

MINORITY SHAREHOLDER PROTECTION AND DIVIDEND POLICY: EVIDENCE FROM THE MATERIAL INDUSTRY

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Abstract

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This study investigates the impact of minority shareholder protection on corporate dividend policy. On one hand, strong minority shareholder protection can be associated with a reduction in dividend payment because shareholders want to receive more dividends to mitigate agency costs. On the other hand, weak minority shareholder protection can lead to an increase in dividend payment since shareholders, in order to protect themselves, may require the company to pay more dividends to compensate for weak minority shareholder protection. Our sample consists of 101 Vietnamese listed firms in the material industry during the period from 2015 to 2021. Employing a pooled ordinary least squares (OLS) model, we find a negative impact of minority shareholder protection on corporate dividend payment. To deal with the endogeneity problem, we apply a system generalized method of moments (GMM) method. The main result estimated from this method is qualitatively unchanged. The finding of this paper suggests that the manager of a company should enhance the corporate governance of the company to protect the minority shareholders.

Keywords: Dividend Policy, Dividend Yield, Minority Shareholder Protection, Shareholder Rights, Corporate Finance, Vietnamese Stock Exchange

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1. INTRODUCTION

The dividend policy is one of the most important financial policies of a company. As a result, many studies have paid attention to investigating the determinants of a company's dividend policy. For example, Al-Kuwari (2009), Issa (2015), Aivazian et al. (2003) and Ho (2003) find that firm size has a positive relationship with dividend policy because it can be seen that large firms are less risky than small one and, therefore, will be able to pay more

dividends. Al-Kuwari (2009), Issa (2015), and Aivazian et al. (2003) show a positive association between profitability and dividend policy for their research sample. Some empirical studies show that when a firm has a high level of financial leverage, it will pay fewer dividends (Al-Kuwari, 2009; Aivazian et al., 2003; Kumar, 2006; Nizar Al-Malkawi, 2007). Growth opportunity can also be found as one of the most important determinants of dividend policy. Amidu and Abor (2006), Holder et al. (1998), and Manos (2003) find evidence of a negative

relationship between firm growth opportunity and dividend policy.

Most of the aforementioned studies use a context including only one country. However, some studies investigate the determinants of dividend policy employing a context containing international countries, such as Denis and Osobov (2008), and Aivazian et al. (2003). Among these studies, a few have examined the impact of the protection of minority shareholder rights on the dividend policy (La Porta et al., 2000; Jiraporn & Ning, 2006; Officer, 2006; Sawicki, 2009; Liljebloom & Maury, 2016; Adjaoud & Ben-Amar, 2010). According to Agyemang et al. (2019), the protection of minority shareholders' rights is "to protect the legitimate interests of minority shareholders from the self-centered and opportunistic corporate managers and majority shareholders. Therefore, at least the rights of all shareholders must be protected through measures being put in place by the business organization" (p. 534). An example measure that can be used is minority shareholders can vote by mail rather than attending the annual meeting of the company. This can make the minority shareholders vote more easily. Or minority shareholders have cumulative voting for directors. This can help the minority shareholders have more power to select their representatives on the boards of directors. Another example is that minority shareholders can require the company to repurchase the shares of the minority shareholders if the shareholders object to certain fundamental changes in the company, such as mergers or asset sales. Basically, when minority shareholders can exercise their rights easily, it suggests that their rights are protected well. Although some studies have investigated the impact of minority shareholder rights on the dividend policy, the evidence of these studies is mixed. However, none of these studies has studied the relationship between minority shareholder protection and dividend policy in Vietnam.

The aim of this study is to investigate the effects of minority shareholder protection on dividend policy using a sample including Vietnamese listed companies operating in the material industry from 2015 to 2021. Vietnam is a small but growing economy in South East Asia. The Vietnamese stock market is still young. Firms in Vietnam have many growth opportunities and thus need a huge amount of capital to invest in these opportunities. One of the most important sources of capital for companies comes from retained earnings. As a result, the dividend policy is particularly important to the growth of the companies. In this study, we select companies operating in the material industry because these companies have recently attracted both locally and globally huge investment capital. In addition, companies in this sector have different dividend policies, with some companies paying a very high level of dividend and others paying no dividend.

Employing a pooled ordinary least squares (OLS) model, we find that strong minority shareholder rights can exert a negative impact on a firm's dividend payment. We also use a generalized method of moments (GMM) model to mitigate the concerns related to endogeneity problems. The result estimated from this model

does not change. We believe we are one of the first to find this result for Vietnam. This will contribute to the literature on the impact of investor protection on corporate financial policy in general and dividend policy in particular.

The rest of this paper is organized as follows. Section 2 reviews the literature on the relationship between minority shareholder rights and dividend policy. Section 3 describes the data and methodology used in this research. Section 4 provides empirical results. And Section 5 concludes and provides some recommendations.

2. LITERATURE REVIEW

The dividend policy is one of the most important policies in corporate finance. Consequently, many studies have examined the determinants of firms' dividend policies. For example, Denis and Osobov (2008) study reasons explaining why listed companies in the US, Canada, Germany, France, and Japan pay dividends. The results of this study show that big companies and profitable companies tend to pay more dividends. Naceur et al. (2006) examine the determinants of the dividend policy of Tunisian companies listed from 1996 to 2002 on the Tunis Stock Exchange (TSE). They find that the current dividend policy depends on the current net income and the last year's dividend policy. Similar to Denis and Osobov (2008), Naceur et al. (2006) show that profitable firms pay more dividends. However, different from Denis and Osobov (2008), Naceur et al. (2006) report that big companies pay fewer dividends compared with small companies. Naceur et al. (2006) also indicate that firms with high stock liquidity have less dividend yield while firm leverage does not exert any impact on the dividend policy.

Dewasiri et al. (2019) investigate the determinants of dividend policy using a sample including listed companies in Sri Lanka from 2010 to 2016. The result shows that the current dividend yield depends on the past dividend yield. Additionally, this study finds that whereas firms with high profitability pay more dividends, firms with high growth opportunities pay less dividends. There are many other studies exploring the determinants of dividend policy such as Mehta (2012), Kazmierska-Jozwiak (2015), and Yusof and Ismail (2016). The common aspect of these studies is that these studies only focus on the characteristics of companies, such as firm size or firm profitability. It seems these studies disregard the potential impact of minority shareholder rights on dividend policy. Previous studies show that the protection of minority shareholders can affect both the financial and investment policies of a company (Jiraporn & Gleason, 2007; Chava et al., 2009; Jiraporn et al., 2006; Houston et al., 2018; Acharya et al., 2011). Therefore, minority shareholder rights can also impact the dividend policy of a company.

There are many studies that have attempted to measure shareholder rights protection in general and minority shareholder rights protection in particular. For example, La Porta et al. (1998) have developed an index to measure the protection of shareholder rights for 49 countries around the world. This study builds an index based on shareholders' ability to participate in the board elections. A higher value of this index implies that it

is easier for shareholders to elect the members of the board of directors. This implies that the right to protect shareholders is strengthened. Djankov et al. (2008) have constructed the anti-self-dealing index to measure minority shareholder rights protection for 72 countries around the world. This index is built based on “private enforcement mechanisms, such as disclosure, approval, and litigation, governing a specific self-dealing transaction” (Djankov et al., 2008, p. 430). A higher value for this index indicates stronger protection of minority shareholder rights.

However, the studies of La Porta et al. (1998) and Djankov et al. (2008) do not measure minority shareholder rights in Vietnam. Furthermore, their index rarely varies over time. World Bank has constructed a time-varying shareholder governance index measures shareholders' rights in corporate governance from 2015 for 190 economies, including Vietnam. Ease of doing business index (*Doing Business*) measures the shareholder rights based on the conflicts of interest through one set of indicators and shareholders' rights in corporate governance through another. *Doing Business* designs a questionnaire based on securities regulations, company laws, civil procedure codes, and court rules of evidence. Then the questionnaire is sent to lawyers. After receiving the response from the lawyers, *Doing Business* will evaluate the answers and give a score measuring the degree of the protection of minority shareholder rights in a country (World Bank, 2019). According to *Doing Business* the score is “the sum of the scores for the extent of conflict of interest regulation index (extent of disclosure, director liability, and shareholder suits sub-indexes) and the extent of shareholder governance index (extent of shareholder rights, ownership, and control structures, and corporate transparency sub-indexes)” (World Bank, 2019). A higher score on this index indicates stronger protection of minority shareholder rights. In our paper, we employ the minority shareholder rights protection index developed by *Doing Business* as the proxy for the protection of minority shareholder rights.

The relationship between the protection of minority shareholders and corporate dividend policy can be explained by the *agency cost* theory. This theory argues that there always exists conflict between a company's shareholders and managers. Specifically, firms' managers want to maintain a stable level of cash in the company. As a result, they tend not to pay dividends even when the increase in the dividend payment benefits the shareholders. When minority shareholder rights are enhanced, this adverse situation can be mitigated, suggesting that a change in minority shareholder rights may affect the corporate dividend policy.

La Porta et al. (2000) propose two opposite hypotheses predicting the impact of minority shareholder rights on the dividend policy of a company. The first hypothesis is the “outcome hypothesis”. This hypothesis forecast that stronger minority shareholder rights can protect the shareholders better by requiring the company to pay a higher level of dividend to the shareholder. This argument is consistent with the agency cost theory. The second hypothesis is the “substitute

hypothesis”, which predicts that weaker minority shareholder rights would increase the dividend payment. This is because companies' managers need to increase the dividend payment to compensate the shareholders for weaker minority shareholder rights. The empirical results of La Porta et al. (2000) support the outcome hypothesis.

There are also some empirical studies investigating the impact of minority shareholder rights on corporate dividend policy and finding evidence supporting the “outcome hypothesis”. For instance, Liljeblom and Maury (2016) examine this impact using a sample consisting of Russian listed companies from 1998 to 2003. They find that when minority shareholder rights increase, the companies in their sample will increase the dividend payment. When studying Canadian listed companies from 2002 to 2005, Adjaoud and Ben-Amar (2010) also indicate a positive association between minority shareholder rights and the dividend payout ratio. Some other empirical studies also find similar evidence, such as Mitton (2004), and Ashraf and Zheng (2015).

By contrast, there are studies providing evidence consistent with the “substitute hypothesis”. For example, Jiraporn and Ning (2006) study the relationship between minority shareholder rights and dividend policy using a sample including the US companies in 1993, 1995, 1998, 2000, and 2002. The result suggests a negative relationship between minority shareholder rights and companies' dividend payout ratio. This result supports the “substitute hypothesis” of La Porta et al. (2000). Other studies also find similar evidence supporting this hypothesis, such as Officer (2006) and Sawicki (2009).

Most of the studies about dividend policy in Vietnam have focused on examining the impact of dividend policy on stock fluctuation and firm value. For example, the studies of Dang et al. (2019), Phan and Tran (2019), and Nguyen et al. (2019) report a negative relationship between dividend yield and the volatility of the stock price. Dang et al. (2021) investigate the impact of dividend policy on firm value. This study finds that companies can increase firm value by increasing the dividend payout ratio. However, this relationship exists only when the dividend payout ratio is higher than 10%. Nguyen and Giang (2015) also find similar evidence to Dang et al. (2021).

To the best of our knowledge, there is no study exploring the impact of minority shareholder rights on corporate dividend policy in Vietnam. Vietnam is an emerging county with many investment opportunities but a high level of agency costs. Consequently, an increase in the protection of minority shareholders can affect the dividend policy of a company remarkably. When the minority shareholder rights are enhanced, minority shareholders may feel safer when investing in the company. As a result, they may be more willing to receive fewer dividends so that the company can have more retained earnings to invest in new investment projects. This suggests a negative relationship between minority shareholder rights and dividend policy in Vietnam. Thus, we develop the following hypothesis:

H1: An increase in minority shareholder rights can reduce the dividend payment.

3. DATA AND METHODOLOGY

3.1. Data

Our data consist of 101 Vietnamese listed companies operating in the building materials industry from 2015 to 2021. The financial data are collected from *FiinPro*, which is a database including financial data for all Vietnamese listed companies. The minority shareholder protection index is sourced from the World Bank *Doing Business*

$$\begin{aligned} \text{DIVIDEND_YIELD}_{it} &= \\ &= \beta_0 + \beta_1 \text{MINORITY_PROTECTION}_t + \beta_2 \text{SIZE}_{it} + \beta_3 \text{PROFITABILITY}_{it} \\ &+ \beta_4 \text{FIRM_GROWTH}_{it} + \beta_5 \text{LEVERAGE}_{it} + \beta_6 \text{GDP_GROWTH}_t + \varepsilon_{it} \end{aligned} \quad (1)$$

where $\text{DIVIDEND_YIELD}_{it}$ = the ratio of dividend payment over the stock price of company i in year t ; $\text{MINORITY_PROTECTION}_t$ = the minority shareholder protection index of Vietnam in year t ; SIZE_{it} = the natural logarithm of total assets of company i in year t ; $\text{PROFITABILITY}_{it}$ = the ratio of net income over the total assets of company i in year t ; FIRM_GROWTH_{it} = the growth rate of the revenue of company i in year t ; LEVERAGE_{it} = the ratio of total debt over total assets of company i in year t ; GDP_GROWTH_t = the GDP growth rate of Vietnam in year t .

The dependent variable in Eq. (1) is the *dividend yield of a company*. The dividend yield is measured by the ratio of the dividend payment over the share price. The independent variable is the *minority shareholder protection index*. This index is constructed based on three dimensions, which are: 1) the strength of minority shareholder protections against the misuse of corporate assets by directors for their personal gain as well as shareholder rights, 2) governance safeguards, and 3) corporate transparency requirements that decrease the risk of the abuse. The strength of minority shareholder protections against the misuse of corporate assets by directors indicates the extent to which shareholders have the power to affect the important

database. We also use the World Bank database to collect data on the Vietnamese gross domestic product (GDP) growth. Our final data are unbalanced data with 680 firm-year observations.

3.2. Methodology

We regress the following equation to investigate the impact of minority shareholder protection on the dividend policy:

decisions of the company, such as the decision to appoint or remove the board members or the decision to issue new shares. The governance safeguards consider the extent to which the law regulates how different corporate organs are checked and balanced in a company. The corporate transparency requirements look at the extent to the related-party transactions, such as the transactions on ownership stakes, or the financial prospects are reported. The index ranges from 0 to 100 and the higher the index is, the stronger the minority shareholder protection.

In Eq. (1), we follow Khalaf (2022) and include some control variables in Eq. (1). The first control variable is firm size (*SIZE*), measured by the natural logarithm of the total assets. The second control variable is firm profitability (*PROFITABILITY*), computed by the net income over the total assets. The third control variable is firm growth (*FIRM_GROWTH*), calculated by the growth rate of the company's net revenue. The next control variable is firm leverage (*LEVERAGE*), measured by the total debt divided by the total assets. The final control variable is the Vietnamese GDP growth rate (*GDP_GROWTH*). Table 1 summarizes the variables we use in this study.

Table 1. Variable definition

<i>Variable</i>	<i>Definition</i>
<i>DIVIDEND_YIELD</i>	The dividend yield is measured by the dividend payment over the share price.
<i>MINORITY_PROTECTION</i>	Minority shareholder protection index.
<i>SIZE</i>	Firm size is measured by the natural logarithm of the total assets.
<i>PROFITABILITY</i>	Profitability is measured by the ratio of net income to total assets.
<i>FIRM_GROWTH</i>	Firm growth is measured by the growth rate of the firm's net revenue.
<i>LEVERAGE</i>	Leverage is measured by the ratio of total debt over the total assets.
<i>GDP_GROWTH</i>	The Vietnamese GDP growth rate.

4. EMPIRICAL RESULTS

4.1. Univariate results

Table 2 provides the summary statistics of variables used in this study. On average, the dividend yield of companies in our sample is 0.070 with a standard deviation of 0.091. Some companies in the sample pay no dividend and others pay a very high level of dividend with a dividend yield of 0.709. Regarding minority shareholder protection, the index ranges from 45 to 55 in our sample period. The mean and

standard deviation of this index are 51.927 and 3.845, respectively. The fluctuation in this index can help to estimate the impact of minority shareholder protection on the firm's dividend policy.

Table 3 provides the correlation matrix of variables used in our study. The negative correlation between the minority shareholder protection index and dividend yield may suggest a negative relationship between them. The correlation coefficients of the right-hand side variables in Eq. (1) are all lower than 0.7, suggesting that the regression model does not have the multicollinearity problem.

Table 2. Summary statistics

Variable	Obs.	Mean	Std. dev.	Min	Max
<i>DIVIDEND_YIELD</i>	680	0.070	0.091	0.000	0.709
<i>MINORITY_PROTECTION</i>	680	51.927	3.845	45.000	55.000
<i>SIZE</i>	680	27.690	1.373	24.249	32.814
<i>PROFITABILITY</i>	680	0.052	0.066	-0.467	0.610
<i>FIRM_GROWTH</i>	680	0.400	2.991	-0.976	48.814
<i>LEVERAGE</i>	680	0.491	0.222	0.000	1.290
<i>GDP_GROWTH</i>	680	0.058	0.019	0.026	0.072

Table 3. Correlation matrix

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) <i>DIVIDEND_YIELD</i>	1.000						
(2) <i>MINORITY_PROTECTION</i>	-0.135	1.000					
(3) <i>SIZE</i>	-0.084	0.091	1.000				
(4) <i>PROFITABILITY</i>	0.298	-0.090	0.003	1.000			
(5) <i>FIRM_GROWTH</i>	-0.049	-0.021	-0.033	0.187	1.000		
(6) <i>LEVERAGE</i>	0.037	0.024	0.279	-0.345	-0.123	1.000	
(7) <i>GDP_GROWTH</i>	0.071	-0.282	-0.059	-0.031	-0.027	0.014	1.000

To confirm that our regression model does not have multicollinearity problems, we also use variance inflation factor (VIF) analysis. The results are reported in Table 4. The results show that the variance inflation factors of the right-hand side variables in Eq. (1) are all less than 10. This supports the results in correlation matrix analysis and confirms that our regression model does not have the multicollinearity problem.

Table 4. Variance inflation factor

Variable	VIF
<i>MINORITY_PROTECTION</i>	1.11
<i>SIZE</i>	1.11
<i>PROFITABILITY</i>	1.19
<i>FIRM_GROWTH</i>	1.04
<i>LEVERAGE</i>	1.25
<i>GDP_GROWTH</i>	1.09

4.2. Regression results and discussion

This section will provide a multivariate analysis of our study. First, we will perform a heteroskedasticity test to check whether our regression model has a heteroskedasticity problem. Specifically, we employ the Breusch-Pagan test for heteroskedasticity for this analysis. The Chi-square (χ^2) statistic of this test is 150.02 with a p-value of 0.000, suggesting that our regression model has a heteroskedasticity problem. To cope with this problem, we estimate the standard errors of Eq. (1) using Huber's (1967) and White's (1980, 1982) methods. In our study, we also cluster the standard errors at the firm level.

After dealing with the heteroskedasticity problem, we estimate Eq. (1) using a pooled OLS model. Table 5 reports the regression results of Eq. (1) using this method. The coefficient of *MINORITY_PROTECTION* is negative and significant at the 5% level, suggesting that stronger minority shareholder protection can reduce the dividend yield. This result is consistent with the "substitution hypothesis" and is similar to the finding of Officer (2006) and Sawicki (2009). This supports our hypothesis *H1*. In economic terms, our result suggests that a one standard deviation increase in the minority shareholder protection index can lead

to a reduction of the dividend yield by around 11%¹. Vietnam is an emerging country where the agency costs between minority shareholders and directors may be very high, suggesting that minority shareholder protection in Vietnam is weak. As a result, Vietnamese companies need to pay a high level of dividends so that the minority shareholders can receive the money and then they can reinvest the money by themselves. This can protect minority shareholders against the misuse of corporate assets by directors.

Regarding the control variables, we have some noticeable results. Firstly, the coefficient of *SIZE* is significantly negative, suggesting a negative relationship between firm size and dividend yield. This can be because bigger firms are less risky and, therefore, they can pay a higher level of dividend. This result is consistent with the result of previous studies, such as Al-Kuwari (2009), Issa (2015), and Aivazian et al. (2003). Secondly, *PROFITABILITY*, has a significantly positive coefficient. This can indicate that firms with high profitability will pay more dividends. Al-Kuwari (2009), Issa (2015), and Aivazian et al. (2003) also find similar results. Finally, the coefficient of *LEVERAGE* is positive and significant. This suggests a positive association between firm leverage and dividend payment. This result contrasts with the result of Al-Kuwari (2009) and Aivazian et al. (2003). However, the result in our study may be because firms in our sample use debt effectively and as a result can pay a high amount of dividend.

Employing a pooled OLS model could not deal with the problem of endogeneity. As the sample in this study is panel data, we can employ alternative regression models for panel data such as a random or a fixed effects model. However, these methods could not mitigate the endogeneity problem. As a result, to check the robustness of our results and to deal with the endogeneity problem, we apply an GMM model to estimate Eq. (1) to deal with the possible endogeneity problem in our analysis. Employing this model can also help to examine the "dynamic" effects of dividend yield because we can include the lag value of dividend yield in this model. The results are reported in Table 6.

¹ 11% = (3.845 * 0.002 / 0.070)100%, where 3.845 is the standard deviation of *MINORITY_PROTECTION*, 0.002 is the coefficient of this variable, and 0.070 is the mean of *DIVIDEND_YIELD* (Table 2).

The post-estimation test of the regression shows that the p-values of the Arellano-Bond (AR2) test and the p-value of the Hansen test are higher than 0.1, suggesting that the estimation results are valid. The coefficient of *MINORITY_PROTECTION* is statistically negative, which supports our previous results. Using a GMM model can also help to investigate the dynamic effects of dividend yield. The coefficient of the lag variable of

DIVIDEND_YIELD is positive and significant at the 5% level, implying that the dividend yield of the company in the previous year can impact positively the dividend yield of the company in the contemporary year. This can be because firms in our sample do not want to change the dividend policy quickly. They need to keep the dividend policy stable so that they can attract more investors in the future.

Table 5. The result of the cluster-robust pooled OLS model

Variables	Coefficient	Z(t-value)	P > Z
1	2	3	4
<i>MINORITY_PROTECTION</i>	-0.002 ^{**}	-2.06	0.042
<i>SIZE</i>	-0.009 [*]	-2.57	0.012
<i>PROFITABILITY</i>	0.528 ^{***}	5.47	0.000
<i>FIRM_GROWTH</i>	-0.003	-1.54	0.127
<i>LEVERAGE</i>	0.080 ^{***}	3.62	0.000
<i>GDP_GROWTH</i>	0.215 [*]	1.93	0.056
Constant	0.339 ^{**}	3.09	0.003
R-squared	0.151		
F-value (p-value)	6.76 ^{***} (0.000)		

Note: ^{***}, ^{**}, and ^{*} indicate the significance at the 1%, 5%, and 10% levels, respectively.

Table 6. Estimation results using alternative regression methods

Variables	Coefficient	Z(t-value)	P > Z
1	2	3	4
Lag of <i>DIVIDEND_YIELD</i>	0.283 ^{**}	1.98	0.047
<i>MINORITY_PROTECTION</i>	-0.001 [*]	-1.67	0.095
<i>SIZE</i>	-0.015	-1.58	0.113
<i>PROFITABILITY</i>	0.444 ^{***}	3.00	0.003
<i>FIRM_GROWTH</i>	-0.007 ^{**}	-2.33	0.020
<i>LEVERAGE</i>	0.028	0.85	0.398
<i>GDP_GROWTH</i>	0.010	0.07	0.940
Constant	0.505 ^{**}	1.97	0.049
R-squared	0.260		
AR (1) test: z-value (p-value)	-1.78 [*] (0.076)		
AR (2) test: z-value (p-value)	0.41 (0.683)		
Hansen test: Chi2-value (p-value)	79.74 (0.550)		
Wald-Chi2 value (p-value)	289.32 ^{***} (0.000)		

Note: ^{***}, ^{**}, and ^{*} indicate the significance at the 1%, 5%, and 10% levels, respectively.

5. CONCLUSION

This paper investigates the impact of minority shareholder protection on a firm's dividend policy. On one hand, strong minority shareholder protection can be associated with a reduction in dividend payment because shareholders want to receive more dividends to mitigate agency costs. On the other hand, weak minority shareholder protection can lead to an increase in dividend payment since shareholders, in order to protect themselves, may require the company to pay more dividends to compensate for weak minority shareholder protection.

Our sample consists of Vietnamese listed companies in the material industry from 2015 to 2021. The result shows a negative impact of minority shareholder protection on a firm's dividend payment. When the protection of minority shareholders is weak, the shareholders may require the company to pay more dividends. This result is robust when we use alternative regression techniques such as pooled OLS and GMM models. Regarding the control variables, our results show that firm size has a negative relationship with the dividend yield, whereas firm profitability and firm leverage have a positive association with the dividend yield.

However, this study is not without limitations. For example, our research sample only includes listed firms in the material industry. This may limit the ability to generalize the result to all companies in Vietnam. In addition, the results are based on the sample of an emerging country, which has different characteristics compared with developed countries. However, this may help to provide new and comprehensive evidence about the impact of minority shareholder protection on the corporate dividend policy. Finally, some data of this study are based on the financial statement of the companies in our sample. In this study, we have assumed that the information in the financial statement reflects the financial performance of the companies accurately. This assumption may be valid because the financial statements of all Vietnamese listed companies are audited before they can be disseminated to investors.

Although this study has several inherent limitations, the results of this study can provide some implications for firms' managers and investors. For firms' managers, the result suggests that if the manager of a company operating in a country with weak minority shareholder protection wants to keep more retained earnings, he needs to enhance the corporate governance of the company to protect the minority shareholders. For investors, the result suggests that investors in countries with

strong minority shareholder protection countries should be aware that they may receive a low amount of dividend when investing in stocks and, therefore, they may need to consider investing in stocks with high liquidity so that they can sell them easily to get

cash. Future research, our study suggests that future studies can investigate the impact of minority shareholder protections on the other aspects of the corporate financial policy, such as the selection of debt and equity in the capital structure.

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