The Syrian Refugee Crisis and Its Impact on the Jordanian Labour Market

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1. Introduction

The Syrian refugee crisis in Jordan began in earnest in 2012. By July 2013, more than 420,000 Syrian refugees were registered with UNHCR, with approximately 280,000 (67 per cent) residing outside of the camps.[1] By July 2014, the total number had risen to more than 604,000 before levelling out to roughly 655,000 in 2016. In early 2018, approximately 670,000 Syrians were registered with UNHCR. These numbers are far below those of Jordan's Department of Statistics, which in the 2015 Census estimated the total Syrian population count at approximately 1.265 million.[2] According to those figures, between 2012 and 2016 Jordan's population grew by 32 per cent.[3]

This sudden population growth brought about by the Syrian refugee crisis has had profound consequences for the Jordanian social, economic and environmental contexts. Social cohesion has been a common concern within urban areas, as Jordanian nationals have increasingly perceived Syrians as a threat to peace and stability within their communities.[4] A nationwide poll carried out by Harvard University in 2013 found that 60 per cent of Jordanians opposed allowing more Syrians to enter the country and 80 per cent preferred segregating Syrians into refugee camps.[5]

Residents of northern cities such as Mafraq and Irbid complain of soaring rental costs for housing. In interviews conducted by the WANA Institute in Mafraq, residents reported that rental prices had increased by more than 100 per cent.[6] A study carried out by researchers from the Massachusetts Institute of Technology found that between 2013 and 2015 rental prices increased by 14 per cent nationwide.

Jordan's natural resource base has also been affected. In 2015, the Ministry of Planning and International Cooperation (MOPIC) found that 70 per cent of Syrians and Jordanians had access to less than the national standard of 100 litres of water per person per day.[7] According to the same

[1] UNHCR Syria Regional Refugee Response, https://data2.unhcr.org/en/situations/syria/location/36
[2] Ghazal, Mohammad; 'Population stands at around 9.5 million, including 2.9 million guests,' *The Jordan Times*, January 2016, http://www.jordantimes.com/news/local/population-stands-around-95-million-including-29-million-guests. The large disparity as between Syrian refugees registered with the UNHCR and the Department of Statistics estimate of Syrians resident in Jordan is that the latter include Syrians who were resident in Jordan prior to the crisis and who have remained resident in the country since.
[3] This 32 per cent figure is the percentage change of population between 2012 and 2016. According to Jordan's Department of Statistics, in 2012 Jordan's total population count was 7.42 million. By 2016, that figure had risen to 9.798 million.
Source: Trading Economics/ Jordan Department of Statistics, https://tradingeconomics.com/jordan/population
[4] In focus groups conducted by the WANA Institute in September 2017, Jordanian nationals expressed resentment towards Syrian nationals based on the perception that the large population influx was a strain on the Jordanian state.
See WANA Institute 'Syrian Refugees and Social Cohesion in Jordan,' April 2018, http://wanainstitute.org/en/publication/syrian-refugees-and-social-cohesion-jordan
[5] Harvard University, 'Non-Paper on the International Response to the Syrian Refugee Crisis: Harvard Field Study Group,' January 2014, https://www.alnap.org/help-library/non-paper-on-the-international-response-to-the-syrian-refugee-crisis-harvard-field
[6] In field interviews conducted by the WANA Institute in November 2018, one stakeholder reported that the price of a luxury apartment in Mafraq had risen from JOD 150 to between JOD 300 and 400. See WANA Institute, 'Syrian Refugee Return: Implications for Jordanian Host Arrangements and Outcomes'
[7] Wa'ed Alshoubaki and Michael Harris; 'The impact of Syrian refugees on Jordan: A framework for analysis,' Journal of International Studies, 2018, https://www.jois.eu/files/11_454_Alshoubaki%20et%20al.pdf

research, the presence of Syrian refugees accounted for 62 per cent of the total water vulnerability index.[8]

Syrian refugees have also become increasingly active in various sectors of the Jordanian labour market. Their entry into the informal labour market has had certain effects on wages and participation rates of other non-Jordanians who were previously employed in the same activities.

The signing of the Jordan Compact in February 2016 provided registered Syrian refugees with limited working rights within agriculture, construction, manufacturing, food and beverage services, and wholesale and retail trade. Its implementation has sparked a broad range of efforts on the part of international organisations, NGOs and national labour organisations to formalise existing arrangements and improve access for individuals seeking employment.

This report — the second piece in a three-part study — will review the body of research that has been conducted on Syrian participation in the labour market and assess the impact that the Syrian refugees had on the Jordanian labour market between 2012 and 2016.

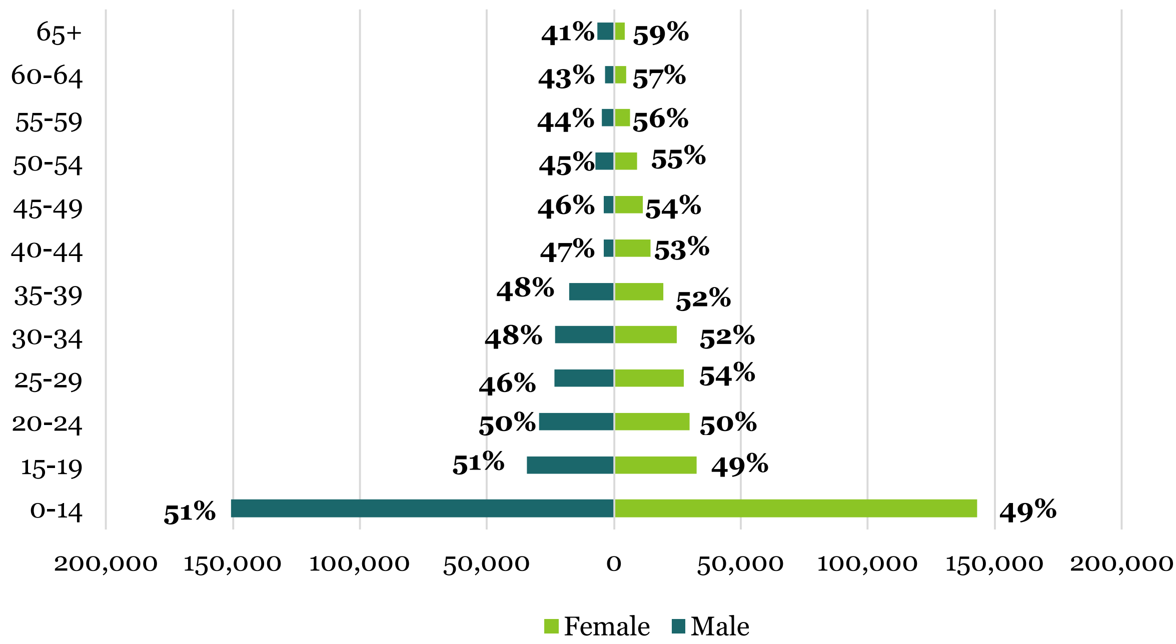
[8] Ibid.

2. Syrian Refugee Labour Market Participation in Jordan, 2013-2017

2.1 Syrian Refugee Population

The Syrian refugee population in Jordan is disproportionately young, with approximately 45 per cent of registered refugees below 15 years of age, according to UNHCR 2016 figures. An additional 4 per cent of the population is above the age of 60, which is generally considered too old to work given the difficult physical conditions associated with displacement, although 65 years is commonly considered retirement age. A slightly larger proportion of registered Syrian refugees appear to be female (51 per cent) than male (49 per cent). These figures yield a population dependency ratio of 89.5 per cent.[9] This compares to 61.3 per cent for the Jordanian resident population as a whole in 2016.[10]

Figure 1: Registered Syrian refugees by age group, end- 2016



Source: UNHCR

[9] The population dependency ratio measures the sum of children (younger than 15 years of age) and elderly (65 years and above) relative to the working age population (persons between the ages of 15 and 64).
[10] The Jordanian population figure for 2016 by age cohorts from which the dependency ratio is calculated is from the Department of Statistics as provided to the WANA Insitute.

2.2 Estimates on Syrian Refugee Labour Market Participation

Since 2013, various research initiatives have been undertaken to assess the labour force participation rate of Syrian refugees in the Jordanian labour market.[11] Each of these studies has been implemented at a different point in time and has drawn on a different sampling methodology. A study carried out in 2013 by the international NGO CARE, estimated that approximately 48.5 per cent of working age Syrian refugees across Irbid, Madaba, Mafraq, and Zarqa were active in the labour force.[12] A study carried out in 2014 by the Norwegian think tank FAFO and the ILO estimated Syrian refugee labour force participation at 28 per cent.[13]

A survey conducted in August 2017 by IPSOS in conjunction with the WANA Institute put Syrian refugee labour force participation at approximately 55 per cent.[14] This value exceeds estimates from earlier years. The difference between this figure and earlier ones may be the result of additional Syrians having entered the workforce over time or may reflect a trend in which larger numbers of employed refugees chose to answer positively to questions regarding their employment. The limited sample size and randomisation of all surveys conducted on Syrian refugee populations in Jordan also may explain the varying results.

Participation in the labour force includes individuals who are currently employed as well as individuals who are unemployed and seeking work. The labour force participation — or economic activity rate, as it is formally defined, also includes part-time and intermittently employed workers. In the context of Syrian refugees in Jordan it is not limited to formal employment.

At the end of 2016, there were 655,410 Syrian refugees registered with UNHCR in Jordan. Of this number 361,862 — 55.2 per cent — were above the age of 15 and thus of working age according to the standard ILO definition.[15] Combining the end-2016 UNHCR refugee population figures with the WANA-IPSOS survey estimate of a 54.2 per cent refugee labour force participation rate, it is estimated that about 196,460 refugees were employed or searching for employment in August 2017. The great majority of these individuals were men: the activity rate for men was estimated at 85 per cent compared to only 30 per cent for refugee women (see Table 1).

[11] The labour force participation rate as defined by the ILO is the 'measure of the proportion of a country's working age population that engages actively in the labour market either by working or looking for work.'
See ILO-Labour Force Participation Rate, https://www.ilo.org/ilostat-files/Documents/description_LFPR_EN.pdf

[12] CARE Jordan, 'Syrian Refugees in Urban Jordan: Baseline Assessment of Community-Identified Vulnerabilities among Syrian Refugees Living in Irbid, Madaba, Mufraq, and Zarqa,' April 2013, https://www.alnap.org/help-library/syrian-refugees-in-urban-jordan-baseline-assessment-of-community-identified

[13] Svein Stave and Hillesund, 'Impact of Syrian Refugees on the Jordanian Labour Market,' ILO and FAFO, 2015, p. 45., https://www.ilo.org/wcmsp5/groups/public/---arabstates/---ro-beirut/documents/publication/wcms_364162.pdf

[14] A quantitative study of 501 Syrian individuals carried out across Amman, Irbid, Mafraq and Zarqa in August 2017 found a labour force participation rate of 54 per cent. See WANA Institute - SPARK, 'Syrian Refugee Employment Trends in Jordan and Future Perspectives,' April 2018, http://wanainstitute.org/en/publication/syrian-refugee-employment-trends-jordan-and-future-perspectives
See WANA Institute 'Syrian Refugee Employment Trends in Jordan and Future Perspectives,' April 2018 http://wanainstitute.org/en/publication/syrian-refugee-employment-trends-jordan-and-future-perspectives

[15] The ILO defines working age as 15 years or older.
ILO Definitions and Metadata, https://www.ilo.org/wesodata/definitions-and-metadata/vulnerable-employment

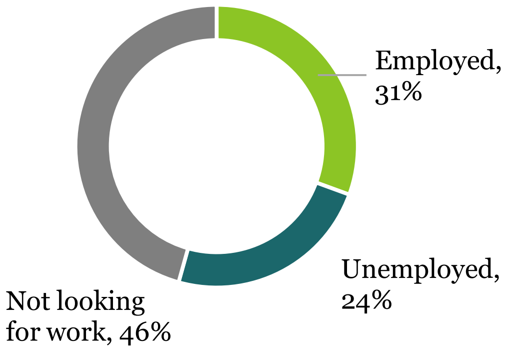
Table 1: Estimates of Syrian Refugee Population and Labour Market Aggregates by Sex in Jordan, 2016[16]	
Total Population	**655,410**
Males	323,648
Females	331,762
Working Age Population (15+)	**361,862**
Males	172,886
Females	188,976
Activity Rates (LFPR)	**54.29%**
Males	85.07%
Females	30.00%
Labour Force	**196,460**
Males	141,799
Females	54,661
Employment	**110,509**
Males	96,524
Females	13,985
Unemployment	**85,951**
Males	45,276
Females	40,676
Unemployment Rates	**43.75%**
Males	31.93%
Females	74.41%

According to the results of the WANA-IPSOS survey, approximately 31 per cent of Syrian refugees above the age of 15 were employed, while an additional 24 per cent reported being unemployed and searching for work.[17] Applying these figures suggests that approximately 110,500 refugees were or had been employed in some fashion, with about 87 per cent of these being men.

[16] Total population and working age population are from the UNHCR Jordan for end-2016. Activity rates are calculated on the basis of data the WANA-IPSOS survey conducted in August 2017. The estimate of employment is calculated as the share of the labour force working occasionally or regularly while unemployment is the share of the labour force seeking work occasionally or regularly, as reported in the WANA-IPSOS survey of August 2017.

[17] The 31 percent of the working-age population who reported being employed plus the 24 percent of the working-age population who were seeking work sum to a 55 percent labour force participation rate for the working-age refugee population in August 2017.

Figure 2: Estimated employment rates of Syrian refugees, WANA-IPSOS survey, August 2017



Of the 31 percent of the working-age population who reported being employed in the WANA-IPSOS study, about 36 per cent reported full-time employment while about 64 per cent reported part-time employment.[18] Given the informal nature of the bulk of refugee employment in Jordan, it should be noted that nearly all such work was contingent and subject to the often-changing needs of employers.

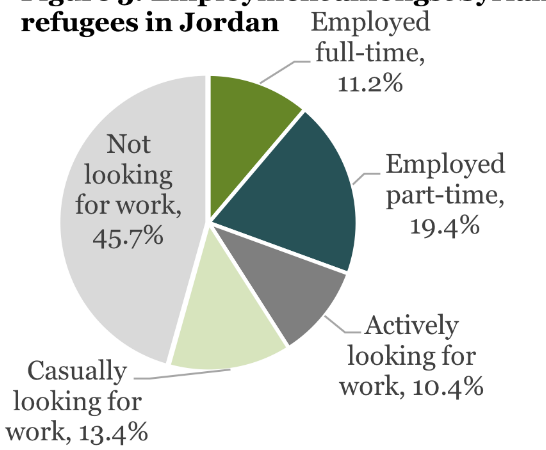
Nearly 44 per cent of Syrian refugees active in the Jordanian labour market were estimated to be unemployed. This implies that, at the time of the survey, some 86,000 refugees were unemployed, with 45,275 of them being men. Forty-three per cent of those who reported being unemployed were actively looking for work, and 56 per cent were casually looking for work.[19]

[18] WANA-IPSOS Survey, August 2017.
[19] WANA-IPSOS Survey, August 2017.

Box 1: Syrian refugee employment trends, 2017[20]

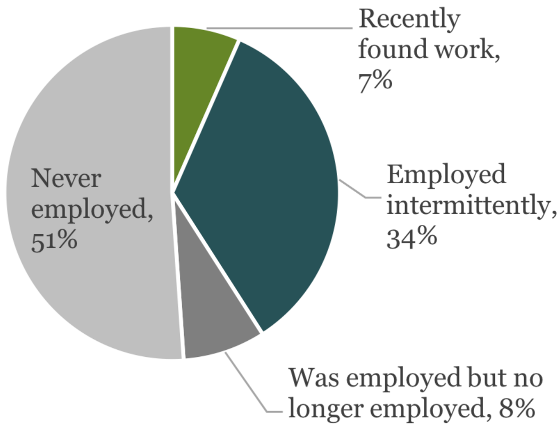
A great deal of Syrian refugee employment in Jordan is sporadic and part-time in nature. A 2017 survey carried out by IPSOS in conjunction with the WANA Institute highlighted this trend, indicating that only 11 per cent of the surveyed population reported being employed full-time. Nineteen per cent of the surveyed population reported being employed part-time, while approximately 24 per cent described themselves as actively or casually looking for work.

Figure 3: Employment amongst Syrian refugees in Jordan



Agreements between workers and employers are also short-term in nature. When asked to describe their work history, a large proportion of survey respondents — approximately 34 per cent — indicated intermittent employment, while an additional 8 per cent indicated having been previously employed.

Figure 4: Work history in Jordan



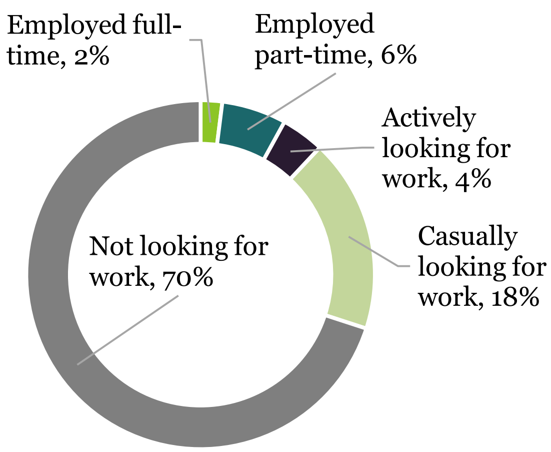
[20] WANA Institute, 'Syrian Refugee Employment Trends in Jordan and Future Perspectives,' April 2018 http://wanainstitute.org/en/publication/syrian-refugee-employment-trends-jordan-and-future-perspectives

2.2.1 Syrian Women's Labour Force Participation

The labour force participation or economic activity rate of Syrian refugee women is far lower than that of Syrian refugee men. The WANA-IPSOS survey found that 30 per cent of the Syrian refugee women's population in Jordan was active in the labour force at the time of the study. Data from the same survey suggests that only 19 per cent of Syrian refugee women in Jordan was employed in Syria prior to displacement. Only 2 per cent of surveyed women reported full-time employment, and only 6 per cent reported part-time employment. Twenty-two per cent was either actively or casually looking for work.

Syrian refugee women who were either employed or looking for work numbered an estimated 54,661 persons and accounted for 28 per cent of the overall Syrian refugee workforce in 2016. An estimated 13,985 Syrian refugee women are thought to have been employed at some point prior to the end of 2016.

Figure 5: Syrian refugee women employment trends, WANA-IPSOS survey August 2017



2.3 Syrian Refugee Employment by Economic Activity

In Jordan, Syrian refugees have been employed almost entirely in the private sector, and in particular, in activities with high rates of economic informality. As has been true for estimates of labour force participation, there is wide variation in the figures reflecting worker distribution across activities.

Based on UNHCR VAF data from 2016, it is estimated that some 40 per cent of total Syrian refugee employment was in a broad range of personal and private services;[21] 28 per cent was in construction; another 14 per cent in wholesale and retail trade; 11 per cent in agriculture; 3 per cent in accommodation and food services; under 2 per cent in manufacturing and about 1 per cent in household domestic services (see Table 2).

Table 2: Estimated Activity Distribution of Syrian Refugee Employment in Jordan, 2016[22]

Economic Activity	Employment	Relative Share	Males Employed	Females Employed
Agriculture	12,503	11.3%	10,632	1,744
Manufacturing	1,933	1.7%	1,748	211
Construction	31,068	28.1%	30,970	1,787
Wholesale/Retail Trade, Repair of Vehicles	15,773	14.3%	13,316	2,254
Accommodation, Food Services	3,248	2.9%	2,837	411
Professional, Scientific, Technical Activities	599	0.5%	454	115
Household Employment Activities	1,078	1.0%	502	382
Other Service Activities	44,306	40.1%	36,065	7,080
Total	**110,509**	**100.0%**	**96,524**	**13,985**

The probability that a Syrian refugee works in a given sector varies across governorates. In Irbid, the construction sector accounts for the largest share of reported employment (40 per cent) compared to 30 per cent in Amman, 26 per cent in Mafraq, and 31 per cent in Zarqa. In Mafraq, agriculture accounts for a significantly larger proportion of reported employment — 43 per cent — than in Amman (3 per cent), Irbid (9 per cent) and Zarqa (3 per cent).[23]

In the 2017 dataset, the agriculture sector accounted for 23 per cent of Syrian refugee employment; the construction sector for 19 per cent, the wholesale and retail trade sector for 15 per cent, the food and beverages sector for 4 per cent, the manufacturing sector for 3 per cent; and the professional, technical and scientific activities sector accounted for 1 per cent (Figure 6). The differences between the UNHCR VAF datasets from 2016 and 2017 may reflect the fact that the

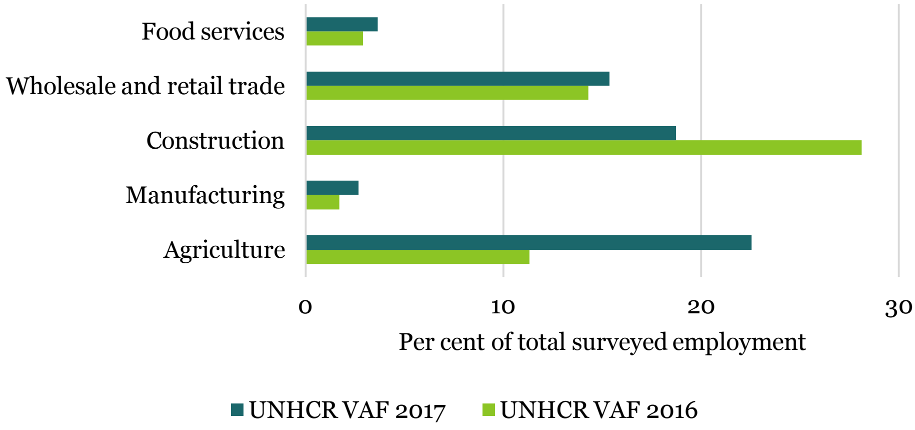
[21] One of VAF categories combines specific personal services such as tailor, barber and hairdresser with handyman services such as craftsman, carpenter, painter, blacksmith and mobile phone repair. This broad category of services has been combined with another non-specific category designated by VAF simply as 'other' to arrive at 'other service activities.' The non-specific category 'other' alone accounted for about 30 per cent of refugee employment in the VAF survey. Inquiries as to the details of this designation yielded no substantive response from UNHCR. The assumption here is that 'other' refers mainly to informal personal services and services to small business. (In the standard international classification system, 'personal services' include repair of household appliances and personal goods; cooking, washing and cleaning services; hairdressing and other beauty treatments and services such as gardening and driving. 'Other services' refers generally to business and professional services.)

[22] Estimates of the activity distribution of Syrian refugee employment are based on the UNHCR Jordan *Vulnerability Assessment Framework* (VAF) rolling survey covering tens of thousands Syrian refugees through early 2017. The VAF utilizes non-standard designations for economic *activities* and conflates these with *occupations*. The original VAF designations have been translated into the standard ILO classification of economic *activities*. Given legal and practical restrictions on Syrian refugee employment — e.g. prohibitions on public sector employment and certain private sector activities — the activities in Table 2 are only subset of Syrian refugee employment datasets.

[23] The WANA Institute, 'Syrian Refugee Livelihoods in Jordan: Statistics Brief.' For access to this report, contact the WANA Institute directly.

sample size of VAF data from 2017 was considerably smaller than the sample size of VAF data from 2016.[24]

Figure 6: Syrian refugee employment distribution across sectors



These values differ from the values derived from the 2014 ILO-FAFO[25] and the 2017 WANA-IPSOS study,[26] as well as the WANA Institute's analysis of UNHCR data from 2017. It is noteworthy that in both the 2014 ILO-FAFO study and the 2017 WANA-IPSOS study, construction accounted for a respective 41 and 40 per cent of reported employment. Manufacturing also accounts for a larger share of reported employment in the ILO-FAFO and WANA-IPSOS studies than in the VAF datasets. This most likely results from the fact that the former aimed to survey a representative population, while the VAF data includes a disproportionate number of vulnerable populations and is on an income scale is right-skewed.

2.3.1 Livelihoods, Financial Outcomes and Refugee Vulnerability

A wide range of organisations has sought to understand the impact that labour inclusion has on Syrian refugee vulnerability. A landmark study undertaken by the World Bank in conjunction with UNHCR questions the value of informal employment, suggesting that the returns to such activity

[24] The sample size of UNHCR's VAF data from 2016 included more than 68,000 households, while the sample size of the same dataset for 2017 included approximately 17,500 households.

[25] The ILO-FAFO survey that was conducted in 2014 produced estimates that are different from those derived using UNHCR VAF data from 2016. According to the estimates formulated in this study, 41 per cent of surveyed Syrians indicated working in the construction sector, 23 per cent in the wholesale and retail trade sector, 12 per cent in the manufacturing sector, eight per cent in the accommodation and food services sector, four per cent in the professional, scientific, and technical activities sector; three per cent in the agriculture sector, and three per cent in the public administration.
See: Stave and Hillesund, 'Impact of Syrian refugees on the Jordanian labour market,' ILO-FAFO, 2015, https://www.ilo.org/wcmsp5/groups/public/---arabstates/---ro-beirut/documents/publication/wcms_364162.pdf

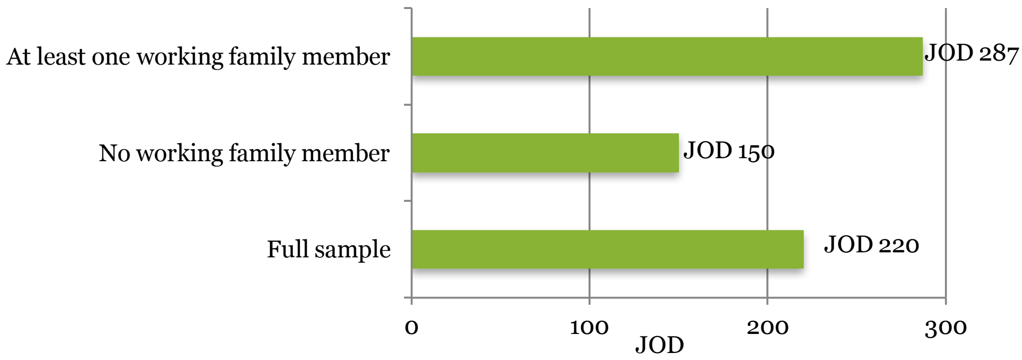
[26] According to the results of the 2017 WANA-IPSOS study, 40 per cent of employed Syrians worked in construction, 22 per cent in accommodation and food services, 11 per cent in manufacturing, an additional 11 per cent in wholesale and retail trade; nine per cent in agriculture, and one per cent in professional, scientific and technical activities.
See: WANA Institute, 'Syrian Refugee Employment Trends in Jordan and Future Perspectives,' April 2018 http://wanainstitute.org/en/publication/syrian-refugee-employment-trends-jordan-and-future-perspectives

may be so low that it has no statistical impact on a household's chance of surpassing the poverty line.[27]

The measurement of economic vulnerability is a complex undertaking that accounts for a wide range of financial and non-financial factors, including estimated monthly expenditures, estimated monthly income, household size, access to health primary services, and a broad range of other indicators. In Jordan, UNHCR has developed a tool known as the Vulnerability Assessment Framework (VAF) that draws on a detailed questionnaire in order to measure a household's ability to meet financial and other needs. Households that are registered with UNHCR are interviewed on an annual basis, and the results of this survey constitute one of the largest available datasets on Syrian refugees in Jordan.

The VAF dataset from 2017 provided to the WANA Institute included an overall sample of 17,518 households, for a total of 34,214 individuals. Of these, 7,864 households (45 per cent) reported at least one working family member.[28] Overall, monthly expenditures of households with at least one working family member are 91 per cent greater than for households with no working family member. This suggests that employment has at least a marginal impact on household welfare.

Figure 7: Median monthly expenditure, VAF 2017



Despite broad participation in the labour force, the income-expenditure gap remains a significant challenge for the great majority of households. Reported monthly expenditures greatly exceed reported monthly income, across all households reporting one or more family members. For households reporting one working family member, monthly income covers approximately 53 per cent of reported monthly expenditures. Amongst the very small section of households reporting two, three or four employed family members, reported monthly income covers a respective 60, 65, and 72 per cent of reported expenditures. Therefore, it appears that participation in the labour market of one or more family member does not exempt households from reliance on assistance from international organisations and NGOs.

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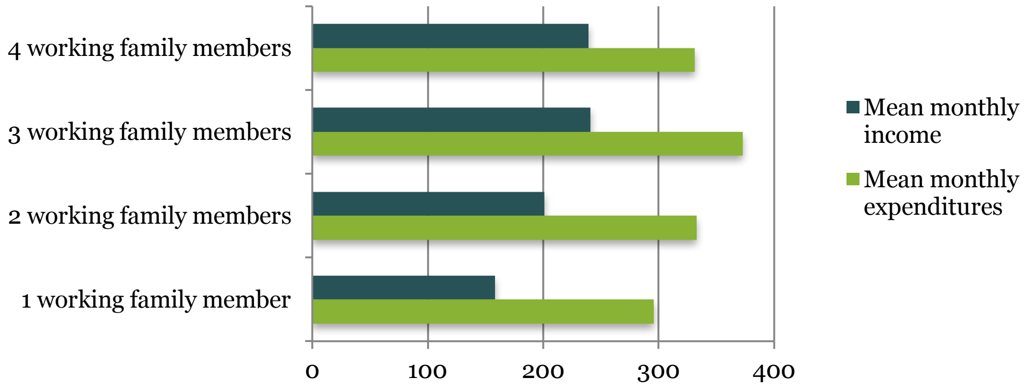
[27] Paolo Verme, et al, 'The Welfare of Syrian Refugees: Evidence from Jordan and Lebanon,' The World Bank, 2016, http://www.worldbank.org/en/news/feature/2015/12/16/welfare-syrian-refugees-evidence-from-jordan-lebanon

[28] Approximately forty per cent of households (6,943) reported one working family member, four per cent of households (787) reported having two working family members, one per cent of households (106) reported having three working family members, and 0.2 per cent of households (28) have four working family members.
Source: WANA Institute analysis of UNHCR 2017 VAF data

Figure 8: Income - Expenditure Gap



3. Syrian Refugees' Impact on Jordan's Labour Market

3.1 Wages and Incomes of Syrian Refugee and Jordanian Workers

Since the onset of the Syrian refugee crisis, the debate on labour inclusion has been indelibly marked by the assumption that Syrian refugees have had a negative impact on wages. Indeed, part of the impetus behind the provision of limited employment rights under the Jordan Compact, stemmed from the belief that the absorption of Syrian workers into the formal labour market would neutralise downward pressure on wages.[29] However, analysis of Department of Statistics wage data over the period between 2010 and 2016 suggests that while the participation of Syrians in the Jordanian labour market may have driven down wages in the informal sector, the wages of Jordanian workers in the formal sector were hardly affected. Within the context of this analysis, it is important to note that the Jordanian labour market is characterised by high rates of informality,[30] and certain activities are more prone to high rates of informality than others (see Annex Table 7).[31]

In 2010, the weighted average monthly wage for Jordanians far exceeded the same figure for non-Jordanians across all relevant sectors, including agriculture, manufacturing, construction, accommodation and food service, and other services. The relative wage advantage of Jordanian workers compared to non-Jordanian workers was particularly pronounced in the manufacturing, construction, accommodation and food services, and other services sectors where the weighted average monthly wages of Jordanians were, respectively, 116.3 per cent, 102.4 per cent, 97 per cent, and 80.9 greater than the wages of non-Jordanians (Table 3).

[29] Shaddin Alhajahmad and Dorsey Lockhart; 'Syrian Refugee Labour Integration Policy in Jordan,' WANA Institute, August 2017, http://wanainstitute.org/sites/default/files/publications/Publication_SyrianRefugeeLabourJordan_English.pdf

[30] The ILO defines Informality as the absence of explicit legal work contracts and/or the absence of society security coverage for workers on the job. See General Conference of the International Labour Organisation, 90th Session, 2002, Conclusions, paragraph 3, for a more elaborated definition of informality.

[31] A 2010 UNDP study found that 26 per cent of Jordanian wage earners were employed informally. When employers, the self-employed, and unpaid family workers were included in the calculation, the total informality rate was estimated at 44 per cent of the working population.
See: Ministry of Planning and International Cooperation and UNDP, 'The Informal Sector in the Jordanian Economy,' 2013, http://www.undp.org/content/dam/jordan/docs/Publications/Gov/The%20Informal%20Sector%20in%20the%20Jordanian%20Economy-jo.pdf

Table 3: Estimated Monthly Wages for Employed Jordanians and Non-Jordanians, 2010 (JOD) [32]			
Economic activity	**Weighted average monthly wage Jordanians**	**Weighted average monthly wage non-Jordanians**	**Relative advantage of Jordanians**
Agriculture, forestry and fishing	245.90	160.50	53.2%
Mining and quarrying	416.75	176.01	136.8%
Manufacturing	284.80	131.69	116.3%
Electricity, gas, steam and air conditioning	355.00	247.03	43.7%
Water supply, sewerage, waste management	312.80	n.a.	n.a.
Construction	294.95	145.75	102.4%
Wholesale and retail trade; repair of vehicles	289.60	n.a.	n.a.
Transportation and storage	295.45	232.46	27.1%
Accommodation and food service	292.45	148.42	97.0%
Information and communication	388.55	n.a.	n.a.
Finance, insurance	396.50	162.50	144.0%
Real estate	381.40	n.a.	n.a.
Professional, scientific and technical	401.95	n.a.	n.a.
Administrative and support service	289.05	n.a.	n.a.
Public administration, defence, social security	312.40	n.a.	n.a.
Education	316.70	n.a.	n.a.
Human health and social work	354.30	n.a.	n.a.
Arts, entertainment and recreation	305.50	n.a.	n.a.
Other services	246.15	136.07	80.9%
Households as employers	165.95	n.a.	n.a.
Extraterritorial organizations	440.95	n.a.	n.a.
Total	**308.20**	**142.24**	**116.7%**

Comparison of these figures with the corresponding ones for 2016 suggests that the entry of Syrian workers into the labour market had little effect on wage growth for Jordanians, but may have negatively impacted wage growth for non-Jordanians. Between 2010 and 2016, the wage advantage of formalised Jordanian workers to formalised non-Jordanians increased from approximately 116 per cent to approximately 130 per cent. Analysis of the underlying wage data shows that the weighted average Jordanian wage grew by about 1 per cent per year in real purchasing power terms, while the same figure for registered non-Jordanians practically did not change.

[32] Data in this table pertaining to Jordanians are from the Department of Statistics *Employment and Unemployment* series for 2016 (see http://www.dos.gov.jo/owa-user/owa/emp_unemp_y.show_tables1_y?lang= E&year1=2016&t_no=49). Data for non-Jordanians is for expatriates with permits to work in Jordan as of 2016 and are from the Ministry of Labour as provided to WANA. Weighted monthly wages by economic activity are calculated as the sum of the mid-points for wage ranges multiplied by the share of each cohort represented by each wage range. In both cases, the highest range is JOD 500 per month and more. For purposes of simplicity, that range has been capped at JOD 600 in the weighted average monthly wage for both Jordanians and non-Jordanians. Wage data for the Syrian refugees are from the UNHCR VAF survey.

Table 4: Average Monthly Wages of Employed Persons by Economic Activity, 2016 (JOD)			
Economic Activity	**Jordanians**	**Non-Jordanians With Work Permits**	**Relative Advantage of Jordanians**
Agriculture	298.85	148.49	101.3%
Manufacturing	344.45	146.51	135.1%
Construction	328.70	173.26	89.7%
Wholesale/Retail Trade, Repair of Vehicles	337.75	194.33	73.8%
Accommodation, Food Services	337.60	182.08	85.4%
Professional, Scientific, Technical Activities	457.80	414.46	10.5%
Other Service Activities	317.70	162.51	95.5%
Household Employment Activities	261.90	172.53	51.8%
Activity-Weighted Overall Monthly Average Wage	**377.50**	**164.46**	**129.5%**

In 2016, the activity-weighted overall average monthly wage for Jordanians was JOD377.50 and JOD147.1 for Syrians. The relative wage advantage of Jordanians over Syrians was most pronounced in the agriculture sector in which the average monthly wage for Jordanians was 205.2 per cent greater than the average monthly wage for Syrian refugees. Within the other service activities, household employment, wholesale and retail trade, construction, accommodation and food services, manufacturing; and professional, scientific and technical activity sectors the relative wage advantages of Jordanians were 173.5 per cent, 159.9 per cent, 83.5 per cent, 65.2 per cent, 49 per cent, and 39.2 per cent respectively. Across these 8 sectors, Jordanians enjoyed a weighted relative wage advantage of 156.6 per cent over Syrian refugees.

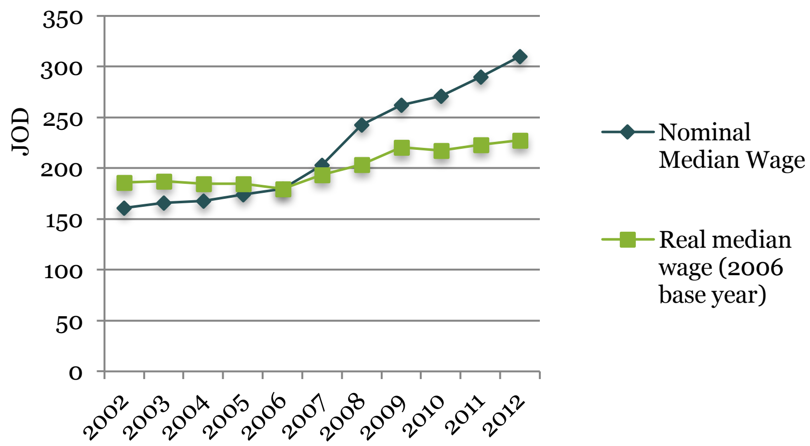
Despite widespread efforts to formalise the employment arrangements of Syrian refugees, at the aggregate level non-Jordanian workers (excluding Syrian refugees) continued to enjoy a significant wage advantage. The activity-weighted average monthly wage of registered non-Jordanians (excluding Syrian refugees) was approximately 12 per cent greater than that of Syrian refugees. Wages of Syrian refugees surpassed those of other non-Jordanians in only three activity areas — manufacturing, construction and accommodation and food services. In all other activities, the wages of Syrian refugees are inferior to those of other non-Jordanians. This suggests that Syrian refugees were, as a group and on an individual basis, the lowest-paid workers in Jordan.

Table 5: Average Monthly Wages of Jordanians and Syrian, 2016[33] (JOD)			
Economic Activity	**Jordanians**	**Syrian Refugees**	**Relative Advantage of Jordanians**
Agriculture	298.85	97.93	205.2%
Manufacturing	344.45	231.14	49.0%
Construction	328.70	179.84	82.8%
Wholesale/Retail Trade, Repair of Vehicles	337.75	184.07	83.5%
Accommodation, Food Services	337.60	204.31	65.2%
Professional, Scientific, Technical Activities	457.80	328.94	39.2%
Other Service Activities	317.70	116.15	173.5%
Household Employment Activities	261.90	100.75	159.9%
Activity-Weighted Overall Monthly Average Wage	**377.50**	**147.10**	**156.6%**

Alongside the influx of this ultra-low paid cohort into the Jordanian labour market, between 2010 and 2016 the nominal wages of formalised Jordanian and formalised non-Jordanian workers continued to increase. During this six year period, the activity weighted average nominal wage for Jordanians increased by 22 per cent, while the activity weighted average nominal wage for formalised non-Jordanians (excluding Syrian refugees) increased by 16 per cent. The inclusion of Syrian refugees in the labour market also appears to have had little impact on the real wages of Jordanian workers. Between 2002 and 2012, the real median wage increased by approximately 22 per cent. In the years directly following the initial influx of Syrian refugees into Jordan, the real median wage continued to grow at a comparable rate, increasing by 4.6 per cent from 2011 to 2012 (see Figure 9).

[33] Data in this table pertaining to Jordanians are from the Department of Statistics *Employment and Unemployment* series for 2016 (see http://www.dos.gov.jo/owa-user/owa/emp_unemp_y.show_tables1_y?lang=%20E&year1=2016&t_no=49). Data for non-Jordanians is for expatriates with permits to work in Jordan as of 2016 and are from the Ministry of Labour as provided to WANA. Weighted monthly wages by economic activity are calculated as the sum of the mid-points for wage ranges multiplied by the share of each cohort represented by each wage range. In both cases, the highest range is JD 500 per month or more. For purposes of simplicity, that range has been capped at JD 600 in the weighted average monthly wage for both Jordanians and non-Jordanians. Wage data for the Syrian refugees are from the VAF survey as provided to WANA.

Figure 9: Median wage levels of Jordanian workers (JOD), 2002-2012[12]



However, while wages in the formal labour market appear not to have been affected, there is evidence that the entry of Syrian refugees into the labour market has resulted in falling wages in the informal labour market. CHF International, the International Federation of the Red Cross and Red Crescent and ILO assessments that track the wages of unskilled and semi-skilled Syrians in agriculture, construction and retail commerce suggest that employers offer payments that are well below accepted minimum levels.[34]

Throughout the refugee crisis, there has been much public rhetoric around the detrimental impact of declining wages on poor Jordanians. According to Department of Statistics data, poor households derive half of their income from wages, as opposed to investment or personal enterprise income.[35] Downward pressure on wages poses a disproportionate risk to disadvantaged Jordanians,[36] whose incomes are at or just above the official poverty line. Declining wages have been most evident in Mafraq, Irbid, Zarqa and Amman — the governorates in which the vast majority of Syrian refugees has settled.[37]

3.2 Syrian Refugee Labour Force Integration, 2011-2016

As previously noted, the Jordanian economy is subject to high levels of informality within certain areas of the labour market; particularly in agriculture, domestic services, wholesale and retail trade, construction, and other miscellaneous services. Upon arrival after 2011, Syrian refugees in search of local employment opportunities were inevitably absorbed into these activities. From 2011 to

[34] Numerous accounts indicate that Syrian refugees have been working for significantly less than unskilled Jordanians and others in the informal economy. Reports indicate wages for unskilled and semi-skilled Syrians of JD 4-JD 10 per day, with Syrian children earning as little as JD 2-JD 5 per day, rates insufficient to provide subsistence livelihoods. See CHF International *Syrian Refugees Crisis: Rapid Assessment Amman, Jordan* July 2012; IFRC *Assessment Report–Syrian Refugees in the Community, Jordan* September 2012; ILO Regional Office for the Arab States *Mission Report*, June 1-6, 2013.
[35] DOS *Household Income and Expenditure Survey, 2010,* Table 3.11.
[36] UNDP and the Government of Jordan *Poverty Reduction Strategy-Final Report*, January 2013. In 2010, some 55.2 per cent of those in poverty and of working age were employed. Poverty in this context is defined as persons who fell below the absolute poverty line.
[37] See, Stave and Hillesund, 'Impact of Syrian refugees on the Jordanian labour market,' ILO-FAFO, 2015, https://www.ilo.org/wcmsp5/groups/public/---arabstates/---ro-beirut/documents/publication/wcms_364162.pdf

end-2016 — the time period under consideration in this report — Syrian refugees made a notable entry into the Jordanian informal economy. Based on estimates of the employment rate discussed in Section 2, as many as 110,509 Syrian refugees may have been employed in some capacity in 2016. This represents approximately 7.8 per cent of total Jordanian employment and about 6 per cent of all persons — Jordanian and foreign — working across the country.

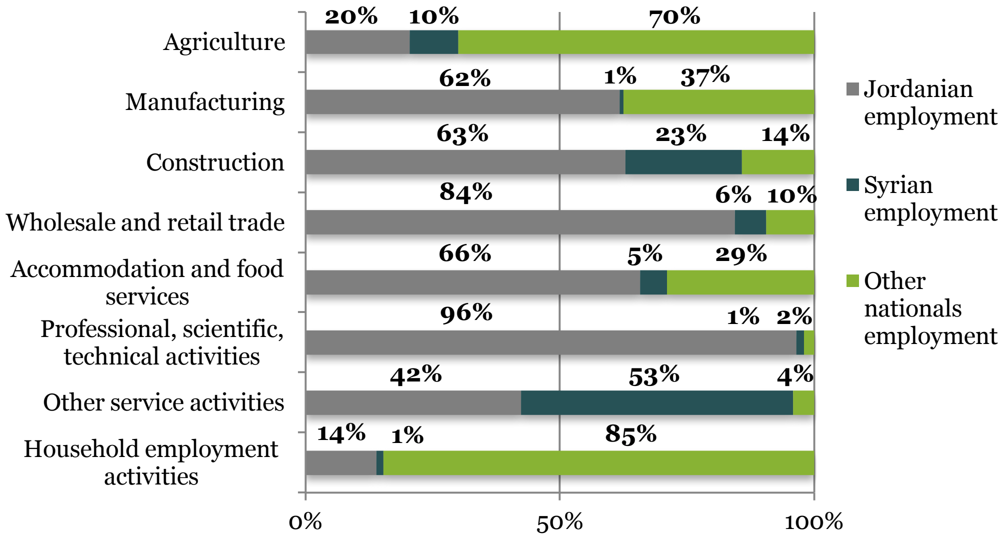
Still, Syrian refugees are not employed to the same extent as their Jordanian counterparts. While the results of the 2017 WANA-IPSOS study suggest that a large proportion of the Syrian working age population is, in one way or another, active in the labour force, a small percentage of Syrians indicate steady, full-time employment. Moreover, the unemployment rate of Syrians is greater than that of their Jordanian counterparts. The official unemployment rate of Jordanian workers averaged 15.28 per cent in 2016.[38] In 2017, the proportion of economically active Syrians who described themselves as unemployed and looking for work was 44 per cent. Formal employment of Syrian refugees in Jordan is limited to five economic activities designated as 'open sectors' under the Jordan Compact; including agriculture, construction, food and beverage services, manufacturing, and wholesale and retail trade. In reality, it appears that formalised work, where Syrians hold a work permit, accounts for a small proportion of overall Syrian refugee employment.

As discussed previously, Syrian refugees have become employed in a number of economic activities including other service activities, construction, wholesale and retail trade, agriculture, manufacturing, and domestic services (household employment activities). The Syrian refugee population as a whole appears to have made the greatest impact on the 'other services'[39] sector, where an estimated 44,306 Syrian refugees were employed in 2016, accounting for an estimated 53.4 per cent of the total employment in such activities. Commonly referred to as employment density of activity, this measurement represents the proportion of overall employment in a given sector that is occupied by a given population group.

[38] Statista, https://www.statista.com/statistics/385565/unemployment-rate-in-jordan/

[39] Other services include activities such as cooking, washing, housecleaning, gardening, tailoring, hairdressing, beauty treatment, household appliance and personal good repair, carpentry, and painting services.

Figure 10: Employment density of activity for Jordanians, Syrians, and other nationals, 2016



The Syrian refugee population also appears to have made substantial inroads into the construction sector, where an estimated 31,068 Syrian workers accounted for about 23 per cent of the sector's total workforce. Within the agriculture, wholesale and retail trade, manufacturing, and domestic services sectors, the employment density of activity for Syrian refugees was estimated at 9.57 per cent, 6.13 per cent, 5.31 per cent, and 1.47 per cent, respectively (see Annex, Table 8). Prior to the onset of the Syrian refugee crisis, each of these sectors employed a large number of foreign workers. They also have been prone to high levels of informality.

3.2.1 Jordan Compact 2016 Work Permit Policy

The decision to grant limited working rights to Syrian refugees under the Jordan Compact was a landmark decision for host state refugee crisis response. By supporting the formalisation of Syrian workers in designated sectors and occupations, the government has undertaken a private sector-based solution to livelihoods whose success depends on business owners' ability to take advantage of the conditions set forth in the Jordan Compact. The decision to embark on a large-scale formalisation effort also represents a paradigm shift in the context of Jordan's large informal market. The long-term success of this project may well require its implementation in tandem with a larger effort to address the underlying forces that drive high rates of informality.

At the end of 2017, there were 46,717 valid work permits in effect for Syrian refugees, which was well below the goal of 75,000.[40] According to research conducted by the Jordanian NGO Tamkeen Fields for Aid, in March 2018, there were an estimated 40,000 valid work permits.[41] These figures

[40] Jordan Ministry of Labour, Syrian Refugee Unit, 'Monthly Progress Report--Syrian Refugee Unit Work Permit Progress Report,' December 2017, pp. 1, 3. The progress report notes that a total of 83,507 permits had been issued in the two-year period from 1 January 2016 to 31 December 2017. The difference between this higher number and the end-2017 figure are work permits that had not been renewed.

[41] Ibanez-Prieto, Ana; '108,000 work permits issued for Syrian refugees since the onset of the crisis,' *The Jordan Times*, August 13, 2018, http://www.jordantimes.com/news/local/108000-work-permits-issued-syrian-refugees-onset-crisis

are far below the Ministry of Labour's aggregate figure of 125,392 for the full period between January 2016 and end-November 2018.

At the sectoral level, work permit figures vary significantly in comparison to estimated employment figures. For manufacturing, agriculture, and accommodation and food services, the number of permits active at end-2017 exceed estimated employment in those sectors by 301.3 per cent, 161.9 per cent, and 131.7 per cent, respectively. In the remaining open sectors the number of active permits lag behind estimated employment by significant margins. In construction, the number of work permits active in 2017 were equivalent to 28.9 per cent of estimated employment in that sector in 2016. In wholesale and retail trade, household employment activities, and other service activities, active permits accounted for a respective 28.2, 15.2, and 3.2 per cent of estimated employment. At the aggregate level, the number of work permits in 2017 constituted approximately 42.3 per cent of total estimated Syrian refugee employment in 2016.

Table 6: Estimated Syrian Refugee Employment by Main Economic Activities in 2016 Relative to Ministry of Jordan Labour Ministry Permits for Syrian Refugees Per the Compact Agreement in 2017[42]

Economic Activity	Ministry of Labour 'Compact' Permits 2017	Estimated Employment 2016	Permits Relative to Estimated Employment
Agriculture	20,247	12,503	161.9%
Manufacturing	5,823	1,933	301.3%
Construction	8,964	31,068	28.9%
Wholesale/Retail Trade, Repair of Vehicles	4,444	15,773	28.2%
Accommodation, Food Services	4,277	3,248	131.7%
Professional, Scientific, Technical Activities	160	599	26.7%
Other Service Activities	1,416	44,306	3.2%
Household Employment Activities	164	1,078	15.2%
Total	**46,717**	**110,509**	**42.3%**

If the employment estimates for 2016 are accurate, then this suggests that the availability of work permits for agriculture, manufacturing and accommodation and food services may have increased Syrian employment in those activities since the Jordan Compact work permit programme was initiated. The apparently limited coverage of work permits in the remaining sectors may mean that Syrian workers held a work permit for one sector, but in reality, were employed across multiple sectors. This is plausible given the contingent and often irregular nature of Syrian refugee employment. All of this is in line with some economists' suggestion that the work permit programme has not created additional jobs but rather has formalised existing jobs and shifted employment from one sector to another.[43]

[42] Permit data are from Jordan Ministry of Labour, Syrian Refugee Unit, 'Monthly Progress Report--Syrian Refugee Unit Work Permit Progress Report,' December 2017 and have been consolidated around the eight main activities using the same method for estimating Syrian refugee employment in Jordan in 2016 (see notes for Table 2 above).

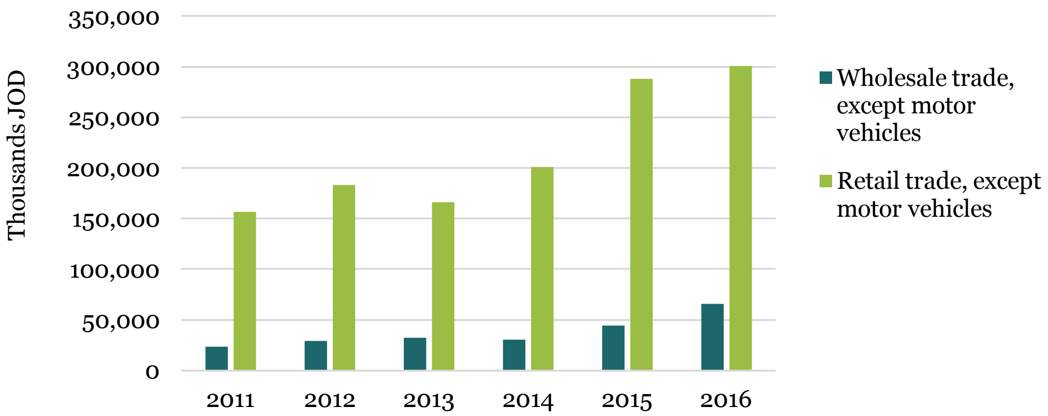
3.2.2 Output, Economic Growth and Unemployment

When the Syrian refugee crisis first began in 2012, Jordan was recording a slow but rising GDP growth of approximately 2.6 per cent.[44] At the peak of the crisis in 2014, GDP growth rose to 3.1 per cent, before dropping to 2.4 per cent in 2015 and 2 per cent in 2016. While some have described the strain on the Jordanian economy caused by Syrian refugees as the central driver of declining growth rates, the reality is less straightforward.

Since 2013, the presence of 8 per cent more people in the country has increased the need for basic goods and services and boosted internal trade. Providers of food items, clothing, apartment rentals, private and public education and health services, and transport services have all experienced a surge in demand for production and service delivery.[45]

On the back this, trade of goods also increased significantly. According to data from the Jordan Department of Statistics, between 2011 and 2016 wholesale trade in northern governorates increased by 183 per cent, and retail trade increased by 92 per cent. In Jordan's central region, wholesale trade increased by 47 per cent, and retail trade increased by 38 per cent.[46]

Figure 11: Gross output for internal trade activities, northern region, 2011-2016



The entry of tens of thousands of Syrian refugees into the Jordanian private sector has also contributed to the production of goods and services. Earnings from their employment, as well as cash assistance from international organisations and NGOs, have been spent in local markets.[47]

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[43] This seems to be the conclusion of Susan Razzaz, a former World Bank economist quoted in Daniel Howden, Hannah Patchett and Charlotte Alfred 'Can Jordan get a million Syrians into work?' *The Guardian* at www.theguardian.com/world/2017/dec/13/can-jordan-get-a-million-syrians-into-work.

[44] The average GDP growth rate between 2010 and 2013 was 2.6 per cent, according to figures from the Central Bank of Jordan. See Trading Economics, https://tradingeconomics.com/jordan/gdp-growth-annual

[45] See 'Syrian Refugees in Jordan: Economic risks and Opportunities,' Arab Reporters for Investigative Journalism, 26 January 2014; 'Syria refugees in Jordan spark tensions, but also growth,' Syria: direct, 20 February 2014.

[46] Jordan Department of Statistics Internal Trade Survey, http://jorinfo.dos.gov.jo/economic/SelectStudyAndPeriod.aspx?lang=1

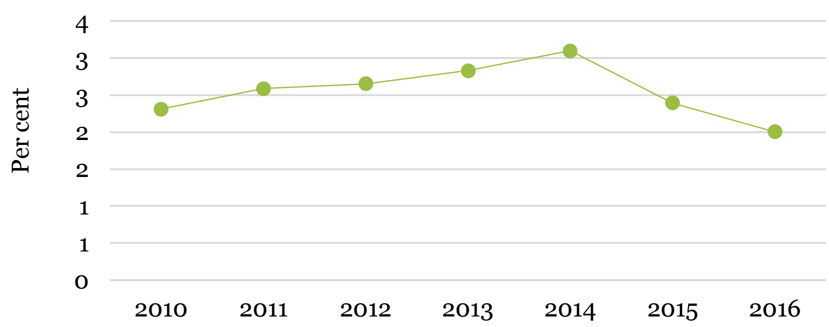
[47] See ILO and Fafo 'Impact of Syrian Refugees on the Jordanian Labour Market,' 2015; WFP and REACH 'Comprehensive Food Security Monitoring Exercise; Syrian Refugees in Jordan,' July 2014; ILO 'The Impact of the Syrian Refugee Crisis on the Labour Market in Jordan; A Preliminary Analysis,' 2014; CARE International Jordan 'Syrian Refugees in Urban Jordan: Baseline Assessment of Community-Identified Vulnerabilities among Syrian Refugees Living in Irbid, Madaba, Mufraq, and Zarqa,' April 2013.

According to data from the Organisation of Islamic Cooperation (SESRIC), between 2012 and 2016 consumer spending increased by approximately 9 per cent.[48]

Wealthy Syrian refugees have registered businesses, invested capital and moved production of goods and services to Jordan, further boosting domestic output and employment. According to the Jordan Ministry of Planning and International Cooperation (MOPIC), Syrian investments in Jordan totaled JOD 42 million in 2012 and JOD 49 million in 2013.[49] By the end of 2014, investment by Syrian refugees had amounted to hundreds of millions of dollars.[50] This, in combination with the heightened economic activity related to the refugee presence, is thought to have contributed to an acceleration in real GDP growth.[51]

In the period between 2010 and 2017, Jordan's official unemployment rate has steadily increased. While some observers attribute this to the Syrian refugee crisis, a broad range of independent factors lie at the heart of this downturn. They include slower economic growth after 2008, reductions in the growth rate of public sector hiring, and a rate of annual job creation that is below the number of young people entering the labour force. It should also be noted that in early 2017 Jordan adopted the OECD method for calculating the unemployment rate, which includes migrant workers and excludes unpaid domestic workers. This change partly explains the sharp rise in unemployment over the course of 2017.[52]

Figure 12: Jordan Annual GDP growth, 2010-2016



[48] See Trading Economics/ SESRIC, https://tradingeconomics.com/jordan/consumer-spending
[49] Alshoubaki and Harris, 'The Impact of Syrian Refugees on Jordan: A Framework for Analysis,' *Journal of International Studies*, April 2018, https://www.jois.eu/files/11_454_Alshoubaki%20et%20al.pdf
[50] 'A 21 million dollar Syrian investment in Jordan,' Syrian Economic Forum, 6 February 2014; 'Syria refugees in Jordan spark tensions, but also growth,' Syria: direct, 20 February 2014.
[51] Data on real GDP growth rates estimates and projections for 2012-2016 are given in IMF *Jordan Fifth Review Under Stand-By Arrangement*, Country Report No. 14/324, December 2014, p. 24. According to the Jordanian Department of Statistics website, the average unemployment rate among Jordanians fell from 12.6 percent in 2013 to 11.9 percent in mid-2015.
[52] The above is based on anecdotal information provided to the WANA Institute by the Jordan Chamber of Industry, May/ June 2017.

4. Conclusion

In the period between 2011 and 2016, Syrian refugees made significant inroads into Jordan's informal labour market. Their absorption into various sectors coincided with, but was not the cause of, a prolonged economic downturn that began to take hold in 2010. While wages in the informal market and of formalised non-Jordanians have been adversely affected, between 2010 and 2016 formalised Jordanian labour enjoyed sustained wage growth. In parallel, it also appears that Syrian workers did not displace Jordanian workers in any significant way. In 2016, only in construction and other services — two activities which had been previously characterised by a high share of foreign workers — did Syrians account for a sizeable share of total employment.

The Reality Going Forward

As the war in Syria abates and the prospect of gradual refugee return looms, many questions related to the Jordan Compact still linger. If a large share of refugees remains in Jordan and Syrian refugee labour force inclusion is to continue, the implications and the scale of the required effort need to be fully understood. In bringing existing, informal Syrian refugee workers into formal arrangements, the Jordanian Government will seek to formalise those economic activities that are most characterised by informality — agriculture, construction, wholesale and retail trade, and the broad range of 'other service activities' described in Section 2. Formalising Syrians while allowing Jordanians and others employed in the same activities to continue in informal arrangements will not be a sustainable scenario. Any effort to reduce levels of informality across the entire labour force will require incentives and significant monitoring and enforcement by Jordanian authorities.

Future Points of Interest

While there is scant evidence of wage compression for Jordanian workers employed in formal arrangements, the impact of Syrian labour on the wages of Jordanians employed in informal arrangements should be seen as a matter of concern. In tandem, the number and demographic of Jordanian households whose incomes have fallen below the poverty line also deserve more attention. Increasing poverty rates most likely result from a combination of the current economic environment and recent structural reforms. Nonetheless, the relationship between this and changing conditions in the informal market should also be explored.

Finally, the influx of Syrian refugees has brought a large pool of unskilled labour to Jordan. As has been the case in other contexts around the world, such a surge in unskilled labour should allow for the redeployment of more highly-skilled local labour into higher productivity, higher wage occupations.[53] While slow GDP growth and high unemployment are likely obstructing this kind of transfer, there may be some incidence of this in specific pockets of the Jordanian economic landscape. Understanding this and the ecosystems that have been developed by Syrian businesses

[53] IMF 'International Migration: Recent Trends, Economic Impacts, and Policy Implications; Staff Background Paper for G20 Surveillance Note,' 12 November 2015, p. 14. Strong evidence of accelerated demand for higher-skilled, better-paid employees has been found in activities whose growth is fuelled by cheap labour in the border provinces of Turkey, the region's largest host of Syrian refugees. See Ximena V. Del Carpio and Mathis Wagner 'The Impact of Syrians Refugees on the Turkish Labor Market,' World Bank Policy Research Working Paper 7402, August 2015.

will serve future advocacy initiatives and instruct efforts to expand Jordan's trade relationship with Syria in the future.

5. Annex

Table 7: Estimated Informality of Jordanian Employment by Economic Activity, 2010[54]

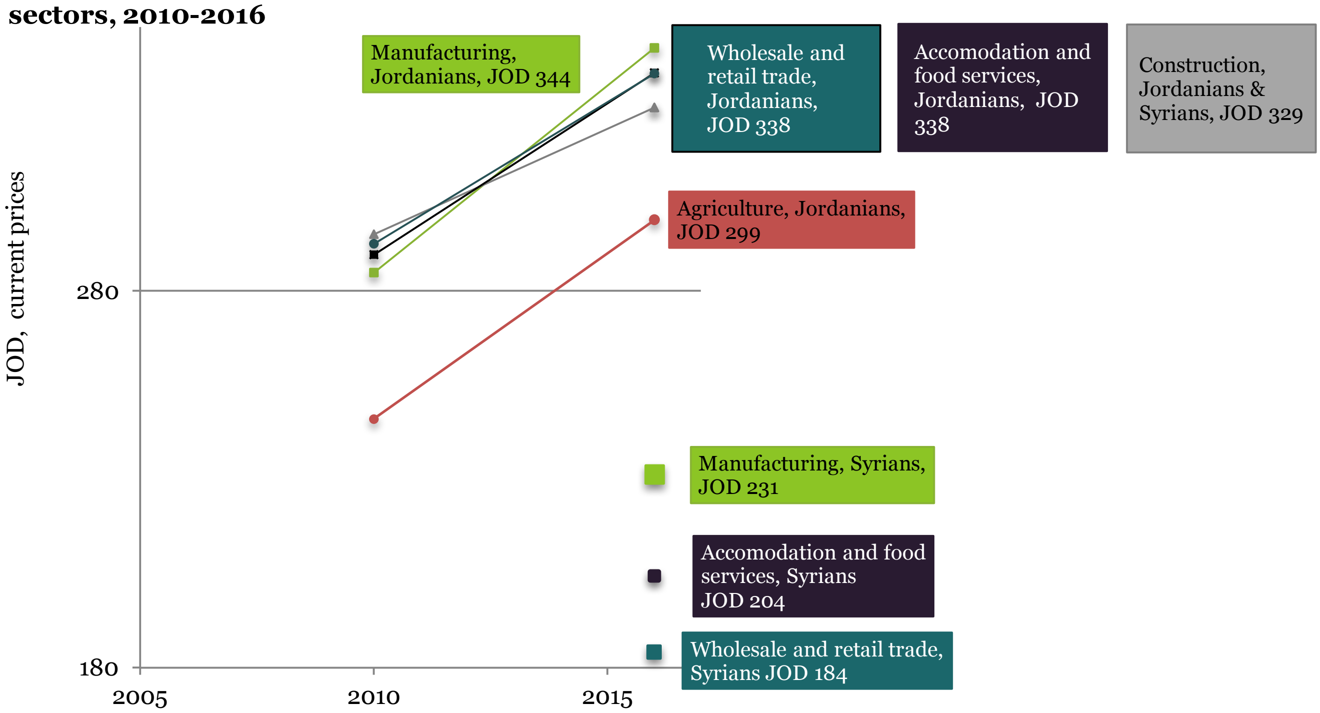
Economic Activity	Estimated Employment	*of which:* Informal Employment	Estimated Informality Rates
Agriculture	25,015	17,749	70.95%
Mining, Quarrying	11,106	2,727	24.55%
Manufacturing	129,131	59,524	46.10%
Electricity, Gas, Air Conditioning	9,440	309	3.27%
Water, Sewerage, Waste Management	2,274	635	27.93%
Construction	79,607	35,661	44.80%
Wholesale, Retail Trade; Repair of Motor Vehicles	199,559	96,237	48.22%
Transportation, Storage	102,163	37,490	36.70%
Accommodation and Food Services	27,354	11,356	41.52%
Information, Communication	22,028	4,511	20.48%
Financial, Insurance Activities	20,379	1,204	5.91%
Real Estate activities	4,964	1,382	27.84%
Professional, Scientific, Technical Activities	27,543	4,023	14.61%
Administrative, Support Service Activities	18,440	2,985	16.19%
Public Administration, Defense, Social Security	297,448	1,422	0.48%
Education	150,145	12,570	8.37%
Human Health, Social Work Activities	63,169	8,354	13.22%
Arts, Entertainment, Recreation	5,603	996	17.77%
Other Service Activities	30,786	16,604	53.93%
Households as Employers	5,368	2,638	49.13%
Activities of Extraterritorial Organizations	4,426	2,097	47.39%
Total	**1,235,948**	**320,472**	**25.93%**

[54] Data in this table are from the Ministry of Planning and International Cooperation and the UNDP *The Informal Sector in the Jordanian Economy* (2010) and *The Panoramic Study of the Informal Economy in Jordan* (2012).

Table 8: Estimated Syrian Refugee Employment Density by Economic Activity in Jordan, 2016[55]					
Economic Activity	**Jordanian Employment**	**Permitted Non-Jordanian Employment**	**Syrian Refugee Employment**	**Total Estimated Employment in Jordan**	**Estimated Syrian Refugee Employment Density of Activity**
Agriculture	26,728	91,363	12,503	130,594	9.57%
Manufacturing	136,641	83,052	1,933	221,626	0.87%
Construction	85,361	19,316	31,068	135,745	22.89%
Wholesale/Retail Trade, Repair of Vehicles	217,130	24,472	15,773	257,375	6.13%
Accommodation, Food Services	40,205	17,686	3,248	61,139	5.31%
Professional, Scientific, Technical Activities	39,559	872	599	41,030	1.46%
Other Service Activities	35,183	3,497	44,306	82,986	53.39%
Household Employment Activities	10,193	62,082	1,078	73,353	1.47%
Total	**1,406,640**	**318,883**	**110,509**	**1,836,032**	**6.02%**

[55] Jordanian employment data are from the Department of Statistics *Employment and Unemployment* series available on-line at http://www.dos.gov.jo/owa-user/owa/emp_unemp_y.show_tables1_y?lang= E&year1=2016&t_no=40. Data on non-Jordanians working in Jordan with permits is from the Ministry of Labour as provided by WANA. Syrian refugee employment data are estimates from Table 3 above.

Figure 13: Average monthly wages for Jordanians and Syrians, selected sectors, 2010-2016



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