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# Women directors' board involvement and remuneration matter for performance of Malaysian listed healthcare companies? A comparison before and during Covid-19

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#### **Abstract**

Most Malaysian listed companies have yet to achieve the government's target of 30% women holding senior management roles, unlike the rising trend observed across regions. Moreover, glass cliff theory as opposed to female leadership theory showed empirical evidence that associate women directors with poor corporate performance as they are hired either to comply with the guota stipulated by government authorities or as a scapegoat for unavoidable business failure during crisis period. Besides, empirical evidence of gender pays disparity also demotivated women directors and consequently ramified corporate performance. An overall panel of 87 firm-year observations compiled from 24 listed healthcare companies from 2018 to 2021 are used to test whether percentage of women directors (WDIR), ratio of average women to men directors' remuneration (WREM), average age of women directors (WAGE), woman chairman dummy (WCHM) and woman CEO dummy (WCEO) affect return on equity (ROE). Random effect regression model results show that WCHM negatively affect ROE in the overall panel (2018-2021) and WAGE positively affect ROE in the during Covid sub-panel (2020-2021). Except for these, women directors' board involvement and remuneration are generally insignificant in influencing healthcare companies ROE because women are under-represented on boards in this sector (mean WDIR of 23.27%), women directors are underpaid in comparison to their men counterparts (mean WREM of 0.8920 which is less than 1) and many of the companies listed in this sector are still relatively new.

## **Keywords:**

women directors, directors' remuneration, return on equity, healthcare companies, Covid-19.



#### Introduction

From being a marginalised and socially excluded majority deeply entrenched in history to finally being acknowledged as a human being deserving of basic rights and respect, women's career options have expanded greatly over the centuries. Based on Figure 1, there is a rising trend in the proportion of women senior management roles worldwide, reaching almost 30% on average in 2022 where Africa, the Association of Southeast Asian Nations (ASEAN), European Union (EU), Latin America, North America and APAC recorded 40%, 37%, 33%, 35%, 33% and 30% respectively (Grant Thornton, 2022). Interestingly, Africa is a success story for female leaders with a notable example which is President Ellen Johnson Sirleaf; while four African nations, i.e., Rwanda, Namibia, South Africa, and Senegal rank high in the top 15 nations with the highest proportion of women in parliaments worldwide alongside Sweden and Finland (World Economic Forum, 2019).

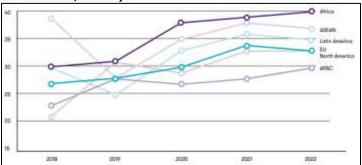


Figure 1. Proportion of women in senior management across Africa, ASEAN, Latin America, EU, North America, and APAC (2018-2022)

Source: (Grant Thornton, 2022)

In Malaysia, there have been empowerment initiatives to increase women participation in corporate senior management. Firstly, a policy of at least 30% women appointment to the public sector management roles was introduced by the Ministry for Women, Family and Community Development (MWFCD) in 2004. This strategy was expanded to include the business sector in 2011 by the government, which set 2016 as the deadline for achieving the goal (Amran, Ismail, Aripin, Hassan, Manaf, and Abdullah, 2014). A Women Directors' Onboarding Training Programme 2012-2014 and a Women Director's Registry under the Women Directors Program to track female board candidacy were developed by the MWFCD through its agency Women Inspirational Network (NIEW). Also, Budget 2015 introduced a Career Comeback initiative to encourage firms to hire and retain board women who have taken career pauses. TalentCorp launched the Resourcing Grant and the Retention Grant in collaboration with MWFCD to entice employers to retain board women with longer-than-sixmonth career breaks (TalentCorp, 2016). Then, in Budget 2022, there is a policy for all listed issuers to have at least one female director on board and this criterion was further added to the Bursa Malaysia Securities Berhad (Bursa) Main Market and ACE Market Listing Requirements (The Star, 2021). The Malaysian Code on Corporate Governance (MCCG), which was issued by the Securities Commission Malaysia (SC) in April, now requires listed boards to have at least 30% women directors or to publicly state the steps they are taking or plan to take to reach this goal, along with a timeline. However, as of September 2022, only 52 of the top 100 listed companies in Malaysia achieved the target of minimum 30% women board participation, while



350 or 36.5% of the total listed companies in Bursa Malaysia have only one woman director on board (BERNAMA, 2022).

Actually, women are capable of taking senior leadership positions. In terms of the political world, there have been multiple instances of women presidents and prime ministers albeit mainly concentrated in Western countries, such as Angela Merkel (2005-2021, Germany) Helle Thorning-Schmidt (2011-2015, Denmark) Johanna Sigurdardottir (2009-2013, Iceland), Margaret Thatcher (1979-1990, United Kingdom), Julia Gillard (2010-2013, Australia) and Yingluck Shinawatra (2011-2014, Thailand). Meanwhile, in terms of the business world, women mainly hold more Human Resources and Chief Marketing Officer positions in Africa, followed by Chief Financial Officer (ASEAN), Chief Executive Officer (Latin America), and Chief Operating Officer and Chief Information Officer (North America) (Grant Thornton, 2022) (Figure 2).

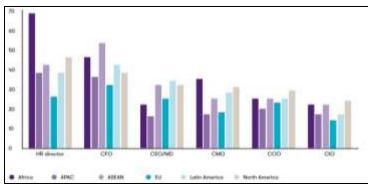


Figure 2. Roles held by women in senior management by region, 2022

Source: (Grant Thornton, 2022)

The problem statements of this study are:

- i) to investigate whether female directors in Malaysia are incompetent, which explains Malaysian listed companies' failure in achieving the 30% target despite the rising trend of female board participation across the globe;
- ii) to examine the contradicting theories Female Leadership Theory and Glass Cliff Theory and apply to the Malaysian setting; and
- to study whether women directors are underpaid, which demotivates women directors and subsequently affects firm performance negatively.

With these problem statements, therefore, the objective of this study is to find out whether the appointment of women directors and their remuneration influence firm performance. By addressing the research gaps specifically on Malaysian healthcare industry, findings of this research might be useful to policymakers, shareholders and management of healthcare companies.

#### **Literature Review**

#### Theoretical Review

The impact of board gender diversity on corporate governance and financial performance is predominantly linked to the "Female Leadership Theory", which explains that female leaders



are more likely to focus on the welfare of subordinates than male leaders and use a "softer" approach when dealing with employees, such as collaborative and consensus-building communication styles. The concept had existed for countless decades in academia, but was strengthened substantially only by Eagly, Karau and Makhijani (1995). This is supported by the primary study by Saint-Michel (2018) on 260 employees and their 65 immediate supervisors from French organisations, who identified that women leaders are largely perceived by their subordinates to display a transformational leadership. Also, the study by Kiseleva (2018) on 20 Russian business companies revealed that symbiotic management models are regarded by business leaders to be the most effective, as the traits of one gender can supplement the traits of another gender harmoniously. Thus, the Female Leadership Theory presents female leadership in a positive light for this study.

In contrast, the "Glass Cliff Theory" presents female leadership in a negative light for this study. This concept was established by Ryan and Haslam (2007). Specifically, this theory explains that female leaders are either hired (1) for the fulfilment of corporate social responsibility, or (2) in times of crisis as a scapegoat for the unavoidable failures or to solve unrealistically difficult problems. It disregards the actual capacity of the female leader and does not bring substantial benefits to the organisation, which ultimately reinforces the gender stereotypes against women. This is supported by the study by O'Neill, Pruysers and Stewart (2019) and Kalekye, Koome and Gichuhi (2021), whose studies focused on the political and business scenes respectively and identified the existence of the Glass Cliff phenomenon. Hence, these theories provide an interesting foundation for our study.

### Empirical Review

To fortify our variable selection, we reviewed relevant literature from 2018 onwards. Firstly, female presence in the boards of directors (also known as percentage of women directors) is a frequently reviewed determinant of firm performance. In the by Singh, Singhania and Aggrawal (2022) on the Indian information and technology (IT) sector, board gender diversity negatively impacts financial performance albeit insignificantly. Singh et al. (2022) explains that women directors are often included just for the sake of token representation and their potentials will only be realised fully once they reach a "critical mass", i.e. having an optimal ratio of 33% women directors on board; which caused the unfavourable regression results because women are underrepresented from the start. Beyond or lesser than that, and the positive effect on firm performance diminishes (Arvanitis, Varouchas, & Agiomirgianakis, 2022).

In terms of female chairperson status and firm performance, the study by Bennouri, Chtioui, Nagati and Nekhili (2018) identified that female leadership (as chairperson) is positively associated with return on equity (ROE) yet negatively associated with Tobin's Q because of the negative stereotypes imposed by investors onto female chairperson, even though they are actually effective in corporate governance. Similarly, female CEO status is positively linked to ROA and ROE in the study by Moreno-Gómez, Lafuente and Vaillant (2018) on a sample of 54 Colombian public businesses for 2008-2015, which supports the Female Leadership Theory because there is more collaborativeness and less hierarchical rigidity.



Next, female directors' age is identified to affect firm performance significantly and positively in the study by Brahma, Nwafor & Boateng (2018) on FTSE 100 firms. This is due to the accumulation of managerial knowledge and experience with age, which is critical for firm performance. This is supported by Fernández-Temprano and Tejerina-Gaite (2020), which identified that age diversity positively affects firm performance. However, this must be complemented with remuneration packages appropriate for the female directors' experience, because gender pay disparities within top management teams will lead to in-group biases and conflicts, which ultimately reduces effective collaboration. This is supported by the study by Yanadori, Kulik, and Gould (2022), who identified a negative relationship between gender pay disparities and firm performance. This is concerning, since women directors are identified to be significantly underpaid as according to Al-Shaer and Harakeh (2020) based on their study which used a sample of FTSE 350 companies and women's integration into boards or compensation committees do not significantly improve the situation – unless they were elected to chair the compensation committee (Cook, Ingersoll & Glass, 2018).

#### **Research Methods**

Therefore, we intend to fill the research gap to study the effect of women directors' board involvement and remuneration on the performance of Malaysian listed companies, and compare the scenarios of before and during Covid-19. Specifically, this study will focus on the healthcare sector because of the rising current health expenditure as a percentage of GDP for the past decade and improved attention on gender equality within Malaysia (World Bank, 2022). This study combines both aspects, which is a novel approach rare in past literature. Moreover, the focus of this study is justified because Malaysia is one of the favourite destinations of medical tourism in ASEAN, and its importance is cemented by the fact that it is one of the few sectors allowed to operate during the Covid-19 pandemic (Birruntha, 2022). Therefore, the focus on the healthcare sector is justified since it is crucial to safeguard the people's lives not just during the pandemic and MCO, but also when things go back to normal after Covid-19.

Our overall sampling period was fixed to be 2018 to 2021, where it will be further split into the pre-Covid sub-panel (2018-2019) and during-Covid sub-panel (2020-2021). The data was obtained from the companies' annual reports, financial statements and corporate governance reports, as well as ROE data from the Refinitiv database. The data was plugged into EViews to conduct the empirical analysis. In detail, data for one dependent variable return on equity (ROE) and five independent variables (1) percentage of women directors (WDIR), (2) ratio of average women directors' remuneration divided by average men directors' remuneration (WREM), (3) average age of women directors (WAGE), (4) woman chairman dummy variable (WCHM) (tagged as '0' if there is no woman chairman and '1' if there is a woman chairman), (5) woman CEO dummy variable (WCEO) (tagged as '0' if there is no woman CEO and '1' if there is a woman CEO) were obtained. ROE was selected because it is a fundamental performance measure. Market-based performance measures such as Tobin Q and total share return are not selected as these measures were highly volatile during the Covid-19 and associated MCO due to changes in investors' sentiment and speculation.

To facilitate this study, firstly, we identified all the companies in the healthcare sector listed on the Malaysian Stock Biz website, resulting in a population size of 27 companies.



However, only 24 companies were ultimately used in the final sample due to data unavailability issues, where 23 companies will be further used for the pre-Covid analysis and 24 companies will be used for the during-Covid analysis. In the overall panel, we gathered 87 firm-year observations; in which there are 23 companies with 40 firm-year observations in the pre-Covid sub-panel and 24 companies with 47 firm-year observations in the during-Covid sub-panel. The details of the sample exclusion are attached in Table 1.

**Table 1. Sample Exclusion Criteria** 

No	Company Name	Variable	Period	Reason
1	Hartalega Holdings Berhad	WREM	2018	Detailed breakdown was undisclosed in financial statements, only the aggregate total was revealed.
2	*Cengild Medical Berhad	All	2018-2021	Company listed on 18 April 2022.
3	*Metro Healthcare Berhad	WREM	2018-2021	Detailed breakdown was undisclosed in financial statements, only the aggregate total was revealed.
		TSR	2018	Company listed on 26 February 2018.
4	Nova Pharma Solutions Berhad	TSR	2018	Company listed on 22 January 2018.
5	Nova Wellness Group Berhad	TSR	2018	Company listed on 20 July 2018.
6	Optimax Holdings Berhad	All	2018-2019	Company listed on 15 July 2020.
		TSR	2020	-
7	Smile-Link Healthcare Global Berhad	TSR	2018-2019	Company listed on 23 April 2019.
8	Topvision Eye Specialist Berhad	TSR	2018	Company listed on 7 June 2018.
9	*UMedic Group Berhad	All	2018-2021	Company listed on 26 July 2022.

Source: Bursa Malaysia and Malaysian Stock Biz.

Note: \* refers to companies removed from the sample.

To achieve the research objective, there are five hypotheses to be tested in this study, which are:

- H<sub>1</sub>: The percentage of women directors affects the return on equity of Malaysian listed healthcare companies.
- H<sub>2</sub>: The ratio of average women directors' remuneration divided by average men directors' remuneration affects the return on equity of Malaysian listed healthcare companies.
- H<sub>3</sub>: The average age of women directors affects the return on equity of Malaysian listed healthcare companies.
- H<sub>4</sub>: The appointment of a woman chairman affects the return on equity of Malaysian listed healthcare companies.
- H<sub>5</sub>: The appointment of a woman CEO affects the return on equity of Malaysian listed healthcare companies.

#### **Results and Discussion**

The descriptive statistics of this study is summarised in Table 2. In particular, the mean of the ROE, WDIR, WREM and WAGE variables for the overall panel are 0.116522, 0.232721, 0.892021 and 51.37644 respectively; pre-Covid panel 0.033748, 0.227578, 0.855610 and 54.31875 respectively; and during-Covid panel is 0.186967, 0.237098, 0.923009 and 48.87234 respectively. Meanwhile, the frequency count for WCHM is 9, 5 and 4 for the overall, pre-Covid and during Covid panels respectively; while the frequency count for WCEO is 10, 4 and 6 for the same periods respectively.



From these statistics, it is worth to note that the mean WDIR is below 0.30, indicating the government's target has not been achieved by healthcare sector companies. Besides, women directors are underpaid compared to men as the mean WREM is below 1.00.

**Table 2. Descriptive Statistics** 

Variable	Overall panel	Pre-Covid panel	<b>During-Covid panel</b>
ROE (in %)			
Mean	0.116522	0.033748	0.186967
Std. Dev.	0.312014	0.170939	0.382369
Max.	1.435000	0.334050	1.435000
Min.	-0.577000	-0.460823	-0.577000
<b>WDIR (in %)</b>			
Mean	0.232721	0.227578	0.237098
Std. Dev.	0.135781	0.111018	0.154843
Max.	0.666667	0.444444	0.666667
Min.	0.000000	0.000000	0.000000
<u>WREM</u>			
Mean	0.892021	0.855610	0.923009
Std. Dev.	1.364145	1.437224	1.313637
Max.	6.927285	6.927285	5.391007
Min.	0.000000	0.000000	0.000000
WAGE			
Mean	51.37644	54.31875	48.87234
Std. Dev.	17.45126	14.04348	19.70348
Max.	73.00000	72.00000	73.00000
Min.	30.00000	30.00000	32.00000
<u>WCHM</u>			
Frequency count	9	5	4
WCEO			
Frequency count	10	4	6

Source: Output from EViews using annual report and Refinitiv data.

The model selection process is facilitated by conducting the Redundant Fixed Effects Test, Breusch-Pagan Lagrange Multiplier Test and Hausman Test as summarised in Table 3.

For the overall panel model, the results indicate that the Random Effects Cross-Section Model produces the best output, as summarised in Table 4. Hence, the Random Effects Model (REM) will be used for all three models of this study for consistency. Thereafter, the REM analysis was conducted and the REM regression results are summarised in Table 5.

**Table 3. Panel Model Selection Hypotheses** 

Tests	Overall panel
Redundant Fixed Effects Test	H <sub>0</sub> : POLS is preferred. H <sub>A</sub> : FEM is preferred.
Breusch-Pagan LM Test	$H_0$ : POLS is preferred. $H_A$ : REM is preferred.



H<sub>0</sub>: REM is preferred. H<sub>A</sub>: FEM is preferred.

Note. Decision rule: Reject H₀ if p-value < a-value of 0.05.

Table 4. Redundant Fixed Effect Test, Breusch-Pagan Lagrange Multiplier (LM) Test and Hausman Test Output Summary of Overall Panel Model

Test	t-statistic	p-value	Decision
Redundant Fixed Effects Test	86.484882	0.0000	Reject $H_0$ if p-value < a-value of 0.05. FEM preferred.
Breusch-Pagan LM Test	13.99906	0.0002	Reject $H_0$ if p-value < a-value of 0.05. REM preferred.
Hausman Test	7.027372	0.2186	Do not Reject H <sub>0</sub> if p-value > a-value of 0.05. REM preferred.  Decision: REM preferred.

Source: Output from EViews.

Based on the regression results, the dependent variable ROE for the overall panel is 58.61% explained by the independent variables. Of which, only WCHM has a significant impact on ROE, where 1 unit increase in WCHM decreases ROE by 0.8389 units. Next, based on the unit root test using Levin, Lin Chu (2002) as summarised in Table 6, all the variables are stationary at level at the significance level of 0.01, except for WDIR which is stationary at level at the significance level of 0.10. Then, based on the variance inflation factor (VIF) test, the VIF values for all variables are lower than 5 as summarised in Table 7. Since all the VIF values < decision rule value of 5, this means that there is no multicollinearity issue in the model. Finally, the Durbin-Watson test statistic is checked, which is  $1.6338 \approx$  decision rule value of 2. This means there is no first-order autocorrelation.

Then, the dependent variable ROE for the pre-Covid panel is 74.29% explained by the independent variables, where all variables do not have any significant impact on ROE. There is no multicollinearity issue in the model. However, the stationarity of the sub-sample is unable to be tested due to the overly small sample size. Also, there is first-order autocorrelation, but the autocorrelation estimator may be biased due to the limited population size. So, this leaves space for future academics for enhanced studies on this topic.

Lastly, for the during-Covid panel, EViews is unable to produce the estimation outputs for WCHM and WCEO due to singular matrix issue. Hence, the equation is reduced to only 3 independent variables, namely WDIR, WREM and WAGE. Therefore, the dependent variable ROE is 84.66% explained by the independent variables, where only WAGE has a significant impact on ROE and 1 unit increase in WAGE increases ROE by 0.0116 units. Here, again, there is no multicollinearity issue but the stationarity is unable to be tested, and there is first-order autocorrelation.



**Table 5. Panel Data Regression Results** 

Variable	Overall panel	Pre-Covid panel	<b>During-Covid panel</b>
R-square	0.5861	0.7429	0.8466
Adjusted R-square	0.405034	0.334682	0.656719
<b>Durbin-Watson stat.</b>	1.6338	3.9130	3.8400
WDIR (in %)			
Coefficient	0.417256	-0.192151	-0.633777
t-statistic	0.856399	-0.319967	0.677807
p-value	0.3950	0.7529	0.5053
WREM			
Coefficient	0.044527	0.003612	-0.198693
t-statistic	1.175930	0.090138	-1.147934
p-value	0.2440	0.9292	0.2639
WAGE			
Coefficient	0.003541	0.003803	0.011556
t-statistic	1.052930	0.800344	1.742794
p-value	0.2963	0.4346	0.0960*
<u>WCHM</u>			
Coefficient	-0.838898	-0.449853	NA
t-statistic	-2.819244	-1.027880	NA
p-value	0.0064***	0.3184	NA
<u>WCEO</u>			
Coefficient	-0.281482	0.012197	NA
t-statistic	-1.280828	0.034366	NA
p-value	0.2049	0.9730	NA

Source: Output from EViews using annual report and Refinitiv data.

Note: \*\*\*, \*\* or \* indicates significant relationship at 0.01, 0.05 or 0.10 level respectively.

Table 6. Unit Root Test Output, t-statistics (Levin, Lin & Chu)

Variable	Level, I(0)	1 <sup>st</sup> Difference, I(1)	2 <sup>nd</sup> Difference, I(2)
ROE (in %)			
Overall	-4.46109***	N.A.	N.A.
Pre-Covid	N.A.	N.A.	N.A.
During-Covid	N.A.	N.A.	N.A.
WDIR (in %)			
Overall	-1.28381*	N.A.	N.A.
Pre-Covid	N.A.	N.A.	N.A.
During-Covid	N.A.	N.A.	N.A.
WREM			
Overall	-58.3836***	N.A.	N.A.
Pre-Covid	N.A.	N.A.	N.A.
During-Covid	N.A.	N.A.	N.A.
WAGE			
Overall	-15.2164***	N.A.	N.A.
Pre-Covid	N.A.	N.A.	N.A.
During-Covid	N.A.	N.A.	N.A.

Source: Output from EViews using annual report and Refinitiv data.

Note: \*\*\*, \*\* or \* indicates significant relationship at 0.01, 0.05 or 0.10 level respectively.



**Table 7. Centered Variance Inflation Factor Test Output** 

Variable	Overall Panel	Pre-Covid Panel	<b>During-Covid Panel</b>
WDIR	1.425455	1.227355	1.728772
WREM	1.614991	1.306416	3.577071
WAGE	1.486896	1.357775	2.095665
WCHM	1.103924	1.151067	1.076687
WCEO	1.687872	1.465101	3.544243

Source: Output from EViews using annual report and Refinitiv data.

To summarise the empirical results, all the variables are insignificant except for WCHM in the overall panel and WAGE in the during-Covid panel, which supports the hypotheses  $H_3$  and  $H_4$  but rejects the hypotheses  $H_1$ ,  $H_2$  and  $H_5$ . This may be because women representation awareness is still relatively low in Malaysia, and the healthcare industry has many newly listed companies which do not yet have time for women directors' influence to materialise properly.

In the significance of study, we prove the existence of the Female Leadership Theory through the WAGE variable, where all models showed a positive relationship with the dependent variable; implying that older women directors are more adept in harnessing and maximising the potentials of their feminine attributes when leading business operations. Meanwhile, the Glass Cliff Theory is shown through two channels:

- (1) based on WREM in the overall and pre-Covid panel, when women directors are given appropriate remuneration packages (i.e., diminished gender pay gap), firm performance experience a positive effect; and
- (2) based on WDIR, WCHM and WCEO for all periods and the original data which indicated women are severely underrepresented in the healthcare industry; causing ambiguous results in the regression model. This is reflected by the real-world situation where women are not given enough executive power to fully realise their potential - resulting in negative outcomes for firm performance instead (Ain, Yuan, Javaid, Usman & Haris, 2021). This also explains the fact that, even though there is a high percentage of women board representation in Africa, their actual corporate performance is low when compared to developed countries.

Nevertheless, for the significant outcomes, WCHM negatively affected ROE perhaps due to female directors' transformational leadership styles which may not be well-received by investors in the Asian setting (Halliday, Paustian-Underdahl, Fainshmidt, 2020). This contrasts with literature because our sample is based on Malaysia while literature is mostly focused on developed countries (Orazalin, 2019). Also, only 2 companies consistently had women chairmen throughout (i.e., Duopharma Biotech Bhd and Malaysian Genomics Resource Center Bhd) with an average of 38% WDIR ratio, diminishing WCHM's contribution since women are underrepresented (Duppati, Rao, Matlani, Scrimgeour & Patnaik, 2019). This explains the insignificance of the WDIR too. Also, women directors are underpaid which leads to demotivation, explained by the mean WREM of 0.89 across the entire sample, which is less than one (Usman, Siddique, Majid Makki, Gull, Dardour & Yin, 2020). On the other hand, WAGE positively affected firm performance because elder women directors are more experienced and



can multitask better, which is a beneficial feminine trait advantageous to firms to weather the new obstacles brought on by Covid-19 where the healthcare sector was allowed to operate but subject to many stringent SOPs (Kamberidou, 2020).

#### **Conclusions**

To summarise, all the variables are insignificant except WCHM in overall Covid panel and WAGE in during-Covid sub-panel because women representation awareness is still relatively low in Malaysia, and the healthcare industry has many newly listed companies which do not yet have time for women directors' influence to materialise properly to be evaluated by the model. Nevertheless, we proved the existence of the Female Leadership Theory through the WAGE variable and the Glass Cliff Theory through the WREM, WDIR, WCHM and WCEO variables. In conclusion, Malaysia has a long way to go in improving women directors' actual representation and governance effectiveness in companies. It is recommended that government policymakers push for more women directors to be appointed and launch quality training programmes to train women directors and managers instead of solely pushing for more women to enter the workforce. Also, owners and company shareholders should delete the Asian culture of prejudice against women's capabilities and appoint more women to senior management roles whilst ensuring gender pay parity. Only then, Malaysia will be one step closer to achieving Gender Equality.

#### References

- Ain, Q. U., Yuan, X., Javaid, H. M., Usman, M., & Haris, M. (2020). Female directors and agency costs: evidence from Chinese listed firms. *International Journal of Emerging Markets,* 16(8), 1604-1633. https://doi.org/10.1108/IJOEM-10-2019-0818
- Al-Shaer, H. & Harakeh, M. (2020). Gender Differences in Executive Compensation on British Corporate Boards: the Role of Conditional Conservatism. *The International Journal of Accounting*, *55*(1), 1-48. https://doi.org/10.1142/S109440602050002X
- Amran, N. A., Ismail, N. I. K, Aripin, N., Hassan, N., Manaf, K. B. A., & Abdullah, S. N. (2014). Women Directors Involvement in Malaysia. *Australian Journal of Basic and Applied Sciences*, 8(5), 226-231. https://www.researchgate.net/publication/264057354\_Women\_Directors\_Involvement\_in\_Malaysia
- Arvanitis, S. E., Varouchas, E. G. & Agiomirgianakis, G. M. (2022). Does Board Gender Diversity Really Improve Firm Performance? Evidence from Greek Listed Firms. *Journal of Risk and Financial Performance*, *15*(306), 1-19. https://doi.org/10.3390/jrfm15070306
- Bennouri, M., Chtioui, T., Nagati, H. & Nekhili, M. (2018). Female board directorship and firm performance: What really matters? *Journal of Banking & Finance, 88*, 267-291. https://doi.org/10.1016/j.jbankfin.2017.12.010
- BERNAMA. (2022, September 23). 52% of top 100 PLCs have 30% women directors, says SC chief. *Free Malaysia Today*. Retrieved from https://www.freemalaysiatoday.com/category/nation/2022/09/23/52-of-top-100-plcs-have-30-women-directors-says-sc-chief/
- Birruntha, S. (2022, October 13). Malaysia remains emerging hotspot in medical tourism. Retrieved from https://themalaysianreserve.com/2022/10/13/malaysia-remains-emerging-hotspot-in-medical-tourism/



- Brahma, S., Nwafor, C. & Boateng, A. (2018). Board gender diversity and firm performance: The UK evidence. *International Journal of Finance & Economies, 26*(4), 5704-5719. https://doi.org/10.1002/ijfe.2089
- Cook, A., Ingersoll, A. R. & Glass, C. (2018). Gender gaps at the top: Does board composition affect executive compensation? *Human Relations, 72*(8), 1265-1403. https://doi.org/10.1177/0018726718809158
- Duppati, G., Rao, N. V., Matlani, N., Scrimgeour, F., & Patnaik, D. (2020). Gender diversity and firm performance: evidence from India and Singapore. *Applied Economics*, *52*(14), 1553-1565. https://doi.org/10.1080/00036846.2019.1676872
- Eagly, A. H., Karau, S. J., & Makhijani, M. G. (1995). Gender and the effectiveness of leaders: A meta-analysis. *Psychological Bulletin*, 117(1), 125–145. https://doi.org/10.1037/0033-2909.117.1.125
- Fernández-Temprano, M. A. & Tejerina-Gaite, F. (2020). Types of director, board diversity and firm performance. *Corporate Governance*, *20*(2), 324-342. https://10.1108/CG-03-2019-0096
- Grant Thornton. (2022). *Women In Business 2022*. Retrieved from https://www.grantthornton.com.my/globalassets/1.-member-firms/malaysia/publications/ibr/women-in-business-2022-opening-the-door-to-diverse-talent.pdf
- Halliday, C., S., Paustian-Underdahl, S., C., Fainshmidt, S. (2021). Women on boards of directors: A meta-analytic examination of the roles of organizational leadership and national context for gender equality. *Journal of Business and Psychology, 36*(2), 173-191. https://link.springer.com/article/10.1007/s10869-019-09679-y
- Kalekye, E., Koome, D. & Gichuhi, D. (2021). Influence of the Glass Cliff Phenomenon on the Effectiveness of Women Senior Managers in Organisational Development in Kenya. *Editon Consortium Journal of Business and Management Studies, 3*(1), 101-108. https://doi.org/10.51317/ecjbms.v3i1.259
- Kamberidou, I. (2020). "Distinguished" women entrepreneurs in the digital economy and the multitasking whirlpool. *Journal of Innovation and Entrepreneurship, 9*(3), 1-26. https://doi.org/10.1186/s13731-020-0114-y
- Kiseleva, L. (2018 10-18). Female leadership in the context of entrepreneurship in Russia [Paper Presentation]. ICSEAL 2018, Prague, Czech Republic. https://doi.org/10.2991/icseal-18.2018.11
- Levin, A., Lin, C. F., & Chu, C. S. J. (2002). Unit root tests in panel data: Asymptotic and finite-sample properties. *Journal of Econometrics*, 108(1), 1-24.
- Moreno-Gómez, J., Lafuente E. & Vaillant, Y. (2018). Gender diversity in the board, women's leadership and business performance. *Gender in Management: An International Journal, 33*(2), 1-20. http://dx.doi.org/10.1108/GM-05-2017-0058
- O'Neill, B., Pruysers, S. & Stewart, D. K. (2019). Glass Cliffs or Partisan Pressure? Examining Gender and Party Leader Tenures and Exits. *Political Studies*, *69*(2), 257-277. https://doi.org/10.1177/0032321719880316
- Orazalin, N. (2020). Board gender diversity, corporate governance, and earnings management: Evidence from an emerging market. *Gender in Management: An International Journal,* 35(1), 37-60. https://doi.org/10.1108/GM-03-2018-0027



- Ryan, M. K. & Haslam, S. A. (2007). The Glass Cliff: Exploring the Dynamics Surrounding the Appointment of Women to Precarious Leadership Positions. *The Academy of Management Review, 32*(2), 549-572. http://www.jstor.org/stable/20159315
- Saint-Michel, S. E. (2018). Leader gender stereotypes and transformational leadership: Does leader sex make the difference? *M@n@gement*, *21*(3), 944-966. https://www.cairn-int.info/journal-management-2018-3-page-944.htm ?WT.tsrc=pdf
- Singh, J., Singhania, S. & Aggrawal, D. (2022). Does board gender diversity impact financial performance? Evidence from the Indian IT sector. *Society and Business Review, 1-20.* https://doi.org/10.1108/SBR-09-2021-0164
- The Star. (2021, October 30). All PLCs to have women directors by January 2023. Retrieved from https://www.thestar.com.my/business/business-news/2021/10/30/all-plcs-to-have-women-directors-by-january-2023
- TalentCorp. (2016). Government's initiatives to increase women in the workforce make headway. https://www.talentcorp.com.my/resources/press-releases/ governments-initiatives-to-increase-women-in-the-workforce-make-headway
- Usman, M., Siddique, M. A., Majid Makki, M. A., Gull, A. A., Dardour, A. & Yin, J. (2020). Executives' pay—performance link in China: evidence from independent and gender-diverse compensation committees. *International Journal of Emerging Markets, 16*(8), 1984-2008. https://10.1108/IJOEM-09-2019-0701
- World Bank. (2022). Current health expenditure (% of GDP) Malaysia. Retrieved from https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS?locations=MY
- World Economic Forum. (2019). These countries have the most women in parliament. https://www.weforum.org/agenda/2019/02/chart-of-the-day-these-countries-have-the-most-women-in-parliament/
- Yanadori, Y., Kulik, C. T. & Gould, J. A. (2022). Who pays the penalty? Implications of gender pay disparities within top management teams for firm performance. *Human Resource Management*, *60*(4), 681-699. https://doi.org/10.1002/hrm.22067