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Advancing Evidence-Based Policy in Crisis Management: The Case of Lebanon

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Advancing Evidence-Based Policy in Crisis Management: The Case of Lebanon.

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I. EXECUTIVE SUMMARY

This study offers an evidence-based assessment of the cross-sectoral effects of Lebanon's protracted economic crisis on the employment, incomes, energy poverty, livelihood and food-based coping strategies, and attitudes towards immigration in seven economic sectors. The study's findings are based on the field survey responses of 931 households earning a livelihood from the agriculture, construction, education, food and beverage, health, manufacturing, and retail sectors drawn from all of Lebanon's governorates. The statistical analysis is complemented, sharpened, and enhanced using the input of high-profile experts who participated in five group Key Informant Interviews.

The findings suggest that Lebanon's economic crisis had pervasive and profound effects on the livelihoods and employment conditions of the respondents across the seven sectors. First, the findings bring to light the extreme energy burden that households face amid the severe rationing of the power supply. More than two thirds of households, across the seven sectors, spend more than 50 percent of their income on energy. The findings also uncover the harsh livelihood and food-based coping strategies that were adopted by the respondents. The bulk of households across the seven sectors have reduced the quantity of basic food staples such milk, fruits, vegetables, and bread and switched to cheaper alternatives for basic food items. In addition, with the exception of respondents from the manufacturing and food and beverage sectors, 30 percent or more of the respondents across sectors report having to skip a meal during the week, while 32.87 percent of the households across sectors are not able to afford a meal with chicken, fish or meat at least once a week.

The crisis afflicting Lebanon has forced significant proportions of the respondents across sectors to resort to livelihood-based coping strategies that involve compromising on the accessibility and, possibly, the quality of healthcare that they receive. More than 42 percent of the respondents across sectors have had to postpone or skip visits to the doctor after falling ill and 58.86 percent of respondents across sectors have had to switch from private to public healthcare. Further, 18.69 percent of the respondents across sector resorted to cancelling their private health insurance and, with the exception of the respondents from the healthcare sector, 25 percent or more of the respondents chose to intentionally reduce or stop their prescribed medication. These findings serve as a forewarning for potentially adverse health and longevity outcomes in the short term in a country once touted as the hospitalization center of the Middle East. They further highlight the increasing reliance on, as well as the burden placed upon, the public healthcare system.

Not surprisingly, the findings also reveal that the vast majority of the respondents would like to immigrate if they are presented with the opportunity. However, the proportion of respondents who initiated the immigration process is lower, likely due to a language barrier, a skill mismatch or the existence of strong family ties that discourage them from immigrating.

The findings also indicate that among the seven sectors that are surveyed, respondents from the construction and agriculture sectors appear to be the hardest hit by the crisis. In particular, employment in the agriculture and construction sectors has been particularly hard-hit by the crisis. For instance, the proportion of respondents from the construction and agriculture sectors having had to reduce the quantity purchased of basic food items, which stands at 90 percent or higher, is the highest across sectors, while these two sectors employ the largest proportion of respondents who resorted to food-based coping strategies that involve food intake. In addition, the respondents earning a livelihood from the construction and agriculture sectors are facing mounting difficulties in affording to pay for private electricity generation.

In view of the findings, policies targeting poverty reduction and increased food security should be prioritized. The numbers point to an urgent need to broaden and expand the cash-based assistance approach, which as of now consists of two programs: the National Poverty Targeting Program (NPTP) and the Lebanon Emergency Crisis and COVID-19 Response Social Safety Net Project (ESSN) funded by the World Bank. Both programs combined will reach around 225,000 families, while current estimates put poverty rates at above 80%. Two additional programs were designed but lack funding: the Broad Coverage Cash Transfer program (BCCT) and the Public Sector Cash Scheme (PSCS). To be able to attract funding, the government should prioritize the expansion of the social assistance registry developed by IMPACT. The registry currently has information on around 500,000 households, and this can easily be expanded to reach the target of around 800,000 households.

Naturally, there is a need for a national social protection system that includes other components than the cash transfers, most importantly a universal health coverage program. There is currently a proposal for a comprehensive social protection strategy that the policymakers are urged to pass as soon as possible.

There is consensus on the need to discontinue all types of blanket subsidies and shift towards targeted cash assistance. The same should be done for bread, where flour is still being subsidized. We would recommend adding a cash component for bread and incorporating it within the existing NPTP, ESSN, and any other related cash assistance programs.

Given the food poverty situation the country has unfortunately reached, we would recommend the removal of all customs duties on all food items (except luxury items). Even though some basic food items are already exempt from customs duties, others such as salt and canned products are not. Totally removing any customs duties on food products is a critical action that the government should undertake to ensure all families can access food at the cheapest prices possible.

Moreover, given our empirical findings on the heterogeneity of the impact of the crisis on different sectors, this should be accounted for when designing relevant policies. For example, in the current situation households employed by the construction and agricultural sectors would need more assistance. This could come in the form of a top up for heads of households employed by the construction or the agriculture sector for instance. However, this can only be implemented if there is a reliable registry that is regularly updated.

Regarding the alarming energy poverty findings, we would recommend designing policies that would facilitate obtaining electricity from distributed generation installations. Besides the provision of food, international aid can focus on installing renewable energy systems in poor areas. At a broader level, plans for electric generation and mass transportation should be prioritized on the government's agenda.

II. INTRODUCTION

Lebanon's economy is collapsing under the weight of a multi-pronged currency, debt, and banking crisis. The sudden stop of inflows following the popular uprising of October 17, 2019 precipitated systemic crises in banking, debt, and the exchange rate, as well as an economic crisis that the World Bank (2021a) classifies as being among the ten, and possibly three, worst crises globally since 1900. The crisis, which was aggravated by the outbreak of COVID-19 and the catastrophic Port of Beirut explosion, led to a sharp contraction in Gross Domestic Product (GDP).¹

The Lebanese have suffered a marked decline in disposable income. The World Bank's (2021b) projections point to a decline in GDP per capita, a measure of average income, by about 40 percent between 2018 and 2021.² The residents of the country are also reeling under the effects of a severe depreciation and triple-digit inflation, which, combined, have wiped out more than 90 percent of their purchasing power. In fact, Lebanon is set to reach the second highest inflation rate globally in 2022, competing closely with Sudan, which currently takes the number one position (Fitch Solutions, 2022).

In the absence of a full-fledged official recovery plan by the government, the economic adjustment is occurring in a highly regressive manner: the bulk of the adjustment is being borne by the vulnerable segments of the society. The so-called middle class is almost disappearing. Indeed, the unprecedented crisis is impoverishing large swathes of society. Low-skilled labor, wage earners and small depositors are particularly prone to the adjustment that is occurring via the depreciation of the currency and the rampant inflation. A host of livelihood-based coping strategies, which will be discussed next, are being employed by individuals and households to mitigate the effects of the crisis.

The most alarming facet of the crisis is the palpable increase in the rates of unemployment and multidimensional poverty, which is now affecting new segments of society for the first time. The soaring poverty is, in part, attributable to inflation's regressive nature as a tax that disproportionately affects the poor and vulnerable. While estimates of poverty are contingent on the exact definition that is employed, international organizations report a surge in poverty since the onset of the crisis in 2019. The World Bank (2020) estimates that the poverty rate increased from 27.4 percent in 2011 to 45 percent of the population in 2019. A phone survey conducted by the WFP (2020) uncovers that 50 percent of the surveyed Lebanese expressed concerns over not having a sufficient food intake. The latter statistic is even more astounding in light of the fact that, according to the same study, households have, as a coping mechanism, lowered expenditures on food. This is one of several coping mechanisms enumerated by 121 participants in Focus Group Discussions held as part of a project conducted by the American University of Beirut focusing on the informal urban sector. The main coping mechanisms were: (1) unable to afford adequate number of meals per day, (2) unable to afford medicine or treatment for chronic conditions and sudden illnesses, (3) unable to afford

¹ The nominal GDP is projected to have contracted from USD 45.4 billion (IMF, 2019) to USD 18.7 billion (IMF, 2020). According to the Central Administration of Statistics, real GDP contracted by 1.9 percent in 2018, 6.9 percent in 2019, and 25.9 percent in 2020. According to Fitch (2022), real GDP is projected to contract by an additional 5 percent in 2021.

² The decline in GDP per capita prompted the World Bank to downgrade Lebanon from its status as an upper middle-income to a lower middle-income country.

purchasing electricity from power generators or other sources, and (4) faced serious threats of eviction from their dwelling due to their inability to pay rent (Dagher et al., 2022).

According to ESCWA (2021a), the multidimensional poverty rate, which measures various facets of deprivation (in addition to the material aspects) such as education, health, public utilities, housing, assets and property, and employment and income, stands at 82% of the total population. The findings also reveal that 40% of the population can be classified as suffering from extreme multidimensional poverty. The highest levels of poverty are observed in the governorates of Akkar, Bekaa, Baalbek-Hermel, and Nabatiye. Poverty in terms of health, access to public utilities, and employment and income contributed the most, in the latter regions, to the multidimensional poverty rate. The same study finds that 13 percent of households are deprived of employment opportunities. The UN (2021) estimates that 78 percent of the Lebanese population was in poverty and that 36 percent of the population was in extreme, or 'food', poverty as of March 2021.

The crisis is also creating wide-ranging and multifaceted effects on the economic sectors. Indeed, Lebanon's severe balance of payments crisis is causing shortages in essential products, medicines, medical supplies, diesel, and gasoline. These shortages of basic inputs to production have weighted on the productive sectors of the economy. More importantly, the human toll of the crisis, beyond the poverty, destitution and deprivation, and desperate—often fatal—migration attempts is alarming. In fact, the country is also losing its high-skilled workforce to immigration. The destruction of human capital, which is a main pillar for a productive economy, is also significantly curtailing the productive capacity and ability to innovate across sectors. Should the brain drain continue, it may incapacitate an economic recovery, which necessitates high and sustained growth rates. The plight of the Lebanese, who largely depended on the private sector for the provision of healthcare, water and electricity, is highlighted by the international press. There was little reprieve from the repercussions of the crisis for the vast majority of the Lebanese.

Not surprisingly, the crises' effects on employment dynamics is manifest. Individuals and households are living in precarious conditions due to diminished income or in many cases a complete loss of income. ESCWA (2021b) offers an assessment of the employment, sales, and activity in the formal sector. The findings reveal that 23 percent of the employees have been laid off between 2019 and 2020.³ The latter drop in employment can be ascribed to the crisis, the COVID-19 pandemic, and the Port of Beirut explosion. However, the World Bank (2020) notes that "of the three crises, the economic crisis has by far had the largest (and the most persistent) negative impact."

³ The disparities in employment patterns that are uncovered in ESCWA (2020) study should be highlighted. Employment in micro enterprises declined by 50 percent due to the crisis and the pandemic. In contrast, employment in net exporting firms doubled.

In spite of the magnitude of the crisis, there exists a big gap in the literature investigating its impacts on the livelihoods of the Lebanese households employed in different economic sectors, or evaluating the efficiency and adequacy of the government's policies in alleviating the negative effects of the crisis. Led by the American University of Beirut (AUB) and funded by the National Endowment for Democracy, the project "Advancing Evidence-Based Policy in Crisis Management: The Case of Lebanon," aims to fill this gap. As part of this project, the AUB team has conducted a data collection exercise (both quantitative and qualitative data) that included (1) a field survey of 931 households,⁴ and (2) 5 group Key Informant Interviews (KIIs) including around 5 experts in each session.

The main goal of the project is to monitor the impact of the multi-dimensional crises Lebanon is facing, on multiple economic sectors, and subsequently advance evidence-based policy reforms that respond to citizens' priorities. Another question that this research aims to answer is whether the impact of the crises on families employed in different sectors was similar or different. The sectors investigated include: agriculture, construction, education, food and beverage, health, manufacturing, and retail.

The repercussions of the crises on a sectoral basis are reviewed next to shed some light on the drivers that underlie the observed unemployment, deprivation, and poverty dynamics that were discussed earlier.

⁴ The survey findings' report can be accessed here <https://scholarworks.aub.edu.lb/bitstream/handle/10938/23478/Sectoral%20Report.pdf?sequence=1>

III. SECTORAL EFFECTS OF THE CRISIS: A REVIEW OF THE LITERATURE

This section provides a review of the existing literature on the sectoral effects of the crisis. In principle, the crisis may have disparate sectoral effects in terms of employment and livelihoods owing to the heterogeneity across and within sectors. For instance, access to export markets may dampen the effects of the crisis for some sectors, such as manufacturing and agriculture, but not others, such as construction.

The review of the literature focuses, in particular, on the seven sectors that are comprised in the survey that was undertaken as part of the project. This review will facilitate contrasting the existing knowledge regarding the sectoral effects of the crisis with the findings gleaned from the survey. That is, it will be possible to discern whether the effects of the crisis were more/less palpable, and whether the survey provides new or different insights. The literature review also offers insights into the livelihood-based coping strategies typically employed by individuals and households.

A. The Wholesale and Retail Sector

The wholesale and retail sector accounts for 15 percent of the employment of Lebanese workers (ILO, 2020a). A survey conducted by the International Labor Organization (ILO, 2020a) shows that employment in the sector was particularly hard-hit by the pandemic and the crisis. Indeed, 41 percent of the workers were permanently laid off between October 2019 and April 2020. The estimates provided by ESCWA (2021b) for the same period, using a different sample start and end dates, point to a smaller decrease in employment of about 24 percent in the sector.

B. The Construction Sector

The construction sector has traditionally been the main recipient of the subsidized lending programs of Banque du Liban (BdL), Lebanon's central bank (World Bank, 2016). The subsidized interest loans propped up activity and employment in the sector. Despite the sizeable funding that the sector attracts, it employs only 6.3% of the Lebanese workforce (ILO, 2020b).

Demand for housing softened with the start of the Syrian crisis in 2011. The oil price decrease of 2014 further weakened demand by expatriates and Arab investors (ILO, 2020b). The downward trend in employment in the construction sector, which can be partly gauged by examining changes in construction permits and cement deliveries, commenced with the halt of subsidized interest lending by BdL in 2018. That trend accelerated markedly since the onset of the crisis: According to the statistics provided by the WFP (2020) in 2020, 36 percent of the Lebanese lost their jobs in the construction sector and 24 percent saw their incomes reduced. ESCWA (2021b) reports that, as a result of the crisis, the sales of housing units have dropped by 45.2 percent and employment in the construction sector has dropped by about 40 percent in 2020.

C. The Healthcare Sector

The destruction in human capital (i.e., brain drain) resulting from the economic crisis is most pronounced in the healthcare sector. The World Health Organization (2021) provides telling estimates of the toll of the crisis: 40 percent of skilled medical doctors and almost 30 percent of registered nurses have relocated outside Lebanon in search for better incomes and opportunities. Collard (2021) estimates that 1,000 medical professionals have left the country. Today, the healthcare sector is on the 'brink of collapse' (Kawa *et al.*, 2022). Shortages in diesel, medical equipment, and essential medicines have strained the healthcare sector since the onset of the crisis. The unreliable electricity, diesel and fuel supply is endangering the operations of intensive care units, dialysis units, cold chain requirements, sterilization and diagnostic procedures (UN, 2021). The formidable financial challenges of healthcare providers and hospitals are exacerbated by the arrears that the Ministry of Public Health has accumulated with hospitals. The seepage in medical expertise coincided with an increased demand for medical services that was caused by the COVID-19 pandemic and the Port of Beirut explosion, which resulted in thousands of injuries.

In addition to the effects of the crisis on the supply of medical care, access to healthcare is rapidly becoming prohibitively expensive. To start with, half of the Lebanese are uninsured and, hence, cannot afford access to private healthcare (UN, 2021). Moreover, even those with access to private or public—through the National Social Security Fund—insurance have to contend with settling a large portion of their healthcare bills (out of pocket). The NSSF reimburses medical charges and fees at the official rate of LBP 1,500, while medical care centers bill at a much higher exchange rate. The difference, owed by the patient, has soared due to the currency depreciation. In terms of statistics, the WFP's (2020) survey indicates that 34 percent of the Lebanese face barriers to accessing healthcare and 56 percent reported facing challenges in accessing medicine. In more recent estimates, ESCWA (2021) finds that the share of households who are deprived from access to healthcare soared from 9 percent in 2019 to 33 percent in 2021.

D. The Agriculture Sector

The agricultural sector comprises the highest percentage of informal employment. Of the 57,000 individuals employed in the sector, 88.1 percent are informal workers (ILO, 2020b).

High production and input costs, due in large part to the currency depreciation, aggravated the challenges that farmers and businesses face. For example, the price of seeds and fertilizers, energy, including most prominently the cost of using diesel generators for the power supply, and rental rate of land have skyrocketed (FAO, 2020). These supply shocks adversely affected employment in the agricultural sector. In fact, 23 percent of workers lost their jobs due to COVID-19, while 32 percent saw their salaries being reduced (WFP, 2020).

E. The Manufacturing Sector

The manufacturing sector was noticeably affected by the crisis. On the one hand and despite the fact that the prevailing crisis offered the local manufacturers the opportunity to meet local demand due to prohibitively expensive imports and import compression, the pandemic worsened the situation in a hitherto fragile sector that is struggling to acquire raw material because of global shortages stemming from global supply chain disruptions (owing to the pandemic) as well as shortages that are specific to Lebanon. On the other hand, some manufacturing sectors such as agro-food have become more competitive internationally mainly owing to the currency depreciation. This has led to an increase in exports in those industries and hence has had positive effects on workers in the sector.

The depreciating exchange rate made imported raw materials expensive. The increasing costs of production translated into higher prices and weaker demand. The adverse consequences on employment were clear. Informal employment constitutes 58.4 percent in a sector that employs 173,000 workers (ILO, 2020b). The ILO (2020b) also documents that 37.3 percent of employees in this severely affected sector are daily workers. This statistic highlights the precarity of their working conditions. The WFP (2020) survey finds that 31 percent of workers in the manufacturing, transport and trade sector were laid off since the outbreak of the COVID-19 pandemic, and 22 percent of the workers reported salary reductions. Of those who were laid off, the ILO (2020a) expects that half will return to work, while the others will be permanently laid off.

F. The Education Sector

The COVID-19 pandemic coupled with the economic crisis disrupted the educational sector and had perceptible negative effects on employment, student enrollment, and educational attainment. Since the government declared a state of general mobilization on March 18, 2020, the social distancing measures and the lockdowns have forced a switch to distance learning using online technologies. Further, the currency depreciation and crisis weighted on the households' ability to afford education. Indeed, the highly privatized nature of the educational sector—private schools cater for about half of the student population (ILO, 2020b)—implied that the costs of the depreciation will be borne by households.

Crisis dynamics also affected employment in the sector which, akin to the healthcare sector, lost part of its qualified labor force (i.e., teachers) to immigration (Ben Brik, 2021) in search for better incomes and opportunities. Indeed, the education sector accounted for 8.6 percent of total employment in Lebanon and employed 10.8 percent of the Lebanese labor force (ILO, 2020b). Also, according to the ILO (2020b), about 100,000 teachers lost their employment by July 2020 due to the precarious financial conditions of the schools. A survey by UNICEF (2022) uncovers that enrollment in schools and universities, dropped from 60 percent in 2020-2021 to 43 percent in 2021-2022. According to UNICEF (2021a), 25% of families are unable to afford the tools for online learning and 15% discontinued their children's education as a coping mechanism. UNICEF (2021c) estimates that an unprecedented 260,000 of school-age Lebanese children might not get back to school. Lastly, the drop in revenues, due to the decrease in enrollment, coupled with an increase in costs weighs on the providers of educational services.

G. The Food and Beverage Sector

The food and beverage sector was hard-hit by the economic crisis and the resulting drop in purchasing power. The woes of the sector were particularly aggravated by the declaration of state of general mobilization by the government on March 18, 2020 and, ultimately, the lockdowns that were imposed to stem the spread of COVID-19. Indeed, the government's efforts to curb the spread of the pandemic resulted in the bankruptcy of a large numbers of restaurants. The ILO (2020) estimates that a total of 784 restaurants shut down and 25,000, out of a total of 69,000, employees were laid off, between September 2019 and February 2020. The WFP (2020) estimates that 42% of workers have lost their jobs in the restaurants and services sectors, with 26% stating that their income was substantially reduced since the beginning of the crisis. These striking statistics show the degree of the carnage caused by the economic crisis and the outbreak of COVID-19 on the food and beverage sector.

H. Coping Strategies

Lebanese households are resorting to harsh livelihood and food-coping strategies to withstand the crisis. The coping strategies comprise spending less on health and education, selling assets such as homes and cars, resorting to humanitarian assistance and social solidarity initiatives, and begging (WFP, 2020). The WFP (2020) reports that 19 percent of Lebanese respondents skipped meals or did not eat for a whole day, which is a considerable proportion. The most severe food-based coping of Lebanese families occurred in Akkar (27%), Beirut (22%), and Beqaa (21%). The UNICEF (2021a) documents that child labor has become more prevalent, often placing children at risk. According to UNICEF (2021a), 9 percent of families sent their children to work and over 30 percent of children skipped a meal. Further, according to the WFP (2020), 12 percent of Lebanese respondents reported an inability to cope.

The inability to withstand the crisis at the household level was compounded by firms having to adopt negative coping strategies. Indeed, the crisis forced Small and Medium sized enterprises, which constitute 95 percent of all businesses in Lebanon and employ 50 percent of the workforce (FAO, 2020), to shorten working hours and reduce wages in lieu of firing employees (FAO, 2020). This exacerbated the precarity of the households' conditions. Despite that, a considerable number of businesses closed down.

IV. THE METHODOLOGY OF THE SURVEY

As part of this project, the AUB team has conducted a data collection exercise (both quantitative and qualitative data) that included (1) a field survey of 931 households covering seven economic sectors and several geographic areas as shown in Tables 1a and 1b, and (2) 5 group Key Informant Interviews including around 5 experts in each session.

Table 1.a: Percentage of respondents living in each Mohafaza

Mohafaza	Count	Percentage
Akkar	115	12%
Baalbak-Hermel	15	2%
Beirut	199	21%
Beqaa	171	18%
Mount Lebanon	230	25%
Nabatieh	28	3%
North Lebanon	64	7%
South Lebanon	109	12%

Table 1.b: Percentage of respondents living in each Caza

Caza	Count	Percentage
Akkar	115	12.4%
Aley	23	2.5%
Baabda	41	4.4%
Baalbek	14	1.5%
Batroun	8	0.9%
Beirut	199	21.4%
Chouf	8	0.9%
Hermel	1	0.1%
Keserwan	7	0.8%
Koura	2	0.2%
Matn	151	16.2%
Minieh-Danniyeh	1	0.1%
Nabatieh	28	3.0%
Saida	106	11.4%
Tripoli	47	5.0%
Tyr	3	0.3%
West Beqaa	1	0.1%
Zahleh	170	18.3%
Zgharta	6	0.6%

The field survey is designed to assess the direct impact of the crisis on respondents' livelihoods and well-being. The main condition for eligibility to take the survey were: 1) being above 18 years old, 2) being a Lebanese citizen, and 3) being employed in one of the seven sectors of interest. To obtain a representative sample in each one of the seven sectors, sample size calculations using a 95% confidence interval and an 8.5% margin of error showed that we need a minimum of 133 households per sector for a total of $133 \times 7 = 931$ surveys.

A structured questionnaire consisting of 52 questions was developed by the AUB team. The dossier submitted to the Institutional Review Board (IRB) at AUB on November 14, 2021, included the IRB application, the consent script, and the questionnaire. After several rounds of revisions, the IRB approval was granted on March 15, 2022. While awaiting IRB approval a specialized firm in conducting surveys, MINERS, was contracted and started getting ready for the task; the questionnaire was uploaded to KoBo and pilot testing was performed. The field surveys were effectively carried out during the last two weeks of March 2022.

Several teams of enumerators worked in parallel in different regions. For most sectors recruitment was done on site in the workplace. For example, enumerators would take permission from a hospital or school to conduct the surveys or alternatively they would approach potential subjects when leaving work or during breaks. Locating interviewees in the construction and agricultural sectors was a bit more challenging compared to other sectors. All interviews were recorded and stored on a shared drive to ensure the quality and accuracy of the information. The raw dataset will remain strictly confidential and only accessible to the project team and any identifying information of respondents shall remain anonymous and undisclosed in the report as per AUB IRB rules. Overall, the average time taken to complete the questionnaire was 17 minutes.

MINERS and AUB research team validated and cleaned the data all throughout the collection process and continued after closing the data collection process once the targeted number of surveys was secured. Random samples of surveys were double-checked via listening to the recordings, especially those held during the pilot phase and first day of the data collection process, to ensure the quality of the collected data. After completing the data collection phase, MINERS and AUB research teams went over the dataset in excel sheets to check for consistency and any anomalies or outliers. The cleanliness of the dataset is a good indication that the survey was well designed.

The first two KIIs preceded the field survey, which was conducted in March 2022, and helped in formulating the survey questionnaire making sure the questions included are effective and comprehensive. The remaining three KIIs (conducted in April, May, and June 2022) helped in validating and supplementing the preliminary findings from the survey.

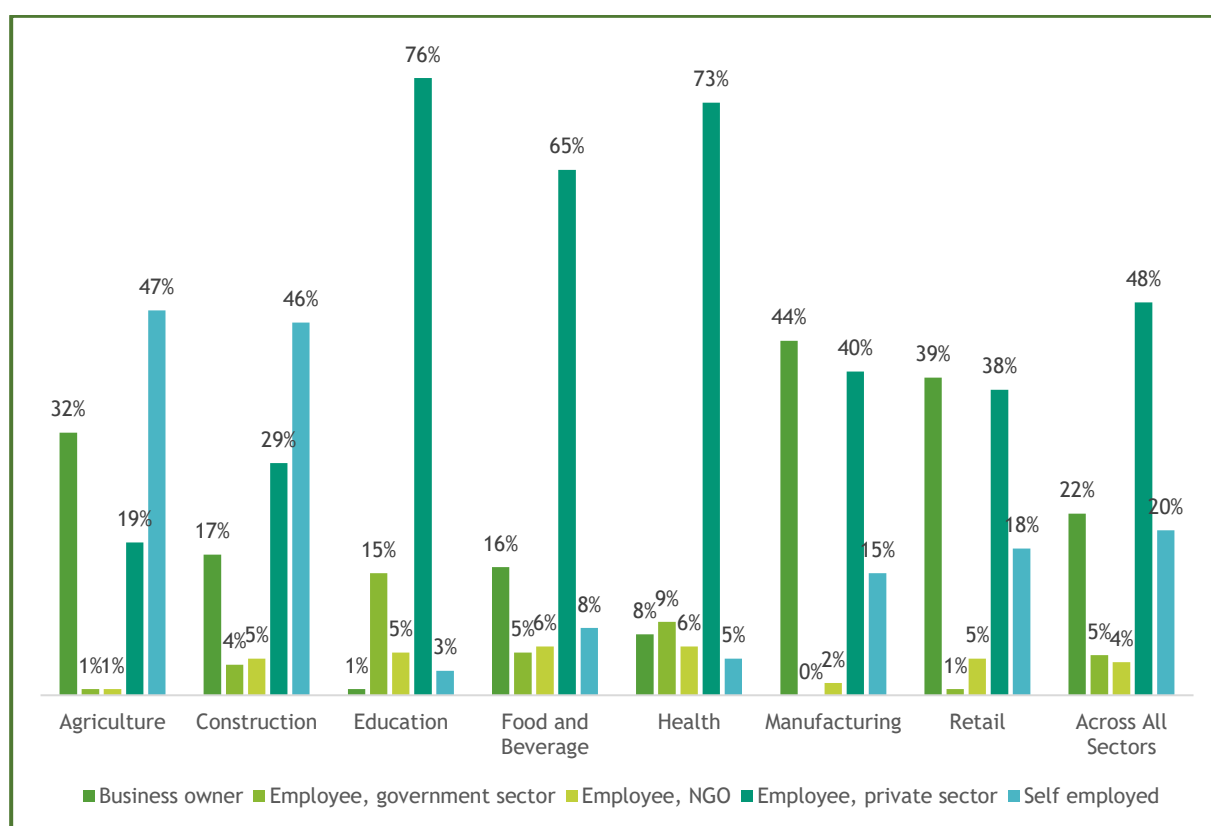
V. THE SURVEY FINDINGS

This section presents and discusses the findings of the survey. The emphasis is placed on a cross-sectoral comparison of the employment, incomes, energy poverty, livelihood-based coping strategies, and attitudes towards immigration in the seven sectors.

A. Employment Types and Precarity

Figure 1 presents the findings relating to the type of employment in the seven sectors.

Figure 1: Type of employment of the respondents



While the majority of employees in the healthcare, food and beverage, and education sectors work in the private sector, the manufacturing, construction, agriculture and retail sectors are characterized by larger proportions of self-employment and business ownership. This may indicate, but does not conclusively imply, a greater degree of informality in employment. Existing studies suggest a general increase in the degree of informality since the onset of the crisis. A recent survey administered by the ILO (2021) suggests that the incidence of nationwide informal employment increased from 54.9 percent in 2018-2019 to 77.8 percent in 2021.

Of the seven sectors that are surveyed, the education and healthcare sectors have the largest proportion of employees working in the public sector. Indeed, employment in the public sector for these sectors stands at, respectively, 15 and 9 percent, respectively. Given that the salaries in the public sector have not witnessed a significant adjustment yet,⁵ the incomes of this particular group of employees is likely to be lower than their counterparts in the private sector.⁶

Table 2 provides the income bracket in Lebanese pounds (LBP) for the respondents across geographies (i.e., by Caza). The table aims at examining the existence of disparities in the income levels across Cazas.⁷ The existence of such disparities may be informative for the remainder of the findings.

Table 2: Income bracket by cazas

Caza	<650,000	[650,000 - 1,200,000]	[1,200,000 - 3,000,000]	[3,000,000 - 5,000,000]	[5,000,000 - 10,000,000]	>10,000,000
Akkar	0.9%	4.3%	29.6%	34.8%	20.0%	10.4%
Aley	0.0%	8.7%	17.4%	30.4%	30.4%	13.0%
Baabda	0.0%	0.0%	22.0%	22.0%	31.7%	24.4%
Baalbek	7.1%	14.3%	42.9%	21.4%	7.1%	7.1%
Batroun	0.0%	0.0%	37.5%	12.5%	37.5%	12.5%
Beirut	0.5%	2.5%	19.1%	36.2%	31.7%	10.1%
Chouf	0.0%	12.5%	37.5%	12.5%	37.5%	0.0%
Hermel	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Keserwan	0.0%	0.0%	0.0%	57.1%	28.6%	14.3%
Koura	0.0%	0.0%	0.0%	50.0%	0.0%	50.0%
Matn	6.0%	6.0%	21.2%	29.8%	24.5%	12.6%
Minieh-Danniyeh	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
Nabatieh	3.6%	3.6%	28.6%	42.9%	21.4%	0.0%
Saida	2.8%	9.4%	40.6%	26.4%	16.0%	4.7%
Tripoli	0.0%	12.8%	42.6%	23.4%	17.0%	4.3%
Tyr	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
West Beqaa	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
Zahleh	2.9%	12.4%	32.4%	32.4%	13.5%	6.5%
Zgharta	0.0%	16.7%	50.0%	16.7%	16.7%	0.0%
Across all Cazas	2.3%	6.8%	27.9%	31.1%	22.7%	9.2%

*Note: income brackets are in LBP

The findings demonstrate that the average level of income in Minieh-Danniyeh, West Beqaa, Tripoli, Baalbek and Saida is lower than in other Cazas. In contrast, Baabda, Koura, Batroun, Keserwan and Matn appear to have higher than average income levels. The results in Table 2 clearly illustrate the incidence of income inequality within and across Cazas.

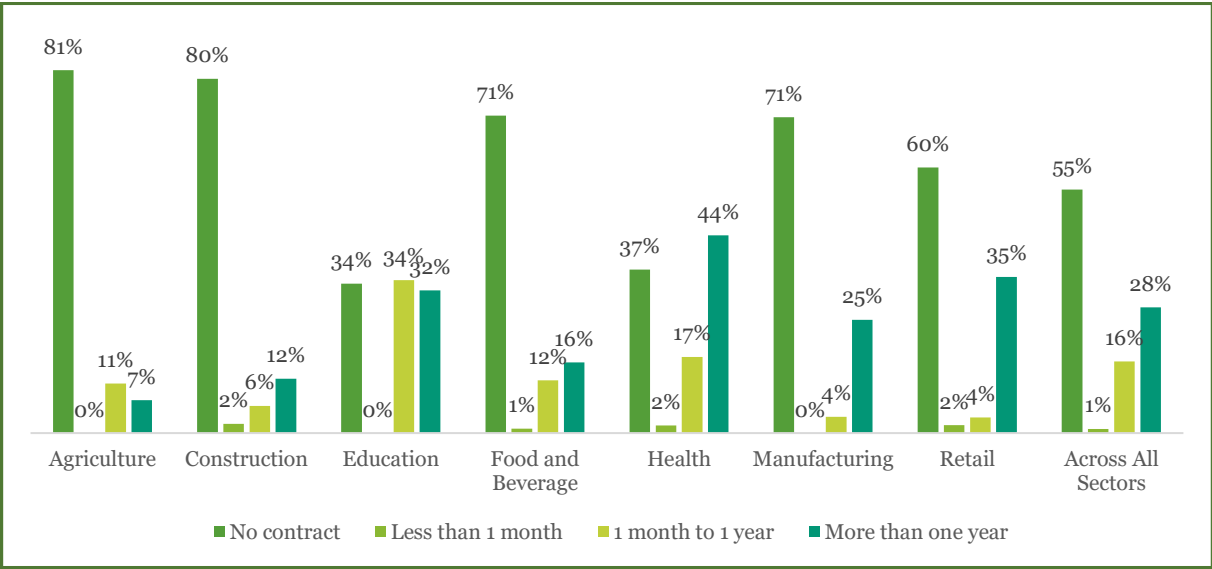
⁵ In 2022, the Government of Lebanon (GoL) has disbursed temporary social assistance to the employees of the public sector and mandated an increase in the transportation allowance for public and private sector employees in 2021 and 2022. To date, these are the only direct forms of assistance provided to the public sector employees.

⁶ We do not perform a formal statistical test of the significance of the differences in income among the public and private sector employees due to the relatively low number of public sector employees in our sample.

⁷ A limitation to note here is that the small number of surveys conducted in certain cazas weakens our conclusions regarding comparisons across cazas.

Figure 2 provides information on the duration of the work contract across the seven sectors.

Figure 2: Duration of work contracts of the respondents



The findings illustrate the precarity of employment in the seven sectors. In fact, the vast majority of employees in the agriculture, construction, food and beverage, manufacturing, and retail sectors do not have a contract. In contrast, the employment conditions in the education and healthcare sector are more stable, in that the proportion of employees that are on a contract of more than one year is nearly equal to that of employees without a contract.

The crisis exerted a palpable impact on employment. Indeed, 5 percent or fewer of the employees across the seven sectors were able to find a better employment opportunity since the onset of the crisis. A significant share of employees lost their jobs (Figure 3), received a pay cut (Figure 4) or saw their working hours being reduced (Figure 5).

Figure 3: Proportion of respondents who lost their job since the onset of the crisis

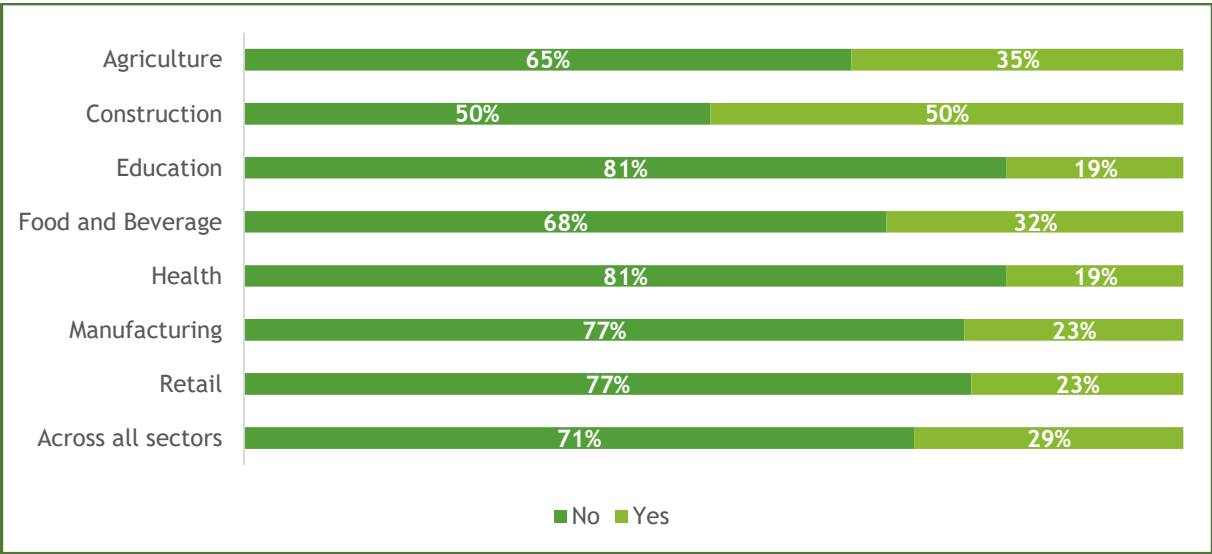


Figure 4: Proportion of respondents who received a pay cut

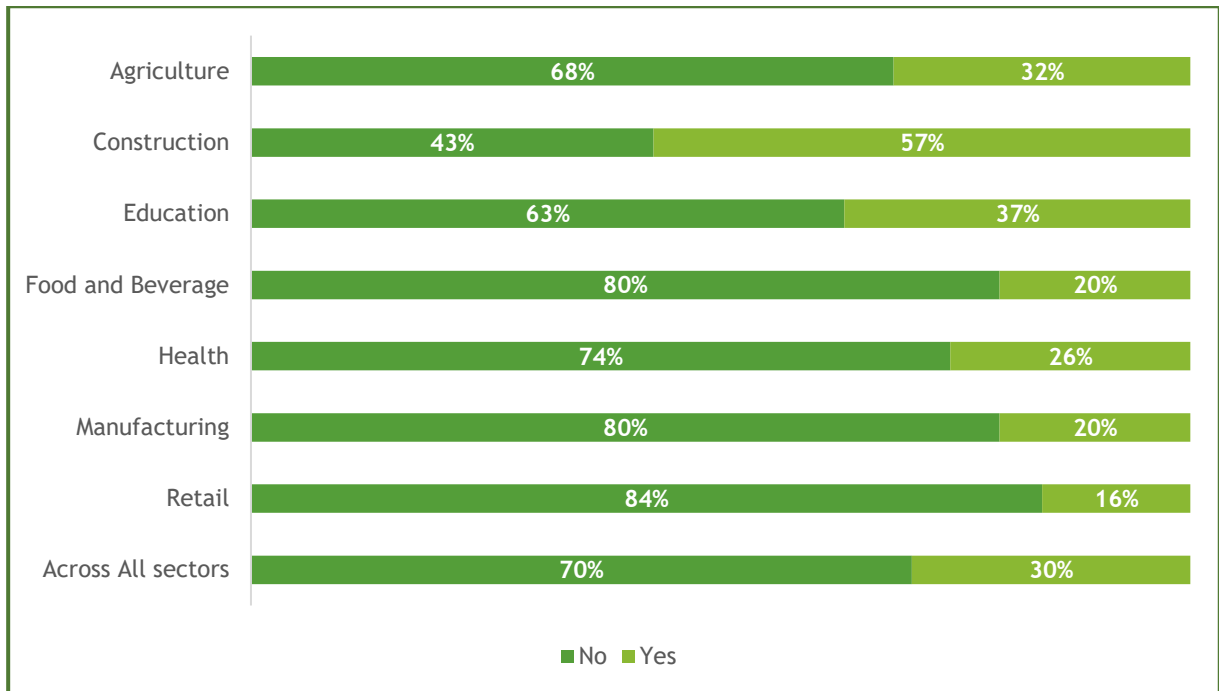
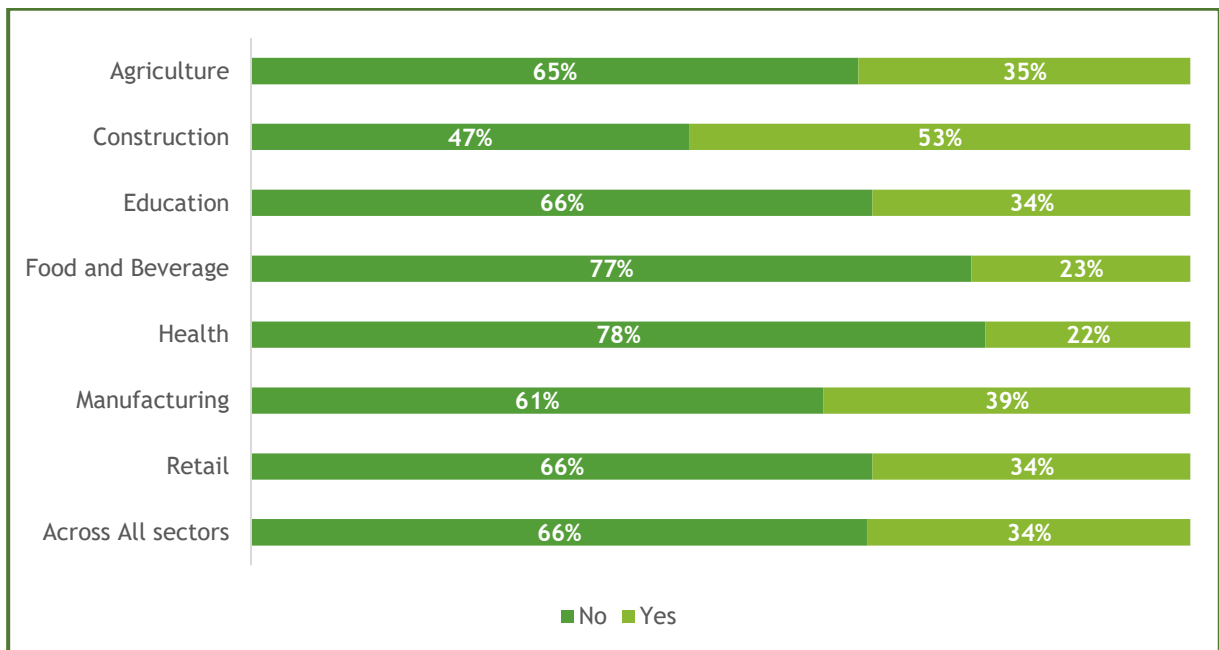


Figure 5: Proportion of respondents whose working hours were reduced

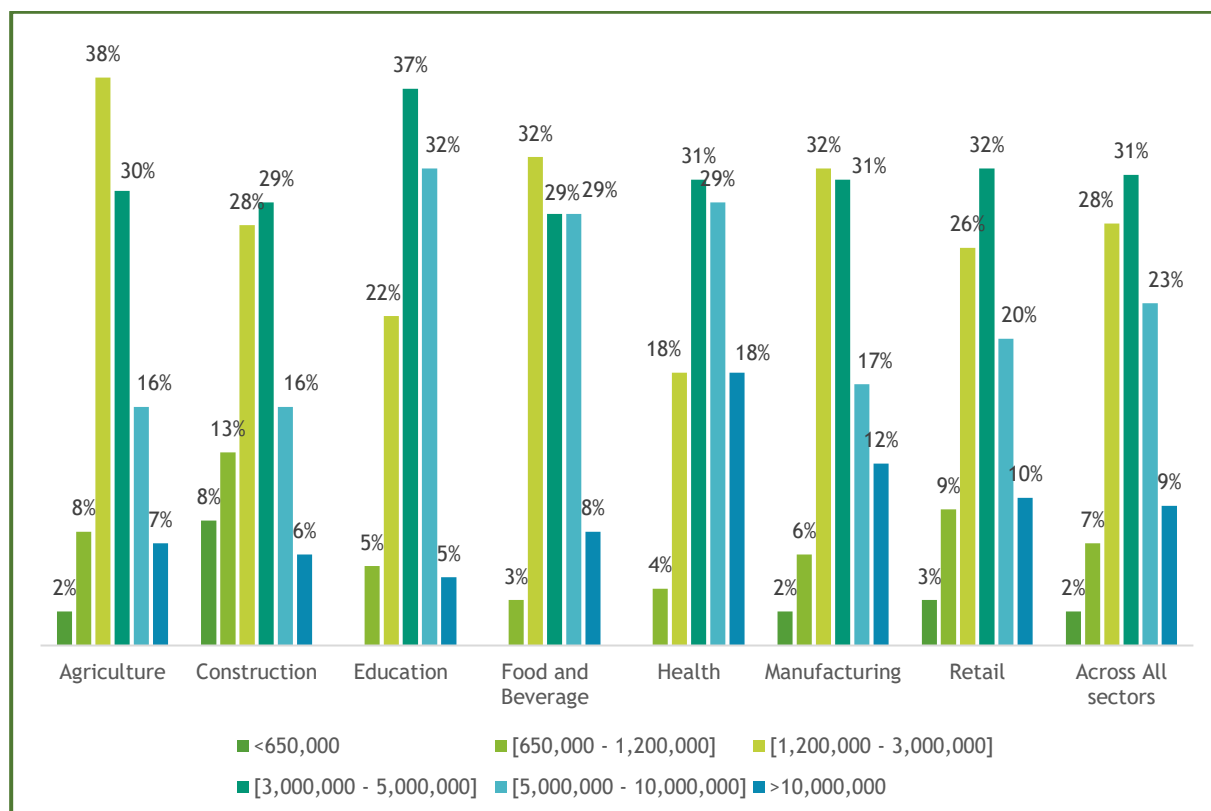


Taken together, the findings in Figures 3, 4, and 5 indicate that employment in the construction sector (and agriculture to a certain extent) has been particularly hard-hit by the crisis.

B. Protecting Purchasing Power: Incomes and Access to “Fresh” Dollars

The findings pertaining to income brackets across the seven sectors are provided in Figure 6. More specifically, the figure provides an estimate of the household income over the past 30 days.

Figure 6: Household income over the past 30 days



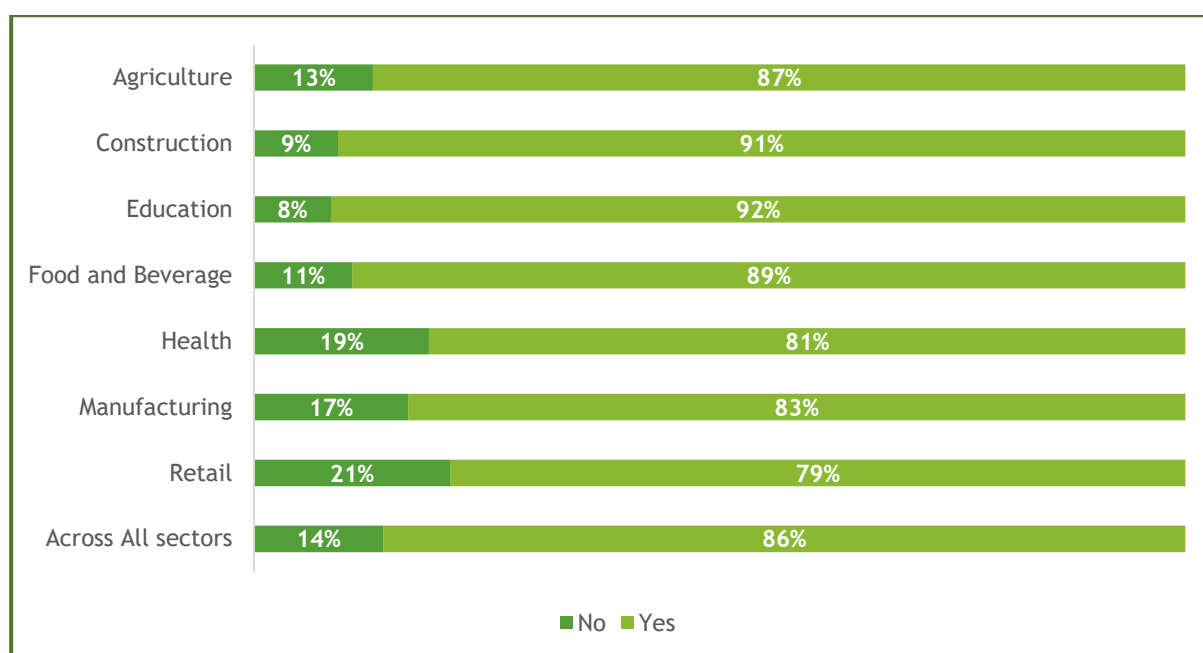
*Note: income brackets are in LBP

The findings reveal that in the agriculture, construction, education, food and beverage, and retail sectors, respectively, 94 percent, 94 percent, 96 percent, 93 percent, and 90 percent of employees earn a monthly salary that is less than LBP 10 million. At current market exchange rates, the vast majority of employees in these sectors earn a monthly salary of USD 344 or less. Strikingly, 2 percent of the employees in the agriculture and manufacturing sectors, 3 percent of the employees in the retail sector and 8 percent of the employees in the construction sector report earning LBP 650,000 or less, which is equivalent to about USD 22 at the current market exchange rate.

While the majority of employees in the healthcare and manufacturing sectors also earn less than LBP 10 million, a noticeable proportion of, respectively, 18 and 12 percent report earnings exceeding LBP 10 million. These are likely to be highly qualified doctors, nurses, and engineers.

Not surprisingly, a very sizeable proportion of employees in the seven sectors have indicated that their wage has lost value (Figure 7).

Figure 7: Proportion of respondents reporting a loss in the value of their wages



The findings in Figure 7 are not surprising in that the broad-based increase in inflation coupled with a severe currency depreciation have greatly diminished the purchasing power of wages. Indeed, according to the Central Administration of Statistics (CAS), average inflation stood at 154.8 percent in 2021, while the exchange rate depreciated by more than 90 percent, breaching the LBP 30,000 per USD on more than one occasion.

A more detailed breakdown of the increase in the prices of the consumption (i.e., the basket comprised in the Consumer Price Index, henceforth, the CPI) basket reveals that food and alcoholic beverages, which account for 20.6 percent of the consumption basket, witnessed staggering increases in 2021 and the first quarter of 2022 (Q1-2022). Indeed, food and alcoholic beverages inflation averaged 316.9 and 423.1 percent in 2021 and Q1-2022. Inflation in clothing and footwear, which account for 5.4 percent of the CPI basket, averaged 317 percent in 2021 and 195 percent in Q1-2022, while inflation in the transportation component of the consumption basket averaged, respectively, 323.2 percent and 513.5 percent in 2021 and Q1-2022.⁸ The staggering increase in inflation and its components decreases perceptibly the purchasing power of wages in LBP and explains our findings in Figure 7.

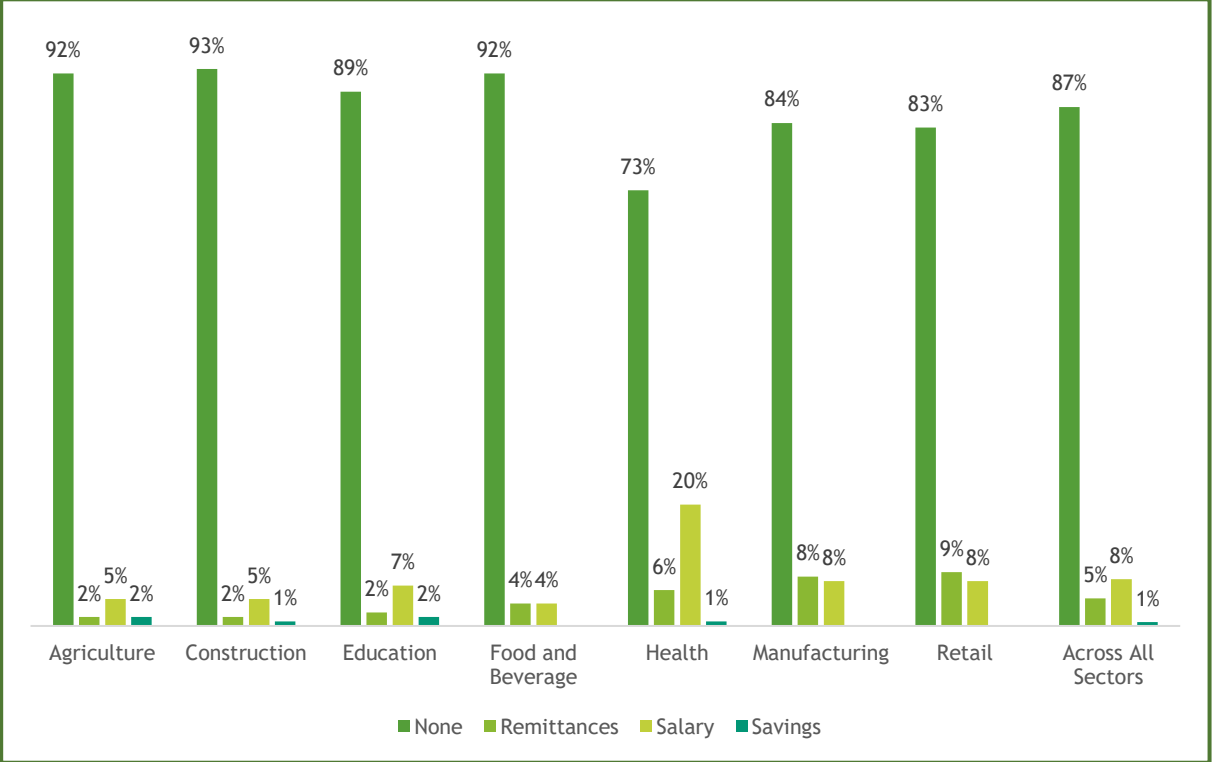
The inflation-depreciation loop has massively eroded the purchasing power of wages, which are still predominantly paid in Lebanese pounds, across sectors. The World Bank (2021b) underscores that inflation is a highly regressive tax which disproportionately affects the poor, vulnerable, and individuals on a fixed income, such as pensioners. Should monetary and financial turmoil continue to drive crisis conditions, specifically through interactions of the exchange rate, currency in circulation, and inflation (World Bank, 2021a, 2021b), unrelenting inflation and depreciation will continue to massively curtail the purchasing power of wages across the seven sectors. The participants in the

⁸ The weight of the transportation component in the consumption basket is 13.1 percent. These weights refer to the 2012 base year computation of the CPI.

KIIs have also identified the severe currency depreciation and rampant inflation as the causes of the erosion in purchasing power.

The only mechanism to preserve the purchasing power is to have access to USD via remittances or wages. Figure 8 provides information on households’ access to “fresh” USD.

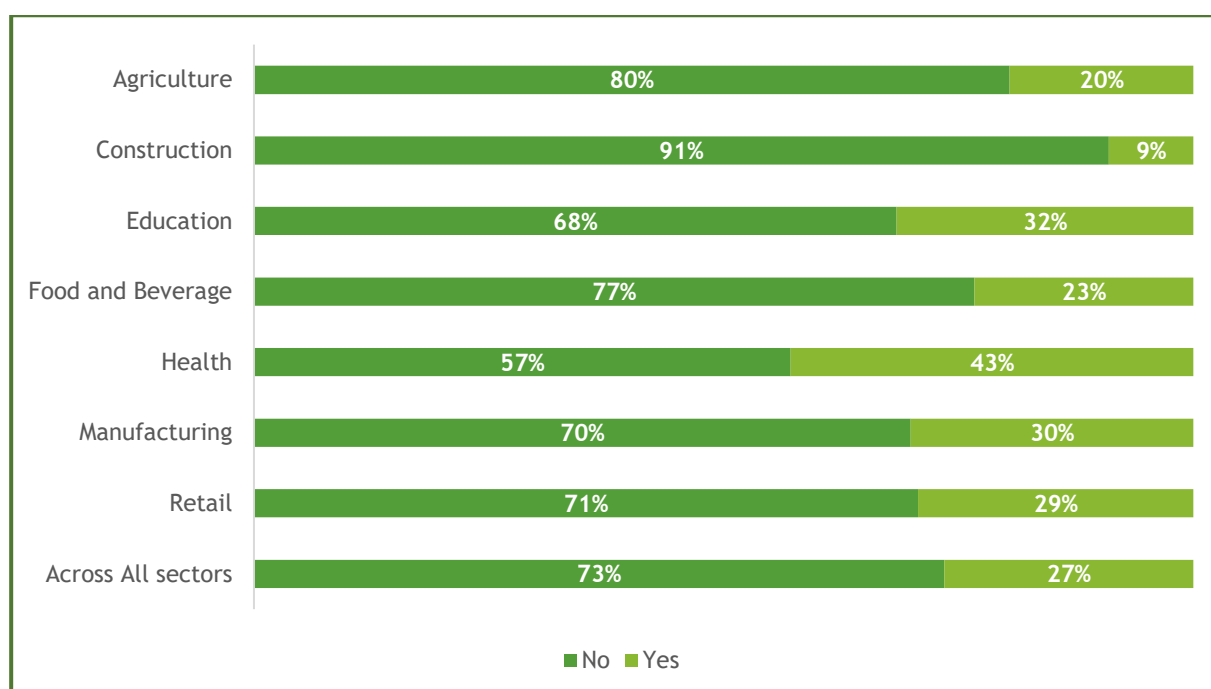
Figure 8: Proportion of respondents with access to “fresh” dollars



As can be immediately gleaned from Figure 8, the vast majority of households across the seven sectors do not have access to “fresh” USD. Further, savings are a small contributor to access to USD. Indeed, households have access to USD via salaries and remittances. The latter finding is not surprising in view of the fact that, according to inwards remittance data from the World Bank, Lebanese residents received about USD 6.2 billion in remittances in 2020 (amounting to, also according to the World Bank, 32.9 percent of GDP). The findings also suggest that the private sector has begun paying part of the salary in USD. Most notably, 20.3 percent of the employees in the healthcare sector report receiving part of their salary in USD. However, the survey results indicate the vast majority of respondents in the healthcare sector receive only between 0 and 25 percent of salary in fresh USD.

Figure 9 provides the responses to the question of whether any member of the household has a bank account.

Figure 9: Proportion of respondents with a bank account



Surprisingly, with the exception of the healthcare sector, more than two thirds of the respondents indicate not having access to a bank account. According to Key Informant Interviews conducted by the AUB team, this finding can be ascribed to (i) a lack of confidence in the banking sector and (ii) BdL's circular, which enticed small depositors to close their accounts. More specifically, the BdL issued circular 148 on April 3, 2020, allowing small depositors, defined as those having LBP 5 million or less, to withdraw their deposits in USD or at the market-equivalent rate. This circular incentivized many small depositors to withdraw their deposits and close their accounts and, hence, may explain the low percentage of households with access to a bank account.

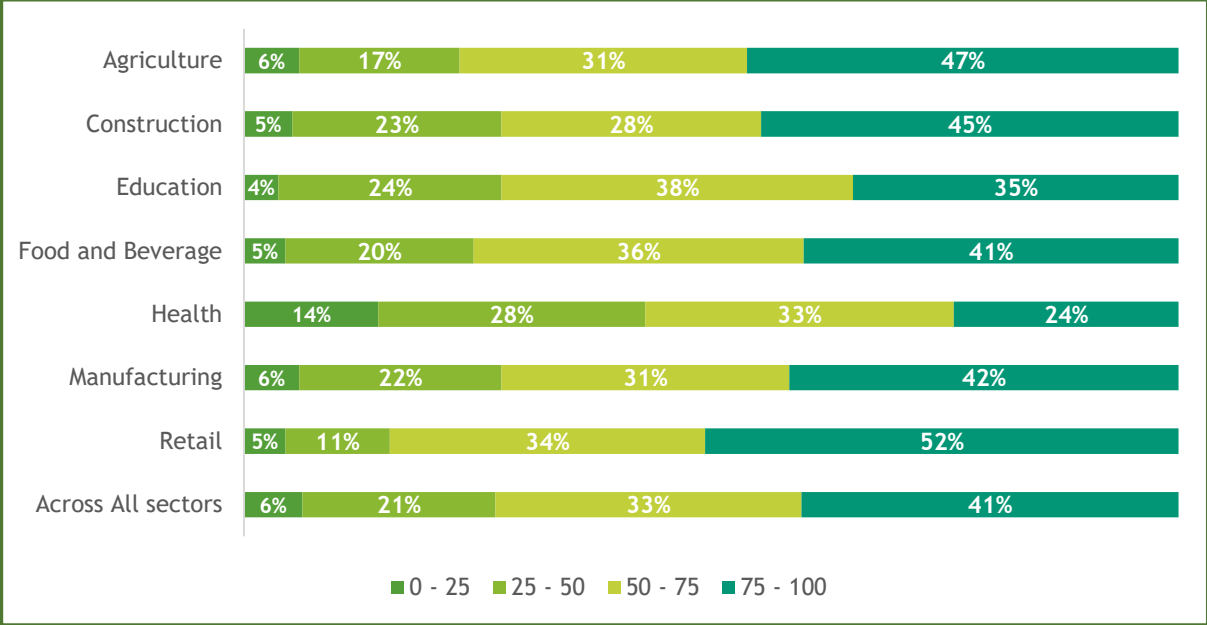
C. Energy Poverty

According to the World Bank (2021b), the economic crisis afflicting Lebanon is leading to the disintegration of the key pillars of Lebanon's post-civil war political economy. Most notably, there is a manifest failure in the provision of basic services, such as, but not limited to, electricity. Indeed, the government's electricity supply has been rationed to as little as two hours per day causing households to turn to private Diesel Generators (DGs), which provide an alternative to government's power supply at an exorbitant cost that further erodes households' purchasing power.

A longstanding subsidy on imports of critical goods, such as oil, medicine, wheat as well as essential items (as identified by the Ministry of Economy and Trade, MoET) rapidly became unsustainable as the gross foreign currency reserves of BdL dwindled in the wake of the sudden stop of October 2019. An ineffective, unsuccessful, and costly experiment with subsidizing selected goods, including diesel and gasoline, in coordination between the MoET and BdL, followed (Dagher and Nehme, 2021). While the subsidy scheme intended to lessen the effect of the depreciation and inflation on the poor and vulnerable, it led to smuggling, scuffles, gunfights, and shortages. These subsidies also benefitted suppliers and retailers without necessarily trickling down to the consumers. The World Bank (2021a) writes: "A more recent phenomena has involved scuffles in supermarkets and angry protests outside over access to subsidized products. This is even occurring in high end supermarkets." Following acute shortages of diesel and gasoline, which resulted in long queues at gas stations, the subsidy scheme was terminated in a disorderly manner in Spring 2021. As a result of the termination of subsidies, the prices of gasoline and diesel soared thus exacerbating the loss of purchasing power of the households.

The energy burden swiftly became tangible. Figure 10 provides the percentage of income spent on energy per household across the seven sectors.

Figure 10: Share of household income spent on energy



Strikingly, more than two thirds of households, across the seven sectors, spend more than 50 percent of their income on energy. In order to put these numbers in context, it must be noted that the American Council for an Energy-Efficient Economy qualifies a scenario in which a household spends more than ten percent of its income on energy as a severe energy burden. By this definition, households across the seven sectors are experiencing a severe energy burden. These findings, extreme as they are, reflect the effects of the lifting of energy subsidies as well as the cost of the reliance on DGs.

The findings reveal that households in the healthcare and manufacturing sectors experience a somewhat lower energy burden than in the other sectors. The participants in KIIs ascribe this to the higher average income of these households. The participants in the KIIs also underscore that some respondents from the agriculture, retail, and manufacturing sectors may be business owners and the higher energy burden in these sectors may reflect the fact that the respondents are not making a distinction between business-related and private (i.e., household-related) energy consumption.

The lack of a reliable and functional public transportation system in Lebanon has, historically, forced the residents to rely on their private vehicles (i.e., cars). The currency depreciation and the lifting of subsidies forced the bulk of respondents to reduce the use of cars to cut on the cost of gasoline (Figure 11) and to use alternative modes of transportation (Figure 12).

Figure 11: Proportion of respondents having to reduce the use of the car to cut on the cost of gasoline

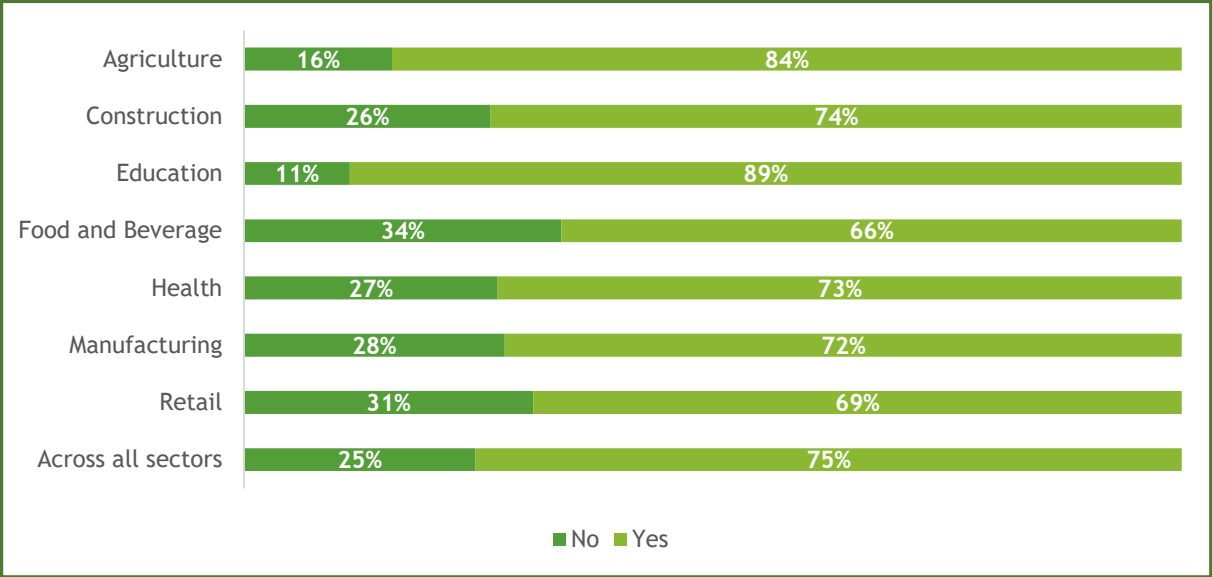
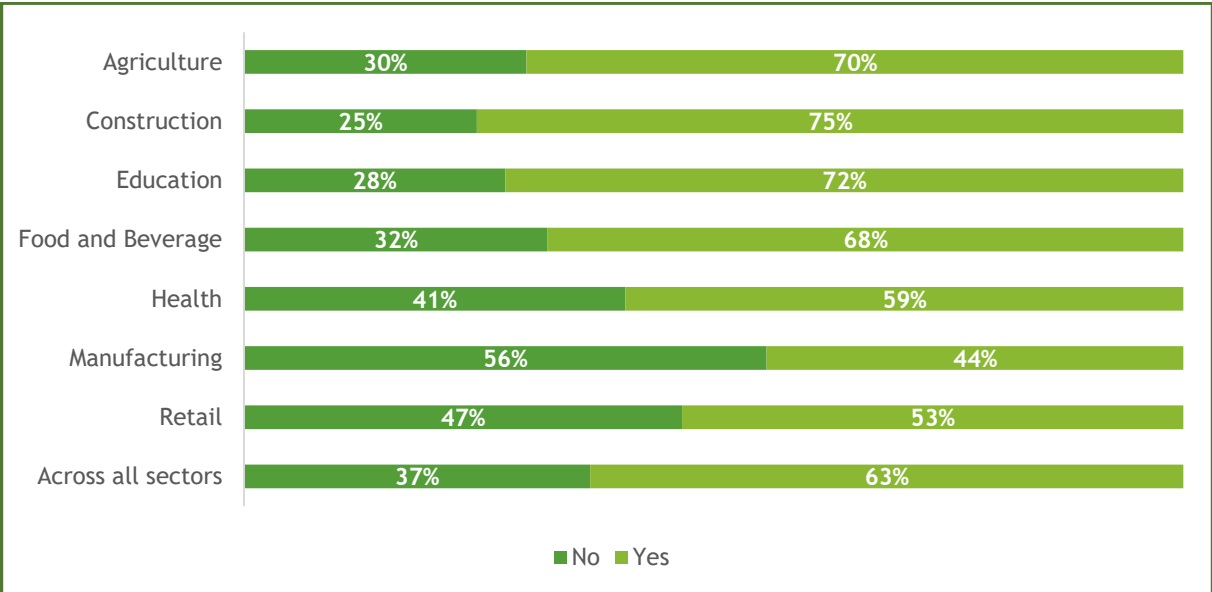


Figure 12: Proportion of respondents that used an alternative mode of transportation



The unaffordability of diesel also forced respondents to adopt harsh coping mechanisms that exacerbate their energy poverty. For instance, the vast majority of respondents reported turning off heating or heating only part of the house (Figure 13), many reported reducing the consumption of water heaters (Figure 14).

Figure 13: Proportion of respondents having to turn heating down despite the house being too cold

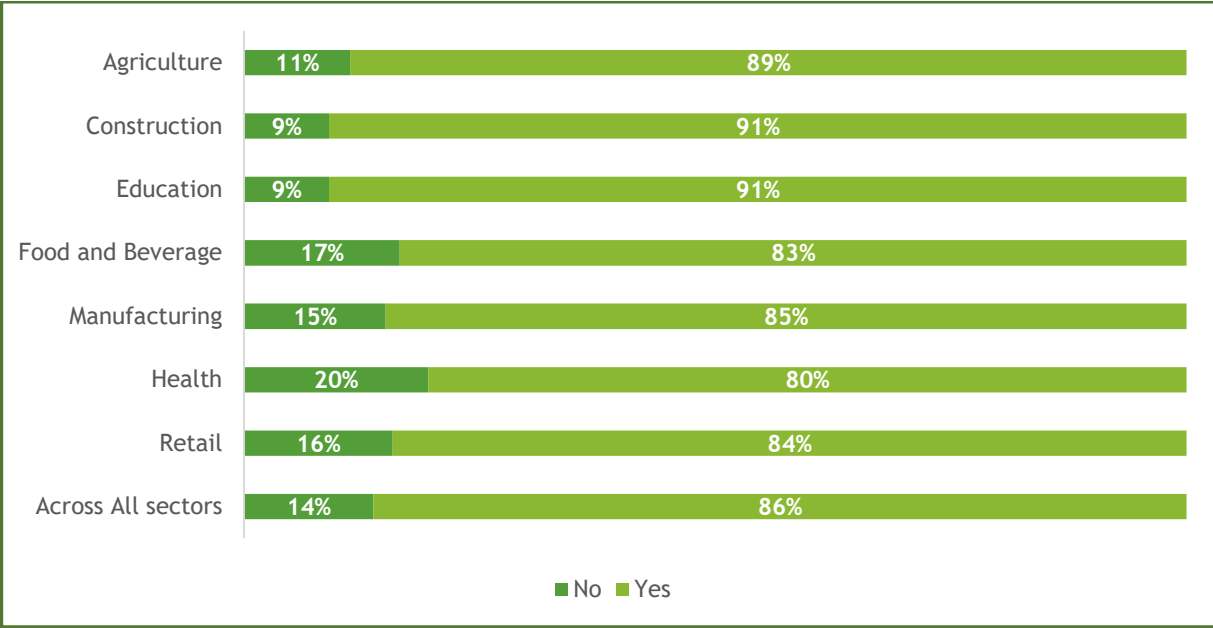
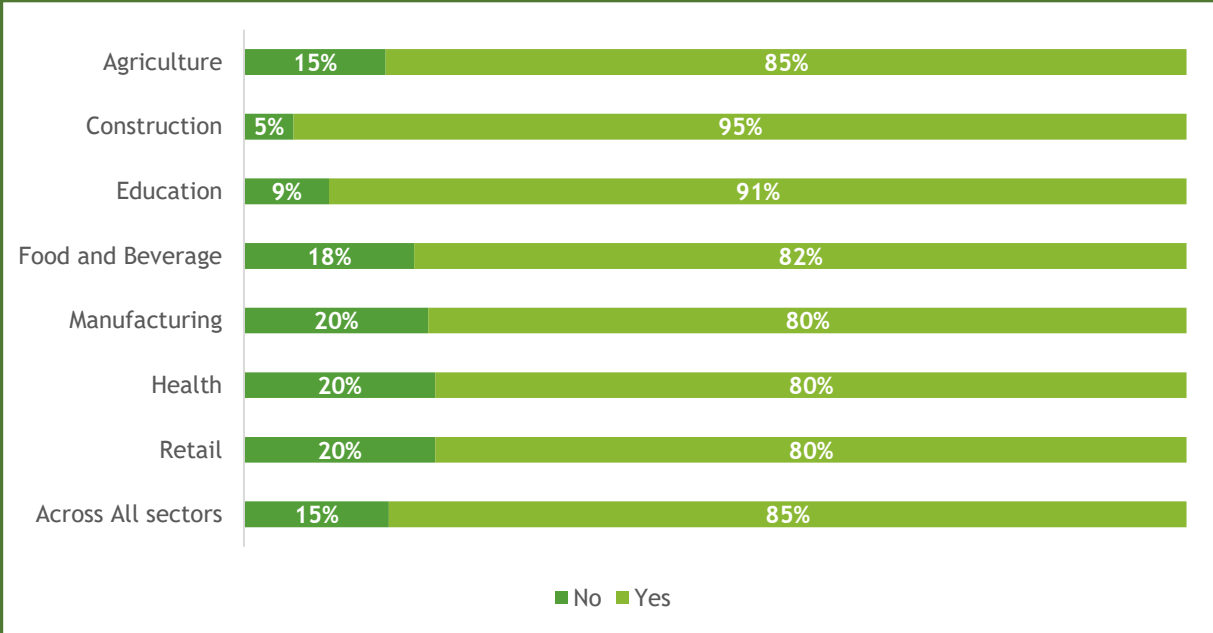
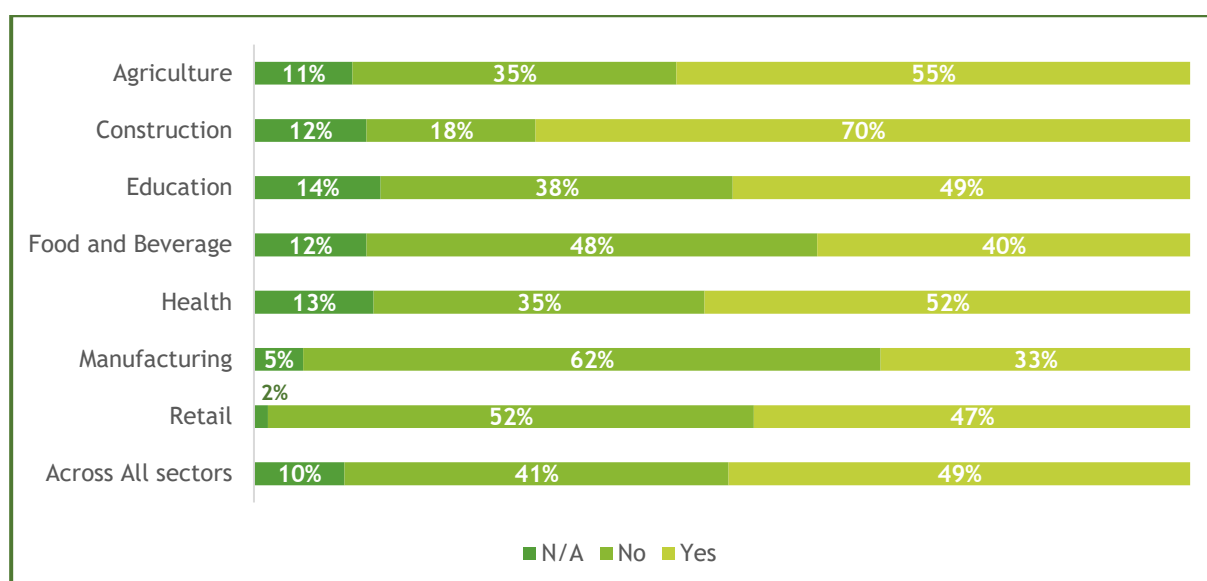


Figure 14: Proportion of respondents having to use less hot water to reduce cost



Due to the exorbitant cost of DGs, the respondents have also reported reducing their amperage capacity in the past two years (Figure 15). This reduction has been drastic; in some cases, it allows only for one light in the house and the fridge.

Figure 15: Proportion of respondents that have reduced their rated amperage



Notably, 70 percent, 55 percent, and 52 percent of the respondents from the construction, agriculture, and healthcare sectors, respectively, have had to reduce their amperage capacity. While the proportion of respondents having to reduce their amperage capacity is lower than 50 percent across the other sectors, it is still material. Respondents working in the manufacturing sector reported the lowest reduction. The findings make it immediately clear that the reduction in amperage capacity is inversely related to the average income across sectors.

The reduction in amperage capacity implies that a sizeable proportion of Lebanese households have to contend with a very limited rated amperage that would barely suffice to operate basic electric equipment (Table 3).

Table 3: Rated amperage by sector

	Agriculture	Construction	Education	Food and Beverage	Health	Manufacturing	Retail	Across all sectors
0	13.53%	4.51%	9.02%	9.02%	7.52%	7.52%	15.04%	9.45%
<5	18.05%	23.31%	6.77%	12.03%	14.29%	12.78%	11.28%	14.07%
5	45.11%	44.36%	62.41%	49.62%	48.12%	40.60%	34.59%	46.40%
10	12.78%	9.77%	10.53%	13.53%	12.78%	21.80%	27.07%	15.47%
>15	3.01%	6.77%	0.75%	3.01%	6.02%	8.27%	7.52%	5.05%
N/A	7.52%	11.28%	10.53%	12.78%	11.28%	9.02%	4.51%	9.56%

Indeed, 76.7 and 72.1 percent of households in the agriculture and construction sectors use five or fewer amperes. Strikingly, 78.2 percent of the households in the education sector get by using five amperes or less. In a similar vein, more than two thirds of households in the health (69.9), manufacturing (60.9), restaurants (70.6) and retail (60.9) sectors, use less than five amperes. The findings also reveal that large proportions of households across sectors get by on less than 3 amperes (Table 4); a capacity that barely suffices to light a house.

Table 4: Exact rated amperage for cases below 5 amperes

	Agriculture	Construction	Education	Food and Beverage	Health	Manufacturing	Retail	Across all sectors
2	20.83%	41.94%	22.22%	25.00%	0.00%	5.88%	46.67%	24.43%
2.5	16.67%	9.68%	44.44%	6.25%	36.84%	5.88%	0.00%	15.27%
3	58.33%	35.48%	33.33%	62.50%	63.16%	88.24%	46.67%	54.96%
3.5	0.00%	3.23%	0.00%	0.00%	0.00%	0.00%	0.00%	0.76%
4	4.17%	9.68%	0.00%	6.25%	0.00%	0.00%	6.67%	4.58%

It should be noted, in this context, that the participants in the KIIs have highlighted the possibility that the energy burden is likely to vary across Caza (i.e., geographies). In fact, owing to the provision of electricity in Zahle by Electricite de Zahle as well as the use of hydropower plants in West Bekaa, these two regions may be less dependent on the supply of electricity from DGs.⁹

Table 5 provides a breakdown by Caza of the hours of electricity supply from DGs. The findings corroborate the hypothesis that households in Zahle are less reliant on DGs. In fact, a large proportion of households in Zahle, ranging from 60 to 91.6 percent, report using zero hours of electricity from DGs in the past month.

Table 5: Hours per day of electricity from the diesel generator in the past month

	Agriculture	Construction	Education	Food and Beverage	Health	Manufacturing	Retail
0	24.81%	14.29%	18.05%	21.05%	19.55%	15.79%	22.56%
Akkar	6.06%	0.00%	4.17%	0.00%	7.69%	0.00%	0.00%
Aley	0.00%	5.26%	0.00%	0.00%	0.00%	0.00%	0.00%
Baalbek	3.03%	0.00%	0.00%	0.00%	0.00%	0.00%	3.33%
Beirut	0.00%	5.26%	0.00%	3.57%	3.85%	0.00%	20.00%
Matn	3.03%	0.00%	0.00%	21.43%	0.00%	28.57%	6.67%
Nabatieh	3.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Saida	3.03%	0.00%	0.00%	3.57%	0.00%	0.00%	3.33%
Tripoli	3.03%	0.00%	4.17%	3.57%	3.85%	4.76%	6.67%
Zahle	78.79%	89.47%	91.67%	67.86%	84.62%	66.67%	60.00%
[1-4]	4.51%	6.77%	4.51%	2.26%	2.26%	0.75%	0.75%
[5-10]	45.11%	55.64%	54.14%	34.59%	48.12%	39.85%	38.35%
[11-19]	20.30%	20.30%	21.80%	37.59%	23.31%	35.34%	30.83%
[20-24]	5.26%	3.01%	1.50%	4.51%	6.77%	8.27%	7.52%
Akkar	14.29%	25.00%	0.00%	16.67%	11.11%	9.09%	0.00%
Beirut	0.00%	75.00%	0.00%	66.67%	22.22%	9.09%	40.00%
Matn	0.00%	0.00%	100.00%	16.67%	55.56%	63.64%	30.00%
Nabatieh	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%
Saida	71.43%	0.00%	0.00%	0.00%	11.11%	18.18%	20.00%
Zgharta	14.29%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

The lesser dependence on DGs in Zahle did not, however, translate into a decrease in the energy burden (Table 6).

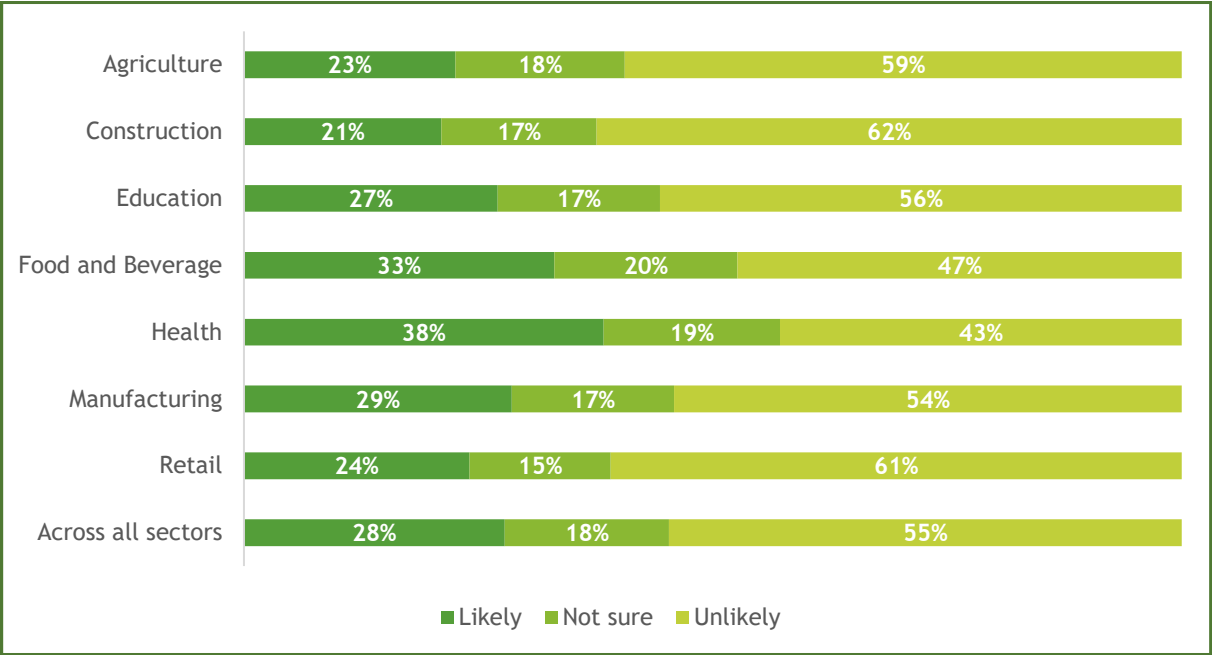
Table 6: Share of income spent on energy in Zahle

% Range	Percentage %
[0-25]	5.29%
[25-50]	14.71%
[50-75]	18.24%
[75-100]	61.76%

⁹ In fact, the Abdel Al/Markabi station, the first of a cascade of three hydropower plants on the Litani river, is located in the village of Machgara in the West Bekaa.

Despite that some avenues to increase the hours of provision of electricity by Electricite du Liban (EdL) have been pursued by the Ministry of Energy, these have not yet come to fruition. Therefore, a continued severe rationing of the power supply by EdL as well as the possibility of a complete blackout loom. It is, therefore, striking that sizeable proportions of respondents across sectors indicate that it is likely or extremely likely that they will not be able to continue to afford paying for DGs (Figure 16).

Figure 16: Proportion of respondents who can continue to afford to pay for private electricity generation for the next six months



Again, the construction and agriculture sectors seem to fare worse than the others. Indeed, 59, 62 and 61 percent of the respondents in the agriculture, construction and retail sectors indicate that they are unlikely or extremely unlikely to continue to afford paying for private electricity generation. These proportions are moderately lower in the education and manufacturing sectors and stand at, respectively, 56 and 54 percent. Respondents in the healthcare and restaurants sector appear to face less acute, although still significant, challenges in continuing to afford paying for private electricity generation over the next six months. In fact, 43 and 47 percent of the respondents in the healthcare and restaurants sector report not being able to continue to pay for electricity generation over the next six months.

In sum, the survey’s results bring to the fore the extreme energy burden facing Lebanese households across sectors due to the lack of provision of electric power from the grid. They also suggest that the energy burden is likely to escalate amidst a very limited power supply and a continuing depreciation of the LBP. Going forward, the findings imply that many households will face the prospect of a complete blackout due to their inability to continue to afford paying for DGs.

D. Livelihood and Food-Based Coping Strategies

The scale and the scope of Lebanon’s protracted economic crisis has led to a severe decline in income per capita. The World Bank (2021a) estimates that GDP per capita has decreased by 35.1 to 38.6 percent between 2017 and 2021. The immiseration caused by the crisis forced Lebanese households across the seven sectors to adopt harsh livelihood-based coping strategies that range from reducing the quantity (and quality) of staple foods to skipping meals. This section sheds light on a variety of mostly negative coping strategies that were used by households to weather the crisis.

To begin with, the bulk of households across the seven sectors have reduced the quantity of basic food staples such as milk, fruits, vegetables, and bread (Figure 17) and switched to cheaper alternatives (lower quality) for basic food items (Figure 18).

Figure 17: Proportion of respondents who reduced the quantity of food staples

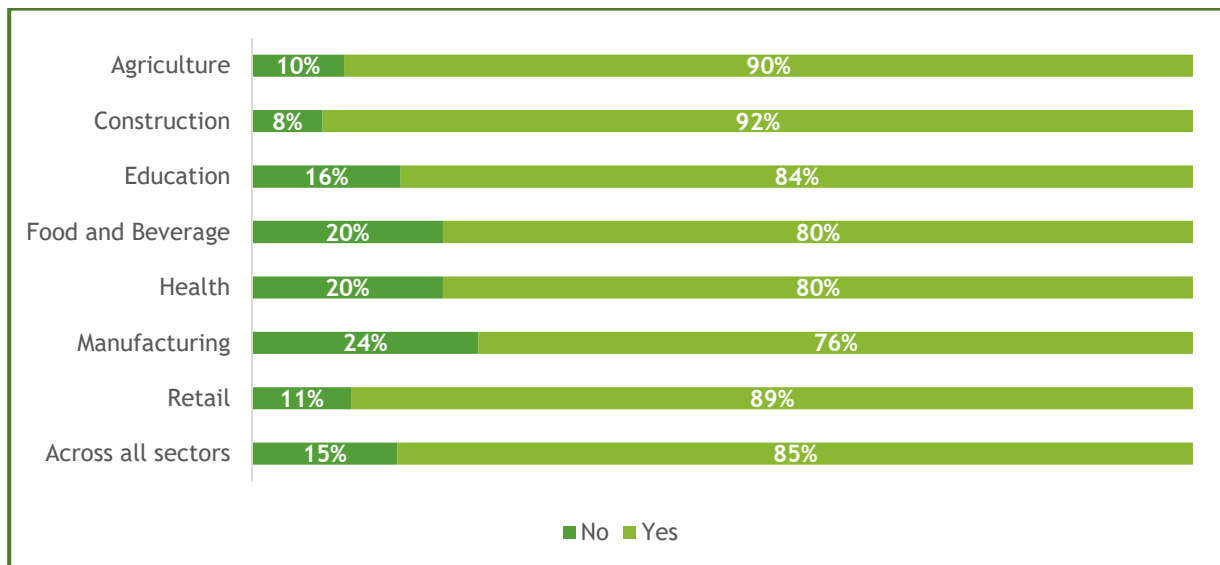
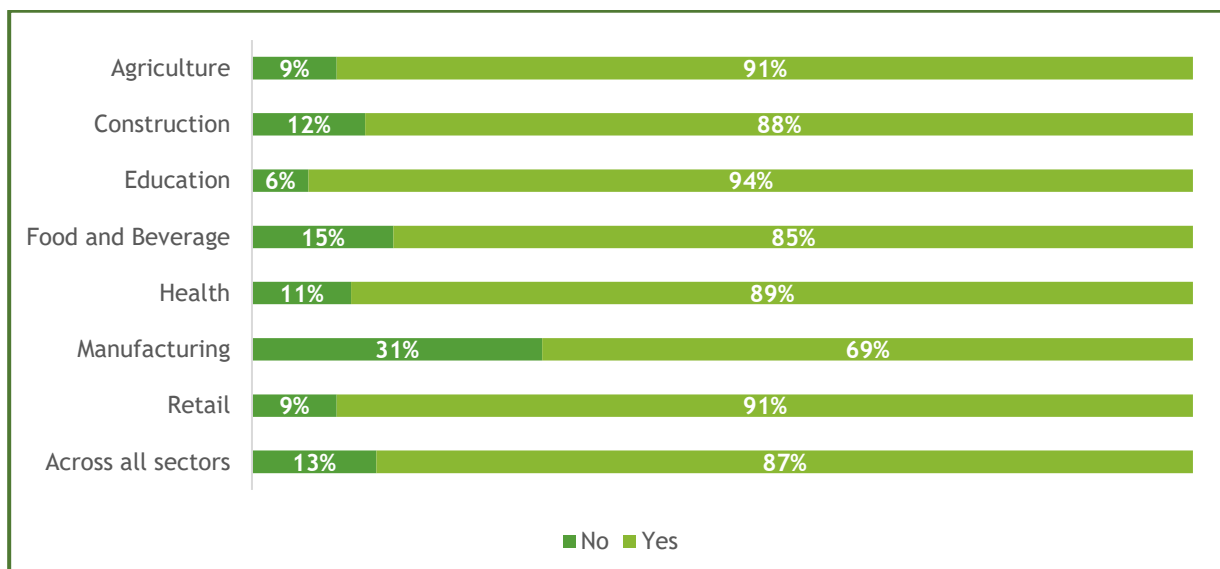


Figure 18: Proportion of respondents who switched to cheaper alternatives for food staples



The proportion of respondents from the construction and agriculture sectors having had to reduce the quantity purchased of basic food items is again the highest and stands at 90 percent or more. With the exception of manufacturing, 80 percent or more of the respondents in the remaining sectors have had to adopt similar practices. Switching to cheaper alternatives for basic food items was another prevalent coping strategy among the respondents in the seven sectors; with the exception of respondents from the manufacturing sector, more than 85 percent of the respondents across the sectors indicate having to employ this coping strategy.

The changes in the consumption patterns are a necessary coping strategy; households across the seven sectors spend a significant proportion of their total income (please refer back to Figure 1) on food and beverages (Figure 19).

Figure 19: Monthly household expenditures on food and beverages



Alarmingly, the coping strategies also involved skipping meals (Figure 20) and not being able to afford a meal with chicken, meat, or fish at least once a week (Figure 21).

Figure 20: Proportion of Respondents Skipping Meals during the Week

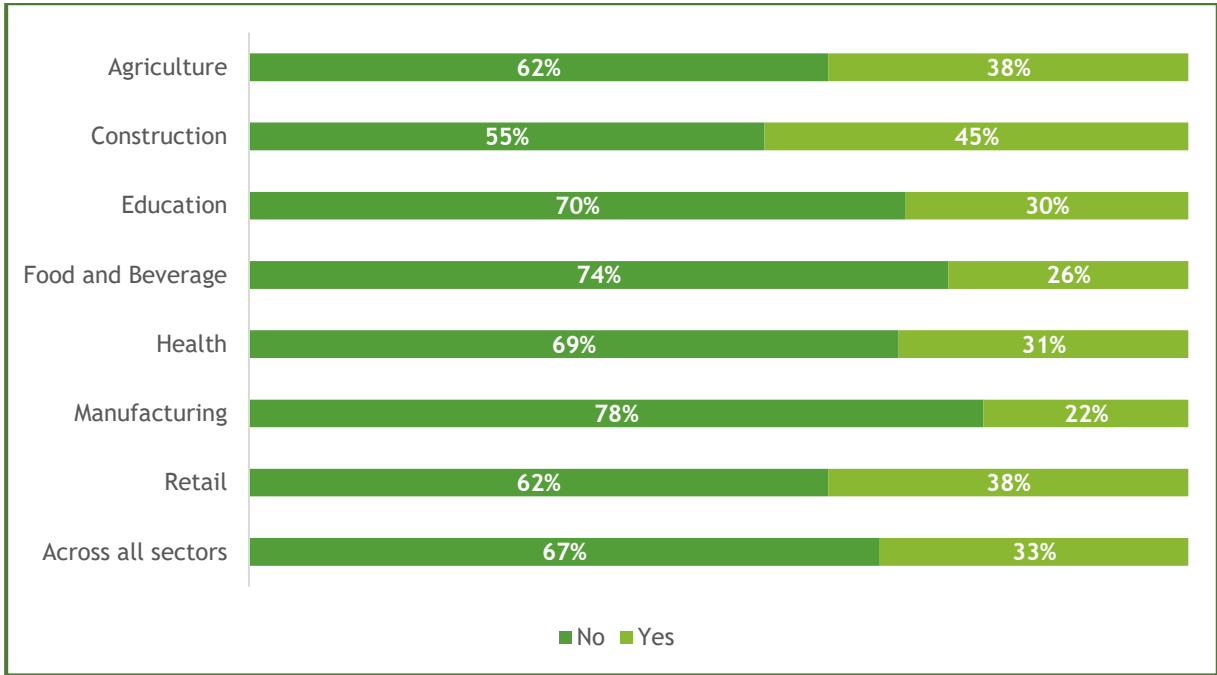
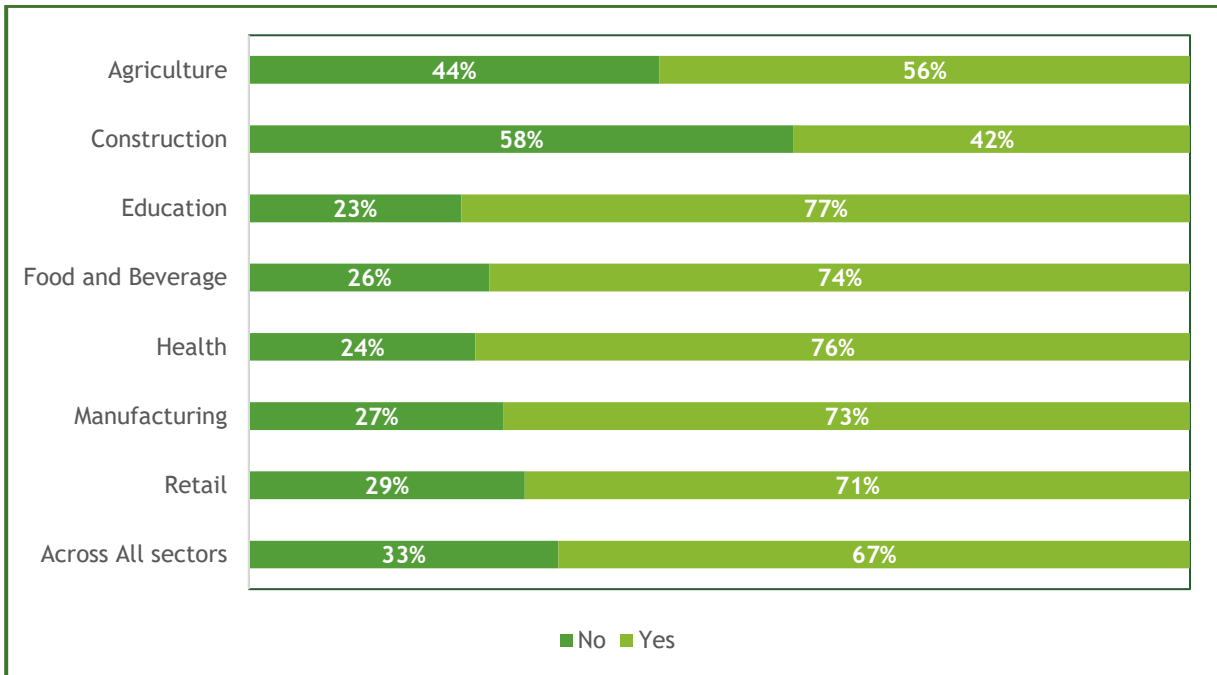


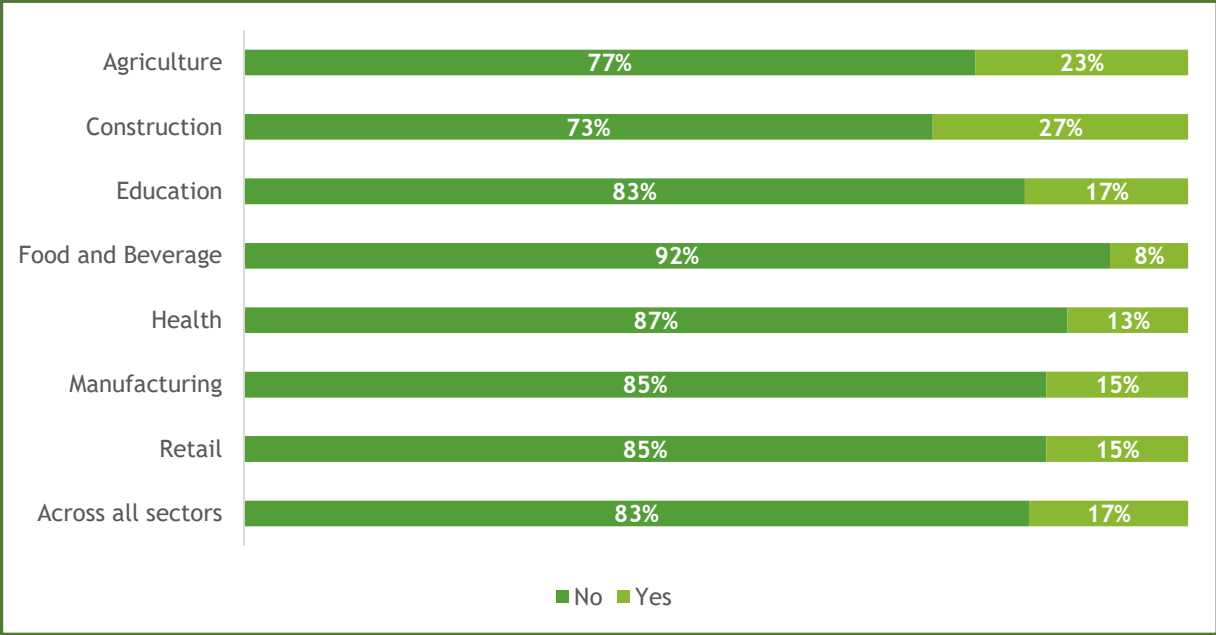
Figure 21: Proportion of respondents who are able to afford a meal with meat, chicken or fish at least once a week



Consistent with the earlier findings, the results in Figures 20 and 21 suggest that the construction and agriculture sectors appear to have the largest proportion of respondents who resorted to livelihood-based coping strategies that involve food intake. It should be highlighted, in this context, that, with the exception of respondents from the manufacturing and food and beverage sectors, 30 percent or more of the respondents across sectors report having to skip a meal during the week. In addition, aside from respondents in the construction and agriculture sectors, less than 30 percent of respondents have not been able to afford a meal with meat, chicken or fish at least once a week. The proportions of respondents reporting an inability to afford consuming meat, fish or chicken at least once a week is, nonetheless, not small for these sectors. In line with Lebanese social norms and family traditions of favoring the offspring, the survey responses show that the proportion of children having had to skip a meal at least was a week is lower than that of adults. Nonetheless, this proportion is still noticeable for the construction and agriculture sectors (Figure 22).

Overall, there is evidence that the crisis is affecting diet diversity and may increase the incidence of hidden hunger (or nutrient deficiencies) if these changes in food consumption patterns persist or become more extreme.

Figure 22: Proportion of children (less than 18 years old) in the household skipping meals more than once a week



Tables 7, 8, 9, and 10 illustrate the regional disparities in the adoption of the livelihood-based coping strategies pertaining to food

Table 7: Proportion of respondents that are able to afford a meal with meat, chicken or fish at least once a week by caza

Caza	No	Yes
Akkar	27.8%	72.2%
Aley	47.8%	52.2%
Baabda	19.5%	80.5%
Baalbek	64.3%	35.7%
Batroun	25.0%	75.0%
Beirut	32.2%	67.8%
Chouf	25.0%	75.0%
Hermel	0.0%	100.0%
Keserwan	42.9%	57.1%
Koura	0.0%	100.0%
Matn	33.8%	66.2%
Minieh-Danniyeh	100.0%	0.0%
Nabatieh	14.3%	85.7%
Saida	27.4%	72.6%
Tripoli	40.4%	59.6%
Tyr	0.0%	100.0%
West Beqaa	100.0%	0.0%
Zahleh	40.6%	59.4%
Zgharta	16.7%	83.3%
Across all Cazas	32.9%	67.1%

Table 8: Proportion of respondents that had to reduce the quantity of basic food staples by caza

Caza	No	Yes
Akkar	23.5%	76.5%
Aley	17.4%	82.6%
Baabda	19.5%	80.5%
Baalbek	7.1%	92.9%
Batroun	25.0%	75.0%
Beirut	12.6%	87.4%
Chouf	25.0%	75.0%
Hermel	0.0%	100.0%
Keserwan	28.6%	71.4%
Koura	100.0%	0.0%
Matn	18.5%	81.5%
Minieh-Danniyeh	0.0%	100.0%
Nabatieh	0.0%	100.0%
Saida	16.0%	84.0%
Tripoli	12.8%	87.2%
Tyr	66.7%	33.3%
West Beqaa	0.0%	100.0%
Zahleh	10.6%	89.4%
Zgharta	0.0%	100.0%
Across all Cazas	15.5%	84.5%

Table 9: Proportion of respondents that had to switch to cheaper alternatives for food staples by caza

Caza	No	Yes
Akkar	7.0%	93.0%
Aley	8.7%	91.3%
Baabda	14.6%	85.4%
Baalbek	7.1%	92.9%
Batroun	12.5%	87.5%
Beirut	12.6%	87.4%
Chouf	12.5%	87.5%
Hermel	0.0%	100.0%
Keserwan	28.6%	71.4%
Koura	50.0%	50.0%
Matn	26.5%	73.5%
Minieh-Danniyeh	0.0%	100.0%
Nabatieh	0.0%	100.0%
Saida	7.5%	92.5%
Tripoli	10.6%	89.4%
Tyr	33.3%	66.7%
West Beqaa	0.0%	100.0%
Zahleh	12.4%	87.6%
Zgharta	16.7%	83.3%
Across all Cazas	13.2%	86.8%

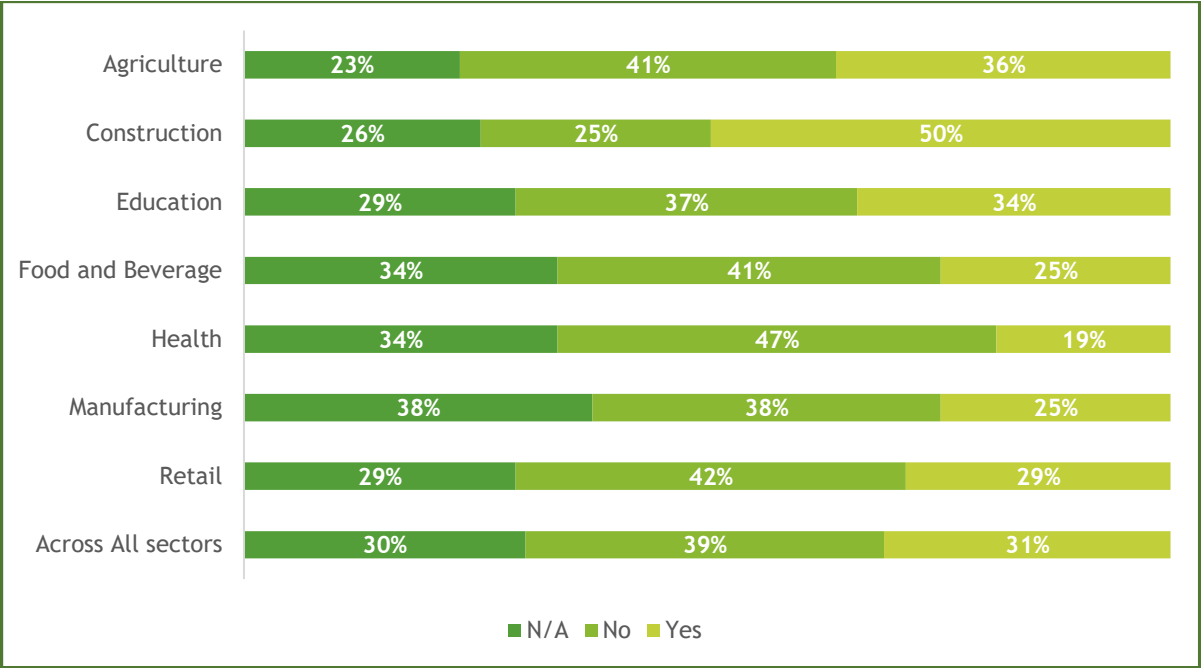
Table 10: Proportion of children (less than 18 years old) in the household skipping meals more than once a week by caza

Caza	No	Yes
Akkar	93.0%	7.0%
Aley	78.3%	21.7%
Baabda	87.8%	12.2%
Baalbek	57.1%	42.9%
Batroun	87.5%	12.5%
Beirut	83.4%	16.6%
Chouf	75.0%	25.0%
Hermel	100.0%	0.0%
Keserwan	71.4%	28.6%
Koura	100.0%	0.0%
Matn	80.1%	19.9%
Minieh-Danniyeh	0.0%	100.0%
Nabatieh	89.3%	10.7%
Saida	93.4%	6.6%
Tripoli	87.2%	12.8%
Tyr	100.0%	0.0%
West Beqaa	100.0%	0.0%
Zahleh	72.4%	27.6%
Zgharta	83.3%	16.7%
Across all Cazas	83.1%	16.9%

Strikingly, all the respondents in Minieh-Danniyeh and West Beqaa indicated an inability to afford a meal with meat, chicken, or fish at least once a week. Further, all of the respondents from Minieh-Danniyeh, Hermel, Nabatieh, and Zgharta have had to reduce the quantity of basic food staples that they consume. Alarming, all the respondents from Minieh-Danniyeh indicated that a child in the household was skipping a meal more than once a week.

The increasing cost of healthcare in July 2021 and in early 2022¹⁰ forced respondents (or members of the household) across the sectors to resort to livelihood-based coping strategies that involve discontinuing (or reducing) prescribed medication, not visiting the doctor when falling ill, shifting from private to public healthcare and ceasing to use private health insurance.

Figure 23: Proportion of respondents who intentionally reduced or stopped prescribed medication



*Note: N/A denotes the proportion of respondents who don't use any prescribed medication

¹⁰ The inflation in the healthcare component of the CPI averaged 268 percent over the period July to December 2021. This average increased in Q1-2022 standing at 433.1 percent. The precipitous increase in the price of healthcare can be ascribed to the termination of subsidies. In fact, inflation in the healthcare component of the CPI averaged 20.9 percent from December to June 2021.

Figure 24: Proportion of respondents who postponed or skipped visits to the doctor after falling ill

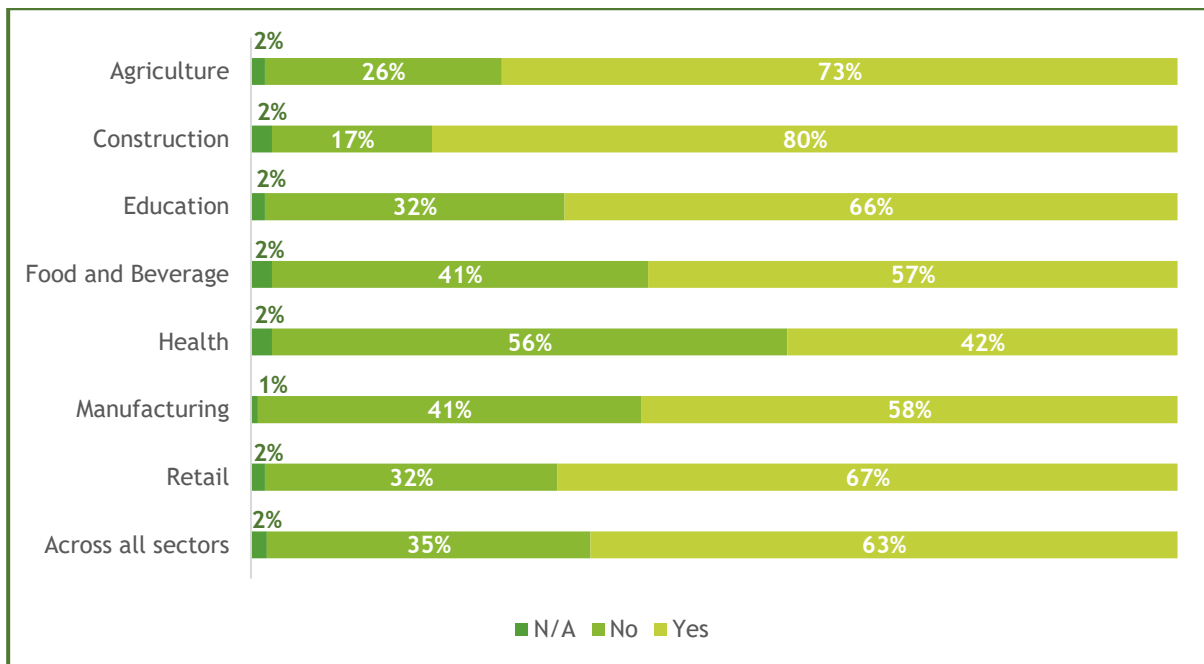


Figure 25: Proportion of respondents who shifted from private to public healthcare

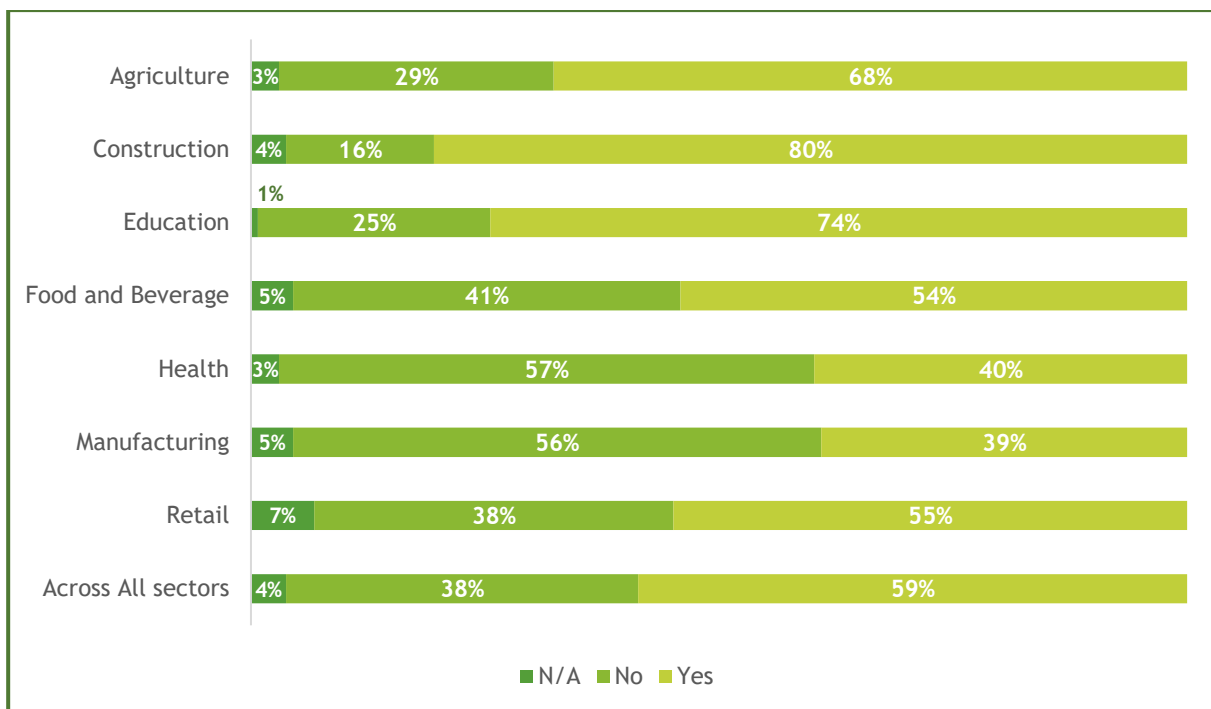
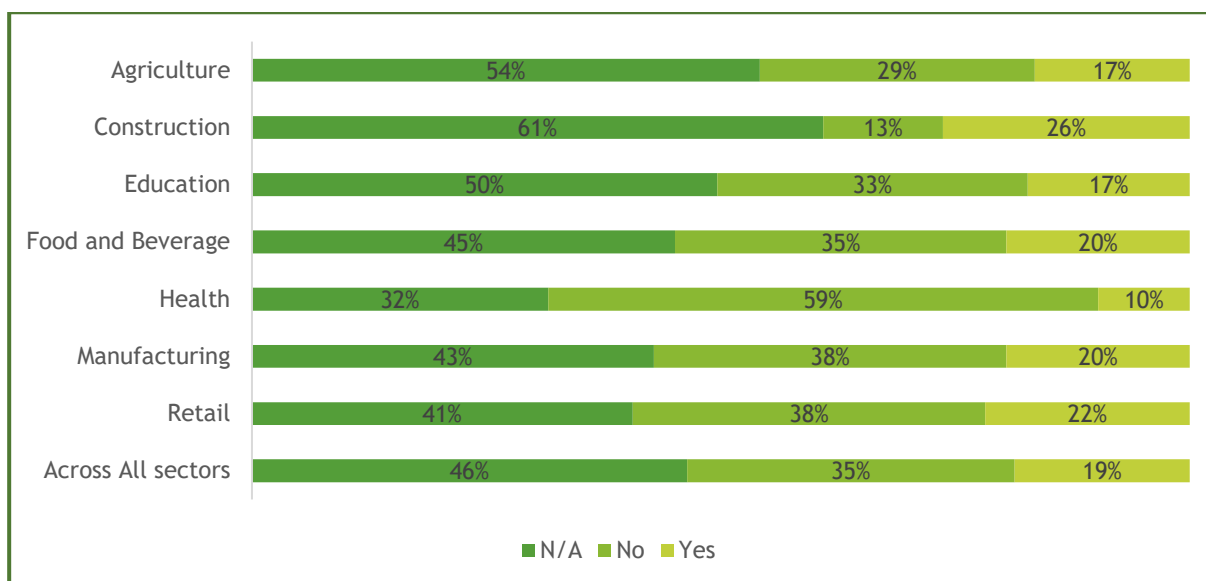


Figure 26: Proportion of respondents who cancelled private health insurance



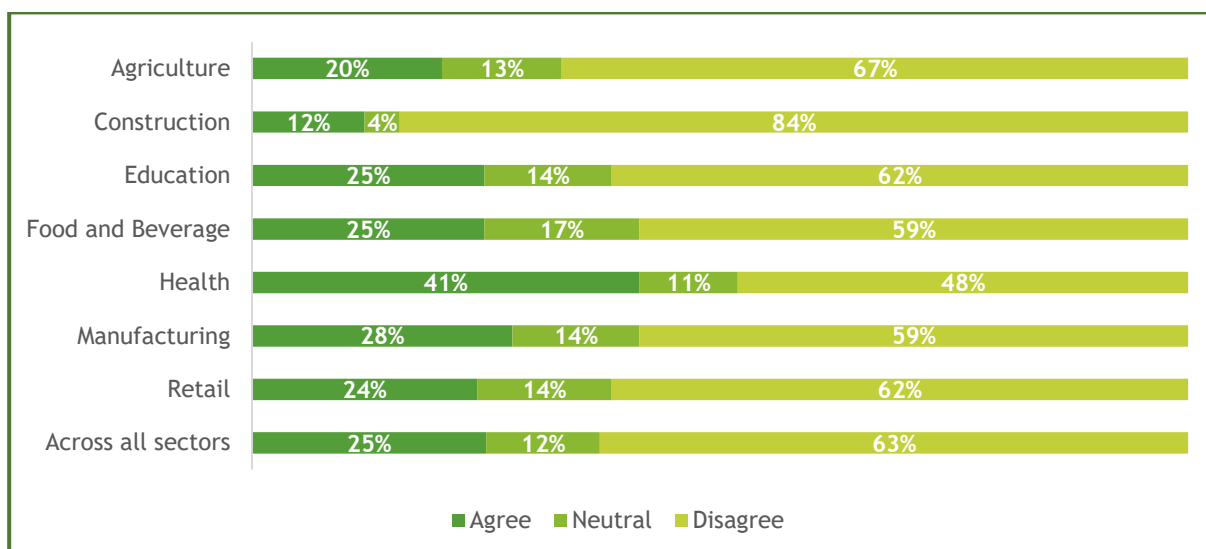
The results in Figures 23 and 24 suggest again that, relative to the other sectors, a larger proportion of the respondents from the construction and agriculture sectors have had to resort to negative coping strategies that involve reducing or stopping prescribed medication and not visiting the doctor when falling ill. Nonetheless, the proportions of respondents in the other sectors that have had to follow suit is also material. With the exception of respondents in the healthcare sector, 25 percent or more of the respondents across sectors intentionally reduced or stopped prescribed medication, while more than 57 percent of respondents postponed or skipped visits to the doctor after falling ill.

The findings in Figure 25 show an increasing reliance on a largely dysfunctional public healthcare system. Indeed, an astounding 74.4, 80.4 and 67.6 percent of respondents from the education, construction and agriculture sectors have had to shift from private to public healthcare and over 54 percent of respondents from the restaurants and retail sectors have had to do the same. The healthcare and manufacturing sectors are the only two for which the proportion of respondents who made the switch from private to public healthcare falls below 40 percent. It should be noted here that these percentages also include those who had both private and public healthcare and had to let go of the private one.

In sum, the crisis afflicting Lebanon has forced significant proportions of the respondents across sectors to resort to livelihood-based coping strategies that involve compromising on the accessibility and, possibly, the quality of healthcare that they receive. These findings serve as a forewarning for potentially adverse health and longevity outcomes in the short term in a country once touted as the hospitalization center of the Middle East. They further highlight the increasing reliance on, as well as the burden placed upon, the public healthcare system.

When asked about their ability to make ends meet based on their total monthly income, more than 50 percent of households who earn their livelihoods from the agriculture, construction, manufacturing, and restaurants sectors indicated that they disagree or strongly disagree with being able to make ends meet based on their household's income.

Figure 27: Proportion of households that report being able to make ends meet based on monthly income



More specifically, 67, 62, 59, 62, and 59 percent of households earning a livelihood from the agriculture, education, manufacturing, retail, and restaurants sectors have indicated that they disagree or strongly disagree with being able to make ends meet in view of their monthly income. A staggering 85 percent of the households earning a living from the construction sector also disagreed or strongly disagreed with being able to make ends meet in view of their total monthly income.

Table 11 provides the responses with regards to households' ability to make ends meet disaggregated by Caza

Table 11: Proportion of households that report being able to make ends meet based on monthly income by caza

Caza	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Akkar	4.35%	28.70%	13.04%	41.74%	12.17%
Aley	8.70%	21.74%	4.35%	39.13%	26.09%
Baabda	7.32%	31.71%	14.63%	34.15%	12.20%
Baalbek	0.00%	0.00%	7.14%	7.14%	85.71%
Batroun	0.00%	25.00%	25.00%	0.00%	50.00%
Beirut	6.03%	23.12%	10.05%	30.65%	30.15%
Chouf	12.50%	25.00%	25.00%	12.50%	25.00%
Hermel	0.00%	100.00%	0.00%	0.00%	0.00%
Keserwan	14.29%	14.29%	0.00%	28.57%	42.86%
Koura	50.00%	0.00%	50.00%	0.00%	0.00%
Matn	5.30%	15.89%	13.25%	29.14%	36.42%
Minieh-Danniyeh	0.00%	0.00%	0.00%	0.00%	100.00%
Nabatieh	10.71%	17.86%	0.00%	50.00%	21.43%
Saida	2.83%	27.36%	16.98%	22.64%	30.19%
Tripoli	0.00%	25.53%	12.77%	44.68%	17.02%
Tyr	33.33%	0.00%	0.00%	66.67%	0.00%
West Beqaa	0.00%	0.00%	0.00%	0.00%	100.00%
Zahleh	2.35%	8.82%	12.35%	20.59%	55.88%
Zgharta	0.00%	16.67%	0.00%	66.67%	16.67%
Across all Cazas	4.73%	20.30%	12.14%	30.08%	32.76%

Table 11 confirms the existence of disparities in the ability to make ends meet across Cazas. For instance, 100 percent of households in Minnieh-Danniyeh and West Beqaa indicate that they strongly disagree with being able to make ends meet given their monthly income (see Table 2). Further, the proportions of households that disagree or strongly disagree with being able to make ends meet in Baalbek (92.8), Zgharta (83.3), Zahle (76.4), and Nabatieh (71.4) are high. Interestingly, the proportions of households facing difficulties in making ends meet are broadly consistent across the cities of Beirut (60.8), Tripoli (61.7), and Tyr (66.6) and are, perhaps surprisingly, higher than Akkar (53.9). Households in the Chouf (37.5) and Baabda (46.3) are the only ones to have less than 50 percent of respondents not agreeing or strongly disagreeing with being able to make ends meet given their total monthly income. For the former, this likely reflects the efforts for social assistance exerted by political parties and NGOs while the latter’s higher than average income level is likely to explain this finding.

The findings reported in Figures 28, 29 and 30 show that selling an asset (real estate, jewelry, car, etc.), dipping into savings, and reducing help to family and friends were prevalent livelihood-based coping strategies across the seven sectors.

Figure 28: Proportion of respondents who had to sell an asset to cope

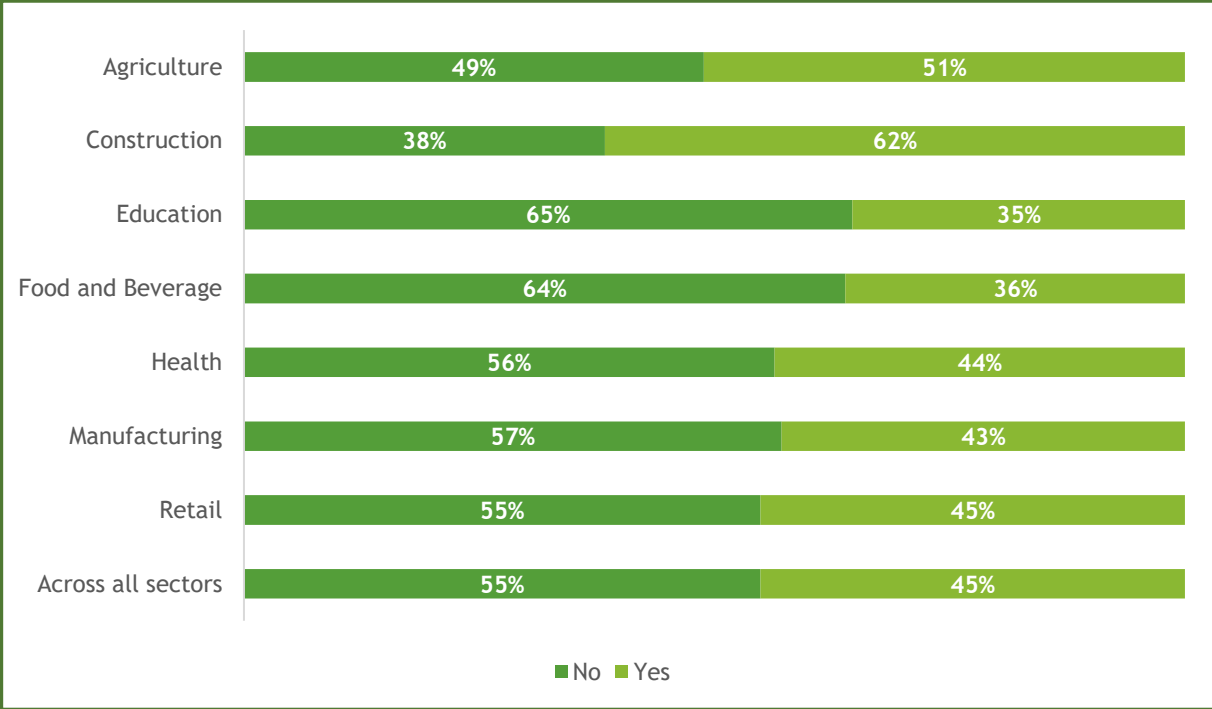


Figure 29: Proportion of respondents who spent some or all their savings to cope

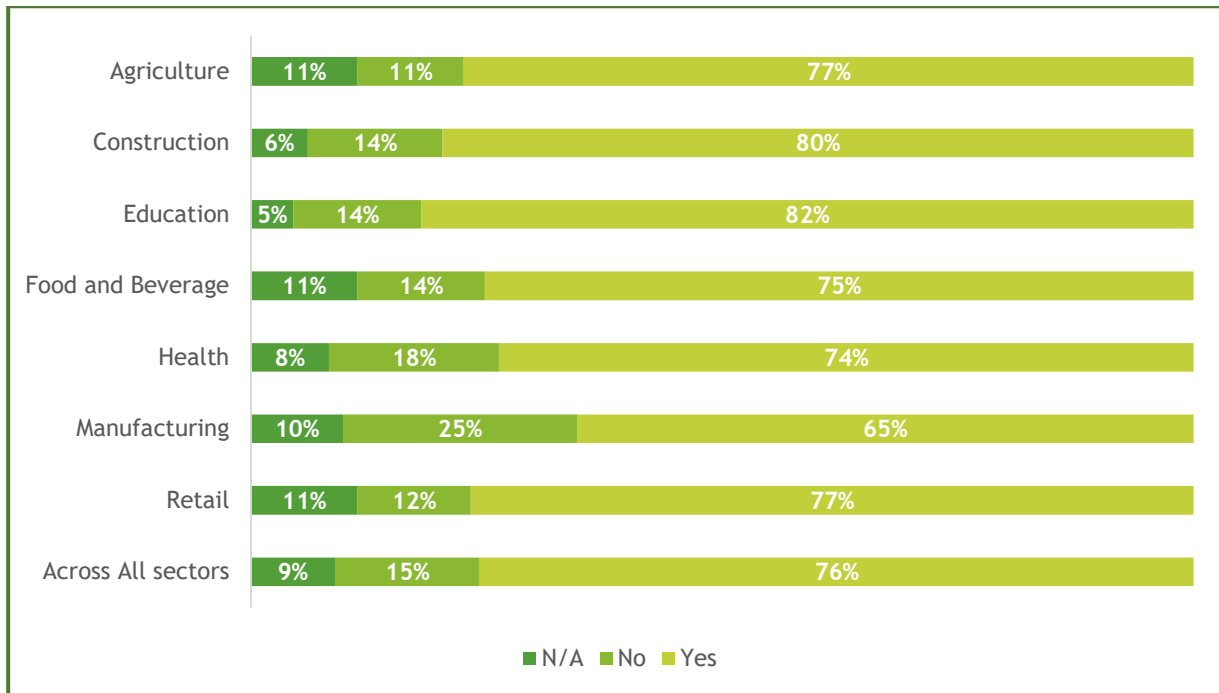
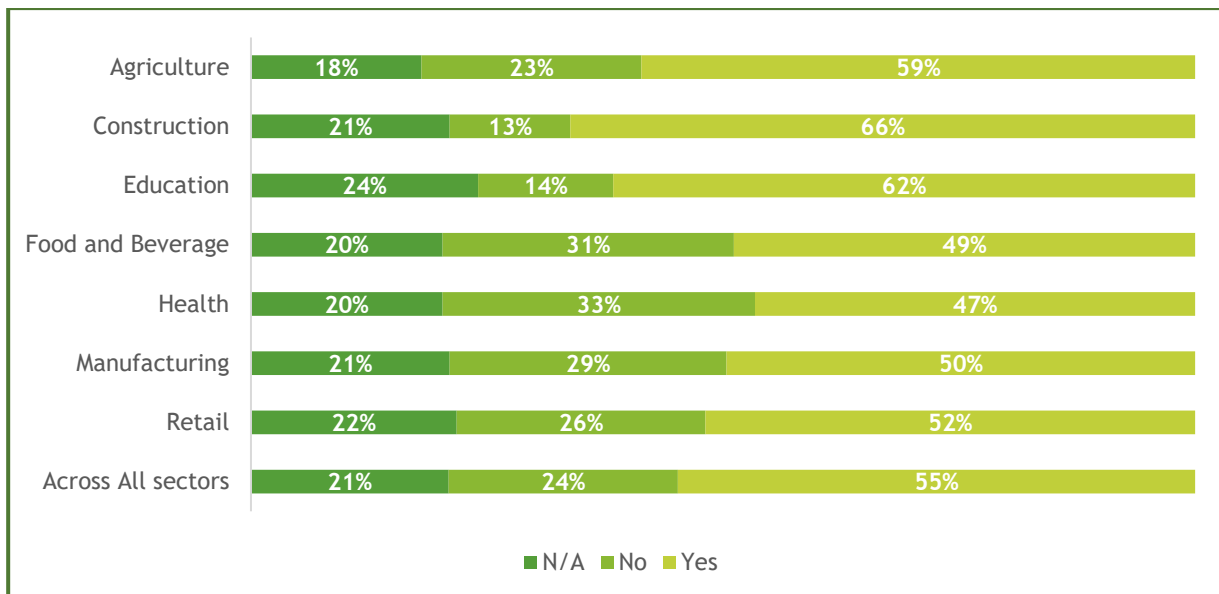


Figure 30: Proportion of respondents who reduced or stopped help to family members and friends



Indeed, with the exception of respondents from the education and food and beverage sectors, more than 43 percent of respondents have had to sell an asset to cope. This same percentage stands at 62 and 51 percent for the construction and agriculture sectors, respectively. In addition, with the exception of the manufacturing sector, more than 73 percent of the respondents have had to spend some or all of their savings in order to cope.

In sum, the harsh—and in some cases detrimental—livelihood-based coping strategies that were adopted by the respondents across sectors underscore the pervasive and deep cross-sectoral effects that Lebanon’s economic crisis exerted on wages and livelihoods. These coping strategies are also consistent with Lebanon being reclassified by the World Bank as a lower middle-income country, from its previous classification as a higher middle-income country.

Further, it appears that the respondents from the agriculture and construction sectors were more profoundly affected by the crisis than the respondents from the other sectors. This may seem surprising at first blush because agriculture is an export sector (construction is not). That is, the agriculture sector could have, in principle, benefitted from an increase in exports due to the enhanced competitiveness caused by the severe currency depreciation. Nonetheless, the participants in the KIIs point out that access to regional and, more precisely, Gulf export markets has been curtailed by the bans imposed on Lebanese agricultural products by most of the Gulf Cooperation Council’s countries. The limited access to the Gulf markets coupled with the export-inhibiting factors that are identified by World Bank (2021b) are the likely root causes for the agricultural sector not profiting from enhanced export competitiveness.¹¹

The main finding that the respondents working in the agriculture and construction sectors are more acutely affected by the crisis is consistent with the elevated degree of job informality and seasonality effects in these sectors. In fact, the estimates of informality provided by the ILO (2022) place “Agriculture, Fishing and Forestry” and “Construction” as the economic sectors with the first and third highest degrees of job informality. These estimates are in line with earlier survey findings on job informality in agriculture and construction that are provided by the ILO (2021).

The respondents from the manufacturing sector appear to be relatively less intensely affected by the crisis. Participants in the KIIs have highlighted that the manufacturing sector may have fared better than the other sectors due to a substitution of imports with domestically manufactured products. This import substitution, rather than enhanced exports of manufactured goods, is a likely explainer of the relative better performance of the sector. Participants in the KIIs have also indicated that the export competitiveness of the manufacturing sector has been adversely affected by the increasing cost of private electricity generation by DGs. But of course, this mostly applies to energy-intensive industries, while other industries benefit from low labor costs and other input costs impacted by the currency depreciation.

The participants in the KIIs have also identified cross-sectoral constraints that affect all of the sectors, and explain, in particular, the absence of enhanced export competitiveness (and higher costs) for manufacturing and agriculture. These factors include supply chain disruptions caused by the outbreak of COVID-19, shortages of essential goods, such as diesel and gasoline, due to Lebanon’s balance of payments crisis, the brain drain as well as an inability to access finance. Indeed, Lebanon’s banking sector, which is at the center of Lebanon’s financial landscape, is unable to perform its basic financial intermediation duties.

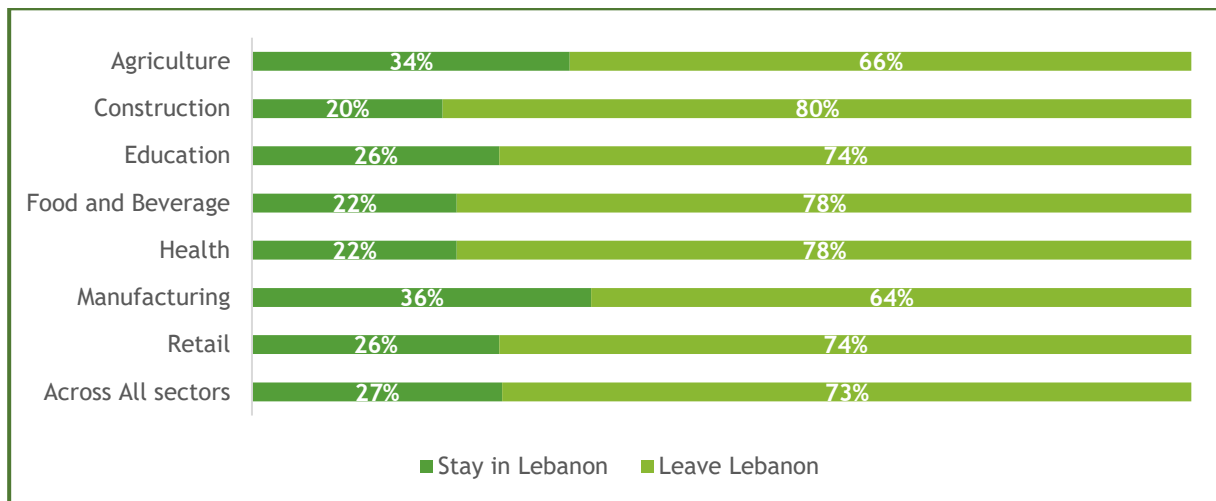
¹¹ Despite the price competitiveness arising from the currency depreciation, the World Bank (2021b) identify three factors that inhibit exports. These are: (i) the (pre crisis) economic fundamentals; (ii) the global conditions; and (iii) the political/institutional environment.

E. Attitudes Towards Immigration

In the wake of the crisis, Lebanon has witnessed the start of mass migration that is gradually leading to a grave loss of human capital (World Bank, 2021b). Indeed, many Lebanese have immigrated in search for better working opportunities and refuge from political instability. This section provides the survey's findings with regards to attitudes towards immigration.

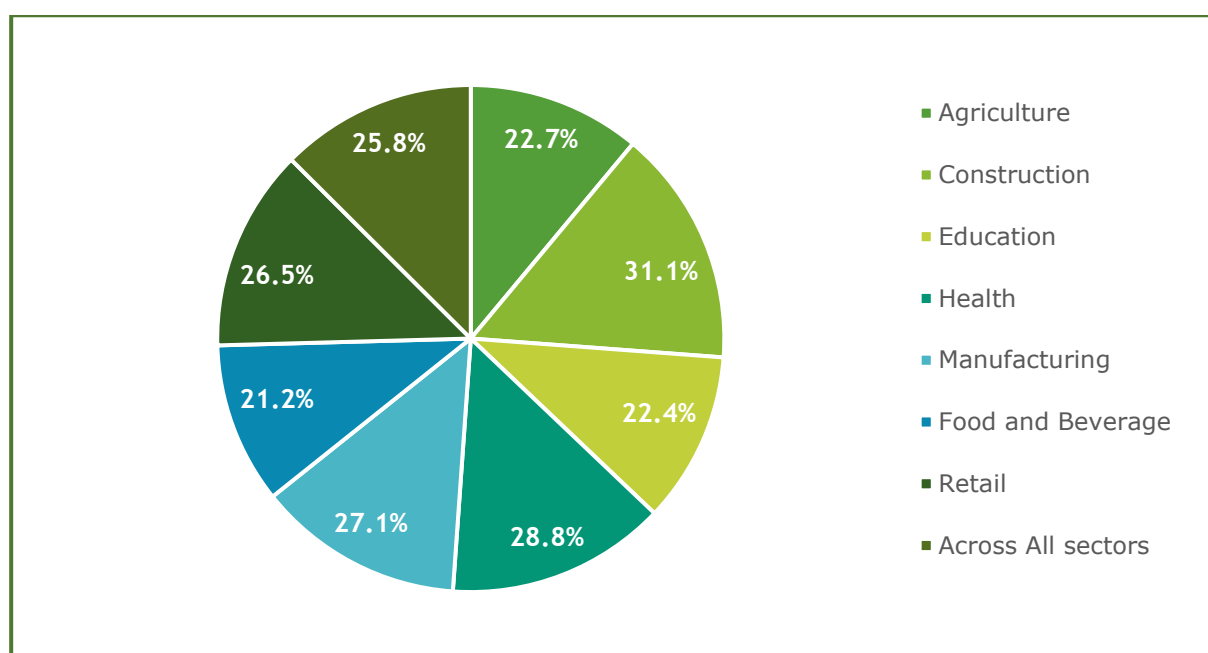
Not surprisingly, more than two thirds of the respondents across sectors indicate that they would be willing to immigrate if they are presented with the opportunity (Figure 31).

Figure 31: Proportion of respondents who would be willing to leave Lebanon



These findings reflect the general sense of helplessness in the face of an economic adjustment which, according to the World Bank (2021a), is concentrated on smaller depositors, the bulk of the labor force and smaller businesses. Indeed, Lebanon's economic woes have resulted in rising unemployment and poverty, which translated into harsh societal and psychological realities. Destitution, suicides as well as desperate (and sometimes fatal) illegal immigration attempts have become more common as a result of the immiseration of the population. Perhaps paradoxically, only a minority of the respondents across sectors has initiated the process of immigration (Figure 32).

Figure 32: Proportion of respondents who initiated the immigration process



The low proportion of respondents who initiated the immigration process may be attributable to a language barrier, a skill mismatch or the existence of strong family ties that discourage the respondents from initiating the immigration process.

Participants in the KIIs have also suggested that the decision to immigrate may be a function of the level of income. That is, for the respondents who earn their livelihoods from export sectors and hence earn a higher income, the incentive to immigrate is low. In order to investigate this hypothesis in more detail, Table 12 provides the income brackets of the respondents who stated they prefer to stay in Lebanon.

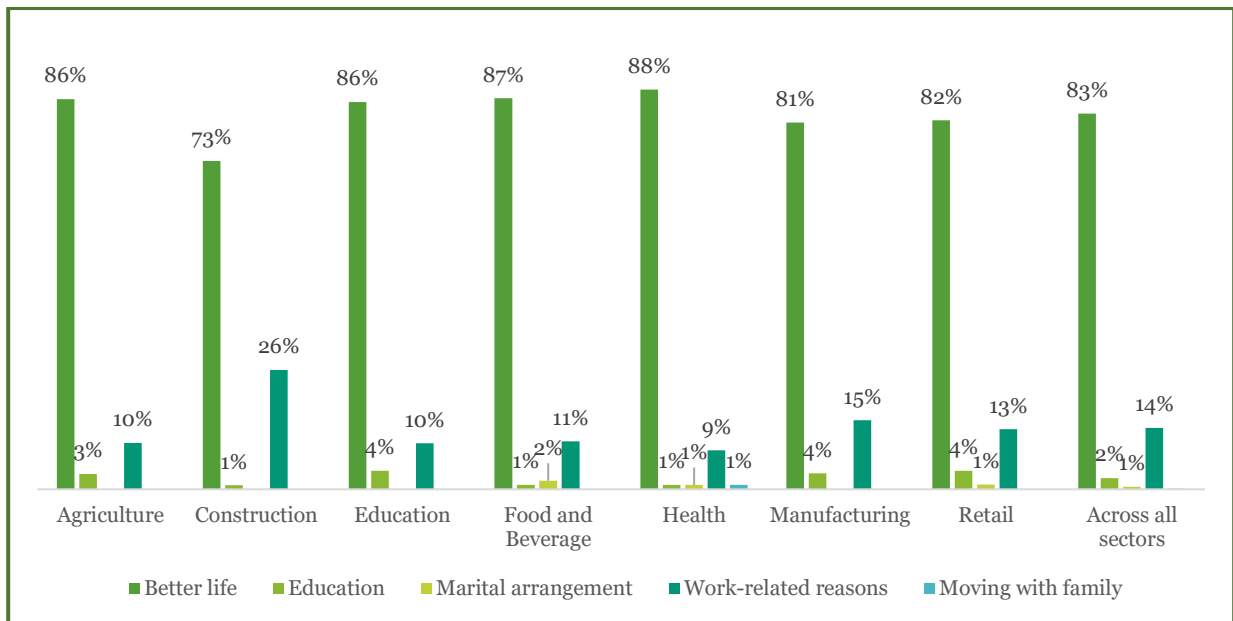
Table 12: Breakdown of the income levels of respondents who prefer staying in Lebanon

	Agriculture	Construction	Education	Food and Beverage	Health	Manufacturing	Retail
<650,000	1	2	0	0	0	3	1
	2%	7%	0%	0%	0%	6%	3%
[650,000 - 1,200,000]	4	2	3	0	1	1	3
	9%	7%	9%	0%	3%	2%	9%
[1,200,000 - 3,000,000]	15	6	7	12	4	13	6
	33%	22%	20%	41%	14%	27%	17%
[3,000,000 - 5,000,000]	15	8	10	5	11	11	13
	33%	30%	29%	17%	38%	23%	37%
[5,000,000 - 10,000,000]	5	6	13	7	6	8	9
	11%	22%	37%	24%	21%	17%	26%
>10,000,000	5	3	2	5	7	12	3
	11%	11%	6%	17%	24%	25%	9%
Total	45	27	35	29	29	48	35

While the average income level of the respondents who prefer to stay in Lebanon appears to be higher than the overall average by sector, the findings in Table 11 cast doubt on the hypothesis that a high level of income is the main determinant of the decision to stay in Lebanon.

Figure 33 provides insight into the main motives for wanting to immigrate.

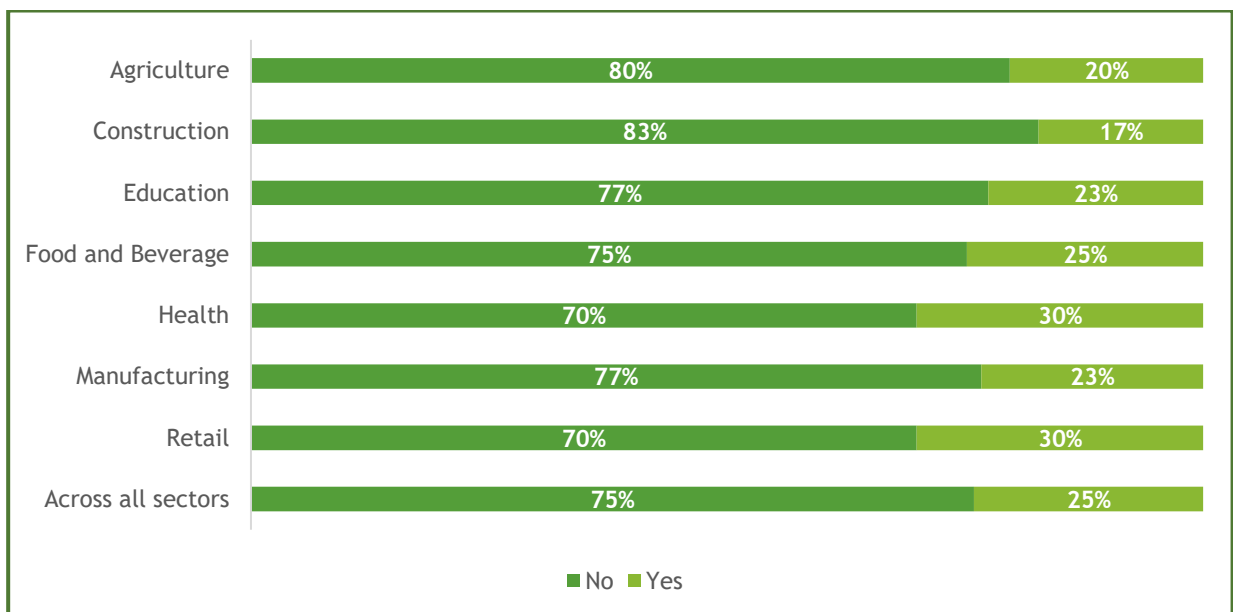
Figure 33: Main reasons for immigration



The findings reveal that the desire to immigrate is driven, predominantly, by a search for better overall living conditions. The second most-cited motive for immigration is the search for better employment prospects.

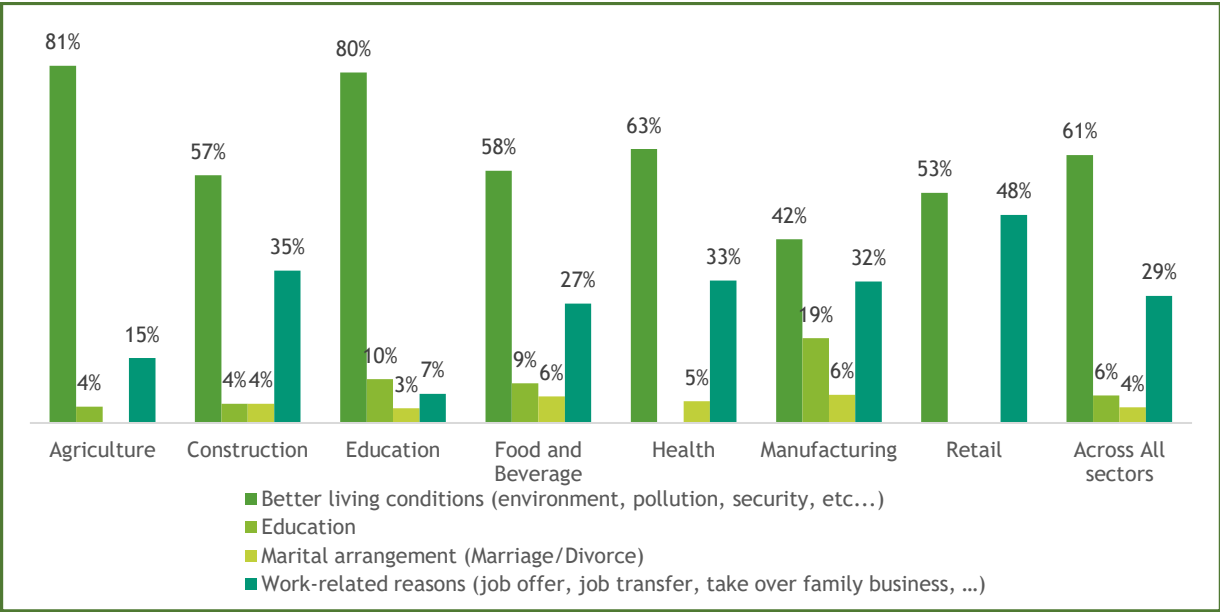
When asked about the number of family members immigrating, less than a third of the respondents indicate that a family member immigrated over the past two years (Figure 34).

Figure 34: Proportion of respondents reporting that a family member immigrated in the past two years



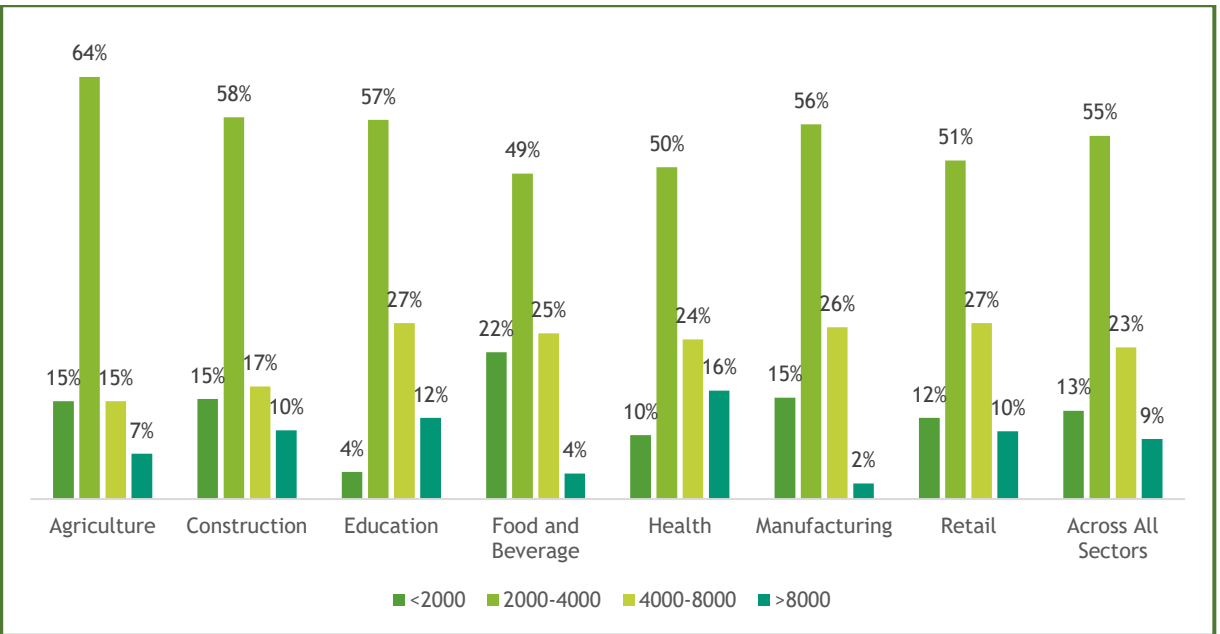
These findings indicate, again, that despite the stated desire to immigration, there exists some trepidation in terms of carrying out the decision to immigrate. The motives for immigration of family members mirror those highlighted earlier. That is, the search for better living conditions is the predominant reason that drove family members to immigrate. This is followed by the search for better employment opportunities (Figure 35).

Figure 35: Motives for immigration of a family member over the past two years



When asked for which monthly salary would they be willing to immigrate, a large proportion of the respondents indicated a monthly wage of USD 2,000 to 4,000 (Figure 36).

Figure 36: Proportion of respondents who are willing to immigrate for a given monthly wage bracket



More specifically, with the exception of the food and beverage sector, 50 percent or more of the respondents would be willing to immigrate for a monthly wage rate between USD 2,000 to 4,000. Strikingly, more than 15 percent of the respondents from the construction and manufacturing sectors and more than 22 percent of the respondents from the restaurants sector are willing to immigrate for a wage rate below USD 2,000. While these wage brackets may not have been appealing prior to the economic crisis, the decline in GDP per capita from USD 7,318 in 2018 to a projected USD 4,576 in 2021 imply that such wages are becoming increasingly attractive.¹² The attractiveness of these salary ranges is another reflection of Lebanon's new reality as lower middle-income country and the plight of the Lebanese.

¹² These numbers are from the World Bank's World Development Indicators database. The GDP per capita for 2021 is a projected value.

VI. CONCLUDING REMARKS AND POLICY RECOMMENDATIONS

This synthesis report examines the findings from a field survey of 931 households, drawn equally from seven productive sectors. The findings of the survey are informed by the insights of the participants in five Key Informant Interviews.

The aim of the survey is to shed light on the effect of Lebanon's economic crisis on the employment conditions, energy poverty, livelihood-based coping strategies and attitudes towards immigration for participants from the agriculture, construction, education, food and beverage, health, manufacturing, and retail sectors.

The findings suggest that Lebanon's protracted economic crisis had pervasive and profound effects on the livelihoods and employment conditions of the respondents across the seven sectors. Further, the findings bring to light the extreme energy burden that households face amid the severe rationing of the power supply. The findings also suggest that households had to adopt harsh livelihood-based coping strategies, which involve, for example, skipping meals and reducing the quantity and quality of staple food items. In addition, the results reveal, perhaps not surprisingly, that the vast majority of the respondents would like to immigrate if they are presented with the opportunity. However, the proportion of respondents who initiated the immigration process is lower, likely due to a language barrier, a skill mismatch, or the existence of strong family ties that discourage them from immigrating. The findings also indicate that among the seven sectors that are surveyed, respondents from the construction and agriculture sectors appear to be the hardest hit by the crisis. These findings provide useful insights for evidence-based policy making.

In view of the findings, policies targeting poverty reduction and increased food security¹³ should be prioritized. The numbers point to an urgent need to broaden and expand the cash-based assistance approach, which as of now consists of two programs: the National Poverty Targeting Program (NPTP) and the Lebanon Emergency Crisis and COVID-19 Response Social Safety Net Project (ESSN) funded by the World Bank. Both programs combined will reach around 225,000 families, while current estimates put poverty rates at above 80%. Two additional programs were designed but lack funding: the Broad Coverage Cash Transfer program (BCCT) and the Public Sector Cash Scheme (PSCS). To be able to attract funding, the government should prioritize the expansion of the social assistance registry developed by IMPACT. The registry currently has information on around 500,000 households, and this can easily be expanded to reach the target of around 800,000 households.

There is consensus on the need to discontinue all types of blanket subsidies and shift towards targeted cash assistance. The same should be done for bread, where flour is still being subsidized. We would recommend adding a cash component for bread and incorporating it within the existing NPTP, ESSN, and any other related cash assistance programs.

¹³ More extensive policy recommendations on the topic of food security are provided in Abou Zaki et al. (2022).

Moreover, given our empirical findings on the heterogeneity of the impact of the crisis on different sectors, this should be accounted for when designing relevant policies. For example, in the current situation households employed by the construction and agricultural sectors would need more assistance. This could come in the form of a top up for heads of households employed by the construction or the agriculture sector for instance. However, this can only be implemented if there is a reliable registry that is regularly updated.

Naturally, there is a need for a national social protection system that includes other components than the cash transfers, most importantly a universal health coverage program. There is currently a proposal for a comprehensive social protection strategy that the policymakers are urged to pass as soon as possible.

Given the food poverty situation the country has unfortunately reached, we would recommend the removal of all customs duties on all food items (except luxury items). Even though some basic food items are already exempt from customs duties, others such as salt and canned products are not. Totally removing any customs duties on food products is a critical action that the government should undertake to ensure all families can access food at the cheapest prices possible.

Regarding the alarming energy poverty findings, we would recommend designing policies that would facilitate obtaining electricity from distributed generation installations. Besides the provision of food, international aid can focus on installing renewable energy systems in poor areas. At a broader level, plans for electric generation and mass transportation should be prioritized on the government's agenda.

VII. ACKNOWLEDGEMENTS

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