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FIRM PERFORMANCE AND DIVIDEND POLICY IN INDIA – MODERATING EFFECT OF CRISIS (PANDEMIC) PERIOD

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ABSTRACT

Shareholders' wealth maximisation is the prime goal of any organisation. This is mainly dependent on the firm's performance which is connected with the return on the investment in lieu of the risk availed by the shareholders. Accordingly, sustaining the shareholders' interest and stabilising the firm's performance should be the core aspects of any organisation. Recently, the whole world has suffered from the pandemic effect which has impacted the whole financial condition of organisations and Indian companies are not an exception. Considering this aspect, the main aim of this paper is to examine the moderating effect of the crisis period which has arisen due to the pandemic on the relationship between the dividend policy and the firm's performance. 433 companies listed on NSE has used for analysis purposes for the period of 2017 to 2021. The study evidenced the moderating effect of crisis on relationship between dividend policy and firm performance. More so, liquidity and leverage are positive and significant to the firm performance whereas dividend payout and firm size have no significant impact on firm performance. The results of the study are implicated to managers, stakeholders, investors as well as academicians as it contributes novelty in financial performance literature by addressing the moderating effect of the crisis period on the relationship between dividend policy and firm performance.

Keywords: Firm performance; Pandemic; National Stock exchange

1. INTRODUCTION

The main aim of any organisation is to enhance the shareholders' wealth maximisation. The dividend is one of the fundamental elements for enhancing the shareholders' wealth. The dividend is the income which has to be distributed to the shareholders out of the profit. Accordingly, on one hand, it serves the purpose of shareholders in a way providing them proper return in return to their risk whereas on the other hand it also serves the purpose of the management in a way as they can enhance the firm value. Accordingly, dividend payment and a firm's financial performance are associated with each other. Several researchers have analysed the relationship between dividend policy and financial performance. Researchers have mainly focused on the various financial and economic indicators which can influence dividend decisions and their impact on financial performance (Kanakriyah, R. (2020); Krieger et. al, (2021)).

India is the fastest-growing country in the emerging market. Researchers have studied the relationship between dividend policy and financial performance focusing the various indicators such as ownership structures, firm characteristics and also the combined effects of the same to assess the relationships. More so, studies also evidenced that the economic condition as a macroeconomic factor can also affect the firm's financial performance as well as the dividend policy. Recently, the whole world has suffered from the pandemic condition and due to the lockdowns and other restrictions affect the firm's financial performance. Accordingly, while assessing the firm's performance considering the dividend impact, it is required to assess the effect of a pandemic on the same. Notwithstanding, the presence of abundant literature on dividend policy and financial performance, to the best of the knowledge of the author that no studies have yet been made focusing on the crisis period impact on dividend policy and financial performance associations. Considering this the current research address the following questions:

1) What is the relationship between dividend policy and firm performance?
2) What is the moderating effect of the crisis period on the relationship between dividend policy and firm performance?

To this end, the remainder of the paper is organised as follows: Section 2 presents the literature review following the conceptual model and research methodology in section 3. Section 4 describes the results and discussions of the results following the implications, limitations and future research directions. Finally, section 5 provides the conclusion.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

This section has covered the literature reviews from both the national and international levels.

Kanakriyah (2020) aimed to study the associations between dividend policy and corporate financial performance in emerging countries. Using the panel data and applying the multiple regression analysis, the study revealed the strong relations amongst the dividend yield, firm size and financial performance. The study also revealed the negative relations of financial performance with leverage. Semaun (2019) analysed the impact of dividend policy, firm size on financial performance and firm value along with corporate governance. The study revealed the positive and significant impact of firm size on firm performance whereas it reported the negative impact of dividend policy and corporate governance on financial performance. Nathani and Gangil (2019) examined the determinants of the dividend policy in India focusing on the automobile and pharmaceutical sectors. Applying panel regressions, the study revealed that liquidity, investment opportunities, and dividend distributions were the dividend determinants in automobile sectors whereas profitability, debt-equity ratio, sales growth and retained earnings played a significant role in determining dividends in the pharmaceutical sector. Bhuto et al. (2020) examined the relationship between dividend determinants with financial performance. The study evidenced that dividend policy mediates its determinants and the firm's financial performance. Hunjra (2020) studied the mediating role of dividend policy with financial performance, uncertainty, corporate social responsibility and stakeholders' interest. The study revealed the mediating role of dividend policy on CSR, stakeholder interest and financial performance.

As firm's financial performance has adequately affected due to the crisis period which has arisen due to the pandemic. In concern with the same several researchers have also made studies focusing on the financial performance of the companies along with the dividend behaviour during the pandemic period. Ali (2022) examined the pandemic effects on corporate dividend policy focusing on the G- 12 countries. Applying logistic regressions, the study revealed that earning prospectus, profitability, leverage and size as the important dividend decisions during the pandemic. Kerieger, et. al. (2021) studied the impact of a pandemic on dividend payouts on publicly traded companies in the U.S. Regression results of the study indicated that economic significance was much more during the pandemic than net income and leverage were the main determinants for cutting the dividends. Xu and Jin (2022) investigated the impact of the pandemic on the financial performance and cash holdings of Chinese agri-food companies. The study revealed the negative impact of cash holdings on highly levered companies than low levered companies. Alsamhi (2021) aimed to examine the impact of the pandemic on the financial performance of selected sectors of Indian companies. The results of the study revealed the variations focusing on the different sectors. The overall crunch of the study reported that net income was the main indicator affecting a firm's financial performance. Ammari (2021) examined the moderating effect of the crisis period on dividend distribution policy considering the effects of ownership concentrations and CEO duality both. The study revealed the significant impact of the crisis period on the dividend distribution policy of the firms.

Considering the arguments, the study has developed the following hypothesis:

H_1 There is a positive and significant relationship between dividend policy and a firm's financial performance.

H_2 Crisis period may moderate the negative relationship between dividend policy and financial performance.

3. CONCEPTUAL FRAMEWORK

The study intends to examine the moderating effect of pandemic period on the relationship between firm's financial performance and dividend policy. The study has also used control variables. The following is the conceptual model of the study presented in figure 1.

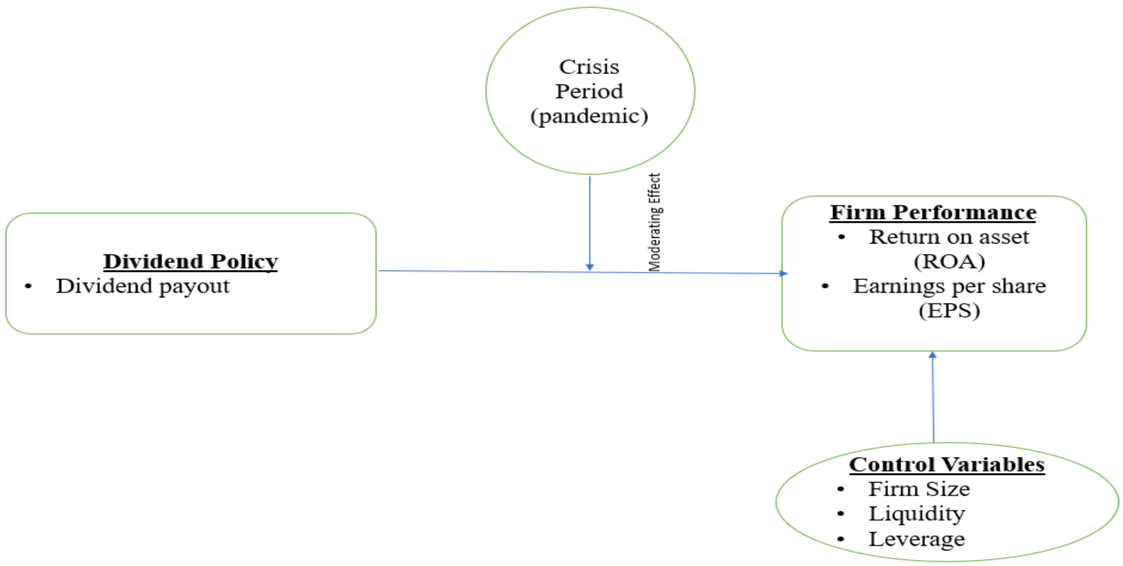

Figure 1: Conceptual Framework

4.RESEARCH METHODOLOGY

The present study is of quantitative and empirical in nature.

Research Design

The study aims to examine the moderating effect of the crisis period which has arisen due to the pandemic on the relationship between financial performance and dividend policy. NSE-listed companies for the period of 2017 to 2021 have been selected for the analysis. Companies are selected as they are good in terms of revenue and growth. Consistent dividends paying along with consistent data availability are considered for the study period. The selected time period has covered the pandemic period and, accordingly, it is relevant to know the moderating effect of the pandemic on firms. Panel data has been used which has been collected from the ACE equity. SPSS and E-views software has been used for analysis purpose. All the selected variables and control variables have been selected based on the literature review. The study applies the Hausman test to identify a suitable regression model. (i.e. Random/Fixed effect model). The study also checked the multicollinearity among the independent variables.

Variables and Descriptions

Table 1: Variables Definition

Variables/ Category	Definition	Representative Studies	Source
Dependent Variable (Criterion)			
Firm Performance (ROA)	Return on Assets Ratio	Kanakriyah, R. (2020)	ACE equity
Firm Performance (EPS)	Natural logarithm of Earning per share	Kanakriyah, R. (2020)	ACE equity
Independent (Predictors) **Ratio**			
Dividend Policy (Dividend Payout)	Dividend Payout Ratio	(Nathani & Gangli (2019))	ACE equity
Moderating Variable			
Crisis (pandemic)	Coded "1" for the period of 2020 and 2021, and "0" otherwise	Ammari (2021)	
Control Variables			
Firm Size	Natural logarithm of total assets	(Nathani & Gangli (2019))	ACE equity

Liquidity	Quick ratio has been used as proxy	(Nathani & Gangli (2019)) ACE equity
Leverage	Total debt to equity ratio	(Nathani & Gangli (2019)) ACE equity

Empirical Equations

The followings are the empirical equations to test the moderating effect of crisis period on financial performance.

The model 1 has framed to know the impact of dividend payout on financial performance.

Financial Performance = β_0 + β_1 **(Dividend Payout)** + β_2 **(Firm Size)** + β_3 **(Leverage)** + β_4 **(Liquidity)** + **e** .... (1)

The basic model has added the new variable (crisis) in the regression model to identify the incremental impact of economic slowdown due to the pandemic effect in the year 2020 and 2021. The crisis variable takes 1 for the period of 2020 and 2021 and 0 otherwise. Accordingly, the new model is:

Financial Performance = β_0 + β_1 **(Crisis)** + β_2 **(Dividend Payout)** + β_3 **(Firm Size)** + β_4 **(Leverage)** + β_5 **(Liquidity)** + **e** .... (2)

Interaction variable has performed to test the moderating effect of the crisis period on the relationship between firm performance and dividend policy. The interaction variable is the product of independent and moderating variable i.e. (dividend policy*crisis period). The model has framed to capture the effect dividend policy on financial performance concerning the crisis period only.

Financial Performance = β_0 + β_1 **(Crisis* Dividend Yield)** + β_8 **(Firm Size)** + β_9 **(Leverage)** + β_9 **(Liquidity)** + **e** .... (4)

RESULTS

This section presents the results of applied empirical test.

Table 2: Descriptive Statistics for Financial Performance

Variables	Mean	Std. Deviation
Earnings per share (Rs. In crores)	1.0653	0.60029
Return on assets (Ratio)	6.8374	5.63367
Dividend Pay-out (Ratio)	22.9634	101.42308
Liquidity (Ratio)	1.2259	1.17738
Leverage (Ratio)	0.7256	1.19211
Firm size (Rs. In crore)	3.2326	0.78243
Crisis	.4000	0.49001

The above table 2 presents the results of the descriptive statistics. The result observes the lower standard deviation for liquidity (1.17738), leverage (1.19211), firm size (0.78243) and earnings per share (0.60029) which reflect their stability in firms' financial performance. However, the high mean of dividend payout (22.9634) with the high volatility of standard deviation (101.42308) indicates the core role of dividend payout in determining the firm's performance.

Table 3: Correlations

	Earnings per	Return on	Dividend	Liquidity	Leverage	Firm size	Crisis

	share	assets	payout				
Earnings per share (EPS)	1.000000						
Return on assets (ROA)	0.415546	1.000000					
Dividend payout (DPY)	-0.298815	-0.131075	1.000000				
Liquidity (LQ)	-0.055284	0.150502	0.008254	1.000000			
Leverage (LV)	0.055782	-0.278372	0.013472	-0.179636	1.000000		
Firm size (FS)	0.252451	-0.133438	0.062216	-0.162215	0.339347	1.000000	
Crisis	0.006703	-0.013530	0.042630	0.070613	-0.043398	0.061231	1.000000

Table 3 presents Pearson's correlations among the independent variables. Analysis observes the highest positive and significant associations between EPS and ROA (i.e. 0.415546) as expected. The other variables which are positively associated with ROA are leverage (0.055782
), firm size (0.25245) and crisis (0.006703). More so, dividend payout and liquidity are negatively correlated with ROA with -0.298815 and -0.055284 respectively.

Apart from these, the current study has also assessed the multicollinearity issues amongst the independent variables. The highest VIF value of each model is presented in table 4 which is 1.180. Accordingly, the study has not found multicollinearity issues. The below-mentioned table 4 presents the results of each model. The table indicates a low value of adjusted R square which is 4.73%. It means approx. 96% of the firm's financial performances' determining factors are due to the error term. The results indicate that liquidity and leverages have a significant and positive impact on a firm's financial performance.

Table 4 Impact of Dividend Policy on Financial Performance
(Crisis as Moderator)
Dependent Variable: Return on Assets

	Model 1			**Model 2**			**Model 3**			**Model 3**		
	Without Crisis			With Crisis			Without Crisis			With Crisis		
	Co-efficient	t-statistics	P-value	Co-efficient	t-statistics	P-value	Co-efficient	t-statistics	P-value	Co-efficient	t-statistics	P-value
C	7.408507	8.581826	0.0000	-1.154941	-0.328348	0.7427	7.302961	8.450362	0.0000	7.099678	8.183453	0.0000
Crisis	---	---	---	-0.909953	-4.435018	0.0000	---	---	---	-0.464866	-2.516914	0.0119
Dividend payout	-0.000938	-1.043744	0.2967	-0.001032	-1.128889	0.2591	0.000139	0.143729	0.8857	-0.000133	-0.137022	0.8910
Liquidity	0.553051	4.926706	0.0000	0.690996	5.115374	0.0000	0.570195	5.079762	0.0000	0.599248	5.324341	0.0000

Leverage	-1.236112	-7.968479	0.0000	-1.839632	-6.409747	0.0000	-1.241582	-8.005515	0.0000	-1.291761	-8.271941	0.0000
Firm size	-0.102277	-0.393671	0.6939	2.743203	2.493111	0.0128	-0.059966	-0.230405	0.8178	0.055540	0.210269	0.8335
Crisis_DPY	---	---	---	---	---	---	-0.006913	-2.955180	0.0032	-0.004746	-1.909836	0.0563
Adjusted R-squared	0.047363			0.532987			0.050690				0.052933	
F-statistic	27.89714			6.651503			24.11007				21.15802	
Prob(F-statistic)	0.000000			0.000000			0.000000				0.000000	
Max. VIF	1.147			1.151			1.180				1.311	

DISCUSSION

The insignificant impact of dividend payout on the firm's performance (P>0.2967) rejects the H_1. It argues that Indian firms can enhance firms' performance without paying high dividends. The result is supported by (Nathani & Gangli (2019)). The positive and significant impact of liquidity and leverage indicates that a firm with a good liquid position as well as with low debt condition can enhance its' performance (Nathani & Gangli (2019)). The result of the study is supported by (Semaun, S. & Nurnajamuddin (2019)). The insignificant result of the firm size indicates that low-size firms can even perform better (Alshmi, 2022).

To know the firm's performance during the pandemic, the study has added a crisis period in model 2. The increasing adjusted R square (i.e. 53% approx.) indicates that the crisis period is impacted by the relationship between dividend policy and firm performance. The negative and significant impact (P< 0.0000) of the crisis on a firm's performance confirms H_2. It is evidenced that during the crisis period companies pay lower dividends and thus impacting the firms' performance (Ammari, 2021).

To know the outlier effects model 3 has added the intersection variable (Crisis*DPY) with the crisis period. The study confirms the crisis period impact on the relationship between dividend payout and firm performance (Ammari, 2021; Alshmi, 2022).

ROBUSTNESS OF RESULTS

The study has checked the robustness of results by changing the proxy variable of firm performance (i.e. EPS). This is an appropriate variable as it covers the current market price of the shares. The study applied the Hausman test to check the suitability of the model. The results of the study are presented in Table 5 which confirms the results of the previous results.

Table 5 Impact of Dividend Policy on Financial Performance

(Crisis as Moderator)

Dependent Variable: Earning Per Share

	Model 1			**Model 2**			**Model 3**			**Model 3**		
	Without Crisis			With Crisis			Without Crisis			With Crisis		
	Co-efficient	t-statistics	P-value	Co-efficient	t-statistics	P-value	Co-efficient	t-statistics	P-value	Co-efficient	t-statistics	P-value
C	-	-	0.40	-	-	0.00	-	-	0.01	-	-	0.02

	0.165346	0.834460	41	0.636709	2.739791	62	0.479413	2.405326	63	0.523795	2.274833	30
Crisis	--	--	--	-0.052742	-3.840220	0.0001	--	--	--	-0.005925	-0.385252	0.7001
Dividend payout	-0.002565	-22.75412	0.0000	-0.002537	-22.55760	0.0000	-0.002016	-15.19528	0.0000	-0.002028	-14.88327	0.0000
Liquidity	0.012225	1.330949	0.1834	0.018423	1.983435	0.0475	0.017251	1.904220	0.0571	0.017810	1.940702	0.0525
Leverage	-0.083834	-4.336111	0.0000	-0.101646	-5.132251	0.0000	-0.081974	-4.310047	0.0000	-0.084026	-4.253263	0.0000
Firm size	0.426767	6.993193	0.0000	0.580332	7.976944	0.0000	0.522262	8.512698	0.0000	0.536908	7.437653	0.0000
Crisis_DPY	--	--	--	--	--	--	-0.001445	-7.535121	0.0000	-0.001406	-6.464377	0.0000
Adjusted R-squared	0.815286			0.816801			0.821280			0.821189		
F-statistic	22.24890			22.41523			23.07245			23.00831		
Prob(F-statistic)	0.000000			0.000000			0.000000			0.000000		
Max. VIF	1.147			1.151			1.180			1.189		

IMPLICATIONS OF THE STUDY

The results of the study have several implications for the policymakers, managers, investors, analysts as well as all the stakeholders. Investors and Analysts can take investment decisions by building up the data of the result. Managers of the company can look into the financial performance of the firm and can take steps how to stabilise the firm performance considering the crisis period. Policymakers of Indian companies can monitor and scrutinise the issues which can help in attracting investors.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

The study is limited to the NSE-listed companies and covered only a few variables for analysis purposes which may cause bias results. Moreover, the scope of the current study is limited as it excludes the companies which are not paying consistent dividends. Further research can be expanded by incorporating more variables as well as the governance aspect that can affect the firm's financial performance focusing on Indian companies. Further research can be expanded by covering the non-dividend paying companies for widening research.

CONCLUSION

The aim of the current study is to know the moderating effect of crisis period on the relationship between dividend policy and firm performance for the period of 2017 to 2021 of NSE-listed companies. The study evidenced that the crisis period is moderating the relationship between dividend policy and firm performance. Apart from these, the study also reported that liquidity and leverage are a positive and significant impact on firm performance. More so, firm size and dividend policy are not significant to firm performance. The study suggested to companies that they should developed the strategies for considering the unavoidable circumstances in order to sustain the stakeholder's interest.

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