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Current Trends and Future Directions on Women CEOs/CFOs and Financial Reporting Quality

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Abstract

The aim of this paper is to review studies of women chief executive officers (CEOs) and chief financial officers (CFOs) in the context of financial reporting quality. By using electronic searches and keywords to identify relevant studies, a total of 22 published studies are identified over the period 2010-2020. Based on the review, two underpinning theories have been widely used in examining the effect of women CEOs/CFOs on the quality of financial reporting, namely, risk aversion theory and gender-ethics theory. In addition, a majority of the studies documented that women CEOs/CFOs lead to more conservative reporting and higher earnings quality. The findings underscore the importance to examine the gender issue in accounting literature and established a business and management case for women to attain the top position whether as a CEO or CFO. This paper also recommends to practitioners and regulators about the effect of having women as CEOs or CFOs on financial reporting quality as women are a pool of talent that is underutilized. In addition, this paper goes beyond a classic narrative review by suggesting future research avenues to examine further such issues in order to broaden the understanding of the role of women in accounting.

Keywords: Women, CEO, CFO, Financial Reporting Quality

JEL Classification Code: J16, M40, M41

1. Introduction

Previous studies in accounting literature documented that chief executive officers (CEOs) and chief financial officers (CFOs) are among the senior management that can affect the quality of financial reporting. This is because CFOs are the ones who have the direct responsibility in preparing financial statements (Jiang et al., 2010) and although CEOs are not involved directly in preparing financial statements, they can influence CFOs by pressuring them as a way to be involved

in accounting manipulation (Feng et al., 2011). However, current worldwide financial crisis and scandals such as Lehman Brothers question the role of CEOs and CFOs. An interesting comment has been raised by the International Monetary Fund's (IMF) Managing Director, Christine Lagarde, in 2010, who mentioned that "if Lehman Brothers had been Lehman Sisters, things would have been different" (Lagarde, 2010). The statement suggests that the existence of women in corporate leadership, whether as CEOs or CFOs, could affect the quality of financial reporting because of the different behavior and leadership style compared to men.

Over the last decade, regulators and governments around the world such as Norway, Italy, Israel and Spain legislate the requirement of women in corporate leadership, whether in the committee board or the senior management level (Terjesen et al., 2015). Nonetheless, some countries such as Malaysia, the United States of America (US) and Singapore only set voluntary targets for all publicly-listed firms to have women representatives on the board and senior management position (Terjesen et al., 2015). This action has been taken in order to overcome the barriers that women face in order to attain top position (Terjesen et al., 2015). The barriers include the work-life imbalance, especially for married women with children as they need to borne a larger share of household work, which

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create a conflict between career advancement or family (Mustapa et al., 2018), and the glass ceiling effect such as sex discrimination and the gender pay gap as women are underpaid even performing the same job and appointed in the same level position (Kireyeva & Satybaldin, 2019). Consequently, the number of women in corporate leadership has arisen in the last ten years. A report by Grant Thornton in 2019 discovered that the increases of women in senior management are more prevalent in 2019 as they represent 29 percent of senior management positions, globally (Grant Thornton, 2019). With the rise of women in senior management, it left the researchers with the question of whether their appointment is for justice case or business case.

The justice case is based on the idea that the existence of women as CEOs/CFOs is the right thing to do, which is to ensure and fulfill gender equality sensitivity. The business case, however, is based on the premise that the existence of women as CEOs/CFOs in the sense of different behaviors in terms of sensitivity towards risk and ethicality than men may enhance the financial reporting quality (FRQ) (Gul et al., 2013). In that view, therefore, the business case premise provides an interesting basis for researchers to examine the gender effect on FRQ. Previous studies in ethics literature documented that women exhibit different behavior than men as they are more inclined to engage in unethical behavior (Mason & Mudrack, 1996). Similarly, in risk aversion literature, women are sensitive to risk and are less likely to engage in reckless behavior that produces adverse outcomes (Harris et al., 2006). Based on the business case premise, there is gaining interest in the gender of CEOs/CFOs in the study of financial reporting (Liu et al., 2016).

Therefore, our objective is to review studies on women CEOs/CFOs in the FRQ topic. This is important because, although this issue has gained researchers' interest, there is a lack of studies that provide a holistic review on the impact of women CEOs/CFOs on FRQ as prior studies, namely, Terjesen et al. (2009) and Pucheta-Martinez et al. (2018) only focused on the impact of women at the board level. Consequently, this paper is essential in assisting researchers for future studies as a way to broaden the understanding of the impact of women CEOs/CFOs in the context of accounting, specifically in financial reporting. This paper also serves as a feedback to the governments and practitioners that are interested to improve the credibility of financial reporting as the review demonstrates the importance of considering women CEOs/CFOs as one of the significant factors for the outcome of financial reporting.

The method used to collect previous studies and the trend analysis is presented in Section 2. In Section 3, the results on the measurements and theories used in the previous studies are reviewed. Section 4 provides a discussion on the impact of women CEOs/CFOs on FRQ. Section 5 provides suggestions for future research. Lastly, Section 6 presents the conclusion.

2. Methodology

A process of electronic research was conducted to review papers in this study. By using Google Scholar, EBSCOhost, Scopus, Science Direct and Emerald Insight, combinations of keywords including “women”, “female”, “gender”, “senior management”, “earnings management”, “financial reporting quality”, “misstatement”, “accounting conservatism”, “restatement”, “financial reporting fraud”, “CEO”, “CFO” were used to search for relevant studies. The papers incorporated in this study met these specific criteria: (i) published in online peer-reviewed journals, (ii) papers that investigate the relationship between independent variable as CEOs/CFOs gender, as well as that the dependent variable is any measurement for financial reporting quality, (iii) exclude theoretical discussions without empirical evidence papers, (iv) exclude non-English papers, and (v) to ensure all relevant papers through 2020 are included, the publication date was not limited. These procedures resulted in 22 papers dealing with the impact of women CEOs/CFOs on FRQ throughout 2010-2020, as review in the next section.

3. Results

The highest number of collected published papers is from leading accounting journals, including *Pacific-Basin Finance Journal* with three published studies followed by the *Journal of Business Ethics* and *Contemporary Accounting Research* with two published studies, respectively. Therefore, the acceptance of this issue in major leading accounting journals draws attention to its importance in accounting literature. The earliest publication is in the year 2010 with three published studies and the curve of the published papers shows an increasing tendency from 2016 to 2020, as shown in Figure 1. The highest number of publication is from 2016 to 2020, moving from two studies in 2016 to five studies in 2017 and four studies in 2020, indicating that such topic is gaining accounting researcher attention.

From the review, a total of 17 studies examined the impact of women CEOs/CFOs on FRQ in developed countries. The fraction is as follows. A total of nine studies focused on the US setting (Barua et al., 2010; Francis et al., 2015; Gavious et al., 2012; Ge et al., 2011; Gupta et al., 2020; Harris et al., 2019; Ho et al., 2015; Janahi et al., 2020; Peni & Vähämaa, 2010; Zalata et al., 2019), two studies in France (Belot & Serve, 2018; Bouaziz et al., 2020), one study in the United Kingdom (Arun et al., 2017), two studies in South Korea (Kim et al., 2017; Na & Hong, 2017), one study in Sweden (Nasution & Jonnergård, 2017) and one study in Australia (Duong & Evans, 2016). There are only five studies in developing countries/emerging economies. One study is from Jordan (Alqatamin et al., 2017) and four studies are in China (Liao et al., 2019; Liu et al., 2016; Luo et al., 2020; Ye et al., 2010).

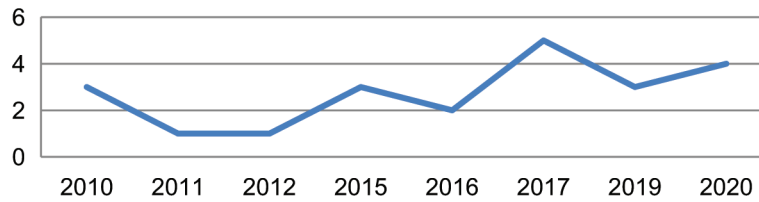


Figure 1: Trends of CEOs/CFOs Gender in Financial Reporting Quality Papers over the Period 2010-2020

Out of 22 studies, 12 studies examined women at CFO position, six studies examined women at CEO position and four studies examined women at both positions indicating that women CFOs gain more interest from researchers to examine the gender effect on FRQ. The review resulted in five main themes of the measurement of FRQ. The measurements are accruals earnings management (AEM), real activity-based earnings management (REM), accounting conservatism, financial fraud, and miscellaneous (i.e., classification shifting, earnings persistence, financial reporting transparency, earnings smoothing, and “meet or beat” earnings benchmark). The studies are also classified into two sub-themes for the theory, which is risk aversion and gender-ethics theory, as shown in Table 1. All these studies use a quantitative method.

3.1. Women CEOs/CFOs and Measurements of Financial Reporting Quality

Table 1 shows that 13 studies use accruals-based management (AEM) as a measurement of FRQ, suggesting that AEM is the utmost measurement that has been widely used by previous studies. From these 13 studies, four studies used AEM concurrently with REM, and one study used AEM concurrently with earnings persistence. The most common proxy of AEM used by the studies are total accruals and working capital accruals utilizing Jones’s (1991) model, modified Jones model, Kothari’s (2005) performance matched abnormal accruals, and Dechow and Dichev’s (2002) model, whereby all of these accruals models are widely used in the literature, especially the first three models because they provide the highest explanatory powers and significances (Acar & Coskun, 2020).

Four studies used REM as a measurement of FRQ, and the emerging use of this measurement started in 2016 with two studies used REM followed by the years 2017 and 2019 with one study, respectively. Only two studies used accounting conservatism as a measurement of FRQ proxy by market-value based measure (market-to-book ratio), earnings-based measure (cumulative non-operating accruals deflated cumulative assets and time-series skewness of earnings) and conditional conservatism. Three studies used financial fraud

as a measurement of FRQ and all the studies are from China. Another miscellaneous measurement used as a proxy of FRQ is classification shifting, financial reporting transparency, earnings smoothing and “meet or beat” earnings with one study, respectively.

3.2. Women CEOs/CFOs and Underpinning Theory

Two underpinning theories have been widely used in examining the effect of women CEOs/CFOs in FRQ. First is gender-ethics theory that explains women are more ethical than men and, therefore, they will be more conservative in making decision than their men counterpart. The foundation of this theory is from Gilligan (1983), which contended that men in general focus on rules and rights, while women commonly focus on responsibilities and relationships; hence, the behavior of women toward relationship and caring are related to ethical judgment. Previous studies such as Akaah (1989) and Lunsford (2000) found that women are more critical of unethical behaviors than men. Recently, Ivan (2012) documented that the leadership style of women managers that are communal, transformational, participative and inclusive make them more ethical than men managers.

Next is the risk aversion theory. Neurophysiologists, social psychologists and sociologists contend that the theory of risk aversion originated from individual demographics or personal attributes (Zuckerman, 1994), social-cultural (Halek & Eisenhauer, 2001) and neural circuits (Trepel et al., 2005). For instance, men are overconfident in making a decision due to higher testosterone exposure, which resulted in the aggressiveness in their behavior compared to women (Sapienza et al., 2009). Huang and Kisgen (2013) found that men executives, due to their overconfident behavior, make acquisition and issue debts more than women executives, but their acquisition return is lower by two percent than those made by women executives. This suggests that women are meticulous and cautious in making a financial decision. Therefore, nine studies have used these theories concurrently as shown in Table 1. In addition, another 11 studies used only risk-aversion theory and two studies used only gender-ethics theory in examining the behavior of women CEOs/CFOs in FRQ.

Table 1: Review Studies

Authors/Countries	Women position	Theories		Measurements									
		RA	ET	AEM	REM	CON	FRAUD	CS	EP	TRS	ES	MBE	
Alqatamin et al. (2017)/Jordan	CFO	✓	✓	✓									
Arun et al. (2015)/UK	CFO	✓	✓	✓									
Barua et al., (2010)/US	CFO	✓		✓									
Belot and Serve (2017)/French	CEO	✓	✓	✓									
Bouaziz et al. (2020)/French	CEO	✓		✓									
Duong and Evans (2016)/Australia	CFO	✓		✓	✓								
Francis et al. (2015)/US	CFO	✓	✓			✓							
Gavious et al. (2012)/US	CEO/ CFO	✓		✓									
Ge et al. (2011)/US	CFO	✓		✓								✓	
Gupta et al. (2020)/US	CFO	✓	✓				✓						
Harris et al. (2019)/US	CEO	✓		✓	✓								
Ho et al.(2015)/US	CEO	✓	✓			✓							
Janahi et al. (2020)/US	CFO	✓	✓								✓		
Kim et al. (2017)/South Korea	CEO/ CFO		✓	✓									
Liao et al. (2019)/China	CFO	✓					✓						
Liu et al. (2016)/China	CFO	✓		✓	✓								
Luo et al. (2020)/China	CFO	✓	✓				✓						
Na and Hong (2017)/South Korea	CEO	✓		✓	✓								
Nasution and Jonnergård (2017)/Sweden	CFO	✓		✓									✓
Peni and Vähämaa (2010)/ US	CEO/ CFO	✓	✓	✓									
Ye et al. (2010)/China	CEO/ CFO		✓	✓						✓			
Zalata et al. (2019)/US	CEO	✓						✓					

RA=risk aversion; ET=gender-ethics; AEM=accruals earnings management; REM=real earnings management; CON=accounting conservatism; FRAUD=financial reporting fraud; CS=classification shifting; EP=earnings persistent; TRS=financial reporting transparency; ES=earnings smoothing; MBE="meet or beat" earnings

4. Discussion

Based on the review, most of the studies used AEM as a measurement because AEM can explain the behavior of women CEOs/CFOs in two perspectives. First, as women are more ethical than men, using AEM is desirable in explaining the ethicality perspective. This is because managers perceived that AEM is more unethical than REM (McGuire et al., 2012) and as women are more ethical, they are more inclined to be involved in AEM. Second, AEM also can be explained from the risk aversion perspective. As AEM is high in scrutiny and is easily detectable by auditors compared to REM, it is therefore a risky method in managing earnings (Alfonso et al., 2015). Thus, as women are more risk sensitive, they are less likely to be involved in AEM. For these reasons, using AEM reflects the ethicality and risk sensitivity of women CEOs/CFOs compared to REM (Ye et al., 2010). Clearly, these two perspectives lead to the same presumption that women, relatively, are more inclined to be involved in AEM compared to men.

Subsequent to the passage of Sarbanes-Oxley Act (SOX), which enhanced the scrutiny in regulation, managers may shift away from AEM to REM because AEM is now easier to be detected and may switch between AEM and REM methods based on their cost relativity (Cohen et al., 2008). If REM is less likely to be detected and is a more ethical method in managing earnings than AEM (McGuire et al., 2012), are women CEOs/CFOs opportunist like men to manipulate earnings? Therefore, there are a growing number of studies that use REM to understand whether the behavior of women CEOs/CFOs is still the same. However, the use of AEM and REM in women CEOs/CFOs studies has been critiqued by Zalata et al. (2019) because both cannot answer whether the impact of women CEOs/CFOs on FRQ is because women are more ethical or more risk averse. They contend that previous studies are not able to disentangle whether it is risk aversion or ethicality that influences the behavior of women CEOs/CFOs in financial reporting because of the use of AEM and REM as a measurement. Therefore, they use classification shifting in the hope of answering whether women CEOs/CFOs are more risk averse than ethical, or vice-versa, which affects FRQ.

Moreover, because of the research design, particularly in using AEM and REM, previous studies use the theory of risk aversion and gender-ethics concurrently as they are not able to disentangle those behaviors (Zalata et al., 2019). Although both theories can be used concurrently to examine the effect of women CEOs/CFOs on FRQ, Doan and Iskandar-Datta (2020) contend that those theories are now competing in explaining the behavior of women CEOs/CFOs. In this respect, by using classification shifting, Zalata et al. (2019) found that women CEOs reported higher FRQ

because of their risk aversion behavior, not because of their ethicality. Hence, the direction of a recent study on women CEOs/CFOs is now to disentangle the puzzle between which behavior, whether risk aversion or gender-ethics, influences women CEOs/CFOs to affect FRQ.

Using various measurements of FRQ, Barua et al. (2010), Belot and Serve (2017), Bouaziz et al. (2020), Duong and Evans (2016), Francis et al. (2015), Gavius et al. (2012), Harris et al. (2019), Ho et al. (2015), Janahi et al. (2020), Kim et al. (2017) and Na and Hong (2017) found that women CEOs/CFOs have a positive relationship with FRQ, suggesting that the existence of women as CEOs or CFOs improve the quality of financial reporting. Nevertheless, Alqatamin et al. (2017), Arun et al. (2015), Ge et al. (2011), Nasution and Jonnergård (2017) and Ye et al. (2010) revealed that women CEOs/CFOs have no relation with FRQ. Only Liu et al. (2016) documented that women CFOs have a positive association with REM as they found that women CFOs reported higher abnormal discretionary expenditure but have a negative association when using AEM. In addition, Peni and Vähämaa (2010) using a signed direction documented that compared to men CFOs, women CFOs exhibit higher income-decreasing discretionary accruals but they failed to find any evidence on women CEOs. Therefore, the results are inconclusive.

The inconclusive results are perhaps due to the differences in the time and the measurement setting used. For instance, Ye et al. (2010) studied firms in China from 2001 to 2006 and found no association between women CEOs/CFOs and AEM. However, Liu et al. (2016) using larger data and more recent data from years 1999-2011 of firms in China documented a negative association between women CFOs and AEM. Moreover, some studies suffering from low representations of women CEOs/CFOs, which reduced the statistical power of the test. For instance, Ge et al. (2010) contended that the insignificant result of their studies is because of the low number of women CFOs in their sample, which is only nine percent.

Additionally, the results of women CEOs/CFOs on FRQ may be context-specific and difficult to be generalized across national boundaries. Therefore, the result in one country may not hold in other countries (Ye et al., 2010). This is because of the capital markets, culture, economic, regulatory environments, and governance mechanisms vary among each of the countries. For instance, the result of women CEOs/CFOs on FRQ in developing countries/emerging economies may not be the same as developed countries, as developing countries/emerging economies are high in gender inequality (Terjesen et al., 2009). Moreover, the effect of women CEOs/CFOs on FRQ in developing countries/emerging economies are understudied as there are only five from the review studies in the setting of developing

countries/emerging economies. In the same vein, women CEOs/CFOs in the US may have the ability to impact FRQ because their appointment may be based on merit since the US only voluntarily required the appointment of women as CEOs/CFOs (Terjesen et al., 2015). The case may be different in the country that legislates the appointment of women in CEOs/CFOs position such as the French, as their appointment by firms may only to fulfill the gender quota and not because of merit.

In addressing this issue, the review shows that none of the studies examined the demographic attributes of women CEOs/CFOs such as age, tenure, education level, financial expertise, religion, ethnicity and nationality that could nurture the behavior of women CEOs/CFOs to affect FRQ as the demographic attributes lead to differences in risk aversion and decision making (Hambrick & Mason, 1984). Although women can be considered as a homogenous group, their demographic attributes lead to differences in behavior among them. For instance, women in Asia are less risk averse and more confident as wealth creators than women in the US, which lead them to be more financially savvy because the Asian culture allows women to handle money from an early age (Hewlett & Moffitt, 2015). Consequently, demographic attributes could explain the effect of women CEOs/CFOs on FRQ, which may require particular skills and competencies, and this also may influence the nature of the linkage between women CEOs/CFOs and FRQ.

5. Future Directions

By having the studies reviewed, there are several avenues that future studies can explore to further the understanding of the effect of women CEOs/CFOs on FRQ. Firstly, is to use more careful research designs such as a quasi-natural experiment of CEO/CFO gender changes rather than the simplistic dualistic gender model. The quasi-natural experiment is better in identifying the gender effect (Francis et al., 2015) and very effective in making causal claims (Antonakis et al., 2010). From the review, all of the studies use the simplistic dualistic gender model except for Francis et al. (2015) that used quasi-natural experiment by identifying the transition of CFO gender changes from men to women CFO to examine the effect of women CFOs on FRQ. Therefore, future studies could employ this research design, whenever possible. In addition, another measurement of FRQ can be employed by future studies such as earnings smoothing, volume estimation of pension obligation discount rates, financial restatement and financial irregularities in order to understand whether gender has the same effect when using these measurements.

It is worth noting that studies of women CEOs/CFOs and FRQ are majorly conducted in developed countries, and there is a lack of studies in the context of developing country/

emerging economies as there are only four studies that used data of China firms and one study, which used Jordanian firms. Moreover, Adams and Ferreira (2009) contend that women are a substitute mechanism of weak governance. Given that the institutional setting of developing countries/emerging economies is different such as Vietnam, where the power is delegated through provincial governments (Nguyen & Duong, 2020) and corporate governance is weaker than developed countries (Crittenden & Crittenden, 2012), therefore, it is important to examine gender on FRQ in developing countries/emerging economies. Hence, future studies could consider examining this issue to understand whether women CEOs/CFOs can be a substitute mechanism of weak governance in developing countries/emerging economies.

In addition, the demographic attributes of women CEOs/CFOs such as age, education level, ethnicity, financial expertise and religion need to be examined to understand through which channel women CEOs/CFOs exert influence on FRQ. This is important because it helps firms not to appoint women blindly as CEOs/CFOs in order to fulfill gender quota especially in a country where the appointment of women is legislated and therefore, demographic attributes of women need to be considered for the appointment. Moreover, it is fruitful for future studies to test the interaction between women CEOs/CFOs with women directors or women audit partners to further understand whether the cooperation among women affect the quality of financial reporting because the economics literature demonstrates that women cooperate with each other more than with men (Kunze & Miller, 2017).

For qualitative research, future studies can investigate the obstacles that women CEOs and CFOs face and overcome in order to be appointed to such a position. The reason why some firms are interested in appointing women as CEOs or CFOs and whether there is still a “glass ceiling” effect for women to attain top positions, especially for CEO and CFO positions also can be examined. This is because even though the number of women in such positions is increasing, the number is relatively low as Harris et al. (2019) documented that only 7.86 percent women are assigned as CEOs in the US sample and Belot and Serve (2017) documented only 9.4 percent women are assigned as CEOs in a French sample. Meanwhile, for women CFOs, Gupta et al. (2020) documented only 8.31 percent in the US sample and Nasution and Jonnergård (2017) documented 17 percent in the Sweden sample.

6. Conclusion

This study presents a review of previous literature on the effect of women CEOs/CFOs on FRQ from 2010 to 2020. During these 10 years, 22 papers have been published and

the majority is in developed countries. This study contributes by providing a comprehensive summary of the previous studies' main results on the relation between women CEOs/CFOs and FRQ. The risk aversion and gender-ethics theory assert the importance of including women as CEO and CFO in order to lessen or mitigate the manipulation of financial reporting. Consequently, those theories have established a business case that helps the understanding of the importance of the inclusion of women as CEOs/CFOs in recent years, especially in the context of quality of financial reporting. Moreover, majority of the results show that women CEOs/CFOs have a positive association with FRQ, indicating that their existence supports the business case and not only the justice case as the results support the well-established premise that women, relatively compared to their male counterparts, are more ethical and risk averse.

This study serves as a feedback for the governments, practitioners and researchers. First, the governments should increase their initiative to promote more women to be appointed at the top position, especially for countries that do not legislate the appointment of women as firms are benefited from the existence of women. The initiative to promote women to attain the top position should not only be for public listed companies but to be extended in small and medium enterprises (SME) as the previous study, namely, Belot and Serve (2017) found negative associations between women CEOs and discretionary accruals in SMEs. However, the initiative should be taken with caution in order to ensure that firms will not blindly appoint women to attain a top position as some of the previous studies have shown that firms in the country that mandate the gender quota may have a negative impact as firms may blindly appoint women by not considering their merit in order to fulfill the mandatory quota (Terjesen et al., 2015).

As for practitioners, this study serves as a feedback that the presence of women as CEO/CFO due to their differences in the behavior of risk aversion and ethicality benefited firms in improving the quality of financial reporting. This could encourage firms to appoint more women at top positions as women are a pool of talent that are underutilized. For researchers, this study provides guidance for the future study to broaden the understanding of the effect of women CEOs/CFOs on FRQ. An initial review on measurements and theories will guide and influence researchers to use different research designs to further investigate the effect of women CEOs/CFOs on FRQ. Moreover, our review shows that the results are inconclusive, which create a research gap in this field. Focus also should be on developing countries/emerging economies as there is lack of study on this issue and to further understand whether the effect of women CEOs/CFOs on FRQ remains the same as the setting and environment are different than developed countries.

By proposing future research in examining the demographic attributes of women CEOs/CFOs and linking their presence in the firms with women who are in the board and/or are audit partners, it will broaden the understanding of the interaction among women that may also affect FRQ. Lastly, by providing the review on the effect of women CEOs/CFOs on FRQ, it underscores the main contributions of the studies in the gender accounting literature.

References

- Acar, G., & Coskun, A. (2020). A comparison of models for predicting discretionary accruals: A cross-country analysis. *The Journal of Asian Finance, Economics and Business*, 7(9), 315-328. <https://doi.org/10.13106/jafeb.2020.vol7.no9.315>
- Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, 94(2), 291-309.
- Akaah, I. P. (1989). Differences in research ethics judgments between male and female marketing professionals. *Journal of Business Ethics*, 8(5), 375-381. <https://doi.org/10.1007/BF00381729>
- Alfonso, E., Cheng, C. A., & Pan, S. (2015). Income classification shifting and mispricing of core earnings. *Journal of Accounting, Auditing & Finance*, 30(1), 1-32.
- Alqatamin, R. M., Aribi, Z. A., & Arun, T. (2017). The effect of the CEO's characteristics on EM: evidence from Jordan. *International Journal of Accounting & Information Management*, 3(25), 356-375. <https://doi.org/10.1108/IJAIM-10-2016-0099>
- Antonakis, J., Bendahan, S., Jacquart, P., & Lalive, R. (2010). On making causal claims: A review and recommendations. *The Leadership Quarterly*, 21(6), 1086-1120.
- Arun, T. G., Almahrog, Y. E., & Aribi, Z. A. (2015). Female directors and earnings management: Evidence from UK companies. *International Review of Financial Analysis*, 39, 137-146. <https://doi.org/10.1016/j.irfa.2015.03.002>
- Barua, A., Davidson, L. F., Rama, D. V., & Thiruvadi, S. (2010). CFO gender and accruals quality. *Accounting Horizons*, 24(1), 25-39. <https://doi.org/10.2308/acch.2010.24.1.25>
- Belot, F., & Serve, S. (2018). Earnings quality in private SMEs: Do CEO demographics matter?. *Journal of Small Business Management*, 56(sup1), 323-344. <https://doi.org/10.1111/jsbm.12375>
- Bouaziz, D., Salhi, B., & Jarbou, A. (2020). CEO characteristics and earnings management: Empirical evidence from France. *Journal of Financial Reporting and Accounting*, 18(1), 77-110. <https://doi.org/10.1108/JFRA-01-2019-0008>
- Cohen, D. a., Dey, A., & Lys, T. Z. (2008). Real and accrual based earnings management in the pre and post Sarbanes Oxley periods. *The Accounting Review*, 83(3), 757-787.

- Crittenden, V. L., & Crittenden, W. F. (2012). Corporate governance in emerging economies: Understanding the game. *Business Horizons*, 55(6), 567-574.
- Dechow, P. M., & Dichev, I. D. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review*, 77(s-1), 35-59.
- Doan, T., & Iskandar-Datta, M. (2020). Are female top executives more risk-averse or more ethical? Evidence from corporate cash holdings policy. *Journal of Empirical Finance*, 55, 161-176.
- Duong, L., & Evans, J. (2016). Gender differences in compensation and earnings management: Evidence from Australian CFOs. *Pacific-Basin Finance Journal*, 40, 17-35. <https://doi.org/10.1016/j.pacfin.2016.07.004>
- Feng, M., Ge, W., Luo, S., & Shevlin, T. (2011). Why do CFOs become involved in material accounting manipulations? *Journal of Accounting and Economics*, 51(1-2), 21-36. <https://doi.org/10.1016/j.jacceco.2010.09.005>
- Francis, B., Hasan, I., Park, J. C., & Wu, Q. (2015). Gender differences in financial reporting decision-making: Evidence from accounting conservatism. *Contemporary Accounting Research*, 32(3), 1285-1318. <https://doi.org/10.1111/1911-3846.12098>
- Gavious, I., Segev, E., & Yosef, R. (2012). Female directors and earnings management in high-technology firms. *Pacific Accounting Review*, 24(1), 4-32.
- Ge, W., Matsumoto, D., & Zhang, J. L. (2011). Do CFOs have style? An empirical investigation of the effect of individual CFOs on accounting practices. *Contemporary Accounting Research*, 28(4), 1141-1179. <https://doi.org/10.1111/j.1911-3846.2011.01097.x>
- Gilligan, C. 1983, 'Do the social sciences have an adequate theory of moral development?', in N. Haan, R. N. Bellah, P. Rabinow and W. M. Sullivan (eds.), *Social Science as Moral Inquiry*, Columbia University Press, New York, NY.
- Grant Thornton. (2019). *Women in business: Building a Blueprint for Action*. Retrieved on May 20, 2020 from https://www.grantthornton.global/globalassets/global-insights---do-not-edit/2019/women-in-business/gtil-wib-report_grant-thornton-spreads-low-res.pdf
- Gul, F. A., Hutchinson, M., & Lai, K. M. (2013). Gender-diverse boards and properties of analyst earnings forecasts. *Accounting Horizons*, 27(3), 511-538. <https://doi.org/10.2308/acch-50486>
- Gupta, V. K., Mortal, S., Chakrabarty, B., Guo, X., & Turban, D. B. (2020). CFO gender and financial statement irregularities. *Academy of Management Journal*, 63(3), 802-831. <https://doi.org/10.5465/amj.2017.0713>
- Halek, M., & Eisenhauer, J. G. (2001). Demography of risk aversion. *The Journal of Risk and Insurance*, 68(1), 1-24.
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9(2), 193-206.
- Harris, C. R., Jenkins, M., & Glaser, D. (2006). Gender differences in risk assessment: Why do women take fewer risks than men? *Judgment and Decision Making*, 1(1), 48-63.
- Harris, O., Karl, J. B., & Lawrence, E. (2019). CEO compensation and earnings management: Does gender really matter?. *Journal of Business Research*, 98, 1-14.
- Hewlett, A. S., & Moffitt, T. A. (2015). Women in Asia are more financially savvy than women in the US. *Harvard Business Review*. Retrieved on September 1, 2019 from <https://hbr.org/2015/08/women-in-asia-are-more-financially-savvy-than-women-in-the-u-s>
- Ho, S. S. M., Li, A. Y., Tam, K., & Zhang, F. (2015). CEO gender, ethical leadership, and accounting conservatism. *Journal of Business Ethics*, 127(2), 351-370. <https://doi.org/10.1007/s10551-013-2044-0>
- Huang, J., & Kisgen, D. J. (2013). Gender and corporate finance: Are male executives overconfident relative to female executives? *Journal of Financial Economics*, 108(3), 822-839. <https://doi.org/10.1016/j.jfineco.2012.12.005>
- Ivan, L. (2012). Sex-role identity, nonverbal sensitivity and potential leadership style. *Procedia—Social and Behavioral Sciences*, 46, 1720-1729. <https://doi.org/10.1016/j.sbspro.2012.05.367>
- Janahi, M., Millo, Y., & Voulgaris, G. (2020). CFO gender and financial reporting transparency in banks. *The European Journal of Finance*, 1-23.
- Jiang, J. X., Petroni, K. R., & Wang, I. Y. (2010). CFOs and CEOs: Who have the most influence on earnings management? *Journal of Financial Economics*, 96(3), 513-526.
- Jones, J. J. (1991). Earnings management during import relief investigations. *Journal of Accounting Research*, 29(2), 193-228.
- Kim, H. A., Jeong, S. W., Kang, T., & Lee, D. (2017). Does the presence of female executives curb earnings management? Evidence from Korea. *Australian Accounting Review*, 27(4), 494-506. <https://doi.org/10.1111/auar.12169>
- Kireyeva, A. A., & Satybaldin, A. A. (2019). Analysis of gender pay gap in different sectors of the economy in Kazakhstan. *Journal of Asian Finance, Economics and Business*, 6(2), 231-238. <https://doi.org/10.13106/jafeb.2019.vol6.no2.231>
- Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, 39(1), 163-197.
- Kunze, A. & Miller, A. R. 2017. Women helping women? Evidence from private sector data on workplace hierarchies. *Review of Economics and Statistics*, 99(5), 769-775. https://doi.org/10.1162/REST_a_00668
- Lagarde, C. (2010, May 2010). Women, power and the challenge of the financial crisis. *The New York Times*. Retrieved on Jun 2, 2020 <https://www.nytimes.com/2010/05/11/opinion/11iht-edlagarde.html?dbk>

- Liao, J., Smith, D., & Liu, X. (2019). Female CFOs and accounting fraud: Evidence from China. *Pacific-Basin Finance Journal*, 53, 449-463.
- Liu, Y., Wei, Z., & Xie, F. (2016). CFO gender and earnings management: Evidence from China. *Review of Quantitative Finance and Accounting*, 46(4), 881-905. <https://doi.org/10.1007/s11156-014-0490-0>
- Lunsford, D. L. (2000). Ethical judgements: Does gender matter? *Teaching Business Ethics*, 4(1), 1-22. <https://doi.org/10.1023/A:1009839517482>
- Luo, J. H., Peng, C., & Zhang, X. (2020). The impact of CFO gender on corporate fraud: Evidence from China. *Pacific-Basin Finance Journal*, 63, 101404. <https://doi.org/10.1016/j.pacfin.2020.101404>
- Mason, E. S., & Mudrack, P. E. (1996). Gender and ethical orientation: A test of gender and occupational socialization theories. *Journal of Business Ethics*, 15(6), 599-604. <https://doi.org/10.1007/BF00411793>
- McGuire, S. T., Omer, T. C., & Sharp, N. Y. (2012). The impact of religion on financial reporting irregularities. *The Accounting Review*, 87(2), 645-673. <https://doi.org/10.2308/accr-10206>
- Mustapa, N. S., Noor, K. M., & Mutalib, M. A. (2018). Why can't we have both? A discussion on work-life balance and women career advancement in Malaysia. *Journal of Asian Finance, Economics and Business*, 5(3), 103-112. <http://doi.org/10.13106/jafeb.2018.vol5.no3.103>
- Na, K., & Hong, J. (2017). CEO gender and earnings management. *Journal of Applied Business Research*, 33(2), 297-308. <https://doi.org/10.19030/jabr.v33i2.9902>
- Nasution, D., & Jonnergård, K. (2017). Do auditor and CFO gender matter to earnings quality? Evidence from Sweden. *Gender in Management: An International Journal*, 32(5), 330-351. <https://doi.org/10.1108/GM-06-2016-0125>
- Nguyen, A. H., & Duong, C. T. (2020). Provincial governance quality and earnings management: empirical evidence from Vietnam. *Journal of Asian Finance, Economics, and Business*, 7(2), 43-52. <https://doi.org/10.13106/jafeb.2020.vol7.no2.43>
- Peni, E., & Vähämaa, S. (2010). Female executives and earnings management. *Managerial Finance*, 36(7), 629-645. <https://doi.org/10.1108/03074351011050343>
- Pucheta-Martinez, M. C., Bel-Oms, I., & Sempere, G. (2018). The association between board gender diversity and financial reporting quality, corporate governance and corporate social responsibility disclosure. *Academia Revista Latinoamericana de Administracion*, 31(1), 177-194. <https://doi.org/10.1108/ARLA-04-2017-0110>
- Sapienza, P., Zingales, L., & Maestripieri, D. (2009). Gender differences in financial risk aversion and career choices are affected by testosterone. *Proceedings of the National Academy of Sciences*, 106(36), 15268-15273. <https://doi.org/10.1073/pnas.0907352106>
- Terjesen, S., Aguilera, R. V., & Lorenz, R. (2015). Legislating a woman's seat on the board: Institutional factors driving gender quotas for boards of directors. *Journal of Business Ethics*, 128(2), 233-251. <https://doi.org/10.1007/s10551-014-2083-1>
- Terjesen, S., Sealy, R., & Singh, V. (2009). Women directors on corporate boards: A review and research agenda. *Corporate Governance*, 17(3), 320-337. <https://doi.org/10.1111/j.1467-8683.2009.00742.x>
- Trepel, C., Fox, C. R., & Poldrack, R. A. (2005). Prospect theory on the brain? Toward a cognitive neuroscience of decision under risk. *Cognitive Brain Research*, 23(1), 34-50. <https://doi.org/10.1016/j.cogbrainres.2005.01.016>
- Ye, K., Zhang, R., & Rezaee, Z. (2010). Does top executive gender diversity affect earnings quality? A large sample analysis of Chinese listed firms. *Advances in Accounting*, 26(1), 47-54. <https://doi.org/10.1016/j.adiac.2010.02.008>
- Zalata, A. M., Ntim, C., Aboud, A., & Gyapong, E. (2019). Female CEOs and core earnings quality: new evidence on the ethics versus risk-aversion puzzle. *Journal of Business Ethics*, 160(2), 515-534. <https://doi.org/10.1007/s10551-018-3918-y>
- Zuckerman, M. (1994). *Behavioral expressions and biosocial bases of sensation seeking*. Cambridge, UK: Cambridge University Press.