

From Vulnerability to Resilience: Households' exposure to shocks and coping mechanisms in Egypt

Imane Helmy

Alanoud Ehab

ERF Policy Conference

Evidence & Insights from Egypt's Labor Market Panel Survey 2023

November 2024

Introduction and Motivation

- This paper examines different **types of shocks** experienced by Egyptian households over the past year **with a special focus on household's vulnerability to food insecurity**.
- It also explores **coping mechanisms** that were adopted by households including changes in labor supply and food consumption.
- **Understanding the nature of shocks** and identifying the determinants of vulnerability to shocks and food insecurity is imperative to design interventions that prevent households from falling into poverty or resorting to stressful strategies that affect their resilience.

Data and Methods

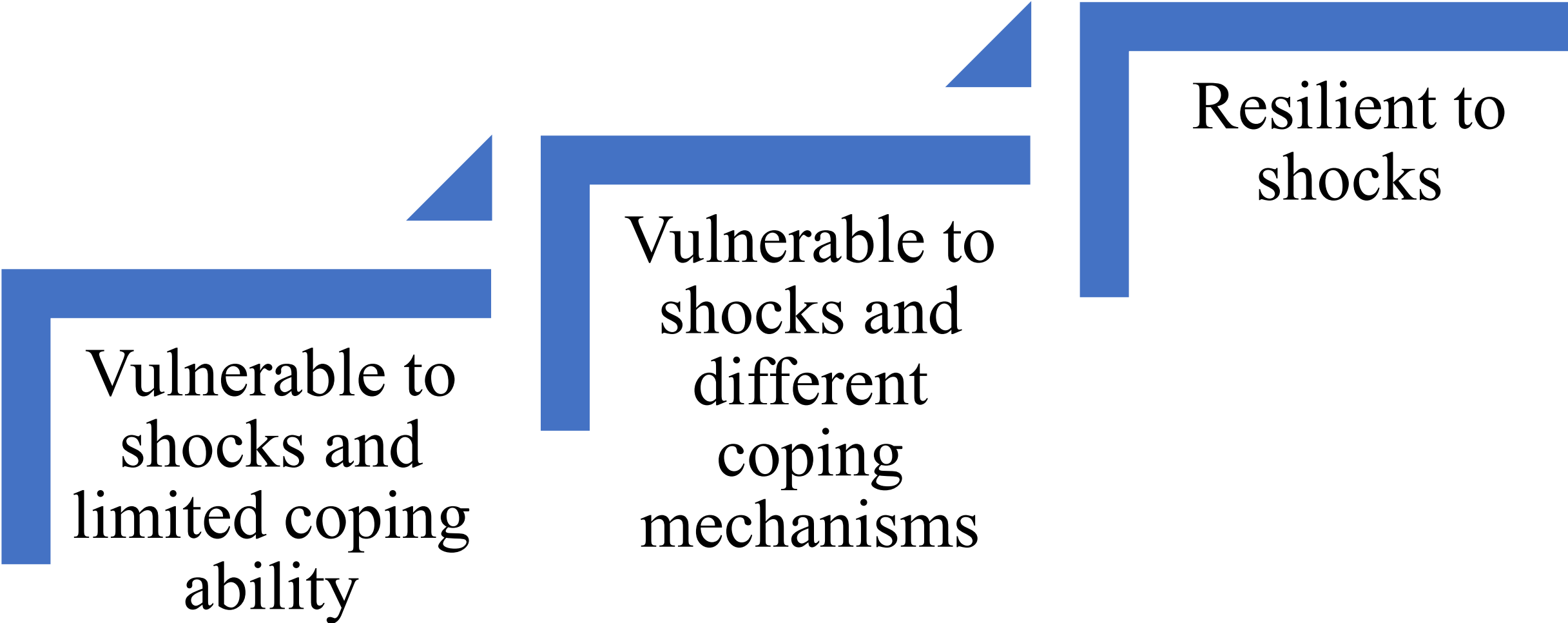
- This study uses Egyptian Labor Market Panel Survey (ELMPS) in 2018 and 2023. **ELMPS 2023** included 17,806 households (70,716 individuals).
- ELMPS 2023 included a module exploring exposure to food insecurity and shocks during the year preceding the survey
- *Revised module compared to 2018:*
 - In 2023 round, the economic events introduced 'increased prices of food and other necessities.
 - Food security questions had a new metric 'Food Insecurity Experience Scale (FIES)' with a longer recall period (one year) compared to four weeks in 2018.
- The survey also enquired about various **formal and informal coping mechanisms**.
- **Descriptive analysis** is used to separately analyze exposure to shocks and exposure to food insecurity given their distinct nature.

Shocks experienced by Egyptian households

Types of Shocks

Environmental Shock	Experienced drought or water shortage during the past year.
Economic Shock	Experienced increase in price of food and other necessities, high cost of agricultural input or loss of employment or reduced income during the past year.
Health Shock	Experienced high level of human disease, serious illness or accident, death of working member or death of a household member during the past year.
Other Shocks	Experienced theft, conflict or violence or a fire during the past year.

Exposure to shocks

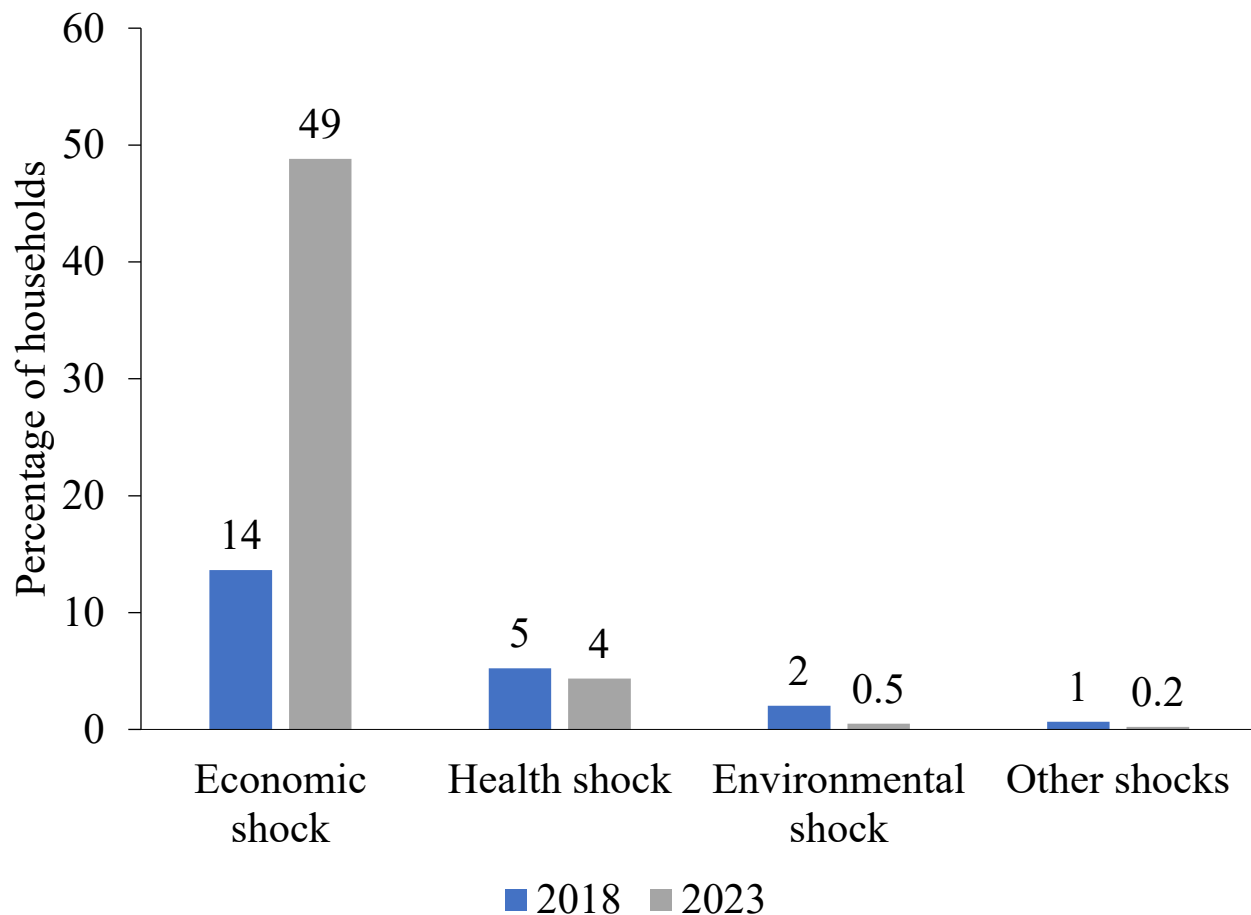


Vulnerable to shocks and limited coping ability

Vulnerable to shocks and different coping mechanisms

Resilient to shocks

Percentage of households who were exposed to shocks during the last 12 months, by wave and type of shock (2018-2023)



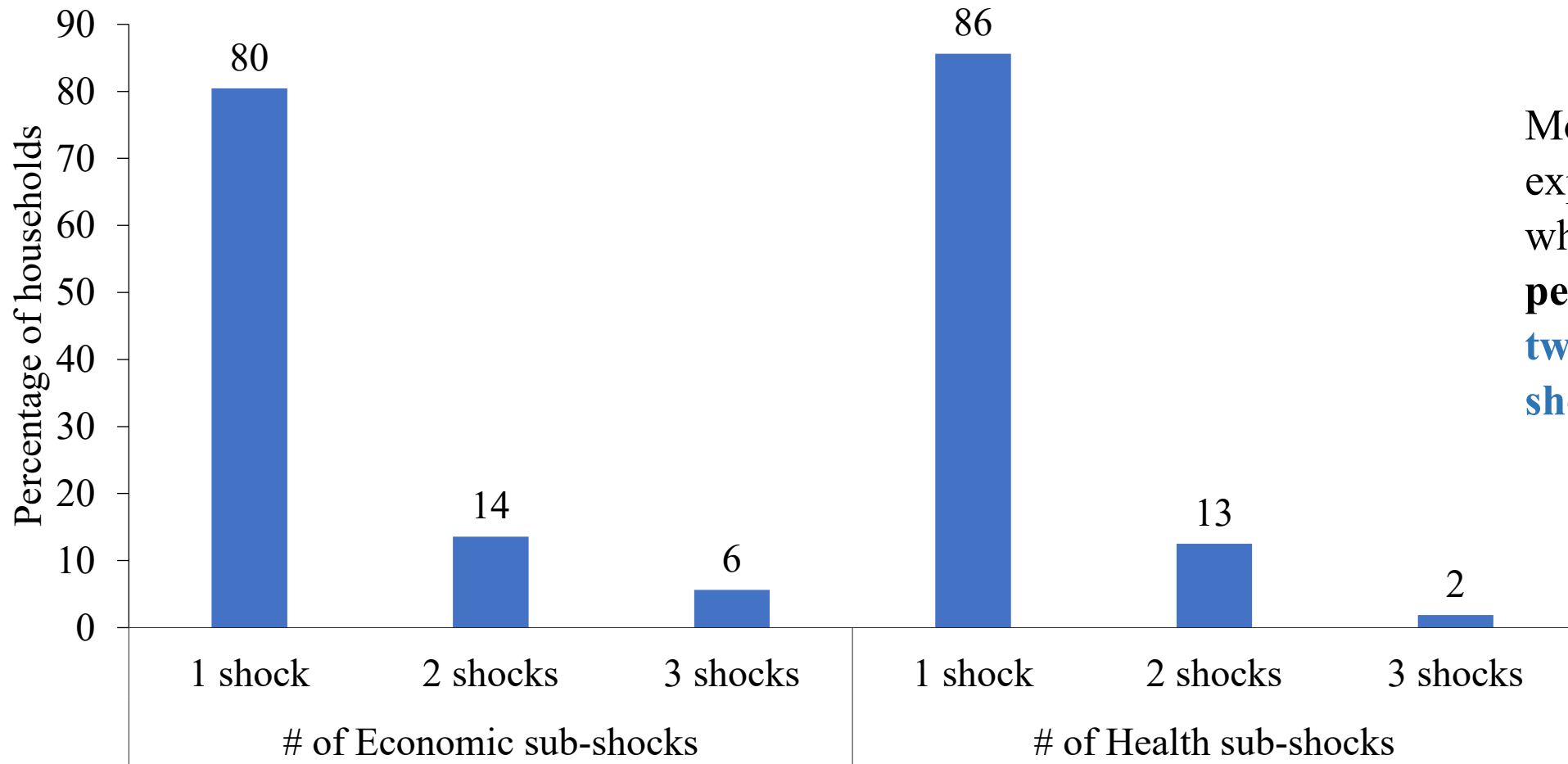
Around 16 percent of Egyptian households were exposed to at least one type of shock in 2018, compared to around **50 percent** in the year preceding the ELMPS survey in 2023.

- The most prevalent types of **economic shocks**: **increased price of food and other necessities (47 percent)**, reduced income (7 percent), loss of employment and increased price of agriculture inputs (4 percent).
- **Health shocks**: exposure to serious human disease (2 percent), death of household member/head (2 percent) and accident (1 percent).

Notes: Multiple shocks are possible. N=15,746 in 2018 and N=17,783 in 2023.

Source: Authors' calculation based on ELMPS 2018 and 2023

Percentage of households who experienced one, two, or three shocks during the year preceding the survey (2023)



Most households experienced **one shock** while **around 13 to 14 percent** were exposed to **two health or economic shocks** simultaneously.

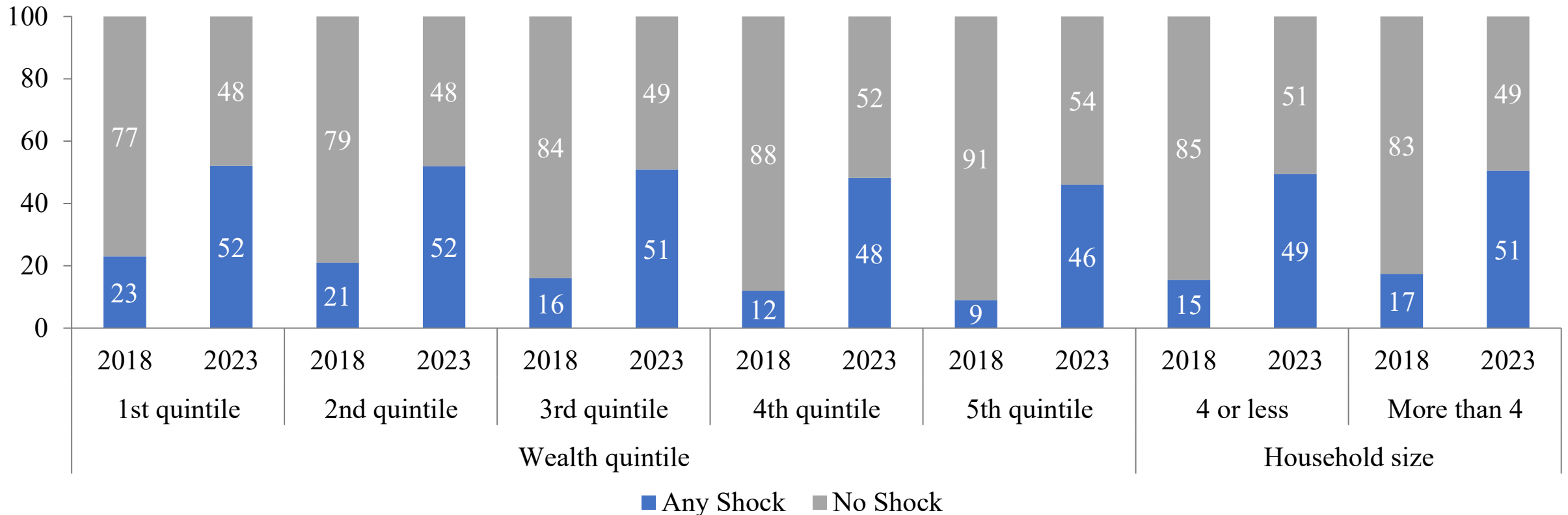
Notes: N=8,706 for economic shocks and N=800 for health shocks.

Source: Authors' calculation based on ELMPS 2023.

Determinants of exposure to shocks

Percentage of households who experienced any type of shock, by wealth quintile and household size (2018-2023)

Larger households and those belonging to the **poorest wealth quintile** were more likely to be exposed to a shock compared to those falling in the fourth and fifth wealth quintile.

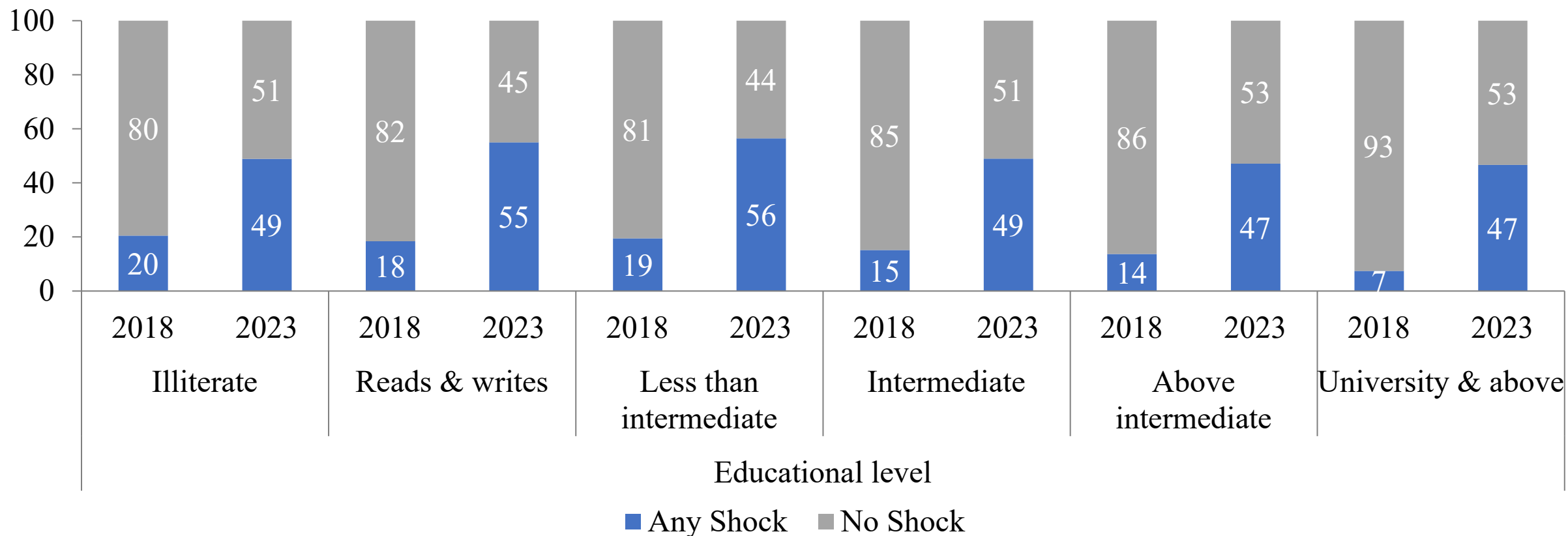


Notes: Multiple shocks are possible. N= 15,746 in 2018 and N=17,783 in 2023.

Source: Authors' calculation based on ELMPS 2018 and 2023.

Percentage of households who experienced any type of shock during the year preceding the survey, by education of household head (2018-2023)

Higher exposure among heads with education levels **below intermediate** compared to above intermediate or university degree

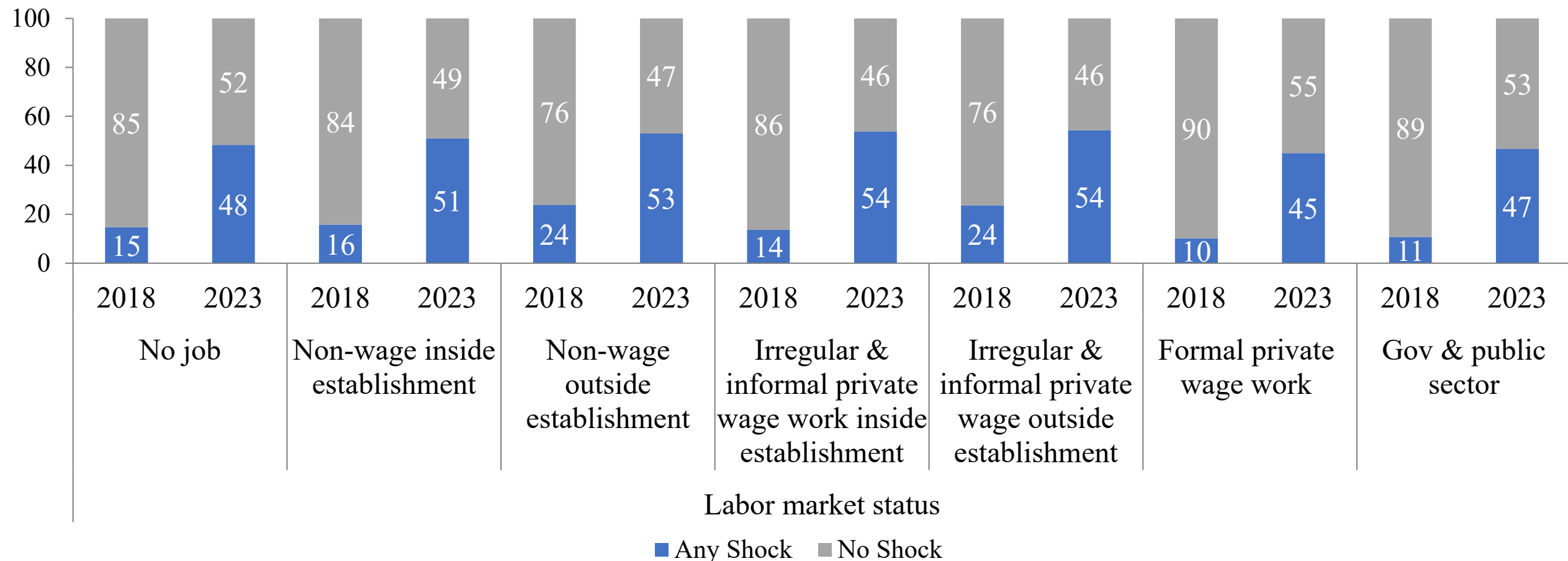


Notes: Multiple shocks are possible. N= 15,746 in 2018 and N=17,783 in 2023.

Source: Authors' calculation based on ELMPS 2018 and 2023.

Percentage of households who experienced any type of shock during the year preceding the survey, by sector of employment of household head (2018-2023)

Exposure to shocks was higher among heads working **irregularly/informally inside or outside of establishments or non-wage work outside establishment**



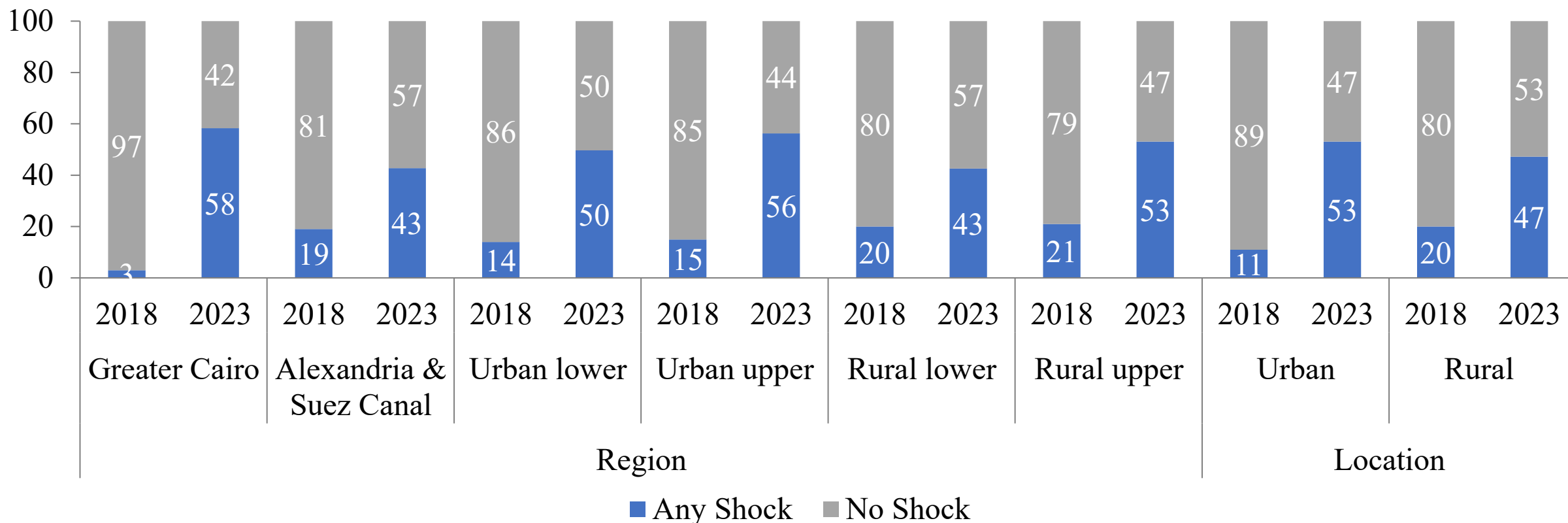
Notes: Multiple shocks are possible. N= 15,746 in 2018 and N=17,783 in 2023.

Source: Authors' calculation based on ELMPS 2018 and 2023.

Percentage of households who experienced any type of shock during the year preceding the survey, by location and region of residence (2018-2023)

Households residing in **urban areas** were highly exposed to economic shocks compared to rural areas
(Linked to Subsistence or Social Assistance?)

Analyzing the dynamics will provide valuable insights into how rural households manage economic challenges compared to their urban counterparts.



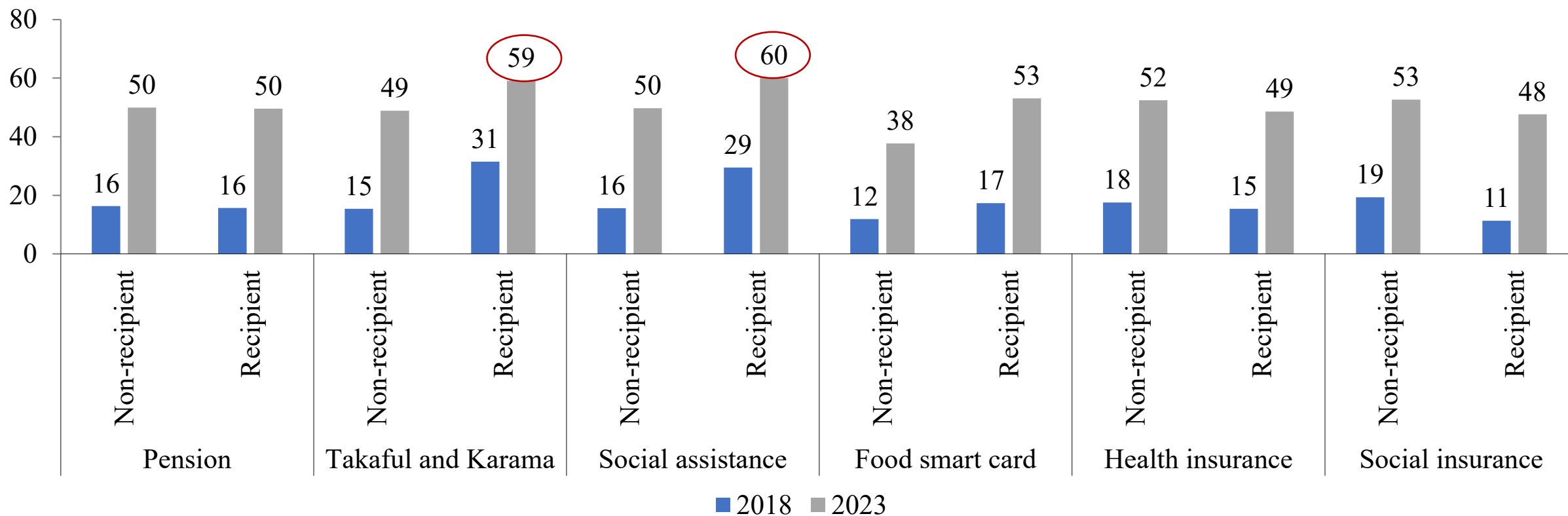
Notes: Multiple shocks are possible. N= 15,746 in 2018 and N=17,783 in 2023.

Source: Authors' calculation based on ELMPS 2018 and 2023.

Percentage of households who experienced any type of shock during the year preceding the survey, by social protection coverage (2018-2023)

Households with access to **health or social insurance** were more resilient to shocks.

Beneficiaries of TKP and SA reported higher exposure (*Targeting?*)



Notes: Coverage for at least one member. In 2018, N=3,631 for pension; 958 for T&K; 707 for social assistance; 12,679 for food ration card; 9,421 for health insurance; 3,971 for social insurance. In 2023, N=4,467 for pension; 2,009 for T&K; 187 for social assistance; 14,020 for food ration cards; 11,496 for health insurance; 4,135 for social insurance. Source: Authors' calculation based on ELMPS 2018 and 2023.

Coping Mechanisms

Coping Strategies

1. No coping

Not adapting any coping strategy to respond to shock.

2. Coping mechanisms

A. Behavior-based responses

Consumption Rationing

Coped by reducing food consumption, reducing spending on health, reduced spending on education

Employment changes

Coped by engaging in additional income generating activities/changed labor supply/changed labor hours, migrating.

B. Assistance-based coping strategies

Coped by receiving cash or in-kind assistance from neighbors/relatives, family/NGO/government

C. Asset-based coping strategies

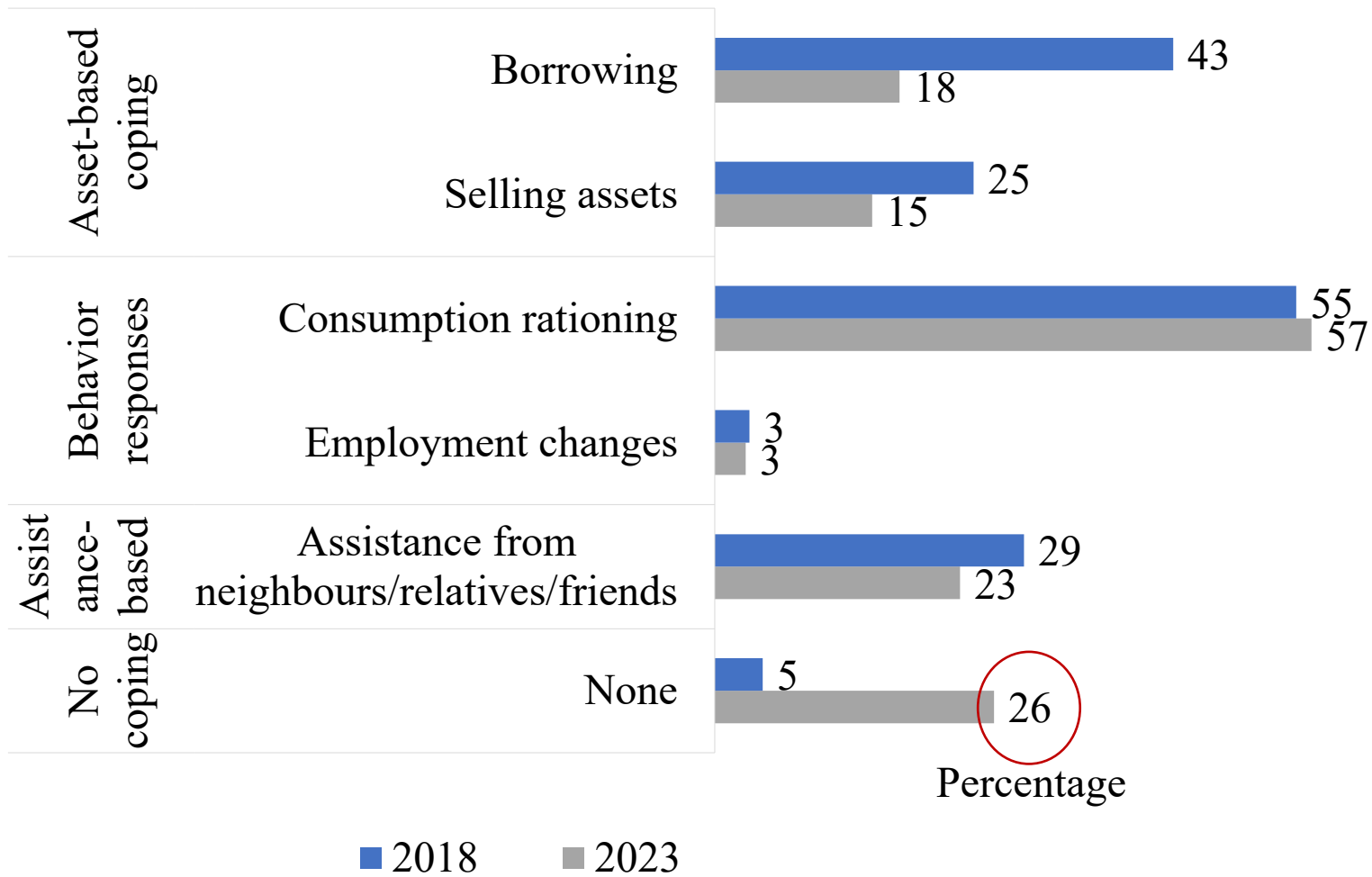
Borrowing

Coped by formal or informal borrowing (cash or in-kind) as well as purchasing food/goods on credit

Use of Assets

Coped by selling assets/jewellery or spent savings or consumed seed stock/livestock

Percentage of households using different coping mechanisms, households with shocks during the past year, 2023



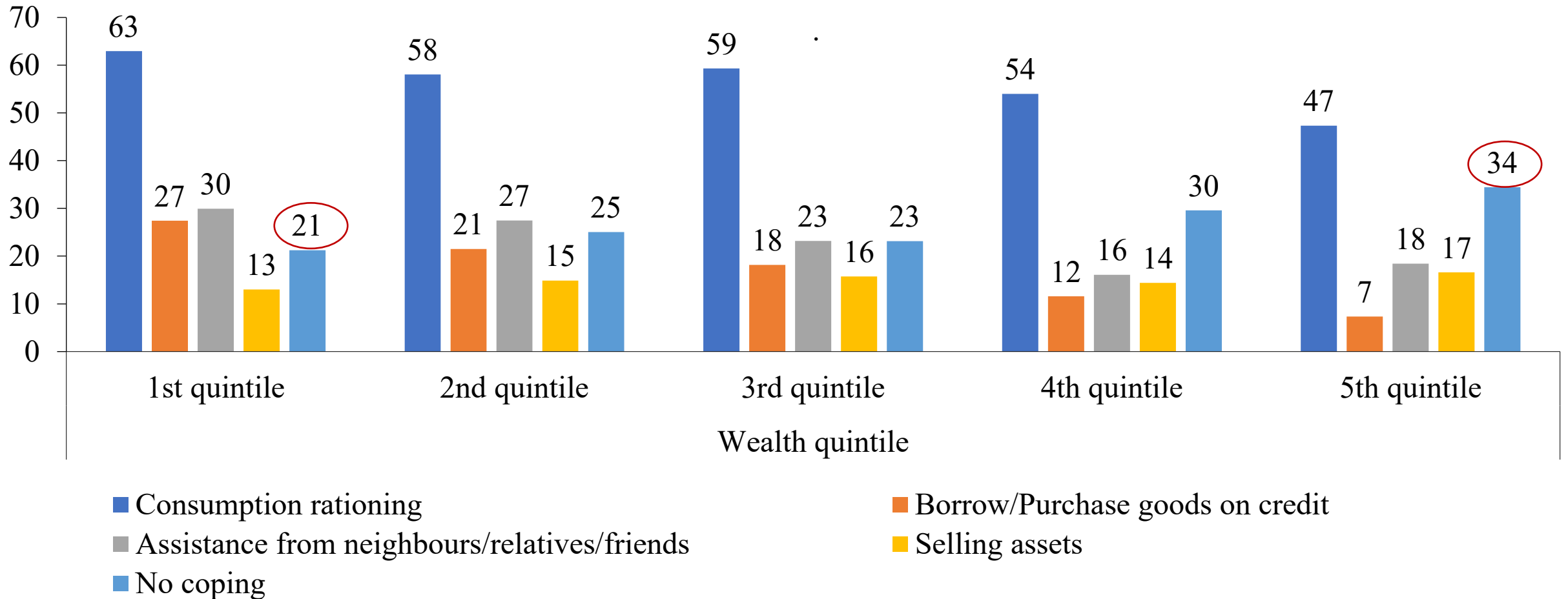
Consumption rationing remained the most common coping strategy

Reliance on social capital declined, yet remains an important safety net for Egyptian households.

Notes: Multiple strategies are possible. N= 2,723 in 2018 and N=8,887 in 2023. Source: Authors' calculation based on ELMPS 2018 and 2023.

Percentage of households using different coping mechanisms after experiencing a shock during the year preceding survey, by household wealth quintiles (2023)

A potentially lower effects of shocks on better-off households and a limited capacity to respond to different types of shocks.

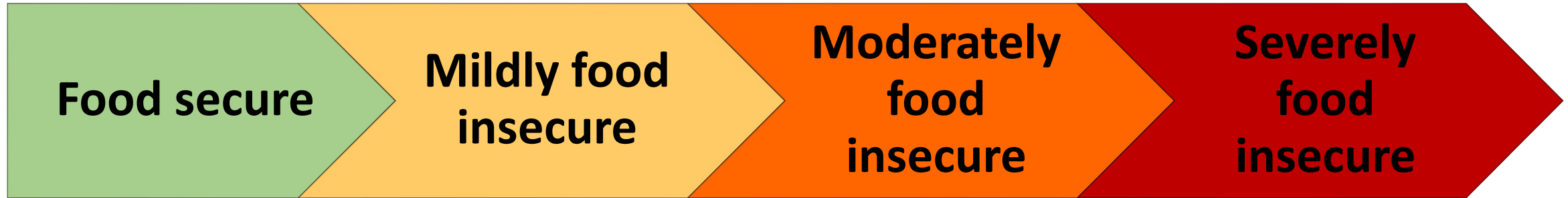


Notes: Multiple strategies are possible (N=8,887).

Source: Authors' calculation based on ELMPS 2023

Food Insecurity

Food Insecurity Experience Scale (FIES)



Household did not experience any food insecurity.

Worried about running out of food

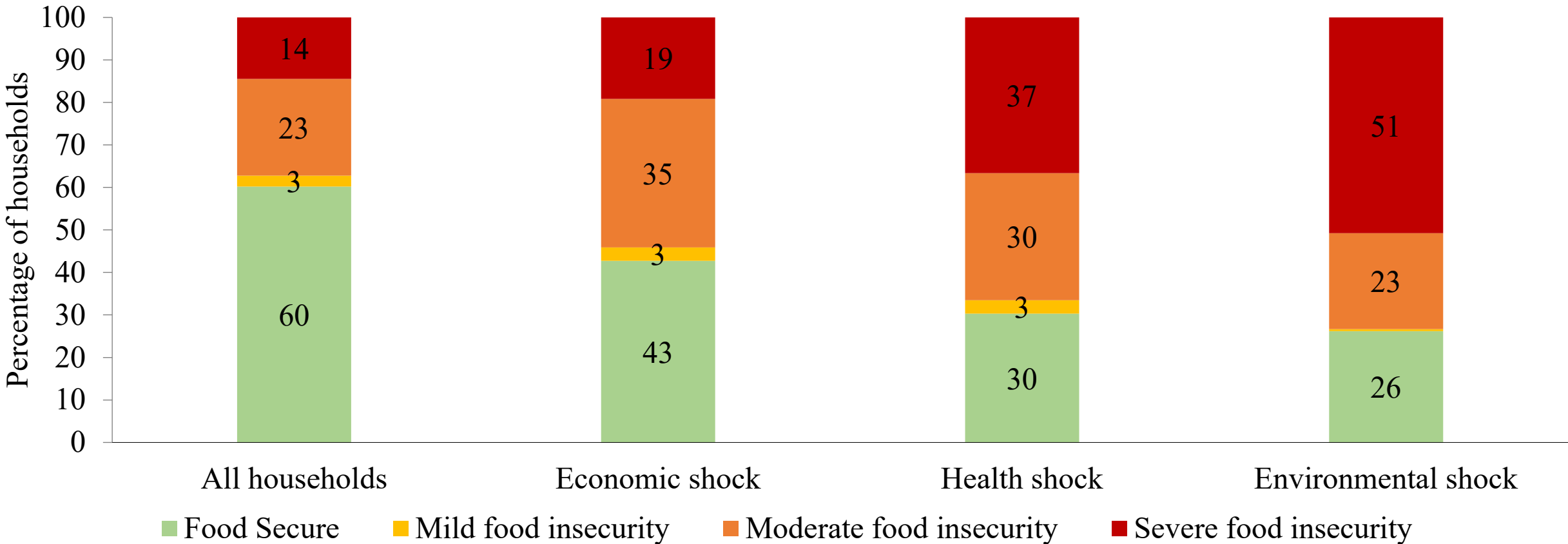
Compromised on food quality, reduced quantities, or even skipped meals

Experienced hunger and went without eating for at least an entire day due to the lack of money or other resources to obtain food

Percentage of households who experienced shock in the year preceding the survey, by degree of food insecurity based on (FIES) (2023)

Majority of Egyptian households (60 percent) were food secure

35 percent of households who experienced **economic shocks** were moderately food insecure



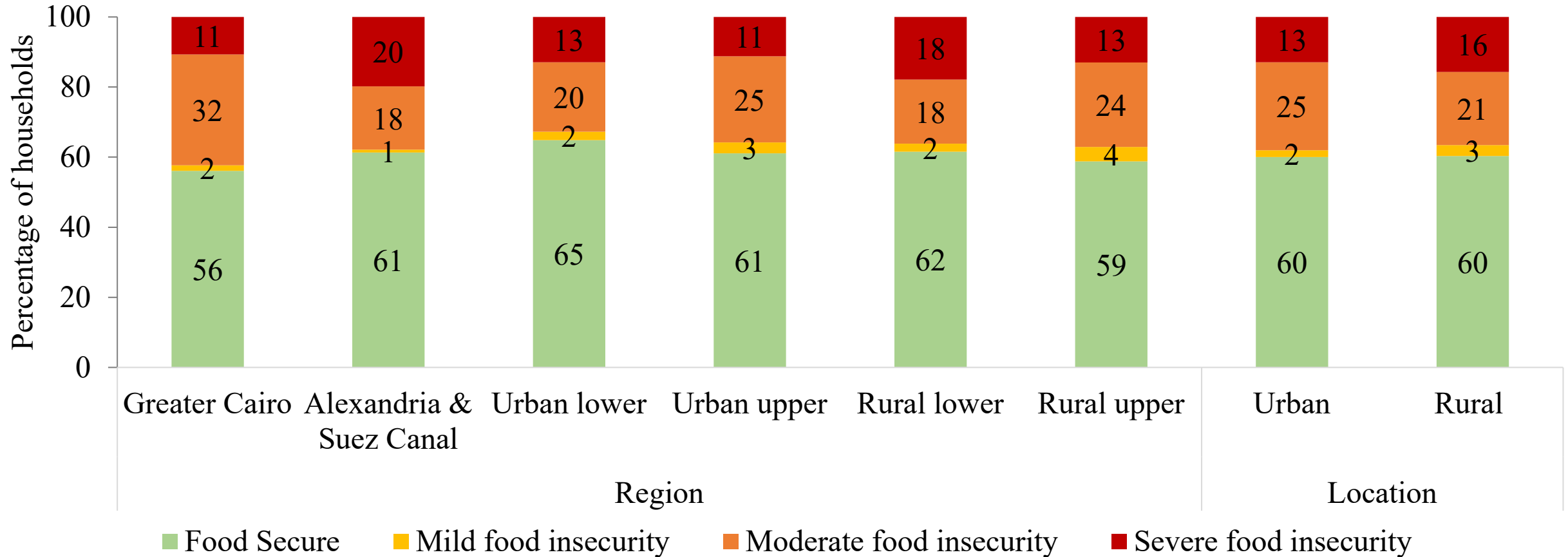
Notes: N=8,577 for economic shocks, N=786 for health shocks, and N=106 for environmental shocks.

Source: Authors' calculation based on ELMPS 2023.

Percentage of households who experienced food insecurity during the past year, by region of residence and location, 2023

Rural areas are more affected by **severe food insecurity**, urban areas struggle with **moderate** insecurity.

Higher food insecurity in **Greater Cairo** and higher **severe** food insecurity in Alex and Suez Canal



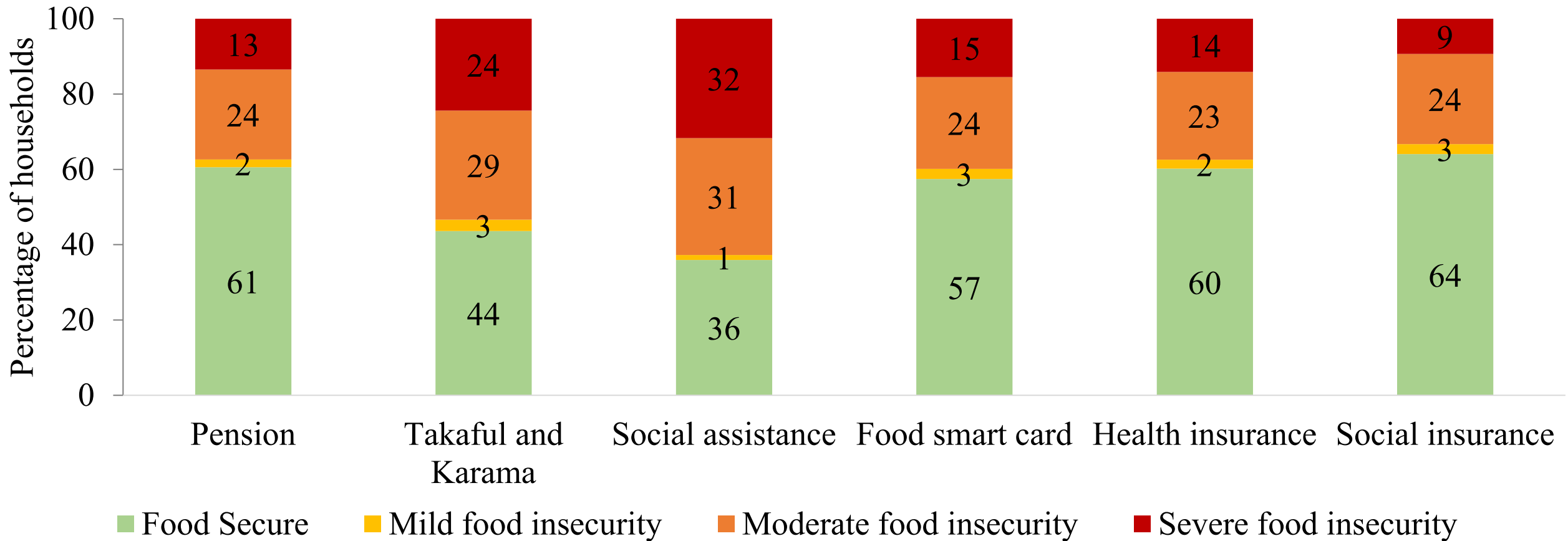
Notes: (N=17,475).

Source: Authors' calculation based on ELMPS 2023

Percentage of households who experienced food insecurity during the past year, by social protection coverage, 2023

Highest share of **moderate and severe food insecurity** among social assistance and TKP beneficiaries

More than half of households with access to **food smart cards** reported being food secure



Notes: Coverage for at least one member. N=4,467 for pension; 2,009 for T&K; 187 for social assistance; 14,020 for food ration cards; 11,496 for health insurance; 4,135 for social insurance.

Conclusion

- Almost **40 percent of Egyptian households** experienced food insecurity and **half of households** were exposed to at least one type of shock during the year 2022/23 (mostly economic shocks).
- Households mostly used consumption rationing—reduced spending on health, food or education—and depended less on social capital to cope with shocks or food insecurity compared to 2018.
- **Interlinked policy measures are needed to increase Egyptian households' resilience to shocks and prevent them from using stressful strategies that may affect their human capital:**
 - Provide poor households with formal shock-responsive social safety nets that are **flexible and sufficient** to strengthen their capacity to respond to shocks.
 - **Labor market reforms** to improve access to formal, inside an establishment jobs and to social security benefits.
 - Tailoring targeted programs to address specific **urban challenges** will be essential.

Thank You!