

Evolution of the Structure and Quality of Employment in Egypt, 2012-2023

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Abstract

This paper examines the evolution of employment in Egypt over the 2012-2023 period. We start by examining employment growth, the structure of employment and its evolution across various types of employment and workplaces. We investigate the extent of employment underutilization as measured by time-related underemployment and educational over-qualification. We also assess the evolution of employment quality in the Egyptian labor market by examining how employment regularity, coverage by social insurance, access to paid leaves and health insurance and job satisfaction have changed over time across different groups of workers. We find that there are signs of improvement in employment outcomes in the 2018 to 2023 period, but that these improvements are mostly limited to male workers and, often only to more educated and privileged workers. We partly attribute these improvements to the emergence of the “missing middle” in the Egyptian economy.

Keywords: employment, job creation, job quality, labor market, Egypt.

JEL Classifications: J21, J62.

ملخص

تبحث هذه الورقة في تطور التشغيل في مصر خلال الفترة 2012-2023. نبدأ بدراسة نمو التشغيل و هيكل التشغيل حسب أنواع مختلفة من الوظائف و أماكن العمل و تطوره عبر الوقت. نقوم بدراسة مدى نقص التشغيل الذي يقاس بنقص التشغيل المرتبط بالوقت ومدى تلائم العمل مع المؤهل الدراسي. كما نقوم بتقييم تطور جدوة التشغيل في سوق العمل المصري من خلال تتبع التغير في درجة الإنتظام في العمل و تغطية التأمين الاجتماعي و نسبة الحصول على أجازات مدفوعة الأجر و نسبة الحصول على تأمين صحي و أخيراً درجة الرضا الوظيفي، وذلك عبر الزمن و لمجموعات مختلفة من المشتغلين. و النتائج تشير إلى أن هناك علامات تؤشر الى تحس في أنماط التوظيف في الفترة من 2018 الى 2023، ولكن هذا التحسن يقتصر غالباً على المشتغلين الذكور و بينهم على المشتغلين الأكثر تعليماً و الأكثر ثراءً. و نعزو التحسن في خصائص العمل الى ظهور ما يسمى بالوسط المفقود في الاقتصاد المصري.

1. Introduction

Studies of the Egyptian labor market based on data collected prior to the onset of the COVID-19 pandemic had shown that employment rates were falling, informality was increasing, and job quality in general was declining (Amer et al., 2021; Assaad, AlSharawy, et al., 2022). The situation got temporarily worse during the pandemic, but there were some signs of recovery in 2021 (ILO & ERF, 2022; Krafft et al., 2022). Prior to the availability of detailed data from the 2023 wave of the Egypt Labor Market Panel Survey (ELMPS), it was not possible to fully assess the extent to which Egyptian labor markets recovered and the extent to which pre-pandemic trends of increasing informality and deteriorating job quality were continuing.

We examine in this paper the evolution of the structure of employment in Egypt over the 2012-2018 and the 2018-2023 period using ELMPS data to shed light on some of these issues. We describe the evolution of employment rates in light of macroeconomic developments and then explore in detail the trends in type of employment for various groups of workers and the changes in the distribution of employment by sector of economic activity, working inside/outside of establishments and establishment size. We then move to an examination of underemployment and labor underutilization, including time-related and skill-related underemployment. Finally, we examine the evolution of job quality in terms of employment regularity, social insurance coverage, and access to employment benefits, such as paid leaves and health insurance. One dimension of job quality that we do not tackle in this paper is pay and earnings since this is the topic of a companion paper in this series (Elsaid et al., 2024).

To briefly summarize the results, we find that although employment rates have continued to decline in the 2018-2023 period, there are signs of improving labor market conditions. Employment growth was faster during that period compared to the 2012-2018 period and, although informalization in general is continuing due to the decline of the public sector, private wage employment is becoming more formal. The most precarious form of employment, informal wage employment outside establishments, which had grown rapidly in the previous period, has actually contracted in the 2018-23 period. Private wage employment as a whole has been stagnant, but self-employment is growing rapidly. Within private wage employment, employment grew more rapidly in small and medium enterprises, confirming the emergence of the “missing middle” in the Egyptian economy (Assaad et al., 2019).

While this improving picture reflects the situation of men who are the majority of workers in Egypt, developments for women were less positive. Their employment growth rate slowed compared to the previous period. They were more adversely affected by the decline of the public sector and they did not experience increases in formal wage employment. In fact, informal wage employment outside establishments increased substantially; a sign of last resort employment due to necessity. Improvements of employment formality in the private sector also appears to be

limited to more educated and relatively privileged men, suggesting that even for men, the improvements are not equally distributed.

Measure of time-related underemployment improved, which bodes well for individuals in precarious jobs, who are generally poorer. In fact, there appears to be an increase in share of workers working an excessive number of hours in private wage work and in own account work. Measures of job quality improved, including slightly higher regularity of employment, a stabilization of the decline in social insurance coverage, and slightly improved access to paid leaves and increased access to health insurance for private sector wage workers. Again, these improved job quality measures appear to be limited to male workers. Much of the improvement appears to be due to compositional shifts away from employment outside establishments and in micro establishments to small and medium establishments. Moreover, conditions of employment also appear to have improved in these small and medium establishments.

Section 2 discusses the macroeconomic background and its relation to employment and unemployment rates. Section 3 presents the evolution of the structure of employment along various dimensions. Section 4 presents measures of time-related and skill-related underemployment. Section 5 discusses the evolution of job quality in terms of regularity of employment, social insurance coverage, access to paid leaves and health insurance. Section 6 concludes.

2. Macroeconomic background

The Egyptian economy has passed through turbulent times in the past decade as evidenced by the fluctuation in GDP growth rates shown in Figure 1. Just as it was recovering from the economic crisis brought about by the January 25th, 2011 revolution and its aftermath, Egypt had to embark on a major stabilization program at the end of 2016 in response to a foreign exchange shortfall (World Bank, 2019). The stabilization program was successful in re-establishing growth by 2018 and the economy grew at a rate in excess of 5 percent per annum (p.a.) in 2018 and 2019, before being hit by the COVID-19 pandemic in 2020 and 2021 (World Bank, 2022). As shown in Figure 1, there was a substantial recovery in growth in 2022, before the shock of the Russia-Ukraine war and rising interest rates around the world caused another foreign exchange crisis that necessitated a further stabilization program in 2024 after a year of delayed macroeconomic adjustments (World Bank, 2024a).

The employment rate has responded weakly, if at all, to the recent economic fluctuations. As shown in Figure 1, the employment rate as captured by the official Labor Force Survey (LFS) was somewhat responsive to GDP growth rate in the 2000s and early 2010s. It dipped in 2001/2 as growth slowed and recovered in the mid to late 2000s as growth picked up. As growth collapsed in 2011, the employment rate began declining, but did not recover when growth picked up in 2014-15. In fact, the only recovery in the employment rate in recent years was in 2021 after it reached a

low in 2020 during the pandemic, but it dipped back down in 2022 even though growth had recovered and rose slightly in 2023 even though growth had declined. The employment rate was back in 2023 to where it had been in 2016 (42 percent).

Although employment rates measured by the ELMPS have tended to be somewhat higher than those measured by the LFS (see Figure 1), the ELMPS generally validates the trend in employment rates captured by the LFS, with one exception. The slight recovery in the employment rate detected by the LFS from 2018 to 2023 is not confirmed in ELMPS data, which only shows a deceleration of the decline. After declining by 2.5 percentage points (p.p.) from 2012 to 2018 (46.7 to 44.2 percent), the employment rate declined by 1.8 p.p. from 2018 to 2023 (to 42.4 percent). According to the ELMPS, the growth rate of employment accelerated slightly from 1.1 percent p.a. in 2012-2018 to 1.5 percent p.a. in 2018-2023 (Figure 3).

The two surveys differ in the trend in the employment rate for men, but not for women, with the LFS showing a substantial recovery in employment rates for men from 65.8 percent in 2018 to 68.7 percent in 2023, while the ELMPS show a continuing decline from 72.3 percent to 68.6 percent.³ Both survey show a decline in the female employment rate, with the LFS showing a reduction from 15.2 percent in 2018 to 13.4 percent in 2023, and the ELMPS showing a reduction from 17.0 to 15.3 percent for the same period.⁴

Unemployment rates have also been weakly responsive to growth in recent years. The unemployment rate according to the LFS peaked at about 13 percent in the 2013-2016 period, partly in response to the slowdown that followed the 2011 revolution and its aftermath. As growth recovered in 2018 and 2019, the unemployment rate dropped appreciably, but stabilized at around 8 percent during the slowdown of 2020 rather than rising. It resumed its slow decline in 2022 and 2023 to reach one of its lowest levels for quarter century, 7 percent. Again, while the ELMPS tends to generate somewhat lower unemployment rates than the LFS, these declining unemployment trends are confirmed by the ELMPS, which shows the unemployment rate declining from 8.2 percent in 2018 to 6.3 percent in 2023. The trends by sex show some differences, however. The LFS showing male unemployment declining by nearly two percentage points from 6.9 percent in 2018 to 4.8 percent in 2023, whereas ELMPS shows it almost flat at 4.8-4.9 percent. Conversely, both surveys show a strongly declining trend in female unemployment, with the LFS showing it declining from 21.5 percent in 2018 to 17.2 percent in 2023, whereas the ELMPS showing going from 19.5 percent to 12.8 percent in the same period. As discussed in Assaad, Krafft and McKillip (2024), the observed decline in unemployment since

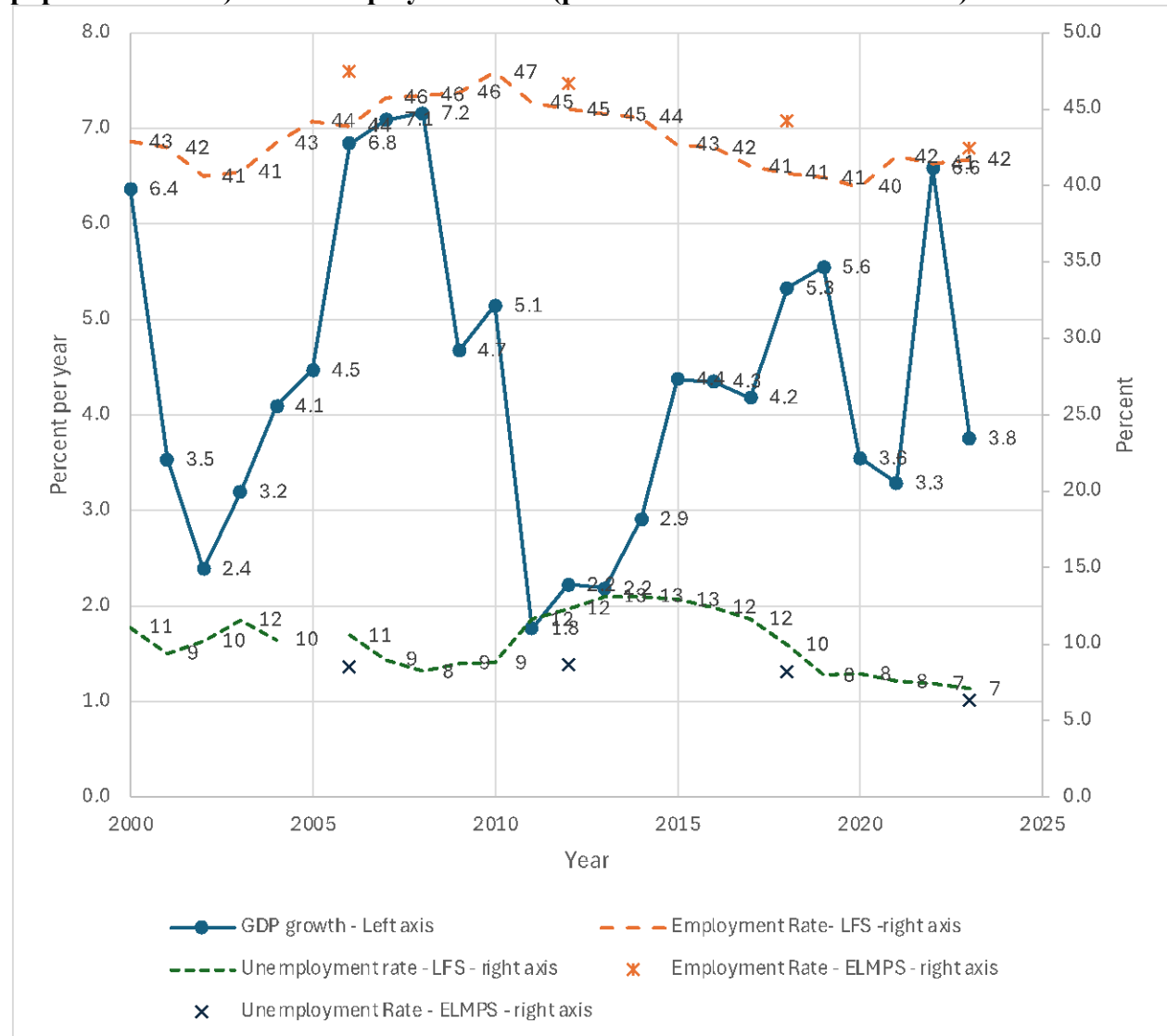
³ It should be noted however that the refresher sample of the ELMPS confirms the increasing trend in the male employment rate that the LFS shows. Based on the ELMPS refresher sample alone, the male employment rate from 65.7 percent in 2018 to 67.3 percent in 2023.

⁴ For further comparisons of the results of ELMPS and LFS, see (Assaad & Krafft, 2024)

2016 can be attributed to temporarily modest demographic pressures on the labor market, coupled with changes in participation behavior among both men and women.

The results on overall employment and unemployment suggests a possible recovery in employment rates for men, but not for women, and a continuing decline in unemployment rates, especially for women, which, given the declining female employment rates, may be attributed to discouragement and declining participation overall.

Figure 1. Annual GDP growth rate (percent per annum), employment rate (percent of the population 15-64) and unemployment rate (percent of the labor force 15-64)



Source: GDP growth rates are from World Development Indicators (World Bank, 2024b), employment and unemployment rates are from Labor Force Survey (CAPMAS, n.d.) and ELMPs (OAMDI, 2013, 2016, 2019)

3. Evolution of structure of employment

We examine in this section the evolution of the composition of employment along a number of dimensions including the type of employment, the sector or economic activity, and, for private wage employment, by whether the job is inside or outside of establishments and by size of establishment.

3.1. Structure of employment by type of employment

The type of employment is a composite variable that combines employment status, sector of ownership, work inside/outside of establishments, and informality, and therefore captures well the institutional aspects of employment in Egypt. The taxonomy we create consists of seven mutually exclusive categories as follows:

- (i) Public sector employment, which includes government and public enterprises employment. The category is almost entirely made up of formal wage work, so we do not break it down further along formality and employment status.
- (ii) Formal private wage employment, which requires that a worker be hired for wage or salary in the private sector and be covered by social insurance. This category consists almost entirely of workers working within fixed establishments, so we do not break it down further along this dimension of inside/outside establishments.
- (iii) Informal private wage work inside fixed establishments, which consists of workers hired for salary or wage by a private sector employer without the benefit of social insurance who work inside a fixed establishment entirely dedicated to an economic activity, such as a shop, office building, factory, or workshop.
- (iv) Informal private wage workers outside fixed establishments, which consists of workers hired for salary or wage by a private sector employer without the benefit of social insurance who work outside of a fixed establishment, such as in a private home, a field, a construction site, on the street, or in a moving vehicle.
- (v) Employers who are own-account workers who hire other workers for wage.
- (vi) Self-employed workers who are own account workers who do not hire others, but who may have unpaid workers from their family working with them.
- (vii) Unpaid family workers who are working in a project or enterprise owned by their household and receive no direct compensation for this work

As shown in Figure 2, the structure of employment in Egypt has been changing in important ways over the past decade. The share of public sector employment has continued to decline appreciably from 30 percent of employment in 2012 to 21 percent in 2023. In fact, as shown in Figure 3, public sector employment has been declining in absolute terms since 2012, and the rate of decline has accelerated from 1.5 percent p.a. in 2012-2018 to 2.2 percent p.a. in 2018-2023. Consistent with many studies that confirm that women strongly prefer government jobs in Egypt (Barsoum, 2015,

2019; Barsoum & Abdalla, 2021), women have a much higher share of public sector employment than men, but that share has been falling faster than men's. Whereas the decline in male public sector employment accelerated somewhat from 1.4 percent p.a. to 1.9 percent p.a. across the 2012-2018 and 2018-2023 periods, it accelerated significantly more among women from 1.8 percent p.a. to 2.8 percent p.a. across the two periods. Given women's strong preference for public sector employment in Egypt, this declining access to public sector employment is likely the main reason for falling female labor force participation rates and greater discouragement among women in the Egyptian labor market.

Although the share of private formal wage employment had recovered in 2023 after falling from 2012 to 2018, it remains relatively small at 11 percent. Nevertheless, as shown in Figure 3, private formal wage employment grew at 4.4 percent p.a., about three times the rate of growth of overall employment. This is quite notable as it had declined by 0.9 percent p.a. from 2012 to 2018. Private formal wage employment was the second fastest growing form of employment in Egypt in the 2018-2023 period after self-employment. The reversal in the trend of private formal wage employment may be related to the enactment of the new social insurance law in 2019, which resulted in more wage workers being covered by social insurance and therefore becoming formal; a hypothesis that will require further testing, but is beyond the scope of this paper.

Men and women did not equally benefit from the growth of formal private wage employment. While men's share in this kind of employment grew from 10 to 11 percent from 2018 to 2023, that of women shrank from 7 to 6 percent. In fact, private formal wage employment grew at a rate of 5.3 percent p.a. for men from 2018 to 2023, whereas it contracted at a rate of 2.3 percent p.a. for women. As we will see below, there are also important differences among male workers as to who was able to benefit from the growth of this kind of employment.

The growth of formal private wage employment was not sufficient to counteract the decline in public sector employment. The combined share of the two forms of formal wage employment has continued to decline, albeit at a slowing rate, from 40 percent in 2012 to 34 percent in 2018 to 32 percent in 2023. The decline of formal wage employment was steeper for women than it was for men. Thus, the informalization trend in the Egyptian labor market is continuing albeit at a somewhat slower pace than in the 2012-2018 period.

Informal wage employment continues to play an important role in the Egyptian labor market.⁵ We disaggregate informal wage employment into two groups based on whether or not the work takes

⁵ The guidelines adopted by the 21st Conference of Labor Statisticians (ICLS-21) to identify informal employment among employees state that their "employment relationship is not, in practice, formally recognized by the employer in relation to the legal administrative framework of the country or not associated with effective access to formal arrangements." (ILO, 2023). We operationalize this here by the employee not being covered by social insurance since Egyptian law requires such coverage.

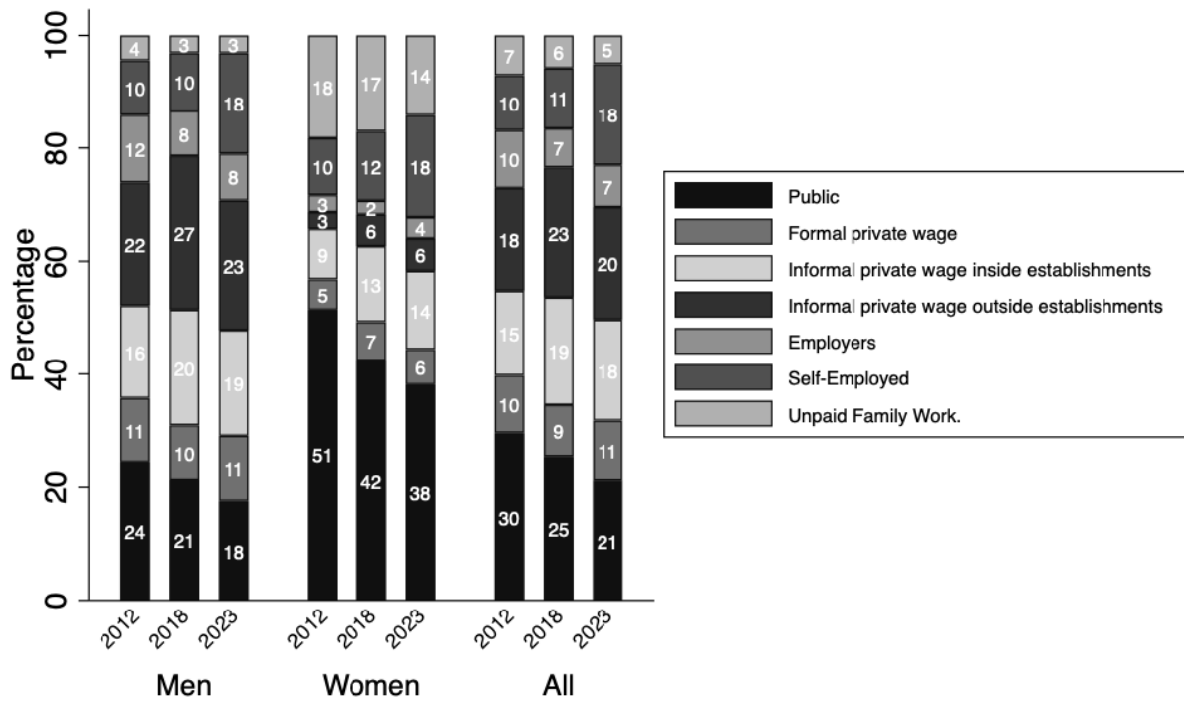
place in a fixed establishment. Informal wage employment in establishments usually involves a regular relationship with an employer and is therefore more easily formalizable. However, informal employment outside establishments is typically more intermittent and precarious and may involve frequent movements across employers. As shown in Figure 2, the share of both types of informal wage employment has declined from 2018 to 2023 after having increased substantially from 2012 to 2018. The overall share of informal wage employment has therefore gone from 33 percent in 2012, to 42 percent in 2018 back to 38 percent in 2023. The share of all private wage employment irrespective of informality also declined from 51 percent in 2018 to 49 percent in 2023. In fact, private wage employment as a whole did not grow at all in the 2018 to 2023 period, with the growth in private formal wage employment being fully counteracted by the decline in informal wage employment outside establishments.

This decline in the share of private wage employment was mostly made up by an increase in the share of self-employment, which went up from 11 percent in 2018 to 18 percent in 2023. In fact, self-employment was by far the fastest growing type of employment between 2018 and 2023, growing at 11.8 percent p.a.. The share of other forms of non-wage employment, such as employers or unpaid family workers, were either stable or slightly increasing from 2018 to 2023. We explore in more detail below the rapid growth in self-employment, which is one of the more important emerging trends in the Egyptian labor market in recent years.

The trend in informal wage employment has differed along gender lines. While the male trend reflects closely the overall trend, for women, all forms of wage employment have either stagnated or declined. We already noted the rapid decline in the two forms of formal wage employment for women, but informal wage employment did not grow for them either. Informal wage employment in establishment stagnated and informal wage employment outside establishments declined by 0.2 percent per annum. Together, these trends account for the overall decline in female employment of 0.5 percent p.a. in contrast to an increase of 2.0 percent p.a. for men.

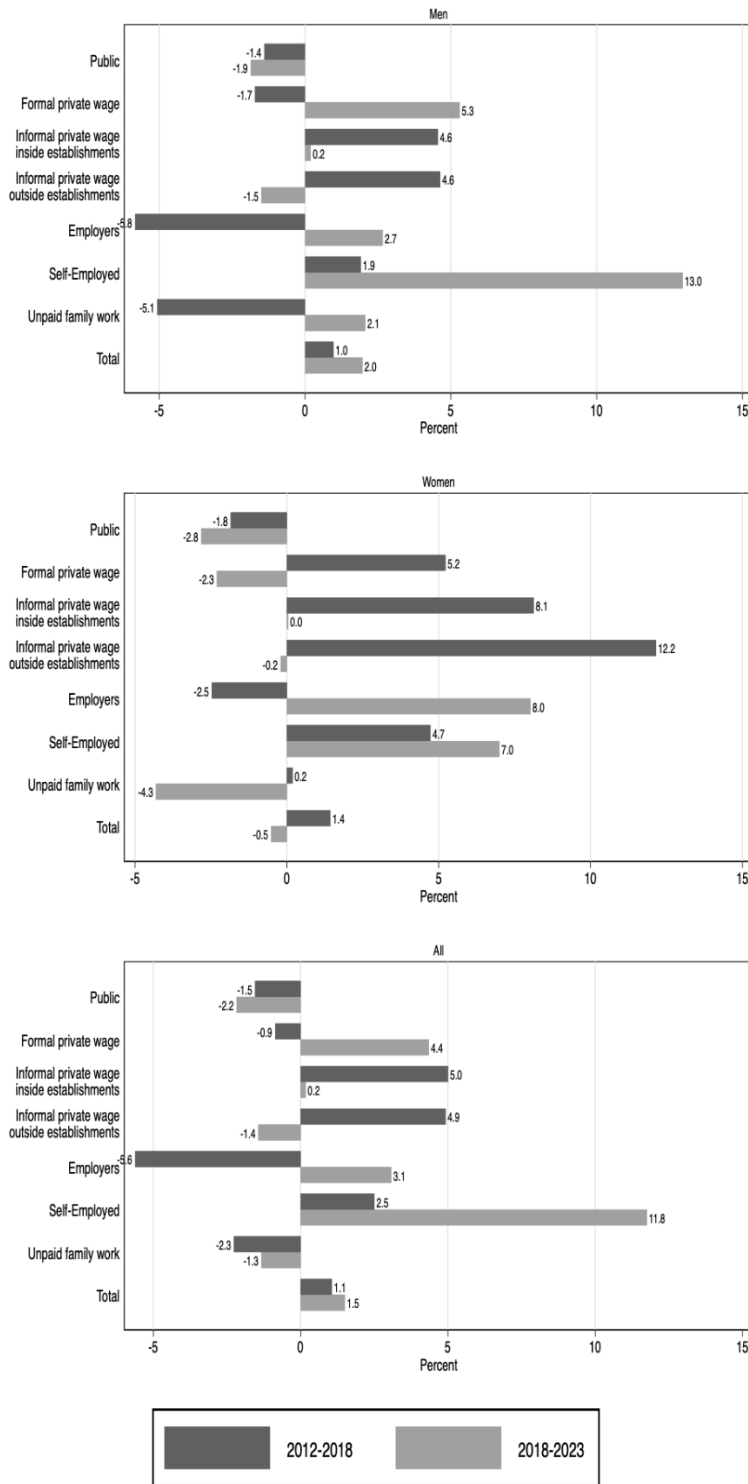
The forms of employment that are expanding for women are self-employment, and work as employers. The growth of these two categories of employment is notable and may indicate an improving outlook for female own account work or simply an attempt on the part of women to respond to a less hospitable labor market.

Figure 2. Structure of employment by type of employment and sex, 2012, 2018, 2023



Source: Authors' calculation based on data from ELMPS 2012, 2018, 2023

Figure 3. Average annual employment growth rate (percent) by type of employment and sex, 2012-2018, 2018-2023



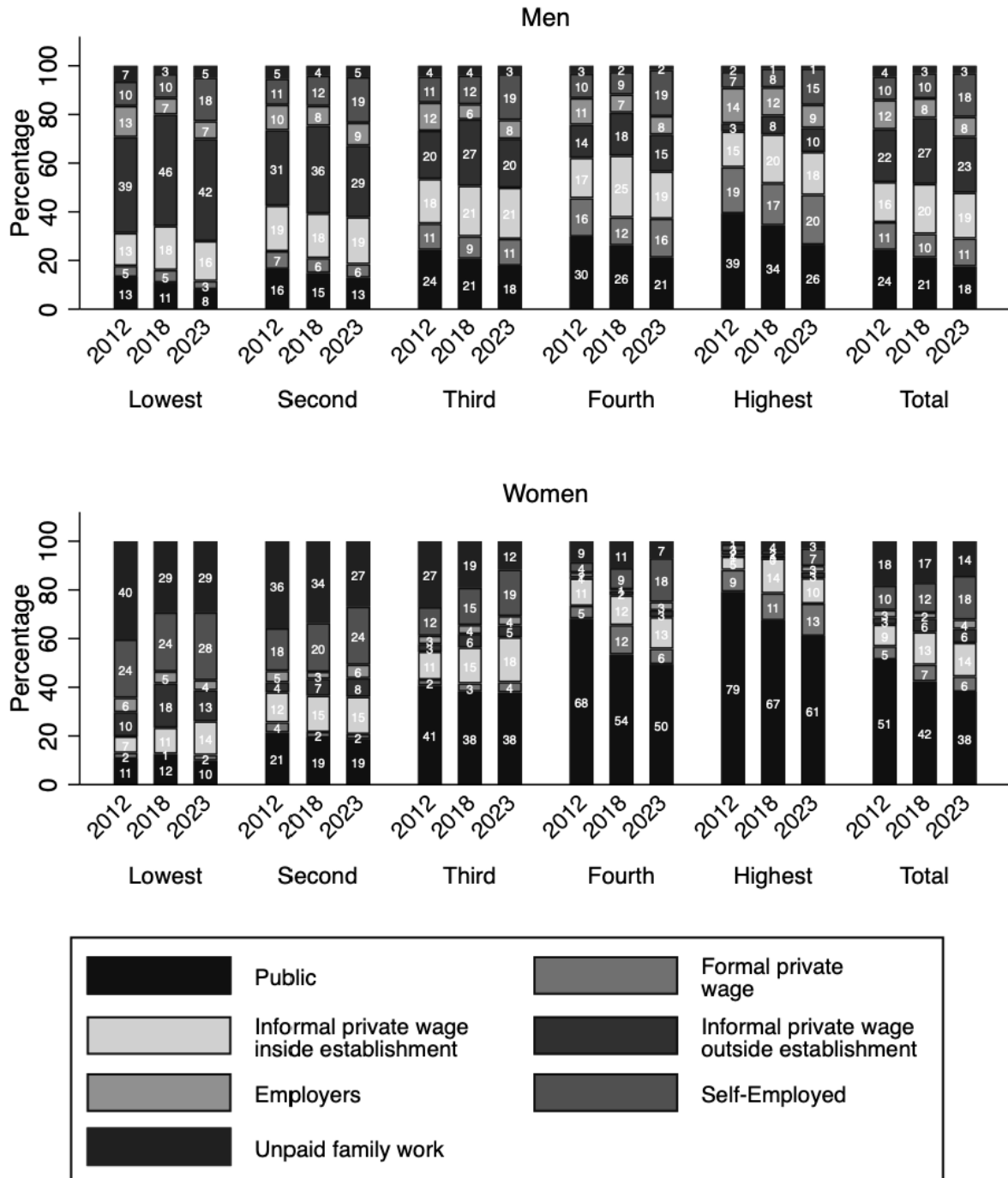
Source: Authors' calculation based on data from ELMPS 2012, 2018, 2023

We now examine the extent to which the type of employment by sex is associated with household wealth to see how employment opportunities have changed according to socioeconomic status. As shown in Figure 4, men at the lowest wealth quintile have very little involvement in formal wage employment and that involvement has continued to decline since 2012. Their most common form of employment is informal wage work outside of establishments, whose share among the poorest men has nonetheless fallen from 46 percent in 2018 to 42 percent in 2023. This is by far the most precarious and unprotected form of employment; one that is clearly associated with poverty. Self-employment, which can also be quite precarious, is the main form of employment to have increased in share among poor men. In comparison to men in the poorest quintile, the employment structure for men in the second quintile looks fairly similar, although with slightly more formal wage employment and less informal wage employment outside establishments. These groups of poorer men did not benefit from the overall trend of formalization of private wage employment and have continued to see their share of both formal private and public wage employment decline.

Men in the middle of the household wealth distribution have higher shares of formal wage employment as well as the more stable informal employment inside establishments. Although they have seen their share of private formal wage employment increase slightly from 9 percent in 2018 to 11 percent in 2023, the increase is not as large as for men in the fourth and fifth quintiles of wealth, whose share of formal private wage employment has increased by 3-4 p.p. This suggests that the changes in social insurance regulations that occurred in 2019-20 may have promoted the formalization of private wage employment for men, but that these efforts have favored relatively high-income male workers.

The structure of employment by wealth shows an even larger contrast for women than for men. As shown in Figure 4, while the poorest women have minimal access to formal wage employment (12 percent in 2023), the richest women are primarily engaged in such employment (74 percent in 2023), mostly made up of public sector employment. However, as public sector employment opportunities have declined, a much larger fraction of women in the fourth and fifth quintiles are engaging in own-account work as either employers or self-employed rather than necessarily in formal private wage work. There is still a substantial proportion of poorer women engaged in unpaid family work, but this proportion is falling rapidly for those in the second and third quintiles of household wealth. An increasing proportion of poorer women are working in informal wage employment both inside and outside establishments as well as in self-employment. The increased access to formal private wage work is even more concentrated at the top among women than among men. Only women in richest quintile of wealth were able to substantially increase their share in this form of employment.

Figure 4. Structure of employment by type of employment, household wealth quintile, and sex, 2012, 2018, 2023



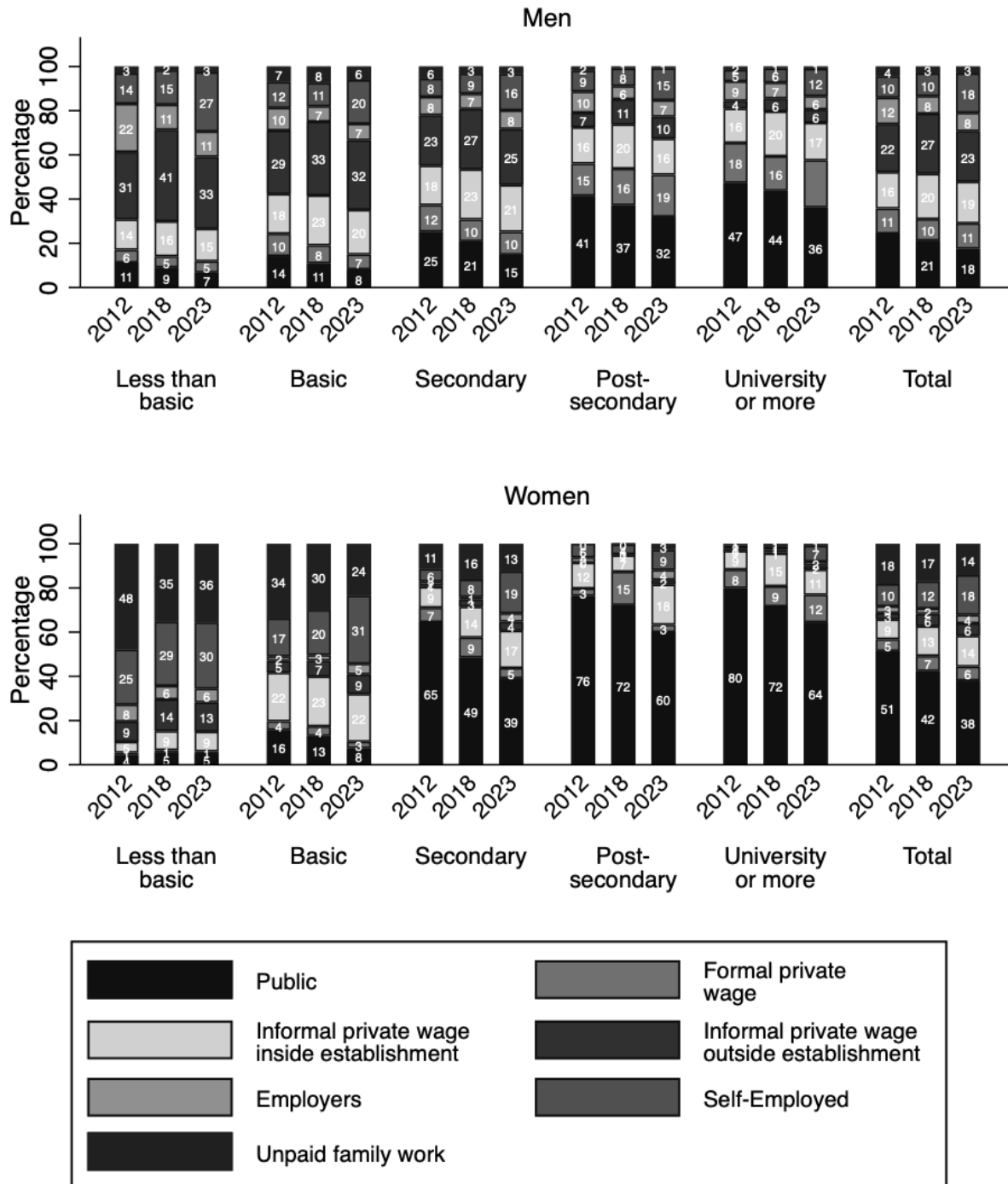
Source: Authors' calculation based on data from ELMPS 2012, 2018, 2023

We examine next, the structure of employment by type and sex according to educational attainment. As is the case with the poorest men, men with basic and less than basic education have very limited and declining access to formal wage employment (Figure 5). While men of all

education groups have a declining public sector employment share, only men with post-secondary and university education have seen an increase in their private formal wage employment share. This confirms that progress in formalizing private wage employment is concentrated among more advantaged male workers.

As is the case with wealth, there are starker differences in employment type across educational attainment for women. As shown in Figure 5, university-educated women are the most reliant on public sector employment with up to 80 percent of them in such employment in 2012. That share has fallen appreciably to 63 percent by 2023, in an indication of how much public sector employment opportunities have contracted. Female secondary education graduates have seen their public sector employment share shrink even more from 65 percent in 2012 to 39 percent in 2023 as it becomes increasingly impossible to acquire public employment with just a secondary degree. These trends partly explain the falling employment rates among educated women in recent years (Krafft, Assaad, and McKillip 2024). As in the case of men, access to formal private sector wage employment has only increased for the most advantaged female workers, in this case, university-educated women, whose private formal employment share went from 9 percent in 2018 to 14 percent in 2023. Among less educated women, the proportion working as unpaid family workers is falling and the proportion who are self-employed is rising, but the overall proportion in non-wage work is relatively stable. Women in the middle of the education distribution have seen rising shares of self-employment and informal wage work to make up for their reduced access to formal wage work.

Figure 5. Structure of employment by type of employment, educational attainment, and sex 2012, 2018, 2023



Source: Authors' calculation based on data from ELMPS 2012, 2018, 2023

3.2. Structure of employment by sector of economic activity

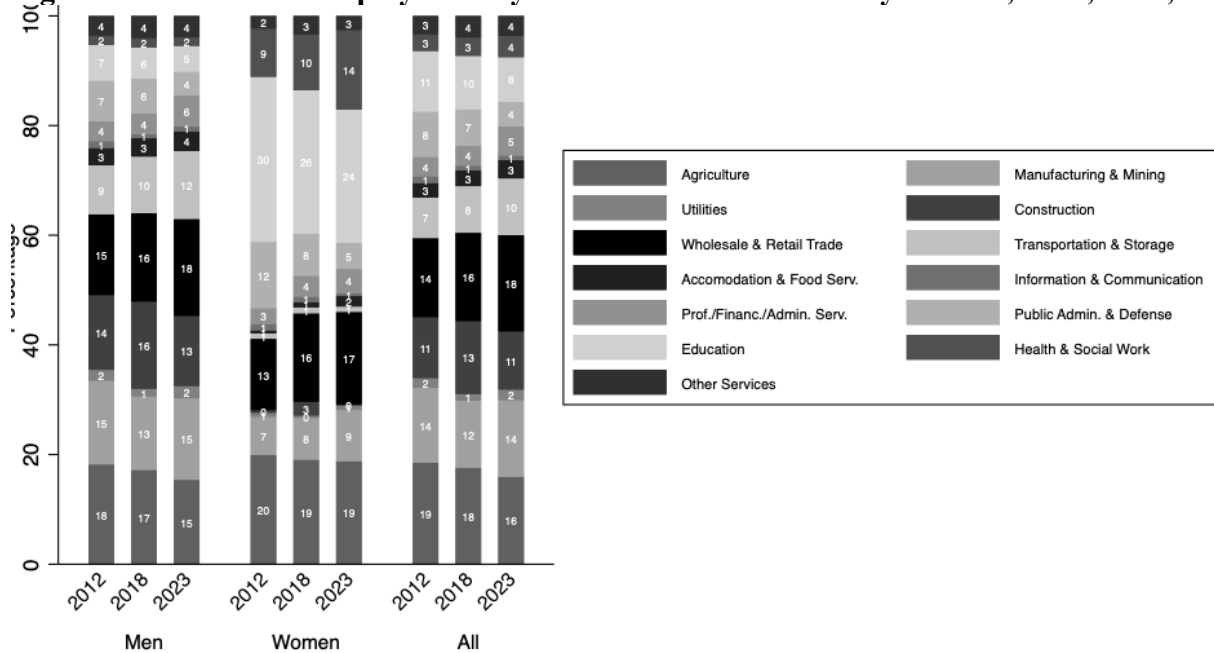
The evolution of the structure of employment by industry reveals a continuing structural shift away from agriculture, a relative stability in the share of employment in secondary sectors, such as manufacturing, mining, utilities, and construction, and a growing share of employment in services. As shown in Figure 6, the services sectors that had substantial growth in their employment share since 2012 include transport and storage, wholesale and retail trade, professional, financial and administrative services,⁶ and health and social work, and other services.⁷ As the public sector shrinks, so does the share of employment in public administration and education. In fact, the stability in the share of construction employment over the 2012-2023 period conceals a substantial increase from 2012 to 2018 followed by a contraction from 2018 to 2023. Sectors that grew their employment share from 2018 to 2023 after having contracted in the 2012-2018 period, include manufacturing and utilities.

As shown in Figure 7, some of the fastest growing sector in terms of employment in 2018-2023 were mostly in the services industries, such as professional, financial and administrative services, transportation and storage, health and social work, and accommodation and food services, but it is also notable that employment in utilities and, to a lesser extent, manufacturing and mining, has also grown much faster than average. The growth of manufacturing, mining and utilities is a welcome sign given their absolute decline in the 2012-2018 period. Declining sectors in 2018-2023 include agriculture and construction, and the public-sector-dominated public administration and education. Employment in agriculture and the public-sector dominated industries had been sluggish for some time, but the decline in construction is a reversal from fairly rapid growth during the 2012-2018 period.

⁶ The Professional, Financial and Administrative Services sector as defined here includes the following sectors in the ISIC 4 rev. 4 one-digit classification: K: Financial and Insurance Activities, L: Real Estate Activities, M: Professional, Scientific, and Technical Activities, N: Administrative and Support Activities.

⁷ The “Other Services” sector as defined here includes the following sectors in the ISIC 4 rev. 4 classification: R: Arts, Entertainment and Recreation, S: Other Services Activities, T: Activities of Household as Employers, U: Activities of Extraterritorial Organizations and Bodies.

Figure 6. Structure of employment by sector of economic activity and sex, 2012, 2018, 2023



Source: Authors' calculation based on data from ELMPS 2012, 2018, 2023

The structure of employment by industry for men is roughly similar to the overall structure and follows essentially similar trends. Women's employment is especially concentrated in the care economy sectors of education, health and social work, and other services, and they have increased their employment share in these sectors from 43 percent in 2018 to 47 percent in 2023. The increase in the share of health and social work in women's employment is particularly notable. The declining share of women's employment in public administration mirrors its decline in the public sector and shows how this previously important part of women's employment in Egypt is shrinking rapidly. Women's employment share in manufacturing is inching upward to just 9 percent in 2023, and their share of employment in agriculture was more stable than that of men at about 20 percent. As shown in Figure 7, the fastest growing industry sector for women was accommodation and food service, which is mostly linked to tourism, followed by utilities, professional and financial services, which have also been growing for men. Health and social work is the one sector where employment has been growing much faster for women than for men.

Figure 7. Average annual growth rate of employment by sector of economic activity and sex, 2012-2018, 2018-2023

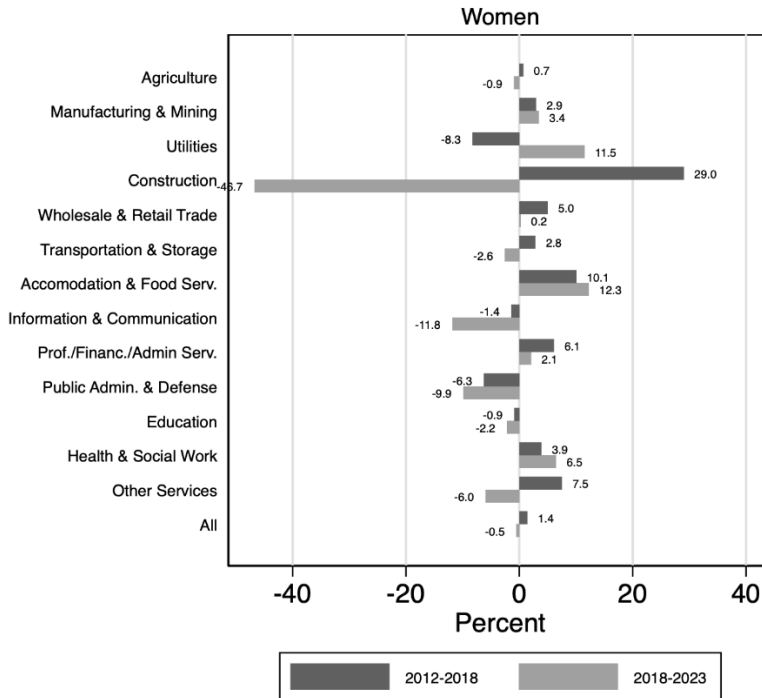
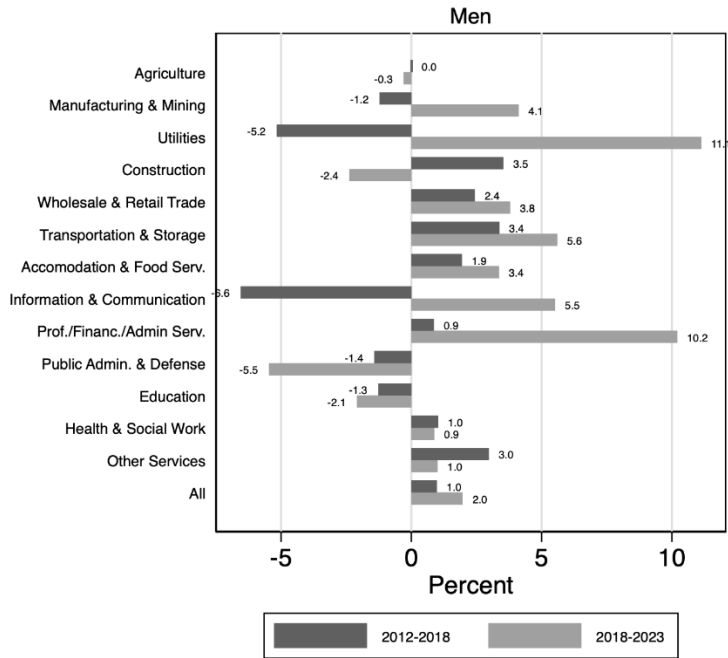
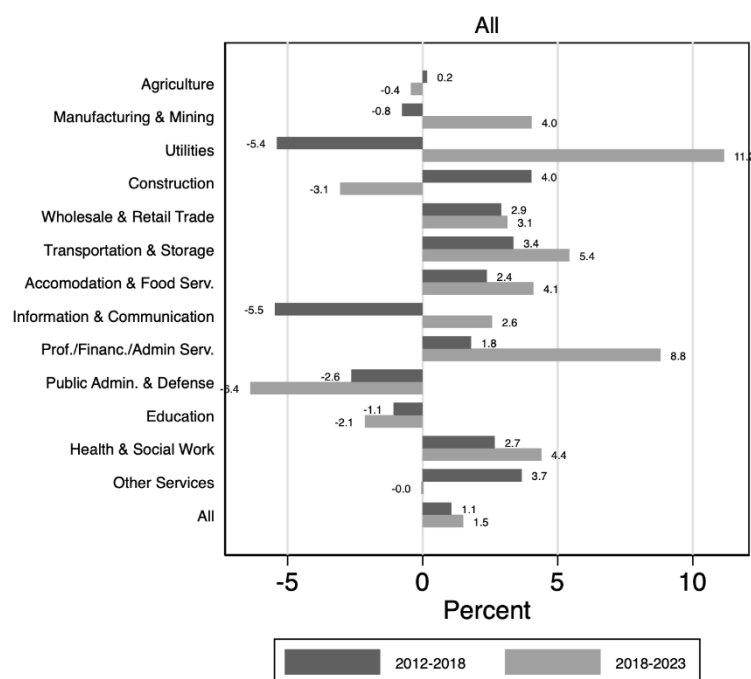


Figure 7. Average annual growth rate of employment by sector of economic activity and sex, 2012-2018, 2018-2023 (continued)



Source: Authors' calculation based on data from ELMPS 2012, 2018, 2023.

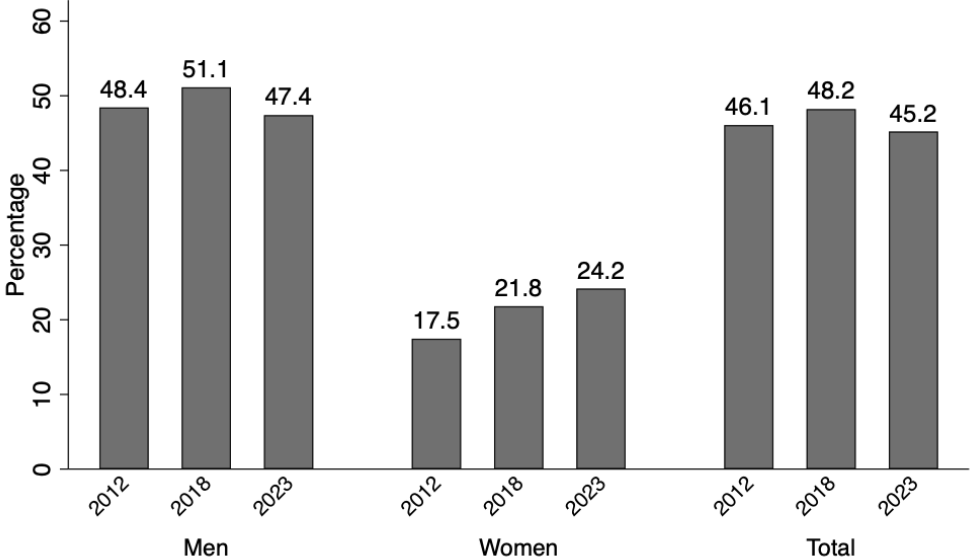
3.2. Evolution of the structure of private wage employment

In this section we analyze private wage employment in further detail, looking at its structure by work inside and outside of establishments and by establishment size category. Previous studies had flagged the increase in the share of private wage employment outside establishments and the re-emergence of the “missing middle” in the size distribution of employment, as the share of micro and large establishments declines in favor of small and medium establishments (Assaad et al., 2019; Assaad, AlSharawy, et al., 2022; Atiyas & Diwan, 2022).

As shown in Figure 8, the proportion of private sector wage employment that is outside establishments has reversed after increasing from 2012 to 2018. This is likely related to the slowdown of the construction industry, since the reversal is concentrated among men. This is a good sign since jobs outside fixed establishments tend to be highly precarious. However, we note that work outside fixed establishments has increased substantially among female private sector

wage workers. This is a further indication that the quality of women’s employment may be deteriorating.

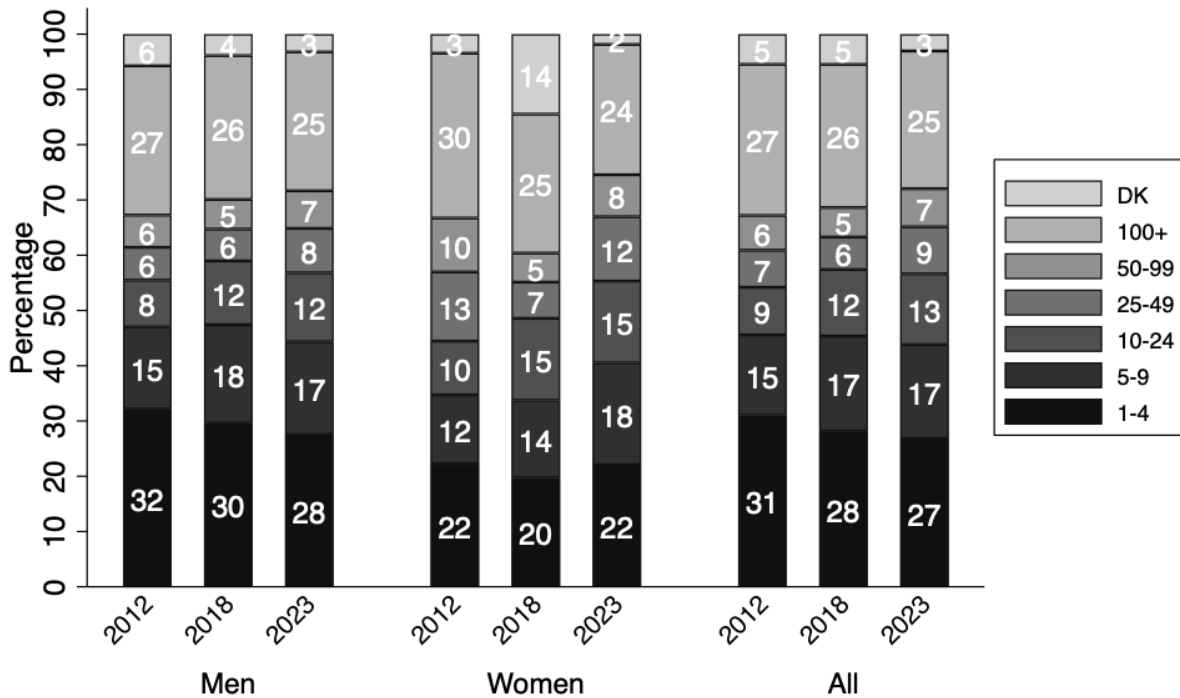
Figure 8. Proportion of private sector wage employment outside of establishments by sex, 2012, 2018, 2023



Source: Authors calculation based on data from ELMPS 2012, 2018, 2023

Private sector wage employment inside establishments is increasingly in small and medium establishments as opposed to micro and large establishments, confirming the “re-emergence of the missing middle” trend. As shown in Figure 9, the shares of private wage employment in establishments of 10-24, 25-49, and 50-99 workers have all increased since 2018 and that of micro and large establishments has declined. The tendency for employment to move to the middle of the establishment size distribution had begun in the 2012-2018 period, but that was mostly in favor of firms in the 5-9 to 10-24 size categories. It now appears to have spread to the medium-sized categories.

Figure 9. Distribution of private sector wage Employment inside establishments by establishment size and sex



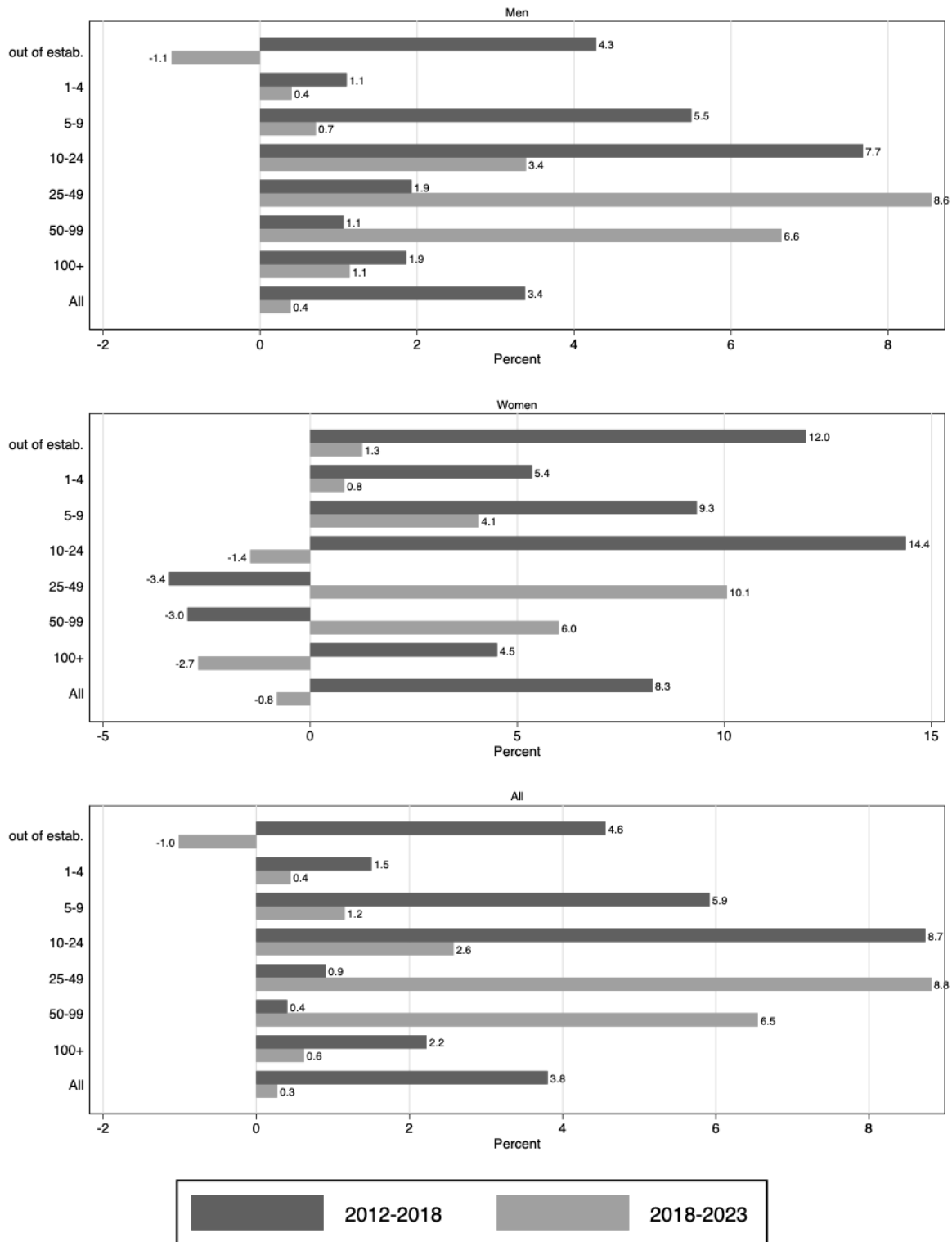
Source: Authors' calculation based on data from ELMPS 2012, 2018, 2023

The slowdown in the growth of private wage employment in recent years that we noted above is confirmed in Figure 10. Private wage employment has only grown by 0.3 percent p.a. in the 2018-2023 period compared to 3.8 percent p.a. in 2012-2018. This slowdown is primarily due to the slowdown of the of the out-of-establishments category, which declined in absolute terms, primarily reflecting the fate of the construction industry. Private wage employment actually declined among women at a rate of 0.8 percent p.a., primarily as a result of a decline in female employment in large establishments and to a lesser extent small establishments of 10-24 workers.

The re-emergence of the missing middle is readily apparent in Figure 10. Employment growth in the medium sized categories of 25-49 and 50-99 workers accelerated substantially in 2018-2023, whereas that of all other size categories slowed. This was true among both men and women. In fact, for women, these categories went from absolute decline to fairly rapid growth.

Although the growth of overall private wage employment was sluggish, the emergence of the missing middle is a good sign for the Egyptian economy since mid-sized firms tend to generate higher quality jobs than micro firms and tend to be more productive than either micro, small or large firms (Atiyas & Diwan, 2022).

Figure 10. Average annual growth rate of private sector wage employment by establishment size and by sex, 2012-2018, 2018-2023

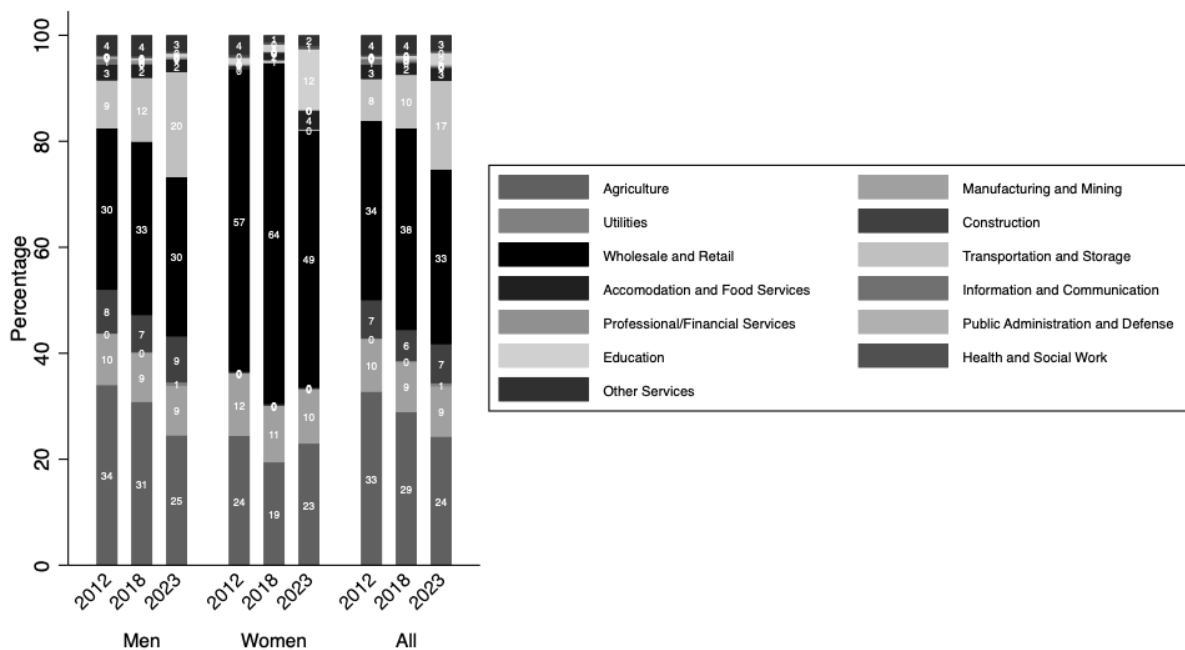


Source: Authors' calculation based on data from ELMPS 2012, 2018, 2023

3.4. The evolution of the structure of own-account work in Egypt

We noted in Section 3.1 above, the very rapid growth of self-employment and to a lesser extent the number of employers in Egypt in the 2018-2023 periods. We explore this phenomenon in more detail in this section by focusing on own account workers, which include both groups. As shown in Figure 11, about a third of own account workers in Egypt are in wholesale and retail trade and about a quarter are in agriculture, both of which saw their shares decline since 2018. The main notable trend is the large increase in the share of education in own-account work, which went from 10 percent in 2018 to 16 percent in 2023. This is an indication of the rapid rise in demand for private lessons and the increasing number of teachers who appear to be dedicating their time exclusively to providing them. The share of manufacturing and mining, and transportation and storage has remained fairly stable at 9 and 7 percent respectively.

Figure 11. Structure of employment by sector of economic activity and sex for own account workers, 2012, 2018, 2023



The sectoral patterns of own account work among men and women are quite comparable. A somewhat higher share of women than men in own account work are engaged in wholesale and retail trade, but similar shares are engaged in agriculture. The share in wholesale and retail trade fell substantially for women in 2023 mostly at the expense of a large increase in the share of education. As expected, few women are active as own-account workers in transportation and storage. By far the fastest growth in own-account work in the 2018-2023 period has been education and utilities, followed by transport and storage.

4. The Evolution of working time, underemployment and educational qualification

We examine in this section the evolution of working time, underemployment and educational over-qualification. We consider time-related underemployment, which considers an individual as underemployed if they work less than full-time involuntarily. The qualification perspective compares the worker's educational qualifications to the qualifications required by their job, as reported by the worker. A worker is considered over-qualified if their education exceeds the education required by their job, correctly qualified if their educational attainment is the same as the education level required by their job, and underqualified if it is below the level required by their job.

4.1. Working time and time-related underemployment

Time-related underemployment (also known as involuntary part-time work) involves working less than full-time involuntarily, as a result of not finding enough employment opportunities. The rate of time-related underemployment is defined as the proportion of the employed working part-time (less than 35 hours per week) because of lack of sufficient employment opportunities. In contrast to open unemployment, which primarily affects relatively more privileged groups in Egypt, those who can afford to remain without work while searching for jobs, time-related underemployment usually affects less privileged workers in precarious or casual jobs. The time-related underemployment rate is also more sensitive to the cyclical fluctuations in the economy than the unemployment rate, which has a large structural component in Egypt. It is therefore plausibly a better measure of labor market health or at least an important complementary measure to the unemployment rate (Krafft & Assaad, 2014).

We begin by examining the distribution of weekly hours of work according to three categories: (i) less than 35 hours per week (part-time employment), (ii) 35-48 hours per week (full-time employment), and (iii) more than 48 hours per week (excessive working time).⁸ As shown in Figure 12, the proportion of workers working part-time (less than 35 hours per week) in Egypt declined to 17 percent in 2023 after having increased from 18 percent in 2012 to 21 percent in 2018. Only a small proportion of formal private wage workers or informal wage workers within establishments work part-time. In fact, the proportion of these workers working excessive hours (more than 48 hours per week) is quite high and has increased substantially from 2018 to 2023. The same is true of employers and the self-employed workers, leading to half of all workers working excessive hours in 2023. The proportion of part-time work is higher among unpaid family workers, and private wage workers outside establishments.

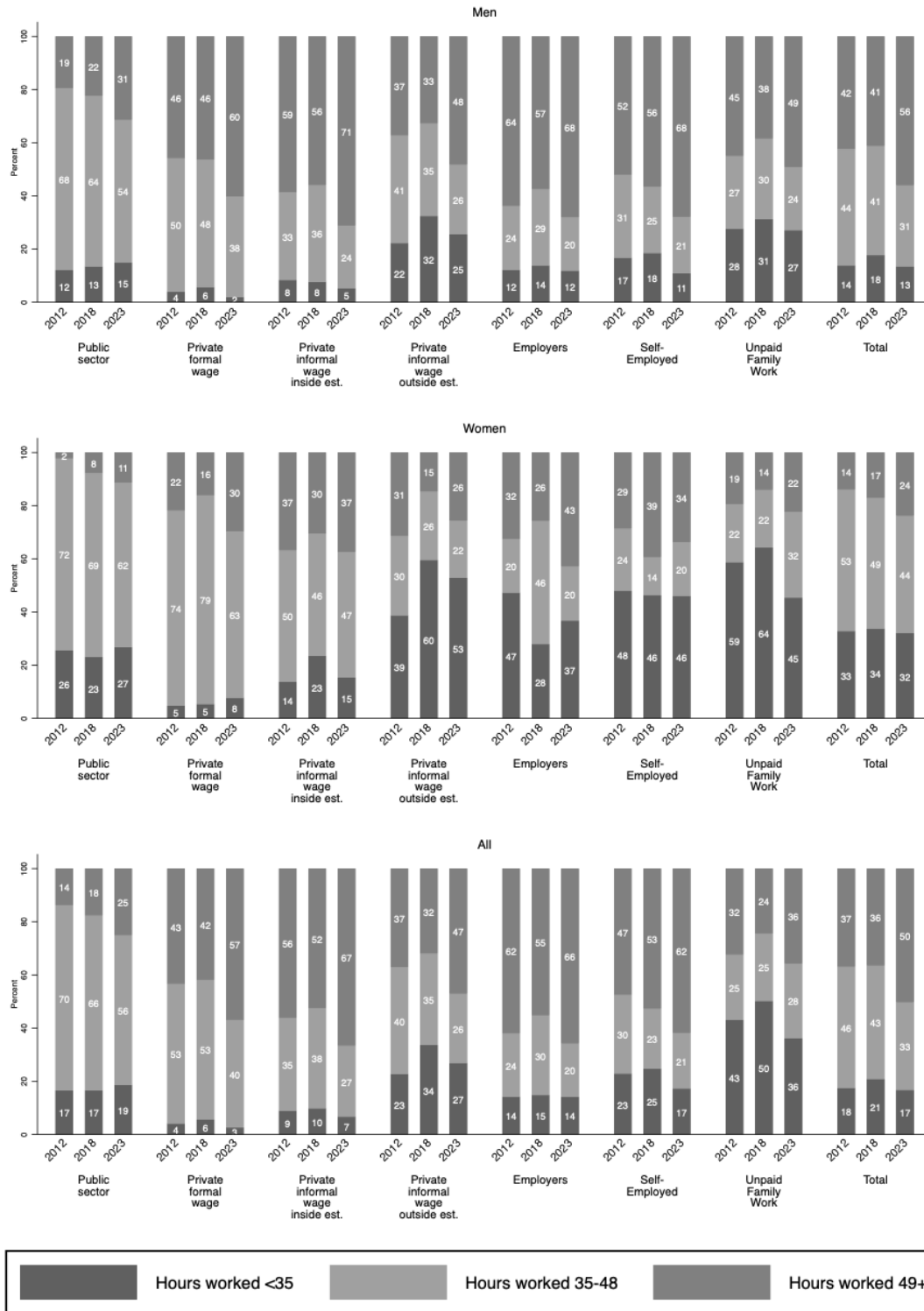
Because of the other demands on their time, part-time employment is more common among women than among men, with about a third of employed women engaged in part-time work in

⁸ This is based on ILO definition of “excessive working time” <https://ilostat.ilo.org/topics/working-time/>.

2023 compared to only 13 percent for men. However, the rate of part-time work is virtually negligible for formally employed women (and men) in the private sector (5 and 2 percent, respectively), suggesting that private sector employers are averse to making part-time work opportunities available to their workers, which could be a significant obstacle for married women to engage in such employment. Whenever women have more control over their work time, as in the case of self-employment, unpaid family work, or informal employment outside establishment they appear to opt for more part-time work. Notably, much higher proportions of female public sector workers work part-time relative to their formal private sector counterparts, partially explaining why women are able to stay in that kind of work even after marriage (see (Krafft et al., 2024)). Some employed women suffer from high rate of excessive working time, such as women employed informally in and out of establishments, employers and self-employed women. Notably, the proportion of women working excessive hours among formally employed private sector workers increased substantially in 2023. This intensification of private sector workloads could partly explain why female employment in that sector has been declining.

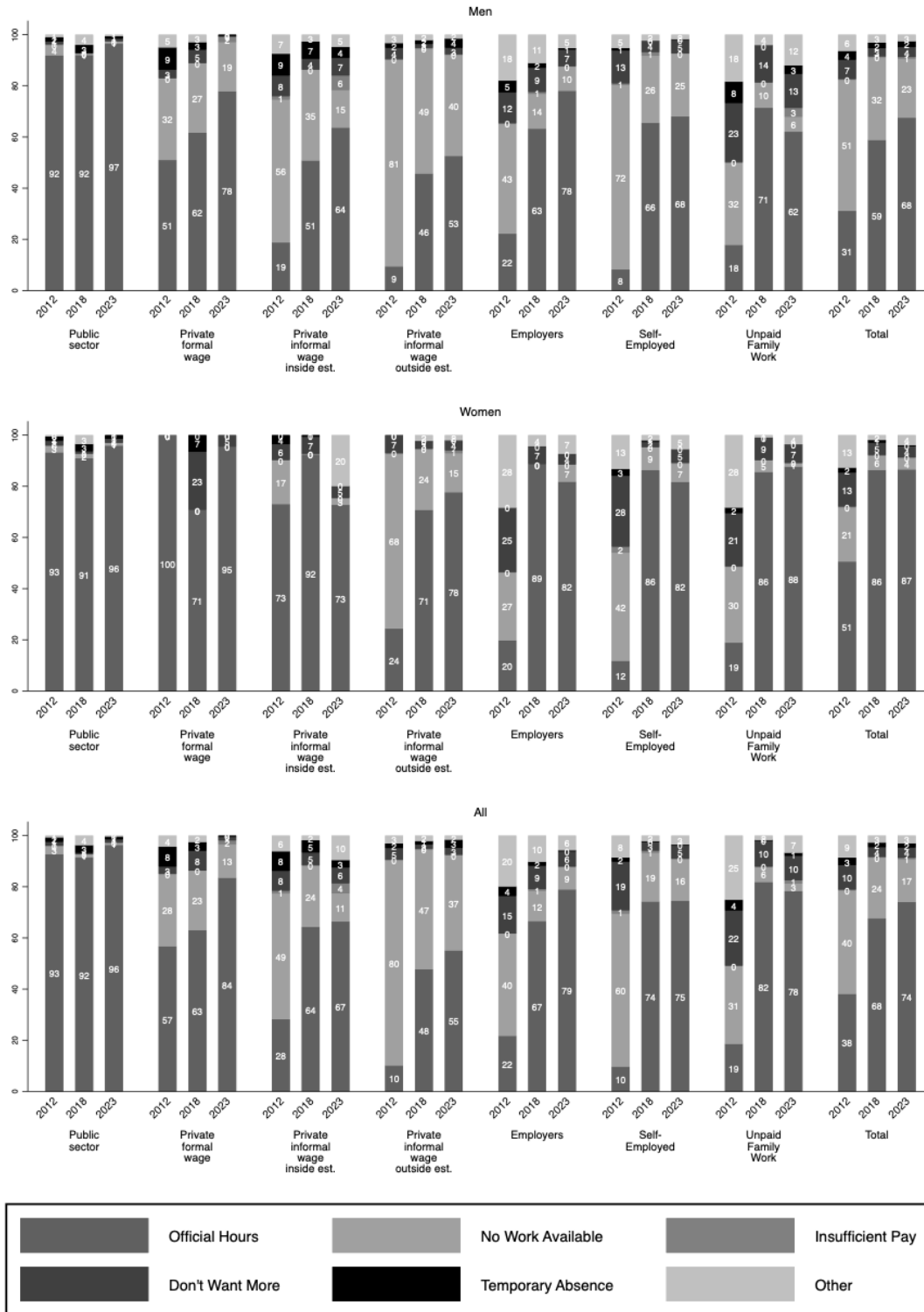
We move next to an analysis of why part-time workers are working less than full-time and whether it is voluntary or due to an inability to find work the rest of the time. As shown in Figure 13, the proportion of part-time workers who say they work part-time because no work is available the rest of the time has dropped substantially from 40 percent in 2012, to 24 percent in 2018, to 17 percent in 2023. This shows that work has become less precarious since 2012, a year in which the economy was in a major cyclical slowdown. The main reason workers provide for working part-time is that official work hours are less than 35 hours per week. Those saying that increased steadily from 38 percent of workers in 2012 to 74 percent of workers in 2023.

Figure 12. Distribution of employment by hours of work categories, less than 35, 35-48 hours and 49+ hours by type of employment and sex, 2012, 2018, 2023



Source: Authors' calculation based on data from ELMPS 2012, 2018, 2023

Figure 13. Distribution of workers engaged in part-time work (less than 35 hours) by reason for being part-time, type of employment and sex, 2012, 2018, 2023



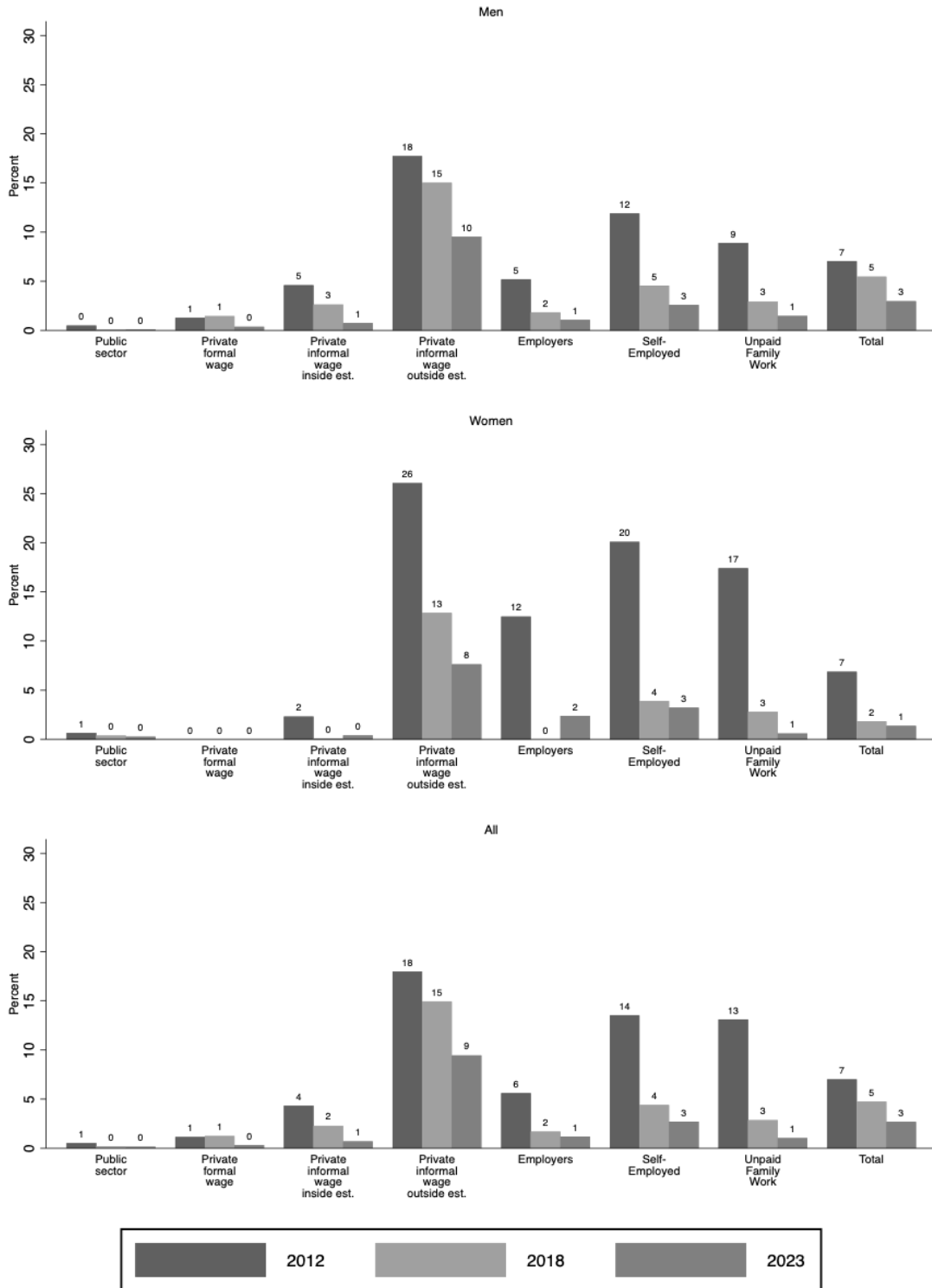
Source: Authors' calculation based on data from ELMPs 2012, 2018, 2023

The rate of time-related underemployment (or involuntary part-time work) is strongly related to the type of employment. Overall, it was substantially higher for men than for women in 2023 because men tend to have higher concentrations in precarious types of employment, such as informal wage work outside establishments. Involuntary part-time work has fallen from 7 percent of the employed in 2012 to 5 percent in 2018 to 3 percent in 2023. This is probably one of the best indicators of an improving labor market for the most vulnerable workers. As shown in Figure 14, it is by far the highest for informal wage workers outside establishments, the most precarious form of employment, followed by self-employed workers and unpaid family workers. It remains fairly elevated in 2023 only among informal workers outside establishments, underscoring the continued vulnerability of these workers to underemployment. As we saw earlier, the share of these workers in total employment has decreased from 23 percent in 2018 to 20 percent in 2023. It is also possible that the drop in time-related underemployment among women be due to women's lower employment rates. If women who are the most marginally integrated in the labor force are the ones who drop out the first, lower employment rates could lead to lower time-related under-employment rates for women. However, we note that the biggest drop in time-related underemployment among women happened between 2012 and 2018, a time in which women's employment was growing compared to the more recent period where it was declining and time-related under-employment did not decline as much. This suggests that a selection out of the labor force is not the main reason for the drop.

Time-related underemployment is one of the labor market outcomes that the strongest association with poverty. As shown in Figure 15, it decreases steadily with the household wealth quintile of the worker. In fact, time-related underemployment is nearly six times higher for the workers in the poorest quintile than it is for those in the richest quintile. The good news is that it was halved from 12 percent to 6 percent from 2012 to 2023 for poorest workers and decreased even more for those in the second and third wealth quintiles. Among women, the decline in underemployment over time was even more pronounced among those in the bottom half of the wealth distribution.

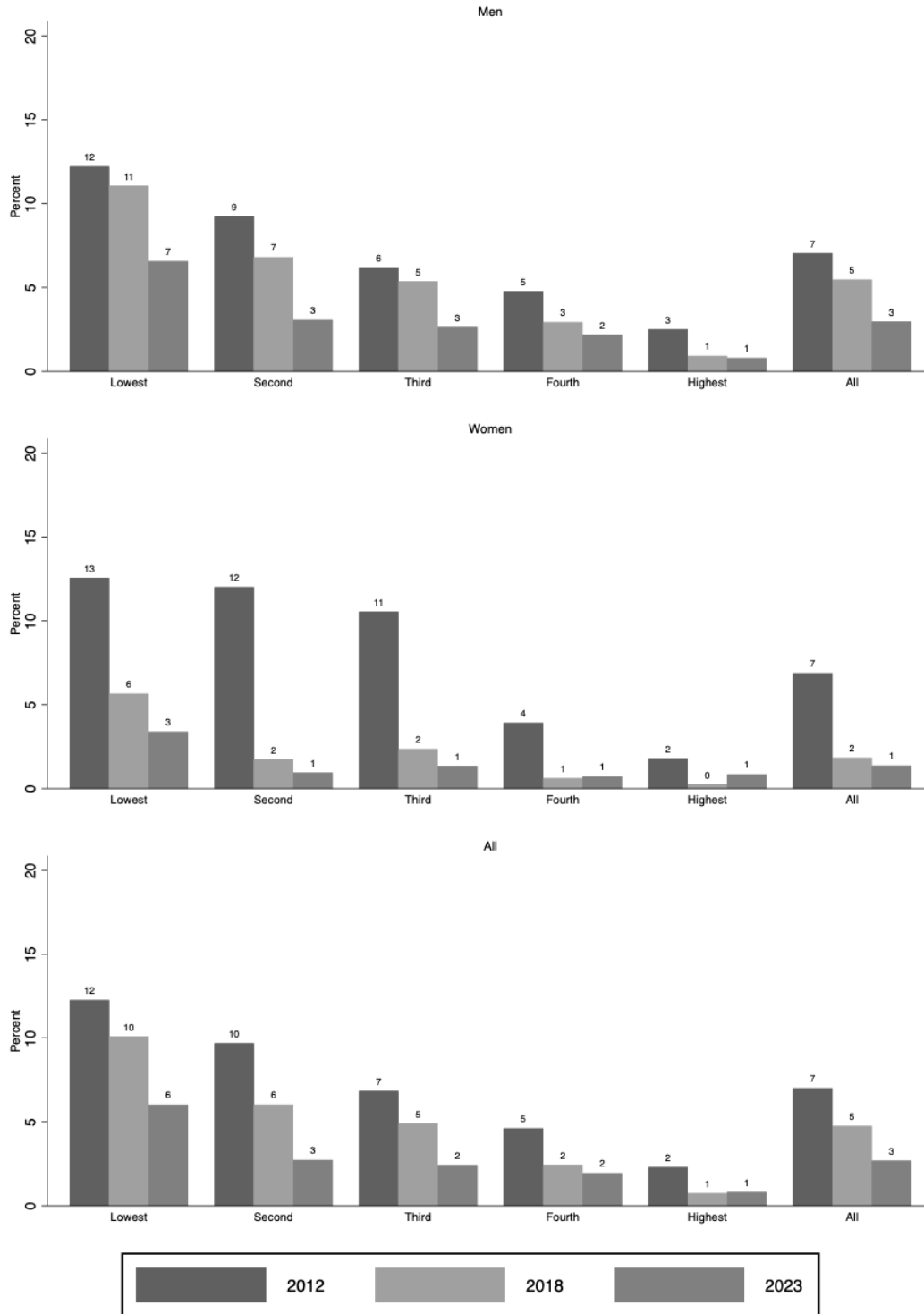
Time-related underemployment is much more prevalent in some activities than in others. As shown in Figure 16, it is highest in construction and agriculture; two activities in which casual employment is the norm. It declined substantially in these industries as the economy recovered from the 2012 slump. It remains fairly high in 2023 in transport and storage. As we mentioned earlier, women are in general less vulnerable to this form of underemployment, because they often try to avoid casual employment outside of establishments. However, women in agriculture, manufacturing and other services suffer from fairly high rates of time-related underemployment that have, nevertheless, declined substantially since 2012.

Figure 14. Rate of time-related underemployment by type of employment and sex, among employed aged 15-64, 2012, 2018, 2023



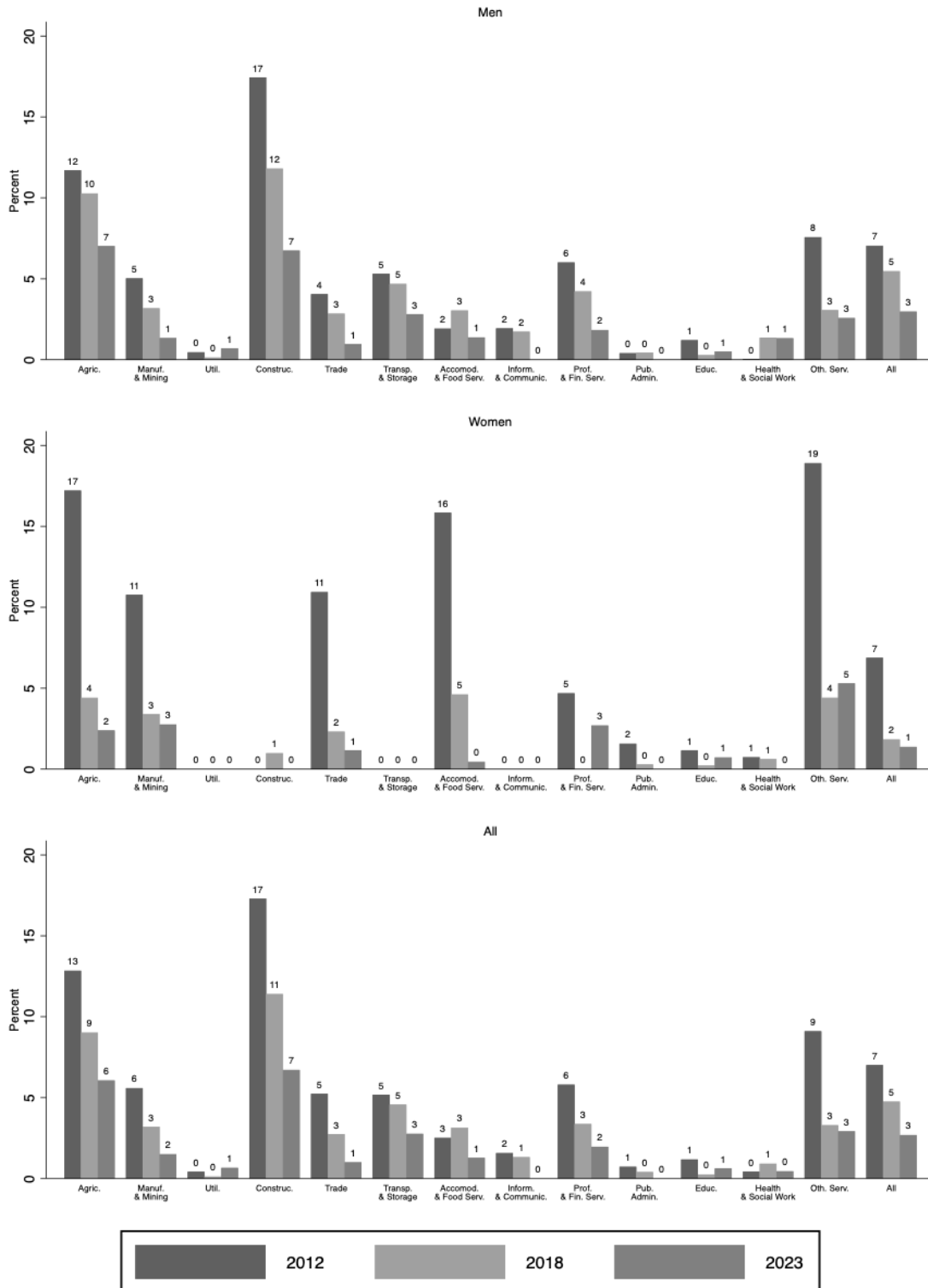
Source: Authors' calculation based on data from ELMPS 2012, 2018, 2023

Figure 15. Rate of time-related underemployment by wealth quintile and sex, 2012, 2018, 2023



Source: Authors' calculation based on data from ELMPS 2012, 2018, 2023

Figure 16. Rate of time-related underemployment by sector of economic activity and sex, 2012, 2018, 2023



Source: Authors' calculation based on data from ELMPs 2012, 2018, 2023.

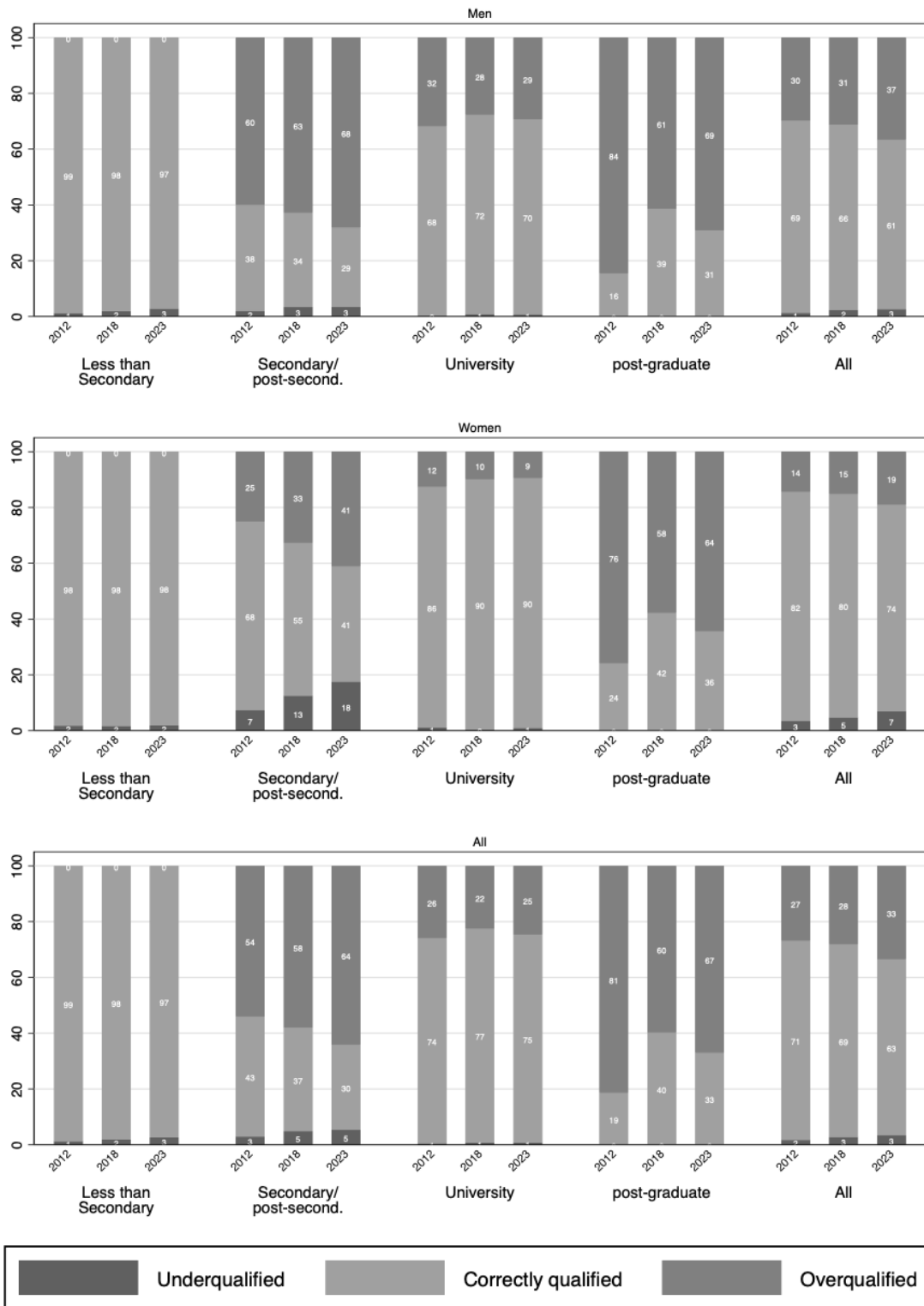
4.2. Educational qualification

The survey enquires about educational qualification by asking workers about the education level that their job requires, allowing us to compare that level to their educational attainment. We assess educational qualification by classifying the educational level required and the worker's educational level into four levels: (i) less than secondary, which includes no schooling through preparatory schooling, (ii) secondary/post-secondary, which includes general secondary, technical secondary and post-secondary institutes, (iii) university, which includes all bachelor's degrees as well as graduates of four-year higher institutes, (iv) post-graduate, which includes all graduate degrees and diplomas. If the worker's education according to this classification is equal to the education required by the job, the worker is said to be correctly qualified, if the worker's education is less than what is required for their job, they are said to be underqualified and if their level of education exceeds the level required by the job, they are said to be overqualified. Educational overqualification is a type of underemployment.

We begin by examining educational qualification by educational attainment, since it is expected that overqualification will mostly affect more educated workers. As shown in Figure 17, a third of all workers report being educationally overqualified for their job in 2023, up from 27 percent in 2012. A very small fraction report being underqualified, but this fraction has nonetheless increased steadily over time as well. By design, workers with less than secondary education are never overqualified for their jobs and a very small fraction report being underqualified. However, a large and rising proportion of workers with secondary or post-secondary education report themselves to be overqualified for their jobs. This is because most secondary educated workers in Egypt end up in manual or craft occupations that they deem do not require formal schooling. This level of education also includes the highest proportion of workers who deem themselves underqualified. About a quarter of university educated workers report being in jobs that do not require that level of education; a proportion that has remained stable over time, but nearly two-thirds of those with post-graduate degrees report that their jobs do not require that level of qualification.

The reported levels of overqualification are lower for women than for men, with about a fifth of women as opposed to two fifths of men reporting being overqualified. This is likely due to the fact that given the dominant male breadwinner/female homemaker norm in Egypt, women who cannot find jobs that match their qualifications can simply stay out of the workforce rather than settle for jobs that do not meet their expectations. Interestingly, it is among women with secondary and post-secondary degrees that we see the fastest rising levels of both overqualification and underqualification.

Figure 17. Educational qualification by educational attainment and sex, 2012, 2018, 2023

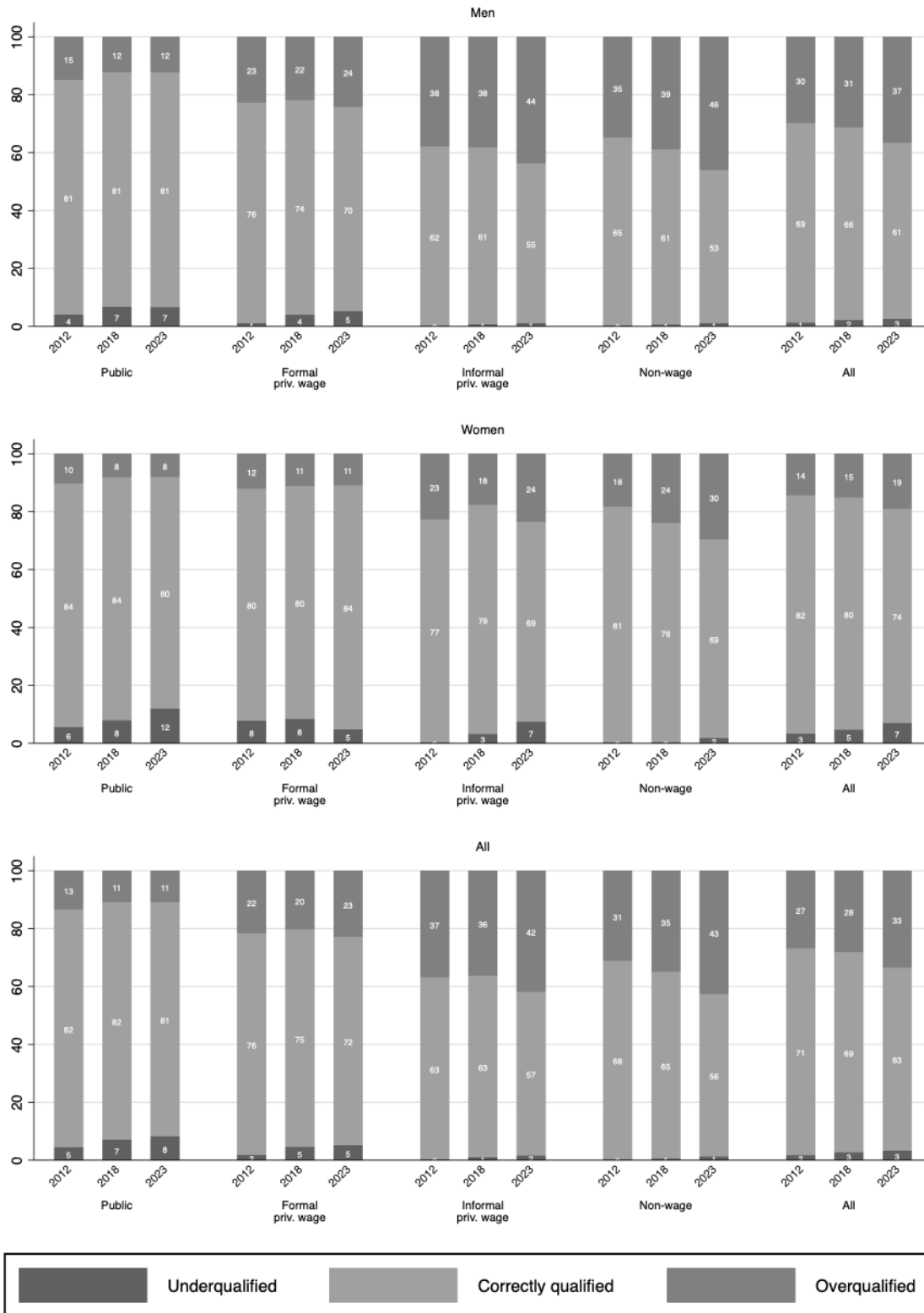


Source: Authors' calculation based on data from ELMPS 2012, 2018, 2023

We now move to an examination of educational qualification by type of employment. As shown in Figure 18, public sector workers and to a lesser extent formal private sector wage workers are less likely to report being overqualified for their jobs. These jobs are often allocated based on educational qualifications, so it is not surprise that formal jobs have a better match between a worker's education and the educational requirements of the job. Informal wage jobs and non-wage jobs report high and rising levels of overqualification. These are often fallback jobs when workers are unable to find a job that matches their qualifications. As education levels rise over time, it is also not surprising that levels of overqualification in these informal jobs rise over time.

Women in all types of employment report lower levels of overqualification than their male counterparts, partly because of the self-selection out of the workforce when a good match with qualifications cannot be found. Also, a higher and rising proportion of women report being underqualified for their jobs than men, especially among those working in the public sector. As in the case of men, women in formal jobs have the lowest levels of overqualification, and those in informal wage jobs and non-wage jobs have the highest levels.

Figure 18. Educational qualification by type of employment and sex, 2012, 2018, 2023



Source: Authors' calculation based on data from ELMPS 2012, 2018, 2023

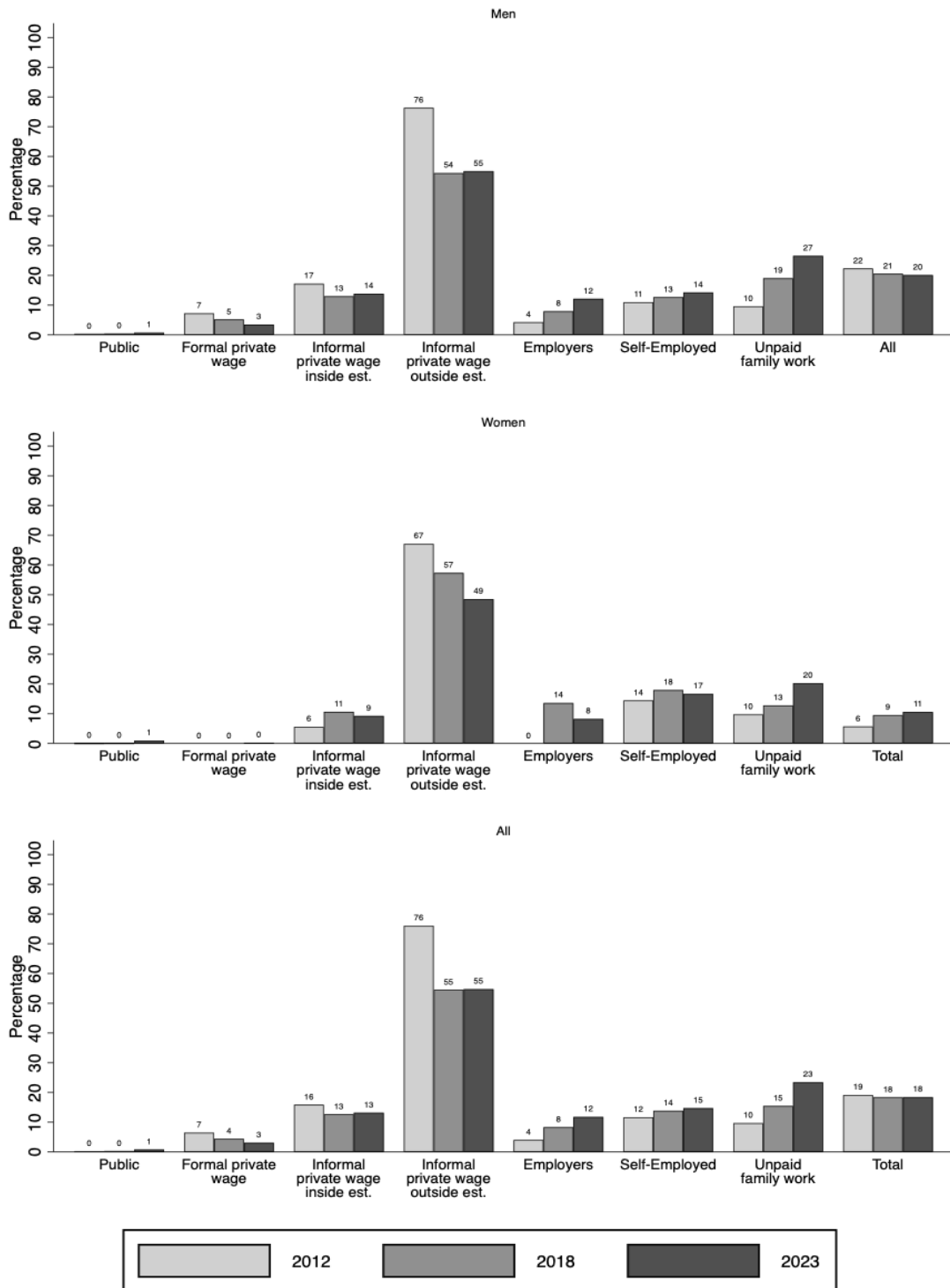
5. Evolution of the Quality of Employment

We now move to an examination of the evolution of the quality of employment in terms of regularity, social insurance coverage, the extent to which it benefits from paid vacations, sick leave, or medical insurance, and subjective job satisfaction with various aspects of one's job.

5.1. Regularity of employment

Regularity of employment is an important measure of employment precarity. We consider employment that is either intermittent or seasonal to be irregular. As shown in Figure 19, irregularity of employment is strongly associated with informal employment outside fixed establishments. Nevertheless, irregularity is also strongly associated with the state of the economy. In 2012, when the economy was in deep crisis in the aftermath of the January 25th revolution, irregularity of employment was at its highest level (19%), but it has remained fairly stable overall from 2018 to 2023 at 18%. Employment irregularity appears to be rising for women (from 6 percent in 2012 to 9 percent in 2028 to 11 percent in 2023), whereas it is declining for men (from 22 percent in 2021 to 21 percent on 2018 to 20 percent in 2023). This is due to compositional shifts of female employment into informal wage work outside establishments and for men away from that kind of work (Figure 8). Irregularity of employment among non-wage workers is relatively limited, but it appears to have increased over time, especially for employers and unpaid family workers. This appears to go against the overall trend of reduced irregularity of employment.

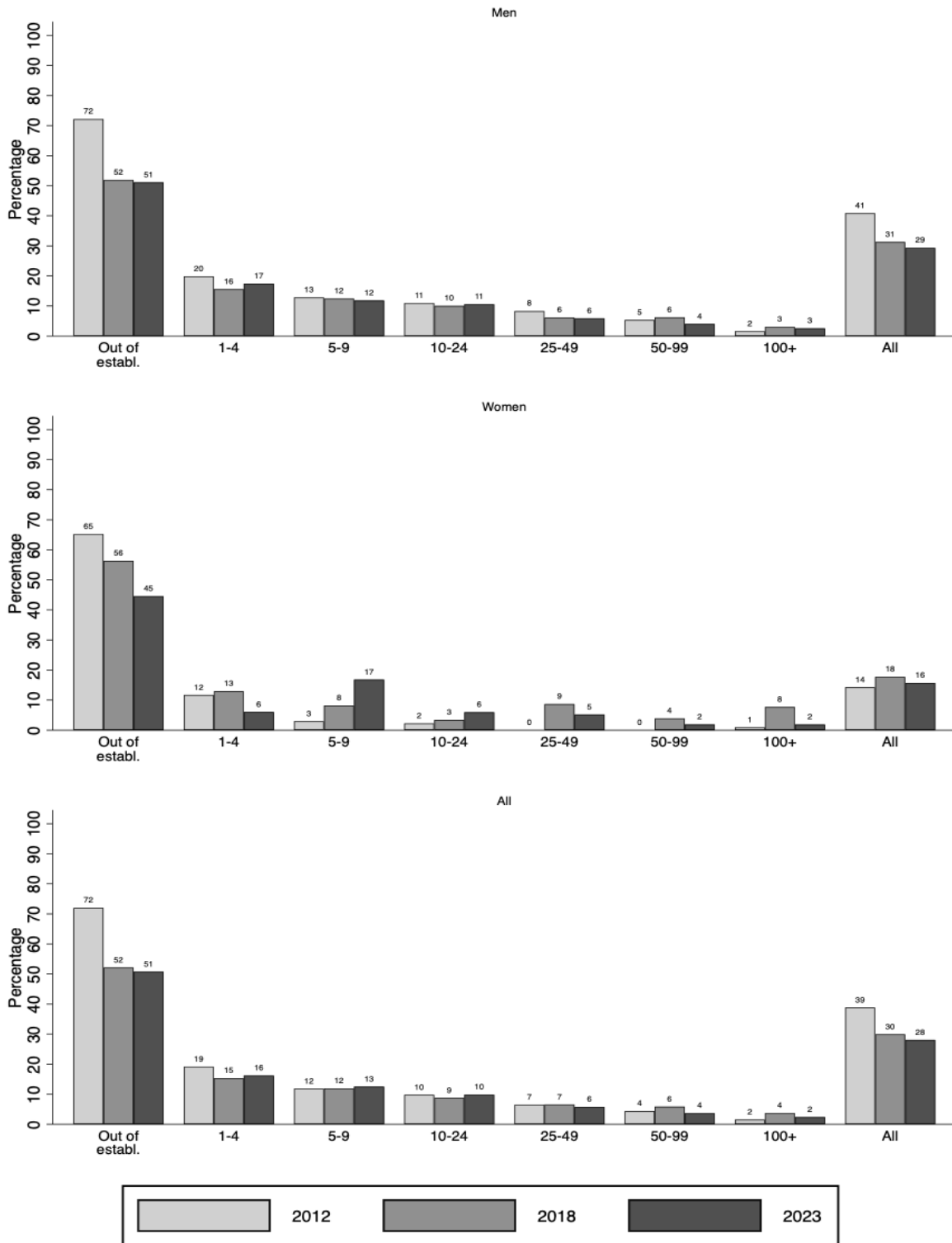
Figure 19. Irregularity of employment by employment type and sex, 2012, 2018, 2023



Source: Authors' calculation based on data from ELMPS 2012, 2018, 2023

We focus next on irregularity within private sector wage work and examine the extent to which it varies by establishment size as well as being in/out of establishments. As shown in Figure 20, besides workers who work for wages outside fixed establishments, irregularity is highest in micro (1-4 workers) and small (5-9 and 10-24 workers) establishments. The decline in regularity for all workers from 2018 to 2023 probably has more to do with compositional shifts away from work outside establishments since it has not changed much within these high irregularity categories. As expected, the pattern for men resembles that of all private wage workers given that they make up over 90 percent of these workers. For female private wage workers, irregularity declined in 2023, contrary to its trend among all workers. There was a divergent trend among different categories of female wage workers though, with irregularity decreasing substantially among those outside establishments and those in micro establishments, but rising appreciably among those in small establishments of 5-9 and 10-24 workers. Some of the decline can also be attributed to compositional shifts we saw toward medium-size establishments (Figure 9).

Figure 20. Irregularity of employment of private wage employees by in/o of establishments and establishment size category and sex, 2012, 2018, 2023



Source: Authors calculation based on data from ELMPS 2012, 2018, 2023

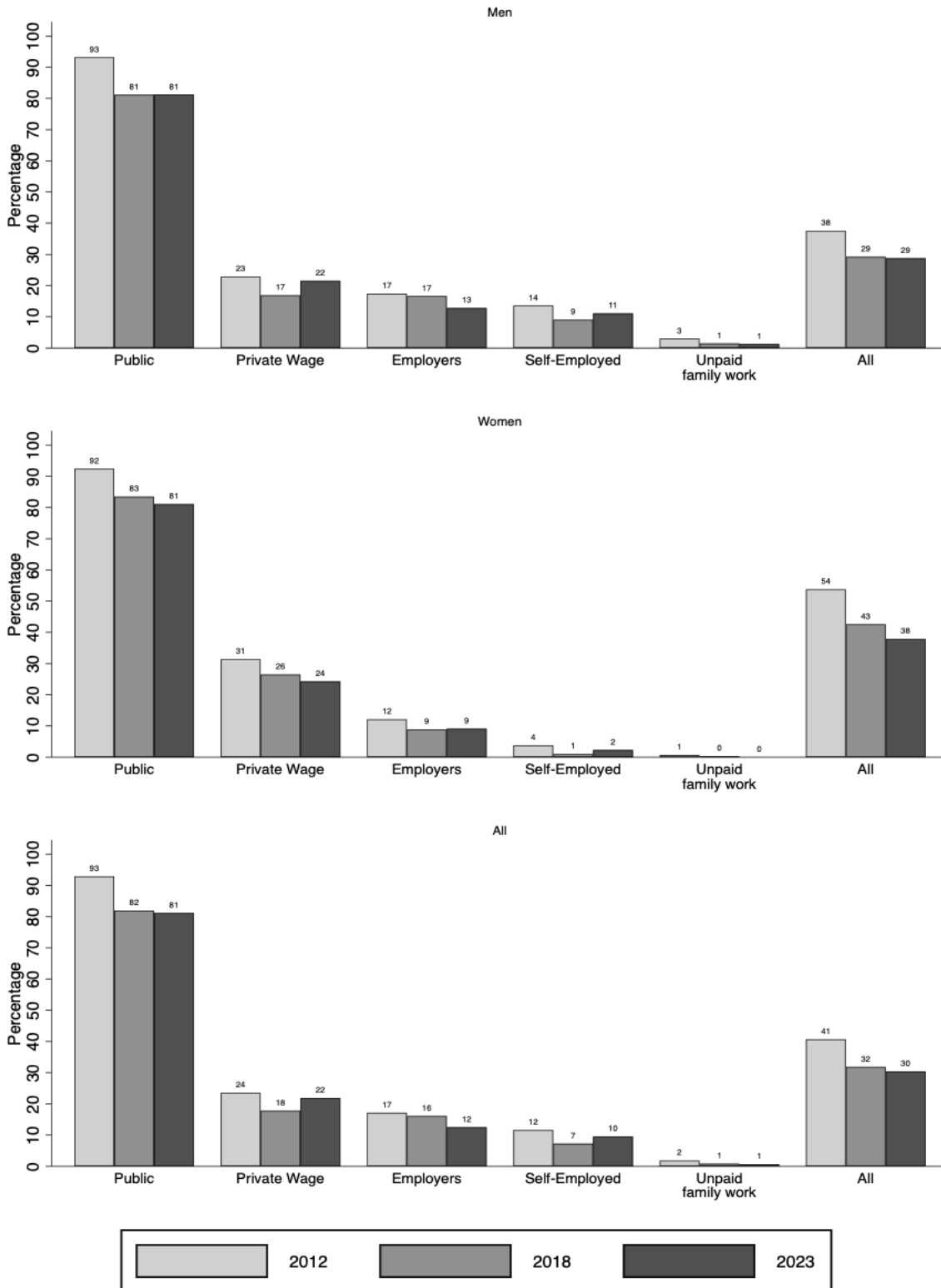
5.2. Social insurance coverage

We turn next to social insurance coverage as a marker of employment quality. Since our definition of type of employment already accounts for informality of employment, which is captured by social insurance coverage, for the purposes of studying social insurance coverage rates, we simplify the type of employment into a simpler typology that includes (i) public sector work, (ii) private wage work, (iii) self-employment, (iv) self-employment, and (v) unpaid family labor. As shown in Figure 21, overall social insurance coverage in Egypt had declined sharply from 41 percent in 2012 to 32 percent in 2018. That sharp decline had been documented in a series of studies and mostly attributed to the sharp rise in the minimum insurable wage in that period, which drove many employers to drop coverage for their workers (Barsoum & Selwaness, 2022; Selwaness & Barsoum, 2023). It appears that the rate of decline in overall coverage has slowed substantially, with rates declining by only 2 p.p. from 2018 to 2023 to reach 30 percent. In fact, overall rates of coverage have stabilized at 29 percent for men from 2018 to 2023, but continued to decline for women, where they had been higher at 43 percent in 2018, but declined to 37 percent in 2023. This could be attributed to a number of reasons. First, while social insurance among male private workers has increased, it has declined women. There has also been compositional shifts in the female labor force from private wage work to non-wage work, especially self-employment, which has extremely low rates of social insurance coverage.

As expected, social insurance coverage rates are very high in the public sector, but not universal. In fact, rates of coverage there have declined from 93 percent in 2012 to 81 percent in 2023, probably the result of the public sector increasingly resorting to short-term hiring contracts. Recent qualitative research amongst women in the health sector provides evidence of recent practices that explain how individuals can be employed in a public sector workplace yet have no protection or insurance coverage. This research found that auxiliaries and cleaners in public sector hospitals in Qalyoubia and Port Said are hired through employment agencies and not be the Ministry of Health [Sholkamy et al., forthcoming]. Rates of social insurance coverage among private wage workers are much lower at 24 percent in 2012, declining to 18 percent in 2018, and recovering to 22 percent in 2023. Rates in private wage work were slightly higher for women than for men, because women are less likely to work outside establishments where coverage is virtually non-existent. However, while male coverage rates have increased by 5 p.p. from 17 percent in 2018 to 22 percent in 2023, female coverage rates have continued to decline steadily since 2012. This suggests that the new social insurance law of 2019 may have induced private employers to increase coverage for at least some male workers, the same did not occur for female workers who are widely expected to leave private wage employment at marriage (Assaad, Krafft, et al., 2022; Selwaness & Krafft, 2020).

Rates of coverage among employers and self-employed workers are even lower than among wage workers. While they declined from 2018 to 2023 for employers, they increased among the self-employed. As expected, rates of coverage among unpaid family workers are virtually negligible.

Figure 21. Rate of social insurance coverage by type of employment and sex, 2012, 2018, 2023



Source: Authors' calculation based on data from ELMPS 2012, 2018, 2023

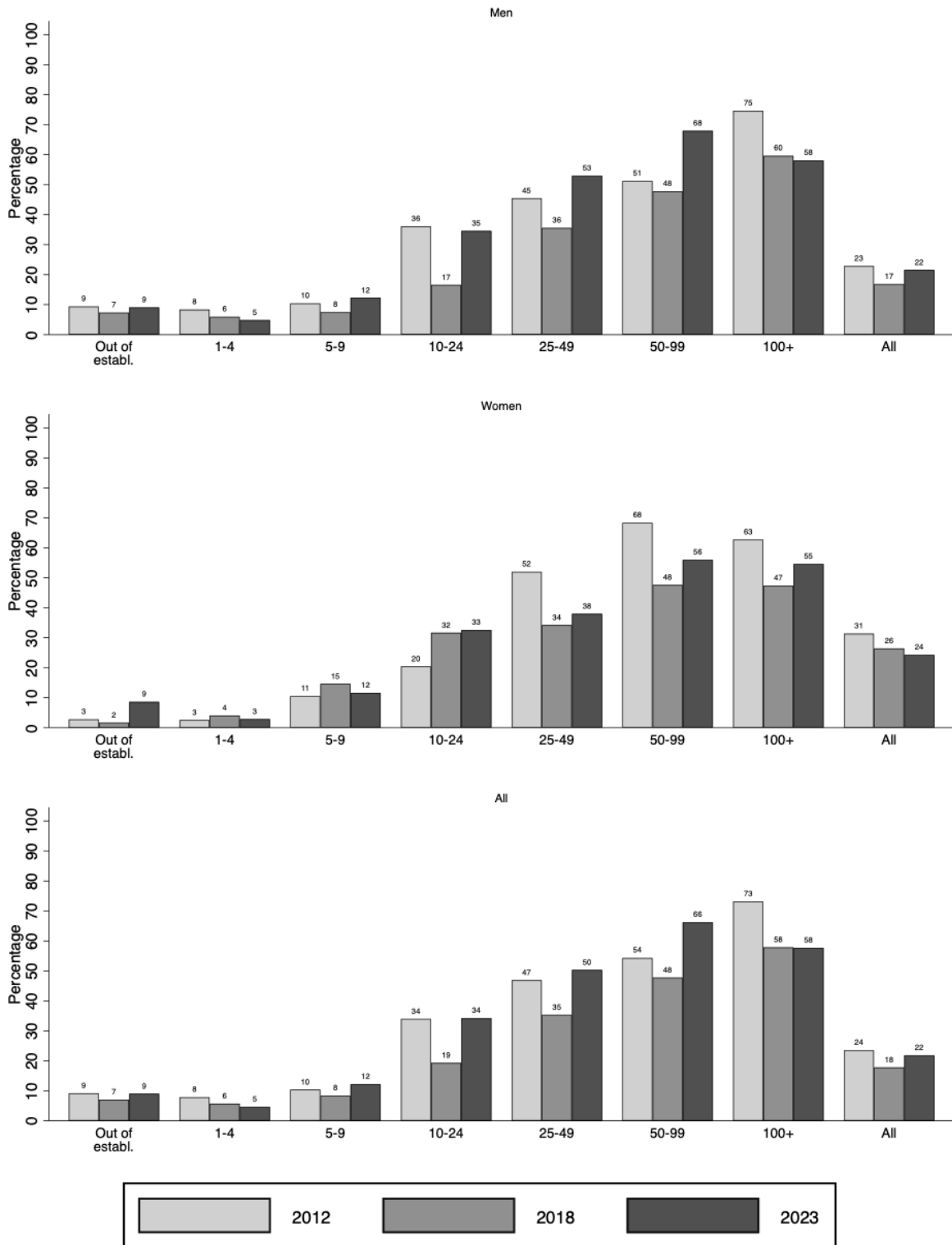
Again, the patterns for men resemble the overall pattern, but women have a somewhat different pattern. Female employers have lower rates of coverage than their male counterparts, but their rates of coverage have stabilized in the 2018-2023 period. Very few self-employed women have social insurance coverage, but rates of coverage among them appear to have increased slightly, after declining from 2012 to 2018.

Examining rates of coverage within private wage employment more closely, we can see from Figure 22 that rates of coverage rise steadily with the size of the establishment. Thus, the improvement in the rates of social insurance coverage in private wage work can be partly attributed to shifts in the composition of private wage employment away from work outside establishments and in microenterprises, where rates of coverage are very low, toward work in small and medium-sized establishments, where rates are higher (See Figure 8 and Figure 9). Besides these compositional shift, rates of coverage have increased in several establishment categories from 2018 to 2023, most notably in small and medium establishments, and even slightly in work outside establishments. A major notable exception is in large establishments of 100 or more workers, where rates of social insurance coverage have been flat after declining substantially from 2012 to 2018, to the point of being lower in 2023 than in the 50-99 worker category.

Women again have contrasting patterns compared to men in private sector wage work. Since coverage has not declined appreciably for women in 2018 to 2023, except in the 5-9 worker category, the overall decline appears to be due to compositional shifts. First, as we have seen in Figure 8, there was a substantial increase in the share of female private wage workers working outside establishments, a category that has very low albeit rising coverage. There is also a shift away from large establishments. Despite compositional shifts in female private wage employment toward medium-sized establishments, which would have increased coverage, these categories had less of an increase in coverage than they did for men, limiting their effects on overall change in coverage.

It remains to be seen whether the slowing trend of decline in overall social insurance coverage, and possibly even a possible reversal of the decline, can be attributed to the new social insurance law passed in 2019 and implemented in 2020. It is clear that women, with their shorter employment time horizon in private wage employment were less likely to benefit from these legal changes than men.

Figure 22. Rate of social insurance coverage, private wage employees, by in/out of establishments and establishment size category and sex, 2012, 2018, 2023



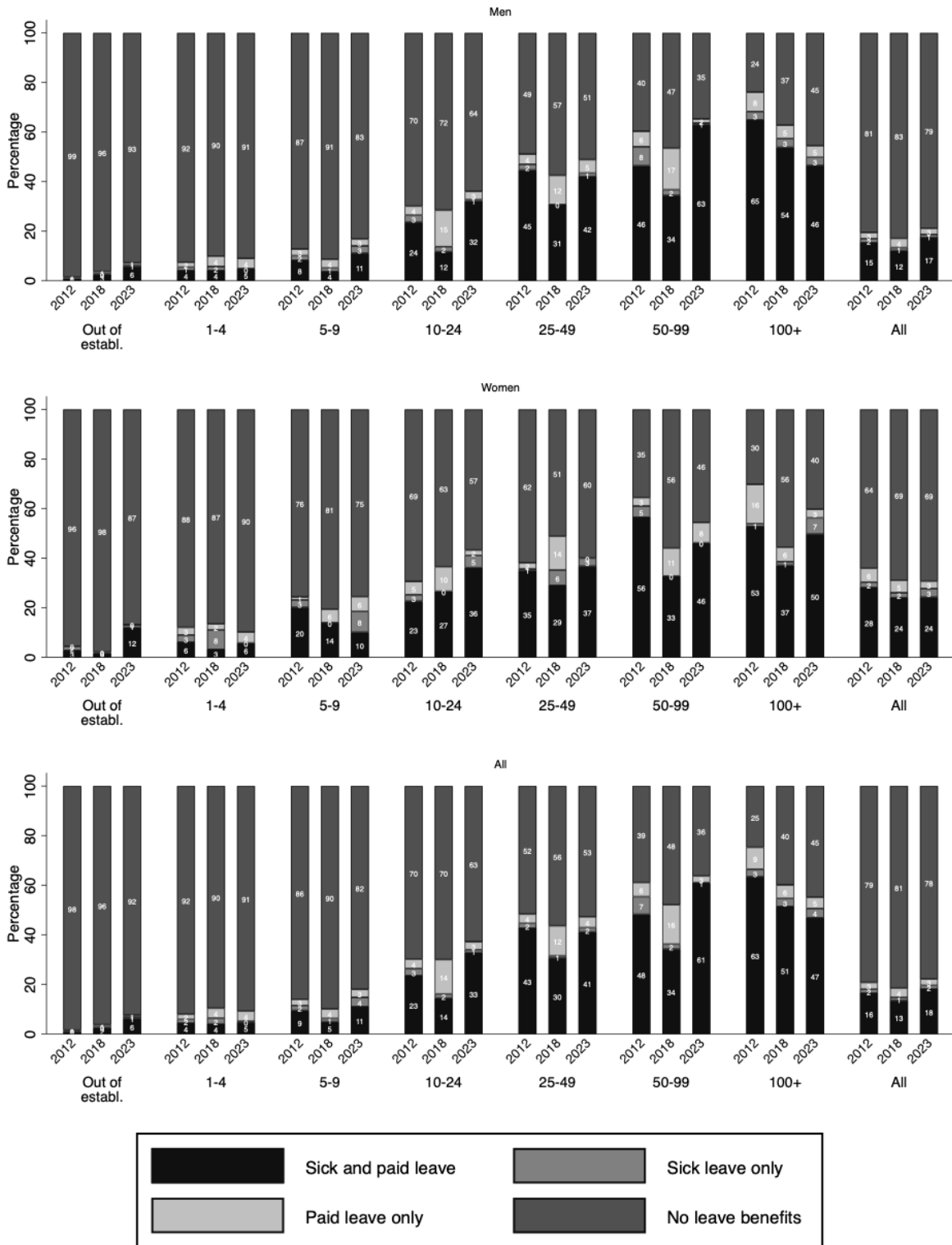
Source: Authors' calculation based on data from ELMPS 2012, 2018, 2023

5.3. Access to paid vacation and sick leave

The next dimension of job quality that we investigate is access to paid vacation and sick leave. For this, we limit our attention to private wage employment since such access is universal in the public sector and not very relevant for non-wag employment. As shown in Figure 23, access to various kinds of paid leaves has increased slightly in the private sector from 2018 to 2023 after having declined in the previous period. The increase is noticeable in all establishment categories except for the largest establishments, where it has declined substantially. In fact, like social insurance coverage, access to paid leaves is lower in 2023 in these large establishments than it is in medium establishments of 50 to 99 workers.

As in the case of social insurance, women, overall have greater access to leave than men, but had virtually no improvement in their access to paid leaves from 2018 to 2023. Again, this appears to be mostly due to compositional shifts in female employment, although access to leaves did decline for women in the 1-4 and 25-49 size categories.

Figure 23. Access to paid vacation and sick leave (percentage) private wage employees, by in/out of establishments and establishment size category, by sex, 2012, 2018, 2023



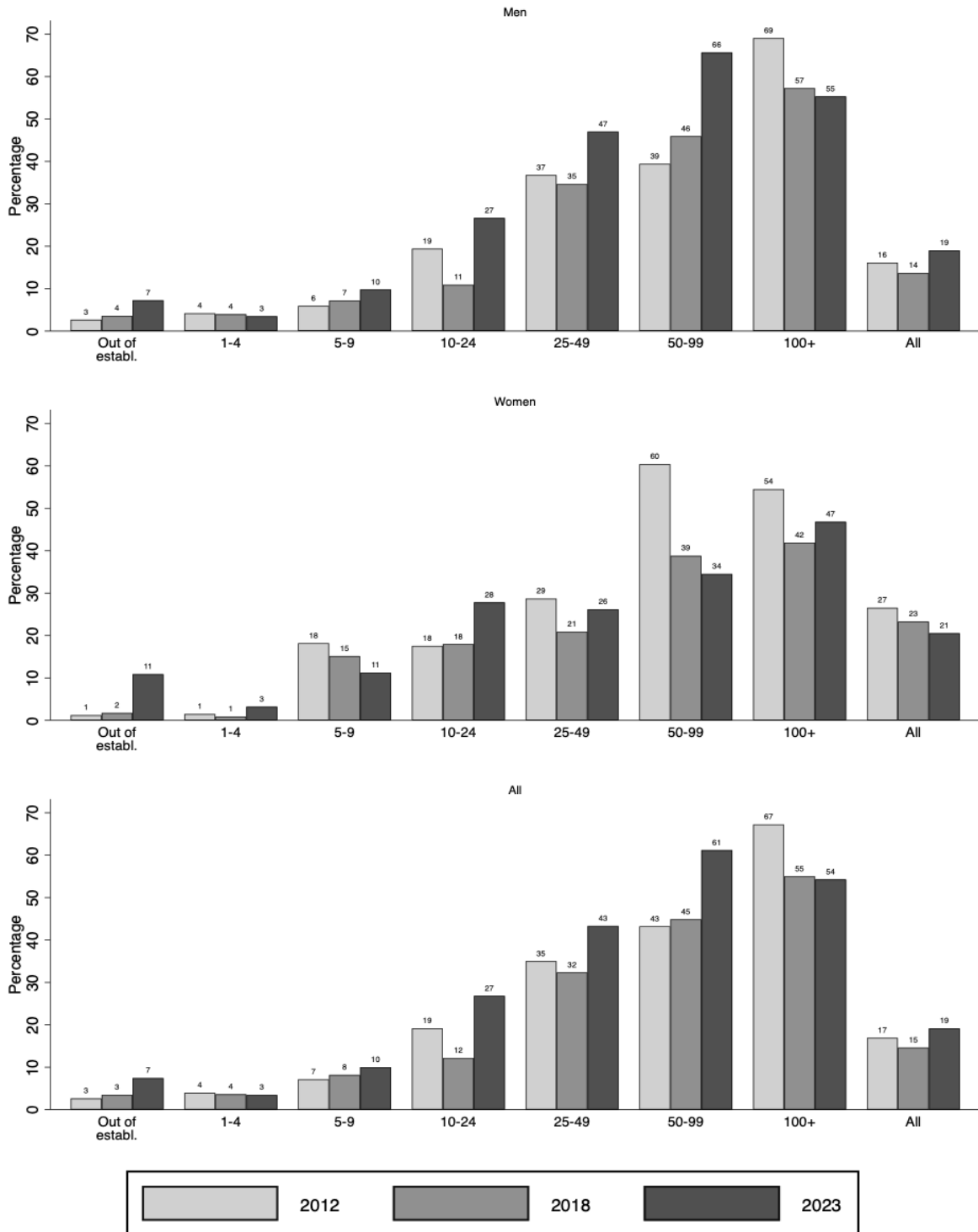
Source: Authors' calculation based on data from ELMPs 2012, 2018, 2023

5.4. Access to employer-provided health insurance

Another dimension of job quality we consider here is access to employer-provided health insurance. Again, we limit our attention to private wage employees. As shown in Figure 24, access to health insurance as a job benefit increased from 15 percent in 2018 to 19 percent in 2023, after having declined in the previous time period. Again, access has increased in all establishment categories, except for the largest, which, as in the case of social insurance and paid leaves, have lower access to health insurance in 2023 than the next smaller size category of 50-99 workers.

Consistent with previous findings, although access has increased for men, it has declined for women in 2018-2023. Besides the compositional shifts we mentioned earlier, the decline for women appears to be related to declines in access in the 5-9 and the 50-99 size categories. There was also less increase in access for women as compared to men in the 10-24 and 25-49 size categories.

Figure 24. Percentage with access to employment-provided health insurance, private wage employees, by in/out of establishments and establishment size category and sex, 2012, 2018, 2023



Source: Authors calculation based on data from ELMPS 2012, 2018, 2023

5.5. Job Satisfaction

One aspect of the quality of employment is the degree of subjective satisfaction with one's job overall and with various aspects of one's work. The ELMPS started collecting data about job satisfaction in 2012, classifying satisfaction on a 5-point scale from fully dissatisfied, to rather dissatisfied, neither dissatisfied nor not satisfied, rather satisfied, or fully satisfied. Besides overall job satisfaction, the survey asks about satisfaction with different aspects of one's job, such as job security, earnings, the type of work, the number of working hours, the work schedule, the working conditions and environment, the commuting distance to the job, and the match between the individual's qualifications and the job they have. Since the vast majority of people choose either fully satisfied or rather satisfied, with smaller numbers selecting the other three categories, we decided to examine the proportion saying they are fully satisfied to get some reasonable variation in the numbers. We examine job satisfaction in 2023 along the various aspects of jobs and the change in job satisfaction from 2018 to 2023.

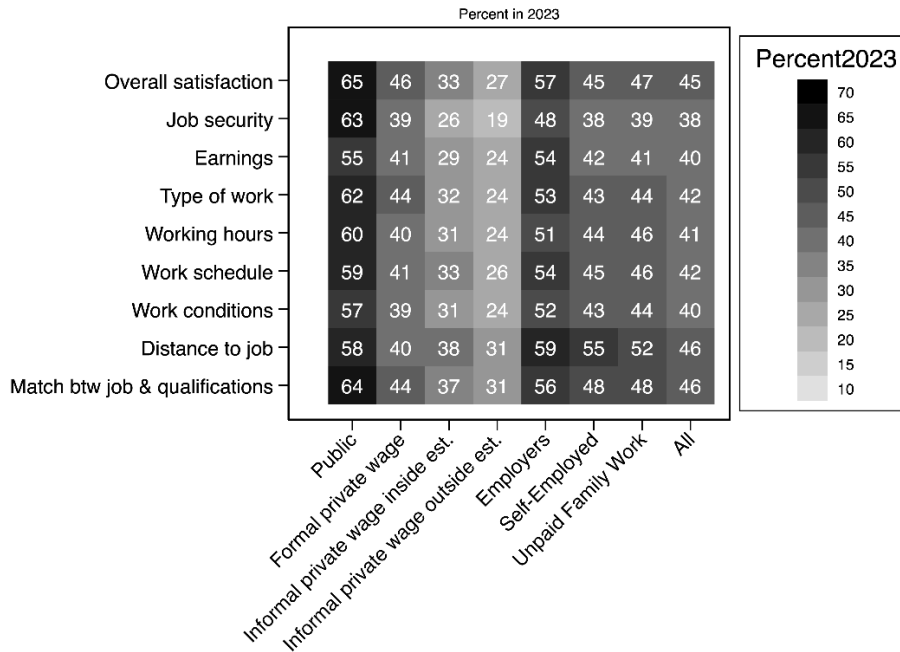
We first examine the percent fully satisfied with their jobs in 2023 according to type of employment. As shown in Figure 25, 45 percent of all workers report being fully satisfied with their jobs, overall. The highest levels of satisfaction are among public sector workers and the lowest are among informal wage workers outside establishments. This sorting of subjective satisfaction levels by type employment corresponds closely to the sorting of the objective measures of job quality we examined above. Employers have the next highest satisfaction levels after public sector workers, self-employed and unpaid family workers tend to be more satisfied than private wage workers, and formal private wage workers tend to be more satisfied than informal private wage workers.

In terms of overall satisfaction, workers appear to be more satisfied with their jobs in 2023 than in 2018, with the percentage reporting being fully satisfied increasing by 8 p.p. from 2018 to 2023. This also corresponds to the generally improving objective job quality indicators we examined above. Only among public sectors did the percent reporting being fully satisfied decline, and only by one percentage point. It improved substantially among self-employed and unpaid family workers and also among informal wage workers.

Considering job satisfaction along different aspects of the job, we note that job security is the aspect of employment receiving the lowest satisfaction levels across all workers followed by earnings and working conditions. We note, however, that the aspect that different kind of workers report to be least satisfied with differs by type of employment. For instance, as shown in Figure 25, public sector workers are generally being fully satisfied with most aspects of their work, but report the least satisfaction with their earnings and the most satisfaction with the match between their qualifications and the requirements of their jobs and their job security. Formal private sector workers are least satisfied with their job security and working conditions, but working hours, work

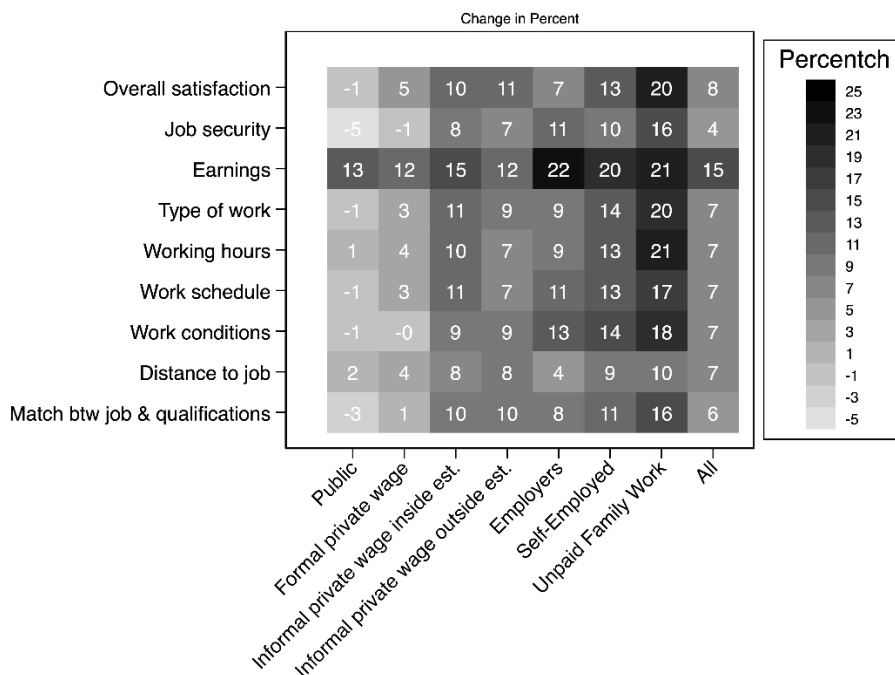
schedules and earnings are close seconds. Like their formal counterparts, informal wage workers inside establishments are least satisfied with their job security, with earnings in second place. Given the precarity of employment in informal wage work outside establishments, these workers report the lowest level of satisfaction of all workers by far regarding their job security, but also a number of other aspects of their jobs, such as earnings, work hours, type of work, and working conditions.

Figure 25. Percent reporting being fully satisfied with their jobs in 2023 along various dimensions of satisfaction and type of employment.



Source: Authors calculation based on data from ELMPS 2023

Figure 26. Change in percent reporting being fully satisfied with their jobs from 2018 to 2023 along various dimensions of satisfaction and type of employment.



Source: Authors calculation based on data from ELMPS 2018, 2023.

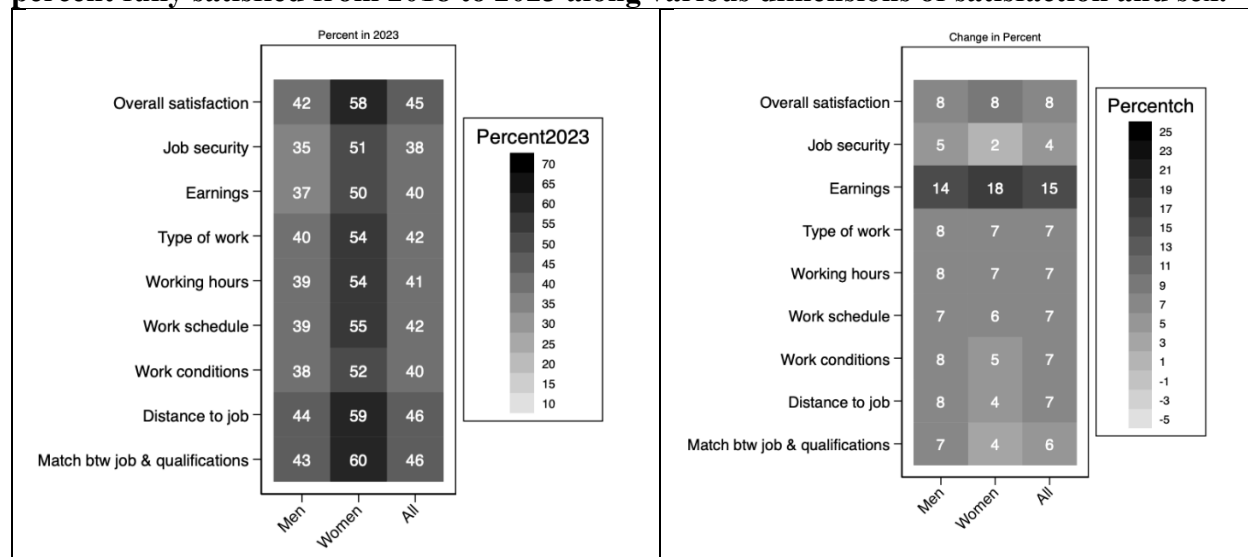
Like public sector workers, employers are generally satisfied with most aspects of their work, with job security being the only aspect where less than 50 percent of them are fully satisfied. The self-employed and unpaid family workers have similar patterns of job satisfaction, with job security again showing up as the aspect there are least satisfied with.

Surprisingly, the biggest improvements in satisfaction levels from 2018 to 2023 have been with earnings, despite the fact that earnings levels had been eroding due to inflation (Figure 26). The groups that reported the highest increases in their satisfaction with earnings are non-wage workers, who have a greater ability to adjust their earnings to inflation. While we did not examine earnings in this paper, there is an entire paper in this series dedicated to examining the evolution of earnings (Elsayed et al., 2024). We should also note that besides non-wage workers, informal private wage workers report large increases in satisfaction with several aspects of their jobs, suggesting improving employment conditions even in precarious jobs.

Women tend to report higher satisfaction levels with their jobs than men. As shown in Figure 27, 58 percent of women report being fully satisfied with the jobs, overall, compared to only 42 percent of men. The largest difference in satisfaction levels in favor of women is with the match between the job and the individual’s qualifications. Women are least satisfied with their earnings, followed by job security and working conditions, almost the same ordering as men. Despite reporting generally higher satisfaction levels than men, the change in the percent of those reporting being

fully satisfied is the same across men and women, meaning it is lower in relative terms for women. Women's change in satisfaction is much lower than men's with regards to job security, work conditions, distance to jobs, and match with qualifications, but somewhat higher with regards to earnings. The smaller increases in satisfaction with regard to job security are in line with the findings that women did not benefit as much from the trend toward the formalization of employment in the private sector.

Figure 27. Percent reporting being fully satisfied with their jobs in 2023 and change in percent fully satisfied from 2018 to 2023 along various dimensions of satisfaction and sex.



Source: Authors calculation based on data from ELMPS 2018, 2023.

6. Conclusions

There are many signs pointing to an improving labor market in Egypt over the 2018 to 2023 period. First, the rate of decline in the employment to population ratio has slowed and employment growth has accelerated somewhat over this period. Second, private formal wage employment has gone from absolute decline to growth, with a rate of growth that is nearly three times the average for overall employment. While this growth is far from sufficient to counter the absolute decline in public sector employment, it does point to some formalization of employment in the private sector. Third, there is a noticeable slowdown in the growth of informal wage employment, especially the portion that is outside fixed establishments, which is known for notoriously poor working conditions and job precarity (Assaad, AlSharawy, et al., 2022). Fourth, there is an increase in the share of private wage employment that is in small and medium establishments, primarily at the expense of employment outside of establishments, in micro establishments, and in large establishments. The emergence of the missing middle in the firm size distribution of employment that this trend represents bodes well for improving productivity, working conditions, and job quality in Egypt. Fifth, there is rapid growth of own-account work, including self-employment and work as an employer. Much of that growth appears to be in education activities, which reflects the

incipient privatization of the education sector in Egypt as more families rely on private lessons for the education of their children. Sixth, some measures of underemployment, such as time-related underemployment, are down and measures of job quality are slightly improved. Rates of employment irregularity are down and the decline in social insurance coverage has substantially slowed and even reversed among male private wage employees. Access to paid leaves and employment-provided health insurance has increased. Finally, worker-reported levels of job satisfaction have improved.

The picture is not uniformly positive, however. Overall, private wage employment has been stagnant, growing at only 0.3 percent p.a. in 2018-2023 after having grown at 3.8 percent p.a. in the 2012-2018 period, suggesting some sluggishness in private sector growth. There are also important distributional issues that temper the positive picture laid out above. Notably, women in the Egyptian labor market have not benefited equally from these improving trends. First, employment rates have fallen more rapidly for women than for men and their employment growth rates in the 2018-2023 period are nearly half what they were in the 2012-2018 period. Women had been more reliant on public sector employment than men and its continued decline has affected them more adversely. Since it is educated women that historically had access to public sector employment, this partially explains the declines in participation among more educated women (see Krafft et al., 2024). Second, women in Egypt have not shared in the growth of private formal wage employment that men experienced. In fact, this type of employment, together with private wage employment overall, shrank in absolute terms for women from 2018 to 2023. Instead, women saw a large increase in the share of informal employment outside establishments and in self-employment, which are highly vulnerable forms of employment. Women's employment in the care economy in general, and specifically in personal services, health and social care has expanded appreciably in the 2018-2023 period. The growth of female self-employment could indicate a positive trend for women unable to remain in wage employment after marriage, but it remains to be seen whether this is truly remunerative work or survival-type self-employment they have to do out of necessity. The rising share of precarious forms of employment for women did not result in increases in time-related underemployment, but did result in more employment irregularity, declining social insurance coverage, and reduced access to employer-provided health insurance.

The improving outlook for men in terms of increasing formality of employment was not shared equally among all male workers. In fact, only male workers with post-secondary and university education or higher saw their share of formal private wage employment increase. The increase was also mostly limited to male workers in the top three quintiles of household wealth. Among women, the increase in the share of private formal wage employment was limited to women with university education and higher and only those in the top quintile of the household wealth distribution.

Despite these inequalities, the emergence of the missing middle in the private sector, if sustained, bodes well for the future of job quality in Egypt. These mid-size enterprises have lower levels of

employment irregularity, higher and rising levels of social insurance coverage, better access to paid leaves and to health insurance.

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