
Analyzing Gender-Based Financial Inclusion Disparities: A Comparative Study of Jordan and other Arab Nations

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THE AIM OF THIS PAPER

The aim of this study is to explore the financial disparities between Jordanian women and their counterparts in the Arab world. The objectives were extended to analyze country-level comparisons on a nation-to-nation basis within Arab Middle Eastern countries. This study seeks to compare and evaluate educational attainment by examining the effects of education among both highly educated and non-highly educated women in Jordan, alongside their counterparts in the same region.

METHODOLOGY

The presented study employs the Global Findex 2021 data to examine the financial disparities between Jordanian women and their counterparts in the Arab world, using a non-parametric Mann-Whitney U test including 6317 females across 13 Arab countries.

MOST IMPORTANT RESULTS

Results suggested that Jordan holds a significantly distinguished position in economic empowerment despite shared cultural norms. While Jordan exhibits relative strengths in education and digital access to services, it faces significant challenges in converting these advancements into broader economic benefits and empowerment. Jordan holds a strong position compared to its counterparts in general, except for Saudi Arabia and the UAE.

RECOMMENDATIONS

It would be beneficial to have a context-specific policy intervention to leverage the unique position of Jordan to foster women's economic involvement and empowerment in Jordan and beyond, aligning with global efforts to enhance gender equality and promote sustainable development.

Keywords: women empowerment, Arab world, financial inclusion, Mann-Whitney U, education

INTRODUCTION

Women's empowerment is a multidimensional process that enables women to achieve their full potential in all areas of life (Pillai 1995). It plays a crucial role in shaping societies and promoting sustainable development by providing women with the capabilities and opportunities to make strategic life choices (Kabeer 2005). Empowering women is both a matter of social justice and a key aspect of human development (Sen 1999). It is linked to improvements in health, education, and economic productivity (Malhotra et al. 2002), and investing in women's empowerment boosts economic growth through increased female labor force participation (World Bank 2019). There is broad consensus on the importance of women's empowerment for achieving sustainable development and a more equal society (Pillai 1995; Malhotra et al. 2002; Kabeer 2005; Chakraborty & Somanathan 2010; Duflo 2012; Hussain & Jullandhry 2020).

A global gender gap persists – including in the Arab region – where men typically have greater access to resources and decision-making power than women (Tatár-Kiss 2021; Sharma et al. 2021; World Economic Forum 2023). While many studies have explored this issue (Klasen and Lamanna 2009; England 2010; Bettio et al. 2013), little attention has been paid to the disparities among women, particularly in developing countries such as Jordan. Jordan exhibits one of the lowest rates of female labour force participation, with female unemployment reaching 23%, markedly exceeding the male rate of 12%. Female labour force participation stands at 14.7%, in contrast to 62.5% for males, with 50% of women exiting the workforce by the age of 30. The private sector shows even lower female representation, and only 18% of businesses are female-owned, compared to 82% male-owned. These disparities stem from complex issues related to infrastructure, policy, and regulation (IMF 2022; World Bank n.d.). Despite progress in health and education, significant gender gaps persist in political and economic participation in Arab countries, due to socio-economic and cultural factors (Shamlawi and Saqfalhait 2016).

LITERATURE REVIEW

Research on the gender gap has focused on various dimensions, particularly economic, educational, political, and healthcare. Shamlawi and Saqfalhait (2016) analyzed the Global Gender Gap (GGG) reports from 2006 to 2015 for fifteen Arab countries, revealing substantial gaps in political and economic empowerment. Zuhur (2003) examined the role of

policies, societal attitudes, and legal frameworks in promoting or obstructing women's empowerment in the Arab world. Fargues (2005) employed a demographic and reproductive approach to measure empowerment in the region indirectly. Glas et al. (2018) employed a multidimensional approach, using data from the World Values Surveys to explore how religion, gender, and sociocognitive empowerment shape attitudes toward gender equality in the Arab world. Martin (2015) applied a transcultural caring model as a theoretical framework to analyze gender equality and the empowerment of women in Arab countries within the health care domains. A recent study by Saqfalhait et al. (2023) investigates the impact of trade liberalization on women's empowerment in the Arab world, focusing on the gender gap index (GGI) and gender development index (GDI), GDP growth and female unemployment rate, by utilizing the fully modified ordinary least squares (FM-OLS) regression model to analyze the effects of trade openness and tariffs on women's empowerment. Hadad (2018) used a qualitative analysis approach to examine the fostering of gender equality in the Arab world in comparison to international standards, focusing on the complex dynamics of legal, social, and political empowerment of females within various Arab countries. Abou-Shouk et al. (2023) employed partial least squares structural equation modeling on a subset of female students across three Arab countries to explore the impact of women's empowerment on tourism development, in terms of how perceptions of women's work in tourism and women's entrepreneurship predict empowerment in the sector. Odine (2013) employed a qualitative analysis to explore the role that social media plays in advocating the rights of women, overcoming the restrictions imposed by traditional media within the Arab world, and revealing the potential of such media to advocate female empowerment. Thabet (2015) used a mixed-methods approach, primarily qualitative, complemented by quantitative data analysis, to examine gender inequality induced by illiteracy, cultural norms, and passive bureaucracy in the Arab region, in addition to a comparative analysis of the Arab states as a block with the rest of the world.

The studies that addressed empowerment and gender disparity within the Arab world mainly concentrated on broad themes such as empowerment, gender gaps, and overarching topics like healthcare, economy, political participation, and social norms. However, they often overlooked or inadequately addressed microdata and specific elements within the female population, such as financial disparity, across Arab countries. This gap highlights the need

for more research on the diverse experiences and challenges faced by women within these regions beyond the general trends and averages (Moghadam 2003; Bastian et al. 2018).

In light of the above, economic needs are fundamental to empowerment, with financial inclusion being a key component. In the Arab region, assessing gender disparities is vital for understanding the broader context of women's empowerment. Since empowerment is context-dependent (Verma 2009), disparities are often measured through indirect proxies. Financial indicators not only reflect economic inclusion but also serve as proxies for broader economic needs. These resources are essential for enhancing individual freedom and well-being, thereby contributing to greater empowerment (Sen 1999; Verma 2009; Duflo 2012).

The objective of the presented study is to assess the financial disparity by providing a comparison framework between the female population in Jordan and their counterpart in the Arab world. The objectives were extended further:

- to analyze country-level comparison on a nation-to-nation basis within Arab Middle Eastern countries,

- to compare and assess education attainment by uncovering the effects of education within both the highly educated women's community and those who are non-highly educated in Jordan with their counterparts in the same country .

DATA AND METHODS

The data presented in this study is based on the Global Findex 2021 (GF2021) individual-level data, accessible through the World Bank Microdata Library. This comprehensive dataset provides insights about individuals globally, including Jordan and other Arab countries. It is a comprehensive dataset that gathers information from about 128,000 adults across 123 economies. It is intended to monitor global access to financial services, including payments, savings, borrowing, and digital transactions. The data offers insights into financial behaviors that contribute to resilience and identifies gaps in access to financial services. Table 1. represents the extracted selected variables along with their descriptions from the Global Findex 2021. Only females from Arab nations were selected for the analysis, completely omitting males.

Table 1. Variables used to conduct the analysis

Variable	Descriptions
Employment (EM)	Represents the respondent's situation in the employment; 1 represents being employed, 2 is not employed
Account Financing (ACC)	Indicates the female respondent's account ownership; 1 having a bank account or account at another financial institution, 0 having no account
Savings (SAV)	Indicates the respondent's savings behaviors; 1 had savings in the past year, 0 did not have savings
Borrowing (BOW)	Indicates if the respondent had borrowed money in the past year as 1 did borrow, 0 did not borrow
Digital Payments (DIG)	Indicates whether the respondent has made any form of digital payment in the past year; 1 did make a digital payment, 0 did not.
Merchant Digital Payments (MDIG)	Indicates the respondent's digital merchant payment attitude; 1 if the respondent used a bank card, or similar to make a purchase online or in-store the past year, 0 if the respondent did not make a digital merchant payment
Wages (WAG)	Indicates if the respondent received wages in the past year, 0 did not receive
Education (EDU)	Explains the education level of the respondent, 1 highly educated, 0 non-highly educated
Mobile Ownership (MOB)	Indicates respondent mobile ownership; 1 have a mobile, 0 do not have mobile
Internet Access (INT)	Describes if the respondent has access to the internet, 0 if the respondent has no access to the internet

Source: Global Findex 2021 individual-level data

The Arab countries included in the analysis represent only those Arab League member states for which complete variable data were available. These are Algeria, Comoros, Algeria, Egypt, Iraq, Jordan, Lebanon, Mauritania, Morocco, Saudi Arabia, Tunisia, United Arab Emirates, West Bank and Gaza, and Yemen.

The Mann-Whitney U test procedure (McKnight & Najab 2010) is a non-parametric method with a solid foundation, particularly suitable for evaluating the disparity between females in Jordan and other countries when data normality is not presumed. This procedure was employed to compare aggregated mean ranks between Jordan and various other Arab countries across multiple selected variables to test the hypotheses. This non-parametric test helps assess the differences between two independent groups (i.e., Jordan vs Arab countries) or between Jordan and specific Arab countries simultaneously. The non-normality of the data was assessed at the initial phase, leading to the selection of the Mann-Whitney U test as appropriate for analysis.

The examined variables are listed in Table 1. The selected variables were carefully chosen as a proxy for empowerment based on the concept of economic needs as a means of empowerment. These variables were chosen to encompass a broad spectrum of factors affecting economic empowerment and digital engagement.

Hypothesis Testing: Hypotheses were formulated to evaluate the significant differences between Jordan and other Arab countries across the selected variables.

The analysis aimed to identify the factors that significantly differ, thereby enhancing our understanding of regional disparities in economic and digital empowerment. The variables considered are Employment (EM), Account Financing (ACC), Savings (SAV), Borrowing (BOW), Digital Payments (DIG), Merchant Digital Payments (MDIG), Wages (WAG), Education (EDU), Mobile Ownership (MOB), and Internet Access (INT). The following hypotheses are formulated within the presented study:

H1: A significant difference exists in employment (EM) between women in Jordan and women in other Arab countries.

H2: There is a significant difference in owning an account at a finance institution (ACC) between women in Jordan and women in other Arab countries.

H3: There is a significant difference in savings (SAV) between Jordanian women and women in other Arab countries.

H4: There is a significant difference in borrowing money (BOR) between women in Jordan and women in other Arab countries.

H5: There is a significant difference in the use of digital payments (DIG) between women in Jordan and women in other Arab countries.

H6: There is a significant difference in the use of merchant digital payments (MDIG) between women in Jordan and women in other Arab countries.

H7: There is a significant difference in wages (WAG) between women in Jordan and women in other Arab countries.

H8: There is a significant difference in mobile ownership (MOB) between women in Jordan and women in other Arab countries.

H9: There is a significant difference in internet access (INT) between women in Jordan and women in other Arab countries.

RESULTS

This study employed the Mann-Whitney U test to compare Jordan with the broader Arab world, selected Middle Eastern countries, and highly educated women – each representing significant components of Arab communities. These took place across many variables to explore the possible disparities highlighting Jordan's unique socio-economic and environmental standing within the region. Results are presented along two primary dimensions: the statistical significance of differences and changes in mean rank, offering a detailed perspective on Jordan's comparative position.

Jordanian versus Arab women

Table 2. illustrates the variables of Account Financing (ACC), Savings (SAV), Digital Payments (DIG), Merchant Digital Payments (MDIG), Education (EDU), Mobile Ownership (MOB), Internet Access (INT): The hypotheses regarding these variables were accepted, as evidenced by p-values below 0.05, suggesting statistically significant differences between an Arab nation and Jordan. This finding suggests substantial disparities between females in Jordan and those in other Arab countries concerning access to financial accounts, savings mechanisms, digital payment systems, educational resources, mobile technology, and internet connectivity.

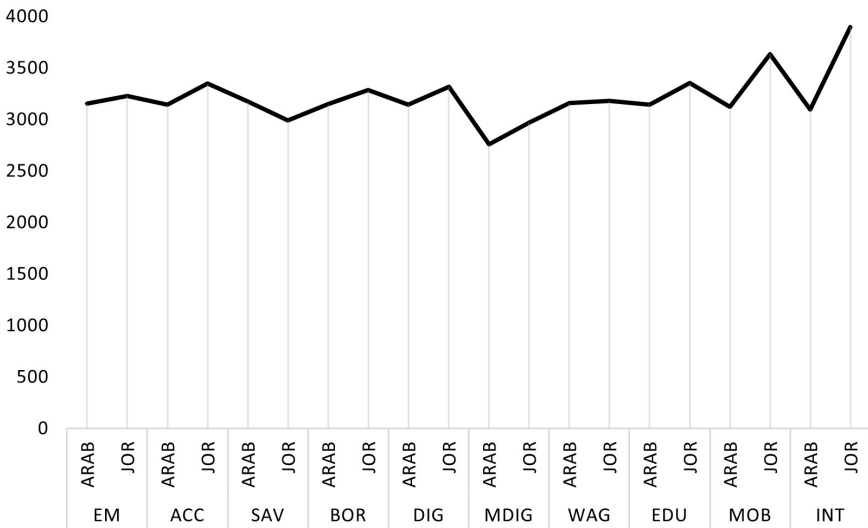
Regarding Employment (EM), Borrowing (BOR), Wages (WAG): The hypotheses for these variables were rejected, with p-values for EM and WAG at 0.30 and 0.64, respectively. This suggests that there are no statistically significant differences between the groups in terms of employment status, borrowing behavior, and wage levels. It

also suggests that there are shared challenges or opportunities in these economic aspects.

The Z-scores reveal that the most significant negative Z-scores were observed for MOB (-9.71) and INT (-11.50); highlighting substantial advantages in mobile ownership and internet access, for females in Jordan compared to their counterparts in other Arab countries. This indicates a higher level of technological engagement and accessibility among Jordanian females compared to their counterparts. The significance in education

(EDU) expressed by the Z score and observing the mean rank (Figure 1.) implies that females in Jordan may have better access to or outcomes in educational endeavors, setting a foundation for broader implications on empowerment and economic participation. Noticeable differences in digital payments (DIG and MDIG) expressed by mean rank suggest a higher penetration or adoption of digital financial services among females in Jordan, presenting opportunities for enhancing financial inclusion strategies in the region.

Figure 1. The aggregated mean rank results of the Mann-Whitney U test comparing Jordan with other Arab countries



Notes: In this comparison, „JOR” represents Jordan, while „Arab” denotes Arab countries. The Y-axis represents mean rank, and the X-axis represents the aggregated variables based on either Jordan or Arab countries.

Source: own research and calculation

Table 2. The results of hypothesis testing for different variables

	EM	ACC	SAV	BOR	DIG	MDIG	WAG	EDU	MOB	INT
Mann-Whitney U	1404273.00	1344547.00	1354345.50	1376160.50	1360725.00	1152274.50	1429401.50	1343695.50	1205113.00	1074499.50
Z	-1.03	-2.93	-2.62	-1.85	-2.58	-7.10	-0.46	-3.58	-9.71	-11.50
Asymp. Sig. (2-tailed)	0.30	0.00*	0.01*	0.06	0.01*	0.00*	0.64	0.00*	0.00*	0.00*
Hypothesis Rejected	Accepted	Accepted	Rejected	Accepted	Accepted	Rejected	Accepted	Accepted	Accepted	Accepted

Notes: The text in bold (*) indicates the accepted hypothesis. The significance test is based on 2-tailed p-values. Data was based on females in Jordan vs females in other countries.

Source: own research and calculation

Comparison of a single country with Jordan

The results exclude MDIG for Saudi Arabia and the UAE due to the estimated values for this particular variable in both countries. The results underscore Jordan's strengths and identify opportunities for enhancement relative to its Middle Eastern counterparts.

The existence of statistically significant differences across most variables suggests that policy interventions in Jordan and other countries should be highly targeted and context-specific. A few non-significant differences were observed, notably in Saving (SAV) when compared to SAUDI. The pattern observed in Egypt and the UAE indicates a degree of convergence and similarity in savings behaviors and mechanisms across these nations. The occurrence of non-significant educational gaps between Jordan and both Yemen and the UAE highlights intriguing educational similarities, despite the disparate economic profiles of these countries. This suggests potentially effective strategies that promote great educational outcomes in the UAE, while highlighting significant socio-economic challenges for Yemen.

An analysis of the mean rank (Figure 2.) indicated that education in Jordan ranks higher than in many other countries, signifying better performance. This indicates a more robust higher

education infrastructure and elevated educational attainment levels in Jordan compared to these other countries. Similarly, in terms of mobile ownership, Jordan surpasses other countries, as evidenced by higher mean ranks reflecting more mobile phone penetration within its population. Internet Access (INT): Jordan demonstrates superior internet access, indicated by elevated mean ranks, implying a larger segment of the population has internet connectivity relative to most countries.

Nonetheless, there are specific domains indicated by the selected variables where Jordan's performance is deficient. For instance, in Account Financing (ACC), Jordan's performance appears inferior to that of the UAE, as evidenced by the lower mean rank for Jordan. This may indicate that the UAE possesses a more advanced financial industry or more accessibility to financial services for its populace. Savings (SAV): Jordan's performance in savings is comparatively weaker than in certain countries, as seen by lower mean ranks in various comparisons. This may indicate disparities in the financial conduct of the populace or the economic well-being of households. Digital Payments (DIG): Jordan's digital payments infrastructure and usage appear to be inferior to that of certain nations, such as the UAE, as indicated by lower average rankings. This highlights disparities in the development and uptake of digital financial services.

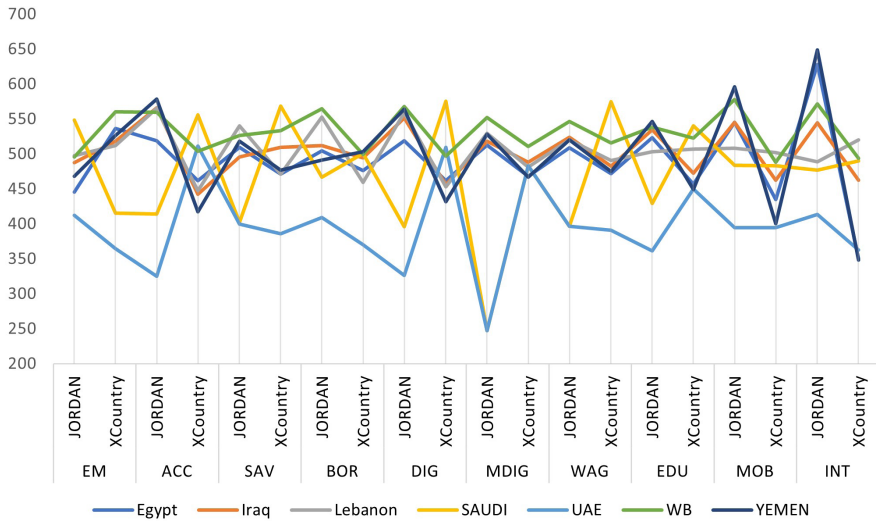
Table 3. The pair testing between Jordan and a single country at a time of the Arab countries in the Middle East region

Pair	EM	ACC	SAV	BOR	DIG	MDIG	WAG	EDU	MOB	INT
JOR-SAUD Z	-8.56	-9.18	-10.72	-2.18	-11.52	-	-12.67	-7.42	-1.02	-1.55
JOR-IRAQ	-2.05	-8.69	-0.94	-1.09	-7.13	-3.15	-5.23	-5.00	-9.41	-6.76
JOR-EGY	-2.53	-1.96	-3.19	-3.29	-4.93	-6.84	-3.31	-6.27	-15.02	-17.26
JOR-UAE	-3.34	-13.00	-1.06	-2.68	-12.62	-	-0.69	-6.41	0.00	-5.01
JOR-WB	-4.32	-3.60	-0.45	-4.03	-5.03	-4.51	-3.52	-1.15	-9.60	-6.31
JOR-YEM	-4.04	-11.96	-3.03	-0.76	-10.68	-7.87	-5.99	-8.49	-15.57	-19.46
JOR-LEB	-0.95	-8.22	-5.19	-5.99	-8.06	-5.70	-3.49	-0.26	-2.41	-4.05
JOR-SAUD SIG	0.04	0.00	0.35	0.28	0.00	0.00	0.00	0.00	0.00	0.00
JOR-IRAQ	0.01	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JOR-EGY	0.00	0.00	0.29	0.01	0.00	-	0.49	0.00	1.00	0.00
JOR-UAE	0.00	0.00	0.65	0.00	0.00	0.00	0.00	0.25	0.00	0.00
JOR-WB	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
JOR-YEM	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.02	0.00
JOR-LEB	0.00	0.00	0.00	0.03	0.00	-	0.00	0.00	0.31	0.12

Notes: Z denotes the Z score of Mann-Whitney U, SIG denotes the p-value.

Source: own research and calculation

Figure 2. The Mean Rank values across the selected individual countries. Comparing variables within each pair (Jordan vs X country)



Notes: The Y-axis represents the mean rank values, and the X-axis represents the pair comparison.

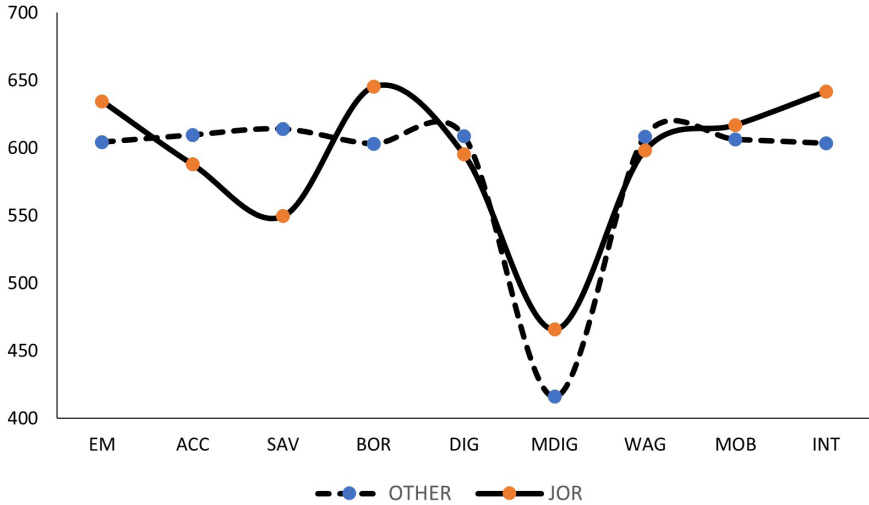
Source: own research and calculation

The impact of education on women’s financial disparities

As illustrated in Table 4., results revealed a contrast between highly educated and non-highly educated women in Jordan compared to other Arab countries. Among highly educated women, significant disparities are predominantly observed in Savings (SAV) and Internet Access (INT), with p-values of 0.02 and 0.01, respectively, indicating a pronounced difference in financial behavior and digital accessibility.

The most notable difference, however, lies in Merchant Digital Payments (MDIG) with a p-value of 0.00, highlighting a unique trend in digital payment adoption among this group. Conversely, women with lower educational attainment exhibit a broader range of significant disparities, particularly in Mobile Ownership (MOB) and Internet Access (INT), both with p-values of 0.00, suggesting a substantial digital divide. Other areas, such as Account Financing (ACC) and Digital Payments (DIG), also exhibit significant differences (p-values of 0.01 and 0.03), indicating a wider gap in financial and digital engagement.

Figure 3. Changes in mean rank values based on Mann–Whitney U comparisons between educated and non-educated segments of the female population in Jordan and other Arab countries, across selected variables



Notes: The Y-axis represents the mean rank, and the X-axis represents the selected variables.

Source: own research and calculation

It is also noteworthy that highly educated women within their group compared to less educated tend to be more consistent, showing less variation women across the Arab world.

Table 4. Hypothesis testings within highly educated and non-highly educated female group , comparing Jordan with other Arab countries

Highly Educated									
	EM	ACC	SAV	BOR	DIG	MDIG	WAG	MOB	INT
Mann-Whitney U	64676.5	65614.0	60832.0	63339.5	66526.0	39757.5	66896.5	66875.0	63776.5
Z	-1.11	-0.80	-2.25	-1.48	-0.48	-3.16	-0.39	-1.49	-2.57
Sig. (2-tailed)	0.27	0.43	0.02	0.14	0.63	0.00	0.70	0.14	0.01

Non-Highly Educated									
	EM	ACC	SAV	BOR	DIG	MDIG	WAG	MOB	INT
Mann-Whitney U	834507.0	816228.0	821200.5	842103.0	831856.5	764380.0	866293.0	702760.5	621868.5
Z	-1.76	-2.72	-2.39	-1.33	-2.18	-4.48	-0.72	-9.39	-10.94
Sig. (2 tailed)	0.08	0.01	0.02	0.18	0.03	0.00	0.47	0.00	0.00

Source: own research and calculation

DISCUSSIONS

The present study provides a detailed empirical analysis of the disparities in financial empowerment between women in Jordan and those across the broader Arab region. Despite shared cultural norms in many Arab countries, the study reveals significant differences in women’s economic empowerment,

particularly regarding education, digital access, and financial inclusion. Seven out of ten hypotheses related to gender disparities were accepted, demonstrating clear contrasts between Jordan and other Arab nations. Jordanian women exhibit higher levels of technological engagement and educational attainment compared to other Arab women, aligning with previous findings by Jalbout (2015), which

emphasize the transformative power of education on societal norms. However, while educational advancements are evident, they have not always translated into economic empowerment for women in Jordan, mirroring regional trends observed in wealthier Gulf countries like Saudi Arabia and the UAE, where significant investments in education and technology have not always led to proportional gains in women's economic empowerment (Jalbout 2015; Moghadam 2003).

The study's findings suggest that the socio-economic empowerment of women in the Arab world is deeply intertwined with cultural norms and values that shape gender roles, as highlighted by Bastian et al. (2018). In Gulf countries, despite substantial investments in education and technology, conservative cultural norms continue to restrict women's full economic participation. Conversely, Jordan's relatively more liberal cultural environment (Koburtay & Abuhusseini 2020; Koburtay et al. 2018) has allowed for some translation of educational and technological advancements into greater economic engagement, though challenges remain. This discrepancy between educational attainment and economic participation is consistent with findings by Mehtap et al. (2017), which suggest that while Jordan provides strong educational opportunities for women, other systemic barriers, such as a lack of access to entrepreneurial resources, limit their broader economic participation.

Regionally, Jordan outperforms countries like Egypt, Iraq, Lebanon, West Bank, and Yemen in most indicators related to women's empowerment, suggesting its relative strength in the Arab context. Notably, Jordan excels in education and internet access compared to Saudi Arabia and the UAE, despite their greater investments and socio-economic transformations. These findings challenge earlier studies, such as Antonijević et al. (2022), which highlighted significant gender gaps in countries like Saudi Arabia, particularly in areas such as digital payments. This suggests that gender disparities are not uniform and may vary based on country-specific contexts.

Political stability in Jordan, when compared to conflict-prone regions like Yemen, also plays a critical role in shaping its comparative performance. While political instability is often viewed as a barrier to women's empowerment (Abou-Shouk et al. 2021), the findings of this study indicate that Yemen, despite ongoing conflict, does not significantly lag behind Jordan in terms of women's employment or education. These results suggest that political stability may not always correlate with women's empowerment in straightforward or predictable ways, challenging the broader discourse

on the link between political stability and gender equality.

This study has also examined the role of highly educated women in the region, noting that while Jordan's highly educated women exhibit no significant differences in terms of wages, borrowing behaviors, or employment, notable disparities exist in internet access and merchant digital payments. This indicates a trend of higher digital and financial inclusion for highly educated women in Jordan, suggesting that the country has integrated digital literacy and financial education as key components of its educational system. Despite this, these advancements have not fully translated into economic empowerment, echoing the broader regional issue of low female labor market inclusion (Kasoolu et al. 2019).

In contrast, non-highly educated Jordanian women demonstrate greater digital connectivity than their counterparts in other Arab nations, with significant differences in internet access and mobile device ownership. This points to a comparative advantage in digital inclusion for non-highly educated women in Jordan. However, this group still faces significant challenges in terms of economic participation, as evidenced by their low labor force participation rates. Nonetheless, their relatively higher levels of digital connectivity and financial inclusion provide a strong foundation for future efforts to enhance their economic empowerment.

This study had limitations, including an incomplete dataset and the assumption of a shared cultural framework among Arabs, which may not fully capture the complexities of women's empowerment. Additionally, factors such as GDP play a significant role in the disparities observed among women across Arab nations.

CONCLUSIONS

While Jordan demonstrates strengths in key areas such as higher education and internet access compared to its neighbors, it faces challenges in fully leveraging these advancements for broader economic growth, particularly regarding the limited economic participation of women. Opportunities exist to learn from more conservative Arab nations, like the UAE and Saudi Arabia, which have effectively empowered women despite cultural constraints. Jordan can build on its educational success, strong workforce, and access to digital services to improve gender equity. Future research should examine more Arab countries and the effects of urbanization on women's economic participation.

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REFERENCES

- Abou-Shouk, M. A., Mannaa, M. T. and Elbaz, A. M. (2021), "Women's empowerment and tourism development: A cross-country study", *Tourism management perspectives*, 37. DOI: 10.1016/j.tmp.2020.100782
- Antonijević, M., Ljumović, I. and Ivanović, Đ. (2022), "4BIs there a Gender Gap in Financial Inclusion Worldwide?" *Journal of Women's Entrepreneurship & Education*, (1–2), 79–96. DOI: 10.28934/jwee22.12.p79-96
- Bastian, B. L., Sidani, Y. M. and El Amine, Y. (2018), "Women entrepreneurship in the Middle East and North Africa: A review of knowledge areas and research gaps", *Gender in Management: An International Journal*, 33(1), 14–29.
- Bettio, F., Corsi, M., D'Ippoliti, C., Lyberaki, A., Samek Lodovici, M. and Verashchagina, A. (2013), *The impact of the economic crisis on the situation of women and men and on gender equality policies*. European Commission, Directorate-General for Justice. Publications Office of the European Union.
- Chakraborty, L. and Somanathan, R. (2010), "Women's Autonomy and Economic Development", *Economic and Political Weekly*, 45(48), 57–64.
- Duffo, E. (2012), "Women's Empowerment and Economic Development", *Journal of Economic Literature*, 50(4), 1051–1079. DOI: 10.1257/jel.50.4.1051
- England, P. (2010), "The gender revolution: Uneven and stalled", *Gender & Society*, 24 (2), 149–166. DOI: 10.1177/0891243210361475
- Fargues, P. (2005), "The Global Demographic Benefit of International Migration: A Hypothesis." *RSC Working Papers*. <https://hdl.handle.net/1814/3352> [15.07.2025.]
- Glas, S., Spierings, N. and Scheepers, P. (2018), "Re-understanding religion and support for gender equality in Arab countries", *Gender & Society*, 32(5), 686–712. DOI: 10.1177/0891243218783670
- Hadad, D. (2018), "Women's 'Empowerment' and Gender Equality in the Arab World: Interpretations and Challenges", in: *KILAW. 5th Annual International Conference (9–10 May 2018)*, entitled: *(Contemporary Challenges to Legal Guarantees in a Changing World)*.
- Jalbout, M. (2015), "Unlocking the potential of educated Arab women", *Education Plus Development*.
- Kabeer, N. (2005), "Gender Equality and Women's Empowerment: A Critical Analysis of the Third Millennium Development Goal", *Gender & Development*, 13(1), 13–24. DOI: 10.1080/13552070512331332273
- Kasoolu, S., Hausmann, R., O'Brien, T. and Santos, M. A. (2019), "Female Labor in Jordan: A Systematic Approach to the Exclusion Puzzle", in: *CID Faculty Working Paper*, 365.
- Klasen, S. and Lamanna, F. (2009), "The impact of gender inequality in education and employment on economic growth: New evidence for a panel of countries", *Feminist Economics*, 15(3), 91–132. DOI: 10.1080/13545700902893106
- Koburtay, T. and Abuhussein, T. (2020), "Normative Islam, prejudice and women leaders: Why do Arab women leaders suffer?", *Journal of Gender Studies*, 30(2), 177–189. DOI: 10.1080/09589236.2020.1863195
- Koburtay, T., Syed, J. and Haloub, R. (2018), "Implications of religion, culture, and legislation for gender equality at work: Qualitative insights from Jordan", *Journal of Business Ethics*, 164, 421–36. DOI: 10.1007/s10551-018-4036-6
- Malhotra, A., Schuler, S. R. and Boender, C. (2002), *Measuring Women's Empowerment as a Variable in International Development*. Washington, DC: The World Bank.
- Martin, M. B. (2015), "Gender equality and the empowerment of women in Arab countries: A transcultural caring perspective", *International Journal of Human Caring*, 19(1), 13–18. DOI: 10.20467/1091-5710-19.1.13
- McKnight, P. E. and Najab, J. (2010), *Mann-Whitney U Test. The Corsini encyclopedia of psychology*. DOI: 10.1002/9780470479216.corpsy0524
- Mehtap, S., Pellegrini, M. M., Caputo, A. and Welsh, D. H. (2017), "Entrepreneurial intentions of young women in the Arab world: Socio-cultural and educational barriers", *International Journal of Entrepreneurial Behavior & Research*, 23, 880–902. DOI: 10.1108/IJEBR-07-2017-0214
- Moghadam, V. M. (2003), *Modernizing women: Gender and social change in the Middle East*, Lynne Rienner Publishers.

- Odine, M. (2013), "Role of social media in the empowerment of Arab women", *Global Media Journal*, 12, 1–30.
- Pillai J. K. (1995), *Women and Empowerment*, New Delhi: Gyan Publishing House.
- Saqfalhait, N., AbdAlla Spetan, K., Awad-Warrad, T. and Alomari, M.W. (2023), "Trade liberalization and women empowerment in the Arab countries", *International Journal of Gender and Entrepreneurship*, 15, 232–248. DOI: 10.1108/IJGE-07-2022-0113
- Sen, A. (1999), *Development as freedom*, Oxford University Press.
- Shamlawi, H. A. and Saqfalhait, N. I. (2016), "Women empowerment in the Arab region: a comparative investigation", *Journal of Business and Economics Research*, 5(6), 191–201. DOI: 10.11648/j.ijber.20160506.12
- Sharma, R. R., Chawla, S. and Karam, C. M. (2021), "Global gender gap index: world economic forum perspective", in: Ng, E. S., Stamper, C. L., Klarsfeld, A. & Han, Y. J. (eds.): *Handbook on diversity and inclusion indices*, Edward Elgar Publishing, 150–163.
- Tatár-Kiss, K. (2021), "Gender Equality Provided by Active Action in Recruitment and Selection Process", *Marketing & Menedzsment*, 55(3), 49–57. DOI: 10.15170/MM.2021.55.03.04
- Thabet, S. (2015), "Women Empowerment in the Arab Region: Between the Anvil of Illiteracy and the Hammer of Passive Representative Bureaucracy", *Journalism and Mass Communication*, 5, 234–249.
- UN Women (2021), *Progress of the World's Women 2021–2022*, New York: UN Women.
- Verma, M. M. (2009). "Approaches to Women's Empowerment: An Overview", *IASSI Quarterly*, 28, 230–249.
- World Bank (2019), *World Development Report 2019: The changing nature of work*, Washington, DC: World Bank. [07.15.2025.]
- World Bank (2024), *Women, Business and the Law 2024*. <https://www.worldbank.org> [15.07.2025.]
- World Economic Forum (2023), *Global Gender Gap Report 2023*. <https://www.weforum.org/publications/global-gender-gap-report-2023> [15.07.2025.]
- Zuhur, S. (2003), "Women and empowerment in the Arab world", *Arab Studies Quarterly*, 25(4), 17–38.