The Impact of Dividend Policy on Shareholder Wealth: A Study on the Retailing Industry of Australia

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ABSTRACT
The impact of dividend policy on shareholder wealth has been a debatable topic for decades. The principal objective of this research is to examine the impact of dividend policy on shareholder wealth. It was grounded on a sample of 13 companies in the Australian retailing industry, listed on the Australian Stock Exchange (ASX) for the period 2012-2017. Dividend payout ratio was used as the proxy variable to measure dividend policy, whereas the market value of a share was the proxy variable for measuring shareholder wealth. The study covered secondary data, employing regression analysis for the purpose of analyzing the data. Previous literature has discussed this association between dividend policy and its impact on shareholder wealth. Studies have proven strong relationships, whereas some criticized the theories and findings. The results of this study established that dividend policy has a positive, moderate relationship with shareholder wealth. This was found to be consistent with the dividend relevance, bird-in-the-hand and signaling theories.

Keywords: Dividend payout ratio, Dividend policy, Market value of share, Shareholder wealth.

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1. INTRODUCTION

The rapid advancement in information technology, together with globalisation have raised grave concerns across all professions. For this reason, all companies attempt, not only to increase their profitability, but also to survive in the competitive landscape. As a result, companies will be motivated to maximise shareholder wealth, which is the principal goal of an organisation (Jensen, 2010). There is considerable discussion on whether dividend policy has an impact on attaining this goal (Baker & Weigand, 2015). However, this goal conflicts with the need to maximise the value of a company (Jensen, 2010) and thus, requires a company to determine an appropriate strategy to balance the conflicting forces (Baker & Weigand, 2015).

Baker and Weigand (2015) defined dividend policy as a strategy of a company determining its distribution of earnings to its shareholders over time. Numerous researches have attempted to examine the impact of dividend policy on shareholder wealth and yet, it remains uncertain to date (Farrukh, Irshad, Shams Khakwani, Ishaque, & Ansari, 2017). Dividend policy is a debatable topic in corporate finance and is
essential to both potential and existing investors and is also imperative for management prosperity (Farrukh et al., 2017). In spite of the criticality of this policy, less research is conducted to examine the effect of dividend policy on shareholder wealth in the Australian retailing industry. Hence, this study is an endeavour to assess the impact of dividend policy on shareholder wealth in the retailing of Australia.

The progression of the study is as follows; beginning with the introduction incorporating the research aim and question, it then leads on to the literature review. Subsequently, the research methodology as well as findings and discussion of the results is presented. It closes with a conclusion discussing limitations and future avenues of research.

1.1 PROBLEM STATEMENT

The successful operation of a business is required in order to generate earnings, which in turn will provide a company with the ability to pay dividends (Zafar, Chaubey, & Khalid, 2012). However, the management of a company will need to determine an optimum level between the amount of dividends paid out and the amount reinvested in a company (Zafar et al., 2012). This sends a signal to the market about the financial health of a company and consequently, is used as an indicator of the performance of a company (Zafar et al., 2012). Zafar et al. (2012) highlighted that even stable companies consider offering dividends to shareholders as rewarding as opposed to reinvesting. Nevertheless, the impact of dividend policy on the wealth of shareholders is a topic that remains unresolved and would result in diverse findings for numerous geographical contexts (Farrukh et al., 2017). Can the findings of these studies be reproduced in the Australian retailing industry? Thus, this study fills the void by determining the effect of the dividend policy on the wealth of shareholders in the aforesaid industry.

1.2 RESEARCH AIM AND RESEARCH QUESTION

The principal aim of this research is to assess the impact of dividend policy (variable being dividend payout ratio) on shareholder wealth (variable being market value of a share) in the retailing industry of Australia.

The following research question is developed in attaining the above aim;

RQ: Is there a relationship between dividend policy and shareholder wealth in the retailing industry of Australia? In the event there is a relationship, does it have a significant impact?

2. LITERATURE REVIEW

Numerous scholars have studied the impact of dividend policy on shareholder wealth, resulting in contrasting perspectives, as discussed below.
2.1 DIVIDEND IRRELEVANCE THEORY

The dividend irrelevance theory, founded by Miller and Modigliani (1961), one of the pioneers in studying this association, established that the dividend policy of a firm is irrelevant to the current valuation of a share, and instead, it is exclusively influenced by the investment policy of a firm. However, it is important to note that this theory was arrived at based on certain assumptions, and hence, the validity was questioned by other scholars.

One of the main assumptions of this theory was the existence of perfect capital markets. This was strongly opposed by the study conducted by Baker and Jabbouri (2016) who concluded that higher dividends were not entirely incorporated into the market values of shares due to the inefficiencies in the market, thereby rejecting Miller and Modigliani’s theory. Hussainey, Oscar Mgbame, and Chijoke-Mgbame (2011) stated that the theory assumes that the best agents of shareholders are managers. However, in reality, this thought process is questioned due to the conflicting interests of the owners and agents (management), resulting in agency costs underlined by Hussainey et al. (2011). This was further affirmed by Ali, Jan, and Sharif (2015, p. 63) who labelled the assumptions as being grounded on “impractical rules”. The theory that dividend policy and firm’s market value are independent is challenged by Nizar Al-Malkawi (2007) since the actual market practices have depicted an association between the dividend policy and shareholder wealth. Nevertheless, it is important to note that Miller and Modigliani (1961, p. 430) counter argued the incompatibilities of the theory whereby a change in the market price of a share could be merely due to the “informational content” of dividends, rather than the effect of the dividend policy.

2.2 DIVIDEND RELEVANCE THEORY

For many decades, the view that dividends do impact shareholder wealth and are reflected in the value of a share has been discussed.

Lintner (1956), in his study, established that dividends are vital in determining share prices, since dividends are linked to permanent increases in earnings. It was also established that due to the brisk reactions by shareholders, managers are hesitant to cut dividends (Lintner, 1956) and this was consistent with Bulan and Hull’s research (2012). Lintner’s findings were supported by many studies including Baker, Veit, and Powell (2001) and Brav, Graham, Harvey and Michaely (2005). It is noteworthy to mention that years later, Lintner’s model was described as the “best description of the dividend setting process available” by Benartzi, Michaely, and Thaler (1997, p. 1032), which was further acknowledged by a more recent study by Baker and Weigand (2015) who identified that the model is consistently used in the shaping of dividend policies to date. However, the validity to date was questioned by Brav et al. (2005) due to the introduction of repurchases that has come into existence since many theories decades ago.

2.3 BIRD-IN-THE-HAND THEORY

Lintner (1956) and Gordon (1959) established that investors would desire to have dividends rather than capital gains since they are risk averse owing to the uncertainty
and information asymmetry in future cashflows and its impact on share price. These findings were supported by many scholars such as Walter (1963), including more recent studies conducted by Hussainey et al. (2011) and Ali et al. (2015) who established that dividend payout ratio had a substantial positive relationship with share price. A point to consider is that since these studies have been conducted over a range of years, whether it is applicable to date is questioned.

On the other hand, Nizar Al-Malkawi (2007) presents the argument that this theory has received less empirical support and has been criticized, backing his argument with the lack of consideration of the tax implications on dividends and share prices. Similarly, Bhattacharya (1979) argues that this theory is flawed under perfect capital markets.

### 2.4 SIGNALLING THEORY

Miller and Modigliani’s study (1961) formed the basis for the signalling theory. Chaabouni (2017) supported this theory by elaborating on how dividends are considered as a signalling device, since an announcement on dividends result in potential and existing investors foreseeing the position of an organisation in a profitability perspective (Farrukh et al., 2017). This implies the importance of the information contained in a dividend announcement (Novianti, Medyawati, & Yunanto, 2013). In addition, dividend payments enhance the reputation and goodwill of a company in the eyes of the investor, causing share prices to increase in value (Al-Hasan, Asaduzzaman, & Karim, 2013).

Conversely, Brav et al. (2005) found little support for this theory. Dividends were regarded as a costly signal to express the true value of a firm and the notion that dividends were used for this purpose was rejected (Brav et al., 2005). Similarly, Baker and Weigand (2015) questioned prior studies for ignoring the other strategies involved in dividend initiations. It is also important to note that Nizar Al-Malkawi (2007) emphasised that only good-quality firms are capable of using dividends to send signals to markets and vice versa. How is a ‘good-quality’ firm defined? Where is the line drawn to differentiate between good-quality and bad-quality? Regardless of the findings of the aforementioned studies, they are not relatable on a similar level since different approaches have been undertaken (Nizar Al-Malkawi, 2007).

### 3. RESEARCH METHODOLOGY

This section describes the methodology utilised in attaining the objectives of this research. It presents the data collection, the theoretical framework including the hypothesis and the variables.

#### 3.1 DATA COLLECTION AND SAMPLING

This study was grounded on secondary data figures of 13 companies in the retailing industry of Australia. The focus was on retail companies that are listed on ASX (https://www.asx.com.au) and have paid dividends for five consecutive years, from 2012 to 2017. The purpose of this study is to assess the impact of the dividend policy on shareholder wealth and hence, only the companies that paid dividends have been
exclusively selected for this study. Any companies that have not paid consecutive dividends in this period have been eliminated from the sample. This data was composed from the annual reports of each company, which is publicly available and on the ASX website, and was considered on an annual basis.

In order to determine this association, the study employed simple regression analysis using Excel. This statistical technique was used since it provides the direction of the relationship (positive or negative) as well as the significance of the relationship, addressing both aspects of the research question.

### 3.2 CONCEPTUAL FRAMEWORK

The following conceptual framework, as illustrated in Fig. 1, was used as a basis in determining the association between the dividend policy and shareholder wealth of a company.

![Conceptual Framework](image)

For the purpose of determining the above association, the following regression model has been established;

\[
M_{i,t} = \beta_0 + \beta_1 D_{i,t} + \epsilon_{i,t}
\]  

(1)

where;
MVS = Market Value of Share,
i = ith company,
t = time period,
\[\beta_1\text{DPR} = \text{Coefficient of Dividend Payout Ratio},\]
\[\epsilon = \text{error term.}\]

As illustrated in the conceptual framework and the regression model above, the market value of a share, which is the proxy for measuring shareholder wealth, is the dependent variable. The dividend payout ratio, which is the proxy to measure dividend policy, is the independent variable.

Based on the above conceptual framework, the following hypothesis have been developed.

**H⁰:** There is no relationship between the dividend payout ratio (dividend policy) and market value of a share (shareholder wealth).

**H¹:** There is a relationship between the dividend payout ratio (dividend policy) and market value of a share (shareholder wealth).
3.3 VARIABLES

The objective of this study is to examine the impact of the dividend policy on shareholder wealth. As a result, it consists of two main variables, one of which is independent (dividend payout ratio) and the other is dependent (market value of share), as demonstrated in Figure 1.

3.3.1 DIVIDEND PAYOUT RATIO

Dividend payout ratio is described as the relative amount of dividends distributed to shareholders to the amount of earnings of a business (Ali et al., 2015). The average of the dividend payout ratios over the years was utilised for this study. It can be calculated using the following formula.

\[
\text{Dividend Payout Ratio} = \frac{\text{Dividend Per Share (DPS)}}{\text{Earnings Per Share (EPS)}}
\] (2)

The data was collected from the annual reports of the respective companies. In the event the ratio was readily available in the annual report, it was directly utilised for the study. On the contrary, if it was not readily available, it will be calculated using the above formula. For this purpose, no special dividends declared has been considered in the DPS figures and the basic EPS, rather than the diluted EPS, have been utilised. Ali et al. (2015) have also used dividend payout ratio as an independent variable.

3.3.2 MARKET VALUE OF SHARE

The market value of a share represents the price of an individual share in a company. It reflects the amount an individual is willing to pay for a share. The market value of the share of a company was derived from the ASX website (https://www.asx.com.au). The market values of the respective company in the sample at the end of each financial year was taken into consideration from 2012 to 2017. There were no modifications to the values, and the data was directly applied for the study. Ali et al. (2015) too have used share price as a dependent variable.

4. FINDINGS AND DISCUSSION

Table 1 represents the results of the estimated regression of 13 companies in the retailing industry of Australia from 2012 to 2017.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Co-efficient</th>
<th>Standard Error</th>
<th>P-Value</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividend payout</td>
<td>0.587091</td>
<td>10.488603</td>
<td>0.034902</td>
<td>0.344676</td>
</tr>
</tbody>
</table>

The correlation co-efficient produces information about the association between two variables. The results of the co-efficient \( r=0.587091 \) report that there is a positive relationship between dividend payout and the market value of a share. This indicates
that an increase in the dividend payout will have a positive effect on the market value of a share. Accordingly, a 1% increase in the dividend payout ratio will result in a 0.5871% increase in the market value of a share. This is coherent with the results of Farrukh et al.’s study (2017) based on Pakistani firms, although dividend per share and dividend yield were used as proxies in measuring dividend policy. Similarly, Chaabouni’s study (2017) also found a positive relationship, though the study was based on the period 2014-2015. Can this study provide a holistic view with a limited timeframe? Regardless of a similar result, it is noteworthy to mention that the statistical analysis used in Chaabouni’s study (2017) was not regression, but event study methodology.

Furthermore, the co-efficient result not being at the extremes of 0 and 1 denotes that there is a moderate relationship between the two variables. This is reinforced by Ali et al. (2015) who also established a moderate relationship (0.5848%) between the same variables, although it was claimed to have a ‘significant positive relationship’. Al-Hasan et al.’s findings (2013) concluded that dividend policy had a significant effect on share price, in the context of Bangladesh. It is worth noting that the sample size used in Al-Hasan et al.’s study (2013) was more than double the size of this study in question.

Nevertheless, when a company develops and maintains a positive image and a good reputation, this will attract potential investors and will keep existing investors content, causing an increase in the funds of a company through the issue of new shares. This will create a ripple effect and the earnings of a company will increase. Resultantly, it will reflect positively in the market value of a share. Nizar Al-Malkawi’s (2007) objection to the signalling effect needs to be taken into account here, since the research was based on multiple industries from 1989-2000. This information could possibly be outdated, raising concerns on its validity. The fact that the research consisted of companies that were de-listed from the stock exchange during the study period raises concerns on the comparability.

It is noteworthy to mention that one of the companies in the sample, Vita Group Limited to be precise, had a negative dividend payout ratio in the year ended 2014 as a result of the loss incurred in the respective period. This could have potentially impacted the significance of the relationship between dividend policy and shareholder wealth for the Australian retailing industry.

The standard error of $10.49 indicates an estimation of the variation of the observed market values of shares. The p-value is essential in determining if the null hypothesis should be rejected. It is also helpful in determining if the relationship observed in the sample exists in the population. If the p-value is less than the significance level, the null hypothesis (H0) will need to be rejected. In this case, p-value of 0.03 is less than the significance level of 0.05 (95% confidence level was used). As a result, the null hypothesis will be rejected and the alternate hypothesis (H1) will be accepted. Therefore, it can be implied that this study is in line with the dividend relevance (Lintner, 1956), bird-in-the-hand (Gordon, 1959; Lintner, 1956) and signalling theories (Chaabouni, 2017). Furthermore, the above results based on the sample, can be inferred to the population of the Australian retailing industry.
Additionally, Table 1 also states R2, which is the coefficient of determination. As explained in the regression model, this signifies the proportion of variation in the data. In other words, 34.5% of the variation in the market value of a share is caused by the dividend payout of a firm. Thus, 65.5% of the variation in the market value of a firm is caused by other factors that have not been accounted for in this model. On the contrary to this study, Al-Hasan et al. (2013) recognised that 76.3% of the share price depends on dividend policy, whereas only 23.7% is accounted for by other variables.

It is noteworthy to highlight that all the prior studies discussed in this section dispute Miller and Modigliani’s (1961) theory through the establishment of a relationship between the aforementioned variables. Additionally, the comparability of the findings of some of these studies based on developing countries to Australia is debateable since the true performance of a company may not particularly be reflected due to the poor accounting standards in the developing countries (Rashid & Rahman, 2008). The varying sample sizes, together with the timeframes, questions the applicability of the respective theories to the Australian retailing industry. In essence, this is caused by the fact that no two companies are the same (Deegan, 2012).

5. CONCLUSION

The principle aim of this research is to examine the relationship between dividend policy (dividend payout ratio) and shareholder wealth (market value of a share). This was done based on a sample of 13 companies in the retailing industry of Australia for the period 2012 to 2017, employing regression analysis. With reference to the research question mentioned above, the empirical findings indicate that there is a positive, moderate relationship between dividend policy and shareholder wealth. These results are consistent with the dividend relevance (Lintner, 1956), bird-in-the-hand (Gordon, 1959; Lintner, 1956) and signalling theories (Chaabouni, 2017).

5.1 PRACTICAL IMPLICATIONS AND RECOMMENDATIONS

Companies need to be cautious when formulating their dividend policies. It is recommended that companies develop stable dividend policies since it will accelerate the market values of shares, resulting in a positive impact on shareholder wealth (Ali et al., 2015; Farrukh et al., 2017). Additionally, firms should have appropriate disclosure on its dividend policies since it guides the investment decisions of shareholders (Farrukh et al., 2017).

5.2 LIMITATIONS

The scope of this study is limited to the firms listed on the ASX in the retailing industry of Australia for the time period 2012-2017. The proposed sample size of 50 companies were not met since some of the companies were not listed on ASX since 2012, whereas some companies did not make consecutive dividend payments for the respective years. Since the sample size was only 13 companies, the generalizability of the findings to other industries is limited. Additionally, dividend policy was measured using a single proxy variable of dividend payout ratio. All other factors such as firm size and growth remain constant in this study. Chiang, Frankfurter, Kosedag, and Wood (2006)
underlined that motivations behind dividends are ignored when using statistical analysis on published financial data. This would ideally be crucial in gaining an insight into dividend policy (Chiang et al., 2006)

5.3 FUTURE AVENUES OF RESEARCH

This study can be expanded in the future to include multiple proxy variables for the measurement of dividend policy as well as shareholder wealth. For example, dividend per share and dividend yield (for dividend policy) and earnings per share (for shareholder wealth) can be incorporated (Farrukh et al., 2017), which will provide a broader and a holistic view of the impact of dividend policy on market value of a share. An increased sample size will address the generalisability limitation.

Future research can be based on a variety of industries, including a combination of industries similar to prior studies. They can be further grouped into sub-categories differentiating between the regular and irregular dividend paying companies, the financial and non-financial companies etc. The time period can also be increased (Farrukh et al., 2017) to elevate the study. Dividend policy will presumably continue to be a debatable topic in corporate finance. Thus, the avenues for future research are endless.

APPENDIX

Data on dividend payout ratio and market value of shares

<table>
<thead>
<tr>
<th>Company Name</th>
<th>X (Dividend Payout Ratio for the year ended)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2013</td>
</tr>
<tr>
<td>AUTOMOTIVE HOLDINGS GROUP LIMITED</td>
<td>0.78</td>
</tr>
<tr>
<td>AMA GROUP LIMITED</td>
<td>0.68</td>
</tr>
<tr>
<td>BREVILLE GROUP LIMITED</td>
<td>0.68</td>
</tr>
<tr>
<td>HARVEY NORMAN HOLDINGS LIMITED</td>
<td>0.67</td>
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<tr>
<td>JB HI-FI LIMITED</td>
<td>0.61</td>
</tr>
<tr>
<td>JOYCE CORPORATION LTD¹</td>
<td>0.90</td>
</tr>
<tr>
<td>NICK SCALI LIMITED</td>
<td>0.79</td>
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<td>SUPPLY NETWORK LIMITED</td>
<td>0.56</td>
</tr>
<tr>
<td>TRADE ME GROUP LIMITED</td>
<td>0.80</td>
</tr>
<tr>
<td>VITA GROUP LIMITED</td>
<td>0.65</td>
</tr>
<tr>
<td>WEBJET LIMITED</td>
<td>1.49</td>
</tr>
</tbody>
</table>

Company Name | Y (Market Value of a Share as at 30th June) | 2013 | 2014 | 2015 | 2016 | 2017
--- | --- | --- | --- | --- | --- | ---
AUTOMOTIVE HOLDINGS GROUP LIMITED | 3.37 | 3.63 | 4.26 | 3.77 | 3.16
AMA GROUP LIMITED | 0.28 | 0.26 | 0.61 | 0.88 | 0.97
BREVILLE GROUP LIMITED | 7.24 | 8.11 | 6.72 | 7.49 | 10.69
HARVEY NORMAN HOLDINGS LIMITED | 2.36 | 2.91 | 4.70 | 4.51 | 3.77
JB HI-FI LIMITED | 15.57 | 17.88 | 20.36 | 22.76 | 22.83
JOYCE CORPORATION LTD | 0.36 | 0.47 | 0.96 | 1.01 | 1.58
NICK SCALI LIMITED | 2.06 | 2.54 | 3.48 | 4.52 | 6.18
SUPPLY NETWORK LIMITED | 1.16 | 2.06 | 2.00 | 2.11 | 2.48
TRADE ME GROUP LIMITED | 3.97 | 3.25 | 3.21 | 4.38 | 4.93
VITA GROUP LIMITED | 0.60 | 0.71 | 1.80 | 4.05 | 1.03
WEBJET LIMITED | 4.20 | 2.34 | 3.07 | 6.79 | 12.31
WESFARMERS LIMITED | 38.38 | 41.80 | 40.90 | 40.24 | 40.79
WOOLWORTH GROUP LIMITED | 32.20 | 36.31 | 27.04 | 21.22 | 25.83

**Results of regression analysis**

**SUMMARY OUTPUT**

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<td>P-value</td>
<td>Lower 95%</td>
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**RESIDUAL OUTPUT**

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<td>13</td>
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**PROBABILITY OUTPUT**

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</table>
ACKNOWLEDGEMENT

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REFERENCES


