

ERF Policy Brief

The Dynamics behind the Decline of Social Insurance in Egypt and Directions for Reform

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In a nutshell

- Workers in Egypt have experienced declines in contributory social insurance coverage (and thus formality) over 1998-2018
- Multiple dynamics drive rising informality, including decreases in obtaining social insurance on entry and while employed, as well as increases in losing social insurance
- The unemployed do not value social insurance, as currently designed. Workers typically have the same reservation wages for jobs with and without social insurance in the private sector
- Further reforms will be needed to make social insurance more appealing to workers and firms, including less expensive and more flexible contributions, better benefits, higher quality of administration, and shifting to a progressive system
- The social insurance system could also be revised to be funded by consumption taxes (non-contributory) instead of the current contributory system.

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Introduction

Over half of the world's workers (58%) lack social insurance coverage and are thus informal (International Labour Organization 2023).¹ Informality has been a particular challenge for MENA, where the inability of countries to provide good (formal) jobs has been an ongoing struggle (Gatti et al. 2014). New entrants and young people are especially and increasingly likely to lack social insurance coverage and be informal in MENA (Alazzawi and Hlasny 2022; Alhawarin and Selwaness 2019; Amer 2019; Angel-Urdinola and Tanabe 2012; Assaad and Krafft 2021; Assaad, Krafft, and Salemi 2023; Merouani 2023).

Egypt has been unable to expand social insurance coverage, instead experiencing declines in coverage. Contributory social insurance coverage declined from 52% of workers in 1998 to 32% by 2018 (Barsoum and Selwaness 2022). Historically, Egypt and many other countries in MENA had a social contract that provided public sector jobs and services, but this social contract has dissolved, and has not been replaced by a new model (Assaad 2014; Devarajan 2022; Devarajan and Ianchovichina 2018; El-Haddad 2020; Loewe, Zintl, and Houdret 2021; Malik and Awadallah 2013). Structural reform and decreases in public sector employment (such employment is almost always formal) played a key role in declining social insurance coverage in Egypt and MENA. As the public sector retreated, the private sector was unable to provide sufficient socially insured jobs (Assaad, AlSharawy, and Salemi 2022; Roushdy and Selwaness 2015; Selwaness and Ehab 2022; Sieverding and Selwaness 2012).

Social insurance coverage has continued to decline even well after structural reform. Recent changes in the structure of the economy and labor force are not responsible for these ongoing declines (Assaad and Wahby 2023). So why does social insurance coverage continue to decline? This policy brief explores the dynamics of social insurance coverage in Egypt over the period 1998-2018 and also the value workers place on social insurance coverage, providing new insight into declines in social insurance coverage (see Krafft and Hannafi 2023 for further analyses).

The brief demonstrates that multiple dynamics drive rising informality, including decreases in obtaining social insurance on entry, an “informality trap” with

¹ Social insurance is the single criteria for wage workers' formality status per the International Labour Organization (2013); for non-wage workers the definition depends on whether the firm is registered with the government, which is generally a pre-requisite to social insurance coverage.

limited transitions into social insurance once employed, and increases in losing social insurance among the employed over time. Workers' reservation wages suggest they do not typically value social insurance coverage.

Further reforms will be needed to make social insurance more appealing to workers and firms, including less expensive and more flexible contributions, better benefits, higher quality of administration, and shifting to a progressive system (as the current system is regressive (Barsoum and Selwaness 2022)). More radically, the social insurance system could also potentially be revised to be funded by consumption taxes (non-contributory) instead of the current contributory system.

Dynamics of Social Insurance Coverage

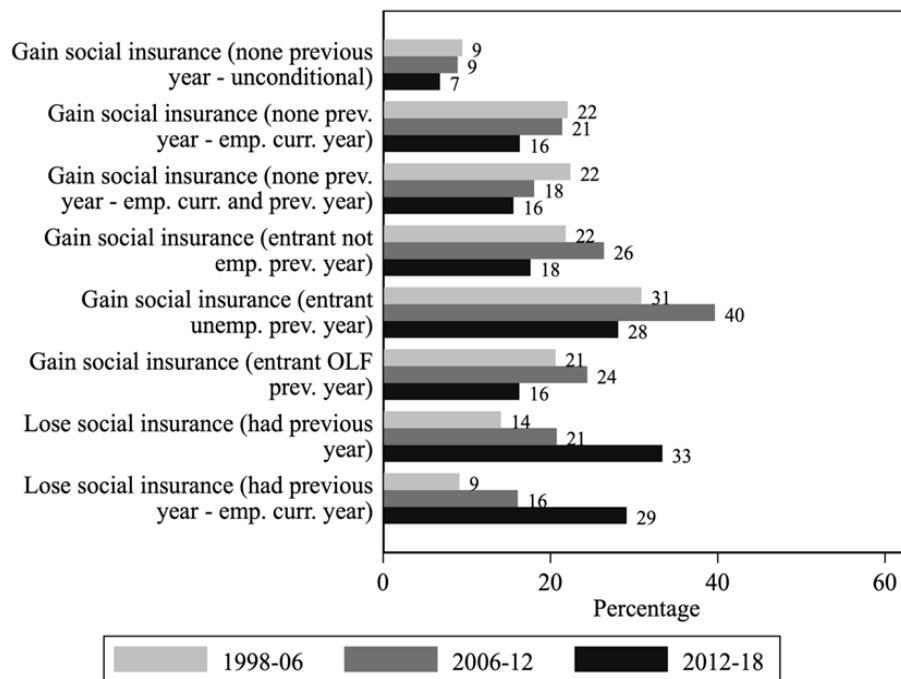
Analyzing social insurance dynamics requires panel microdata on workers and their contributory social insurance coverage. We therefore use the Egypt Labor Market Panel Survey (ELMPS) waves of 1998, 2006, 2012, and 2018 (Krafft, Assaad, and Rahman 2021; OAMDI 2019). We can assess dynamics from 1998-2006, 2006-2012, and 2012-2018. The panel nature of the data allows us to directly assess dynamics, comparing the same individuals at two points in time. We use two key margins of social insurance dynamics: gaining social insurance (often distinguishing at entry from while remaining in employment) and losing social insurance (distinguishing between remaining in employment and exiting work). In Krafft & Hannafi (2023) we present detailed descriptive and multivariate results for social insurance dynamics. We summarize the results here.

Figure 1 shows the panel transitions of gaining and losing social insurance coverage over 1998-2006, 2006-2012, and 2012-2018. The share of those without social insurance gaining social insurance declined from 2006-2012 (9%) to 2012-2018 (7%). Focusing on those who were employed in the latter period, 21% of those without social insurance in 2006 who were then employed in 2012 gained social insurance, compared to 16% of those over 2012 to 2018. Fewer workers were gaining social insurance over time.

Analyses further distinguish between those employed in both periods and “entrants,” who were not employed in the initial period but became so in the latter period. The share gaining social insurance while employed in both periods also fell over time, from 22% in 1998-2006 to 18% in 2006-2012 and 16% in 2012-2018. Entrants (those who were not employed initially and subsequently obtained



Figure 1. Panel transition rates (percentage), individuals aged 18-59 in 2006/2012/2018 over panels 1998-2006, 2006-2012 and 2012-2018



Source: Authors' calculations based on the ELMPS 1998, 2006, 2012, and 2018 panel data

Notes: Entrant is an individual who was not employed in the previous year and is employed in the current year.

employment) experienced an increase in gaining social insurance from 1998-2006 (22%) to 2006-2012 (26%), but then a further drop in 2012-2018 (18%). This pattern over time held for both entrants from unemployment and entrants from being out of the labor force (OLF), but those entering from unemployment (who likely had higher reservation working conditions) were more likely to gain social insurance at entry.

A troubling trend is that losing social insurance increased substantially over time. Between 1998 and 2006, 14% of those with social insurance lost it, compared to 21% in 2006-2012, and 33% over 2012-2018. These results are not driven by additional exits from the labor force; among those who remained employed from 1998-2006, only 9% lost social insurance, compared to 16% in 2006-2012 and 29% over 2012-2018.

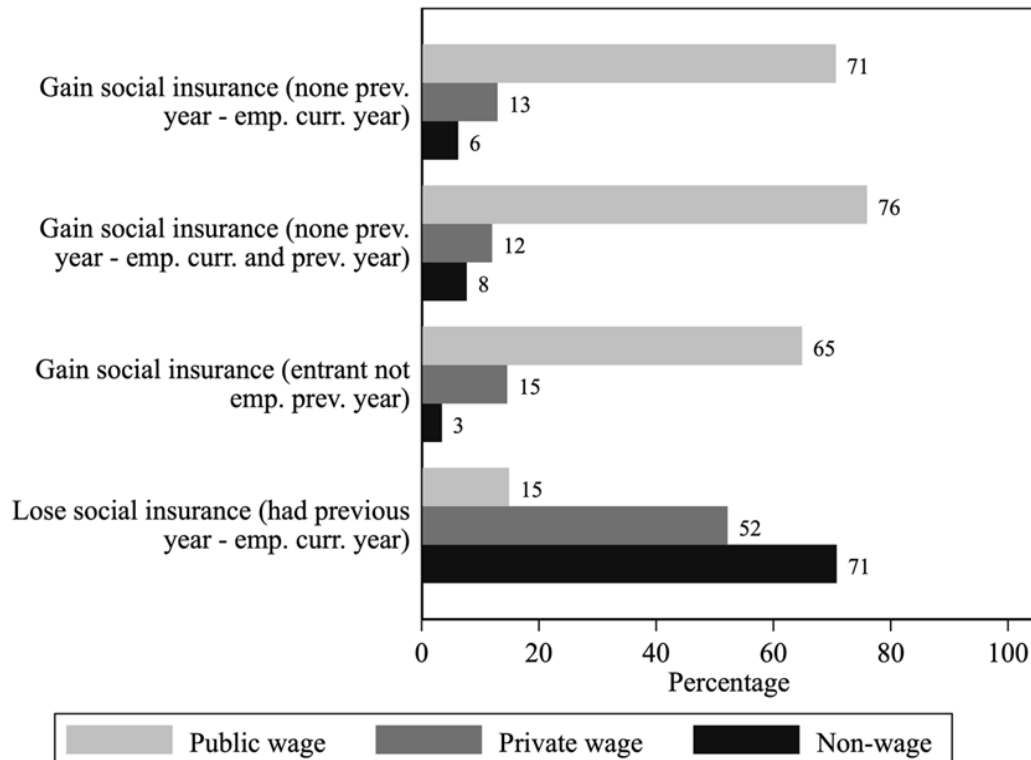
The type of work individuals obtain determines whether they are covered by social insurance. Figure 2 shows the panel transitions for 2012-2018 by sector in 2018, for those employed in 2018. Gains of social insurance for those who did not have it in the previous year are higher for those who end up in the public sector (71%),

compared to the private sector (13%) or non-wage work (6%). There are only some small differences for those who remain employed but did not have social insurance previously and new entrants who were not previously employed in these patterns. Those who were employed but lacked social insurance have a 76% chance of gaining social insurance in the public sector, but only 12% in the private sector and 8% for non-wage workers. For new entrants, 65% gain social insurance on entry to the public sector, 15% to the private sector, and only 3% in non-wage work. The percentage of those who lose social insurance while remaining employed is lower for those who are (in the latter period) in the public sector (15%) but higher in the private (52%) and non-wage sectors (71%).

The multivariate models highlighted key predictors of gaining and losing social insurance coverage. Workers in the public sector, in large firms, and in fixed establishments were more likely to obtain social insurance coverage. Workers who were in professional or operations occupations, were more educated and older, or had more years in their current job were more likely to gain social insurance. These groups were also often, but not always, less likely to lose social insurance.



Figure 2. Panel transition rates (percentage), individuals aged 18-59 in 2018, 2012-2018 by sector in 2018



Source: Authors' calculations based on the ELMPS 2012-2018 panel data

Notes: Entrant is an individual who was not employed in the previous year and is employed in the current year.

Do Workers Value Social Insurance? The Private Sector Social Insurance Reservation Wage Premium

One important issue that could be driving declines in formality is that workers may not value social insurance. Figure 3 explores the value that is placed on a formal (socially insured) job. Specifically, the figure looks at the private sector social insurance reservation wage premium. Unemployed workers are asked their reservation wage for a private sector job with social insurance, and then without social insurance, and this figure graphs the difference between those two reservation wages, as a percent of the private uninsured wage. If workers valued the benefits of social insurance, they would be willing to accept a lower wage for a socially insured job compared to one without social insurance, and thus the premium would be positive. The premium is in fact, on average, not a premium. The mean difference (uninsured wage-insured as a % of uninsured wage) is -18% and the median is 0%. The 25th percentile is 0% and the 75th percentile 20%. Men have a lower premium for social insurance than women, which may relate to women's higher reservation working conditions generally (Dougherty 2014).

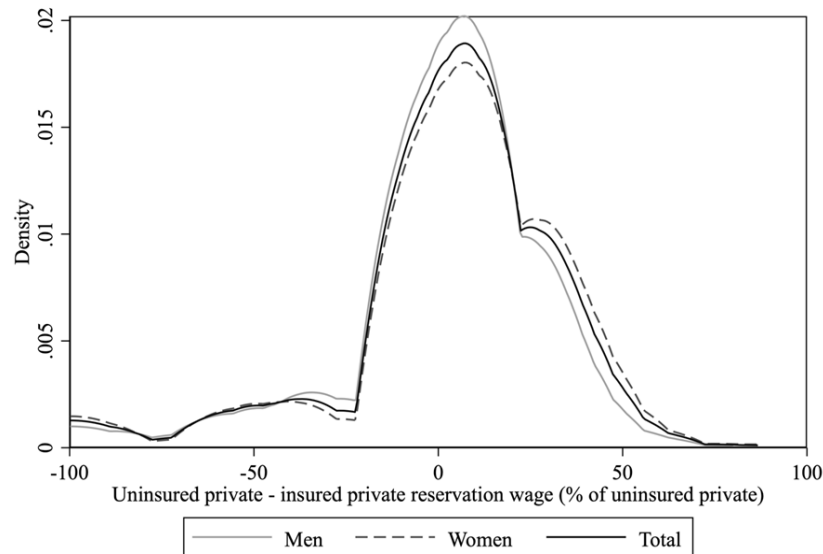
Reforming and Expanding Social Insurance

Contributory social insurance is critically important to ensuring workers can retire and have old-age income. Enrolling in social insurance, and thus formalizing employment, is associated with not only benefits in old age, but also a number of benefits and protections while working (Barsoum and Selwaness 2022). Yet social insurance coverage has been declining in Egypt. As this brief demonstrates, fewer workers – both entrants and those already employed – are gaining social insurance coverage. Increasing numbers of workers are losing social insurance, even when they remain employed. How can social insurance coverage be increased in Egypt?

Egypt has already taken a number of reforms to encourage firms to formalize (register), a pre-requisite to social insurance coverage for their workers, and to improve the social insurance system (Barsoum and Selwaness 2022; Shehata & Partners Law Firm 2020). Although social insurance coverage rates had not increased substantially as of 2021 (Assaad and Wahby 2023), it may take some time for the effects of reforms to be apparent. Future research will also need to explore the long-term impacts of these reforms.



Figure 3. Private sector social insurance reservation wage premium (uninsured private reservation wage – insured private reservation wage as a percentage of uninsured private reservation wage) by sex, unemployed individuals aged 18-59, 2018



Source: Authors' calculations based on the ELMPS 2018 data

Notes: Using the broad market definition of unemployment. Epanechnikov kernel, bandwidth 10.

The unemployed placed little value on social insurance, as measured by the lack of a social insurance premium; workers were typically not willing to forgo wages in order to obtain the benefit of social insurance. This could be due either to workers understanding but truly not valuing social insurance, or misunderstandings of the costs and benefits of social insurance. Policy responses for an information problem would be very different than for a case where workers and employers understand the benefits and costs of social insurance and find the costs outweigh the benefits. Future research needs to explore more closely the value firms and workers place on social insurance and why they do (or do not) enroll in social insurance. Workers may truly value social insurance coverage at less than its costs, as was found in Mexico (Abel et al. 2022). This could, however, be undervaluing social insurance; jobseekers may under-estimate wage growth in formal jobs, such that temporary wage incentives increase formal employment (Abel et al. 2022).

A variety of approaches have been undertaken to try to increase take-up of social insurance in other low- and middle income countries, including premium subsidies, additional/bundled benefits, information campaigns, and enrollment assistance (Canelas and Niño-Zarazúa 2022a). Workers are more willing to pay

for less expensive and more flexible contributions, better benefits, and higher quality of administration (Miti et al. 2021), suggesting key directions for reform that could also increase take-up.

Challenges with the design of the social insurance system may require further reforms. For instance, despite reforms, social insurance in Egypt remains regressive (Barsoum and Selwaness 2022). Transforming it into a progressive system could be important for increasing the appeal of enrolling in social insurance to workers. Ensuring that firms are formal may require different efforts, for instance, simplified tax procedures and lower tax rates for micro firms in Brazil increased firm formality and employment (Fajnzylber, Maloney, and Montes-Rojas 2011).

One possible, more radical reform to the social insurance system is moving financing from payroll to consumption taxes (Anton-Sarabia, Hernandez, and Levy 2012; Esteban-Pretel and Kitao 2021; Pagés 2017). This reform would essentially move from a contributory to non-contributory scheme. While this would certainly expand who could access benefits in old age, a downside is it might also make workers more willing to work for unregistered firms or in positions that lack other benefits; the global evidence on these effects is mixed (Canelas and Niño-Zarazúa 2022b; a). However, an upside would be that



decoupling social insurance benefits from employment could increase labor mobility and entrepreneurship, since states and transitions to non-wage work often led to the loss of social insurance.

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