Excluded Generation: The Growing Challenges of Labor Market Insertion for Egyptian Youth

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Abstract

Youth in Egypt hold rising aspirations for their adult lives, yet face an increasingly uncertain and protracted transition from school to work and thus into adulthood. This paper investigates how labor market insertion has been evolving over time in Egypt and how the nature of youth transitions relates to gender and social class. The study examines 19,925 respondents from the 2012 wave of the Egypt Labor Market Panel Survey. We demonstrate that recent youth cohorts face poorer chances of transitioning into a good job than previous cohorts, despite large increases in educational attainment. Social class is playing an increasing role in determining the success of the transition from school to work in Egypt. Whether youth successfully make transitions to formal jobs, embark on such transitions and fail, or pursue more traditional careers in informal employment or family businesses or farms depends on a complex and changing interaction between their own educational attainment and the resources of their families. In light of these findings, we discuss the policies that can help facilitate more successful transitions for struggling youth in Egypt.

Keywords: Transition from school to work; Youth, Adulthood; Life course; Egypt

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1 Introduction

In line with their increasing educational attainment, Egyptian youth hold rising aspirations for their adult lives (Assaad and Barsoum 2009; Sieverding 2012). Yet they are increasingly struggling to transition to adult roles and to fulfill these aspirations. Moving from adolescence to adulthood rests on three key life course transitions: education, employment, and family formation. High unemployment rates and rising levels of informality in employment, despite increasing educational attainment among Egyptian youth, are symptoms of the difficulties youth face in negotiating these transitions, particularly the transition from school to work. The uncertain and increasingly protracted nature of the transition to adulthood in Egypt and in other countries of the Arab world has been dubbed in the literature as "waithood," short for wait adulthood (Dhillon and Yousef 2009; Salehi-Isfahani and Dhillon 2008; Singerman 2007).

The frustrations and anxiety associated with the transition to adult roles, especially the perception of a lack of social justice in the opportunities available to youth as they negotiate the transition, have undoubtedly been a potent force propelling the political events that have widely come to be known as the "Arab Spring." The increasing obstacles educated youth face in achieving their ambitions manifested themselves in the prominent role middle class youth have played in protest movements (Backeberg and Tholen 2018; Joffé 2011; Kandil 2012; Kuhn 2012; Malik and Awadallah 2013; Moghadam 2013; Pace and Cavatorta 2012; Richards et al. 2014). This paper uses the case of Egypt to illustrate the nature of the waithood phenomenon and how it relates to social class, gender and educational attainment. Using a life course perspective, we

offer a typology of school to work transitions based on the process of transition itself and how it intersects with gender, education and family background.

2 Background on Egypt

The rise of waithood in Egypt is the result of changes in the social contract and policy landscape in the country. Historically, an "authoritarian bargain" social contract held in Egypt, whereby the state offered free public services, such as health care and education, as well as government employment guarantees for the educated, to obtain the political acquiescence of the middle class to authoritarian rule (Assaad 2014; Desai, Olofsgård, and Yousef 2009; Devarajan and Ianchovichina 2018; Karshenas, Moghadam, and Alami 2014; World Bank 2004). Under this social contract, education quantity expanded rapidly in Egypt. Out of 146 countries, Egypt was 14th in terms of the increase in years of schooling between 1980-2010 (Campante and Chor 2012). Quality of education, however, did not keep pace with quantity (Mullis et al. 2015; Rugh 2002; El-Kogali and Krafft 2020; World Bank 2008).

The expanding education system in Egypt was focused on creating credentials, more so than skills (Assaad, Krafft, and Salehi-Isfahani 2018; Salehi-Isfahani 2012). This credentialist orientation was driven by the historical public sector employment guarantee, whereby those with secondary education and above were guaranteed employment in the public sector (Assaad 1997). Although initially (in the 1960s) the employment guarantee had a limited impact on a labor market where few were educated, the rapid expansion of education, in part motivated by the employment guarantee, generated unsustainable growth in the public sector by the 1980s, leading to lengthened wait times for public sector jobs (Assaad 1997). Ultimately, the Economic Reform and Structural Adjustment Program (ERSAP) starting in 1991 led to a reduced role for the public sector in the economy and labor market (El-Zanaty and Associates 2007).

Although the goal of structural reforms was to create a robust private sector, Egypt has struggled to create good, formal jobs in the private sector (World Bank 2014). As the public sector shrank, it was primarily informal employment that replaced it, not formal work (Assaad and Krafft 2015a). Labor demand in Egypt remained weak, such that the economy followed primarily a labor-absorbing model, creating informal, low-productivity jobs for a growing youth population (Assaad, Yassin, and Krafft 2018). Especially since the private sector has not been able to offer robust alternatives, youth continue to substantially prefer public sector employment, followed by formal private and lastly informal work (Barsoum 2015).

One of the reasons that youth may prefer obtaining employment through the public sector is that the private sector labor market is widely perceived to be driven by social connections or *wasta*, in Arabic. While 11% of those in the public sector obtained their jobs by asking friends or family for help, across the formal and informal private sectors 45-46% of those with jobs obtained them through friends or relatives (World Bank 2014). Likewise, 75% of Egyptians agree that a personal connection (*wasta*) is critical to securing work (El-Kogali and Krafft 2020). Firm success is also linked to political connections, with politically connected firms creating fewer jobs but enjoying privileges and less competition in Egypt's economy (Chekir and Diwan 2015; Diwan, Keefer, and Schiffbauer 2014).

The problem of education conferring low skills may exacerbate the role of *wasta*, in that, in the absence of information about skills conveyed by educational credentials, employers use social background as a signal of potential employee quality (Assaad, Krafft, and Salehi-Isfahani 2018). A substantial body of qualitative research illustrates how employers will ask potential employees about everything from their parents' education to whether their family has a microwave oven (Barsoum 2004; Moghadam 2003; Salemi 2015; Shaalan 2014). The role of background may be particularly limiting for young women, who, historically, disproportionately

relied on public sector employment (Assaad and Krafft 2015a), and who may be more limited by social norms in terms of what jobs they can accept (Dougherty 2014).

Female labor force participation is low and has remained so over time in Egypt, despite the increase in women's education (Assaad, Hendy, et al. 2018). A variety of reasons have been proposed for low rates of participation in Egypt and the Middle East and North Africa region more widely, including religion and patriarchal norms, caregiving responsibilities, and limited labor demand (World Bank 2013). While religion plays an important role in customs, norms, and laws, the diversity of labor market outcomes in the Islamic World emphasizes the importance of understanding other factors as well (World Bank 2013). Although individual gender role attitudes do not necessarily have an impact on labor market outcomes, social norms may still play a key role (Miyata and Yamada 2017). Traditional norms emphasize men's roles as breadwinners and women's roles as homemakers (Hoodfar 1997; World Bank 2013). Particularly once married, and with substantial caregiving responsibilities, work outside the home becomes a "second shift" for women and very challenging to reconcile with caregiving (Assaad, Krafft, and Selwaness 2017; Hendy 2015). Private sector work is particularly difficult to reconcile with caregiving due to longer hours and limited benefits (Assaad and Krafft 2015a; Assaad, Krafft, and Selwaness 2017). Women who do work are highly concentrated in certain sectors, in a segmented labor market, in part because of strong norms about acceptable working conditions; something that is sometimes referred to as "reservation working conditions" (Dougherty 2014).

3 Theoretical framework and previous research

Our paper has an overarching theoretical framework of life course transitions, focusing on the school-to-work transition. The concept of the life course refers to the interlinked sequence of age-specific social roles that individuals experience as phases in life. The life course paradigm

allows for the study of multiple key transitions and trajectories and their intersections with institutions and other contexts. This perspective allows us to understand how young people's lives unfold over time, in contrast to research that focuses on experiences and statuses at a single point in time. A life course perspective also encourages understanding the interplay between multiple domains, for instance school and work, and how they intersect, rather than treating them as separate (Crivello 2011; Han and Moen 1999; Mortimer and Shanahan 2003). Throughout this paper, we draw on a life course perspective and especially the sub-set of life course literature focused on labor market transitions (Brzinsky-Fay 2010; Unay-Gailhard 2016). Globally, youth are becoming increasingly educated without corresponding professional opportunities and thus the transition from school to work has become more uncertain and challenging in many contexts (Bynner 2005; Crivello 2011; Peou and Zinn 2015; Posti-Ahoka and Palojoki 2014).

An important element of adopting a life course perspective is understanding how the young person's family background, socio-economic class or privilege, and gender intersect with her or his trajectory. Social origins theories link initial background to educational trajectories and early career transitions (Elman and O'Rand 2007; Pallas 2002). We therefore draw on these theories and the global literature on how background and class shape school-to-work transitions (Iannelli and Smyth 2008; Schoon and Lyons-Amos 2016; Unay-Gailhard 2016; Vancea and Utzet 2018; Virdia and Schindler 2019) as an important complement and component of life course, transitional, and school-to-work theories.

The inter-linkages between transitions, especially schooling, work, and family formation, are vitally important for understanding the trajectories of Egyptian youth as they move into adult roles. Previous research on Egypt and Jordan has demonstrated how employment transitions for youth are shaped by educational attainment and gender (Amer 2009, 2015; Angel-Urdinola and Semlali 2010; Assaad and El-Hamidi 2009; Assaad, Hendy, and Yassine 2014; Gebel and Heyne

2014, 2016; Heyne and Gebel 2016). Education and employment outcomes also intersect with marriage trajectories in ways that are fundamentally distinct along gender lines (Amin and Al-Bassusi 2004; Assaad, Binzel, and Gadallah 2010; Assaad and Krafft 2015b; c; Gebel and Heyne 2014, 2016; Salem 2014, 2015; Singerman 2007). Most research focuses on one of these transitions at a time, but some previous works have examined multiple transitions as part of a single trajectory (Amin and Al-Bassusi 2004; Assaad, Binzel, and Gadallah 2010; Dhillon, Dyer, and Yousef 2009; Gebel and Heyne 2014). While previous research has noted the important role that education plays in youth inclusion or exclusion (Assaad and Barsoum 2007; Heyne and Gebel 2016), we examine the arguably growing role of socio-economic background in youth exclusion.

We specifically test three hypotheses. Given the aforementioned differences by gender, we test these hypotheses separately for men and women:

Hypothesis 1: Initial labor market outcomes depend on youth's education.

Hypothesis 2: Initial labor market outcomes depend on social class.

Hypothesis 3: Across cohorts, initial labor market outcomes increasingly depend on social class.

We are particularly interested in H3. We expect the retreat of the public sector and the inability of the Egyptian labor market to create sufficient formal private sector jobs in its place may lead to an increasing role of social class in shaping youth transitions. H1 and H2 are, however, important prerequisites to test before determining H3.

Whether youth successfully make modern transitions, embark on such transitions and fail, or pursue a traditional route to adulthood through family-based or casual/informal wage employment depends on a complex interaction between their own educational attainment and the resources their families bring to bear to assist them with their transition. We provide a taxonomy

of youth based on own education and family background to demonstrate how privilege or exclusion shape transitions across the life course. With increasing levels of education, youth in Egypt and throughout the Arab world have increasing expectations for modern living—modern jobs and modern marriages. These expectations remain unmet for many youth, creating a source of frustration and anxiety. Unmet expectations also intersect with a sense of social injustice, as the success of youth in meeting these expectations is increasingly shaped by their socio-economic background. This dynamic has created an insider/outsider divide for youth in Egypt and elsewhere in the Arab world, contributing to the sense of social injustice articulated by middle-class youth in the Arab uprisings of 2011.

4 Data and Methods

The analysis that follows relies principally on data from the 2012 wave of the Egypt Labor Market Panel Survey (ELMPS 2012), which was implemented by the Economic Research Forum in cooperation with the Egyptian Central Agency for Public Mobilization and Statistics (CAPMAS) (OAMDI 2016). The unique features of these data that make this analysis possible are the fact that it includes detailed retrospective information describing the first job the individual obtained upon entry into the labor market as well as information about the individual's parents irrespective of whether or not they are co-resident in the household. These two features allow us to study the transition into first employment and the influence of social background on this transition for individuals of various school-leaving cohorts and educational backgrounds in 2012. The sample of the 2012 wave of the survey consists of 12,060 households. We retrospectively study the transition into first employment using individuals who left school (or turned 15, whichever was later) at least three years prior to the 2012 wave. This limitation ensures that youth have had a chance to transition into first employment. Starting from three years prior to the survey, we create three decade-long school leaving cohorts to compare across

cohorts. This focus results in a working sample of 9,965 men and 9,960 women. We also draw occasionally on previous waves of the same survey in 2006 and 1998 to observe the characteristics of individuals in their natal households as a way to validate their social class position.[5]

First, we classify individuals along a taxonomy of education and social class, which we describe in detail in the next section, and validate this taxonomy against other measures of privilege. Second, we define the type of first long-duration employment (a position of six months or more),[6] if any, that the individual obtains within three years of school exit along a scale from most traditional/informal to most modern/formal. We create this taxonomy of employment types based on a combination of employment status (wage work, self-employment, unpaid family work), regularity of employment, formality of the employment relationship, formality of the firm the individual is employed in, and the sector of ownership. The type of employment that is at the most traditional end of our taxonomy is work in a family business as either an employer (which is very rare), a self-employed worker or an unpaid family worker. This is followed by irregular wage employment, defined as wage employment that is either intermittent (casual, for example, day labor)[7] or seasonal and offers limited attachment to a particular employer. Such employment is almost always informal (lacking a contract or social insurance). Regular (temporary or permanent) wage employment is further subdivided into informal employment in informal private firms, informal employment in formal private firms, formal employment in private firms,

[5] All of the ELMPSs are nationally representative once sample weights are applied. We use weights for all analyses. See Assaad & Krafft (2013) for more information on the ELMPS.

[6] This is the first job that lasts more than six months or the first status after leaving school, whichever is earlier. Only 7% of non-student working-age adults (ages 15-64) in the ELMPS started a first job before leaving school (median of three years before). These jobs were typically of long duration, with a median of 9 years. Since these are typically jobs that persist substantively after school exit we include such jobs in our definition of first job. Very few (2% of working-age non-students) had interruptions in schooling, so we do not adjust our definitions in any way to account for interruptions.

[7] In the data, intermittent work in the same occupation and industry, e.g. working as a construction worker on different sites and for different employers, is considered a single position.

and public sector employment, which includes employment in state-owned enterprises as well as the civil service. We classify public sector work as superior to private sector formal work, because it is the kind of work that is typically preferred by youth and their families (Barsoum 2015). Formal wage work in the private sector is a viable alternative, as it still offers crucial benefits (that come along with a legal contract or social insurance), but averages longer hours of work (Assaad and Krafft 2015a). As in other countries (Kogan 2011), we show that such formal work is often hard to obtain without the requisite family connections.

The final category in the first employment taxonomy is "no work." We only consider a person to have worked if he or she did so within three years of leaving school, so as to ensure a comparable time span to obtain work for all cohorts. An individual is classified as having "no work" if she or he only started a first job more than three years after school exit or never worked.

To ascertain changes in the nature of the transition to first employment over time, we subdivide our sample into three school-leaver cohorts. These are ideal for analysis of school-to-work transitions as the school leaver cohort would have entered the labor market at similar times and experienced similar labor market conditions. If individuals never attended school or left before age 15, we treat their time of school exit as age 15, the age at which individuals can legally work in Egypt. We begin our school-leaver cohorts three years prior to the survey (in order to observe first employment) and move backwards by decades. We refer to a young cohort, made up of those school leavers in 2000-2009, a middle cohort, made up of those school leavers in 1990-1999, and an old cohort, made up of those school leavers in 1980-1989.

Once we have established our educational/social class taxonomy and the type of employment outcomes we can observe, we begin with a descriptive analysis that examines the relationship between the two, separately for men and women, and comparatively across cohorts. We then move to a multivariate analysis that relies on multinomial logit models to estimate the

probability of transitions into various types of employment as a function of the educational/social class taxonomy, the school-leaver cohorts, and their interactions. This analysis allows us to predict how transition probabilities into various kinds of first employment are affected by the education/social class taxonomy and how this relationship changed across the three school-leaver cohorts. The models also allow us to estimate marginal effects and conduct statistical tests of the effects of education/social class on the type of first employment obtained by the individual (if any) and of differences in these effects across cohorts.

5 A Taxonomy of Youth Based on Educational Attainment and Social Class

To understand the potential paths of youth transitions, we define a taxonomy of youth privilege based on own educational attainment and family background. The school and work phases of the life course mark important milestones in the transition to adulthood. They also tend to occur in sequence; the timing and success of education impacts the timing and success of the transition to work, and, in turn, these two transitions affect the timing and success of the transition to marriage and family formation.

Following previous work on youth transitions in the Arab World and cognizant of the risk of over-simplifying a complex phenomenon, we define two archetypal life courses for youth, one that we refer to as “traditional” and the other as “modern” (Dhillon, Dyer, and Yousef 2009). The traditional life course involves early exit from school and an immediate and early transition to work with no unemployment nor extended job search. Work is typically in a family enterprise or farm, or as an irregular/informal wage worker. The modern life course involves more schooling, at least up to the upper secondary level, and a search for formal employment, which often involves a period of extended unemployment. Formal jobs play a particularly important role in the modern transition, as these jobs, which have typically been in the public sector, offer the benefits, job security and status that educated youth aspire to and are thus strongly preferred

by them (Barsoum 2015). Formal jobs are the signal of a successful modern work transition that enables youth, young men in particular, to signal that they are economically ready for marriage (Assaad, Binzel, and Gadallah 2010; Assaad and Krafft 2015b; Krafft and Assaad 2017).

Attaining upper secondary or higher education, the first step of the modern transition, has become increasingly common in Egypt. At the same time, formal jobs have become increasingly scarce as public sector hiring continues to decline without a commensurate increase in private formal employment (Assaad and Krafft 2015a). This has created a pinch point or bifurcation among those attempting to make modern transitions. Youth with secondary or higher education have expectations of joining the middle class by accessing formal employment, but increasingly find themselves excluded from such employment, resulting in a protracted and often disappointing trajectory. We thus distinguish between two trajectories among those attempting a modern transition. Both start with a minimum level of educational attainment, but then diverge in their employment trajectories depending on the resources and privileges families bring to bear to assist the young people in their transition. The privileged or successful modern transition may involve a period of unemployment, but this is typically followed by formal employment and thus a more favorable transition into adult roles. The struggling or failed modern transition may involve a period of unemployment, perhaps quite a lengthy one, but this is typically followed by either informal work (for men) or by withdrawal from the labor force (for women).

We distinguish between four different 'types' of youth based primarily on their own educational attainment, but also on socio-economic background, both of which shape the opportunities and expectations of youth. We consider both young people's own education and that of their fathers, using father's education as a proxy for the socio-economic status of youth,[8]

[8] We focus on father's education as a measure of socio-economic background rather than occupation for two reasons. First, education has strong explanatory power for inequality and occupation has little additional explanatory

the expectations of their families, and the social connections that can be deployed to support their transitions. Youth are categorized as attaining: (i) less than a secondary education (ii) a secondary education (iii) higher education, but having a father with less than secondary education or (iv) higher education and having a father with a secondary education or higher. We hypothesize that those with less than secondary education are likely to expect and experience traditional transitions, but that those with secondary and higher education are much more likely to expect and attempt a modern transition, with varying degrees of success.[9]

Figure 1 shows the distribution of individuals along this four-way taxonomy by sex and across the school-leaving cohorts. While 50% of men had less than secondary education among the oldest cohort (1980s school leavers), only 28% of the youngest cohort of men (2000s school leavers) had not attained a secondary degree. Secondary education has seen the greatest expansion across cohorts, with its share increasing from 31% to 43% of men. The share of men with higher education has increased from 20% to 28%. As expected, a greater share of younger men with higher education also have fathers with secondary education or higher. Women exhibit a similar pattern, but have experienced a more dramatic increase in education (from a less educated starting point), as indicated by the more rapid decline in the share of women with less than secondary education. While almost two thirds (63%) of the oldest cohort of women had less than secondary education, more than two thirds (69%) of the youngest cohort now has secondary

power (Assaad, Krafft, et al. 2018; Krafft and Assaad 2015). Second, education data are better measured than employment outcomes in the retrospective data (Assaad, Krafft, and Yassin 2018). We focus on father's education rather than adding mother's education as well, as the two are highly correlated and, since we are already assessing the relationship between father's education, own education, and cohort in shaping labor market outcomes, adding mother's education as an additional variable would create empirical and interpretation challenges. We tested using a single variable combining mother's and father's education and results were substantively similar.

[9] We decided not to disaggregate those with secondary education by father's education since the vast majority of them had fathers with less than secondary education (see Figure 3).

education or higher. This dramatic shift in educational attainment across cohorts is undoubtedly a primary driver of the shift in expectations in favor of a modern transition to adulthood.

We argue that our taxonomy combining a youth's own education with the educational attainment of his or her father accurately captures the socio-economic gradient in Egypt. To demonstrate this, we examine in Figure 2 the degree to which our taxonomy correlates with parental position in the wealth distribution for individuals in the youngest cohort in 2012 who were observed in their natal households in the 2006 wave of the ELMPS.[10] The vast majority (71%) of those with less than secondary education are from the bottom two (2006) wealth quintiles. Just 4% are from the richest fifth of households and 7% from the second richest wealth quintile. Youth with secondary education are mostly from the lower-middle of the wealth distribution, with 72% from the bottom three wealth levels, but 11% are from the richest fifth of households and 17% from the fourth wealth quintile. Individuals with higher education but less educated fathers are from the upper-middle end of the wealth distribution. Although 27% are from the bottom two wealth quintiles, the remaining 73% are fairly equally distributed across the top three wealth quintiles. Those with higher education and more educated fathers are by far the most privileged segment of youth, with almost two-thirds (64%) coming from the richest wealth quintile, and 21% from the fourth wealth quintile. Only 10% are from the middle wealth quintile,

[10] What we refer to as parents' wealth is a household level variable based on an asset index of housing quality and durable goods estimated using factor analysis, a common approach (Filmer and Pritchett 2001). We do not use the contemporaneous wealth distribution of the individual's household since we wish to use wealth as a measure of social background rather than as an outcome of a youth's transition. We use parents' wealth in 2006 for individuals in the youngest cohort in 2012 who were living with their parents and whose parents were heads of households in 2006. About 77% of the youngest cohort who were present in both the 2006 and 2012 rounds of the ELMPS were living with their parents and their parents were the head of the household and/or the head's spouse in 2006. In 2006, 29% were working and may have been contributing towards household assets. Therefore, we also check for similar patterns using 1998 parental wealth, when these individuals would have been even younger, and 91% were living with their parents. Just 4% were working in 1998. Both instances provided a similar distribution of parental wealth by our proposed youth taxonomy.

5% from the second, and less than 1% from the poorest wealth quintile. The education taxonomy we use thus represents a strong socio-economic gradient and demarcation of privilege for youth.

By construction, our higher education categories take into consideration parents' education. Nevertheless, because parents' education is highly predictive of their children's education, the lower categories in our educational taxonomy are also strongly associated with parental education as a measure of socio-economic class and privilege. Figure 3 shows the relationship between the youngest cohort's own educational attainment and that of their father. Among youth with less than secondary, 72% had illiterate fathers, and most of the rest (13%) had fathers who were just literate, but had no formal educational certificate. Half of the youth with secondary education (49%) had illiterate fathers, 19% had fathers that could only read and write, 16% had fathers with basic education, and only 11% had fathers with a similar level of education (secondary). As youth almost always achieve an education level equal to or higher than that of their parents, only 5% of secondary educated youth have a father with higher than secondary education. Among youth with higher education but less educated fathers, 40% had illiterate fathers, 29% had fathers who could only read and write, and 31% had fathers with basic education. Most of those with higher education and more educated fathers had fathers with higher education (59%) and the remaining 41% had fathers with secondary education. Youth who completed higher education but have less educated fathers are fairly similar to those who achieved secondary education in terms of father's education, although they tend to have somewhat wealthier parents.[11]

[11] See Assaad (2013) and Krafft and Alawode (2018) for further evidence on the importance of family background in accessing higher education in Egypt.

6 Transitions to First Employment and Privilege: A Descriptive Analysis

We examine in this section the patterns of school-to-work transitions along the taxonomy we constructed combining own education and father's education and along gender lines. We consider obtaining a first job that is formal—either in the public or private sectors—to be a successful modern transition. Informal wage work lacks the security or benefits of formal work. Individuals who start as informal but regular wage workers in informal firms have limited chances of formalizing over time and can only do so by switching firms. In contrast, individuals who start as informal workers within formal firms have a much greater chance of later becoming formal (Roushdy and Selwaness 2015). Therefore, while we consider first employment in informal wage work to generally be an unsuccessful modern transition, individuals who start in informal wage work but work in formal firms may in the long term have a good chance of securing formal employment and making a delayed but successful employment transition.

Own educational attainment and social class background are strongly associated with the type of first work a new entrant obtains. Education shapes both youth work aspirations and options; for instance, most formal work, especially public sector work, requires at least a secondary degree. For many years in Egypt, achieving secondary or higher education in fact guaranteed public sector employment for young people (Amer 2009; Assaad 2009, 1997). New labor market entrants with less than secondary education consistently engage in traditional employment trajectories, and this has remained the case across the young and old cohorts (Figure 4). Among the youngest cohort, for men with less than secondary education 20% enter into family businesses or farms, 34% go into irregular wage work, and 26% find regular informal wage work in informal firms. The pattern of first employment was very similar among the oldest cohort of men with the same level of education: 26% in family businesses or farms, 34% in irregular wage work, and 27% in informal employment in informal firms. Women with less than

secondary education generally do not engage much in market work, and again the pattern is quite similar across the two cohorts. As shown in Figure 4, 86% of the youngest cohort and 87% of the oldest cohort of less educated women had “no work” (within three years after school exit) as their first status. Most of the remainder are in family businesses or farms. The less educated therefore continue to face essentially the same employment options across cohorts, primarily informal employment for men and lack of participation in market work for women.

Individuals with secondary education used to have a substantial opportunity to access formal employment in their first jobs, but that opportunity has virtually vanished in recent years. As shown in Figure 4, 15% of men with secondary education among the oldest cohort were able to access public sector jobs and another 7% got formal private sector jobs. These proportions dwindled across cohorts to 3% in public sector jobs and 5% in formal private sector jobs for the youngest cohort. Among women with secondary education, 18% obtained public sector jobs among the oldest cohort. These shares dwindled to 3% for public sector jobs among the youngest cohort. The employment pattern for the secondary educated is now looking increasingly similar to that of individuals with less than secondary education for both men and women.

New entrants with higher education among the oldest cohort appear to have had similar prospects of a modern transition, irrespective of their social class background. As shown in Figure 4, men with higher education but less educated fathers among the oldest cohort had a 43% chance of obtaining a public sector job and a 14% chance of obtaining a formal private sector job, with a total probability of formal employment of 57%. Those with more educated fathers had a similar total probability of formal employment of 50%, but had notably greater access to the formal private sector (27%). For the oldest cohort, the public sector appeared to serve as a class equalizer, somewhat counteracting the tendency of the formal private sector to discriminate by social class. The picture is quite different among the youngest cohort of men with higher

education. Those with less educated fathers have only a 31% chance of ending up in a formal job, as compared to 46% chance among those with more educated fathers. For this cohort, the chances of joining both the public and private formal sectors are lower for those with less educated fathers. This shows that while the formal private sector is still favoring graduates from a higher social class, the public sector is no longer playing the equalizing role it used to play for the oldest cohort. Other work has demonstrated that there are direct effects of social background in the labor market, even after accounting for potential differences in the type or quality of human capital (Assaad, Krafft, and Salehi-Isfahani 2018). This direct labor market impact of social background is likely to present a substantial and ongoing challenge to socio-economic mobility as the economy continues to shift toward greater reliance on the private sector for employment creation.[12]

Employment outcomes of women with higher education also differ substantially across cohort and by social class. As shown in Figure 4, 40-41% of higher educated women from the oldest cohort ended up in public sector jobs, irrespective of the education of their fathers. Few ended up in private formal employment. The picture looks very different for those from the youngest cohort. The proportion obtaining public sector jobs declined from 40% to 24% for those with more educated fathers and from 41% to 19% for those with less educated fathers. While the proportion ending up in the private formal sector increased from 3% to 9% for those with more educated fathers, it remained at 4% for those with less educated fathers. The private formal sector has thus partially made up the decline in public sector opportunities for those of higher social class, but has not played any such role for those from lower social classes. Informal

[12] See Barsoum (2004) for a discussion of how private sector employers in Egypt use class markers as indicators of worker quality.

employment has not changed much across cohorts for either group, so, in effect, the reduction in formal sector opportunities turned into reduced employment overall.

With the decline in public sector employment opportunities, there has been a substantial contraction in formal employment opportunities for youth, especially for youth with secondary education, and those with higher education but from less privileged backgrounds. Education has been devalued in the face of a rapidly increasing supply of educated individuals and limited expansion in demand for educated labor.[13] This is partly manifested in the substantial declines in returns to schooling in Egypt over time (Krafft 2018; Krafft, Branson, and Flak 2019; Said 2015; Salehi-Isfahani, Tunali, and Assaad 2009).

7 Multivariate Analysis of Differences in First Employment Outcomes Across the Educational/Social Class Taxonomy and Across Cohorts

In this section, we move to the estimation of multivariate models of the school-to-work transition process and its education and social class determinants. Because our outcome variable is categorical, we estimate a multinomial logit regression model for the probability of various employment statuses in the first job (if any). As in the descriptive analysis, the categories of the outcome variable are (i) work in a family business as a self-employed worker or unpaid worker, (ii) irregular wage work, (iii) regular but informal private wage employment in an informal firm, (iv) regular but informal private wage employment in a formal firm, (v) formal private wage employment, (vi) public sector wage employment, and (vii) "no work." For women, we combine together "work in family business" and "irregular wage work," which are both rare. We also lump together regular informal wage work in formal and in informal enterprises, because the cell

[13] Migration may provide a potential route for men to (temporarily) improve their employment opportunities and facilitate a more modern transition, but opportunities to migrate are limited and cannot fully offset unequal opportunities within Egypt (Wahba 2015).

counts in each of the two categories can be quite small for some education categories and school leaver cohorts.

The following variables are used as regressors: (i) the educational taxonomy, with the same distinction we made earlier between those with father less than secondary and father secondary and above among those with higher education and above, (ii) the three school leaver cohorts and (iii) the interaction of the educational taxonomy and school leaver cohorts. The interactions allow the effects of education and background to vary across cohorts. To facilitate the interpretation of the regressions, we predict the probability of transition into each labor market state for each combination of the educational taxonomy and cohort, for men and women separately. These predictions, which essentially recreate the descriptives but allow for testing of statistical significance, are shown in the set of plots presented in Figure 5 and Figure 6 (underlying values are shown in Table 1 (for men) and Table 2 (for women)). We conduct a series of statistical tests to investigate whether the probabilities of various labor market states differ across education taxonomies, within cohorts (marginal effects shown in Table 3 for men and Table 5 for women). We also conduct tests to examine whether the probabilities of transition into the various labor market states vary across cohorts, within education taxonomies (marginal effects shown in Table 4 for men and Table 6 for women). These results answer H1 (when comparing education levels) and H2 (when comparing by social class among the highly educated). These results also allow us to test H3, whether there have been changes over time in the role of social class.

We begin by discussing the results for men. As shown in Figure 5, the probability of entering first employment in a family business or farm generally declines with the educational taxonomy (all differences are significant in at least one cohort, per Table 3). For example, in the youngest cohort there is a 19.8% chance (0.198 predicted probability) of working in a family

business for those with less than a secondary education, compared to 18.7% for someone with secondary education in the youngest cohort, 13.5% for someone with higher education but a less educated father, and 9.0% for someone with higher education and a more educated father, from the youngest cohort. There are, however, few significant differences across cohorts (Table 4) in terms of this traditional transition, primarily lower chances in the youngest and middle cohort for the less than secondary group compared to the oldest.

The probability of entering into irregular wage employment declines even more sharply with education and is higher for the middle and youngest cohorts than for the oldest cohort. Educational taxonomy differences are almost always significant (Table 3). Statistical tests shown in Table 4 demonstrate the probability of entering into irregular employment remained the same for the less than secondary group, but increased significantly for the secondary educated in the middle and youngest compared to the oldest cohort, for example from 18.8% chance in the oldest to 27.3% chance in the youngest cohort. Those with higher education and father less than secondary also had significant (higher) probability of irregular wage work in the youngest cohort (11.8% versus 6.2% in the middle cohort). This probability also significantly increased for the higher education, father secondary and above, but from a much lower base (from 1.2% to 4.5% from oldest to youngest cohort). Given its gradient with education and social class, irregular wage work appears to be the employment state most associated with disadvantage in Egypt and it appears to have increased significantly and substantially, particularly for the secondary educated and higher education, father less than secondary.

The tests in Table 3 show the probability of informal employment in informal firms varies significantly by educational taxonomy. This type of initial labor market status has increased significantly across cohorts, for the middle and youngest versus oldest. The increase is largest for those who have higher education, but less educated fathers (from 11.0% among the

oldest cohort to 22.3% among the youngest cohort). Thus, like irregular employment, informal employment in informal firms is associated with disadvantage and has become more prevalent among younger cohorts of Egyptian men, regardless of educational attainment, but not regardless of social class.

Informal employment in formal firms is a fairly low probability occurrence compared to the other employment states considered. Tests across education levels in Table 3 only sometimes show significant differences. As indicated in Table 4, the increase in the probability of informal employment in formal firms has been largest (and significant) for the middle and youngest versus oldest among the secondary educated and youngest (8.5%) versus middle (3.4%) and oldest (3.6%) among the higher education, father less than secondary men. Patterns have been less clear and differences smaller for the less than secondary and higher education, father educated groups. Although informal employment in formal firms is more desirable than other forms of informal employment because it holds a greater promise of subsequent formalization, it has been increasing over time as private sector employers are increasingly using it as a trial form of employment for new entrants, and one that appears increasingly related to class.

Despite the substantial transformation of the Egyptian economy from state-led growth to market led growth, the probability of formal private employment appears not to have changed much across cohorts at a given level of educational attainment. It does increase with educational attainment, but most strongly with social class for higher educated workers. As shown in Table 3 formal private sector employment is significantly associated with rising education and class in every comparison. For example, in the youngest cohort a man with less than secondary has a 1.1% chance of formal private sector work, a 5.3% chance if secondary educated, a 12.8% chance if he has higher education but a less educated father, and a 25.9% chance if he has higher

education and a secondary educated father. Table 4 confirms that the probability of private formal employment has not appreciably increased across cohorts.

Finally, we examine the probability of public sector employment as the first employment of Egyptian men across cohorts and educational attainment. First, as shown in Figure 5 and as expected, the probability of such employment rises strongly with education. All differences by education, but not all by social class are significant (Table 3). For the secondary educated and the higher education, father less than secondary group there have been large and significant changes across cohorts (Table 4). In the oldest cohort, the higher education, father less than secondary men had significantly higher probability of public sector work (42.7%) than the higher education, father secondary and above men (23.4%). In the youngest cohort, this has shifted to an 18.2% chance for the higher educated with less educated fathers, compared to a 20.0% chance for those with more educated fathers. For the secondary educated, the chance of a public sector job has dropped from 15.0% to 3.1% across the oldest to youngest cohorts. The equalizing role public sector employment used to play for educated but less privileged members of the oldest cohort, providing them a route to modern transitions, has disappeared.

Now we turn to the results for women, shown graphically in Figure 6. Recall than in the case of women, we define a category including both employment in a family business/farm and irregular wage employment, since the latter is quite rare among women in Egypt. As shown in the top left hand panel of Figure 6, the probability of this category of employment is declining with education, but is not changing systematically across cohorts (confirmed by the significance tests in Table 5 and Table 6). Recall, we also merge informal wage employment in informal and formal firms into a single category. The probability of this kind of employment increases significantly with education, but differences by social class among those women with higher education are not significant (Table 5). There are no significant differences over time for the

higher education, father secondary and above group, but there are some, varying by cohort in all other groups (Table 6). For example, while 4.4% of women in the oldest cohort had an initial transition into informal wage work in the higher education, father less than secondary group, this rose to 11.2% in the middle cohort and 10.2% in the youngest cohort.

The probability of formal private wage work is almost zero for women with less than secondary education and increases steadily with education thereafter. As shown in Table 5, the difference by educational taxonomy is statistically significant for at least one cohort, particularly in the middle and youngest cohorts. The only group with a substantial increase over time was women with higher education and educated fathers, whose probability of formal private work went from 3.1% to 8.9% (significant, Table 6).

As in the case of men, access to public sector employment in the first job for women is strongly predicated on educational attainment and has been declining substantially over time. As shown in Figure 6, women with less than secondary education have virtually no access to such employment and access increases steadily with education from that point on (significant differences across the taxonomy except by class among the highly educated in the oldest cohort). Social class did not have an effect on access to public employment for the oldest cohort, but has increasing effects for younger cohorts, again confirming the diminishing role of the public sector as a class equalizer. For instance, while in the oldest cohort a woman with higher education but a less educated father had a 41.2% chance of public sector work and one with a more educated father a 40.3% chance, this has shifted in the youngest cohort to a 19.2% chance for the woman from the less privileged background, versus 24.3% for the more privileged woman (the difference in the youngest cohort is statistically significant). Table 6 confirms the statistically significant decline in the probability of public sector employment across cohorts for women at the secondary level, and between the youngest cohort and the other two cohorts at the higher

education level. The end result of these changes in access to employment is that women educated at the secondary level and those with higher education but with less privileged backgrounds are increasingly excluded from employment. This can be clearly seen in Figure 6 as the probability of not having worked yet increases significantly among the youngest cohort among these educated but less privileged women. Notably, there has been no significant change across cohorts in not working for women with less than secondary education. In the youngest cohort, the difference in not working between secondary (85.1%) and less than secondary (85.9%) has disappeared (in the oldest cohort 87.2% of the less than secondary had not yet worked, versus 74.4% of the secondary educated). Secondary educated women now have similar chances of undertaking traditional transitions as women with less than secondary education.

Overall, for both men and women, whether youth meet their aspirations for modern transitions to adulthood or fail to meet them increasingly depends on their socio-economic background and less on their own educational attainment. Even youth with the same level of education experience very different labor market outcomes depending on their class background, measured here by their father's education.

8 Conclusions

Youth in Egypt are increasingly attaining high levels of education and have rising expectations for achieving middle class status primarily by accessing formal employment. Some Egyptian youth continue to experience traditional transitions from school to work, but those who attain secondary education or above and who strive to achieve a modern transition to adulthood are increasingly struggling. We have illustrated, for the case of Egypt, using a life course perspective, how the inter-linkages between different transitions and the transitions themselves are mediated by gender and privilege. The low quality of human capital, the disinterest of youth

in the private sector, and the political orientations and economic policies that have precluded the growth of a robust private sector have left Egypt with a shrinking pool of desirable jobs at a time of rising expectations. In this increasingly pressurized environment family resources and connections play a decisive role in whether the aspirations of youth are achieved, evidenced here and elsewhere as a decline in social mobility (Binzel 2011). This trend contributed to the sense of social injustice articulated in the Arab Spring and the involvement of middle class youth in protest movements (Binzel and Carvalho 2013; Joffé 2011; Kandil 2012; Kuhn 2012; Malik and Awadallah 2013; Pace and Cavatorta 2012; Richards et al. 2014).

As youth in Egypt have achieved higher educational attainment, their ability to undertake successful transitions to adulthood that live up to their heightened aspirations continues to be strongly conditioned on gender and social class. Much of the focus of public discourse in recent years has been on youth unemployment, which neglects the experiences of youth who do not or cannot afford to search for modern employment (Krafft and Assaad 2014). More attention needs to be paid to the experiences of youth continuing to experience a more traditional transition pattern, or those obtaining higher levels of education but losing hope of being able to transform their education into higher quality employment. This is especially true of young women who are increasingly giving up on employment altogether.

Particularly important in promoting the wellbeing of youth is improving employment opportunities through more dynamic, growing economies that can be globally competitive. It is also necessary to reform the many institutions—especially in the education system and the labor market—that have limited opportunities for youth and confined success to those with more family resources and privilege. The structures that have limited access to higher education to privileged youth and emphasized credentials and social networks in the labor market at the expense of skills, ability and effort have contributed to this state of affairs. Ultimately, however,

it will not be sufficient to simply redistribute access to existing opportunities, but it is also imperative that the Egyptian economy creates more and better opportunities for youth by becoming more dynamic and globally competitive.

Declaration of Interest Statement

Conflicts of interest: none

Data Availability Statement

The ELMPS 2012 data are publicly available to researchers through the Economic Research Forum Open Access Microdata Initiative: www.erfdataportal.com

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Tables

Table 1. Predicted probability of transition into various labor market states, men, Egypt, 2012.

	Family business	Irregular wage	Reg. inf. In inf. Firm	Reg. inf. In form. Firm	Formal private	Public	Not yet working
LT Sec.							
Oldest	0.257	0.337	0.268	0.022	0.020	0.018	0.077
Middle	0.210	0.348	0.305	0.023	0.025	0.010	0.078
Youngest	0.198	0.337	0.262	0.030	0.011	0.005	0.157
Secondary							
Oldest	0.189	0.188	0.178	0.017	0.066	0.150	0.212
Middle	0.199	0.245	0.251	0.037	0.054	0.066	0.150
Youngest	0.187	0.273	0.230	0.033	0.053	0.031	0.193
Higher Ed. FT LT Sec							
Oldest	0.104	0.079	0.110	0.036	0.142	0.427	0.100
Middle	0.168	0.062	0.242	0.034	0.109	0.301	0.083
Youngest	0.135	0.118	0.223	0.085	0.128	0.182	0.130
Higher Ed. FT Sec+							
Oldest	0.137	0.012	0.098	0.095	0.268	0.234	0.156
Middle	0.092	0.064	0.171	0.035	0.231	0.265	0.141
Youngest	0.090	0.045	0.162	0.058	0.259	0.200	0.187
N (Obs.)	9965	9965	9965	9965	9965	9965	9965

Source: Authors' calculations using ELMPS 2012

Table 2. Predicted probability of transition into various labor market states, women, Egypt, 2012.

	Fam. bus./Irr. Wage	Informal	Formal private	Public	Not yet working
LT Sec.					
Oldest	0.098	0.023	0.003	0.005	0.872
Middle	0.095	0.031	0.009	0.001	0.865
Youngest	0.088	0.050	0.003	0.000	0.859
Secondary					
Oldest	0.014	0.043	0.020	0.179	0.744
Middle	0.032	0.077	0.018	0.065	0.808
Youngest	0.038	0.058	0.021	0.032	0.851
Higher Ed. FT LT Sec					
Oldest	0.022	0.044	0.038	0.412	0.484
Middle	0.011	0.112	0.050	0.257	0.569
Youngest	0.022	0.102	0.036	0.192	0.647
Higher Ed. FT Sec+					
Oldest	0.001	0.104	0.031	0.403	0.462
Middle	0.001	0.073	0.071	0.360	0.494
Youngest	0.012	0.082	0.089	0.243	0.573
N (Obs.)	9960	9960	9960	9960	9960

Source: Authors' calculations using ELMPS 2012

Table 3. Differences across the Educational Taxonomy in the Probability of Various Transitions to First Labor Market Status for Individuals from Different Cohorts, Men, Egypt 2012

	Family business	Irregular wage	Reg. inf. In inf. Firm	Reg. inf. In form. Firm	Formal private	Public	Not yet working
Oldest							
Less than sec. - sec	0.068***	0.149***	0.090***	0.005	-0.045***	-0.131***	-0.135***
Less than sec. - HE FT <Sec	0.153***	0.257***	0.158***	-0.014	-0.122***	-0.409***	-0.023
Less than sec. - HE FT Sec+	0.120***	0.324***	0.170***	-0.073**	-0.247***	-0.216***	-0.078*
Sec. - HE FT <Sec	0.085***	0.109***	0.068**	-0.019	-0.076***	-0.278***	0.112***
Sec. - HE FT Sec+	0.052	0.176***	0.080**	-0.078**	-0.202***	-0.084*	0.056
HE FT <Sec - HE FT Sec+	-0.033	0.067***	0.012	-0.059*	-0.126**	0.193***	-0.055
Middle							
Less than sec. - sec	0.011	0.103***	0.054**	-0.013*	-0.028***	-0.056***	-0.071***
Less than sec. - HE FT <Sec	0.042*	0.286***	0.063**	-0.010	-0.084***	-0.291***	-0.005
Less than sec. - HE FT Sec+	0.118***	0.284***	0.134***	-0.012	-0.206***	-0.255***	-0.063**
Sec. - HE FT <Sec	0.030	0.183***	0.009	0.003	-0.056***	-0.236***	0.066***
Sec. - HE FT Sec+	0.106***	0.181***	0.080**	0.002	-0.178***	-0.200***	0.009
HE FT <Sec - HE FT Sec+	0.076**	-0.002	0.071*	-0.002	-0.122***	0.036	-0.058*
Youngest							
Less than sec. - sec	0.011	0.064***	0.032*	-0.003	-0.043***	-0.025***	-0.036*
Less than sec. - HE FT <Sec	0.063***	0.219***	0.039	-0.055***	-0.117***	-0.177***	0.028
Less than sec. - HE FT Sec+	0.108***	0.292***	0.100***	-0.028*	-0.248***	-0.195***	-0.029
Sec. - HE FT <Sec	0.052**	0.155***	0.007	-0.052***	-0.074***	-0.151***	0.063***
Sec. - HE FT Sec+	0.097***	0.228***	0.068***	-0.025*	-0.205***	-0.170***	0.006
HE FT <Sec - HE FT Sec+	0.045*	0.073***	0.061**	0.027	-0.131***	-0.018	-0.057**

Notes: Marginal effects based on multinomial logit models shown in Table 1
*p<0.05, **p<0.01, ***p<0.001

Table 4. Differences across Cohorts in the Probability of Various Transitions to First Labor Market Status for Individuals at Different Points in the Educational Taxonomy, Men, Egypt 2012

	Family business	Irregular wage	Reg. inf. In inf. Firm	Reg. inf. In form. Firm	Formal private	Public	Not yet working
LT Sec.							
Youngest - Middle	-0.012	-0.011	-0.043*	0.006	-0.015**	-0.005	0.079***
Youngest - Oldest	-0.059***	0.000	-0.006	0.008	-0.010	-0.013**	0.080***
Middle - Oldest	-0.047**	0.011	0.037*	0.001	0.005	-0.008	0.001
Secondary							
Youngest - Middle	-0.012	0.028	-0.021	-0.004	0.000	-0.035***	0.043**
Youngest - Oldest	-0.002	0.085***	0.052**	0.015*	-0.012	-0.119***	-0.019
Middle - Oldest	0.010	0.057**	0.073***	0.020**	-0.012	-0.084***	-0.062***
Higher Ed. FT LT Sec							
Youngest - Middle	-0.033	0.056***	-0.019	0.051***	0.018	-0.119***	0.046*
Youngest - Oldest	0.031	0.039	0.113***	0.048**	-0.015	-0.245***	0.029
Middle - Oldest	0.064**	-0.017	0.132***	-0.003	-0.033	-0.126***	-0.017
Higher Ed. FT Sec+							
Youngest - Middle	-0.002	-0.019	-0.009	0.022	0.028	-0.065	0.046
Youngest - Oldest	-0.047	0.033*	0.064*	-0.038	-0.009	-0.034	0.031
Middle - Oldest	-0.045	0.052**	0.073*	-0.060*	-0.037	0.031	-0.015

Notes: Marginal effects based on multinomial logit models shown in Table 1
*p<0.05, **p<0.01, ***p<0.001

Table 5. Differences across the Educational Taxonomy in the Probability of Various Transitions to First Labor Market Status for Individuals from Different Cohorts, Women, Egypt 2012

	Fam. bus./Irr. Wage	Informal	Formal private	Public	Not yet working
Oldest					
Less than sec. - sec	0.084***	-0.020*	-0.017**	-0.174***	0.128***
Less than sec. - HE FT <Sec	0.076***	-0.021	-0.036*	-0.407***	0.388***
Less than sec. - HE FT Sec+	0.097***	-0.082*	-0.028	-0.398***	0.411***
Sec. - HE FT <Sec	-0.008	-0.001	-0.018	-0.232***	0.260***
Sec. - HE FT Sec+	0.013*	-0.062	-0.011	-0.223***	0.282***
HE FT <Sec - HE FT Sec+	0.021	-0.060	0.008	0.009	0.023
Middle					
Less than sec. - sec	0.063***	-0.046***	-0.009*	-0.065***	0.057***
Less than sec. - HE FT <Sec	0.084***	-0.080***	-0.042**	-0.257***	0.295***
Less than sec. - HE FT Sec+	0.094***	-0.042*	-0.063***	-0.360***	0.370***
Sec. - HE FT <Sec	0.021**	-0.035	-0.033*	-0.192***	0.239***
Sec. - HE FT Sec+	0.031***	0.004	-0.054**	-0.295***	0.314***
HE FT <Sec - HE FT Sec+	0.010	0.039	-0.021	-0.103*	0.075
Youngest					
Less than sec. - sec	0.049***	-0.008	-0.018***	-0.031***	0.008
Less than sec. - HE FT <Sec	0.065***	-0.052***	-0.033***	-0.192***	0.212***
Less than sec. - HE FT Sec+	0.075***	-0.032**	-0.085***	-0.243***	0.286***
Sec. - HE FT <Sec	0.016*	-0.044***	-0.015	-0.161***	0.204***
Sec. - HE FT Sec+	0.026***	-0.024*	-0.068***	-0.212***	0.278***
HE FT <Sec - HE FT Sec+	0.010	0.019	-0.052***	-0.051*	0.074**

Notes: Marginal effects based on multinomial logit models shown in Table 2.
*p<0.05, **p<0.01, ***p<0.001

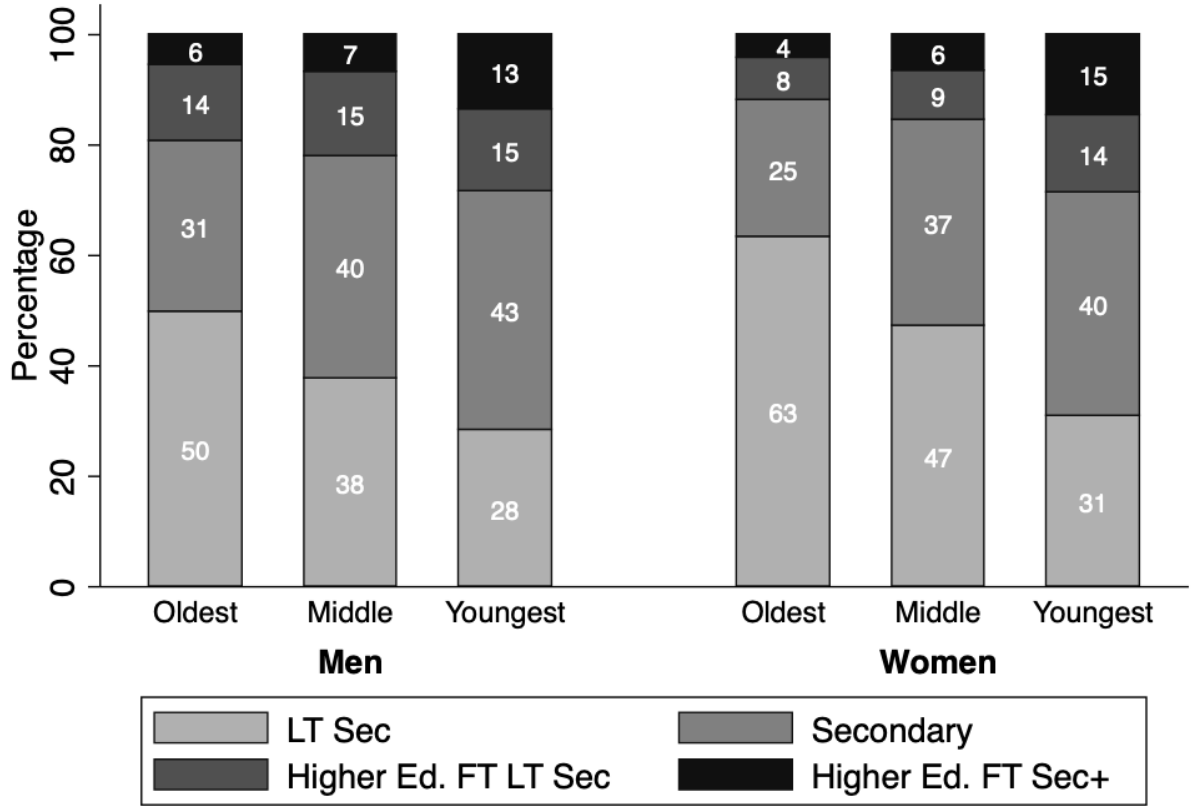
Table 6. Differences across Cohorts in the Probability of Various Transitions to First Labor Market Status for Individuals at Different Points in the Educational Taxonomy, Women, Egypt 2012

	Fam. bus./Irr. Wage	Informal	Formal private	Public	Not yet working
LT Sec.					
Youngest - Middle	-0.007	0.019*	-0.005	0.000	-0.006
Youngest - Oldest	-0.010	0.027***	0.000	-0.005*	-0.013
Middle - Oldest	-0.003	0.009	0.006*	-0.004*	-0.007
Secondary					
Youngest - Middle	0.007	-0.019*	0.003	-0.034***	0.043**
Youngest - Oldest	0.024***	0.016	0.001	-0.148***	0.107***
Middle - Oldest	0.018*	0.035**	-0.002	-0.114***	0.064**
Higher Ed. FT LT Sec					
Youngest - Middle	0.011	-0.010	-0.014	-0.065*	0.078*
Youngest - Oldest	0.000	0.058**	-0.002	-0.219***	0.163***
Middle - Oldest	-0.011	0.068**	0.012	-0.154***	0.085
Higher Ed. FT Sec+					
Youngest - Middle	0.011*	0.009	0.017	-0.117**	0.079*
Youngest - Oldest	0.011*	-0.022	0.058**	-0.159**	0.112*
Middle - Oldest	0.000	-0.031	0.041	-0.042	0.033

Notes: Marginal effects based on multinomial logit models shown in Table 2.
*p<0.05, **p<0.01, ***p<0.001

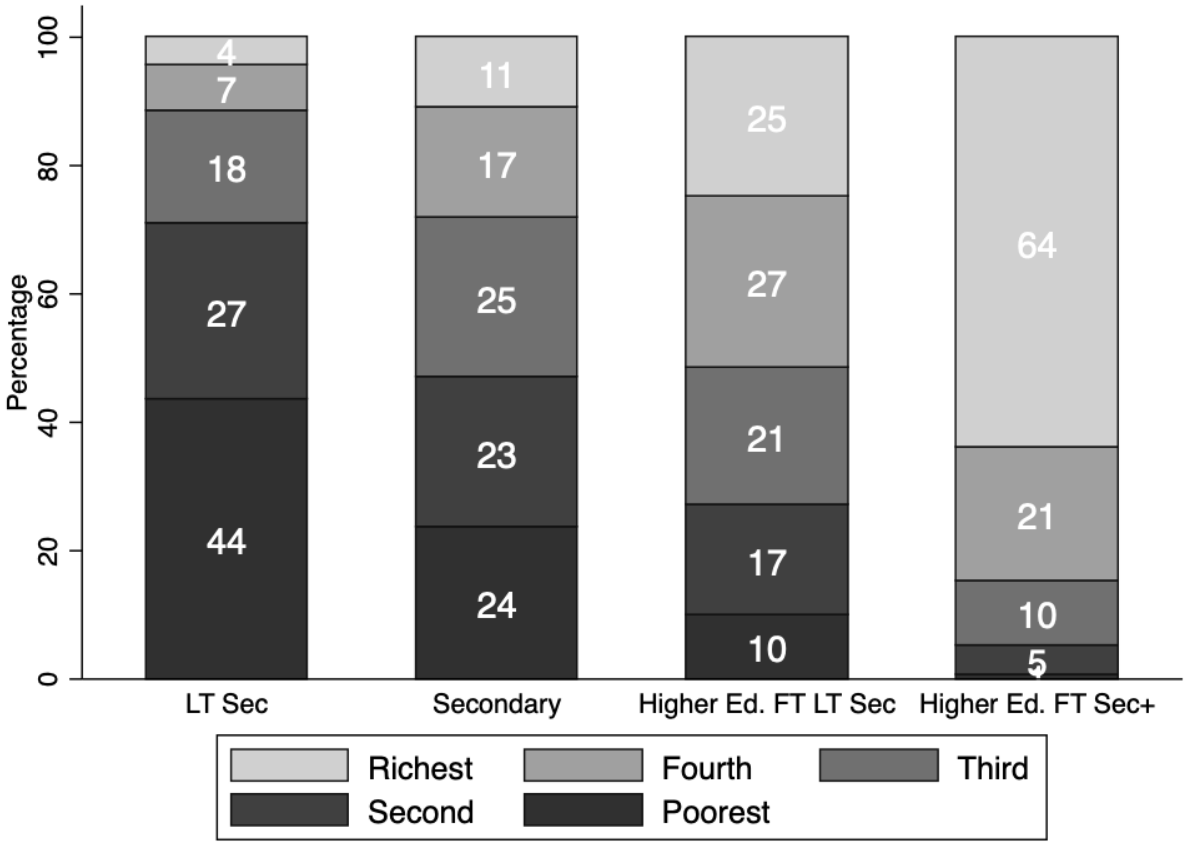
Figures

Figure 1.Taxonomy across School-Leaving Cohorts and by Sex (Percentage), Egypt, 2012



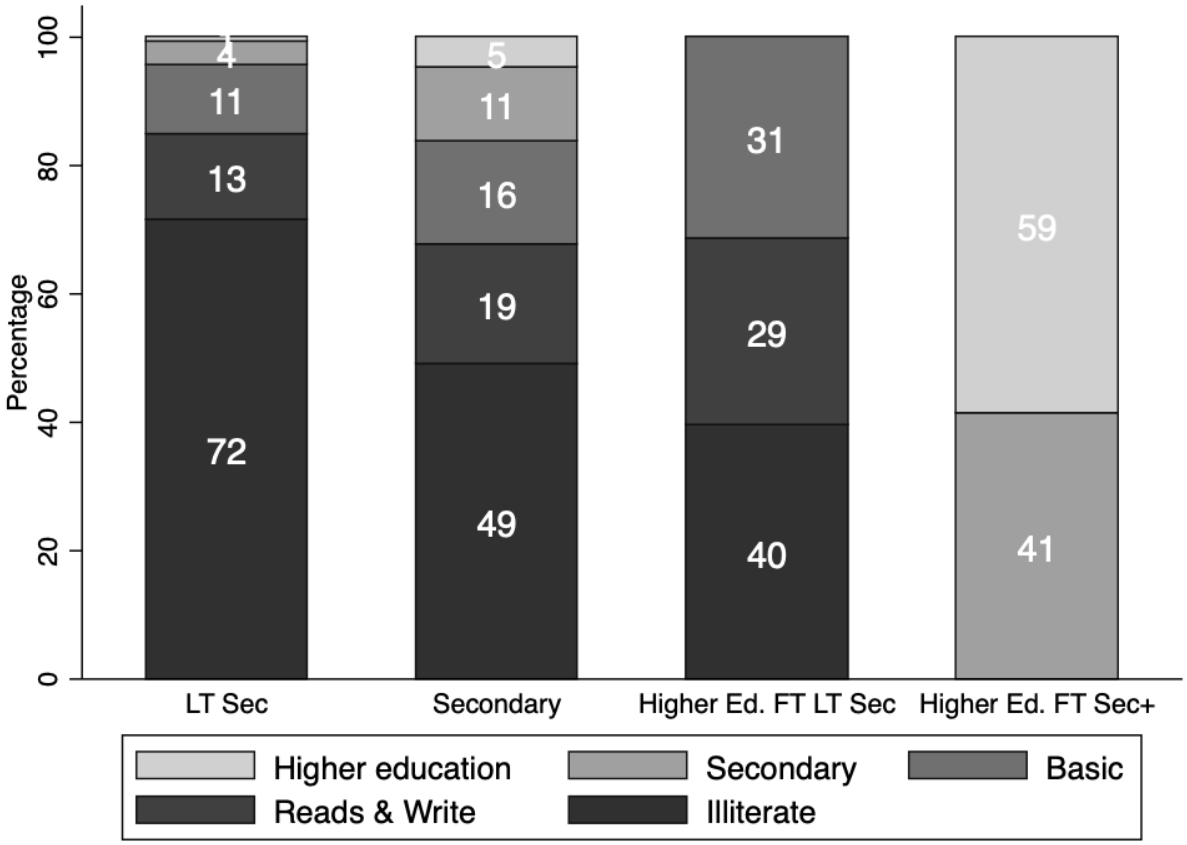
Source: Authors' calculations using ELMPS 2012

Figure 2. Parents' Wealth in 2006 by Youth Taxonomy (Percentage), Youngest School-Leaving Cohort, Egypt, 2012



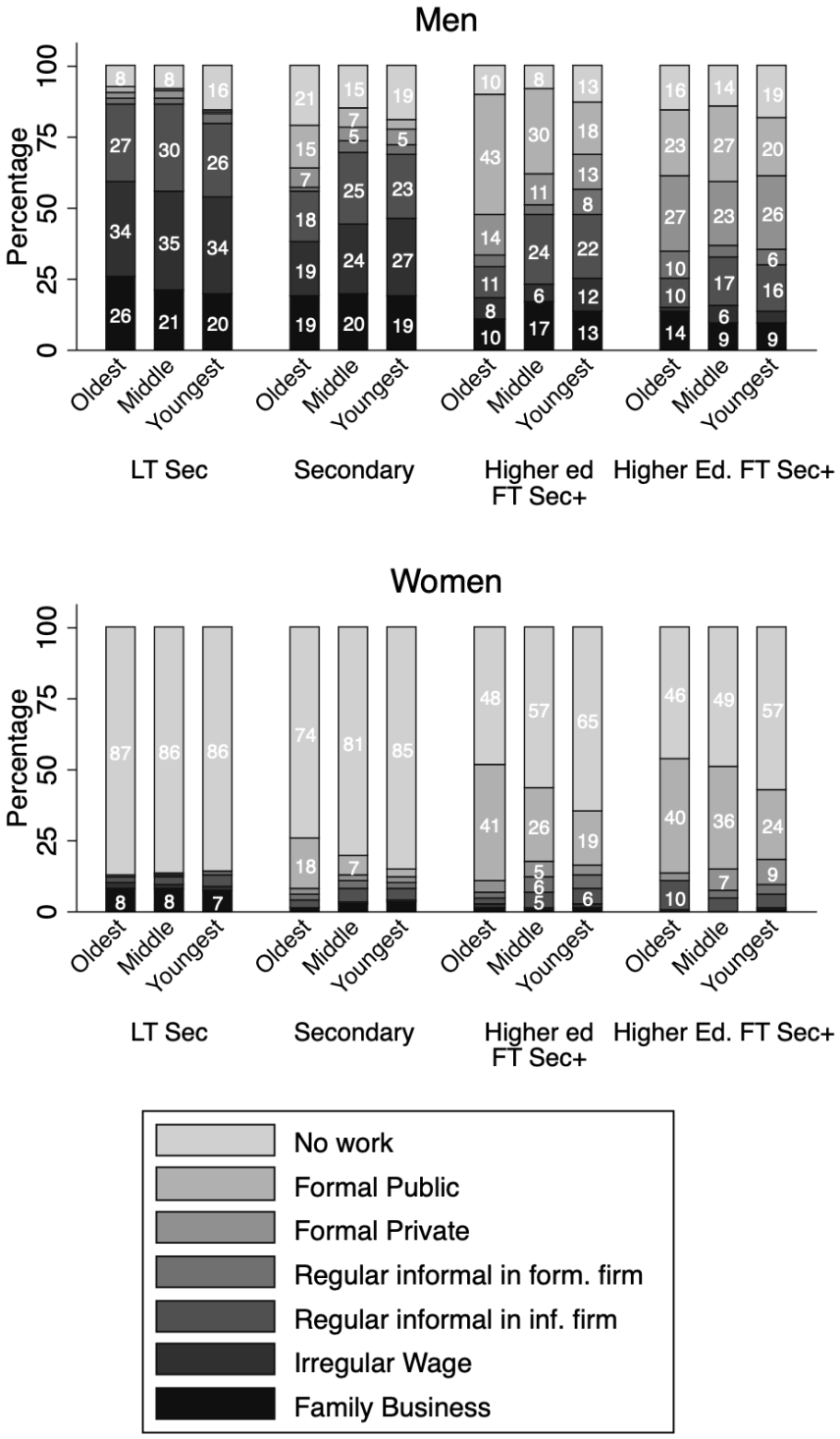
Source: Authors' calculations using ELMPS 2006, 2012
Notes: Restricted to youth who were living with their parents and whose parents were household heads in 2006.

Figure 3. Father's Education by Youth Taxonomy (Percentage), Youngest School-Leaving Cohort, Egypt, 2012



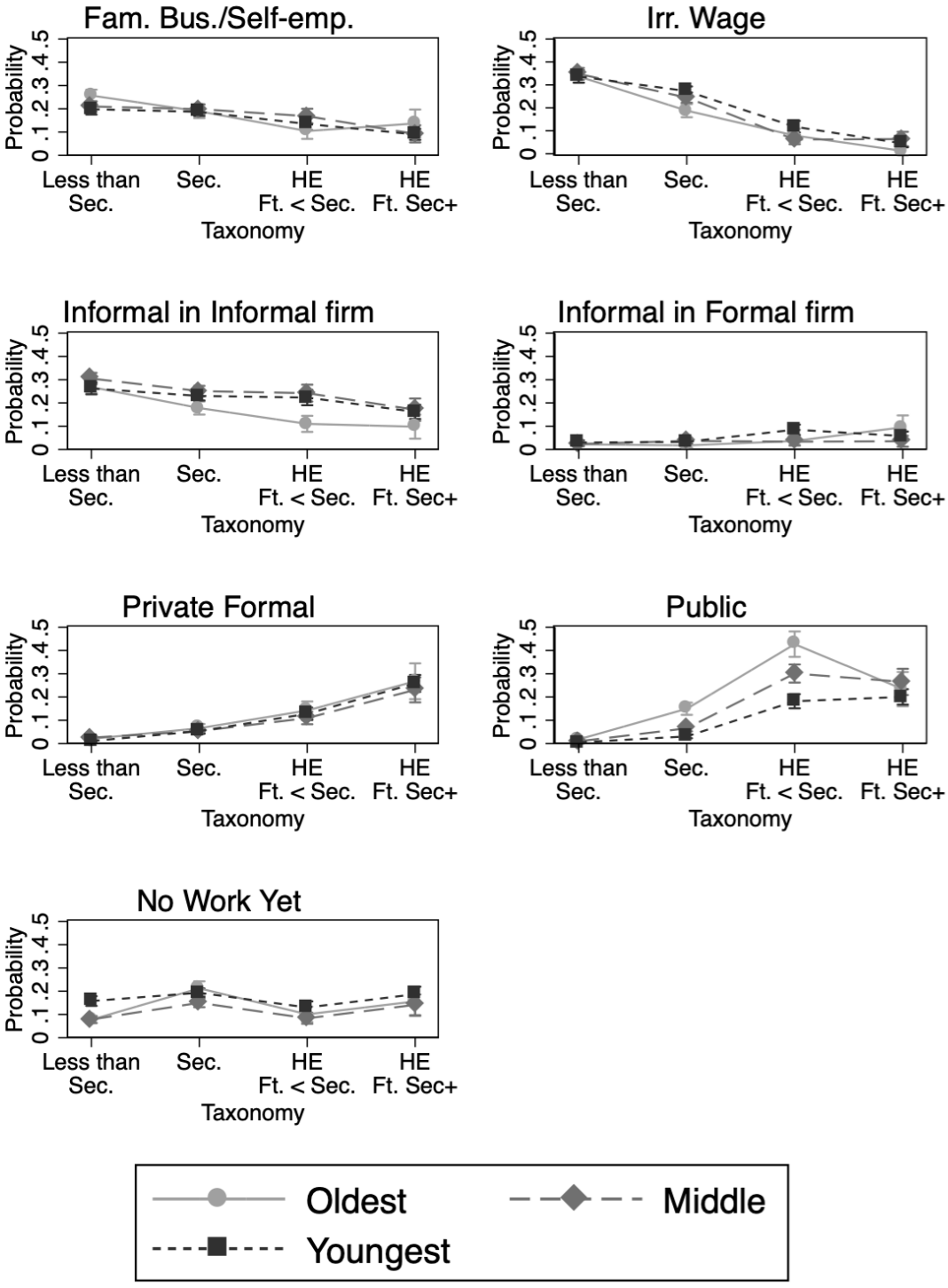
Source: Authors' calculations using ELMPS 2012

Figure 4. First Labor Market Status (Percentage), by Taxonomy, Cohort, and Sex, Egypt, 2012



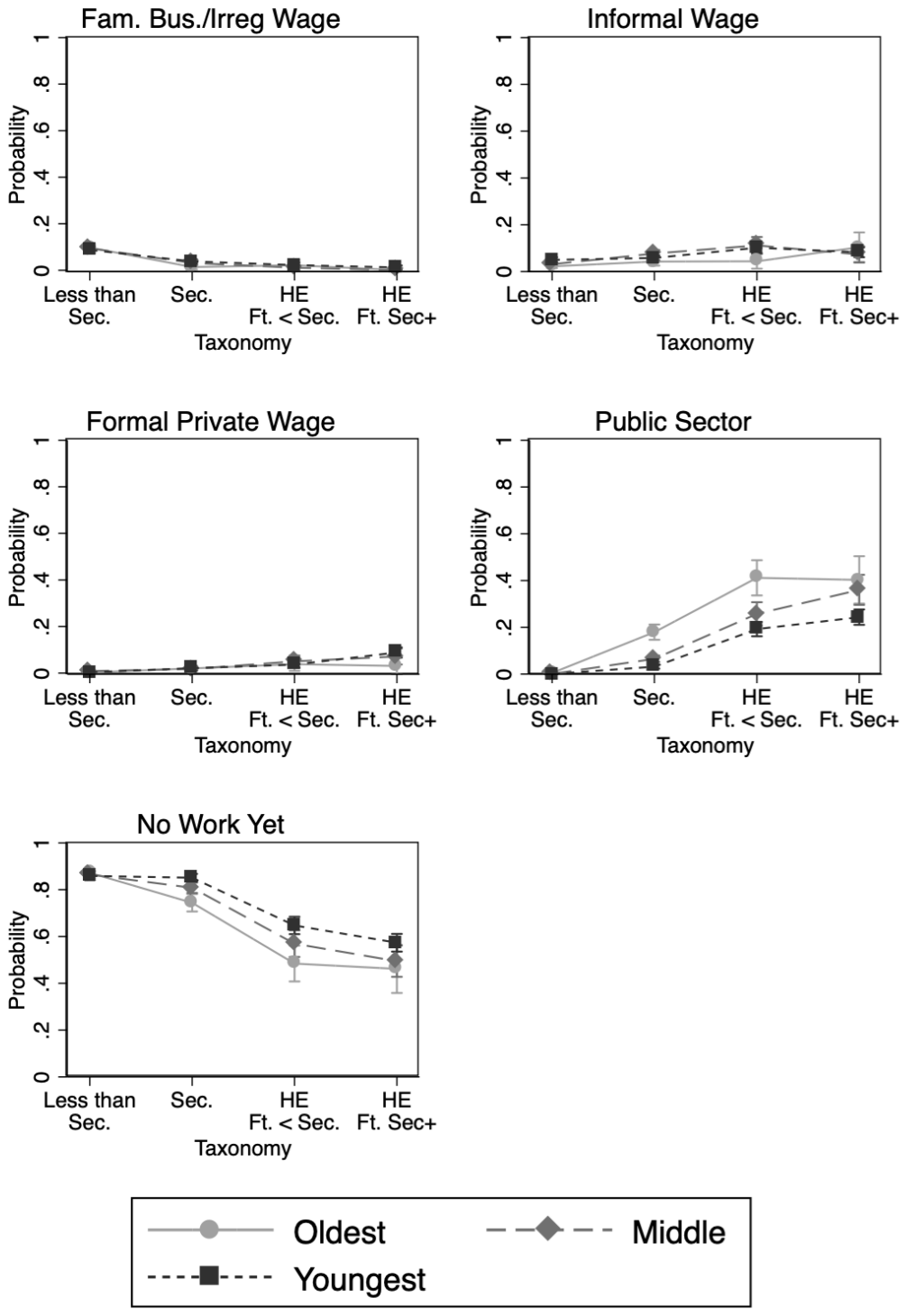
Source: Authors' calculations using ELMPS 2012

Figure 5. Predicted Probabilities of Transition into Labor Market Statuses, Men, Egypt 2012



Source: Authors' calculations using models in Table 1. Bars indicate 95% confidence intervals.

Figure 6. Predicted Probabilities of Transition into Labor Market Statuses, Women, Egypt 2012



Source: Authors' calculations using models in Table 2. Bars indicate 95% confidence intervals.