# THE EFFECT OF GENDER DIVERSITY ON THE FINANCIAL PERFORMANCE OF JORDANIAN BANKS

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# ABSTRACT

This study aims to explore whether the percentage of women on boards of directors and top and medium-level executive management positions in Jordanian banks had an effect on these banks' financial performance. To do so, the study employs a multiple regression model on data from Jordanian banks for the period from 2009 to 2016. The findings show that, contrary to the findings of many studies from developed countries, there is no statistically significant relation between the percentages of women on boards and top and medium-level executive managements of Jordanian banks and these banks' financial performance. However, due to the apparent advantages of the inclusion of women in such positions, as seen by the findings of many international studies, this study recommends that most Jordanian banks increase their currently small percentages of women on boards and top executive management positions in order to potentially achieve such advantages.

**Keywords:** Gender Diversity, Board of Directors, Executive Management, Banks, Financial Performance, Jordan.

#### INTRODUCTION

Gender diversity and the inclusion of more women in boards of directors and top executive management positions have the potential to add value to organisations. For instance, gender diversity can result in more social sensitivity when solving problems (Woolley et al., 2010) and increased diversity in thought and result in better company performance (Ernst & Young, 2009). When board members include more gender diversity, a firm may increase its chances of effectiveness due to better understanding their stakeholders' needs, leading to better risk management and general business practice. Decision-making would potentially be enhanced through adding new ideas and perspectives to board and executive management meetings. Groysberg & Bell (2013) found from a survey that 90% of female directors and 56% of male directors said that women add fresh perspectives and thought diversity to boards of directors.

Internationally, numerous studies show evidence of a positive relation between gender diversity on boards of directors and financial performance of firms. Joy et al. (2007) found that companies with higher numbers of women on their boards significantly outperformed other companies, with a 42% higher return on sales and a 53% higher return on equity. Also, Curtis, Schmid & Struber (2012) studied data from more than 2000 global companies and found that female representation on boards was associated with better performance and share prices, including lower volatility in earnings and share prices. Similar findings were reported by Carter, Simkins & Simpson (2003), Smith, Smith & Verner (2006), Francouer, Labelle & Sinclair-Desgange (2008), Krishnan & Parsons (2008), Reguera-Alvardo, de Fuentes & Laffarga (2015) and Willows & van der Linde (2016).

Recent statistics on Jordan show very low percentages of gender diversity. According to the World Bank, only 15.7% of firms in Jordan have female participation in ownership and only 2.4% have a female top manager. These figures are low even when compared to average Middle East and North African countries' statistics (World Bank Group, 2013). In addition, Al-Rahahleh (2017) reports that in her sample of non-financial public listed companies in Jordan between 2009 and 2015, the percentage of females on boards averaged 4.3%.

This research aims to explore whether there exists a significant relation between gender diversity on the boards and executive management positions of Jordanian commercial banks and these banks' financial performance. By doing this, this study aims to contribute to our knowledge by conducting such a study in the developing country context of Jordan, where the characteristics of this context and its business environment and corporate governance systems may potentially affect the findings of the study. The motivation of this study is to explore whether the Jordanian business environment has similar or dissimilar effects, compared to environments of international studies, regarding the potential effects of gender diversity in boards and executive management positions on financial performance. The banking sector was used as a population for this study given that the banking sector is the most regulated and best governed sector of the Jordanian public listed companies and is likely to include a relatively high (compared to other sectors) percentage of women on boards and top executive positions, thus enabling the researchers to successfully conduct this study.

The subsequent section of this study discusses the Jordanian banking sector. It is followed by a literature review section and a section on the research method. After that, findings are presented and are followed by discussion and conclusions.

## THE JORDANIAN BANKING SECTOR

The banking sector in Jordan is a very important sector in the Jordanian economy. According to the Central Bank of Jordan (CBJ) (2017), there were 25 operating banks in Jordan by the end of 2016. Among these were 16 Jordanian banks and nine branches of foreign banks. These banks carried out their business through 805 branches in Jordan and 182 abroad. Three banks in Jordan label themselves as Islamic banks (Qasim, Mohamad & Ibrahim, 2017).

Jordanian banks are required by law to be formed as public listed companies. As such, they have been required, since 1998, to apply International Financial Reporting Standards (IFRS) in preparing their financial statements, which are to be audited under International Standards on Auditing (ISA) (Siam & Abdullatif, 2011). Jordanian banks are subject to different local Jordanian laws and regulations regarding companies, banks, listed securities and corporate governance.

Banks are the most-advanced type of Jordanian companies in terms of corporate governance. The Modified Instructions for Bank Governance (CBJ, 2016) require that boards of directors of banks include at least eleven members of which none are executive managers in the bank and at least four are independent members with sufficient experience in finance or banking. The board of directors should establish several committees including a governance committee, an audit committee and a risk management committee. A member of the board of directors has to be at least 25 years old, be sufficiently experienced, not be a member in any other bank in Jordan (unless it is a subsidiary of the bank in question), not be a lawyer, legal consultant or external auditor of the board). Similarly, an executive manager of the bank has to work full-time for the bank in Jordan. Finally, the bank's external audit firm has to be rotated at a maximum of seven years, with the old audit firm not being selected again for at

least two years. In the first year of the new audit firm, a joint audit report by the new and old firms is required (CBJ, 2016). Despite these governance instructions, most banks in Jordan can be considered closely-held in terms of share ownership (Abdullatif & Kawuq, 2015) and many apply a family business model to some extent (Abdullatif, 2016), with large investors likely to have a significant role in appointing board and executive management members.

Notably, the CBJ (2016) instructions do not include any requirements about the inclusion of women on either board of directors or executive managements of banks. From the researchers' observations about banks in Jordan, banks vary considerably in the percentages of women represented on their boards of directors and top executive managements, but they are still a minority compared to men.

#### LITERATURE REVIEW

A popular theory dealing with gender diversity in the workplace is the stakeholder theory, which suggests that there are social benefits from placing women in senior positions (Cabrera-Fernandez, Martinez-Jimenez & Hernandez-Ortiz, 2016). Westphal & Milton (2000) emphasise that minority groups such as women and ethnic minorities often bring unique perspectives that can be used to enhance decision making. Kramer, Konrad & Erkut (2006) argue that when a company board includes three or more women, governance is improved through taking into account the perspectives of multiple stakeholders groups, including employees, customers and the community at large. The presence of those women would also enhance decision making through increasing the likelihood of dealing with difficult issues rather than ignoring them (Kramer, Konrad & Erkut, 2006). In addition, Abdullah, Ismail & Nachum (2016) argue that female directors are preferred by both large and small shareholders, as they are likely to excel in monitoring, an attribute preferred by both groups of shareholders.

Nowadays, companies face pressure from various stakeholders, such as institutional investors and the society to appoint females on their boards (Nekhili & Gatfaoui, 2013). Norway has enacted laws to encourage the presence of females in corporations, while the government of Quebec, Canada,

"adopted a resolution to gradually increase to 50% the proportion of women sitting on the boards of state-owned firms (Audet, 2006)" (Francouer, Labelle & Sinclair-Desgange, 2008, p. 85).

Several studies looked at the effects of appointment of females as bank directors or promoting them to senior management positions. In their synthesis of studies on the roles of gender diversity in top positions (such as boards of directors, audit committees, CEOs or CFOs), Khlif & Achek (2017) conclude that female representation on such positions led to an increase in the conservativeness of financial reporting and in the level of reporting on social and environmental issues and led to lower tax aggressiveness. On the representation of females on top audit positions, Khlif & Achek (2017) concluded that this led to higher audit fees, shorter report lag and a higher likelihood of an adverse audit opinion being issued.

Findings of several studies have suggested that female managers are more likely to take less-risky approaches to business (Carter, Franco & Gine, 2017). For example, Huang & Kisgen (2013) found that female-led firms are less-risk-takers in that they are less likely to undertake acquisitions or issue debt than male-led firms & Faccio, Marchica and Mura (2016) found that more reliance on female CEOs leads to a reduction in corporate risk-taking, lower leverage and lower volatility of earnings. Francis et al. (2015) found that female CFOs are associated with lower firm risk, lower levels of dividend payout and more conservative financial reporting. Similarly, Arun, Almahrog & Aribi (2015) found that the presence of women on boards in the UK is associated with lower earnings management and Richardson,

Taylor & Lanis (2016) found that the presence of women on boards in Australia is associated with lower tax aggressiveness. Finally, Lenard et al. (2017) found that the presence of a female leader (on board or executive management) in a company decreases the likelihood of litigation based on financial reporting fraud. Similar findings were also reported particularly from the banking industry, where Bellucci, Borisov & Zazzaro (2010) found that female loan officers tend to be more risk-averse than their male counterparts when making decisions regarding giving loans to new, unestablished loan applicants. Similar findings were reported by Beck, Behr & Guettler (2013), who found that loans handled by female loan officers tend to be less likely to turn problematic than those screened by male loan officers. It seems from the findings of the above-mentioned studies that in many cases women generally tend to be more risk-averse and more ethically-oriented than their male counterparts.

On the effects of female representation on boards of directors and top executive management positions on the financial performance of companies, findings of several studies have suggested the existence of a positive effect of such a representation on financial performance measures. Willows & van der Linde (2016) found that the representation of women on boards had a positive effect on the return on assets and the return on equity in South Africa. Krishnan & Parsons (2008) found a similar positive effect on profit by companies giving more senior management positions to women and that these companies achieved higher returns on stock after initial public offerings. Other studies finding a positive relation between the presence of women on boards or senior management and financial performance include those by Carter, Simkins Simpson (2003), Smith, Smith & Verner (2006), Francouer, Labelle & Sinclair-Desgange (2008) and Reguera-Alvardo, de Fuentes & Laffarga (2015). However, there are some studies that have found no significant relation (or even a negative relation) between the presence of women on boards or senior management positions and firm performance. These include Adams & Ferreira (2009), Carter et al. (2010), Darmadi (2013) and da Silva & Margem (2015). It can therefore be concluded that the findings of studies on the relation between gender diversity in firms and firm performance are inconclusive, but that a large percentage of these studies predict the likelihood of a positive effect on financial performance when women are represented on boards of directors or executive management positions. Based on the previous studies mentioned above, this study attempts to test the following hypotheses in the Jordanian banking context:

H1: There is a statistically significant positive relation between the percentage of women on Jordanian banks' boards of directors and these banks' performance, measured by the Return on Assets (ROA).

H2: There is a statistically significant positive relation between the percentage of women on Jordanian banks' executive managements and these banks' performance, measured by the Return on Assets (ROA).

Literature about women in business leadership positions in Jordan is relatively limited. Qasem & Abdullatif (2014) found some discrimination against women in accounting-related positions in the Jordanian private sector due to characteristics of the Jordanian society and the Jordanian workplace. Radwan et al. (2017) found similar discrimination against women in leadership positions in the Jordanian public sector. The International Finance Corporation's (2015) study on Jordan found that while women are represented to a small degree on top-level managerial positions, gender diversity was found to be associated with better corporate governance implementation and improved board effectiveness in decision-making. In the only study the researchers are aware of that covered women in the banking sector in Jordan, Ahmad & Alshbiel (2016) found that banks with female CEOs had inferior performance compared to those with male CEOs. However, their study can be criticised for measuring the presence of women on executive managements by using a dummy variable based on the CEO position being held by a female (only one Jordanian bank currently has a female CEO) and measuring their presence on boards of directors by using a dummy variable based on the existence of at least one woman on the board (boards of Jordanian banks include different numbers of women).

Therefore, this study attempts to improve on such measures and contribute to knowledge by analysing the possible role of female representation on Jordanian banks' boards of directors and top and medium-level executive management on the financial performance of these banks. This contribution is made more explicit by the study covering data from the years 2009 to 2016, therefore covering the period of the global financial crisis and its aftermath, thus showing whether female representation on Jordanian banks' boards and executive managements had a potential impact on their financial performance during these particular events.

#### **RESEARCH METHOD**

The population of this study is comprised of all of the 16 Jordanian banks listed on the ASE as of April 2017 (the time of completing the data collection for this study). Of these, four banks were excluded from the study due to their refusal to cooperate regarding providing information about the percentage of women on their executive managements. One more bank was excluded from the study given that is was just recently established, since including its data may distort the findings. This led to the study sample being comprised of data from 11 Jordanian banks. The data were collected for the period from 2009 to 2016, thus covering the years of the global financial crisis and its aftermath, in order to assess whether banks with more women on their executive managements or their boards of directors performed better, similar or worse than those with less women.

This study employed an ordinary least squares (OLS) multiple regression model in order to study the effects of the percentages of women on boards of directors and executive managements of Jordanian banks on the financial performance of these banks. The model used in the study was as follows:

#### $ROA = \alpha + \beta_1 WOMENBOD + \beta_2 WOMENEXEC + \beta_3 SIZE + \beta_4 LEVERAGE + \beta_5 LOANDEP$

Where, ROA (Return on Assets) is the measure used to assess bank performance, which is the dependent variable in this study. It is measured by dividing the bank's net income after tax by its total assets. ROA data were collected from the Companies Guide, which is published annually by the Amman Stock Exchange (ASE). ROA has been used in several studies as evidence of financial performance of banks (for example, Abbasoglu, Aysan & Gunes, 2007; Petria, Capraru & Ihnatov, 2015; Menicucci & Paolucci, 2016 and Mehta & Bhavani, 2017).

WOMENBOD is a measure of the percentage of women on the boards of directors of the banks included in this study. The source of this information is the publicly-available annual reports of these banks. For each bank and each year, the percentage was manually calculated by the researchers. The researchers argue that, due to its higher accuracy, this approach is superior to that used by Ahmad & Alshbiel (2016), who measured this variable as a dummy variable (1 if at least one board member was a woman and 0 if none were women).

WOMENEXEC is a measure of the percentage of women on the top and mediumlevel executive managements of the banks included in this study. As this data is not publicly available in published annual reports of the banks, the source of this information was direct phone and email contact with the banks. The researchers argue that, due to its higher accuracy, this approach is superior to that used by Ahmad & Alshbiel (2016), who measured this variable as a dummy variable (1 if the CEO was a female and 0 if not, especially that only one bank in this study's sample has a female CEO). Unfortunately, four banks refused to provide the researchers with data regarding women on top executive management boards, while the 11 banks included in the sample provided only current percentages (as of early 2017), claiming that no accurate data can be given about previous years. Therefore, the researchers used the 2017 data as a proxy to cover all years from 2009 to 2016, as it can be argued that these percentages are expected not to have changed dramatically. The researchers recognize this matter as a limitation regarding the data used in this study, but they argue that the importance of this variable to this study justifies its measurement in this manner<sup>1</sup>.

Three control variables are also used in the model. The first control variable is the bank's size (SIZE), which is measured by the natural logarithm of total assets of each bank on 31/12 of each year. Total assets data was collected from the Companies Guide, which is published annually by the ASE. Bank size has been used for similar purposes in several studies (for example, Spathis, Kosmidou & Doumpos, 2002; Sufian & Habibullah, 2009; Gul, Irshad & Zaman, 2011; Menicucci & Paolucci, 2016). The second control variable is the bank's leverage rate (LEVERAGE), which is measured using the debt ratio of each bank on 31/12 of each year (calculated by dividing total liabilities of the bank by the sum of its total liabilities and owners' equity). The debt ratio data was collected from the Companies Guide, which is published annually by the ASE. The debt ratio has been used for similar purposes in several studies (for example, Ben Naceur, 2003; Kosmidou, 2008; Obamuyi, 2013 and Menicucci & Paolucci, 2016). Finally, the third control variable is the ratio of the bank's loans to its deposits (LOANDEP), which is measured using the ratio between credit given by the bank and deposits placed by its clients. The sources of information regarding this ratio were the Companies Guide and the published individual financial statements of each bank for each year. This ratio is a measure of how much risk each bank is willing to take in giving credit, compared to its deposit levels (for example, Shingjergji & Hyseni, 2015; Huang & Pan, 2016; van der End, 2016) and is related to this study through the argument that banks with higher percentages of female managers and/or directors are expected to be less risk-taking.

#### FINDINGS

# **Descriptive Statistics**

Table 1 shows descriptive statistics related to the variables used in this study. It can be seen from this table that while Jordanian banks are generally conservative in their credit policies and are relatively similar concerning their debt ratios (LEVERAGE), they do differ to some extent on other variables. Such differences can be seen in the level of credit-to-debit percentages and in their returns on assets and their sizes. However, the variables that showed the highest differences among banks were those related to the existence of women on boards of directors and executive managements of the banks, ranging from near-zero to about 33% of such boards and managements<sup>2</sup>. Therefore, the main focus of this study is whether these differences are likely to impact the financial performance of the banks.

Table 1 DESCRIPTIVE STATISTICS OF THE VARIABLES						
Variables	Number of observations	Minimum	Maximum	Mean	Standard deviation	
ROA	88	- 0.17%	2.51%	1.285%	0.45	
WOMENBOD	83	0	28.57%	5.411%	7.244	
WOMENEXEC	88	2.1%	33%	12.887%	11.285	
SIZE	88	20.231	23.976	21.656	0.928	
LEVERAGE	88	82.37	92.86	86.833	2,637	
LOANDEP	87	42.18	80.35	61.066	9.335	

## **Correlation Coefficients**

Table 2 shows the results of Pearson correlation coefficients between the variables used in this study. It is a useful measure to use in order to analyse (1) the direction of the statistical relation between any two variables, (2) the statistical strength of the relations between the independent variables and the dependent variable and (3) the statistical strength of the relations among the independent variables themselves (suggesting the likelihood of multi-collinearity if the latter were high) (Smith, 2015).

Table 2 PEARSON CORRELATION COEFFICIENTS						
Variables	ROA	WOMENBOD	WOMENEXEC	SIZE	LEVERAGE	LOANDEP
ROA	1	-0.110	-0.053	-0.031	-0.287**	-0.008
WOMENBOD	-0.110	1	0.336**	0.056	-0.118	0.276*
WOMENEXEC	-0.053	0.336**	1	0.362**	-0.329**	-0.079
SIZE	-0.031	0.056	-0.362**	1	-0.152	-0.132
LEVERAGE	-0.287 **	-0.118	-0.329**	-0.152	1	-0.137
LOANDEP	-0.008	0.276*	-0.079	-0.132	-0.137	1

\*Statistically significant at the 5% level

\*\* Statistically significant at the 1% level

It can be seen from Table 2 that ROA looks not to have any statistically significant relation to any of the independent variables used in this study, apart from a relatively-weak negative relation with the banks' leverage level. A possible explanation of this may be the costs of serving interest expenses to a larger percentage of deposit holders, especially combined with the relative conservativeness in credit-to-debit percentages of Jordanian banks.

To test for multi-collinearity among the independent variables in the regression model, the Variance Inflation Factor (VIF) test was used. In general, VIF values of 10 or higher can be considered as indicators of high multi-collinearity (Sekaran & Bougie, 2016). It can be seen from Table 3 below that as all VIF values reported were significantly below 10, suggesting that multi-collinearity is not a significant problem with the model used.

Table 3VARIANCE INFLATION FACTORTEST RESULTS				
Variables	VIF value			
WOMENBOD	1.379			
WOMENEXEC	1.766			
SIZE	1.482			
LEVERAGE	1.356			
LOANDEP	1.296			

To test for the robustness of the findings, a White's test for heteroscedasticity was performed. The results showed a significance value of 0.405, which is higher than the p-value of 0.05, suggesting that heteroscedasticity is not a significant problem for the model used in this study.

#### **Multiple Regression Analysis**

Table 4 shows the findings of the multiple regression analysis performed in this study. Consistent with the findings from the correlation analysis, it can be seen that apart from the statistically significant negative relation between the leverage levels and ROA, there were no other statistically significant relations between ROA for Jordanian banks and their size, credit-to-debit percentages or the percentages of women on the banks' boards of directors or executive managements. Therefore, both hypotheses of this study are rejected, suggesting that giving women leadership positions in Jordanian banks during and after the global financial crisis did not have a material effect on these banks' financial performance.

Table 4 MULTIPLE REGRESSION RESULTS					
Variables	Unstandardised Coefficients	Standardised Coefficients	t-value	p-value	
Constant	10.475		3.646	0.000	
WOMENBOD	-0.003	-0.044	-0.358	0.722	
WOMENEXEC	-0.010	-0.245	-1.746	0.085	
SIZE	-0.099	-0.203	-1.579	0.118	
LEVERAGE	-0.076	-0.438	-3.567	0.001	
LOANDEP	-0.005	-0.107	-0.889	0.377	

# **DISCUSSION AND CONCLUSION**

This paper covered the potential effect of gender diversity on the financial performance of Jordanian banks listed on the Amman Stock Exchange. This was achieved by studying the effects of the percentages of women on boards of directors of these banks and their top and medium-level executive managements on the financial performance of these banks, measured by their Return on Assets. In summary, the study found no statistically significant relation between either the percentages of women on boards or their percentages on top and medium-level executive management positions and the financial performance of these banks.

The findings of this study are contrary to those of several other studies, especially to those from developed countries, such as findings of Carter, Simkins & Simpson (2003); Smith, Smith & Verner (2006); Fracouer, Labelle & Sinclair-Desgange (2008); Krishnan & Parsons (2008); Reguera-Alvardo, de Fuentes & Laffarga (2015) and Willows & van der Linde (2016). Such a difference in findings might be attributed to the low levels of representation of women in Jordan on boards and senior executive management positions of public listed companies (World Bank, 2013; Al-Rahahleh, 2017). In addition, Obeidat et al. (2012) argue that cultural factors affect Arab organizations, making them characterized with high power distance, collectivism and centralization of decisions made by specific individuals. Jordanian businesses, as a result of cultural factors, may to some extent have high levels of uncertainty avoidance and be somewhat intolerant regarding deviant managerial ideas (Abdullatif & Al-Khadash, 2010), such as including women in top board and executive management positions. Therefore, the differences between the findings of this study and those from developed countries can arguably be attributed to cultural and social factors that tend to limit women's chances, compared to those of men, of achieving top management positions and be successful in them. Such factors include women being perceived as being at lower levels than men on issues like decisiveness in decision-making, leadership ability, career aspiration, ability to handle pressure and adaptation to change (Qasem & Abdullatif, 2014).

While the findings of this study suggest no significant correlation between having women on the board or executive management and the financial performance of Jordanian banks, a potential positive effect of the role of having women in the boardroom or in executive management positions cannot be ignored, given the magnitude of international literature supporting the existence of such an effect. Therefore, given the relatively low percentages of females on boards of directors and top and middle-level executive management positions in Jordanian banks, the researchers argue that increasing such percentages might lead to better bank performance given that gender diversity is likely to broaden the range of managerial skills on the board and add more managerial perspectives, including a tendency for more conservativeness in decision-making, less aggressive financial reporting and more caring for social issues and for the needs of multiple groups of stakeholders. Effects of such managerial perspectives have a significant potential to positively affect the financial performance of Jordanian banks.

While the researchers tried their best efforts to make this study as highly reliable as possible, it faced some limitations. The main limitation was the lack of sufficient data on the percentages of women in top and medium-level executive management positions. Due to the high importance of this variable to the study, the researchers used the best available proxy to deal with any missing data, as mentioned earlier in the section on research method.

Given the paucity of studies looking at the effects of gender diversity on the performance of banks and other companies in Jordan, this study can be considered as being exploratory. Therefore avenues for further research on this topic are numerous. For example, detailed case studies on banks in Jordan that have experimented with higher percentages of women may reveal some insights about how the presence of these women has affected the decision-making process in the banks and in what directions. In addition, this study was applied in the banking sector in Jordan where, while banks may in many cases have more females on boards and top executive positions (compared to other sectors), this sector has its own characteristics in terms of regulation and financial measures. Therefore, repeating this study in other sectors may provide some useful findings about the role of gender diversity in the Jordanian business sector.

#### **ENDNOTES**

- 1. A medium-level executive manager was defined for the purpose of this study as a department director, branch director or any equivalent job title. Top executive managers include CEOs, deputy CEOs, assistant CEOs or any equivalent job title.
- 2. The bank that reported the 33% of women on its executive management was the only one to report having a female CEO.

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