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OWN ACCOUNT WORKERS INJORDAN: PROFILE AND WORK CHARACTERISTICS

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Abstract

In this paper, we compare own account workers (employers and the self-employed) to private sector wage workers in Jordan using the Jordan Labor Market Panel Surveys of 2010 and 2016. Our results demonstrate that own account workers are demographically dissimilar from wage workers in the private sector. Own account workers tend to be older, male, and have more work experience. While they have lower educational attainment than private sector wage workers, own account workers exhibit relatively higher wealth outcomes. Capital transfers from fathers who were also own account workers are an important determinant of a worker being an employer or self-employed. In terms of job characteristics, the self-employed were more likely than other private sector workers to work outside of a fixed establishment, with many engaged in transportation-related activities. Employers and self-employed workers were also concentrated in wholesale and retail trades in both 2010 and 2016. Own account workers frequently reported being overqualified for their jobs, and the self-employed exhibited the lowest levels of job satisfaction of all private sector job types.

JEL Classifications: J4, O1

Keywords: Own account workers, microenterprises, Jordan, self-employment

ملخص

في هذه الورقة ، نقارن العاملين لحسابهم الخاص (أصحاب العمل والعاملين لحسابهم الخاص) بالعاملين بأجر في القطاع الخاص في الأردن باستخدام المسوحات التي أجراها فريق العمل الأردني لسوق العمل لعامي 2010 و 2016. وتظهر نتائجنا أن العاملين لحسابهم الخاص يختلفون ديموغرافيًا عن العاملين بأجر في القطاع الخاص. فهم غالبا أكبر سنا ومن الذكور ولديهم خبرة. وبالرغم من أن تحصيلهم العلمي أقل من العاملين بأجر في القطاع الخاص ، فأن العاملين لحسابهم الخاص يحققون نتائج أعلى نسبياً في الثروة. تعتبر التحويلات الرأسمالية من الآباء الذين كانوا أيضًا عاملين لحسابهم الخاص عاملاً هامًا في تحديد العامل الذي يصبح صاحب عمل أو من العاملين لحسابهم الخاص. وفيما يتعلق بخصائص الوظيفة ، كان العاملون لحسابهم الخاص أكثر عرضة من غيرهم من العاملين في القطاع الخاص للعمل خارج مؤسسة ثابتة ، حيث يشارك الكثير منهم في أنشطة تتعلق بالنقل. كما تركز أصحاب العمل والعاملين لحسابهم الخاص في تجارة الجملة والتجزئة في عامي 2010 و 2016. وكثيراً ما أفاد العاملون لحسابهم بأن مؤهلاتهم أعلى من العمل الذى يقومون به.، وأظهر العاملون لحسابهم أدنى مستويات الرضا الوظيفي لجميع أنواع الوظائف في القطاع الخاص.

1. Introduction

Own account workers manage their own enterprises. Some are employers who hire at least one other person while others are self-employed (with no hired employees). These workers are important in developing countries, such as Jordan, for two key reasons. First, own account work may provide an means of earning an income for workers with a particular education or skill profile, which is especially important for individuals who encounter limited regular wage work opportunities. Second, successful own account workers that expand their enterprises may create job opportunities for others. It is therefore important for us to better understand what groups of Jordanians are most likely to engage in own account work and the characteristics of their economic activities.

There are several studies that examine the profile of own account workers in developing countries. These studies have shown that compared to private sector wage workers, own account workers were more mobile, less risk averse, older, and more likely to have parents who were own account workers (De-Mel, McKenzie, & Woodruff, 2008; Djankov, Qian, Roland, & Zhuravskaya, 2006a, 2006b). Some evidence suggests that own account workers are also more likely to belong to wealthier households (De-Mel, McKenzie, & Woodruff, 2008).

There are several views as to the conditions required for own account workers to enter the market, succeed, and expand their enterprises. On market entry, evidence points to partial substitution from wage employment to self-employment, as well as the selection of better performing wage workers into self-employment (Fajnzylber, Maloney, & Rojas, 2006; Premand, Brodmann, Almeida, Grun, & Barouni, 2012). Studies that examined the constraints facing own account workers based on firm size and productivity have found that a lack of access to credit may serve as a main obstacle (Grimm, Krüger, & Lay, 2011). Moreover, factors related to institutional quality such as political stability, the regulation of corruption, and a country's regulatory framework may also significantly affect the outcomes of own account workers (Álvarez & Urbano, 2011; Schiff, Schmidt, & Troncoso, 2014).

Building on this work, our paper examines the characteristics of Jordanian own account workers compared to private sector wage workers. We investigate the demographic characteristics of own account workers as well as the characteristics of these workers' enterprises. By comparing outcomes from two recent nationally representative waves of Jordanian data, we consider evidence of changes over time. The results will be of particular interest to policymakers who are looking to invest in programs that support and affect own account workers, such as targeted microcredit interventions.

Our results suggest that own account workers were demographically dissimilar from private sector wage workers. Compared to private sector wage workers, own account workers tended to be older and were more likely to be men. Despite having lower educational attainment than private sector wage workers, we find relatively large proportions of these workers in the higher wealth quintiles. Own account workers were more likely to have a father who was an own

account worker as compared to private sector wage workers, which suggests that some of the human, physical, or social capital needed to manage a small business is transmitted inter-generationally. We do not observe any other clear difference in capital holdings, savings, or borrowing when comparing own account workers to private sector wage workers. However, the self-employed were more likely to have worked previously in the public sector as compared to employers and private sector wage workers.

We additionally find that own account workers were more likely to work outside of a fixed establishment, and that nearly half of the self-employed worked in either a transport-based setting or as a mobile worker. In terms of economic activities, own account workers were concentrated in wholesale and retail trades in both 2010 and 2016. We also find large proportions of the self-employed in transportation and storage. Examining occupations, we find that own account workers were less likely to be in management or professional services as compared to private sector wage workers, with larger representation in blue and white collar positions for both employers and the self-employed. Based on self-reporting, we also show that own account workers were considerably more likely to be overqualified for their jobs as compared to private sector wage workers. While few private sector wage workers reported a technical skill requirement for their job, we found that employers were the most likely to state that their position required a technical skillset. Employers also worked the longest hours per week but reported the highest levels of job satisfaction.

Section 2 discusses the data and research approach. Section 3 examines the demographic profile of own account workers, while Section 4 investigates the job characteristics of own account workers compared to private sector wage workers. Section 5 presents concluding remarks.

2. Data and Methods

Our analysis uses the 2010 and 2016 waves of the Jordan Labor Market Panel Survey (JLMPS). The JLMPS is a nationally representative panel survey that contains information on labor, including own account workers (Krafft & Assaad, 2018). Using these data, we compare three groups of Jordanian workers[2] aged 15-64: private sector wage workers,[3] the self-employed, and employers. Our analysis focuses exclusively on a worker's primary job due to few workers with secondary jobs in the JLMPS 2010 and 2016 waves. We also exclude unpaid family workers from our analysis due to their small sample size (53 in 2010 and 30 in 2016). There were 840 own account workers in the 2010 sample (541 self-employed workers and 299 employers) and 2,045 private sector wage workers. In 2016 we observe 701 own account workers (470 self-employed and 231 employers), compared to 1,914 private sector wage workers. Weighting these observations, own account workers represented approximately 29% of the Jordanian

[2] The JLMPS is a nationally representative sample of all nationalities living in Jordan. For our analysis, we focus exclusively on those respondents with Jordanian citizenship.

[3] We define employment using the market definition (reference period of three months). We restrict our analyses to the private sector only (excluding international, NGO, and other sectors).

private sector workforce in 2010 and 26% of the private sector workforce in 2016 (figure not shown).

As illustrated in Figure 1, two-thirds of own account workers were self-employed, and about a quarter were employers hiring four people or fewer in both survey years. Managers of firms hiring 5-9 people were uncommon (5%), and only 4% of own account workers managed more than 10 people at their firms. Hence, we can consider the majority (about 90%) of the own account workers in our sample to be the owners of microenterprises, given that their ventures involve 0-4 employees.

3. Demographic Profile of Own Account Workers

We first examine the demographic profile of own account workers to identify which segments of the Jordanian population are relatively more likely to work as employers or self-employed workers. In this section, we also consider different assets and sources of income to see whether these are related to own account activity. Comparisons between 2010 and 2016 are included whenever possible.

The majority of own account workers in our sample were men, as 93% of own account workers were men in 2010 and 96% were in 2016 (figure not shown). The large share of men in this group of workers in part reflects gender imbalances in the Jordanian labor market, hence Figure 2 examines the distribution of private work types by sex. Compared to men, women in the private sector were less likely to be in own account work as compared to wage work. In 2016, only 6% of employed women in the private sector were own account workers, as compared to 30% of men. The share of employed women who were own account workers also declined between the two survey years, from 14% in 2010 to 6% in 2016. Since the count of female own account workers in the JLMPS sample is too small for separate analysis of women, all figures in our chapter are based on data from both men and women aggregated.[4]

The relative size of own account workers in regional labor markets varies (Figure 3). In 2016, the share of employers in the private sector workforce was higher in the North (14% urban and 11% rural) as compared to other areas. By contrast, employers made up a very small share of the rural South region (less than 5%). The share of self-employed workers was also highest in the urban North (23%) and rural North (25%) in 2016. Self-employed workers were a smaller share of the urban South region (11%) as compared to other areas of the country.

Comparing 2010 to 2016 in Figure 3, the share of private sector workers who were self-employed dropped in all rural areas. The largest decline in self-employment was in the rural North, where the proportion of private sector workers who were self-employed declined by ten percentage points (35% to 25%) between the two survey waves. By contrast, the proportion of private sector workers who were employers increased in the urban North and rural North but declined or remained relatively constant in all other regions.

[4] There are 64 female own account workers in the JLMPS 2010 sample and 32 in 2016.

Employers and the self-employed tend to be older than private sector wage workers. In 2016, the mean age of employers in our sample was 43.5 years and the mean age of the self-employed was 40.7 years, which was higher than the mean age of private sector wage workers (34.2 years). Figure 4 provides the distribution of ages within work types. The peaks of these distributions shows what the most frequent ages are for each job type. The age distribution of the two own account worker types is quite similar, though at later ages, self-employed workers are rarer than employers, suggesting that some employers remain in business into their sixties and beyond. By contrast, private sector wage workers are generally younger than own account workers.

Figure 5 compares the educational attainment of employers, the self-employed, and private sector wage workers. In 2016, own account workers had lower educational attainment as compared to private sector wage workers. Around two-thirds (63% of employers and 68% of the self-employed) of own account workers had a basic education or less, as compared to 48% of private sector wage workers. Additionally, while 35% of private sector wage workers held a diploma for studies beyond the secondary level, only 20% of employers and 18% of the self-employed completed a post-secondary or university degree in 2016.

Between 2010 and 2016, the population of private sector wage workers became more educated, a trend driven by the higher level of schooling among young labor market entrants as compared to older workers. However, the population of own account workers appears to have grown less educated. Between 2010 and 2016, there was an increase in the share of employers and self-employed workers with no educational attainment (those who were illiterate or could only read and write). The percentage of employers with no educational attainment increased by 14 percentage points and that of the self-employed by 9 percentage points. There were also reductions in the proportion of own account workers with secondary attainment.

To see if the outcomes of Figure 5 are driven by age differences between own account workers and private sector wage workers, Figure 6 compares the educational attainment of different age groups of private sector workers.[5] In both survey years, own account workers aged 23-39 were less likely to hold a tertiary degree and considerably more likely to have no formal education or only a basic education as compared to private sector wage workers.

The outcomes for the older cohort (aged 40-64) are more mixed. In both survey years, employers demonstrated similar or even higher educational attainment as compared to private sector wage workers. The self-employed demonstrated considerably lower levels of attainment as compared to private sector wage workers, with higher rates of workers reporting a basic education or less and lower rates of tertiary attainment in both 2010 and 2016.

[5] The ages are defined as 23-64 to examine only those who were old enough to have potentially completed a university degree.

The results of Figure 6 suggest that the lower educational attainment exhibited by own account workers (Figure 5) was partly driven by younger own account workers, who were often less educated than their private sector wage worker counterparts. These differences in own account workers' educational attainment by age cohort suggest that there may be other inter-generational differences in work histories, a possibility we explore elsewhere in this section.

Overall, own account workers have comparable or slightly higher wealth status relative to private sector wage workers. Figure 7 illustrates the distribution of wealth status, based on an asset index of durable goods, by worker type. The wealth distribution of self-employed workers roughly corresponds to that of private sector wage workers; in 2016, the highest wealth quintile represented approximately one-quarter of both groups, while the lowest wealth quintile represented less than ten percent of both groups. On the other hand, employers exhibited higher wealth status as compared to the other work types. In 2016, over one-half (51%) of employers were in the highest wealth quintile, while less than 20% fell into the bottom two quintiles.

As with education (Figure 6), the wealth of own account workers varies by age to some extent. This is shown in Figure, which examines the wealth distribution of two age categories by private sector work type for those aged 23-64 in 2010 and 2016.[6] For employers, we find larger shares of the older cohort in the highest wealth quintile (56% in 2010 and 2016), as compared to the younger cohort (32% in 2010 and 40% in 2016). However, a considerable share of younger employers exhibited high wealth status, as over one-half of these workers were in the two two wealth quintiles in 2010 and 2016. Unlike employers, the wealth distribution of the self-employed was rather similar for the two age groups. For example, in 2016, while older self-employed workers were more likely to be in the highest wealth cohort as compared to younger self-employed workers, about one-half of self-employed workers were in the top two wealth quintiles in both age groups.

Compared to private sector wage workers, employers exhibited higher wealth outcomes than their same-age counterparts. However, self-employed workers' wealth status as compared to private sector wage workers varied by age. Among the younger cohort (aged 23-39), self-employed workers were less likely than their private sector wage worker counterparts to be in the top wealth quintile but equally likely to be in one of the two top wealth quintiles. By contrast, the wealth distributions for private sector wage workers and self-employed workers aged 40-64 are roughly the same.

4. Resources of own account workers

This section examines several resources that may impact an individual's viability as an own account worker. Managing a small business requires skills, knowledge, and financial inputs, and here we take a look at such forms of capital and consider whether they vary with work status (own account as compared to private sector wage).

[6] The age categories are defined over ages 23-64 for comparison to Figure 5.

First, perhaps own account activity requires skill and experience acquired through years of working. To consider this hypothesis, we compare the work experience of own account workers to private sector wage workers in 2016. The mean years of work experience for employers was 21.3 years and the self-employed 20.1 years, which is considerably larger than the mean of 11.9 years for private sector wage workers (figure not shown). Figure 9 provides the distribution of experience categories by private work type in 2016. While 21% of private sector wage workers had over 20 years of work experience, we find that about half of the own account workers in our sample (54% of employers and 48% of self-employed workers) had 21 years of work experience or more. Moreover, one-fifth of employers (21%) and the self-employed (20%) had over 30 years of work experience. The experience profiles of own account workers are certainly related to their higher age profile relative to private sector wage workers. But age does not explain the experience outcomes by itself. Another likely reason why own account workers have more years of experience is because they exit schooling earlier (Figure 5).

It is also possible that individuals are more likely to manage a small business or be self-employed if they had a father who was also an own account worker, as fathers may transmit the practical skills and social connections profitable for own account work for their children. Figure 10**Error! Reference source not found.** examines the job status of private sector workers' fathers (when the worker was aged 15) by work type. In 2016, 19% of employers had fathers who were also employers and 17% had fathers who were self-employed. Likewise, 26% of self-employed workers had fathers who were self-employed. The proportion of private sector wage workers who had a father who was an employer (5%) or self-employed (13%) was notably lower. These results offer some evidence of inter-generational transmission of human, social, physical, and/or managerial capital playing a role in own account activity.

Another theory that could explain selection into entrepreneurship in Jordan is the receipt of government pensions, as a pension can provide the financial capital needed to invest in a small enterprise and respond to shocks.[7] To see if there is any relationship between the receipt of a pension and entrepreneurial activities, Figure 11 examines the distribution of household pension receipt. These questions were posed differently in the two survey years, so we focus on differences across groups as opposed to change over time.[8] The results suggest that the self-employed were more likely to belong to a pension receiving household than employers in both years, but it is unclear whether the self-employed were more likely to be from a pension-receiving household as compared to private sector wage workers. Pension receipt may partly

[7] The JLMPS asks respondents about other income, including remittances, public assistance, non-profit assistance, income from rent, and interest on investments. Workers' households reported extremely low receipt of all non-pension income (< 2%) and there was no strong variation by private sector work type. We also examined household access to savings and borrowing. Here there was some variation by household member private sector work type, but the frequency of any savings or borrowing was so low that it is difficult to draw conclusions (see Table 1 and

Table ***2*** in the Appendix).

[8] In 2010, a household member was asked to list household receipt of payment from a series of sources. In 2016, questions about such payments were asked using yes or no questions.

explain the decision to remain self-employed and not transition to employer status, but it does not appear to predict own account activity over a private sector wage work.

To evaluate the relationship between public sector experience and own account work, Figure 12 examines private sector wage workers in 2016 who had held at least one job prior to their current job and the percentage of these particular workers were engaged in the public sector in the position prior to their current position. It is important to note that the majority of private sector workers in Jordan have never held a previous job: 84% of private sector wage workers, 78% of employers, and 78% of the self-employed list no job prior to their current position. Of those private sector workers who held a previous job, we find that employers with previous experience were no more likely than private sector wage workers to have worked previously in the public sector. However, self-employed workers who held a previous job were considerably more likely to have worked previously in the public sector.

4. Job characteristics

In this section, we examine the job characteristics of own account workers as compared to private sector wage workers. Additionally, we evaluate the extent to which own account workers were satisfied with their jobs relative to private sector wage workers.

Figure 13 presents the percentage of different private sector worker types who work outside of a fixed establishment (i.e. who do not work in an office, factory, etc.). The self-employed were more likely to work outside of an establishment as compared to other groups in both 2010 and 2016, and the share of self-employed workers operating outside of a fixed establishment increased by 10 percentage points. By comparison, the share of employers and private sector wage workers who worked outside of a fixed establishment in 2010 and 2016 was much lower. Interestingly, we observe an increase in workers operating outside of a fixed establishment for all private sector workers between 2010 and 2016.

We evaluate a more detailed breakdown of work location for 2016 in Figure 14. The most common location for the self-employed was transport-based and other mobile workplaces (47%), which aligns with the findings in Figure 13. While nearly half of the self-employed characterized their work location in this way, only 9% of employers or private sector wage workers were employed in transport-based or mobile workplaces in 2016. For employers, a shop was the most common work location (46%), and shop-based work was more common for this group as compared to the self-employed (25%) and private sector wage workers (21%). Employment in one's own home or farm was also more common among own account workers as compared to private sector wage workers.

Figure 15 examines economic activity by type of private sector worker and round. Compared to private sector wage workers, own account workers were considerably more likely to be engaged in wholesale and retail activities. While less than one quarter of private sector wage workers described their economic activity as wholesale and retail, a large and growing proportion of

employers (36% in 2010 and 45% in 2016) and the self-employed (35% in 2010 and 40% in 2016) were engaged in wholesale and retail activities.

Transportation and storage were also common activities for the self-employed, which corresponds to this worker type's frequent job location outside of a fixed establishment. While about one-fifth (19%) of the self-employed reported working in transportation and storage in 2016, this actually represents a 11 percentage point decline in the share of self-employed workers engaged in these activities as compared to 2010.

Own account workers, especially the self-employed, were less likely to be engaged in manufacturing, mining, and related trades as compared to private sector wage workers. Around one-quarter (25% in 2010 and 23% in 2016) of private sector wage workers worked in these economic activities, as compared to less than one-tenth of employers (5% in 2010 and 8% in 2016) and the self-employed (6% in 2010 and 4% in 2016).

For the "various professional acts" category, which includes professional services in fields such as health, education, and finance, we also found that private sector wage workers were more likely to be involved in these activities as compared to own account workers. In 2016, 31% of private sector wage workers were employed in these fields, as compared to 13% of employers and 18% of the self-employed. Moreover, it appears that the share of employers engaged in these activities declined by 6 percentage points between 2010 and 2016 while the share of self-employed workers increased by 5 percentage points.

The occupational structure also varied substantially by work type. As shown in Figure 16, the share of private sector wage workers who were managers or professionals increased from 20% in 2010 to 26% in 2016. A considerably smaller share of own account workers worked as managers or professionals. In the case of employers, this share declined, from 15% in 2010 to 7% in 2016. This decreasing share of managers and professionals has corresponded with increasing shares of employers engaged in blue or white collar jobs. Overall, the self-employed remained the most likely to be engaged in white and especially blue collar positions, though these shares declined slightly between the two survey waves.

Notes: White collar occupations include technicians and associate professionals, clerical support workers, and service and sales workers. Blue collar occupations include skilled agricultural, forestry, and fishing workers, craft and related trades workers, plant and machine operators, and assembly workers, and elementary occupations.

We next consider whether different types of private sector workers were over or under-qualified for their jobs. This is calculated by comparing the self-reported educational level required to do the respondent's job and the respondent's actual educational attainment. As shown in Figure 17, the share of overqualified workers is much larger among own account workers as compared to private sector wage workers. Over one half (58% of employers and 51% of the self-employed) considered themselves overqualified for their job in 2016, as compared to 37% of

private sector workers (a figure that is still rather high). This finding reflects the growing share of educated workers in Jordan, but also implies that the structure of labor demand for both own account and private sector workers is still skewed towards low-skilled jobs.

Figure 18 examines technical skill requirements for different private sector workers. The majority (80-88%) of all private sector workers reported no technical skill requirement for their job. Private sector wage workers were slightly more likely to state that their job required technical skills obtained through formal schooling, with 8% reporting this. On the other hand, having a job that required skills obtained outside of formal schooling was most common among employers (15%).

Figure 19 examines work hours per week in the two survey rounds for different types of private sector wage workers. Average hours of employment for all private sector workers declined between the two surveys, from 49 hours per week in 2010 and 45 hours in 2016. This reflects slowing job creation for Jordanians in recent years (Assaad & Salemi, 2018). The self-employed exhibited the largest decline in hours, from 49 hours per week in 2010 to 38 hours per week in 2016. These results may be best understood in light of increasing rates of irregular labor for low-skilled Jordanians (Assaad & Salemi, 2018). In such a case, the self-employed may be substituting hours of own account work for hours of casual or seasonal labor. In both survey rounds, employers report the highest average work hours, at over 50 hours per week.

The JLMPS 2016 included questions on whether workers were satisfied with their jobs across a number of dimensions. Figure 1 shows reported satisfaction across different dimensions by work type. In general, there were higher levels of job satisfaction among employers as compared to private sector wage workers or the self-employed. Even though employers frequently report being overqualified for their roles (Figure 17) and also report the most hours of work per week (Figure 19), they report the high levels of satisfaction with their job matching their qualifications (87%) and their work hours (88%).

5. Conclusion

In this paper, we examine own account workers' (the self-employed and employers) demographic and job characteristics, as well as their satisfaction with their jobs. We found that the overall share of own account workers was declining or stagnant in almost all regions, and this decline can mostly be attributed to the declining share of employers among private sector workers. Examining gender, we showed that Jordanian women were less likely to be own account workers compared to private sector wage workers and the share of private sector women engaged in own account work appeared to be declining over time. Additionally, own account workers exhibited lower educational attainment and yet belonged to higher wealth quintiles compared to private sector wage workers. This was especially the case for employers who, despite the majority having a basic education or less, represented 15% of private sector workers in the highest wealth quintile. Importantly, own account workers tended to be older and to possess more years of work experience as compared to private sector wage workers.

With respect to job characteristics, there were stable but high rates of self-employment operating outside of a fixed establishment. Likewise, the number of private sector wage workers and employers operating outside of a fixed establishment grew since 2016. Regarding economic activities, own account workers represented a growing share of the wholesale and retail sectors compared to private sector wage workers. In addition private sector wage workers were relatively more likely to be in professional and manager occupations, while own account workers were more often in blue and white-collar jobs. By comparing the minimum education required for the job and the actual education of both own account and private sector wage workers, we found that a larger share of own account workers were overqualified compared to private sector wage workers.

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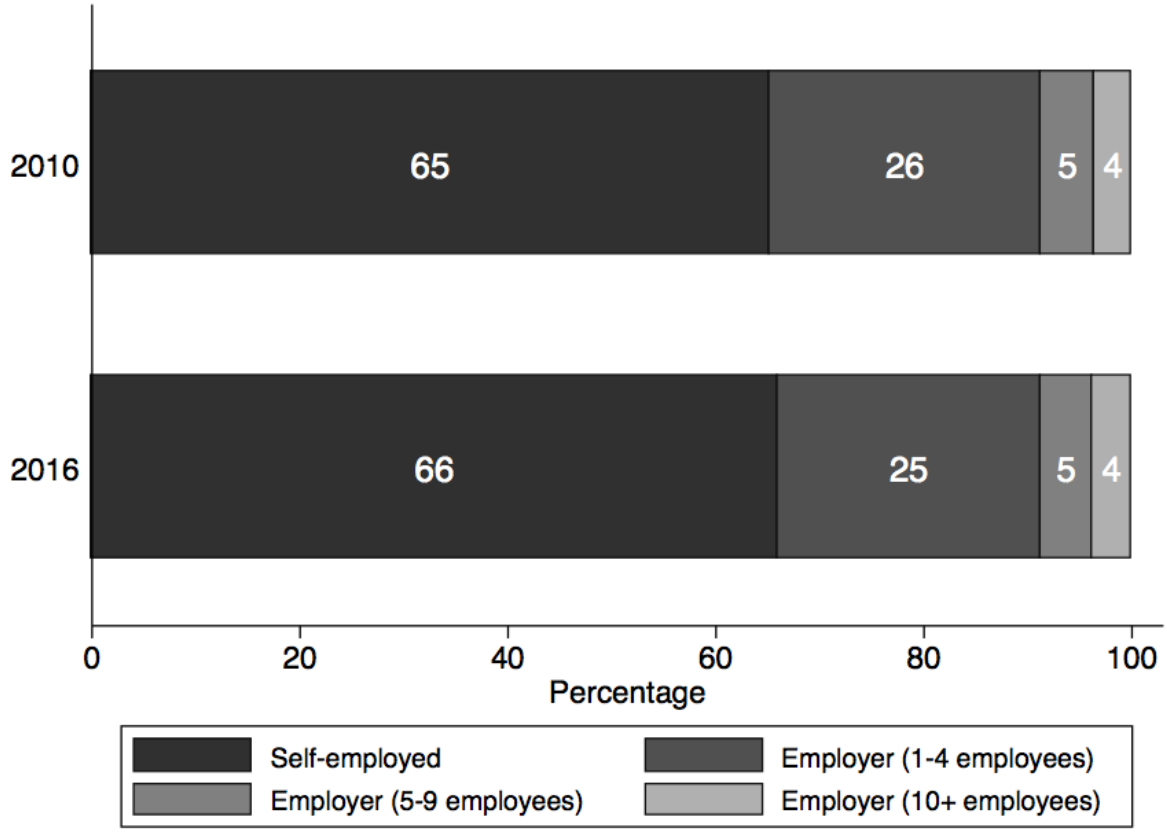
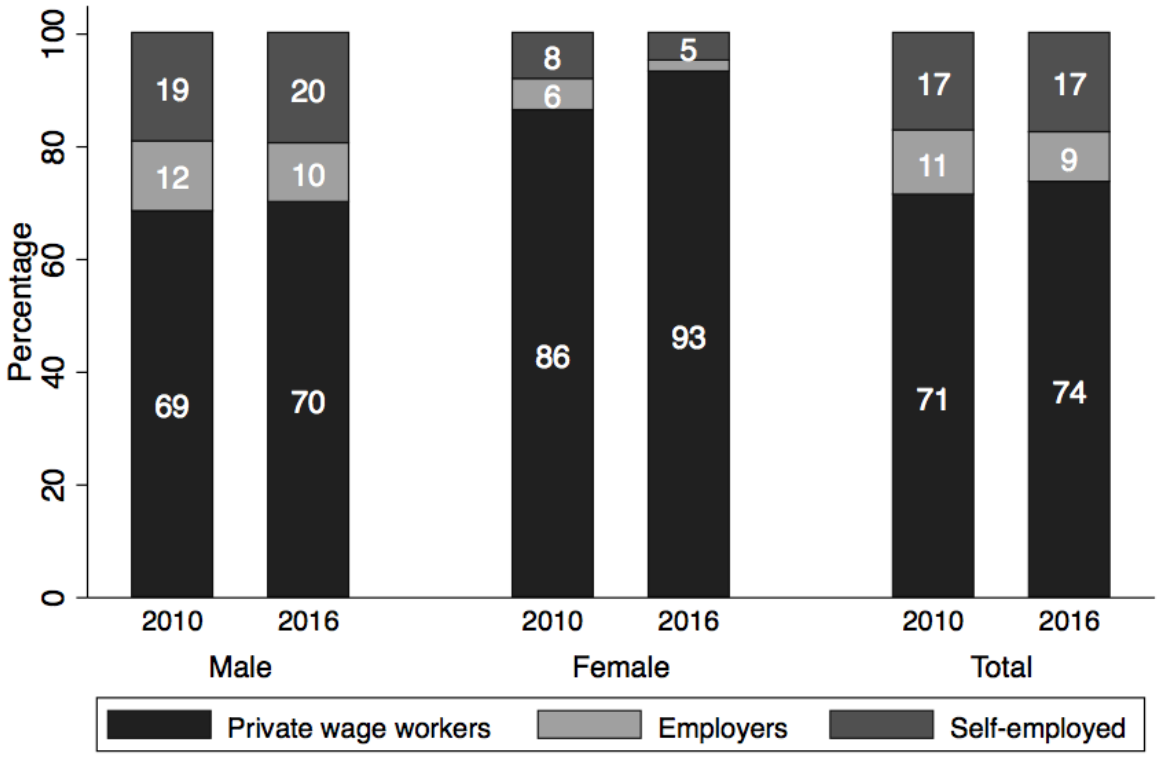
Figure 1: Work type by wave, Jordanian own account workers aged 15-64 (percentage)



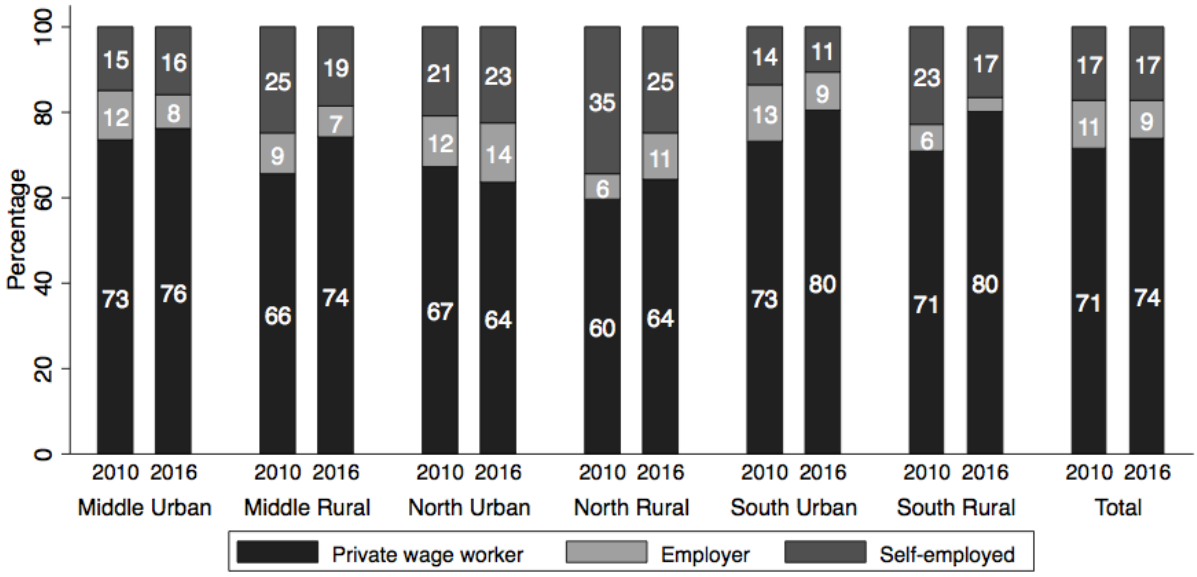
Source: authors' calculations based on JLMPS 2010, 2016

Figure 2: Work type by gender and wave, Jordanian private sector workers aged 15-64 (percentage)



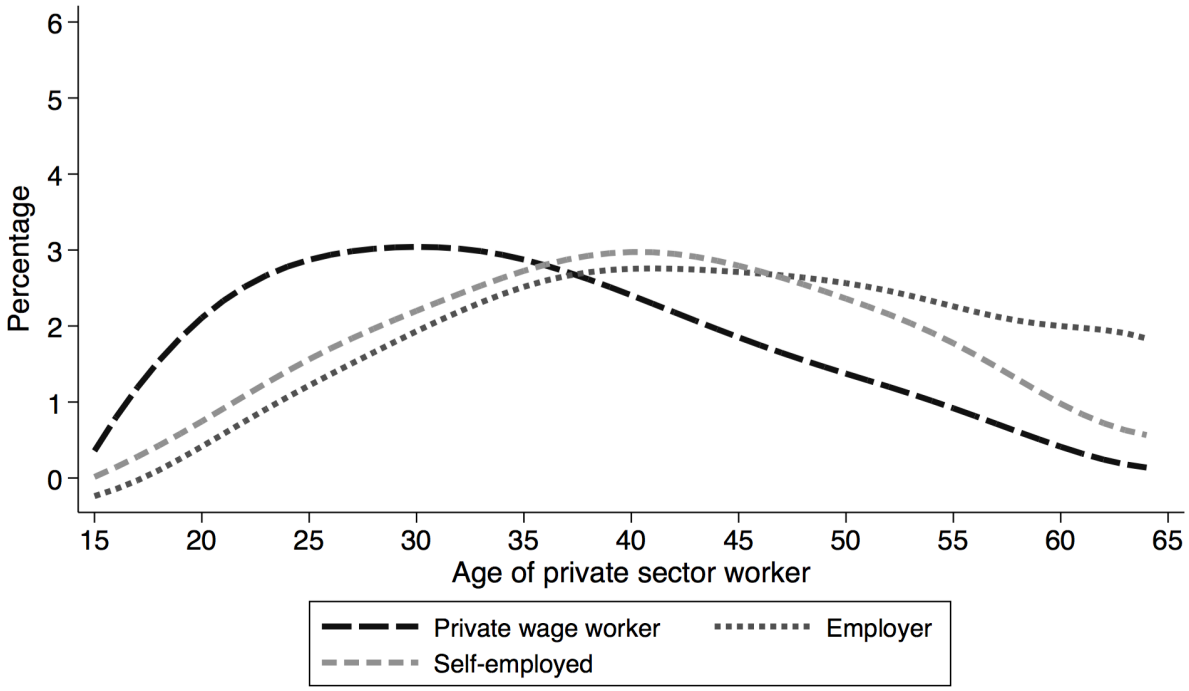
Source: authors' calculations based on JLMPS 2010, 2016

Figure 3: Work type by region and wave, Jordanian private sector workers aged 15-64 (percentage)



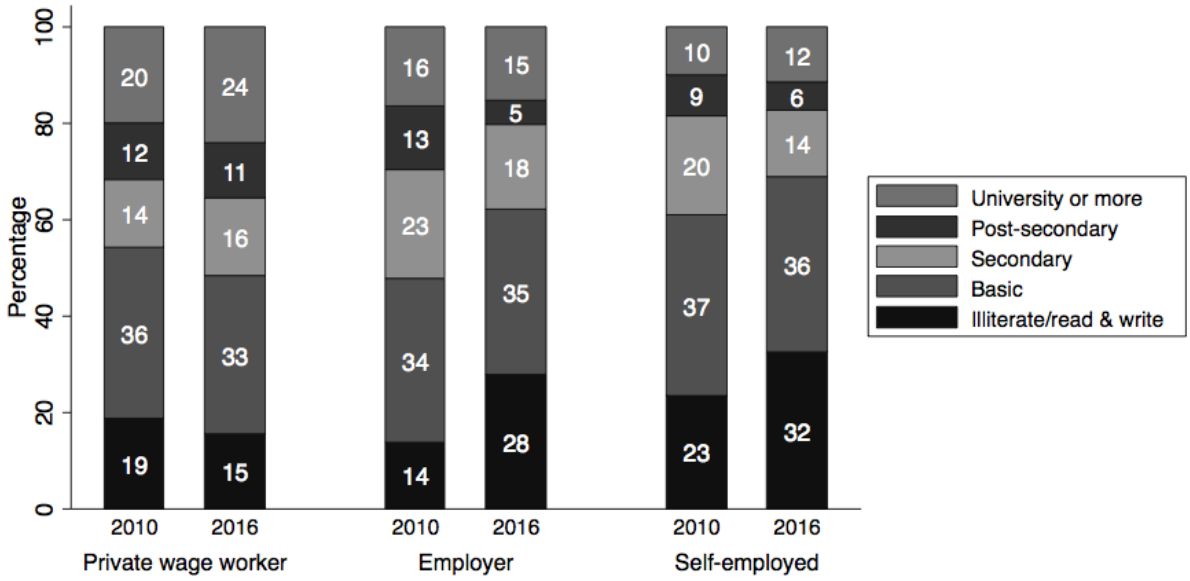
Source: authors' calculations based on JLMPS 2010, 2016

Figure 4: Distribution of age by work type, Jordanian private sector workers aged 15-64 (percentage)



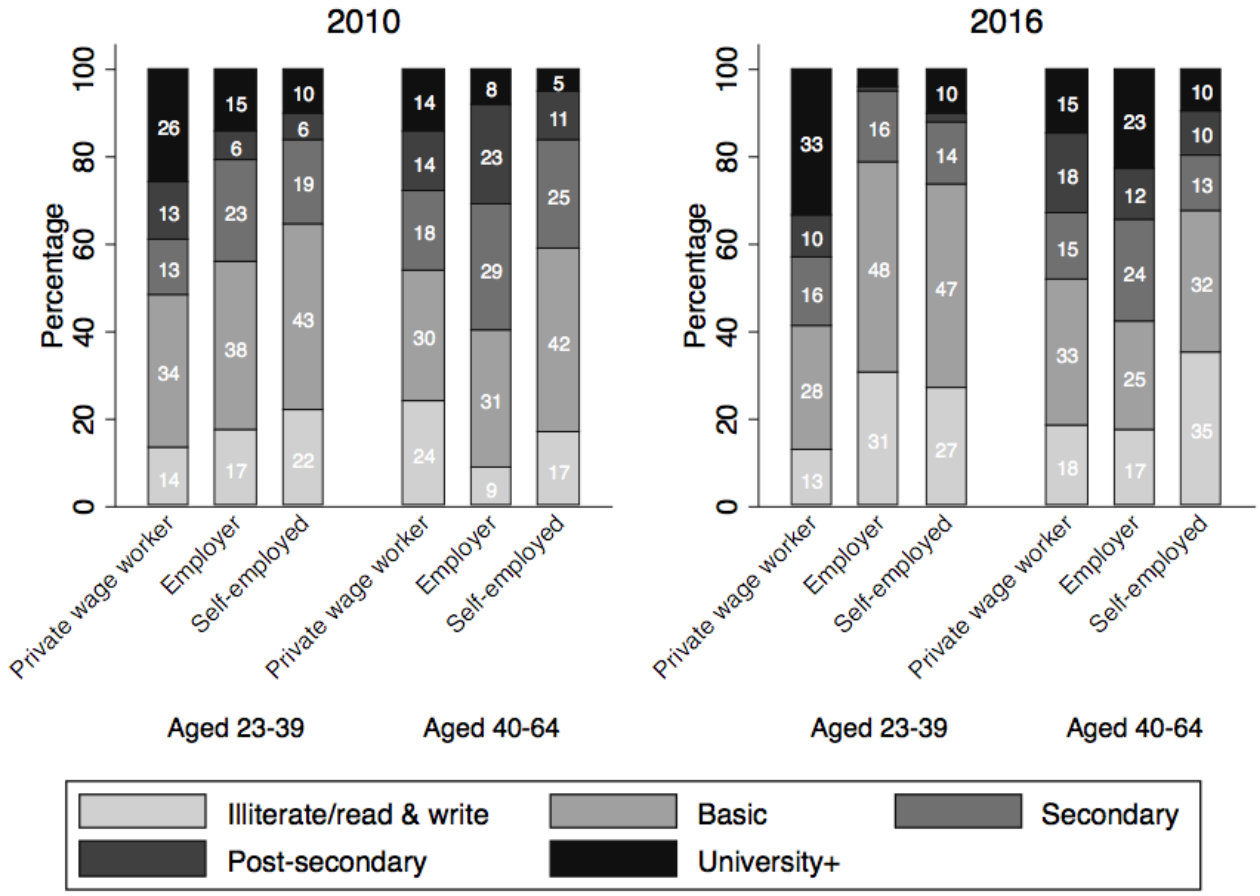
Source: authors' calculations based on JLMPS 2016.
Notes: Lowess smoother, bandwidth=1

Figure 5: Educational attainment by work type and wave, Jordanian private sector workers aged 15-64 (percentage)



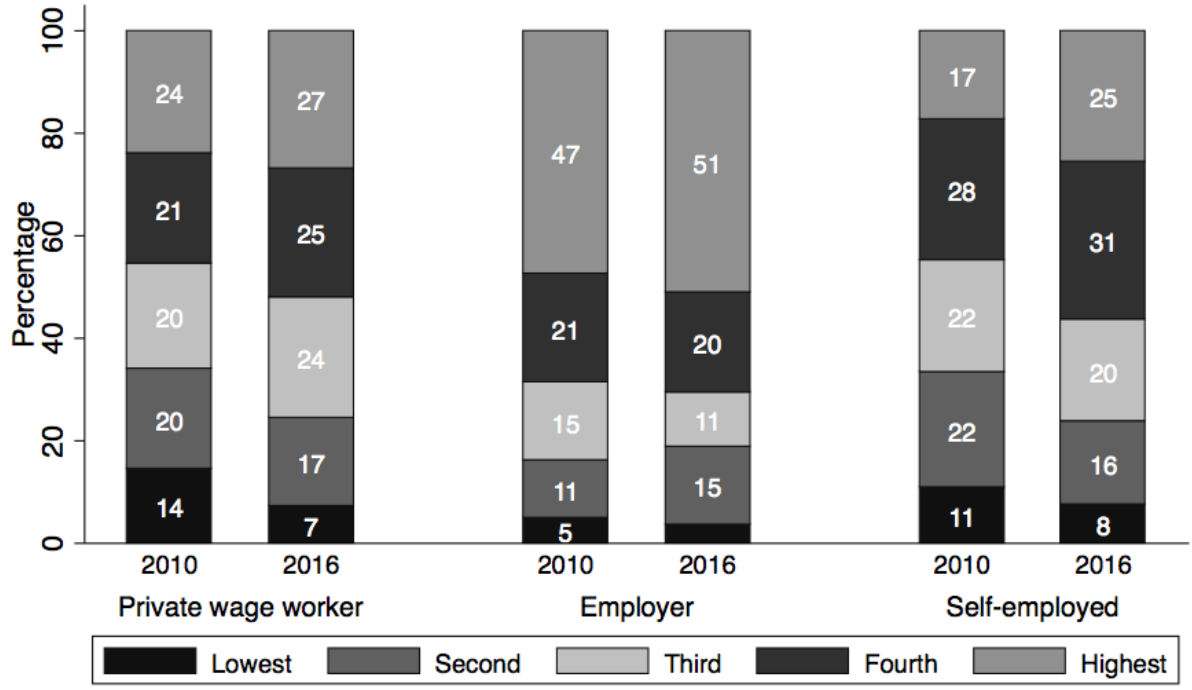
Source: authors' calculations based on JLMPS 2010, 2016

Figure 6: Education by work type, age group, and wave, Jordanian private sector workers aged 23-64 (percentage)



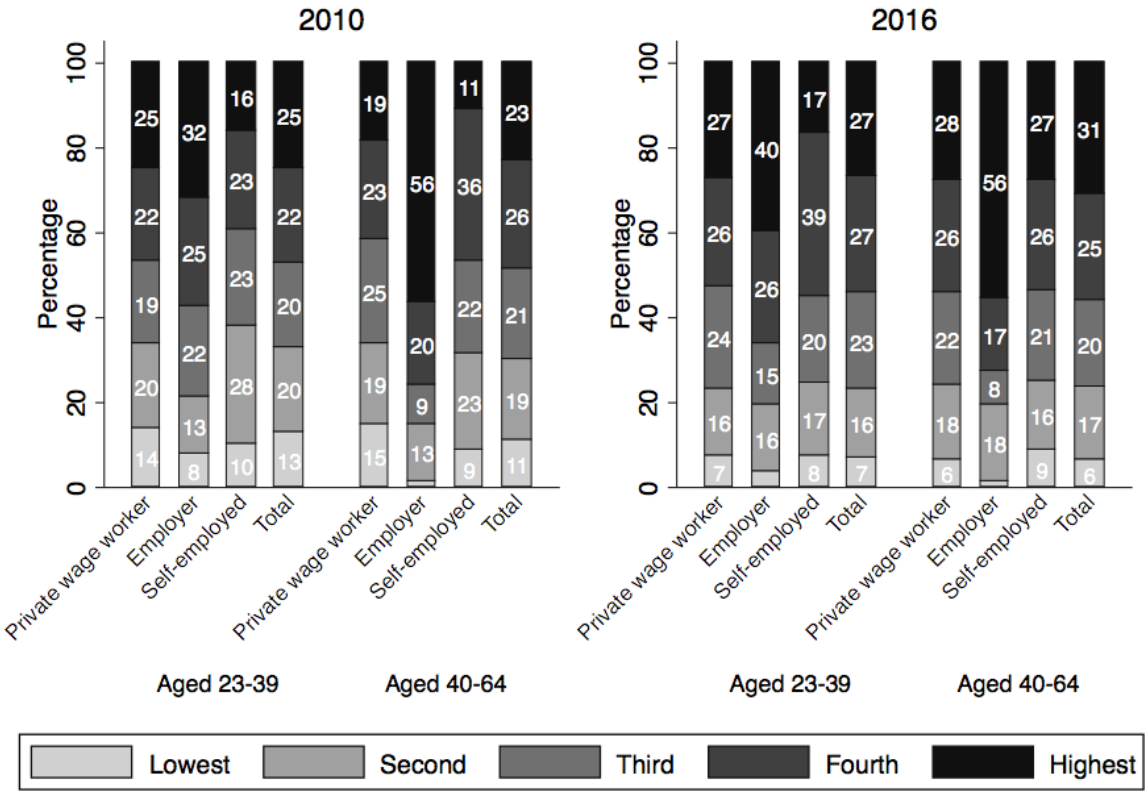
Source: authors' calculations based on JLMPS 2010, 2016

Figure 7: Wealth quintile by work type and wave, Jordanian private sector workers aged 15-64 (percentage)



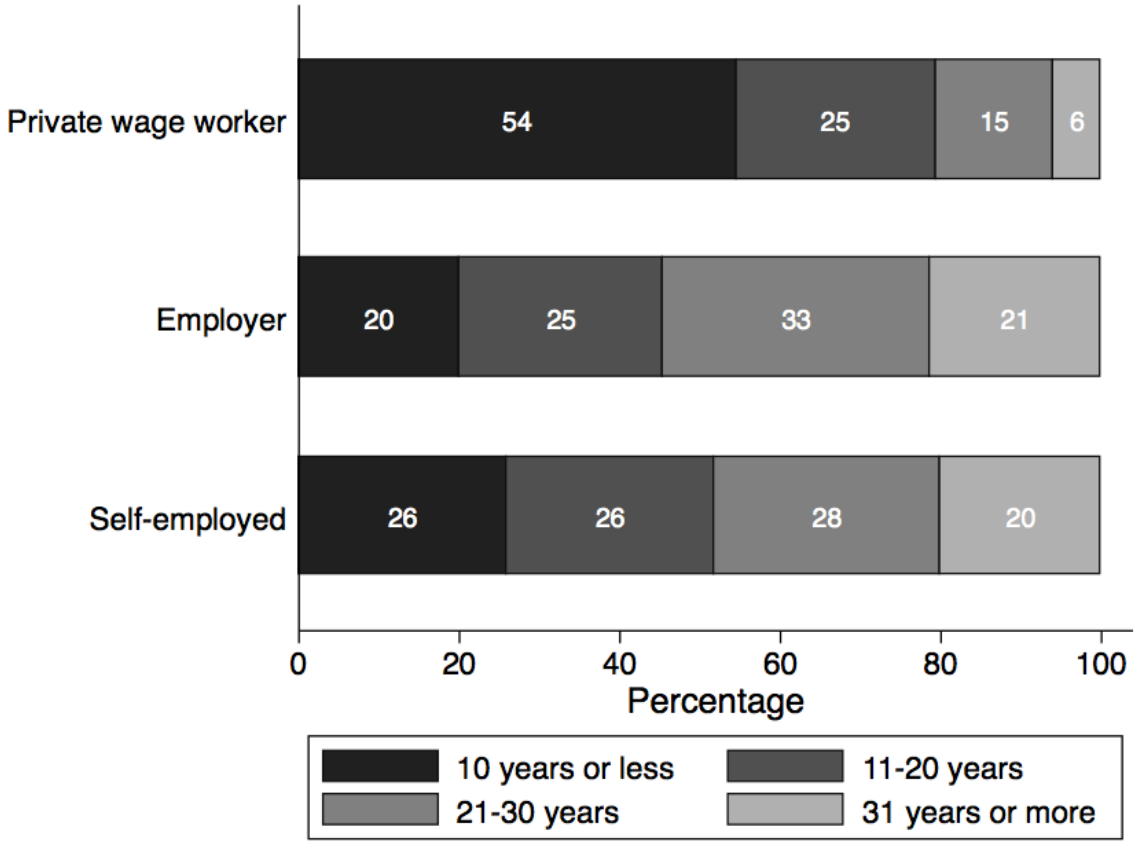
Source: authors' calculations based on JLMPS 2010, 2016

Figure 8: Wealth quintile by work type, age, and wave, Jordanian private sector workers aged 23-64 (percentage)



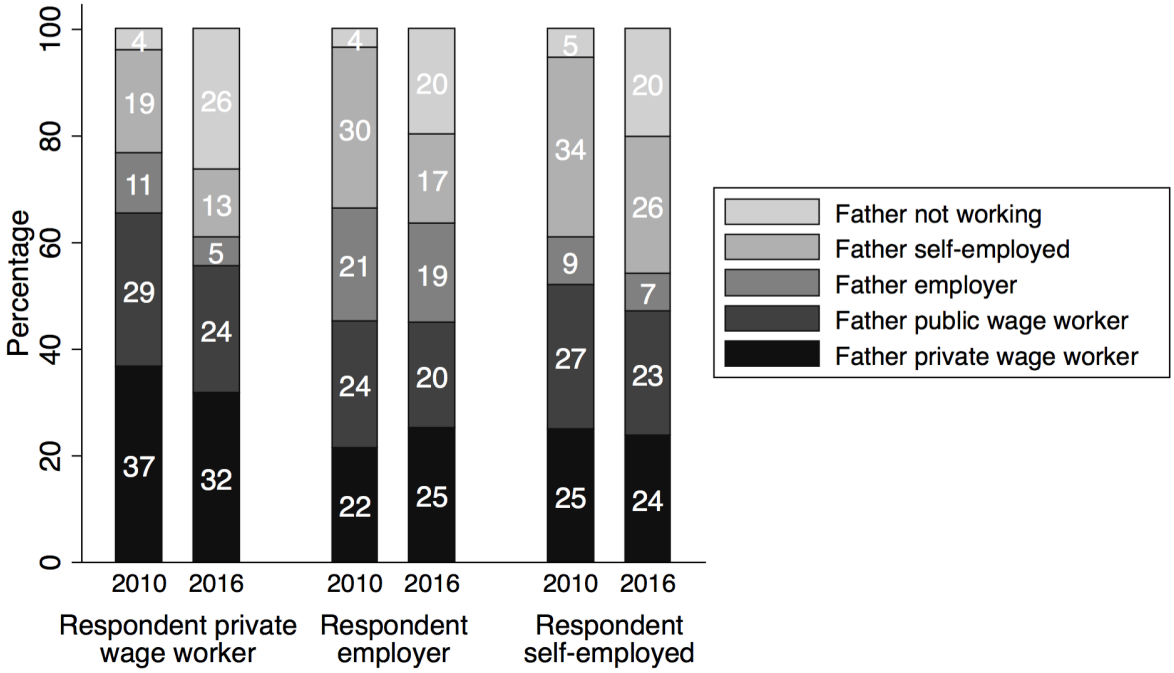
Source: authors' calculations based on JLMPS 2010, 2016

Figure 9: Work experience by work type, Jordanian private sector workers aged 15-64 (percentage)



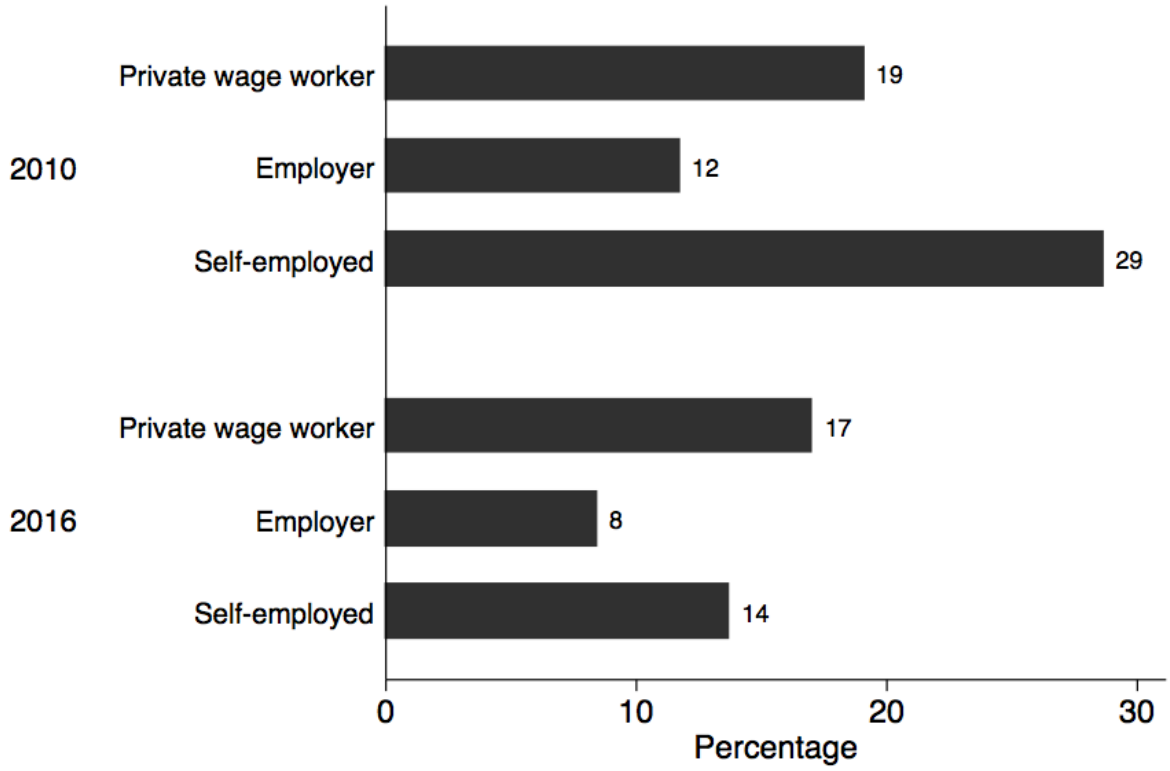
Source: authors' calculations based on JLMPS 2016

Figure 10: Respondent's father's work type by respondent's work type and wave, Jordanian private sector wage workers aged 15-64 (percentage)



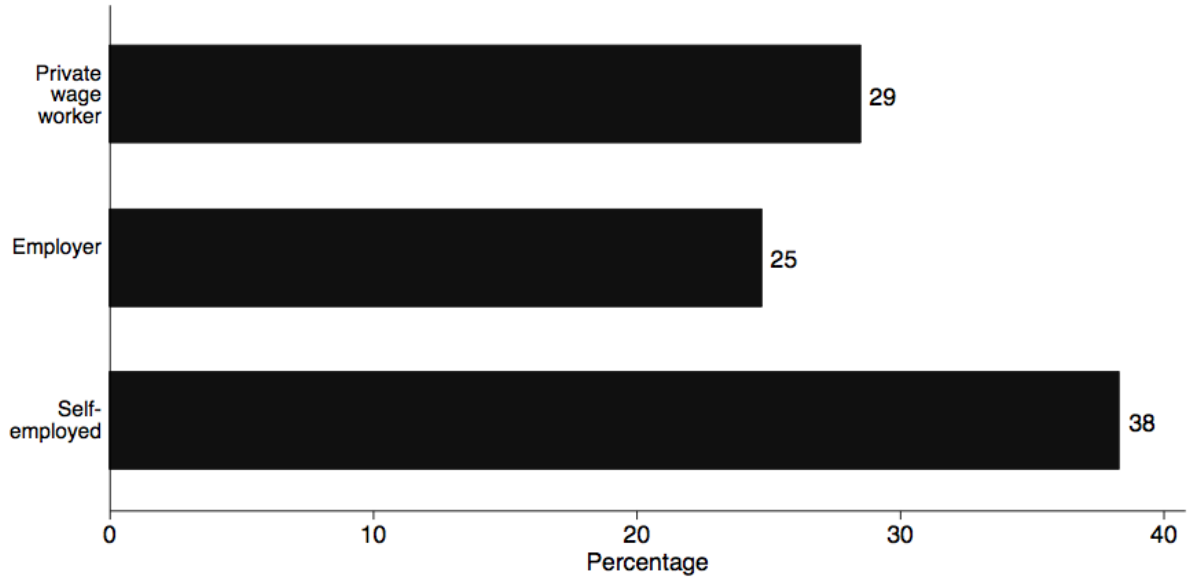
Source: authors' calculations based on JLMPS 2016.
Notes: Respondent's father's status is based on respondent's self-reporting of his/her father's employment status when he/she was 15 years old.

Figure 11: Pension receipt by work type and wave, Jordanian private sector workers aged 15-64 (percentage)



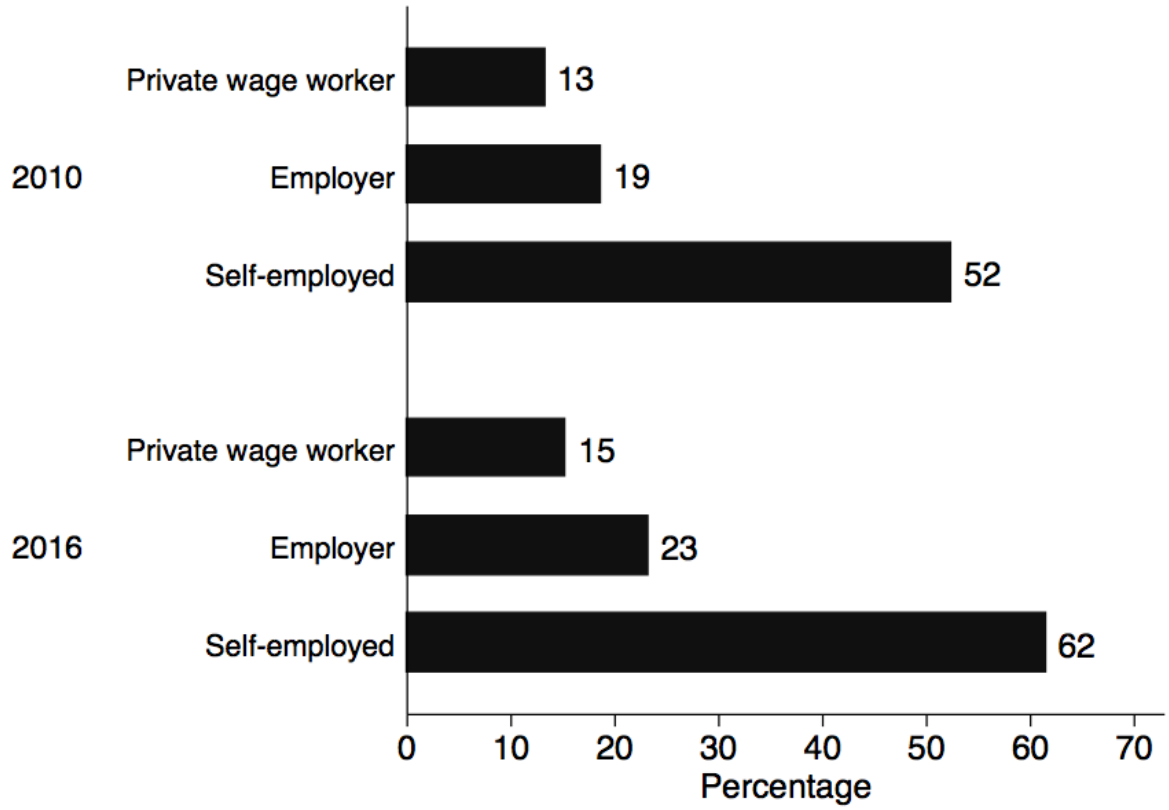
Source: authors' calculations based on JLMPS 2016

Figure 12: Previous job experience in the public sector by work type, Jordanian private sector workers who had a previous job aged 15-64 (percentage)



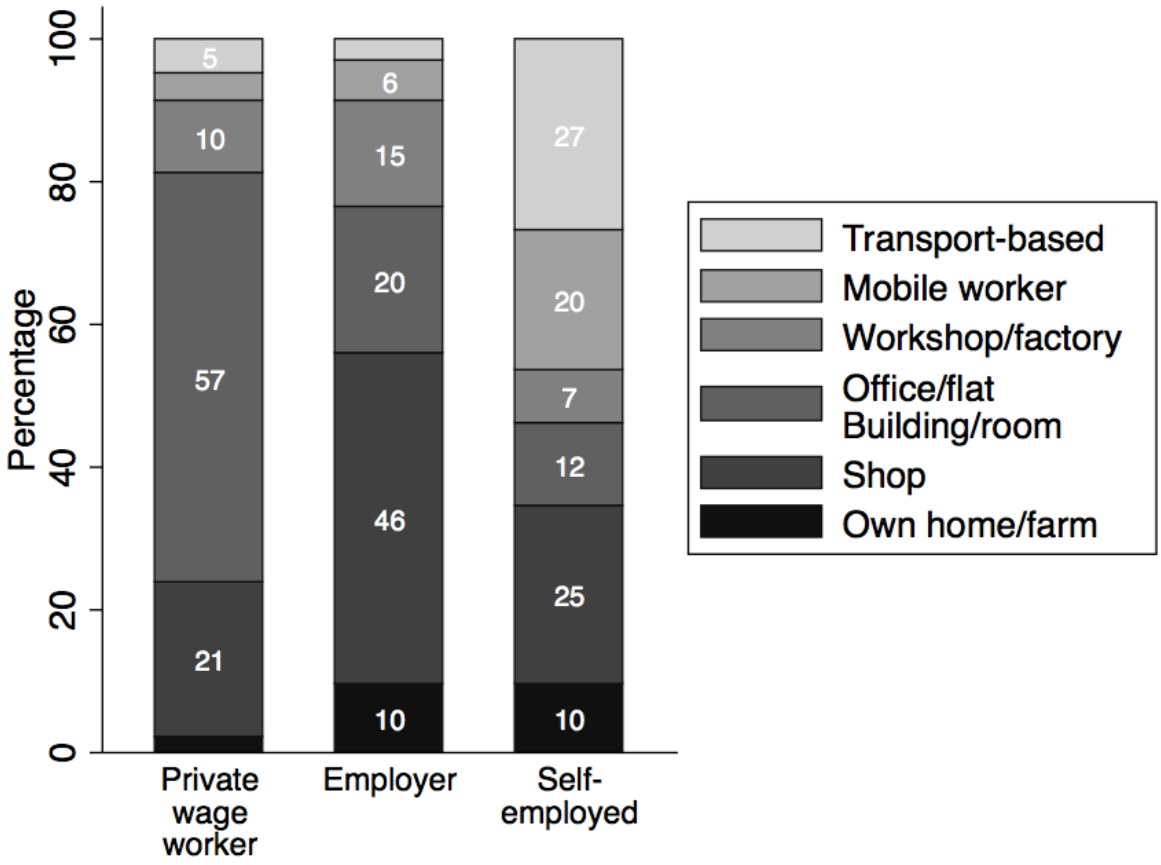
Source: authors' calculations based on JLMPS 2016.
Notes: figure reports outcomes based on the job prior to current job, and not whether the respondent ever had a public sector job.

Figure 13: Work outside of fixed establishment by work type and wave, Jordanian private sector workers aged 15-64 (percentage)



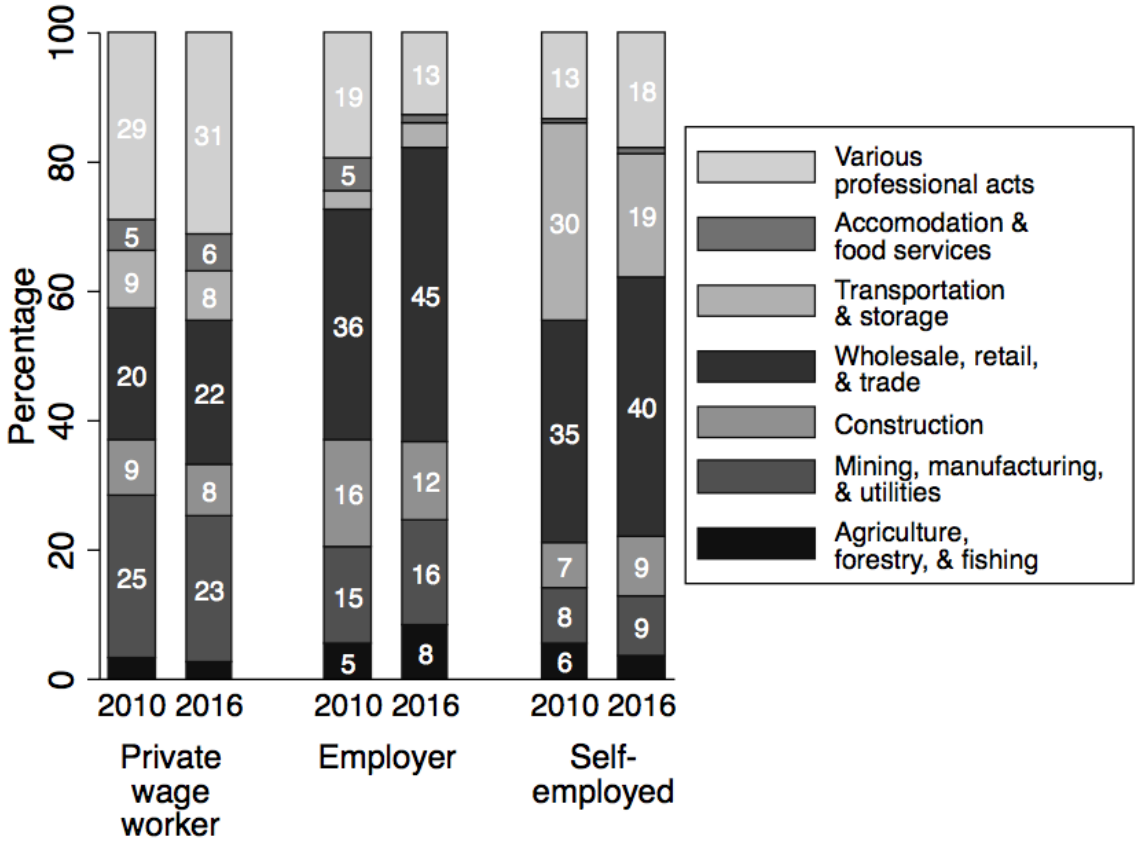
Source: authors' calculations based on JLMPS 2010, 2016

Figure 14: Work location by work type, Jordanian private sector workers aged 15-64 (percentage)



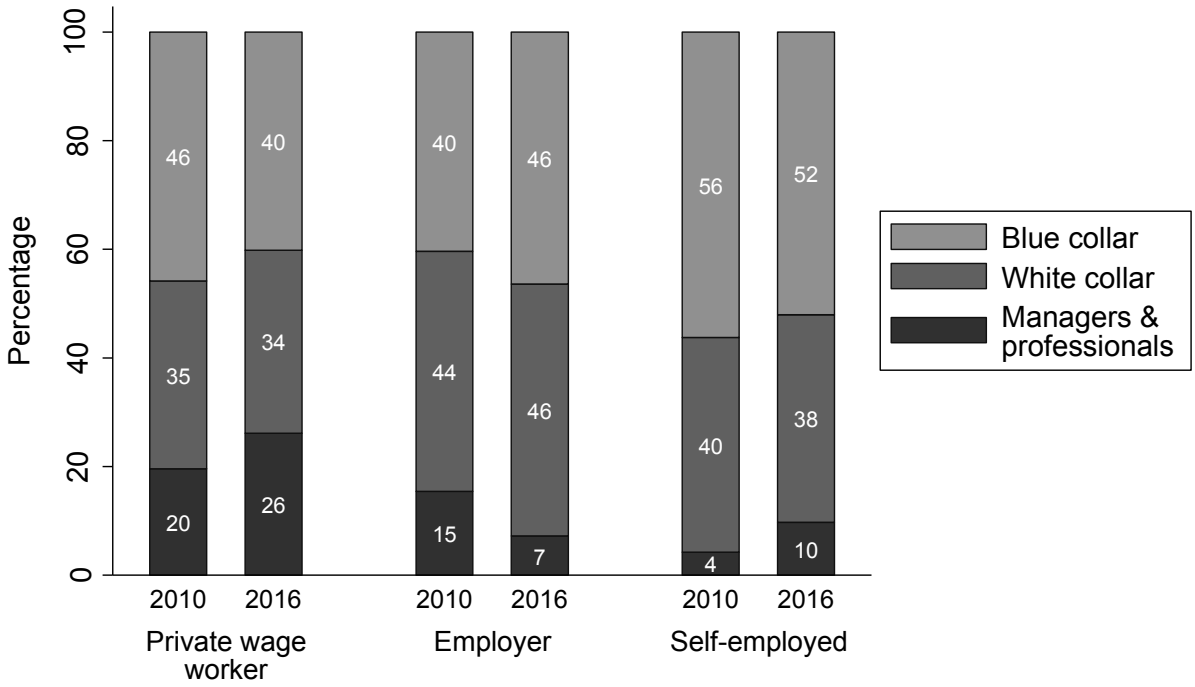
Source: authors' calculations based on JLMPS 2016

Figure 15: Work type by economic activity and wave, Jordanian private sector workers aged 15-64 (percentage)



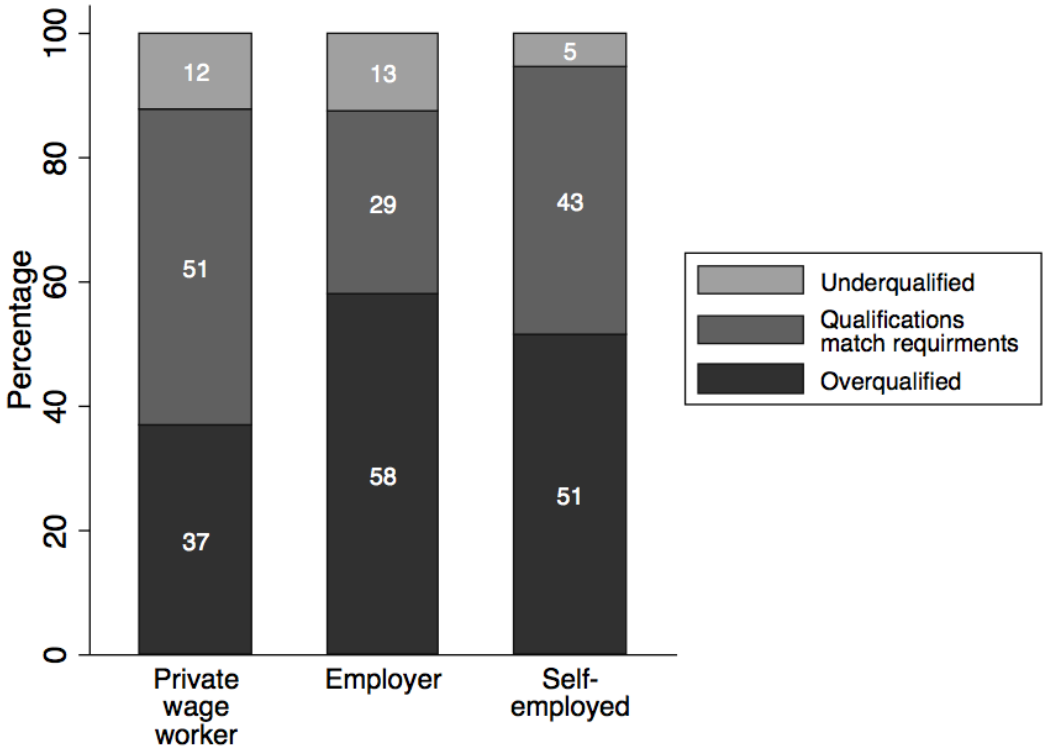
Source: authors' calculations based on JLMPS 2010, 2016

Figure 16: Occupations by work type and wave, Jordanian private sector workers aged 15-64 (percentage)



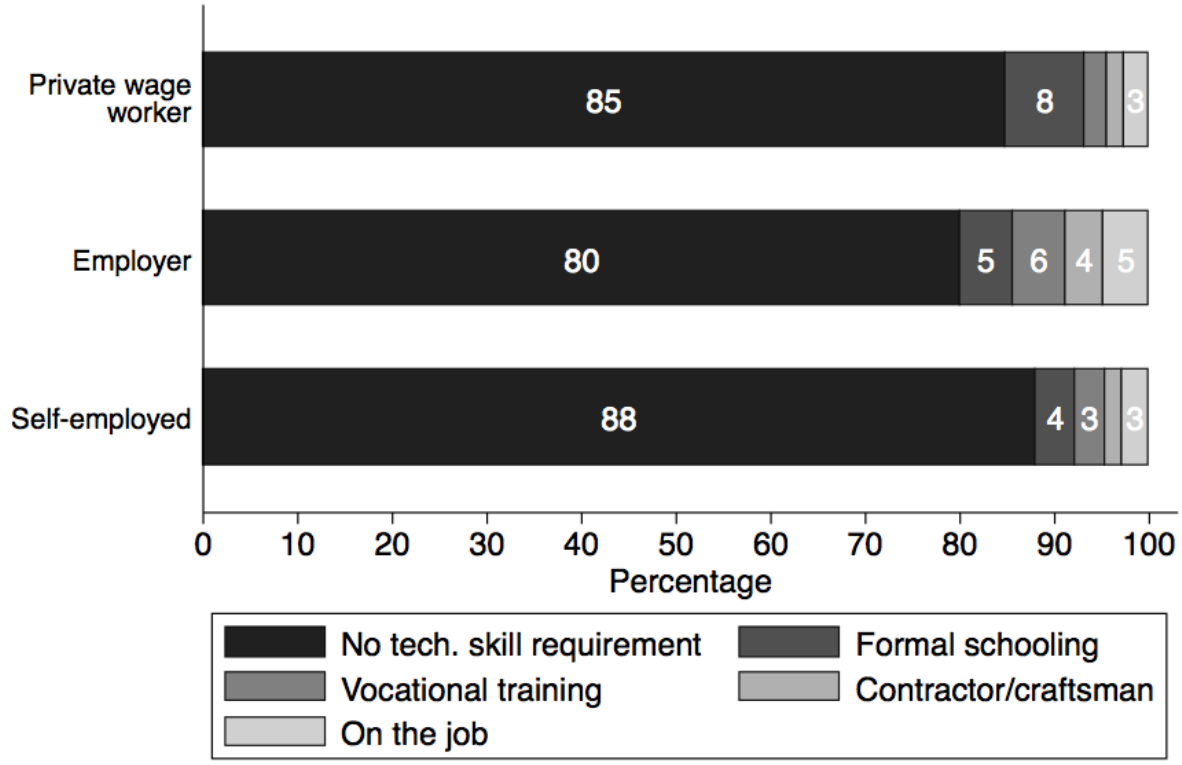
Source: authors' calculations based on JLMPS 2010, 2016

Figure 17: Job qualifications by work type, Jordanian private sector workers aged 15-64 (percentage)



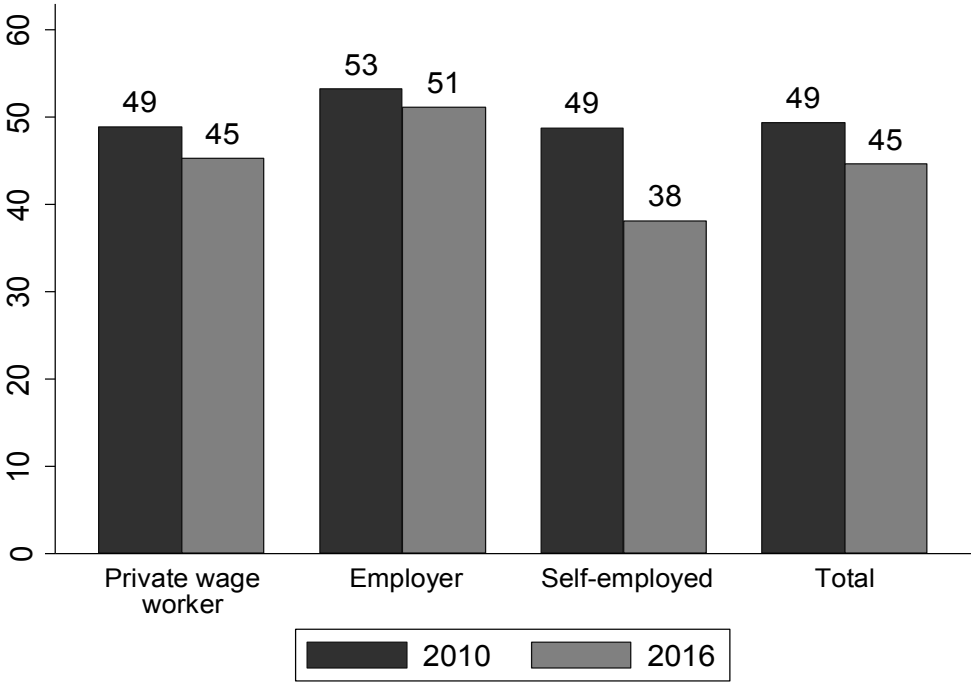
Source: authors' calculations based on JLMPS 2016.

Figure 18: Technical skill requirement and where skill was obtained by work type, Jordanian private sector workers aged 15-64 (percentage)



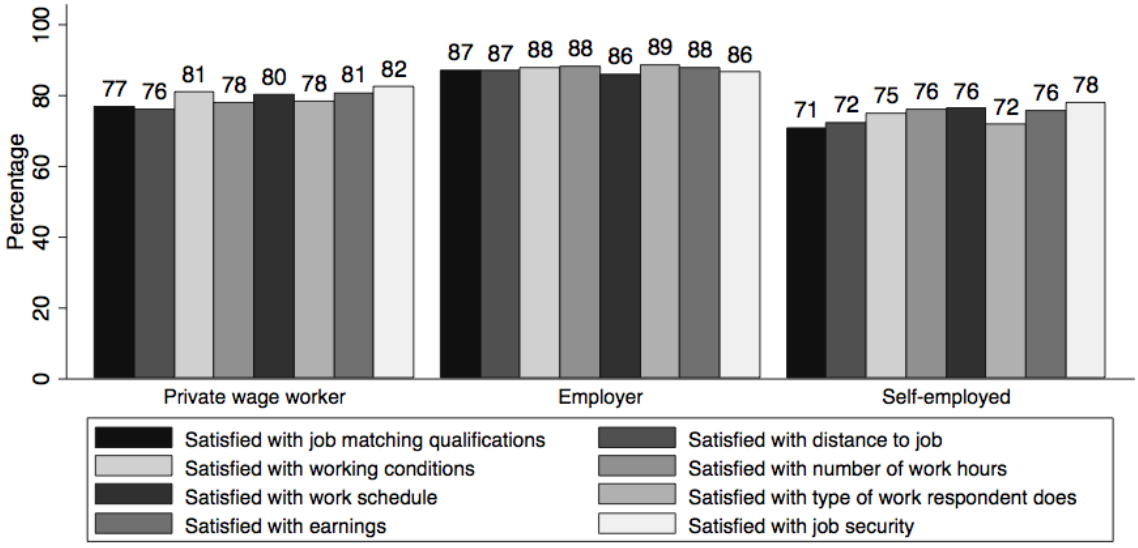
Source: authors' calculations based on JLMPS 2016

Figure 19: Work hours per week by work type and wave, Jordanian private sector workers aged 15-64 (mean)



Source: authors' calculations based on JLMPS 2010, 2016

Figure 20: Reported job satisfaction measures among Jordanian private sector wage workers aged 15-64 by work type (percentage)



Source: authors' calculations based on JLMPS 2016

Appendix

Table 1: Percentage of households receiving different forms of income by job type, Jordanian private sector wage workers aged 15-64 (percentage)

In the last 12 months, household received...

	Private sector wage worker	Employer	Self-employed
A pension	17.1	8.5	13.8
Money from public assistance fund	1.2	1.2	2.2
Money from non-profit or charity	0.7	0.0	0.2
Income from rent	1.8	2.3	2.3
Interest or investments	0.0	0.0	0.2
Money from any other sources	0.3	0.4	0.0
N	1,914	230	470

Source: authors' calculations based on JLMPS 2016.

Table 2: Percentage of individuals with savings or borrowing by job type, Jordanian private sector workers aged 15-64

Savings and Borrowing	Private sector wage worker	Employer	Self-employed
Respondent has savings	2.1	3.9	0.8
Respondent applied for a formal loan in the last 12 months	3.4	3.8	5.0
Respondent has borrowed from informal sources	2.2	5.5	2.2
N	1,914	230	470

Source: authors' calculations based on JLMPS 2016

Notes: "Informal sources" of borrowing include family, friends, acquaintances, informal lenders, etc.