PRR 44 | October 2022

ERF

Policy Research Report

Investigating the Effects of COVID-19 on the Jordanian Economy:

A Macro-Micro Analysis

Nada Hazem, Marina Hicham, Racha Ramadan,
Moheb Said and Chahir Zaki

ECONOMIC RESEARCH FORUM
منتدى البحوث الاقتصادية

Table of Contents

Summary

The Jordanian case, being an upper middle-income, relatively diversified and politically stable country, is of particular interest for several reasons. This report examines the macroeconomic and microeconomic effects of COVID-19 on Jordan. First, Jordan has, for a number of decades, acted as the "shock absorber" for the surrounding area, an island of stability and refuge in a region beset by conflict. According to the UNHCR (2019), one in every four people in Jordan is a refugee. Jordan had barely begun to recover from the global financial crisis when the Syrian conflict and regional instability further hampered its economy (Assaad and Salemi, 2019). The COVID-19 pandemic is a further shock to an already struggling economy; prior to the pandemic, Jordan already had the third lowest rate of employment in the world with 31% in 2020. Unemployment rate is particularly high among youth with 37.28% and women with 24% (Assaad, Krafft and Keo, 2019; World Development Indicators, 2022). Moreover, Jordan, being a rent economy, is highly dependent on foreign direct investment and remittances. With the decline in oil prices in labor-importing countries and the pandemic, these channels are likely to exert a negative effect at the macroeconomic level (lower economic growth, more unemployment, less trade) and the microeconomic one (poor, youth, women, informal workers, refugees and vulnerable populations).

The objective of this report is threefold. First, it provides an overview of the COVID-19 impact on Jordan and the associated government's response. The latter was necessary but not sufficient, especially when it comes to the support provided to households and firms. Second, using both macroeconomic and microeconomic datasets, we examine the effect of the COVID-19 on the economy. Indeed, we show how the structural characteristics of the Jordanian economy amplified the impact of the pandemic. Finally, we provide some policy recommendations to curb the negative effects of this shock at different levels (especially monetary, fiscal, social, and trade policies).

Several conclusions can be withdrawn from our findings. At the macroeconomic level, in order to curb the negative effects of the health shock, the government implemented some fiscal measures that led to a decrease in government revenues and an increase in spending. This led to a deterioration of the fiscal deficit that increased from 6% during the first quarter of 2020 to 10% in the second quarter and a higher primary deficit from 1% to 5.5%. At the monetary policy level, the Central Bank adopted an expansionary monetary policy. To do so, more than 550 million dinars were injected to the national economy by reducing the compulsory reserve from 7% to 5%. Moreover, the Central Bank of Jordan adopted a number of measures to boost the financial sector including: restructuring the loans of individuals and companies, reducing the guarantee commissions of the industrial and services finance program from 1.5% to 0.75% for all loans, reducing the start-up loans guarantee commission from 1% to 0.75%, and increasing the insurance coverage percentage of the local sales guarantee program from 80% to 90%. Mid-sized firms took advantage of this initiative since 38% applied for or received a business loan. This figure is lower for larger ones (22%). The lowest figure is the one of micro.

This result is a surprising given that, generally, the smaller the firms, the more they need financial resources. Yet, mid-sized firms, exporters and those operating either in the manufacturing sector or the services contracted a loan from or asked to reschedule it in

Summary

order to cope with the crisis. At the trade level, the total number of harmful and liberalizing measures imposed by Jordan has changed drastically with the health crisis since the total number of harmful measures has increased from 1 to 7 between 2018 and 2020 (such as the ban on exports of food products or the ban on re-exportation or selling of medical masks).

At the microeconomic level, small, and micro firms are the most affected by the economic slowdown. Employed individuals in these firms, especially those with no contracts, were more likely to be fired or experience decline in their payment. Second, income decline, increase in food price, limited availability of food and limited mobility threaten food security of households. This food crisis may be considered as an access problem, both physically and economically, especially for low income and vulnerable groups as refugees and those living in urban areas. Third, women are the main ones to bear the cost of the increasing care work during the lockdown period and the e-schooling. Fourth, working remotely, in a context of precaution measures and social distancing, is not easily applied as some jobs cannot be done off work sites, employees are not allowed to work from home and because of lack of technology. Finally, the main coping strategies applied to face the painful economic impacts include borrowing money from family or friends in the country, taking money out of savings, borrowing from banks, employer, or private lender and selling assets.

1. Introduction

The outbreak of the COVID-19 pandemic represents an unprecedented shock for the world economy. Indeed, as it was described by the International Monetary Fund (IMF), the "*Great Lockdown*" recession will drag global GDP lower by 3% in 2020 (IMF, 2020). When it is compared to the financial crisis of 2008/2009, one can notice that despite superficial similarities, differences are more profound and more pronounced. In fact, both affected the world economy; both required economic policies (monetary and fiscal) to provide support and both were associated to a high level of uncertainty. Yet, the COVID-19 is more serious for four reasons. First, while the cause of the 2008 crisis was finance related, the COVID-19 one is health-related. Second, while the former had a direct effect on the financial/nominal sector of the economies and an indirect one on the real sector, the latter has a stronger effect on the real sector (both supply and demand are affected). Third, while the former required policies to revive the financial sector, the latter is still uncertain as it chiefly depends on the vaccine accessibility and usage. Fourth, and consequently, the COVID-19 crisis is likely to have a longer duration and with more (human) losses not just financial ones. In a nutshell, this shock is exceptional as it is both a supply and demand shock that would negatively and heterogeneously affect economic growth, employment, income, different sectors, and population and human development through various channels. The impact of COVID-19 is likely to disproportionately affect low-income populations, youth, women, informal employees and refugees, set back development gains, and could hinder economic or democratic reform processes.

Furthermore, firms around the world were largely affected by the repercussions of COVID-19 as many businesses were forced to close either temporarily or permanently due to lockdowns. Global supply chains were massively disrupted resulting in an increased cost of supplies and an inability to deliver the service in a quality and timely manner. Consequently, numerous firms have lost productivity gains and witnessed their sales and profits shrink. Different enterprises had different coping strategies whether to reduce input costs via workers layoffs and salary adjustments or to upgrade their model and diversify their products. Understanding and assessing the impact of COVID-19 on firms' performance (particularly micro and small enterprises) as well as identifying their respective survival strategies are among the objectives of this report. At the social level, the Economic and Social Commission for West Asia (ESCWA) shows that the region could lose USD 42 billion of GDP and at least 1.7 million jobs in 2020 because of the pandemic (ESCWA, 2020). Moreover, Abu Ismail (2020) estimates that poverty would increase to reach 32.4%, according to a base-case scenario. Therefore, it is important to examine the pandemic's effect on the MENA economies at both the macroeconomic and microeconomic levels.

The study will focus on Jordan, which is an upper middle-income, relatively diversified and politically stable country. Jordan is an important case to consider for a variety of reasons. First, Jordan has, for a number of decades, acted as the "shock absorber" for the surrounding area, an island of stability and refuge in a region beset by conflict. According to the UNHCR (2019), one in every four people in Jordan is a refugee. Jordan had barely begun to recover from the global financial crisis when the Syrian conflict and regional instability further hampered its economy (Assaad and Salemi, 2019). The COVID-19 pandemic is a further shock to an already struggling economy; prior to the pandemic, Jordan already had the third lowest rate of employment in the world with 31% in 2020. Unemployment rate is particularly high among youth with 37.28% and women with 24% (Assaad, Krafft and Keo, 2019; World Development Indicators, 2022). Moreover, Jordan, being a rent economy, is highly dependent on foreign direct investment and remittances. With the decline in oil prices in labor-importing countries and the pandemic, these channels are likely to exert a negative effect at the macroeconomic level (lower economic growth, more unemployment, less trade) and the microeconomic one (poor, youth, women, informal workers, refugees and vulnerable populations).

The objective of this report is threefold. First, it provides an overview of the COVID-19 impact on Jordan and the associated government's response. The latter was necessary but not sufficient, especially when it comes to the support provided to households and firms. Moreover, we analyze to what extent these policies are sustainable. Second, using both macroeconomic and microeconomic datasets (see Appendix 1 for a detailed description of the data sources), we examine the effect of the COVID-19 on the economy. Indeed, we show how the structural characteristics of the Jordanian economy amplified the impact of the pandemic. Finally, we provide some policy recommendations to curb the negative effects of this shock at different levels (especially monetary, fiscal, social, and trade policies).

The remainder of the report is structured as follows. Section 2 provides an overview of the health developments related to the pandemic. Section 3 examines the evolution of the macroeconomic policies, namely the monetary, fiscal and trade ones. Section 4 analyses how the real sector was affected by the pandemic at both the macro

and firm levels. Section 5 examines the social impact of the pandemic on both the labor market and food security. Section 6 analyses how economic agents coped with the crisis. Section 7 concludes.

2. Health Developments

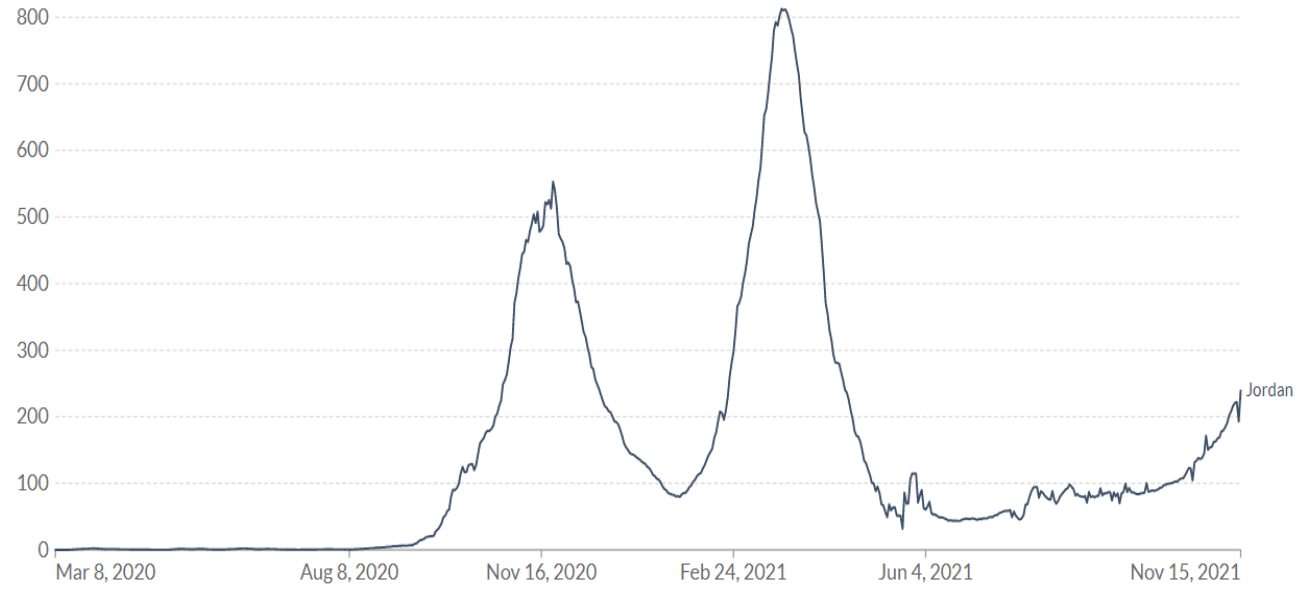
Like many other Middle East and North African countries, the first case of COVID-19 was confirmed by the authorities in Jordan on 02 March, 2020. The patient remained in hospital quarantine and was declared recovered on 13 March 2020. On March 15th, the Health Ministry confirmed 13 cases. This is why the Jordanian government had a prompt policy response by activating information campaigns (on prevention and hygiene), travel bans (China, Iran, and South Korea on February 23rd and extended to Italy on the 25th), and other containment measures (school closure, prohibition of events, halt of newspaper printing, among others). Although the lockdown made major progress in containing the virus, it led to a sharp and painful economic impact (Al-Khalidi, 2020). Since then, the numbers have been increasing until they reached 895,564 cumulative cases and 11,255 deaths related to COVID as of November 15, 2021 (see Figures 1 and 2 respectively). As of November 2021, this figure is still increasing.

Yet, as it is shown in Figures 1 and 2, with the beginning of the second wave, the authorities had to enforce local lockdowns. In October, the Government re-instated a nationwide lockdown for Fridays, and closed schools and universities until the end of the 2020. Early 2021, some restrictions were lifted until the beginning of the third wave where Jordan reinstated evening curfews given that the highest daily COVID-19 death toll reached 111 at the end of March (IMF policy tracker, 2021). However, it is important to note that the number of daily new confirmed deaths per million people has decreased significantly compared to June 2021 with the increase in vaccination, as it will be shown later.

Indeed, early 2021, vaccinations started for health-vulnerable nationals and refugees, and health care workers. As of November 15, 3.6 million citizens and residents of Jordan are fully vaccinated. Compared to other Middle-Eastern countries, Jordan (78.4 per 100 people) is doing better since the vaccination rate is higher than Egypt (32.3 per 100) and Lebanon (51.1 per 100 people), though lower than Tunisia (82.6 per 100) and Morocco (129.6 per 100 people) (Figure 3). This is good news for the Jordanian economy since the higher the rate, the more efficient the vaccination effect. For instance, Arnon, Ricco, and Smetters (2021) show that, in the United States, doubling the number of vaccine doses administered daily to 3 million would create more than 2 million jobs and boost real GDP by about 1%.

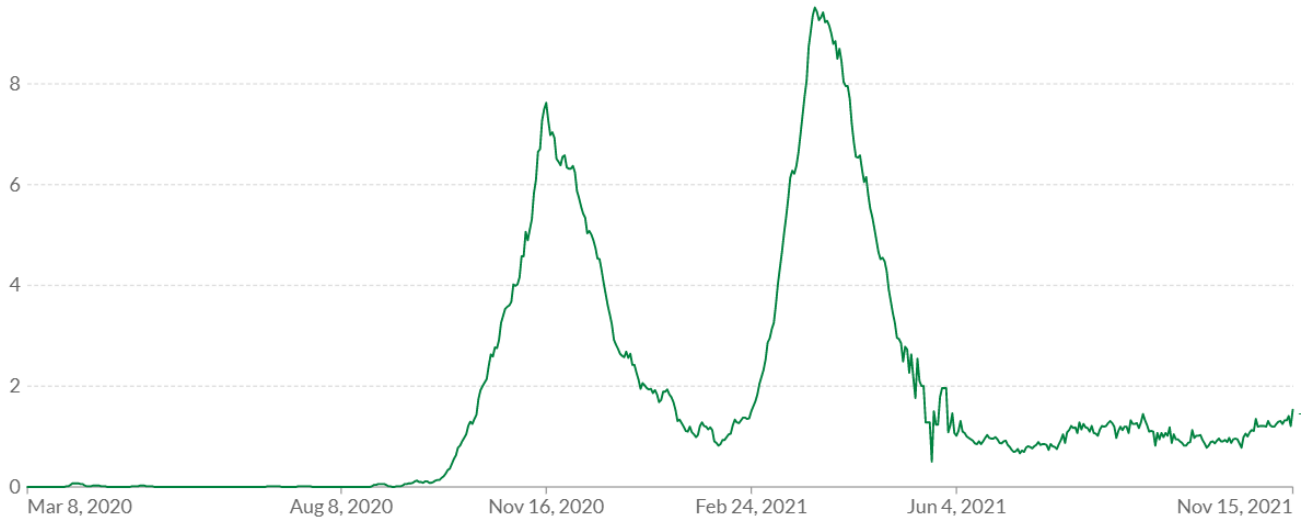
In order to counteract the economic drawbacks of the pandemic, the government of Jordan took several measures that aim to increase liquidity and support the most affected sectors by the lockdown that was implemented several times (EMEA, 2020). In addition, the Executive Board of the International Monetary Fund (IMF)

Figure 1: Daily new confirmed COVID-19 cases per million people



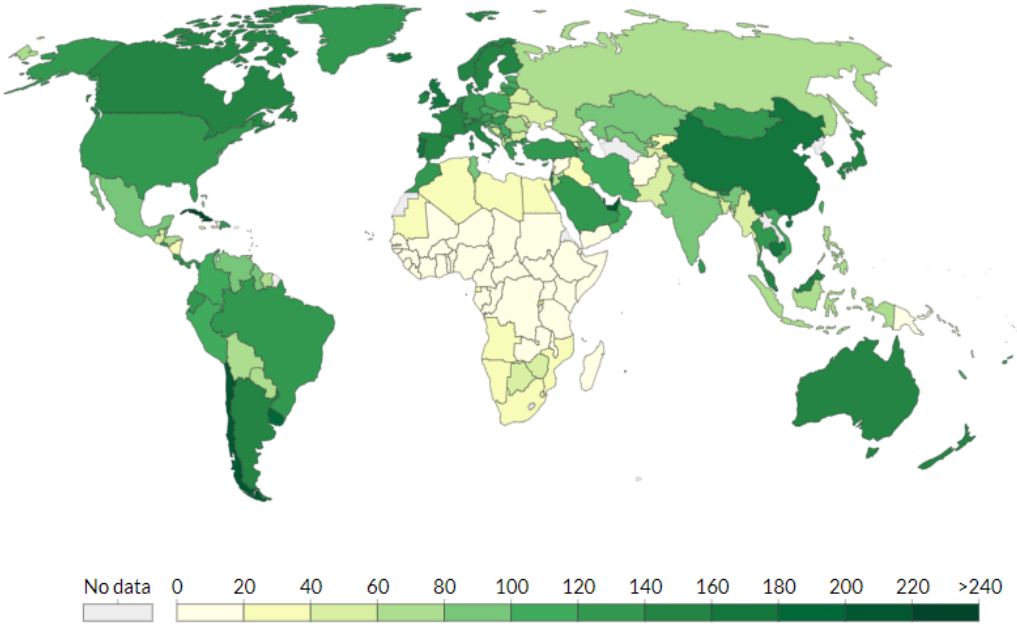
Source: Johns Hopkins University online dataset.
Note: (i) These figures are as of November 15th, 2021. (ii) Figures shown are the rolling 7-day average. The number of confirmed cases is lower than the number of actual cases; the main reason for that is limited testing.

Figure 2: Daily new confirmed COVID-19 deaths per million people



Source: Johns Hopkins University online dataset.
Note: (i) These figures are as of November 15th, 2021.
(ii) Figures shown are the rolling 7-day average. Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.

Figure 3: COVID-19 vaccine doses administered per 100 people



Source: Johns Hopkins University online dataset.
Note: (i) These figures are as of November 15th, 2021.
(ii) Total number of vaccination doses administered per 100 people in the total population. All doses, including boosters, are counted individually. As the same person may receive more than one dose, the number of doses per 100 people can be higher than 100.

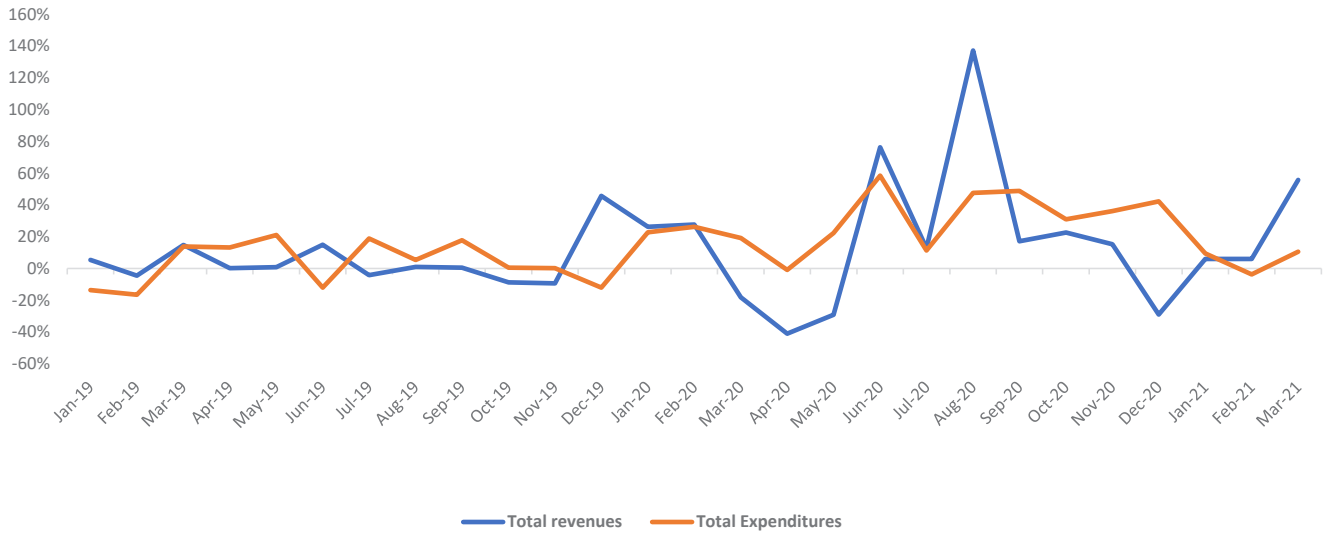
approved Jordan's request for emergency financial assistance under the Rapid Financing Instrument (RFI) amounting to US$ 400 million in May 2020. Later on, in December 2020, the IMF Executive Board approved the completion of the first review under the Extended Fund Facility (EFF) making US$148 million available to support the reforms of the Jordanian economy. The next section analyzes how macroeconomic policies evolved in order to support the economy at both the macroeconomic and microeconomic levels.

3. Macroeconomic Policies and Outcomes

3.1. Fiscal Policy

In order to curb the negative effects of the health shock, the government implemented some fiscal measures that led to a decrease in government revenues and an increase in spending (see Figure 4). Indeed, while the latter increased by 19% (in real terms, year-on-year) in March 2020, the former decreased by 18% in the same month. In November 2020, the difference narrowed since revenues increased by 15% and spending by 36% (in real terms, year-on-year).[1] However, starting 2021, revenues growth rates (56%) were higher than expenditures ones (11%), which explains the improvement in the fiscal deficit that decreased from 10% to 4% during the first quarter of 2021.

Figure 4: Growth rates of revenues and expenditures (%) 2019-2021



Source: Authors' own elaboration using the Ministry of Finance dataset.
Notes: Figures have been deflated using the consumer price index. Growth rates are calculated on year-on-year-basis.

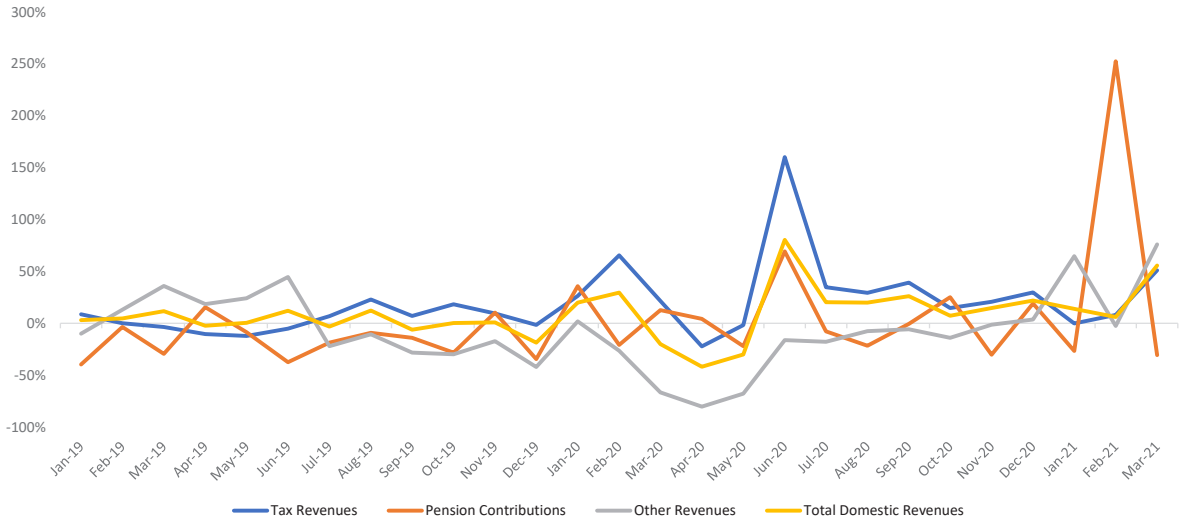
At the revenues level, measures included, first, the partial postponement of the surrendering of sales tax proceeds for three months and early payments of employee salaries leading to a decrease in tax revenues by 14% in April 2021 (see Figure 5). Second, the Social Security Corporation has suspended the implementation of old age insurance for private sector employees for three months, as of March 1, 2020 and reduced the social security subscription ratio for institutions and employees from 21.75% to 5.25%. This is why pensions contributions decreased by 22% in June 2020. Moreover, 70 percent of customs duty collections due from selected companies were postponed. However, the decreasing trend of revenues changed starting February 2021 since tax and other revenues experienced a positive growth with the pensions more volatile.

At the spending side, the Social Security Corporation announced in March the launch of an online platform to receive applications for in-kind aids, aimed at helping daily paid workers who have been affected by the COVID crisis and low-income adults aged over 70. Moreover, the government allocated 50 percent of maternity insurance revenues (JD 16 million – about USD 23 million) to material assistance for the elderly and the sick. Some products were subsidized by imposing price ceilings for essential products. At the health level, the government allocated JD 50 million (USD 71 million) for health equipment and medical supplies, rental of hotels for quarantines, and additional COVID-related security costs.

At the social level, it also developed a temporary cash transfer program (costing JD 81 million or USD 114 million) for the unemployed and self-employed. At the sectoral level, the government supported several sectors especially tourism. Moreover, the government implemented the Takafoul programmes financed by the National Aid Fund (see Figure 6). This program includes two pillars: Takaful 1 (to help poor Jordanian families meet their basic needs through a financial support) and Takaful 3 (a supplementary support program that targets heads who work for a daily wage, or who depend on their daily income from sectors that are affected by the pandemic).

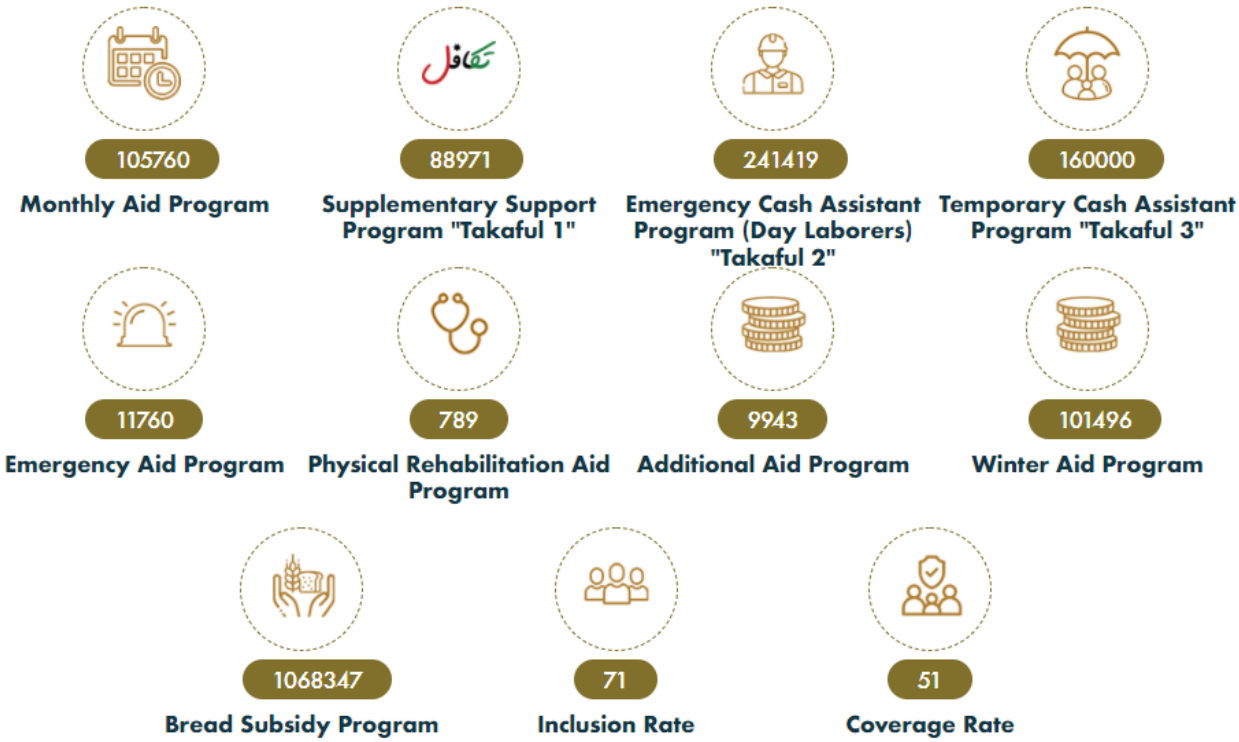
[1] Year on year refers to the growth rate between a month in year t and the same month in t-1.

Figure 5: Evolution of domestic revenues (%) 2019-2021



Source: Authors' own elaboration using the Ministry of Finance dataset.
Notes: Figures have been deflated using the consumer price index. Growth rates are calculated on year-on-year-basis.

Figure 6: Numbers and rates of the Takafoul programme

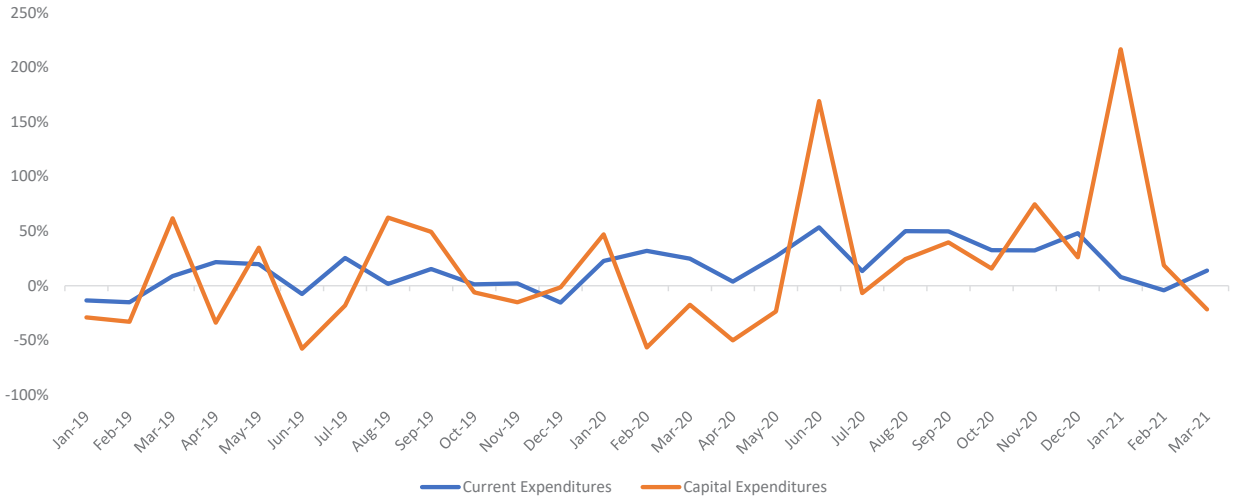


Source: The Website of the National Aid Fund https://naf.gov.jo/Default/En.

This is why current spending witnessed a positive growth rate over the whole period (see Figure 7), whereas capital expenditure experienced a severe decline between February and May 2020. This decreasing trend of capital expenditure continued until the first quarter of 2021 as their growth rate reached -22% in March 2021.

These different trends led to a deterioration of the fiscal deficit that increased from 6% during the first quarter of 2020 to 10% in the second quarter and a higher primary deficit from 1% to 5.5% as it is shown in Figure 8. The difference is even higher when compared to the same quarter of 2019 (where the overall deficit was 4% and the primary one

Figure 7: Evolution of current and capital expenditures (real, %) 2019-2021



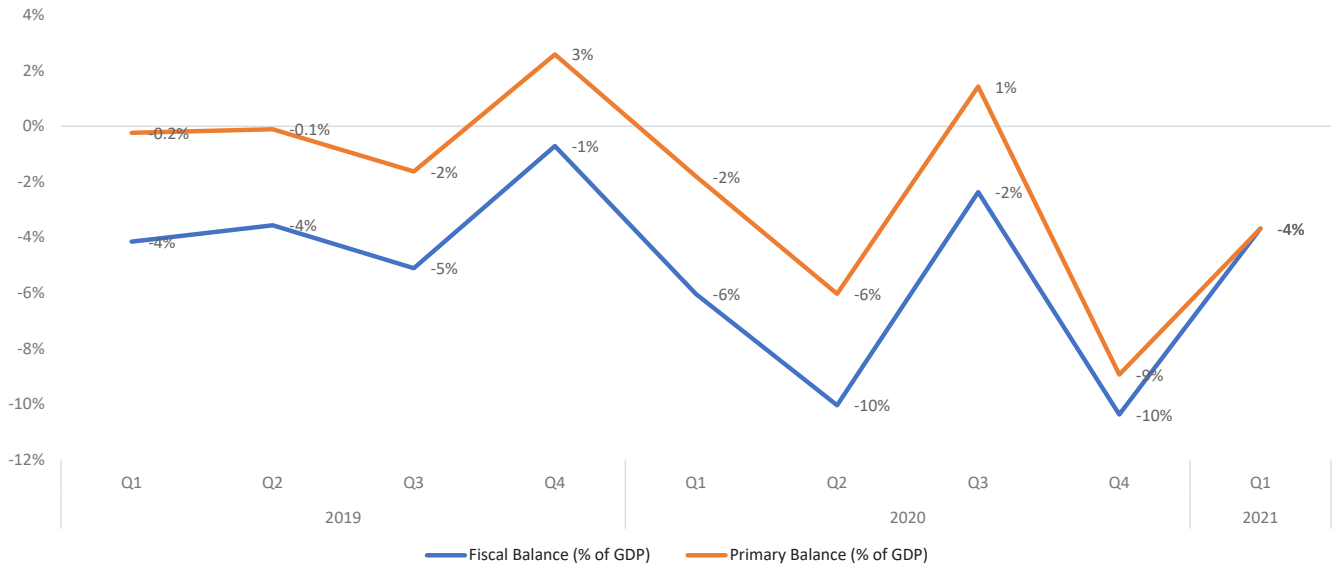
Source: Authors' own elaboration using the Ministry of Finance dataset.
Notes: (i) Figures have been deflated using the consumer price index. Growth rates are calculated on year-on-year-basis. (ii) On average, expenditure of health represented 7.8% of GDP between 2010 and 2019.

was 0.1%). In the first quarter of 2021, both the primary and overall fiscal deficit reached 4% after a significant decrease in the last quarter of 2020.

While the first part of the analysis examines the effect of this expansionary fiscal policy at the macroeconomic level, it is important to see how both firms and household benefited from these support programs.

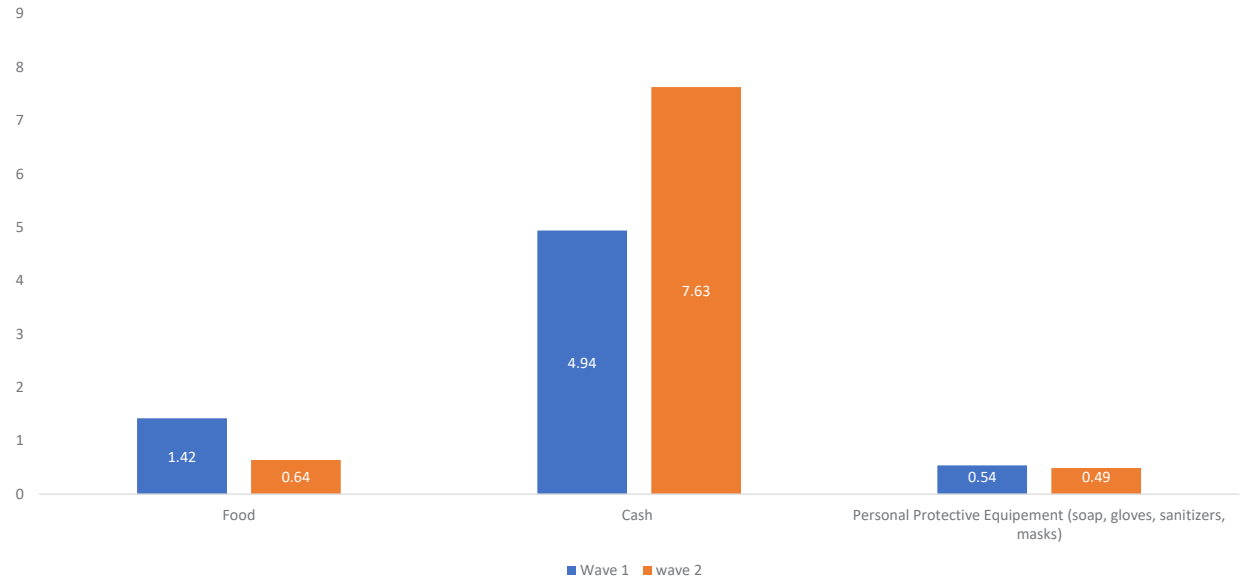
As a response to the pandemic, individuals receive cash and food support from government that they do not usually receive. This irregular support includes as well personal protective equipment such as gloves, masks, soap, and sanitizer. In the two waves, cash is the main type of support received by individuals with 5% and 8% in wave 1 and wave 2, respectively (Figure 9). In March 2021, around 5% of males and 5% of females receive cash transfer. These shares increase to 8% and 7% in June 2021. Although more individuals in urban and rural areas receive cash support in June 2021 compared to March 2021, less than 1 % of individuals in camp receive cash support in June 2021comapred to 6.5% in March 2021. It worth noting that all income

Figure 8: Fiscal deficit and primary deficit (% of GDP) - 2019-2021



Source: Authors' own elaboration using the Ministry of Finance dataset.

Figure 9: Share of individuals receiving irregular government support -wave 1 and wave 2



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

groups benefit from such cash support during the pandemic. However, the share of beneficiaries in the lowest income group is higher compared to other groups (Table 1).

At the firm level, it is important also to see how such government support programs were beneficial to the firms and whether they met their needs or not. Tables 2a and 2b compare, by firm size, firms that applied or received government support with their most needed policies. Generally, most of those that benefited from such programs are either medium or large firms, whereas micro firms' share is the lowest. For instance, while 5% of micro firms applied for or received a partial or total salary subsidy, this figure is higher for mid-sized firms (7%) and large ones (9%). The same holds for subsidized provisions, reduction in delay or taxes, and delay in social security. Interestingly, some figures increased in the second wave compared to the first wave, especially large firms that benefited from a partial or a total salary

Table 1: Prevalence of individuals receiving cash support by sex, geographical location, and income group

	Wave 1	Wave 2
Sex		
Male	4.63	8.18
Female	5.28	7.05
Location		
Urban	5.29	7.38
Rural	2.21	10.54
Camps	6.54	0.35
Income Quartile		
First quartile	8.47	11.84
Second quartile	3.35	8.56
Third quartile	4.48	4.53
Fourth quartile	4.43	3.98

Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

Table 2a: Percentage of firms that applied or received government support and their most needed policies, by firm size

	Wave 1					Wave 2				
	6-9	10-24	25-49	50+	Total	6-9	10-24	25-49	50+	Total
Partial/total salary subsidies	5%	12%	7%	9%	8%	8%	14%	18%	25%	14%
Cash transfers/ unemployment benefits	1%	2%	2%	2%	2%	1%	0%	3%	2%	1%
Rental utility subsidy or deferrals	2%	6%	2%	2%	3%	1%	4%	5%	0%	3%
Subsidized provisions	2%	3%	3%	7%	3%	0%	2%	1%	1%	1%
Reduction or delay in taxes	5%	8%	6%	8%	7%	4%	6%	9%	7%	6%
Delay in Social Security	14%	19%	19%	20%	17%	9%	14%	28%	25%	16%
Didn't apply	65%	60%	48%	54%	59%	72%	65%	52%	52%	64%

Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.
Note: Multiple answers were allowed. Given that figures of wave 1 and wave 2 were different, both are included in the table.

subsidy whose share increased from 9% to 25% and delay in social security from 20% to 25%. In contrast, micro (and small firms) generally benefited less in the second wave since 9% (14%) took advantage of the delay in social security down from 14% (19%). In the two waves, most of the firms report their need for reduction or delay in taxes (see Table 2b), followed by the delay in social security.

When the sectoral dimension is taken into consideration, Table 3 shows that firms operating in the agriculture sector did not apply to any government support program, followed by those operating in the services one. In contrast, the share of those that did not apply is significantly lower in the manufacturing sector (37%), accommodation, and food services (53%). It is also important to note that among the most needed government support programs are those related to the delay in tax payments. This is why, in the short term, the government might face further fiscal pressure and limited fiscal space with lower revenues.

Moreover, in the second wave, the share of firms that did not apply decreased in the agriculture and in the services sectors but significantly increased in the manufacturing one from 37% in the first wave to 64% in the second one. This might be attributed to the slight recovery that was observed pointing out a lower need for such policies. Yet, Table 4 confirms the finding of Table 2 where the most needed policy is the one of reduction or delay in taxes in both of the two waves.

Table 2b: Firms' most needed government support (Period average), by firm size

	6-9	10-24	25-49	50+	Total
Partial/total salary subsidies	4%	4%	5%	7%	5%
Cash transfers/ unemployment benefits	2%	3%	2%	1%	2%
Rental utility subsidy or deferrals	7%	3%	4%	3%	5%
Subsidized provisions	3%	4%	2%	2%	3%
Reduction or delay in taxes	14%	20%	20%	18%	17%
Delay in Social Security	5%	6%	6%	5%	6%
Others	52%	41%	49%	49%	47%

Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.
Note: Multiple answers were allowed. Given that figures of wave 1 and wave 2 were similar, we took an average of the two waves.

Table 3: Percentage of firms that applied/received government support

Panel A: Applied/received government support – wave 1

	Partial/ total salary subsidies	Cash transfers/ unemployment benefits	Rental utility subsidy or deferrals	Subsidized provisions	Reduction or delay in taxes	Delay in Social Security	Didn't apply
Agri, fishing or mining	0%	0%	0%	0%	0%	26%	74%
Manufacturing	15%	5%	5%	2%	12%	33%	37%
Construction or utilities	5%	0%	0%	0%	11%	22%	56%
Retail or wholesale	7%	1%	5%	4%	3%	12%	64%
Transp. and storage	2%	2%	0%	0%	4%	22%	64%
Accom. and food ser.	14%	0%	4%	0%	10%	15%	53%
Information and com.	2%	0%	0%	7%	2%	9%	68%
Fin. act. or real estate	7%	3%	5%	9%	5%	15%	65%
Education	7%	0%	13%	0%	13%	27%	53%
Health	6%	0%	0%	0%	6%	17%	72%
Other services	0%	0%	0%	0%	0%	0%	84%
Total	8%	2%	3%	3%	7%	17%	59%

Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.
Note: Multiple answers were allowed.

Panel B: Applied/received government support – wave 2

	Partial/ total salary subsidies	Cash transfers/ unemployment benefits	Rental utility subsidy or deferrals	Subsidized provisions	Reduction or delay in taxes	Delay in Social Security	Didn't apply
Agri, fishing or mining	16%	0%	0%	0%	0%	0%	67%
Manufacturing	9%	2%	2%	2%	5%	25%	64%
Construction or utilities	14%	0%	8%	0%	9%	31%	51%
Retail or wholesale	8%	1%	3%	1%	4%	12%	68%
Transp. and storage	23%	0%	0%	0%	0%	17%	63%
Accom. and food ser.	30%	2%	2%	0%	10%	17%	48%
Information and com.	0%	0%	2%	0%	6%	12%	69%
Fin. act. or real estate	4%	0%	4%	0%	4%	5%	86%
Education	25%	0%	0%	19%	16%	8%	56%
Health	14%	3%	3%	3%	3%	17%	73%
Other services	5%	0%	0%	0%	0%	16%	70%
Total	13%	1%	3%	1%	5%	16%	64%

Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.
Note: Multiple answers were allowed.

Table 4: Firms' most needed government support (period average), by industry

	Partial/ total salary subsidies	Cash transfers/ unemployment benefits	Rental utility subsidy or deferrals	Subsidized provisions	Reduction or delay in taxes	Delay in Social Security	Others
Agri, fishing or mining	0%	0%	0%	5%	12%	10%	53%
Manufacturing	4%	4%	4%	5%	23%	7%	43%
Construction or utilities	5%	5%	0%	4%	22%	3%	48%
Retail or wholesale	2%	1%	6%	4%	18%	5%	48%
Transp. and storage	9%	0%	0%	4%	20%	7%	53%
Accom. and food ser.	6%	4%	6%	3%	12%	3%	43%
Information and com.	6%	0%	7%	4%	19%	10%	43%
Fin. act. or real estate	2%	1%	1%	0%	10%	0%	66%
Education	6%	7%	18%	0%	9%	4%	33%
Health	5%	0%	3%	1%	22%	9%	54%
Other services	2%	3%	3%	2%	20%	10%	41%
Total	4%	2%	5%	3%	17%	5%	48%

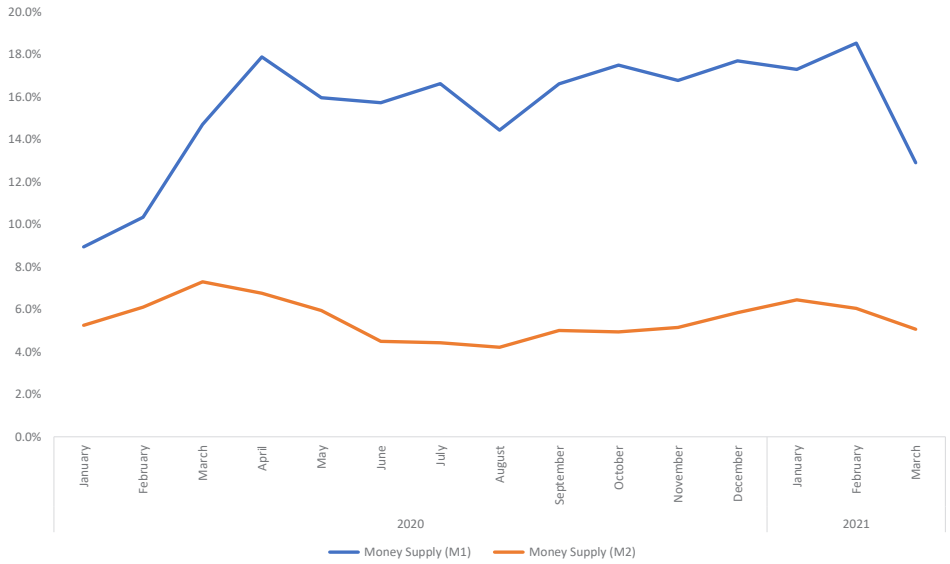
Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.
Note: Multiple answers were allowed. Given that figures of wave 1 and wave 2 were similar, we took an average of the two waves.

3.2. Monetary Policy

At the monetary[2] policy level, the Central Bank adopted an expansionary monetary policy. To do so, more than 550 million dinars were injected to the national economy by reducing the compulsory reserve from 7% to 5%. Thus, as it is shown in Figure 10, growth rates of both M1 and M2 increased from 10.3% and 6.1% in February to 14.7 and 7.3% in March 2020. Yet, in 2021, such growth rates decreased to reach 12.9% and 5.1% in March 2021. Expansionary monetary policies are generally associated to a higher inflation that reached a monthly rate of 2.1% in March 2020 compared to 1.2% a year before (see Figure 11). Yet, with a lower money growth rate, inflation eased to reach 0.1% in March 2021. Second, it reduced most policy rates by 50 basis points on March 3rd, 2020 and further by 100 basis points on March 16 2020 (see Figure 12) to remain constant at 3.5%.

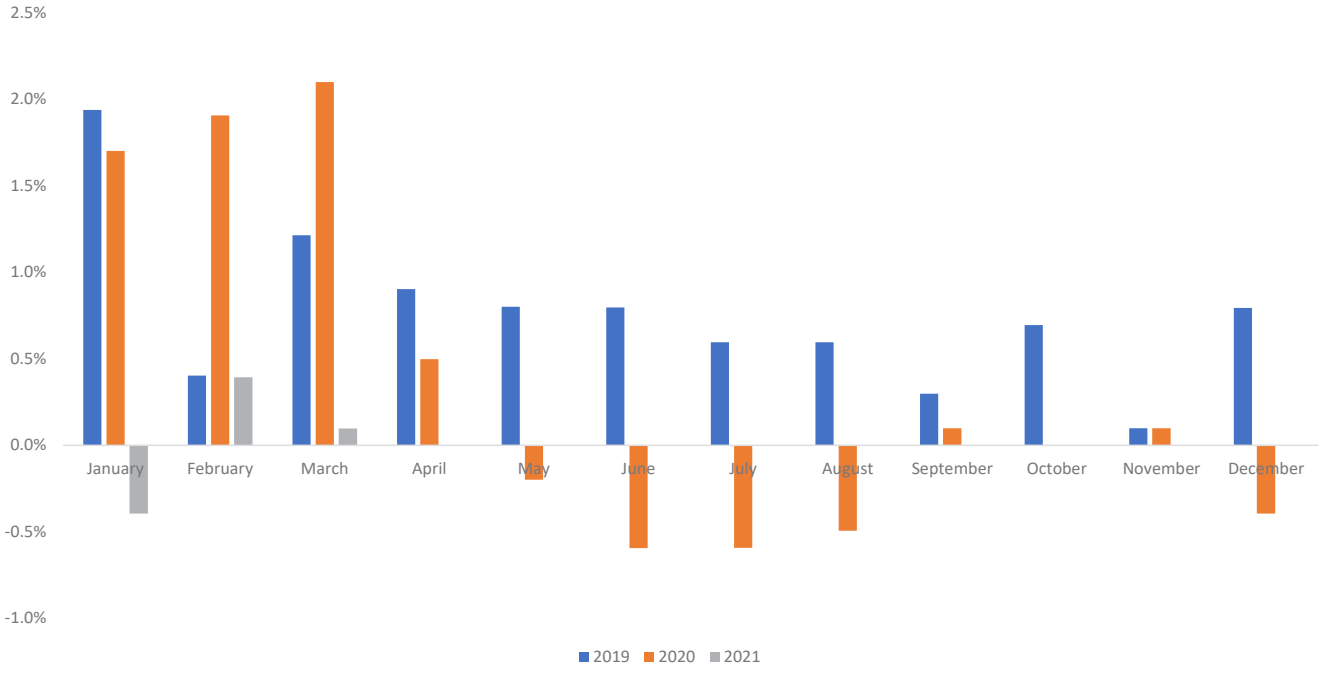
[2] Jordan has a pegged exchange rate arrangement.

Figure 10: Growth rates of M1 and M2 (%) between 2019 and 2021



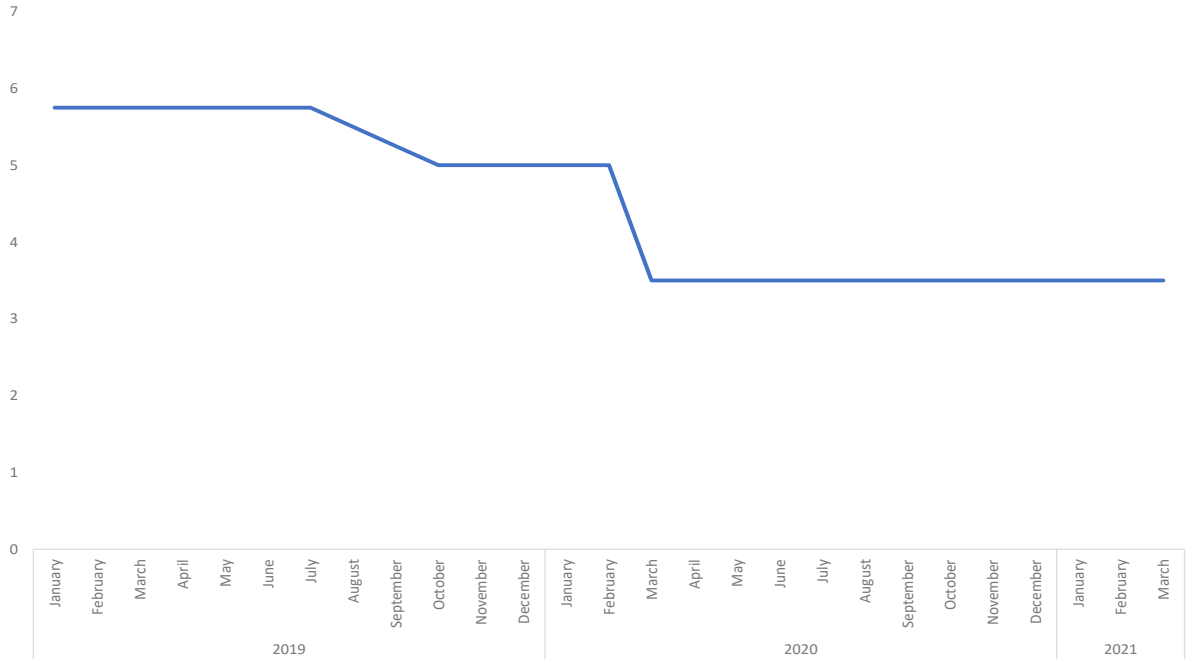
Source: Authors' elaboration using the Central Bank dataset.

Figure 11: Evolution of inflation rates



Source: Authors' own elaboration using the Central Bank dataset
Note: The inflation rate is calculated based on the consumer price index with a base year 2018.

Figure 12: Evolution of interest rates



Source: Authors' own elaboration using the Central Bank dataset.

Moreover, the Central Bank of Jordan adopted a number of measures to boost the financial sector as follows. First, banks were allowed to restructure the loans of individuals and companies, especially medium and small ones, which have been affected by the repercussions of COVID-19. Second, financing costs were reduced and the maturity of the existing and future advances to the economic sectors were extended through the Central Bank programme to finance and support economic sectors. Third, the Jordan Loan Guarantee Corporation raised the insurance coverage rate for the local sales guarantee programme. This includes reducing the guarantee commissions of the industrial and services finance program from 1.5% to 0.75% for all loans, reducing the start-up loans guarantee commission from 1% to 0.75%, and increasing the insurance coverage percentage of the local sales guarantee program from 80% to 90%. Fourth, for Small and Medium Enterprises (SMEs), the CBJ reduced the cost and expanded the coverage of guarantees provided by the Jordan Loan Guarantee Corporation on SME loans and, in March 2021, it increased its subsidized lending schemes for SMEs from JD 500 million to JD 700 million.

At the microeconomic level, Table 5 shows firms benefited from such initiatives. Mid-sized firms took advantage of this initiative since 38% applied for or received a business loan. This figure is lower for larger ones (22%). The lowest figure is the one of micro. This result is a surprising given that, generally, the smaller the firms, the more they need financial resources. Currently, it is difficult to have a clear answer whether their application was rejected or they did not apply.[3] Yet, it is important to note that the highest share of non-applicants (to any support program, those of the Central Bank or the Government) is that of micro firms. Moreover, in the second, the share of those who applied or received or those in need of a loan has decreased for types of firms. When the sectoral dimension is taken into consideration, Table 6 shows that the most important programs, even compared to the government measures, are business loans, followed by delays in social security payments, and loan payment deferral, especially for the manufacturing sector and that of accommodation and food services. Moreover, it shows that the share of firms operating in the manufacturing sector that applied or received a loan decreased significantly from 43% in the first wave to 18% in the second one. In the same line, Table 7 shows also that mid-sized firms, exporters and those operating either in the manufacturing sector or the services contracted a loan from or asked to reschedule it in order to cope with the crisis.

[3] One of the reasons that might explain the fact that they did not apply is that they were not aware of this initiative.

Table 5: Percentage of firms that applied or received Central Bank support and their most needed policies, by firm size

	Wave 1					Wave 2				
	6-9	10-24	25-49	50+	Total	6-9	10-24	25-49	50+	Total
Applied/received support										
Business loans	18%	22%	38%	22%	23%	12%	18%	22%	19%	17%
Loan payment deferrals	10%	11%	16%	8%	11%	6%	8%	5%	13%	7%
Most needed policies										
Business loans	14%	17%	13%	13%	15%	11%	18%	9%	15%	14%
Loan payment deferrals	4%	6%	5%	5%	5%	1%	1%	3%	1%	1%

Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.
Note: Multiple answers were allowed.

Table 6: Percentage of firms that applied or received central bank support and their most needed policies, by economic activity

	Wave 1		Wave 2		Most needed policy	
	Busin. loans	Loan paym. Deferr.	Busin. loans	Loan paym. Deferr.	Busin. loans	Loan paym. Deferr.
Agric., fishing or mining	0%	9%	18%	8%	17%	5%
Manufacturing	43%	24%	18%	9%	8%	5%
Cons. or utilities	22%	12%	25%	11%	15%	1%
Retail or wholesale	16%	7%	15%	4%	15%	3%
Transportation and storage	16%	8%	17%	7%	6%	2%
Accom. and food services	28%	5%	21%	10%	23%	2%
Information and com.	17%	4%	9%	11%	9%	3%
Fin. act. or real estate	21%	20%	6%	6%	16%	6%
Education	40%	13%	19%	8%	18%	7%
Health	16%	11%	10%	0%	8%	0%
Other services	16%	0%	13%	0%	16%	6%
Total	23%	11%	16%	7%	14%	3%

Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.
Note: Multiple answers were allowed.

Table 7: Coping Strategies as perceived by firms

	Exporting Status		Firm Size				Firm Industry		
	Exp.	Non-Exp.	6-9	10-24	25-49	50+	Agri.	Manuf. const.	Services
Contracting bank credit	13%	7%	4%	6%	15%	9%	0%	16%	6%
Rescheduling bank loans	14%	11%	7%	12%	18%	14%	0%	18%	10%

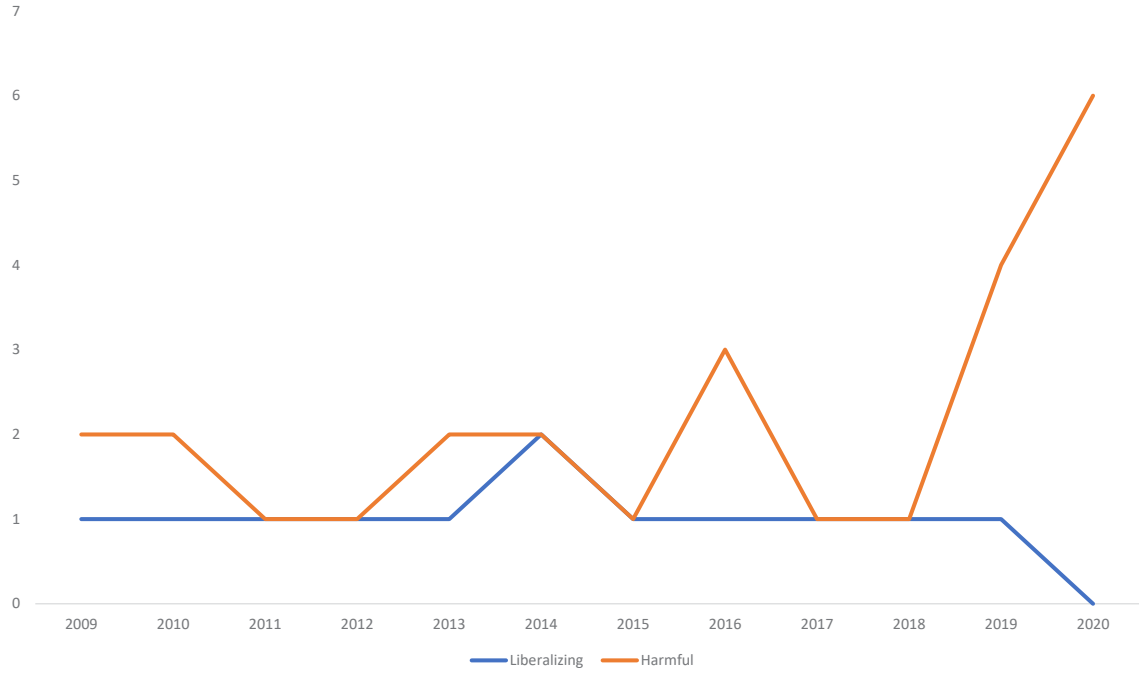
Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Firms Survey.
Note: Figures represent averages over the two waves of the survey.

3.3. Monetary Policy

While fiscal and monetary policies have been mobilized to support the economy, trade policy has been used but to a lesser extent in order to restrict or promote exports and imports. Indeed, Figure 13 shows that the total number of harmful and liberalizing measures imposed by Jordan has changed drastically with the health crisis since the total number of harmful measures has increased from 1 to 7 between 2018 and 2020 (such as the ban on exports of food products or the ban on re-exportation or selling of medical masks). At the same time, the number of liberalizing ones decreased to reach zero compared to previous years. Thus, generally, the Jordanian trade policy has become more protectionist.

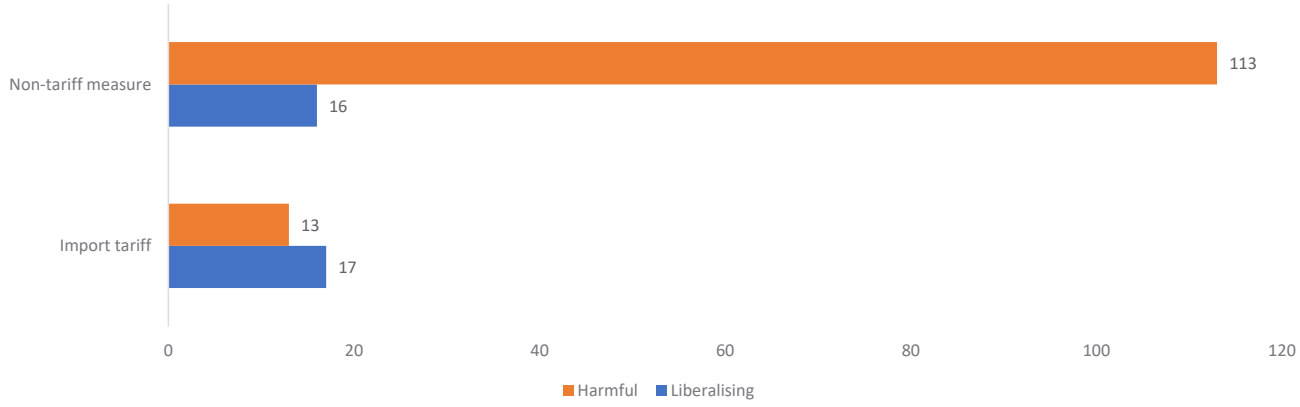
Yet, this was not the case of Jordan only since the latter faced several protectionist measures imposed by its main trade partners. This clearly affected the competitiveness of Jordanian exports and the availability of its imports. Figure 14 shows that Jordan faced 113 harmful non-tariff measures ranging from public procurement to exports

Figure 13: Evolution of harmful and liberalizing measures imposed by Jordan



Source: Global Trade Alert dataset.

Figure 14: Measures faced by Jordan



Source: Global Trade Alert dataset.

bans imposed by its trade partners (and limit the ability of Jordan to satisfy its needed imports) as it is shown in Figure 15. These measures have been chiefly imposed by two main trade partners, namely USA and India (see Table 8).

At the sectoral level, while some sectors witnessed liberalization policies given the health context (such as pharmaceuticals and food products), other sectors experienced protectionist policies such as iron, steel, pharmaceuticals products, wearing and apparel) as it is shown in Table 9.

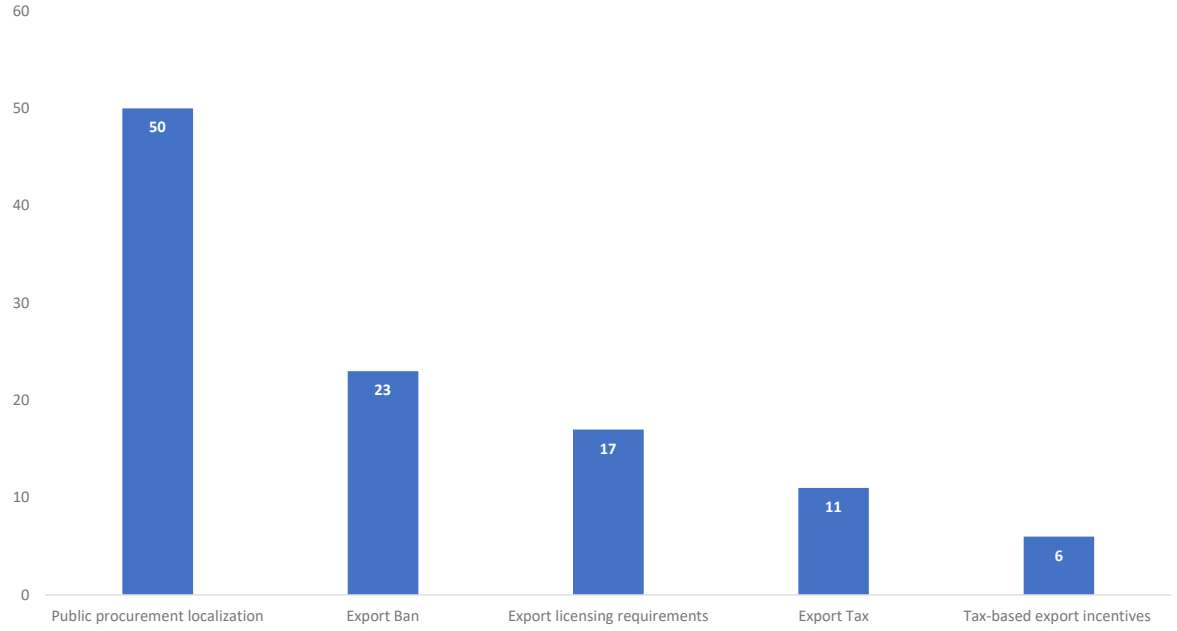
After presenting the policy measures that were implemented at the fiscal, monetary and trade levels, it is important to analyze how the real sector responded to the pandemic and whether the support policies helped the firms curb its negative effects.

Table 8: Main initiating countries

Country	Number of interventions	% of Jordan's exports
United States of America	55	23.7%
India	17	8.4%
United Kingdom	9	0.3%
Argentina	8	0.02%
Turkey	7	0.7%
Russia	7	0.04%

Source: Global Trade Alert dataset.

Figure 15: Non-tariff measures faced by Jordan



Source: Global Trade Alert dataset.

Table 9: Interventions by sector

Liberalizing		Harmful	
Sector	**Number of Interventions**	**Sector**	**Number of Interventions**
Pharmaceutical products	7	Products of iron or steel	48
Food products	5	Pharmaceutical products	26
Other electrical equipment & parts	4	Wearing apparel, except fur apparel	8
Electronic valves & tubes; electronic components; parts	4	Soap, cleaning preparations, perfumes & toilet preparations	7
Other general-purpose machinery & parts	4	Metal wastes or scraps	7

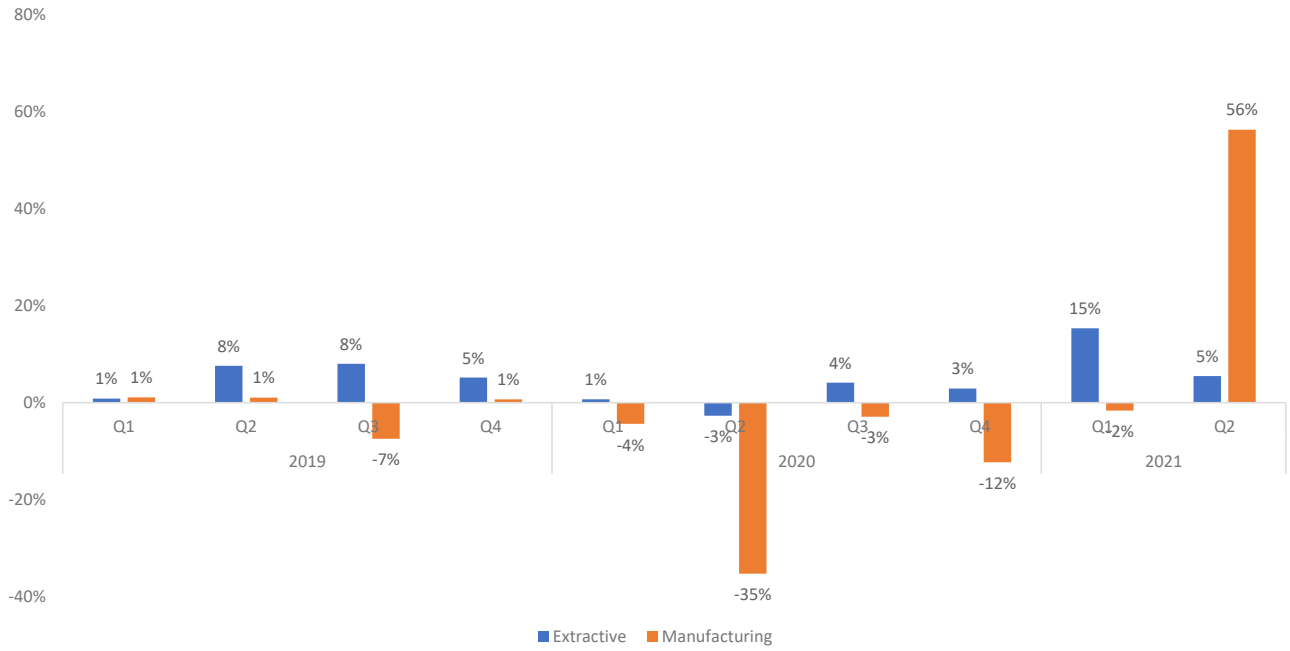
Source: Global Trade Alert dataset.

4. Response of the Real Sector

4.1. Sectoral Impact

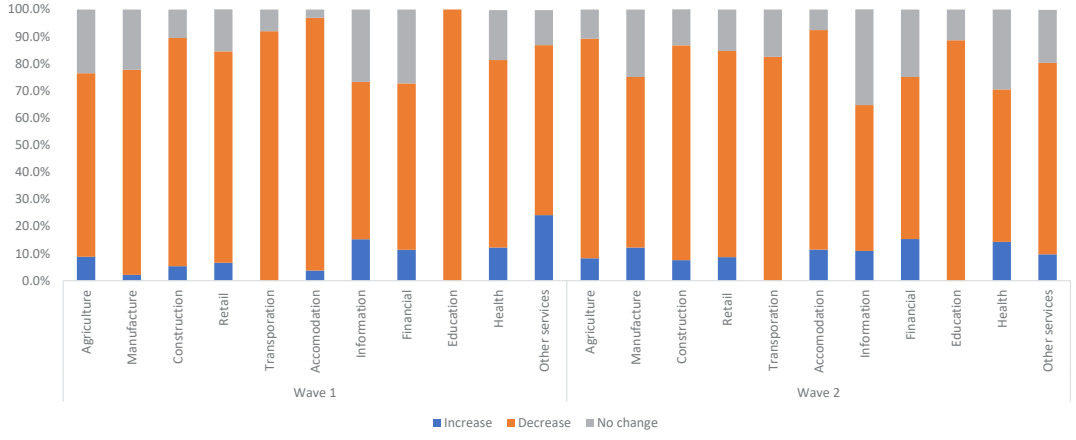
Figure 16 shows the growth rates of both the manufacturing and extractive industries in real term. According to data from the Central Bank of Jordan, the second quarter of the 2020 experienced a severe decline of the real sector that decreased by 35% compared to a slight increase by 1% during the same quarter a year before. This negative trend continued in the third quarter but much lower (-3%). In contrast, the extractive sector, while witnessed a slight decrease in the second quarter of 2020, it increased by 4% in the third quarter. In 2021, the manufacturing sector experienced a significant increase by 56% in the second quarter (y-o-y), chiefly because of the base effect (a very low level of production in the second quarter of 2020). At the microeconomic level, this negative effect was also translated into a significant decrease of firms' revenues that decreased by 76% in the manufacturing sector in the first wave. A more significant decrease has been observed in the first wave for the transportation and accommodation sectors that are tourist related sectors but to slightly lower in the second wave (see Figure 17). Moreover, and in line with Figure 16, the share of firms reporting a decrease in the manufacturing sector decreased to reach 63% in the second wave, while those reporting a growth in their revenues increased from less than 1% to 12.2%.

Figure 16: Growth rates of value added (%)



Source: Authors' elaboration using the Central Bank dataset.
Note: Figures were originally reported in quantities.

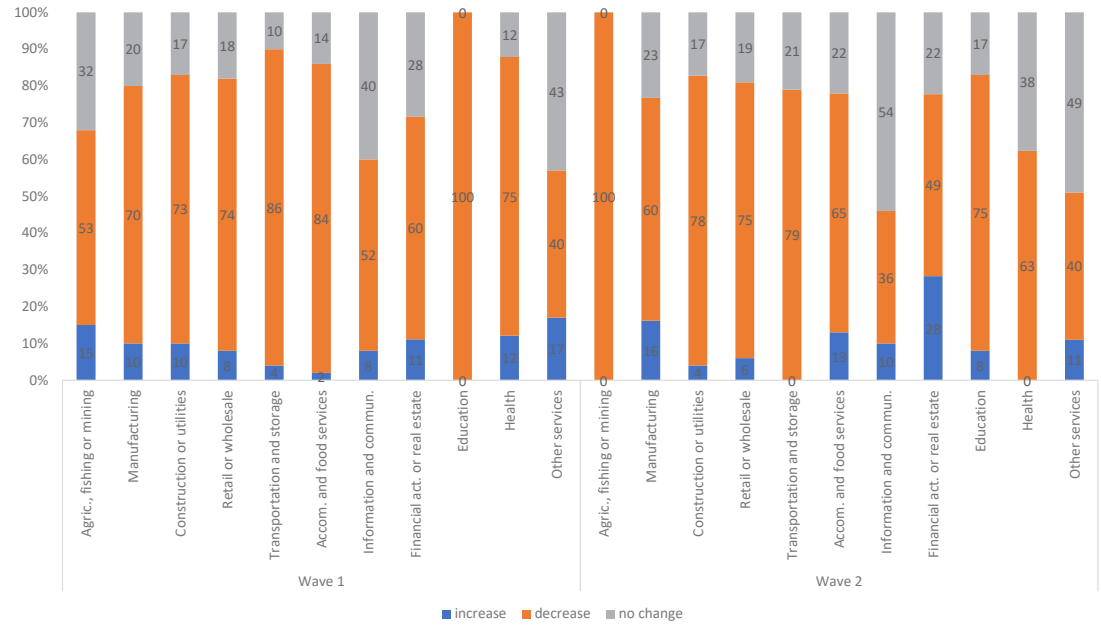
Figure 17: Evolution of revenues (by sector and wave)



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Firms Survey.

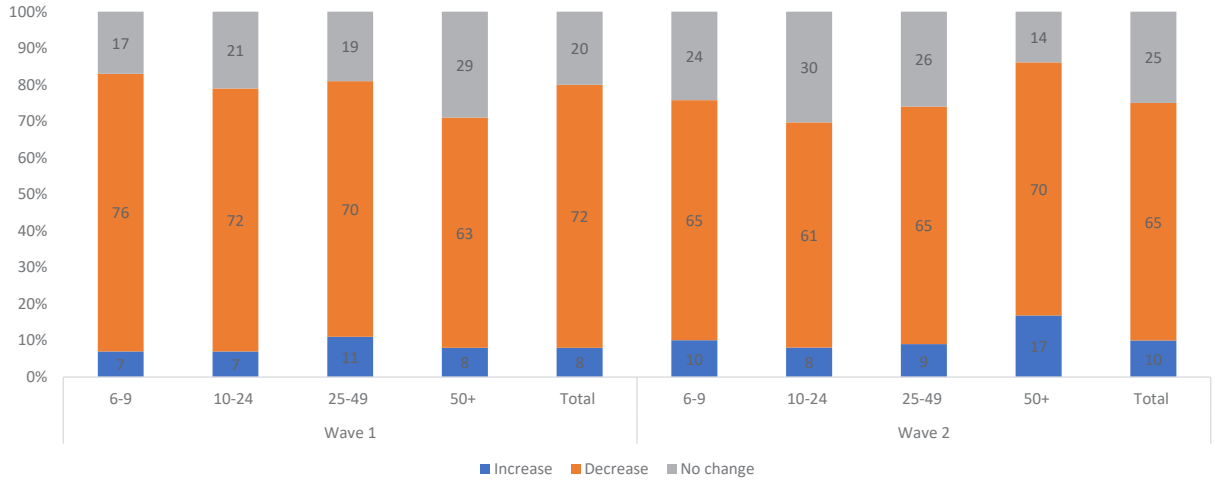
From a demand perspective, in the first wave, the two sectors that experienced the lowest decrease are agriculture (53%), information and communication (52%), and other services (43%). Moreover, 15% firms operating in the agriculture sector experienced an increase in their revenues, compared to 8% in the whole sample. This shows to what extent sectors that are related to basic needs (food and agriculture) or to online education and teleworking (information and communication) was not as negatively affected as other sectors (see Figure 18). Yet, in the second wave, some sectors experienced an improvement especially the manufacturing one, transportation, accommodation and education. In contrast, agriculture and construction slightly deteriorated given that the share of firms reporting a decrease in the demand increased between the two waves. Figure 19 shows also that the share of larger firms experiencing a decrease in demand is lower compared to micro, small and medium ones since 63% responded that their income decreased compared to 76% of micro firms and 72% of medium ones in the first wave. Some improvements have been observed in the second wave given that the share of those who report a decrease in the total demand decreased. This holds mainly for smaller firms (less than 50 workers) since 70% of those of more than 50 workers reported a decrease in their demand up from 63% in wave 1. Moreover, only 14% experienced an increase in their demand down from 29%.

Figure 18: Change in demand for goods & services, compared to 2019, by industry and wave



Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

Figure 19: Change in demand for goods & services, compared to 2019, by firm size and wave



Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

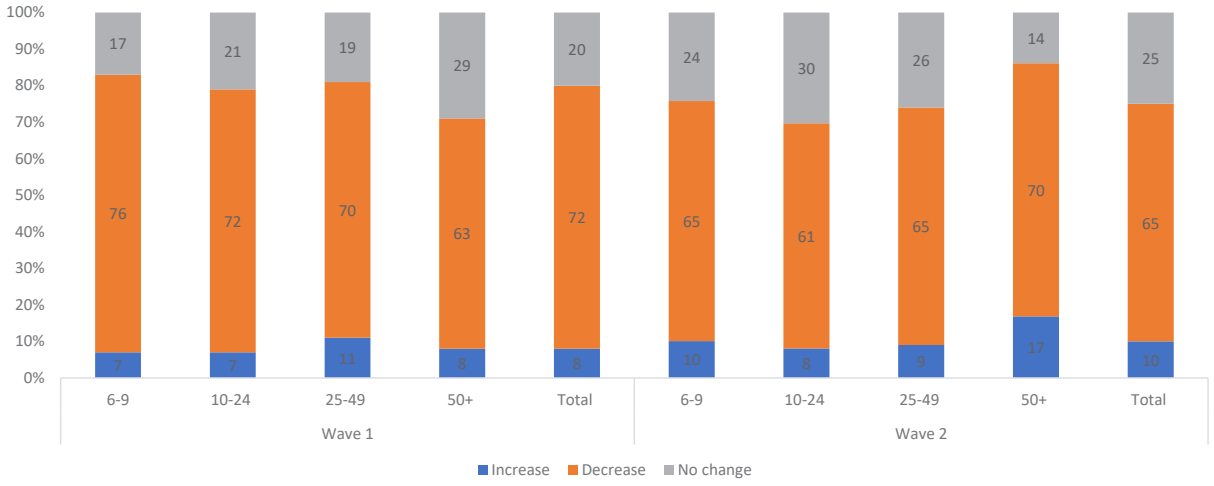
4.2. Trade and Firm Dynamics

Before showing how trade was affected by the shock, it is important to see what the main sectors are where Jordan has a comparative advantage. Figure 20 presents the revealed comparative advantage (RCA) index that compares the share of one product in a country's total exports to the share of the same product in world exports. A value of less than unity implies that the country has a revealed comparative disadvantage in the product. Similarly, if the index exceeds unity, the country is said to have a revealed comparative advantage in the product. This index has been calculated at the HS2 level. Indeed, the sectors having the highest comparative advantage are fertilizers (31.4), salt and sulphur (25.7), live animals (15.7), apparel (15.4), edible vegetables (10.7), some chemical products (8.7).

Against this background, it is important to analyze how these main sectors responded to the crisis. Figure 21 shows the growth rates of the top five exported and imported product by Jordan at the monthly level in 2019 and 2020. At the export level, the second quarter of 2020 witnessed a significant decrease of apparel and clothing by 28% in April 2020 compared to -10% the same month a year before. Yet, this trend continued in May and June 2020 compared to positive growth rates in 2019. For pharmaceuticals, their exports declined in April but turned to be positive in the following months (except September 2020). Moreover, fertilizers, despite having the highest RCA, experienced a negative growth rate in some months (mainly February, March and August 2020). As per imports, the quarter of the pandemic (between April and May) was characterized by a significant decrease in the imports of durable goods (machinery (panel a), vehicles (panel b), electrics (panel c) and fuels (panels d and e)). However, such trend was quickly reversed for vehicles starting June 2020 onward.

At the country level, the structure of Jordan's partners did not significantly change between 2019 and 2020. Indeed, in terms of Jordanian imports' main suppliers, China, USA, and Germany's shares in Jordan's imports remained constant in 2019 and 2020 (see Figure 22). Yet, Saudi Arabia and Turkey's ones decreased to reach 12% and 3% down from 16% and 5% respectively. Among the potential reasons that explain such a decrease pertains to the restrictions imposed by Jordan in the wake of the pandemic. Moreover, the decrease in Turkish imports is due to the cancellation of the free trade agreement with Turkey. At the exports level, Jordan increased its share going to India from 8% in 2019 to 11% in 2020, while that going to USA declined from 24% to 22% as it is shown in Figure 23.

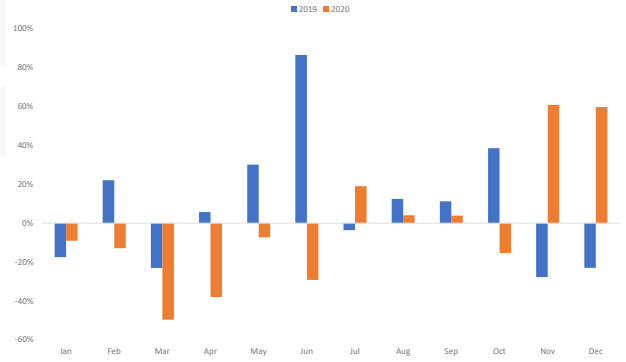
Figure 20: Revealed comparative index of the top 20 products (HS2)



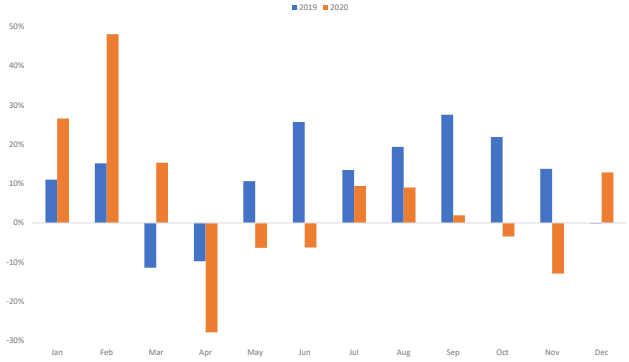
Sources: Authors own elaboration using the International Trade Center dataset.
Note: Figures represent averages over the period 2015-2020.
The revealed comparative index compares the share of one product in a country's total exports to the share of the same product in world exports. We use the RCA index defined by Balassa (1965), in which the RCA of country i for product j is measured by the product's share in the country's exports in relation to its share in world trade:
$RCA_{ij}=(X_{ij}X_{it})/(X_{wj}X_{wt})$ where X_ij and X_wj are the values of country i's exports of product j and world exports of product j, and where Xit and X_wt refer to the country's total exports and world total exports. A value of less than unity implies that the country has a revealed comparative disadvantage in the product. Similarly, if the index exceeds unity, the country is said to have a revealed comparative advantage in the product.

Figure 21: Growth rates of top five imported (left) and exported (right) products by Jordan

(a) Nuclear reactors, boilers, machinery and mechanical appliances

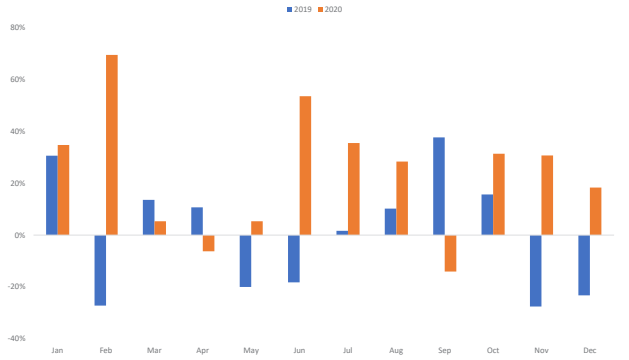


(a) Articles of apparel and clothing accessories

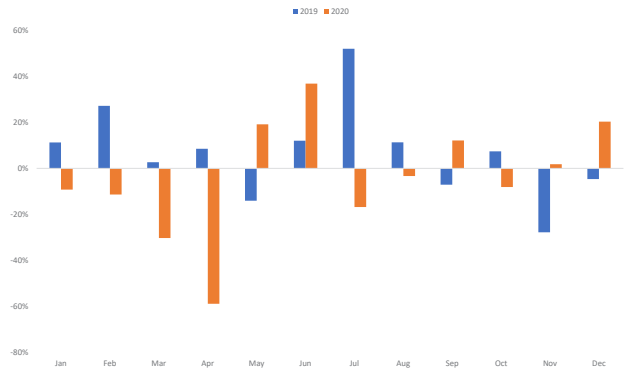


(b) Vehicles other than railway or tramway rolling-stock

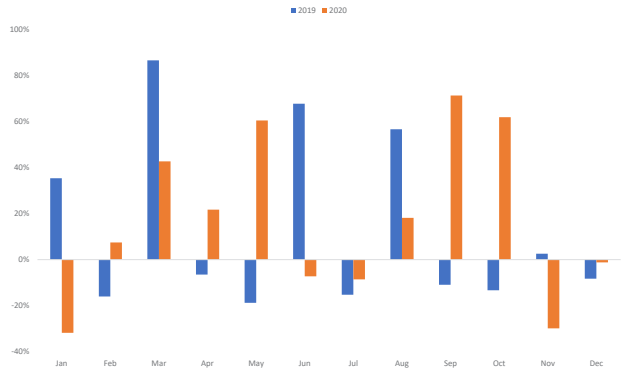
(b) Pharmaceutical products



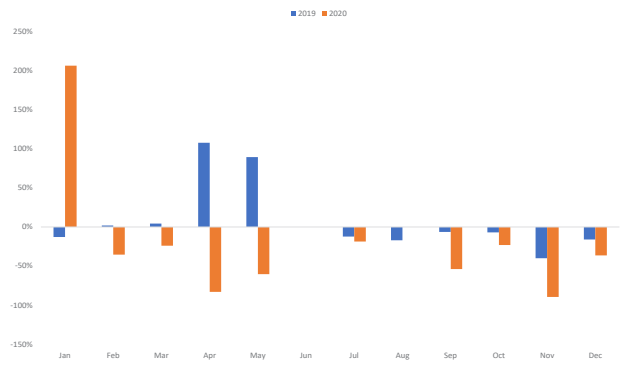
(c)Electrical machinery and equipment



(c) Potassium crude



(d) Petroleum crude



(d) Mineral or chemical fertilizers

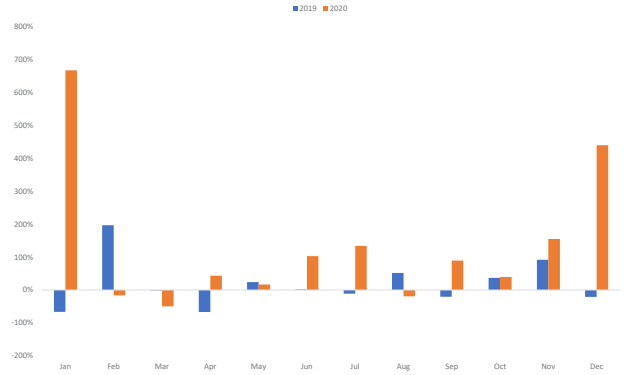
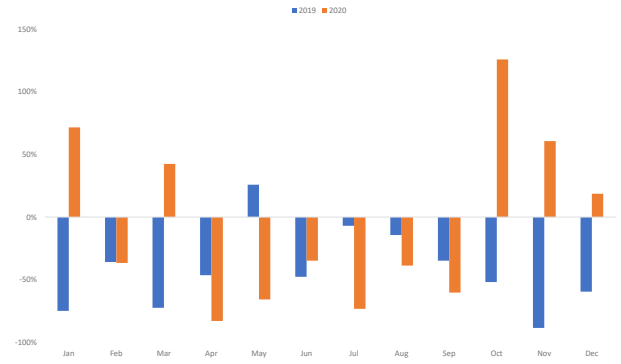
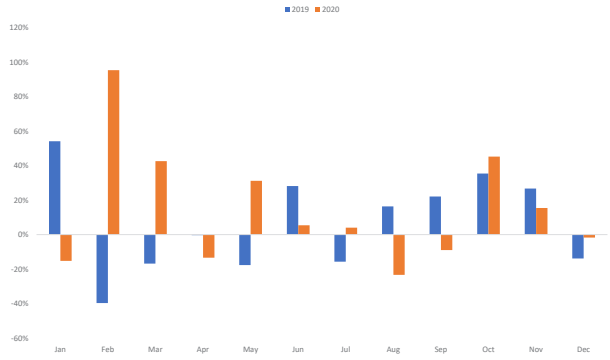


Figure 21: Continued

(e) Natural gas liquefied

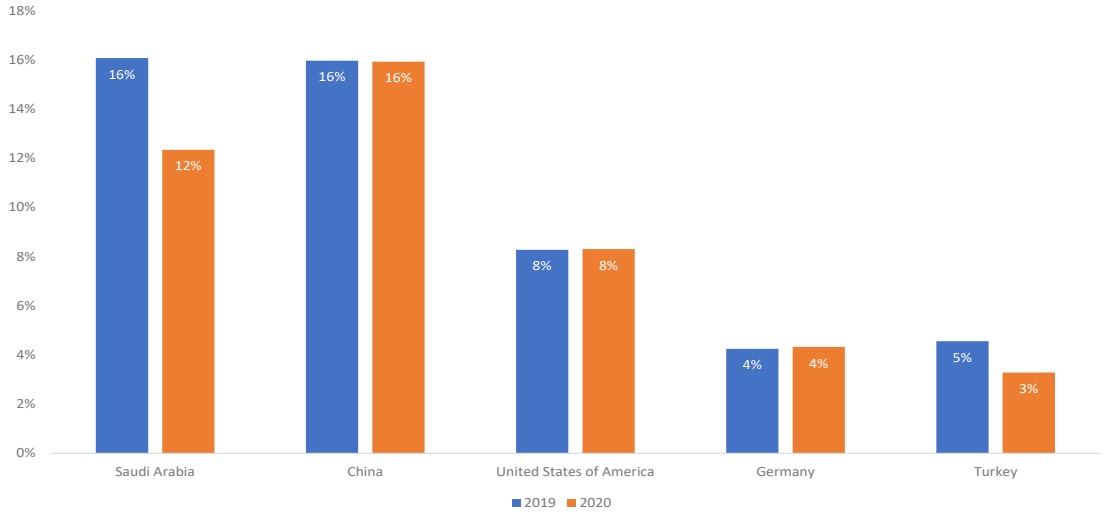


(e) Phosphates, crude



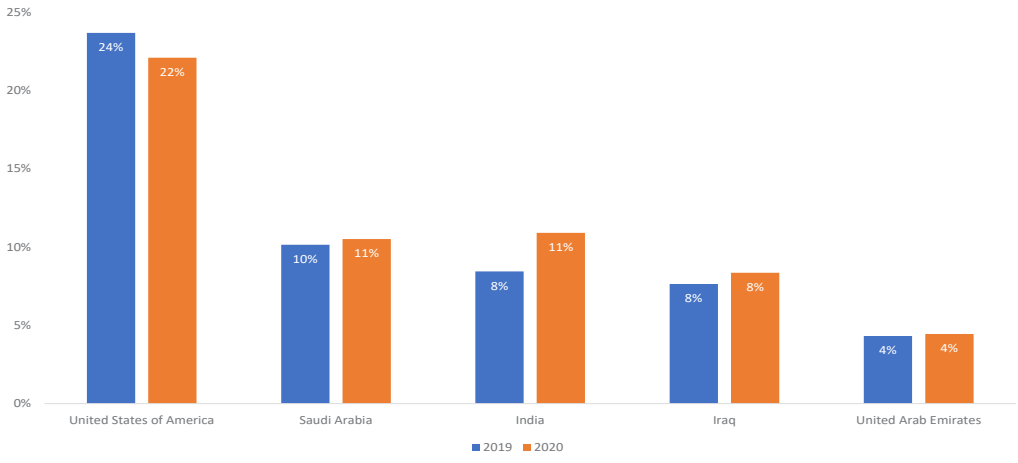
Source: Authors' elaboration using the Central Bank dataset.
Note: All figures have been deflated using the Consumer Price Index of Jordan.

Figure 22: Jordanian imports' main suppliers during 2019-2020 (% of total imports)



Source: Constructed by the authors using data from Trade Map, International Trade Center.

Figure 23: Main destinations for Jordanian exports during 2019-2020 (% of total exports)

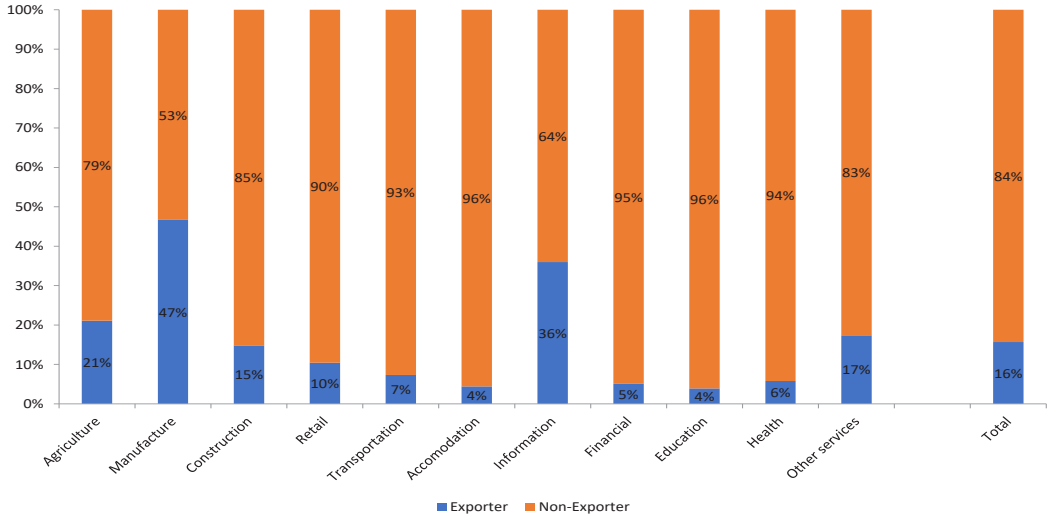


Source: Constructed by the authors using data from Trade Map, International Trade Center.

In order to see how firms responded to the trade shock, Figure 24 shows the share of exporting and non-exporting firms by sector (average of the two waves). Whereas 47% of the manufacturing firms export, this share is slightly lower for those of the information and communication one (36%) and for the agriculture one (21%). On average, 66% of exporting firms reported that their revenues decreased. This share is higher for non-exporting ones (76%).

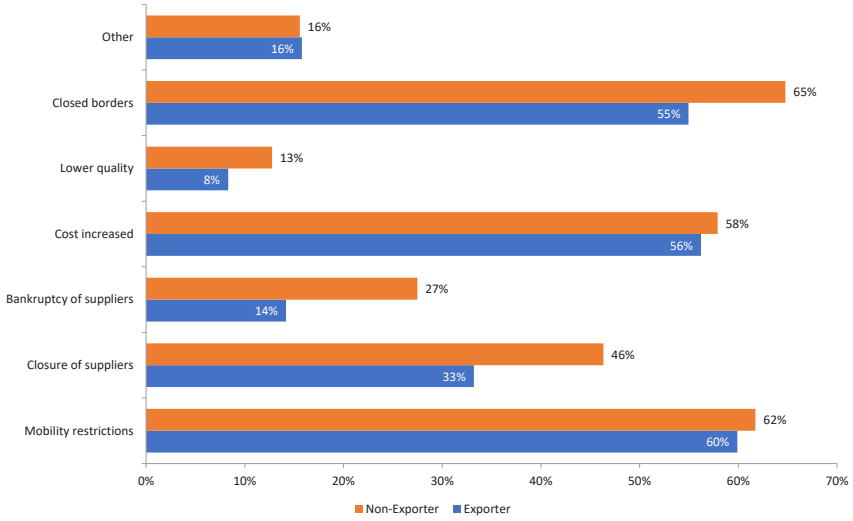
Jordan, like many other MENA countries, relies heavily on imported inputs. This is why, when examining the trade response to the pandemic, it is important to analyze the reasons behind the disruption in inputs. Figure 25 presents averages of the two waves and shows that 55% of exporting firms responded that closed borders explain disrupted inputs. This figure is higher for non-exporters (65%). Clearly, the disruption in inputs makes the latter less available and thus their cost increases. This is why 56% and 58% of exporters and non-exporters respectively argued that increase cost is the main reasons behind the input disruptions. Finally, mobility restrictions also affected the firms due to curfews and social distancing (60% of exporters and 62% of non-exporters). Some firms also faced, with the limited supply of imported inputs, inputs of lower quality that were made available. Yet, this represented rather a challenge to these firms since 13% of non-exporters and 8% of exporters reported that inputs of a lower

Figure 24: Exporters and non-exporters (by sector)



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Firms Survey.
Note: Figures represent averages over the two waves of the survey.

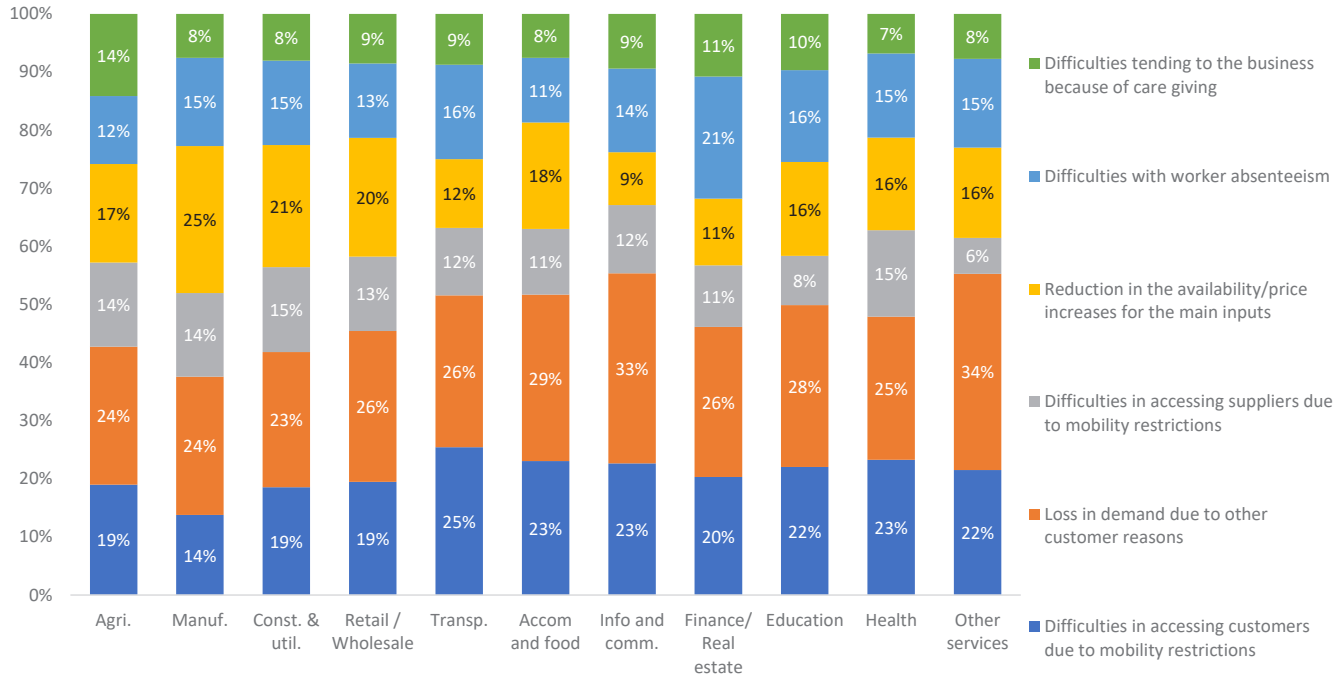
Figure 25: Main reason for disruption in inputs



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Firms Survey.
Note: Figures represent averages over the two waves of the survey.

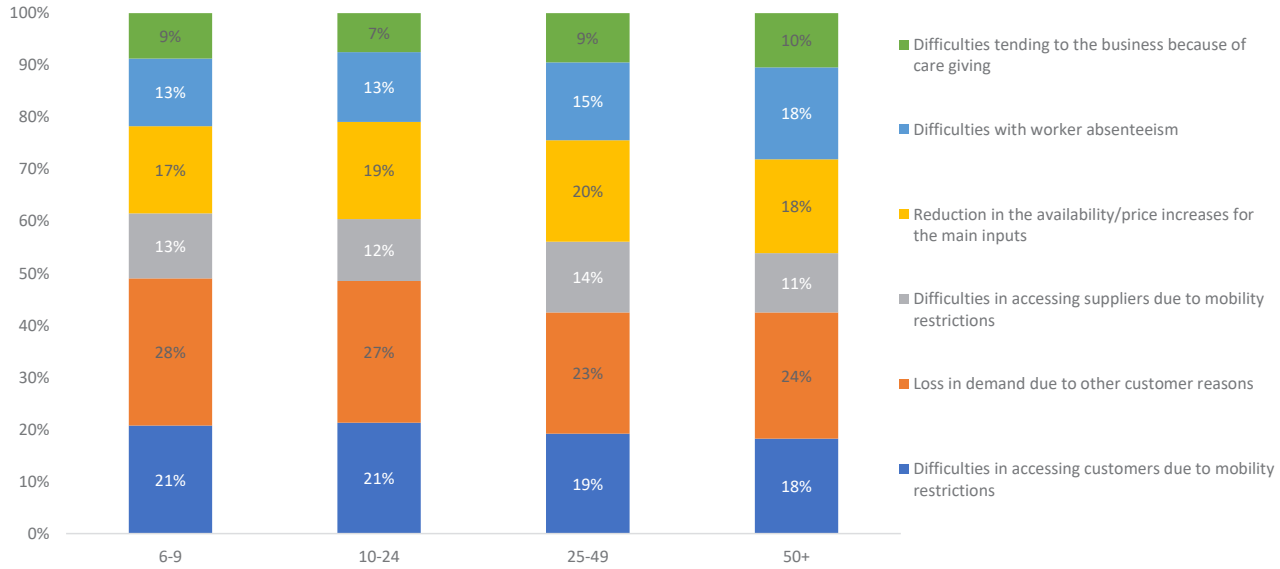
quality are a reason of disruption. Figures 26-28 confirm the previous findings given that the most important challenges faced by firms are either the decrease in demand, inputs that became more expensive or accessing customers due to mobility restrictions, or workers absenteeism for both exporters and non-exporters and for forms of different sizes.

Figure 26: Types of COVID-19 challenges faced according to the firm's industry



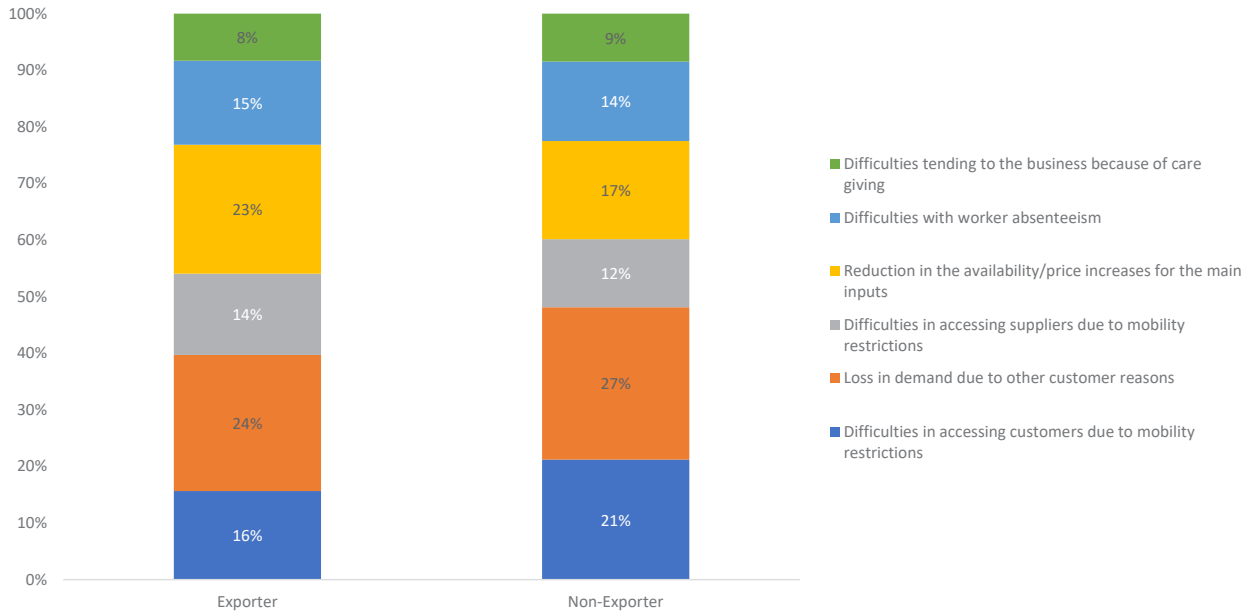
Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Firms Survey.
Note: (i) Multiple answers were allowed. (ii) Figures represent averages over the two waves of the survey.

Figure 27: Types of COVID-19 challenges faced by firm size



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Firms Survey.
Note: (i) Multiple answers were allowed. (ii) Figures represent averages over the two waves of the survey.

Figure 28: Types of COVID-19 challenges faced according to the firm's exporting status



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Firms Survey.
Note: (i) Multiple answers were allowed. (ii) Figures represent averages over the two waves of the survey.

The previous sections examine the economic effects of the pandemic and how firms benefited from different support programs. The next section investigates the social impact of the pandemic at both the labor market and food security levels.

5. The Social Impact of the Pandemic

Poverty and inequality in Jordan, as the rest of the Arab States, is expected to be strongly affected by the COVID-19 crisis (Abu Ismail, 2020). According to the National Social Protection Strategy of Jordan, 2019-2025, 15.7% live below the poverty, with 58% of poor men participating in labor market. Thus, more individuals are expected to fall into poverty as a result of the economic slowdown, job loss and income decline. Moreover, the disproportionate impact of the pandemic on the different groups based on their characteristics, as sex, nationality, income group, geographical location is expected to increase income inequality, inequality in outcomes and inequality in opportunities. Thus, the present section discusses the social impacts of the pandemic on individuals and households. More precisely, the first subsection presents the change in labor demand and labor supply as a result of the outbreak of the pandemic. And the second sub-section explores the vulnerability of individuals to food insecurity because of the mobility restrictions and income loss limiting food availability and food access.

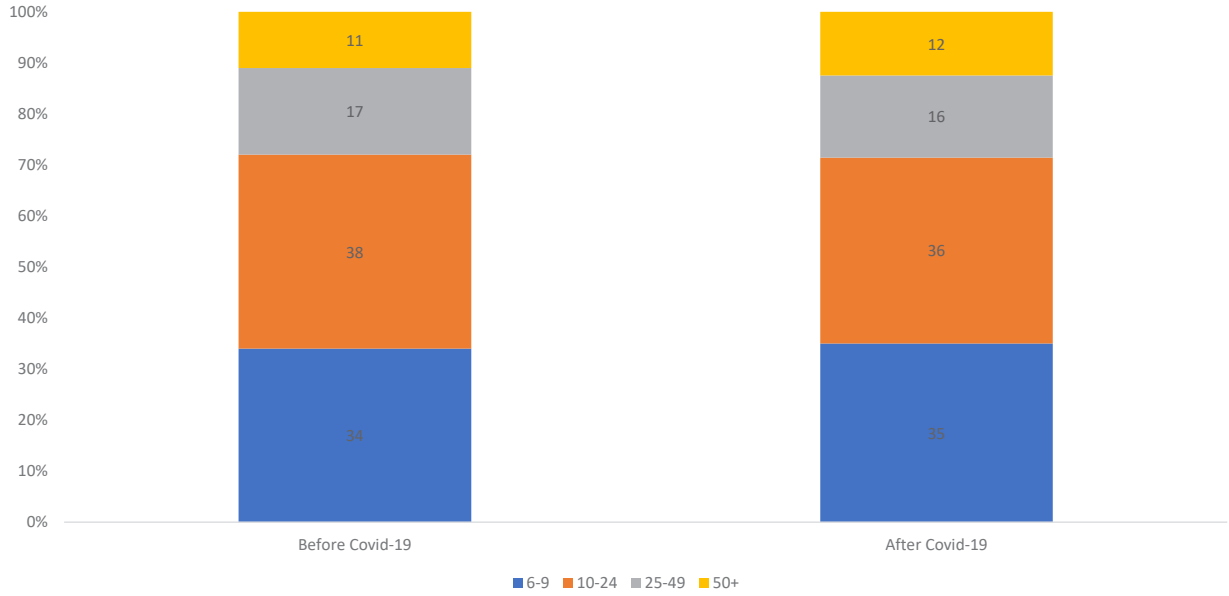
5.1. Labor Market Developments

Both labor supply and labor demand had been negatively affected by the Covid-19 crisis, resulting in job loss and reduction of working hours and income. This negative impact differs across economic activities, firms' size, employment contracts' types, sex and nationalities of employees.

5.1.1. Labor Demand

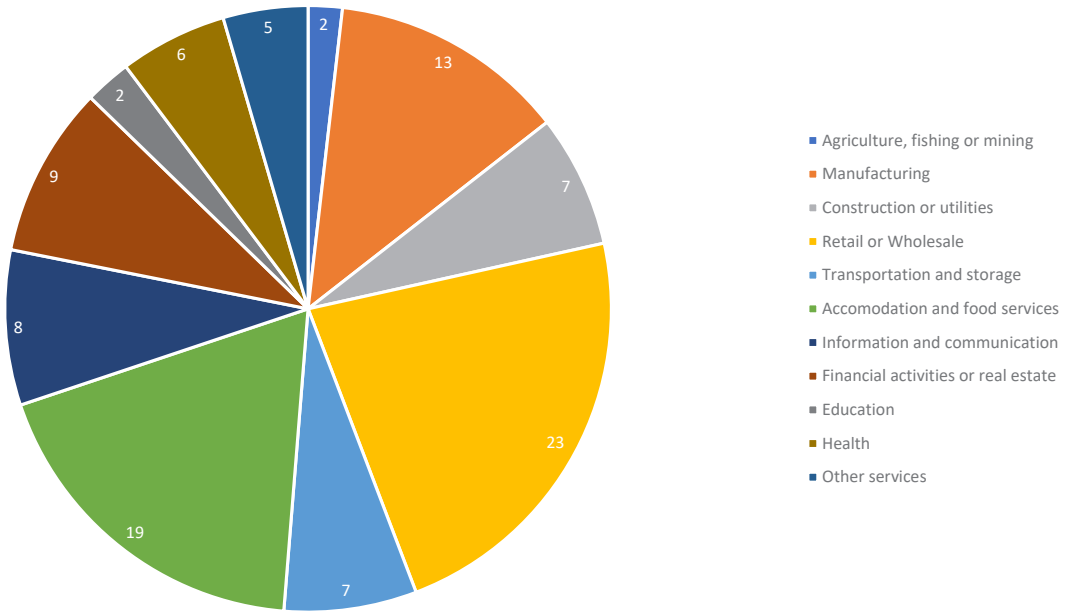
In the Jordanian labor market, most of the firms are micro and small enterprises with less than 24 employees. This structure does not change with the pandemic with more than 50% of the firms are micro and small firms (Figure 29). Firms are mainly concentrated in the retail or wholesale sector (23%) and food and accommodation sector (19%) (Figure 30). These sectors had been hard-hit by the pandemic and the precaution measures (ILO, 2020).

Figure 29: Distribution of firms by size before and after the pandemic



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Firms Survey.

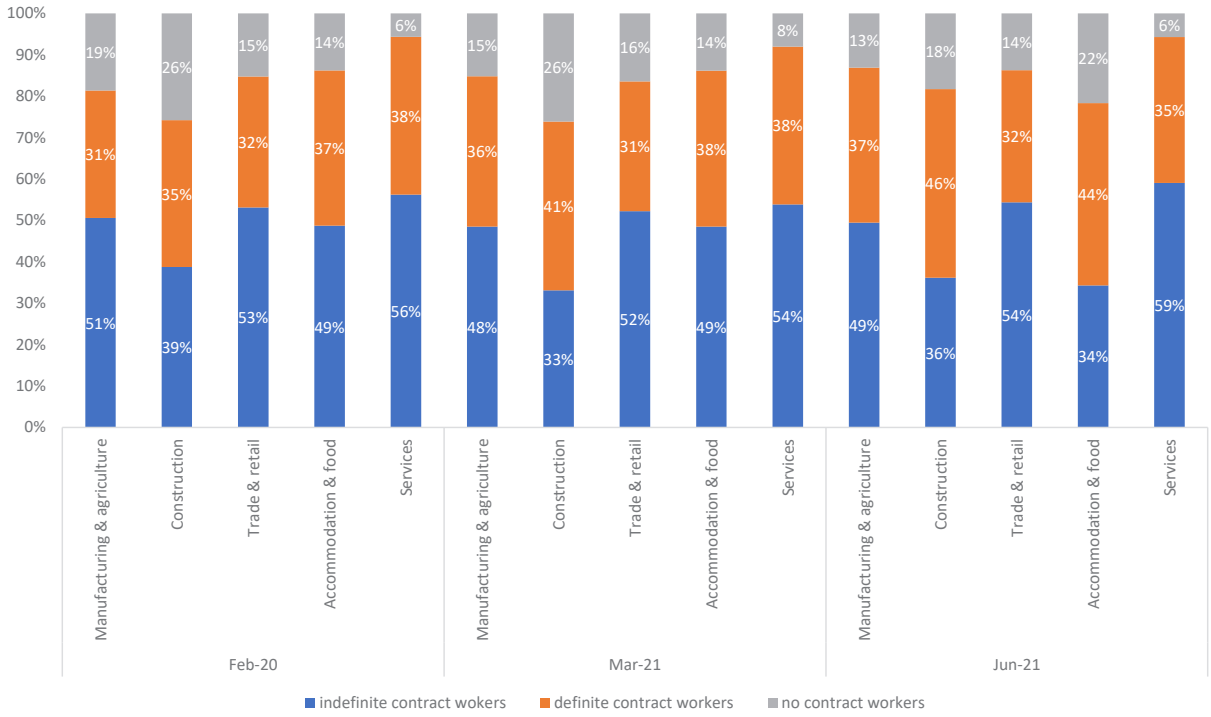
Figure 30: Distribution of firms by economic activities



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Firms Survey.

The distribution of the workers based on their contract type differ according to the economic activity of the firm and its size. Before the outbreak of the pandemic, 26% of the workers in the construction sector have no contracts, followed by the manufacturing and agriculture sectors with 19% of the workers are informally employed. In the services sector, more than 50% of the workers have indefinite contracts, with no change after the spread of the new coronavirus. In March, 2021, one year after the beginning of the pandemic, the share of the informally employed in the construction sector remains the same, then it decreases to become 18% in June 2021. While for the manufacturing and the agriculture sector, the share of informally employed decreased to 13% in June 2021, with an increase in the share of workers with definite contract to 37% compared to 31% in February 2020 (Figure 31).

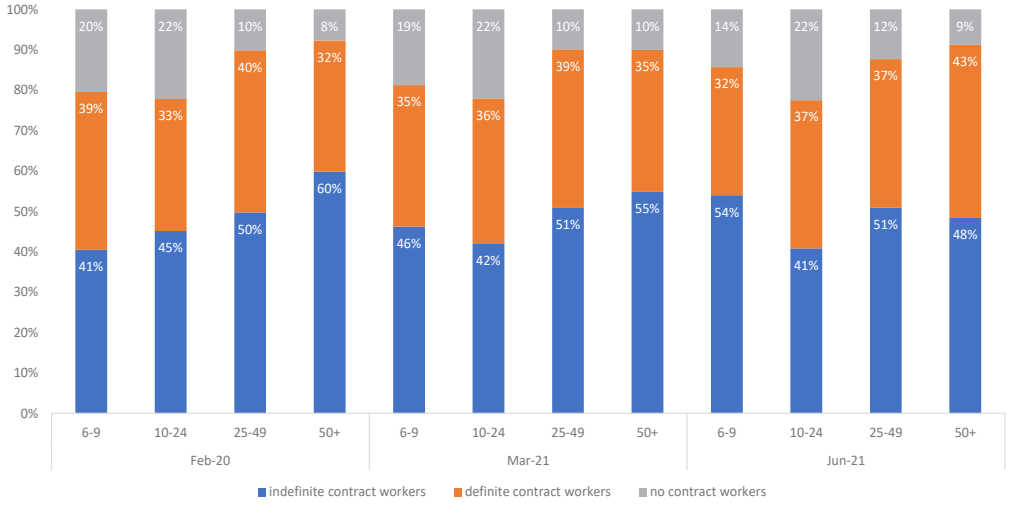
Figure 31: Distribution of workers by economic activity and contract type



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Firms Survey.

For the firm size, around 22% of workers in small firms are employed without contract; this share did not change with the pandemic. For large firms with more than 50 workers, 60% of the workers have indefinite contracts. However, this share decreased to 55% in March 2021 and to 48% in June 2021 (Figure 32). Though the share of informal employment declined in some firms and some sectors, informal employment remains a significant characteristic of the Jordanian labor market. Working without contracts or social insurance reduce the workers' resilience to any economic or health chock as the Covid-19 one. Therefore, workers in micro firms and in the construction, manufacturing, and agriculture sectors, consist one of the main vulnerable groups to the economic drawback of the pandemic.

Figure 32: Distribution of workers by firm size and contract type



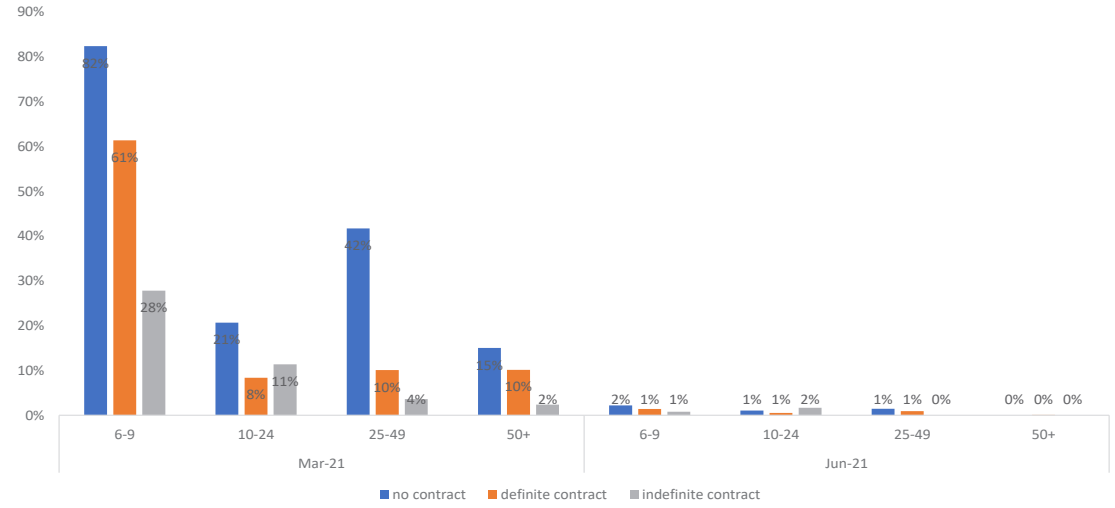
Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Firms Survey.

The lockdown, precaution measures, and the economic slowdown had affected the labor demand. Different coping strategies had been applied to reduce costs, including workers layoffs and/or salary and hours adjustments. The impact is likely to affect employees disproportionally based on their contracts' types, economic activities and firms' sizes.

In March 2021, many workers were fired mainly those working in micro and medium firms without contracts. Among workers with no contracts, 82% of those in micro firms and 42% of those working in micro enterprises were fired. Firing workers is less used by firms in June 2021. Large firms are less likely to use this strategy, specifically in June 2021 (Figure 33). This means that by June 2021, months after the spread of the virus, firms, especially the large ones, are able to adapt to the new environment with other strategies than firing workers.

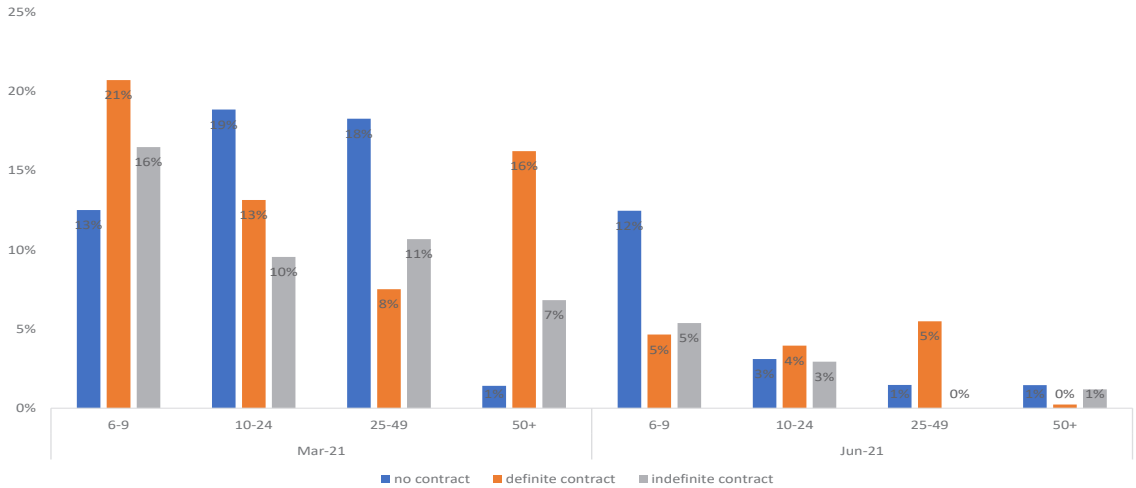
Other strategies include wage reduction. In March 2021, all firms use this strategy whatever the contract type of the worker is. However, in June 2021, mainly micro firms continue applying this strategy especially with workers who have no contract. While large firms are more resilient and able to adapt to the new economic situation with a reduction in wage of only 1% of their workers with no contract or indefinite workers (Figure 34).

Figure 33: The percentages of workers who were fired according to their contract and firm size



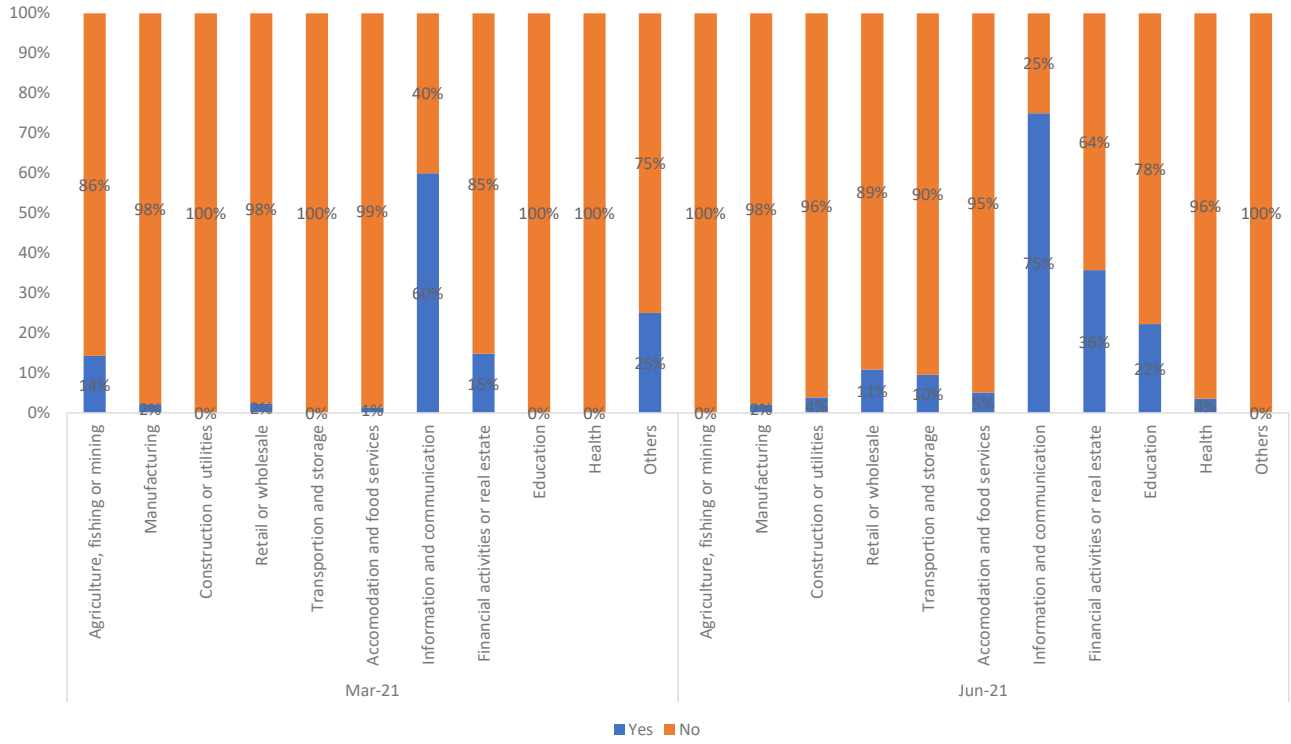
Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Firms Survey.

Figure 34: The percentages of workers whose wage decreased according to their contract and firm size



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Firms Survey.

Figure 35: Percentages of firms whose workers ever worked remotely since February 2020



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Firms Survey.

With the lockdown and precaution measures, working remotely from home became the new working environment for many employees. However, the ability to work from home depend on the telework ability of the job that may depend on the economic activity or on other factors as access to technology. As discussed by AlAzzawi (2021), the percentage of teleworkable jobs is around 29% in Jordan. Telework ability is higher in the education sector with a teleworkability index[4] of 80%. While in sectors as agriculture and construction, teleworkability is around 5%. Figure 35 shows that for more than 80% of firms, it was not possible for workers to work from home. This is observed in all economic activities except the information and communication sector. For only 40% and 25% of the firms in the information and communication sector, workers were not able to work from home, in March 2021 and June 2021, respectively.

Many challenges face firms for the ability to work from home. The main challenge, cited by almost all firms, is the difficulty to monitor work from home. Other barriers include access to computer, internet, and poor internet quality. For some economic activities as agriculture, manufacturing, retail or wholesale and real state, working from home was not possible because of the required materials. Finally, care responsibilities consist an important challenge to work from home in almost all economic activities (Table 10).

[4] The teleworkability index is developed using International micro-level data on occupational characteristics of different jobs in the MENA region. The main objective of the index was to assess the possibility that a job is executed remotely regardless whether the individuals have access to internet or not. For more details about the index see AlAzzawi (2021)

Table 10: Challenges faced by firms for working from home, by economic activity (%)

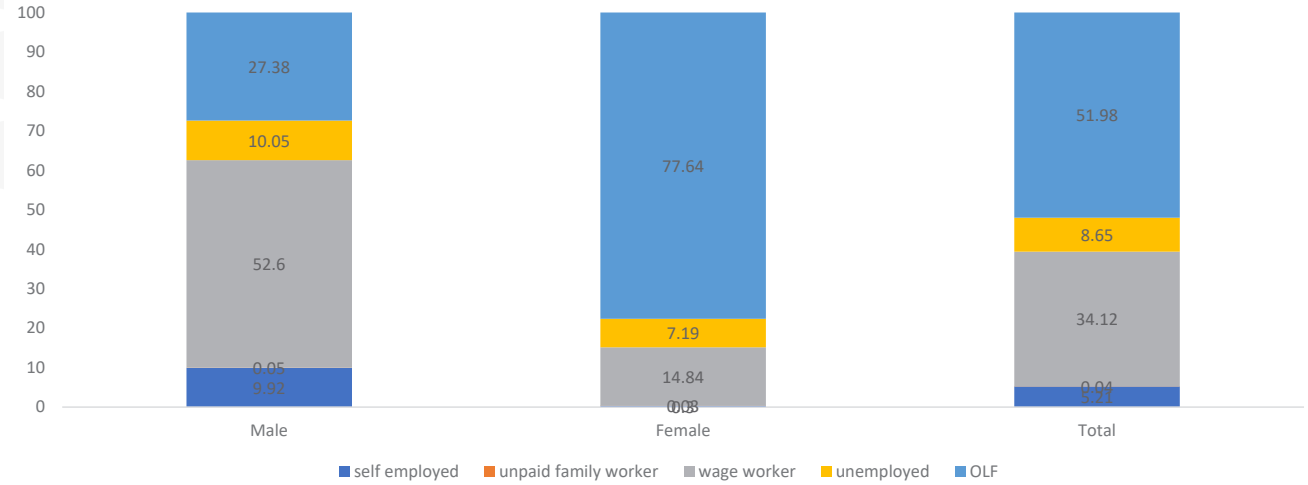
	No computer	No required material	No internet access	Poor internet quality	No work-space at home	Childcare	Difficulty to monitor worker per-formance
Mar-21							
Agriculture, fishing or mining	50	50	50	50	0	50	100
Manufacturing	8	17	17	17	8	4	75
Construction or utilities	0	0	9	18	9	27	64
Retail or wholesale	8	5	3	11	16	8	70
Transportation and storage	25	0	0	31	13	25	44
Accommodation and food services	11	11	11	21	16	21	47
Information and commu-nication	11	0	11	19	5	8	81
Financial activities or real estate	20	16	24	8	16	20	88
Education	20	20	20	40	20	20	60
Health	0	0	0	0	0	0	100
Others	0	0	0	10	0	0	100
Jun-21							
Agriculture, fishing or mining	0	0	0	33	0	0	0
Manufacturing	20	10	0	10	0	10	30
Construction or utilities	6	0	6	13	6	31	44
Retail or wholesale	25	16	6	22	9	19	25
Transportation and storage	0	8	15	38	8	8	31
Accommodation and food services	0	5	0	18	0	18	18
Information and commu-nication	0	0	0	16	3	8	34
Financial activities or real estate	17	13	8	25	13	33	29
Education	17	17	17	83	17	33	50
Health	0	0	0	33	0	17	0
Others	0	8	0	17	0	0	42

Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Firms Survey.

5.1.2. Labor Supply

On the supply side, before the spread of the pandemic, around 34% of individuals were wage workers, 5.2% were self-employed and less than 1% were unpaid family workers (Figure 36). Among wage workers, 41% are informally employed with no social insurance. Figure 36 shows low female labor force participation with 78% of females out of labor force and only 14.84% of females are wage workers. On the contrary, only 27.26% of males are out of labor force and 52.6% are wage workers. Wage workers are mainly concentrated in the retail or wholesale sector with 15.56%, followed by the education sector with 12.78%. Employed females are mainly concentrated in the education sector (36.97% of employed female) and health sector (20.29% of female employed). While employed males are concentrated in the retail or wholesale sector (17.24% of male wage workers), followed by the construction sector (10.39% of male wage workers) (Figure 37).

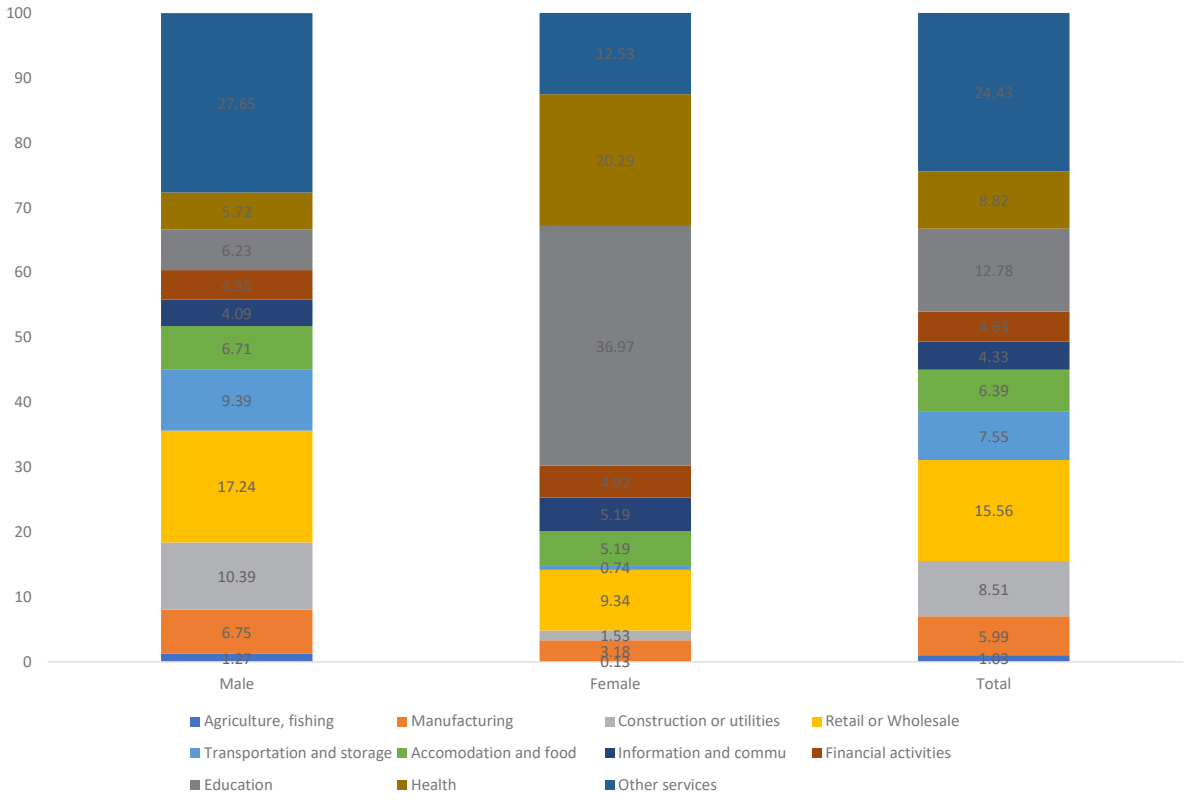
Figure 36: Distribution of individuals by employment status according to sex



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

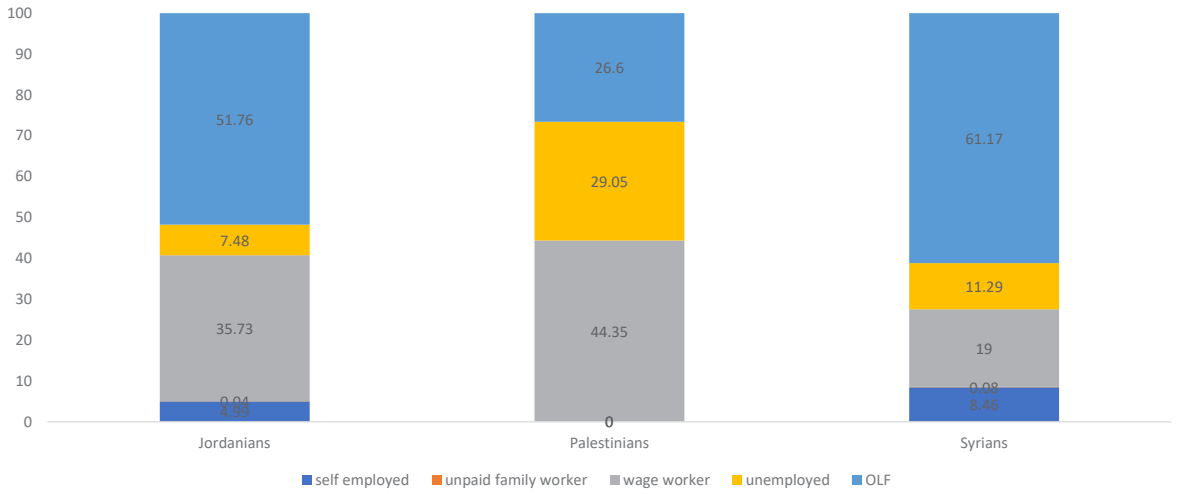
Around 52% of Jordanians are out of labor force; this share is 27% and 61% among Palestinians and Syrians, respectively. Employed Jordanians and Palestinians are mainly wage workers with 36% and 44%, respectively, compared to only 19% of Syrians (Figure 38). Employed adults aged between 25 and 49 years old are mainly wage workers. Young individuals in the age group 18-19 are mainly out of labor force with 72%. Similarly, 85% of individuals aged between 60 and 65 are out of labor force (Figure 39).

Figure 37: Distribution of wage workers by economic activity and by sex



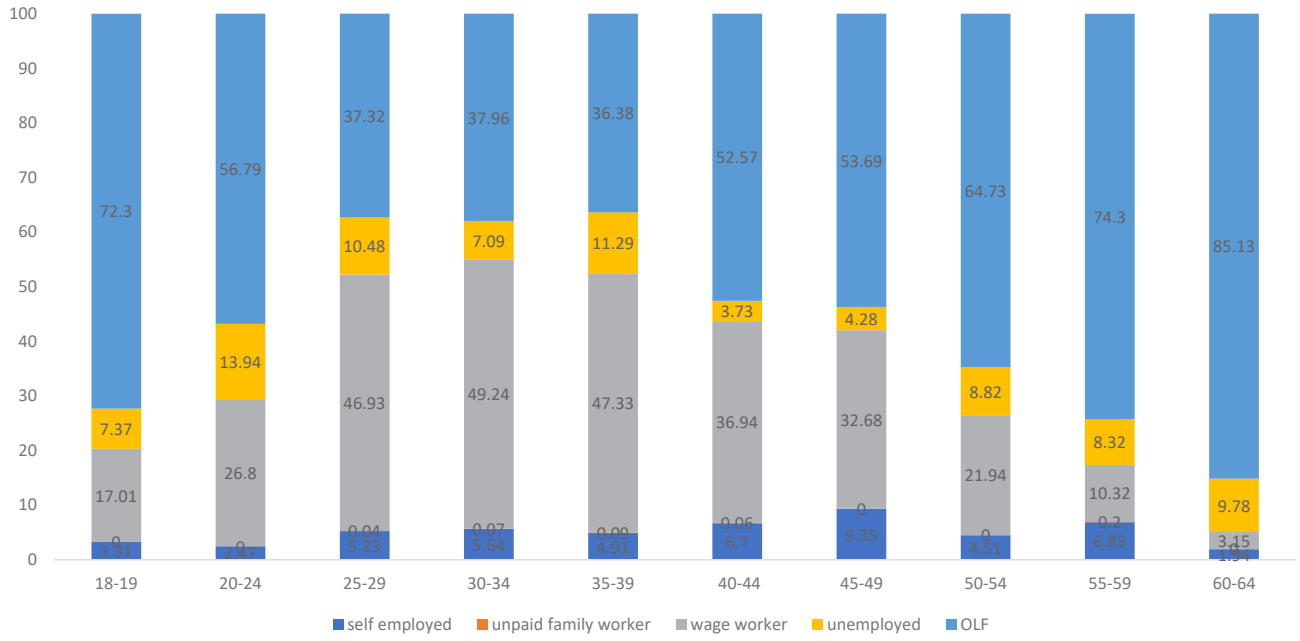
Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

Figure 38: Distribution of individuals by employment status and nationality



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

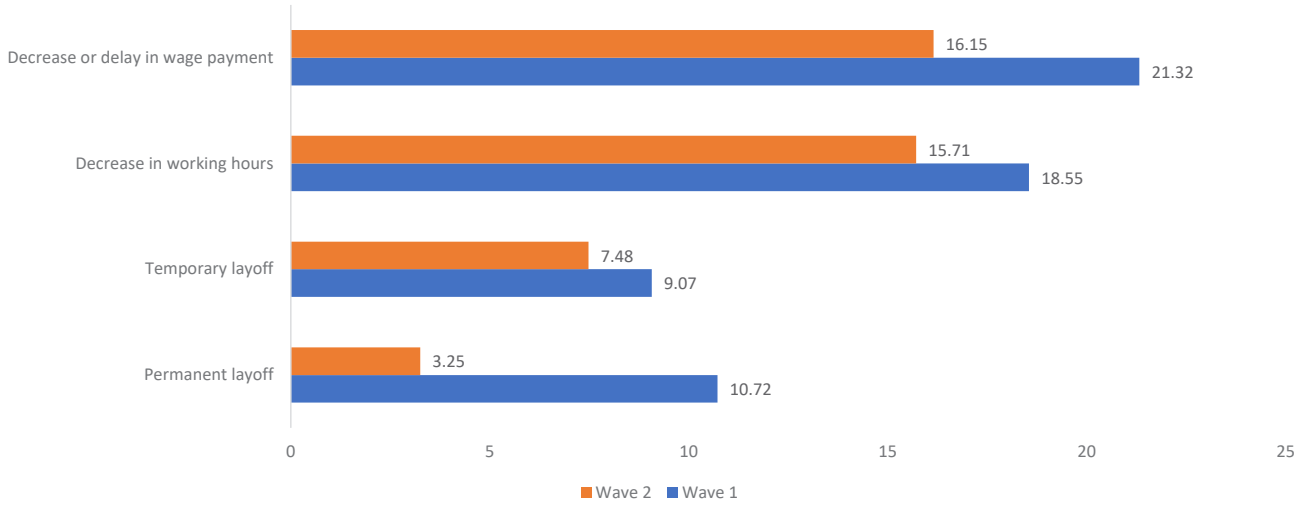
Figure 39: Distribution of individuals by employment status and age groups



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

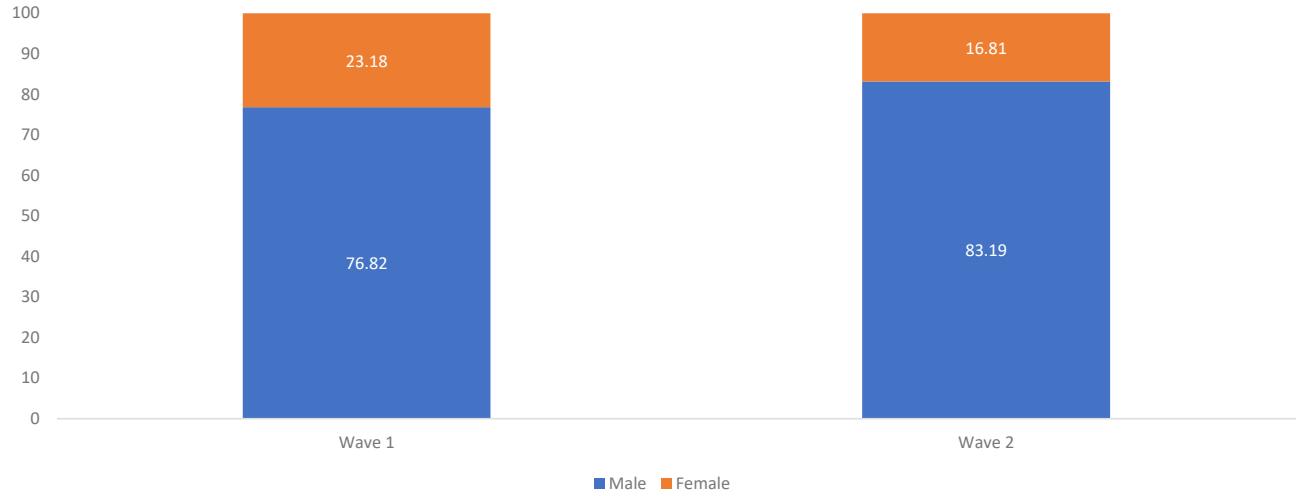
The economic drawback of the crisis, the decline in revenues and the difficulties faced by the businesses were translated into the layoff of employees, permanently or temporary. Among the wage workers employed in February 2021, around 11% and 9% experience permanent and temporarily layoff, In March 2021 (wave 1), respectively. In June 2021, after more than one year of the spread of the virus, the permanent suspension is less used as a coping strategy by the firms. Only 3% of those who were wage workers in February 2020, have been permanently suspended in the past 60 days of the survey because of the Covid-19 restrictions (Figure 40). In both waves, it was found that most of individuals experiencing permanent layoff are men and young individuals in the age group (25-29) (Figures 41-42). Similarly, individuals living in urban areas are more likely to experience layoff in both waves (Figure 43). This is expected as urban areas are the epicenter of the spread of the pandemic. Additionally, more than 70% of those who were permanently suspended in both waves are Jordanians.

Figure 40: Percentage of individuals experiencing layoff, decrease in working hours and/or wage payment because of Covid-19 or related restrictions- wave 1 and wave 2



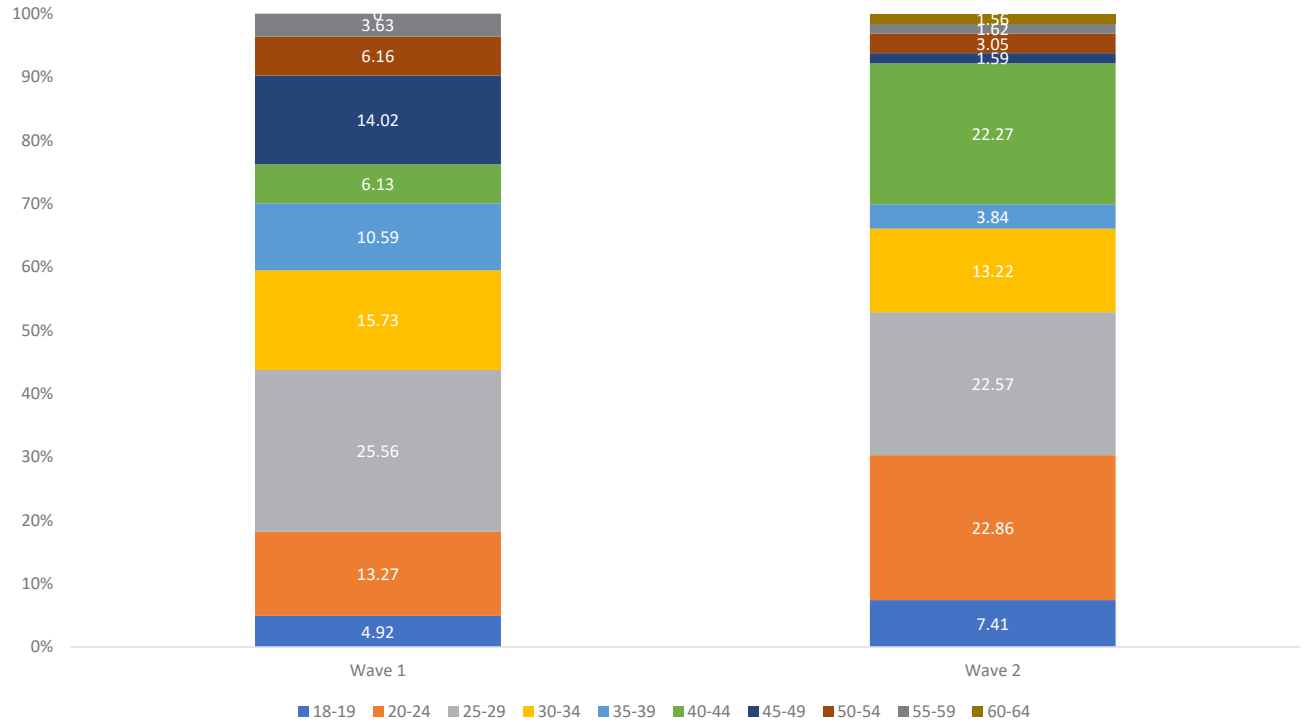
Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

Figure 41: Distribution of individuals experiencing permanent layoff by sex- wave 1 and wave 2



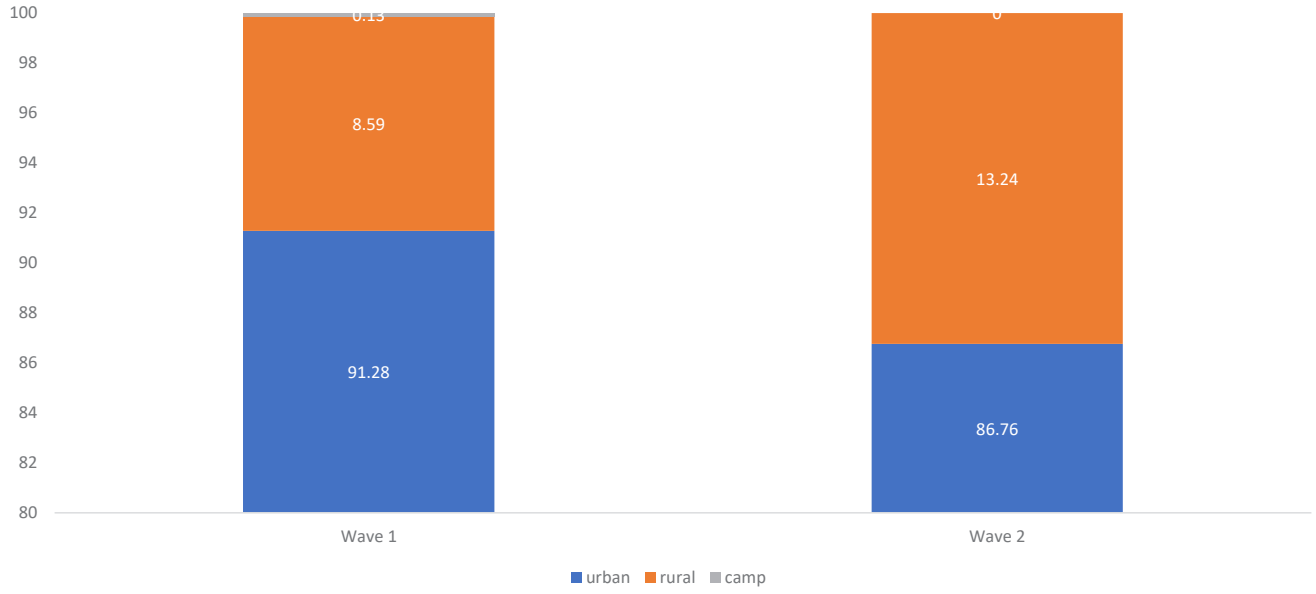
Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

Figure 42: Distribution of individuals experiencing permanent layoff by age group- wave 1 and wave 2



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey

Figure 43: Distribution of individuals experiencing permanent layoff by geographical location- wave 1 and wave 2



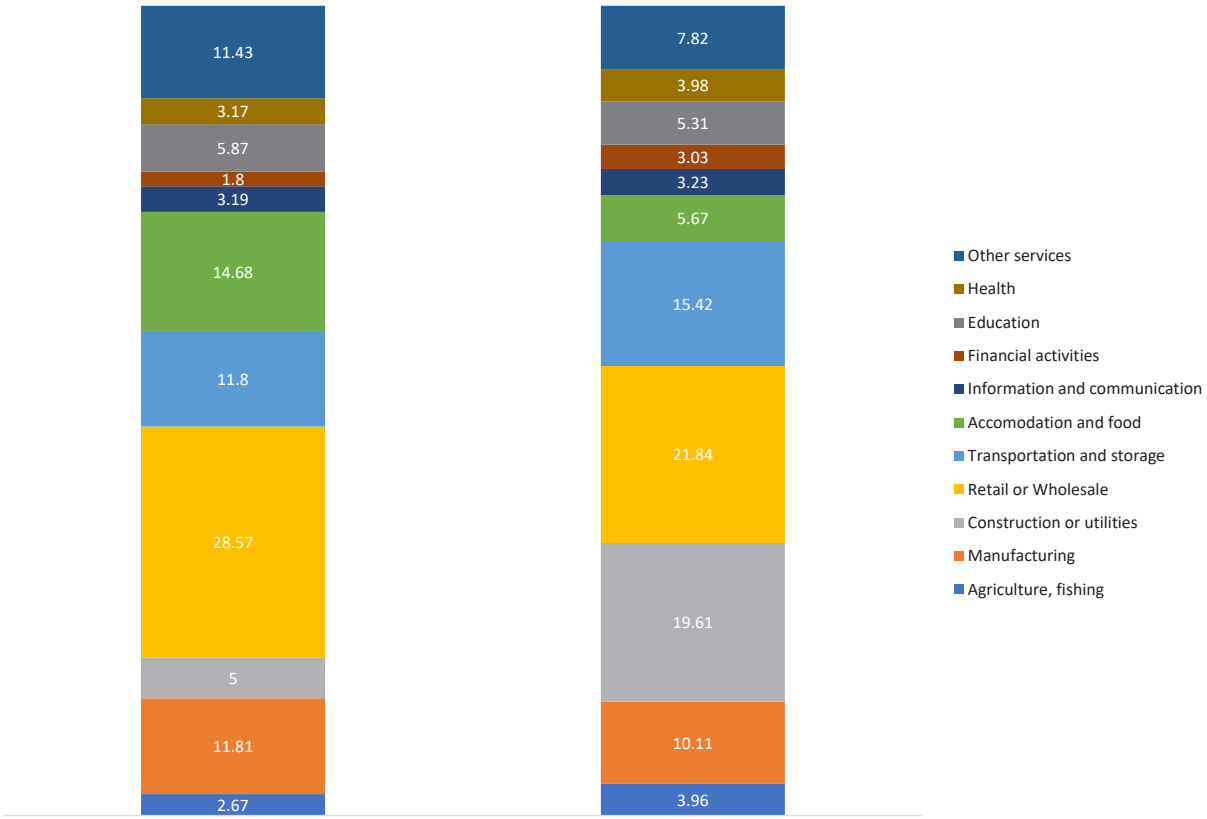
Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

Other strategies applied by businesses during the pandemic include reduction in working hours, reduction in payment and/or delay in payment. In March 2021, 19% of wage workers reduce their working hours compared to 16% in June 2021. In addition, around 21% of wage workers experience decrease or delay in their wage payment, compared to 16% in March 2021 (Figure 40).

The effect of the pandemic on the employees is disproportionate according to their economic activity and the formality of their employment. More than 50% of individuals who have been permanently suspended, in both waves, were informally employed in February 2020 without social insurance. These findings confirm the vulnerability of the informal employees and the importance of social security for the individuals' resilience in case of shocks. Moreover, most of employees, who have been permanently suspended, were employed in hard-hit sectors as retail or wholesale, transportation, manufacturing, construction and utilities, in both waves. The less affected sectors, in both waves include health, education, and financial activities (Figure 44).

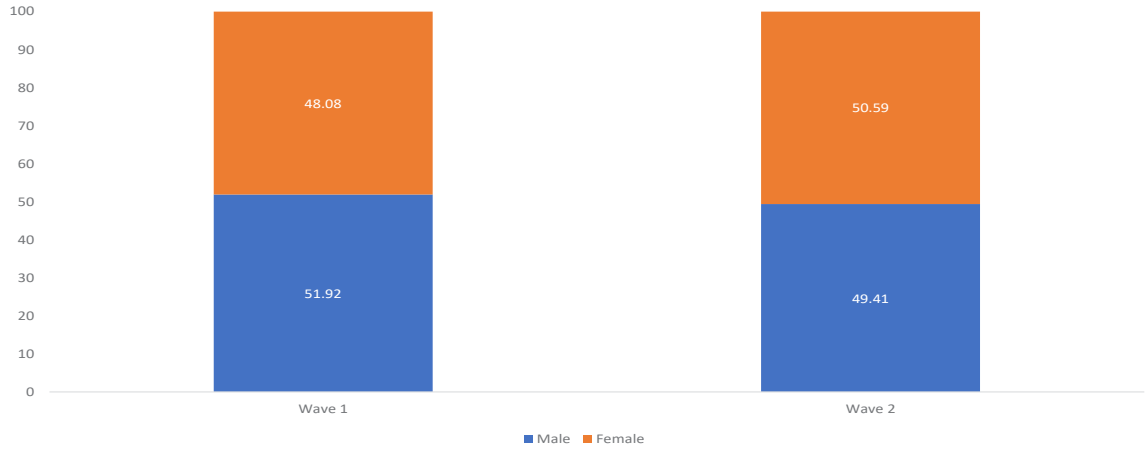
Permanent and temporary suspension, decreasing working hours and/or decreasing wage payment increase individuals' vulnerability to income decline. In March 2021, 49% of individuals experience decrease in their household's income. This share increases to 51% in June 2021. Income reduction may result in an increase in poverty and inequality between the different socio-economic groups. Thus, understanding the characteristics of the vulnerable groups who are more likely to see their income decreasing is required for adequate policies and poverty reduction programs. Both male and female see their income decrease, with 52% of male and 48% of female experiencing a decrease in their income. In June 2021, these shares became 49% and 51%, respectively. In both waves, individuals whose households' income decreased are mainly Jordanians and individuals living in urban areas (Figures 45-47). Other vulnerable groups include individuals employed in retail and wholesale sector, construction and utilities, transportation and storage, and accommodation and food sectors (Figure 48).

Figure 44: Distribution of individuals experiencing permanent layoff by economic activity- wave 1 and wave 2



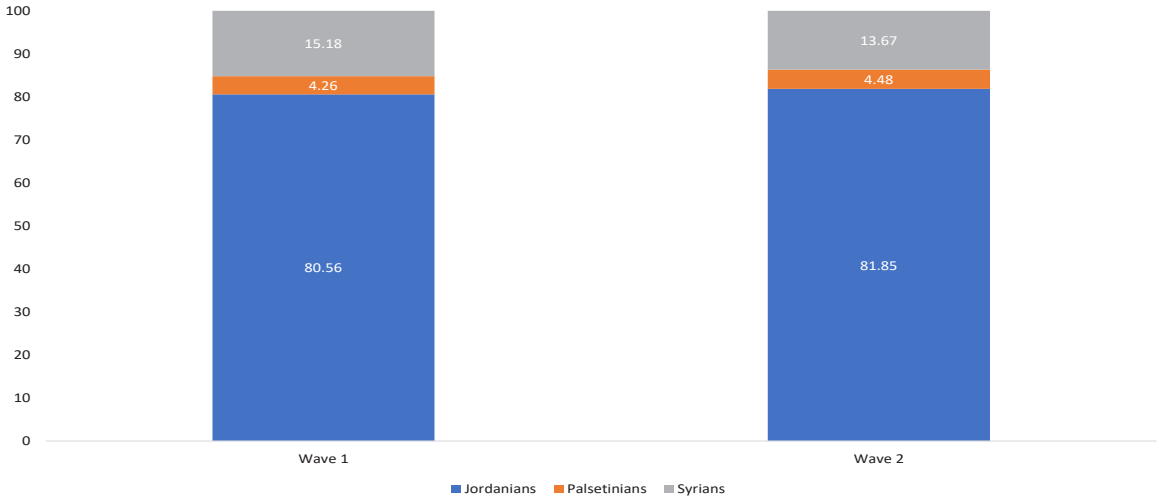
Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

Figure 45: Distribution of individuals whose income decreased by sex- wave 1 and wave 2



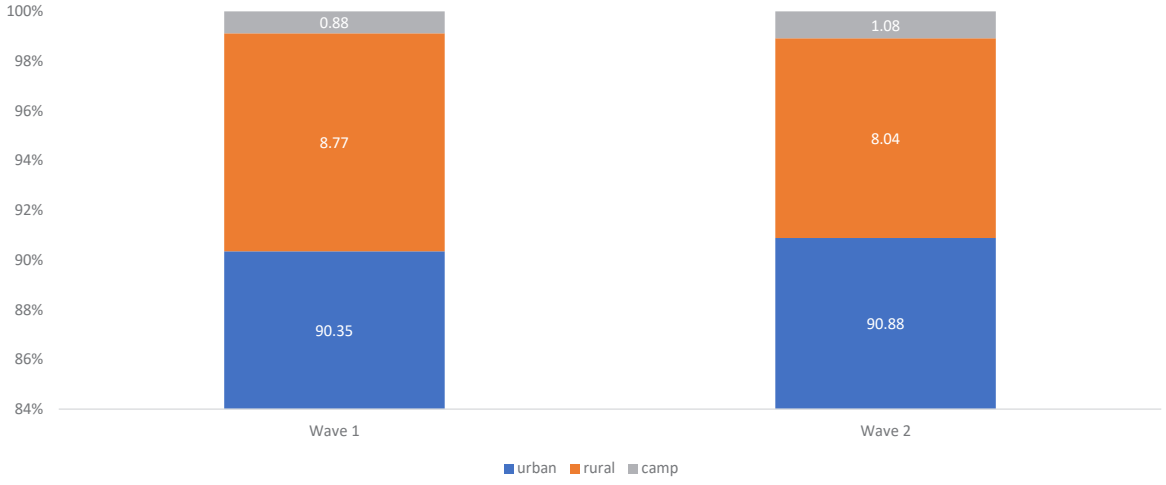
Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

Figure 46: Distribution of individuals whose income decreased by nationality- wave 1 and wave 2



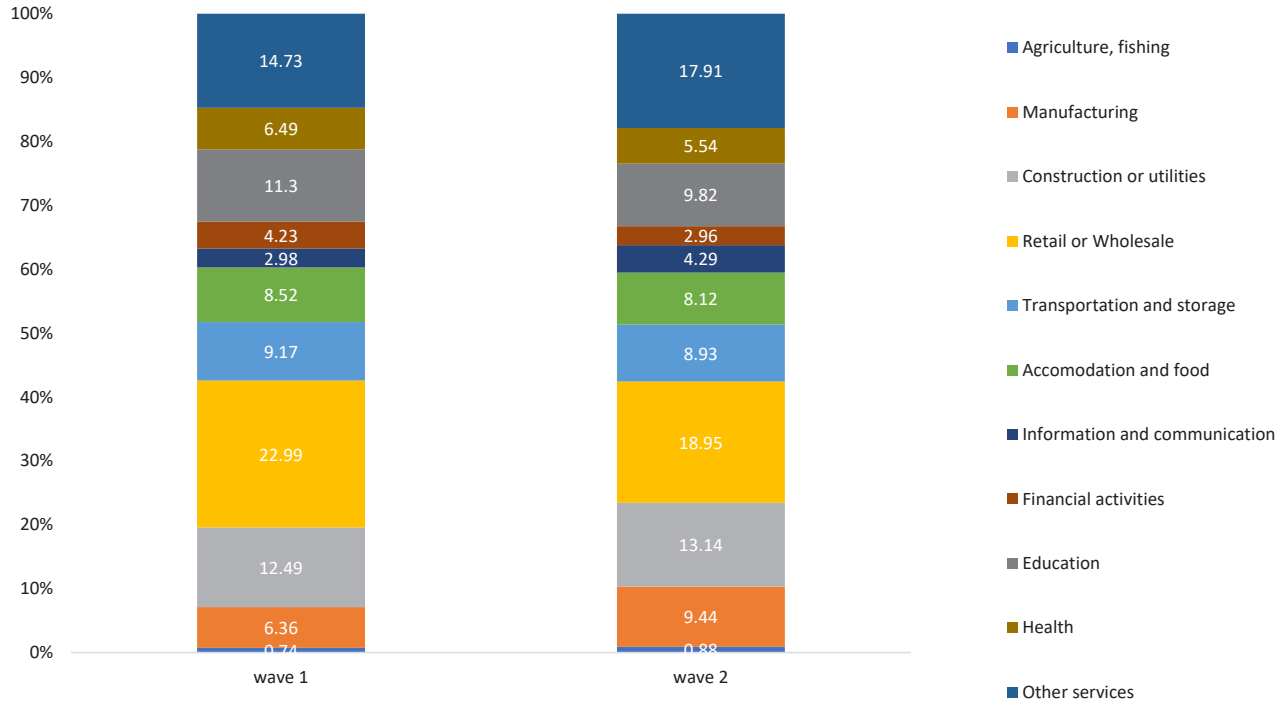
Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

Figure 47: Distribution of individuals whose income decreased by geographical location- wave 1 and wave 2



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

Figure 48: Distribution of individuals whose income decreased by economic activity- wave 1 and wave 2



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

- *Working from home*

The lockdown measures and mobility restrictions create a new environment for work. Individuals have to work from home during the lockdown period. However, working remotely is not easily applied for many reasons as limited access to technology or the inability to do the job from home.

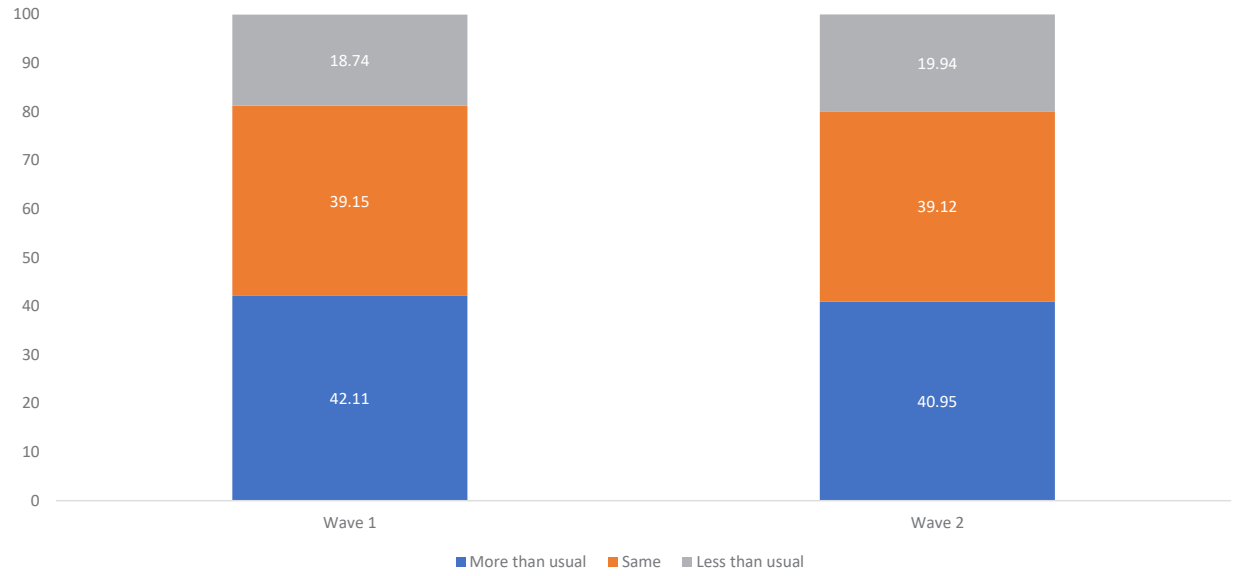
When asked if they are able to work from home, 85% and 81% of males respond that they are not able to work from home in March 2021 and in June 2021. For females, 49% and 41% state that they are not able to work from home, in both waves respectively. The main reason of the inability to work from home is that jobs cannot be done from home (more than 80% of both males and females), followed by the reason of not being allowed to work from home. For females, 3% and 1% state that caregiving responsibilities are the reasons they are not able to work from home in wave 1 and wave 2, respectively.

Among Syrians, more than 90% are not able to work from home. These shares are 84% and 93% of Palestinians. While for Jordanians 77% and 76% are not able to work from home. Whatever the nationality of the respondent, the main reason reported for not being able to work from home is that they cannot do their jobs off work site, a reason stated by more than 80% of those who cannot work from home for all nationalities in the two waves. The second most cited reason is that they are not allowed. Similarly, more than 90% of individuals in refugee camps are not able to work from home in both waves, as they cannot do their jobs from home or they lack technology. For urban and rural areas, more than 70% of individuals are not able to work from home in the two waves. These findings are expected as found from the analysis of the firms' survey. Firms find it difficult to monitor work when it is done remotely and for some economic activities, work cannot be done from home because of the required materials.

- *Unpaid care work (women specific)*

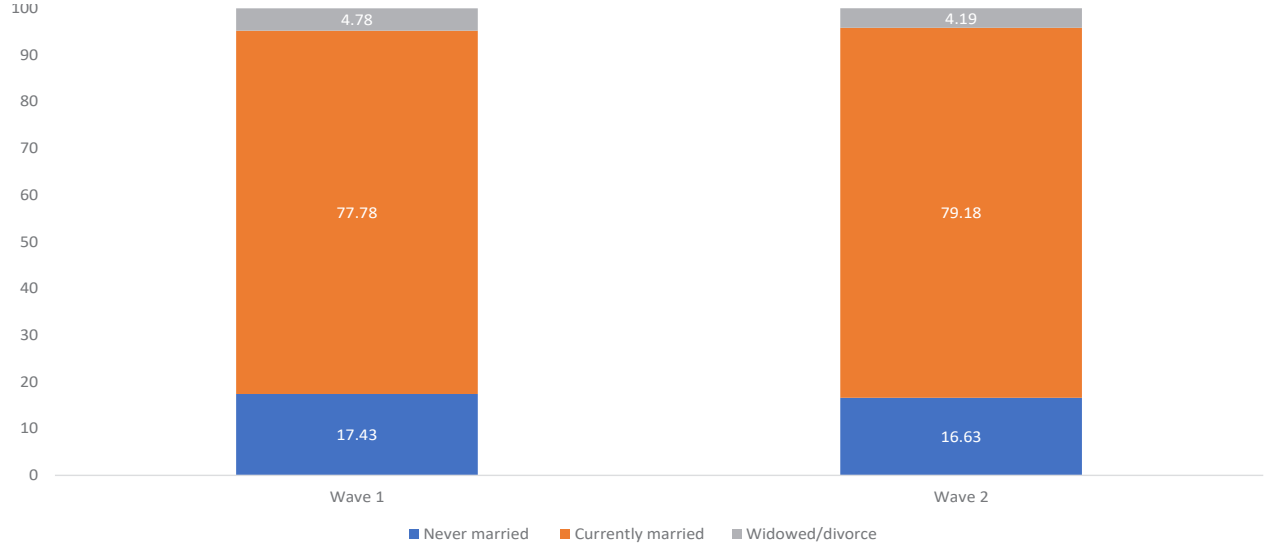
In Jordan as well as in other MENA countries, the traditional gender roles define women as the main caregivers while men are the main breadwinners. With the lockdown measures and home schooling, care responsibilities are expected to increase for females. In both waves, 42% and 41% of females experience increase in hours spent caring for children (Figure 49). Most of females who experienced increase in children responsibilities are those who are currently married and those living in urban areas (Figures 50 and 51). Children care responsibilities increase for both employed and not employed females. Hours spent caring for children increased for 66% of employed females and 45% of not employed female in wave 1. In wave 2, there is a decrease in the share of females whose children care hours increase, for both employed and not employed (Figure 52).

Figure 49: Change in hours spent caring for children past week v. Feb. 2020- wave 1 and wave 2



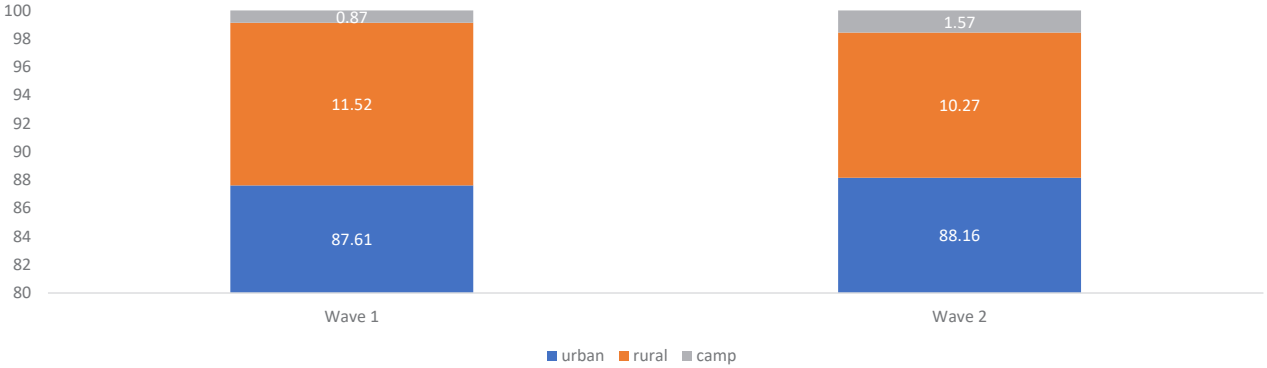
Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

Figure 50: Distribution of females reporting increase in hours spent caring for children more than usual by marital status



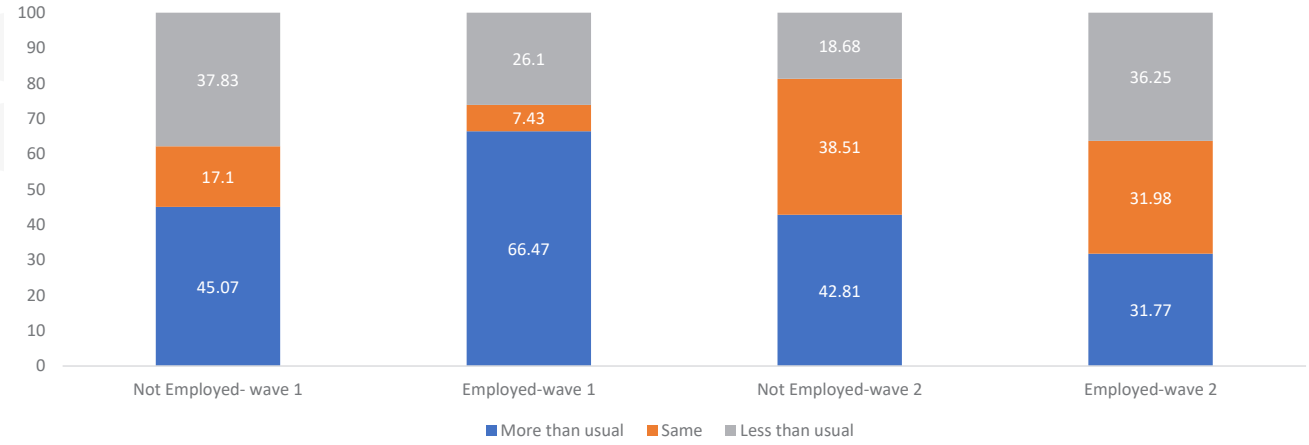
Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

Figure 51: Distribution of females reporting increase in hours spent caring for children more than usual by geographical location



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

Figure 52: Distribution of females by change in hours spent caring for children past week v. Feb. 2020 and employment status- wave 1 and wave 2



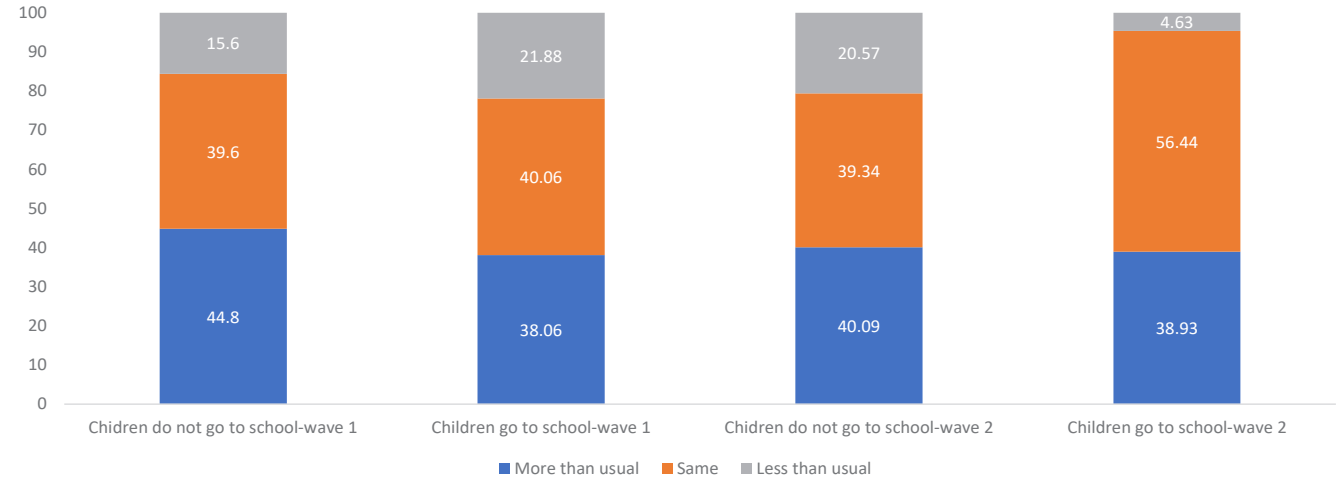
Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

Children responsibilities are expected to increase with children staying at home and not going in person to schools. In households where children do not go to school, 45% and 41% of females experience an increase in children care hours, in wave 1 and wave 2 respectively. While for households where children go to school, 38% and 39% of females see an increase in hours spent caring for children, in wave 1 and wave 2, respectively (Figure 53).

Similarly, 32% and 38% of females declare that hours spent for housework increased compared to February 2020, in wave 1 and wave 2 respectively (Figure 54). Most of them are married and living in urban areas (Figures 55 and 56).

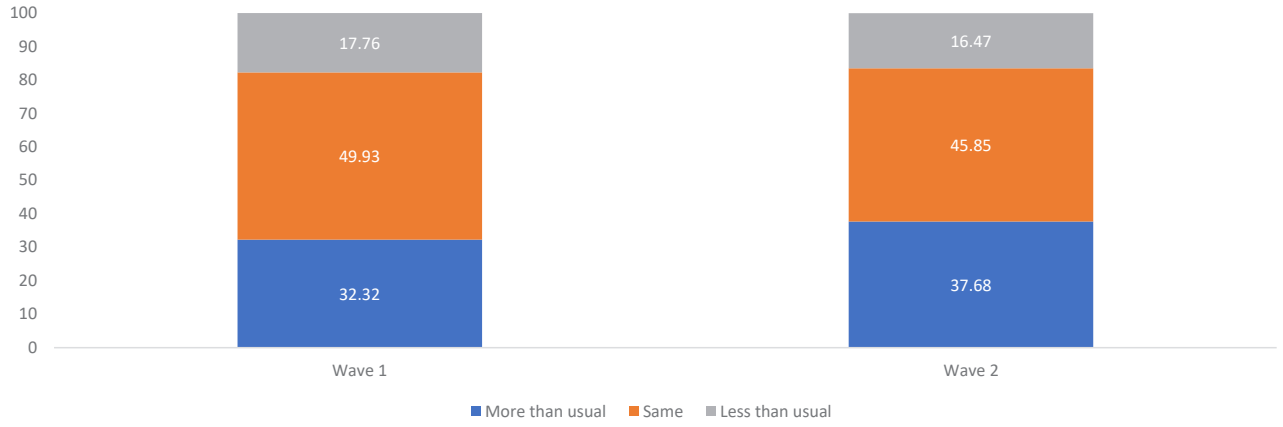
This shows that even with partner present in the household, females are the main responsible for housework and care for children. This is the case of both employed and not employed females. In June 2021, 34% of not employed females and 36% of employed females experience an increase in hours spent on housework past week versus February 2020 (Figure 57).

Figure 53: Distribution of females by change in hours spent caring for children past week v. Feb. 2020 and e-school status- Wave 1 and Wave 2



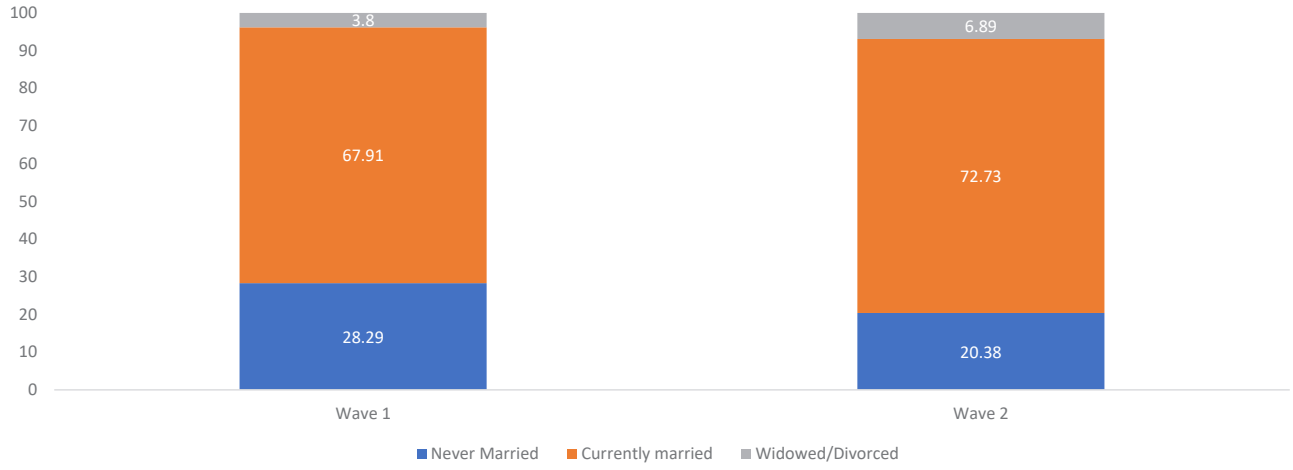
Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

Figure 54: Change in hours of housework past week vs. Feb. 2020- wave 1 and wave 2



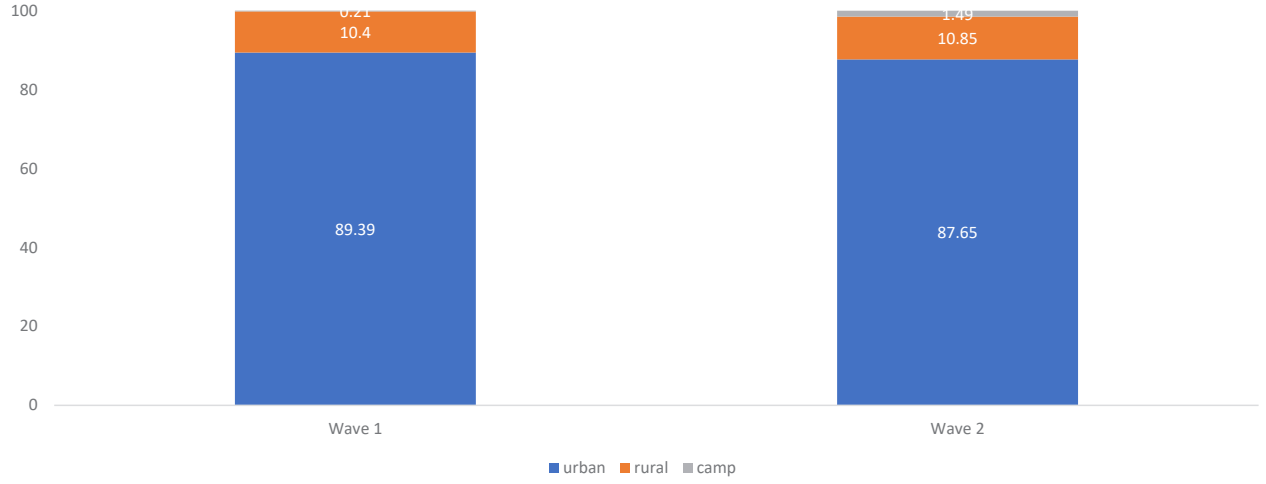
Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

Figure 55: Distribution of females experiencing increase in hours of housework past week vs. Feb. 2020 by marital status- wave 1 and wave 2



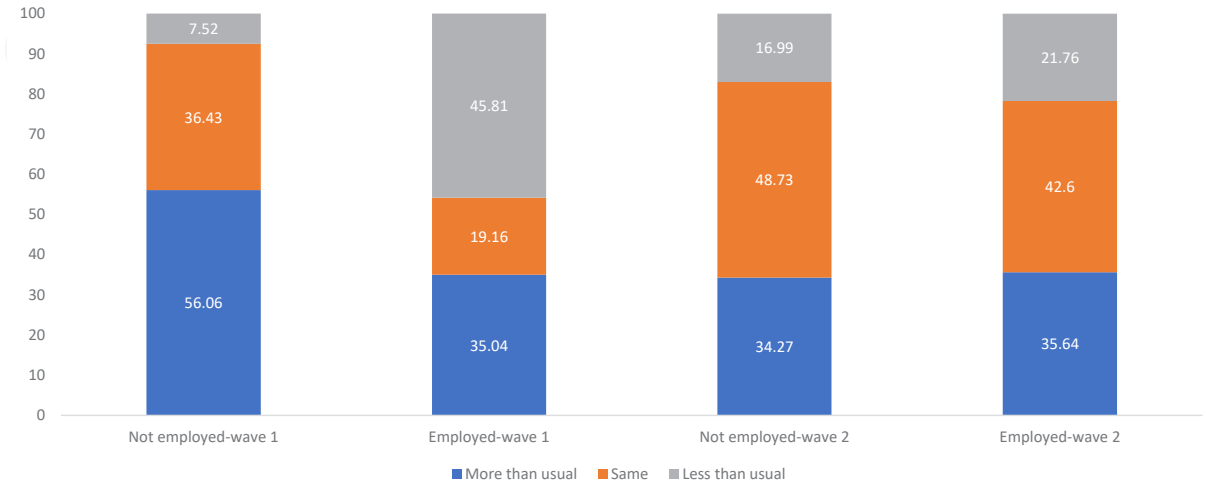
Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

Figure 56: Distribution of females experiencing increase in hours of housework past week vs. Feb. 2020 by geographical location- wave 1 and wave 2



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

Figure 57: Distribution of females experiencing increase in hours of housework past week vs. Feb. 2020 by employment status- wave 1 and wave 2



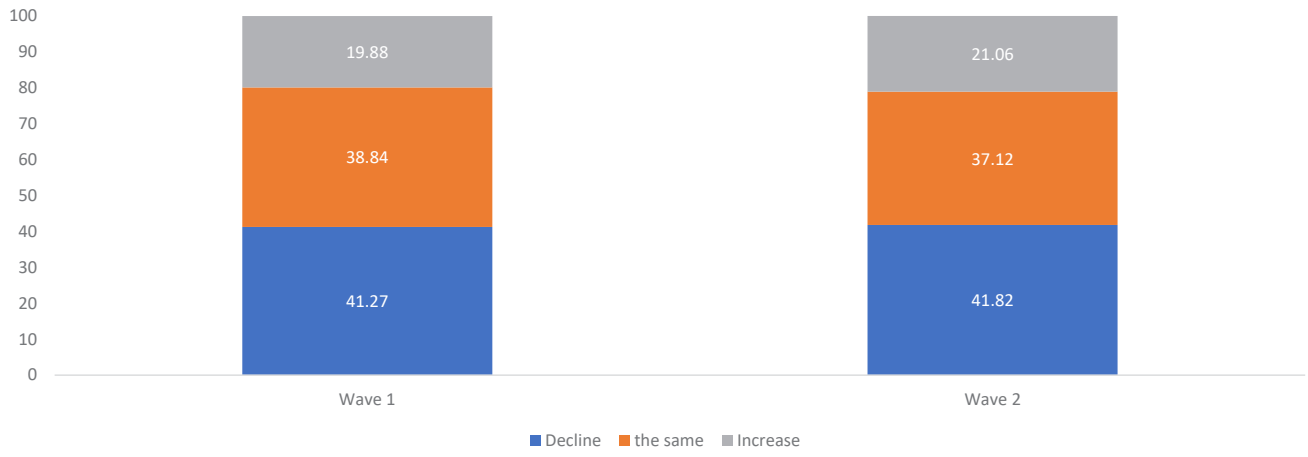
Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

5.2. Food Security

The different dimensions of food security had been threatened by the pandemic. The lockdown and mobility restrictions limited physical access to food. Additionally, the loss of jobs, income reduction, and food price rise disturb the economic access to food. As a result, individuals decrease their food expenditure, the consumed meals, and/or the amount of food consumed by meal. More than 30% of the households have to reduce the number of meals or the portion they usually eat. Figure 58 shows that around 41% and 42% of households had decreased their food spending in March 2021 and June 2021, compared to February 2020, respectively. Poor households in the lowest income quartile are more likely to decrease their food expenditure, with 50% and 55% of household of the first quartile reporting decrease in their food expenditure in wave 1 and wave 2, respectively. These shares are lower among the households of the highest quartile with 27% in the two waves (Figure 59).

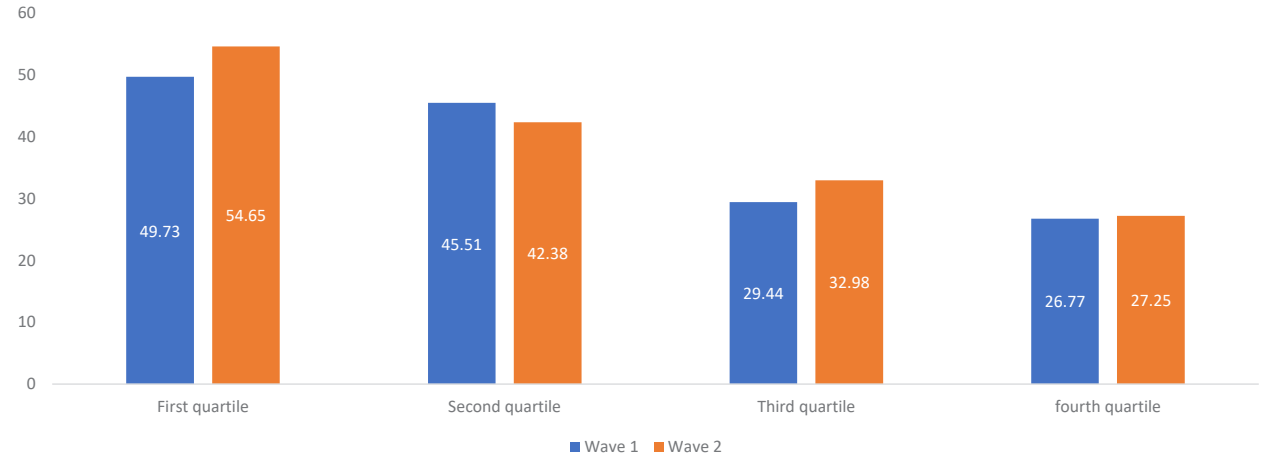
Other vulnerable groups to the negative effect of the pandemic on food expenditure include Syrians, with more than 50% of Syrian households experiencing a decrease in their food expenditure (Figure 60). Similarly, 42% and 43% of households living in urban areas experience a decrease in their food expenditure compared to February 2020, in wave 1 and wave 2 respectively. These shares are lower among households living in rural areas and refugee camps (Figure 61). This is expected as urban areas are the epicenter of the spread of the virus.

Figure 58: Change in food spending last month compared to Feb. 2020- wave 1 and Wave 2



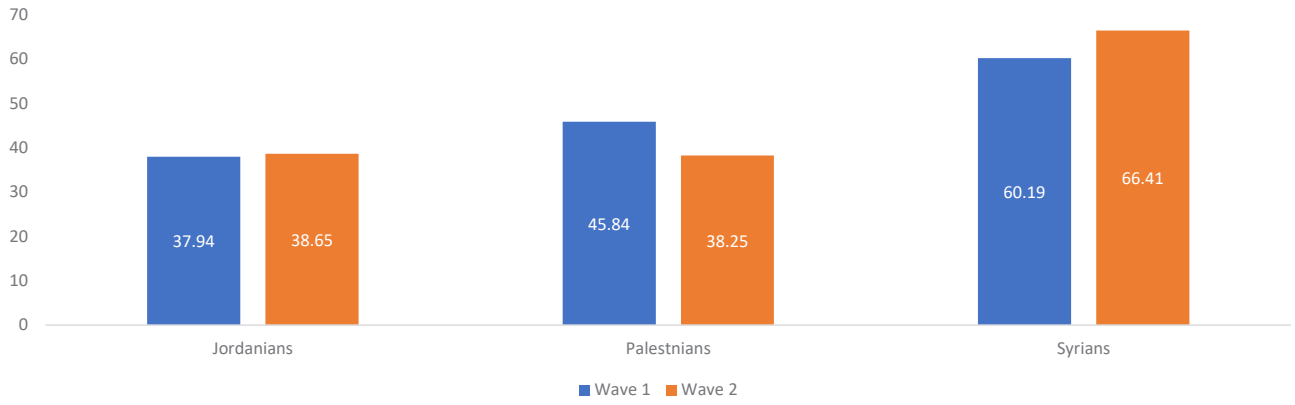
Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

Figure 59: Prevalence of households who experience decrease in their food expenditure compared to Feb. 2020 by income quartile- wave 1 and Wave 2



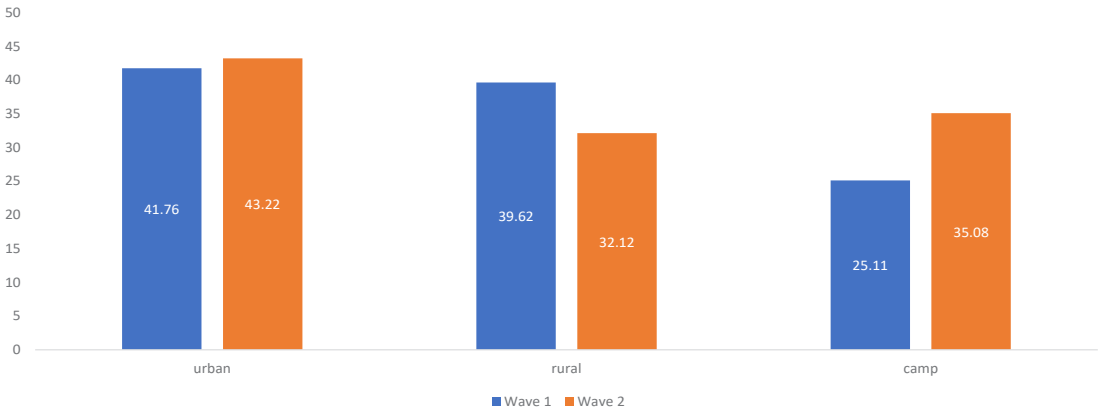
Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

Figure 60: Prevalence of households who experience decrease in their food expenditure compared to Feb. 2020 by nationality- wave 1 and wave 2



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

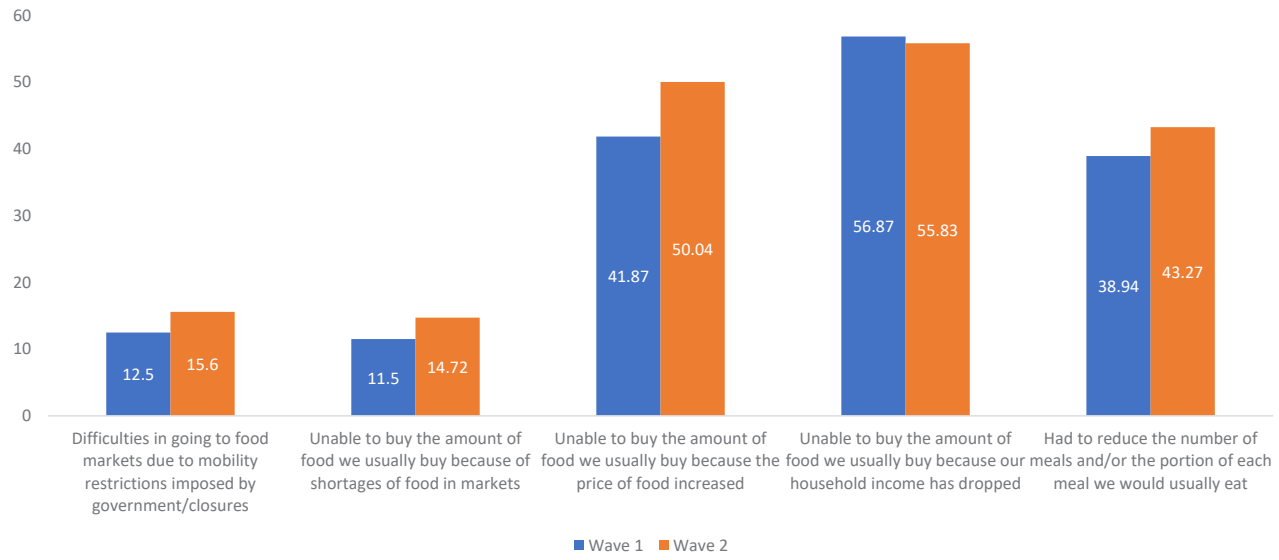
Figure 61: Prevalence of households who experience decrease in their food expenditure compared to Feb. 2020 by geographical location- wave 1 and wave 2



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

Limited economic access is a major main challenge for achieving food security. In June 2021, 56% and 50% of the households were unable to buy the amount of food they usually consume because of decrease in income and rising food prices, respectively. These shares were 57% and 42% in wave 1, showing the persistence of the negative drawback of the pandemic on food security over time (Figure 62). Households in the two lowest income quartiles are mainly the ones who were unable to buy food because of food price rising. Food price rising affect all geographical locations with more than 40% of households in urban, rural areas and refugee camps unable to buy usual amount of food because of rising prices. Similarly, all household are affected by price rising whatever their nationalities with more than 30% of all households unable to buy usual amount of food because of rising prices (Table 11).

Figure 62: Share of households who mentioned one of the following difficulties in getting food



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

Table 11: Percentage of households who were unable to buy usual amount of food because of rising food price

	Wave 1	Wave 2
Income		
First quartile	54.99	64.49
Second quartile	43.45	51.33
Third quartile	30.99	43.55
Fourth quartile	22.91	31.19
Location		
Urban	41.7	49.38
Rural	44.28	56.46
Refugee camp	32.53	43.2
Nationality		
Jordanians	41.19	49.44
Palestinians	46.53	37.15
Syrians	44.78	59.58

Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

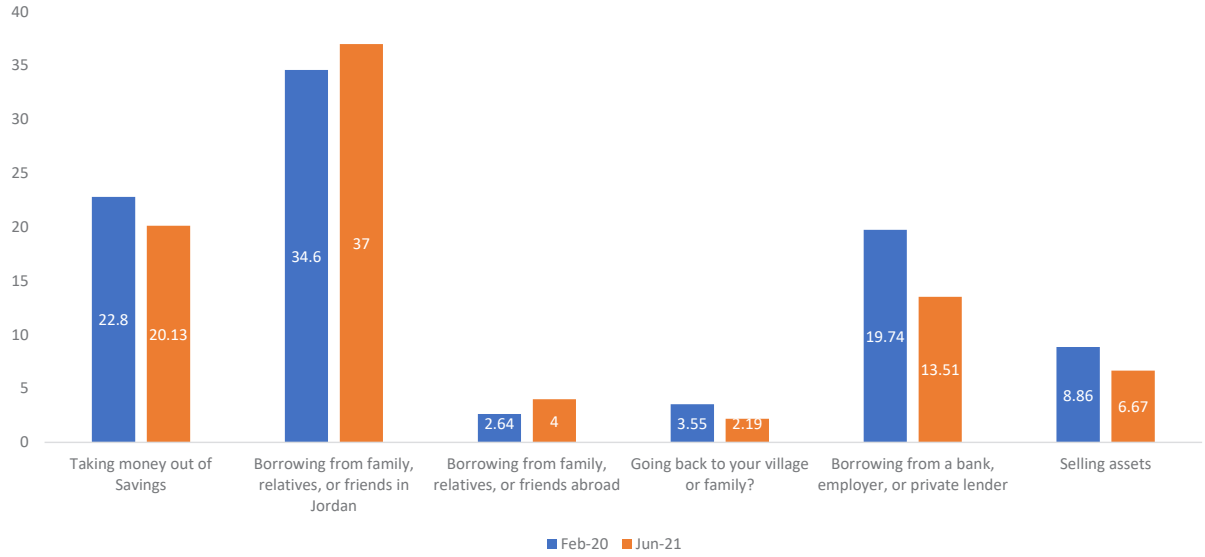
6. On Coping Strategies of the Jordanian Economy

6.1. Households Strategies

During crisis periods, job loss and income decline, individuals resort to several coping strategies as borrowing from family and friends in the country or abroad, selling assets, borrowing from banks and/or taking from savings. Individuals may resort to several coping strategies at the same time. Borrowing money from family or friends in the country is the main commonly used coping strategy in Jordan. In June 2021, 37% of the respondents use this coping strategy. This share was 35% in February 2020. The second common coping strategy is taking money out of savings followed by borrowing from banks, employer, or private lender. Worth noting that in June 2021, less individuals depend on these two strategies (Figure 63).

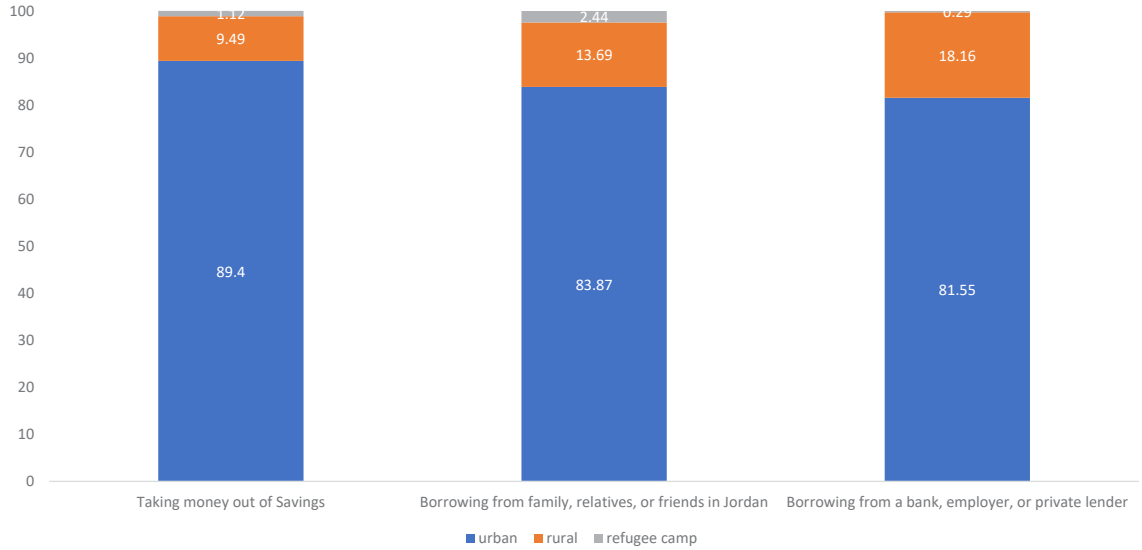
These three common used coping strategies, in June 2021, are mainly used by Jordanians and individuals living in the urban areas (Figures 64 and 65). Borrowing from family

Figure 63: Coping strategies used by individuals in Feb. 2020 and Jun. 2021



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.
Note: Figures are average of the two waves.

Figure 64: Share of individuals using the main coping strategies by geographical location



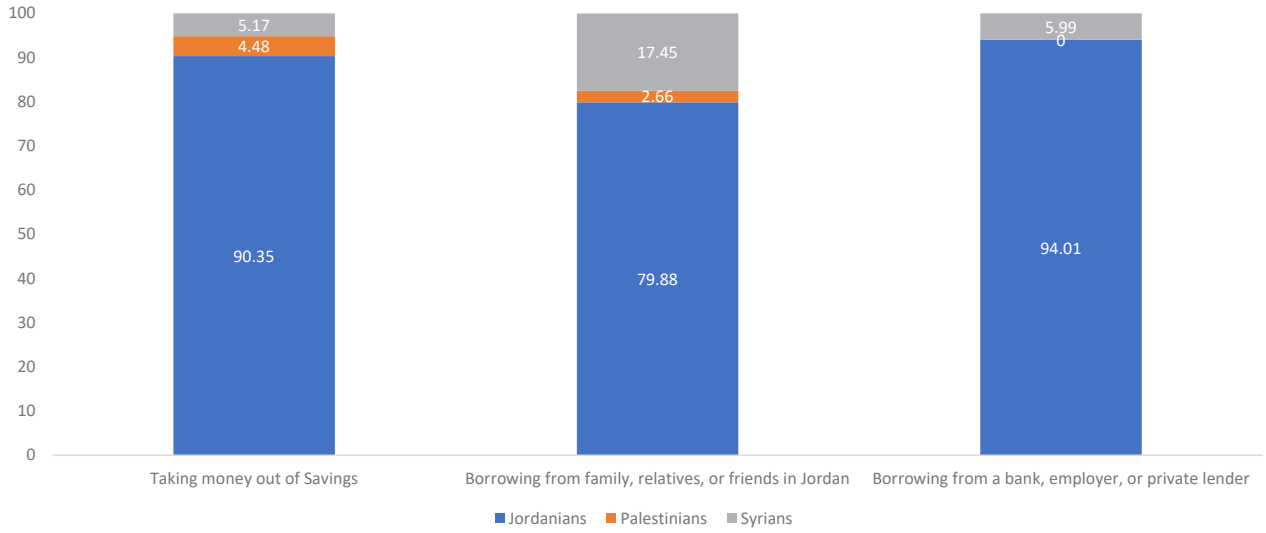
Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey.

and friends in Jordan is the main coping strategy used by individuals in refugee camps with 78% of individuals in camps resorting to this strategy in June 2021. Moreover, for poor individuals in the lowest quartile, they mainly resort to borrow from family and friends in the country. Around 48% of individuals in the lowest quartile borrow from family and friends in the country. While 32% of individuals in the highest income group take money out of savings.

Figure 66 shows that both males and females depend on selling assets and borrowing from family and friends in Jordan as the main coping strategy. While males are the main borrowers from banks, employers and private lenders.

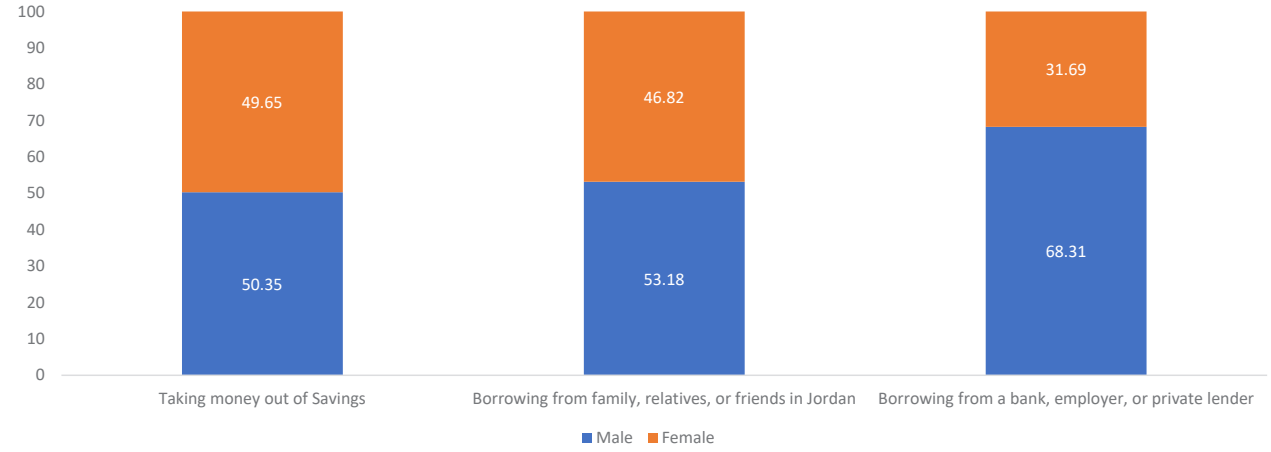
Finally, it worth noting that there was a slow improvement in the economic situation of individuals in June 2021 compared to the first months of the outbreak of the pandemic. In June 2021, 40% of individuals did not need to resort to any of the mentioned coping strategies. This share was 34% in February 2020.

Figure 65: Share of individuals using the main coping strategies by nationality



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey

Figure 66: Share of individuals using the main coping strategies by sex



Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Households Survey

6.2. Firms Strategies

As per firm strategies to cope with the pandemic, Table 12 shows that coping strategies did not significantly change neither the products nor the production processes of firms. Indeed, a small minority of firms switched or changed their products and their production processes in the two waves. This conclusion holds for all firms by exporting status, economic activity and firm size. Yet, most of the firms used phones for marketing and increased their use of internet (especially medium sized firms and those operating in the services sector). It is also important to note how receiving an aid from friends and family in the country helped different types of firms to overcome the negative effect of the pandemic, compared to the aid received from outside the country (through remittances of family or friends). Indeed, remittances received by the Jordanian economy decreased by 13.8% in the second quarter of 2020 compared to the same quarter of 2019. Moreover, this decreasing trend continued in the third and fourth quarters of 2020 until remittances experienced a nascent increase of 0.6% in the first quarter of 2021.

Table 12: Firms' coping strategies against the COVID-19 challenges according to the firm's exporting status, size, and industry

	Exporting Status		Firm Size				Firm Industry		
	Exp.	Non-Exp.	6-9	10-24	25-49	50+	Agri.	Manuf. const.	Services
Use of phone for marketing	54%	48%	54%	55%	49%	61%	42%	43%	51%
Use of Internet	61%	54%	53%	53%	62%	58%	50%	53%	56%
Switching product	5%	5%	5%	4%	5%	6%	4%	7%	4%
Change in product	5%	5%	3%	6%	6%	10%	8%	10%	4%
Change in production processes	9%	6%	5%	9%	7%	7%	0%	11%	6%
Re-arranging workplace	29%	28%	24%	32%	28%	30%	37%	25%	29%
Change in transport /delivery	7%	9%	6%	10%	10%	10%	30%	8%	8%
Purchasing on credit /advances	28%	15%	7%	20%	27%	25%	25%	26%	15%
Receiving aid from friends /family in country	13%	14%	17%	16%	11%	6%	8%	18%	13%
Receiving aid from friends /family abroad	8%	6%	4%	8%	5%	7%	8%	7%	6%

Source: Authors' elaboration using ERF COVID-19 MENA Monitor – Firms Survey.
Note: Figures represent averages over the two waves of the survey.

7. Conclusion and Policy Recommendations

The aim of the present study is to examine the pandemic's effect on Jordanian economy at both the macroeconomic and microeconomic levels. The study tackles the impact of COVID-19 on firms' performance (particularly micro and small enterprises), the social impact of the pandemic, (mainly on vulnerable groups as poor, youth, women, refugees and informally employed) and identifies their respective survival strategies.

Several conclusions can be withdrawn from our findings. At the macroeconomic level, in order to curb the negative effects of the health shock, the government implemented some fiscal measures that led to a decrease in government revenues and an increase in spending. This led to a deterioration of the fiscal deficit that increased from 6% during the first quarter of 2020 to 10% in the second quarter and a higher primary deficit from 1% to 5.5%. At the monetary policy level, the Central Bank adopted an expansionary monetary policy. To do so, more than 550 million dinars were injected to the national economy by reducing the compulsory reserve from 7% to 5%. Moreover, the Central Bank of Jordan adopted a number of measures to boost the financial sector including: restructuring the loans of individuals and companies, reducing the guarantee commissions of the industrial and services finance program from 1.5% to 0.75% for all loans, reducing the start-up loans guarantee commission from 1% to 0.75%, and increasing the insurance coverage percentage of the local sales guarantee program from 80% to 90%. Mid-sized firms took advantage of this initiative since 38% applied for or received a business loan. This figure is lower for larger ones (22%). The lowest figure is the one of micro. This result is a surprising given that, generally, the smaller the firms, the more they need financial resources. Yet, mid-sized firms, exporters and those operating either in the manufacturing sector or the services contracted a loan from or asked to reschedule it in order to cope with the crisis. At the trade level, the total number of harmful and liberalizing measures imposed by Jordan has changed drastically with the health crisis since the total number of harmful measures has increased from 1 to 7 between 2018 and 2020 (such as the ban on exports of food products or the ban on re-exportation or selling of medical masks). At the same time, the number of liberalizing ones decreased to reach zero compared to previous years. Thus, generally, the Jordanian trade policy has become more protectionist. Yet, this was not the case of Jordan only since the latter faced several protectionist measures imposed by its main trade partners (namely USA and India).

At the microeconomic level, first, the pandemic curbs the social development progress achieved in Jordan. Mainly poverty and inequality are expected to increase. Vulnerable groups include individuals in the lowest income group, informal employees, individuals working in hard hit sectors, as retail or wholesale, transportation, manufacturing,

construction and food and accommodation sectors, and those living in urban areas. Second, small, and micro firms are the highly affected by the economic slowdown. Employed individuals in these firms, especially those with no contracts, were more likely to be fired or experience decline in their payment. Third, income decline, increase in food price, limited availability of food and limited mobility threaten food security of households. This food crisis may be considered as a physical and economic access problem, especially for low income and vulnerable groups as refugees and those living in urban areas. Fourth women are the main ones to bear the cost of the increasing care work during the lockdown period and the e-schooling. Fifth, working remotely, in a context of precaution measures and social distancing, is not easily applied as some jobs cannot be done off work sites, employees are not allowed to work from home and because of lack of technology. Sixth, the main coping strategies applied to face the painful economic impacts include borrowing money from family or friends in the country taking money out of savings, borrowing from banks, employer or private lender and selling assets. Seventh, the negative economic drawback of the pandemic is persistent in the two waves of the household surveys, indicating that economic recovery will take longer time. Thus, continue government support and social policies are highly required.

Against this background, we can recommend the following at both the macroeconomic and microeconomic levels.

Regarding the macroeconomic level:

- Fiscal policy:
  - Because of the limited fiscal space Jordan has, more efforts have to be deployed in order to increase tax revenues. While it is difficult to conceive an increase in tax rates given the circumstances, tax administration (management, declaration, collection and allocation) has to improve. This will increase the efficiency of tax policy and raise tax revenues without further increases in tax rates. This is of particular importance given that one of the most needed policies by firms is tax delays, which might affect tax collection in the short term.
  - Second, it is crucial to increase the share of productive spending (health, education, etc.) compared to non-productive expenditure (through subsidies, wages and compensation of employees and government purchases) in order to increase the positive impact on growth and make the latter more inclusive.
  - Third, in a longer term, and in order to reduce fiscal pressure, the government of Jordan might consider adopting a fiscal rule (spending, revenue or debt rule) in order to avoid inflationary pressures in the long run, which will further affect the poorest segments of the population.
  - Fourth, in the medium term, fiscal instruments could be made more progressive to tap on the resources that are available at the top of the income and wealth distribution to help plug the holes at the bottom of the income/consumption distribution.

- At the monetary policy level:
  - The Central Bank will have to extend loan deferrals and credit with eased conditions in order to help firm cope with crisis. Yet, this has to be done cautiously to guarantee the banks solvency.
  - With the increase of fiscal deficit, it will be crucial to enforce the independence of Central Bank of Jordan to avoid a de facto monetization of public debt that is increasing.
  - Moreover, given that inflation is artificially low because of a fixed exchange rate system to the US dollar, Jordan needs to move to a more resilient exchange rate arrangement.

- At the trade policy level:
  - It will be important to avoid further protectionist measures that might lead to a retaliation from other countries.
  - Moreover, it is crucial to increase the transparency of trade-related policy actions. This can take place through more timely data on trade flows and policies, especially when it comes to non-tariff measures.

Regarding the microeconomic level:

- Social Policies and Targeting:
  - Continue irregular support, mainly cash support, is required to support vulnerable groups who lost their jobs and/or experience income decline. Government support should ensure equal access to food and medicines and medical supplies, to all individuals whatever their socio-economic characteristics.
  - Integrated social policy with targeted programmes and policies targeting vulnerable individuals based on their socio-economic characteristics as sex, income groups, economic activities, and geographical locations are recommended to reduce the horizontal inequalities between the different groups.

- The government should ensure food availability and food access (both physically and economically), especially during periods of mobility restrictions and precaution measures.

- At the labor market level:
  - Investing in decent jobs and good working conditions
  - Providing incentives to formalize the informal sector to increase the resilience of informal employees.
  - Enabling new working environment by investing in technology and related infrastructure, and new monitoring techniques.
  - Increase the telework ability of jobs to enable remote work and decrease the job loss in case of crisis as the actual one.
  - Providing government support and incentives to small and micro firms, especially those in the hard-hit sectors, to increase their resilience and their ability to create new formal economic opportunities.

- From a gender lens:
  - Women are the main responsible of unpaid care work, and they are the main ones to bear the cost of the increasing care work during the lockdown. Investing in education and health sectors and creating employment opportunities in paid care sectors would redistribute care responsibilities. Additionally, investing in these jobs would increase female labor force participation in Jordan as women are mainly concentrated in these sectors.

References

Abu Ismail, K. (2020). "Impact of COVID-19 on Money Metric Poverty in Arab Countries". Economic and Social Commission for Western Asia (ESCWA). E/ESCWA/CL2. GPID/2020/TP.10

Al Azzawi, S. (2021). Lives Versus Livelihoods: Who Can Work from Home in MENA ? ERF Working Papers Series. https://erf.org.eg/publications/lives-versus-livelihoods-who-can-work-from-home-in-mena/. [Accessed 25th/9/2021].

Al-Khalidi, S. (2020) 'Jordan lifts driving ban as it eyes normality after tight lockdown', Reuters, 29 April.

Assaad, R. (2014) 'Making sense of Arab labor markets: the enduring legacy of dualism', IZA Journal of Labor & Development, 3(1), pp. 1–25. doi: 10.1186/2193-9020-3-6.

Assaad, R., Krafft, C. and Keo, C. (2019) 'The Composition of Labor Supply and Its Evolution from 2010 to 2016 in Jordan.', in Krafft, C. and Assaad, R. (eds) The Jordanian Labor Market Between Fragility and Resilience. Oxford, UK: Oxford University Press.

Assaad, R. and Salemi, C. (2019) 'The Structure of Employment and Job Creation in Jordan: 2010-2016', in Krafft, C. and Assaad, R. (eds) The Jordanian Labor Market Between Fragility and Resilience. Oxford, UK: Oxford University Press.

Baldwin, R. and Tomiura, E. (2020) "Thinking ahead about the trade impact of COVID-19"

Central Bank of Jordan (2020) "Recent Monetary & Economic Developments in Jordan", September's Monthly Report.

Das, J. et al. (2013) 'U.S. and them: The geography of academic research', Journal of Development Economics. Elsevier B.V., 105(1), pp. 112–130. doi: 10.1016/j.jdeveco.2013.07.010.

Demertzis, M. and Maslloren, G. (2020) "The cost of coronavirus in terms of interrupted global value chains".

Department of Statistics (Jordan) and ICF (2019) Jordan Population and Family Health Survey 2017-18. Amman, Jordan and Rockville, Maryland, USA.

EMNES (2020) "Covid-19 in the Mediterranean and Africa - Diagnosis, Policy Responses, Preliminary Assessment and Way Forward".

International Labor Organization Note (2020) "COVID-19 and world of work: Impacts and responses".

IMF (2020) World Economic Outlook "A long and difficult ascent", October.

National Social Protection Strategy (2019-2025)- Hashemite Kingdom of Jordan

UNCHR (2019) Global Trends: Forced Displacement in 2018.

World Bank Group (2020) Jordan Economic Monitor "Weathering the Storm", June.

Appendix: Data sources

Microeconomic datasets:

The analysis conducted in this report is based on COVID-19 MENA monitor data for households and firms. The surveys were conducted by the Economic Research Forum.

Household surveys:

For the social impact of the pandemic, the COVID-19 MENA Monitor Household survey for Jordan is used. The survey compares the situations of individuals and households before the pandemic in February 2020 with their situations after the outbreak of the pandemic in two points of times; March 2021 (wave 1) and June 2021 (wave 2). Wave 1 includes 2,549 individuals, while wave 2 includes 2,503 individuals. Among the 2503 individuals observed in June 2021; 62% are panel that were surveyed in wave 1, and the remained 38% were observed only in wave 4. The survey contains information on basic socio-demographic characteristics of respondents, self-reports on change in income, food expenditure, employment and living conditions before and after the pandemic. Moreover, data includes information on methods of education used during the lockdown in schools at the household level, on coping strategies and on food security status.

Firm surveys:

The COVID-19 MENA Monitor Enterprise Survey includes data set that integrates and harmonizes data and variables from up to 2 rounds across 2021. The ERF COVID-19 MENA Monitor Survey is constructed using a series of short panel phone surveys, that are conducted approximately every two months, and it covers business closure (temporary/permanent) due to lockdowns, ability to telework/deliver the service, disruptions to supply chains (for inputs and outputs), loss of product markets, increased cost of supplies, worker layoffs, salary adjustments, access to lines of credit and delays in transportation. The sample universe for the firm survey was firms that had 6-199 workers pre-COVID-19. Stratified random samples were used to ensure adequate sample size in key strata. A target of 500 firms was set as a sample.

Macroeconomic datasets:

We relied on different datasets:

1) For fiscal, monetary and real sector variables, we used the datasets that are available on the website of the Central Bank of Jordan https://statisticaldb.cbj.gov.jo/
2) For trade variables:
   a. Trade flows: we used the International Trade Center dataset.
   b. Trade policy: Global Trade Alert dataset.

ERF at a Glance: *The Economic Research Forum (ERF) is a regional network dedicated to promoting high-quality economic research for sustainable development in the Arab countries, Iran and Turkey. Established in 1993, ERF's core objectives are to build a strong research capacity in the region; to encourage the production of independent, high-quality research; and to disseminate research output to a wide and diverse audience. To achieve these objectives, ERF's portfolio of activities includes managing carefully selected regional research initiatives; providing training and mentoring to junior researchers; and disseminating the research findings through seminars, conferences and a variety of publications. The network is headquartered in Egypt but its affiliates come primarily from different countries in the region.*

Contact Information

ERF Office
Address: 21 Al-Sad Al-Aaly St. Dokki, Giza, Egypt
PO Box 12311
Tel: +202 333 18 600 - 603
Fax: +202 333 18 604
Email: erf@erf.org.eg
Website: http://www.erf.org.eg

Follow us

economic-research-forum *ERFlatest* *TheERFLatest* *www.erf.org.eg*