

## Article

# The Relationship between Promoters' Holdings, Institutional Holdings, Dividend Payout Ratio and Firm Value: The Firm Age and Size as Moderators

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**Abstract:** The present paper aims to empirically examine the effect of promoters' holdings and institutional holdings on dividend payout ratio and the firm value. Most importantly, this paper explores the age and size of the firm as the moderators in the relationships. Data collected from 23 companies from India and 253 data points were analyzed to test the hypothesized relationships. The results indicate that promoters' holdings and institutional holdings are positively associated with dividend payout ratio and firm value. Further, moderator hypotheses suggest that (i) firm age moderates the relationship between promoters' holdings and dividend payout ratio, (ii) firm size moderates the relationship between institutional holdings and dividend payout ratio, (iii) firm age moderates the relationship between promoters' holdings and firm value, and (iv) firm size moderates the relationship between institutional holdings and firm value. The implications for theory and practice are discussed. The conceptual model developed and tested in this research contributes to both the literature on dividend payout ratio and firm value and to the needs of institutional investors interested in increasing the firm value.

**Keywords:** institutional holdings; promoters' holdings; firm value; dividend payout ratio; firm size

## 1. Introduction

The institutional and promoters' holdings, firm value, and dividend payout ratios have been widely researched by scholars in financial management (Grinstein and Michaely 2005; Jory et al. 2017; Rozeff 1982; Strickland 1996). Extant research reported that mitigating the agency costs helps enhance firm value primarily through governance mechanism (Bathala et al. 1994; Odum et al. 2019; Shleifer and Vishny 1986). The significance of institutional holdings in enhancing the firm value has been highlighted by some researchers in the past (e.g., Chen et al. 2018; Chung et al. 2003; Coffee 1991; Steiner 1996; Tsai and Gu 2007). However, the boundary conditions as to how these holdings affect the firm value have received little attention from the researchers. On the contrary, dividend payout ratio has received increasing attention by researchers, primarily because of its potential effect on the firm value (Budagaga 2017; Damayanti and Palinggi 2023; Nurokhmah et al. 2023; Setiyawati et al. 2017; Tjijpta et al. 2022; Yang and Ma 2022). It is well documented that institutional holdings and dividend payout ratio play a significant role in increasing the

firm value. However, relatively scant research addressed the moderating role of size and age of the firm.

From a theoretical standpoint, the large shareholders have the inherent power to influence the governance mechanism by applying pressure on the board to revamp and dance to the tunes of these investors (Shleifer and Vishny 1997). However, the stakes involved are very high for these institutional investors. Hence, they carefully monitor even their drastic moves once they realize that it would decrease the value of the firm. Therefore, institutional and promoters' holdings act as a double-edged sword, and they determine which side they use to the public, but the consequences can only be known from their actions. It depends on the institutional investors to examine the effect of their actions. Some researchers contend that there is positive association of the institutional holdings to the firm value (Drakos and Bekiris 2010; Hamidullah and Shah 2011; Pant and Pattanayak 2008).

The research on the relationship between dividend payout ratio and firm value is exhaustive (Lumapow and Tumiwa 2017; Odum et al. 2019). For example, in a study on chemical companies in India roughly two decades ago from 1996–1997 to 2005–2006, it was found that dividend policy has a significant effect on the shareholder's wealth (Azhagaiah and Priya 2008). Various other researchers also corroborated the positive impact of dividend policy on the firm value (De Wet and Mpinda 2013).

While the direct linear effects of age and size of firm are understandable, it would be interesting to investigate how age and size changes the strength of relationship between institutional and promoters' holdings on dividend payout ratio and firm value. From a theoretical standpoint, firm size and age will have significant direct influence on firm value and dividend payout ratio. It is logical that as the firm expands in size it is more likely to have higher earnings, and the firms will have a choice to pay higher dividends. At the same time, when a firm is in the industry for a long time (representing the age), it is more likely that it will have a considerable size of the market and have higher rate of returns, a part of which may be distributed as dividends. In this study, our primary interest is to see the moderating effect of age and size on dividend payout ratio and firm value. Since prior researchers have not explored this relationship, this study aims to bridge the gap by answering the following research questions (RQs):

RQ1: How do promoters' holdings effect dividend payout ratio and firm value?

RQ2: How do institutional holdings effect dividend payout ratio and firm value?

RQ3: How does firm age moderate the relationship between promoters' holdings and (i) dividend payout ratio and (ii) firm value?

RQ4: How does firm size moderate the relationship between institutional holdings and (i) dividend payout ratio and (ii) firm value?

This study makes five significant contributions to the literature on dividend payout ratio and firm value. First, the study aligns with the studies in the literature that show that promoters' holdings are significantly and positively related to dividend payout ratio and firm value. Second, consistent with past studies, this study provides empirical evidence that institutional holdings have a positive and significant effect on dividend payout ratio and firm value. Third, this study found that the relationship between promoters' holdings and dividend payout ratio is stronger (positive) for older companies in terms of age, whereas the relationship is weaker (negative) for new firms (firms of a lower age). Fourth, the results reveal that promoters' holdings have higher firm value for new firms when compared to old firms. However, firm value increases exponentially with the increase in age of a firm. Fifth, for big firms, institutional holdings result in a higher dividend payout ratio and higher value of the firm as compared to small firms. To sum up, the oversimplified moderated model developed and tested in this research makes a significant contribution to the literature.

## 2. Hypothesis Development

### 2.1. Promoters' Holdings and Dividend Payout Ratio

A promoter is a person or a group of persons, who are involved in the incorporation of a corporation. Promoters are the significant part in the organization and management of a business. According to the Securities and Exchange Board of India (SEBI's) Disclosure and Investor Protection Guidelines, 2000 (DIP Guidelines) and Substantial Acquisition of Shares and Takeover Regulations, the 1997 (Takeover Code) "Promoter or Promoter Group" exercise ample control over the company by virtue of their shareholding and management rights (Kumar and Singh 2013). Promoters' holdings are the percentage of shares held by the promoters group out of the total outstanding shares. Companies with higher promoters' holdings pay a high dividend to their shareholders by exercising effective control over the management and reducing the cost of agency (Arora and Srivastava 2021; Jawade 2021). Promoters' holdings have a positive effect on the dividend payout of BSE 500 listed companies in India (Gupta 2017). On the contrary, companies with more than 65 to 70 per cent promoters' holdings result in having a 21.3 per cent decrease in the dividend payout ratio, due to higher tax on dividend income (Dhamija and Arora 2019). Earlier scholars reported that larger amounts of promoter holding demotivate the promoters to choose a higher payout ratio (Kumar 2006). From the above discussion we hypothesize the relationship as follows:

**Hypothesis 1 (H1):** *Promoters' holdings are positively associated with dividend payout ratio.*

### 2.2. Promoters' Holdings and Firm Value

The traditional scholars in financial management have empirically advocated that promoters' holdings result in a decrease in agency cost and increase the firm value because of the vested interests the promoters have in the wealth of the company (Jensen and Meckling 1976), since the personal stakes involved are substantial promoters' attempt to maximize the firm value (Shleifer and Vishny 1988). Wang (2018) also found a non-linear relationship between promoter' holdings and firm value where the firm value first declines with an increase in promoter' holdings and then upsurges as promoters own more shares. On the contrary, an increase in promoters' holdings has a negative effect on firm value, due to the entrenchment effect (Demsetz 1983). To resolve the contradictory findings, Claessens et al. (2002) suggest that there is a threshold level of stock holdings beyond which the costs of minority shareholders outweigh the benefits, resulting in a decrease in the firm value. Concentrated promoter ownership represents holding at least five per cent of a firm's shares (Pandey and Sahu 2019; Selarka 2005). Interestingly, Yasser and Mamun (2015) found an insignificant association between the ownership concentration and firm value. Though some studies found a negative association of promoters' holdings with firm value, extant research skewed towards positive association (Abbasi et al. 2017; AL-Najjar 2016; Denis and McConnell 2003; Gaur et al. 2015; Yasser and Mamun 2017). Based on the above arguments, the following hypothesis is offered:

**Hypothesis 2 (H2):** *Promoters' holdings are positively associated with the firm value.*

### 2.3. Institutional Holdings and Dividend Payout Ratio

According to Koh (2003), institutional ownership is defined as the number of shares out of the total shares possessed by institutions at the end of the year. Institutional holdings represent the ownership by institutions such as mutual fund companies, pension fund companies, private foundations, investment companies, and other large agents who manage funds on behalf of others (Ratnawati et al. 2019). Jacob and Jijo Lukose (2018) highlighted the fact that institutional ownership plays a vital role in dividend payout ratio. Since institutional investors periodically monitor the actions of chief executive officers who make policies about the declaration of a dividend, it is more likely that the greater the institutional holdings in the firm, the greater will be the dividend payout ratio (Jensen

1986). Institutional investors who have more than five per cent in shares will have more control over the way in which the earnings are distributed as dividends (Putri et al. 2017). Institutional investors prevent the opportunistic behavior of the managers, which may influence the dividend decisions made by the top management (Annisa and Nazar 2015; Ayunitha et al. 2020). Khan (2006) found a positive relationship between dividends and shareholding for insurance companies in the United Kingdom. Since the institutional investors hold a significant portion of shareholdings in a firm, they exercise their voting rights in favor of dividends (Chang et al. 2016; Firth et al. 2016; Grinstein and Michaely 2005). Thus, several researchers have found a positive association for institutional ownership and dividend payout ratio (Affandi et al. 2019; Kania and Bacon 2005; Lahiri 2013; Mirza 2014; Thanatawee 2013). The literature review also reveals a negative effect of institutional ownership on the dividend payout ratio (Arora and Srivastava 2021; Basri 2019; Gusni 2017; Thanatawee 2014a; Taufan and Wahyudi 2013). The findings are therefore inconclusive. However, in the middle of the mixed findings, we support the positive association of institutional holdings on dividend payout ratio, and offer the following hypothesis:

**Hypothesis 3 (H3):** *Institutional holdings are positively associated with dividend payout ratio.*

#### 2.4. Institutional Holdings and Firm Value

The performance of a firm is often assessed by its market value (Hasibuan and Khomsiyah 2019); the responsibility of the CEOs and the top management team is to maximize the wealth of shareholders, which depends on the firm value (Nwaobia et al. 2016). In the Indian context, a plethora of researchers have documented the positive effect on institutional holdings and firm value of reducing agency costs (Ahmad and Jusoh 2014; Bhattacharya and Graham 2009; Ferreira and Matos 2008; Karpavicius and Yu 2017; Lin and Fu 2017; McConnell and Servaes 1990; Muniandy et al. 2016; Ongore 2011; Thanatawee 2014b). On the contrary, Bebcuk et al. (2017) opined that institutional investors had less incentive to monitor the activities of the CEOs and the top management, which may have a negative effect on the firm value. Navissi and Naiker (2006) found that institutional ownerships of up to 30 per cent had a positive impact on firm value, but ownerships above 30 per cent reduced firm value. Furthermore, some researchers argue that there is a negative relationship between institutional holdings and firm value (Chen et al. 2008; Jennings 2005; Mollah et al. 2012). From the above argument, we offer the following hypothesis.

**Hypothesis 4 (H4):** *Institutional holdings are positively associated with the firm value.*

#### 2.5. Moderating Effect of Firm Age

Firm age is one of the important factors considered by prospective investors when choosing an investment alternative of a firm. Firm age reflects the capability of the organization to run a business (Putri and Rachmawati 2017). Firm age is the number of years since the company has been incorporated. The age of the company is calculated as the year of study minus the date of incorporation (Saxena and Sahoo 2020). The study of the moderation of age between promoters' holdings and the dividend payout ratio and firm value is new in the literature. The researcher would like to make an attempt to study this in the Indian context. So, the following hypothesis is developed:

**Hypothesis 1a (H1a):** *Firm age moderates the relationship between promoters' holdings and dividend payout ratio.*

**Hypothesis 2a (H2a):** *Firm age moderates the relationship between promoters' holdings and firm value.*

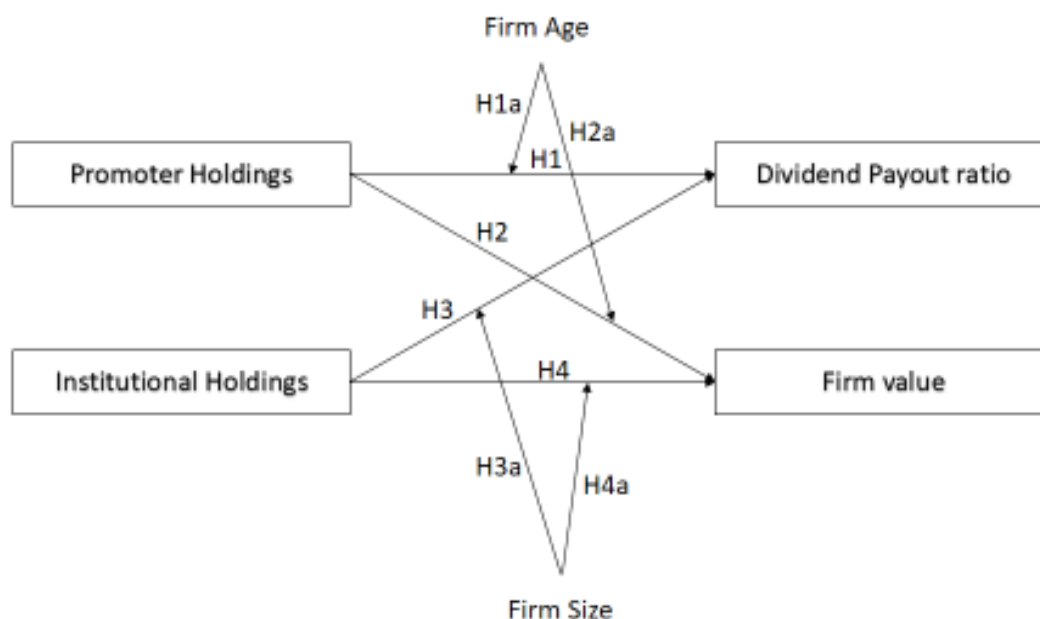
### 2.6. Moderating Effect of Firm Size

Firm size plays an important role in empirical corporate finance (Dang et al. 2018; Hashmi et al. 2020). Firm size affects in a practical way many important corporate finance decisions, such as: (i) investment decision (Bakke and Whited 2010; George et al. 2011), (ii) financing decision (Gonzalez and Gonzalez 2012; Kurshev and Strebulaev 2015), (iii) dividend decision (Adjaoud and Ben-Amar 2010; Moortgat et al. 2017), and (iv) working capital decision (He et al. 2017; Jalal and Khaksari 2020). Firm size always has a significant effect on firm value (Nurainy et al. 2013). Bhushan (1989) found a significant and positive relationship between firm size and the number of analysts following the firm. A higher analyst following may reduce information asymmetry, as well as providing a stronger monitoring from the capital market. Thus, firm size has a positive moderating effect on the relationship between ownership structure (institutional holding) and firm value (Chakkravarthy et al. 2023; Suriawinata and Nurmawati 2022). From the above premise, the following two hypotheses were developed:

**Hypothesis H3a:** *Firm size moderates the relationship between institutional holdings and dividend payout ratio.*

**Hypothesis H4a:** *Firm size moderates the relationship between institutional holdings and firm value.*

The conceptual model is presented in Figure 1.



**Figure 1.** Conceptual Model.

### 3. Method

The present study aims to examine the effect of promoters' holdings and institutional holding and its effect on dividend payout ratio and firm value, and it also provides empirical evidence for the moderating role of firm age and firm size. The financial data were collected from secondary sources. The researcher used Prowess IQ powered by the Centre for Monitoring Indian Economy (CMIE) to collect the financial information, which is the most widely used database for collecting financial information in India. The samples were 23 companies listed on the Bombay Stock Exchange (BSE) Healthcare Index during November 2021. To increase the validity of the sample unit, the researcher collected data for the companies paying dividends consecutively for a period of 11 years, from March 2011 to March 2021.



The rationale for selecting 23 companies stems from the post-COVID-19 situation of publicly traded companies. Though the outbreak of the COVID-19 pandemic devastated the corporate sector in all the industries, the healthcare industry has outperformed the others in the market. Therefore, our focus was on the healthcare sector. During November 2021 there were 90 companies listed in the BSE Healthcare Index, out of which we considered data from 23 (which represents 25% of the companies) publicly traded companies in the healthcare industry, because we were interested in companies that have been distributing dividends continuously for 11 years. We did not include the companies that failed to pay dividends in one or more years during the study period.

#### 4. Measurement of Variables

The quality of the research work is based on the quality and appropriateness of the variables chosen and its measurement. Here, in Table 1, the researcher provides the variables used and their measurement.

**Table 1.** Variables and the Measurements.

Variables	Type of Variable	Measurement
Firm value (Tobin's Q)	Dependent	(Market value of equity + Book value of equity)/Book value of assets
Dividend payout ratio	Dependent	Dividend per share/Earning per share
Promoters' Holdings	Independent	Percentage of shares held by Promoters /Total outstanding shares
Institutional Holdings	Independent	Percentage of shares held by institutions/Total outstanding shares
Firm age	Moderator	Number of years of life since inception
Firm size	Moderator	Natural log of total assets

#### 5. Analysis

##### 5.1. Descriptive Statistics and Multicollinearity

The descriptive statistics (means, standard deviations, and zero-order correlations) are presented in Table 2.

**Table 2.** Descriptive statistics (means, standard and zero-order correlations).

	Mean	S.D	1	2	3	4	5	6
1. Promoters' Holdings	1.75	0.10	1					
2. Institutional Holdings	1.15	0.43	0.48 **	1				
3. Firm Age	1.65	0.16	0.49 **	−0.17 **	1			
4. Firm Size	10.36	0.63	−0.37 **	0.74 **	−0.022 **	1		
5. Firm Value	0.57	0.19	0.04	0.37 **	−0.02	0.34 **	1	
6. Dividend payout ratio	2.55	0.18	0.06	0.05	0.10	0.05	0.10	1

\*\*  $p < 0.01$ .

The preliminary analysis of the correlation reveals that the highest correlation was 0.74 (between institutional holdings and firm size). If correlations between the variables exceed 0.75, a multicollinearity problem is said to be present. In this study, the correlations between all the variables were within the threshold of 0.75, and hence multicollinearity is not a problem (Tsui et al. 1997). We also checked for variance inflation factor (VIF) values and found these to be less than 5, suggesting that the data are not infected by multicollinearity (Hair et al. 1998).

### 5.2. Statistical Analysis

We followed the ordinary least squares (OLS) in testing the hypotheses. Since moderators are involved in the model, we used hierarchical regression, a part of OLS. In this study, firm age and size are the moderators expected to directly relate to the dependent variables: dividend payout ratio and firm value. However, direct relationships may not imply that the moderator relationships hold good. In this research, we hypothesized that firm size and age are moderators that will interact with the independent variables to significantly influence the dependent variables: firm value and dividend payout ratio. Following Aiken and West (1991) and Richardson et al. (2015), we used hierarchical regression to test the hypotheses. The empirical model presented in this study can be tested with different populations, and it is very likely that the results will not be significantly different from what we obtained in this study.

### 5.3. Results of Dividend Payout Model

Before running the regression and testing hypotheses, we checked for the normality of the data and heteroskedasticity. Since these are not survey-based data, the reliability cannot be checked using Cronbach's alpha. The variables and the measurement of variables were captured in Table 1.

In general, age and size are labeled as 'control variables'. But, in this research we consider the age and size as moderator variables, and hence we entered the age and size as moderators in the second step of the regression equation.

The hierarchical regression result of the effect of main variables on dividend payout ratio is represented in Table 3. The regression coefficient of promoters' holdings ( $\beta = 0.109$ ,  $p < 0.05$ ), institutional holdings ( $\beta = 0.146$ ,  $p < 0.05$ ), and firm age ( $\beta = 0.103$ ,  $p < 0.05$ ) were positive and significant, thus supporting H1 and H3. And the regression coefficient of firm size ( $\beta = 0.014$ ) was not significant in determining the dividend payout ratio of companies listed in the BSE S&P Healthcare index. The regression model was significant, and explained 13.7 per cent variance in dividend payout ratio because of the independent variables [ $R^2 = 0.137$ ; Adj  $R^2 = 0.134$ ;  $F(4, 248) = 75.67$ ;  $p < 0.05$ ].

The model was significant, and explained 19.5 per cent variance in the dividend payout ratio because of these interactions (as well as the main variables) [ $F(6, 246) = 59.7$ ,  $p < 0.001$ ;  $R^2 = 0.195$ , and adjusted  $R^2 = 0.191$ ,  $\Delta F = 33.04$ ,  $p < 0.001$ ;  $\Delta R^2 = 0.058$ ]. These results support the moderation hypotheses H1a and H3a.

**Table 3.** Hierarchical regression results of promoters' holdings, institutional holdings on dividend payout ratio and firm value, with firm age and firm size as moderators.

Variables	Column 1	Column 2	Column 3	Column 4
Dependent Variable----→	Dividend Payout Ratio	Dividend Payout Ratio	Firm Value	Firm Value
	Step 1	Step 2	Step 1	Step 2
<i>Main variables</i>				
Promoter's Holdings	0.109 *	0.132 *	0.617 ***	0.191 *
Institutional Holdings	0.146 *	0.152 *	0.188 *	0.366 ***
Firm Age	0.103 *	0.110 *	0.101 *	0.238 *
Firm Size	0.014	0.104 *	0.034	0.063
<i>Moderators</i>				
Promoters' Holdings × Firm Age		0.255 *		0.793 ***
Institutional Holdings × Firm Size		0.182 *		0.161 *

Table 3. Cont.

Variables	Column 1	Column 2	Column 3	Column 4
Dependent Variable---→	Dividend Payout Ratio	Dividend Payout Ratio	Firm Value	Firm Value
R <sup>2</sup>	0.137	0.195	0.209	0.228
Adj R <sup>2</sup>	0.134	0.191	0.204	0.213
ΔR <sup>2</sup>		0.058		0.015
F	75.67 *	59.07 ***	16.41 ***	12.13 ***
ΔF		33.04 ***		3.09 ***
df	4, 248	6, 246	4, 248	6246

Standardized beta coefficients are reported. \*\*\*  $p < 0.001$ ; \*  $p < 0.05$ . Standard errors and t values are in parentheses. To examine the effect of moderator variables, in the second step the interaction terms were entered into the regression equation. The firm age and size are used as a moderator in the equation. The regression results from column 2 (step 2) reveal the interaction of promoters' holdings  $\times$  firm age ( $\beta = 0.255$ ;  $p < 0.05$ ), and institutional holdings  $\times$  firm size ( $\beta = 0.182$ ;  $p < 0.05$ ); hence, the hypotheses H1a and H3a are supported.

#### 5.4. Results of Firm Value Model

The effect of the main variables on firm value is represented in Table 3 (Column 3). The results of the regression coefficient of promoters' holdings ( $\beta = 0.617$ ,  $p < 0.001$ ), institutional holdings ( $\beta = 0.188$ ,  $p < 0.05$ ), and firm age ( $\beta = 0.101$ ,  $p < 0.05$ ) are positive and significant, thus supporting H2 and H4. And the regression coefficient of firm size ( $\beta = 0.034$ ) was not significant in determining the firm value of selected companies listed in the BSE S&P Healthcare index. The regression model was significant, and explained 20.9 per cent variance in firm value because of the independent variables [ $R^2 = 0.209$ ; Adj  $R^2 = 0.204$ ;  $F(4, 248) = 16.41$ ;  $p < 0.001$ ].

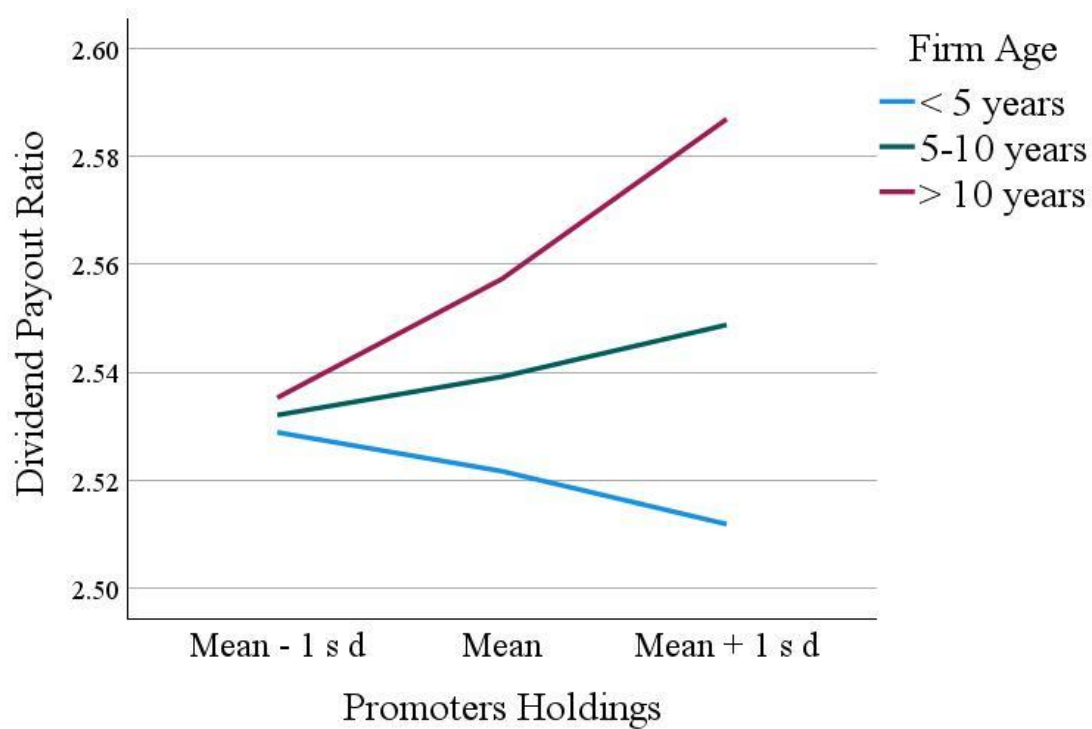
To examine the effect of moderator variables, in the second step the interaction terms were entered into the regression equation. The firm age and size are used as a moderator in the equation. The regression results from column 4 (step 2) reveal the interaction of promoters' holdings  $\times$  firm age ( $\beta = 0.793$ ;  $p < 0.001$ ) and institutional holdings  $\times$  firm size ( $\beta = 0.161$ ;  $p < 0.05$ ); hence, the hypotheses H2a and H4a are supported.

The model was significant, and explained 22.8 per cent variance in the firm value because of these interactions (as well as the main variables) [ $F(6, 246) = 12.13$ ,  $p < 0.01$ ;  $R^2 = 0.228$ , and adjusted  $R^2 = 0.213$ ,  $\Delta F = 3.09$ ,  $p < 0.001$ ;  $\Delta R^2 = 0.015$ ]. These results support the moderation hypotheses (H2a, H4a).

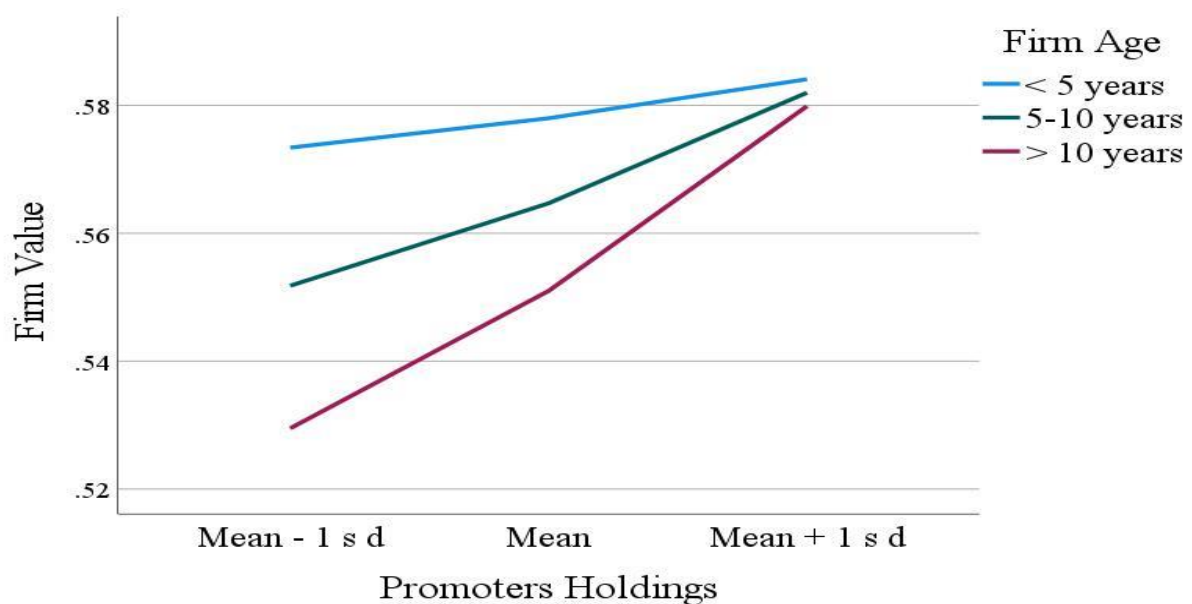
While the direct effects of promoters' holdings and institutional holdings on dividend payout and firm value are self-explanatory, it would be necessary to present the expected interaction effects of firm age and firm size on the dependent variables' dividend payout ratio and the firm value. The expected results of moderation are shown in the following figures.

The interaction plots of promoters' holdings and firm age are represented in Figures 2 and 3. As shown in Figure 2, companies with a firm age of more than 5 per cent tend to increase the effect of promoters' holdings on dividend payout ratio positively. Where the trend line shows an upward trend, when the promoters' holding rises the dividend payout ratio also rises. With regard to Figure 3, companies with a firm age of less than 5 per cent tend to increase the effect of promoters' holdings on firm value, whereas firms with ages of more than 5 per cent tend to increase the firm value but not above those of the firms with less than 5 per cent. Thus, this supports the moderation hypotheses H1a and H2a.



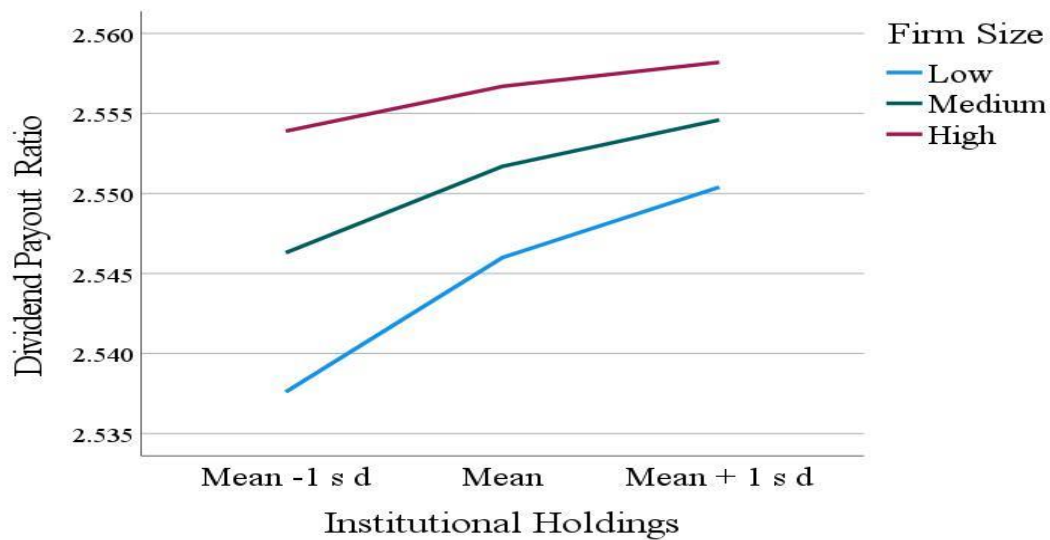


**Figure 2.** Firm age as a moderator in the relationship between promoters' holdings and dividend payout ratio.

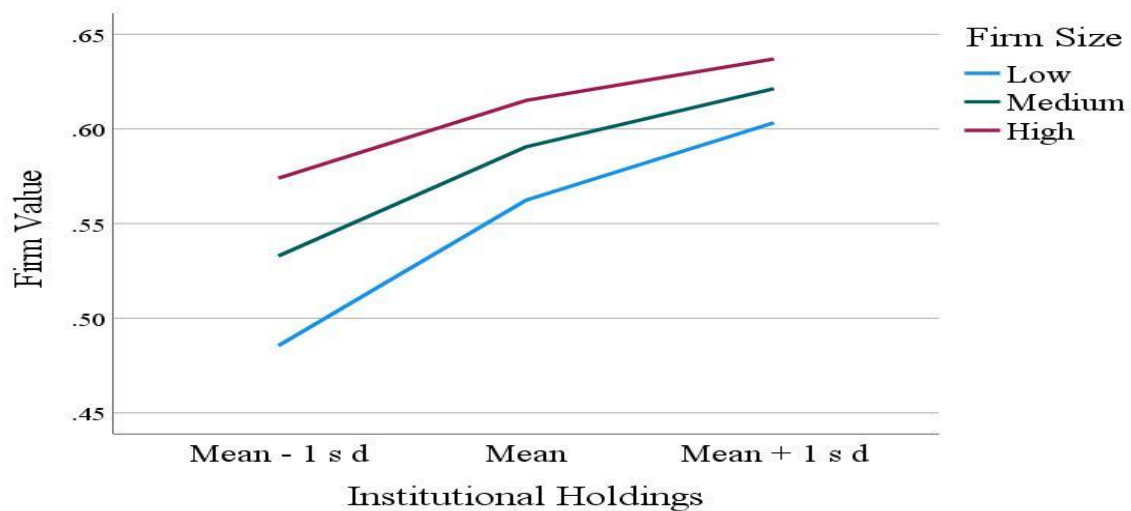


**Figure 3.** Firm age as a moderator in the relationship between promoters' holdings and firm value.

The interaction plots of institutional holdings and firm size are represented in Figures 4 and 5. As shown in Figure 4, the interaction between institutional holdings and firm size is positive. The rise in the firm's size increases the effect of institutional holdings on the dividend payout ratio. Regarding Figure 5, the interaction between institutional holdings and firm size is positive. The rise in the firm's size increases the effect of institutional holdings on the firm value. Thus, it supports the moderation hypotheses H3a and H4a.



**Figure 4.** Firm size as a moderator between institutional holdings and dividend payout ratio.



**Figure 5.** Firm size as a moderator in the relationship between institutional holdings and firm value.

#### 5.5. Direct Effects of Firm Age and Firm Size

This study focuses mainly on the moderating effect of firm age and firm size in the relationship between promoters' holdings and firm value and institutional holdings and dividend payout ratio. Since the moderator variables also have a direct influence (Aiken and West 1991), the direct hypothesis of the effect of moderator variables on the dependent variables is omitted by the researchers. As shown in Table 3, the immediate effects of firm age and size on dividend payout ratio and firm value are positive and significant. Since these direct (linear) effects are understandable, we did not hypothesize these in this research.

## 6. Discussion

This paper attempts to underscore the importance of firm age and size in changing the strength of the relationship between promoters' holdings, institutional holdings, dividend payout ratio, and firm value.

First, it is proposed that promoters' holdings would positively impact the dividend payout ratio. The underlying logic, supported by the extant research, is that promoters would like to create an impression in the minds of potential investors about the positive intent of the company to take care of the shareholders through good periodical dividend

payout. As the investors differ in their requirements, some prefer regular dividends. In contrast, some young investors may care about something other than periodical dividends, and are more interested in the firm's value. Therefore, the promoters with significant holdings would see regular dividends paid to the stockholders.

Moreover, the higher the promoters' holdings, the more control over the business affairs, whereby the promoters streamline the company's activities and reduce the agency cost, thus increasing the dividend payout to the shareholders. The promoters can also enjoy this as an incentive for the monitoring role. Thus, the study's findings corroborated previous findings (Arora and Srivastava 2021; Gupta 2017). Second, the promoter's holdings also enhance the firm's value, as their efforts are directed towards its success, measured in terms of firm value. So, it is self-explanatory that the influential monitoring role of promoters' holdings promotes efficiency in the utilization of resources, thus paving the way to increasing the firm's value. Thus, the findings support the existing literature (Abbasi et al. 2017; Gaur et al. 2015; AL-Najjar 2016; Yasser and Mamun 2017). Third, the institutional holdings also operate similarly to promoters' holdings, affecting the positive relationship between dividend payout and firm value. Thus, the study's findings support the previous literature (Lin and Fu 2017; Muniandy et al. 2016; Thanatawee 2014b).

Regarding the moderation hypothesis, firm age moderates the relationship between promoters' holdings on dividend payout ratio and firm value. Moreover, firm size moderates the relationship between institutional holdings' dividend payout ratio and firm value. Thus, the findings support the positive moderation hypothesis of previous studies (Chakkravarthy et al. 2023; Suriawinata and Nuralita 2022).

### 6.1. Practical Implications

The findings from this study have several implications for the companies interested in understanding the antecedents of firm value and dividend payout ratio. As many companies in the pharmaceutical industry have been in the industry for quite a long time, growing competition between the companies prompts the top management team to maintain a sustained competitive advantage by retaining the existing shareholders. One way of doing it is to increase the dividend payout, lest the shareholders move out of the companies and invest in alternative companies that pay higher dividends. The results from this study explain how the firm value is impacted by age and size. When companies shy away from increasing their size, the present study signals that it is a good idea to explore diversification of investments and expand by engaging in either a concentric or conglomerate strategy, depending on the available opportunities. This study also provides valuable insights into companies in general, apart from the pharmaceutical companies, about the boundary conditions for dividend payout ratio and firm value.

### 6.2. Limitations and Future Research

Every research is confined to sample units chosen for the study. In the corporate literature, numerous companies have different accounting disclosure practices, the companies of banking and financial institutions have different disclosure norms, and the practices of dividend study may be different among the industries. This study used 11 years of financial data from 23 BSE S&P Healthcare Index companies. So, the study's results can be generalized to the particular industry or related industries alone. Moreover, the data depend on the trustworthiness of the prowess database. The study period is from 2016 to 2021; the adverse environmental factors may impact the results which may change when generalizing the results in other periods of the study. Therefore, future researchers can include more years and test the model by extending it to other industries in India and worldwide.

Another limitation of this study is the limited sample size. We could focus only on 23 companies (because we focused only on the companies that have been paying dividends continuously). Further, a cross-industry analysis would have been more helpful in enriching the results. It would also be interesting to study the relationships between the variables

from industries in different countries, and see if there are any marked differences with the relationships in the hypothesized model.

### 6.3. Conclusions

The present study developed a conceptual model and empirically examined the moderating role of firm age and firm size in the relationship of promoters' holdings, institutional holdings dividend payout ratio, and firm. The results indicate that firm age and firm size are the prominent moderators. In this research, the hypotheses tested are expected to contribute to the burgeoning theory of financial management. This study provides valuable insights for practicing managers in understanding the antecedents and boundary conditions for enhancing firm value. This study provides avenues for future research. It is suggested that future studies may focus on the role of other variables such as financial leverage and capital structure in influencing the value of the firm and dividend payout ratio, which may significantly contribute to the growing body of knowledge in finance.

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