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Abstract

This paper investigates the evolution of labor supply in Jordan over the period 2010 to 2025. Analyses explore demographic drivers of labor supply, including age structure, population growth and its drivers of marriage and fertility, as well as immigration and refugees. Population growth has slowed in Jordan, in part due to lower fertility. Jordan's population has become increasingly educated, with women's average years of schooling having exceeded men's for some time. Labor force participation is explored overall and in terms of its key components of employment-to-population ratios and unemployment rates. Patterns of labor supply are disaggregated by age, education, nationality, and sex, with a particular focus on how marriage and household composition shape women's participation. Overall, employment and labor force participation rates have declined to very low levels, while unemployment has risen. Labor market outcomes have improved slightly for Syrian refugees in 2025 compared to 2016. Women's employment rates and participation are very low, with single women more likely to be employed than married ones. Youth unemployment rates are particularly high and have increased over time. Overall, Jordan's labor supply is being increasingly underutilized.

Keywords: Labor force, employment, unemployment, gender, refugees, Jordan
JEL Classifications: J00, J21, J64, J11, J16

ملخص

تبحث هذه الورقة في تطور المعروض من العمالة في الأردن خلال الفترة من 2010 إلى 2025. وتستكشف التحليلات الدوافع الديموغرافية لعرض العمالة، بما في ذلك التركيبة العمرية والنمو السكاني ودوافعه للزواج والخصوبة، فضلا عن الهجرة واللاجئين. تباطأ النمو السكاني في الأردن، ويرجع ذلك جزئيا إلى انخفاض الخصوبة. لقد أصبح سكان الأردن متعلمين بشكل متزايد، حيث تجاوز متوسط سنوات الدراسة للنساء متوسط سنوات الدراسة للرجال لبعض الوقت. ويتم استكشاف المشاركة في القوى العاملة بشكل عام ومن حيث مكوناتها الرئيسية المتمثلة في نسب العمالة إلى السكان ومعدلات البطالة. ويتم تصنيف أنماط عرض العمالة حسب العمر والتعليم والجنسية والنوع، مع التركيز بشكل خاص على كيفية تأثير الزواج وتكوين الأسرة على مشاركة المرأة. وبشكل عام، انخفضت معدلات التوظيف والمشاركة في القوى العاملة إلى مستويات منخفضة للغاية، في حين ارتفعت معدلات البطالة. تحسنت نتائج سوق العمل بشكل طفيف بالنسبة للاجئين السوريين في عام 2025 مقارنة بعام 2016. ومعدلات توظيف المرأة ومشاركتها منخفضة للغاية، حيث تزيد احتمالات توظيف النساء غير المتزوجات مقارنة بالنساء المتزوجات. وتعتبر معدلات البطالة بين الشباب مرتفعة بشكل خاص، وقد زادت بمرور الوقت. وبشكل عام، فإن المعروض من العمالة في الأردن لا يتم استغلاله بالقدر الكافي على نحو متزايد.

1. Introduction

Jordan has persistently struggled with low labor force participation and high unemployment, particularly for youth and women (Leape et al. 2025; Assaad et al. 2019; Assaad and Krafft 2023; Assaad et al. 2023). To place Jordan in a comparative perspective, Jordan has the 11th lowest labor force participation rate in the world (ILOSTAT 2025b). The country has the second lowest rate of female labor force participation in the world, higher than only that of Afghanistan (ILOSTAT 2025b). Jordan has the tenth highest rate of unemployment in the world (ILOSTAT 2026). The country has the sixth highest unemployment rate among women (ILOSTAT 2026) and the seventh highest youth unemployment rate in the world (ILOSTAT 2025a).

Long a place of refuge in a turbulent region, Jordan has, since 2011, been hosting a large number of Syrian refugees, on top of a long-term trend of hosting economic migrants from countries such as Egypt (Assaad et al. 2019; Krafft, Razzaz, et al. 2019; Wahba 2014; Malaeb and Wahba 2019). Although refugees have not had a negative impact on the labor market outcomes of Jordanians (Fallah et al. 2019), regional conflict has had a negative effect on Jordan's economy and labor market (Gatti et al. 2025).

Yet Jordan, like much of the Middle East and North Africa (MENA) region, has limited data available (Ekhator-Mobayode and Hoogeveen 2022) to understand how its labor market is evolving in this challenging environment. This paper uses the new wave of the Jordan Labor Market Panel Survey (JLMPS) implemented in 2025 (Krafft, Assaad, and Ragab 2026; OAMDI 2026), along with previous waves in 2016 and 2010 (Krafft and Assaad 2021; OAMDI 2018a, 2018b), to explore the evolution of labor supply and labor market outcomes in Jordan over the 2010-2025 period. The JLMPS is a nationally representative household survey, which collects data from all individuals aged six and older on their labor market outcomes (among other topics). As well as following a panel of households and individuals across waves, the JLMPS included a refresher sample in 2016 and 2025 that over-sampled non-Jordanians; this over-sampling is accounted for in the sample weights, which are used throughout (Krafft and Assaad 2021; Krafft, Assaad, and Ragab 2026).

The analyses demonstrate that demographic pressures on labor supply are slowing, although these effects will only be felt long term. Population growth for Jordanians has slowed, in part due to lower fertility. There is, however, some possibility that lower fertility is the result of postponement, as rising ages of marriage (potentially due to challenging economic conditions) may be a key driver. More unambiguously positive is that there continue to be appreciable declines in girl child marriage.

Recent cohorts have attained higher levels of education, for instance more than 30 percent of recent cohorts have completed university education. Women's average years of schooling has exceeded

men's for some time. There has also been ongoing progress in increasing school enrollment rates for non-Jordanians, although their rates are still below those of Jordanians. Refugee flows into Jordan have also slowed substantially, if not reversed with the end of the Syrian conflict (UNHCR 2025). Thus, on the demographic front, there are no new pressures – but creating enough decent jobs for the increasingly educated population remains a challenge.

Labor market outcomes have worsened as of 2025, deteriorating from what were already low rates of labor force participation and employment and high rates of unemployment in previous waves. The labor force participation rate for the population aged 15-64 has dropped from 44 percent in 2010 to 38 percent in 2025. The employment rate has fallen from 39 percent to 30 percent over the same period. Unemployment has correspondingly risen from a rate of 11 percent to 21 percent. Youth and women are particularly struggling in Jordan's labor market, but men and older adults have also experienced deteriorating labor market outcomes. While the educated have higher labor force participation, they have also experienced falling labor force participation and employment rates. While single women are more likely to be employed than married women, both groups have experienced declining employment rates. The rise in unemployment has been a particular challenge for youth; the unemployment rate for Jordanian women aged 20-24 is 69 percent in 2025 and it is 36 percent for Jordanian men at this age. One area of slight improvement is that, while Syrians continue to have lower employment rates than Jordanians and especially Egyptians (who are largely economic migrants), their employment rates have improved slightly from 2016 to 2025. However, overall, Jordan's labor market outcomes show deterioration from what were already challenging conditions.

2. Demographic pressures on labor supply

Demographics are a key driver of labor supply, shaping how many individuals are entering the labor market and the skills they bring. This section examines the structure of Jordan's population and how it has evolved over the 2010-2025 period. Then, we look at trends in fertility and marriage. Lastly, we explore trends in educational attainment and school enrollment.

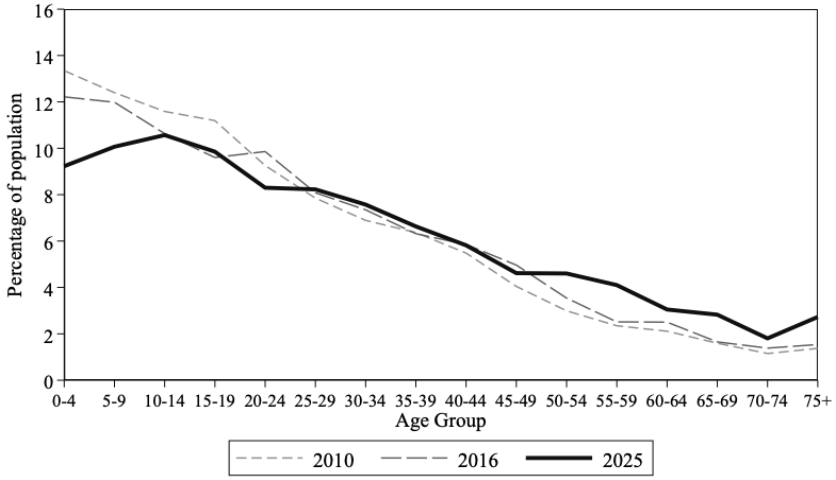
2.1. Population trends

Jordan has a youthful population structure. Figure 1 depicts the evolving age structure of Jordan's population from 2010-2025. There has been some decline in the youth share in the population, with 58 percent of the population aged 0-24 in 2010, falling slightly to 54 percent in 2016 and 48 percent in 2025. The most notable shift in the age structure in 2025 is a fall in the proportion of the youngest age group, aged 0-4, relative to previous years (from 13 percent in 2010 to 9 percent in 2025). In 2010 and 2016, the 0-4 age group was the largest in the population, whereas in 2025, the largest was the 10-14 age group (11 percent). There are thus signs that Jordan is once again

progressing in its demographic transition after a period of fertility stall (Krafft et al. 2021), a point we explore further below in terms of fertility trends.

There are also relatively fewer 5-9-year-olds and 20-24-year-olds in 2025 compared to previous waves (Figure 1); the latter group is particularly pertinent in terms of near-term labor market pressures. The trends in terms of fewer younger children are currently affecting health and education systems but will take some time to impact the labor market. Moreover, in 2025, we see a rise in the population of adults aged 50 and older, relative to previous waves, which will create new pressures on pension and social protection systems, particularly given Jordanians' tendency towards early retirement (Alhawarin and Selwaness 2019).

Figure 1. Population structure of Jordan (percentage in five-year age group), 2010-2025



Source: Authors' calculations based on JLMPS 2010-2025

Table 1 shows population growth rates, by age group, over the periods 2010-2016 and 2016-2025. The table focuses on the Jordanian population, since the last population census was in 2015 and the more dynamic non-Jordanian population is potentially in flux (Krafft, Assaad, and Ragab 2026; UNHCR 2025). Overall, the Jordanian population growth rate has declined from 2.9 percent per annum (p.p.a.) between 2010 and 2016 to 2.5 p.p.a. between 2016 and 2025. A drop in growth rates occurred across younger age groups, but to varying degrees. The rate of population growth for young children (aged 0-4 years) was just 0.1 p.p.a. over the 2016-2025 period, compared to 0.4 p.p.a. in 2010-2016. The overall child population (aged 0-14) grew 0.9 p.p.a. over 2016-2025 after growing 1.1 p.p.a. in 2010-2016. The growth rate of youth, aged 15-24, fell from 3.2 p.p.a. over 2010-2016 to just 1.0 p.p.a. over 2016-2025. The young adult population, aged 25-29, continued to grow fairly rapidly with only a slight decline from 3.4 p.p.a. to 3.2 p.p.a. comparing the two periods. The growth rate for prime age adults (aged 30-64) remained the same at 4.0 p.p.a. The elderly population, aged 65+, was in fact the only group growing at an increasing and rapid clip, going from 5.9 p.p.a. in 2010-2016 to 6.9 p.p.a. in 2016-2025.

Table 1. Population growth rates (annual percentages) for Jordanians, by age group: young children (aged 0-4), children (aged 0-14), youth (aged 15-24), young adults (aged 25-29), prime-age (aged 30-64), elderly (aged 65+), and total (all ages), 2010-2016 and 2016-2025

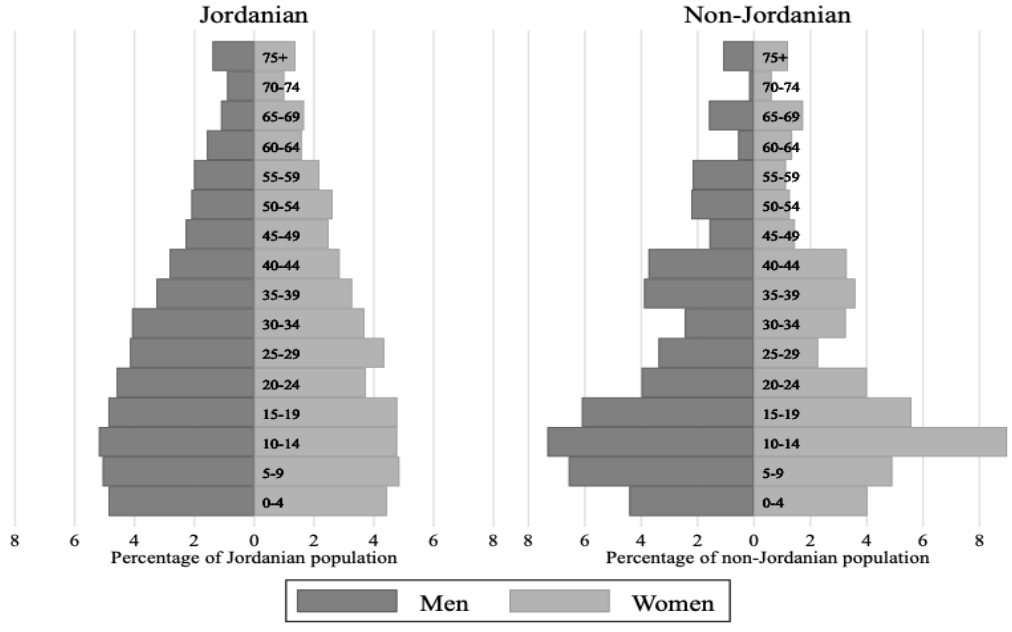
	Young children (0-4)	Children (0-14)	Youth (15-24)	Young adults (25-29)	Prime age (30-64)	Elderly (65+)	Total
2010-2016	0.4	1.1	3.2	3.4	4.0	5.9	2.9
2016-2025	0.1	0.9	1.0	3.2	4.0	6.9	2.5

Source: Authors' calculations based on JLMPS 2010-2025

Jordan has long been a country of both refugees and economic migrants (Krafft, Sieverding, et al. 2019; Wahba 2014; Malaeb and Wahba 2019; Krafft and Tamim 2026). Figure 2 explores the population age structure by nationality and sex, for 2025. Among Jordanians, the population structure is similar to that of the country overall; a higher proportion of the population lies within younger age groups, but with a peak at ages 10-14. The Jordanian population is also generally gender balanced by age.

As for the non-Jordanian population, while there is also a peak at ages 10-14, it is larger as a share of the population than for Jordanians, and there are relatively fewer younger children, particularly aged 0-4. There are also relatively fewer youth and young adults (ages 20-34), a pattern which is largely driven by Egyptian migrants being concentrated in ages 35-59. The Syrian population is concentrated among youth and children (Krafft and Tamim 2026).

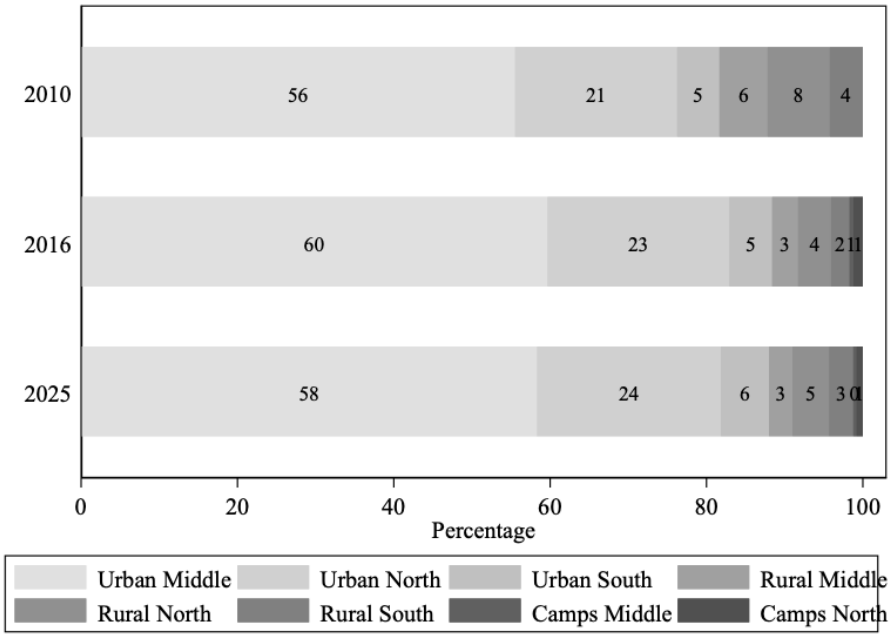
Figure 2. Population structure of Jordan (percentage in five-year age group), by sex and nationality, 2025



Source: Authors' calculations based on JLMPS 2025

Jordan's population remains highly urbanized and concentrated around the capital, Amman (in the Middle region). Figure 3 shows the population by region and location for 2010-2025. Although urban areas of the Middle region held 56 percent of the population in 2010, this rose to 60 percent in 2016, but fell slightly (to 58 percent) in 2025. In 2025, 24 percent of the population was in the urban portion of the North region, 6 percent in the urban portion of the South region, 3-5 percent in rural areas of each of the three regions, and 1 percent or less in refugee camps in the Middle and North regions.[4]

Figure 3. Population (percentage), by region and location, 2010-2025



Source: Authors' calculations based on JLMPS 2010-2025

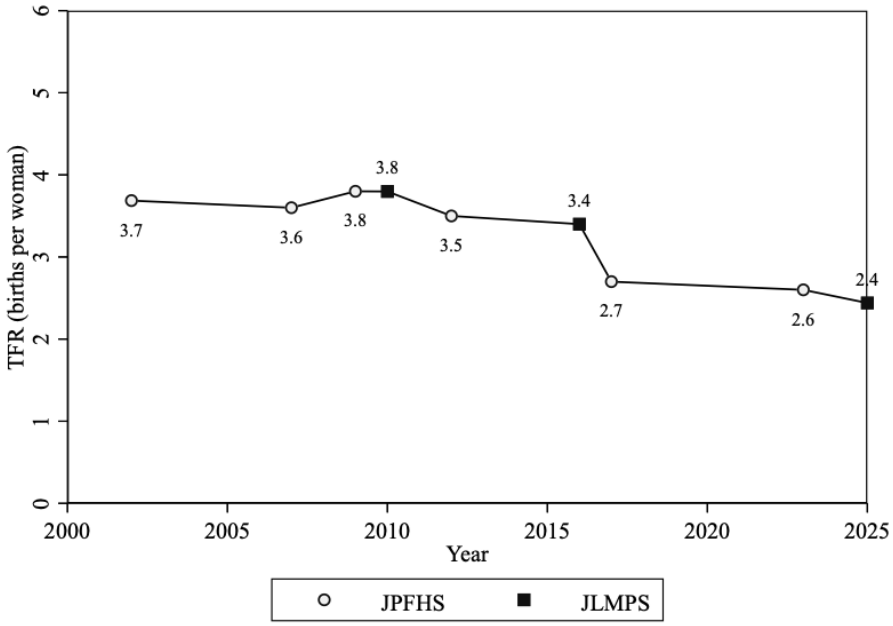
2.2. Trends in fertility and marriage

In this section, we examine the evolution of the total fertility rate (TFR), and the age-specific fertility rate (ASFR), in Jordan through 2025. The TFR is the total number of children that a woman would have, if she lives to the end of her childbearing years, based on the prevailing ASFRs. Figure 4 shows the TFR in Jordan from 2000 to 2025 based on the JLMPS and data from the Jordanian Population and Family Health Survey (JPFHS) (Department of Statistics (DoS) [Jordan] and ICF 2024).[5] In 2025, Jordan's TFR has reached the lowest rate to date, of 2.4 births per woman. This is a considerable decline from the 3.6-3.8 births per woman found over the 2002-2010 period. Jordan had remained in a fertility stall through 2016 (TFR of 3.4) (Krafft et al. 2021). However, since the 2017 JPFHS fertility has been much lower; 2.7 births per woman in 2017, 2.6

[4] The majority of Syrian refugees in Jordan live in host communities, not refugee camps (Krafft and Tamim 2026).
[5] The TFR when restricting to Jordanians only is either the same or within 0.1 births per woman of the total.

births per woman in 2023, and 2.4 births per woman in 2025. While Jordan continues to have above-replacement fertility, it has experienced a substantial shift in fertility from 2016 to 2025. In the near term, this could potentially affect women's participation in the labor market, and, in the long term, it will affect demographic pressures that shape labor market entry trends.

Figure 4. Total fertility rate (TFR, births per woman), 2002-2025

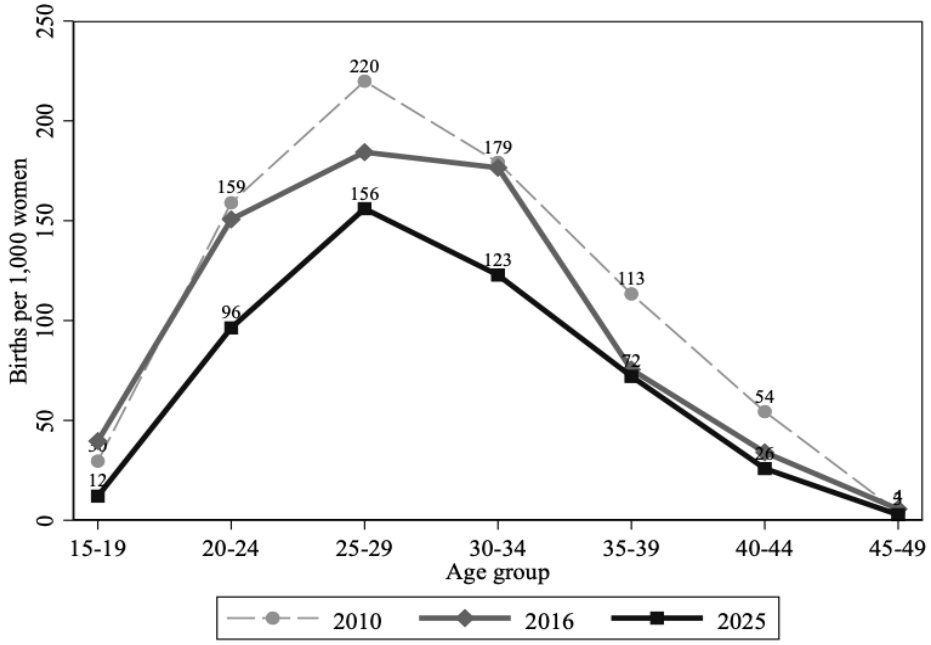


Source: Authors' calculations based on JLMPS 2010-2025 and JPFHS (Department of Statistics (DoS) [Jordan] and ICF 2024)

Notes: Based on the three years preceding each survey.

The ASFR is presented as the annual number of births per thousand women in each age group. Figure 5 shows Jordan's ASFRs for each age group as reported by the various waves of the JLMPS. The figure shows a notable decline in the ASFRs across all age groups in 2025 relative to previous years. The decline was particularly large for the 25-29 age group – the group with the highest fertility – falling from 220 to 156 births per thousand women over 2010 to 2025. Furthermore, a sharp decline is also noticeable in 2025 for the age groups 20-24 and 30-34, both of which had stagnant fertility rates between 2010 and 2016. As for older age groups, women aged 35 and older, the ASFR did not decline much since 2016.

Figure 5. Age specific fertility rates (ASFRs, annual births per 1,000 women), women aged 15–49, 2010-2025



Source: Authors' calculations based on JLMPS 2010, 2016, 2025

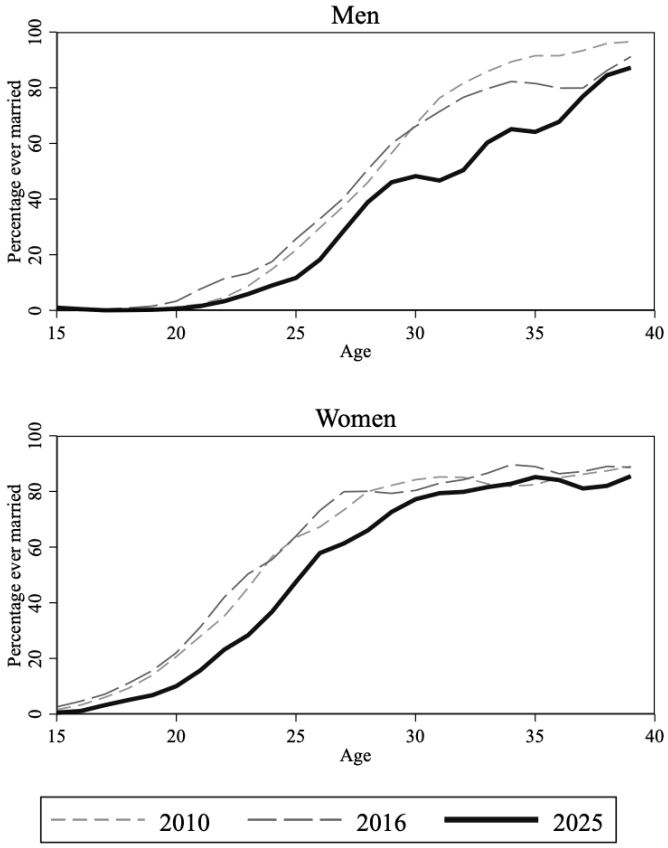
Notes: Based on the three years preceding each wave of the survey. Labels for 2010 and 2025.

Marriage has a key, and highly gendered, relationship with labor supply outcomes, as employment is a pre-requisite to marriage for men, while women tend to leave employment at or in anticipation of marriage in Jordan (Selwaness and Krafft 2021; Assaad et al. 2022; Krafft and Assaad 2020). Figure 6 shows the percentage of those aged 15-39 who were ever married by each year of age, sex and wave. The percentage ever married has fallen for most ages for both young men and young women in 2025 compared to 2016, after relatively little change between 2010 and 2016. Although ever marriage by age 39 is high (above 80 percent) for both men and women in all waves, a smaller percentage of men were married by age 25 and especially in their early 30s in 2025. For women, the percentage ever married declined in 2025 over ages 20-30 but remained roughly similar to previous years for those 30 or older. Median ages at marriage have shifted higher accordingly.[6] For those 15-39 in each wave, the median age at marriage shifted over the 2010-2025 period from 28 to 30 for men and from 22 to 24 for women. Given the appreciable costs of marriage in Jordan, which are primarily borne by the groom and his family (Assaad et al. 2017), later ages of marriage may be signals of economic struggles. More positively, there has been an appreciable decline in girl child marriage, from 14 percent of women aged 15-39 marrying before age 18 in 2010 to 12 percent in 2016, and 7 percent in 2025.[7]

[6] Calculated using the Kaplan-Meier estimator to account for censoring (those never or not yet married).

[7] Syrian refugees both historically and in Jordan had higher rates of child marriage (Sieverding et al. 2019, 2020), but child marriage has declined while in Jordan (Krafft and Tamim 2026).

Figure 6. Percentage ever married by single year of age, sex, and wave, ages 15-39, 2010-2025



Source: Authors' calculations based on JLMPS 2010-2025

Notes: We use a lowess running-mean smoother with bandwidth 0.25

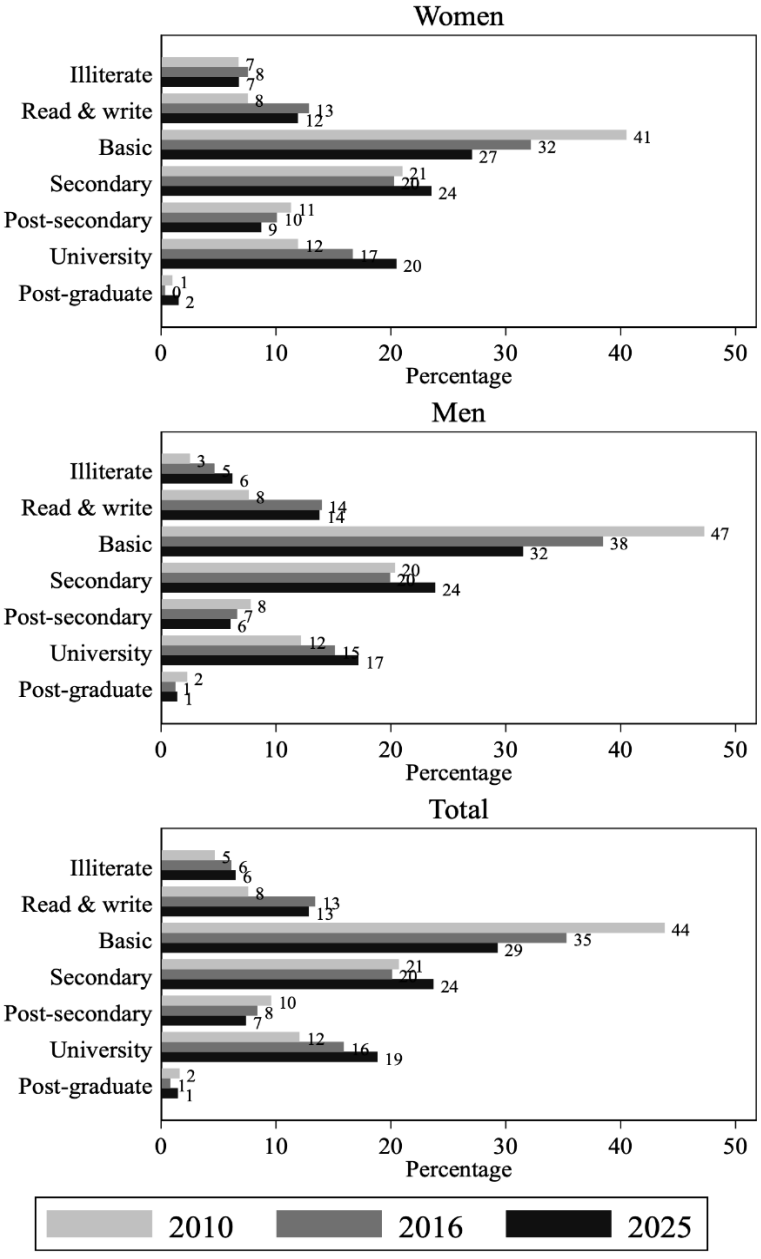
2.3. Education trends

Jordan's education system comprises 10 years of basic education, two years of secondary education, and higher education options including two-year post-secondary degrees, four and five-year university degrees, and postgraduate studies. Figure 7 shows the educational attainment of Jordanians (specifically), aged 25-64 over time and by sex. Illiteracy has, if anything, slightly increased from 5 percent in 2010 to 6 percent in 2025. An appreciable fraction of adults (13 percent in 2025) can read and write but did not complete basic education. Basic education is the most common degree, with 29 percent attaining that level in 2025; [8] a decline from previous years (44 percent in 2010) due to increases in secondary and especially higher educational attainment. Almost a quarter of adults in 2025 had a secondary degree (24 percent, up from 21 percent in 2010). While two-year post-secondary attainment has declined somewhat, from 10 percent in 2010

[8] Some of these with basic may have completed primary degrees under the education system that prevailed prior to 1988 (UNESCO - IBE 2006), when basic education was extended to 10 years. In previous versions of JLMPS data, these individuals were incorrectly classified.

to 7 percent in 2025, university attainment has risen, from 12 percent in 2010 to 19 percent in 2025. Post-graduate degrees have remained stable around 1-2 percent. Although women are slightly more likely to be illiterate than men, they have otherwise comparable or even higher attainment; for instance, in 2025, 17 percent of men had a university degree compared to 20 percent of women.

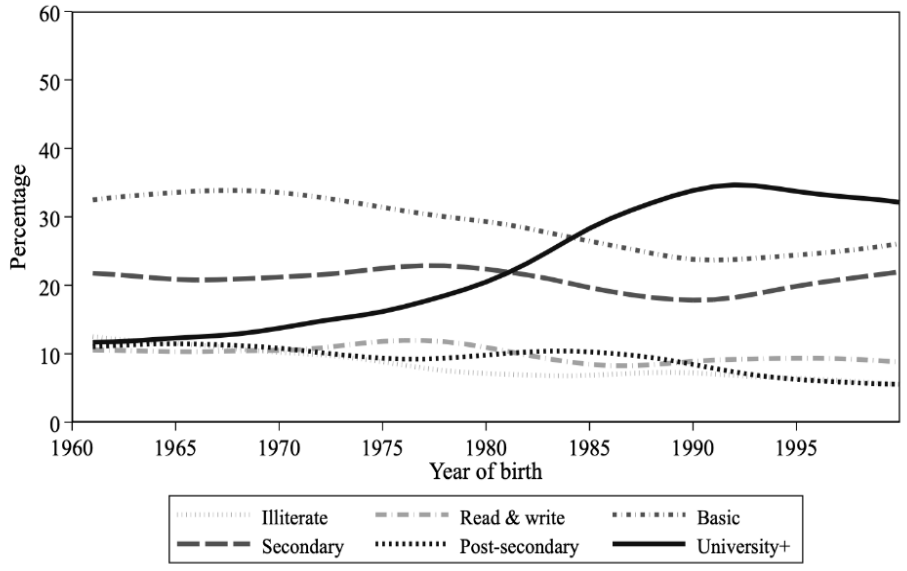
Figure 7. Educational attainment (percentage), by sex, Jordanians, ages 25–64, 2010, 2016, 2025



Source: Authors' calculations based on JLMPS 2010-2025

Figure 8 further explores education trends, examining attainment by birth cohort for Jordanians. The most common education level (30-35 percent) for almost all age cohorts up until those born in the mid-80s was a basic education. Jordan expanded access to basic education quite early in historical terms (Assaad and Saleh 2018). However, university education edged out basic education to become the most common education level (slightly more than 30 percent) among those born in 1985 and onwards. University education expanded particularly rapidly for the cohorts born from 1975 to 1989, before plateauing for those born after 1990. The share of secondary degree holders has remained relatively stable at around 20 percent of each cohort, although declining very slightly as the share of university graduates increased. Two-year post-secondary degrees have declined somewhat over time, and the share illiterate or that of those who can just read and write also declined, but primarily so over 1970-1989 birth cohorts, with progress plateauing thereafter.

Figure 8. Education levels (percentage) by year of birth, Jordanians, 2025

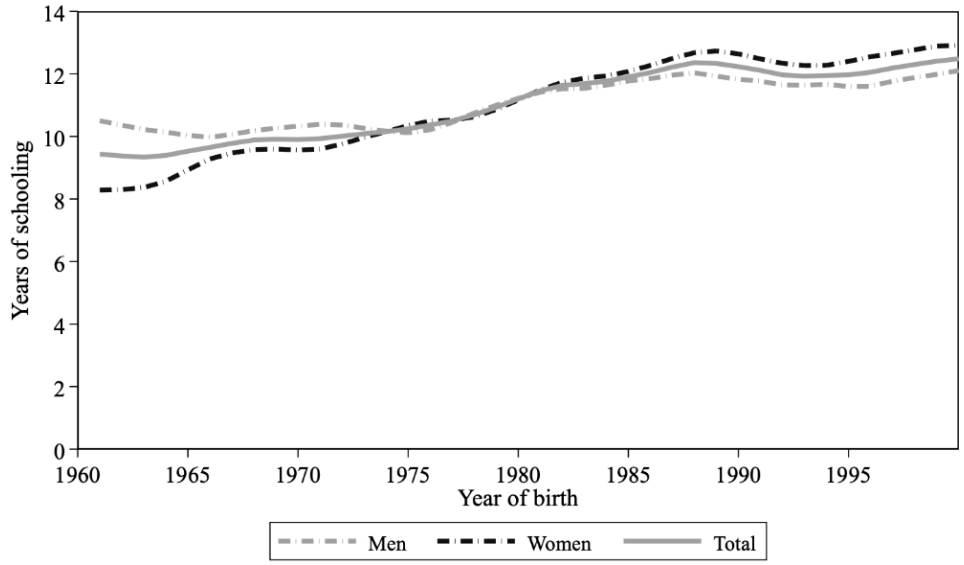


Source: Authors' calculations based on JLMPS 2025

Notes: Limited to those born in 1961-2000 to ensure an adequate living sample size for older generations and that education is complete for younger cohorts. We use a lowess running-mean smoother with bandwidth 0.5.

Figure 9 investigates the mean years of schooling by year of birth and sex for Jordanians. Overall, younger cohorts born in the 1990s have around 12 years of education on average, compared to approximately 9 years for cohorts born around 1960. While there was an almost two-year gap in favor of men over women for those born around 1960, educational attainment by gender converged by mid-1970s cohorts, and a gap developed in favor of women who, in the youngest cohorts have, on average, nearly two more years of schooling than their male counterparts.

Figure 9. Mean years of schooling, by sex and year of birth, Jordanians, 2025

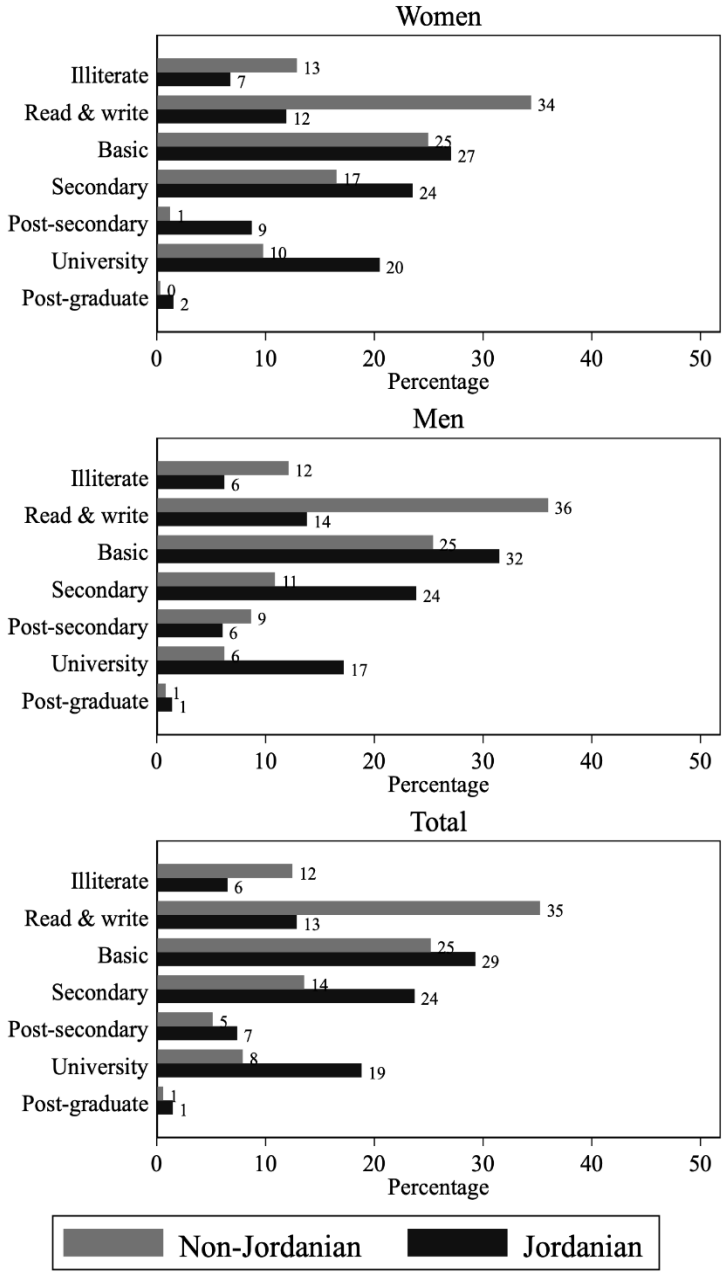


Source: Authors' calculations based on JLMPS 2025

Notes: Limited to those born in 1961-2000 to ensure an adequate living sample size for older cohorts and that education is complete for younger cohorts. We use a lowess running-mean smoother with bandwidth 0.25.

While previous figures on education focused on Jordanians only to examine longer time trends within the same population, Figure 10 shows educational attainment in 2025, by nationality and sex. Illiteracy is much higher among non-Jordanians (12 percent) than among Jordanians (6 percent), as is the proportion of those who can just read and write (35 percent non-Jordanians, 13 percent Jordanians). While 25 percent of non-Jordanians have a basic education, 29 percent of Jordanians do. Secondary and higher education are much more common among Jordanians than non-Jordanians; only 14 percent of non-Jordanians have a secondary education compared to 24 percent of Jordanians. Likewise, only 8 percent of non-Jordanians have a university degree compared to 19 percent of Jordanians. These disparate educational patterns suggest that Jordanians and non-Jordanians are often in relatively distinct labor market segments, as confirmed in other research (Fallah et al. 2019; Malaeb and Wahba 2024; Razzaz 2017).

Figure 10. Educational attainment (percentage), by sex and nationality, ages 25-64, 2025

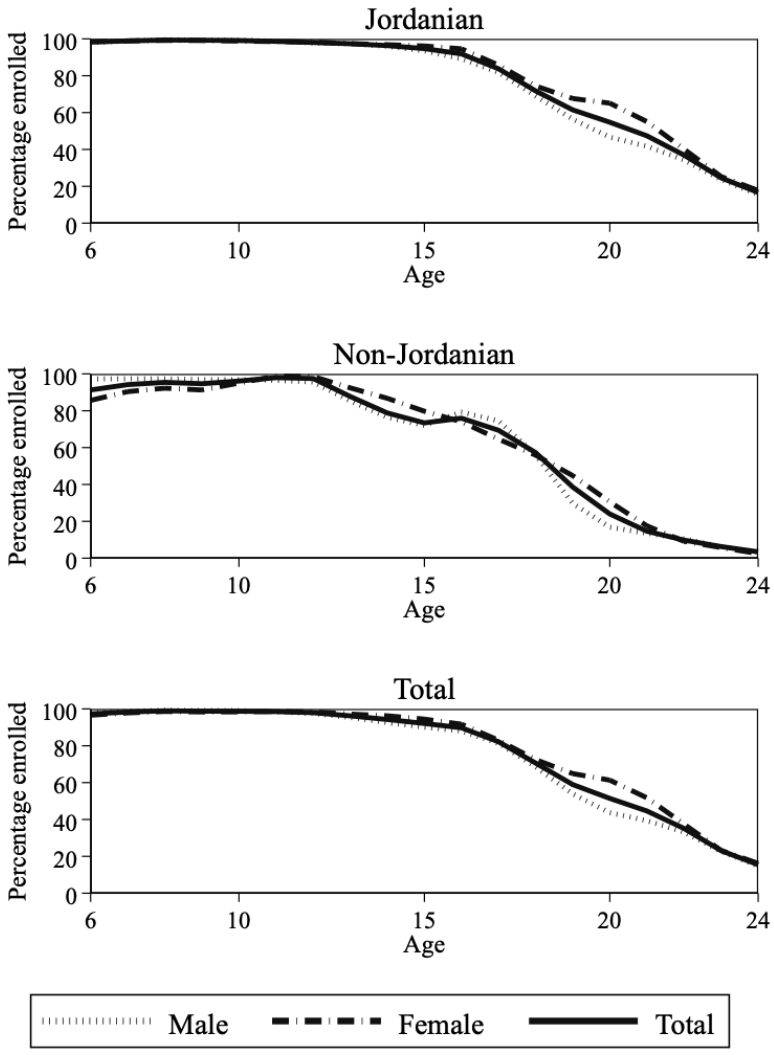


Source: Authors' calculations based on JLMPS 2025

While previous figures examined adult educational attainment for those aged 25-64 and done with their schooling, Figure 11 shows school enrollment (in any level of the formal education system) by sex, nationality and age in 2025. Almost all individuals aged 6-10 years old are enrolled in school. However, non-Jordanians have some gaps at early ages that may be due to delayed enrollment before near universal enrollment at age 10. Enrollment drops for those older than 12 years old, with the drop starting earlier and being greater for boys relative to girls, as well as for

non-Jordanians compared to Jordanians. A sharper decline in enrollment is noticeable for both girls and boys around 16 years of age; the typical age of completion of compulsory (basic) education. A large but reduced percentage of Jordanians remains enrolled through age 18 (around 60 percent, which represents the end of the secondary stage if on time) and then into higher education (around 40 percent). Fewer non-Jordanians (around 20 percent) are enrolled at higher education ages, and are not necessarily in higher education but may have experienced delays and disruptions in their schooling (Krafft et al. 2022).

Figure 11. School enrollment by sex, nationality, and year of age, 2025



Source: Authors' calculations based on JLMPS 2025.

Notes: We use a lowess running-mean smoother with bandwidth 0.25.

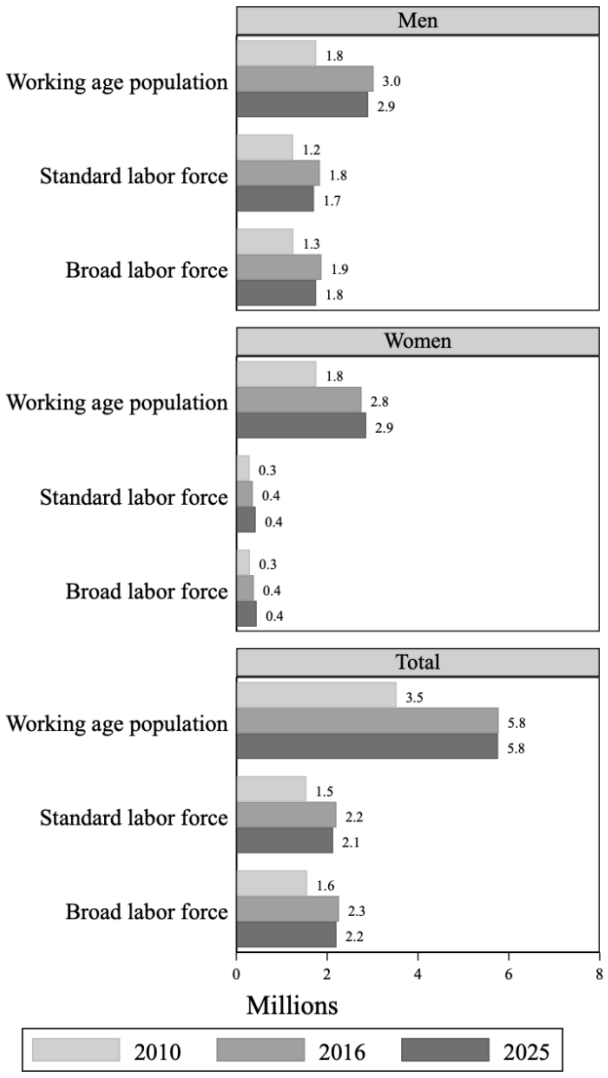
3. Labor force participation

In turning to labor force statistics, we first describe our measures of employment, unemployment, and the labor force. Per international guidance, employment is defined as work for pay or profit (ILO 2013). We operationalize this as working, even if just for one hour, within the seven days preceding the survey or being attached to a job but temporarily absent (e.g., on vacation for the week). Unemployment is defined as an individual *not* being employed, wanting to work, and being available to start within two weeks. In the standard definition of unemployment, we also require that an individual actively searched for work within the past four weeks; in the broad definition of unemployment, the search criterion is dropped to include the discouraged unemployed. The labor force is composed of those who are employed and those who are unemployed. We thus have both broad and standard definitions of the labor force, depending on whether the broad or standard unemployment criterion is used. We focus on the working age population, those aged 15-64 years old.

Figure 12 shows the estimated size of the working age population, the standard labor force and the broad labor force, for the 2010 to 2025 period, by sex. [9] The working-age population in Jordan has almost doubled from 3.5 million in 2010 to 5.8 million in 2025. However, this increase in the working age population has not translated into a proportionate increase in the labor force. The standard labor force increased from 1.5 million in 2010 to 2.2 million in 2016 and then declined to 2.1 million in 2025. Although the population has almost doubled, for neither men nor women has the labor force increased proportionately. Focusing on the standard labor force, it has increased for men from 1.2 million to 1.7 million over 2010-2025, while, for women, it has increased from only 0.3 million to 0.4 million.

[9] Since Jordan had a recent Population Census in 2015, preceding the 2016 wave, but did not have such data for 2025, absolute population numbers in 2025 are projections over a longer time span and subject to greater uncertainty (Krafft, Assaad, and Ragab 2026).

Figure 12. Size of working age population and labor force (millions), by definition and sex, ages 15–64, 2010-2025

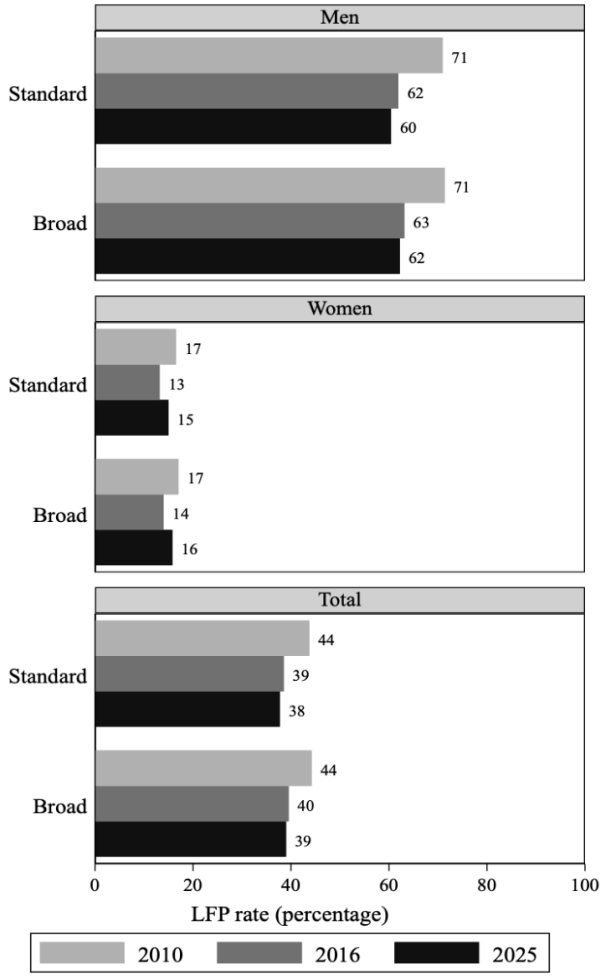


Source: Authors' calculations based on JLMPS 2010-2025

The labor force participation rate is the percentage of the working age population (aged 15-64) that is in the labor force. Figure 13 shows the labor force participation rate by sex and over time using both the standard and the broad definitions of the labor force. Jordan has historically had low labor force participation rates (Assaad et al. 2019), which continued to decline in 2025. While the labor force participation rate was 44 percent by the standard definition in 2010, this dropped to 39 percent in 2016 and further to 38 percent in 2025. The broad and standard participation rates also increasingly diverged, with the broad rate the same as the standard rate in 2010, but a one percentage point difference in 2016 and 2025, signaling increasing discouragement paired with dropping participation.

A low participation rate among women is a key challenge in Jordan's labor market. In 2025, a mere 15 percent of women were in the labor force according to the standard definition (16 percent by the broad measure), whereas the share was 60 percent for men (standard definition, 62 percent by the broad measure). Participation for women dropped from 17 percent (standard definition) in 2010 to 13 percent in 2016 but increased in 2025. Participation for men continued to decline in 2025, dropping from 71 percent in 2010 to 62 percent in 2016 and then 60 percent in 2025 (standard definition).

Figure 13. Labor force participation rate (percentage), by sex and definition, ages 15–64, 2010-2025

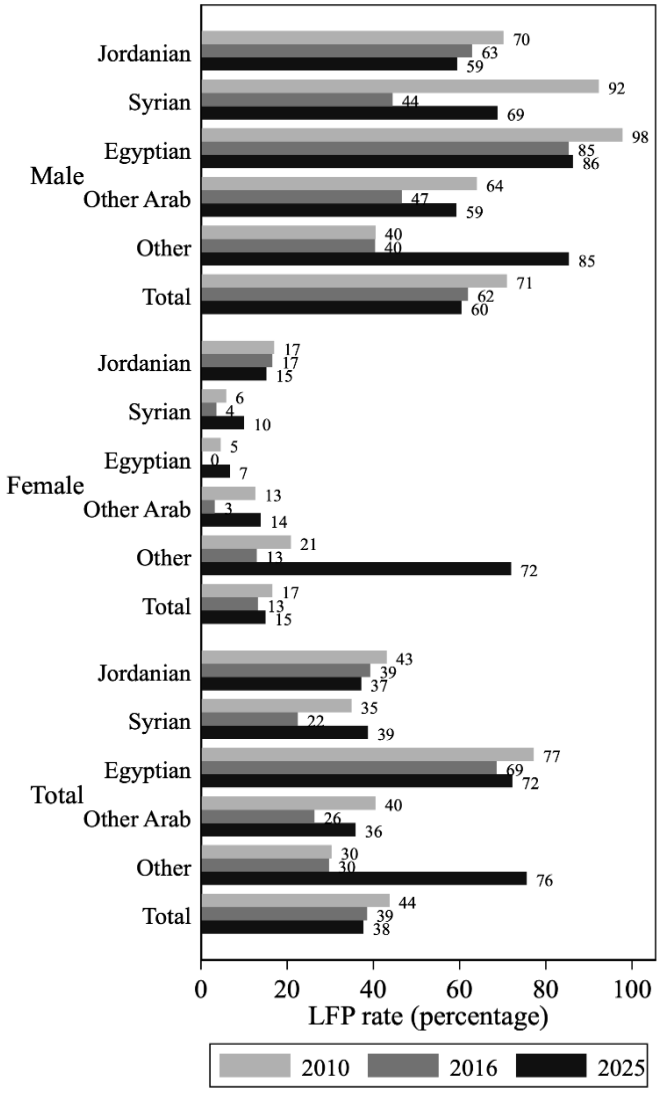


Source: Authors' calculations based on JLMPS 2010-2025

Figure 14 shows the standard labor force participation rate by sex and nationality over time. The trends for Jordanians have been a steady decline in participation, from 43 percent in 2010 to 39 percent in 2016 and 37 percent in 2025. Declines occurred for men across all three waves (from 70 percent to 59 percent) and particularly in 2016-2025 for women, dropping from 17 percent in 2010-2016 to 15 percent in 2025. In 2010, male Syrians and Egyptians were economic migrants

with high participation rates (92-98 percent). Starting in 2016, Syrians were primarily refugees and had lower male participation rates, 44 percent, which rose to 69 percent (above that of Jordanian men) in 2025. Egyptians experienced declining participation rates, but still high in 2025 at 86 percent for men. While other Arab and other groups had lower participation rates than Jordanians, the "other" group had much higher participation in 2025 than previous years, going from 30 to 76 percent, rising for both women and men. Aside from the "other" group, women's participation for other nationalities is lower than for Jordanians, e.g., 10 percent for Syrians in 2025.

Figure 14. Labor force participation rate (percentage), standard definition, by sex and nationality, ages 15–64, 2010-2025

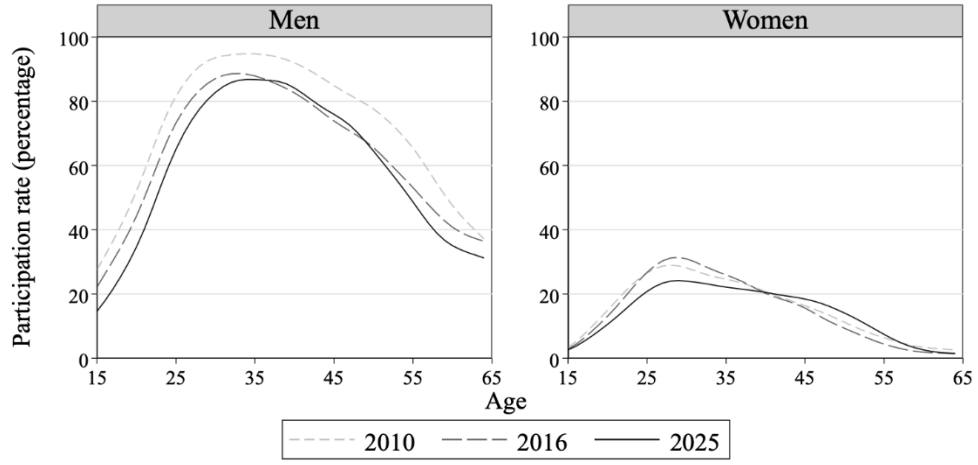


Source: Authors' calculations based on JLMPS 2010-2025

To compare to a similar population over time, we examine the labor force participation rate for Jordanians by age and sex over time in Figure 15. For men, in 2025, the highest labor force participation rate is around age 35, peaking around 85 percent. Participation declines over time are visible across all ages for men over 2010 to 2025, with drops in both youth and older adult participation from 2016 to 2025. Over 2016 to 2025, only for men aged 35-49 were participation rates stable. Peak participation also shifted to later ages for men over time.

For women, in 2025, the highest labor force participation rate, slightly above 20 percent, is among those in their mid-twenties to late thirties. In previous years, a labor force participation rate above 20 percent and reaching about 30 percent was found among a wider age range of women, from early twenties to around age 40. However, in 2025 the participation rate among women aged 45 and older was higher in comparison to previous years (potentially a cohort effect).

Figure 15. Labor force participation rate (percentage), standard definition, by sex and age, Jordanians aged 15–64, 2010-2025



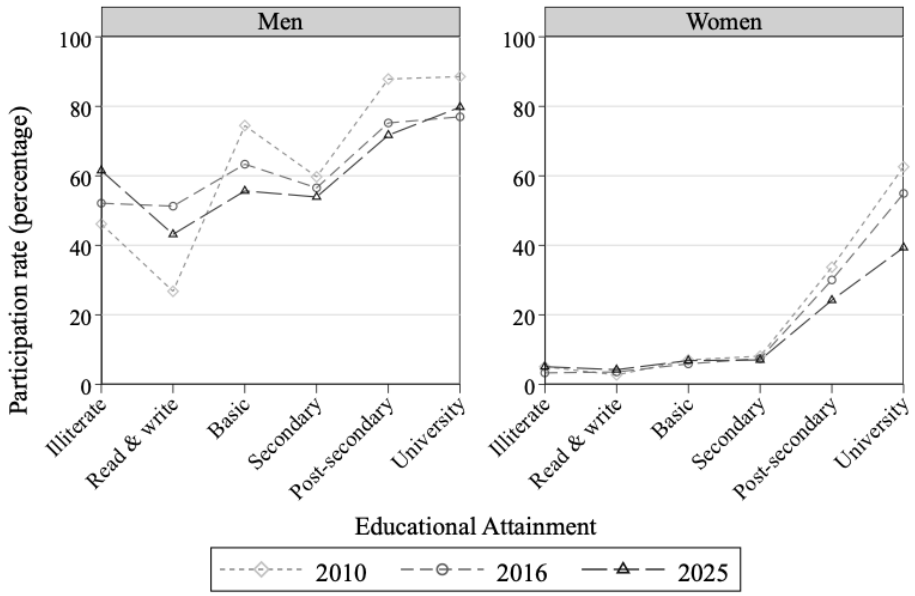
Source: Authors' calculations based on JLMPS 2010-2025

Notes: We use a Lowess running-mean smoother with bandwidth 0.4

Figure 16 explores labor force participation over time by sex and education, focusing on Jordanians. For men and women the highest participation is among those with higher education. In 2016, for men, the labor force participation rate was lower for each education level compared to what it was in 2010, except for an increase for those who were illiterate or could only read and write. Similarly, in 2025, for men we observe a decline in the rates relative to 2016, at each education level, except for illiterate men and at the university level, where the participation rate was slightly above 2016 but below 2010, just below 80 percent. Women's participation for education levels less than higher education has always been and remains very low, below 10 percent. Participation rates increase for women with a post-secondary education and further for those with a university education. However, participation rates among these women have declined

over time, and to an increasing extent. For women with a university education, participation rates fell from 63 percent in 2010 to 39 percent in 2025. This trend largely explains why overall female participation continues to decline despite the existence of the large positive relationship between education and female labor force participation and rising female educational attainment.

Figure 16. Labor force participation rate (percentage), standard definition, by sex and educational attainment, Jordanians aged 15–64, 2010-2025



Source: Authors' calculations based on JLMPS 2010-2025

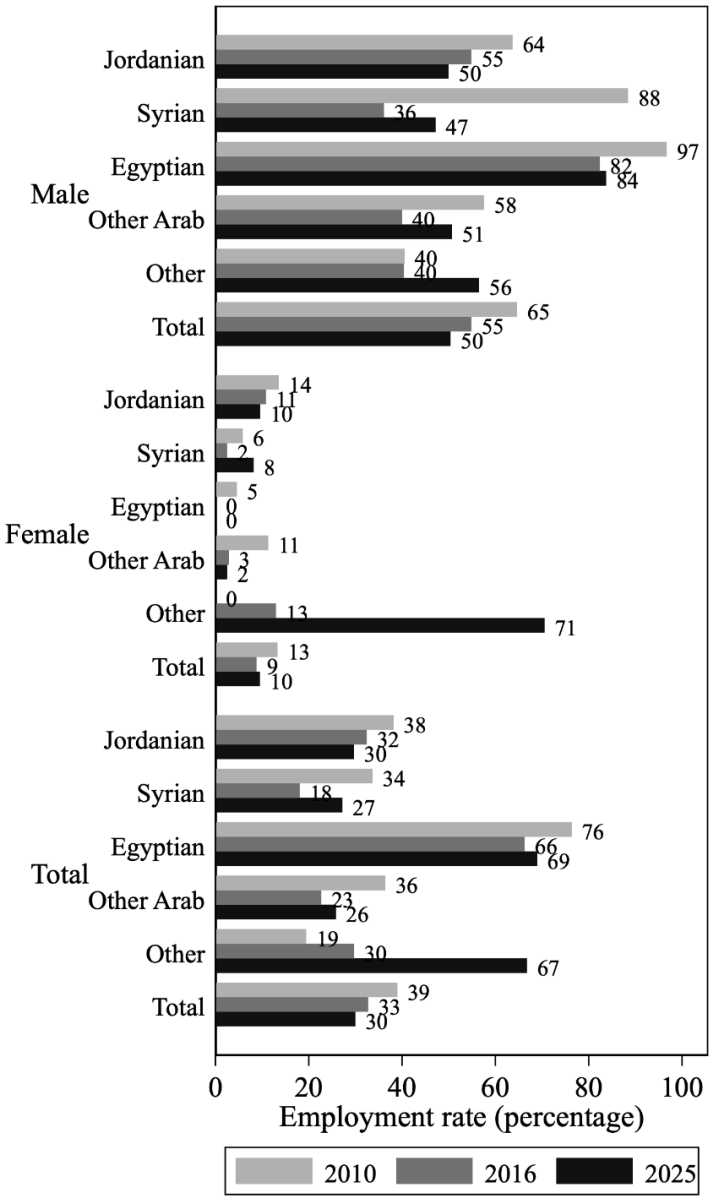
4. Employment rate

We now turn to the two key components of the labor force, employment (examined in this section) and unemployment (examined in the next section). The employment-to-population ratio (or employment rate for short) is the percentage of the working age population that is employed. Figure 17 shows employment rates by sex and nationality over time. There are lower employment rates in 2025, overall and for Jordanians specifically, for both men and women. The total overall employment rate dropped from 39 percent in 2010 to 33 percent in 2016 and 30 percent in 2025. Jordanian men's employment rates have fallen from 64 percent in 2010 to 50 percent in 2025. Jordanian women's employment rates have dropped from 14 percent to 10 percent over the same period. Both are among the lowest such rates in the world (ILOSTAT 2025c).

As with labor force participation, employment rates fell from 2010 (34 percent) to 2016 for Syrians (18 percent) but then rose slightly to 27 percent in 2025. Employment rates declined from 2010 to 2016 for Egyptians, from 76 percent to 66 percent, but rose to 69 percent in 2025. Employment rates followed a similar trajectory for other Arabs as for Egyptians, but at a much lower level (e.g.,

26 percent in 2025), and rose for other nationalities (from 19 percent in 2010 to 67 percent in 2023). The patterns for men followed the overall trends. Only 8 percent or fewer of Syrian, Egyptian, or Other Arab women are employed, but 71 percent of other nationality women.

Figure 17. Employment rate (percentage), by sex and nationality, ages 15–64, 2010-2025

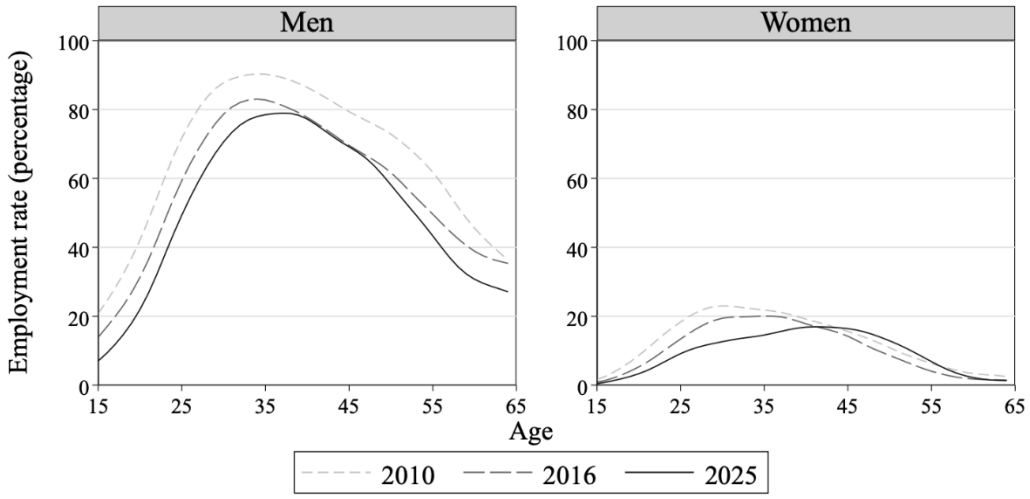


Source: Authors' calculations based on JLMPS 2010-2025

Focusing on Jordanian nationals, Figure 18 shows the employment rate by age and sex over time. The pattern for employment by age for men is similar to that for labor force participation, with clear declines across almost all age groups over time, and peak employment shifting to later ages, from early 30s in 2010 to later 30s by 2025. While peak employment for men was around 90

percent in 2010, this was below 80 percent in 2025. For women, employment rates fell for young women over time, with peak employment shifting from the late 20s to 35 over 2010-2016 and then age 45 by 2025. In 2025 no age group was above 20 percent employment, unlike in previous waves.

Figure 18. Employment rate (percentage), by sex and age, Jordanians aged 15–64, 2010-2025

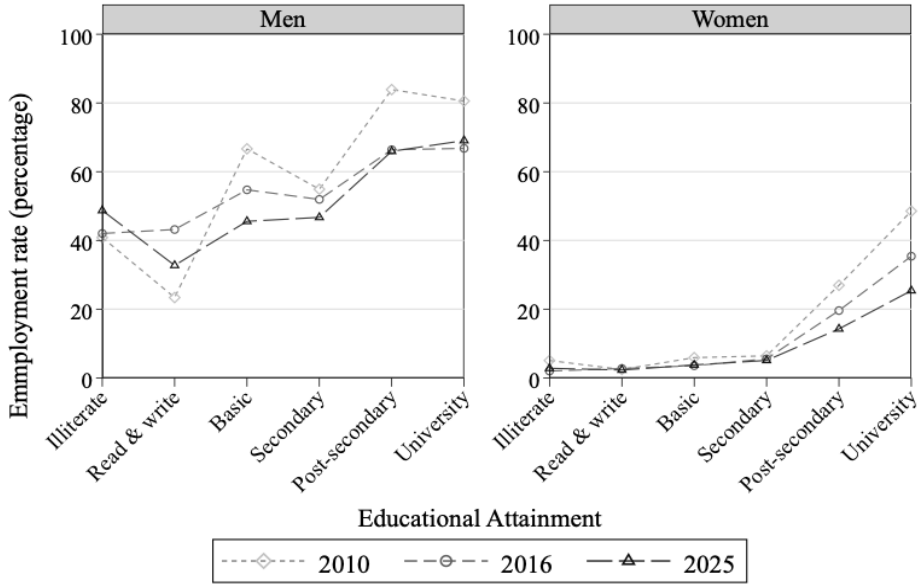


Source: Authors' calculations based on JLMPS 2010-2025

Notes: We use a lowess running-mean smoother with bandwidth 0.4.

Figure 19 shows the employment rate of Jordanians by sex and educational attainment over time. The patterns in employment by education follow a similar pattern to labor force participation. Employment rates have dropped from 2010 to 2016 for all men except those who are illiterate or can only read and write, and further from 2016 to 2025 for all men except those who are illiterate or with higher education. Men with university degrees have the highest employment rate at 69 percent in 2025. For women, employment rates are very low for those without higher education and have fallen over time for those with higher education, from 49 percent in 2010 for those with university degrees to 25 percent in 2025. This halving of educated women's employment may be due to declining availability of public sector employment for the educated (Assaad et al. 2020; Assaad and Khraise 2026).

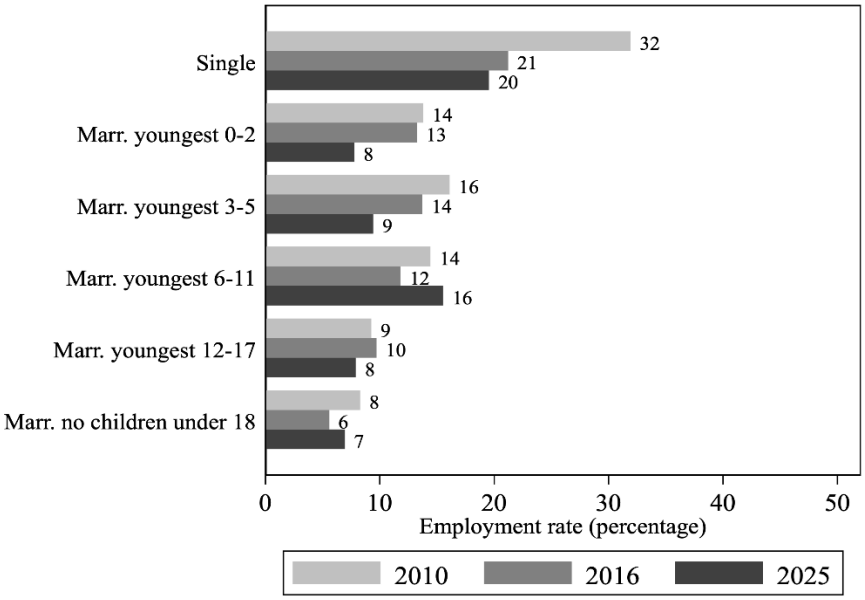
Figure 19. Employment rate (percentage), by sex and educational attainment, Jordanians aged 15–64, 2010-2025



Source: Authors' calculations based on JLMPS 2010-2025

Figure 20 shows the employment rate by marital status and age of youngest child for Jordanian women not enrolled in school aged 15-64 over time. In all three years, the highest employment rate was for single women, although this dropped to 20 percent by 2025. This compares to rates of 7-16 percent for married women with various numbers and ages of children in 2025. There is not, however, a clear gradation in employment rates by the age of the youngest child, with those whose youngest is aged 0-2 having the same employment rate of 8 percent as those whose youngest is 12-17. This result is consistent with past research that women exit employment at or in anticipation of marriage, more so than as a function of childbearing (Assaad et al. 2022; Selwaness and Krafft 2021). Men (not shown in the figure) in contrast have higher employment when married (56 percent employment rate for single Jordanian men versus 73 percent for married Jordanian men, among those aged 15-64 not in school); employment is a pre-requisite to marriage for men (Krafft and Assaad 2020).

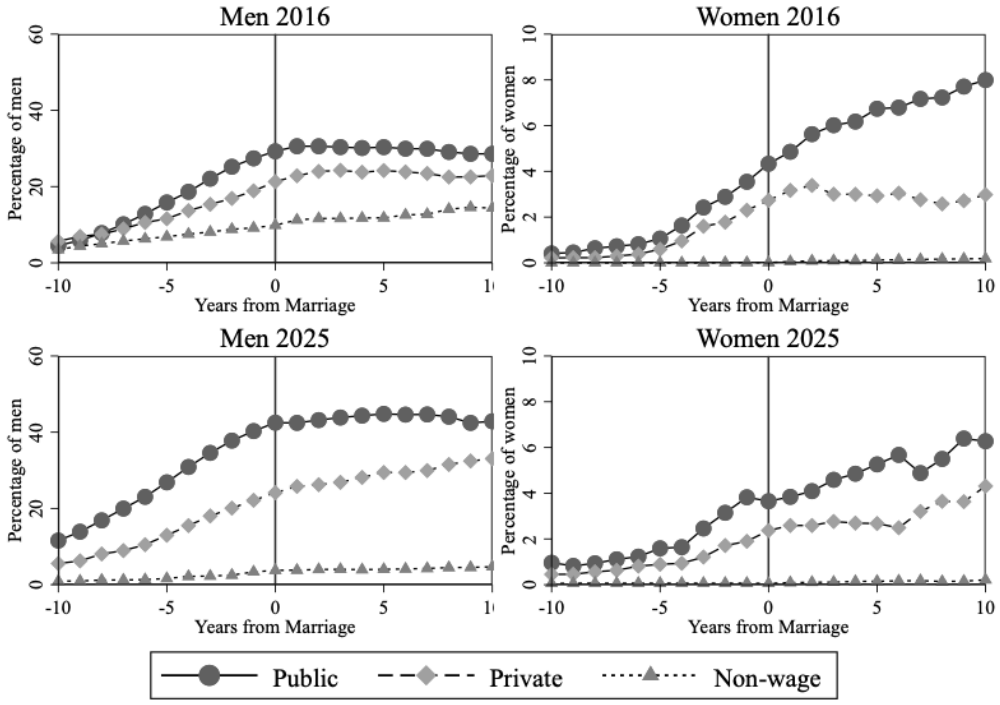
Figure 20. Employment rate (percentage), by marital status and age of youngest child, Jordanian women not enrolled in school, ages 15–64, 2010-2025



Source: Authors' calculations based on JLMPS 2010-2025

Figure 21 exploits the JLMPS retrospective data on labor market statuses and marriage timing to examine how labor market status varies for men and women relative to marriage timing (year zero in the figure), comparing 2016 and 2025 as well. The analyses focus on those married in the 20 years preceding the wave. For men, employment rises in the run up to marriage. Public sector employment then tends to plateau or decline while private sector wage work and non-wage work continue to rise after marriage. For men, comparing 2016 and 2025 emphasizes the rising share of public sector work and decline of non-wage work prior to marriage. For women, public sector wage work is more common than private sector wage work. While employment rates rise prior to marriage, they plateau and fluctuate around marriage for private sector wage work. Fewer women in 2025 are finding public sector employment prior to or after marriage.

Figure 21. Percentage employed in various kinds of work by years since marriage and sex, Jordanian individuals married in the 20 years preceding the wave, ages 15–64, 2016 and 2025

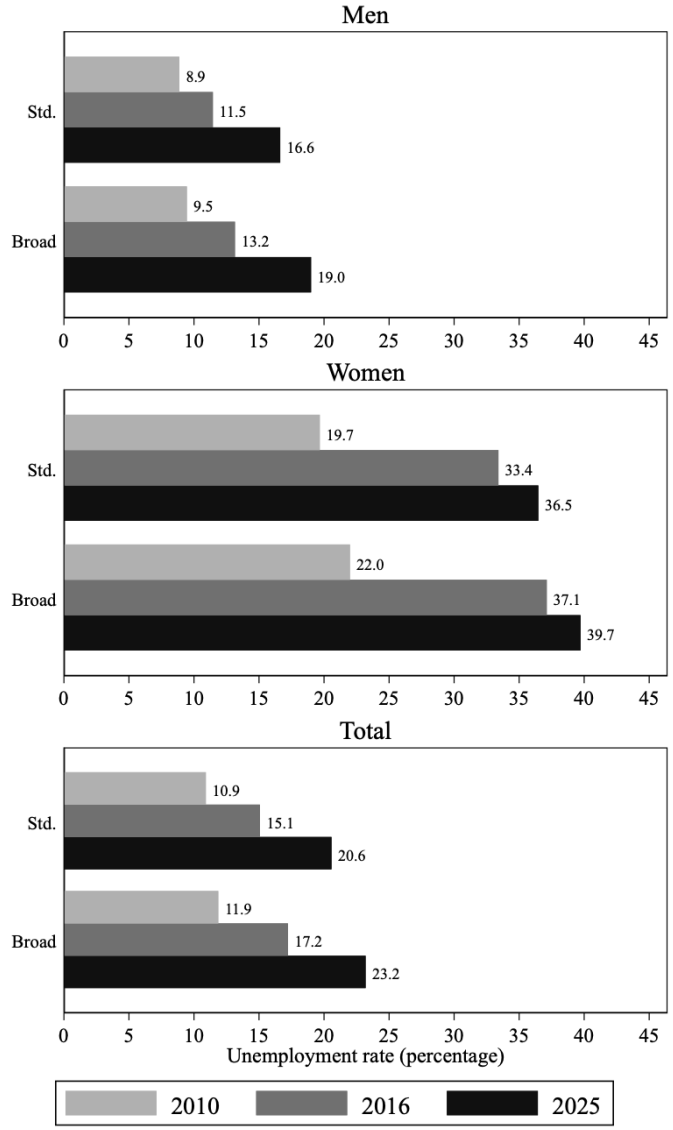


Source: Authors' calculations based on JLMPS 2016 and 2025

5. Unemployment rate

This section examines unemployment rates in the Jordanian labor market over the 2010 to 2025 period. The unemployment rate is the share of the labor force that is unemployed (is not employed, wants to work, and (for the standard definition) is actively searching for work). Figure 22 shows the unemployment rate by sex and definition over time. The unemployment rate has been rising from 10.9 percent in 2010 to 15.1 percent in 2016 and 20.6 percent in 2025 using the standard definition. Using the broad definition, the unemployment rate has risen from 11.9 percent to 23.2 percent over the 2010-2025 period. Although both groups experience high unemployment rates, women's unemployment rate is more than double that of men in all years; using the standard definition, women's unemployment rate rose from 19.7 percent in 2010 to 36.5 percent in 2025, while men's rose from 8.9 percent to 16.6 percent over the same period.

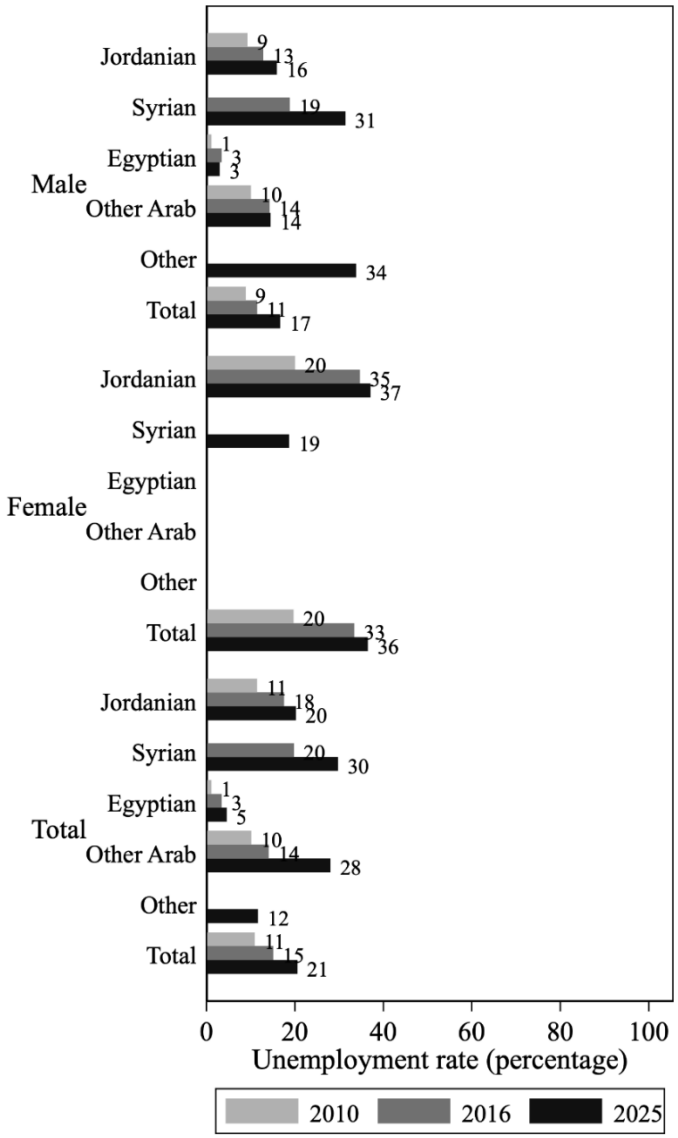
Figure 22. Unemployment rate (percentage of the labor force), by sex and definition, ages 15–64, 2010-2025



Source: Authors' calculations based on JLMPS 2010-2025

Comparing the Jordanians to non-Jordanians, Figure 23 shows the standard unemployment rate, by sex over time. Unemployment was higher in 2025 relative to previous years, regardless of nationality, overall and for both men and women. The only exception was for Egyptian men, whose unemployment rate remained 3 percent. For men, in 2025, the highest rates of unemployment were among Syrian (31 percent) and "other" nationalities (34 percent). For women, it is not possible to calculate unemployment rates for many nationalities due to the few women in the labor force. However, among Jordanian and Syrian women, the two groups with enough sample to analyze, Jordanians have higher unemployment rates (37 percent vs. 19 percent for Syrians).

Figure 23. Unemployment rate (percentage of the labor force), standard definition, by sex and nationality, ages 15–64, 2010-2025



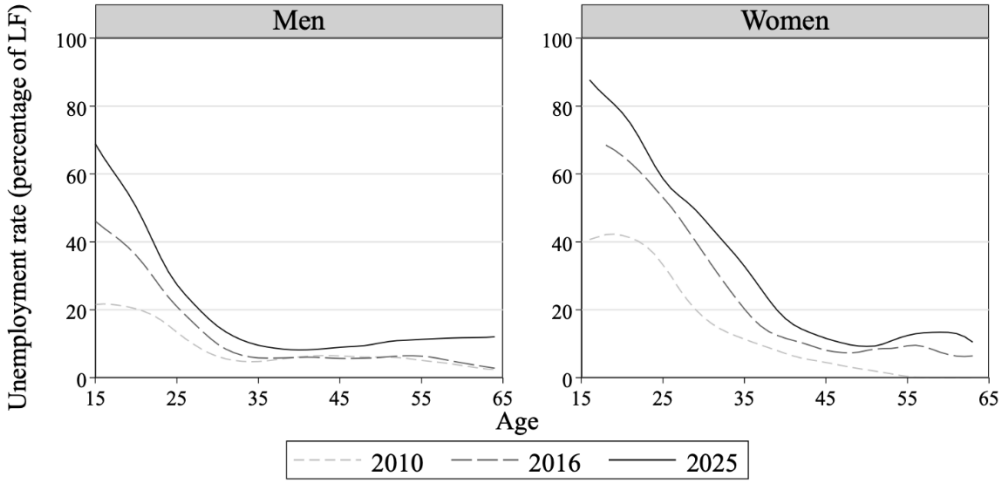
Source: Authors' calculations based on JLMPS 2010-2025

Note: No unemployment rate shown when too few individuals in a group are in the labor force (N<50) to be able to calculate an unemployment rate.

Unemployment is primarily a youth, new entrant phenomenon, but is increasingly affecting young adults and older ages. Figure 24 shows the standard unemployment rate for Jordanian nationals, by sex and age, over time. Youth unemployment has always been an issue but has increased to extremely high levels in 2025; for instance, the unemployment rate for Jordanian women aged 20-24 is 69 percent in 2025 (it was 46 percent in 2010) and for men at this age it is 36 percent (it was 18 percent in 2010). Although unemployment falls appreciably by age 35 for men and age 45 for

women, unemployment has increasingly extended into older ages. There are higher unemployment rates in 2025, at every age, compared to 2016 and 2010 for both men and women.

Figure 24. Unemployment rate (percentage of the labor force), standard definition, by sex and age, Jordanians aged 15–64, 2010-2025

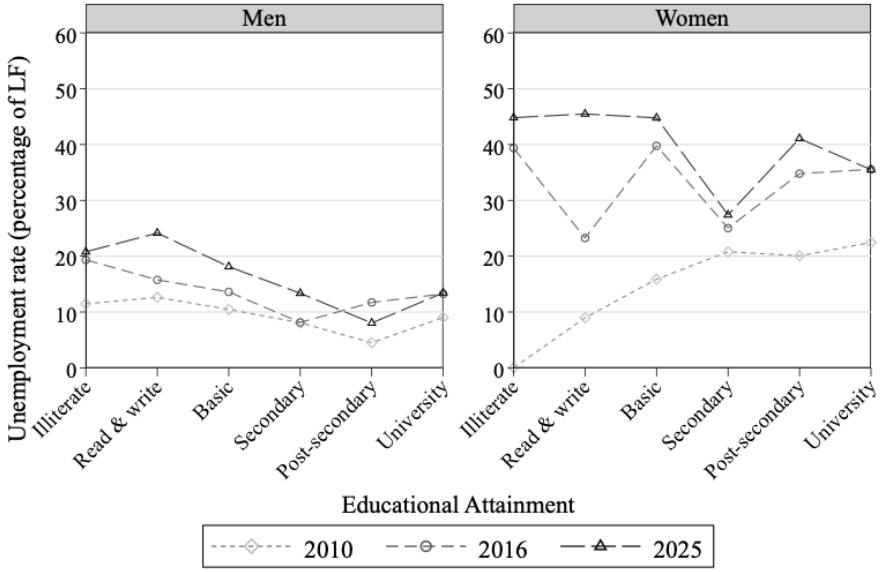


Source: Authors' calculations based on JLMPS 2010-2025

Notes: We use a lowess running-mean smoother with bandwidth 0.4.

For men, unemployment is relatively lower for the educated, whereas for women, unemployment rates are high across education levels (though few uneducated women participate in the labor force). Figure 25 explores the standard unemployment rate for Jordanian nationals, by sex and educational attainment, over time. While for men unemployment was similar across education levels in 2010, by 2016 and increasingly so in 2025, unemployment declined with education. In 2010, illiterate men had an unemployment rate of 11 percent and university educated men 9 percent; in 2025 illiterate men had an unemployment rate of 21 percent and university educated men 13 percent. In 2016 and 2025, women with less education had the highest unemployment rates (around 45 percent for basic and below in 2025), but few such women participate. The largest group of participants, university-educated women, experienced rising unemployment from 2010 to 2016, from 22 percent to 36 percent, remaining at 35 percent in 2025 (in a context of declining participation).

Figure 25. Unemployment rate (percentage of the labor force), standard definition, by sex and educational attainment, Jordanians aged 15–64, 2010-2025



Source: Authors' calculations based on JLMPS 2010-2025

6. Conclusions

Prior to 2025, Jordan had already been struggling with challenges such as high unemployment and low labor force participation. Unfortunately, as this paper demonstrated, labor market outcomes have worsened in 2025 compared to previous waves. Labor force participation has fallen from 44 percent in 2010 to 38 percent in 2025 and unemployment risen from 11 to 21 percent over this period. Youth and women have particularly poor labor market outcomes, but men have also experienced deteriorating outcomes.

Although outcomes have worsened broadly, less educated Jordanians have experienced particularly high and rising unemployment rates among men. Very few less educated women participate in the labor force, and participation and employment rates have been falling for educated women. Youth unemployment rates have risen, and peak participation shifted to later ages for both men and women, indicating increasingly challenging school-to-work transitions. One bright spot is that of Syrians, who since 2016 are mostly refugees, and who have labor market outcomes that, while they mostly remain worse than Jordanians or economic migrants such as Egyptians, have seen slight improvements (see Krafft and Tamim 2026 for further details on Syrian refugees' outcomes).

There are also some bright spots in terms of demographics, although Jordan has struggled to translate these demographics into a dividend. Population growth has slowed, with fertility down to 2.4 births per woman. Ages of marriage are shifting later, which is good news in terms of

reduced girl child marriage, but concerning in terms of delayed life course transitions for young adults; “waithood,” wait adulthood, may be exacerbated (Dhillon and Yousef 2009; Assaad et al. 2023). The population is increasingly educated, and women more so than men for recent cohorts. However, given poor labor market outcomes, this investment in human capital is not yet paying off. A bright spot is again among Syrian refugees, whose enrollment rates, while below those of Jordanians, have continued to improve (Krafft and Tamim 2026). Leveraging this human capital and addressing the myriad challenges underlying Jordan’s poor labor market outcomes will require further research into their drivers (see, for example, Krafft, Assaad, Paloma, et al. 2026 for an exploration of the impact of early childhood care and education on female labor force participation in Jordan) and a concerted policy effort.

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