment refers to the status of the employed person regarding the type of authority that the worker is able to exercise in relation to the work performed and the type of economic risk to which the worker is exposed.[10] The survey data distinguish four statuses in employment: employee, employer, own-account worker and contributing family worker. The results presented in Figure 8 show a significant increase in the share of employees in total employment, from 70.9 per cent in 2018-2019 to 74.5 per cent in 2022. The data also show a slight increase in the share of contributing family workers, from 0.8 per cent in 2018-2019 to 1.4 per cent in 2022. By contrast, the data show a decrease in the share of employers, from 9.0 per cent in 2018-2019 to 6.3 per cent in 2022, and a slight decrease in own-account workers, from 19.2 per cent in 2018-2019 to 17.9 per cent in 2022. It is thus apparent that one effect of the events that occurred in Lebanon between 2018-2019 and 2022 was to reduce the relative number of independent workers (employers and own-account workers) and increase the relative number of dependent workers (employees and contributing family workers).

Figure 8: Employment by status in employment at main job, LFHLCS 2018-*20*19 and LFS 2022 (%)



Sector of employment

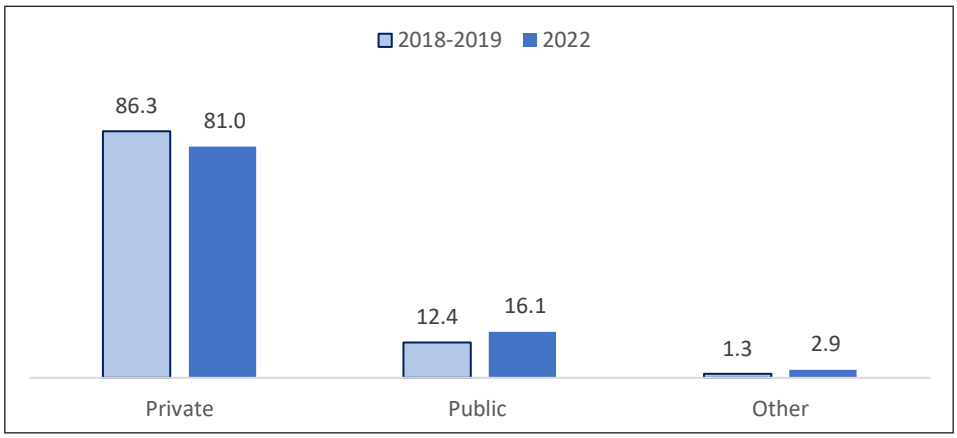
Figure 9 presents the survey findings on the composition of employment by sector of employment at main job and compares them with the corresponding data from LFHLCS 2018-2019. The two main sectors of employment are the "public sector", including government agencies at all levels of government and government-controlled enterprises, and the "private sector", covering all financial and non-financial

[10] ILO, International Classification of Status in Employment (ICSE-18), Resolution concerning statistics on work relationships, 20th International Conference of Labour Statisticians, Geneva, 10-19 October 2018.

corporations and quasi-corporations owned, controlled, and managed by individuals, groups or business entities. Other sectors of employment distinguished in the survey are "households", including individuals or groups of individuals, other than quasi-corporations, producing goods and non-financial and financial services for the market; "non-profit institutions serving households", such as churches and religious societies, sport clubs, trade unions and political parties; and "international institutions", including extraterritorial organizations, such as embassies and consular missions

The findings show that the basic structure of employment by sector of employment has remained essentially unchanged, with more than 90 per cent of the employed population engaged at main job in either the public sector or the private sector. The share of employment in each of these sectors has, however, increased, in particular, employment in the public sector, which was 12.4 per cent in 2018-2019, reached 16.1 per cent of total employment in 2022. This growth in the share of the public sector is due to the fact that the private sector has witnessed a decline in share of total employment, from 86.3 per cent in 2018-2019 to 81 per cent in 2022.

Figure 9: Employment by sector of employment at main job, LFHLCS 2018-2019 and LFS 2022 (%)



Informal employment

The informality of employment may be measured in terms of (a) the characteristics of the production unit in which the employed person works, or (b) the characteristics of the job that the individual has in the production unit. The measurement under (a) is called employment in the informal sector, while the measurement under (b) is referred to as informal employment.

In broad terms, employment in the informal sector refers to persons engaged in production units operating at a low level of organization, with little or no division between labour and capital as factors of production.[11] These are generally unincorporated enterprises, not registered at the national level, not keeping or not required to keep accounts for reporting to government, and often operating with no or few employees on a casual basis.

By contrast, informal employment refers to the type of employment relationship of the job holder.[12] In the case of employers and own-account workers without employees, the job holder is themselves. Therefore, the informality of their job is defined by the informality of their production units. If they are engaged in

[11] ILO, Resolution on the measurement of employment in the informal sector, Fifteenth International Conference of Labour Statisticians, Geneva, 1993.

[12] ILO, *Guidelines concerning a statistical definition of informal employment*, Seventeenth International Conference of Labour Statisticians, Geneva, 2003.

the informal sector, they have informal employment. For employees, the type of employment relationship is defined in terms of the social protection or certain entitlements that the job provides, in particular, paid annual leave or paid sick leave. All contributing family workers are classified as having informal employment, irrespective of whether they work in formal or informal sector enterprises.

Table 4 cross-classifies employment in terms of both concepts of informality. The results obtained from the earlier survey, LFHLCS 2018-2019, are presented in the lefthand section of the table and those obtained from the 2022 follow-up survey are presented in the right part of the table. The rows give the classification of employment in terms of the characteristics of the production units, while the columns give the classification in terms of the characteristics of jobs. According to these results, employment in the informal sector increased by 13.1 percentage points, from 35.2 per cent in 2018-2019 to 48.3 per cent in 2022. Similarly, informal employment increased by 7.5 percentage points, from 54.9 per cent in 2018-2019 to 62.4 per cent in 2022.

Table 4: Employment by informality of jobs and production units, LFHLCS 2018-2019 and LFS 2022 (%)

Production units	2018-2019 (%)		
	Informal jobs	Formal jobs	Total
Informal sector	35.1	0.0	35.2
Outside informal sector	19.8	45.0	64.8
Total	54.9	45.1	100.0

Production units	2022 (%)		
	Informal jobs	Formal jobs	Total
Informal sector	45.8	2.5	48.3
Formal sector	15.2	35.1	50.3
Households	1.4	0.0	1.4
Total	62.4	37.6	100.0

The 2022 findings also show that 15.2 per cent of total employment included persons with informal jobs working in the formal sector. This category includes, for example, employees working in large private corporations or government agencies with short-term contracts and without social security contributions by the employer. Persons with informal jobs engaged by households, such as domestic workers without social security contributions by their employers, or without paid annual leave or paid sick leave accounted for a further 1.4 per cent of total employment. It is instructive to note that, overall, the share of informal employment outside the informal sector has decreased slightly, from 19.8 per cent in 2018-2019 to 16.6 per cent in 2022.

Using the data given in the Annex Tables on the CAS website,[13] more detailed analysis of informal employment may be conducted by sex, educational attainment, occupation, branch of economic activity, and sector of employment. In particular, it can be seen that the share of informal employment has uniformly increased in all branches of economic activity, except for "Administrative and Support Service Activities", "Activities of Households as Employers" and "Sewerage, Waste Management and Remediation Activities". Employment in these last two branches of economic activity is too low to give statistically significant results, however. The top three branches of economic activity with the highest percentage of informal employment remain "Agriculture, Fishing and Forestry" (98.1 per cent), "Activities of Households as Employers" (91.5 per cent) and "Construction" (90.5 per cent).

The proportion of informal employment in non-agricultural sectors, by sex, is one of the indicators of the United Nations Sustainable Development Goals (SDG indicator 8.3.1).[14] The lower the value of the indicator

[13] http://www.cas.gov.lb/index.php/demographic-and-social-en/laborforce-en
[14] https://sdg.data.gov/8-3-1/

for a given country, the closer the country is to the development goal. Table 5 shows the estimates obtained from the follow-up survey LFS 2022 compared with the corresponding findings of LFHLCS 2018-2019. It can be seen that the proportion of informal employment in non-agricultural sectors actually increased from 53.7 per cent in 2018-2019 to 60.3 per cent in 2022, indicating that Lebanon regressed in relation to this development goal during the period. In the case of female workers, however, a slight decline may be observed, from 54.8 per cent in 2018-2019 to 53.2 per cent in 2022.

Table 5: Informal employment in total non-agricultural employment by sex, LLFHLCS 2018-2019 and LFS 2022 (%)

	Male	Female	Total
LFHLCS 2018-2019	53.3	54.8	53.7
LFS 2022	62.7	53.2	60.3

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.

Qualification mismatch

According to the ILO *Guidelines concerning the measurement of qualifications and skills mismatches of persons in employment*,[15] qualification 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. Qualification mismatches include:

(a) Mismatch by level of education: this occurs when the level of education of the person in employment does not correspond to the level of education required to perform their job. Over-education occurs when the level of education and training of the person in employment is higher than that required to perform their job. Under-education occurs when the level of education and training of the person in employment is lower than that required to perform their job.

(b) Mismatch by field of study: this occurs when the field of study of the person in employment does not correspond to the field of study required to perform their job.

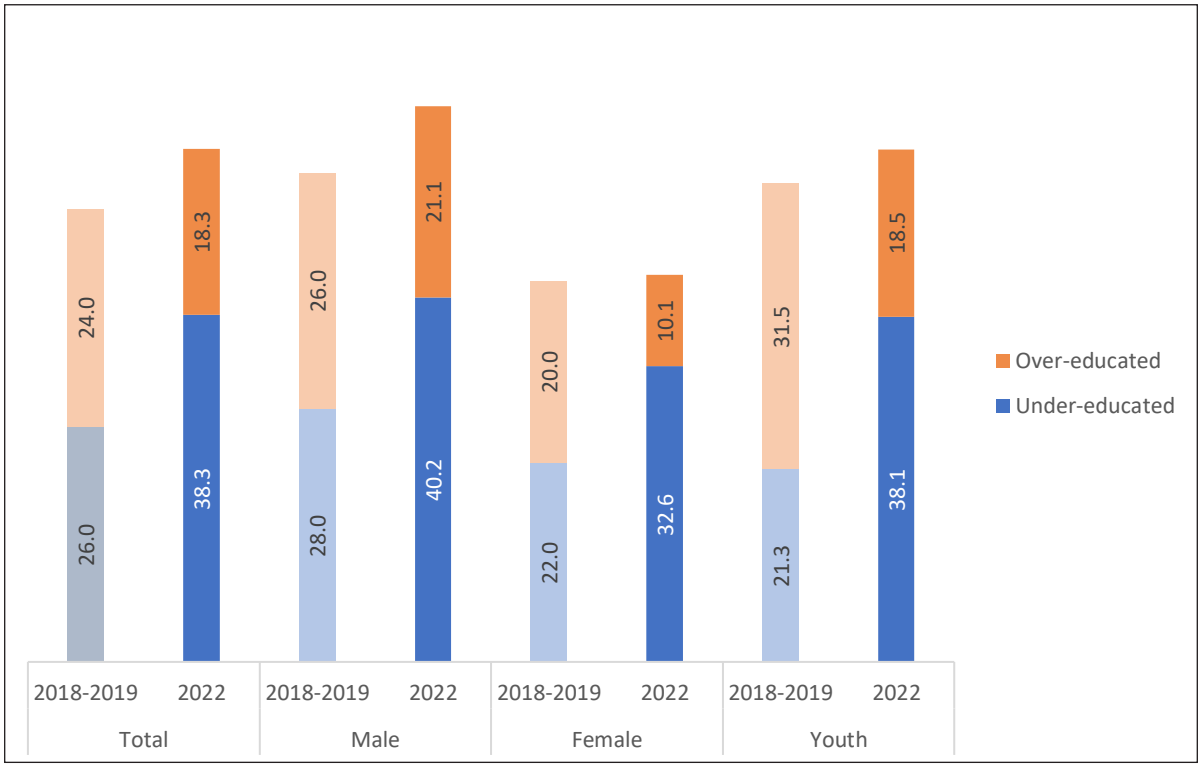
The 2022 follow-up survey provides estimates of qualification mismatch by level of education for various classifications, including sex, age group, nationality, occupation, branch of economic activity, status in employment, sector of employment and informality of employment. The survey also provides estimates of qualification mismatch by field of study for the same classification variables. The main results on

[15] ILO, *Guidelines concerning measurement of qualifications and skills mismatches of persons in employment*, endorsed by the 20th International Conference of Labour Statisticians, Geneva, 2018.

qualification mismatch by level of education are presented in graphic form in Figure 10 and compared with the corresponding data from LFHLCS 2018-2019. It can be observed that, for more than half (56.6 per cent) of the employed population in 2022, the level of education did not correspond to the level of education required to perform their job. The corresponding percentage in 2018-2019 was 50 per cent, indicating an increase of qualification mismatch during the period. It is instructive to note that over-education has actually fallen, from 24 per cent in 2018-2019 to 18.3 per cent in 2022, while under-education has considerably increased, from 26 per cent in 2018-2019 to 38.3 per cent in 2022. This suggests that relatively more over-educated persons lost employment during the intervening period than under-educated persons.

Similar results are obtained for males, females and youth. Qualification mismatch increased for all three categories of persons between 2018-2019 and 2022. Over-education decreased, and under-education increased in relative terms for all three categories of persons.

Figure 10: Qualification mismatch by level of education for different categories of employed persons, Lebanon LFHLCS 2018-2019 and LFS 2022 (%)

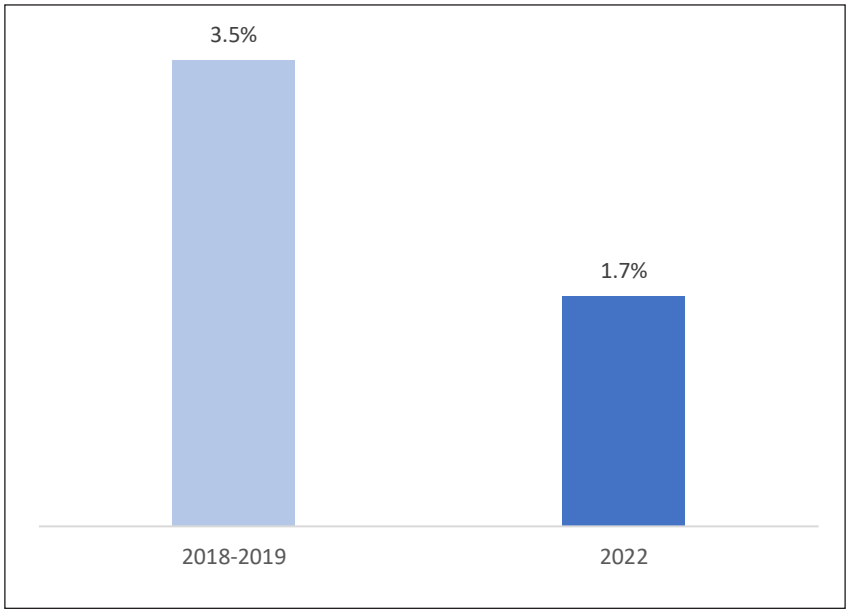


Multiple jobholding

Multiple jobholding refers to the engagement of the employed person in more than one job or activity during the reference period. It is generally poorly reported in household surveys as respondents tend to avoid reporting any secondary activities they have been engaged in for pay or profit during the survey reference period for fear of disclosure to authorities or simply because of response fatigue in the survey. Interviewers also tend not to probe too forcefully on multiple jobholding because they know that it could entail a longer interview period and a more detailed editing procedure. An examination of survey findings on multiple jobholding may nonetheless be instructive, as the reporting bias in the two survey periods may cancel each other out, providing a reasonably accurate estimate of change.

Figure 11 shows the percentage of the employed population reporting multiple jobs during the reference periods of the surveys. It shows that 1.7 per cent of the employed population was engaged in more than one job or activity in 2022, down from the survey estimate of 3.5 per cent in 2018-2019. This represents a fall of almost two percentage points, which may be interpreted as a consequence of the overall decline of employment during the period from 2018-2019 to 2022, and the scarcity of main jobs, in general, let alone multiple jobs.

Figure 11: Multiple jobholding, LFHLCS 2018-19 and LFS 2022 (%)



Chapter 4: Hours of work and income from employment

Hours of work are not uniform across all categories of employed person. Because the definition of employment is broad, covering all amounts of work, including just one hour during the reference week, it is important that employment data are analysed in conjunction with data on hours of work to distinguish between the various intensities of employment. Data on hours of work are also needed to measure time-related underemployment and to calculate hourly earnings so that the resulting data on earnings are comparable across different categories of workers. Following the presentation of the survey findings on hours of work, this chapter will also present the results on average monthly and hourly income from employment of employees at main job, estimates of the gender pay gap and estimates of the percentage of employees with a low pay rate.

Usual and actual hours of work

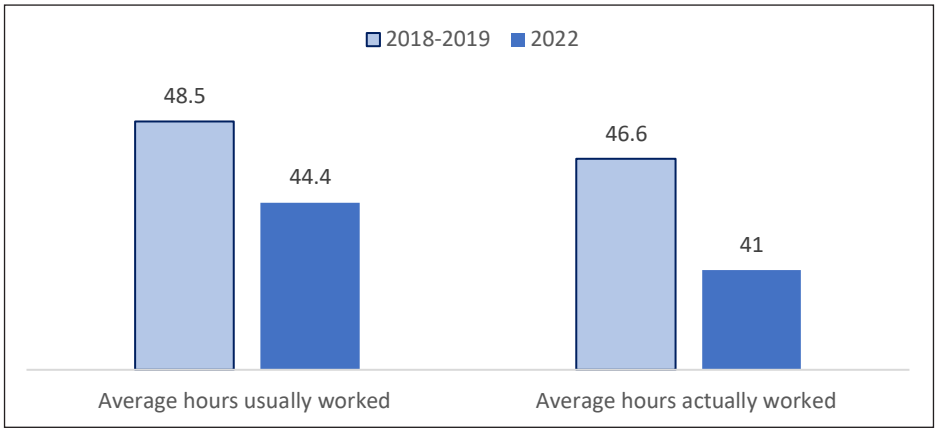
The current international standards recognize seven concepts of working time, each serving a specific objective.[16] They include hours actually worked and hours usually worked, hours paid for normal hours of work, contractual hours of work, overtime hours of work and absence from work hours measured using other sources of data. The relevant concepts measured in labour force surveys are "hours usually worked per week" and "hours actually worked during the reference week".

- ***Hours usually worked*** refers to the typical value of hours usually worked in a job (or work activity) per week, measured over a long observation period of a month, quarter, season or year.
- ***Hours actually worked*** includes time spent in a job (or work activity) in the performance of activities that contribute to the production of goods and services during the survey reference week. It includes: (a) direct hours spent carrying out the tasks and duties of the job (or work activity); (b) related hours spent maintaining, facilitating or enhancing productive activities; (c) downtime when the person cannot work due to machinery or process breakdown, but continues to be available for work; and (d) resting time of short periods for rest, relief or refreshment, according to established norms and national circumstances.

Figure 12 shows the average hours usually worked per week and the average hours actually worked during the survey reference week at main job according to the 2022 survey findings, compared with the corresponding data obtained from LFHLCS 2018-2019. It shows that the average number of hours usually worked per week at main job by the employed population was 44.4 hours in 2022, considerably less than the corresponding number of 48.5 hours in 2018-2019. Similarly, the average number of hours actually worked during the reference week at main job was significantly lower in 2022 (about 41.0 hours) than in 2018-2019 (46.6 hours). It should be noted that in both time periods, hours usually worked per week were generally higher than hours actually worked during the reference week. This is because, for those employed persons who were temporarily absent from work during the reference week, the hours actually worked is zero, while their hours usually worked per week is a positive number.

[16] ILO, Resolution concerning the measurement of working time, 18th International Conference of Labour Statisticians, Geneva, 2008.

Figure 12: Hours usually worked and hours actually worked at main job, LFHLCS 2018-2019 and LFS 2022 (hours)



The hours of work of men and women differ considerably in Lebanon. According to the survey findings shown in Figure 13, in 2022, the average number of hours usually worked per week at main job was about 46.8 hours for men, compared with 37.1 for women. Similarly, the average number of hours actually worked at main job during the reference week was 42.6 hours for men and 35.7 hours for women. It is instructive that the hours actually worked during the reference week are lower than the hours usually worked per week for both categories of workers, male and female. It can also be observed that the difference between hours actually worked during the reference week and hours usually worked is wider among men (about 4.2 hours) than women (about 1.4 hours). This finding is intriguing as it cannot be explained in terms of incidence of temporary absence from work as shown later in this chapter in the section on temporary absence from work.

Figure 13: Hours usually worked and hours actually worked at main job by sex, LFS 2022 (hours)

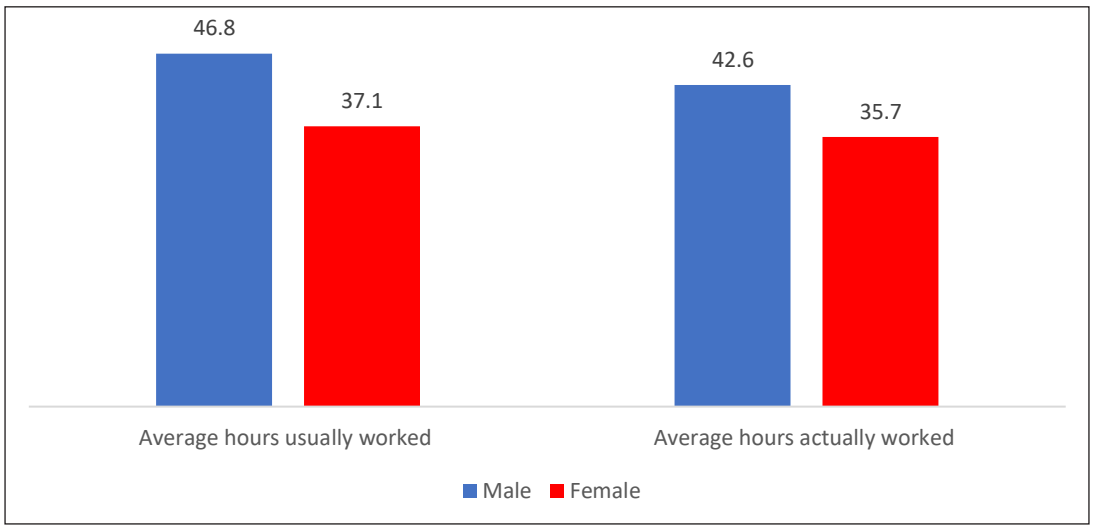
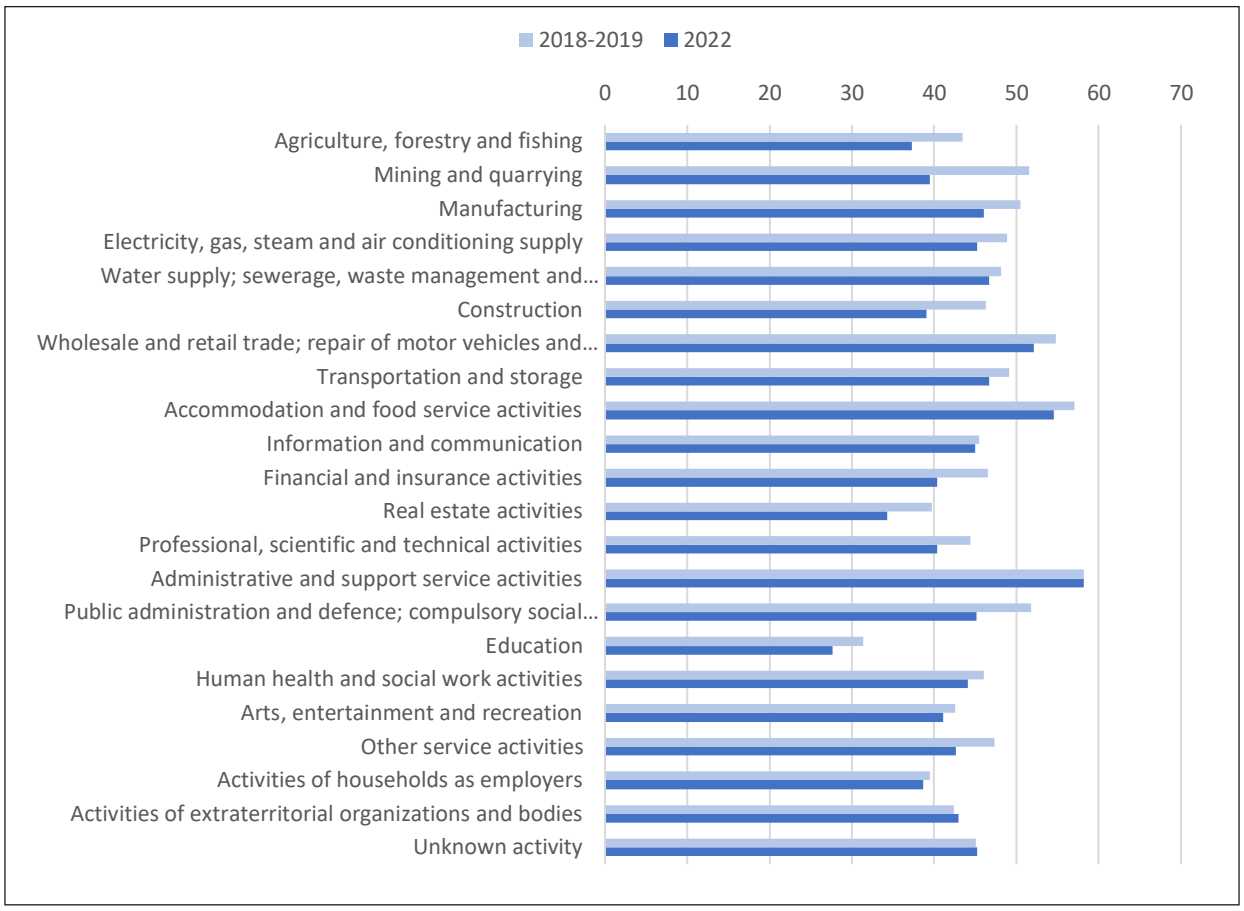


Figure 14 shows the average hours usually worked per week at main job by branch of economic activity in 2022 and compares the findings with the corresponding data for 2018-2019.

Figure 14: Average hours usually worked per week at main job by branch of economic activity, LFHLCS 2018-*20*19 and LFS 2022 (hours)



It can be noted that the average hours usually worked per week at main job has uniformly decreased or remained unchanged in all branches of economic activity with the exception of international organizations and bodies, in which average hours usually worked has increased slightly from 42.4 hours per week in 2018-2019 to 42.9 hours per week in 2022. The branch of economic activity with the longest hours usually worked remains "Administrative and support service activities", with 58.2 hours per week in both 2018-2019 and 2022. The next branch of economic activity with the longest hours usually worked remains "Accommodation and food service activities", with 57.1 hours per week in 2018-2019 and 54.5 hours per week in 2022.

Education remains the branch of economic activity with the shortest average hours usually worked: 31.4 hours per week in 2018-2019 and 27.7 hours per week in 2022. The "Education" branch of economic activity includes persons working in schools, colleges, universities, and technical and vocational training programmes, and those engaged in sports and cultural education centres. These persons tend to have shorter working hours because of the calendar of the education system, where the academic year is generally 8 to 10 months in the autumn, winter and spring, with no schooling during the summer months. Another reason for the shorter average hours usually worked of this branch of economic activity is that survey respondents tend to report their working time mainly at the place of work, often omitting the working time spent at home on preparation of class materials and correction of class assignments and exercises.

The largest falls in the average hours usually worked per week at main job were in construction (from 46.3

hours per week in 2018-2019 to 39.1 hours per week in 2022) and public administration and defence (from 51.8 hours per week in 2018-2019 to 5.2 hours per week in 2022).

Short and long hours of work

Table 6 shows the distribution of employed persons by sex according to hours usually worked per week at all jobs in 2022 and compares the findings with the corresponding data for 2018-2019. It can be observed that most employed persons usually worked between 30 and 59 hours per week in 2022 (58.4 per cent), only slightly lower than the corresponding percentage in 2018-2019 (60.0 per cent). This overall result masks different trends for men and women. The proportion of men usually working a core number of hours per week (30-59 hours per week) actually rose from 57 per cent in 2018-2019 to 58.9 per cent in 2022. By contrast, the proportion of women usually working a core number of hours per week (30-59 hours per week) substantially decreased, from 68.7 per cent in 2018-2019 to 56.7 per cent in 2022.

Table 6: Employed persons by number of hours usually worked at all jobs by sex, LFHLCS 2018-2019 and LFS 2022 (%)

Number of hours	2018-2019			2022		
	Total	Male	Female	Total	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0
Less than 30 hours	11.0	7.9	20.0	16.8	13.9	25.5
30 – 39 hours	13.0	10.5	20.3	15.9	14.9	19.0
40 – 49 hours	31.9	30.1	37.3	28.3	28.4	27.8
50 – 59 hours	15.1	16.4	11.1	14.2	15.6	9.9
60+ hours	29.0	35.1	11.4	18.7	22.5	7.6
No response or don't know	0.02	0.02	0.0	6.1	4.7	10.2

The number of persons usually working short hours, that is, less than 30 hours per week, remained relatively low (11 per cent in 2018-2019 and 16.8 per cent in 2022), but was significantly higher among women (20 per cent in 2018-2019 and 25.5 per cent in 2022) than men (7.9 per cent in 2018-2019 and 13.9 per cent in 2022).

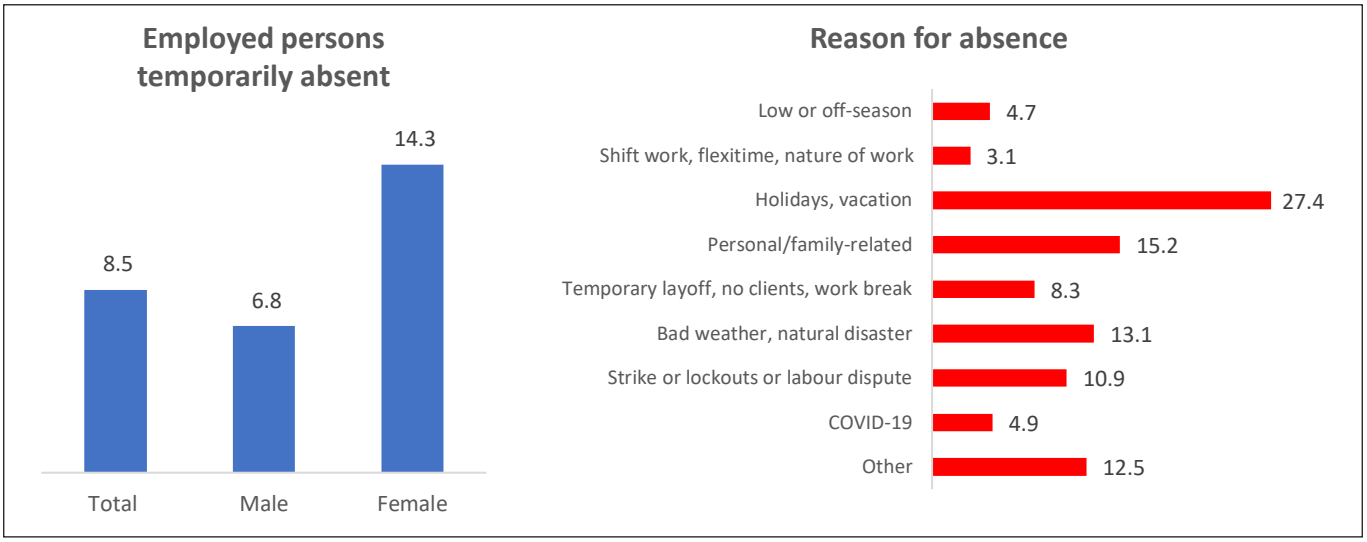
At the other extreme of the distribution, the results in Table 6 show that the proportion of persons usually working long hours (more than 60 hours per week) has fallen from 29 per cent in 2018-2019 to 18.7 per cent in 2022. The fall in the proportion of persons working long hours is observed for both men (from 35.1 in 2018-2019 to 22.5 per cent in 2022) and women (from 11.4 per cent in 2018-2019 to 7.6 per cent in 2022). Because long hours of work are generally considered to be a threat to physical and mental health and to have an adverse effect on the balance between work and family life, the fall in the proportion of persons working long hours can be seen as an unintended benefit of the major events that took place in Lebanon during the years between 2018-2019 and 2022.

Temporary absence from work

Employed persons on "temporary absence from work" during the reference week refers to those who, having already worked in their present job, were "not at work" for a short period but maintained a job attachment during their absence. The "job attachment" is assumed to exist when the reported reasons for absence are by their nature usually of short duration, such as sick leave due to own illness or injury (including occupational), public holidays, vacation or annual leave, and periods of maternity or paternity leave as specified by legislation. With other reasons for absence, such as parental leave, educational leave, care for others, other personal absences, strikes or lockouts, reduction in economic activity (for example, temporary lay-off, slack work), disorganization or suspension of work (for example, due to bad weather, mechanical, electrical or communication breakdown, problems with information and communication technology, shortage of raw materials or fuels), the "job attachment" is considered to exist if the person continues to receive remuneration during the period of absence, and/or the duration of absence is not greater than three months.

According to the survey results shown in Figure 15, about 8.5 per cent of the employed population were temporarily absent from work during the reference week in 2022. The percentage was higher among women (14.3 per cent) than men (6.8 per cent).

Figure 15: Employed persons temporarily absent from work by sex and reason for absence, LFS 2022 (%)



The most frequent reason for absence was "holidays, vacation" (27.4 per cent), while "strike or lockout or labour dispute" was the reason given for 10.9 per cent of temporary absences from work. COVID-19 accounted for 4.9 per cent of total temporary absences from work.

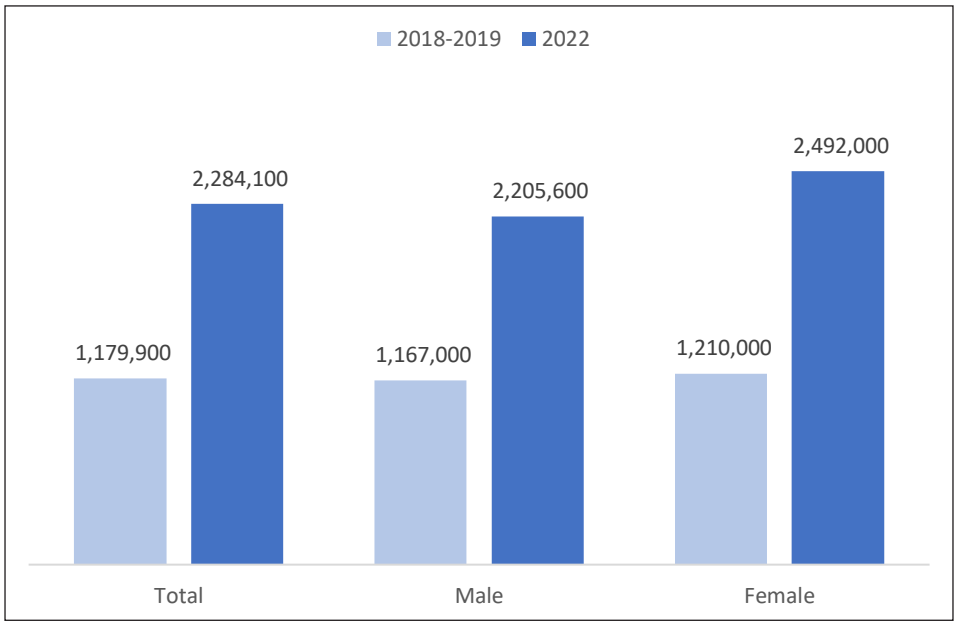
Income from employment of employees at main job

Measuring income from employment in household surveys is subject to considerable reporting errors, some deliberate and some involuntary due to memory lapses or misunderstanding, especially in the case of self-employment income, where the distinction between return to labour and return to capital is not always clear. For these reasons, the analysis of the data on income from employment is limited here to cash earnings of employees at their main job, excluding remuneration in kind and services. Earnings of

employees or income from paid employment include direct wages and salaries in cash for time worked and work done, remuneration for time not worked, cash bonuses and gratuities, profit-related pay and employment-related social security benefits.[17]

The main results of the survey are shown in Figure 16. The average monthly earnings of employees at their main job were about 2,284,100 LBP in 2022, slightly lower among male employees (about 2,205,600 LBP) than female employees (2,492,000 LBP). The corresponding results for 2018-2019 are also presented in Figure 16. Analysis of the data is complicated by the fact that, during the period between the two surveys, Lebanon experienced a very high rate of inflation and a large fall in the value of its currency in relation to the major foreign currencies. This complication is compounded by the fact that some people received their pay in United States dollars or other currencies, while most received it in the local currency, Lebanese pounds.

Figure 16: Average monthly earnings of employees at main job by sex,* LFHLCS 2018-2019 and LFS 2022 (LBP)



**Earnings received in US$ were converted at the exchange market rate of $1 = 25,000 LBP at time of data collection.*

The official data on consumer price indexes produced by CAS give the following inflation rates during the period of the two surveys:[18]

- Total inflation from December 2018 to October 2021 was 562%

- Total inflation from December 2019 to October 2021 was 519%.

This means that consumer prices increased more than fivefold during the period between the two surveys. During the same period, the movement of the exchange rate of the US dollar to the Lebanese pound was:

- $1 = 1,500 LBP in December 2018

- $1 = 25,000 LBP in December 2021

[17] ILO, Resolution on the measurement of employment-related income, 16th International Conference of Labour Statisticians, Geneva, 1998.

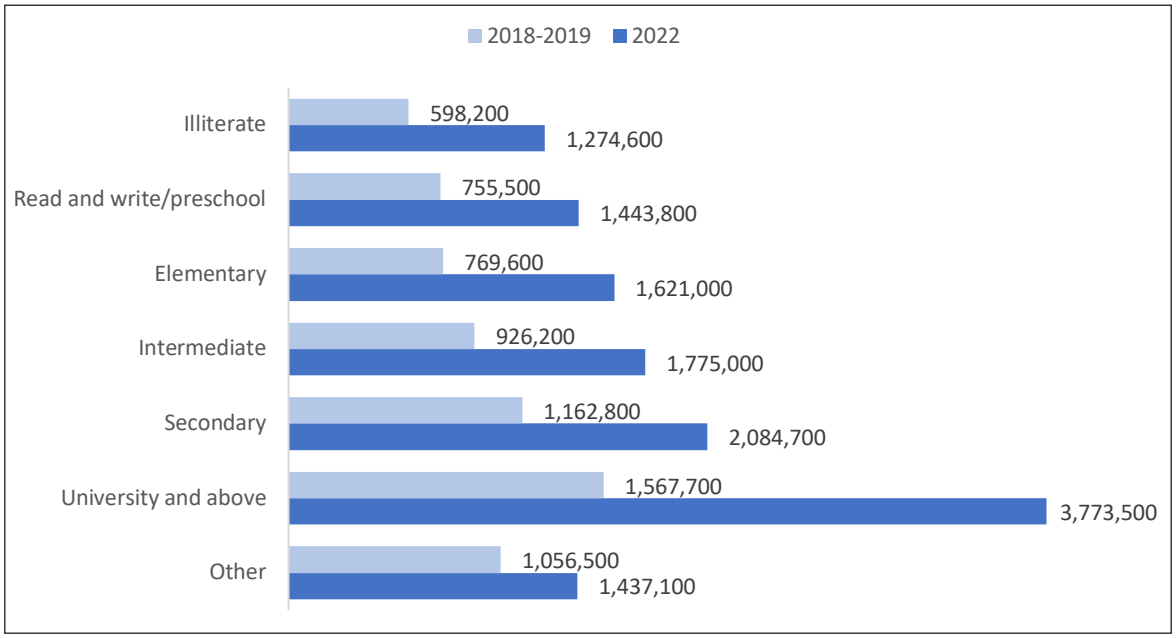
[18] http://www.cas.gov.lb/images/PDFs/CPI/2021/Inflation%20in%20figures.pdf

This indicates a more than tenfold fall in the value of the Lebanese pound against the US dollar. An analysis of the survey findings on earnings in Figure 15 on the basis of these data suggests that the monthly cash earnings of employees at main job changed by much less during the period, seeing a roughly twofold increase from 1,179,900 LBP in 2018-2019 to 2,284,100 LBP in 2022. Taking inflation and exchange rates into account, however, it is clear that the events in Lebanon during this period had a huge impact on the purchasing power of employees, which declined substantially. This conclusion would not be essentially different with alternative combinations of persons earning in Lebanese pounds and others earning in US dollars.

Figure 17 sets out the findings on the average cash earnings of employees at main job by level of educational attainment and compares them with the data from the LFHLCS 2018-2019. It should be noted that the 2018-2019 survey did not measure the level of educational attainment in terms of the highest level of education that the individual had completed, but in terms of the level of education attained whether completed or not. It can be observed from the figure that, in both survey periods, the average monthly earnings increased with the level of educational attainment. Employees with a university education and above had the highest earnings: 1,567,700 LBP in 2018-2019, and 3,773,500 LBP in 2022. Employees with a university education and above also had the steepest increase in monthly earnings during the period (about 240 per cent). By contrast, employees with secondary education had the lowest increase in average monthly earnings, from 1,162,800 LBP in 2018-2019 to 2,084,700 LBP in 2022 (that is, about 180 per cent).

The fact that some employees received payment in foreign currencies contributed to an increase in the inequality of earnings of employees at large. According to the survey findings, about 3 per cent of the total number of employees received their payments in US dollars or some other foreign currency. As these persons were generally in the highest bracket of income from employment, payment in foreign currencies had the effect of thickening the upper tail of the size distribution of monthly earnings and, thus, widening the inequality of earnings in Lebanon.

Figure 17: Average monthly earnings of employees at main job by educational attainment, LFHLCS 2018-19 and LFS 2022 (LBP)



Gender pay gap

The gender pay gap measures the extent to which the income from employment of men differs from that of women and is an indicator of the Sustainable Development Goals (SDG 8.5.1).[19] It is defined as the difference between the average monthly earnings at main job of male and female employees as a percentage of average monthly earnings at main job of male employees:

$$gender\ pay\ gap = 100 \times \frac{(E_m - E_w)}{E_m}$$

In the equation, E_m is the average monthly earnings at main job of men, and E_w is the corresponding average monthly earnings at main job of women. A value of "0" for the gender pay gap denotes perfect equality of earnings between men and women. Positive values of the gender pay gap reflect the extent to which women's earnings fall short of those of men. By contrast, negative values of the gender pay gap reflect the extent to which women's earnings are higher than those of men.

According to the survey results, the average monthly earnings of male employees at main job was about 2,205,600 LBP and that of female employees about 2,492,000 LBP. This indicates that women earned, on average, more than their male counterparts at their main job on an hourly basis. The calculation below shows that, in 2022, the gender pay gap was, in fact, negative in Lebanon:

$$gender\ pay\ gap\ of\ all\ employees\ at\ main\ job = 100 \times \frac{(2{,}205{,}600 - 2{,}492{,}000)}{2{,}205{,}600}$$
$$= -13\ per\ cent$$

Table 7: Gender wage gap of employees at main job by level of educational attainment (%)

Level of educational attainment	LFHLCS 2018-2019	LFS 2022
Total	**-3.6**	**-13**
Elementary	22.4	27.6
Intermediate	23.6	18.1
Secondary	16.3	13.6
University and above	17.9	18.5

Table 7 show that the largest pay gap (23.6 per cent) was found for those with an intermediate level of education in 2018-2019, and for those with an elementary level of education (27.6 per cent) in 2022.

Regarding the total, similar results were obtained in 2018-2019. The negative value of the gender pay gap was found to result from the fact that non-Lebanese workers earned substantially less than Lebanese (almost half), and the majority of non-Lebanese employees were men. Thus, after disaggregation by citizenship, the monthly gender pay gap of Lebanese employees was found to be 6.5 per cent, indicating that Lebanese men earned, on average, 6.5 per cent more than Lebanese women in 2018-2019.

Similar disaggregation by citizenship gives the gender pay gap of Lebanese in 2022 based on the following calculation:

[19] https://unstats.un.org/sdgs/metadata/?Text=&Goal=8&Target=8.5

$$gender\ pay\ gap\ of\ Lebanese\ employees\ at\ main\ job = 100 \times \frac{(2{,}336{,}400 - 2{,}503{,}700)}{2{,}336{,}400}$$
$$= -7.2$$

Although, this indicates that Lebanese men earned, on average, 7.2 per cent less than Lebanese women in 2022.

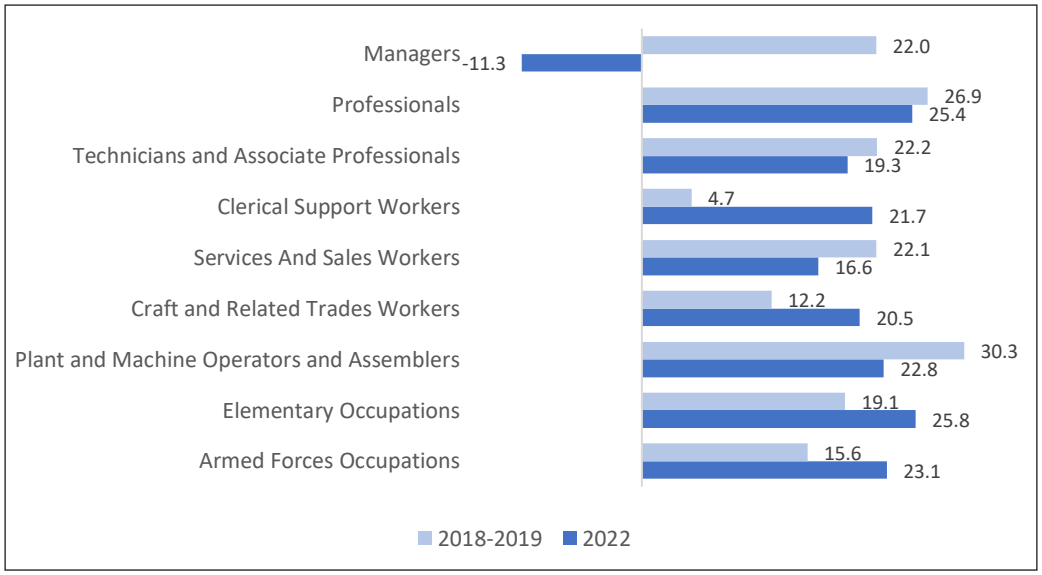
Figure 18 sets out the survey findings on the gender pay gap of Lebanese employees in 2022 by occupation (dark blue) and compares them with the corresponding data from the earlier survey, the LFHLCS 2018-2019 (light blue). The dark blue data show that the gender pay gap was positive for all occupational categories in 2022, except for "Managers"; this indicates that male Lebanese managers earned, on average, 11.3 per cent less than female Lebanese managers in 2022.

The largest gender pay gap in 2022 was for "Elementary occupations". In this category, male Lebanese employees tend to earn 25.8 per cent more than female Lebanese employees. The next highest gender pay gap in 2022 was among "Professionals", in which category male Lebanese employees earn on average 25.4 per cent more than their female counterparts.

The findings for 2018-2019 were somewhat different, however. The light blue data in Figure 18 show that, contrary to the 2022 data, the gender pay gap was positive among "Managers", that is, male Lebanese employees tended to earn, on average, more than female Lebanese employees in managerial positions in 2018-2019.

The largest gender pay gap in 2018-2019 was for "Plant and machine operators and Assemblers", in which category male Lebanese employees tended to earn 30.3 per cent more than female Lebanese employees. The next highest gender pay gap in 2018-2019 was also among "Professionals", with male Lebanese employees earning on average 26.9 per cent more than their female counterparts.

Figure 18: Gender pay gap of Lebanese employees at main job by occupation,* LFHLCS 2018-19 and LFS 2022 (%)



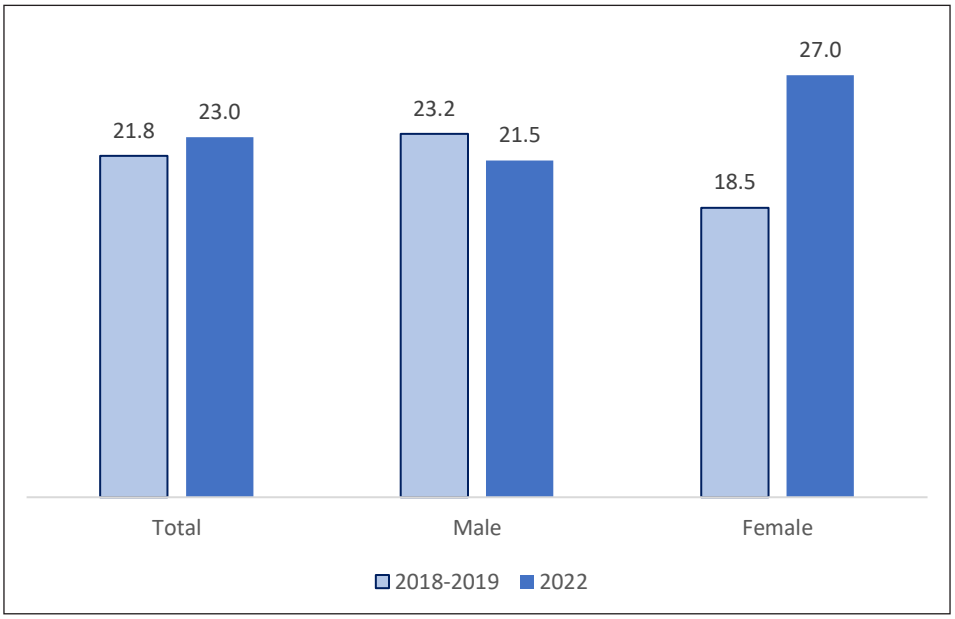
**: The gender pay gap was not calculated for "Skilled agricultural, forestry and fishery workers" because no female employees appeared in this category in the 1922 sample.*

Low-pay workers

The size distribution of earnings is an indicator of income inequality. "Employees with low pay rate" is one of the ILO decent work indicators.[20] It is defined as the percentage of employees whose hourly earnings at all jobs equal 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. Two thirds of median hourly earnings is, in many cases, close to the minimum wage of the country. The choice of two thirds has the virtue of simplicity and wide applicability, including where there is no minimum wage legislation or where the statutory minimum wage is far below the prevailing market wage. As in LFHLCS 2018-2019, the calculations were also made here in terms of monthly rather than hourly earnings, and on the basis of the main job rather than all jobs.

According to the survey findings, the median monthly earnings of employees at their main job was 1,600,000 LBP in 2022, so two thirds of the median may be calculated as 1,066,700 LBP. Thus, employees with monthly earnings of less than 1,066,700 LBP in 2022 were considered to be low-pay workers. In the earlier survey, LFHLCS 2018-2019, the median monthly earnings of employees at their main job was calculated as 950,000 LBP, and the two thirds threshold defining low pay rate was 633,300 LBP.[21] Figure 19 shows the percentage of employees with a low pay rate by sex in 2022 (dark blue columns) and the corresponding values from the LFHLCS 2018-2019 (light blue columns). The findings show that the percentage of employees with low pay rate has increased from 21.8 per cent in 2018-2019 to 23.0 per cent in 2022. Among female employees, the proportion with low pay rate has increased significantly more than the average, from 18.5 per cent in 2018-2019 to 27.0 per cent in 2022. Among male employees, the proportion with low pay rate has fallen from 23.2 per cent in 2018-2019 to 2.5 per cent in 2022.

Figure 19: Employees with low pay rate in total employment by sex, LFHLCS 2018-2019 and LFS 2022 (%)

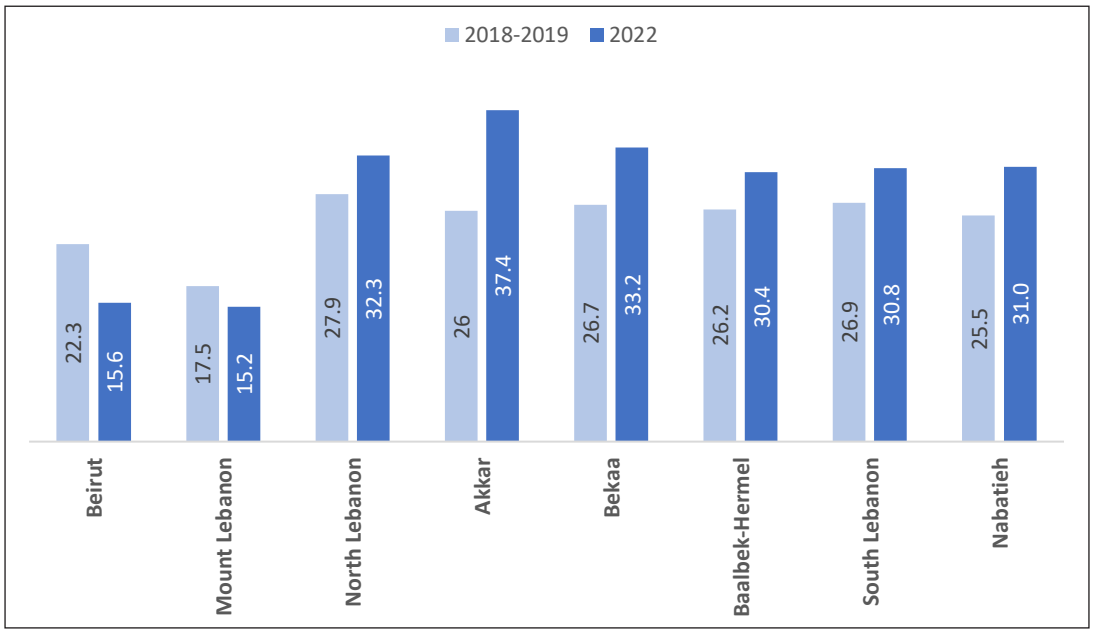


[20] ILO *Decent Work Indicators Guidelines for Producers and Users of Statistical and Legal Framework Indicators*, ILO Manual, Second Version, December 2013, pp. 76-78.

[21] In 2018-2019, two-thirds of the median wage amounted to 633,300 LBP, which at the time was the equivalent of 422.2 USD, based on the prevailing exchange rate of 1,500 LBP/USD. In 2022, the low pay threshold was 1,066,700 LBP, which is the equivalent of 42.67 USD, based on the market exchange rate of 25,000 LBP/USD.

Figure 20 shows the change in the proportion of employees with low pay rate by governorate. It is instructive to note that, in both 2018-2019 and 2022, the proportion of employees with low pay rate was lower than the national average in Beirut and Mount Lebanon. In fact, in these governorates, the number of employees with low pay rate has fallen, in Beirut from 22.3 per cent in 2018-2019 to 15.6 per cent in 2022, and in Mount Lebanon from 17.5 per cent in 2018-2019 to 15.2 per cent in 2022. In all other governorates, the proportion of employees with low pay rate has increased. The highest increase was in Akkar, from 26 per cent in 2018-2019 to 37.4 per cent in 2022, followed by Bekaa, where the proportion of employees with low pay rate increased from 26.7 per cent in 2018-2019 to 33.2 per cent in 2022. It is important to note that Bekaa was also among the governorates with the highest increase in the unemployment rate, shown earlier in Chapter 2.

Figure 20: Employees with low pay rate in total employment by governorate, LFHLCS 2018-19 and LFS 2022 (%)



Chapter 5: Duration and method of seeking employment

The behaviour of the unemployed when seeking employment is a function of the circumstances in which they find themselves in relation to the labour market. Thus, in a tight labour market, early success in finding employment may be difficult and the duration of seeking employment can be long, unless some unemployed drop out of the labour market altogether due to discouragement. At the same time, in a tight labour market, one would expect unemployed persons to make more effort to find work, using more direct methods of job-seeking. These issues are examined below.

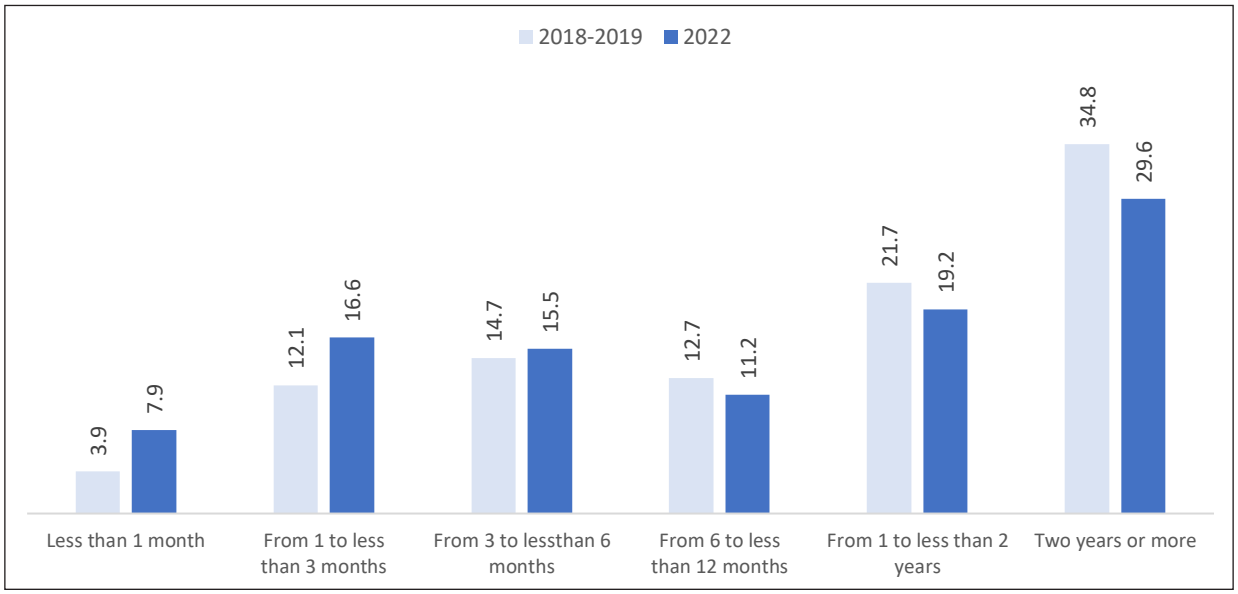
Duration of search for employment

Figure 21 shows the follow-up survey findings on the distribution of the unemployed by duration of search for employment and compares them with the corresponding findings of the LFHLCS 2018-2019. Duration of seeking employment refers to the elapsed period since the time the unemployed person began carrying out activities to seek employment, or since the end of the last job, whichever is shorter. It differs from the concept of duration of unemployment, which is the length of time that an unemployed person has been without work, available for work, and actively seeking work. Duration of unemployment is generally more difficult to measure in surveys than duration of search for employment. International standards define persons in long-term unemployment as persons in unemployment with a duration of search for employment lasting 12 months or more, including the reference period.

According to the findings shown in Figure 21, in 2022, 29.6 per cent of the unemployed had been seeking employment for two years or more, and another 19.2 per cent had been seeking employment for one to two years. Thus, in total, 48.9 per cent of the unemployed were in long-term unemployment in 2022. It is instructive to note that long-term unemployment has actually declined since 2018-2019, when 56.5 per cent of unemployed persons had been seeking employment for 12 months or more.

One interpretation of this finding is that, after a period of unsuccessful job-seeking of 12 months or more, or even 6 months or more, some persons seeking employment became discouraged and stopped looking for employment, thus leaving the labour force. These people are accounted for in the category of discouraged jobseekers among the potential labour force. Discouraged jobseekers refers to those outside the labour force who do not “seek employment” for labour market reasons. Labour market reasons include past failure to find a suitable job, lack of experience, qualifications or jobs matching the person’s skills, lack of jobs in the area, and considered too young or too old by prospective employers.

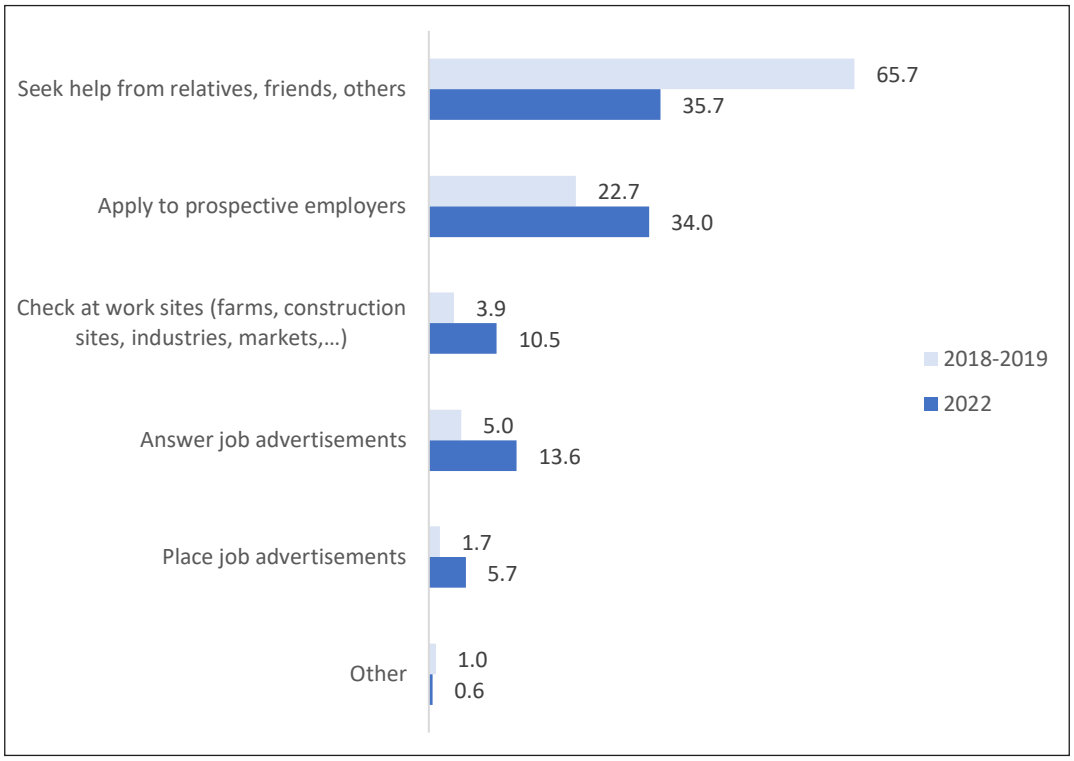
Figure 21: Unemployed persons by duration of search for employment, LFHLCS 2018-2019 and LFS 2022 (%)



Method of seeking employment

The unemployed population exerts pressure on the labour market by actively looking for work. Each unemployed person may use one or more methods of seeking work during the four-week reference period for job search. Figure 22 shows the distribution of the unemployed population by method of searching for employment and compares the findings with the corresponding data from the LFHLCS 2018-2019. It can be observed that the principal method used by the unemployed persons for seeking employment both in 2018-2019 and in 2022 was through relatives, friends and acquaintances. The percentages are considerably different, however: 65.7 per cent in 2018-2019 and 35.7 per cent in 2022. This indicates a considerable shift from informal methods of seeking employment, such as seeking help from relatives and friends, to more formal methods, such as direct application to prospective employers, checking at work sites, farms and construction sites, and placing and answering job advertisements. The percentage of unemployed persons using each of these formal methods increased significantly during the period from 2018-2019 to 2022.

Figure 22: Unemployed persons by method of seeking employment, LFHLCS 2018-2019 and LFS 2022 (%)



Chapter 6: Particular categories of persons

This final chapter examines the situation of particular categories of persons, namely, women in managerial positions, youth not in employment, education or training (NEET), and international migrant workers.

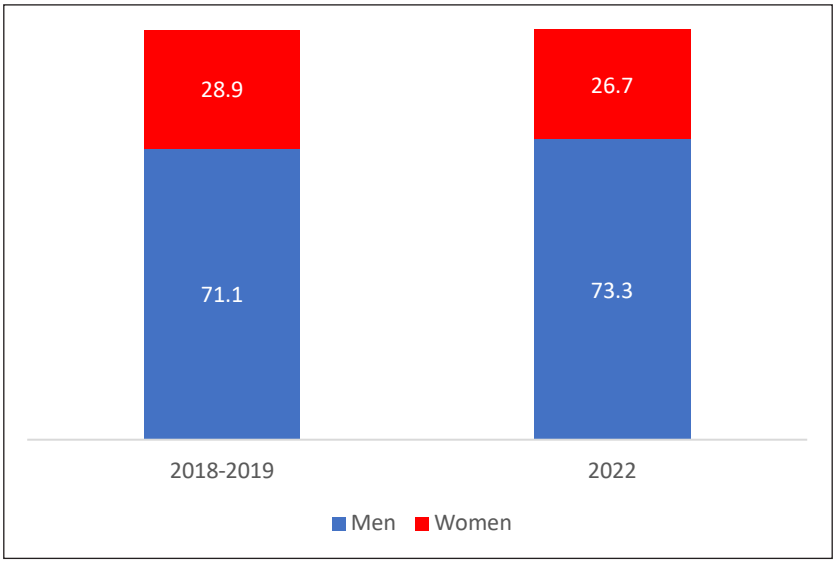
Women in managerial positions

The "female share in managerial positions" is an indicator of the Sustainable Development Goals (SDG 5.5.2).[22] It is defined as the proportion of females in the total number of persons employed in managerial positions. Occupations in senior and middle management correspond to the ISCO-8 sub-major groups:

- Chief executives, senior officials and legislators ISCO-08 Code 11
- Administrative and commercial managers ISCO-08 Code 12
- Production and specialized services managers ISCO-08 Code 13

According to the findings shown in Figure 23, the overall share of women in managerial positions was about 26.7 per cent in 2022, a drop of about 2 percentage points from the findings of the LFHLCS 2018-2019, when the share of women in managerial positions was 28.9 per cent. By symmetry, the share of men in managerial positions increased by 2 percentage points, from 71.1 in 2018-2019 to 73.3 per cent in 2022.

Figure 23: Share of women and men in managerial positions, LFHLCS 2018-2019 and LFS 2022 (%)



Youth not in employment, education or training (NEET)

Youth not in employment, education, or training (NEET) is an indicator of the Sustainable Development Goals (SDG 8.6.1).[23] It is defined as the share of the youth population (15-24 years old) who are not in employment, education, or training in relation to the total youth population.

$$NEET\ rate = 100 \times \frac{youth\ not\ in\ education, employment\ or\ training}{youth\ population}$$

[22] https://unstats.un.org/sdgs/metadata/?Text=&Goal=5&Target=5.5
[23] https://sdg.tracking-progress.org/indicator/8-6-1-youth-not-in-education-employment-or-training-neet/

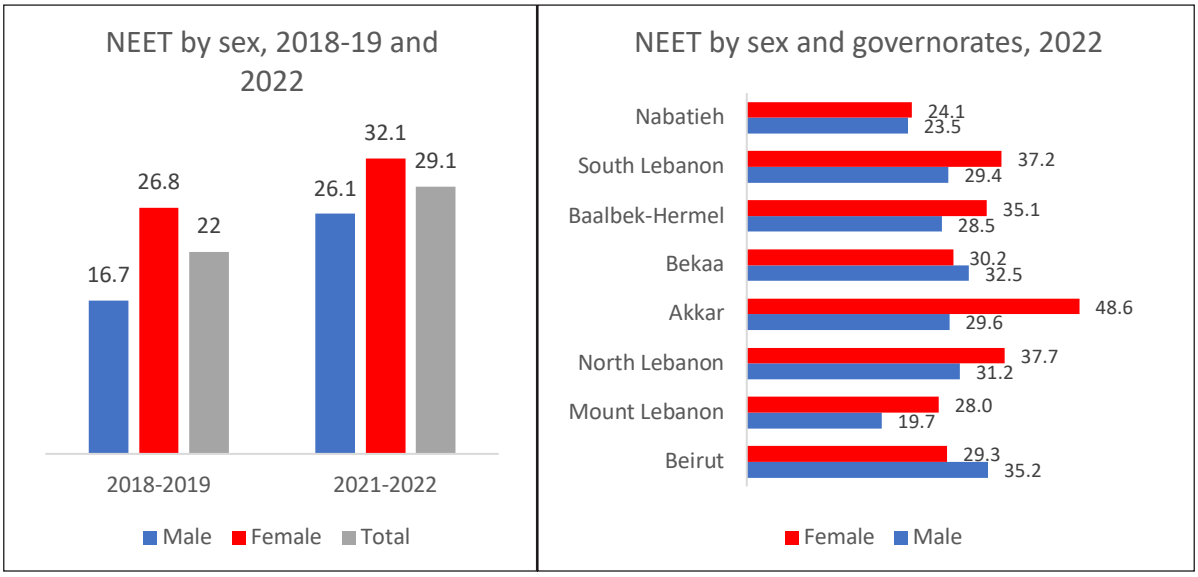
The indicator provides a measure of youth who are outside the education system, not in training and not in employment, and thus serves as a broader measure of potential youth labour market entrants than youth unemployment. It includes discouraged youth jobseekers and those who are outside the labour force as a result of disability and engagement in household chores, among other reasons. The NEET rate is also a better measure of the current universe of potential youth labour market entrants than the youth inactivity rate, as it includes those youth who are outside the labour force and are in education, and thus furthering their skills and qualifications. The NEET rate is related to the employment-to-population ratio as expressed below:

NEET rate = proportion of youth not in school – youth employment-to-population ratio

The "proportion of youth not in school" refers to the number of youth (15-24 years old) not in education or training, expressed as a percentage of the total youth population. Thus, when everyone is out of school or training, the NEET rate = 1 – Youth employment-to-population ratio.

Figure 24 presents, on the left, the survey estimates of the NEET rate by sex and compares them with the data from the LFHLCS 2018-2019. It can be observed that almost one third of the female youth population was neither in employment nor education or training in 2022 (32.1 per cent), a net increase from 2018-2019, when about 26.8 per cent of the female youth population was not in employment, education or training. A similar change can be observed in the case of the male youth population, for whom the NEET rate increased from 16.7 per cent in 2018-2019 to 26.1 per cent in 2022.

Figure 24: Youth (15-24 years old) not in education, employment or training (NEET) by sex and governorate, LFHLCS 2018-2019 and LFS 2022 (%)



The 2022 findings in the righthand section of Figure 24 show that the female NEET rate was higher than the corresponding male rate in all governorates, except Beirut and Bekaa. The highest female NEET rate was recorded in Akkar (48.6 per cent), followed by North Lebanon (37.7 per cent), while the lowest female NEET rate was recorded in Nabatieh (24.1 per cent), followed by Mount Lebanon (28 per cent). The ranking of the male NEET rate by governorate differs somewhat from that of the female rate: the highest male NEET rate was recorded in Beirut (35.2 per cent), followed by Bekaa (32.5 per cent), while the lowest rate was recorded in Mount Lebanon (19.7 per cent).

International migrant workers

For statistical purposes, international migrant workers are defined as all persons of working age present in the country of measurement who are in one of the following two categories:

(a) *usual residents*: international migrants who, during a specified reference period, were in the labour force of the country of their usual residence, either in employment or unemployment.

(b) *not usual residents, or non-resident foreign workers*: persons who, during a specified reference period, were not usual residents of the country but were present in the country and had labour attachment to the country, that is, they were either in employment supplying labour to resident producer units of that country or were seeking employment in that country.[24]

Because of their non-resident status, international migrant workers, category (b), (non-resident foreign workers) are, generally, not covered by household surveys, except perhaps for some non-resident foreign domestic workers and other non-resident foreign workers providing services to households as employer. In both the 2022 follow-up labour force survey and the earlier survey, the LFHLCS 2018-2019, the estimates were limited to international migrant workers, category (a) of the definition given above, and refer to workers with non-Lebanese citizenship who were in employment or seeking employment during the survey reference week.

Figure 25 (lefthand section) shows the labour force participation rates of the Lebanese and non-Lebanese working population in 2018-2019 and 2022. It can be seen that the labour force participation rate of non-Lebanese was greater than that of Lebanese in both time periods, a result consistent with the ILO *Global estimates of international migrant workers*.[25] The relatively higher labour force participation of international migrant workers can be explained by the fact that, in many cases, migration occurs for work-related reasons. Thus, it is to be expected that non-citizens would have higher labour force participation than citizens. When migration takes place for reasons other than work, survival in another country requires a source of livelihood, which, for migrants, usually means the need to work. In line with this explanation, Figure 25 (righthand section) shows that the unemployment rate of non-Lebanese workers (8.7 per cent) was lower than that of Lebanese workers (12.1 per cent) in 2018-2019. However, it is surprising to observe that the relationship was reversed in 2022, when the unemployment rate of non-Lebanese workers (36.5 per cent) exceeded that of Lebanese workers (28.1 per cent).

Another feature shown in Figure 25 (lefthand section) is that the decline in the labour force participation rate of non-Lebanese, from 60.8 per cent in 2018-2019 to 47.7 per cent in 2022, was significantly higher than the decline in the labour force participation rate of Lebanese, from 46.3 per cent in 2018-2019 to 42.6 per cent in 2022. This can be attributed to the temporary nature of most international labour migration in Lebanon: with the downturn of the economic situation, international migrant workers tend to leave the labour market and return to their country of origin or move to a third country in search of new employment.

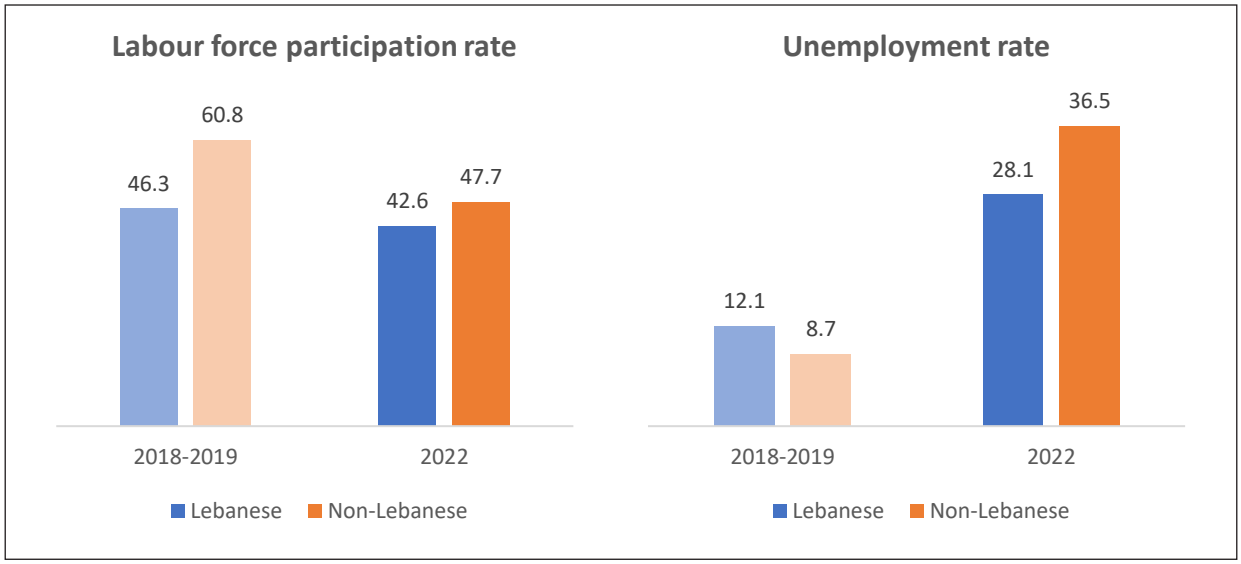
Closer analysis, in fact, shows that the higher labour force participation rate of non-Lebanese in 2022 is essentially the result of their higher rate of unemployment. Otherwise, the employment-to-population ratio of Lebanese and non-Lebanese was almost equal in 2022: 30.6 per cent for Lebanese and 30.2 per cent

[24] ILO, *Guidelines concerning statistics of international labour migration*, 20th International Conference of Labour Statisticians, Geneva, 2018, para. 14.

[25] LO: *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.

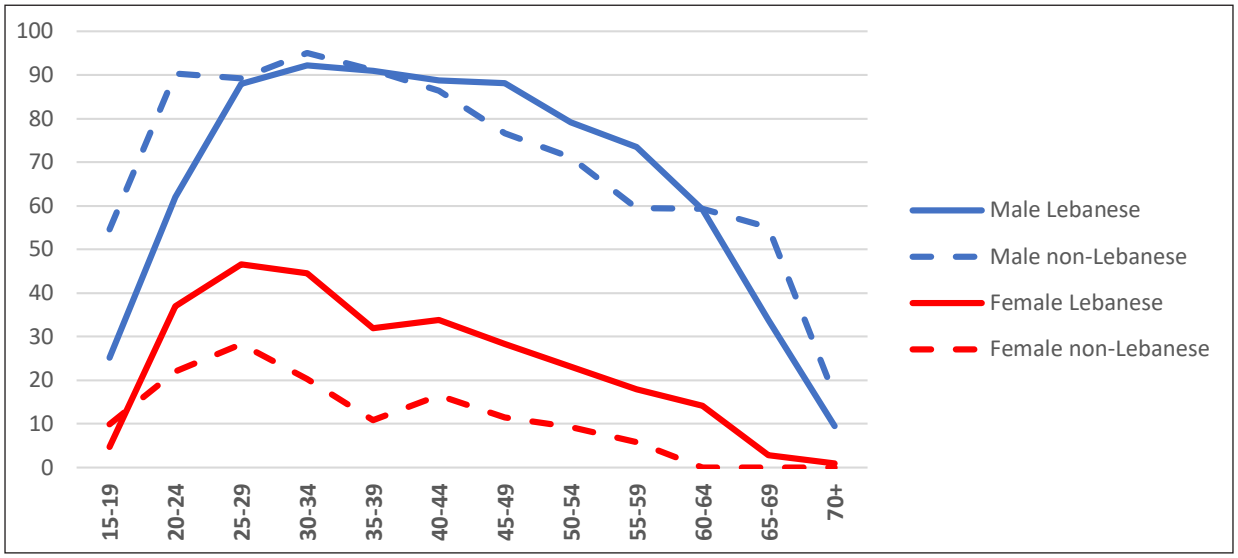
for non-Lebanese. This result is achieved by using the following relationship between the employment-to-population ratio, the unemployment rate and the labour force participation rate:

Figure 25: Labour force participation rate and unemployment rate by citizenship, LFHLCS 2018-2019 and LFS 2022 (%)



It should also be noted that the overall higher labour force participation of non-Lebanese compared to Lebanese is not uniformly true across all sex and age categories. Figure 26 shows the labour force participation rate by sex and age group of Lebanese and non-Lebanese according to the findings of the 2022 follow-up labour force survey, which show that the female labour force participation rate of non-Lebanese (red dashed-curve) is lower than that of Lebanese (red solid curve) at all age groups except the very young, 15-19 years old. By contrast, the male labour force participation rate of non-Lebanese (blue dashed curve) is generally higher than or almost equal to that of Lebanese (blue solid curve) at young and core age groups, and again at older age groups. The exception is in the middle age category, 40-59 years old, where the male labour force participation rate of non-Lebanese is lower than that of Lebanese.

Figure 26: Labour force participation rate by sex and age group of Lebanese and non-Lebanese populations, Lebanon LFS 2022 (%)



Annex A: Survey methodology

The methodological annex is composed of three parts: sample design; questionnaire design; and main concepts and definitions. These are described, in turn, below.

Sample design

The sample for the follow-up labour force survey 2022 consisted of all households reporting a valid telephone number, whether landline or mobile, in the fourth quarter round of the previous survey, the LFHLCS 2018-2019.

• *Sample design of LFHLCS 2018-2019*

The Labour Force and Household Living Conditions Survey 2018-2019 covered the population of Lebanon living in residential dwellings in the time period April 2018 to March 2019. It excluded the population living in non-residential units such as army barracks, refugee camps and adjacent settlements, and informal settlements. The sample design was based on a stratified two-stage sampling scheme according to which:

(a) At the first stage of sampling, a sample of about 2,700 geographical areas (or blocks referred to as "ilots") were drawn as primary sampling units (PSUs) with probabilities proportional to size, where size is measured in terms of the number of dwellings as recorded in the Census of Buildings, Dwellings and Establishments (CBDE) conducted by Central Administration of Statistics in 2004. Altogether, the sampling frame comprised 15,970 "ilots", of which 14,555 were non-empty and 1,405 were empty. A non-empty "ilot" was defined as an area where there was at least one residential unit or one combined residential and work unit or one unit for which the use was not known.[26] The sample frame of "ilots" was first allocated among the administrative districts of the country, known as "Cazas", and spread almost equally over the four quarters of the survey year. The allocation of sample "ilots" among Cazas was based on the square root allocation with a minimum allocation of 68 sample ilots in each Caza. In practice, due to problems encountered in field operations, the number of sample ilots in a few Cazas turned out to be slightly less than the specified minimum.

(b) At the second stage of sampling, the dwellings in the sample ilots (primary sampling units) were freshly listed to take into account the new building developments and other changes since 2004. Then, a fixed number of sample dwellings (20 households) were selected with equal probabilities from the updated list of dwellings in each sample ilot. This formed the final sample for interviewing, consisting of about 54,000 households. In dwellings with more than one household, the practice implemented by CAS was to interview all households in the dwelling. The sample design provided a non-response rate of about 15 per cent of the sample households, due to absence, refusal or other reasons.

[26] The sample selection was extended to "empty" and "near-empty" ilots on the ground that these areas, empty or near empty in 2004, may have grown in population, and dwelling units may have been formed since then. Near empty ilots were defined to be ilots with one to nine housing units according to CBDE results. Accordingly, four additional ilots were randomly selected from the "empty" and "near-empty" ilots per Caza, one each quarter 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 the sample ilots under the basic design were selected.

• *Sample design of follow-up labour force survey 2022*

The sample for the follow-up survey consisted of all households reporting a valid telephone number, whether landline or mobile, in the fourth quarter round of the LFHLCS 2018-2019. The sample size allocated to the fourth quarter round of the survey was one fourth of the total sample size, 54,000/4 = 13,500 households. Due to the high rate of non-response in the LFHLCS 2018-2019, the effective sample size of the fourth round of the survey was in fact 10,549 households. Table A1 shows the distribution of the effective sample of households that reported having a telephone, by governorate. The data show that almost 90 per cent of the sample households reported having a phone, whether landline or mobile. The highest percentage was in North Lebanon (97.1 per cent) and the lowest in Beirut and Nabatieh (84.6 per cent).

Table A 1: Sample households reporting having phone at fourth round of LFHLCS 2018-2019 by governorate

Governorate	Total	Have phone	Do not have phone	Percentage with phone
Total	**10 549**	**9 459**	**1 090**	**89.7**
Beirut	755	639	116	84.6
Mount Lebanon	3 541	3 097	444	87.5
North Lebanon	1 696	1 646	50	97.1
Akkar	489	464	25	94.9
Bekaa	909	852	57	93.7
Baalbek-Hermel	721	666	55	92.4
South Lebanon	1 240	1 081	159	87.2
Nabatieh	1 198	1 014	184	84.6

A pilot survey of 300 such households, conducted by CAS in mid-2020, showed that about 50 per cent of the telephone calls were successful, in the sense that the telephone call reached a contact and the respondent agreed to an interview of about 15 minutes. The pilot survey also showed that the vast majority of the respondents were the head of their households. Separately, based on data provided by CAS, it was calculated that the age distribution of the heads of households with landline or mobile telephones in the 2019 Q4 sample differed significantly from the age distribution of the general population of working age. This leads to the conclusion that the respondents to the telephone call may not be assumed to be a randomly selected sample of household members. It was therefore decided to extend the survey interview to all members of the household.

Telephone success rate

As described above, the sample of the follow-up labour force survey 2022 was, in effect, composed of the 9,459 telephone numbers of households who reported having a telephone in the last round of the LFHLCS 2018-2019. Table A2 shows the outcome of the attempts to reach the households in the follow-up labour force survey 2022. The data indicate that 1,062 telephone lines were found to be deactivated when contacted for interview. Another 63 telephone numbers led to units other than households, such as shops, offices, workshops, and so on. Calls to 1,576 other telephone numbers remained unanswered and, when an additional 56 numbers were called, the respondent refused to take part in the survey. In total, 5,444

calls led to eligible households with fully completed interviews and to a further 56 with partially completed interviews. The rate of telephone success, that is, the ratio of completed interviews to the total number of sample telephone numbers, was thus 57.6 per cent, slightly higher than the 50 per cent figure obtained from the pilot survey. The effective sample size of the follow-up survey was therefore 5,444 households, with a total of 22,046 household members, representing an average household size of 4.07 persons.

Table A 2: Sample telephone numbers by type of outcome and governorate, LFS 2022

Governorate	Total	Tel. inactive	Tel. not for HH	Tel. no answer	Refused	Completed	Semi-completed	Phone success rate %
Total	**9 459**	**1 062**	**63**	**1 576**	**1 258**	**5 444**	**56**	**57.6**
Beirut	639	54	7	132	73	372	1	58.2
Mount Lebanon	3 097	350	13	486	506	1 716	26	55.4
North Lebanon	1 646	173	17	272	248	926	10	56.3
Akkar	464	50	7	71	28	305	3	65.7
Bekaa	852	61	3	179	77	531	1	62.3
Baalbek-Hermel	666	105	2	88	47	422	2	63.4
South Lebanon	1,081	143	6	182	154	586	10	54.2
Nabatieh	1,014	126	8	166	125	586	3	57.8

Table A2 shows the telephone success rate and the distribution of the effective sample size by governorate. Akkar was the governorate with the highest completion rate (65.7 per cent), followed by Baalbek-Hermel (63.4 per cent) and Bekaa (62.3 per cent). The governorate with the lowest success rate was South Lebanon (54.2 per cent), followed by Mount Lebanon (55.5 per cent) and North Lebanon (56.3 per cent). The telephone success rates in Nabatieh (57.8 per cent) and the Beirut governorate (58.2 per cent) were very close to the national average (57.6 per cent).

Calculation of sampling weights

The sample weights were calculated in two steps. In the first step, the design weights were obtained as the inverse of the probabilities of selection of sample household. In the second step, the design weights were adjusted to take into account non-responses. A further adjustment was made to take into account household phone access. The resulting adjusted weights were, however, not calibrated to independent population totals as no reliable population projections could be obtained for the present purpose.

The design weight was calculated on the basis of the probabilities of selection of the households obtained by the sample design of the LFHLCS 2018-2019, that is, the sample households selected in the last round of the survey.

$$d_{ijh} = \frac{1}{\pi_{ijh}}$$

The denominator refers to the probability of selection j in "ilot" i of stratum h. These probabilities were calculated as the product of two probabilities corresponding to the two-stage sampling design of the survey:

$$\pi_{ijh} = \pi_{ih} \times \pi_{j|ih}$$

where refers to the probability of selection of "ilot" i of stratum h at the first stage of sampling and refers to the conditional probability of selecting household j in the sample "ilot" I of stratum h, at the second stage of sampling after the fresh listing of all households in that sample "ilot". In cases where the household had moved from one geographical area to another, the design weight was assigned to the new geographical area in an attempt to incorporate the change in the population structure in the final estimates.

The design weights were then adjusted for non-response of eligible sample households by inflating the design weights by the inverse of the response rate:

$$d'_{ijh} = d_{ijh} \times \frac{1}{R_{gh}}$$

where d_{ijh} is the design weight, calculated earlier, for the responding household j in sample "ilot" i of stratum h, and R_{gh} is the response rate of eligible households in response homogeneity group g, in which the sample household belongs. Eligible households are sample units living in regular dwellings, including those who were temporary absent or refused participation in the survey. Adjustment for non-response is generally based on response rate of households in the same response homogeneity group (RHG), that is, households considered to have a similar propensity to participate in the survey.[27] Households in the same response homogeneity group are assumed to have the same probability of response. In the present context, after some experimentation, the Casa was considered an appropriate geographic unit for defining response homogeneity groups.

The last step of the calculation of the sampling weights was to account for the non-coverage of households without access to a landline or mobile telephone. In addition to higher non-response rates, telephone surveys are subject to non-coverage bias due to missing households without access to telephone services, but also because some telephone lines become deactivated over time and others change from servicing residential dwellings to other units outside the scope of the survey, such as shops, offices, workshops, and so on One approach to dealing with the non-coverage bias of telephone surveys is to adjust the sampling weights to account for the likelihood of households having access to residential telephone services. [28] Let p_i denote the probability that household i has a valid telephone number, then the phone-adjusted weight may be expressed as,

$$phone - adjusted\ weight = \frac{d'_{ijh}}{\hat{p}_i}$$

where d'_{ijh} is the design weight adjusted for non-response described earlier and is an estimate of the probability that household I has a valid telephone number, p_i. The probability p_i may be estimated using co-variates available in the survey or by incorporating specially designed questions in the survey at the design stage. In the present context, a simple procedure has been adopted by assuming that the probability that a household has a valid telephone number is uniform for all households living in the same Caza. This probability has been calculated as the percentage of households with valid telephone number among all households in the same Caza in the base sample, i.e. the sample of households in the last round of LFHLCS 2018-2019.Thus,

$$\hat{p}_i = proportion\ of\ households\ with\ valid\ telephone\ in\ Caza\ g, \qquad if\ i \in Caza\ g$$

[27] Eurostat, *Survey sampling reference guidelines. Introduction to sample design and estimation techniques, 2008 edition*, European Communities, Luxembourg, 2008, pp. 30-3.

[28] Steven T. Garren and Ted C. Chang, "Improved ratio estimation in telephone surveys adjusting for noncoverage," *Survey Methodology*, June 2002, Vol. 28, No. 1, pp. 63-76. Statistics Canada, Catalogue No. 12-001-XIE.

Calculation of sampling errors

Sampling errors arise due to the fact that the survey does not cover all elements of the population, but only a selected portion. The sampling error of an estimate refers to 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: (i) sampling bias; and (ii) sampling variance. Sampling bias reflects the systematic error that may occur due to the failures of the sample design; for example, certain elements of the population receiving zero probability of selection. 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 with the same sampling design.

The calculation of the sampling variance of survey estimates, or its square root, the standard errors, in complex multistage 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 standard errors of a variety of statistics, such as totals, means, ratios, proportions, and their differences can be obtained on the basis of values calculated for primary sampling units.[29] 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' function of the R-contributing package "sampling".[30] Then the relationship between the relative standard error or relative variance of an estimate and its size, expressed by the generalized function, was estimated on the basis of five observations on y (working age population, labour force, employment, unemployment and outside labour force),

$$\frac{var(y)}{y^2} = a + \frac{b}{y}$$

where var(y) denotes the variance of the estimate y in units of 1,000, and a and b are the parameters of the generalized variance function. The values of a and b are given below for males and females, separately:

	a	b
Total	7.533e-05	3.256e+02
Males	1.798e-05	3.228e+02
Females	8.166e-05	3.477e+02

The generalized variance function was then used again to obtain approximate standard errors of rates and proportions:

$$\frac{Var(r)}{r^2} = (\frac{b}{y} - \frac{b}{x})$$

where r = y/x is a rate or proportion with y the numerator, and x the denominator. This relationship has been used to obtain the approximate standard errors of the main labour force rates by sex shown in Table A3. The results show, for example, that the approximate standard error of the survey estimate of the total labour force participation rate is 0.5 percentage points. The lower bound of the confidence interval

[29] Verma, Vijay, *Sampling Methods*, *Manual for Statistical Trainers* Number 2, Statistical Institute for Asia and the Pacific (SIAP), Tokyo, Revised 2002.

[30] R-contributing package "Sampling": 'varest': Variance estimation using the Deville's method. https://www.rdocumentation.org/packages/sampling/versions/2.9/topics/varest

of the estimate is about 42.4 per cent and the upper bound is about 44.4 per cent. The estimate of the employment-to-population ratio also has a standard error of about 0.5 percentage points. As expected, the standard error of the unemployment rate is somewhat larger at 0.7 percentage points. It can be verified that the estimates of the main labour force indicators for the male and female populations, separately, have generally higher standard errors than the standard error of the corresponding indicator for the combined population. For example, the standard error of the male unemployment rate is 0.8 percentage points and that of the female unemployment rate is 1.4 percentage points, considerably larger than the standard error of the overall unemployment rate, which is 0.7 percentage points.

Table A 3: Standard errors of estimates of the main labour force rates by sex, LFS 2022

Rates	Estimate (%)	Standard error (percentage points)	Confidence interval[1]	
			Lower (%)	Upper (%)
Total				
Labour force participation rate	43.4	0.5	42.4	44.4
Employment-to-population ratio	30.6	0.5	29.7	31.5
Unemployment rate	29.6	0.7	28.3	30.9
Male				
Labour force participation rate	66.2	0.7	64.8	67.4
Employment-to-population ratio	47.4	0.7	45.9	48.7
Unemployment rate	28.4	0.8	26.9	30.0
Female				
Labour force participation rate	22.2	0.6	21.1	23.4
Employment-to-population ratio	15.0	0.5	14.0	16.0
Unemployment rate	32.7	1.4	29.9	35.3

Note: [1] Calculated at the confidence level of 95 per cent.

Annex B: Questionnaire design

The questionnaire of the follow-up labour force survey 2022 maintained the basic structure of the previous survey, the LFHLCS 2018-2019, but was adapted for telephone interviewing. The questionnaire also incorporated additional questions and specific answer categories to assist the measurement of the impact on the labour market of the main events in Lebanon during the period 2019-2021: the 17 October Revolution, the COVID 19 total lockdown in mid-March 2020 and the August 2020 Port of Beirut blast.

In addition to the cover page on which the geographic characteristics of the household were recorded, the questionnaire contains 12 modules:

Module 1: Household characteristics

Module 2: Education

Module 3: Nationality

Module 4: Insurance

Module 5: Employed at work

Module 6: Temporary absence

Module 7: Main job characteristics

Module 8: Working time

Module 9: Job search and availability

Module 10: Previous employment status

Module 11: Income and financial situation

Module 12: Emigration

There were a total of 100 questions in the 12 modules: 5 questions on household address; 6 questions on household characteristics; 6 questions on education; 3 questions on nationality; 3 questions on health insurance; 6 questions on employed at work; 5 questions on temporary absence; 19 questions on main job characteristics; 14 questions on working time; 13 questions on job search and availability; 4 questions on previous employment status; 15 questions on income and financial situation; 4 questions on emigration.

Like the LFHLCS 2018-2019 questionnaire, the follow-up labour force survey 2022 questionnaire was designed to measure employment and labour underutilization in line with the international standards of the 19th International Conference of Labour Statisticians.[31] The questionnaire does not, however, measure the other forms of work, such as own-use production work, unpaid trainee work and volunteer work, which were deemed to have limited relevance in the present circumstances of Lebanon. The questionnaire was field-tested as part of a pilot survey in 2021.

[31] ILO, Resolution concerning statistics of work, employment and labour underutilization, adopted by the 19th International Conference of Labour Statisticians, Geneva, 2013.

Annex C: Main concepts and definitions

In line with international standards, the main concepts and definitions used in the survey are given below:

- **Working age population:** All persons, 15 years old and above, who were usual residents of the country, regardless of sex, country of origin, nationality, citizenship or geographic location of their place of work. The working age population excluded persons living in institutional households outside the scope of the survey, such as construction sites, refugee camps, army barracks, school dormitories, and other locations not considered as regular living quarters

- **Labour force:** The working age population who was either in employment or in unemployment during the survey reference week.

- **Employment:** All persons of working age who, during the survey reference week, were engaged in any activity to produce goods or provide services for pay or profit. They comprise: (a) employed persons "at work", that is, who worked in a job for at least one hour; and (b) employed persons "not at work" due to temporary absence from a job, or to working-time arrangements (such as shift work, flexitime and compensatory leave for overtime).

- **Unemployment:** All persons of working age who were not in employment, who carried out activities to seek employment during the last four weeks and who were currently available to take up employment given a job opportunity.

- **Time-related underemployment:** All persons in employment who, during the survey reference week, wanted to work additional hours, whose usual working time in all jobs was less than 40 hours per week, and who were available to work additional hours given an opportunity for more work.

- **Potential labour force:** All persons of working age who, during the survey reference week, were neither in employment nor in unemployment and: (a) carried out activities to "seek employment", were not "currently available" but would become available within a short subsequent period established in the light of national circumstances (that is, unavailable jobseekers); or (b) did not carry out activities to "seek employment", but wanted employment and were "currently available" (that is, available potential jobseekers).

- **Persons outside the labour force:** All persons of working age who were neither in employment nor in unemployment during the survey reference week.

- **Extended labour force** = Labour force + Potential labour force

- **Labour force participation rate** = [labour force / working age population] x 100

- **Employment-to-population ratio** = [persons in employment / working age population] x 100

- **Unemployment rate:** LU1 = [persons in unemployment / labour force] x 100

- **Combined rate of time-related underemployment and unemployment**:
  LU2 = [(persons in time-related underemployment + persons in unemployment) / labour force] x100

- Combined rate of unemployment and potential labour force:
  LU3 = [(persons in unemployment + potential labour force) / (extended labour force)] x 100

- **Composite measure of labour underutilization**:
  LU4 = [(persons in time-related underemployment + persons in unemployment + potential labour force)

/ (extended labour force)] x 100

- **Hours actually worked:** Time spent in a job (or work activity) in the performance of activities that contribute to the production of goods and services during the survey reference week. They include: (a) direct hours spent carrying out the tasks and duties of the job (or work activity); (b) related hours spent maintaining, facilitating or enhancing productive activities; (c) downtime when the person in his or her job cannot work due to machinery or process breakdown, but continues to be available for work; and (d) resting time of short periods for rest, relief or refreshment, according to established norms and national circumstances.

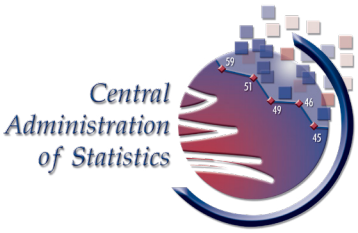
- **Hours usually worked:** Typical value of hours actually worked in a job (or work activity) per week, measured over a long observation period of a month, quarter, season or year.

- **Hourly earnings of employees at main job:** Monthly earnings at main job / [hours usually worked at main job per week x 52/12], where monthly earnings refer to total cash remuneration, excluding employee contributions to compulsory employment-related social security and retirement income provision schemes, but including direct wages and salaries in cash for time worked and work done, remuneration for time not worked (annual vacation and other paid leave, and so on), cash bonuses and gratuities. In the case of multiple jobholding during the survey reference week, "main job" refers to the job with the longest hours usually worked

- **Employment in the informal sector:** All persons in employment who were engaged in household unincorporated enterprises that were not registered at the national level, or did not, in law or in practice, keep full bookkeeping of accounts. In case of survey non-response, other criteria on social security contributions by the employer, nature of place of work, and number of employees were used, depending on the status in employment of the person in that job.

- **Informal employment:** All employers and own-account workers operating an enterprise in the informal sector, all contributing family workers, and all employees with no social security contribution by the employer, irrespective of the formal or informal nature of the enterprise in which they work. In the case of survey response of employees, other criteria on paid annual leave and paid sick leave were used

Definitions of other concepts measured in the survey are given directly in the text of the report, such as status in employment, branch of economic activity, occupation, skills mismatch, gender pay gap, low pay workers, NEET rate, international migrant workers, and so on.



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