

Determinants of Dividend Policy: Evidence from Malaysian Public Listed Companies

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Abstract

Dividend policy has become one of the important issues in any corporation since it relates to investment and financing decisions that a firm makes. It is crucial for a firm to build a strong understanding of dividend policy as corporate dividend policy gives a huge impact on a firm's decision in key areas such as capital budgeting, asset pricing, mergers and acquisitions, and capital structure. The aim of this study is to examine the factors that will determine dividend policy decisions made by public listed companies in Malaysia. Among the variables included in this study are leverage, liquidity, profitability, firm size and corporate tax. Quantitative research method was chosen for this study and eighty-three (83) public listed companies in Malaysia were selected as a sample size based on annual data during 2013-2017. Multiple regression analysis was used to test research hypotheses. Other tests including Diagnostic test, Normality test, Multicollinearity test, Autocorrelation test, and Pearson's Correlation coefficient analysis were also conducted in this study. The findings revealed that leverage and liquidity which were measured by debt to equity ratio and current ratio, respectively, have insignificant impact on dividend policy which was measured by dividend payout ratio. This study also provide new insights into profitability, tax, and firm size which were measured by return on equity (ROE), corporate tax, and $\ln(\text{total assets})$ have a significant positive relationship with dividend policy. Future research on the determinants influencing dividend policy may take governance structure types into account. This is owing to the fact that businesses operate in various governance systems with varying types and histories in various industries and nations, which may result in varying representations of dividend policy.

Keywords: Dividend Policy, Determinants, Dividend Theories.

Introduction

Dividend distribution is such an important area to investors. It indicates the level of reward for every single cent they invest in a company. The decision on the amount of

dividends to be distributed to investors every year will result in a company being more dependent on either internal earnings or external earnings. A company's dividend policy is benchmarked for the company's success, and so it differs between organisations around the world and is inconsistent every year. Therefore, dividend policy decisions have received a lot of attention not only from investors and business people but also from the management of companies, as well as public listed companies in Malaysia.

More dividend theories have been developed starting from the agency theory formed by Jensen & Meckling (1976) which states that agency cost can be reduced through dividend decision. Dividend policy is also one of the methods to signal a firm's future financial earning and reduce the occurrence of information asymmetry (Miller & Rock, 1985). Myers & Majluf (1984) introduced pecking order theory that supports dividend policy, and Deangelo & Deangelo (2006) introduced life-cycle theory which asserts that dividend distribution relies on the maturity level of the firms.

Dividend policy is "the practice that management follows in making dividend payout decisions or, in other words, the size and pattern of cash distributions over time to shareholders" (Yusof & Ismail, 2016). Dividend policy has become one of the important issues in any corporation since it relates to and affects investment and financing decisions that a firm makes. Due to this, according to Allen & Michaely (1995), it is crucial for a firm to build a strong understanding of dividend policy as corporate dividend policy gives a huge impact on a firm's decision in key areas such as capital budgeting, asset pricing, mergers and acquisitions, and capital structure.

Numerous previous studies have attempted to investigate the factors that determine dividend policy, yet it is still a puzzle. Chay & Suh (2009) in their studies revealed that each country has a different dividend policy that takes into consideration different rules, regulations, and cultures. Zameer et al (2013) added that each firm in every country has a different dividend policy due to different tax policies, institutions, and even different capital markets.

Despite various studies conducted on the determinants of dividend policy in both developed and emerging economies, there is still no consensus on the factors that can be considered for dividend policy decision (Mui & Mustapha, 2016). In other words, there is no dividend policy that can be universally accepted, hence company managers find it difficult to decide the distribution of cash dividend to the shareholders. It shows that an optimal dividend policy decision is crucial as explained by (Yusof & Ismail, 2016).

In Malaysia, Bursa Malaysia (2018) has provided public listed companies in Malaysia with the guidance on factors to be considered for dividend policy decision. However, Focus Malaysia (2017) highlighted that public listed companies in Malaysia may not express their interests in maximizing shareholders' wealth, since they are not familiar with their dividend policy to explain the dividend levels to pay as a percentage of their annual net income.

This study aims to determine the factors that influence the dividend policy among public listed companies in Malaysia. Specifically, this study examines whether there is a relationship between these factors and dividend policy. The other remaining content of this paper is structured as follows. In the next section, some relevant literature review is presented. Then, a conceptual framework and some hypotheses are introduced in detail, together with some reasons for their adoption. The following section introduces the methodology, followed by the data analysis and results. Finally, the discussion and conclusions are presented.

Literature Review

Empirical Evidence on the Determinants of Dividend Policies

A large number of previous academic studies from different countries have detailed the determinants of dividend policies including in Asia, Europe, and Middle Eastern countries. Tsuji (2010) in his study entitled “What Are The Determinants Of Dividend Policy?”, examined corporate earnings as the determinant of dividend policy among Japanese electrical appliances companies. With a sample period from 1986 until 2006, the author explored catering theory and signalling hypothesis in two perspectives. Tsuji (2010) found that there was a positive relationship between corporate earnings and dividend payments from the cross-sectional viewpoint, however there was a negative relationship between corporate earnings and dividend payments from the aggregate time-series viewpoint.

Abor & Bokpin (2010) investigated the effects of investment properties and corporate finance on dividend payout policy, with a samples of 34 emerging countries and covered a 17-year period, 1990 – 2006. The results showed that there was a significant negative relationship between investment opportunities and dividend payout. The results also revealed that profitability and market capitalization were significant in influencing dividend payout policy. However, there were insignificant effects of financial leverage, external financing, and debt maturity on dividend payout policy.

Abor & Bokpin (2010) investigated the effects of investment properties and corporate finance on dividend payout policy, which the results show significant negative relationship between investment opportunities and dividend payout. The authors claimed that the firms with high investment portfolio, would have a very low dividend payout policy in order to retain funds to finance their investments. The positive or negative result for the profitability and market capitalization can influence dividend payout policy. Authors revealed that profitable firms are likely to satisfy their shareholders by distributing high dividend payments. High stock market capitalization may indicate that there is a potential growth in the firm, therefore, would require funds to finance such growth. The effect then would be that firms might give the low dividend to the shareholder.

Al-Khadhiri & Alzomaia (2013) examined the factors determining dividends for 105 non-financial firms listed in the Saudi Arabia stock exchange from 2004 to 2010. Among the factors included were earnings per share, previous dividends, growth, debt to equity ratio, beta and firm size. By using the regression model, the results showed that only firm size, firm's profitability and previous dividend had a significant influence on dividend decision. In other words, in setting their dividend policy, Saudi non-financial listed firms relied and depended on their level of earnings per share and past dividend per share as well as firm size.

Zameer et al (2013) examined the determinants of dividend policy in the financial banking sector. Applying the stepwise regression analysis on the data of 27 foreign and domestic banks listed in Pakistan stock exchange, they investigated the factors affecting dividend policy. The results showed that profitability, last year dividend and ownership structure had a significant positive impact on dividend policy, while liquidity showed a significant negative impact on dividend policy in the banking industry. However, firm size, leverage, agency cost, growth and risk showed no impact on dividend policy.

Several different theories have been introduced in explaining dividend policy. A large number of previous studies have described a wide range of factors that can influence a firm's dividend policy. Different sets of factors have been tested and inconsistent results have been found, therefore it is hard to determine which determinants are better to use in developing

a dividend policy. In addition to that, there is a lack of study on the determinants of dividend policy in Malaysia.

Even though it is hard to choose which factor to test, previous studies on dividend policy have provided a picture of general determinants such as leverage, liquidity, profitability and firm size. Further explanation on hypotheses development based on previous studies and dividend theory is presented below.

Leverage and Dividend Policy

Rozeff (1982) stated that companies that have high financial leverage will tend to decide on low dividend payout to eliminate the transaction cost of external debt financing. The negative relationship between leverage and dividend is consistent with the pecking order theory (Myers & Majluf, 1984). A high debt level indicates that the companies are bearing a fixed debt repayment and high interest charges, and consequently the companies face a high risk of not having sufficient cash and cash equivalents for settlement of the payment. Therefore, the higher the leverage ratio, the lower the chances of the company in making dividend payment to the shareholders, since the company will face financial constraints which lessen the probability of dividend distribution. Therefore, this study hypothesizes that leverage has a negative relationship with dividend policy, as supported by (Al-Malkawi, 2007; Thi & Trang, 2012; Gul et al., 2012). This fact leads to the development of the following hypothesis

Hypothesis 1 (H1): There is a significant negative relationship between leverage and dividend policy.

Liquidity and Dividend Policy

The relationship between liquidity and dividend policy is supported by signaling dividend theory by (Miller & Rock, 1985). Company management, in order to distribute dividend payment, needs to ensure that the company has a consistent and sufficient cash flow (Mehta, 2012). Ho (2003); Kaźmierska-Jóźwiak (2015) suggested that companies that hold more cash and cash equivalent will pay more dividend than companies with insufficient cash. In other words, distribution of dividend will convey the information to investor that companies that pursue extra internal equity after the distribution of dividend have sufficient fund to finance future projects. Companies' liquidity gives a signal to investors that the companies are in a good financial position and are not facing any financial pressure to distribute dividend payout. Therefore, this study hypothesizes a positive relationship between liquidity and dividend payout policy. In other words, firms with more cash should pay more dividend, otherwise managers may invest the cash irrationally as suggested by (Miller & Rock, 1985). This fact leads to the development of the following hypothesis

Hypothesis 2 (H2): There is a significant positive relationship between liquidity and dividend policy.

Profitability and Dividend Policy

Profitability level of a company is used to access the ability of the business in generating earnings as well as to indicate whether the company is doing well in a particular year. It has been claimed by previous studies that profit is the most important sections in a firm's financial statement and is an important factor to determine dividend policy (Boțoc & Pirtea, 2014).

Most studies have found a positive relationship between profitability and dividend policy such as Thirumagal & Vasantha (2017); Yiadom & Agyei (2011); Epaphra & Nyantori, (2018); Abbas & Ameer (2017); Yegon et al (2014), which indicated that firms with greater profitability and consistent profit in a particular year are in a strong growth and are more inclined to pay more dividend to the shareholders. On the other hand, Gusni (2017); Maldajian & El Khoury (2014) observed a significant negative relationship between profitability and dividend policy in their studies.

This study hypothesizes a significant positive relationship between profitability and dividend policy as suggested by agency theory (Jensen & Meckling, 1976), signaling theory (Miller & Rock, 1985), life-cycle theory (Deangelo & Deangelo, 2006) and bird-in-hand theory (Gordon, 1962; Lintner, 1956). Assuming that firms with a greater profit level have a free cash flow, paying out more dividend will reduce agency problem by reducing a manager's control of cash.

Paying more dividends to investors signals a positive news to them and makes them believe that the firms have a potential in sustainable profitability. This is due to information asymmetry – a situation in which investors receive less information about the firms as compared to the management of the firms. Other than that, mature and big companies are believed to be more stable and have more profit, so they tend to pay more dividend as compared to young and immature companies which are yet to produce more profit.

Taking these theories and previous studies into consideration, this study formulates the following hypothesis

Hypothesis 3 (H3): There is a significant positive relationship between profitability and dividend policy.

Firm Size and Dividend Policy

The idea that firm size has a positive and significant impact on dividend policy was proven in various studies such as by (Al-Kuwari, 2009; Al-khadhiri & Alzomaia, 2013; Arko et al., 2014; Komrattanapanya & Suntraruk, 2013; Boțoc & Pirtea, 2014; Kuzucu, 2015; Tahir & Mushtaq, 2016; May & Yacob, 2018; Bostanci et al., 2018). Most of the studies claimed that companies with larger size are less risky and more mature, hence are able to pay more dividend as compared to companies with smaller size. However, a small number of studies such as by Kapoor et al (2010); Dahlquist et al (2014); Ahmad et al (2018) revealed a significant negative relationship between firm size and dividend policy decision. An insignificant impact of firm size on dividend policy was also proven by (Perretti et al., 2013; Ethel et al., 2015; Pratap et al., 2018; Sinabutar & Nugroho, 2015).

This study hypothesizes a positive and significant relationship between firm size and dividend policy as suggested by life-cycle theory (Deangelo & Deangelo, 2006) and agency theory (Jensen & Meckling, 1976). The life-cycle theory explains that larger firms tend to pay more dividends to their shareholders by using internal earnings as compared to small firms due to the flexibility in raising funds from capital market, larger firms do not depend on internal earnings to finance future investments. Paying out more dividends to investors is also seen as one of the methods in reducing agency cost in larger-sized firms as supported by the agency theory. Agency cost is always associated with firm size since the widely spread ownerships in larger firms have more bargaining control, which in turn increase the agency cost (Jensen & Meckling, 1976).

Taking these theories and previous studies into consideration, this study formulates the following hypothesis

Hypothesis 4 (H4): There is a significant positive relationship between firm size and dividend policy.

Corporate Tax and Dividend Policy

The relationship between corporate tax liability and dividend was first explained by Masulis & Trueman (1988), who explained that the dividend payment will be decreased in association with the increase of corporate tax liability. The reason behind this theoretical negative relationship aligns with the pecking order theory since high corporate tax will positively impact the net earnings of the company. According to Masulis & Trueman (1988), investors with differing tax liabilities will not be uniform in their ideal firm dividend policy. The negative relationship between corporate tax and dividend is supported by Arif & Akbar (2013) who mentioned that investors are discouraged to receive dividend payment when the companies have a high level of corporate tax liability. As a result, this study formulates the following hypothesis

Hypothesis 5 (H5): There is a significant negative relationship between corporate tax and dividend policy.

Research Framework

Based on the literature review, the model of this study is shown in Figure 1. The hypotheses refer to the determinants that influence dividend policy. The aim of this study is to examine the relationship between dividend policy and the four variables i.e. leverage, liquidity, profitability and corporate tax which is controlled by firm size.

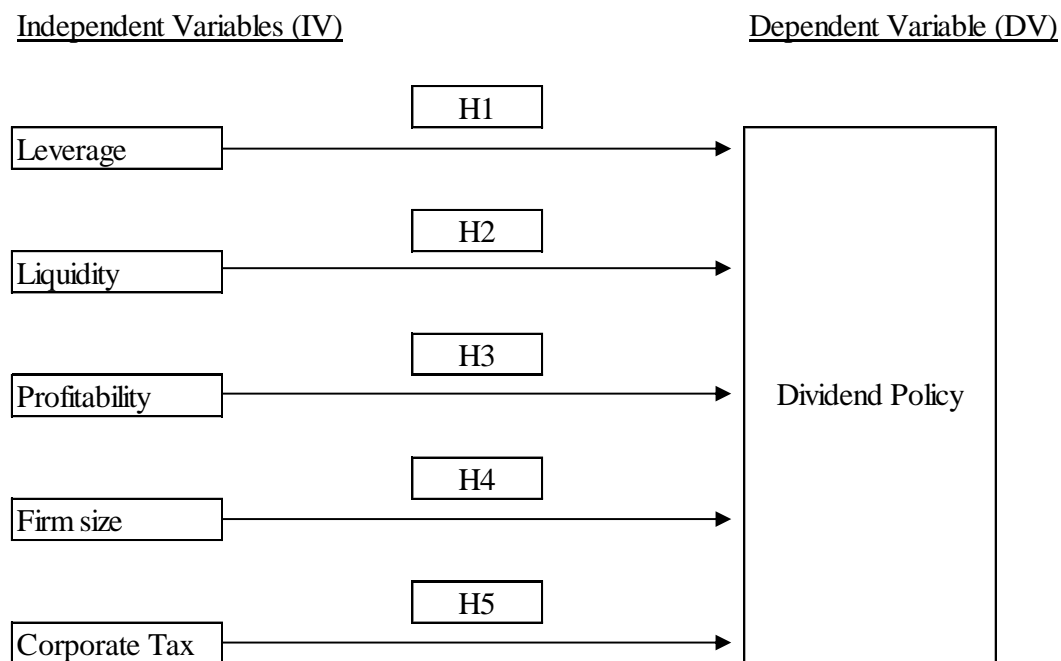


Figure 1 The Conceptual Framework

Methodology

Data Collection

In this study, a recent 5-year period, i.e. from 2013 to 2017, was selected. Quantitative research was conducted on the top 83 public listed companies by market capitalization in Bursa Malaysia. The objective of this study is to analyse the impact of the five independent variables (leverage, liquidity, profitability, firm size and corporate tax) on dividend policy represented by dividend payout ratio. The main statistical program used in this study was IBM SPSS Statistics software program (SPSS).

Analysis Method

This study applied multiple regression analysis by taking five independent variables i.e. leverage, liquidity, profitability, firm size and corporate tax to be tested against the dependent variable i.e. dividend policy which was represented by dividend payout ratio. Secondary data was collected from Eikon (2018) as the main source. The data that was collected directly from Thomson Reuters Eikon (2018) were total liabilities, current ratio and return on equity (ROE). The data for dividend payout ratio and corporate tax were collected from Annual Report which could be accessed through the respective public listed companies' website.

This study examined the relationship between the dependent variable i.e. dividend policy and the five independent variables, namely leverage, liquidity, profitability, firm size and corporate tax. The regression equation used is as follows:

$$DP_{i,t} = \beta_0 + \beta_1 \text{Leverage}_{i,t} + \beta_2 \text{Liquidity}_{i,t} + \beta_3 \text{Profitability}_{i,t} + \beta_5 \text{CorporateTax}_{i,t} + \beta_4 \text{Size}_{i,t} + \varepsilon$$

Where,

$DP_{i,t}$ = Dividend payout ratio for firm i at time t .

$\text{Leverage}_{i,t}$ = Debt to equity ratio for firm i at time t .

$\text{Liquidity}_{i,t}$ = Current ratio for firm i at time t .

$\text{Profitability}_{i,t}$ = Return on equity for firm i at time t .

$\text{CorporateTax}_{i,t}$ = Tax for firm i at time t .

$\text{Size}_{i,t}$ = Natural logarithm of total assets for firm i at time t .

ε = Error term.

$\beta_0, \beta_1, \beta_2, \beta_3, \beta_4,$ and β_5 are the coefficient of the regression model.

Results

Based on regression analysis of variance (ANOVA), it indicates that multiple regression of equation model is significant [$F_{(5,409)} = 22.099, p < .001$]. This also implies that at least one of the independent variables in this study had a significant linear relationship with dividend policy.

The result of regression analysis reveals a negative insignificant linear relationship between leverage and dividend policy [$t_{(409)} = -1.180, p = .239$]. There is a positive insignificant linear relationship between liquidity and dividend policy [$t_{(409)} = 1.014, p = .311$]. On the contrary, the result reveals a significant positive relationship between profitability and dividend policy [$t_{(409)} = 8.481, p < .001$]. Moreover, there is also a significant positive linear relationship between firm size and dividend policy [$t_{(409)} = 2.542, p = .011$]. Lastly, regression analysis shows a significant positive relationship between corporate tax and dividend policy [$t_{(409)} = 6.213, p < .001$].

Coefficients^a

Model		Unstandardized Coefficients			Sig.
		B	Std. Error	t	
1	(Constant)	-.282	.180	-1.562	.119
	Leverage	-.021	.018	-1.180	.239
	Liquidity	.008	.008	1.014	.311
	Profitability	1.424	.168	8.481	.000
	Firm Size	.064	.025	2.542	.011
	Tax	.908	.146	6.213	.000

a. Dependent Variable: Dividend Policy

Discussion

Leverage and dividend policy

Even though the coefficient result showed a negative relation between leverage and dividend policy, statistical result of p-value showed that it was insignificant [$t_{(409)} = -1.180$, $p = .239$] as shown in Table 9. The relationship between leverage and dividend policy hence accepted the null hypothesis which implied that leverage level of a company does not influence dividend policy decision made by its management and the board of directors. Furthermore, debt to equity ratio was not significant and cannot be explained in the changes of dividend payout ratio. This finding is similar to that of Mui & Mustapha (2016) who found insignificant relationship between leverage and dividend policy.

Liquidity and dividend policy

The coefficient value of .008 showed a positive relationship between liquidity and dividend policy, yet it was insignificant influence with a p-value of $.311 > .05$ [$t_{(409)} = 1.014$, $p = .311$]. The observed result did not support the hypothesis that liquidity was positively related to companies' dividend policy. Therefore, this study accepted the null hypothesis which indicated that the current ratio of public listed companies in Malaysia is one of the factors in determining the payment of dividend to shareholders. The result of this study is in line with Takmaz (2017); Thi & Trang (2012), while it contradicts Jabbouri (2016); Agyemang (2013) who found a significant effect of liquidity on dividend policy.

Profitability and dividend policy

The coefficient value of 1.424 for profitability in this study indicates a positive relationship between profitability and dividend policy. This study found that profitability of the companies significantly influenced dividend payout decision [$t_{(409)} = 8.481$, $p < .001$]. This study rejected the null hypothesis i.e. profitability does not affect dividend policy, and revealed that profitability of a company positively and significantly impacted dividend payout decision. The result of this study conforms with a number of studies by (Epaphra & Nyantori, 2018; Abbas & Ameer, 2017; Yegon et al., 2014). However, it contradicts the findings by Mahdzan et al (2016); Eng et al (2013) who found an insignificant negative relationship between profitability and dividend policy.

Firm Size and Dividend Policy

A positive and significant relationship between firm size, measured by LN (total assets) and dividend policy was found in this study [$t_{(409)} = 2.542$, $p = .011$]. It implies that public listed companies in Malaysia with more total assets tend to distribute more dividend payout to the

shareholders. In other words, the result suggests that larger public listed companies in Malaysia are inclined to increase and enhance its dividend policy. The null hypothesis was rejected in accordance with the hypothesis that there was a significant positive relationship between companies' firm size and dividend policy.

Tax and Dividend Policy

The result of this study surprisingly revealed a positive relationship between tax and dividend policy with a coefficient value of .908. The significance or p-value of less than .001 implied that corporate tax significantly affected dividend policy [$t_{(409)} = 6.213, p < .001$]. In other words, the increase in corporate tax is associated with the increase in dividend payout among public listed companies in Malaysia. This result provides the evidence that even though the amount of tax payable increases, company managements do not reduce the dividend payment to shareholders. Moreover, the result also implied that corporate dividend policy of public listed companies in Malaysia is significantly affected by the changes in tax.

Conclusion

The results revealed that profitability, firm size and corporate tax had a significant positive effect on dividend policy among public listed companies in Malaysia. However, the results of the other two factors revealed that both leverage and liquidity had an insignificant negative effect on dividend policy among public listed companies in Malaysia.

No.	Hypotheses	t	p	Relationship Findings	Results
H1	There is a significant negative relationship between leverage and dividend policy.	-1.180	.239	Negative	Rejected
H2	There is a significant positive relationship between liquidity and dividend policy.	1.014	.311	Positive	Rejected
H3	There is a significant positive relationship between profitability and dividend policy.	8.481	.000	Positive	Accepted
H4	There is a significant positive relationship between firm size and dividend policy.	2.542	.011	Positive	Accepted
H5	There is a significant negative relationship between corporate tax and dividend policy.	6.213	.000	Positive	Rejected

This study only focused on firm characteristics in examining the relationship with dividend policy. Future studies on the determinants of dividend policy may include the types of governance structure as a variable. This is due to the fact that companies in different industries as well as different countries operate in different types and backgrounds of governance structures and hence may provide a different picture of dividend policy.

This study only focused on the top 83 public listed companies in Bursa Malaysia of the highest total dividend. These companies are already established and may have their expertise in managing and developing the dividend policy decision. However, small companies that also

pay dividends need a guidance in determining the dividend policy. Therefore, future studies may include small companies as a sample and make a comparison between small dividend-paying companies and large dividend-paying companies.

Next limitation of this study is that it examined and analysed the effects of only five general firm characteristics which are leverage, liquidity, profitability, tax and firm size on dividend policy. These five firm characteristics may not provide a solid conclusion on which factors need to be considered by managers to develop dividend policy. Hence, future studies in Malaysia may include other firm characteristics such as past dividend payment, growth and investment opportunities, as well as earnings of companies.

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References

- Abbas, A., & Ameer, M. S. (2017). Determinants of Dividend Policy in Services Industry of China Determinants of Dividend Policy in Services Industry of China. *International Journal of Business, Economics and Management Works*, 4(11), 20–23. <https://doi.org/10.5281/zenodo.1063975>
- Abor, J., & Bokpin, G. A. (2010). Investment opportunities, corporate finance, and dividend payout policy: Evidence from emerging markets. *Studies in Economics and Finance*, 27(3), 180–194. <https://doi.org/10.1108/10867371011060018>
- Agyemang, E. B. (2013). Determinants of Dividend Payout Policy of listed Financial Institutions in Ghana. *Research Journal of Finance and Accounting*, 4(7), 2222–2847. <https://doi.org/10.2298/PAN1306725N>
- Al-khadhiri, A., & Alzomaia, T. S. (2013). Determination of Dividend Policy: The Evidence from Saudi Arabia. *International Journal of Business and Social Science*, 4(1), 181–192.
- Al-Kuwari, D. (2009). Determinants of The Dividend Policy in Emerging Stock Exchanges : The Case of GCC Countries. *Global Economy & Finance Journal*, 2(2), 38–63.
- Allen, F., & Michaely, R. (1995). Dividend policy. *Handbooks in Operation Research and Management Science*, 9, 793–837. [https://doi.org/10.1016/s0927-0507\(05\)80069-6](https://doi.org/10.1016/s0927-0507(05)80069-6)
- Arif, A., & Akbar, F. (2013). Determinants of Dividend Policy : A Sectoral Analysis from Pakistan. *International Journal of Business and Behavioral Sciences*, 3(9), 16–33.
- Bostanci, F., Kadioglu, E., & Sayilgan, G. (2018). Determinants of Dividend Payout Decisions: A Dynamic Panel Data Analysis of Turkish Stock Market. *International Journal of Financial Studies*, 6(93), 1–16. <https://doi.org/10.3390/ijfs6040093>
- Botoc, C., & Pirtea, M. (2014). Dividend payout-policy drivers: Evidence from emerging countries. *Emerging Markets Finance and Trade*, 50(4), 95–112. <https://doi.org/10.2753/REE1540-496X5004S407>
- Bursa Malaysia. (2018). Retrieved from <http://www.bursamalaysia.com>
- Chay, J. B., & Suh, J. (2009). Payout policy and cash-flow uncertainty. *Journal of Financial Economics*, 93(1), 88–107. <https://doi.org/10.1016/j.jfineco.2008.12.001>
- Dahlquist, M., Robertsson, G., & Rydqvist, K. (2014). Direct evidence of dividend tax clienteles. *Journal of Empirical Finance*, 28, 1–12. <https://doi.org/10.1016/j.jempfin.2014.05.003>
- Deangelo, H., & Deangelo, L. (2006). The irrelevance of the MM dividend irrelevance theorem. *Journal of Financial Economics*, 79(2), 293–315. <https://doi.org/10.1016/j.jfineco.2005.07.005>

- Dufour, J. M., & Dagenais, M. G. (1985). Durbin-Watson tests for serial correlation in regressions with missing observations. *Journal of Econometrics*, 27(3), 371–381. [https://doi.org/10.1016/0304-4076\(85\)90012-0](https://doi.org/10.1016/0304-4076(85)90012-0)
- Eng, S., Yahya, M., & Hadi, A. (2013). The Dividend Payout Policy – A Comparison On Malaysian Islamic And Conventional Financial Institutions. *Journal of WEI Business and Economics*, 2(2), 12–20.
- Epaphra, M., & Nyantori, S. S. (2018). Analysis of the determinants of dividend policy : Evidence from manufacturing companies. *Institute of Accountancy Arusha*, (February), 1–24. <https://doi.org/10.13140/RG.2.2.10291.94244>
- Ethel, I. C., Okwo, M., & Inyama, O. I. (2015). Dividend Payout Policy Determinants of Selected Listed Brewery Firms in Nigeria: A Meta-Analysis (2000–2013). *European Journal of Business, Economics and Accountancy*, 3(3), 101–118.
- Gill, A., Biger, N., & Tibrewala, R. (2010). Determinants of Dividend Payout Ratios: Evidence from United States. *The Open Business Journal*, 3, 8–14. <https://doi.org/10.2174/1874915101003010008>
- Gordon, M. J. (1962). The Savings Investment and Valuation of a Corporation. *The Review of Economics and Statistics*, 44(1), 37–51. <https://doi.org/doi:10.2307/1926621>
- Gusni. (2017). The Determinants of Dividend Policy : A Study of Financial Industry in Indonesia. *Jurnal Keuangan Dan Perbankan*, 21(4), 562–574.
- Gul, S., Mughal, S., Bukhari, S. A., & Shabir, N. (2012). The Determinants of Corporate Dividend Policy: An Investigation of Pakistani Banking Industry. *European Journal of Business and Management*, 4(12), 1–5.
- Hashemijoo, M., Ardekani, A. M., & Younesi, N. (2012). The Impact of Dividend Policy on Share Price Volatility in the Malaysian Stock Market. *Journal Of Business Studies Quarterly*, 4(1), 111–129.
- Ho, H. (2003). Dividend policies in Australia and Japan. *International Advances in Economic Research*, 9(2), 91–100. <https://doi.org/10.1007/BF02295710>
- Hosain, Z. (2016). Determinants of the Dividend Payout Policy : A Study on Listed Private Commercial Banks of Dhaka Stock Exchange Limited in Bangladesh. *Journal of Economics and Finance*, 7(5), 1–10. <https://doi.org/10.9790/5933-0705040110>
- Inland Revenue Board of Malaysia. (2017). *Taxation of Real Estate Investment Trust or Property Trust Fund* (Third Edit). Inland Revenue Board of Malaysia.
- Jabbouri, I. (2016). Determinants of corporate dividend policy in emerging markets: Evidence from MENA stock markets. *Research in International Business and Finance*, 37(May), 283–298. <https://doi.org/10.1016/j.ribaf.2016.01.018>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/http://dx.doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/http://dx.doi.org/10.1016/0304-405X(76)90026-X)
- Kapoor, S., Anil, K., & Misra, A. (2010). Dividend policy determinants of Indian FMCG sector: A factorial analysis. *Journal of Modern Accounting and Auditing*, 6(9), 50–64.
- Kaźmierska-Jóźwiak, B. (2015). Determinants of Dividend Policy: Evidence from Polish Listed Companies. *Procedia Economics and Finance*, 23, 473–477. [https://doi.org/10.1016/S2212-5671\(15\)00490-6](https://doi.org/10.1016/S2212-5671(15)00490-6)
- Khan, N. U., Jehan, S. Q. U. A., & Shah, A. (2017). Impact of taxation on dividend policy: Evidence from Pakistan. *Research in International Business and Finance*, 42, 365–375. <https://doi.org/10.1016/j.ribaf.2017.07.157>

- Komrattanapanya, P., & Suntraruk, P. (2013). Factors Influencing Dividend Payout in Thailand: A Tobit Regression Analysis. *International Journal of Accounting and Financial Reporting*, 3(2), 255–268. <https://doi.org/10.5296/ijafr.v3i2.4443>
- Kuzucu, N. (2015). Determinants of Dividend Policy: A Panel Data Analysis for Turkish Listed Firms. *International Journal of Business and Management*, 10(11), 149. <https://doi.org/10.5539/ijbm.v10n11p149>
- Lintner, J. (1956). Distribution of Incomes of Corporations Among Dividends, Retained Earnings, and Taxes. *The American Economic Review*, 46(2), 97–113.
- Mahdzan, N. S., Zainudin, R., & Shahri, N. K. (2016). Interindustry dividend policy determinants in the context of an emerging market. *Economic Research-Ekonomska Istrazivanja*, 29(1), 250–262. <https://doi.org/10.1080/1331677X.2016.1169704>
- Maldajian, C., & El Khoury, R. (2014). Determinants of the Dividend Policy: An Empirical Study on the Lebanese Listed Banks. *International Journal of Economics and Finance*, 6(4), 240–256. <https://doi.org/10.5539/ijef.v6n4p240>
- Masulis, R. W., & Trueman, B. (1988). Corporate investment and dividend decisions under differential personal taxation. *The Journal of Financial and Quantitative Analysis*, 23(4), 369–385. <https://doi.org/10.2307/2331077>
- Mehta, A. (2012). An Empirical Analysis of Determinants of Dividend Policy - Evidence from the UAE Companies. *Global Review of Accounting and Finance*, 3(1), 18–31.
- Miller, M. H., & Modigliani, F. (1961). Dividend Policy, Growth and the Valuation of Shares. *The Journal of Business*, 34(4), 411–433. <https://doi.org/10.1086/521238>
- Miller, M. H., & Rock, K. (1985). Dividend Policy under Asymmetric Information. *The Journal of Finance*, 40(4), 1031–1051. <https://doi.org/10.1111/j.1540-6261.1985.tb02362.x>
- Mui, Y. T., & Mustapha, M. (2016). Determinants of Dividend Payout Ratio: Evidence from Malaysian Public Listed Firms. *Journal of Applied Environmental and Biological Sciences*, 6(March), 48–54.
- Myers, S. C., & Majluf, N. S. (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)
- Al-Malkawi, N. H. (2007). Determinants of Corporate Dividend Policy in Jordan: An Application of the Tobit Model. *Journal of Economic and Administrative Sciences*, 23(2), 44–70. <https://doi.org/10.1108/10264116200700007>
- Nuhu, E. (2014). Revisiting the Determinants of Dividend Payout Ratios in Ghana. *International Journal of Business and Social Science*, 5(8), 230–238.
- Osborne, J. W., & Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical Assessment, Research and Evaluation*, 8(2), 1. <https://doi.org/http://pareonline.net/getvn.asp?v=8&n=2>
- Pratap, B., Thakur, S., & Kannadhasan, M. (2018). Determinants of dividend payout of Indian manufacturing companies A quantile regression approach. *Journal of Indian Business Research*, 10(4), 364–376. <https://doi.org/10.1108/JIBR-02-2018-0079>
- Rafique, M. (2012). Factors Affecting Dividend Payout : Evidence From Listed Non-Financial Firms of Karachi Stock Exchange. *Business Management Dynamics*, 1(11), 76–92.
- Rozeff, M. S. (1982). Growth, Beta and Agency Costs As Determinants of Dividend Payout Ratios. *Journal of Financial Research*, 5(3), 249–259. <https://doi.org/10.1111/j.1475-6803.1982.tb00299.x>

- Shah, S. Z. A., Ullah, W., & Hanain, B. (2011). Impact of ownership structure on dividend policy of firm (Evidence from Pakistan). *2010 International Conference on E-Business, Management and Economics*, 3, 22–26.
- Sinabutar, A., & Nugroho, A. B. (2015). Dividend Payout Ratio in Indonesian Consumer Goods Industry : Panel Analysis and Determinant Factors in 2004-2013. *Journal of Business and Management*, 4(4), 453–464.
- Tahir, M., & Mushtaq, M. (2016). Determinants of Dividend Payout: Evidence from listed Oil and Gas Companies of Pakistan. *The Journal of Asian Finance, Economics and Business*, 3(4), 25–37. <https://doi.org/10.13106/jafeb.2016.vol3.no4.25>
- Takmaz, S. (2017). Dividend Policy Drivers in Turkish Listed Firms. *International Journal of Academic Value Studies (Javstudies JAVS)*, 3(16), 40–52. <https://doi.org/10.23929/javstudies.579>
- Taleb, G. Al. (2012). Measurement of Impact Agency Costs Level of Firms on Dividend and Leverage Policy : An Empirical Study. *Interdisciplinary Journal of Contemporary Research in Business*, 3(10), 234–244.
- Thirumagal, P. G., & Vasantha, S. (2016). Dividend policy on shareholders wealth-evidences from Indian pharmaceutical industry. *Indian Journal of Science and Technology*, 9(15). <https://doi.org/10.17485/ijst/2016/v9i15/90568>
- Thirumagal, P. G., & Vasantha, S. (2017). Dividend Payout Determinants : Evidence from Indian Industries. *International Journal of Pure and Applied Mathematics*, 117(21), 811–829.
- Tsuji, C. (2010). What Are The Determinants Of Dividend Policy? The Case Of The Japanese Electrical Appliances Industry. *Business and Economics Journal*, 1(1), 1–16.
- Yegon, C., Cheruiyot, J., & Sang, J. (2014). Effects of Dividend Policy on Firm's Financial Performance: Econometric Analysis of Listed Manufacturing Firms in Kenya. *Research Journal of Finance and Accounting*, 5(12), 136–144.
- Yiadom, E. M., & Agyei, S. K. (2011). Determinants of Dividend Policy of Banks in Ghana. *International Research Journal of Finance and Economics*, 61(61), 99-108.
- Yusof, Y., & Ismail, S. (2016). Determinants of dividend policy of public listed companies in Malaysia. *Review of International Business and Strategy*, 26(1), 88–99. <https://doi.org/10.1108/RIBS-02-2014-0030>
- Zameer, H., Rasool, S., Iqbal, S., & Arshad, U. (2013). Determinants of Dividend Policy: A Case of Banking Sector in Pakistan. *Middle East Journal of Scientific Research*, 18(3), 410–424. <https://doi.org/10.5829/idosi.mejsr.2013.18.3.12200>
- Bursa Malaysia. (2018). Retrieved from http://bursa.listedcompany.com/dividend_policy.html
- Focus Malaysia. (2017). Retrieved from http://bursa.listedcompany.com/dividend_policy.html
- Malaysiastock.biz. (2017). Retrieved from <https://www.malaysiastock.biz/Report-Analysis/Top-KLSE-Dividend-Stock.aspx>