




**THE IMPACT OF TAX AGGRESSIVENESS AND GENDER DIVERSITY ON THE CORPORATE SOCIAL RESPONSIBILITIES OF LISTED FIRM IN JORDAN**

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ARTICLE INFO	ABSTRACT
<p><b>Article history:</b></p> <p><b>Received</b> 31 January 2023</p> <p><b>Accepted</b> 18 April 2023</p>	<p><b>Purpose:</b> The aim associated with the current article is to examine the role of tax aggressiveness along with gender diversity on the corporate social responsibilities (CSR) reporting of the Jordanian listed firms.</p> <p><b>Theoretical framework:</b> The data of the selected firm has been extracted from the Jordan Stock Exchange from 2007 to 2018.</p> <p><b>Design/methodology/approach:</b> The Logit model has been executed because of the binary nature of the predictive variable of the study.</p> <p><b>Findings:</b> The results have indicated that tax aggressiveness along with gender diversity has positive along with significant linked with CSR reporting.</p> <p><b>Research, Practical &amp; Social implications:</b> These findings have been guided to the policymakers along with the upcoming studies while formulating the policies related to the CRS reporting and investigation this area in future.</p> <p><b>Originality/value:</b> These findings have been guided to the policymakers along with the upcoming studies while formulating the policies related to the CRS reporting and investigation this area in future.</p>
<p><b>Keywords:</b></p> <p>Corporate Social Responsibilities (CSR); Tax Aggressiveness; Gender Diversity; Listed Firms of Jordan.</p> <div data-bbox="172 1048 481 1294" style="text-align: center;">      </div>	<p>Doi: <a href="https://doi.org/10.26668/businessreview/2023.v8i4.511">https://doi.org/10.26668/businessreview/2023.v8i4.511</a></p>

**O IMPACTO DA AGRESSIVIDADE FISCAL E DA DIVERSIDADE DE GÊNERO NAS RESPONSABILIDADES SOCIAIS CORPORATIVAS DE EMPRESAS LISTADAS NA JORDÂNIA**

**RESUMO**

**Objetivo:** O objetivo associado ao presente artigo é examinar o papel da agressividade fiscal junto com a diversidade de gênero nos relatórios de responsabilidade social corporativa (CSR) das empresas listadas na Jordânia.

**Referencial teórico:** Os dados da empresa selecionada foram extraídos da Bolsa de Valores da Jordânia de 2007 a 2018.

**Desenho/metodologia/abordagem:** O modelo Logit foi executado devido à natureza binária da variável preditiva do estudo.

**Resultados:** Os resultados indicaram que a agressividade fiscal junto com a diversidade de gênero tem um efeito positivo e significativo relacionado com os relatórios de RSC.

**Implicações de pesquisa, práticas e sociais:** essas descobertas foram direcionadas aos formuladores de políticas, juntamente com os próximos estudos, ao formular as políticas relacionadas ao relatório de CRS e à investigação dessa área no futuro.

**Originalidade/valor:** Essas descobertas foram orientadas para os formuladores de políticas junto com os próximos estudos ao formular as políticas relacionadas ao relatório de CRS e investigação nesta área no futuro.

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**Palavras-chave:** Responsabilidade Social Corporativa (CSR), Agressividade Fiscal, Diversidade de Gênero, Empresas Listadas na Jordânia.

## EL IMPACTO DE LA AGRESIVIDAD FISCAL Y LA DIVERSIDAD DE GÉNERO EN LAS RESPONSABILIDADES SOCIALES CORPORATIVAS DE LAS EMPRESAS COTIZADAS EN JORDANIA

### RESUMEN

**Propósito:** El objetivo asociado con el artículo actual es examinar el papel de la agresividad fiscal junto con la diversidad de género en los informes de responsabilidad social corporativa (RSC) de las empresas jordanas que cotizan en bolsa.

**Marco teórico:** Los datos de la firma seleccionada han sido extraídos de la Bolsa de Valores de Jordania desde 2007 hasta 2018.

**Diseño/metodología/aproximación:** Se ha ejecutado el modelo Logit debido a la naturaleza binaria de la variable predictiva del estudio.

**Hallazgos:** Los resultados han indicado que la agresividad fiscal junto con la diversidad de género tiene una relación positiva y significativa con los informes de RSE.

**Implicaciones sociales, prácticas y de investigación:** Estos hallazgos han sido guiados a los formuladores de políticas junto con los próximos estudios al formular las políticas relacionadas con los informes e investigaciones de CRS en esta área en el futuro.

**Originalidad/valor:** estos hallazgos han sido guiados a los formuladores de políticas junto con los próximos estudios al formular las políticas relacionadas con el informe del CRS y la investigación de esta área en el futuro.

**Palabras clave:** Responsabilidades Sociales Corporativas (RSC), Agresividad Fiscal, Diversidad de Género, Empresas Cotizadas de Jordania.

### INTRODUCTION

Corporate social responsibility (CSR) has become a critical aspect of modern business practices as companies are expected to take on more significant social and environmental responsibilities beyond their primary objective of profit maximization. The factors that impact CSR are numerous, including tax aggressiveness and gender diversity within the organization.

Tax aggressiveness refers to the extent to which companies engage in legal but aggressive tax planning activities to minimize their tax liabilities. While tax aggressiveness is not inherently wrong, it can lead to negative social and environmental outcomes when companies neglect their social responsibilities. For instance, when companies avoid paying taxes, they may undermine government programs and services that are vital to addressing social and environmental challenges.

Gender diversity is another factor that can impact CSR. Studies have shown that gender-diverse organizations tend to have better CSR practices than their male-dominated counterparts. Gender diversity helps to bring different perspectives and ideas to the table, which can lead to more innovative and sustainable solutions to social and environmental challenges. Moreover, gender diversity can help companies to promote equality and reduce discrimination, which are essential components of CSR. Companies that promote gender diversity also tend to have better

employee satisfaction and retention rates, which can lead to a more committed and productive workforce.

Tax aggressiveness and gender diversity are two critical factors that impact CSR. While tax planning is necessary for companies to remain competitive, they should also prioritize their social and environmental responsibilities. Likewise, promoting gender diversity within organizations can help to improve CSR practices, boost employee satisfaction and retention, and lead to more innovative and sustainable solutions.

## **Background**

From the past decade, the concept of corporate tax planning within the business environment is attracting the researchers more to dig it out (Whait, Christ, Ortas, & Burritt, 2018). In the business world, the tax is considered as a burden on firm profitability. The firm usually adopts the tax aggressiveness strategy to reduce the firm's burden of tax and, result, to squeeze the firm tax liability with the intentions to comply the framework developed by the country (Lanis & Richardson, 2011). With the passage of time, these tax aggressiveness policies have become one of the common features within the business world, as taxes play a vital role in the firm's core decision making. In several investigations, the tax strategy is reported as a part of CSR. This relationship between tax strategy and corporate social responsibility is seeking the more attentions of researchers (Bird & Davis-Nozemack, 2018; Whait et al., 2018). In this modern world, corporate social responsibility has become the need of the business to survive in the business environment. Corporate social responsibility is the responsibility of the company to perform the activities for welfare or support of the community. The more engagement of the firm in CSR is also known as one of the vital factors for its success (Commission, 2011). There is a close relation between tax and corporate social responsibility, as tax is considered an important factor for organization and corporate social responsibility also has a strong effect on the firm. If the gravity of resources taken by the state is low, ultimately less the services will be returned (Chatzoglou, Chatzoudes, Amarantou, & Aggelidis, 2017). Accordingly, this approach will throw a negative effect on the firm corporate repute (Graham, Hanlon, Shevlin, & Shroff, 2014).

In the corporate culture such strategies are decided by the board of directors (BODs), usually considered as an expression of the firm's value. Researchers also proposed that in comparison with men, women have more trend towards ethical values. The presence of women member in the board of directors tends to more focus towards the CSR culture in comparison

with tax planning strategies. From the past few years and also due to some scams, the policymaking authorities are promoting to encourage the addition of female member in the firm decision bodies. European Commission specifically in its directive with the strong support of gender diversity in listed firms' governance structure. A representation of at least 40 percent of females was supported. IN continuation to this United Nations also in its Agendas 2030 regarding the sustainable development promoting the gender equality, and further in its sub-clause 5.5 the women's participation in different like political, managerial environment is strongly supported.

### **Problem Statement**

Despite the growing importance of corporate social responsibility (CSR) in modern business practices, many companies still struggle to effectively implement and prioritize CSR initiatives. Two factors that can impact CSR practices are tax aggressiveness and gender diversity within organizations. While tax planning is necessary for companies to remain competitive, aggressive tax planning can lead to negative social and environmental outcomes when companies neglect their social responsibilities. Similarly, male-dominated organizations may struggle to prioritize CSR initiatives and promote equality, which can have a negative impact on their social and environmental outcomes. As such, it is essential to understand the impact of tax aggressiveness and gender diversity on CSR practices to identify strategies that can help companies to effectively balance their economic, social, and environmental responsibilities. By addressing these factors, companies can improve their CSR practices, contribute to a more sustainable and equitable society, and enhance their reputation and long-term success.

In recent years, there has been an increasing demand for companies to take a more active role in addressing social and environmental challenges beyond their primary objective of profit maximization. This has led to the emergence of corporate social responsibility (CSR) as a critical aspect of modern business practices. CSR encompasses a wide range of activities, including philanthropy, environmental sustainability, ethical labor practices, and community engagement.

As such, it is essential to understand the impact of tax aggressiveness and gender diversity on CSR practices to identify strategies that can help companies effectively balance their economic, social, and environmental responsibilities. By addressing these factors,

companies can improve their CSR practices, contribute to a more sustainable and equitable society, and enhance their reputation and long-term success.

### Objectives

The present investigation has two of the main aims. First, to investigate the relationship between organization tax aggressiveness and approach towards corporate social responsibility. Second, is to test the moderating effect of gender diversity by supporting the United Nations Agenda 2030. Specifically, this investigation will test whether the presence of a female member in the firm board of decision-making body will affect the firm approach towards the corporate social responsibility and tax aggressiveness. Literature also reported that the presence of a female member in the firm decision-making body affects the relationship between tax aggressiveness and the corporate social responsibility approach (Lanis & Richardson, 2018).

The insurance sector of any country plays a vital role in the country economy. One of the reason stands behind is that the insurance sector connected with almost all the other sectors of the economy. Literature from history indicates that the insurance sector of Jordan came into existence in the year of 1946. There was an affiliation between one of the insurance agency and the Egyptian Insurance Company (EIC). This was the time when the insurance sector got recognition within the country. If we have a look into past their word insurance was limited to bank and other financial instruments like the letter of credit (LCs), land and also to transportation. Most of the time such an insurance cover (letter of credit (LCs), land and transportation) was provided by one of the country bank (Ottoman Bank) vide a United Kingdom-based insurance company titled as Eagle Star. The first legal body regarding Insurance was established in 1956. The Jordan Insurance market analysis report issued by the research and development department states that there are a total of 24 insurance companies exist in the list. These companies deal in marine, aviation, marine plus aviation, fire and other property damages, liability, other branches, credit and motor insurance. The claims paid against marine, aviation, marine plus aviation, fire and other property damages, liability, other branches, credit and motor insurance in 2020 were 0.721 M, nil, 0.721 M, 8.472 M, 0.184 M, 0.221 M, 0.288 M and 38.147 million respectively.

The statistics of the Jordan Insurance market from April-2019 to April-2020 shows that the underwritten premiums in 2019 the Marine Insurance was 6.41M and it reduced to 5.9M in the year 2020. There was an 8% decrease from 2019 to 2020. An increasing trend was reported in fire insurance. The fire insurance increases at the rate of 8% from 2019 to 2020. There was

27.6% decreasing trend from 2019 to 2020 was reported in the motor insurance. The compulsory, comprehensive, credit insurance were decreased 30.5%, 20.8% & 42.6% respectively. But there was an increasing trend reported in the liability insurance which stands at 10.3%. Others, medical and general insurances were decreased at the rate of 19.6%, 3.4% and 12.2% respectively. There was a 1.9% increase in life insurance from 2019 to 2020. On the other hand, the claim paid during from April-2019 to April-2020 in the Jordan Insurance market shows that there was 74.9% less claim paid in Marine Insurance. There were 38.2% more claims paid in the respect of fire insurance. The claims paid against motor, compulsory, comprehensive and credit insurance were decreased 35%, 34.4% 36.4 & 29.2% respectively. But there was an increasing claim payment trend was reported in the liability insurance which stands at 66.8%. The claims paid against others, medical and general insurances were decreased at the rate of 79.3%, 12.8% and 24.5% respectively. There were 32.3% fewer claims paid against life insurance. In the case of underwriters commission, the companies ranked top five are Arab oriented Insurance, Jordan Insurance, SOLIDARITY-first Insurance, Al-Nisar Al-Arabi Insurance and Middle East Insurance. These underwritten premium of Arab oriented Insurance, Jordan Insurance, SOLIDARITY-first Insurance, Al-Nisar Al-Arabi Insurance and Middle East Insurance were 14.9 M, 9.2 M, 8 M, 6.6 M and 6.6 million respectively. Additionally, the share of these companies in claims paid are Arab oriented Insurance, Jordan Insurance, SOLIDARITY-first Insurance, Al-Nisar Al-Arabi Insurance and Middle East Insurance were 13.8 M, 8.4 M, 7.1 M, 5.6 M and 5.4 million respectively. The records from 2006 states that were total of 26 listed insurance companies in Jordan. Out of these 26 companies, one has the specialization in life and 7 in general insurance and the remaining 18 companies offering both life and general insurance. These statistics and increasing as well as decreasing trends in the sector urges the researchers to investigate more and explore the other related factors.

The present investigation second approach and tries to fill the gap in the available literature by analyzing the gender diversity moderating effect in the firm corporate body. The aim was to explore the gender diversity as a firm decision making body important factor. As the existence of female member in the firm board will support the firm corporate social responsibility approach (Nadeem, Zaman, & Saleem, 2017) which is considered as an important factor for its economic achievement. Furthermore, studies also proposed that the existence of a female member in the firm decision-making board strongly affect its tax planning (Huseynov & Klamm, 2012).

## LITERATURE REVIEW

Right decision on the right time matters in a real term for the organization. Every decision taken by the company management has a strong impact on the entire organization. So the decision making bodies keep a closer look at all the aspects that will absorb the decision effects. Like the wrong decision at the right time will badly affect the organization operation, on the other hand, the right decision at the wrong time is nothing but wastage of time and resources. With the passage of the time, the changing trend of board diversity is increasing. The more diversified board are liked more by all the stakeholders of the organization. On the other hand in this modern world, the tax is a very important factor both the organization as well as for organizations. On one hand, it's a way of revenue for the government but on the other hand, it is considered as a burden by the business entities of the country. The firm uses its maximum resources to reduce this burden. The firms used different ways to reduce their tax burden but within the framework decided by the policy-making bodies of the country. Any policy used by the organization to reduce its tax liability is termed as tax aggressiveness. But this policy in no way is against the law of the land. One of the firms aim to stand behind the reduction of this tax burden is to ensure a healthy remuneration to its beneficiaries or investors (Hanlon & Slemrod, 2009; Huseynov & Klamm, 2012) and also an enhancement in the existing resources for value creation (Desai & Dharmapala, 2006). With the passage of time the international environment forcing the organization to show more diversity in the form of decision-making authority. There is risk associated with this strategy like it involves concerns for an organization, like tax administration, complying expense as well as reputational cost in the result of pressure from social and political factors on corporate decisions (Graham et al., 2014). Alsmady (2023) aimed to examines the relationship between the accounting information quality, tax avoidance, and political connection in all Jordanian companies listed on Amman Stock Exchange. The current study also investigates the moderating effect of political connections on accounting information quality and company performance relationships. Further, the study examines the moderating effect of political connection on tax avoidance and company performance relationship. Similarly Relaiza et al. (2023) aimed to determine the relationship between CSR and financial control; to achieve this, references were taken from different authors reviewing the state of the art with the purpose of an exhaustive understanding of the subject

In the world, there is a mixed opinion regarding the decision power of gender. Some societies proposed that there is no difference between the decision making powers of men and women. On the other hand, some societies proposed that the decision making strength falls more in the men in comparison with the women. The usually welcomes the gender discrimination. Studies proposed that the organizations have diverse boards reported a positive nexus with the controlling of management and also more disclosure of corporate social responsibility (Liao, Luo, & Tang, 2015). The studies also proposed that the more the board is diverse the more it will disclose the corporate social responsibility. There is a positive linkage exist between the diversity of the board and corporate social responsibility disclosure (Bear, Rahman, & Post, 2010). The study proposed that social role theory in this context proposed that both male and female play a different but important role in society. As there are gender-based expectations are attached to them. In comparison with the male, females are considered more communal (Eagly, 2009). Here the social role theory supports this investigation. On the other hand, the investigation also proposed that in the case of gender the resource-dependent theory plays a vital role. This theory states that women present the non-traditional professional experience in comparison with the men (Cruz, Justo, Larraza-Kintana, & Garcés-Galdeano, 2019). Both the theories are in relation with the genders. In both the theories the women are supported and appreciated more in comparison with the men. Both of these theories will be applied in this investigation.

The role of women in society plays a vital role in the development of society. A woman plays a role in a different form. Around the globe, the role of society varies according to the culture of the land. In western culture, women are supported more to participate in the development of society. Gender discrimination does exist in all the developed and under-developed nations. But the gravity of discrimination is far less in the developed countries in comparison with the under-developed countries. The international efforts are in the progress to reduce this gravity of discrimination. From the past few decades, women are more active in claiming their rights. On the other hand, women are also encouraged to play their role in the development of society. This role can be in any shape. The diversity of the board is also the continuation of these efforts. There is negative linkage reported between a firm tax aggressiveness and reputational cost in the result of negative effect on the community, as the government has fewer resources for its citizens (Friese, Link, & Mayer, 2008), results in the social inequality and also lower the speed of economic growth (Lanis & Richardson, 2012; Richardson & Lanis, 2011). Any aggressive tax policy is usually not considered a responsible



exercise. There are mixed results reported in the literature about the relationship between firms corporate social responsibility approach and tax aggressiveness.

In this era, the more involvement of any firm in the corporate social responsibility practices is considered as one of the vital factors for its survival and success (Rao & Tilt, 2016). Corporate social responsibility is the firm contribution towards the development of its economic conditions and to increase its social and environmental standards not only in the European Union but also at the international level (Commission, 2005). Corporate social responsibility practices adoption aligned with the firm's managers values and reasons (Chrisman, Chua, Kellermanns, & Chang, 2007), the firm adopt these policies for the resolution of the agency problem which usually exists between the firm's managers and its stakeholders (Barnea & Rubin, 2010) and also to do better the relationship with its stakeholders (Letza, Sun, & Kirkbride, 2004). The studies also proposed that there is a positive association reported between corporate social responsibility and business environment. The inclusion of corporate social responsibility practices in the firm's decision-making process imposes a positive effect on the firm's overall environment. It makes the achievement of the firm's legitimacy possible, achievement of the financial results (Fernandez-Feijoo, Romero, & Ruiz, 2014), transparency as well as the betterment of its reputation (Branco & Rodrigues, 2006). Corporate social responsibility is considered as one of the firm's best tool for the achievement of its legitimacy with the help of better relationship with all the stakeholders and also results in an enhancement in its reputation (Branco & Rodrigues, 2006), which usually guarantee the firm's success and survival and also to evade any kind of corporate-level scam (Cheng & Courtenay, 2006).

There are mixed results reported about the relationship between tax aggressiveness and the firm corporate social responsibility approach. Like some researchers proposed that there is a positive association between tax aggressiveness and corporate social responsibility approach. The firms which are more tax aggressive are also more concerned with corporate social responsibility approach (Carroll & Joulfaian, 2005; Lenssen, Bevan, Fontrodona, & Preuss, 2010). Studies also proposed a negative association between corporate social responsibility and tax aggressiveness. A firm which is more concerned with the corporate social responsibility activities has less tax aggressiveness approach (Gulzar et al., 2018). There are mixed results reported regarding the relationship between board diversity and its impact on different factors (Martínez-Ferrero, Eryilmaz, & Colakoglu, 2020). The study also proposed that gender

diversity not only affect corporate social responsibility but also affect the reputation of the firm (Bear et al., 2010).

Around the globe, in every corporate environment, it's the board of directors who have the powers to formulate the policies for the firm. They also decide the disclosure level of the results achieved by the firm. The composition of this board is the legal requirement of the firm. The number of members can vary. The member of this board is called directors of the firm. They are selected based on different skills, experiences and capabilities as decided by the firm. In this context, every single member of this board has its unique importance, risk evaluation which affect the reporting of corporate social responsibility (Rao & Tilt, 2016). Its existence and opinion matter a lot for the future of the firm. The literature on board composition is rapidly increasing. Particularly, some researchers investigated the gender leadership role in the firm decision-making body (Marinova, Plantenga, & Remery, 2016). The gender diversity and the firm decision-making process are relevant with each other and its achievement of a firm good governance structure is possible with it (Nadeem et al., 2017), achievement of the financial results (Fernandez-Feijoo et al., 2014) and transparency (Cabeza-García, Fernández-Gago, & Nieto, 2018).

The board of directors are permitted to formulate such a strategy which covers the benefits of all the stakeholders (Barbero & Marchiano, 2016) as well as high financial growth (Bear et al., 2010; Reguera-Alvarado, de Fuentes, & Laffarga, 2017). As there is a positive association reported between the existence of female member in the firm's board and the corporate social responsibility activities performance. The studies proposed that the female members of the board are usually not involved with the tax matters of the firm (Kastlunger, Dressler, Kirchler, Mittone, & Voracek, 2010; Lanis, Richardson, & Taylor, 2017), which is also one of the reasons of their more focus towards the corporate social responsibility activities approach. The more focus of the female members towards the corporate social responsibility activities gives indications that the attitude towards the tax aggressiveness is more men in comparison with women. On the other hand, the study also proposed that there is no association between the female existence in the firm boards and the adoption of tax strategy (Khaoula & Ali, 2012). The hypotheses desired form the above given discussion are:

**H1:** There is an association between gender diversity, firm tax aggressiveness and corporate social responsibility approach.

**H2:** Female director's influences the links of firm tax aggressiveness approach and the corporate social responsibility approach.

**H3:** Female CEO influences the links of firm tax aggressiveness approach and the corporate social responsibility approach.

## METHODOLOGY

The basic aim of the current article is to examine the role of gender diversity among the links of tax aggressiveness and CRS reporting. For this purpose, data has been extracted from the twenty-two listed companies of Jordan that have been taken from the Jordan Stock Exchange for the year 2007-2018. To attain the purpose of the current study, this study used two different research methodologies. Firstly, an approach of document analysis has been used to collect data of female directors within a corporate board. In this regard, annual reports that were published by listed companies have been assessed to collect gender diversity's attributes. Finally, to investigate the moderating impact of gender diversity among the links tax aggressiveness and CSR reporting, the present study has been used the analysis of panel data with fixed effects on the time interval of twelve years (2007–2018), with 264 observations. An analysis of panel data has been conducted because the Jordan Stock Exchange has diverse approach from stock exchanges of other countries to corporate board and corporate governance compositions.

In addition, the present study has adopted the logit model in the study that was widely used by past studies while investigating CSR disclosure, corporate governance, and tax aggressiveness. The basic characteristic of the logit model is that it provides the best estimation in case of binary nature of the dependent variable and CSR reporting has been used as the dependent variable and it measured as same as GRI standards. This predictive variable is a dummy because values of 0 or 1 have been provided to this variable were as 1 represented to the firm who provided the CRS reporting according to the GRI standards and 0 represented to the firm who does not provide the CRS reporting according to the GRI standards. In addition, the present study has been used the control variables with attributes of a corporate board. LNNTA has been used as a control variable that represented the size of a firm and measured by the natural logarithm of total asset. A study of Gul and Leung (2004) exposed that large firms are most likely to engage in CSR activities. Moreover, ROA has also been used as a control variable that is measured by the profitability index of return on assets and calculated by the ratio of net profit to the total asset. Furthermore, TA has been used as a predictor that represents “effective tax rate” (ETR) that is measure planning about corporate tax and calculated by the ratio of total tax expense and income before taxes (Dyreg, Hanlon, & Maydew, 2008). In addition, WD has

been used as the percentage of women directors on the board and calculated by the ratio of several women on the board and the total size of the board. While WCEO has been used as the CEO's gender and used as a dummy variable that has values 0 or 1. The value 1 has been given if women hold the CEO designation and value 0 has been given if women do not hold the CEO designation. To investigate the moderating role of gender diversity among the links of tax planning and CSR reporting,  $WD * TA$  has been used as an interaction term and calculated by the multiplication of  $WD$  and  $TA$ . In addition,  $WCEO * TA$  has also been used as the interaction term and also computed by multiplying  $WCEO$  and  $TA$ . Thus, based on these variables, two models have been developed as under:

### Model 1:

$$CSRR_{it} = \alpha_0 + \beta_1 TA_{it} + \beta_2 WD_{it} + \beta_3 WCEO_{it} + \beta_4 LNNTA_{it} + \beta_5 ROA_{it} + e_{it} \quad (1)$$

Where;

CSRR = Corporate Social Responsibilities Reporting

$i$  = Firm

$t$  = Time Period

$TA$  = Tax Aggressiveness

$WD$  = Women Director

$WCEO$  = Women CEO

$LNNTS$  = Size of the Firm (Natural Log of Total Assets)

$ROA$  = Return on Assets

Model 1 shows the relationships among the tax aggressiveness and CSR reporting according to the GRI standards.

### Model 2:

$$CSRR_{it} = \alpha_0 + \beta_1 TA_{it} + \beta_2 WD_{it} + \beta_3 WCEO_{it} + \beta_4 LNNTA_{it} + \beta_5 ROA_{it} + \beta_2 WD * TA_{it} + \beta_3 WCEO * TA_{it} + e_{it} \quad (2)$$

Where;

CSRR = Corporate Social Responsibilities Reporting

$i$  = Firm

$t$  = Time Period

$TA$  = Tax Aggressiveness

$WD$  = Women Director

$WCEO$  = Women CEO

$LNNTS$  = Size of the Firm (Natural Log of Total Assets)

$ROA$  = Return on Assets

$WD*TA$  = First interaction term

$WCEO*TA$  = Second interaction term

The model 2 shows the moderating impact of gender diversity among the relationships of tax aggressiveness and CSR reporting according to the GRI standards. The measurement of variables is shown in Table 1.

Table 1: Measurement of Variables 1. Source: Research author (2022).

S#	Variable	Measurement	Value
1	Corporate Social Responsibilities Reporting	0= not according to GRI standard 1= according to GRI standard	0 to 1
2	Tax Aggressiveness	The ratio of total tax expense and income before taxes	Percentage
3	Women Director	The ratio of the number of women in the board and the total size of the board	Percentage
4	Women CEO	0= male CEO 1= female CEO	0 to 1
5	Size of the Firm	Natural log of total assets	Log
6	The profitability of the Firm	Return on assets	Percentage

## RESULTS AND DISCUSSION

The findings have been shown the descriptive statistics along with correlation matrix, variance inflation factor, Hausman test specification and logit regression models. Firstly, the present study highlighted the descriptive statistics that show the mean, standard deviation, minimum and maximum values of the variables. The results highlighted that the minimum tax aggressiveness rate is 1.21 percent while the maximum rate is 94.95 percent. In addition, the percentage of directors with respect to women is 0 percent minimum while 55.21 percent maximum. These values are mentioned in Table 2.

Table 2: Descriptive Statistics 1 Source: Research author (2022).

Variables	Means	S.D.	Mini.	Max.
CSRR	0.124	0.245	0	1
TA	11.32	17.21	1.21	94.95
WD	21.07	13.52	0	55.21
WCEO	0.045	0.214	0	1
LNTA	5.154	1.354	0.352	8.124
ROA	0.785	11.985	-112.11	298.652

The findings show that no high correlation among the items the values are lower than 0.90 while the links among the CSR reporting and TA along with gender diversity are positive.

In addition, the links among the control variable such as ROA along with LNNTA and CSR reporting are positive. These links are shown in Table 3.

Table 3: Correlation Matrix 1. Source: Research author (2022).

Variables	CSRR	TA	LNNTA	WCEO	WD	ROA
CSRR	1.000					
TA	0.019	1.000				
LNNTA	0.112	-0.247	1.000			
WCEO	-0.077	0.022	-0.472	1.000		
WD	0.136	-0.311	0.576	-0.370	1.000	
ROA	0.026	0.193	-0.051	-0.050	0.291	1.000

The findings also ensure that no issue with multicollinearity assumption of the regression because the variance inflation factor (VIF) values are lower than 5. These values are mentioned in Table 4 given below:

Table 4: Variance Inflation Factor (VIF) 1. Source: Research author (2022).

	VIF	1/VIF
WD	2.005	.499
LNNTA	1.828	.547
WCEO	1.342	.745
ROA	1.299	.77
TA	1.249	.801
Mean VIF	1.545	.

The results of the study show the Hausman test that has been used to check the appropriateness of the model among the Random-Effects Model and Fixed-Effects Model. The results rejected the null hypothesis about the Random-Effects is appropriate, while accepting the alternative hypothesis is about the Fixed-Effects is appropriate. Thus, the Fixed-Effects Model has been a more appropriate model than Random-Effects for the current study. Table 5 shows the results of the Hausman test:

Table 5: Hausman Test 1. Source: Research author (2022).

	Coef.
Chi-square test value	10.91
P-value	0.043

The Logit regression model exposed the relationship among the variables and the statistics show that gender diversity has positive along with significant linked with CSR reporting because t-statistics are larger than 1.64 while the probability values are less than 0.05.

However, tax aggressiveness positive along with insignificant linked with CSR reporting and reject H1. These links are shown in Table 6.

Table 6: Logit Model 1. Source: Research author (2022).

CSRR	Beta	S.D.	t-value	p-value	Sig
TA	.012	1.003	0.01	.991	
WD	2.024	.723	2.80	.005	***
WCEO	3.198	1.836	1.74	.082	*
LNTA	-.419	.506	-0.83	.408	
ROA	0	.007	-0.05	.96	

\*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .1$

The Logit regression model exposed the relationship among the variables and the statistics show that gender diversity has positive along with significant linked with CSR reporting because t-statistics are larger than 1.64 while the probability values are less than 0.05. In addition, gender diversity positive moderated among the links of tax aggressiveness and CSR reporting and accept H2 and H3. These links are shown in Table 7.

Table 7: Logit Model with Interaction Te 1. Source: Research author (2022).

CSRR	Beta	S.D.	t-value	p-value	Sig
TA	.159	.091	1.74	.078	
WD	2.838	.849	3.34	.001	***
WCEO	1.952	1.921	1.02	.31	
LNTA	-1.346	.746	-1.80	.071	*
ROA	.011	.012	0.97	.333	
TA*WD	3.081	.904	3.41	.006	***
TA*WCEO	.251	.144	1.74	.081	*

\*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .1$

## Implications

The results have indicated that tax aggressiveness along with gender diversity has positive along with significant linked with CSR reporting. These outcomes are similar to the output of Zeng (2016) who also exposed that CSR reporting depends upon the tax aggressiveness of the firm. In addition, a study by Al Fadli, Sands, Jones, Beattie, and Pensiero (2019) found that gender diversity has a positive influence on the CSR reporting of the firm and this outcome is same as the outcome of the current article. Moreover, a study conducted by Galbreath (2018) also examined that CSR reporting depends on the gender diversity, the female dominant firm is more aggressive than the other firm in terms of CSR reporting and these outcomes are matched with the findings of the ongoing study. Furthermore, a study by Cabeza-García et al. (2018) investigated that female gender has dominant in the CSR reporting than the

male gender in the firm and these outcomes are same as the output of the current article. These findings has been guided to the policymakers along with the upcoming studies while formulating the policies related to the CRS reporting and investigation this area in future.

## CONCLUSION AND LIMITATIONS

Thus, it has been concluded that the listed firm of Jordan has female dominance along with the aggressive tax system that is the reason for high CSR reporting in the firm. The listed firms have published the CSR reports according to the GRI standard due to their female dominance in the firm. This study suggested the upcoming studies that they should add more predictors to enhance the scope of the study. In addition, it is also recommended by the ongoing article that the future studies should also add other than listed firm in the analysis. Finally, the current study has suggested that future studies should also increase the number of the firm along with the time frame to enhance the scope of their studies.

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