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Household Vulnerability and Resilience in Egypt: The Role of Social Policies*

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About the authors

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Key Questions:

- What are the shocks experienced by Egyptian households and how did they cope?
- How do social programs in Egypt mitigate the vulnerability of poor households?

In a nutshell

- Almost a quarter of Egyptian households experienced food insecurity and 16 percent were exposed to at least one type of shock during the year 2017/18.
- Poor households were four times as likely to have experienced food insecurity and more than twice as likely to have experienced shocks compared to rich households.
- Job informality of household members increased the likelihood of shocks and food insecurity. Also, a higher disability rate was associated with higher food insecurity.
- Households mostly used consumption rationing—reduced spending on health, food or education—and social capital to cope with shocks or food insecurity.
- Social protection schemes need a stronger role in mitigating the vulnerability of poor households.
- Interlinked policy measures are needed to increase Egyptian households' resilience to shocks and prevent them from using stressful strategies that may harm their human capital and render them more vulnerable to shocks in the future.

This policy brief draws on a number of recent ERF working papers discussing the results of the 2018 wave of the Egypt Labor Market Panel Survey (ELMPS). These papers include Assaad et al. (2019); Selwaness and Ehab (2019); Sieverding and Hassan (2019); Helmy and Roushdy (2019).



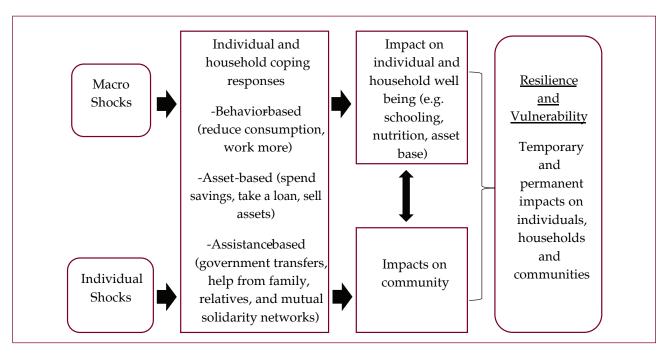
Managing risks and reducing vulnerability to shocks enhances the well-being of households and encourages investment in human capital (Heitzmann, Canagarajah, & Siegel, 2002; Holzmann & Jorgensen, 1999). The mechanisms for managing risks can be broadly classified into: 1) risk prevention measures to reduce the probability of shocks; and 2) coping measures to relive the impact of shocks after they occur (World Bank, 2001).

In this policy brief, we describe the nature of shocks and food insecurity experienced by Egyptian households as well as their preventive and coping mechanisms using recent data from the 2018 Egypt Labor Market Panel Survey (ELMPS). This brief also examines the role of social protection programs in strengthening the capacity of households to respond to and recover from shocks. More effective social

programs with wider coverage outreach are still needed to mitigate household vulnerability to shocks and food insecurity.

Shocks can be classified as micro-shocks that affect individuals or households; meso-shocks that affect the communities; or macro-shocks that affect the whole nation. Another dimension of classification is the nature of event, such as economic, health, environmental and social shocks (Heitzmann et al., 2002; Holzmann & Jorgensen, 1999; World Bank, 2001). Figure 1 shows a framework that links shocks and vulnerability. To respond to different macro or micro shocks, households employ diverse coping measures that affect the well-being of households through different channels including schooling, nutrition and asset depletion. Consequently, household resilience and vulnerability are affected by shocks (Heltberg et al., 2012).

Figure 1 Shocks and vulnerability: a conceptual framework



Source: compiled by authors based on Heltberg et al., 2012

While all households were negatively affected by various shocks, poor households were the most vulnerable.

Around 16 percent of Egyptian households were exposed to at least one type of shock in the year preceding the ELMPS 2018 interview. Economic shocks were the most frequently reported type of shocks. About 14 percent of the households were exposed to an economic shock, 5 percent to a health shock, 2 percent to an environmental shock, and 1 percent to a social shock. Reduced income (12 percent) followed by loss of employment (7 percent) were the most prevalent types of economic shocks. Health shocks varied slightly between human disease (3 percent), accident (2 percent) and death (2 percent) (Helmy & Roushdy, 2019).

Additionally, around 25 percent of households experienced food insecurity during the month preceding the survey. About 15 percent of households experienced food insecurity alone, while about 10 percent experienced both food insecurity and at least one type of shock simultaneously.

Households belonging to the poorest wealth quintile (23 percent) were more than twice as likely to experience a shock compared to those falling in the fourth (12 percent) and fifth (9 percent) wealth quintile groups. Similar to shocks, the likelihood of food insecurity was higher among the poorest households. About 39 percent of the poorest quintile households experienced food insecurity, as compared to only 11 percent of the richest quintile households.

Poverty, poor health status, and food insecurity trap

Poverty was also associated with disability and poor health outcomes. Based on the broad definition of disability, the disability rate was 17 percent in 2018

among the Egyptian population aged five and above. A higher rate was reported among the poorest wealth quintile (18 percent) compared to a range of 15-16 percent among second to fifth wealth quintiles. As well as having a lower probability of being covered by health insurance, poor individuals reported suffering from poor health status based on self-rated health² and the subjective well-being³ (Selwaness & Ehab, 2019; Sieverding & Hassan, 2019).

Disability and food insecurity were linked. This relationship is as expected since both food insecurity and disability are higher among the poor. Additionally, exposure to shocks was associated with low subjective wellbeing (Sieverding & Hassan, 2019).

Rural households, particularly those living in Upper Egypt, were more vulnerable

Exposure to shocks was higher in rural areas compared to urban areas. More households were exposed to shocks in rural Upper Egypt (21 percent) and rural Lower Egypt (20 percent), followed by the Alexandria and Suez Canal region (19 percent), Urban Upper Egypt (15 percent), Urban Lower Egypt (14 percent) and Greater Cairo (3 percent). A similar regional disparity was observed when analyzing food insecurity, which was higher in the 1,000 poorest villages (31 percent), followed by other rural areas (28 percent), as compared to 21 percent among urban households. The two regions that had the highest rates of food insecurity were rural Upper Egypt (32 percent) and Alexandria and Suez Canal (31 percent) (Helmy & Roushdy, 2019).4

¹ The broad definition of disability classifies individuals as disabled if they have at least some difficulty in performing tasks in at least one of the six domains: seeing, hearing, walking, cognition, self-care and communication (Sieverding & Hassan, 2019).

² The self-rated health measure asks respondents "how is your health in general?". Respondents select one category: "very good or excellent", "good", "fair", "bad" and "very bad" (Sieverding & Hassan, 2019).

³ ELMPS 2018 included the World Health Organization Well-Being Index (WHO-5) which asks about respondents' life over the last two weeks in the form of five positively-phrased statements. Respondents select a range from 5 (all the time) to 0 (none of the time) (Sieverding & Hassan, 2019).

⁴ This high rate of food insecurity in Alexandria and Suez Canal was consistent with the increased poverty level in these governorates that reached 32 percent in Ismailia, 22 percent in Alexandria and 20 percent in Suez Canal in 2017/2018 compared to 24 percent, 12 percent and 17 percent, respectively, in 2014/2015 (Central Agency for Public Mobilization and Statistics, 2019).

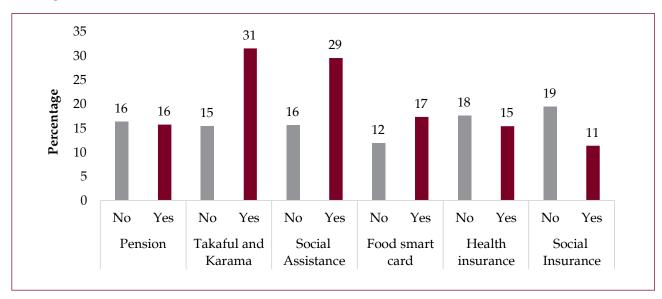
Takaful and Karama and food-ration cards: good coverage but the same shocks and food insecurity

Social protection systems worldwide are expected to play a crucial role in mitigating the risks of households and reducing exposure to shocks (World Bank, 2001). Around 57 percent of Egyptian households received either non-contributory (such as Sadat/Mubarak pensions, Takaful and/or Karama, 5 and other types of social assistance) or contributory (such as retirement pensions) benefits compared to 62 percent in 2012 and 68 percent in 2006. This decline could be due to the decrease in the percentage of households with at least one actively contributing member as well as the drop in social insurance coverage (Selwaness & Ehab, 2019).

On the other hand, the percentage of households covered by any type of social assistance transferred by the government increased from 9 percent in 2006 to 13 percent in 2018. This increase in coverage was higher among lowest wealth quintile, indicating that these schemes have been well-targeted towards more vulnerable households (Selwaness & Ehab, 2019).

Figure 3Error! Reference source not found. shows that despite receiving social assistance, beneficiary households still reported higher exposure to risks as compared to non-beneficiary households. For instance, 31 percent of households which received Takaful or Karama were exposed to shocks, compared to 15 percent among non-recipient households. Results were similar for other social assistance and food ration cards.

Figure 2 Percentage of households who experienced shocks during the past year by social protection coverage



Source: Helmy & Roushdy (2019). Notes: At least one member has access.

⁵ See World Bank (2015) for more details on Takaful and Karama programs.

Food insecurity was common among households receiving social assistance and food ration cards. Over a quarter of the households who received food ration cards suffered from food insecurity during the month preceding the ELMPS survey. Furthermore, the degree of food insecurity was highest among households receiving Takaful and Karama conditional cash transfers or other types of social assistance. Less than 9 percent of the households receiving retirement pensions reported severe food insecurity, compared to 18 percent of the households receiving social assistance and 15 percent of the Takaful and Karama beneficiaries (Helmy & Roushdy, 2019).

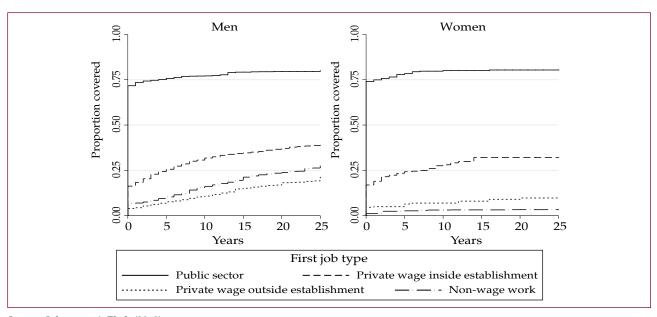
Job formality and exposure to shocks

The share of informal employment, those working with neither a contract nor social insurance coverage, increased in 2018 (Assaad, AlSharawy and Salemi 2019). This increase was due to the increasing share of private wage work outside a fixed establishment.

The percentage of workers with social insurance fell by almost 10 percentage points, from 42 percent in 2012 to only 32 percent in 2018. The largest decline in social insurance coverage was among men working outside an establishment, from 11 percent in 2006 and 2012 to 6 percent in 2018 (Selwaness & Ehab, 2019).

Lack of social insurance coverage is also quite prevalent among new entrants to the Egyptian labor market. Figure 3 shows the proportion of workers who are covered by social insurance with each year of work since first job. New entrants to the public sector were the most likely to be socially insured as soon as they are hired (71 percent of men and 74 percent of women). Only between 16 to 17 percent of male and female private sector wage workers inside an establishment acquire social insurance immediately after being hired. Their chances of being covered by social insurance increase over time. However, the chance of wage workers outside establishments becoming covered remain persistently low over time, implying a higher chance of informality trap (Selwaness & Ehab, 2019).

Figure 3 Proportion acquiring social insurance coverage by years since the start of first job, by the type of first job in the labor market and by sex, ages 15-64, ELMPS 2018



Source: Selwaness & Ehab (2019)

Informality of employment is linked with exposure to shocks among households. Households with heads working in the informal private sector were twice as likely to get exposed to a shock (20 percent), as compared to households with heads working in the formal private or public sectors (10-11 percent). Additionally, around 23 percent of the households with heads working outside an establishment were exposed to a shock as compared to only 12 percent among those of heads working inside an establishment (Helmy & Roushdy, 2019).

Similar to social insurance coverage, health insurance benefits also witnessed a decrease in coverage. Around 72 percent of individuals aged 15 and above reported having no access to health insurance in 2018 as compared to 68 percent in 2012. Women and poor individuals were less likely to have health insurance.

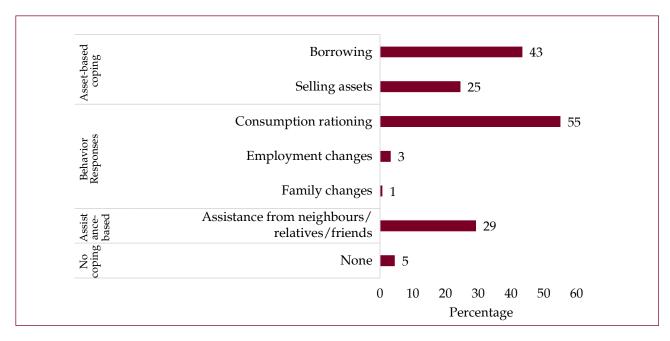
In contrast to social assistance, households who had health insurance were less likely to experience

a shock in 2017/2018, 15 percent versus 18 percent among those without health insurance. The case was likewise for those with social insurance: 11 percent experienced a shock versus 19 percent among those without social insurance (Helmy & Roushdy, 2019).

Households use coping mechanisms that may harm their human capital and render them more vulnerable to future shocks

Figure 4 shows that consumption rationing (55 percent) followed by borrowing (43 percent) were the two most frequently reported coping mechanisms in response to shocks. Social capital was an important safety net for Egyptian households, as almost a third (29 percent) of households reported seeking assistance from relatives and friends in response to a shock (Helmy & Roushdy, 2019).

Figure 4 Percentage of households using different coping mechanisms, households with shocks during the past year



Source: Helmy & Roushdy (2019). Notes: Multiple strategies are possible

The majority of households who reported borrowing as a coping strategy purchased goods on credit or used their social capital as the source of credit. About 28 percent of households borrowed money from their relatives or friends as opposed to 5 percent who borrowed from a bank or a money lender. Consumption rationing as a coping strategy primarily consisted of reducing spending on health (36 percent), eating less food (35 percent), and reducing spending on education (22 percent) (Helmy & Roushdy, 2019).

Borrowing and purchasing on credit were more prevalent as coping strategies among male headed households (45 percent) than female headed households (36 percent). In contrast, assistance from neighbors, relatives, and friends were more frequently reported by female headed households (33 percent) than by male headed households (28 percent). These findings confirm the difficulties women in Egypt face in getting access to formal credit (see Roushdy and Selwaness (2015) and World Bank (2018)).

As for food insecurity, more than 54 percent of households did not adopt any coping mechanism when experiencing food insecurity. Food insecurity is probably mostly chronic rather than a sudden shock. Nevertheless, 34 percent of the households who experienced food insecurity borrowed or purchased food on credit while 19 percent received assistance from neighbors, relatives, and friends to cope with the food insecurity.

Conclusion and policy recommendations

It is important to provide poor households with formal shock-responsive social safety nets that are flexible and sufficient to strengthen their capacity to respond to shocks. The coping strategies adapted by Egyptian households in response to shocks were mostly consumption rationing. These strategies were not effective enough in protecting them but rather have clear irreversible consequences on the nutritional and educational status of future generations. Accordingly, the government's top priority should be developing risk reduction measures in order to prevent deterioration in the nutritional, health, and educational status of children

Expanding the types of cash transfer programs that deliberately target women, like the Takaful program, is vital given the evidence on how household vulnerability and child welfare is related to the gender of who controls the resources of the household. Furthermore, poor Egyptian household did not access formal loans, which left them with only the option of informal borrowing, which may be costly. It is crucial to develop policies that aim to increase the access of households, owning few assets, to low-cost loans. Special attention should be given here to female headed households who generally experience low access to formal credit in Egypt.

Labor market reforms are needed to help poor household members to find a formal job that provides both social and health insurance coverage and other non-monetary benefits. Special efforts should be directed towards inaugurating a better investment climate combined with a well-functioning private sector, in order to boost the creation of new formal and high-quality jobs. The results show access to formal, inside establishment jobs and to social security benefits were associated with considerably lower exposure to shocks and food insecurity in Egypt.

Further reading

Assaad, R., AlSharawy, A., & Salemi, C. (2019). Is The Egyptian Economy Creating Good Jobs? Job Creation and Economic Vulnerability from 1998 to 2018 (Working Paper Series No. ERF Working Paper Series (Forthcoming)).

Central Agency for Public Mobilization and Statistics. (2019). *Main Indicators-HIECS* 2017/2018. Egypt.

- Heitzmann, K., Canagarajah, S., & Siegel, P. (2002). Guidelines for assessing the sources of risk and vulnerability. Social protection discussion paper series. Washington, D.C.
- Helmy, I., & Roushdy, R. (2019). *Household Vulnerability* and Resilience to Shocks in Egypt (Working Paper series No. ERF Working Paper Series (Forthcoming)).
- Heltberg, R., Hossain, N., Reva, A., & Turk, C. (2012). Anatomy of Coping: Evidence from People Living through the Crises of 2008 – 11.
- Holzmann, R., & Jorgensen, S. (1999). Social protection as social risk management: Conceptual underpinnings for the social protection sector strategy paper. Washington, D.C.
- Roushdy, R., & Selwaness, I. (2015). Young People's Labor Market Outcomes During a Period of Transition. In R. Rania & M. Sieverding (Eds.), PANEL SURVEY OF YOUNG PEOPLE IN EGYPT (SYPE) 2014:Generating Evidence for Policy, Programs, and Research. Cairo, Egypt: The Population Council.

- Selwaness, I., & Ehab, M. (2019). Social Protection and Vulnerability in Egypt: A gendered Analysis (Working Papers No. ERF Working Paper Series (Forthcoming)). Cairo, Egypt.
- Sieverding, M., & Hassan, R. (2019). *Associations between economic vulnerability and health and wellbeing in Egypt* (Working Paper series No. ERF Working Paper Series (Forthcoming)).
- World Bank. (2001). Word Development Report 2000/2001: Attacking Poverty. New York, United States: Oxford University Press.
- World Bank. (2015). International Bank For Reconstruction
 And Development Project Appraisal Document On A
 Proposed Loan In The Amount Of USD400 Million To
 The Arab Republic Of Egypt For A Strengthening Social
 Safety Net Project. Washington, DC.
- World Bank. (2018). The Global Findex Database 2017. Retrieved from https://globalfindex.worldbank.org/

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