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Would the Food Insecure Raise their Hands? Applying the case of Egypt in the era of COVID-19

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Abstract

Food security can be considered an economic access challenge in Egypt, as poverty and food security are highly correlated. The spread of the novel coronavirus, with its economic drawback, is expected to jeopardise Egyptian food security by exacerbating existing challenges. Using the Economic Research Forum (ERF) COVID-19 Monitor data for Egypt (Wave 2), logit models are estimated to examine the determinants of food security in Egypt, during June 2021, post the spread of COVID-19. Two indicators are used to measure food security. First the households' ability to obtain the usual amount of food, without reporting any change because of a decline in income or increase in prices. This is considered as economic access to food. The second measure considers food consumption; households are considered food secured if they do not have to reduce their usual number of meals/portions. The results show that females, low-educated, self-employed, those working in hard-hit sectors, those who lost their income and households with a high share of children under six years old are all more likely to be food insecure.

JEL classification: C35, Q10, Q18.

Keywords : COVID-19; Egypt; food consumption; food security; logit model.

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Introduction

The COVID-19 pandemic is a health and economic crisis, that has affected progress made in the development process. The increasing number of cases and the death toll associated with the outbreak of COVID-19, in addition to the precautionary measures applied by governments to control the spread of the virus, resulted in economic slowdown, loss of jobs, income decline and threat of food security. The pandemic threatens the different dimensions of food security; its availability, access and utilisation.

On the supply side, food importing countries were negatively affected by the restrictions implemented by food exporting countries at the beginning of the crisis. Limited quantities of imports and rising food prices resulted from such restrictions and from unusual consumer behaviour during the first months of the pandemic, which affected food availability at the macro level and limited consumer purchasing power. Moreover, the decline in tourism revenues and remittance, as a consequence of the dual shock, would restrict the foreign currency available for food imports (World Food Programme, 2020a). On the demand side, mobility restrictions, rising food prices and declining income limited food access, both physically and economically. Moreover, as a result of job losses and a decline in income, households resorted to coping strategies affecting their food security. Such coping strategies may include a reduction in the number of meals consumed or consumption of less nutritious cheap food items (World Food Programme, 2020b; UNDP, 2021)

Egypt, a net food importing country, with an average cereal dependency ratio of 44.6 in 2015-2017 (FAOSTAT, 2021), achieved progress in many indicators of the second development goal (SDG2); ending hunger and achieving food security. Since 2015, the prevalence of undernourished (indicator 2.1.1) has stagnated at around 4% of the total population. Furthermore, the prevalence of severe food insecurity in the adult population decreased to 7.8% in 2017-2019, compared to 8.4% in 2014-2016. However, challenges remain for many indicators of food security. Egypt suffers from the triple burden of malnutrition: obesity, stunting and micro-nutrient deficiencies (anaemia) (indicator 2.2.2). In 2017/2018, the prevalence of stunting was 17.5% and anaemia was 22.3%, whilst the prevalence of anaemia amongst women aged 15-49 (pregnant and non-pregnant) (indicator 2.2.3) was higher than 25% (Financing Sustainable Development Goals in Egypt, 2022).

With the spread of COVID-19 and the pressure it places on food security, Egypt implemented different measures to ensure food availability. These measures include the importation of substantial quantities of wheat and other staples, doubling the capacity of grain silos, increasing areas cultivated by wheat and a stimulus initiative

by the Central Bank of Egypt for SMEs operating in fishing, poultry and livestock. Thus, Egypt faces minimal exposure to food supply shock. On the contrary, the exposure to demand shock is considered high in Egypt. Food security in Egypt may be considered an economic access problem. Food security and poverty are highly correlated, with an average share of food expenditure that was more than 40% of the total expenditure of the poorest households (HEICS, 2015) and a high poverty rate of 29.8% in 2019/2020 (CAPMAS, 2020).

Around 73.5% of the population declared that their income decreased because of the pandemic with individuals having to reduce their consumption of meat, chicken, fish and fruits (FAO, 2020; CAPMAS, 2020). Thus, the actual pandemic is expected to exacerbate the existing challenges to food security in Egypt. The negative drawbacks of the pandemic are disproportionate across the different socio-economic groups. Vulnerable groups like the poor, informal employees or those working in hard hit sectors, are more likely to experience food insecurity, mainly through the income channel and limited purchasing power.

Against this setback, this paper contributes to the discussion examining the implications of the pandemic on household's food security. More precisely, the Economic Research Forum (ERF) COVID-19 Monitor data for Egypt (Wave 2- June 2021) is used to examine the determinants of food security in Egypt, post the spread of the coronavirus. Since more than 45% of the respondents mention that they were not able to buy the usual amount of food because of price increases or a decline in income and around 43% had to reduce their meals or portions that they would usually eat, food security is measured by economic access to food and ability to consume the usual number of meals/portions. The determinants of food security include individuals and households' characteristics.

To the author's knowledge, empirical studies examining the impacts of COVID-19 household food security in Egypt are scarce. Such empirical analysis is required to provide decision-makers with evidence-based recommendations, in order to mitigate the negative effects on households at risk.

The paper is organised as follows. The first section reviews the literature tackling determinants of household food security and the impact of COVID-19 on food security. Section 2 presents the methodology and the data to be used. Section 3 discusses the estimated results and section 4 concludes, with a discussion on the various limitations.

1. Literature review

The main determinants of food security at the household level, which is the paper's main focus of interest, includes socio-economic and demographic characteristics of individuals and households. These characteristics include sex, age, education level, employment status, economic activity, access to social security, size of the household, income level and the geographical locations. Rose and Charlton (2002) found that households living in rural areas, who have a low income or a large household size, are more likely to be food insecure in South Africa. In Pakistan, Sultana and Kiani (2011) examined the determinants of household food security using a logistic regression. They measured food security using the cost of calorie approach, whereby a household is food secured if its per capita food expenditure is greater than the cost of the minimum number of calories required per person in the household. The results show that living in rural areas and the dependency ratio negatively affect food security. However, a high educational level has a positive impact on food security. Similarly, Aidoo et al (2013) used logistic regression and found that household food security amongst rural households in the Sekyere-Afram Plains district in Ghana is affected by the household size, farm size, off-farm income, marital status, and access to credit.

For COVID-19, food security at the household level might be threatened via different channels. First, the lockdown, quarantine and mobility restrictions limited individual mobility and their physical access to food. Additionally, these measures disrupted the food value chain, reducing food availability in the markets and resulting in an increase in food prices. Secondly, the negative setbacks of the crisis on economic growth and the loss of jobs limit individual ability to access sufficient income, food or enough nutritious food, especially amongst poor and marginalised groups (Aidoo et al, 2013; FAO, 2020). Poverty and income decline threaten the nutritional status of households, especially in a context where there is no social protection to shield households against income loss (Kansiime et al. 2021).

The pandemic may aggravate the impacts of the key factors affecting food security. In Bangladesh, Szabo et al (2016) used a logistic model to study the impact of soil salinity and the socio-economic characteristics of households on food security. The latter is measured by using two common indicators, calorie availability and household expenditure on food items. Using the 2010 Household Income and Expenditure Survey and the Soil Resource Development Institute, they found that education and remittance flows are significant predictors of food insecurity. Thus, the economic slowdown and the limited remittance flows resulting from the pandemic, are expected to threaten household's food security.

Moreover, the negative setbacks of the pandemic are disproportionate, according to the socio-demographic characteristics of individuals. In Jordan, using chi-squared test, Elsahoryi et al. (2020) found that there is a significant difference in food insecurity according to monthly income per capita, education level, household size and house status. Likewise, Kansiime et al. (2021) examine the impact of COVID-19 on food security in Kenya and Uganda. They used a probit model to estimate the factors affecting the food nutrition outcome. They use the Food Insecurity Experience Scale (FIES) and the consumption of micro-nutrient rich food as proxies for food security. Their findings show that food security and the dietary quality of respondents in both countries worsened because of the pandemic. This is mainly explained by loss or reduction of income, limited purchasing power and limited access to markets. Thus, food insecurity that resulted from the COVID-19 crisis, might be considered as a demand shock as a consequence of shocks to household income and purchasing power.

Poor households and those depending on labour income are more likely to resort to food-based coping strategies and to experience food insecurity. However, social security programmes play a significant role in mitigating against food insecurity. In South Africa, assuming a very mild effect on food production and distribution, Arndt et al. (2020) found that households with low educational attainment and a high dependence on labour income are the ones vulnerable to income and food insecurity shocks. These negative effects are mitigated by government transfers.

In Egypt, the impact of COVID-19 on food insecurity may be considered a demand shock as well. The pandemic deepens the existing economic access challenges for poor households and vulnerable groups. According to a study conducted by CAPMAS (2020) assessing the impact of COVID-19 on Egyptian households, by June (2020), 73% of households declared a decrease in income. This income decline is mainly because of the precautionary measures, a decrease in wages or unemployment. As a result, the consumption of meat, chicken, fruits and vegetable fell, whilst spending on rice, oil, legumes, medical supplies, detergents, disinfectants and internet bills increased (Caria et al, 2021). Likewise, Breisinger et al. (2020) found that the loss of tourism and Suez Canal revenues, and the decrease in remittances resulted in a decline in household consumption and expenditure by 9 percent to 10.6 percent of the average household income. In February 2021, 45% of households reported a reduction in their food purchasing because of rising prices, whilst 45% reported a decrease in their food expenditure because of falling income (ILO, ADA & ERF, 2021). This shows the negative setback of the pandemic on the ability of households to consume sufficient and nutritious food

A recent report, conducted by UNDP (2021), showed that COVID-19 is expected to jeopardise household welfare in the Arab States, including Egypt, especially with declining oil revenues. There is a differential impact according to the socio-demographic characteristics of individuals. Using unconditional quantile regression (UQR), UNDP (2021) investigates the determinants of food security in four Arab countries, Jordan, Egypt, Iraq and Somalia. Food expenditure per capita is used as a proxy for food security. The results for Egypt show that a household, whose head has a higher education level, has better access to food through the impact of education on income. Employment status and economic activity are key factors in income level and food access. The results show that households whose heads work in the construction sector are more vulnerable to a decline in income and to reduced food expenditure. It is worth noting that the construction sector is fundamental to urban growth in Egypt, which is one of the sectors that has been negatively affected by the spread of the virus and the precautionary measures (Oxford Business Group, 2020).

Finally, El Shal et al (2022) examine to what extent existing social safety nets and unusual support in Egypt, as well as in three other countries within the region, have mitigated against food insecurity during the COVID-19 pandemic. They estimated a difference-in-difference fixed effect model, using the ERF COVID-19 MENA Monitor data for Egypt, Tunisia, Jordan and Morocco. They found that unusual government support had no significant effects on food security in Egypt, Jordan and Morocco, whilst support from non-governmental institutions played a significant role in food security during the pandemic.

Using the ERF COVID-19 MENA Monitor data set for Egypt, the present paper examines the situation of Egyptian food security in June 2021, after the outbreak of COVID-19. The paper contributes to the existing scarce evidence-based research by examining the drivers of two dimensions of food security in Egypt; economic access and food consumption.

2. Data and Methodology

The paper uses the second wave of the ERF COVID-19 Monitor Data for Egypt. It is a phone survey that contains information on basic socio-demographic characteristics of respondents, self-reports on change in income, food expenditure, food bought, care work for women, employment status, education methods and living conditions in June 2021 - compared to February 2020, before the spread of COVID-19. The survey population consisted of mobile phone users aged 18-64 in Egypt. The samples were stratified by mobile operator and weights are used to be nationally representative (Krafft et al, 2022)

As discussed above, the pandemic may jeopardise the different dimensions of food security. The present paper focuses on two dimensions; economic access to food (*Model A*), and food consumption (*Model B*). The dependent variable of *Model A* is a binary variable that takes value 1 if the household has economic access to food, 0 otherwise. A household has economic access to food if the respondent replies that no household member was unable to buy the usual amount of food, during the past 7 days, because of income decline or/and increase in prices. For *Model B*, the dependent variable is a binary variable that equals 1 if the respondent replies that no household member had to reduce their meals or portions during the past 7 days, 0 otherwise.

Given the data used and following the literature, a logistic regression is considered the appropriate method to be used to examine the factors affecting the likelihood of having economic access to food and of consuming the usual amount of food in June 2022, compared to February 2020. The regressors in the two models include a set of socio-economic characteristics of the respondents and their households. Individual characteristics include the age, gender, education level and employment status of the respondent in February 2020. The effect of the pandemic is disproportionate on employees in different economic activities. Sectors such as manufacturing, tourism and construction are the sectors hardest hit by the pandemic (International Labour Organisation, 2020). Therefore, the economic activity of employees in February 2020 is included in the model. For the household's characteristics, the model includes the ratio of children under six years old to household size, the income quartile of the household in February 2020 and geographical location.

Since individuals who are informally employed without social security are expected to be amongst the most affected by such a crisis, a second version of the two models is estimated to include the formality status of the wage workers[2]. And to allow for the impact of change in the household's monthly income on food security, a third version of the two models is estimated to include change in income, instead of the income quartile of the household. This income loss dummy variable takes value 1 if the household experienced a decline in

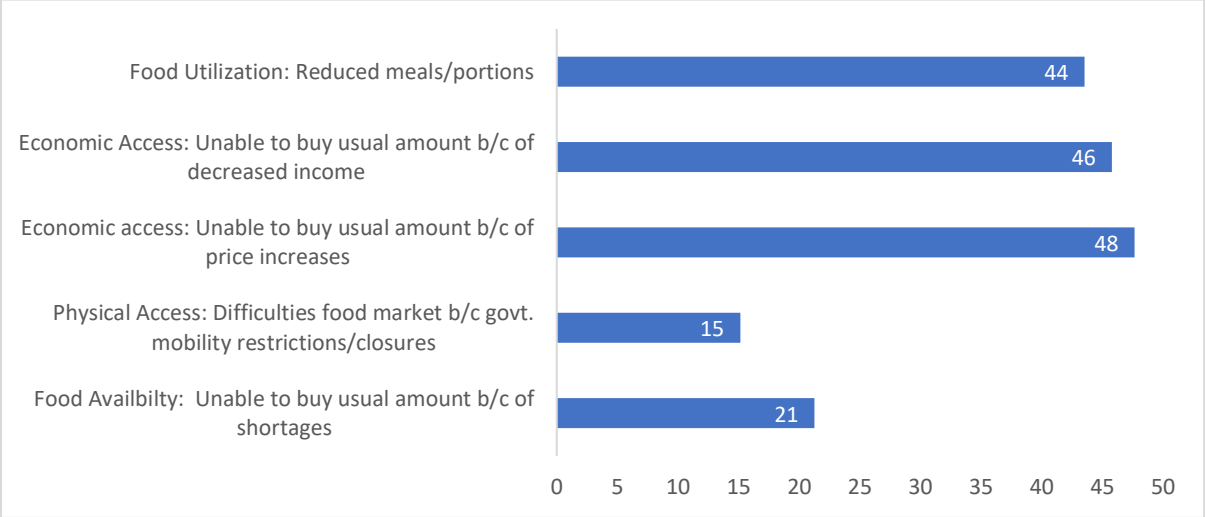
[2] There is no information regarding the formality of other employment types.

monthly income during the previous month to the survey, compared to February 2020, and 0 otherwise.

The used wave includes 2007 respondents. Each respondent replies to the survey questions on behalf of her/his household. It is worth noting that the survey does include information regarding the status of the respondent in the household. Hence, the respondent is not necessarily the household's head, but she/he replies for all the household's members

Around 42% of the respondents are female and 52% live in rural areas. Regarding the different dimensions of food security, figure 1 shows that economic access is the one most affected by the spread of coronavirus. Around 48% and 46% of the households were not able to buy the usual amount of food because of price increases and income decline, respectively. This shows that the pandemic is exacerbating the existing challenges for food security in Egypt, by limiting economic access to food. Whilst in terms of physical access, 15% of the respondents mention that they (or one of their household's members) faced difficulties in accessing food markets because of mobility restrictions. For food consumption, around 44% had to reduce their meals or portions they usually eat. And for food availability, 21% of the households were not able to buy the usual amount because of food shortage. These shares are higher amongst individuals living in rural areas.

Figure 1: Prevalence of households experiencing different dimensions of food insecurity because of the spread of COVID-19



Source: constructed by the author using COVID-19 MENA Monitor Data for Egypt - Wave 2

As poor households spend more on food compared to the highest income group, households in the lowest income group and those who lost income are more likely to experience limited access to food. In the first wealth quartile, around 68% experience limited access to food because of rising prices and/or income decline. This share is 46% in the fourth

quartile. Similarly, for food utilisation, 53% of households in the lowest income group had to reduce their meals/portion they usually eat, whilst the prevalence of this is 26% in the highest income quartile.

The negative setback of the pandemic on food security is to be expected, given its negative impact on income. According to the COVID-19 MENA Monitor Data for Egypt - Wave 2, in the previous month of the survey, 22% of the respondents report a decrease in their household's total monthly income by more than 25%, compared to February 2020. Besides this, 25% of the respondents experience a decrease in income of between 1% and 25%. The survey shows that 75% of households whose monthly income decreased, were not able to buy the usual amount of food because of rising prices and/or a decline in income. And 56% of households who experienced a fall in their income, had to reduce their meals/portions, compared to 32% of those who did not experience a decline in income.

3. Estimated Results

The estimated marginal effects of the regressors of the different logit models are presented in table 1 (economic access models A) and table 2 (food consumption models B). For the different versions of the economic access model, the results show that female respondents are more likely to mention that a member of their household was not able to buy the usual amount of food because of increasing prices or decreasing income. This negative effect of being female in relation to economic access to food is significant, in all versions of the model. As the female respondent may or may not be the household's head, we cannot draw a conclusion about the gender impact on food security in female-headed households.

Respondents with a higher education level are more likely to have economic access to food, compared to those with less than basic education. Such a positive effect of education is expected and in line with the literature, given the positive effect of education on income level.

For the employment status of the respondent, the results show that being a wage worker, formally or informally, has no significant impact on economic access to food in June 2021. But being a self-employed, in February 2020, significantly decreases the likelihood of economic access to food, compared to those who were unemployed or out of the labour force. Such a negative impact shows that the self-employed are amongst those groups at risk, as they were amongst those who lost their jobs and income, because of the spread of the virus. Likewise, respondents who work in hard-hit sectors, such as construction and manufacturing, are less likely to be food secured, compared to those who work in other economic activities. It is worth noting that employment status and economic activity are no longer significant when the model controls for the loss of income. Households who report a decline in their income during the previous month are less likely to have economic access to food, compared to those who did not observe any change in their monthly income, or experience an increase in their monthly income. This is to be expected, given that food

insecurity in Egypt is an economic access problem, so losing income is the main channel through which the pandemic threatens food security.

Geographical location and the income group of households appear to have no significant effects on their food security, whilst the higher the share of children under six years old - a characteristic of poor households - the lower the odds to have economic access to food.

For food consumption models (Models B), table 2 shows that older and female respondents are more likely to mention that their households had to reduce the meals or portions consumed during the past 7 days. As found with the economic access to food, respondents with a higher education level are more likely to be food secured when food consumption is being considered. Respondents who have secondary or higher education have a greater probability of mentioning that their households did not reduce food consumption, compared to those who have less than basic education.

The results show that the employment status and economic activity of the respondent are not a significant determinant of food consumption. And as found in Models A, the household income group and geographical location have no significant effect on food consumption. Finally, households whose income decreased are less likely to be food secured, in terms of the number of meals/portions they are used to consuming, as well as households with high share of children under six years old.

These findings confirm that food security is a multi-dimensional phenomenon, since the factors affecting food access may not be the same as the drivers of food utilisation.

4. Concluding Remarks and Policy Recommendations

The paper examines the determinants of food security in Egypt after the spread of the coronavirus. Food security is measured by two indicators, reflecting two dimensions: economic access and food consumption. Using the ERF COVID-19 Monitor data for Egypt – 2nd wave, a logistic regression is estimated, controlling for the individuals and household characteristics.

The analysis shows that income is the main channel through which the pandemic jeopardises household food security. Households who experienced a loss of income because of the pandemic, are more likely to be unable to buy the amount of food they usually buy, due to the fall in their income or in their purchasing power. They are also more likely to resort to food-based coping strategies, by reducing the number of meals or portions they usually consume. Similarly, poor households or households with a high share of children under five years old, would resort to such coping strategies. Other drivers of vulnerability to food insecurity include low education and employment in hard-hit sectors.

Based on the review of literature and the present analysis, we can conclude that the spread of COVID-19 magnified the challenges that existed before the pandemic. As food security is an economic access problem, vulnerable groups who were food insecure because of limited resources before the pandemic, remain food insecure with the economic setback of the pandemic on households. This is in addition to the new vulnerable groups who lost their jobs or income sources because of the coronavirus.

From a policy perspective, the present analysis sheds light on the vulnerable groups who need government interventions in the short and long term. With the spread of the coronavirus, the Egyptian government adopted different support programmes to protect the vulnerable groups. These policies include conditional cash transfers; increase in strategic food reserves; price control in addition to the food subsidies (UNDP, 2021).

In the long term, and with the actual Ukraine-Russia war expecting to exacerbate the existing challenges, more policies need to be implemented to ensure food supply and food demand. The Egyptian government might increase investment in the agriculture sector to increase its productivity, especially in a context of climate change. Achieving rural development would guarantee economic opportunities and food security for everyone. Ensuring equal access to education, technology and decent jobs are necessary conditions to ensure food security for everyone, by guaranteeing access to income.

Finally, it is worth mentioning that the present analysis has several limitations. First, the data used is for June 2021 and, as highlighted by Mandour (2021), the crisis is not over yet and the different variants of the coronavirus may affect food availability, in addition to the Ukraine- Russia war. Thence, more recent data is required to investigate the food security situation in Egypt. Second, the individual characteristics included in the model, as mentioned, may not be the characteristics of the head of the household. Such a limitation prevents the analysis from providing an in-depth discussion into the role of the head in ensuring the household's food security, especially from a gender perspective. Finally, the paper discusses only one side of food security, the demand side. More analysis regarding the supply side is required, mainly in the context of the actual Ukraine-Russia war.

Table 1: Estimated Marginal Effects for the different versions of Model A - Economic Access to Food

	Model A1	Model A2	Model A3
Age	0.000	0.000	0.000
	0.002	*0.002*	*0.002*
Female respondent	-0.138***	-0.138***	-0.103***
	0.048	*0.048*	*0.049*
Education Level (Reference: below basic education)			
Basic education level	-0.037	-0.039	-0.056
	0.057	*0.057*	*0.054*
Secondary education level	0.045	0.043	0.033
	0.044	*0.044*	*0.043*
Higher education level	0.165***	0.163***	0.145***
	0.050	*0.050*	*0.049*
Employment status Reference: non-employed			
Wage worker	-0.033		
	0.082		
Formal wage worker		-0.022	-0.037
		0.084	*0.077*
Informal wage worker		-0.042	-0.031
		0.086	*0.077*
Self employed	-0.150***	-0.150***	-0.075
	0.060	*0.060*	*0.060*
Industry (Reference: Other industries)			
Agriculture	-0.113	-0.111	-0.064
	0.102	*0.102*	*0.097*
Manufacturing	-0.169*	-0.166*	-0.123
	0.091	*0.091*	*0.085*
Construction	-0.192**	-0.190**	-0.129
	0.089	*0.090*	*0.080*
Retail and wholesale	0.046	0.049	0.036

	0.099	*0.099*	*0.091*
Transportation and accommodation	-0.120	-0.118	-0.051
	0.092	*0.092*	*0.084*
ICT and finance	-0.034	-0.041	0.014
	0.108	*0.109*	*0.107*
Education and health	0.027	0.027	0.021
	0.085	*0.085*	*0.077*
Ratio of children under six years old to household size	-0.384***	-0.385***	-0.336***
	0.090	*0.090*	*0.087*
Income Quartile (Reference: Q1or did not mention)			
Q2	-0.003	-0.004	
	0.041	*0.041*	
Q3	0.034	0.033	
	0.045	*0.045*	
Q4	0.071	0.069	
	0.061	*0.061*	
Rural (reference: urban areas)	0.006	0.006	0.008
	0.034	*0.034*	*0.033*
Experiencing income loss			-0.238***
			0.029

Standard errors in italic. ***p<0.01, **p<0.05, *p<0.1

***Source**: Estimated by the author using COVID-19 MENA Monitor Data for Egypt - Wave 2*

Table 2: Estimated Marginal effects for the different versions of Model B - Food Consumption

	Model B1	Model B2	Model B3
Age	-0.003*	-0.003*	-0.004**
	0.002	*0.002*	*0.002*
Female respondent	-0.132***	-0.133***	-0.108**
	0.046	*0.046*	*0.046*
Education Level (Reference: below basic education)			
Basic education level	0.03	0.028	0.018
	0.059	*0.058*	*0.054*
Secondary education level	0.096**	0.095**	0.095**
	0.043	*0.043*	*0.042*
Higher education level	0.227***	0.224***	0.224***
	0.05	*0.051*	*0.048*
Employment status (Reference: non-employed)			
Wage worker	-0.05		
	0.086		
Formal Wage Worker		-0.04	-0.036
		0.089	*0.083*
Informal Wage Worker		-0.057	-0.037
		0.089	*0.082*
Self employed	-0.071	-0.071	-0.009
	0.056	*0.056*	*0.057*
Industry (Reference: Other industries)			
Agriculture	0.029	0.03	0.059
	0.108	*0.109*	*0.104*
Manufacturing	-0.155	-0.152	-0.115
	0.097	*0.097*	*0.095*
Construction	-0.003	-0.001	0.046
	0.096	*0.096*	*0.092*
Retail and wholesale	0.003	0.005	-0.009
	0.104	*0.105*	*0.099*
Transportation and accommodation	-0.134	-0.133	-0.082
	0.09	*0.09*	*0.083*
ICT and finance	-0.071	-0.077	-0.027
	0.127	*0.127*	*0.125*
Education and health	-0.049	-0.049	-0.058
	0.092	*0.092*	*0.087*
Ratio of children under six years old to household size	-0.320***	-0.321***	-0.282***
	0.088	*0.089*	*0.087*

Income Quartile (Reference: Q1or did not mention)			
Q_2	0.028	0.028	
	0.041	*0.041*	
Q_3	0.071	0.07	
	0.044	*0.044*	
Q_4	0.125	0.123	
	0.059	*0.059*	
Experiencing income loss			-0.196***
			0.03
Rural (reference: urban areas)	0.004	0.004	-0.001
	0.034	*0.034*	*0.033*

Standard errors in italic. ***p<0.01, **p<0.05, *p<0.1

Source: Estimated by the author using COVID-19 MENA Monitor Data for Egypt - Wave 2

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ABOUT EMANES

The Euro-Mediterranean and African Network for Economic Studies (EMANES) is a network of research institutions and think tanks working on socio-economics policy in Europe, the Mediterranean and Africa. EMANES is coordinated by the Euro-Mediterranean Economists Association (EMEA).

The research conducted by EMANES Researchers, Associates and Fellows aims to design sound and innovative socio-economic models that are inclusive, sustainable and employment creative, to devise new models for regional integration and to provide policy recommendations towards this goal.

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- Digital economy;
- Healthcare policy;
- Human capital development, education, innovation, skill mismatch and migration;
- Labor markets, employment and employability;
- Finance, financial inclusion and the real economy;
- Sustainable development;
- Regional integration;
- Euro-Mediterranean economic partnership;
- Scenarios analysis and foresight.

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