

Distr.
LIMITED
E/ESCWA/EDID/2017/Technical Paper.15
18 October 2017
ORIGINAL: ENGLISH

Economic and Social Commission for Western Asia (ESCWA)

Country Profile on Employment and Decent Work

Jordan

Salim Araji, Ottavia Pesce*



United Nations
Beirut, 2017

Note: This document has been reproduced in the form in which it was received, without formal editing. The opinions expressed are those of the authors and do not necessarily reflect the views of ESCWA.

* Araji is a first economic affairs officer in the Economic Development and Integration Division at United Nations Economic and Social Commission for Western Asia, araji@un.org. Pesce is an associate economic affairs officer in the Economic Development and Integration Division at United Nations Economic and Social Commission for Western Asia, pesce@un.org. We want to thank, Dr. Khalid Abu Ismail of ESCWA and Dr. Carlos Soto Iguarán of the Universidad Externado de Colombia (CIPE) for their comments. We also want to thank Mohamad Al-Kotob of ESCWA for his extensive research assistance. The views expressed are those of the authors and do not necessarily reflect those of the United Nations.

Introduction

This country profile provides trend analysis of key indicators of productivity and decent employment among different demographic segments of the Jordanian population. The profile looks at Jordan's demographic, employment, output and sector productivity trends. We also examine indicators related to SDGs goal 8 (related to economic growth, full and productive employment and decent work) and to other relevant SDG goals (such as gender equality and quality educational) to assess whether Jordan is on track to meet these aspects of the 2030 Agenda and identify the main challenges. This employment profile could help policy makers and government officials at all levels to understand key trends in Jordan's labour market and prioritise policy choices to improve employment and productivity prospects in line with Agenda 2030.

We use data from secondary sources such as the World bank and ILO to analysis population, labour force, unemployment, output and productivity. We also use some data from national sources, after ensuring that it does not contradict international data sources. This country profile and other country profiles are expected to be a first step in triggering a policy debate on how to achieve decent employment in the Arab region and to form an informative basis for future research.

1. Population trends and Demographic analysis

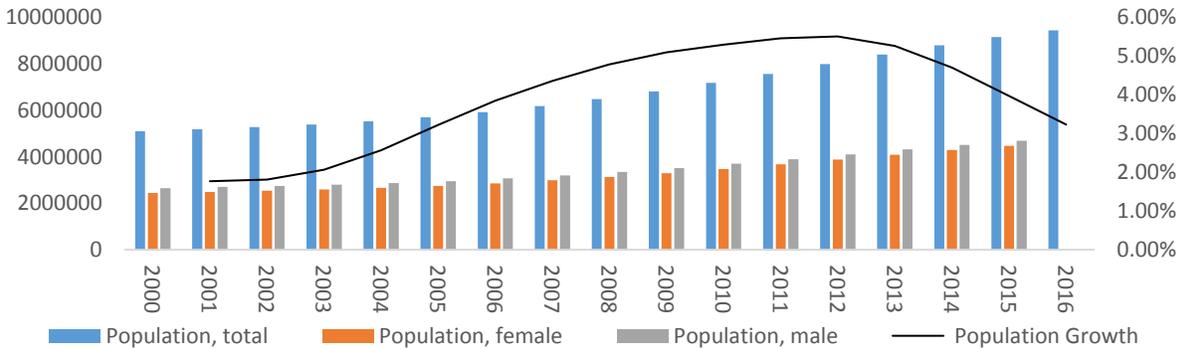
According to Jordan's latest population census in 2016, total population was 9.5 million, of which 6.6 million Jordanians and the remaining 30 % of other nationalities. This 30 % included 1.3 million Syrians (13.2 %), 636,000 Egyptians (6.7 %), 634,000 Palestinians without national ID numbers (6.6 %), and an additional 3.6 % from other countries. The ratio of female to male is close to 1. An optimum gender equality scenario requires that female population should be half of the labour force and half of the employed contributing to half of GDP income. As we will see, despite the progress made in Jordan toward better gender equality over the past few years, the reality is far from such optimum.

The Jordanian population increased by 85% between 2000 and 2016 and is expected to double from its 2000 level by 2018. Jordan is a highly-urbanised country: 42 % of people (4 million) lived in the capital Amman. It has a youthful population: one every three people is between 10 and 24 years old, and one in five is between 15 and 24¹. The fertility rate in Jordan averaged 3.6 births per woman for the period between 2000 and 2015. This is above the global and regional averages for the same period. As shown in Figure 1, population growth averaged 3.94 % between 2000 and 2016. The highest level of population growth, 5.2 % in 2012, amounted to 4.2 times the global average. This high population growth can be

¹ http://www.dos.gov.jo/dos_home_e/main/population/Jordan_International/Jordan-HIMS.pdf

attributed mostly to the influx of refugees and foreign workers (most recently from Syria, previously from Iraq and Palestine)..

Figure 1: Population and Population Growth



Source: World Bank Data.

If we disaggregate population by age groups, one can see that all age brackets are growing at a positive rate in Jordan between 2000 and 2015. The demographic composition has shifted in the past two decades toward older population. While the share of young population (ages 0-24) adds up to the largest portion of total population, older age brackets (35-64) have been growing faster than the younger population, especially after 2010. Such high growth rates among the elders can be attributed to the rapid growth of the youth population in the 1990's (known as the youth bulge) and to the refugee influx after the Iraqi and the Syrian war. Despite the high fertility rates of the national and refugee population, the younger population (age 0-29) did not witness the same speed of growth compared to older age brackets. Therefore, Jordan may expect its population growth to shift to older age groups in future decades. This would create a larger share of the 65-above age group—a dependent population that is not employed and that relies on economically active population for consumption.

As mentioned earlier, the Jordanian population is young: between 2000 and 2015, 36 % belonged to the 0-14 age bracket (Figures 2,3). This is 6 percentage points above the global average rate. On average, the 15-24 age bracket comprised 20.4 % of the population between 2000 and 2015. Older age brackets, including those who are above the age of 65 (considered as dependent population), made up smaller shares of the population and grew at varying levels. Population shares of those who are within the following age brackets: 35-44, 45-54, 55-64 grew on average by 2 %, 2.7 %, 2.5 % and 1.3 % respectively between 2000 and 2015.

Figure 2: Age Bracket %age of total Population

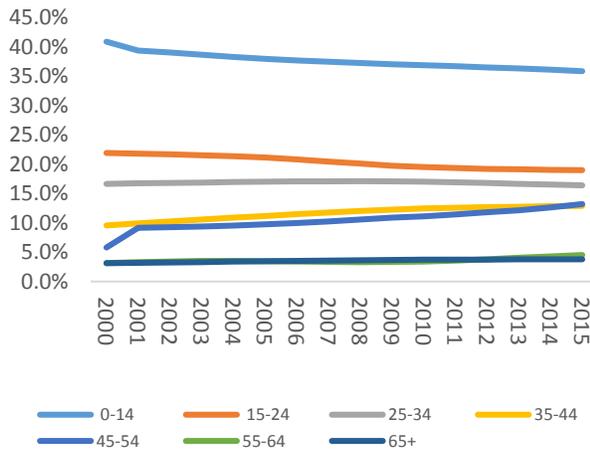
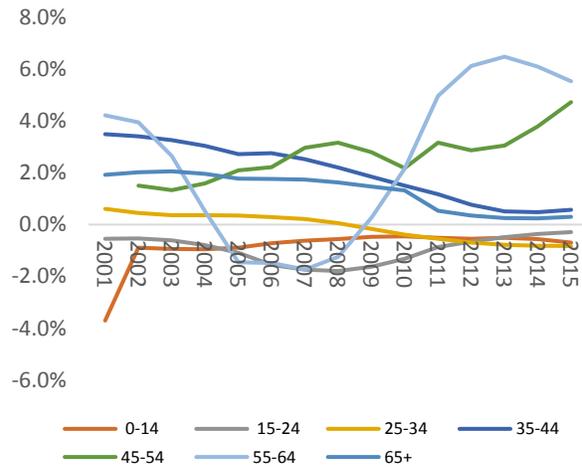


Figure 3: Growth in age brackets as a %age of total Population.



Source: World Bank staff estimates based on age/sex distributions of United Nations Population Division's World Population Prospects.

2. Labour Force Participation²

According to the ILO, the labour force participation rate is the ratio of the labour force to the working age group. It measures the population between the age of 15-64 (including students) who is active in the labour market. It captures the people who are either full time or part-time employed or actively looking for work. It excludes the discouraged workers who gave up looking for a job.³ Given Jordan's rapid population growth and high share of young population, one would expect labour force participation to be high. Economists refer to this as the "demographic opportunity": the benefit of a large young and active share of the population that contributes to the labour force. However, such opportunity can only turn into an advantage when such working age group is gainfully employed in an active labour market. Looking at Figure 4 below, this does not seem to be the case in Jordan. Looking at the graph below, the working age group increased until 2013 and then modestly decreased until 2015⁴, while growth in labour force participation had sharp fluctuations, with large spikes up to 8% in 2005, 2007 and 2009, followed by decreases over 2010-13, when it plummeted below 1%.⁵ Later we will see that such fluctuations do not move in parallel with economic growth.

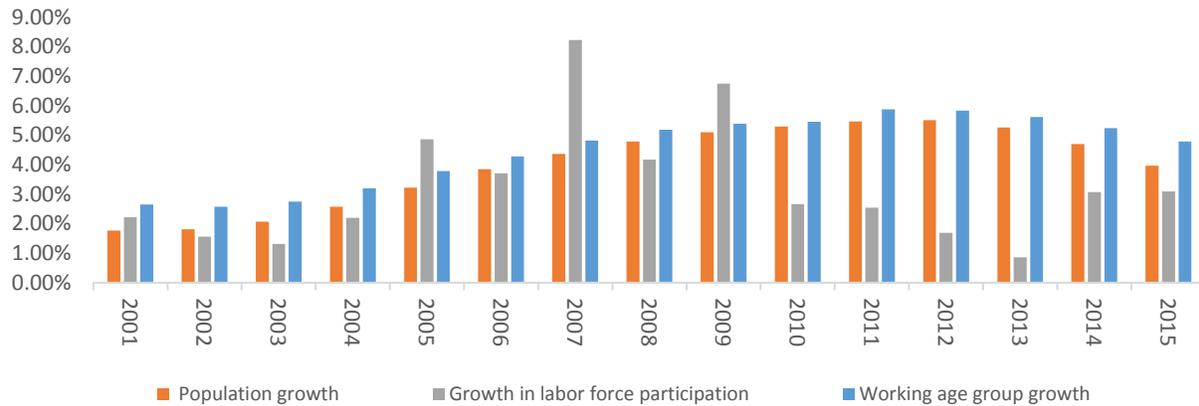
² According to the ILO, the labour force participation and employment data do not include refugees.

³ According to the ILO the inactivity rate is equal to 100 minus the labour force participation rate, when the participation rate is expressed as a number between 0 and 100.

⁴ Jordan has historically had a low labour force participation rate: in 2015, 56 percent of Jordanians identified in a survey by the Department of Statistics as "has no job and not looking for a job".

⁵ One interesting observation, the labour force participation trend could not be explained neither by population growth nor by economic growth

Figure 4: Population growth, Working age group growth and Growth in labour force participation



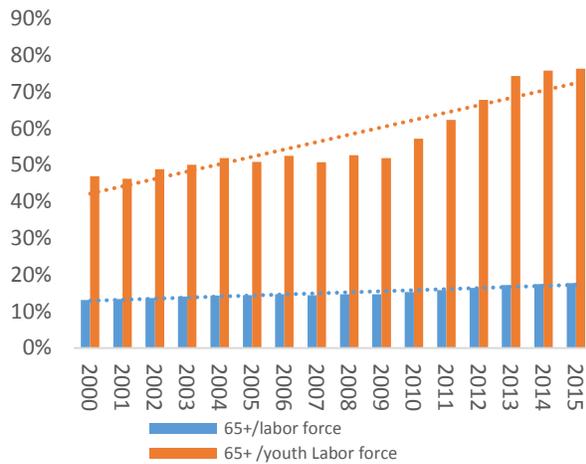
Source: World Bank Data and International Labour Organization.

Since labour force is not growing at the same speed as the population growth, one would expect a higher burden to be placed on the existing labour force. For example, Figure 5 shows the ratio of those who are 65 years and above to the total labour force and youth labour force. The older population is often dependent on other members of the family, especially in non-resource rich Arab states, where retirement plans and benefits for senior citizens are scarce. The ratio of the 65-above age group to the labour force increased by 5% between 2000 and 2015, whereas the ratio of the same age groups to the youth labour force increased modestly from 47 % in 2000 to 52 % in 2009 and then jumped to 76 % in 2015. In figure 5.1 below, we calculate the economic dependency ratio (EDR).⁶ The EDR is calculated as a ratio of the unemployed, the inactive, those under 15, and those above 65, divided by the total number of employed in the economy⁷. In Jordan, the EDR has increased from 3.95 in the year 2000 to 4.40 in the year 2015, a 12% jump. An increase in the EDR indicates that the number of dependents per employed person is increasing. Breaking down the numerator into its components reveals that the unemployment rate and share of non-working age individuals (especially those under 15) have been decreasing, whereas the share of inactive individuals has been increasing. Thus the increase in EDR can be attributed specifically to the increase in inactive individuals, rather than to other variables. As we can see in the figure, the EDR stopped its downward trend and started increasing in 2008.

⁶ Based on Meckinley et al., $EDR = (Unemployed + Inactive + Elderly + Young)/Employed$

⁷ McKinley, T., Cozzi, G., & Michell, J. (2016). *Development, Demography and Migrations. Challenges for Europe in the World, 2030*, 217.

Figure 5: 65+ Population dependence on labour force



Source: World Bank Data.

Figure 5.1: Economic dependency ratio

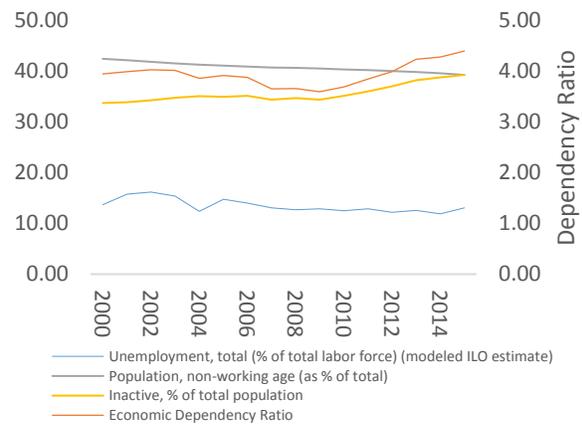
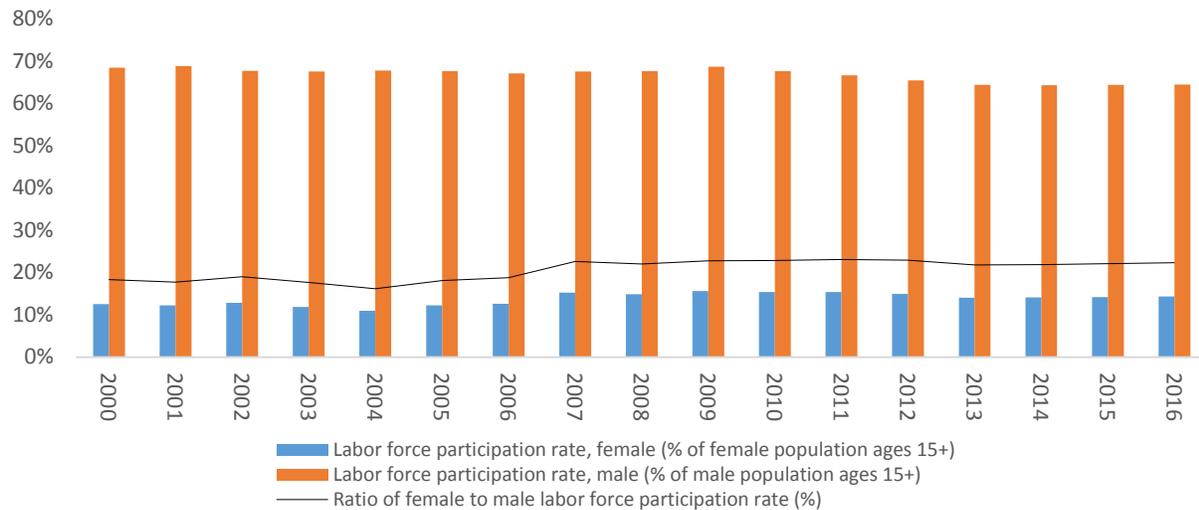


Figure 6 shows the gender gap between females and males in the Kingdom. The average female participation rate between 2000 and 2016 was 14 %, which is 73 % lower than the global average and 12% lower than the regional average. Female participation has increased minimally to reach 16 % in 2009 and then experienced a decrease to almost 14% in 2016. The participation rate of female youth is even lower: Jordanian females aged 15-24 have an average participation rate of only 9.6 % of total females. According to the World Bank Development Indicators, this is one fourth of the global female participation rate in the same age brackets. On the other hand, Jordanian males had a labour force participation rate starting at 68% in 2000, with the highest value being 69 % in 2009. As is the case for females, male participation has seen a decrease in recent years, falling to 64 % in 2016. This level is below the global and regional averages for the years considered (2000-2016), which were 74.6 % and 75 % respectively. Youth male labour force participation rate -41% between 2000 and 2016- is also below the global and the regional averages.

The proportion of females to males in labour force participation has been stagnating, with no significant progress between 2009 and 2016. The wide gender gap in the Kingdom could be due to many different issues. Firstly, cultural obstacles to women's employment could be lowering the incentive for females to join the labour market. Secondly, policies promoting gender equality in the workforce (such as quotas, role models and employment conditions favouring mothers such as day care, flexible work and generous maternity leave) could be weak. Thirdly, the overall lack of job opportunities (due to the recent slow economic growth) is reducing employment options for all. More general issues, such as the lack of policies incentivising people to seek employment and training programs, the lack of unemployment benefits, and the lack of efficient labour market institutions also weaken labour force participation.

Figure 6: Labour force Participation



Source: World Bank Data, from the International Labour Organization, ILOSTAT database.

3. Unemployment

The unemployment rate is the portion of the labour force that is actively looking for a job. In Jordan, the duration of unemployment spells is longer than average.⁸ Based on ILO estimates, figure 7 shows that unemployment as a percentage of labour force oscillated between 12% and 16% over the period 2000-16, with fluctuations becoming less steep in recent years. Females were more than twice as likely to be unemployed than males. Albeit their low participation in the labour force, female unemployment started at 22% in 2000 and reached 24% in 2016, with a sharp fluctuation in 2004. This fluctuation is linked to the drop in labour force participation in 2004 rather than to a drop in female unemployment. According to data from the Jordanian department of Statistics (JDoS), over the past decade unemployment has been concentrated mainly in Amman (not surprisingly as the city is also the most attractive location in the country for job-seekers). However, if we look at the unemployment geographical map, the share of unemployed in Amman has decreased from 31.5% in 2007 to 26.7% in the first half of 2016, while it has been increasing from 19.7% in 2007 to 25% in 2016 in Jordan's second largest city, Irbid, close to the border with Syria⁹. The city of Zarqa, which is the centre of Jordan's industrial production, hosting almost half of Jordanian factories, also increased its share of unemployment over 2007-16, from 12.9% to 16.4%.

⁸ According to the department of statistics 2016 analysis, 68.6 % of unemployed reported that they have been unemployed for more than 7 months (and 41 % for over a year).

⁹ Jordan Department of Statistics. http://www.dos.gov.jo/owa-user/owa/emp_unemp.show_tables1?lang=E&year1=2016&round=1&t_no=42.

Figure 7: Unemployment

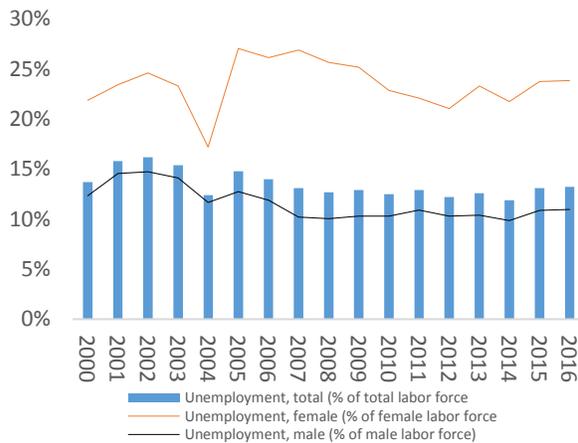
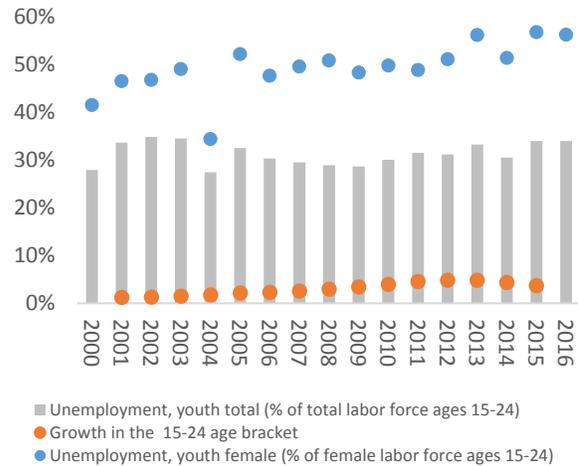


Figure 8: Youth Unemployment



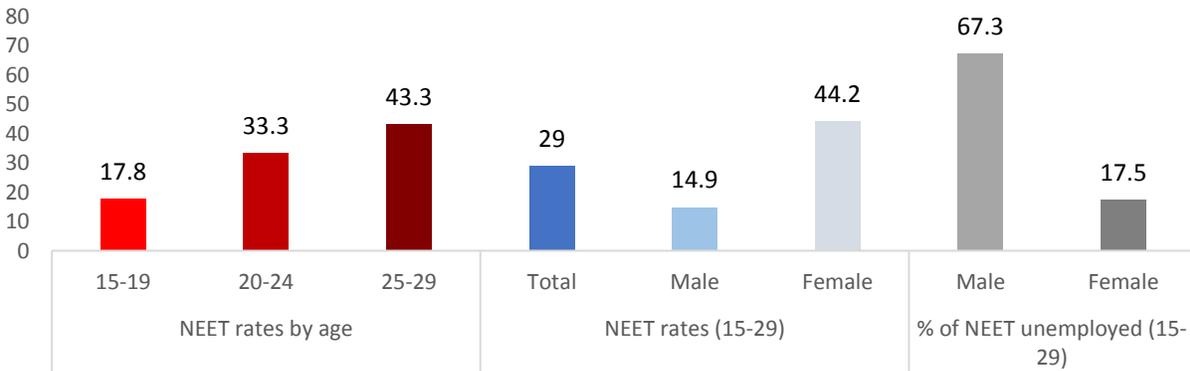
Source: World Bank Data, from the International Labour Organization, ILOSTAT database.

Youth unemployment refers to those who are of 15-24 years of age and who are labour market participants actively looking for a job. Figure 8 shows that youth unemployment in Jordan is high, with an average unemployment rate of 26% between 2000 and 2016. This is 8% higher than the global average and 2% higher than the regional one. As mentioned before, female youth unemployment is particularly high and has been increasing, from 41% in 2000 to 56% in 2016. As we will see in the following sections, this is despite the increase in the educational attainments of Jordanian women over the same period.

A common indicator used to describe youth unemployment is the percentage of youth who is neither in employment, education or training (NEET). In 2012, the latest year for which the NEET is available for Jordan, the NEET rate among youth aged 15-24 was 24.6%.¹⁰ As shown in Figure 9 below, Jordan's NEET rates in 2012 were higher among those in the 25-29 age bracket, and much higher among females than males. The high share of NEET among those aged 25-29 may point to difficult transitions to work for highly educated youth that left their educational programme in Jordan. Also, the high percentage of youth aged 15-19 and 20-24 in NEET indicates that many already left school or training at a very early age. High NEET rates may also be due to the large proportion of women who become inactive after the age of 24 (whether or not they have graduated from tertiary education), mostly because they take on the biggest share of family duties and caring for the elderly.

¹⁰ As a comparison, the rate was 13.1% in the EU28 and higher than that of Jordan in fellow Arab countries such as Egypt (35.3%), Palestine (32%) and Tunisia (25.4%).

Figure 9: NEET rates by age, sex and unemployment status, Jordan, 2012.



Source: ILO School to Work Transition Surveys (SWTS) 2012-13.

A 2012 survey conducted by the JDoS showed that the young unemployed in Jordan felt that the main barrier to finding employment was the lack of available jobs¹¹. The survey also revealed that 53.2 % of employed youth were in informal jobs, most of them as paid employees holding informal jobs in the formal sector. Such contracts do not provide long-term job security and do not give access to benefits such as paid sick leave, paid annual leave and pension contributions.

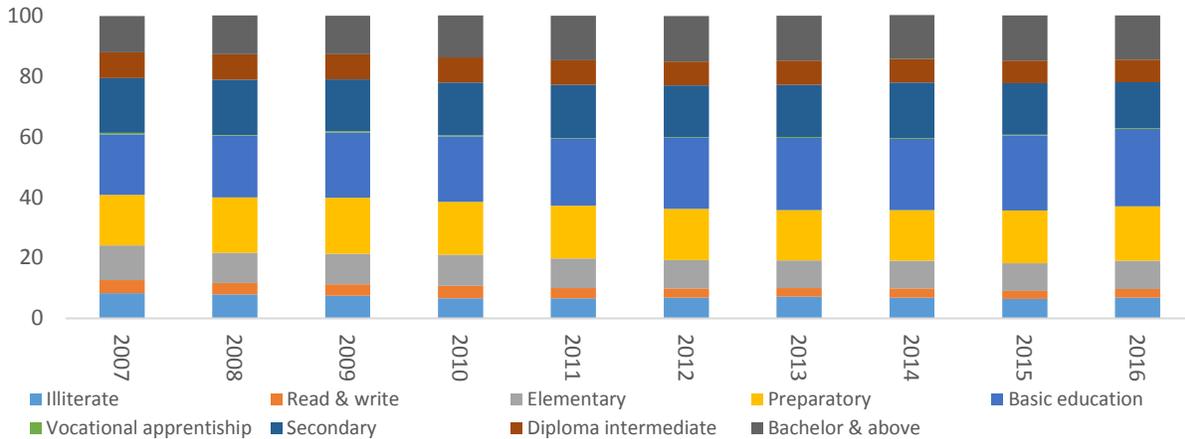
Overall, the evidence shows that youth unemployment and specifically female unemployment will remain a key challenge for Jordan to reach the employment targets set in goal 8 of the SDGs by 2030.

4. Employment by education

Jordan has been investing heavily in its human skills, especially at the lower echelons of education. As shown in Figure 10, the percentage of Jordanians who are illiterate, can only read and write, have only elementary education, vocational apprenticeship, intermediate diploma or secondary education all decreased over the period (respectively by -18%, -33%, -19%, -40%, -12%, -17%). On the other hand, the percentages of Jordanians who had preparatory, basic education and bachelor and above increased by, respectively, 8%, 28% and 22%. It is worth noting that the percentages of women who are illiterate (10%) is still relatively high. Increases in education at the lower levels have been higher among men than among women. For example, the percentage of women who could only read and write decreased by 29% over 2006-17, but that of men dropped by 36%.

¹¹ http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms_245876.pdf

Figure 10: Share of Jordanians aged 15+ by education level achieved.



Source: ESCWA analysis of JDoS data¹²

In Jordan, progresses in educational attainment have not been matched by a comparable increase in decent employment¹³. Figures 11 and 12 show that the highest levels of unemployment is among those who have less than secondary education (usually the poorest segment of the population) and among those with a bachelor's degree and above. This latter information could indicate that sectors in the Kingdom's economy are not sophisticated enough to absorb the supply of highly skilled individuals. Secondly, some economic sectors in Jordan require mainly employees at the secondary and below tertiary levels of education. This contributes to keeping the demand for highly skilled human capital low. The distribution of unemployment by education level also varies significantly between males and females. According to data from the 2015 Census, 65.8 % of unemployed men had less than secondary education, while 76.7% of unemployed women had bachelor degree and above. This difference points to a large waste of talent of highly educated women in Jordan. The gap in wages between women and men in the same type of work is also significant, and Jordan has no law mandating equal remuneration for females and males for work of equal value.

¹²(http://www.dos.gov.jo/owa-user/owa/emp_unemp_y.show_tables1_y?lang=E&year1=2011&t_no=15)

¹³ Among those employed, wages are relatively low. 33.4% of the employed earned less than 300 JD per month (less than approximately US\$ 423). Only 66.6 % of the employed earned more than 300 JD per month. Data from the JDoS, unfortunately discontinued after 2007, also points to a widening gap between the higher paid professions and lower remunerated ones. Over 2000-07, the wages of legislators, senior officials and managers, as well as those of service workers, increased more than those of other categories of workers in nominal terms (+45 %). The wages of plant and machines operators, clerks and professionals saw the smallest nominal increases (between 12 % and 33 %). Inflation over this period was low, at 3 % on average.

Figure 11: Unemployment by educational attainment

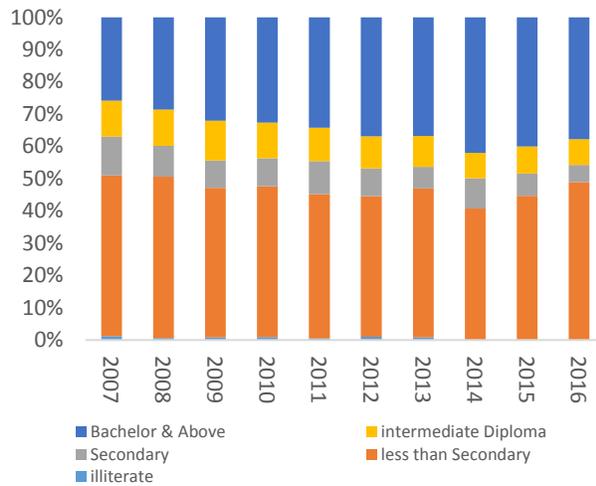
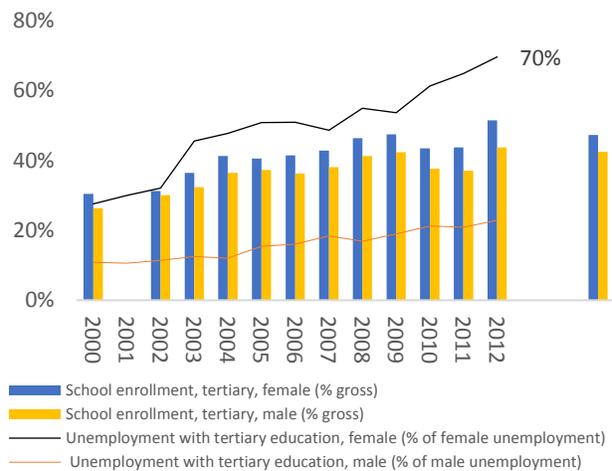


Figure 12: Tertiary education and Unemployment



Source: Unemployment by Education from ESCWA analysis of JDoS data¹⁴; School Enrolment from World Bank data.

Figure 12 focuses on highly skilled labour force. It shows that unemployment with tertiary education is high and has been increasing, especially for women (70% in 2012), but also among men (23%). Such gap between educational attainment and jobs point to vast structural issues related to the inclusiveness of economic growth (especially between 2004 and 2008, when Jordan experienced high growth) and to inconsistencies between the skills acquired through education and the requirements of the labour market. One could conclude that citizens with higher education are not adequately targeted by Jordan's labour market policies, which mostly target more vulnerable groups.

5. Informal Employment

Informal employment refers to all legal employment that is not taxed or monitored. In Jordan, this is characterized by low and declining wages, long working days, and poor working conditions, including lack of work contracts¹⁵. According to the 17th International conference of Labour statistics (ICLS), informal employment includes jobs in the formal sector (without social and health benefits), in the informal sector or in the household. Based on this definition, the informal employment in Jordan amounted to 26 % (IMF 2008).¹⁶ According to the IMF, this was lower than the shares for Lebanon and Tunisia (30%), Egypt and Syria (34%) and Morocco (44%). IMF research also estimated Jordanian self-employment at approximately 5% of the working age population¹⁷. In recent years, the percentage of self-employed has declined, which some researchers see as a proxy for increased informal labour. Potential policy options to bring more economic activities into the formal sector include improving the business and investment environment; promoting an adequate regulatory and tax burden; fighting corruption; and improving transparency, institutions and governance.

¹⁴ http://www.dos.gov.jo/owa-user/owa/emp_unemp.show_tables1?lang=E&year1=2016&round=1&t_no=43

¹⁵ Work Permits regulations and Employment Outcomes of Syrian Refugees in Jordan. UNHCR. 2017.

¹⁶ with IMF research estimating it at 26% of GDP in 2008¹⁶.

¹⁷ <https://www.imf.org/external/pubs/ft/scr/2014/cr14153.pdf>.

6. Child Labour in Jordan

According to goal 8 of the SDGs, child employment represents the proportion of children aged 5-17 years engaged in child labour. In Jordan, child employment affects 1.89 % of all children aged 5-17¹⁸. Of these, 88.3% males and 11.7% are female, according to the last survey carried out in 2016. Jordan has formulated a distinction between “economically active children” and “child labour”, with the latter referring exclusively to work that impedes children’s development, whether physical (through hazardous work) or mental (through disrupting education)¹⁹. In 2016, the vast majority (91.7%) of working children were considered to be in child labour. The majority of hazardous work in child labour is done by the 15-17 age bracket, with 20% and 8% for the 12-14 and 5-11 years age brackets respectively. Hazardous work includes the handling of dangerous machinery or equipment, explosives, fire, gas, or chemicals, as well as guard duties, repetitive excessive physical effort, and a variety of unhealthy environment.

According to the National Child Labour Survey (2016), the distribution of child labour in 2016 was as follows: employed workers constituted 47%, unpaid family workers 32% and self-employed 6%. Self-employed male children usually work in the informal sector, mainly in urban areas. They usually sell items on the streets, work in cafes and restaurants and other services. On the other hand, the majority of female child workers (71%) works as unpaid family workers. The survey found that children work on average 33 hours per week. The highest figure was 46 hours per week for males aged 15-17 and 11.36 hours for females aged 5-11.

7. Output growth and productivity

Over 2000-09, Jordan’s annual GDP growth averaged 6.5%. From 2009 onward, however, GDP growth averaged just 2.5%. As reported in the Jordan Economic Growth Plan for 2018-22²⁰, the main causes for this decline include the global financial crisis, the regional turmoil caused by the Arab Spring, increased insecurity in the region causing a drop in tourism (which made up 35% of Jordan’s exports in 2015²¹), the closure of trade routes (exports to Iraq made up 22% of Jordan’s total exports in 2009, but only 9.5% in 2015²²), the drop in commodity prices and the decline in remittances (from 21.8% of GDP in 2000 to just 14.3% in 2015²³). As shown in Figure 13, GDP growth in Jordan averaged 4.3% over the whole period 2000-16. Over this period, GDP growth does not seem to have driven reductions in unemployment. The correlation between GDP growth and unemployment is 0.27, meaning that unemployment has a weak positive association with economic growth. This is counter-intuitive and implies that Okun’s law does not apply in Jordan. One could argue that since Jordan has no nominal currency anchor (due to its fixed exchange rate regime), unemployment is a product of private sector performance and fiscal policy

¹⁸ National Child Labour Survey 2016 of Jordan. Center for Strategic Studies, 2016

http://www.ilo.org/wcmsp5/groups/public/---arabstates/---ro-beirut/documents/publication/wcms_510520.pdf

¹⁹ Child Labour in the Urban Informal Sector in three governorates of Jordan (Amman, Mafraq and Irbid). ILO, 2014.

http://www.ilo.org/wcmsp5/groups/public/---arabstates/---ro-beirut/documents/genericdocument/wcms_246207.pdf

²⁰ <https://rhc.jo/sites/default/files/JEPGReportEn.pdf>.

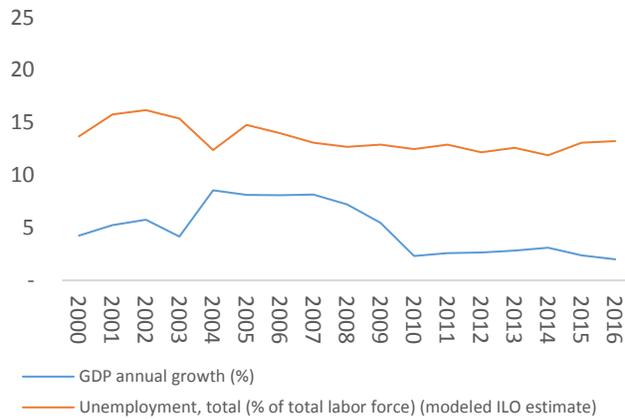
²¹ World Bank data.

²² <http://atlas.cid.harvard.edu/explore/map/export/jor/show/all/2015/>

²³ World Bank data.

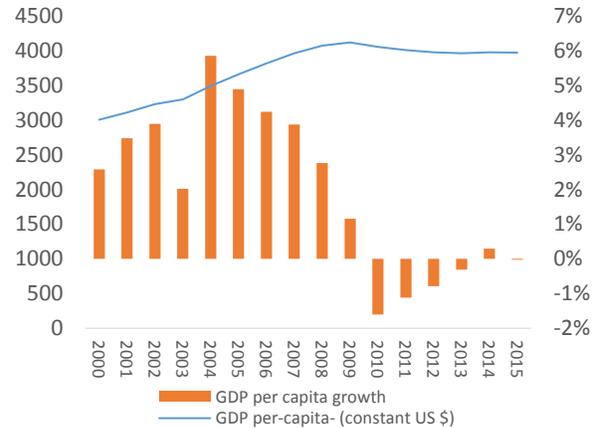
spending. To this end, one can conclude from the graph below that the role of fiscal policy and private sector performance is weak in reducing unemployment.

Figure 13: GDP growth and unemployment



Source: World Bank Data.

Figure 14: Per-capita GDP and Per-capita GDP Growth



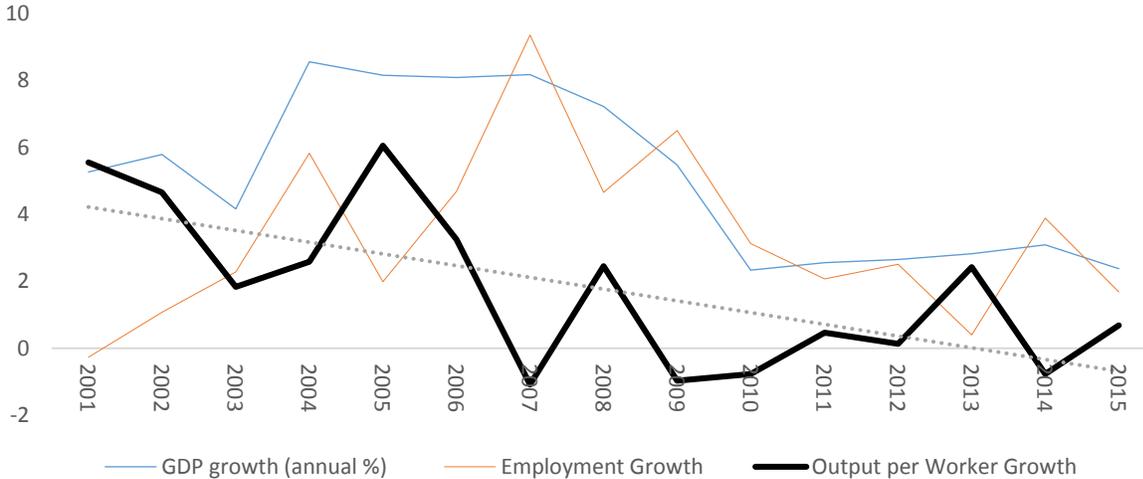
Source: World Bank Data.

The Kingdom had a sharp increase in per-capita income up to 2008, reaching US\$ 4,120, and then experienced a decrease to US\$ 3,500 in 2015. The main reasons behind lower growth in per-capita income are lower domestic investments and productivity growth, along with high population growth. As a higher middle-income country, the growth in per-capita income in Jordan has lagged that of emerging markets and countries with the same economic structure. This high fluctuations in per-capita growth is not in line with target one of SDGs goal 8 which requires countries to sustain growth in inclusive per-capita income.

Labour productivity

Relating to goal 8 of the SDGs, higher input productivity is a sign of higher efficiency in production and an indication of decent employment. Productivity measures the units of output generated per units of input. In other words, it measures the earning capacity of the economy. Theoretically, the decreasing trend of productivity presented above could be either due to technological advancements over time that were not capable of increasing productivity, or to a lack of production efficiency - meaning that the production process reached the maximum level of output with a given level of technology and human capital/labour skills. In Figure 15, we plot the ratio of total output per worker growth, GDP growth and employment growth in Jordan. In recent years, Jordan experienced low productivity growth, especially after the crisis of 2007, and around zero productivity growth between 2010 and 2015. This downward trend of productivity performance continued after the spark of the Syrian war and the sharp drop in economic activity post 2009 to stabilise at around 2% growth in 2015.

Figure 15: Labour Productivity



Sources: Output per worker from ILO modelled estimates, Labour force participation from ILOSTAT database.

Evidence revealed that low productivity has an adverse long-term effect on real wages and living standards. This reduces the chances of fulfilling target 1 of SDG goal 8. Jordan's recent decrease in productivity should be explored by Jordanian policymakers and intervened upon. The abundance of human capital in Jordan could be utilised to increase the stock of technology, raise productivity and balance out the diminishing return of capital and labour.

8. Employment and sector transformation

Structural transformation is usually defined by economists as the shift of factor inputs and economic contribution from lower value added activities (such as agriculture) into higher value added ones such as manufacturing and productive services. In Jordan, there is little evidence of structural transformation taking place over 2000-16. Over this period, agriculture as a percentage of GDP doubled from 2% to 4%. Manufacturing saw a small increase from 16% to 18%. Industry excluding manufacturing²⁴ increased minimally, from 10% to 11%. Services saw a slight decline, from 72% to 66% of GDP. These trends are quite different from those that took place in other Arab countries for which data is available over the period²⁵.

The graph below shows the shares of employment by value added sector as a percentage of GDP over time²⁶. The only sector that is creating employment almost hand in hand with its growth in contribution to GDP is the services sector. Industry and agriculture are growing as a share of GDP but their employment

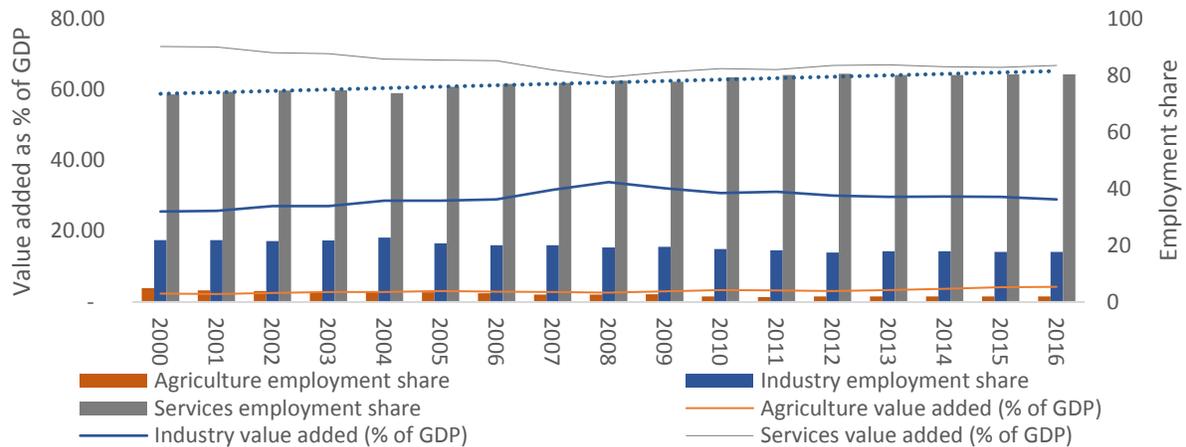
²⁴ Industry excluding manufacturing includes mining, construction, electricity, water and gas.

²⁵ Egypt, for example, saw a drop in the contribution of agriculture and manufacturing and an increase in those of services and industry excluding manufacturing. The same goes for Morocco and Lebanon, except for the fact that Lebanon saw a reduction in the contribution of industry excluding manufacturing. This evidence seems to point to the fact that Jordan has not undergone a structural transformation of its economy over the period.

²⁶ *data by sub-sectors has been aggregated into main sector categories following the International Standard Industrial Classification of All Economic Activities (ISIC). Note that 2004 numbers do not round up to 100 % due to a small percentage of respondents being in unspecified occupations.

shares are decreasing overtime. Such transformation is intuitive in agriculture (low skilled sector), especially when referring to the human capital accumulation (education) trends that we explored before. The jobless growth in industry, however, is concerning.

Figure 16: Sector Value added and Employment per Sector



Sources: employment shares from ILO; value added from World Bank data.

As seen from the graph above, the past 16 years have seen a decrease in agricultural, and industry employment (-58 % and -18% respectively). On the other hand, employment in services, which was already high, has gone up by almost 9 % between 2000 and 2016. Of the 80.3 % employed in services in 2016, almost 43.3 % was working in public (not business or private) services such as public administration, defence or education²⁷. The corresponding percentage in 2004 was 33%: this shows that employment in public services increased greatly over the 12-year period when data is available.

Overall, the growth in value adding sectors in Jordan is not creating enough jobs as it used to be in the 90's of the last century. For example, if we look at the employment elasticity of growth as a way to see how responsive employment is to economic growth, the results are rather low especially in industry and agriculture.

Table 1: Output-employment elasticities

Employment – output elasticity	0.58
Employment – output elasticity (agriculture)	-0.11
Employment – output elasticity (industry)	0.25
Employment – output elasticity (services)	0.84

Source: ESCWA calculations

²⁷ Public services here comprise: public administration and defense; compulsory social security; human health and social work activities; education; extraterritorial organizations and bodies. Business and private services comprise: Wholesale and retail trade, repair of motor vehicles and motorcycles; transport and storage; accommodation and food services activities; information and communication; financial and insurance activities; real estate activities; professional, scientific and technical activities; administrative and support services activities; arts, entertainment and recreation; other service activities; activities of households as employers, undifferentiated goods and services, producing activities of households for own use. All categories are as defined by the Jordan Department of Statistics.

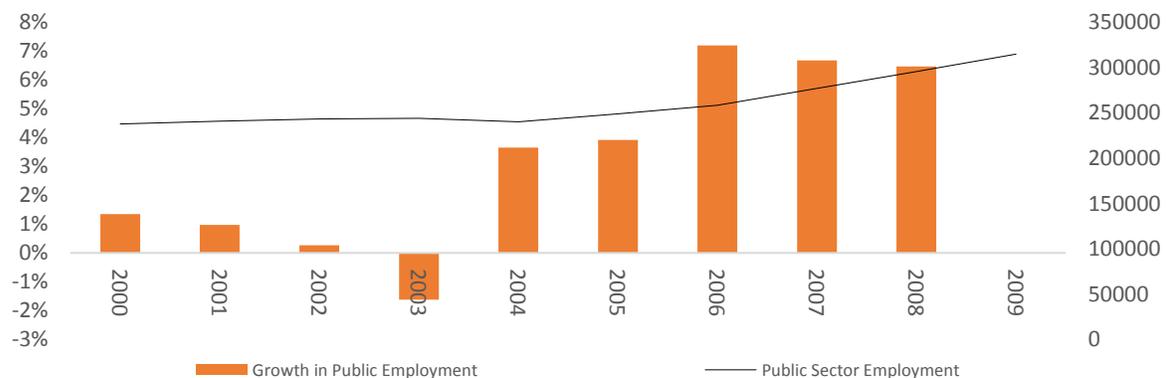
According to the World Bank, the elasticity of employment is almost half of its 1991-1999 level (1.16).²⁸ . It is worth mentioning that if we split employment by gender we see that females are more responsive to income growth with an elasticity score of 0.86 compared to 0.54 for males. The services sector has the highest elasticity of employment to output growth, at 0.8, compared to 0.25 for industry and -0.11 for agriculture. The high employment elasticity in the services sector, however, does not tell whether services jobs are created in high value adding services or low value adding services (especially government services). Overall, the elasticities presented above reveal that employment is partially inelastic to changes in output, hinting that more inclusive growth is required.

Public Sector employment

The public sector is one of the biggest employers in Jordan. According to the most recent data from the Jordanian DoS, 39.2% of all people employed in 2016 worked in government. Such high public sector employment may be contributing to the low productivity of the Jordanian workforce.

Growth in public employment, as shown in the figure 17, decreased over 2000-03, starting at 1% and reaching negative levels in line with the fiscal consolidation plan. However, starting from 2004, growth climbed to 4% and remained positive thereafter. Looking at economic growth trends over 2000-09, one can see that in 2004 economic growth reached 8.1% and stood at the same level up to 2008. This hints to the procyclicality of recurrent spending and specifically public sector recruitment in Jordan's fiscal budget.

Figure 17: Public employment and Public employment growth.



Source : International Labour Organization

9. Social insurance and social safety nets

In Jordan, social insurance programmes²⁹, which are generally associated with formal employment, do not seem to target the poorest segments of the population adequately. The latest available data (2010)

²⁸ <http://mop.gov.jo/echobusv3.0/SystemAssets/pdf/Reports/Jordan%20DPR%20Volume%201-Overview.pdf>

show that social insurance programmes covered only 24.9% of the population in the poorest quintile. As a comparison, the programmes covered 31.2% of the population in the richest quintile³⁰. The coverage of social safety nets³¹ (such as cash transfers and last resort programmes) fared better, reaching 83% of the population in the poorest quintile. Surprisingly, however, 31% of the richest quintiles were also covered by social safety nets in 2010³². Overall, only 22% of total safety nets benefits went to the poorest quintile in 2010. Such data points to the need to better target social safety nets and increased coverage of social insurance programs.

10. Refugees and employment in Jordan.

Jordan has been a refugee host country since Palestinian refugees first arrived following the creation of Israel in 1948. Over the years, Jordan saw the arrival of other migrant flows from the region, besides the Palestinians, chiefly from Lebanon during the 1975-1991 civil war, and from Iraq since the 1991 Gulf War and after the 2003 US-led invasion³³. The ongoing war in Syria, which started in 2011, brought a large new wave of refugees to Jordan: the UN estimates that Jordan now hosts 1.3 million Syrians. According to UNHCR, 93% of them live below the poverty line. The recent ISIS-led occupation of Iraq also pushed many more Iraqis to flee to Jordan. Because of these influxes, Jordan is the second country in the world (after Lebanon) with the highest ratio of refugees per citizens: according to data from the UN Population Division, in 2015 Jordan hosted 2.8 million refugees and around 360,000 non-refugee international migrants. All in all, these 3.1 million international migrants³⁴ made up 41 % of Jordan's population.

Over the past decades, the influx of refugees brought both costs and benefits for Jordan. While refugees have weighed on the country's infrastructure and social services, the refugee issue has attracted large amounts of foreign aid, which has contributed to the Kingdom's economy. However, today fewer refugees manage to leave Jordan to find employment in the region (because of reduced opportunities in the Gulf following the collapse in oil prices and because of prolonged conflict elsewhere in the region), and many of the refugees who remain in Jordan are unemployed. This is both due to the difficulty of obtaining a work permit, which requires several bureaucratic steps, proof of residence and a lot of paperwork, and to the lack of opportunities that fit the skills of refugees. Non-Jordanian workers must be approved by the Minister of Labour and fill needs which Jordanian workers cannot. Recently, a study conducted by the ILO found that just 10% of Syrian refugee workers in Zaatari refugee camp and outside the camp has obtained permits for their current job. 18% of Syrian refugees outside the camp reported having applied for a permit, but only 4% of them succeeded. Those who applied did so for work permits in mostly low-skilled

²⁹ According to the World Bank definition, social insurance programmes include old age contributory pensions (including survivors and disability) and social security and health insurance benefits (including occupational injury benefits, paid sick leave, maternity and other social insurance). Estimates include both direct and indirect beneficiaries.

³⁰ World Bank data.

³¹ According to the World Bank definition, social safety nets include cash transfers and last resort programs, noncontributory social pensions, other cash transfers programs (child, family and orphan allowances, birth and death grants, disability benefits, and other allowances), conditional cash transfers, in-kind food transfers (food stamps and vouchers, food rations, supplementary feeding, and emergency food distribution), school feeding, other.

³² World Bank data.

³³ Chatelard, G. 2010. Jordan: A Refugee Haven. Migration Policy Institute. Available at www.migrationpolicy.org. [25 March 2014.] <http://www.migrationpolicy.org/article/jordan-refugee-haven>

³⁴ United Nations Population Division. Trends in the international migrant stock: the 2015 revision.

sectors: 32% applied for permits specified for construction, 30% for services, 17% for restaurants, 17% for industry and 4% for agriculture. Among workers who did not apply for a permit, the main reasons cited were that permits are too expensive (64 %) or too difficult to get (15 %)³⁵.

A study by the ILO and FAFO institute ³⁶ on Syrian refugee employment in Jordan claimed that 51 % of Syrian men and 7% of Syrian women living outside camps are participating in the Jordanian labour market. Unemployment rates are 57% for men and 88% for women. In general, male Syrian refugees are working informally in sectors that are not attractive to Jordanians, such as agriculture, construction, food services, and retail trade. The paper suggests that the main impact of the increased Syrian labour market activity in Jordan so far has been downward pressure on wages in the informal economy. Occupations in the informal sector frequently carry safety risks and contravene laws, meaning that refugees are often in precarious and risky employment. Studies carried out by Jordan's Ministry of Labour and by NGOs operating in Jordan have, for example, found children employed, in contravention of Jordanian law (which sets 16 as the minimum age for work), at below minimum wages, and with no controls on working hours or safety conditions.

Besides being a host country, Jordan has also long been a departure country for Jordanians and refugees residing in Jordan to seek employment abroad. In 2015, remittances to Jordan, either from Jordanians working abroad or from refugees sending money back to Jordan, made up 14% of GDP. Remittances to Jordan as a percentage of GDP, however, declined sharply from 22% in 2000 to 12% in 2012, before climbing again, most probably due to the influx of Syrian refugees to the Kingdom since 2011. According to the JDoS, in 2015 there were 34,951 Jordanians living abroad³⁷. 53% of them were within 20 and 34 years of age. 42% were abroad for work, 21% for study. 75% were males.

Expected jobs required by 2030.

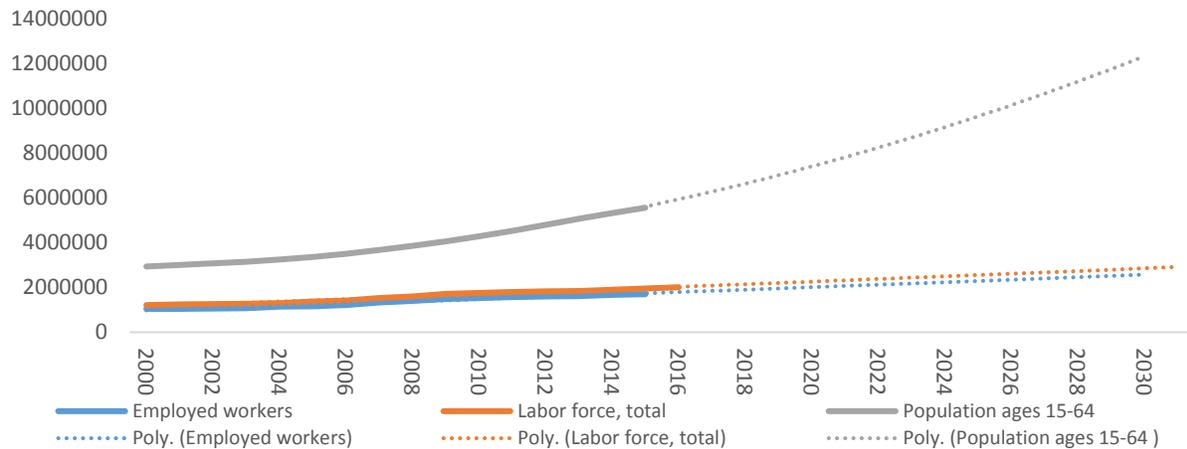
The graph below plots the jobs required to be created between 2017 and 2030 assuming a 5% natural unemployment rate for Jordan. In our analysis, we projected the gap between employed population and the labour force to calculate the additional jobs required if 95 % of the population was employed. In our projections, we assumed that labour force participation will continue growing at the same business as usual rate and without matching the global or regional average participation rates. This simple model shows that, if Jordan replicates the same level of economic growth between 2017 and 2030, unemployment will remain a significant issue. The Kingdom could require the creation of almost 2.5 million new jobs for the projected period. This requires on average 165,000 new jobs annually between 2017 and 2030.

³⁵ Access to work for Syrian refugees in Jordan: a discussion paper on labour and refugee laws and policies. ILO, 2015. http://www.ilo.org/wcmsp5/groups/public/---arabstates/---ro-beirut/documents/publication/wcms_357950.pdf

³⁶ http://www.ilo.org/wcmsp5/groups/public/---arabstates/---ro-beirut/documents/publication/wcms_364162.pdf

³⁷ http://www.dos.gov.jo/dos_home_a/main/population/census2015/JordaniansAbroad/Abroad_6.1.pdf

Figure 18: 2030 projections



Source: World Bank Data.

The additional jobs that were required pre-2016 were less than the jobs needed for post 2016, meaning that additional pressure will be exerted on successive governments to close the unemployment gap.

11. Main Policy Challenges

Jordan faces the following medium and long-term challenges to promote employment and decent work in line with the 2030 Agenda:

- **According to our simplified projections, In order to achieve 95% employment, Jordan would need to create almost 2.5 million new jobs between now and 2030 holding other things constant.** The Jordanian population is increasing rapidly (due in part to the influx of refugees and foreign workers). Despite the large share of working age population, labour participation is low (especially for women) and unemployment is high (12-16%). Youth unemployment averaged 26% over 2010-16. In the business as usual scenario, unemployment will remain a significant challenge. In order to employ 95% of its population, the Kingdom would require almost 2.5 million new jobs, or 165,000 jobs annually, between 2017 and 2030. Surveys suggest the main challenge is the lack of jobs, not the lack of skills. In fact, one of the highest unemployment rate categories is university graduates.
- **Female unemployment, in particular for the youth, remains unacceptably high.** The gap in employment and salaries between women and men perpetuates high gender inequality in the Kingdom. Moreover, most of Jordan's unemployed females are highly educated, pointing to a large waste of talent. Policy measures need to address the cultural and practical obstacles to increasing female employment.
- **Youth unemployment is high and labour force participation is low.** Coupled with the demographic growth in elderly shares of the population, these factors are going to exacerbate the EDR of Jordan in the coming years. Policies should focus on increasing labour force participation, especially among the youth.

- **Economic growth in the last decade has not been job-intensive.** GDP growth averaged 4.3% in Jordan over 2000-16. Over this period, GDP growth does not seem to have driven reductions in unemployment.
- **Structural transformation has been small and has not led to significant job creation in sectors with high productivity such as industry or manufacturing.** Productivity has declined sharply since 2007 and there is little evidence of positive structural transformation taking place in the economy over 2000-16. Most employment was generated in the services sector (highest employment output elasticity) and in the public sector in particular. No recent data is available on informal employment, but according to the IMF this amounted to 26% in 2008.
- **The conflict in Syria has exacerbated the refugee burden in Jordan.** The ongoing war in Syria, which started in 2011, brought a large wave of refugees to Jordan: the UN estimates that Jordan now hosts 1.3 million Syrians. UNHCR estimates that 93% of them live below the poverty line. The influx of refugees has had enormous costs for Jordan, but has also brought some benefits. Today fewer refugees manage to leave Jordan to find employment in the region (because of reduced opportunities in the Gulf), and many of them are unemployed. The main impact of the increased Syrian labour market activity in Jordan so far seems to have been downward pressure on wages in the informal economy. Jordanian policy makers should better target the refugee population for gainful employment.