

Female Participation and Employment in the Labor Market in Jordan: An Analysis Based on Amman Household Survey 2008

Haruka USUKI

I. Introduction

Labor market issues inside Jordan have attracted an increasing level of attention since the 1990s. Before this time, the role of remittances in the Jordanian economy received attention because Jordanian workers in oil-producing countries increased due to the oil price boom in 1973, and sent money to Jordan through remittances. However, the Gulf War in 1990-91 resulted in significant repatriations of Jordanian workers from oil-producing countries, mostly from Kuwait. As a result, the unemployment rate rose sharply, and unemployment became a social problem in Jordan as most of the returnees held higher education credentials. This resulted in a limited number of suitable jobs in the Jordanian labor market. Despite this situation, research on both employment and unemployment in Jordan remains limited due to a dearth in available micro data.

One of the key characteristics of the labor market in Jordan is the low labor force participation rate¹ [UNDP et al. 2013: 16; Ababsa 2013: 177-178]. Labor force participation rate refers to the percentage of the economically active population (employed and unemployed population) in the country aged 15 or over. UNDP et al. [2013] state four reasons for the low rate: (i) low rate of female participation, (ii) a high proportion of youth population, (iii) the expansion of the educational system, and (iv) increased migration of young workers, especially in Gulf countries.

This paper focuses on the low rate of participation by women in the labor force. This issue is particularly serious in Jordan where women's participation is significantly lower than men's participation rates, even though the educational level in Jordan is relatively high among women

1 UNDP et al [2013] shows some characteristics of the Jordanian labor market; demand and supply imbalances in the labor market, fluctuating rates of unemployment, the low crude activity rate in the labor force, imbalance in the sectoral distribution between agriculture and service, imbalance in the geographical distribution between Amman and other areas, and sending and receiving labor market [UNDP et al 2013: 14-19].

and the gender gap in education is nominal.

The aim of this paper is to explore female labor force participation and employment patterns in Jordan, especially in the capital of Amman, using original household survey micro data.

This paper consists of five sections. Section II reviews literature on women and the labor market in Jordan. Section III briefly introduces the survey “Amman Household Survey 2008” and the data obtained from it. Section IV presents situations of participation in labor market in Amman and women’s work experiences. Section V examines employment patterns in view of gender and marital status. Section VI draws conclusions from the analysis.

II. Previous Studies

Previous research on women and the labor market in Jordan primarily focus on labor force participation. The following three studies provide more detailed analysis in this area using household survey micro data.

“Jordan Living Conditions Survey” was carried out countrywide from January-April 1996 by Jordan Department of Statistics (DOS) and Fafo Institute of Applied Social Sciences, with a target sample size of 6,000 households. Hanssen-Bauer and Tiltne [1998] reported the results of the survey and reveal that the female labor force participation rate is low because most women stop working after marriage, and higher education is the most important factor when women keep working [Hanssen-Bauer and Tiltne 1998: 227].

Assaad [2014] examines changes in the employment structure in the Jordanian labor market over 25 years using the dataset derived from “Jordan Labor Market Survey of 2010.” Economic Research Forum implemented this survey using a nationally representative sample design of 5,760 households in cooperation with DoS and National Center for Human Resource Development of Jordan. This survey clarifies the limited number of employment opportunities for women due to structural changes in the public sector brought on by economic liberalization. Additionally, the study revealed three important points on labor force participation and employment patterns by gender. Firstly, there is a significant gap of labor force participation rate between women with post-secondary education and women with secondary education or lower. Secondly, the labor force participation rate of married women is lower than that of married men. Thirdly, never married men and never married women both tend to be engaged in private sector employment, while the percentage of married women working in the public sector is higher than married men when married men and married women have the same education level.

Chamlou, Muzi, and Ahmed [2011] analyze determinants of female labor force participation in Amman using a household survey commissioned and designed by the World Bank and collected in 2008 by DoS. Respondents included 8,233 men and women aged 15-64 in Amman, excluding students. The main results of this survey are that higher education (post-secondary and higher) has a positive impact on female labor force participation, whereas being married

is negatively associated with female labor force participation in Amman as well as other parts of Jordan [Chamlou, Muzi, and Ahmed 2011:1, 12-13]. However, this survey does not analyze employment patterns by gender.

The research presented in these three articles identifies important preliminary findings. The female labor force participation rate among women with post-secondary education is higher than women with secondary education or lower, but the rate of married females is very low in Jordan and specifically in Amman. Moreover, across Jordan, married women tend to work in the public sector compared with women who never married and men.

Previous research using the focus group discussion method confirms the above results and further elaborates on female employment patterns. Miles [2002] identifies significant gaps in employment patterns between men and women. For example, women are limited to work aligned to social and cultural expectations including forgoing employment to raise children. Peebles et al. [2007] conclude Jordanian women, especially married women working in the private sector, suffer from discrimination since employers avoid hiring women due to strict labor laws for protecting women. Brown et al. [2014] further reasoned that young women have a strong intention to work, but they prefer the public sector to the private sector based on interviews targeted to young people aged 15-29.

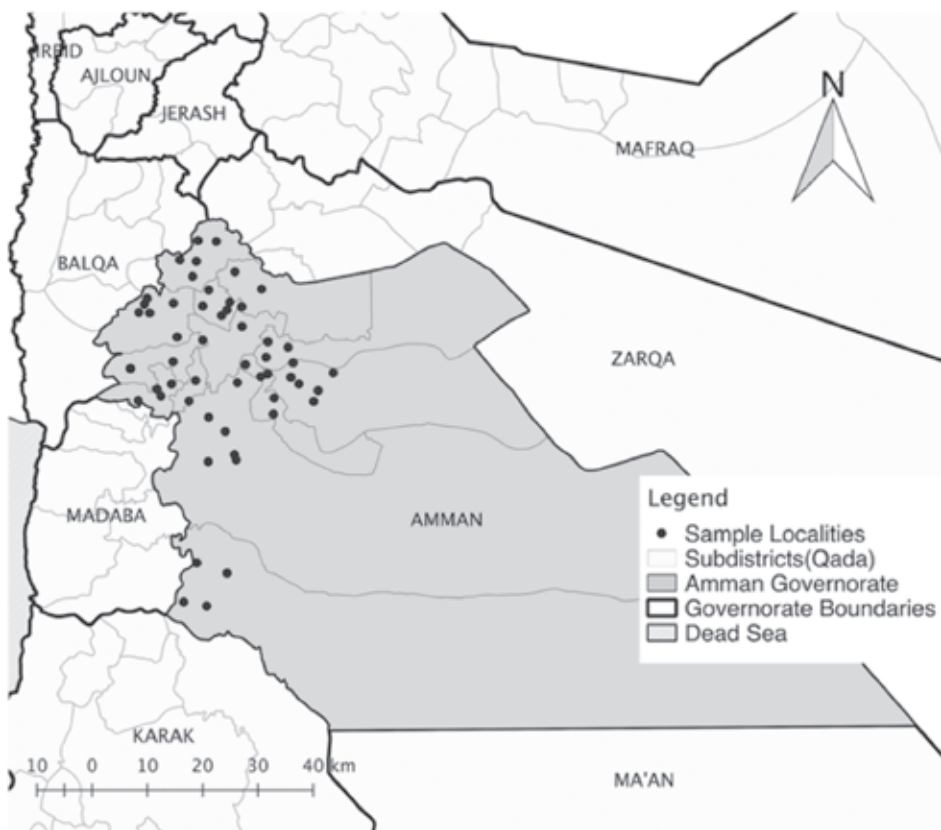
This paper evaluates residents aged 15 years or older in Amman governorate and investigates not only labor force participation but also employment patterns in Amman. As UNDP et al. [2013] notes, employment in Jordan is concentrated on Amman and the surrounding areas. Are Amman's labor force and gender dynamic representative of the rest of Jordan? This paper examines Jordanian labor force participation in view of some indicators (sex, age, educational level and marital status) and the differences in employment patterns among men, never married and married women, using the original micro data conducted on Amman.

The following analysis, based on the Jordan population and housing census in 2004, highlights the differences between Amman and Jordan as a whole. The population of Jordan is 5,074,242 people, of which 1,924,823 people (37.9% of all residents in Jordan) live in Amman governorate. The employed population living in Jordan is 1,116,284 people, of which 42.7% live in Amman. Amman also has a high level of education, the lowest illiteracy rate (10.0% in Jordan; 7.6% in Amman) and the highest percentage of the population with post-secondary education (19.2% in Jordan, 22.7% in Amman). The most important difference in socioeconomic indicators is that the percentage of those who are engaged in the private sector is the highest among governorates in Jordan (66.4% in Jordan overall, 80.7% in Amman). Employed persons in Amman have occupations requiring higher levels of education, such as professionals (17.7% of employed persons in Jordan and 21.0% in Amman). Other workers in Amman tend to be engaged in wholesale and retail trade, financial intermediation, real estate and manufacturing, with more limited participation in agriculture and mining.

III. Overview of Survey and Data

1. Overview of Survey and Survey Area

This paper uses the original micro data collected in household surveys from years 2008-2009 in Amman governorate (hereafter Amman Household Survey 2008) by the Graduate School of Economics, Hitotsubashi University, in collaboration with Department of Statistics (DoS) in Jordan.² This survey was conducted as part of the “Need-Based Program for Area Studies: Middle East within Asia” project, sponsored by the Ministry of Education, Culture, Sports, Science and Technology in Japan.



Map 1 Amman Governorate and Sample Area (Localities)

Source: Digital Map provided by DoS and Amman Household Survey 2008

² The Administration Office [2010] presents details from Amman Household Survey 2008 such as the schedule of the survey and the questionnaire structure. Kato, Usuki, and Iwasaki [2013] report the results of the survey according to the administrative regions of Amman governorate in Japanese.

The aim of this survey is twofold: (i) to identify the socioeconomic living conditions of people and households in Amman governorate, and (ii) to show the relationship of various factors, such as family structure, income level, educational level, employment, and migration at the household level.

The Amman Household Survey 2008 was conducted using a sample size of 1,200 households located across Amman Governorate, which resulted in a sample of 1,194 households being successfully interviewed, a response rate of 99.5%. The sample was designed using a two-stage stratified cluster sampling method. The first stage applied probability proportion to size, while the second stage used the systematic method at the capital level. Amman governorate has 157 localities (*tajamma'* in Arabic) and the survey was carried out in 53 localities. Map 1 shows Amman Governorate and sample areas.

2. Sample Profile: Nationality, Age, Sex, Educational Level and Marital Status

From the 1,194 households sampled, a total number of 6,833 household members were identified, indicating an estimated household size of 5.7 people. Table 1 shows the frequency and the percentage of all sample nationality, age, sex, and the percentage distribution of Jordanians 15 years and older by sex, educational level, and marital status.

The majority of the sample is composed of Jordanians: 6,608 people have Jordanian nationality. They account for 96.7% of all household numbers.³

In Amman, as well as the rest of Jordan, a high proportion of youth was observed in the survey.⁴ Notably, Jordanians under the age of 15 account for 34.6% of all Jordanians, and Jordanians below the age of 30 account for 65.1%.

As to the ratio between Jordanian men and women aged 15 or older, there is almost no difference. Educational level, marital status, and socioeconomic factors, such as work sector and occupation, are indicators obtained from samples of 15 years or more.

Previous research confirms that the gender gap in education is relatively small in Jordan [Assaad 2014: 105]. Amman Household Survey 2008 shows similar findings. As shown in Table 1, the percentage of Jordanians aged 15 and older with vocational/secondary or higher education is comparable between men and women.

As for marital status, the percentage of married women is higher than married men because

3 The number of non-Jordanians identified from the Amman Household Survey 2008 is 227 persons (3.3% of all household numbers). According to population and housing census in 2004, non-Jordanian population accounts for 10.9% of Amman governorate's population. This gap may reflect the fact that the household survey was conducted primarily on private households and few collective households where many foreign workers reside. The results of Amman Household Survey 2008 show that the number of non-Jordanian household heads is very few and most non-Jordanians household members are women with Jordanian husbands. Some non-Jordanians were identified as domestic workers from South East Asia or South Asia countries such as Indonesia and Sri Lanka.

4 On based on the results of 2004 and 2015 population census, the percentage of population under the age of 15 in the total population living in Jordan is 37.5% and 34.4% respectively.

Jordanian women tend to marry earlier than Jordanian men. According to “Jordan Population and Family Health Survey 2012” published by DoS, the median age of marriage for Jordanian women aged 25-49 was 22.4 years in 2012, and 66.2% of Jordanian women were married by age 25 [Department of Statistics 2013: 43-44].

Table 1 Sample Profile and Distribution of Survey Participants by Sex, Educational Level and Marital Status

	Freq.	%		Male	Female	Total
Nationality			Educational Level (Jordanians aged 15+)			
Jordan	6,608	96.7	Illiterate/Read & Write	7.7	16.7	12.1
Other	225	3.3	Basic Education	53.5	45.2	49.4
Total	6,833	100	Vocational/Secondary	19.7	20.7	20.2
Age (Jordanian)			More than Secondary (University+)	19.1	17.4	18.3
0-14	2,284	34.6	Total people surveyed	2,202	2,122	4,324
15-64	3,997	60.5	Marital Status (Jordanians aged 15+)			
65+	327	4.9	Never Married	50.6	39.3	45.1
Total	6,608	100	Married	48.1	51.5	49.8
Sex (Jordanians of age 15+)			Divorced/Separated/Widowed	1.2	9.2	5.2
Male	2,202	50.9	Total people surveyed	2,202	2,122	4,324
Female	2,122	49.1				
Total	4,324	100				

Source: Amman Household Survey 2008

IV. Economically Active and Inactive Persons

1. Definitions

Jordanians aged 15 or older are composed of economically active and inactive persons. Table 2 shows the frequency and the percentage of Jordanians by economic activity status. Forty-five household members working outside Jordan are excluded from this table.⁵

Economically active persons are either employed or unemployed and include those who are participating in the labor market. Employed persons are defined as paid employees, employers,

⁵ Excluded household members reside outside of Jordan for work.

own-account workers and unpaid workers.⁶ A paid employee represents a person aged 15 or older who responded positively to the question “Do you have basic wage?” Possible answers include “Yes, present,” “Yes, past” and “No.” An unemployed person is defined as a person actively searching for any job within one month of the time of the survey.

Table 2 Economic Activity Status (Jordanians of age 15 years or older)

			Male		Female		Total	
			Freq	%	Freq	%	Freq	%
Economically Active	Employed	Paid Employee	1,017	47.1	209	9.9	1,226	28.7
		Employer	163	7.5	13	0.6	176	4.1
		Own-Account Worker	81	3.8	8	0.4	89	2.1
		Unpaid Worker	8	0.4	1	0.0	9	0.2
	Unemployed	143	6.6	45	2.1	188	4.4	
Total			1,412	65.4	276	13.0	1,688	39.4
Economically Inactive	Student		382	17.7	384	18.1	766	17.9
	Homemaker		25	1.2	1,394	65.8	1,419	33.2
	Other Income		140	6.5	24	1.1	164	3.8
	Illness/Disabled/Age		179	8.3	42	2.0	221	5.2
	Other		21	1.0	-	-	21	0.5
	Total			747	34.6	1,844	87.0	2,591
Total			2,159	100.0	2,120	100.0	4,279	100.0

Source: Amman Household Survey 2008

Note: Excluding 45 persons working outside Jordan; “Unemployed” means persons who are searching for employment within one month of the survey; “Other income” means persons who receive income from shares, royalties, pensions, or from any aids or subsidies.

Economically inactive persons will be further analyzed later in this paper; however it is important to note that the majority of economically inactive females are homemakers, or “house

6 Unpaid worker refers to any person working for his/her family or other persons and not receiving payments such as apprentices or trainees according to the definition of DoS. Employers hire paid employees and own-account workers hire unpaid workers. Additional definitions can be found on the DoS website;

<http://www.dos.gov.jo/dos_home_e/main/population/census2004/methodology.pdf> (Accessed May 2019)

makers” as they are referred to in the survey. Homemaker refers to “any person aged 15 years and more who is not economically active and not attending school regularly, who is engaged in household duties or supervises those who perform such duties and paid housemaids and baby sitters are not included in this category” according to the definition of DoS.⁷

2. Labor Force Participation Rate by Sex, Educational Level, Marital Status, and Age

Labor force participation rate by sex is calculated using data from Table 2. Only 13.7% of Jordanian women are economically active compared with 65.4% of Jordanian men. Therefore, the results of the Amman household survey 2008 also show that Jordanian females have a comparably low participation rate in the labor force.

Education and marriage influence Jordanian women’s labor force participation in Amman [Chamlou, Muzi, and Ahmed 2011]. Jordanian women with higher levels of education (post-secondary) have high participation in the labor market. On the other hand, married women are less likely to work outside the home.

Building upon this analysis, labor force participation rate between Jordanian men and Jordanian women can be meaningfully compared by taking account into educational level, marital status and age. Age is an essential indicator because it is possible to analyze the timing of the entry into and the withdrawal from the labor market.

As shown in Figure 1, the male labor force participation rate shows a similar tendency between men with less than secondary levels of education and males with post-secondary education, regardless of age. Among men aged 20-44, the labor force participation rate is very high regardless of educational level; the rate ranges from 90-100%. The labor force participation rate of men aged 45 or more continues to decline regardless of education level.⁸

Labor force participation rate of women with secondary education levels or lower is consistently low. This indicates that women without minimum levels of education are not able to participate in the labor market, while highly educated females have a tendency to participate in the labor market at higher rates. Figure 1 shows that the labor force participation rate of women with secondary education levels or lower remains low, but the rate of females with more post-secondary education is relatively high. The peak of the rate is between 25 and 29 years old, with nearly 70% participation. However, the participation rate for well-educated women is lower than for men, and participation starts to decrease at an early age of 30 years old. This decline might be due to withdrawal for marriage as 66.2% of Jordanian women marry by 25 years old as previously stated.

7 This definition is cited from the following DoS website: <http://www.dos.gov.jo/dos_home_e/main/population/census2004/methodology.pdf> (Accessed May 2019)

8 Declines in male labor force participation rates can be correlated to the early retirement system which allows by law early retirement from age 45 [Assaad 2014: 220-221; Alhawarin 2014: 50-51].

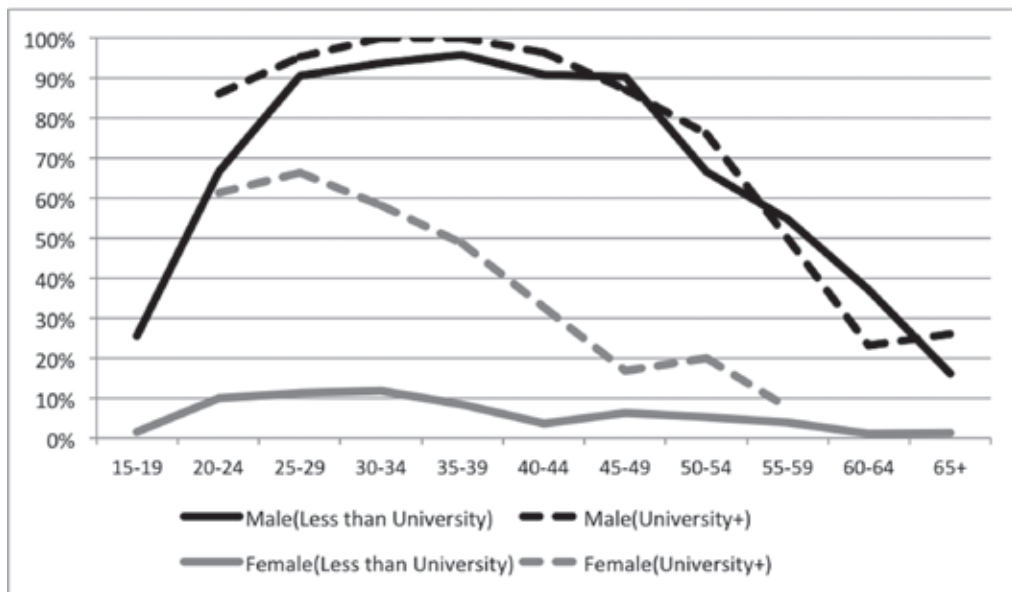


Figure 1 Labor Force Participation Rate by Sex, Age and Educational Level

Source: Amman Household Survey 2008

Considering marital status, Figure 2 illustrates the labor force participation rate of Jordanians aged 20-39 years. These specific age groups are analyzed as over 70% of Jordanians of age 15-19 are students and more than 90% of Jordanians aged 40 or older are married. Among Jordanian women aged 40-49 and 50-59 years, the percentage of never married women is 9.6% and 4.1%, respectively.

The male labor force participation rate remains high regardless of marital status and educational level. Over 90% of both never married and married men are economically active excluding never married men aged 20-24 years (most are students).

While marital status does not have a significant impact on male labor force participation rates, marital status impacts women significantly. The rate of never married women ranges from 50-60% except for those aged 20-24, while the rate of married women remains extremely low (approximately 10%).

Drawing upon data presented in Figures 1 and 2, it can be inferred that married women have low labor force participation rate regardless of age. In addition, the participation rate among women with post-secondary education decreases after the age of 30. Regardless of the level of education, women tend to withdraw from the labor market after marriage.

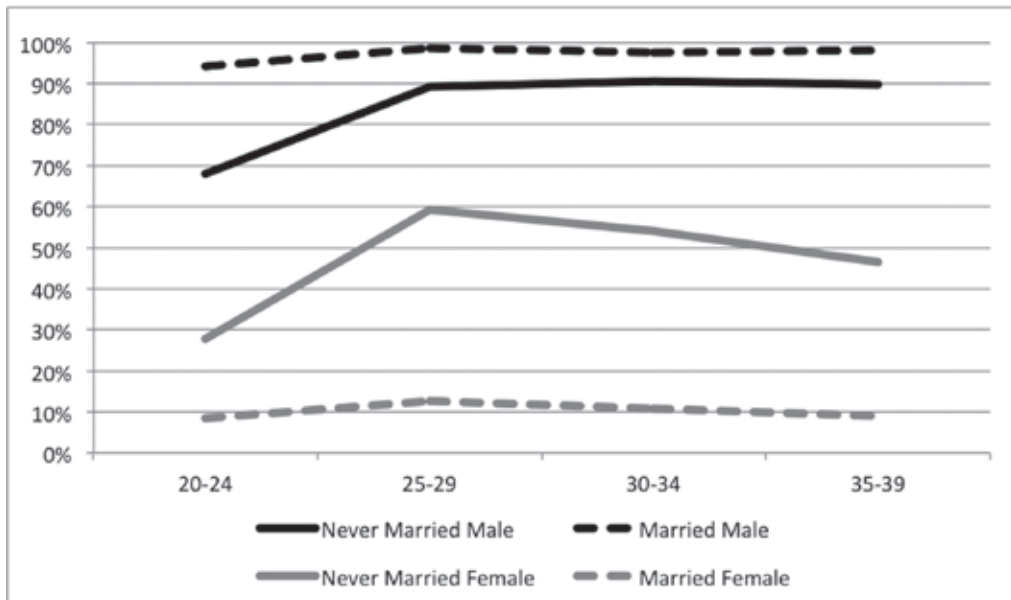


Figure 2 Labor Force Participation Rate by Sex, Age and Marital Status (20-39 years old)

Source: Amman Household Survey 2008

Note: "Married" includes divorced, separated, and widowed.

3. Work Experiences of Economically Inactive Females with Higher Education

Men have various reasons for not participating in the labor force. For example, they may be students, be in receipt of other income such as pension or shares, have disabilities or diseases, and so on. However, based on the data collected during the survey, economic inactivity among women is largely reported due to education or due to their role in the household as homemakers. According to participant responses, 97.1% of economically inactive women are homemakers and students.

Some of the economically inactive women with post-secondary education are homemakers, although the percentage is low (12.7% of all female homemakers). Have they worked previously? Those who answered "Yes, past" to the above question "Do you have basic wage?" have work experiences. This definition excludes respondents who had worked as own-account workers, employers or unpaid workers; however, this has little effect on the analysis because the percentage of such women is very low (8.0% of economically active women compared to 17.8% of active men).

Inactive women have fewer work experiences than inactive men, even if they are well educated. Based on the survey, 43.2% of inactive women with post-secondary education (192 persons) have had paid employee experiences compared to 84.0% of men (75 persons).

Table 3 shows paid employee experiences of female homemakers with post-secondary

education. More than half – 56.1% – have no professional work experience regardless of education level. This result indicates that women do not necessarily work just because they hold high academic qualifications.

In particular, young women have fewer paid employee experiences. Nearly 80% of female homemakers aged 20-29 and 69.2% of female homemakers aged 30-39 have no paid employment experiences. The reported reason for women not participating in the labor market is that they are waiting for marriage or do not meet the definition of unemployed persons. For instance, they stop seeking employment opportunities. However, 83.7% of females of age 20-39 are married (72 of 86 persons). Therefore, it seems that they did not choose to work because they got engaged or married soon after their graduation from college or university.

Table 3 Percentage Distribution of Female Homemakers with Post-Secondary Education by Paid Employee Experience and Age

		20-29	30-39	40-49	50+	Total
Paid Employee Experience	Yes, past	21.3	30.8	50.0	79.4	43.9
	No	78.7	69.2	50.0	20.6	56.1
Total people surveyed		47	39	60	34	180

Source: Amman Household Survey 2008

V. Female Employment Patterns by Marital Status

1. Characteristics of Paid Employees

This section examines women's employment patterns by using four indicators; work sector, contract status, occupation, and economic activity. The focus of the analysis is paid employees as socioeconomic indicators are only collected from this group.

While there is a relationship between female labor force participation and marital status, the same correlation is not observed with male labor force participation rates – i.e. educational level and marital status do not appear to impact the participation rate among men. Therefore, employment patterns can be meaningfully compared among men, never married women and married women; the sample number is 1,017, 145 and 64 people respectively.⁹

Most of the economically active women are paid employees (Table 2). Therefore, female paid employees have the same characteristics as other economically active females when compared with males. That is, female paid employees are younger than male paid employees because never married females have a high percentage of female paid employees. Most importantly, females have extremely high education; 70.8% of all female paid employees have post-secondary education compared with 23.9% of male paid employees.

⁹ The sample size is small due to the limited number of economically active women.

As to similarities between never married and married women, there is no difference in educational level, while never married women are younger than married women. Additionally, 60.7% of never married women are under the age of 30 compared to 32.8% of married women.

2. Work Sector, Contract Status, Occupation and Economic Activity

Table 4 shows the percentage distribution of Jordanian paid employees by sex, work sector, contract status, occupation, and economic activity.

There is a higher percentage of married female paid employees working in the public sector compared with male and never married female paid employees: 56.3% of married female employees are engaged in the public sector compared to 35.3% of male and 28.3% of never married females. As public sector workers generally have permanent contracts, this also means that married female paid employees have permanent contracts. The survey results show that 91.7% of paid employees in the public sector hold permanent contracts compared to only 19.1% of private sector paid employees who hold similar permanent contracts.

The data also shows that economically active women hold a higher percentage of professional occupations than men regardless of marital status: 69.7% of female paid employees are professionals, technicians and associate professionals compared to only 22.6% of male paid employees. This is due to the fact that women workers have a tendency to be highly educated. As shown in Table 5, there is a positive association between educational level and occupation regardless of sex in Amman. Among paid employees with post-secondary education, 70.3% of men and 91.0% of women are professionals, technicians, and associate professionals.

On the relationship between participation rate and type of economic activities, public administration and defense have the highest percentage of male paid employees (21.8%), followed by manufacturing (16.8%), and wholesale and retail trade (15.4%). Never married women's participation is concentrated in education (24.1%) and health and social work (15.9%), with lower rates of participation in wholesale and retail trade (12.4%) and manufacturing (11.7%). In summary, the percentage of both male and never married female workers who are engaged in manufacturing, wholesale and retail trade is relatively high. This is the same trend found during the 2004 census previously mentioned.

Despite this trend, the majority of married women workers are engaged in education, health and social work. Workers engaged in the education sector include the highest percentage of married female paid employees (50.0%), with health and social work representing the second highest sector for married female paid employees (17.2%). Additionally, all paid employees in education, health, and social work do not represent a high percentage of workers in the public sector overall.¹⁰ Furthermore, the survey indicates that married women tend to be engaged not only in the public sector, but in specific economic activities such as education, health, and social work.

¹⁰ Public administration and defense have the highest percentage of Jordanians working in public sector (53.9%), followed by other community, social and personal service activities (18.6%).

Table 4 Percentage Distribution of Jordanian Paid Employees by Employment Situations, Sex and Marital Status

	Male	Never Married Female	Married Female
Work Sector			
Public Sector	35.3	28.3	56.3
Private Sector	64.7	71.7	43.8
Contract Status			
Permanent	45.1	36.6	60.9
Temporary	17.6	35.9	25.0
None	37.3	27.6	14.1
Occupation			
Managers	0.1	-	-
Professionals	13.4	47.6	48.4
Technicians & Associate Professionals	9.2	22.1	25.0
Clerical Support Workers	7.9	8.3	3.1
Service & Sales Workers	13.6	12.4	10.9
Craft & Related Trades Workers	20.9	2.8	-
Plant & Machine Operators, & Assemblers	16.1	-	-
Elementary Occupations	18.8	6.9	12.5
Economic Activity			
Agriculture, Hunting & Forestry	0.2	-	-
Mining & Quarrying	0.5	0.7	1.6
Manufacturing	16.8	11.7	4.7
Electricity, Gas & Water Supply	2.7	0.7	-
Construction	5.9	0.7	-
Wholesale & Retail Trade	15.4	12.4	3.1
Hotels and Restaurant	2.9	0.7	-
Transport, Storage & Communications	9.1	2.8	3.1
Financial Intermediation	2.3	2.1	-
Real estate, Renting & Business Activities	3.3	11.0	4.7
Public Administration & Defense	21.8	7.6	3.1
Education	6.1	24.1	50.0
Health & Social Work	3.1	15.9	17.2
Other Community, Social & Personal Service Activities	9.7	9.0	9.4
Activities of Private Households	0.1	0.7	3.1
Total people surveyed	1,017	145	64

Source: Amman Household Survey 2008.

Note: "Private Sector" includes international institutions.

Table 5 Percentage Distribution of Jordanian Paid Employees by Occupation, Sex and Educational Level

Occupation	Male		Female	
	Less than University	University+	Less than University	University+
Managers	-	0.4	-	-
Professionals	-	56.0	1.6	66.9
Technicians & Associate Professionals	4.5	24.3	16.4	25.7
Clerical Support Workers	9.8	1.6	18.0	2.0
Service & Sales Workers	15.8	6.6	32.8	3.4
Craft & Related Trades Workers	26.5	3.3	3.3	1.4
Plant & Machine Operators & Assemblers	20.5	2.1	-	-
Elementary Occupations	22.9	5.8	27.9	0.7
Total people surveyed	774	243	61	148

Source: Amman Household Survey 2008

VI. Conclusion

The Jordanian female labor force participation rate is very low despite the nominal gender gap in education in the country. This paper examines the labor force participation and employment patterns of women in Jordan by taking account into sex, age, educational level and marital status, drawing upon micro data and initial analysis presented in 2008 and 2009 surveys in Amman governorate.

As previous studies highlighted, the results of the household survey show that education and marriage have a strong impact on female labor force participation. The labor force participation rate of women with post-secondary education is high, while the participation rate of married women is low. At the same time, it also indicates that even women with post-secondary education tend to withdraw from labor market after marriage.

Notably, over half of homemakers with post-secondary education, especially young women, have no work experience. As such, well educated women do not necessarily participate in the labor market just because they hold high academic qualifications.

Married female workers tend to be engaged in public sector work in Amman governorate as well as across Jordan, including in areas where private sector opportunities are limited. Moreover, the results of the surveys and subsequent data analysis confirms that married female workers show a tendency to work only in the public sector and in specific economic activity categories including education, health and social work.

For further study of female labor force participation and the wider Jordanian labor market

is necessary. For instance, Zarqa – like Amman – hosts the majority of private sector workers, while southern regions such as Karak and Ma'an have a high percentage of public sector employees. Further examination is required to determine whether similar trends in female labor market participation are seen across the country.

Bibliography

- Ababsa, Myriam. ed. 2013. *Atlas of Jordan: History, Territories and Society*. Beirut: Presses de l'ifpo.
- Administration Office. ed. 2010. *Amman Household Survey 2008*. (Research Report Series No.10). N.p.
- Alhawarin, Ibrahim. 2014. "Patterns and Determinants of Early Retirement: The Case of Jordanian Men." *Jordan Journal of Economic Sciences* 1(1): 49-65.
- Assaad, Ragui. ed. 2014. *The Jordanian Labor Market in the New Millennium*. Oxford: Oxford University Press.
- Brown, Ryan Andrew, Louay Constant, Peter Glick and Audra K. Grant. 2014. *Youth in Jordan: Transitions from Education to Employment*. Santa Monica, CA: RAND Corporation.
- Chamlou, Nadereh, Silvia Muzi, and Hanane Ahmed. 2011. *Understanding the determinants of female labor force participation in the Middle East and North Africa region: The role of education and social norms in Amman*. AlmaLaurea Working Papers No. 31, Bologna: AlmaLaurea Inter-University Consortium. <<http://www2.almalaurea.it/universita/pubblicazioni/wp/pdf/wp31.pdf>> (Accessed May 2019)
- Department of Statistics, The Hashemite Kingdom of Jordan. 2013. *Jordan Population and Family Health Survey 2012*. Amman: Department of Statistics.
- Hanssen-Bauer, Jon, Jon Pedersen and Age A. Tiltnes. eds. 1998. *Jordanian Society: Living Conditions in the Hashemite Kingdom of Jordan Fafo report 253*. Oslo: FAFO, Institute for Applied Social Science.
- Kato, Hiroshi, Haruka Usuki and Erina Iwasaki. 2013. *Urban Society of Amman: Report of the Amman Household Survey 2008*. Global COE Hi-Stat Discussion Paper Series gd12-272, Institute of Economic Research, Hitotsubashi University. (in Japanese)
- Miles, Rebecca. 2002. "Employment and Unemployment in Jordan: The Importance of the Gender System." *World Development* 30(3): 413-427.
- Peebles, Dana, Nada Darwazeh, Hala Ghosheh, and Amal Sabbagh. 2007. *Factors affecting women's participation in the private sector in Jordan*. Amman: National Center for Human Resources Development. <<http://www.almanar.jo/ar/documents/Mayssa%20Gender%20report.pdf>> (Accessed May 2019)
- UNDP (United Nations Development Programme), Jordan Economic and Social Council and AECID Spanish Agency for International Development Cooperation. 2013. *The Informal*

Sector in the Jordanian Economy. N.p. (First published in 2010) <<https://www.undp.org/content/dam/jordan/docs/Publications/Gov/The%20Informal%20Sector%20in%20the%20Jordanian%20Economy-jo.pdf>> (Accessed May 2019)

Website

Department of Statistics, Jordan. Population and Housing Census 2004 Databank <http://dosweb.dos.gov.jo/censuses/population_housing/census2004/census2004_tables/> (Accessed May 2019)