Factors Affecting Dividend Policy: Evidence from Consumer Product and Trading Services Sector

Nur Zahidah Bahrudin*, Siti Zaitun Saddam², Abd Hadi Mustaffa³, Hasni Abdullah⁴ and Zahariah Sahudin*⁵

¹,²,³,⁴,⁵Faculty of Business Management, Universiti Teknologi MARA, Cawangan Selangor, Malaysia.
Email Address: zahidah1002@uitm.edu.my

*Corresponding author

Abstract

This paper aims to study the connection between a firm's characteristics and dividend policy in the consumer product and trading services sector from 2015-2019. The static panel data analysis is the best method as this study combines two elements of analysis: time series and cross-sectional to achieve this study's objective. Referring to the findings from the fixed-effect model, among independent variables that influence dividend policy, only liquidity and profitability factors demonstrated a significant impact on dividend policy for these two sectors. These findings indicate that a company that possesses higher liquidity will pay a higher dividend to its shareholders. In contrast with the profitability result, the profitable company tends to pay a lower dividend. Thus, this study could give the shareholders' view about the performance of particular companies on their responsibility in paying the dividend to the shareholders and investors. Consistent with dividend signaling theory, a company's announcement of an increase in dividend policy is a sign of positive future predictions regarding sustainability and faithfulness to the company. This research suggests that in the future, to focus on the risk factors that might directly affect the decision on the dividend policy. Besides, the risk elements also can be a benchmark to enhance the performance of companies.

Keywords: Dividend policy, Consumer Product and Trading Services Sector, Panel Data, Dividend Signaling Theory.

Introduction

The capital market is a platform for various long-term financial instruments in equity and debt with maturities of more than one year. Investors have expectations (return) of their investments, dividends, and capital gains in capital market activities. Therefore, determining the correct dividend policy is very important for the company because it affects its sentiment. The dividend payout decision has been a significant issue since the development of the theory of corporate finance. Researchers worldwide develop many models to determine the factors that drive the company's dividend decision (Issa, 2015). It is because dividend policy is one of the significant factors that attract investors, regardless of their experiences participating in the stock market or a new investor. Dividends are a payment to investors by publicly traded firms to bring their capital into the business. In other words, a dividend is a token reward to the shareholders for their interest in the company's shares, which usually originates from the company's net income. If the company decides not to pay or pay fewer dividends, it will get more internal income, reducing its dependence on external income. On the other hand, if a company pays high dividends, it will result in less Internal income, thereby increasing its reliance on debt or another external financing, which means that the decision to raise funds is directly related to the dividend policy (Yusof & Ismail, 2016).

Dividends and dividend policies are key factors that many investors consider when deciding...
which securities to invest. Because it will help the investors obtain high returns, and the company's dividend payment strategy represents its financial success. The best dividend decision is vital as it affects the capital structure of a firm. Also, it will have an impact on the investment decision and cost of capital of the firms. In addition, previous research has shown that dividend decision-making may be affected by various factors, including earnings, company size, investment opportunities, lagging dividends, and cash flow. Over the years, academic research has systematically examined the factors that affect the dividend payment policy. Despite extensive research on this issue, the reported evidence is still inconclusive. Moreover, these studies are primarily conducted in the context of developed countries (Hashemi et al., 2012). Therefore, this study examines the factors affecting dividend policy in the developing country (Malaysia) on the consumer product and trading services sector. It is because research on developing countries has been overlooked and less emphasized on the particular sector.

**Consumer Product and Trading Services Sector in Malaysia**

Investors prefer to take a close look at consumer goods in the consumer products and services industry as a viable option trend that is constantly evolving, making the consumer goods and services market an interesting one to consider. Also, like other spending sectors, demand for consumer products does not fall or swing significantly through economic downturns. In fact, during recessions, certain consumer staples also see a rise in demand and appear to fluctuate in a more organized manner. When it comes to developing a diverse portfolio, consumer products are frequently disregarded. However, experienced investors have been tapping into the consumer goods business for years because it is easier to grasp and has no connection to the overall economy.

Although several studies have been conducted on the determinants of the dividend payout ratio in developed countries, the findings on this issue are still inconclusive as various results have been found about the relationships between the determinants and the dividend. Also, previous studies done were not explicitly conducted in terms of industries. Therefore, regarding the issue of dividend policy, there are numerous studies undertaken in different locations. It is essential to examine the factors that could influence the dividend payments of firms, as it will encourage investors to closely track the trend of dividend payments and help them make a good investment choice. This research aims to investigate the determinants impacting dividend payout in the consumer goods and services sector. The research illustrates determinants that can impact dividend payout policies, such as liquidity, profitability, leverage, sales growth, and earnings per share. This study is limited to companies listed in the consumer product and services sector. This sector may be related as the recession-proof sector is critical goods, particularly for company-based products. These industries include agricultural products, automobile, consumer services, food and drinks, household goods, personal goods, retail and transport, leisure, and hospitality.

Issues that emerge when a company decides to allocate its earnings to shareholders include the proportion to which shareholders will be given the money. If the payout should be as cash dividends or buy back those shares, assets should be transferred to shareholders and how predictable the payment should be. There is much discussion on policies of dividends. Since Black (1976) referred to shareholder interest in dividends and the practice of companies paying dividends as the “dividend puzzle,” scholars have tried to explain the determinants of dividend policy. Since then, the amount of theoretical and empirical study on dividend policies has risen substantially (Baker & Powell, 1999).

The first explanation is that dividends give investors a clear idea of corporations' financial well-being (Gill et al., 2010). The rationale is that only businesses with sound financial health should
allocate their profits as dividends to their owners. The second explanation is that dividends allow investors to find businesses with stable revenue streams. The rationale here is consistent with the Clientele Effect, which illustrates investors looking for better dividend stocks. When businesses have generous returns higher than a risk-free rate, investors can invest in those businesses. Investors can receive daily positive cash returns from their investments as a stable income when engaging in firms that consistently distribute dividends. The third explanation, along with the Dividend Signaling Theory, indicates that dividend payouts reflect the willingness of businesses to retain their share prices (Gill et al., 2010), suggesting that companies with consistent dividend payouts form a safety net of margin for their share prices.

**Literature Review**

Dividends refer to distributing part of the profit to investors and shareholders as a form of reward to maximize shareholder wealth. Dividend policy is "the approach followed by management when making dividend payment decisions, in other words, the size and pattern of cash distribution to shareholders over time" (Lease et al., 1999).

Several scholars have undertaken different studies on this dividend puzzle over the years. To determine the dividend payout policy on different variables, the empirical work of this analysis was carried out. Liquidity, profitability, leverage, earnings per share, and sales growth are investigated in this research as the factors influencing dividend payout.

**Theory Base**

This study is guided by dividend signaling theory, developed by Bhattacharya (1979). Dividend signaling theory describes the behavior between individuals and organizations who access the different information and how they send and interpret it. According to dividend signaling theory, changes in dividend policy convey information regarding future cash flows. Dividend signaling shows that information asymmetry refers to financial information, and dividend policy is positively related. Normally, companies that are good in paying dividends have better performance, and this theory postulates that managers use dividends to signal a firm's prospects or profitability to outside shareholders because they have asymmetric information about it. The greater the asymmetry of information, the more sensitive the payout is to the firm's prospects. There are five asymmetrical pieces of information in dividend signaling theory used in this study—liquidity, profitability, leverage, earnings per share, and sales growth.

**Liquidity's influence on dividend policy**

Liquidity, in detail, referring to stock liquidity defined as the capacity to trade a large amount of a company's stock for a low cost in a short period (Holden et al., 2014). Several scholars emphasized that stock liquidity plays an integral part in influencing dividend policy. Jabbouri (2016) pointed out that liquidity is a significant factor because, with a low cost closely associated with cash shortage, the company can treat the dividend as accrual, which can be paid later. However, contrary to Franc-Dąbrowska et al. (2020) and Lee and Yoon (2017), not all companies have the same dividend policy due to company size. There is an assumption that a small company will have small liquidity and vice versa. Hence, Baker et al. (2018) portray that liquidity does not play an essential role in dividend policy because of different investor preferences. Liquidity perhaps contributes towards a significant influence on dividend policy. Arif et al. (2020) stated that the stronger the liquidity position in a company, the higher capability the company's dividend policy would be. It is because stock liquidity enhances its dividend by reducing cash flow volatility (Nguyen, 2020). Therefore, the first hypothesis is proposed as:
H0 = There is no significant relationship between liquidity and dividend policy. 
H1 = There is a significant relationship between liquidity and dividend policy.

**Profitability's influence on dividend policy**

Some scholars indicated that profitability (PROFIT) contributes significantly towards dividend policy. The more profitable the company, the better the dividend policy (Arif et al., 2020; Dewasiri et al., 2019). Shareholders are always looking for a company that recorded better profitability, so they will have a chance to gain a better dividend in the future (Kabbani et al., 2020). However, few scholars disagree about the findings. Santos et al. (2020) stated that profitability does not affect dividend policy because profitability does not influence the company's value. On the other hand, different company sizes will have different profitability levels, thus will lead to different dividend policies. The big company has a better control dividend policy. No matter how big the profitability will be, they have the power to pay a small dividend to shareholders (Kilincarslan and Demiralay, 2020; Kumar and Ranjani, 2018). Hence, the second hypothesis is proposed as:

H0 = There is no significant relationship between profitability and dividend policy. 
H1 = There is a significant relationship between profitability and dividend policy.

**Leverage's influence towards dividend policy**

Leverage (LEV) is also known as a firms' debt level. It is also considered an indicator influencing dividend policy, but some scholars found leverage has a reverse relationship. It means, the higher leverage or debt level the company has, the dividend policy will become lower (Milhem, 2016). In addition, highly levered firms pay fewer dividends because they need more internal funds to pay the periodic interest and principles. Thus they skipped paying dividends to the shareholder (Hadian, 2019; Khan et al., 2017; Rahmawati et al., 2018). To make dividend policy better, the company needs to lower the debt level by relying on available profits (Das, 2017). Thus, with the available profits, it will reduce the debt level. However, it is the opposite view with Santosa et al. (2020). Leverage does not affect the company's dividend policy because the company can look at other alternatives via capital policy such as capital expenditure, business expansion, and other strategic business decisions that make the company not bother much about leverage. Therefore, the third hypothesis is as follows:

H0 = There is no significant relationship between leverage and dividend policy. 
H1 = There is a significant relationship between leverage and dividend policy.

**Earnings Per share's influence on Dividend Policy**

Earnings Per Share (EPS) refers to the expected gain that a shareholder gets per share unit. The better EPS for the company will be the better dividend policy (Bilal and Jamil, 2015). EPS is derived from the company's net profit, whereby the better net profit will influence investors to purchase more shares (Saleema et al., 2020). Thus the more share purchase by investors will make the stock price more volatile (Shah and Noreen, 2016). The earnings generated by the company are split between retained earnings and dividends. Higher earnings indicate a better dividend policy by paying out dividends (Kumaraswamy et al., 2017). After paying dividends, the surplus would be sufficient to pursue business activities using internal financing with retained earnings; thus, the debt level will be controllable. However, Das (2017) found it EPS does not significantly influence dividend policy. The mature company does not have to rely on EPS and follow the dividend payout pattern. Those companies believe that there is a better
alternative than EPS as a dividend policy indicator. Therefore, the fourth hypothesis is proposed as following:

H0 = There is no significant relationship between earnings per share and dividend policy.
H1 = There is a significant relationship between earnings per share and dividend policy.

Sales growth’s influence on dividend policy
Sales growth (SGrowth) refers to increasing current year sales based on last year's sales performance. Nyere and Wesson (2019) found that sales growth is significantly influencing dividend policy. The companies that increased their sales retained their profits to meet their working capital requirements and improve future shareholder payouts. It is also supported by Warganegara et al. (2020), whereby sales will increase income and profit. Thus it will enable the business to offer the optimal dividend policy to the shareholder. However, there is an opposite view that sales growth does not significantly influence dividend policy. When sales growth is robust, some companies decided to pay either lower or zero dividends (Chang et al., 2020). Hence, a reduction or no payouts may send a powerful and negative signal to investors, resulting in a dramatic decline in stock prices. In addition, sales growth did not play a part in influencing dividend policy because the company can raise funds internally through retained earnings or externally through equity capital, which is a better alternative than focusing on sales growth (Akhmadi and Robiyanto, 2020). Thus, the fifth hypothesis is proposed as following:

H0 = There is no significant relationship between sales growth and dividend policy.
H1 = There is a significant relationship between sales growth and dividend policy.

With all the literature review on theory and variables discussed, hence Figure 1 on the dividend policy determinants frameworks is presented as followings:

![Dividend Policy Determinants Framework](image)

**Figure 1**: Dividend Policy Determinants Framework

Data and Methodology
This study carried out a quantitative study based on secondary data. The pertaining sample consists of 23 publicly traded companies from the consumer products and services sector in Malaysia. The selected companies are listed in the Kuala Lumpur Stock Exchange (KLSE), which consistently paid dividends from 2015 until 2019. The fundamental purpose of this study is to demonstrate the relationship between the dependent variable and factors that affecting the dividend payout ratio. The listed independent variables are liquidity, profitability, leverage, earnings per share, and sales growth. Further, the panel data model is implemented since this
study has combined the total observations of cross-sectional and time-series estimation models. Hence, the model estimation shows below:

$$DPR_{i,t} = \beta_0 + \beta_1 LIQ_{i,t} + \beta_2 PROFIT_{i,t} + \beta_3 LEV_{i,t} + \beta_4 EPS_{i,t} + \beta_5 SGrowth_{i,t} + \varepsilon_{i,t}$$

**Equation 1**

where $DPR_{i,t}$ is represented by dividend payout ratio as a dependent variable, which equals dividend per share divided by earning per share for bank $i$ in time $t$; $LIQ_{i,t}$ is represented by the current ratio for bank $i$ in time $t$; $PROFIT_{i,t}$ is the net profit margin for bank $i$ in time $t$; $LEV_{i,t}$ is leverage which proxied by total liabilities divided by total assets; $EPS_{i,t}$ is earnings per share proxied by net income/weighted average shares outstanding; $SGrowth_{i,t}$ is represented by changes of growth from the previous year; and $\varepsilon_{i,t}$ is the error term.

**Table 1: List of variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Proxy</th>
<th>Measurements</th>
<th>Expected sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividend Payout Policy</td>
<td>Dividend payout</td>
<td>Dividend Per Share/Earning Per Share</td>
<td>+ve</td>
</tr>
<tr>
<td>(DPR)</td>
<td>ratio</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquidity (LIQ)</td>
<td>Current Ratio</td>
<td>Current Asset/Current Liabilities</td>
<td>+ve</td>
</tr>
<tr>
<td>Profitability (Profit)</td>
<td>Net profit margin</td>
<td>Net Income/Total Assets</td>
<td>+ve</td>
</tr>
<tr>
<td>Financial Leverage (LEV)</td>
<td>Debt Ratio</td>
<td>Total liabilities/total assets</td>
<td>-ve</td>
</tr>
<tr>
<td>Earnings per share (EPS)</td>
<td>Earnings Per Share</td>
<td>Net Income/weighted average shares outstanding</td>
<td>+ve</td>
</tr>
<tr>
<td>Sales growth(SGrowth)</td>
<td>Sales Growth</td>
<td>S1-S0/S0</td>
<td>+ve</td>
</tr>
</tbody>
</table>

The analysis will be conducted in two stages. First, it will begin with the diagnostic test presented by Variation Inflation Factor (VIF) test to check the existence of multicollinearity problem between independent variables, followed by heteroscedasticity test by using Modified Wald and serial correlation test using Wooldridge test. Second, factors affecting dividend policy are investigated using Pooled Ordinary Least Square (POLs hereafter) and checking whether the data can be pooled or estimated using the Random Effect Model (REM hereafter) or Fixed Effect Model (FEM hereafter). The test that is used is Breush & Pagan Langarian Test (BP-LM test). Based on the hypothesis of the BP-LM test, if the p-value for the test is less than 0.05, then data cannot be pooled, which can proceed to REM.

Further, to identify either omitted variables correlate with the regressors, this study implemented Hausman Test. Suppose the p-value result for the Hausman test is less than 0.05. In that case, the omitted variables correlate with the other regressors, and it is proved that the FEM is a consistent model with different intercepts.
Result and Analysis
The analysis of this study begins with identifying the existence of multicollinearity, heteroskedasticity, and serial correlation check in the data. Referring to Table 2, no multicollinearity issue exists among independent variables as the VIF result is less than 10. However, this model suffers from heteroscedasticity as the modified Wald Test is less than 0.05, but it will be corrected in the model later. On the other hand, the serial correlation result showed that this model is free from serial problems, which means that model estimation does not suffer any misspecification.

Table 2: Diagnostic Test for Static Panel Data
<table>
<thead>
<tr>
<th>Efficiency measurement</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIF test for Multicollinearity</td>
<td>1.62</td>
</tr>
<tr>
<td>Modified Wald Test for Heteroskedasticity</td>
<td>50841.02***</td>
</tr>
<tr>
<td>Wooldridge test for serial correlation</td>
<td>7.119*</td>
</tr>
</tbody>
</table>

Note: Values in parentheses are p-value. ***, **, * indicate statistical significance at the 1%, 5% and 10% level, respectively.

Determining the effect of firm-specific factors on dividend policy continues with the static panel data estimation in Table 3. First, this study estimates the POLS model and found that only liquidity and leverage showed a positive and significant relationship with dividend policy. The estimation further continues with the BP-LM test to identify whether data can be pooled or proceed to the other REM or FEM estimations. The result for the test indicates that rejecting H-null in which the REM is a suitable model. However, the analysis continues by examining whether the suitable model is REM or FEM (the model's intercept is either randomly distributed or fixed). Hence, the Hausman test is executed, and the result demonstrates that the appropriate model is FEM. As a result, the best model to explain determinants of dividend policy for the consumer and trading services sector is FEM, and the findings illustrate below.

Table 3: Result for Static Panel Data

<table>
<thead>
<tr>
<th></th>
<th>POLS</th>
<th>REM</th>
<th>FEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.155</td>
<td>0.334</td>
<td>0.517</td>
</tr>
<tr>
<td></td>
<td>(0.153)</td>
<td>(0.204)</td>
<td>(0.320)</td>
</tr>
<tr>
<td>LIQ_{i,t}</td>
<td>0.047***</td>
<td>0.563***</td>
<td>0.124***</td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td>(0.193)</td>
<td>(0.041)</td>
</tr>
<tr>
<td>PROF_{i,t}</td>
<td>0.771</td>
<td>0.764</td>
<td>-3.789***</td>
</tr>
<tr>
<td></td>
<td>(0.569)</td>
<td>(0.791)</td>
<td>(1.394)</td>
</tr>
<tr>
<td>LEV_{i,t}</td>
<td>0.925***</td>
<td>0.719**</td>
<td>0.517</td>
</tr>
<tr>
<td></td>
<td>(0.224)</td>
<td>(0.327)</td>
<td>(0.587)</td>
</tr>
<tr>
<td></td>
<td>0.0003</td>
<td>0.0007</td>
<td>0.0002</td>
</tr>
<tr>
<td>EPS_{i,t}</td>
<td>(0.0004)</td>
<td>(0.0007)</td>
<td>(0.002)</td>
</tr>
<tr>
<td></td>
<td>-0.001</td>
<td>-0.0005</td>
<td>-0.0003</td>
</tr>
<tr>
<td></td>
<td>(0.0009)</td>
<td>(0.0009)</td>
<td>(0.0008)</td>
</tr>
<tr>
<td>BP-LM Test</td>
<td>15.17***</td>
<td>(REM chosen)</td>
<td>-</td>
</tr>
<tr>
<td>Hausman Test</td>
<td>-</td>
<td>21.53***</td>
<td>(FEM final model)</td>
</tr>
</tbody>
</table>
Based on Table 3, only liquidity and profitability indicate a significant relationship towards dividend policy for consumers product and services companies. Therefore, the null hypothesis for liquidity is rejected, and this indicator has a positive relationship with dividend policy. It means that the company that has access to funding can maintain the dividend payment to their shareholders. This industry is one of the largest and vital contributors to the Malaysian economy, in which they might only use internal factors to operate their business. Thus, it will reduce the possibility of applying for debt.

As a consequence, the ability to pay a higher dividend is favorable. The finding is consistent with Botox and Portea (2014), whereby they claimed the cash need is more important in explaining the dividend payout when investor protection is high. Indeed, the most recent study by Franc-Dąbrowska et al. (2020) claimed that the cash accumulation for dividend payment does not cause financial liquidity deterioration. Their result is consistent with the dividend signaling theory, in which by maintaining the company's liquidity, they will be able to consistently paying the dividend. Thus it can signal their future profitability or earnings.

On the other hand, the profitability factor shows a negative and significant effect on dividend policy, in contrast to the majority of prior studies. Hence, the null hypothesis for profitability is rejected, which proves, the profitable company tends to pay a lower dividend. It signifies that the higher dividend payment is not necessarily postulates to the profitable company, but it may be influenced by the company's total assets acquired. As this industry consists of larger companies, they want to sustain and entitle to give the best for shareholders. Kuzucu (2015) found a consistent result that stated that more profitable companies are associated with lower dividend payout or less ability to pay the dividend. Kilincarslan and Demiralay (2020) ascertained that large companies do not have any issue paying dividends regardless of their profitability. Besides that, Santosa et al. (2020) claimed that profitability does not influence its value; hence, it will not affect the dividend policy. In addition, according to the dividend signaling theory, if the firms fail to imitate the signals, particularly from top management, they usually will experience a shrinking increase in earnings. Hence, the capability of companies to pay a dividend is lower.

**Conclusion**

Dividend payment is the primary concern for the shareholders and investors as it also illustrates the strength of the company's performance. Hence, top management handles the dividends policy is vital and is to be the main highlighted issue. As a result, the determinants factors that affect dividend policy are essential to be investigated. This present study aims to identify factors affecting dividend policy for the consumer product and trading services sector from 2015 until 2019. The findings showed that higher liquidity companies tend to pay a higher dividend by employing a static panel data model. Meanwhile, the profitable company pays the dividend lower, perhaps due to other factors. Hence, the result validates with the dividend signaling theory for liquidity effect only. The dividend payment depends on the information received by the managers related to the company's performance. However, profitability result is contradicting with the dividend signaling theory, as supposedly the company who portraits higher profit tend to pay favorable dividends to their shareholders. Due to profitability invalidates dividend signaling theory, hence future research suggested to conduct in depth study on the relationship between profitability and dividend policy. This study gives general practitioners insight into making decisions of their investment strategies to achieve their
personal or organizational goals. In addition, it is also very much related to the health condition of particular companies and gives confidence to the investors to contribute their funds unconditionally. Furthermore, this study points out some recommendations for future research. The first is to integrate the risk elements as it also essential determinants in evaluating the dividend policy. It is inevitable for every business to face systematic and unsystematic risk. Hence, considerations to consider this element is reasonable. Besides that, further research also can have a comparative analysis on the period of post and after pandemic covid-19. The expected findings might give a different insight into the investment decision of shareholders or other parties involved. Lastly, this study can be expanded to a larger sample; thus, the results can be generalized to another setting.

References


