



The Influence of Board Governance on Operating Performance of Malaysian IPOs Based on Market Size

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Abstract: This study illustrates the significance of comprehending board governance by examining the relationship between director characteristics and the operating performance of Malaysian IPO firms. The selected firms in the sample are categorized based on market capitalization to enhance the study's rigor. Board governance is represented by board diversity and structure as independent variables and operating performance as a dependent variable. Operating performance is measured by earnings before interest and tax to total assets (EBIT/A). The findings of descriptive analysis show that Malaysian IPOs' operating performance before the IPO is better than during the IPO year, and the performance declines further after the IPO year. Several directors' characteristics have a significant relationship with post-IPO operating performance. When the dependent variable is EBIT/A, board size and the number of independent directors are significantly and negatively related to operating performance. These results suggest that more directors and independent directors do not bode well for firm performance for small-size firms, indicating potential differences in the effectiveness of corporate governance practices between Malaysia and other developed countries. On the other hand, variables such as the size of the board and age diversity exhibit significance for large firm's size. On the other hand, variables such as postgraduate education level, gender diversity, age diversity, and family ownership generally do not exhibit a significant relationship with operating performance. This study extends the current literature by inserting a comprehensive set of directors' profile variables.

Keywords: Board characteristic, IPOs, operating performance, board diversity, board size, and firm size.

JEL Classification: G30; G32; G14

Paper Type: Research

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1. INTRODUCTION

The new issue market is an integral component of the capital market, allowing companies to raise funds through the issuance of new shares or by selling their existing shares. The strategic impact of the financing decision to offer new issues or IPOs has motivated extensive research within the field. Prior literature has extensively explored the price behavior of these offerings, both in developed and developing markets. Generally, previous research findings indicate that IPOs often record substantial gains on the first day of trading, delivering excess returns to investors in the short run.

However, it is noteworthy that IPOs exhibit poor long-term stock returns, a phenomenon well-documented by researchers such as Loughran and Ritter (1994) and Cai and Wei (1997). Loughran and Ritter (1994) provided a comprehensive review of international evidence on the long-run underperformance of IPOs, revealing mixed results among different researchers. For instance, Lee et al. (1996) observed severe underperformance in the long run for Australian IPOs. In contrast, Rosa et al. (2003) found no such evidence in the same market over a two-year post-IPO period. In comparison, Ritter (1991) reported significant negative returns for U.S. IPOs in the first three to five years following their IPOs. Interestingly, in Malaysia, IPOs tend to outperform the market, both in the short run and the long run, as suggested by Corhay et al. (2002), Zaluki et al. (2007), and Mohamad et al. (1994).

Numerous comprehensive examinations have delved into the accounting-based operating performance of firms following their initial public offerings (IPOs). Notable contributions to this field include studies by Jain and Kini (1994, 2008), Balatbat et al. (2004), and Wang (2005), all of which have collectively revealed a consistent trend: post-issue operating performance tends to undergo a notable and statistically significant decline when compared to pre-issue levels. This robust body of research underscores the intriguing dynamics surrounding IPOs, shedding light on the challenges and adjustments companies face as they transition from private entities to publicly traded ones, ultimately contributing to a deeper understanding of the market's financial landscape and investment decisions.

Most notably, prior Malaysian studies have primarily focused on underpricing and short-term and long-term stock price performance of IPOs. These studies consistently identify relatively higher underpricing in Malaysian IPOs compared to other countries, particularly within the Asian market, as documented by Dawson (1987), Othman et al. (1999), Mohamad et al. (1994), and Wu (1993). Dawson (1987) even highlighted the exceptional performance of Malaysian IPOs in both the short and long run. Several factors have been identified to explain IPO performance in Malaysia, including institutional ownership (Yong et al., 2011), underwriter reputation (Carter and Manaster, 1990; Kenourgios et al., 2007; Su and Bangassa, 2011), lock-up provisions (Wan Hussin, 2005; Rashid et al., 2014), market conditions (Derrien and Womack, 2003; Chua, 2014), after-market liquidity (Ellul and Pagano, 2006), and earnings management (Nagata, 2013).

Surprisingly, most of the studies analyzing the operating performance of IPO firms in Malaysia have overlooked the director's characteristics, as demonstrated by Zaluki (2008), Zaluki (2005), Ho and Raja Amir Hamzah (2011), and Masruki and Azizan (2012). These factors ensure that publicly listed companies adhere to good corporate governance practices.

This study takes a fresh approach by analyzing changes in the operating performance of listed firms before and after their initial public offerings, specifically focusing on the Malaysian context. We examine firms listed in Bursa Malaysia in market capitalization categories. Additionally, this study investigates the relationship between directors' characteristics and the post-issue operating performance of Malaysian IPO firms.

A company's board of directors plays a pivotal role in overseeing its business, approving strategic decisions, and evaluating its performance. The quality and diversity of directors are expected to influence a firm's future performance. Moreover, in emerging markets like Malaysia, ownership structure and alignment of managerial interests with shareholders' interests become crucial, given the high information asymmetry and potential for non-value maximizing behavior. This study aims to fill the gap in existing research by exploring these dimensions comprehensively and providing valuable insights into the unique dynamics of the Malaysian IPO landscape.

2. LITERATURE REVIEW

In addition to analyzing the underpricing level and the stock price performance of IPO firms, researchers also examine the operating performance of IPO firms. Balatbat et al. (2004) examined the post-listing operational performance of Australian IPOs by focusing on the relationship between the ownership structure and firm performance. They found that the operating returns of IPO firms appear to be relatively stable for up to five years after the IPO. Operating performance is calculated by taking the profit before interest, tax deflated by the total asset. Furthermore, the study conducted a multivariate analysis to test the effects of insider ownership and corporate governance attributes (board composition and leadership) on post-listing operating performance.

The dependent variable is adjusted operating returns, and the independent variables are operating returns, ownership shareholders, proportion of outside directors, share ownership of institutional investors, age of company, proportion of retained ownership, leverage, and proportion of tangible asset to total asset. The findings show that ownership shareholding is only significant in years four and five. The outside directors variable is considered lacking in explanatory power, and the institution ownership variable is significant in years three and five. Leverage is significant from year two until year five, and the proportion of tangible assets is significant in years one, two, four, and five.

Arik and Mutlu (2015) examined the post-IPO operating performance of the companies listed on Borsa Istanbul. They found that operating performance indicators, except cash flows from operations over total assets, declined following the IPOs relative to the pre-IPO year. Jain and Kini (2008) studied the impact of strategic investment choices on post-IPO operating performance and the survival of US IPO firms. They focused on four key resource allocations for investment decisions by issuing firms - product diversification, R&D expenditure, capital investments, and advertising expenditure. The sample in the study comprises 3837 firms, listed from 1980 to 1997, in the US market. Abnormal operating performance is computed as the difference between the issuing firm's raw operating performance and the median operational performance of the firm's industry. The results of this study show the extent of diversification of the issuing firm's products. In addition, the extent and intensity of the industry's adjusted capital expenditure are generally positively related to the IPO firms. For survival analysis, the results suggest that pre-issue managerial commitment to R&D spending and the development of a diversified product line will enhance the ability of IPO firms to remain viable longer.

Jain and Kini (1994) also examined the post-issue operating performance of IPO firms by examining changes in their operating performance. The sample of this study consists of 682 IPOs from 1976 to 1988. These firms' operating performance changes were measured relative to year -1 (a year prior to IPO) and three years after the listing. The operational performance was measured by return on asset, cash flow/total asset, sales, asset turnover, and capital expenditures. The results show that IPO firms exhibited a decline in their post-IPO operating performance, relative to the year before listing, until five years after listing. Pre-IPO operating performance levels may lead investors to develop optimistic earnings growth expectations for IPO firms. Although there is an increase in sales and capital expenditure, the pre-IPO performance levels are not sustained, leading to a decline in expectations. In ownership evidence, the results show a positive relationship between managerial ownership retention and post-operating performance.

Drawing upon extensive research conducted by Long, Lin, and Chen in 2021, this study delves into the financial dynamics of 200 publicly listed firms hailing from the Growth Enterprise Market of China. Employing a rigorous methodology involving regression models, the primary objective is to discern the pivotal role of initial public offering (IPO) capital expenditure in shaping these firms' operational performance. Long et al. (2021) seminal work reveals compelling insights into the allocation of financial resources in the pre-IPO and post-IPO phases.

The research underscores that, before their IPOs, a substantial proportion of financial resources is directed toward strategic business development initiatives. This strategic allocation is primarily aimed at bolstering operational performance, a strategic imperative driven by the imperative to meet the stringent requirements of the IPO process. It signifies a conscious and proactive approach these firms adopt to position themselves favorably in the market.

However, the post-IPO landscape presents a contrasting picture. Long et al. (2021) findings highlight a notable shift in resource allocation. Following the successful IPO, a significant portion of the capital is channeled into equity investments. This strategic maneuver is driven by the firms' aspiration to augment their market value swiftly. Paradoxically, this shift towards equity investments leads to a discernible decline in operational performance, ultimately contributing to its deterioration.

In sum, Lin and Chen's research underscores the dynamic financial strategies firms adopt in the China Growth Enterprise Market as they navigate the challenging IPO landscape. Their study provides a nuanced understanding of how firms allocate capital at different stages of their journey toward becoming publicly listed entities, shedding light on the critical interplay between IPO capital expenditure, operational performance, and market value enhancement.

Wang (2005) examined the changes in the operating performance of Chinese IPOs by focusing on the effect of ownership of 747 Chinese firms that were listed from 1994 to 1999. Operating performance is measured by return on asset (ROA), operating income to asset (OI/A), and sales to assets (S/A). The results show a sharp decline in the post-issue operating performance of the IPOs, measured by the three variables. Based on the signaling model of underpricing, this suggests that underpriced IPO firms are more likely to exhibit superior operating performance compared to those that do not record underpricing. Based on the performance measured by ROA and OI/A, the results show

that IPO firms that recorded underpricing levels above the median level did not perform better than those that recorded underpricing below the median level. However, the S/A performance measurement showed a different direction, in which firms that experience more severe underpricing are associated with a more significant decline in performance. They also found that legal entity ownership and concentration of non-state ownership are significantly associated with performance changes.

Chi and Padget (2006) also examined operating performance changes of Chinese IPOs by using the profitability ratio (earnings per share, return on equity, and return on asset), sales growth rates, asset turnover, and debt to asset ratio. The results show that profitability ratio, sales growth rates, and asset turnover declined significantly after the IPOs, whilst debt-to-asset ratios decreased or only increased slowly, while total sales increased gradually. Furthermore, the study also examined the relationship between the post-issue operating performance and the long-run market returns of IPOs. The results show that investors consider accounting information when making investment decisions. Firms with a high return on assets (ROA) and those with smaller ROA, higher sales growth rates, higher asset turnover, and higher debt-to-asset ratio would record higher market returns in the long run.

Huang and Song (2005) examined China's newly listed H-firms' pre- and post-financial and operating performance. H-shares refer to the shares that foreign investors can own, and 12 accounting proxies are used to measure the H-firms' financial and operating performance changes. Performances are measured by profitability ratio (return on sales, return on asset, and return on equity) and operating efficiency (sales efficiency, net income efficiency, and asset turnover). The results show that the operating performance marginally increased (except ROE) in year 0 and then significantly decreased during the following three years if compared to the level in year -1. Sales increased before and after going public, and dividend payout increased after listing. The study also analyzed the privatization effect and IPO effect, and the findings show that the IPO effect dominates the privatization effect, suggesting that after listing, the H-firms experience a significant decrease in profitability and operating efficiency.

Cai and Wei (1997) examined the long-run stock returns and operating performance of 180 IPOs listed in Japan. In order to measure the operating performance, they used ordinary income relative to total assets. The results show that performance drops significantly by 1.6% to 3% within five years after listing. The ownership structure of Japanese firms is normally characterized by a large holding by a financial institution that has control over the firm's investments and financing decisions. This study also documents that the prevalent long-run underperformance in the Japanese IPO market offers important evidence that managers take advantage of the 'window of opportunity' to issue new shares when the cost of capital is low.

Mikkelsen et al. (1997) examined ownership and the operating performance of companies that are applying for listing in the US market. They measured the ownership of directors and blockholders as well as individuals who control or own the firm. They analyzed the operating performance from the fiscal year before the initial public offering and up to ten fiscal years after the offering. Operating performance is measured by operating return on asset (operating income before deducting depreciation, interest, taxes, and extraordinary items divided by end-of-year assets). The study documented that the median operating income falls sharply during the first five years of listing, from the year before going public. They also found that ownership stakes decline significantly after going public, and the

changes in equity ownership, which result from going public, do not lead to changes in incentives that would affect the operating performance. Based on the firm's size, large and established companies experience a significant decline in performance after IPO listing.

Kim et al. (2004) examined ownership and the operating performance of Thai firms after they go for listing. They focused on the relationship between managerial ownership and operating performance. Operating performance is calculated by two methods: operating returns on total assets and operating cash flow. The findings show that an increase in managerial ownership is associated with a more desirable firm performance within both ownership ranges of 0-31% and 71-100%. Greater managerial ownership, in the 31-71% ownership range, is negatively associated with a firm's performance. They also found that firms with a high level of bank financing suffer a larger performance decline when they apply for listing.

Ahmad and Lim (2005) analyzed the operating performance of IPOs in Malaysia, focusing on the difference between the pre-and post-IPO operating performance. Using 162 samples of Malaysian IPOs from 1996 to 2000, a significant difference was found between pre- and post-IPO operating performance when operating return on assets (ROA), total assets turnover (ATO), and return on sales (ROS) were used to measure operating performance. This study also found that the size of the firm and pre-IPO profitability have a significant relationship with post-IPO operating performance.

Zaluki (2008) studied the impact of earnings management on post-operating performance in Malaysian IPOs. The author found that post-operating performance declined in the IPO year and up to three years following IPOs relative to the pre-IPO period. The results indicated that the decline in post-IPO operating performance is due to the existence of earnings manipulation by the IPO manager at the time of going public. The year-to-year analysis reveals that the decline in performance is greatest in the year immediately following the IPO.

There are few explanations as to why the post-operating performance of IPO firms declines after the listing. One of the explanations refers to agency costs when a firm transitions from a private to a public firm, and there is a potential for increased agency costs. According to Jensen and Meckling (1976), when there is a reduction of management ownership, which happens when a private firm goes for public listing, it is likely to lead to agency problems. Another explanation could be that the managers attempt to 'window dress' their accounting figures prior to listing. This situation will lead to the pre-IPO performance being overstated and the post-IPO performance being understated.

Auret and Britten (2008) investigated the post-issue operating performance of 391 South African IPOs between 1990 and 2003. Several variables, such as changes in profitability (ROA), investment and growth, tax, leverage, and cost of credit, were analyzed over a three-year period through a fixed-effects panel data regression model. The findings show that there is a significant deterioration in post-issued operating performance (ROA) in the third year after listing. The authors suggested that this occurs because entrepreneurs are taking advantage of a window of opportunity.

Wong (2012) studies the operating performance of 418 IPOs in Hong Kong from 1991 to 2000. The change in operating performance of these firms is measured during a year before the listing (t-1) to the year of listing (t+1), and to each of the following four years will be reported. The operating performance of listed firms was examined using profit

margin and return on assets. In addition, this study examined the effects of ownership retention, firm size, leverage, earnings management, and past profits on changes in performance. As a result, there is a decline in post-IPO operating performance, starting from the first financial year after listing. In addition, a decline in operating performance was also recorded by firms with the following characteristics - small, high-leveraged, fast-growing, low level of ownership retention by original shareholders, and upward earnings management at the time of listing. This might be due to agency problem that occurs when a firm goes public, and managers time their issues at the peak of the firm's long-run performance.

Alanazi and Liu (2013) studied the financial and operating performance of IPOs in six countries (Saudi Arabia, Oman, Emirates, Bahrain, Kuwait, and Qatar) from the GCC (Gulf Cooperating Council) region. Operating performance is measured by return on assets (ROA), return on sales (ROS), and sales to assets (S/A). After examining 52 IPOs between 2003 and 2010, the results show that the IPOs' post-performance declined after going public. The regression analysis between the change in operating performance and the global financial crisis dummy variable shows an insignificant negative relationship. The researchers opined that the GCC region is insulated against the global financial crisis due to conservative financial and monetary policies.

3. DATA AND METHODOLOGY

This section explains the theoretical framework developed for this study, based on the theories discussed in the previous chapter – the agency cost theory and the signaling theory, as well as the literature relevant to the objectives of this study. Figure 1 shows the theoretical framework developed for this study, whereby it lists the dependent variable, independent variables, and the control variables selected for this study. The selection of all the variables is based on the underpinning theories discussed earlier and the relevant studies in the literature.

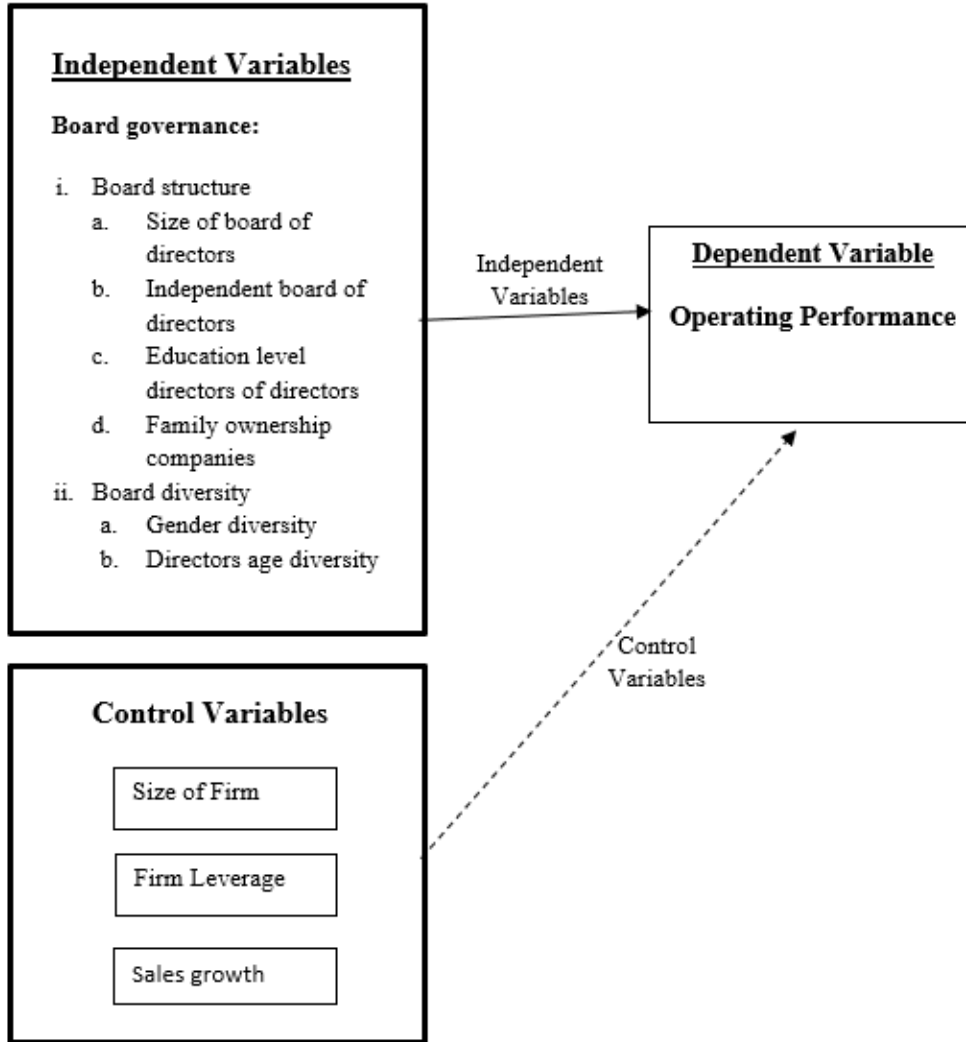


Figure 1. The Relationships Between the Dependent Variable and Independent Variables based on firm size

Based on Figure 1, three vital control variables have been identified—firm size, firm leverage, and sales growth—which significantly contribute to the comprehensive understanding of the operating performance of Malaysian IPOs. Firm size, as indicated by Shari (2022), plays a crucial role, with larger firms demonstrating a longer survival period post-IPO. Firm leverage, as revealed by Ong et al. (2020) and Ben Ahmed et al. (2021), reflects financial risk and may impact IPO value and investment decisions. Sales growth, as emphasized by Hossain and Khan (2021), is essential in explaining changes in operating performance, particularly concerning the effects of IPO events. Incorporating these control variables in the analysis strengthens the research by capturing the influence of firm characteristics and financial dynamics, ultimately enhancing the comprehensiveness and applicability of findings regarding the interplay between board governance and the operating performance of Malaysian IPOs.

4. RESULTS AND DISCUSSION

Table 1 shows the descriptive statistics of Directors' profiles of small-size companies, which are the bottom 30% in terms of market capitalization. The findings show that 60.42% of the directors have at least an undergraduate degree, and 18.76% have a master's degree. The average board size is 6.59, with a minimum of 4 and a maximum of 13 directors. In terms of gender, about 15.06% of the board comprised of female directors. For independent directorship, the average proportion of independent directors is 37.58%, with a maximum of 57.14% and a minimum of 22.22%.

Table 1. Descriptive Statistics of Directors' Profile for Large Companies

	EDU	BOARD	DIRAGE	GENDER	IND
Mean	0.2064	7.3761	0.5640	0.1017	0.3758
Median	0.1818	7.0000	0.6111	0.0000	0.3333
Maximum	0.6000	14.0000	0.7407	0.4800	0.6667
Minimum	0.0000	4.0000	0.0000	0.0000	0.1111
Std. Dev.	0.1651	1.9286	0.1588	0.1444	0.1032
Observations	117	117	117	117	117

The main difference between the large and small companies is in terms of the representation of female directors on the board, which is 10.17% for large companies and 15.06% for small companies. The other directors' profiles do not show much difference between both groups.

Table 2. Descriptive Statistics of Directors' Profile for Small Companies

	EDU	BOARD	DIRAGE	GENDER	IND
Mean	0.1876	6.5897	0.5336	0.1506	0.3683
Median	0.1667	6.0000	0.5625	0.0000	0.3750
Maximum	0.6667	13.0000	0.7300	0.4938	0.5714
Minimum	0.0000	4.0000	0.0000	0.0000	0.2222
Std. Dev.	0.1815	1.7078	0.1407	0.1613	0.0718
Observations	117	117	117	117	117

4.1 Based on Size (Market Capitalization)

Table 3 shows the median operating performance changes for the companies in the sample based on size. Similar to the results in the previous section, there is a significant difference, indicating a declining trend throughout the intervals selected for the study, except in the EBIT/S ratio of large companies comparing year -1 and year 0, in which it is not significant.

Table 3. Operating Performance Median Change Based on Size (Wilcoxon Sign-Rank Test)

	Year -1 to 0	Year -1 to +1	Year -1 to +2	Year -1 to +3	Avg 3 years pre and post
Large Companies					
EBIT/A	2.863***	5.891***	7.108***	7.119***	7.116***
EBIT/S	1.526	4.138***	5.232***	5.552***	5.033***
Small Companies					
EBIT/A	6.868***	8.109***	8.517***	8.785***	8.329***
EBIT/S	2.950***	6.246***	7.356***	7.353***	6.545***

*** Significant 1 percent level

** Significant 5 percent level

* Significant 10 percent level

4.2 Large Market Capitalization Size EBIT/A

Table 4 shows the result of regression between the director's profile and EBIT to total asset-based large market capitalization firms. The top quartile of large-size firms is used to categorize the large market capitalization firms. BOARD and DIRAGE are significant in a firm's operating performance. Two control variables also show a significant result, namely SIZE and SG (sales growth).

Table 4. Large Market Capitalization Size EBIT/A

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EDU	0.786210	0.529926	1.483623	0.1413
BOARD	-0.574227	0.314140	-1.827933	0.0708*
DIRAGE	0.903774	0.448892	2.013346	0.0470**
GENDER	0.378456	0.461086	0.820792	0.4139
IND	-0.825492	0.834438	-0.989279	0.3251
FMLY	-0.000423	0.003112	-0.135934	0.8922
SIZE	0.118693	0.063120	1.880430	0.0632*
LEV	0.049115	0.349634	0.140476	0.8886
SG	0.348465	0.173935	2.003422	0.0481**
R-squared	0.252095			
Adjusted R-squared	0.056990			

*** Significant 1 percent level

** Significant 5 percent level

* Significant 10 percent level

4.3 Small Market Capitalization Size EBIT/A

Table 5 shows the outcome for IPO firms with a low market capitalization with EBIT to total assets as the dependent variable. The firms are based on the bottom quartile of firms in terms of size on market capitalization. Only the number of independent variables is significant toward the firm's IPO operating performance. This result suggests that a number of independent directors is important to monitor the small firms. This is consistent with previous findings that the presence of a large number of independent directors has an impact on a company's performance (Ponnu, 2008, Richardson, 2003 Brickley et al 1994). As a result, the presence of independent directors appears to be important in policy decision-making (Richardson, 2003). This is consistent with the argument that having a large number of independent directors on the board will improve monitoring and

transparency, ensuring fairness (Schellenger et al., 1989; Feng et al., 2007; Chen et al., 2011).

Table 5. Small Market Capitalization Size EBIT/A

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EDU	0.254013	0.457054	0.555761	0.5797
BOARD	-0.534152	0.338689	-1.577118	0.1182
DIRAGE	0.148154	0.514098	0.288182	0.7738
GENDER	-0.435367	0.450508	-0.966391	0.3364
IND	-2.616512	1.168669	-2.238882	0.0275**
FMLY	-0.003177	0.003076	-1.032874	0.3043
SIZE	0.541488	0.133463	4.057214	0.0001***
LEV	-1.333835	0.793232	-1.681520	0.0960*
SG	0.669717	0.183206	3.655532	0.0004***
R-squared	0.336253			
Adjusted R-squared	0.172101			

*** Significant 1 percent level ** Significant 5 percent level * Significant 10 percent level

Table 5 used Total Assets as the dependent variable. For the analysis, only the number of board members in IPO firms is significant compared to the previous analysis, Table 5, which recorded the number of independent directors as substantial, not the number of board sizes. There are contradicting arguments on the board size for firms with firm performance.

A large or small board size has advantages and disadvantages. However, a large board size is less effective in decision-making. Previous research has shown that a large board size contributes to slow or poor decision-making, as demonstrated by Lipton and Lorch (1992), Belkhir (2009), and Hermalin and Weisbach (2003). This is due to member disagreements, communication issues, and inefficiency as a result of the large board size. This is consistent with Jensen's (1993) claim that a smaller board size is better for effective decision-making.

However, according to Tu et al. (2007), a small board size will result in arbitrary and subjective decision-making as well as self-interested behavior by controlling shareholders via proxy by insider directors. According to Raheja (2005), a firm's board size increases when it is vulnerable to corporate expropriation by the controlling shareholder. According to Chen et al. (2011), a large board size should be able to control agency conflict efficiently due to resource advantage and cross-industry management, and it helps to create a good external image. Furthermore, in order to avoid cronyism, the board of directors can present a variety of interests.

5. CONCLUSION

This study aims to analyze the pre- and post-IPO operating performance of firms listed on Bursa Malaysia. Using the independent sample t-test approach, the outcome displays the median operating performance changes for all the sampled firms. The median EBIT/A and EBIT/S ratios are shown to have decreased over the course of the study, according to the t-test results. Between year -1 and year 0, year -1 and year +1, year -1 and year +2, year -1 and year +3, and between the average three years before the listing and the average three years following the listing, there is a considerable variation in operating performance.

In the analysis of IPO firms with low market capitalization, focusing on the bottom quartile, the study reveals that the number of independent directors significantly influences operating performance. This aligns with earlier research emphasizing the impact of a higher number of independent directors on company performance. The presence of independent directors is deemed crucial in policy decision-making, fostering monitoring and transparency to ensure fairness.

REFERENCES

- Ahmad-Zaluki, N. A. (2008). Post-IPOs operating performance and earnings management. *International Business Research*, 1(2). <https://doi.org/10.5539/ibr.v1n2p39>
- Ahmad, G. N., Prasetyo, M. R. P., Buchdadi, A. D., Widyastuti, U., & Kurniawati, H. (2022). The effect of CEO characteristics on firm performance of food and beverage companies in Indonesia, Malaysia, and Singapore. *Calitatea*, 23(186), 111-122.
- Ahmad, M., Raja Kamaruzaman, R. N. S., Hamdan, H., & Annuar, H. A. (2020). Women directors and firm performance: Malaysian evidence post policy announcement. *Journal of Economic and Administrative Sciences*, 36(2), 97-110.
- Ahmad, Z. & Lim, S.M. (2005). Operating performance of initial public offerings in Malaysia. *Capital Market Review*, 13, 21-32.
- Balatbat, M. C. A., Taylor, S. L., & Walter, T. S. (2004). Corporate governance, insider ownership and operating performance of Australian initial public offerings. *Accounting and Finance*, 44(3), 299–328. <https://doi.org/10.1111/j.1467-629x.2004.00114.x>
- Bantel, K. A., & Jackson, S. E. (1989). Top management and innovations in banking: Does the composition of the top team make a difference? *Strategic Management Journal*, 10(S1), 107–124. <https://doi.org/10.1002/smj.4250100709>
- Barro, R. J., & Lee, J. W. (2013). A new data set of educational attainment in the world, 1950–2010. *Journal of Development Economics*, 104, 184–198. <https://doi.org/10.1016/j.jdeveco.2012.10.001>
- Beasley, M. S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *The Accounting Review*, 71, 443–465.
- Belkhir, M. (2009). Board structure, ownership structure and firm performance: Evidence from banking. *Applied Financial Economics*, 19, 1581-1593
- Carter, R. & Manaster, S. (1990). Initial public offerings and underwriter reputation. *The Journal of Finance*, 45(4), 1045-1067.
- Dawson, S.M. (1987). Secondary market performance of initial public offers in Hong Kong, Singapore and Malaysia: 1974-1984. *Journal of Business, Finance and Accounting*, 4(1), 65-76.
- DeAngelo, H., & DeAngelo, L. (2000). Controlling stockholders and the disciplinary role of corporate payout policy: a study of the Times Mirror Company. *Journal of Financial Economics*, 56(2), 153–207. [https://doi.org/10.1016/s0304-405x\(00\)00039-8](https://doi.org/10.1016/s0304-405x(00)00039-8)
- Derrien, F. & Womack, K. (2003). Auctions vs. book building and the control of underpricing in hot IPOs markets. *The Review of Financial Studies*, 16(1), 31-61.
- Dwaikat, N., Queiri, A., & Qubbaj, I. S. (2020). Board governance on dividend initiation by initial public offerings: Evidence from The Malaysian stock market. *Cogent Economics & Finance*, 8(1), 1761241.
- Dwaikat, N., Queiri, A., & Qubbaj, I. S. (2021). The Effect of Ownership Structure of Initial Public Offerings (IPOs) on Dividend Initiation: A Case Study in Malaysia. *The Journal of Asian Finance, Economics and Business*, 8(4), 317-328.
- Eisenberg, T., Sundgren, S. and T.Wells, M. (1998). Larger board size and decreasing firm value in small firms. *Journal of Financial Economics*, 48, 35-54.
- Fondas, N. and Sasselos, S. (2000). A different voice in the boardroom: How the presence of women directors affects board influence over management. *Global Focus*, 12, 13–22.
- Joyce, L.S.L. (2001). Corporate Governance in Asia. *Asia Business Law Review*, 34, 46-67.

- Kallias, A., Kallias, K., Tsalkamas, I., & Zhang, S. (2023). One size does not fit all: The conditional role of CEO education on IPOs performance. *Journal of Business Research*, 157, 113560
- Kang, H., Cheng, M. & Gray, S.J. (2007). Corporate governance and board composition: diversity and independence of Australia boards. *Corporate Governance*, 15, 194-207.
- Kaplan, E. & Rodrik, D. (2001). Did the Malaysian Capital control work? National Bureau of Economic Research (NBER). NBER Working Paper No. W8142.
- Kenourgios, D.F., Papathanasiou, S. & Melas. E.R. (2007). Initial performance of Greek IPOs, underwriter's reputation and oversubscription. *Managerial Finance*, 33(5), 332-343.
- Kim, K.A., Kitsabunnarat, P. and Nofsinger, J.R. (2005). Large shareholders, board independence and minority shareholders right: evidence from Europe. European Corporate Governance Symposium held at Leeds University, Texas Tech University, and California State University.
- Kim, K.A., Kitsabunnarat, P., and Nofsinger, J.R. (2004). Ownership and operating performance in an emerging market: evidence from Thai IPOs firms. *Journal of Corporate Finance*, 10(3), 355-381.
- Lizińska, J., & Czapiewski, L. (2019). Is window-dressing around going public beneficial? Evidence from Poland. *Journal of Risk and Financial Management*, 12(1), 18.
- Marimuthu, M. And Kolandaisamy, I. (2009). Ethnic and gender diversity in boards of directors and their relevance to financial performance of Malaysian companies. *Journal of Sustainable Development*, 2(3), 139-148.
- Masruki, R., & Azizan, N. A. (2012). The impact of Asian financial crisis to earnings management and operating performance in Malaysia. *Social Sciences (Pakistan)*.
- Matsuura, Y., Yahya, N. C., & Phuc, N. H. (2022). Patent Signals of IPOs Performance: Evidence from High-and Low-Tech Industries in Japan. *The Asian Journal of Technology Management*, 15(1), 21-39.
- Mehmood, W., Mohd Rashid, R., & Tajuddin, A. H. (2021). A review of IPOs underpricing: Evidence from developed, developing and emerging markets. *Journal of Contemporary Issues and Thought*, 11(1), 1–19. <https://doi.org/10.37134/jcit.vol11.1.2021>
- Mohd Sehat, R. and Abdul Rahman, R. (2005). Ownership of the firm and corporate value. Working paper, Faculty of Accounting, University Teknologi MARA, Shah Alam.
- Nagata, K. (2013). Does earnings management lead to favorable IPOs price formation or further underpricing? Evidence from Japan. *Journal of Multinational Financial Management*, 23, 310-313.
- Nahar, S., Aziz, A., & Azani, A. (2022). The effect of board independence, gender diversity and board size on firm performance in Malaysia. *Journal of Social Economics Research*, 9(4), 179-192.
- Prasad, D., Vozikis, G.S. & Ariff, M. (2006). Government public policy, regulatory intervention and their impact on IPOs underpricing: The case of Malaysian IPOs. *Journal of Small Business Management*, 44(1), 81-98.
- Pucheta-Martínez, M.C., Gallego-Álvarez, I. (2020). Do board characteristics drive firm performance? An international perspective. *Review of Managerial Science*, 14, 1251–1297.
- Qi, D., Wu, W. & Zhang, H, (2000). Shareholding structure and corporate performance of partially privatized firms: evidence from listed Chinese companies. *Pacific-Basin Finance Journal*, 8(5), 587-610.
- Shari, W. (2022). Do Malaysian initial public offerings (IPOs) survive in the after-market? *Southeast Asian Journal of Economics*, 10(2), 145-179.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The Journal of Finance*, 52(2), 737–783. <https://doi.org/10.1111/j.1540-6261.1997.tb04820.x>
- Singh, H. and Harianto, F. (1989). Management board relationship, take over risk and the adoption of golden parachutes. *Academy of Management Journal*, 32, 7-32.
- Singh, I. & Zahn, J.L.W. (2008). Determinants of intellectual capital disclosure in prospectuses of initial public offerings. *Accounting and Business Research*, 38(5), 409-431.
- Yong, O. (2011). Winner's Curse and Bandwagon Effect in Malaysian IPOs: Evidence from 2001-2009. *Jurnal Pengurusan*, 32, 21-36.
- Yong, O., Yatim, P., & Sopian, R. Z. Z. (1999). Significance of board of listings and type of issue on the underpricing and aftermarket performance of Malaysian IPOs. *Capital Markets Review*, 7, 47–74.

- Yong, O., Yatim, P., & Sopian, R. Z. Z. (1999). Significance of board of listing and type of issue on the under-pricing and after-market performance of Malaysian IPOs. *Capital Markets Review*, 7(1&2), 47-74.
- Yusoff, W.F. (2013). Exploring Malaysian corporate leader's views of effective board. *Journal of Management and Sustainability*, 3(1), 145-154.
- Zahra, S. A., & Filatotchev, I. (2004). Governance of the entrepreneurial threshold firm: A knowledge-based perspective. *The Journal of Management Studies*, 41(5), 885–897. <https://doi.org/10.1111/j.1467-6486.2004.00458.x>
- Zaluki, A., Campbell, K. & Goodacre, A., (2007). The long run performance of Malaysian initial public offerings (IPOs). *Journal of Business Finance and Accounting*, 34(1 & 2), 78-110.
- Zhang, J., Chen, H., Zhang, P., & Jiang, M. (2022). Product market competition and the value of corporate cash: An agency theory explanation. *International Review of Financial Analysis*, 84, 102422.
- Zhang, M., Goa, S., Guan, X. and Jiang, F. (2014). Controlling shareholder-manager collusion and tunneling: Evidence from China. *Corporate Governance: An International Review*, 22(6), 440-459.
- Zuha, S., Abdul Rahman, R. and Mahenthiram, S. (2009). Ultimate ownership and performance of Islamic financial institutions in Malaysia. Asian Finance Association 2009 International Conference.