ERF POLICY CONFERENCE
FROM DATA TO POLICY: EVIDENCE AND INSIGHTS FROM THE EGYPT
LABOR MARKET PANEL SURVEY 2023
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Introducing the Egypt Labor Market Panel Survey 2023

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ELMPS 2023 – A long history of collaboration

- Egypt Labor Market Panel Survey (ELMPS) is a 25-year collaboration between the Economic Research Forum (ERF) and Egypt's Central Agency for Public Mobilization and Statistics (CAPMAS)
  - Waves in 1998, 2006, 2012, 2018, 2023
  - Comparability goes back to the Special round of Labor Force Survey held in October 1988
  - In 2023, we also partnered with the Ministry of Planning and Economic Development and International Cooperation (MoPEDIC)

- Supported in 2023 by ILO ADWA project, World Bank, Poverty and Global Equity Practice and MENA Chief Economist office, Agence Française de Développement, UNICEF, and UN Women, in addition to MoPEDIC.

- Complements surveys in Tunisia (2014), Jordan (2010, 2016, with one in process in 2024), Sudan (2022)

Data Availability

- Data is available for public use through ERF's Open Access Microdata Initiative (OAMDI)
- http://erfdataportal.com/index.php/catalog/LMPS

- Full 2023 cross-sectional data (all variables)
- Harmonized variable from 1988-2023 in repeated cross-sectional data form and from 1998-2023 in panel data form.

Prior Impact

- Over the years ELMPS has become the workhorse of labor market and human development research and policy analysis in Egypt

- As of July 1st 2024, the ELMPS, through the 2018 wave, has been the primary source of data for:
  - 195 articles in peer-reviewed journals
  - 72 books and chapters in edited volumes
  - 35 theses and dissertations
  - numerous working papers, policy briefs, and official reports

- ELMPS datasets have been downloaded 1,744 times from 2013 to mid-2024

Questionnaire modules – new and substantially updated

Household	Individual
• Statistical Identification	• Statistical Identification
• Tracking Splits	• Residential Mobility
• Individual Roster	• Father's Characteristics
• Housing Information	• Mother's Characteristics
• Current Migrants	• Siblings
• Transfers from Individuals	• Health
• Other Sources of Income	• Education
• Shocks and Coping	• Training Experiences
• Household Non-Farm Activities	• Skills
• Agricultural Assets: Lands	• Past Seven Days Subsistence Work
• Agricultural Assets: Livestock/Poultry	• Employment
• Agriculture: Crops	• Unemployment
• Agricultural Assets: Equipment	• Characteristics of Main Job
• Other Agricultural Income	• Secondary Job
	• Labor Market History
	• Marriage
	• Fertility
	• Female Employment
	• Earnings
	• Earnings in Secondary Job
	• Return Migration
	• Information Technology
	• Savings & Borrowing
	• Attitudes
	• Time use

Fieldwork

- Training of the trainers July 24-29, 2023 at CAPMAS

- Enumerator training August 19-30, 2023 at CAPMAS

- Data collection began September 15, 2023

- Vast majority of data collection finished end of December 2023
  - Small percentage of additional households finalized thereafter through February 2024

- Fieldwork by governorate-specific teams of female enumerators
  - 3-5 enumerators and one supervisor per team

- Quality control throughout fieldwork
  - Random sample covering all enumerators, randomly re-asked sections with varying probability

- Data cleaning and coding in parallel and following fieldwork

Panel sample

- Started with a nationally-representative sample of 4,816 Households in 1998
- Every subsequent wave
  - We attempt to follow all previous wave households and individuals within them – original households
  - We track all individuals who *split* to form new households and include their entire new household – split households
  - We add a nationally-representative refresher sample of approximately 2,000 household – refresher households
- By 2023, we had reached 17,784 households containing a total of 70,636 individuals
  - Of these, 13,565 households and 50,268 individuals were tracked from 2018 to 2023.

Addressing Sample Attrition

- Two possible types of attrition in this kind of panel design:
  - Type I: Loss of entire household
    - Exclude "natural attrition," entire household dies, migrates, leaves frame (collective housing, Frontier governorates)
  - Type II: Original household found, member has left, member who split is not found
    - Account for individuals who "split together"
    - Exclude "natural attrition," if member died, migrated, left frame

  - We account for both types of attrition by estimating non-response weights to make the cross-sectional sample (including the refresher sample) representative of the population in current survey year and the panel sample representative of the panel of households being followed
    - We essentially "Weight up" households we do capture who are similar to households who attrited

Status of 2018 households in 2023

	Number	Percentage
Initial households from 2018	15,746	100
Households located in 2023	13,587	86.3
Natural attrition	310	2
Left country or frame	171	1.1
All deceased	139	0.9
Type I attrition	1,849	11.7
Unable to reach or complete household	1,453	9.2
Refused	396	2.5
Type I attrition rate	**12%**	

Type I attrition rate is the lowest we have achieved with the LMPSs yet; the ELMPS 2018 Type I attrition rate was 15%, ELMPS 2012 was 17%, ELMPS 2006 was 24%, and JLMPS 2016 was 38%

Status of individuals and split households in 2023

Conditional on 2018 household found

	Number	Percentage
Individuals present in 2018 in original households found in 2023	54,317	100.0
Individuals still in original households in 2023	47,769	87.9
Individuals no longer in original households in 2023	6,548	12.1
Natural attrition	3,029	5.6
Died	1,824	3.4
Emigrated or left sample frame	827	1.5
Moved to group housing	378	0.7
Individual splits to form households within the sample frame	3,519	6.5
Potential split households (households accounting for individuals who split together)	3,016	
Split households found	2,174	72.1
Split households not found (attrited)	842	27.9
Type II attrition rate		**27.9**
Individuals from 2018 in split households found	2,470	70.2
Individuals from 2018 in split households not found	1,049	29.8
Total individuals from 2018 who were found	50,239	

Refresher sample design

- A refresher sample of 2,036 households was added in 2023.

- The refresher sample was distributed over 200 primary sampling units (or clusters) designed to have 10 households each

- Nationally-representative sample with an over-sample of urban areas, but excluding border governorates (like previous ELMPS waves)
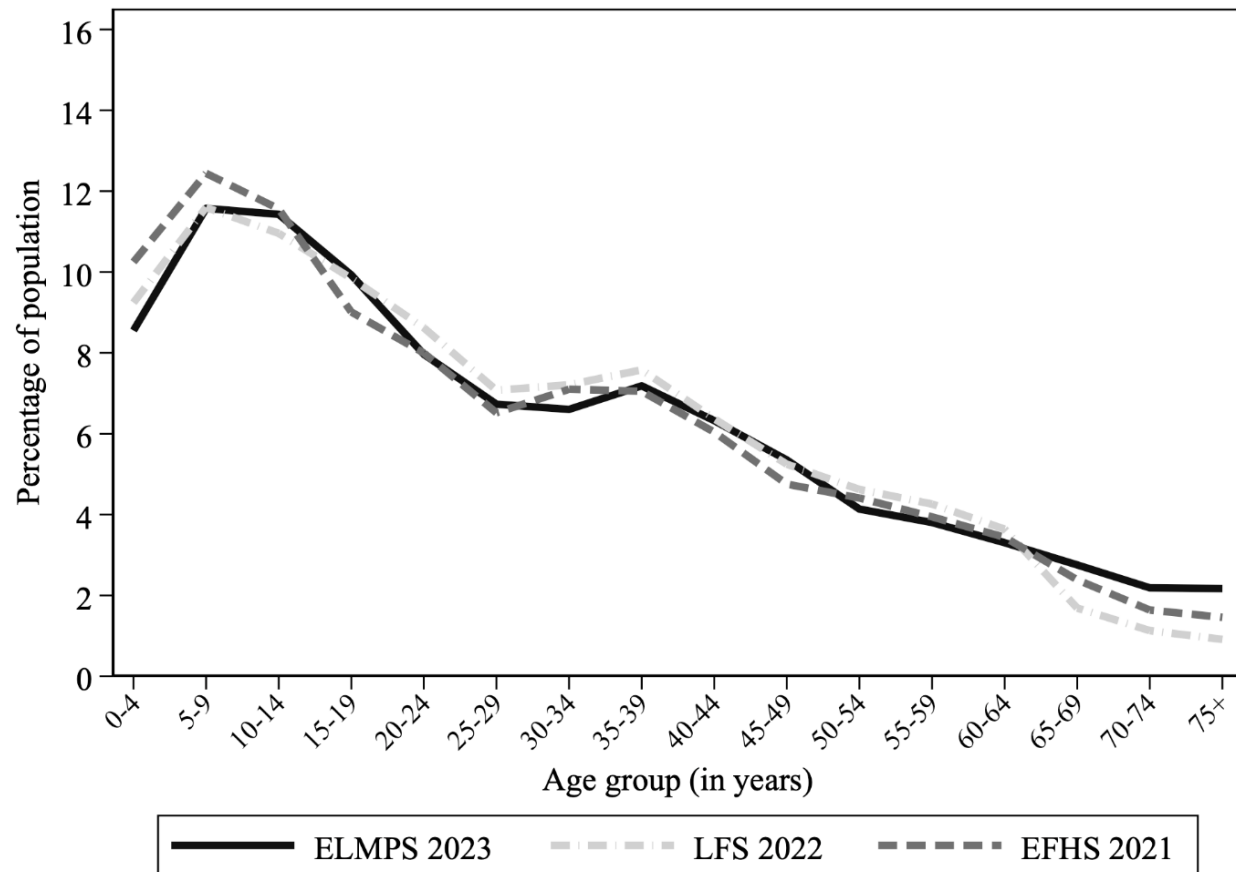
Sample weights

- Account for two types of attrition from panel sample
- Account for design of refresher sample
  - Refresher sample can be used independently for validation purposes
- Use population from October 1, 2023 to create expansion weights
- For individuals, there is small percentage (< 1 %) of non-response due to individuals being in the household roster, but not filling an individual questionnaire. Individual weights account for this type of non-response

Demographic comparisons

- Comparators:
  - Labor Force Survey (LFS) 2022 microdata
    - For labor market comparisons, go back to 2001 with LFS data, use quarterly 2023 bulletins
  - Egypt Family Health Survey (EFHS) 2021 microdata
- Household size
  - ELMPS finds more small households
- Age groups, marital status, educational attainment, enrollment
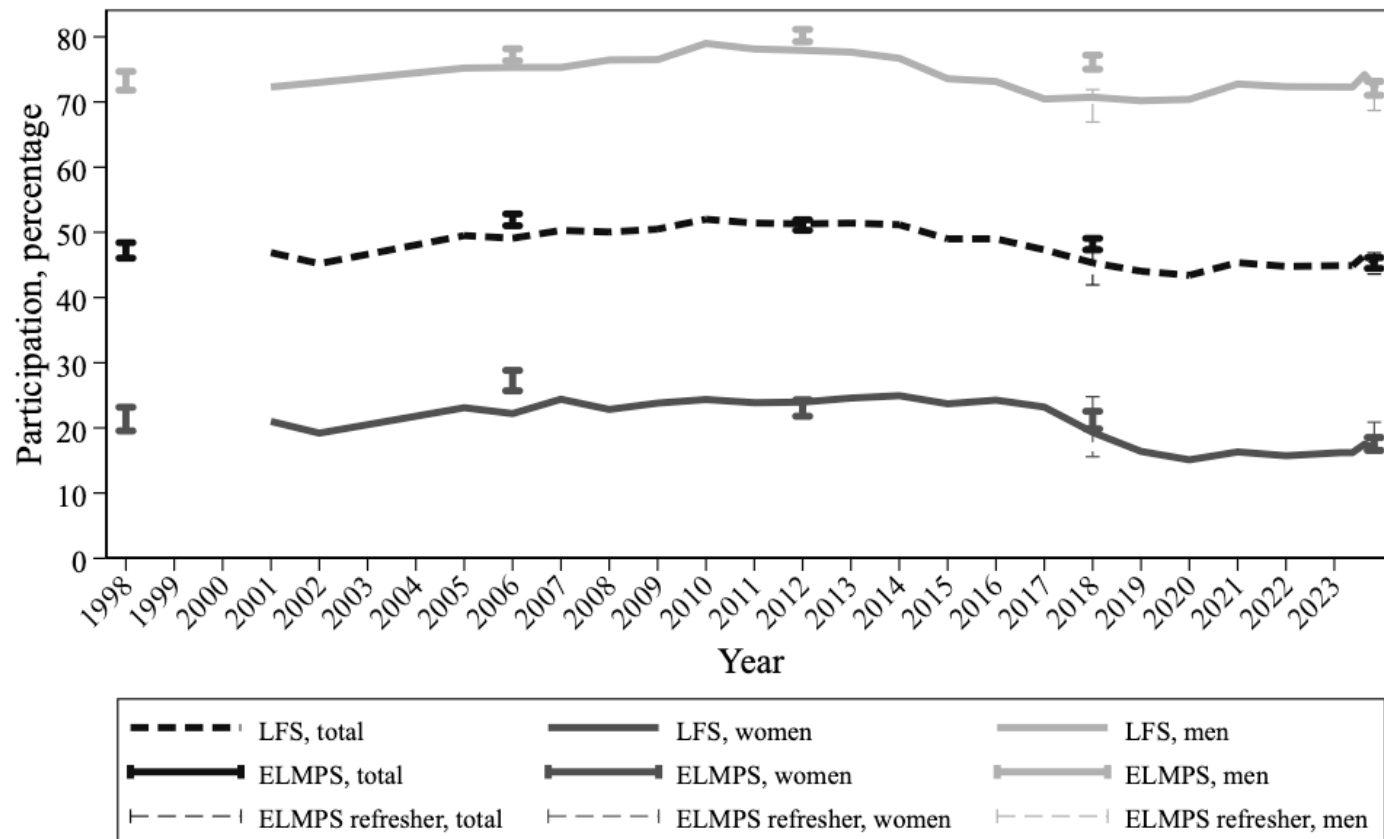 - Only very minor differences

Example demographic comparison: Age groups

Figure 2. Age distribution (percentage in age group), by data source, 2021-2023

Source: Authors' calculations based on ELMPS 2023, LFS 2022, and EFHS 2021
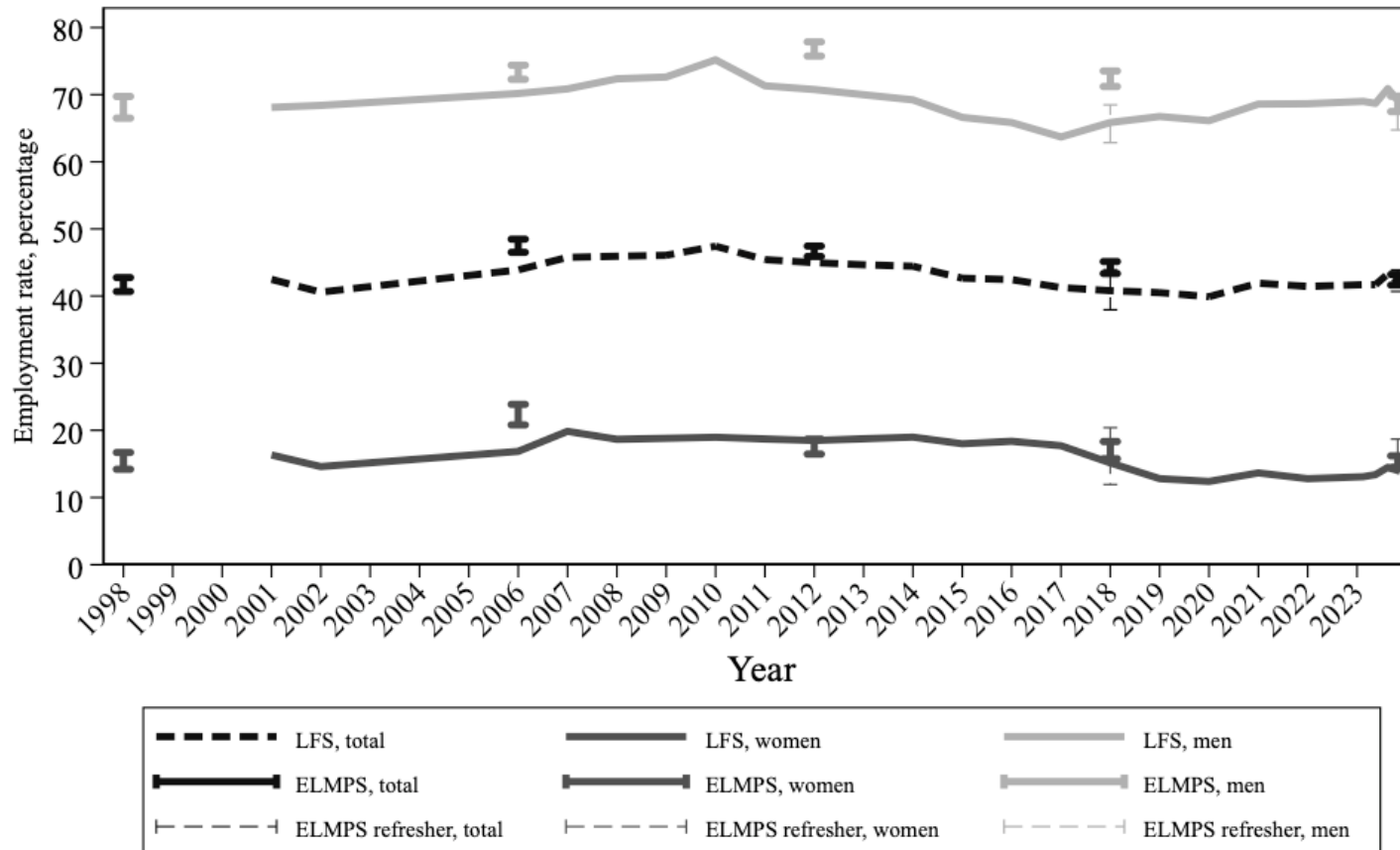
Labor force participation rate (percentage of the population), by data source and sex, ages 15-64, 1998-2023

Source: Authors' calculations based on ELMPS 1998-2023 and LFS 2008-2022; LFS 2023 data are from quarterly bulletins (CAPMAS 2023a; 2023b; 2023c; 2024); LFS 2001-2007 data are from ILOSTAT (ILO 2019).

Bars are 95% confidence intervals

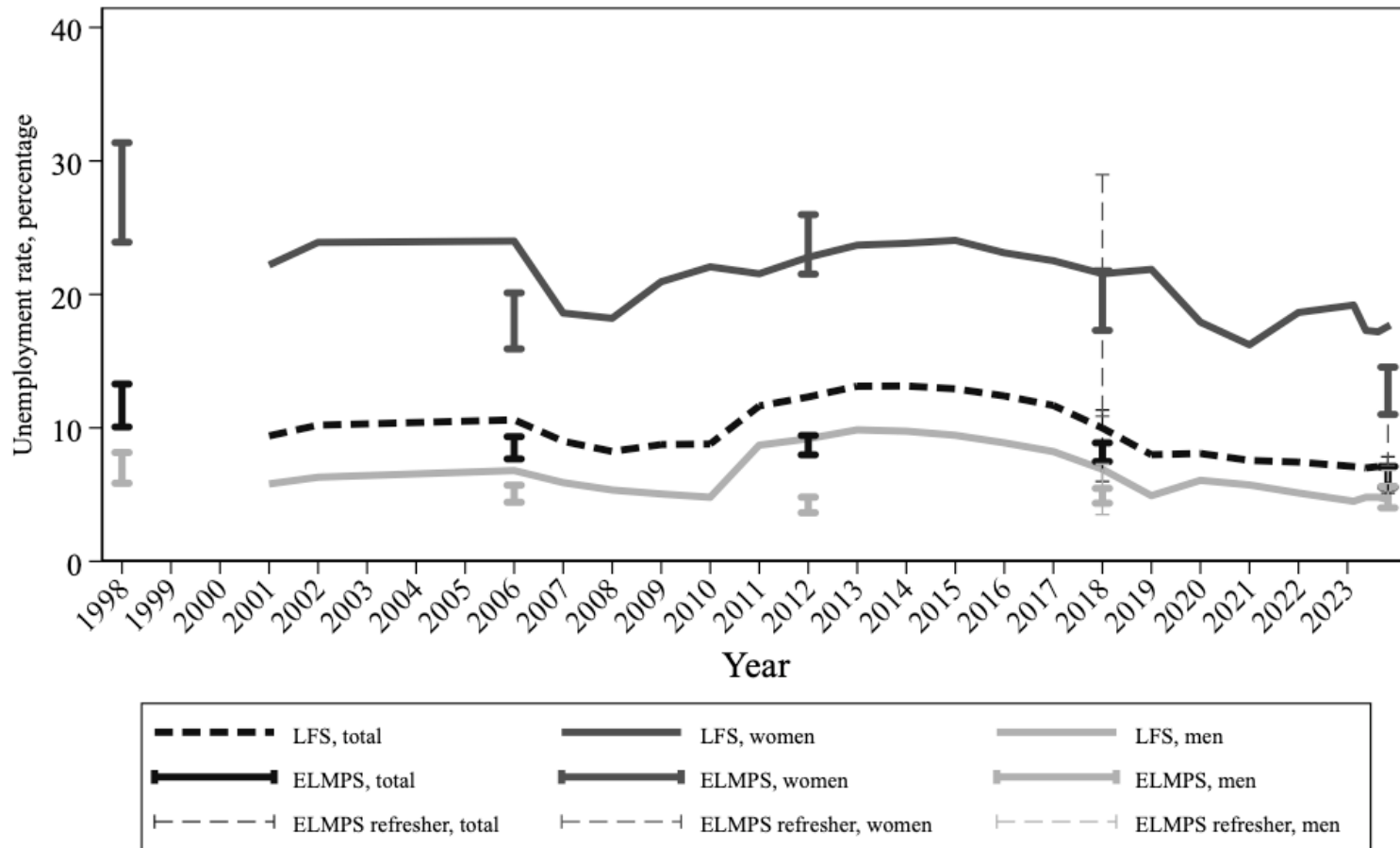# Employment rate (percentage), by data source and sex, ages 15-64, 1998-2023

Source: Authors' calculations based on ELMPS 1998-2023 and LFS 2008-2022; LFS 2023 data are from quarterly bulletins (CAPMAS 2023a; 2023b; 2023c; 2024); LFS 2001-2007 data are from ILOSTAT (ILO 2019).

Bars are 95% confidence intervals

Unemployment rate (percentage of the labor force), by data source and sex, ages 15-64, 1998-2023

Source: Authors' calculations based on ELMPS 1998-2023 and LFS 2008-2022; LFS 2023 data are from quarterly bulletins (CAPMAS 2023a; 2023b; 2023c; 2024); LFS 2001-2007 data are from ILOSTAT (ILO 2019).

Bars are 95% confidence intervals

Summary

- Essential data source for the research and policy community
  - Detailed, multi-topic questionnaire
  - Longitudinal data spanning 25 years
  - A basis for wide-ranging research and policy analysis on labor markets, social protection, gender inequality, migration, marriage and fertility, use of technology, green economy, …
  - Lowest Type I attrition to date, Type II a bit higher
- Attrition modeling helps generate weights that ensure the sample remains representative over time
- Only small differences in basic demographic characteristics with other household surveys fielded in 2021 and 2022.
- Similar labor force participation and employment rates. Similar unemployment rates for men, but ELMPS produces somewhat lower unemployment rates for women.