



Faculty of Economics and Business

Top Executives Officer Gender Diversity and Working Capital Efficiency

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A dissertation submitted

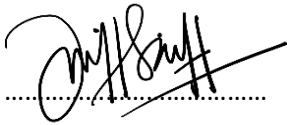
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DECLARATION

I declare that the work in this dissertation was carried out in accordance with the regulations of Universiti Malaysia Sarawak. Except where due acknowledgements have been made, the work is that of the author alone. The dissertation has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

A handwritten signature in black ink, appearing to read 'Nurhidayah', is written over a horizontal dotted line.

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ABSTRACT

With only 7.55% of women holding top executive positions in Malaysia, concerns over tokenism and its impact on financial performance are growing. In the post-COVID economic recovery, where effective working capital management is crucial, this gender diversity may limit companies' ability to optimise financial strategies and operational efficiencies. The lack of diversity at the executive level restricts innovative decision-making and hinders talent utilisation, potentially undermining organisational resilience. This study investigates the influence of gender diversity among top executives on working capital management performance in firms listed in Malaysia from 2001 to 2021. The methodology includes purposive sampling, Logit Binary Regression, and Bhattacharya's (1996) Working Capital Efficiency Index. Findings reveal that female top executives excel in overall Working Capital Efficiency (WCE), while male top executives perform better in Working Capital Utilisation (WCU). Females focus on sustainable strategies, while males are more aggressive in utilising current assets for short-term revenue. The study recommends that female participation improves risk management, innovation, and corporate governance. However, limitations include the focus on Bursa Malaysia. Future studies could explore industry-specific analyses. Stakeholders should recognise that diversity in executive teams is crucial for effective working capital management.

Keywords: Top executives officer gender diversity, working capital efficiency, firms listed in Bursa Malaysia, logit binary regression, working capital index

Kepelbagaian Jantina Pegawai-Pegawai Eksekutif Utama dan Kecekapan Pengurusan

Modal Kerja

ABSTRAK

Peratusan wanita yang sangat rendah dalam peranan eksekutif tertinggi di Malaysia hanya 7.55% menimbulkan kebimbangan tentang tokenisme dan kesannya terhadap prestasi kewangan. Jurang gender ini boleh membatasi keupayaan syarikat untuk mengoptimumkan strategi kewangan dan kecekapan operasi terutama pasca-COVID, di mana pengurusan modal kerja yang cekap sangat penting namun kekurangan kepelbagaian di peringkat eksekutif bukan sahaja menghadkan pengambilan keputusan yang inovatif tetapi juga menghalang penggunaan bakat yang berkesan, yang berpotensi merosakkan daya tahan organisasi dan daya saing jangka panjang. Oleh itu, kajian ini menyelidiki pengaruh kepelbagaian gender dalam kalangan ketua pegawai eksekutif terhadap kecekapan pengurusan modal kerja bagi firma tersenarai di Bursa Malaysia (2001 hingga 2021) dengan menggunakan kaedah logit regresi binari dan Indeks Kecekapan Modal Kerja Bhattacharya (1996). Kajian ini juga mewujudkan satu kerangka kerja yang menyeluruh melalui teori Kitaran Tunai dan teori Upper Echelon. Lalu diakui bahawa terdapat perbezaan gender dalam mempengaruhi kecekapan modal kerja. Ketua Pegawai eksekutif wanita dianggap cekap dalam mengurus modal kerja secara keseluruhan, sementara pegawai eksekutif lelaki cemerlang dalam pemanfaatan modal Kerja. Jadi, ketua pegawai eksekutif wanita lebih menitikberatkan pendekatan keberlangsungan dan strategi jangka masa panjang manakala ketua pegawai eksekutif lelaki agresif memanfaatkan aset semasa untuk menjana pendapatan dengan kadar segera. Kajian ini mengesyorkan bahawa penyertaan wanita meningkatkan prestasi pengurusan risiko, inovasi, dan prestasi tadbir urus korporat. Namun, terdapat kelemahan dalam kajian ini, merangkumi fokus sampel ke atas Bursa Malaysia, yang berpotensi menyekat pengamalan umum. Kajian masa depan

boleh meneroka analisis yang khusus kepada pelbagai industri dan menilai kedudukan sebenar setiap ketua eksekutif. Dengan kajian ini, pihak berkepentingan akan sedar bahawa memberikan keutamaan kepada pengurusan modal kerja dan kepentingan kepelbagaian serta penglibatan wanita dalam pasukan ketua eksekutif adalah suatu langkah yang penting

Kata kunci: *Kepelbagaian gender pegawai-pegawai eksekutif, kecekapan modal kerja, firma yang tersenarai di Bursa Malaysia, regresi logit binari, indeks kecekapan modal kerja*

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LIST OF ABBREVIATIONS

CEO	Chief Executive Officer
CFO	Chief Financial Officer
COO	Chief Operating Officer
MCCG	Malaysian Code on Corporate Governance
PLCs	Public Listed Companies
REITs	Real Estate Investment Trusts
SDG	Sustainable Development Goals
TEG	Top Executives' Gender Diversity
WCE	Working Capital Efficiency
WCEI	Working Capital Efficiency Index
WCM	Working Capital Management
WCP	Working Capital Performance
WCPI	Working Capital Performance Index
WCU	Working Capital Utilization
WCUI	Working Capital Utilization Index

CHAPTER 1

INTRODUCTION

1.1 Study Background

In the contemporary landscape of financial management, the importance of effective working capital management during crises is normally related to the risk mitigation style and its impact on liquidity. This dissertation embarks on exploring the direction of top executives' gender on the working capital efficiency of the companies listed in Bursa Malaysia, following the influence of gender diversity among top executive officers on the working capital efficiency of companies listed on Bursa Malaysia, spanning a period of 20 years.

Finance theory typically revolves around capital budgeting, capital structure, dividend policy, and working capital management. Despite this, Smith (1980), as well as Nazir and Afza (2009) said that capital has not received as much attention as the other mentioned categories. But Kroes and Manikas (2014) emphasise cash flow management as a critical element in a firm's operational strategies. Even, work-in-process plays a pivotal role in the manufacturing system of a company as it serves as the initial source of generated working capital (Bhattacharyya, 1996). Although working capital management involves short-term financial decisions, it often proves to be a genuine source of profit. That is why Jose et al. (1996) believe that the day-to-day management of a firm's short-term assets and liabilities is a must to remain sustainable and continue to be able to accomplish demand.

In historical context, the concept of working capital traces its roots back to the practices of the old Yankee peddler. Working capital referred to the actual merchandise carried by the peddler in his wagon as he ventured out to sell his goods. The term working capital captured the essence of what he traded or turned over to generate profits. The wagon and horse, constituting the means of transportation, represented the fixed assets of the

peddler. Typically, he owned the horse and wagon, financed through equity capital. However, the merchandise itself was acquired on credit, either through borrowing from suppliers or securing loans from a bank. These loans were specifically designated as working capital loans.

The repayment of these loans became a crucial aspect of the peddler's financial dealings. After each sales trip, he had to demonstrate solvency by repaying the working capital loans, proving his creditworthiness for potential future loans. The frequency of these trips directly impacted the turnover rate of his working capital in which the more trips made per year, the faster the working capital turned over, leading to increased profits. This historical narrative reflects the fundamental principles of working capital and its pivotal role in the operations and profitability of businesses, echoing the practices of sound banking in times past.

Pass and Pike (1987) marked a significant milestone by providing empirical support for the pivotal role of working capital in business operations. Their research challenges the reality that working capital is not merely a financial metric but a substantial cost that puts the necessity for skilled management and decision making at the top position.

Working capital is not a one-size-fits-all concept but a dynamic element that needs careful thought, adjustment, and importantly, the expertise of skilled executives leading the way (Richards & Laughlin, 1980). This motivated Bhattacharya (1996) to segregate WCM efficiency into 3 parts, which are working capital management performance (WCP), working capital utilisation effectiveness (WCU), and overall working capital efficiency (WCE). It is interesting to see the influence of gender referring to the difference in decision-making styles, which certainly affects these three paths as WCM can be a short-term strategy that really needs quick action. Therefore, business organisations encourage exploring various options, especially on decision making to ensure the availability of a bombastic perspective

to achieve a profitable balance. Thus, the diversity of gender becomes crucial to get a variation and boost the monotone of leadership style. This also emphasises the strategic path where businesses strive to find the right balance of their working capital to suit either in the demand or supply side specific needs.

1.2 Overview of Gender Equality Policies in Organizational Contexts

Globally, various countries have introduced laws and quotas related to gender equality in board management, particularly in the board of directors for public companies. Garcia-Blandon et al. (2022) stated in their review that Norway became the earliest country by passing the law in 2003. The country tried to balance gender equality in public firms by exposing it for volunteerism at the beginning of the law. 40% of women's involvement in the board of directors is considered to comply with the law and it continued until 2006, then the rule became mandatory.

In 2008, with strong determined efforts, most of the companies complied with the law, because if they didn't, the companies were deemed to be penalised and would be delisted. This action shows how serious the Norway legislator's commitment is in balancing gender in the decision-making role as they believed this action could produce healthy economic activities. Researchers also stated through their observations that the strictness of the law on the involvement of women in top management varies according to the level of strictness. For example, European countries such as France, Iceland, Italy, Belgium, Germany, Spain, Portugal, Austria, and the Netherlands mandate a percentage in the range of 30% to 40% for women's involvement. On the other hand, developing countries such as India and Pakistan set only one woman in the board of directors is sufficient. While countries such as Australia and the United Kingdom always encourage a percentage of between 30%

and 40% of women in the board of directors, but it is not mandatory, and no penalty is imposed.

Recognising the importance of gender diversity in national development has promoted gender equality in leadership and is not only a rigid concern for individuals and corporations, but also stands out as a formidable global challenge acknowledged by various national governments. For instance, again, European Commission report which is, “Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of Regions,” (1996) highlighted the significance of addressing the challenge for equality in leadership for effective gender equality in National Gender Equality Strategy 2020–2025.

Furthermore, the United Nations, through its 2030 Sustainable Development Agenda, explicitly designates achieving gender equality in leadership as a key objective. This signifies a widespread international consensus on the crucial role of establishing gender balance in leadership roles and shows that Europe is at the levels in attaining gender balance of organisations. It can be a solid basis for comprehending the importance of examining gender diversity in leadership as it aligns with broader international endeavours that are always aimed at achieving sustainable and fair development.

Meanwhile, according to Ferdous et al. (2023), the Malaysian government also took a proactive step in promoting gender equality by endorsing a 30% female quota for high-ranking positions in the public sector in 2004 a year later after Norway. The public listed firms were given until 2010 to achieve this 30% target. Building on this initiative, in June 2011, again the policy to listed companies set a deadline of 2016 for them to ensure that there are at least 30% female board members. However, up until today, the latest development in Malaysia's gender equality policies is articulated in the Malaysia Code of

Corporate Governance (MCCG) 2021. And, according to MCCG-2021, all boards are obligated to maintain a minimum of 30% women representation. If there are any companies whose board members falling short of this quota, they are required to disclose the justification, proposed corrective measures, and an estimated timeline for compliance.

Back in January 2022, Bursa Malaysia had announced the requirement for public listed companies (PLCs) with market capitalisation of RM2 billion as of 31 December 2021, to appoint at least one-woman board members by 1 September 2022 and 1 June 2023. However, it is worth noting that several PLCs have yet to conform to the requirements. Yet the members of the board of directors have also pointed out shortcomings, especially in positions that require direct involvement with day-to-day operations. After all, all this only discussing the board of directors, if even board members are facing challenges, it emphasises the difficulty for those in positions below.

In fact, it is acknowledged that the Malaysian government, such as SDG 5.1.1 reported by Teoh (2023) and other organisations such as Bursa Malaysia always want to close the gender gap among decision makers. However, the main player of the national economic activities, which is companies listed on the Bursa Malaysia, are still far behind, whereas other countries have already made it mandatory and are subject to penalties if not complied with.

1.3 Navigating Economic Challenges: Impact on Malaysian Businesses

Amidst these efforts, Bhatia and Srivastava (2016) reported that spillover effects of the Russia-Ukraine conflict are observed in Malaysia, which is facing significant challenges due to both domestic and global factors. Since Malaysia is the third most competitive business location in the world (Bernama, 2022), the depreciation of the Malaysian Ringgit is disrupting the supply chain, causing a notable increase in the cost of building materials.

This, in turn, leads to heightened expenses for raw materials, finished goods, or services imported from abroad. Sarkar et al. (2008) even noted that the increase in the cost of goods can lead to a phenomenon called imported inflation.

These interconnected issues contribute to a host of difficulties for public listed companies in Malaysia, including increased costs, logistical complexity, and disruptions in the supply chain. The production sector, in particular, bears the brunt of these challenges. It is like a domino effect when one thing leads to another, creating a complex web of issues that businesses need to navigate strategically. This can make it more challenging for companies to manage their working capital effectively as they may need to spend more money on raw materials or other inputs. As cost escalates, it will directly harm the firm financially and going to affect the firm's profitability or could even result in financial loss. The impact of increased cost will result in less cash on hand to pay suppliers and employees.

In this complex scenario, the effective management of working capital emerges as a critical imperative. The escalating costs of building materials pose a significant threat, potentially compelling numerous companies to consider withdrawal due to sustainability concerns. This heightened risk is exemplified by notable industry players like Sunway Construction Group Berhad, S P Setia Berhad, and Gamuda Berhad, who have explicitly detailed the challenges stemming from supply chain disruptions and increased costs in their annual reports of 2021. These challenges, particularly intensified by the repercussions of the COVID-19 pandemic, making it clear how serious the situation has become.

The effective management of working capital as a concept highlighted by Zeidan and Shapir (2017) demands a delicate equilibrium between short-term liquidity requirements and long-term growth objectives, especially in the face of economic downturns. These challenges magnify difficulties in managing working capital effectively, as companies may need to

spend more on raw materials and inputs. Increased costs can directly impact a firm's financial health, affecting profitability and potentially leading to financial loss. With less cash available to pay suppliers and employees, businesses face additional strains.

Therefore, the dynamic integration of strategies addressing risk mitigation, liquidity, and leadership style becomes a cornerstone for fortifying the overall health and resilience of a company. Just as a balanced circulatory system contributes to the well-being of an individual, same as the harmonious coordination of these strategies ensures that a company is equipped to navigate challenges, adapt to changing circumstances, and pursue sustained growth over the long term.

1.4 Problem Statement

Notably, Notably, fluctuations in inventory management, coupled with pre-existing concerns over global supply chains in Malaysia, add complexity to the business dynamics. Additionally, according to the Malaysian Working Capital Report (2022), the primary objective of change management or restructuring, as identified by 65% of respondents, is to improve working capital efficiency. This underscores the recognised importance of optimising working capital as a key motivation for organisational transformation. Also, the report highlights a critical issue observed in a public listed company, in particular, the instability during the pandemic, which has caused its performance of working capital to deteriorate further. Supply chains exhibited a slow response to external shocks, leading to a substantial increase in working capital days and revealing a lack of agility in adapting to unprecedented events. Despite signs of recovery, nominal working capital showed minimal change, suggesting a potential disconnect between revenue growth and working capital efficiency.

This unresponsiveness of nominal working capital to external events raises pertinent questions about the role of corporate leadership. It is necessary to focus on working capital as a medium to prove this point because working capital can be likened to the main blood stream in a company aligned with the current persistence challenge in Malaysian businesses. This is closely related to decision-making styles, where effective leadership must understand and adjust working capital strategies to cope with unforeseen external changes.

Thus, the adaptive decision-making style focuses on two things, namely i) effective working capital management that can ensure the company remains competitive and stable in the face of economic challenges, and ii) the role of top executives, where they play a very influential role in shaping and implementing the company's financial and operational strategies (Nielsen, 2010).

Nielsen also stressed that, to study how team characteristics affect strategic decisions, it's important to focus only on the people involved in making those decisions. Three (3) important positions in managing the working capital management are Chief Financial Officer (CFOs) as a top financial leader, while the Chief Operating Officer (COOs) and Chief Executive Officer (CEOs) could influence strategic decisions involving resource allocation and company operations. They are directly involved in making day-to-day decisions in the company's operations, and tests of working capital effectiveness provide a true picture of individual performance either through working capital management performance (WCP), working capital utilisation effectiveness (WCU), and overall working capital efficiency (WCE).

By analysing their performance, the results can illustrate in more depth how gender differences will impact day-to-day operations. As such, it prompts an investigation into whether top executive gender diversity influences the adaptability and performance of

working capital in companies, aligning with the objectives outlined in the 2022 Working Capital Report by PWC.

Additionally, the observed conservative approach of female executives in working capital management policies suggests intriguing possibilities, and it might be influenced by various country-specific features. In China, for instance, where traditional values and hierarchical structures hold sway, female CFOs may adopt a conservative stance in line with societal expectations and established business norms. The collectivist nature of Chinese culture could contribute to a more cautious financial strategy, emphasising stability and resilience. The regulatory environment in China may also play a role in shaping the financial practices of female executives.

A significant discovery indicates that male CEOs tend to be more careful in engaging in actual earnings manipulation because of their risk-averse tendencies during a market downturn, whereas female CFOs are inclined to restrict actual earnings management during a market upswing (Li et al., 2021). While Malaysia known for its cultural diversity and evolving economic landscape, the conservative financial strategies of female executives might be influenced by unique factors. The way Malaysian society views and adheres to conservative financial principles, cultural norms, and government regulations can impact how cautious financial approaches are accepted and utilised. Malaysia's focus on developing its economy and embracing diversity may affect how gender diversity is managed.

This means, ensuring women's full participation in leadership roles is not only a step towards achieving gender equality but also a strategic advantage. It can enhance decision-making processes, including the management of working capital, which is vital for addressing challenges like inventory fluctuations and global supply chain disruptions. However, in Malaysia, the involvement of women in top management or executive positions is still far from sufficient.

Table 1.1: Women in Top Executive Positions in Bursa Malaysia (2021)

Position	Number of companies	Percentage of total firms
Chief Executive Officer (CEOs)	14	1.37%
Chief Financial Officer (CFOs)	14	1.37%
Chief Operating Officer (COOs)	49	4.8%
Total	77	7.55%

Source: (Bursa Malaysia, 2022)

Based on statistical observations in Malaysia as of 2021, it was found that, in total, 77 companies out of 1020 firms, or roughly 7.55%, have women in top executive officer roles. Specifically, there are 14 female CEOs, which accounts for approximately 1.37% of the total. Similarly, there are 14 female COOs, representing another 1.37%. Furthermore, there are 49 female CFOs, making up about 4.80% of the firms.

This raises deep questions about traditional views that may still be held by key industry players, who may think that only men are eligible for executive positions. It makes Malaysia look like having a tokenism theory issue, when companies only include individuals or minority groups in an environment or organisation as a sign of appreciation or to give the impression that the organisation is inclusive and fair, even though their participation may be symbolic or limited. In an employment or management context, tokenism may occur when organisations include individuals from minority groups without providing real opportunities for active involvement or significant influence as occurs in western countries (Lyness & Thompson, 2000).

This study serves as an extension to the research conducted by Hu et al. (2023), which focused on Chief Finance Officer (CFO) demographics and their influence on working capital policies in Chinese listed companies from 2001 to 2021. This research not only extends the geographical scope to Malaysia but broadens the examination to encompass

CFOs, CEOs, and COOs as parts of the top executive gender diversity matrix. What sets this study apart is a shade exploration into the gender diversity landscape, specifically comparing the working capital performance disparities between male and female top executives.

Besides, Minasyan and Tovmasyan's (2020) study explore gender differences in decision-making, underscoring the unique characteristics of women. In-depth analysis shows a marked difference, with men tending to be more confident and promoted more often in leadership positions. Empirically in Armenia, women like to make group decisions, while men prefer individual decisions. This is because women are often associated with attractive ways of communication and a good listener. They may be more open to other people's ideas and opinions, sparking a desire to make decisions together. Researchers also believed that key characteristics of women include analytical thinking, negotiation, honesty, and intuitive thinking. All these sensitive expressions enable to colour the discussion and encourage organisations to ensure leadership that reflects diversity and maximises the potential of everyone, regardless of gender.

The Malaysian Sustainable Development Goal (SDG) 5.1.1 emphasises women's full participation in leadership and equal opportunities. Through a combination of good policies and practices, the gender gap can be reduced. It means, investing in transformative policies is essential to achieving gender equality. These measures, especially if made mandatory, have the potential to challenge persistent gender stereotypes and preconceptions about the roles of women and men in society.

Gender diversity in senior leadership teams has been proven to enhance financial performance and effective working capital management. Studies conducted by McKinsey and Hunt et al. (2018) support this assertion by demonstrating a positive correlation between gender diversity and improved financial outcomes for companies.

The lack of gender diversity in top leadership teams is not only an ethical concern but also hinders efficient working capital management and financial performance. Unfortunately, in Malaysia, the percentage of women in top executive positions remains very low. Therefore, the research questions are formulated as follows:

1.5 Research Questions

- i. Does the gender of top executives significantly influence the firm's working capital performance, and if so, which gender has a more positive impact?
- ii. Does the gender of top executives significantly influence the firm's working capital utilisation, and which gender demonstrates greater effectiveness in this area?
- iii. Does the gender of top executives significantly influence the firm's overall working capital efficiency, and which gender contributes more effectively to improving this efficiency?

1.6 Research Objectives

1.6.1 General Objective

This study aims to investigate the direction of top executives' gender on the working capital efficiency of companies listed on Bursa Malaysia.

1.6.2 Specific Objectives

To accomplish the general objectives of this research, the following specific objectives are formulated:

- i. To assess the direction of top executive's officer gender toward firm's working capital performance. This involves analysing how gender influences the efficiency in managing short-term assets, such as receivables, payables, and inventory, to enhance working capital management performance.

- ii. To examine the direction of top executive's officer gender toward firm's working capital utilization. This will reveal which gender of top executives better drives the effective utilization of current assets to generate sales. This involves measuring the efficiency of converting working capital into revenue and analysing the role of gender in optimizing asset turnover ratios.
- iii. To investigate the direction of top executive's officer gender toward firm's overall working capital efficiency more effectively. This includes evaluating both the performance and utilization of working capital to understand if gender impacts the ability to achieve optimal working capital efficiency.

1.7 Organisation of the Study

The Chapter 1 outlines the background of studies, research questions, research objectives, and the significance of the studies.

The Chapter 2 will review related articles regarding the relevance underpinning theories of working capital, management of working capital components, top executives gender diversity, working capital management efficiency, and firm performance in the Malaysian context, empirical evidence on the relationship between working capital efficiency and profitability, literature gap, and literature summary.

The Chapter 3 is methodology that includes introduction, research design, populations, conceptual framework, measurement of variables, research hypotheses, data collection, data analysis, and chapter summary.

The Chapter 4 of this study delves into the data analysis, evaluating the hypotheses formulated in the second chapter. Initially, a graphical representation illustrates trends among firms with gender-diverse top executive teams and those without. The key metrics,

including the minimum (Min), maximum (Max), Median and Mean values, across three pivotal components (the Working Capital Performance Index and the other two explanatory variables) are presented.

Concluding the study, the Chapter 5 offers a comprehensive summary of the research outcomes, their implications, limitations, and recommendations for future exploration.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This literature review delves into prior investigations regarding the correlation between top executive's officer gender diversity and working capital management. The review commences by exploring the primary theoretical underpinning of this study, notably the Cash Conversion Cycle Theory and Upper Echelon Theory. It further presents empirical evidence that substantiates these theoretical frameworks. The review critically examines the influence of female representation in top executive roles on working capital management. It scrutinises previous research, questioning the depth of existing studies, and highlights diverse theoretical perspectives, particularly those related to decision-making diversity. This analysis aims to uncover whether the inclusion of women in leadership truly leads to more effective management or if it merely reflects broader social expectations. Through this thorough exploration of existing literature, the study endeavours to pinpoint any gaps in current knowledge on these subjects and establish a foundation for future research.

2.2 Top Executive's Gender

Top gender diversity in the corporate organisation refers to the inclusion of both men and women in senior executive roles within an organisation by (Bleidorn et al.,2016). Then, researchers believed, psychologically, men and women typically think in different ways. These differences can be seen in how they make decisions, process information, assess risks, and communicate. For instance, men might be more inclined to take risks and focus on achieving specific goals, whereas women might pay closer attention to details and consider the emotional and relational factors in decisions. These variations in thinking contribute to a broader range of perspectives when both genders are involved in leadership and decision-

making roles. Mason and Hambrick (1984) suggested that the personal traits of top managers influence their strategic decisions, which then affect the overall performance of the company. It emphasises a balanced representation of genders at the highest levels of decision-making, such as in the top executive officer. This diversity aims to leverage the unique perspectives, experiences, and thinking styles that each gender brings, ultimately leading to more comprehensive and effective strategic decisions and enhancing overall corporate performance.

Firms with a higher representation of women in their top executive teams tend to maintain a larger proportion of their total assets as cash (Adhikari, 2017). The tendency for companies with more women in top leadership to hold a larger portion of their funds as cash is linked to the perceived risk aversion of female executives compared to their male counterparts. The study uses the number of women in upper position roles as an indicator of the overall caution among managers. Female executives, on average, exhibit more careful risk-taking compared to their male counterparts, leading to a preference for safer strategies. The study's findings highlight that companies with more women in influential roles tend to adopt more conservative financial approaches, resulting in higher cash reserves. This additional cash serves as a precautionary buffer in the face of unforeseen events or economic challenges.

Besides, drawn from the insights of Bishop-Monroe et al. (2021) emphasises the pivotal role of the Chief Diversity Officer (CDO) in unlocking the advantages of diversity initiatives within organisations. Researchers then citing evidence from the McKinsey and Hunt et al. (2018) that underscores a 33% higher likelihood of strong profitability in companies with culturally diverse executive teams. From there, the review highlights a 21% increased likelihood of outperforming in profitability and a notable 27% higher likelihood of increasing firm value in organisations with diverse gender representation at the executive

level. In the end, researchers concluded that diversity is not just the right thing to do ethically but also a smart strategy for improving cash management, growing market share, and increasing the overall value of a company. This review emphasises the importance of the Chief Diversity Officer (CDO) in guiding organisations towards real economic benefits linked to diversity and inclusion practices. With varied insights, these leaders can optimise cash flow, ensuring liquidity without overstocking cash, and manage inventory more efficiently by balancing supply with demand. Additionally, their diverse approaches to receivables management can improve collection strategies and reduce bad debts.

Therefore, the diverse perspectives within a culturally and gender-diverse executive team can lead to more balanced and effective execution techniques in working capital management. This balanced execution can enhance the firm's profitability and ensuring that working capital is managed in a way that supports sustainable growth and operational efficiency. In fact, Julizaerma and Sori (2012) suggested that a lack of diversity can increase risk due to uncertainty in the external environment. Aljughaiman et al. (2023) also highlighted that the economic benefits and improved company performance resulting from the relevant characteristics of directors, including diverse ideas and inputs. Furthermore, Madi et al. (2014) believed that gender differences can improve company performance.

Most of the researchers believed that diversity could bring a balance in decision making. Alix Valenti et.al (2011) as cited by Iqbal et al. (2019) agreed that women's leadership is gaining trust and appreciation worldwide, suggesting that gender diversity is essential for effective corporate governance. However, a study done by Gao et al. (2017) points out that there is still a significant gap in the number of male and female leaders, indicating that gender diversity is not yet fully embraced. Hence, gender diversity is a distinct advantage, implying that there may be conflicting opinions regarding the influence of gender diversity on the performance of companies. Therefore, studies suggest that a higher presence

of women in leadership roles can lead to more effective supervision, reduced unethical behaviour, and a lower chance of financial result manipulation by minimising excess cash reserves.

2.2.1 Monitoring Roles

Research by Guizani and Abdalkrim (2022) emphasises the importance of female leaders in monitoring managerial behaviour and curbing opportunistic tendencies. Similarly, findings from Hu et al. (2023) suggest that female leaders, especially those in management positions, tend to adopt proactive strategies in managing financial aspects, such as the Cash Conversion Cycle (CCC). From there, the natural monitoring expertise that women possess allows them to detect early signs of potential issues in working capital management. Their attention to detail ensures that nothing is overlooked, with every operation adhering strictly to rules and plans. This observant nature stems from a woman's sensitivity, which is different from men's as they are believed to be more aggressive in solving cash management problems, but still rely on women to understand the consequences of any process or decision-making actions (Minasyan and Tovmasyan, 2020).

Adams and Ferreira (2009) as cited by Guizani et al. (2018) demonstrated that gender diversity in leadership roles enhances organisational monitoring and accountability, with a particular focus on long-term value creation. Darmadi (2011) found that companies with a higher percentage of female leaders with high education levels often exhibit a more independent organisational structure enhancing the monitoring of managerial behaviour and positively influencing financial metrics.

This means, the notion that female leaders in management play a crucial role in effective monitoring to strengthen their company corporate governance level. Their diverse

skills and psychological control, contribute not only to mitigating opportunistic behaviour but also to enhancing the efficiency of working capital utilisation.

2.2.2 Executive Roles

Research indicates that women typically exhibit a greater inclination towards risk aversion than men, which can influence their decision-making within the workplace (Mo & Lee, 2022). They also have found that firms led by female executives are more likely to adopt conservative and careful strategies. This is aligned with the Upper Echelons Theory that further supports this notion, positing that the personal characteristics of executives can greatly influence their decision-making (Hambrick, 2007). In the context of working capital management, research shows that firms led by women are more likely to adopt conservative policies to manage their working capital (Peni & Vahamaa, 2010). This approach is known as the conservative strategy hypothesis, which suggests that female executives are more likely to choose less risky and more conservative strategies to avoid stock-outs and ensure sufficient liquidity to meet short-term liabilities. That is why, a good understanding of empathy and the ability to handle conflict tactfully can assist in resolving complex situations, including resolving payment disputes or other issues that may affect the CCC (Rahman et al., 2016).

However, some studies have found conflicting evidence regarding the impact of gender on working capital management strategies. For example, Pasko et al. (2022) found that male and female executives have similar levels of concern about stock-outs and liquidity risk. This suggests that the behaviour of female executives may not be significantly different from that of their male counterparts in terms of managing working capital.

Yet, studies have challenged the notion in which women are inherently more risk-averse than men. For instance, a study by Schopohl et al. (2021) found that female executives

are not necessarily more conservative than male executives, but rather exhibit different risk-taking behaviour. The study also suggests that the relationship between gender and risk-taking is complex and depends on the specific context and individual characteristics of executives. Overall, although there are indications that female executives may be inclined towards adopting cautious approaches in managing working capital, the relationship between gender and risk-taking is not straightforward and requires further investigation.

2.3 Cash Conversion Cycle concept

The concept of the Cash Conversion Cycle (CCC) delves into the efficiency of a company's working capital management especially in terms of liquidity. According to Wang (2019), the Cash Conversion Cycle (CCC) serves as a crucial metric for evaluating the efficiency of a firm's management and its intrinsic need for external financing. To understand the concept, Figure 2.1 are constructed as below:

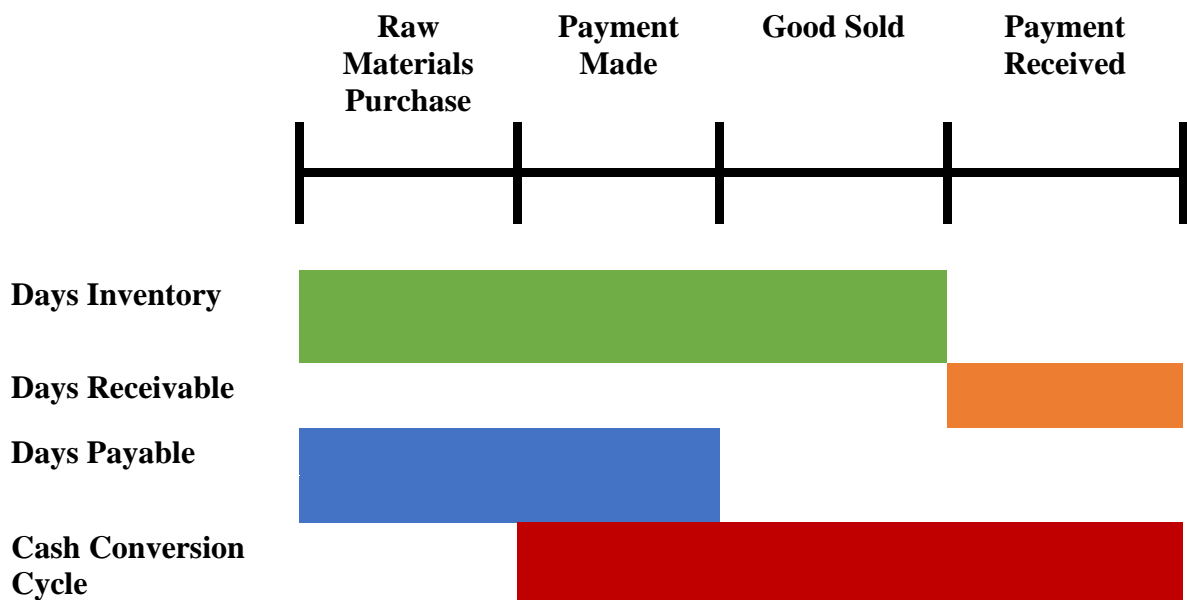


Figure 2.1: Cash Conversion Cycle (CCC) Concept

Figure 2.1 visually depicts the Cash Conversion Cycle (CCC), illustrating the time required for a company to sell inventory, collect receivables, and settle payables. Whereas it

reflects the number of days the company's cash is engaged in operational activities. The CCC holds importance in asset pricing considerations for various reasons (Chang, 2018).

Technically, the cash conversion cycle (CCC) involves calculating the number of days it takes for a company to convert its investments in inventory and other resources into cash flow from sales. The CCC is calculated by subtracting the number of days it takes to sell inventory (days inventory outstanding, or DIO) and the number of days it takes to collect receivables (days receivables outstanding, or DRO) from the number of days it takes to pay payables (days payables outstanding, or DPO).

In simpler terms, the discovery that companies with a shorter Cash Conversion Cycle (CCC) tend to yield better stock returns comes from cash conversion spread research. Researchers found that this CCC effect lasts for at least three years after sorting stocks based on their CCC. The key takeaway is that Cash Conversion Cycle work suggests that understanding a company's CCC can be like having a sneak peek into how its stock might perform in the future. The Cash Conversion Cycle (CCC) holds a strong correlation with various aspects of firms' short-term operational and financing activities. A higher CCC is closely associated with increased reliance on short-term debt to finance working capital, exposing firms to higher aggregate funding risks, particularly during periods of funding liquidity deterioration or financial crises.

Meanwhile, a longer CCC period increases the need for external financing and delays the supply of goods or services, affecting a company's risk and decisions related to capital budgeting, dividends, and investments (Muktiadji & Sastra, 2013). That is why maintaining an ideal balance for accounts receivable, inventory, and accounts payable is crucial for an efficient cash conversion cycle. Gorondutse et al. (2017) emphasise the importance of a shorter CCC for effective cash flow management, particularly for small and large businesses seeking financial stability and growth. Eljelly (2004) emphasises the CCC as a strong

indicator of a company's effectiveness in managing its working capital. Azhagaiah and Janakiraman (2009) define it as the amount invested in current assets associated with company profits. Ebben and Johnson (2011) endorse the CCC as a tool for measuring cash flow management, highlighting the need to balance working capital management for optimal profitability and liquidity.

The challenge of a lack of gender diversity in top executive teams creates a profound impact on companies' working capital management. Limitations in perspective and decision making can hinder operational efficiency, including optimising the CCC (Cash Conversion Cycle) in managing working capital.

A lack of gender diversity can result in a less holistic approach to working capital management strategies. For example, decisions regarding inventory, receivables, and payment obligations may not reflect the range of perspectives and experiences that a more diverse executive team can bring. As a result, companies may have difficulty achieving the ideal balance in maintaining CCC efficiency.

In efforts to optimise CCC, critical aspects such as inventory management, credit policies, and the receivables collection cycle must be managed carefully. Gender diversity can bring diverse insights to identify innovative and effective solutions in overcoming every challenge that arises in the working capital cycle. However, an imbalance in executive team diversity can result in a lack of comprehensive understanding of the entire CCC process.

As research focuses on the interaction between gender diversity and working capital management, a deeper understanding of how executive team composition can influence each stage of CCC will provide valuable insights. Therefore, this research encourages further exploration to identify concrete solutions that can increase the efficiency of working capital management through increasing gender diversity in top executive decision making.

2.4 Working Capital Management

Working capital management, including cash, inventory, and especially accounts, has a direct impact on the profitability, risk, and value of a firm. There are various theories that have evolved to explain and guide organisations in optimising their working capital practices. However, there are two main theories that discuss aspects of the distribution of working capital, namely the Trade-off Theory for liquidity and the Pecking Order Theory for debt (Jakpar et al., 2017).

Each theory offers a unique perspective on the relationship between financial results and working capital efficiency. However, this study focuses on the exploration of the Cash Conversion Cycle (CCC) Theory. As stated by Chintia and Prasad (2021), they found many studies that confirm the Cash Conversion Cycle Theory can be a comprehensive framework to understand the extent to which a company manages its cash flow related to its operating cycle. This becomes even more important because the management of working capital, including cash, inventory, and especially accounts, directly impacts a firm's profitability, risk, and value.

The uniqueness of the CCC Theory is the accuracy in measuring the company's operational efficiency and provides a clear picture of how the company can improve financial performance through more efficient working capital management. By emphasising the CCC Theory, this study is confident to provide a more in-depth and detailed view of working capital efficiency in the company context.

Meanwhile, the second theory used in this study is Upper Echelon Theory. According to Ting et al. (2015), the financial field has become a hot topic among researchers, such as in the study of leverage decisions by Modigliani and Miller (1958), Myers (1984), the theory of leverage decisions such as Trade-Off Theory (Miller, 1977) and Pecking Order Theory

(Myers and Majluf, 1984), as well as tests conducted across various regions including the United States by Titman and Wessels (1988), the Asia-Pacific region (Deesomsak et al. 2004), and Latin American firms (Cespedes et al. 2010).

However, many existing empirical studies do not consider the human factor in determining the firm's financial leverage (Subrahmanyam, 2007). In 2007, he concluded that traditional finance academics often voiced some general objections to behavioural finance. For example, theoretical behavioural models are quite ad hoc and designed to explain the facts of certain styles only, while behavioural models are formed through how a person reacts based on extensive experimental evidence and explain the evidence better than the traditional or every response have specific meaning. Another general consideration is, if there is any examination about behaviour, then the accuracy of its methodology is difficult to be accepted because the stigma of a person's behaviour is abstract and remain among researchers. Even many empirical works have been done through different time periods and cross-sectionally in various countries, it is often said that behavioural finance does not present a unified theory.

Thus, the selection of Upper-Echelon Theory (UET) for this study becomes very meaningful. This theory emphasises that the characteristics of individuals in the top management team, including educational and professional backgrounds, play an important role in making working capital management decisions. Research by Hrazdil et al. (2023) confirmed the importance of the Upper-Echelon Theory in analysing the relationship between leadership characteristics, board diversity, and working capital management efficiency. These results reflect the continuity and relevance of theory in answering the research questions of this study as well as provide a deeper insight into the context of working capital management and firm decisions. Therefore, until now, researchers continue to use the Upper-Echelon Theory as the main framework to explain leadership dynamics in the context of working capital management.

2.5 Underpinning Theories

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2.5.1 Cash Conversion Cycle (CCC) Theory

Table 2.1 refers to the extraction of literature review of Cash Conversion Cycle. The Cash Conversion Cycle Theory is a concept that was operationalised by Richards and Laughlin (1980) through their investigation at New Orleans, Louisiana to evaluate a company's efficiency in working capital management. They turned the idea of the cash cycle into something practical called the Cash Conversion Cycle (CCC) Theory. This theory suggests that if a company manages its cash flow well and keeps the activities related to cash in a short period, it will end up with companies having more capital to roll, stable profitability, and boosting the trust among suppliers. Richards and Laughlin's (1980) expect that this theory could help in recognising factors that influence financial capabilities that focus on the utilisation of cash such as borrowing capacity, investment of reserves cash, and what are the potential causes of fluctuations in a company's cash flows. Whereby, if a company's working capital management is not efficient and the cash cycle is too long, it can result in less profit and a lower overall value of the firm. The finding from their analysis indicates that a prolonged cash conversion cycle could result in higher investment demands, encompassing both cash and non-cash current assets. This, in turn, has the potential to hinder the company's capacity to fund these investments using immediate repayment obligations.

In a similar vein, Oseifuah and Gyekye's (2017) study also employs Richards and Laughlin's (1980) Cash Conversion Cycle Theory in investigating the impact of working capital management efficiency and its distinct components on the profitability of a sample comprising 75 non-financial firms listed on the Johannesburg Stock Exchange (JSE). Using the CCC Theory, the researchers want to see how effectively a company manages its working capital to meet cash flow needs through separate components of profitability. They also expected that a shorter Cash Conversion Cycle (CCC) can contribute to a company's profitability and value because it reflects efficiency in managing a company's assets and

liabilities. A longer CCC can indicate that a company needs more time to convert assets into cash. This can result in delays in collecting money from sales and require greater investment in working capital. Hence, as the findings confirmed that, if the CCC reduces, the shareholders' value will also increase, signifying CCC performance can be a signal for a good investment.

While, in research done in Romania, Cristea and Cristea (2018) found similar results, supporting the idea mentioned earlier. Whereas long cash conversion cycles may require additional financing to support daily operations. Then, interest costs and other financial costs also will increase when a company heavily relies on external sources of funds to maintain its liquidity. At the end, this may affect relationships with suppliers or creditors since they can become stricter on payment terms or impose additional fees, which could fall short of the target profit.

Next, by using this theory combined with Fama French factors to control for risk in the analysis of the CCC's impact on stock returns, it shows how different companies in the United States with varying CCC levels perform in the stock market Madyson McPherson (2018). As a result, if companies manage their money more aggressively, they tend to get more profits and perform better. Conversely, if companies have longer cash conversion cycles, they may generate lower stock returns, especially after considering the risks. Hence, the efficiency of a company in managing its cash will affect the equity investment performance.

In the Asian context, Pandeiro (2022) found that the cash conversion cycle has a negative effect on return on assets and return on equity in manufacturing firms in ASEAN+3 countries. Poor cash management can negatively affect ROA and ROE, but it may not be directly related to net profit margins. Researchers believed, this is due to an increase in the duration of the Cash Conversion Cycle (CCC) caused by slow inventory turnover or delays

in collecting receivables can tie up capital and have a negative impact on Return on Assets (ROA) and Return on Equity (ROE). This conclusion highlights that efficient management of the cash conversion cycle is an important factor in supporting optimal financial performance, because extending the CCC can result in wasted capital and a reduction in a company's financial performance.

The researchers continue to utilise Richards and Laughlin's (1980) Cash Conversion Cycle (CCC) Theory as the guiding framework for investigating the relationship between internal audit and working capital management in Malaysia. In the study conducted by Haran Karna Nidi and Amirul Hafiz Mohd Nasir titled "Do Internal Auditors Improve Firms' Working Capital Management? (2022)" in Malaysia, they are stating that Richards and Laughlin's (1980) Cash Conversion Cycle (CCC) Theory served as a framework that investigates the relationship between internal audit and working capital management. The prior study found a negative and significant relationship between internal audit cost and the cash conversion cycle (CCC) ratio. This suggests that an increase in internal audit cost improves firms' operational efficiency and effectiveness, thereby improving firms' CCC ratios. These findings support the theory that effective working capital management, as measured by the CCC, is vital for firm profitability, and that investment in internal audit can enhance the quality of services provided on the effectiveness and efficiency of working capital management.

This theory likely emphasises the importance of understanding and managing the time it takes for a company to complete its operating cycle and convert various components of working capital into cash. Prior related research that has been reviewed acknowledges the Cash Conversion Cycle (CCC) Theory as a valuable tool for assessing a company's efficiency in working capital management. Also, most researchers agreed that the CCC Theory provides a strategic framework in measuring the performance of working capital

performance. Therefore, CCC is considered a widely accepted measure in working capital management, providing a comprehensive insight into a firm's ability to manage its working capital. The study's relevance and applicability persist into 2022, as the researchers continue to utilise Richards and Laughlin's (1980) Cash Conversion Cycle (CCC) Theory as the guiding framework for investigating the working capital efficiency.

In fact, multiple studies, including those in Western, Eastern and the ASEAN+3 countries, suggest that a shorter CCC positively correlates with profitability and shareholder value. Effectively managing the cash conversion cycle is seen as contributing to rolling capital, stable profitability, and enhanced trust among stakeholders. Besides, the consistent findings across studies reviewed indicate that a prolonged CCC can lead to higher investment demands, which hinder a company's capacity to fund investments, and potentially result in lower profitability and firm value.

Meanwhile, it can provide an insight into the relationship between working capital efficiency and overall firm performance. The study acknowledges that a lack of gender diversity in top executive teams may contribute to operational inefficiencies, impacting the optimisation of working capital. That is why the employment of CCC Theory in this study is expected to provide a framework to evaluate the consequences of strategic decisions influenced by diverse leadership compositions.

2.5.2 Upper Echelon Theory

Mason and Hambrick (1984) introduced the Upper Echelon Theory in 1984, suggesting that an organization's top management team's biological characteristics can influence its strategic choices and performance. This theory has been widely examined in the context of strategic decision-making and organizational performance. It posits that the characteristics of the upper-echelon team, including age, tenure, and functional backgrounds,

can potentially affect organizational performance by influencing their decision-making process.

The decision by Hrazdil et al. (2023) to incorporate the Upper Echelon Theory as a fundamental framework in their analysis throughout the 2006 to 2019 study emphasizes the theory's crucial role. This intentional choice underscores the importance of recognizing how the upper echelon's dynamics influence executive decision-making and, consequently, significantly impact the quality of financial reporting.

Fundamentally, the investigation explores the potential link between gender diversity among Chief Executive Officers (CEOs) and Chief Financial Officers (CFOs) and the overall quality of financial reporting. This relevance is heightened by the joint responsibility of certifying financial statements and annual disclosures held by both CEOs and CFOs in publicly traded companies. The underlying hypothesis posits that gender-diverse dyads of executives can bring diverse perspectives and professional scepticism into the complex process of financial reporting.

Executives tend to make decisions based on their own worldview. If top executives have a conservative temperament, they may tend to maintain the status quo, avoid major risks, and be reluctant to adopt significant changes in business strategy or operations. This can influence company policies related to innovation, diversification, or restructuring, which in turn can affect the efficiency of working capital management and company performance. By understanding the conservative nature of top executives, we can relate it to strategic and policy decisions that can directly influence the workings of capital in the organization.

By recognizing the significance of the Upper Echelon Theory, the study gains a theoretical lens through which to examine how the gender composition of top executive teams influences the optimization of working capital efficiency. This theoretical perspective guides the exploration of how diverse leadership characteristics impact strategic decision-

making processes related to working capital, thereby offering valuable insights into the nuanced interplay between gender diversity, operational dynamics, and financial performance. Ultimately, the application of the Upper Echelon Theory enriches the study's theoretical foundations and enhances its capacity to uncover meaningful patterns.

2.6 Understanding Cash Conversion Cycle (CCC) and Top Executives Officer Gender

Over the years, numerous scholarly studies have highlighted the positive impact of women in leadership roles within organisations. This focus on female leaders, particularly those overseeing management responsibilities, has consistently demonstrated advantages for effective corporate governance. Investigations conducted by researchers such as Campbell and Minguez-Vera (2008), Carter et al. (2010), and Cambrea et al. (2020) consistently affirm that companies benefit operationally and financially when there is a higher representation of female leaders.

Feminine stereotypes often include strengths in communication, building relationships, and understanding the needs of others (Rahman et al., 2016). In the CCC context, the ability to establish good relationships with suppliers, customers, and other interested parties can assist in negotiating more favourable payment terms.

Despite the significance of the CCC as a mechanism for managing working capital, limited analysis has been conducted, focusing on the role of women in top executives in influencing the cash conversion cycle and overall working capital management effectiveness. There are many studies regarding corporate governance factor and cash conversion cycle, for example, study conducted by Ajanthan and Kumara (2017), which examined board size, CEO duality, board composition and board meeting towards cash conversion cycle. The study's findings found that gender diversity within the governing bodies and board meetings of Sri Lankan listed companies reflects a modest mean value of

0.059, with a range spanning 0.44. This suggests a limited representation of women, on average, in top executive roles.

Notably, the study highlights a maximum value of 12 for board meetings, averaging at 4.95, indicating proactive efforts by some companies to enhance the participation of women in governance structures. This presents a positive trajectory towards improved gender diversity in Sri Lankan companies, which is heading in a favourable trend. However, the observed range and average underscore the existing room for improvement, particularly in cultivating gender diversity among top executives. Such enhancements are crucial for a more comprehensive exploration of its potential impact on the Cash Conversion Cycle (CCC).

The observed tendencies of female executives to rely on less leverage and make less risky financial decisions can have implications for the optimisation of working capital (Aljughaiman et al., 2023). Aljughaiman's research, particularly the noted tendencies of female executives to employ less leverage and make less risky financial decisions, holds relevance when viewed through the lens of the Cash Conversion Cycle (CCC) Theory in working capital management.

The CCC is a crucial financial metric gauging the time required for a company to convert its investments in inventory and other assets into cash inflows from sales. In the context of female executives' financial decision-making, their inclination towards reduced leverage and risk aligns with the Days Payable Outstanding (DPO) component of the CCC. Opting for a more conservative approach in financing and investments may extend the time taken to settle payments to suppliers, resulting in a higher DPO.

This prolonged payment period positively influences the overall CCC, empowering the company to exercise better control over its cash flow and working capital. Women in

leadership tend to have a long-term view and consider the impact of their decisions on the sustainability of the business. In managing CCC, this can be reflected in a more sustainable strategy, including fair payment policies to suppliers to build lasting relationships.

Moreover, the stability and lower earnings volatility associated with the decision-making of female executives may contribute to more predictable revenue streams, impacting the Days Sales Outstanding (DSO) component of CCC. A consistent revenue flow can potentially shorten the DSO, further optimising the overall CCC. A good understanding of empathy and the ability to handle conflict tactfully can assist in resolving complex situations, including resolving payment disputes or other issues that may affect the CCC.

However, along with these challenges, a lack of gender diversity in executive decision-making can carry risks. Too much caution or delay in making decisions can be detrimental to operational efficiency, and CCC management is no exception. While the direct application of CCC Theory to female executives' financial decisions necessitates further empirical validation, these insights suggest a potential relationship between their financial behaviours and the efficiency of working capital management.

2.7 Top Executive Gender Diversity: Extraction of Literature Review for Implications for Working Capital Management Efficiency and Firm Performance in Malaysia

Studies on working capital management (WCM) in Malaysia provide a deep understanding of the influencing factors and working capital management strategies in the context of local companies. Al-Mawsheki's (2022) study from 2010 to 2016 emphasises the effect of efficient working capital management and working capital policy on the added economic value of the company. The effectiveness of working capital management is

evaluated through the reduction of the cash conversion period, which includes demand and supply activities.

The study of Hameer et al. (2021) focuses on the vital role of working capital management in Malaysian public companies. One of the important elements is the inventory days, which reflects how long the company needs to sell its stock. This study shows a significant negative relationship between inventory days and company performance, indicating that a company's ability to optimise the inventory cycle can improve operational performance. Through a technical perspective, the abovementioned studies contribute to the understanding of short-term operational decisions and risk management in the context of working capital. A proper working capital management strategy can play an important role in improving liquidity, reducing financial risk, and improving overall company performance.

Trends in the study of working capital management (WCM) in Malaysia show a continuous emphasis on exploring the dynamics of the relationship between the company's operating results and the efficiency of using short-term financial resources. Studies by Al-Mawsheki (2022) from 2010 to 2016 highlight the importance of efficient working capital management and the influence of board composition on WCM strategy.

A study by Hameer et al. (2021), involving data from 2009 to 2018 highlights the level of effectiveness of working capital management (WCM) in the operational and financial results of companies in Malaysia. This string of trends reflects the concentration of research in the last decade and reflects the continued interest in exploring the relationship between working capital and company performance.

Although the literature is not directly related to studies on top executives' gender and working capital efficiency, those studies provide a basis for further exploration of how

gender diversity in high positions affects the working capital management decisions of companies in Malaysia.

2.8 Conceptual Framework

Based on Based on the literature review conducted, a conceptual framework was built, linking Top Executives Officer Gender Diversity (TEG) to three aspects of Working Capital Management Performance (WCP), Working Capital Utilisation Effectiveness (WCU), and Working Capital Efficiency Effectiveness (WCE).

In this study, an independent variable is top executives' gender (TEG) measured using the binary approach and is expected to influence the dependent variables, which are Working Capital Performance (WCP), Working Capital Utilisation (WCU), and Working Capital Efficiency (WCE). And each aspect (WCP, WCU, and WCE) could reveal different patterns or outcomes.

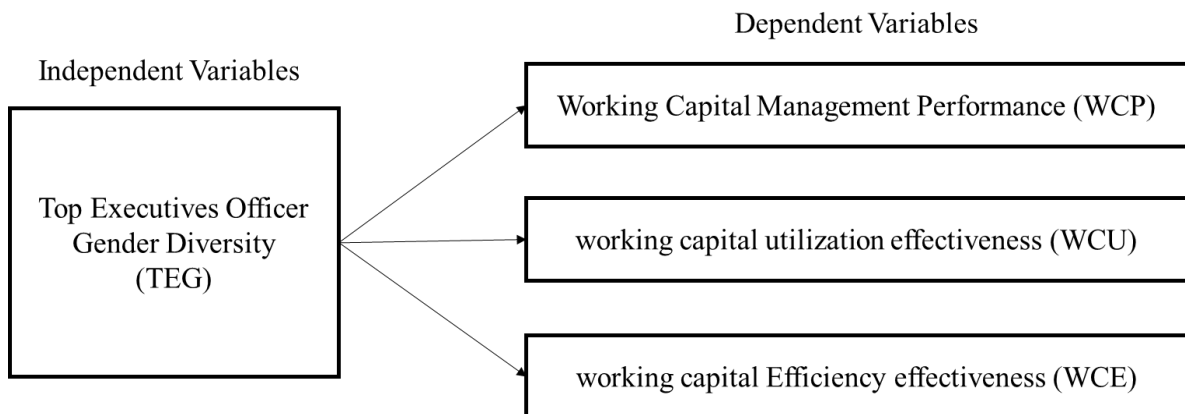


Figure 2.2: Conceptual Framework of the Top Executives Officer Gender Diversity and Working Capital Efficiency

2.8.1 Top Executives Officer Gender Diversity (TEG):

TEG, representing the gender of top executive positions for CEOs, CFOs, and COOs is expected to influence the effectiveness of working capital. According to Upper Echelon

Theory (Mason and Hambrick, 1984), the backgrounds referring to gender of top executives could influence their decision-making processes and strategic approaches variously.

2.8.2 Working Capital Management Performance (WCP):

Working Capital Performance (WCP) was designated as the dependent variable in this study to illustrate the direction of gender diversity among top executives on short-term working capital performance. Hence, the integration of Upper Echelon Theory with CCC Theory clarified whether male or female executives were more likely to improve WCP, considering that managing short-term assets requires quick decision-making.

2.8.3 Working Capital Utilization Effectiveness (WCU):

Working Capital Utilisation (WCU) also became the dependent variable to explore which gender of top executive officer can be linked to the company efficiency in managing their current assets to generate sales. The combination of Cash Conversion Cycle (CCC) Theory and Upper Echelon Theory framed the analysis of whether the expertise in managing the utilisation of current assets was influenced by the gender of male or female as top executive officers.

2.8.4 Working Capital Efficiency Effectiveness (WCE):

Working Capital Management Efficiency (WCE) is treated as a dependent variable, where, Upper Echelon Theory and Cash Conversion Cycle Theory (CCC), offers a comprehensive understanding of how working capital efficiency, covering both performance and utilisation aspects is towards female or male top executive female or male supervision. This means that TEG and WCM are signals for the decision-making styles, risk tolerance, and financial strategies of the companies.

2.9 Literature Gap

The literature review reveals a significant gap in current research related to the impact of top executives' gender diversity on working capital efficiency. While existing studies acknowledge the broader importance of gender diversity in organisational leadership, they often lack a specific focus on the dynamic's relationship within top executive teams and their direct influence on working capital. Many studies adopt a demographic approach, incorporating various variables beyond gender, thereby diluting the specific effects of gender diversity at the highest organisational levels. Moreover, the prevalent concentration of research in manufacturing industries limits the generalizability of findings across diverse sectors.

The review also identifies a methodological gap, as traditional working capital ratios, criticised for their limitations and mathematical errors, continue to dominate the literature. Meanwhile, the current literature on working capital efficiency lacks a comprehensive examination of the methodological intricacies and potential limitations of the Working Capital Efficiency Index. Existing studies predominantly reference this method without delving into its broader effects on other variables, or without establishing clear connections or dependencies on other critical factors influencing working capital management making it challenging to construct a robust research conceptual framework centred solely on the Working Capital Efficiency Index.

Also, the lack of application of the Working Capital Efficiency Index represents the main variable in empirical research created a void in the literature relating to an in-depth understanding of the impact of each variable under the working capital efficiency index. Previous studies tend to focus more on methodological aspects and do not explore the substantive relationship between working capital efficiency and various other dependent and independent variables.

By addressing this gap, this study not only scrutinises the unique implications of the Working Capital Efficiency Index but also contributes to the development of a research framework that considers its effects on multiple variables, providing a more holistic perspective on working capital management.

And, some might think that gender solely will not determine the effectiveness of working capital and it still depend on other characteristics of the executives but, to bring gender equality as a decision maker will not disregard the undeniable benefits it can offer especially in understanding of how leadership style of different gender will be the important factor to drive companies in optimising their operating investment control and business performance, particularly within Malaysia's manufacturing sector.

2.10 Summary of Literature

The related literature review for each section has been analysed whether it supported or contradicted the idea of this study. There is quite a lot of related literature starting from the very old article from 1958 until 2023. This literature review tries to shape a revolution within the working capital management as well as gender diversity within top executive teams. The use of old prior research in this study indeed supports all elements discussed in this study as the topic is also derived from the combination of real time cases, Malaysian business context, and literature review. Besides, the findings are obtained from various regions around the world and this literature review tries to benchmark itself with the western and neighbouring countries to have a variety of perspectives. The concept of the Cash Conversion Cycle (CCC) delves into the efficiency of a company's working capital management especially in terms of liquidity. There are various theories that have evolved to explain and guide organisations in optimising their working capital practices. Cash Conversion Cycle Theory is important to understand and manage the time it takes for a

company to complete its operating cycle and convert various components of working capital into cash.

However, many existing empirical studies do not consider the human factor in determining the firm's financial leverage. Also, most of the researchers agreed that a lack of diversity can increase risk due to uncertainty in the external environment. Thus, the Upper Echelon Theory combined with CCC Theory applied to be a foundation for this study as companies must consider the unique circumstances of gender difference in leadership and adopt a tailored approach to working capital management.

Besides, a lot of researchers recommend that this kind of study should consider factors such as the nature of their industry, the size of the company, and the economic conditions of the country or region where they operate. In terms of findings, most of the findings companies with more women in influential roles tend to adopt more conservative financial approaches, resulting in higher cash reserves. Therefore, female leaders are believed to bring diverse skills and technical knowledge, and they are highly relying on less leverage or make less risky financial decisions but can have implications for the optimisation of working capital.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methodology used in this study. It starts with a research design followed by hypothesis development, the data collection process, and testing procedures. Besides, the final samples are also presented together with the measurement of variables exposed precisely according to each variable and element used in hypothesis testing later in the findings chapter. This chapter will also include the discussion of literature related to each variable and data analysis

3.2 Research Design

This study will utilise a quantitative research approach, which involves the use of numerical data to test hypotheses and analyse the relationships between variables. The data collected is the secondary data, obtained from the financial statements of publicly listed companies in Malaysia. The Working Capital Efficiency Index developed by Bhattacharya (1996) is used to evaluate the effect of independent variable (TEG) which measured using the binary approach towards dependent variables (WCP, WCU, and WCE). The logit regression was applied using statistical software Eviews13 to generate the result. This study involves the collection of data from publicly listed companies in Malaysia for 20 years, from 2001 to 2021. Hence, the final presentation of the data is in panel data format, where each company's data is arranged sequentially based on the alphabetical (A-Z) order and year (smallest to largest).

3.3 Hypotheses Development

3.3.1 Working Capital Performance

A cohort of 15 companies within the pharmaceutical sector, Prasad and Lakshmi (2018) employed the index method to assess working capital management efficiency over the period 2006 to 2016. Utilising the index method, they determined that 10 firms demonstrated commendable proficiency in working capital management, while 5 firms needed to enhance their capabilities in this regard. Rahman's (2023) evaluation of the performance index for ten selected four-wheeler automobile companies in India from 2011-12 to 2020-21 revealed an average performance index below 1 or near 1, with an average of 0.30. On a company-specific basis, the average ranges from 0.89 to 0.19 indicate a collective challenge for selected passenger car manufacturers in efficiently managing their current assets.

Relating this to the hypothesis that top executives' gender significantly influences the firm's working capital performance, the study seeks to delve into how the gender composition among top executives correlates with the adeptness in managing current assets and their impact on sales. By quantifying the relationship between sales and individual components of working capital, the research aims to provide nuanced insights into the performance dynamics influenced by gender diversity. The Cash Conversion Cycle (CCC) Theory and Upper Echelon Theory complement this hypothesis by emphasising the strategic importance of effective working capital management, as reflected in the performance index, and how diverse leadership can contribute to this efficacy.

H₁: Top executives' gender has a positively significance influence on the firm's working capital performance.

3.3.2 Working Capital Utilization

Extending the insights from Kaur and Singh's (2013) study, which underscored the adept management of working capital and the utilisation of current assets by 14 companies in the capital goods sector in India, the current research broadens its scope to the automobile industry. Rahman's (2023) investigation covering the period from 2011-12 to 2020-21 managed to uncover selected passenger car manufacturing companies in the automobile sector that exhibit notable efficiency in utilising current assets for sales generation. The observed variations in efficiency levels across companies underscore the nuanced dynamics of utilising current assets to generate sales. Drawing on the Upper Echelon Theory, Hypothesis 2 posits that companies with heightened efficiency in working capital management, particularly in current asset utilisation, are more likely to be led by top executives who contribute to a diverse and dynamic decision-making process. This hypothesis finds support in the Cash Conversion Cycle (CCC) Theory, emphasising the pivotal role of effective working capital management in driving increased sales and overall financial performance. Thus, Hypothesis 2 is formulated as below:

H₂: Top executives' gender has a positively significant influence on the firm's working capital utilization

3.3.3 Working Capital Efficiency

Afza and Nazir's (2011) study assessing the efficiency levels of working capital management in 22 cement firms in Pakistan revealed consistent strong performance over 20 years, with an efficiency index average exceeding 1 in 18 years. In a similar vein, Valipour and Jamshidi (2012) explored 72 listed firms in pharmaceutical, chemical, non-metal minerals, and base metal industries. Their regression analysis demonstrated a significant and positive impact of each working capital management efficiency index on overall asset

efficiency within the discussed firms, while the Cash Conversion Cycle did not exhibit a significant effect. Drawing insights from these findings, the study posits that female directors may contribute significantly to the effective risk mitigation approaches within capital management practices. This hypothesis aligns with existing literature, highlighting that female executives tend to adopt a more conservative approach (Adhikari, 2017), leading to lower financial reporting errors and more cautious business operations. In particular, gender brings a unique and risk-averse perspective that may align with the principles of effective capital management outlined in the CCC and Upper Echelon Theory. Building upon this, Hypothesis 3 is described as follows:

H₃: Top executives' gender has a positively significant influence firm's overall working capital efficiency.

3.4 Data collection

The data collection process for this study covers the period from 2001 to 2021 with the population of 1020 Malaysian listed companies as of 2021. The selection of a sample for this study 20 years starting from 2001 until 2021 aligned with the proactive efforts of the Malaysian government in promoting gender equality, as emphasised by Ferdous et al. (2004). Furthermore, companies listed on Bursa Malaysia provided detailed and audited financial reports (Alsayani, Mohamad & Al-Matari., 2023). In other words, it ensures the compliance with strict regulations and allows for relevant analysis of the impact of gender diversity in top management. These companies are also key players in the economy, and their decisions can significantly influence the market. Furthermore, this selection aligns with the Malaysian government's initiatives to promote women's participation in top position, making this study more relevant in the Malaysian local context and providing deeper insights into the progress made towards achieving gender equality.

Following that, this study will employ a purposive sampling method similar to prior research conducted by Tongco (2007) as it focuses on companies with female top executives. The participants are selected based on specific criteria rather than randomly. This means that, it is the non-probability sampling that allows for the selection of knowledgeable individuals who can provide valuable insights, rather than choosing participants randomly. The data were obtained from the Bureau van Dijk's (Orbis) database and will then be cross-checked with their annual report to ensure the validity of the data. The data collected are listed as follows:

- Female Chief Operating Officer Name
- Female Chief Financial Officer Name
- Female Chief Executive Officer Name
- Total Assets
- Net Sales
- Operating Revenue
- Total Current Assets
- Net Inventory
- Work in Progress
- Raw Material
- Finished Goods
- Work in Progress
- Raw Materials
- Finish Goods
- Inventory Prepayment and Other Adjustments
- Net Accounts Receivable

- Accounts Receivable
- Doubtful Accounts and Allowances
- Total Others Current Assets
- Other Current Assets
- Prepaid Expenses and Advances
- Deferred Charges
- Total Cash and Short-Term Investments
- Cash and Cash Equivalents
- Short-Term Investments

Moreover, data from matching companies of approximately the same size or operating revenue used to ensure a fair outcome. This method was also used in Keller's et al. (2023) study to identify gender differences among top business executives in the United States using a large dataset of matched executives and employers spanning the past quarter century. The financial statements to be used for collecting relevant financial data are the balance sheet and income statement. This involves choosing firms listed on the stock exchange with a female Chief Executive Officer, female Chief Operating Officer, or female Chief Financial Officer.

This position is directly involved in the daily operation of working capital management even CEOs would be involved in the final decision part, but still important in framing the working capital decision. Following this, companies with male Chief Executive Officers, Chief Operating Officers, or Chief Financial Officers will be selected as long as they operate within the same industry and exhibit comparable sizes, with a permissible difference of approximately 15% in either total assets or operating revenue. This rigorous methodology is implemented to ensure the fairness and suitability of the collected data for the sample.

The proposed data collection period is from 2001 to 2021, spanning 20 years. The selection of a sample for 20 years was considered for this study to align with the proactive efforts of the Malaysian government in promoting gender equality, as emphasised by Ferdous et al. (2004). The sample is taken a little early to observe if there are companies that already have a woman in their top executive teams before the policy promotion was launched in 2004. So, it is better not too far until five years back to strike a balance between capturing sufficient historical data and ensuring that the observations remain relevant and applicable to the current context.

This duration will enable a comprehensive analysis of the financial performance of the selected companies, which is necessary for identifying trends and patterns. Collecting data over a longer period will also allow for the examination of potential changes in the relationship between gender diversity and financial performance over time, as well as the impact of external factors such as economic trends and changes in regulations. The collected data will be entered in the Microsoft Excel file to calculate the index for each variable and other relevant metrics. The resultant data will be further analysed using EViews12, a statistical software package commonly used in econometric analysis, to conduct descriptive and regression analyses.

3.5 Final Samples

After all the data is downloaded, they must go through the data screening and cleaning process. First, download the companies with female top executives from Orbis, verify and cross-reference the name, position, and gender details in the corresponding annual reports for each company and year. Then, compile a list specifying the years when female top executives were identified. After that, proceed to find matching companies within the

same sector through stock market data. Then, confirm the presence of only male top executives in these matching companies.

After that, ensure the matching companies are comparable in size or operating revenue to maintain relevance in the analysis. At this stage, companies in real estate investment trust industry (REITs) are excluded as they do not represent a real business that directly impacts on the working capital performance. The dataset with the missing values and those that were coded “N.A” or not available is then deleted. Excluding these firms provides the true nature of firms with or without females in their top executive’s line, later in the analysis. As an example, a dataset from 2021 initially included 77 companies with female top executives. After refining the dataset, the sample size was reduced to 52 companies. Ultimately, by matching companies with and without female executives, the final analysis encompassed a total of 104 companies, accurately reflecting the true influence of top executives on working capital performance. Lastly, calculate the formula of three indexes and take out the value that turns out incalculable. Hence, the final samples after the cleaning process are as follows:

Table 3.1: Total Final Sample

Year	Total companies
2001	2
2002	4
2003	2
2004	4
2005	8
2006	4
2007	2
2008	10
2009	8
2010	12
2011	16
2012	22

Table 3.1: continued

2013	24
2014	30
2015	36
2016	64
2017	74
2018	70
2019	102
2020	90
2021	104
Final Samples	688

3.6 Measurement of Variables

The conceptual framework for this study is based on one dependent variable which is top executive gender that is expected to have a significant impact on the independent variable (working capital management performance or WCP, working capital utilisation effectiveness or WCU, and overall working capital efficiency or WCE).

Instead of using WCM ratio approach, this research chooses to adopt Working Capital Efficiency Index develop by Bhattacharya (1996) that separated the WCM efficiency into 3 parts, which are Working Capital Management Performance (WCP), Working Capital Utilisation effectiveness (WCU), and overall Working Capital Efficiency (WCE) as its ability to show the overall efficiency of working capital management. This method is also an alternative to the working capital ratio which has been criticised by several authors (Kasiran et al., 2016).

These critics stated that the use of WCM ratio by Zimon and Tarighi (2021), using liquidity, CCC ratio and turnover ratio to evaluate the WCM strategies of small and medium firms in Poland found the method too static and relying on parameters. Besides, the CCC by

Richards and Laughlin's (1980) ratio was unable to provide a comprehensive picture due to the potential for mathematical errors. The criticism also highlighted a perceived inappropriate focus on the total amount of funds, a lack of focus on total funds invested, and deficiencies in the differentiation of weights for each component of working capital. Similarly, Goel and Sharma (2015) as cited by Habib and Mourad (2022) suggested that using the weighted CCC might not provide accurate results due to the exclusion of relevant data into the WCC formula when they examined the change in working capital management efficiency in the Indian manufacturing sector. Using the Working Capital Efficiency Index, this research seeks to overcome these limitations and present a more holistic approach to assessing the efficiency of a company's working capital as the latest studied by Rahman (2023). This method is expected to provide a more accurate and comprehensive understanding of how companies manage their working capital

3.6.1 Independent Variables

Top executive's gender (TEG) is measured by binary approach. Where, 1 is defined as companies with female top executives and 0 is defined by companies without female or having male top executives only. This helps in ensuring that our predictions stay between zero and one, as suggested by Stock & Watson (2019). Demir and Akkuş (2015) also employed this approach, and they believed that this approach is applicable for the study that has two categories or outcomes through its dependent variable. Besides, a study on "Accuracy in credit card fraud detection by Atchaya & Somasundaram (2023) showed that logit regression reached a mean accuracy of 93.59%.

These results provide a strong basis for choosing logistic regression over other methods such as Naive Bayes in this research, especially since the findings from 2023 indicate its relevance. In this study, using binary values to describe the gender of the chief executive is a way to simplify the data and formulate the model. This study might predict the

likelihood of a good result of (WCP, WCU and WCE) towards female or male chief executives. Therefore, the number of final samples must be in even number to show the fairness of evaluation as the result will reveal the real direction of the prediction whether to the zero or one.

3.6.2 Dependent Variable

i. Working Capital Management Performance:

The Working Capital Performance variable will use Working Capital Performance Index (WCPI) to measure a firm's ability and manage its working capital by comparing its current assets such as and current liabilities. The higher the WCPI value, the better the firm's working capital management performance. Generally, an overall WCPI value greater than 1 indicates efficient management of working capital. It shows that companies can generate revenue from production that is greater than the capital they use to buy current assets. To evaluate the working capital management performance variable, the WCPI will be calculated for each company in the sample using the formula provided as below:

$$(WCPI) = I_s \frac{\sum_{i=1}^N \frac{W_{i(t-1)}}{W_{it}}}{N} \quad \text{Equation 3. 1}$$

Where;

W_i = Individual group of current assets

I_s = Sales Index defined as: $\frac{S_t}{S_{t-1}}$

N = Number of current assets group

$i = 1, 2, 3, \dots, N$

ii. Working Capital Utilization Effectiveness:

The Working Capital Utilisation Index (WCUI) will be used to measure the second independent variable which is WCU. It is used to measure a firm's efficiency in using its working capital to generate revenue. The higher the WCUI value, the better the firm's working capital management performance which means, they can use all the current assets within the timeframe and less waste inventory which fully meet the target sales. Generally, an overall WCUI value greater than 1 indicates efficient management of working capital. The WCU will be calculated for each company in the sample using the following formula:

$$WCUI = \frac{A_{t-1}}{A_t} \quad \text{Equation 3. 2}$$

Where,

A = Current Assets/Sales

iii. Working Capital Efficiency:

Lastly, the Working Capital Efficiency Index (WCEI) will be used to measure the WCE. It is the combination of WCPI and WCUI. The higher the WCEI value, the better the firm's working capital management performance. Generally, an overall WCEI value greater than 1 indicates efficient management of working capital which combined the efficiency in managing and utilisation of current assets in generates high sales. WCEI can be calculated by:

$$WCEI = (WCPI * WCUI) \quad \text{Equation 3. 3}$$

Overall, the use of multiplication in the Working Capital Efficiency Index (WCEI) formula is due to its precision in reflecting overall efficiency. Unlike addition or averaging, which can obscure or dilute inefficiencies, multiplication ensures that any shortfall in WCUI or WCPI is clearly shown. This method has also been applied in similar studies, such as by

Goker et al. (2020), Rahman, A. (2023), Ceylan (2020) and Valipour, H., & Jamshidi, A. (2012), to study captures a fuller picture of how these factors interact and contribute to the firm's financial health. This holistic view allows for better identification of trends, patterns, and insights that might be missed when considering each component in isolation.

3.7 Data Analysis

This This section focuses on the hypothesis testing and interpretation processes. There are two stages involved, which are descriptive analysis and regression analysis. The analysis will be conducted using EViews12 software, which is widely used in econometric analysis as it can perform various descriptive statistics and data analysis techniques.

3.7.1 Working Capital Efficiency Index

The analytical approach using the Working Capital Efficiency Index (WCEI) becomes an important metric in evaluating financial stability and operational efficiency in organisations. This study examines the performance of working capital for companies with only male and with the diversify top executives' gender, with a specific focus on the minimum (Min), maximum (Max), Median, and average values (Mean) for three important components, namely Working Capital Performance Index (WCPI), Working Capital Utilisation Index (WCUI), and Working Capital Efficiency Index (WCEI). This analysis delves into how gender diversity among company leaders influences working capital performance.

3.7.2 Descriptive Analysis

At the initial stage of this research, the descriptive analysis will be conducted to provide an overview of the sample data: the summary of the working capital performance index, working capital utilisation index, and working capital efficiency index and the trend

of participation of female top executives within 2001 to 2021. This method is commonly used in finance (Fisher, 2010) and will enable the identification of trends and patterns in the performance of the companies. The data obtained from the descriptive analysis will form the basis for the upcoming stages of the study.

3.7.3 Diagnostic Test

To ensure the robustness and validity of the logistic regression model, several diagnostic tests were conducted. These tests aimed to verify that the model's assumptions were met and that the results would be reliable for drawing valid conclusions. For logistic regression, the assumption of normality for residuals is not required as the method estimates probabilities rather than predicting continuous values. Therefore, the focus was shifted to confirming that other critical assumptions such as the absence of multicollinearity and the linearity of the logit were adequately addressed. By performing these diagnostic tests, the study ensured that the logistic regression model was both robust and accurate, and this is crucial for making informed decisions based on the analysis.

i. Linearity

The first step involved evaluating the linearity of the relationship between the independent variables and the dependent variable. This was achieved by assessing the Pearson correlation coefficients to ensure linearity is essential as it validates the logit function correctly and represents the relationship between predictors and the outcome (Darkwah et al., 2019). Researchers also stated that, if the Pearson correlation between two independent variables exceeds the 0.8 threshold, it could indicate redundancy, meaning the variables may be too similar in what they measure.

This redundancy can lead to multicollinearity, which can distort the results of regression analyses, making it difficult to determine the individual effect of each variable on the dependent variable. In such cases, the standard errors of the coefficients may increase, leading to less reliable and less precise estimates, ultimately weakening the overall validity of the study's findings.

ii. Multicollinearity

Although multicollinearity is generally less critical in logistic regression compared to linear regression, it can still affect the stability of coefficient estimates and their standard errors (Allison, 1999). To address this, Variance Inflation Factors (VIFs) were calculated for each independent variable: Top Executives' Gender (TEG), Working Capital Performance Index (WCPI), Working Capital Utilisation Index (WCUI), and Working Capital Efficiency Index (WCEI). Identifying and resolving multicollinearity issues ensures that the model's coefficients are stable and interpretable.

When considering multicollinearity, a common rule of thumb is that if the Variance Inflation Factor (VIF) exceeds 10, it may indicate significant multicollinearity issues. This suggests that one or more independent variables are highly correlated with others, which can distort the results of the regression analysis. In such cases, it becomes challenging to determine the individual impact of each variable on the dependent variable, leading to less reliable and less precise estimates.

3.7.4 Logit Binary Regression

This study uses a logit binary regression model initiated by Darlington in 1968 and it continued to be updated until 2017, including the addition of information from the book *Regression Analysis and Linear Models* published in 2017 (Darlington & Hayes,

2017). Fernandes et al. (2020) also stated that the use of binary dependent variables is common in political science empirical research as evidenced in various situations such as voting behaviour, election results, compliance with policies or otherwise, the categorisation of democracy or non-democracy, the initiation of war or otherwise, and appeals against court decisions.

In all these cases, logistic regression is the most suitable technique for modelling the variation of the dependent variable based on the set of independent variables. In the same way as used by prior research, De Lucia et al. (2020), which relies on a logit regression model to identify whether ESG initiatives affect the financial performance of public European enterprises where, the model maps input features to predicted output values according to algorithm computation. The null hypothesis was rejected when the p-value associated with a coefficient is below the significance level (e.g., 0.05), which means statistically significant impact of the independent variable on the dependent variable.

A model, companies with female top executives and companies without female in their top executive is the independent variable or so called the response variable. Meanwhile, Working Capital Performance (WCP), Working Capital Utilisation (WCU) and Working Capital Efficiency (WCE) act as independent, explanatory and predictor variables. The full logit regression models used in this study are as follows:

$$\text{Log} \left(\frac{p}{1-p} \right) = \beta_0 + \beta_1(WCP) + \beta_2(WCU) + \beta_3(WCE) \quad \text{Equation 3.6}$$

Where,

$$\text{Log} \left(\frac{p}{1-p} \right) \quad = \quad \text{log odds ratio}$$

$$p \quad = \quad \text{probability}$$

β_0	= the intercepts that represent the log-odds of top executive's gender diversity when all explanatory variables are zero
$\beta_1, \beta_2, \beta_3,$	= the coefficients for independent variables
βWCP	= Working capital performance index of firm
βWCU	= Working capital utilization index of firm
βWCE	= Working capital efficiency index of firm

Through this model, the study aims to assess the study hypotheses using the following rule of thumb for accepting or rejecting the hypothesis in the context of logistic regression confirmation. this model, the study aims to assess the study hypotheses using the following rule of thumb for accepting or rejecting the hypothesis in the context of logistic regression confirmation.

i. Rule of Thumb:

- If the results are positive, it implies a higher probability towards females in TEG. Conversely, if the results are negative, it signifies a higher probability towards males in TEG.
- Additionally, when examining significance (p-value more than 10% sig level), a result is considered statistically significant if the p-value is smaller than 10%. Otherwise, it is regarded as not statistically significant.

This is aligned with the study by Darlington and Hayes (2017), where even the most basic inferential test can be thought of as a comparison between a model and data. The straightforward nature of this approach renders it an appealing probability significance threshold, provides relevant flexibility, and reflects the reality of binary outcomes.

CHAPTER 4

FINDINGS & DISCUSSIONS

4.1 Introduction

This chapter discusses the results obtained in the previous chapter. It starts with an analysis of the time trends of time trends analysis, followed by a descriptive analysis, the descriptive analysis among the weighted composite working capital performance index, and finally the result of logit binary regression analysis.

4.2 Time Trends for Companies with Female and without Female Top Executive's

This section shows a time trend for companies with women and without women changes in recent years from 2001 to 2021. This trend is also generated through the total accumulation across the entire sample, namely 361 companies with female top executives and 21,059 companies without female as top executives. Indeed, the number of samples in this section is not the same as the sample described in Section 3.4: Final Samples, as this section takes all companies with female chief executive officers even though the financial data is incomplete or in the REITs industry. This is because the main purpose is to see the number of companies that have female chief executive officers only and does not involve other analyses. The number of samples for this study is almost the same as the existing study conducted by Keller et al. (2020), which aimed to examine gender gaps in executive representation and compensation for the US firms. For this study, there was a very large significant gap between the line for companies with female top executives and companies without females as top executives, but if a similar trend is being done in a few decades in future, surely the line will come closer to crossing each other. This will reflect the narrowing of the gender gap in company leadership over time

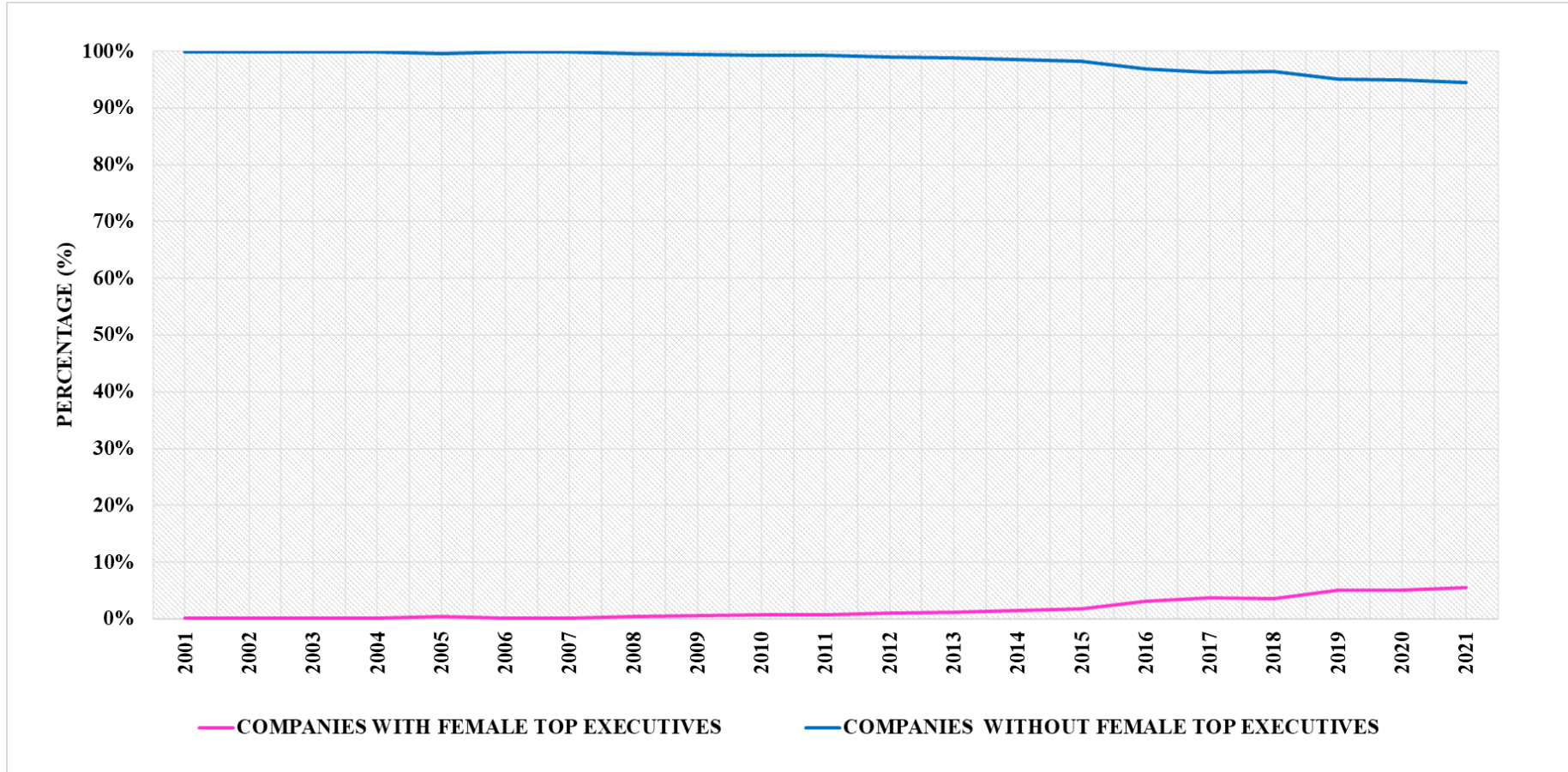


Figure 4.1: Time Trends for Companies with Female and without Female Top Executive’s

Source: Authors own construction (2024)

Figure 4.1 shows the time trends over the past two decades shed light on a persistent gender gap in leadership roles within Malaysian listed firms, particularly in the circumstance of top executive gender diversity. This pronounced and enduring disparity raises concerns about the lack of equality and suggests old beliefs and biases regarding the suitability of women for leadership roles.

In 2001, a mere 0.1% of companies had female top executives, while a staggering 99.9% were led by males. This stark contrast underscores a prevalent belief that women may be less suitable for executive roles, contributing to the slow progress in achieving gender equality. The subsequent years witnessed a gradual increase in the percentage of companies with female leaders, reaching 5.6% in 2021. While there is a modest improvement, the dominance of companies without female leaders, ranging from 94.4% to 99.9%, highlights deep-rooted challenges and biases.

The shift from 0.1% to 5.6% indicates a positive trajectory, but the slow pace of change is evident. The overwhelming presence of companies without female leaders suggests that traditional gender roles and stereotypes persist in influencing leadership appointments. The reluctance to appoint women to top executive positions may be fuelled by deeply ingrained societal norms. Traditional gender norms and stereotypes may persist in the corporate environment, influencing the perception of women's leadership capabilities.

Malaysia, like many other countries, has long-standing cultural norms that may associate leadership traits more closely with masculine qualities. This bias can impact hiring, promotion, and leadership selection processes, perpetuating a male-dominated top executive landscape (Campuzano, 2019). This finding also is in line with the opinion of Keller et al. (2020) regarding the lack of time flexibility and friendly corporate culture towards women in the profession of top executives that may explain why the number of female executives is

low, especially if women value time flexibility more or face more disabilities in competitive and male-dominated environments. In this situation, these factors may be an obstacle for women to reach executive positions in the organisation.

The significant increase from 1.8% in 2015 to 3.1% in 2016 in the number of companies with female leaders can probably be attributed to the efforts and initiatives implemented by various parties, including the Securities Commission, Bursa Malaysia, and industry players, as stated in the National Transformation Programme Annual Report, 2016. Efforts to boost the local stock market and drive more vigorous growth, including a focus on women's involvement in the business sector, could be important factors that drive this increase. Efforts to enhance the involvement of women in the business sector, including concentration on the board of directors, may have been recognised as a strategic approach to achieve diversity and improve the efficiency of company management. Similarly, the implementation of the Green Lane Policy that triggers more efficient market effectiveness and access can be a factor that gives confidence to investors and companies to be more actively involved in the stock market. This may have had a positive effect on the confidence to appoint women leaders. The involvement of qualified futures stock market brokers and general participants in the derivatives market can also create more opportunities and workflows involving women leaders. With the combination of these efforts, it may have created a more conducive climate for the growth and increased presence of women in executive positions in 2016.

There was a significant increase in the involvement of women in executive positions from 2020 to 2021, with an increase of 0.5 percentage points. Although this increase may seem modest, at the corporate level, it may reflect greater efforts to achieve gender balance and more effective leadership selection. The COVID-19 pandemic, by bringing pressure and significant changes in the business environment, may have been the main driver for

reflection and improvement in company management. Otherwise, it is also possible that if there is no COVID-19 attack, the number of women's involvement in holding top executive positions will increase sharply because the Malaysian government along with several other responsible bodies are actively raising compliance with Malaysia's gender equality policies.

However, the sluggish pace of change in the Malaysian corporate landscape, with less than 10% annual growth in female top executives, limits the realisation of these potential benefits. Hence, the gap between the two lines in Figure 4.1 above will take a long time to cross. If firms do not move towards involving more women in executive positions, especially in the board of directors or top executives it may face some risks and challenges in strategic management of companies and lower the cash ownership. As without a balanced presence in the leadership team, the risk of abuse of power or conflict of interest can increase. Ultimately, working capital efficiency will decrease as the risk of unethical or irresponsible actions spirals out of control as the conservative role of women diminishes.

4.3 Descriptive Statistics

This analysis delves into the working capital performance of both with female and only male as top executives, specifically examining the minimum (Min), maximum (Max), and mean and median values for three essential components: Working Capital Performance Index (WCPI), Working Capital Utilization Index (WCUI), and Working Capital Efficiency Index (WCEI).

Table 4.1: Descriptive Statistics for the Sample Firms

Companies With Female Top Executives			
	WCPI	WCUI	WCEI
Mean	1.284	1.091	1.444
Median	1.115	0.800	0.920
Minimum	0.330	0.170	0.160

Table 4.1: continued

Maximum	4.890	7.910	24.160
Companies With Only Male Top Executives			
	WCPI	WCUI	WCEI
Mean	1.283	1.158	1.384
Median	1.090	0.820	0.950
Minimum	0.070	0.170	0.050
Maximum	5.566	8.280	10.413

Source: Authors own construction (2024)

Table 4.1 indicates the descriptive statistical result for the entire samples using the working capital index and financial ratio. Both companies with female and only male top executives have almost the same mean for the Working Capital Performance Index (WCPI) which are 1.284 and 1.283, respectively. It indicates gender of top executives portraying a solid working capital performance as the value is more than 1. Additionally, companies with male top executives are believed to be more excellent in utilising its working capital (1.158) compared to companies with female top executives (1.091). Even though companies with female top executives have lower mean, but still, it is greater than 1. So, both genders have no difficulties in utilising their working capital in a good way. However, companies with female top executives have a higher mean for the Working Capital Efficiency Index (WCEI) compared to companies with male top executives which is 1.444 and 1.384.

As for the median, companies with males are dominant in each variable. However, there are not so obvious variations between both companies in the working capital efficiency index. The middle number for WCPI, WCUI and WCEI are greater than 1 indicates even the middle number shows both companies already reach a good level of working capital efficiency.

Companies with females' top executives also dominate in all the variables with a minimum value of all variables. But both minimum values are lower than 0.5 for the working capital index. The large gap between min value and maximum value for the working capital index means there are still companies that are having difficulties in managing their working capital. Lastly, the maximum value for the entire variables is conquered by companies with male top executives.

However, the highest maximum value is generated by companies with female top executives through WCEI with 24.160 which exceeds the other two maximum values for WCPI and WCUI from companies with male top executives. Thus, in general, Malaysian listed firms show an obvious inconsistent performance in managing working capital management as it shows a very large gap between minimum value and maximum value.

4.4 Diagnostic Analysis

Following the completion of the descriptive analysis, the study proceeded with the necessary diagnostic tests to ensure the validity of the logistic regression model. The diagnostics focused on evaluating multicollinearity and linearity, both critical for maintaining the integrity and reliability of the regression results. These tests were conducted to confirm that the assumptions required for logistic regression were satisfied, setting the stage for the subsequent analysis.

4.4.1 Pearson Correlation Coefficient Analysis

Following the descriptive analysis, the study evaluated the linearity of relationships between the TEG, WCPI, WCUI and WCEI.

This evaluation was conducted using Pearson correlation coefficients to ensure that the relationships adhered to the assumptions necessary for logistic regression.

Table 4.2: Pearson Correlation Coefficient Analysis

	GENDER	WCP	WCU	WCE
GENDER	1.0000			
WCP	0.0552	1.0000		
WCU	-0.0562	-0.2584	1.0000	
WCE	0.0367	0.4329	0.5774	1.0000

Source: Authors own construction (2024)

Based on the Pearson correlation analysis as shown in the Table 4.2 above, there are no significant signs of redundancy among the independent variables, as no correlations exceed the 0.8 threshold, which typically indicates redundancy issues. The moderate correlation between Working Capital Utilisation (WCU) and Working Capital Efficiency (WCE) is not high enough to cause concern. However, to fully ensure the absence of redundancy, additional analysis such as the Variance Inflation Factor (VIF) could be considered.

4.4.2 Multicollinearity Analysis

The next step in the analysis involved assessing multicollinearity, which, although less critical in logistic regression than in linear regression, can still influence the stability of coefficient estimates and their standard errors. To ensure the reliability of the results, the study conducted a Variance Inflation Factor (VIF) analysis to detect any potential multicollinearity among the independent variables. The table below presents the uncentered VIF values for the variables examined.

Although multicollinearity is less critical in logistic regression compared to linear regression, it can still affect the stability of coefficient estimates and their standard errors. By identifying and resolving any issues with multicollinearity, the study ensured that the results would be reliable.

Table 4.3: Variance Inflation Factor (VIF) Analysis

Variable	Uncentered VIF
WCPI	2.180179
WCUI	3.268195
WCEI	4.450644

Source: Authors own construction (2024)

Table 4.3 above shows all these VIF values are well below the common threshold of 10, which typically indicates the presence of multicollinearity issues. Since none of the variables exceed this threshold, it suggests that multicollinearity is not a serious concern in your model. Therefore, there is no significant redundancy among the independent variables, and the model should be stable in terms of the relationships between the variables.

All necessary assumptions for logistic regression, including linearity of the logit relationship and independence of observations, have been checked. With these conditions confirmed, the logistic regression has been conducted to analyse the direction of TEG towards WCP, WCU, WCE in the study.

4.5 Logit Binary Regression Analysis

By using logistic regression, the study sought to assess how changes in the gender composition of top executives could influence these financial performance indicators. This analysis provided insights into whether the presence of female or male executives was direct to either WCP, WCU or WCEI.

Table 4.4: Logit Regression Result

Dependent Variable	TEG	
	Coefficients	P-value
WCPI	-0.266395	0.1268
WCUI	-0.295147	0.0387
WCEI	0.218843	0.0570
C	0.364966	0.0645

Source: Authors own construction (2024)

According to the findings presented in Table 4.2, the logit binary regression analysis indicates that gender differences among top executives (TEG) do not exert a statistically significant influence on working capital management performance (WCPI). The negative coefficient observed (-0.266395) and the associated p-value of 0.1268 surpass the 10% significance level. Consequently, this implies that variations in top executives' gender do not significantly impact changes in working capital performance. Therefore, it is evident that neither female nor male top executives can be conclusively associated with variations in working capital management.

Meanwhile, in the context of Working Capital Utilisation (WCU), gender differences demonstrate a significant influence on the efficiency of working capital utilisation. This is supported by a negative coefficient of (-0.295147), and the associated p-value of (0.0387) which is below the 10% significance level. In essence, the observed gender disparity among top executives (TEG) significantly affects the changes in Working Capital Utilisation (WCU) efficiency, as indicated by the result. In other words, it implies that male top executives are statistically and significantly linked to certain patterns or changes in how current assets are utilised to drive sales performance.

However, when considering the overall effectiveness of working capital management (WCE), the logit regression analysis indicates that the probability of achieving higher Working Capital Effectiveness (WCE) is associated with female top executives. The positive coefficient of 0.218843, coupled with a p-value of 0.0570, falling below the 10% significance level, supports this observation. Consequently, this affirms the trend identified in the descriptive statistics, revealing that female top executives exhibit higher max value of WCEI compared to their male counterparts.

In conclusion, logit binary regression analyses suggest that gender alone cannot fully account for variations in the aspects of working capital performance. Hence, other factors, beyond gender differences, may play a significant role in shaping these financial outcomes.

4.6 Discussion on the Findings

4.6.1 Top Executives Gender Effect on Working Capital Performance

The logit regression results show that gender diversity does not have a probability of being associated with Working Capital Performance. The coefficient is negative and statistically not significant. This means that the proportion of male top executives is not strong enough to influence the changes in working capital performance. This result answers the first objective of the study even though Hypothesis 1, which states that top executives' gender significantly influences the firm's working capital performance, cannot be accepted. This may be due to the complexity and variation in the data used because in some cases, the tendency of uncontrolled external factors can cause results that do not meet expectations. For example, significant differences in working capital performance between genders may be influenced by certain industry characteristics that are not accounted for in the analysis.

Meanwhile, the variations or changes of net accounts receivable, doubtful accounts, and other current assets such as prepaid expenses, advances, and deferred charges might not be severely affect the working capital performance. Whereas the amount is relatively small compared to the company's total assets and liabilities to influence the changes in working capital performance. This means that, the majority of the samples are still inefficiently managing the budgeting of inventory purchase while ensuring that all the productions are sold within the time frame. When the sales are smaller than current asset, it could lead to a longer cash conversion cycle as said by Muktiadji and Sastra (2013) a longer CCC period increases the need for external financing and delays the supply of goods or services, affecting

a company's risk and decisions related to capital budgeting, dividends, and investments. Therefore, the samples of either companies with female top executives or without female top executives might have external financing and delay the supply of goods or services.

The finding also does not align with Guizani et al. (2018), where gender diversity in leadership roles enhances organisational monitoring and accountability, with a particular focus on long-term value creation. This might be due to the original circumstance of the current asset being kept temporarily. Which means, the decision made to manage all aspects of current assets must be done immediately and uncertainties depending on the current nature of the demand for the sales.

Also, based on the finding, systematic ways of work style or even fancier does not really impact the good level of sales. This is aligned with the Upper Echelon Theory that brings diverse perspectives and professional scepticism to financial reporting. Darmadi (2011) also agreed that companies with a higher percentage of female leaders often exhibit a more independent organisational structure and higher education level enhancing the monitoring of managerial behaviour and positively influencing financial metrics. Higher education of female top executives would be beneficial for the completion of administration obligations, such as compliance with reporting standards, but not for the operational actions to aggressively increase sales. In other words, good reporting is not enough to prove that it can improve working capital performance. In any way, managers should be creative in facing any changes that require quick decisions, for example, the use of analytical tools served by Industrial Revolutions 4.0 (IR4.0). It is true that the ability to collect and analyse data in real-time from various business areas is a positive step. However, true success comes when an ordinary human can take wise actions based on the insights gained from all the advanced tools. The ability to make effective and bold decisions remains a key skill in managing a company and still depends on human decision.

In the Malaysian business landscape, envisioning increased representation of women in executive roles may not have highlighted yet on the potential benefits in terms of working capital performance. The existing nature of Malaysian companies may consistently demonstrate proficiency in working capital management, aligning with the unique skills women leaders bring not much improvement. Gender of leaders still cannot be confirmed by strong communication and collaboration skills. This is because both female and male play a pivotal role in orchestrating effective coordination among diverse departments involved in working capital management. They need to emphasise that clear communication extends to fostering better inventory management and facilitating timely receivables collection. However, this commitment seems not effective towards the gender of the top executive's officers. Both can only do well if they can negotiate and discuss with the debtors, and thus might still depend on a person's communication skills.

Additionally, prior research indicates that women leaders tend to adopt a more conservative risk management approach, strategically mitigating uncertainties associated with working capital decisions. This conservative stance not only minimises financial errors but also reduces doubtful accounts, thereby ensuring a stable and resilient working capital structure. To complement this risk-conscious approach, female leaders exhibit a meticulous attention to detail, and this is particularly crucial in managing components such as accounts receivable, inventory, and other current assets. This meticulousness is instrumental in optimising the working capital structure and pinpointing areas for improvement. However, good reporting and transparency become irrelevant if they cannot utilise the reports.

Furthermore, the unique perspective brought by female leaders emphasises adaptability and innovation in financial strategies in securing high sales. This emphasis translates into the embrace of new technologies and innovative approaches to working capital management, enhancing overall operational efficiency. Differ with the result, their

inclination towards inclusive decision-making fosters a collaborative environment, leveraging diverse viewpoints to address challenges associated with working capital still cannot be proven. The inclusive approach expects to promote a holistic understanding of financial operations, ultimately leading to the formulation of better strategies for managing current assets. In essence, the interconnected strengths of female leaders ranging from effective communication to risk management, attention to detail, innovation, and inclusivity, which collectively contribute to the optimisation of working capital efficiency within organisations but unfortunately still cannot be proven by Malaysians.

4.6.2 Top Executives Gender Effect on Working Capital Utilization

The observed higher mean Working Capital Utilisation Index (WCUI) among male executives may be attributed to their more risk-tolerant approach, which is commonly associated with traditionally male-dominated sectors in Malaysia. In industries where men dominate leadership positions, executives often adopt strategies involving higher risk-taking, aiming for aggressive sales targets and expansion initiatives. This risk-tolerant behaviour is likely reflected in how male executives manage individual components of current assets.

This is in line with the logistic binary regression result, where the results show that gender diversity has a probability of being associated with Working capital performance. The proportion of males at the executive level is correlated with increased performance in working capital utilisation (WCUI). Thus, Hypothesis 2, which states that top executives' gender has a significant impact on the firm's working capital utilisation is accepted. It answers the second objective of the study and generally male top executives manage to control the use of all the current assets within the timeframe and having zero or very small amount of waste inventories and fully meet the target sales.

This means, in day-to-day factory operations, companies with male top executives may incline to maintain sufficient inventories, anticipating increased demand or market fluctuations. This approach could be influenced by a more relaxed attitude towards risk and a willingness to take on

higher levels of inventory. Through this, it can be said that the existing actions of the male top executive in Malaysia seems are able to exceed what is required by the inventory policy as proposed by Prastacos (1981) which has an important role in determining how often and how large orders are placed by the stock location (Hospital Blood Bank) to the supplier (Regional Center). This policy is the best decision-making strategy for management to ensure the availability of sufficient stock to meet most of the demand, without having to result in excessive levels of expiration on stored products. But with their aggressive behaviour as stated by Schopohl et al. (2021), perhaps they did not just follow the policy advice, but caused the decisions made to be agile. Otherwise, the top executive females are believed, their tendency to follow hundred percent of the policy is undeniable.

Additionally, in managing accounts receivable, male executives might adopt a more lenient credit policy, fostering stronger relationships and easy to make friends due to less dramatical scenes surrounding male relationships with people around them, for example with customers or suppliers could stimulate high sales. In other words, this could be because of their sociable and easy-going nature, making connections with a broad network of suppliers and customers is male top executives' natural superpowers.

Also, with their superpowers in cash management, male top executives in Malaysia might be more willing to pursue growth opportunities, even if it involves maintaining lower cash reserves. This inclination aligns with the general notion that men, in certain situations, tend to exhibit a more risk-tolerant attitude. This result may be due to the more tolerant approach to risk that male executives generally take, especially in traditionally male-dominated sectors. For example, in product production, innovative inventory management for flexible adaptation (Fekete & Hartványi, 2018) and in situations where the production process cannot be predicted precisely, especially in industries such as liquid metal, a tolerance on partial package sizes can be given for items made to order (MTO mode).

This is intended to reduce wastage, or high costs involved if planned inventory quantities cannot be followed. This tolerance represents an element of green inventory, where production order quantities will be adjusted to customer needs. Instead, female top executives might be taking a longer

time to do documentation to describe that they cannot provide what the customer needs and stick to the normal flow. A lack of ability to adapt to changing job demands or a lack of ability to take new initiatives can hinder the transition to higher leadership positions of females (Ely et al., 2011). Thus, it really highlighted that, in making day-to-day decisions to utilise the current asset by male top executives tend to take higher risks, perhaps with the goal of achieving more aggressive sales targets or larger expansion initiatives.

These results align with the finding of Goker (2020), indicating proficient utilisation of working capital elements will result to effectively generate sales. The study's relevance extends beyond specific regions, emphasising the global importance of proficient working capital practices in navigating and thriving within dynamic market environments. Also, this is in line with the conservative strategy hypothesis, which says that female executives tend to choose a less risky and more cautious approach in working capital management, with the aim of preventing stock outs and ensuring sufficient liquidity for short-term liabilities. Their ability to deal with conflict tactfully and empathically also contributes to the resolution of complex situations, including those affecting the Cash Conversion Cycle (CCC) (Rahman et al., 2016). Pasko et al. (2022) showed similarities in male and female executives' concerns about stock-outs and liquidity risk, challenging entrenched concepts of gender differences.

Hence, although it is possible for women to adopt conservative strategies in working capital utilisation, it is important to acknowledge that every individual, including male executives, can also practise prudent financial practices as confirmed by this study. This supports the idea that differences in working capital management may be more complex than just gender stigma and depend on individual circumstances and characteristics.

4.6.3 Top Executives Gender Effect on Working Capital Efficiency

For the WCEI (Working Capital Efficiency Index), female top executives, on the other hand, demonstrate a slightly higher mean in WCEI compared to companies without

female top executives. This suggests that, on average, female executives may exhibit a slightly higher efficiency in managing working capital.

Whereas logit regression results show that gender diversity have a probability of being associated with a firm's working capital efficiency. The proportions of females in top executive's officer teams, may have a positive influence on the overall efficiency of working capital. It answers the third objective of the study and thus, Hypothesis 3, which states that top executives' gender has a significant impact on the firm's overall working capital efficiency, is accepted.

The results of the study by Nastiti et al. (2019) suggest that the participation of women in supervisory or executive positions increases investment in working capital, shows a cautious nature towards risk and prioritises liquidity. Although female top executives as discussed above are likely to be afraid to face a big risk but does not mean the preparations made are very strict. It is just that it might not be for a short term and moderate level of risk. Females are synonym with overthinking as saying by Van Werven et al. (2017); it clearly shows that they have anticipated something that might happen in future more than thinking on the frequent but lower risks.

That is the reason why females rarely put themselves into any sort of bet in real life compared to men. In fact, they will try their best to build a defensive wall that may be beyond the reach of male executive minds. It could be indicative of the diverse approaches that male and female executives adopt in managing working capital. Female executives, on average, may employ strategies that enhance the efficiency of working capital utilisation, such as streamlined inventory management, optimised receivables collection, or judicious cash flow management.

Moreover, after answering the second hypothesis, companies without female top executives are more reliable in securing the high sales with their utilisation skills. However, this revelation raises the thought that women may have overall competence, not only in managing the use of current asset resources, but also in handling whole aspects. This reinforces the view that the protective and overthinking nature of women may make them not only focus on one direction. It becomes clear when they are able to lead the entire team to achieve sales without standing out in one particular aspect as exactly as the saying goes, "that's how women are". Their soft personality or lack of participation in voicing opinions in decision-making discussions is clearly shown, but they can bridge the gap with subordinates who actually carry out the operations. In Malaysia, most companies usually have middle managers of the operations department who are men due to their masculinity.

The gendered political economy of control and resistance on the shop floor of the multinational firm in a case-study from Malaysia by Elias (2005) studied male top executives and found that they are less close to subordinates because of selfishness, so even if a decision has been made, it does not mean that all subordinates follow the decision. As Ragins and McFarlin (1990) said where, the opposite gender as leaders creates harmony relationships between superiors and subordinates. But the discrepancy might be attributed to industry-specific dynamics. Different sectors may require varying working capital management strategies, and if female top executives' executives are more prevalent in industries where efficient working capital utilisation is crucial, it could contribute to the observed higher mean WCEI for female executives.

Additionally, it is essential to consider the influence of individual leadership styles. Female executives may bring unique skills and perspectives to the table, contributing to a more efficient decision-making process in terms of working capital management. Their focus on collaboration, risk mitigation, and strategic planning might contribute to a higher

WCEI. This finding shows that there may be a conflict with the issue of tokenism by Lyness and Thompson (2000) in the management of working capital that may arise when they do not perform in (WCU). This is because women may report more complaints, then, of cultural incompatibility and exclusion from informal networks and they are more concerned with a good disciplinary record than men. But the acceptance of Hypothesis 3 means that female top executives are not necessarily involved in tokenism issues and can even manage the entire working capital.

Despite that, it is crucial to acknowledge that these tendencies are contextual and may be influenced by industry norms prevalent in the company's operational landscape. Female leaders may find alignment with conservative industry practices. Recognising and understanding these gender-related differences offers valuable insights for companies seeking to optimise working capital efficiency, leveraging the diverse strengths brought by both male and female executives in their day-to-day decision-making processes. This means that, the notion that only men are eligible for such roles cannot be accepted.

The success of working capital management by a female top executive's officer in Malaysian companies has been achieved. Again, women may tend to adopt a more cautious and less aggressive strategy in using current assets in the context of the day-to-day effectiveness of the company. In a 20-year study in Malaysia involving companies listed on Bursa Malaysia, the results of the study show that women in executive roles need to restructure to ensure full success in working capital management. Although the efficiency in WCPI management has been proven, that is is not correlated to the top executive's gender, the balancing that female executives bring change the traditional perspective and expected can control the overall management of working capital based on the dynamic landscape of Malaysian economics.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

Chapter 5 of this dissertation marks the end of the research that has been conducted on Top Executives Officer Gender Diversity and Working Capital Performance. The main objective of this study is to evaluate how the gender of the chief executive affects the performance of the company's working capital. This research method includes the use of the WCEI index by Bhattacharya (1996). Through five research objectives, namely assessing the impact of the Top executive's gender on working capital performance, working capital utilization and overall working capital efficiency, this study contributes to the understanding of gender factors in the company's working capital management. By detailing and analyzing the data, this dissertation seeks to provide insight into the role of gender in understanding and improving the performance of a company's working capital, providing a contribution to the field of finance and management, and providing a foundation for further research.

5.2 Summary of the Findings

From the result of binary logit regression analysis and hypothesis testing, it can be concluded that, among the three hypotheses proposed, only two were accepted, which are Hypothesis 2: Top executives' gender has a significant impact on the firm's working capital utilisation (WCUI) and Hypothesis 3: Top executives' gender has a significant impact on the firm's working capital efficiency (WCEI).

This shows that gender differences at the executive level do have an influence on the performance of a company's working capital efficiency. Although Hypothesis 2 shows that male top executives are influential, the results of the study confirm that the role of females in working capital management is more important and significant. Companies with female

top executives cannot only be associated with the performance of Working Capital Utilisation (WCUI) as they are highly significant with the Working Capital Efficiency Index (WCEI). This finding provides support for balancing values that are often associated with the presence of women in leadership.

Therefore, the research problem that observes the influence of gender on the performance of working capital has been successfully answered through all the objectives that have been investigated and the empirical support found in WCUI and WCEI.

5.2.1 A Summary of the Structure and Logical Flow of the Current Research

Table 5.1: A Summary of the Structure and Logical Flow of the Current Research

<p>Research Problems</p>	<p>The pandemic induced decline in working capital performance among Malaysian companies, coupled with persistent challenges such as an import inflation, prompts an investigation into the influence of top executive gender diversity on working capital adaptability. Despite global initiatives, the low representation of women in executive positions in Malaysia raises concerns about tokenism, challenging traditional views and highlighting the potential for significant contributions by women to decision-making effectiveness.</p>
<p>Research Gap</p>	<ul style="list-style-type: none"> • Many studies adopt a demographic approach, incorporating various variables beyond gender, thereby diluting the specific effects of gender diversity at the highest organisational levels. • The prevalent concentration of working capital research in manufacturing industries limits the generalisability of findings across diverse sectors. • Existing studies predominantly reference this method without delving into its broader effects on other variables, or without establishing clear connections or dependencies on other critical factors influencing working capital management making it challenging to construct a robust research conceptual framework centred solely on the Working Capital Efficiency Index.

Table 5.1: continued

<p>General Research Objective</p>	<ul style="list-style-type: none"> This dissertation embarks on exploring the direction of top executives' gender on the working capital efficiency of companies listed on Bursa Malaysia. 		
<p>Research Questions</p>	<p>RQ1</p>	<p>RQ2</p>	<p>RQ3</p>
	<p>Does the gender of top executives significantly influence the firm's working capital performance, and if so, which gender has a more positive impact?</p>	<p>Does the gender of top executives significantly influence the firm's working capital utilisation, and which gender demonstrates greater effectiveness in this area?</p>	<p>The gender of top executives significantly influences the firm's overall working capital efficiency, and which gender contributes more effectively to improving this efficiency?</p>
<p>Research Objectives (Specific)</p>	<p>RO1</p>	<p>RO2</p>	<p>RO3</p>
	<p>To assess the direction of top executive's officer gender towards</p>	<p>To examine the direction of top executive's officer gender towards firm's working capital utilisation.</p>	<p>To investigate the direction of top executive's officer gender towards</p>

Table 5.1 continued

	firm's working capital performance.		firm's overall working capital efficiency more effectively.
Research Hypotheses	H₁	H₂	H₃
	H1: Top executives' gender has a positively significant influence on the firm's working capital performance.	Top executives' gender has a positively significant influence on the firm's working capital utilisation.	H3: Top executives' gender has a positively significant influence firm's overall working capital efficiency.
Measurement of Variables	Working capital Performance Index (WCPI).	Working capital Utilisation Index (WCUI).	Working capital Efficiency Index (WCEI).
	Top Executive Gender (TEG) 1 is defined as companies with female top executives and 0 is defined by companies without female or having male top executives only.		

Table 5.1 continued

Methodology	Logit Binary Regression		
Results Findings	Negative coefficient (-0.266395) and p-value of 0.1268 is higher than 10% significance level.	Negative coefficient of (-0.295147) and p-value of (0.0387) is lower than the 10% significance level.	Positive coefficient 0.218843 and the p-value of 0.0570 is lower than the 10% significance level.
	The study could not determine which gender: female or male has a more positive effect on this performance.	male executives may be more effective in managing current assets for optimal sales outcomes compared to their female counterparts.	female executives may enhance the firm's ability to manage working capital effectively, improving both performance and utilisation outcomes.
	H₁ Not Accepted	H₂ Accepted	H₃ Accepted

Source: Authors own construction (2024)

5.3 Contributions of the Study

By examining the relationship between inclusive efficiency of working capital, gender diversity, and corporate financial performance in Malaysian incorporated firms, various significances are expected from this research.

5.3.1 Empirical

At the empirical level, this study makes a substantial contribution by unravelling the impact of gender diversity among top executives on working capital management efficiency. The comprehensive approach of utilizing data from Orbis Data Stream and verified through company annual reports official released by Bursa Malaysia, not only ensures data accuracy and comparability but also enhances the overall reliability and authenticity of the research findings.

Recognizing the valuable perspectives and innovative ideas that women executives bring to the table, the study suggests that their inclusion can foster improved risk management, innovation, and overall corporate performance. Corporations and top executives' candidates, particularly women, gain valuable insights for enhancing risk management and overall performance, while investors and shareholders can leverage this information to make informed decisions based on gender diversity policies, potentially leading to enhanced firm performance. Policymakers, armed with these findings, can advocate for inclusive leadership practices, thereby fostering positive changes in corporate governance.

By understanding the state of working capital efficiency over the 20-year period under review, regulators can gain deep insight into changes and trends in working capital management practices in companies, including the implications for gender diversity at the executive level. This information is key to designing policies that support gender

empowerment in the context of executive leadership. By knowing how working capital efficiency is related to gender diversity, regulators can develop guidelines and regulations that encourage increased participation of women in executive positions, create an inclusive work environment and support gender equality.

5.3.2 Practical

In practical terms, this study becomes particularly relevant for Malaysian companies confronting challenges in effective working capital management, as underscored by the 2021 Malaysia Productivity Corporation's report (MPC). Amidst these challenges, stakeholders are strongly urged to prioritise both working capital management and the imperative of diversity and inclusion within top executive teams. This encouragement extends specifically to shareholders, who are prompted to actively consider the inclusion of more women in executive roles to recognise their potential in contributing to enhanced decision-making and overall firm performance.

Policymakers can strategically employ these findings to craft initiatives aimed at fostering gender diversity within executive ranks, acknowledging that gender-inclusive leadership positively impacts both financial and operational outcomes. Investors, armed with insights into gender diversity policies and prevailing practices in current asset management, are empowered to make well-informed investment decisions.

Beyond that, by providing a clear framework, this study not only guides researchers seeking to explore the intersection of gender diversity and working capital across diverse industries but also emphasises the critical aspect that gender should be valued and integrated into corporate strategies for optimal operational outcomes.

5.3.3 Methodological

In the context of methodology, the focus of this study is on ensuring fairness and impartiality. The analysis of gender impact on working capital efficiency goes beyond just selecting the same data. It meticulously ensures uniformity in matrices such as size or operating income. The extensive time required for data accessibility has made the data collection process for identifying the gender of top executives' officers involves thorough scrutiny of annual reports each year.

This comprehensive examination is essential for identifying individuals holding such positions. This limitation introduces challenges in obtaining comprehensive and detailed data, considering that gender analysis needs to be conducted continuously for each studied year.

This meticulous approach not only eliminates potential injustice in the study but also bestows reliability upon the results obtained. Furthermore, by embracing Bhattacharya's (1996) methodology, specifically the Working Capital Efficiency Index, and addressing the inherent weaknesses in mathematical models and ratio concepts for working capital, this study opens avenues for improvement in the finance field.

The adoption of the Working Capital Efficiency Index as distinct variables not only contributes methodological rigour but also enhances the credibility of the findings. This methodological approach benefits a diverse set of stakeholders, including corporations aiming for fair and data-driven decision-making, investors seeking reliable indicators for financial performance, and policymakers advocating for evidence-based gender diversity initiatives.

Overall, the interconnected fairness and robust methodology of this study cater to the needs of a broad spectrum of participants, promoting transparency and reliability in the examination of executive decision-making dynamics.

5.3.4 Theoretical

This research has high relevance and significance because it integrates two main theories, namely Upper Echelon Theory and Cash Conversion Cycle (CCC) Theory. The combination of these two theories makes a substantial contribution to the development of knowledge in the fields of working capital management and executive leadership. This study is important because it not only validates the relationship between Upper Echelon Theory and CCC in different contexts, but also provides new concepts and insights in the development of relevant theories.

The success of this research confirms the continuity of Upper Echelon and CCC theories, although applied to different domains, providing a basis for further theoretical development in understanding how executive leadership and working capital management influence each other. The results of this research also provide new insights in terms of theoretical updates and practical implications, providing a basis for business stakeholders and future researchers to understand in more depth the crucial relationship between gender diversity in top executive teams, working capital efficiency, and company performance. Thus, this study expands our understanding of existing theories in addition of making a real contribution to updating business management theory and practice.

5.4 Limitations of the Study

Although this study provides important insight into the influence of executive gender on working capital efficiency, there are several limitations that need to be considered when interpreting the results and applying these findings.

First, the sample size may be a limitation, where this study only focuses on companies listed on Bursa Malaysia. This may not fully reflect the diversity in smaller industries or sectors. For example, with a small rate of female top executives in a company have not yet convinced investors that the working capital operation in the company will show

excellent performance. These constraints can affect the generalisation of results to the business population. In addition, dynamic and changing market conditions may cause variations in company performance that cannot be fully controlled. External factors such as global economic conditions or specific sector issues may influence working capital management decisions and may impact the results of this study.

Additionally, another limitation to consider is the absence of prior studies that integrate the Working Capital Efficiency Index (WCEI) and logit binary regression. While this study attempts to combine two analytical methodologies, the lack of references or similar studies poses challenges in terms of comparisons and benchmarking the performance of this study. A lot of prior research tabulated their result of WCE indices in the findings part as it shows the signature of the existing studies, but this study is just using the WCE index as a measurement of variables together with the initial overview of the WCM performance, and it is not just stop there, hence in the findings part for this study that result was not included. Also, this study analysed many industries so, it is not applicable to be presented in the finding part. This might lead to confusion to other researcher or any reader since typically it will be presented by table for each sample in the data set due to the small size sample. Therefore, the inability to refer to similar studies within the framework of this study is very hard.

5.5 Recommendations for Future Research

Future research endeavours could enhance the understanding of working capital management's efficacy concerning gender diversity by adopting an industry-specific approach. This is motivated by the study of Jizi and Nehme (2017) instead of investigating the relationship between women's participation in corporate boards of directors on company risk by reducing the volatility of company stock returns. The future study can embrace the

relationship between women's participation in top executives' team on company stock returns as a part of an explanatory variable for working capital efficiency. It can also reveal that the participation of female directors reduces the volatility of higher stock returns in specific industries. This method entails categorising companies into distinct industries and investigating the influence of top executives' gender on working capital within each sector. Through this targeted analysis, researchers may unveil nuanced patterns and insights that are industry-specific, shedding light on the unique impact of female leadership on working capital efficiency for companies in Malaysia.

In addition to the, it is strongly recommended that future studies persist in employing Logit Binary Regression as a method of inquiry within the domain, given its capacity to offer a straightforward perspective and compactness.

Furthermore, the inclusion of the working capital efficiency index together with Logit binary regression is encouraged to introduce greater variability into the realm of working capital research. The future studies should continue the trend analysis over time for companies with and without female executives by continuing the Figure 4.1: Time Trends for Companies with Female and without Female Top Executives. This approach is very creative in understanding the difference in the performance of companies listed on Bursa Malaysia in terms of gender equality. For example, the next 20 years which is in the year 2041, maybe it can show the impact of women's participation as executives superior in the long term and assess to what extent the gap between the two lines. It can also make a great curiosity whether the lines have already crossed and in what year did it happen? Or if not, how long will it take for the size of the gap to shrink? In fact, there may also be revelations as to whether the shrinking also affects the performance of working capital in the Malaysian market in the future or vice versa.

REFERENCES

- Abdullah, S. N., & Ismail, K. N. I. K. (2013). Gender, ethnic and age diversity of the boards of large Malaysian firms and performance. *Jurnal Pengurusan*, 38, 27–40. <https://doi.org/10.17576/pengurusan-2013-38-03>
- Abimbola, O., & Kolawole, O. (2017). Effect of working capital management practices on the performance of small and medium enterprises in Oyo State, Nigeria. *Asian Journal of Economics, Business and Accounting*, 3(4), 1–8. <https://doi.org/10.9734/ajeba/2017/35237>
- Adams, R. B., & Ferreira, D. (2008). Women in the boardroom and their impact on governance and performance. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.1107721>
- Adhikari, B. (2017). Female executives and corporate cash holdings. *Applied Economics Letters*, 25(13), 958–963. <https://doi.org/10.1080/13504851.2017.1388904>
- Afza, T. (2011). Working capital management efficiency of cement sector of Pakistan. *Journal of Economics and Behavioral Studies*, 2(5), 223–235. <https://doi.org/10.22610/jebbs.v2i5.240>
- Ajanthan, A., & Kumara, K. U. (2017). Corporate Governance and Cash Conversion Cycle: Evidence from Listed Companies in Sri Lanka. *Asian Economic and Financial Review*, 7(12), 1303–1316. <https://doi.org/10.18488/journal.aefr.2017.712.1303.1316>
- Allison, P. D. (1999). *Logistic Regression using the SAS System: Theory and Application*. <http://ci.nii.ac.jp/ncid/BA62056700>

- Aljughaiman, A. A., Cao, N. D., Trinh, V. Q., Albarrak, M. S., & Vo, X. V. (2023). Does gender diversity affect financial strength differently in conventional and Islamic banks? Evidence from MENA countries. *Pacific-Basin Finance Journal*, 80, 102095. <https://doi.org/10.1016/j.pacfin.2023.102095>
- Al-Mawsheki, R. M. S. A. (2022). Effect of working capital policies on firms' financial performance. *Cogent Economics & Finance*, 10(1). <https://doi.org/10.1080/23322039.2022.2087289>
- Alsayani, E. M. A., Mohamad Nor, M. N., & Al-Matari, E. M. (2023). Audit committee's chairman characteristics and auditor choice: empirical evidence from Malaysia ACE market. *Cogent Business & Management*, 10(1), 2156086.
- Alshubiri, F. (2017). Analysis of the relationship between working capital policy and operating risk: an empirical study on Jordanian industrial companies. *Investment Management & Financial Innovations*, 7(2). <https://businessperspectives.org/journals/investment-management-and-financial-innovations/issue-2-cont-4/analysis-of-the-relationship-between-working-capital-policy-and-operating-risk-an-empirical-study-on-jordanian-industrial-companies>
- Aman, A. S. (2022). Spillover effects of Russia-Ukraine conflict in Malaysia. *NST Online*. <https://www.nst.com.my/business/2022/10/838554/spillover-effects-russia-ukraine-conflict-malaysia>
- Azhagaiah, R., & Janakiraman, M. (2009). The Relationship between Working Capital Management Efficiency and EBIT. *Managing Global Transitions*, 7(1), 61–74. https://www.fm-kp.si/zalozba/ISSN/1581-6311/7_061-074.pdf

- Barber, B. M., & Odean, T. (2001). Boys will be Boys: Gender, Overconfidence, and Common Stock Investment. *The Quarterly Journal of Economics*, 116(1), 261–292. <https://doi.org/10.1162/003355301556400>
- Bernamea. (2022). Malaysia lokasi perniagaan ketiga paling kompetitif di dunia. *Harian Metro*. <https://www.hmetro.com.my/bisnes/2022/08/876306/malaysia-lokasi-perniagaan-ketiga-paling-kompetitif-di-dunia>
- Bhatia, S., & Srivastava, A. (2016). Working Capital Management and Firm Performance in Emerging Economies: Evidence from India. *Management and Labour Studies*, 41(2), 71–87. <https://doi.org/10.1177/0258042x16658733>
- Bhattacharyya, H. (1996). *Total Management by Ratios: an integrated approach*. <https://ci.nii.ac.jp/ncid/BA28783236>
- Bhattacharyya, H. (2007). Total management by ratios: an analytic approach to management control and stock market valuations. In *SAGE Publications eBooks*. <https://ci.nii.ac.jp/ncid/BA87793764>
- Bishop-Monroe, R., Wingender, J. R., & Shimerda, T. A. (2021). Chief diversity officers measure diversity. *Organizational Dynamics*, 50(4), 100799. <https://doi.org/10.1016/j.orgdyn.2020.100799>
- Brealey, R. A., & Myers, S. C. (2000). Study guide for use with Principles of corporate finance, sixth edition. In *Irwin/McGraw-Hill eBooks*. <http://ci.nii.ac.jp/ncid/BA58245696>

- Bursa Malaysia. (2024). *Title of the webpage or document*. Bursa Malaysia.
<https://www.bursamalaysia.com>
- Carter, D. A., D'Souza, F. P., Simkins, B. J., & Simpson, W. (2010). The gender and Ethnic Diversity of US boards and board committees and firm financial performance. *Corporate Governance: An International Review*, 18(5), 396–414.
- Cambrea, D. R., Calabrò, A., La Rocca, M., & Paolone, F. (2021). The impact of boards of directors' characteristics on cash holdings in uncertain times. *Journal of Management & Governance*, 26(1), 189–221. <https://doi.org/10.1007/s10997-020-09557-3>
- Campbell, K., & Mínguez-Vera, A. (2007). Gender diversity in the boardroom and firm financial performance. *Journal of Business Ethics*, 83(3), 435–451. <https://doi.org/10.1007/s10551-007-9630-y>
- Campuzano, M. V. (2019). Force and Inertia: A Systematic Review of Women's Leadership in Male-Dominated Organizational Cultures in the United States. *Human Resource Development Review*, 18(4), 437–469. <https://doi.org/10.1177/1534484319861169>
- Cespedes, J., González, M. and Molina, C.A. (2010), "Ownership and capital structure in Latin America", *Journal of Business Research*, Vol. 63 No. 3, pp. 248-254, doi: 10.1016/j.jbusres.2009.03.010.

- Chang, C. (2018). Cash conversion cycle and corporate performance: Global evidence. *International Review of Economics & Finance*, 56, 568–581. <https://doi.org/10.1016/j.iref.2017.12.014>
- Chintha, S. S., & Prasad, K. V. (2021). A Study on the Impact of Cash Management on the Financial Performance of the Listed Manufacturing Companies from Muscat Securities Market, Sultanate of Oman. *International Journal of Business and Administrative Studies*, 7(1). <https://doi.org/10.20469/ijbas.7.10003-1>
- Coleman, S., & Robb, A. (2009). A comparison of new firm financing by gender: evidence from the Kauffman Firm Survey data. *Small Business Economics*, 33(4), 397–411. <https://doi.org/10.1007/s11187-009-9205-7>
- Communication from the Commission to the Council, The European Parliament, The Economic and Social Committee and the Committee of Regions. (1996). *European Foreign Affairs Review*, 1(Issue 2), 255–263. <https://doi.org/10.54648/eerr1996017>
- Corvino, A., Caputo, F., Pironti, M., Doni, F., & Martini, S. B. (2019). The moderating effect of firm size on relational capital and firm performance. *Journal of Intellectual Capital*, 20(4), 510–532. <https://doi.org/10.1108/jic-03-2019-0044>
- Cristea, C., & Cristea, M. (2018). Cash conversion cycle and corporate performance: evidence from Romania. *MATEC Web of Conferences*, 184, 04009. <https://doi.org/10.1051/matecconf/201818404009>
- Darkwah, K. A., Nortey, E. N. N., Asare-Kumi, A. A., & Asare, K. (2019). An estimation of working capital management on profit using logistic regression and discriminant analysis. *Journal of Economics Management and Trade*, 1–9. <https://doi.org/10.9734/jemt/2019/v23i430136>

- Darlington, R. B., & Hayes, A. F. (2017). *Regression analysis and linear models: concepts, applications, and implementation*. The Guilford Press.
- Darlington, R. B. (1968). Multiple regression in psychological research and practice. *Psychological Bulletin*, 69(3), 161–182. <https://doi.org/10.1037/h0025471>
- Darmadi, S. (2011). Board Members' Education and Firm Performance: Evidence from a Developing Economy. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.1904762>
- Datta, S., Doan, T., & Toscano, F. (2021). Top executive gender, board gender diversity, and financing decisions: Evidence from debt structure choice. *Journal of Banking and Finance*, 125, 106070. <https://doi.org/10.1016/j.jbankfin.2021.106070>
- Demir, E., & Akkuş, Ö. (2015). An introductory study on “How the genetic algorithm works in the parameter estimation of Binary Logit Model?” *International Journal of Sciences: Basic and Applied Research*, 19(2), 162–180. <http://gssrr.org/index.php?journal=JournalOfBasicAndApplied&page=article&op=view&path%5B%5D=3252>
- Deesomsak, R., Paudyal, K., & Pescetto, G. (2004). The determinants of capital structure: evidence from the Asia Pacific region. *Journal of Multinational Financial Management*, 14(4–5), 387–405. <https://doi.org/10.1016/j.mulfin.2004.03.001>
- De Lucia, C., Paziienza, P., & Bartlett, M. (2020). Does good ESG lead to better financial performances by firms? Machine learning and logistic regression models of public enterprises in Europe. *Sustainability*, 12(13), 5317. <https://doi.org/10.3390/su12135317>

- Do Internal Auditors Improve Firms' Working Capital Management? (2022). *Asian Journal of Accounting & Governance*, 18. <https://doi.org/10.17576/ajag-2022-18-12>
- Ebben, J., & Johnson, A. C. (2011). Cash Conversion Cycle Management in Small Firms: Relationships with Liquidity, Invested Capital, and Firm Performance. *Journal of Small Business & Entrepreneurship*, 24(3), 381–396. <https://doi.org/10.1080/08276331.2011.10593545>
- Elias, J. (2005). The gendered political economy of control and resistance on the shop floor of the multinational firm: A case-study from Malaysia. *New Political Economy*, 10(2), 203–222. <https://doi.org/10.1080/13563460500144751>
- Eljelly, A. M. A. (2004). Liquidity - profitability tradeoff: An empirical investigation in an emerging market. *International Journal of Commerce and Management*, 14(2), 48–61. <https://doi.org/10.1108/10569210480000179>
- Ely, R., Ibarra, H., & Kolb D. M. (2011). Taking Gender into Account: Theory and Design for Women's leadership Development programs. *Academy of Management Learning and Education*, 10(3), 474–493. <https://doi.org/10.5465/amle.2010.0046>
- Erhardt, N., Werbel, J. D., & Shrader, C. B. (2003). Board of Director Diversity and Firm Financial Performance. *Corporate Governance: An International Review*, 11(2), 102–111. <https://doi.org/10.1111/1467-8683.00011>
- Fekete, I., & Hartványi, T. (2018). Innovative inventory management for flexible adaptation. In *Flexible systems management* (pp. 119–132). https://doi.org/10.1007/978-981-10-8929-9_8

- Ferdous, J., Mohamad Yusof, N. A., & Zakaria Z. (2023). Women on Board and Its Impact on Firm Performance: Evidence from Malaysian Energy Industry. *International Journal of Accounting, Finance and Business (IJAFB)*, 8(46), 34 - 44.
- Fisher, W. P. (2010). Rasch, Frisch, and Two Fishers: A social history of the econometric origins of some widely used psychometric models. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.1698919>
- Fortifying governance: Malaysian Code on Corporate Governance 2021 updates. (n.d.). EY Malaysia. https://www.ey.com/en_my/take-5-business-alert/fortifying-governance-malaysian-code-of-corporate-governance-2021-updates
- Fred, M. (2021). *Effects of accounts receivable management on the financial performance of construction companies in Rwanda: A case of NPD Ltd.* <http://154.68.126.42/handle/123456789/1280>
- Fe, F., & Suryani, A. (2017). Ukuran perusahaan, modal kerja, dan return on equity (roe) pada industri otomotif yang terdaftar di bursa efek indonesia (bei) selama periode 2012-2015. *Ekonomis*, 1(1), 78. <https://doi.org/10.33087/ekonomis.v1i1>.
- Gamuda Berhad. (2021). *Committing to Radical Change Annual Report 2021*. Retrieved from www.gamuda.com.my.
- Gao, W., Li, W., & Zhen, H. (2017). Do family CEOs benefit investment efficiency when they face uncertainty? *Chinese Management Studies*, 11(2), 248–269. <https://doi.org/10.1108/cms-03-2016-0052>

- Garcia-Blandon, J., Argilis-Bosch, J. M., Ravenda, D., & Perez, G. R. (2022). Female directors, board-gender quotas and firm performance: evidence from Norway. *Ekonomiska Istrazivanja-economic Research*, 36(2). <https://doi.org/10.1080/1331677x.2022.2142822>
- Goel, U., & Sharma, A. K. (2015). Working capital management efficiency in Indian manufacturing sector: trends and determinants. *International Journal of Economics and Business Research*, 10(1), 30. <https://doi.org/10.1504/ijebr.2015.070273>
- Goker, I. E. K. (2020). An analysis of working capital efficiency of companies listed on sustainability index by index method. *Journal of Business, Economics and Finance*, 7(2), 94–102. <https://doi.org/10.17261/pressacademia.2020.1206>
- Gorondutse, A. H., Ali, R. A., Abubakar, A., & Naalah, M. N. I. (2017). The effect of working capital management on SMES profitability in Malaysia. *Polish Journal of Management Studies*, 16(2), 99–109. <https://doi.org/10.17512/pjms.2017.16.2.09>
- Granovetter, M., & Swedberg, R. (1993). The Sociology of economic life. *Southern Economic Journal*, 59(4), 832. <https://doi.org/10.2307/1059747>
- Guizani, A., Lakhal, F., & Lakhal, N. (2018). The cash flow sensitivity of cash in family firms: does the board of directors' matter? *Managerial Finance*, 44(11), 1364–1380. <https://doi.org/10.1108/mf-10-2017-0440>
- Guizani, M., & Abdalkrim, G. M. (2022). Female directors and working capital management: aggressive vs. conservative strategy. *Management Research Review*, 46(7), 976–995. <https://doi.org/10.1108/mrr-02-2022-0146>

- Habib, A. M., & Mourad, N. (2022). Analyzing the Efficiency of Working Capital Management: a New Approach Based on DEA-Malmquist Technology. *Operations Research Forum*, 3(3). <https://doi.org/10.1007/s43069-022-00155-7>
- Hambrick, D. C. (2007). Upper Echelons Theory: an update. *Academy of Management Review*, 32(2), 334–343. <https://doi.org/10.5465/amr.2007.24345254>
- 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. <https://doi.org/10.5465/amr.1984.4277628>
- Hameer, N. a. B. A., Ramakrishnan, S., & Gillani, S. M. a. H. (2021). The Impact of Working Capital Management on Firm Performance across Bumiputera and Non Bumiputera Manufacturing Firms in Malaysia. *Estudios De Economía Aplicada*, 39(4). <https://doi.org/10.25115/eea.v39i4.4585>
- Howorth, C., & Westhead, P. (2003). The focus of working capital management in UK small firms. *Management Accounting Research*, 14(2), 94–111. [https://doi.org/10.1016/s1044-5005\(03\)00022-2](https://doi.org/10.1016/s1044-5005(03)00022-2)
- Hrazdil, K., Simunic, D. A., Spector, S. A., & Suwanyangyuan, N. (2023). Top executive gender diversity and financial reporting quality. *Journal of Contemporary Accounting & Economics*, 19(2), 100363. <https://doi.org/10.1016/j.jcae.2023.100363>
<https://www.jpw.gov.my/index.php/en/about-us/54-about-jpw/government-policy/1244-national-women-s-policy-and-women-s-development-action-plan-2>

- Hunt, D. V., Yee, L., Prince, S., & Dixon-Fyle, S. (2018). Delivering through diversity. In *McKinsey & Company*. <https://www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/delivering-through-diversity>
- Hu, Q., Bhuiyan, M. B. U., & Houqe, M. N. (2023). CFO Demographics and Working Capital Management in China. *Journal of Emerging Market Finance*. <https://doi.org/10.1177/09726527231190692>
- Iqbal, S., Nawaz, A., & Ehsan, S. (2019). Financial performance and corporate governance in microfinance: Evidence from Asia. *Journal of Asian Economics*, 60, 1–13. <https://doi.org/10.1016/j.asieco.2018.10.002>
- Jakpar, S., Tinggi, M., Tk, S., Johari, A., Kt, M., & Ms, S. (2017). Working Capital Management and Profitability: Evidence from Manufacturing Sector in Malaysia. *Journal of Business and Financial Affairs*, 06(02). <https://doi.org/10.4172/2167-0234.1000255>
- Jizi, M., & Nehme, R. (2017). Board gender diversity and firms' equity risk. *Equality, Diversity and Inclusion: An International Journal*, 36(7), 590–606. <https://doi.org/10.1108/edi-02-2017-0044>
- Jose, M. L., Lancaster, C., & Stevens, J. L. (1996). Corporate returns and cash conversion cycles. *Journal of Economics and Finance*, 20(1), 33–46. <https://doi.org/10.1007/bf02920497>
- Julizaerma, M., & Sori, Z. M. (2012). Gender diversity in the boardroom and firm performance of Malaysian public listed companies. *Procedia - Social and Behavioral Sciences*, 65, 1077–1085. <https://doi.org/10.1016/j.sbspro.2012.11.374>

- Kasiran, F. W., Mohamad, N. A., & Chin, O. (2016). Working Capital Management Efficiency: A study on the small medium enterprise in Malaysia. *Procedia. Economics and Finance*, 35, 297–303. [https://doi.org/10.1016/s2212-5671\(16\)00037-x](https://doi.org/10.1016/s2212-5671(16)00037-x)
- Kaur, H. V., & Singh, S. (2013). Managing working capital efficiency in capital goods sector in India. *Global Business Review*, 14(2), 343–355. <https://doi.org/10.1177/0972150913477526>
- Keller, W., Molina, T., & Olney, W. W. (2020). *The gender gap among top business executives*. <https://doi.org/10.3386/w28216>
- Krishnan R. B. a. S. M.; P. B. V. (n.d.-d). *Study guide for use with Principles of corporate finance, sixth edition*. CiNii Books. <http://ci.nii.ac.jp/ncid/BA58245696>
- Kroes, J. R., & Manikas, A. (2014). Cash flow management and manufacturing firm financial performance: A longitudinal perspective. *International Journal of Production Economics*, 148, 37–50. <https://doi.org/10.1016/j.ijpe.2013.11.008>
- Lyness, K. S., & Thompson, D. E. (2000). Climbing the corporate ladder: Do female and male executives follow the same route? *Journal of Applied Psychology*, 85(1), 86–101. <https://doi.org/10.1037/0021-9010.85.1.86>
- Li, X., Than, E. T., Ahmed, R. R., Ishaque, M., & Huynh, T. L. D. (2021). Gender diversity of boards and executives on real earnings management in the bull or bear period: Empirical evidence from China. *International Journal of Finance & Economics*, 28(3), 2753–2771. <https://doi.org/10.1002/ijfe.2562>

- Linley, P. A., Maltby, J., Wood, A. M., Joseph, S., Harrington, S. J., Peterson, C., Park, N., & Seligman, M. E. P. (2007). Character strengths in the United Kingdom: The VIA Inventory of Strengths. *Personality and Individual Differences, 43*(2), 341–351. <https://doi.org/10.1016/j.paid.2006.12.004>
- Madi, H., Ishak, Z., & Manaf, N. a. A. (2014). The impact of audit committee characteristics on corporate voluntary disclosure. *Procedia - Social and Behavioral Sciences, 164*, 486–492. <https://doi.org/10.1016/j.sbspro.2014.11.106>
- Mason, P. A., & Hambrick, D. C. (1984). Upper echelons: the organization as a reflection of its top managers. *Academy of Management Review, 9*(2), 193. <https://doi.org/10.2307/258434>
- McPherson, M. (2018). A Return to the Cash Conversion Cycle and Corporate Returns. *All Graduate Plan B And Other Reports, Spring 1920 To Spring 2023*. <https://doi.org/10.26076/5bc1-346e>
- Miller, M. H. (1977). Debt And Taxes*. *The Journal of Finance, 32*(2), 261–275. <https://doi.org/10.1111/j.1540-6261.1977.tb03267.x>
- Minasyan, D., & Tovmasyan, G. (2020). Gender Differences in Decision-making and Leadership: Evidence from Armenia. *Business Ethics and Leadership, 4*(1), 6–16. [https://doi.org/10.21272/bel.4\(1\).6-16.2020](https://doi.org/10.21272/bel.4(1).6-16.2020)
- Modigliani, F., & Miller, M. H. (1958). The Cost of Capital, Corporation Finance, and the Theory of Investment. *The American Economic Review, 48*(3), 261–297. <http://www.jstor.org/stable/1809766>

- Mo, K., & Lee, K. Y. (2022). The effects of chief executive officer gender on firm labor investment efficiency. *Borsa Istanbul Review*, 22(6), 1260–1270. <https://doi.org/10.1016/j.bir.2022.09.003>
- Muktiadji, N., & Sastra, H. (2013). Analisis modal kerja dan pengaruhnya terhadap pertumbuhan perusahaan. *Jurnal Ilmiah Manajemen Kesatuan*, 1(3), 229–236. <https://doi.org/10.37641/jimkes.v1i3.271>
- Myers, S., & Majluf, N. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187-221. [https://doi.org/10.1016/0304-405X\(84\)90023-0](https://doi.org/10.1016/0304-405X(84)90023-0)
- Nastiti, P. K. Y., Atahau, A. D. R., & Supramono, S. (2019). Working Capital Management Policy: female top managers and firm profitability. *Central European Management Journal*, 27(3), 107–127. <https://doi.org/10.7206/cemj.2658-0845.5>
- National Women’s policy and Women’s Development Action Plan - jpw.gov.my. (n.d.).
- Nazir, M. S., & Afza, T. (2009). Working capital requirements and the determining factors in Pakistan. *The IUP Journal of Applied Finance*, 15(4), 28. https://www.researchgate.net/profile/Talat_Afza/publication/228618942_Working_Capital_Requirements_and_the_Determining_Factors_in_Pakistan/links/09e4150c06b3e1db5e000000.pdf
- Oseifuah, E. K. (2016). Cash Conversion Cycle theory and corporate profitability. In *Cash Conversion Cycle theory and corporate profitability: Oseifuah, Emmanuel Kojo*.
- Oseifuah, E. K., & Gyekye, A. B. (2017). Working capital management and shareholders’ wealth creation: evidence from non-financial firms listed on the Johannesburg Stock

- Exchange. *Investment Management & Financial Innovations*, 14(1), 80–88.
[https://doi.org/10.21511/imfi.14\(1\).2017.08](https://doi.org/10.21511/imfi.14(1).2017.08)
- Pandeirot, L. B. (2022). Cash conversion cycle and profitability on manufacturing firms in ASEAN+3. <https://ejournal.apiu.edu/9ISC/article/view/113>
- Paul Nyende. (2011). *Building Networks for Market Access*.
- Pass, C., & Pike, R. (1987). Management of working capital: a neglected subject. *Management Decision*, 25(1), 18–24. <https://doi.org/10.1108/eb001430>
- Pasko, O., Lagodiienko, N., Кудлаєва, Н., Riabenko, L., & Gerasymenko, N. (2022). Does corporate governance moderate the effect of corporate social responsibility on a firm’s financial performance? *Problems and Perspectives in Management*, 20(4), 588–601. [https://doi.org/10.21511/ppm.20\(4\).2022.44](https://doi.org/10.21511/ppm.20(4).2022.44)
- Peni, E., & Vähämaa, S. (2010). Female executives and earnings management. *Managerial Finance*, 36(7), 629–645. <https://doi.org/10.1108/03074351011050343>
- Prabahkaran, N. (2014). *The moderating effect of cost of capital on the relationship between working capital management and financial health in selected Malaysian public listed firms*. <https://etd.uum.edu.my/4974/> *International Scholar Conference Asia-Pacific International University*. (n.d.). <https://www.apiu.edu/research/international-scholar-conference/>
- Prasad, R. S. R., & Lakshmi, B. H. (2018). Working capital management efficiency: a study on selected pharmaceutical companies in India. *International Journal of Information and Computing Science*, 5(1), 40-45. <https://doi.org/10.4018/978-1-4666-5154-8.ch001>

- Prastacos, G. P. (1984). Blood Inventory Management: An Overview of Theory and practice. *Management Science*, 30(7), 777–800. <https://doi.org/10.1287/mnsc.30.7.777>
- PwC. (2022). *PWC Malaysia's 2022 Working Capital management study.pdf*.
- Raheman, A., & Nasr, M. (2007). Working Capital Management and Profitability-Case of Pakistani Firms. *International Review of Business Research Papers*, 3(2), 275–296. https://www.researchgate.net/profile/Mohamed_Nasr11/publication/228727444_Working_capital_management_and_profitabilitycase_of_Pakistani_Firms/links/0c960523758d23d0e1000000.pdf
- Rahman, A. (2023). Working Capital Management Efficiency using the Index Method. *Journal of Economics and Management*, 3(1), 75–85. <https://doi.org/10.3126/jem.v3i1.59196>
- Rahman, B. A., Salad, N. A., & Mapjabil, J. (2016). Ciri dan pengaruh stereotaip feminin terhadap pengurusan dalam kalangan penjawat awam (The features and implication of feminine stereotypes in public service management). *Geografia: Malaysian Journal of Society and Space*, 12(14). <https://ejournal.ukm.my/gmjss/article/download/16258/5111>
- Ragins, B. R., & McFarlin, D. B. (1990). Perceptions of mentor roles in cross-gender mentoring relationships. *Journal of Vocational Behavior*, 37(3), 321–339. [https://doi.org/10.1016/0001-8791\(90\)90048-7](https://doi.org/10.1016/0001-8791(90)90048-7)
- Richards, V. D., & Laughlin, E. J. (1980). A Cash Conversion Cycle approach to liquidity analysis. *Financial Management*, 9(1), 32. <https://doi.org/10.2307/3665310>

- Sarkar, J., Sarkar, S., & Sen, K. (2008). Board of Directors and Opportunistic Earnings Management: Evidence from India. Social Science Research Network. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1318704
- S. Ling, A. Ali, W. Wong et al. (2020) Working Capital Management and Firm Performance: An empirical study for Malaysian public listed companies in property industry. (2020). *Borneo Journal of Social Sciences and Humanities*. <https://doi.org/10.35370/bjssh.2019.1.2-06>
- SC, M. (2022). *Corporate Governance Monitor 2022*. 23. Retrieved from www.investsmartsc.my
- Schopohl, L., Urquhart, A., & Zhang, H. (2021). Female CFOs, leverage and the moderating role of board diversity and CEO power. *Journal of Corporate Finance*, 71, 101858. <https://doi.org/10.1016/j.jcorpfin.2020.101858>
- Smith, K. (1980). Profitability versus liquidity tradeoffs in working capital management. In: Readings on the Management of Working Capital.
- Subrahmanyam, A. (2007). Behavioural Finance: a review and Synthesis. *European Financial Management*, 14(1), 12–29. <https://doi.org/10.1111/j.1468-036x.2007.00415.x>
- Stock, J. H., & Watson, M. W. (2019). *Introduction to Econometrics, Global Edition*.
- Teoh, M. (2023, March 31). Malaysia long way from achieving gender equality, says SDG 5.1.1 report. *The Star*.

<https://www.thestar.com.my/lifestyle/family/2023/03/31/malaysia-long-way-from-achieving-gender-equality-says-sdg-511-report>

Ting, I. W. K., Azizan, N. A., & Kweh, Q. L. (2015). Upper Echelon Theory Revisited: The Relationship between CEO Personal Characteristics and Financial Leverage Decision. *Procedia - Social and Behavioral Sciences*, 195, 686–694. <https://doi.org/10.1016/j.sbspro.2015.06.276>

Titman, S., & Wessels, R. (1988). The determinants of capital structure choice. *Journal of Finance*, 43(1), 1–19.

Tongco, M. D. C. (2007). Purposive sampling as a tool for informant selection. *Ethnobotany Research and Applications*, 5, 147. <https://doi.org/10.17348/era.5.0.147-158>

Ujah, N. U., Tarkom, A., & Okafor, C. E. (2020). Working capital management and managerial talent. *International Journal of Managerial Finance*, 17(3), 455–477. <https://doi.org/10.1108/ijmf-12-2019-0481>

Van Werven, C. (2017). *The impact of board diversity on bank's risk taking in Europe*. <https://essay.utwente.nl/72734/>

Valipour, H., & Jamshidi, A. (2012). Determining the Optimal Efficiency Index of Working Capital Management and its Relationship with Efficiency of Assets in Categorized Industries: Evidence from Tehran Stock Exchange (TSE). *Advances in Management and Applied Economics*, 2(2), 1–9. http://www.scienpress.com/Upload/AMAE/Vol%202_2_9.pdf

- Valenti, M. A., Luce, R. A., & Mayfield, C. O. (2011). The effects of firm performance on corporate governance. *Management Research Review*, 34(3), 266–283. <https://doi.org/10.1108/01409171111116295>
- Wang, B. (2019). The cash conversion cycle spread. *Journal of Financial Economics*, 133(2), 472–497. <https://doi.org/10.1016/j.jfineco.2019.02.008>
- Yegon, C., Kiprono, K. J., & Willy, C. (2014). Working Capital Management and Corporate Financial Performance: Evidence from Panel Data Analysis of Selected Quoted Tea Companies in Kenya. *Research Journal of Finance and Accounting*, 5(5), 53–62. <https://iiste.org/Journals/index.php/RJFA/article/viewFile/11411/11743>
- Zeidan, R., & Shapir, O. M. (2017). Cash conversion cycle and value-enhancing operations: Theory and evidence for a free lunch. *Journal of Corporate Finance*, 45, 203–219. <https://doi.org/10.1016/j.jcorpfin.2017.04.014>
- Zimon, G., & Tarighi, H. (2021). Effects of the COVID-19 Global Crisis on the Working Capital Management Policy: Evidence from Poland. *Journal of Risk and Financial Management*, 14(4), 169. <https://doi.org/10.3390/jrfm140401>