

Dividend and Bank Performance in India: Evidence using Panel Data Analysis



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Abstract: Dividend has been a matter of concern since the concept of limited liability of the firms came to existence. The uncertainty regarding dividend policy is supposed to hunker down unless we move away from whack-a-mole approach to a long-winded solution to the problem of dividend policy. The issue gets exacerbated because of inclination towards the valuation by the people who call the shots in the firms. This paper explores the association of dividend with the rising NPAs in the Indian banks. The findings of the paper are the testimony to the fact that dividend policy in the banks has issues and need to be checked and corrected. It is recommended in the paper to decouple dividends from the NPA by linking dividend policy with free cash flow. It is also recommended to adopt DVR shares to cater to the aspirations of those investors who do look for consistent dividend policy irrespective of the performance of the banks in a particular year.

Key Words: Banks, Dividend Policy, Panel Data, Performance.

I. INTRODUCTION

Dividend policy is one of ongoing debate in the corporate world [2]. As a matter of corporate finance, the dividend should be given when a firm has excess cash than what the firm needs to their reinvestment needs [5]. However, there is no unanimous evidence for residual dividend policy as the most sought-after policy in India or in any other nation [20]. However, the stability of dividend pay-out as a policy has more acceptance in the corporate world as well as to the shareholders [12],[13],[15]. Due to umpteen reasons, corporates may want to stick to a consistent dividend policy. This policy of stable dividends may be detrimental to the long-run performance and even the long-term solvency of the firm. This policy is in direct conflict with the basic governance and profit distribution policy of corporate finance [2],[9]. One of the obvious interpretations of this stable dividend policy is that a firm pays the same dividend whether the firm makes a profit or not. A firm tries to stick to its stable dividend policy even if the firm is financially distressed [9],[10]. It is not that the issue of stable dividend policy is a matter of fact for a particular sector. Rather it slights across the sectors [19].

However, for a few sectors, which may be in distress, stable dividend policy can stifle their inorganic as well as organic growth. It is not that the problem is not discussed in the literature before. There are many studies to explore the most optimum dividend policy [2],[3],[7],[12]. Despite voluminous literature on the topic, the issue of optimum dividend policy remains unresolved. This study is an attempt to understand the issue of dividend policy viz-a-viz bank performance in India. NPA is one of the indicators of the bank performance [28]. We believe that the problem of dividend policy in banks can be understood well by finding the association between dividend pay out and NPA. If a firm is paying dividend despite the rising NPA, it can be considered that consistent dividend policy is not helping the banks to come out of morass and labyrinth of NPA. The varied issues in the banks regarding their performance is the main motivation for this study. This study chooses to look for the problem of the performance of the banks from the perspective of the dividend policy. Hence the objective of this study is to determine the impact of dividend payment on the NPA. Although both do not seem to have any logical relevance, the indirect association can be subtle and fritter away possibility of the better performance if checked properly. As a dividend policy subject to the profitability can add more value than dividend payment may not increase the NPA levels. On the contrary, increase in NPA due to dividend implies that the consistent dividend policy bereft of the consideration of profitability depletes the value of the bank. Surprisingly, it is found that dividends lead to increase in the NPA levels. The results corroborate the perception that consistent dividend policy is detrimental to the value proposition of the banks in India. Such results are not observed in the literature. Hence, findings of the papers add novelty and a unique perspective to the dividend policy and performance of the banks. The findings of the study can have the wider scope and can help the issue of dividend and NPA in banks across all the emerging economies. The scant literature will be benefitted by the findings of the current paper. The main implication of the findings of the study is to help policy makers and decision makers in the banks to consider the adverse impact of consistent dividend policy on the value of the banks. The rest of the paper is arranged in the six sections including the Introduction section. The next section is on theoretical background and hypotheses formulation. The third section is on data and methodology followed by fourth section on the results. The fifth section is on discussion of the finding of the current paper with respect to the earlier similar studies. The study is concluded in the sixth and last section.

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II. THEORETICAL BACKGROUND, LITERATURE REVIEW AND HYPOTHESES FORMULATION

Bank and its performance are a subject matter of great debate and scholarly discourse [4],[6],[37]. The technological advancement in the banks build the right ecosystem to create futuristic banks which can handle the uncertainties of the future in more effective way [27],[29],[30],[31],[32]. Banks do have their share of issues regarding governance and disclosures [14], [35], [36]. The issue of market efficiency [16],[17],[18], volatility [22],[23],[33],[34] and derivative market also have its impact on the performance of the banks [21],[24], [25], [26], [34], [38]. But the perspective of dividend is usually dodged by the academicians and researchers. This study is an attempt to bridge the gap and provide the empirical evidence regarding the dividend policy and performance of the banks especially when performance of the banks is visualized from the NPA point of view.

Thus, the following hypothesis is framed:

H₁: Dividends are not associated with the NPA levels in the banks.

III. DATA AND METHODOLOGY

A. Data and Variables

Panel Data of 34 Indian banks are taken up over the five years period is taken up (2015-2019). The variables undertaken in the study are: 1) NPA (non-performing assets) of the banks; 2) Dividend pay put ratio (DPR); and 3) Debt-Ratio (DR). NPA is the amounts of advances which are defaulted for more than 3 months. DPR is defined as dividend pay out ratio to ascertain the dividend [1] payment in the banks. DR is as a control variable to control for the long-term liquidity in the banks [8],[11].

B. Methodology

Panel data modelling is used to explicate the impact of DPR on the NPA of the banks while long term liquidity is controlled. Following static model is made and estimated:

$$NPA_{it} = \beta_0 + \beta_1 DPR_{it} + \beta_2 DR_{it} + v_{it} \tag{Eq-1}$$

Where

$\beta_0, \beta_1, \beta_2$ are coefficients

v_{it} is combined error term ($\lambda_i + u_{it}$); λ_i is individual error variance and the u_{it} is regular idiosyncratic error term

The following dynamic model is estimated

$$NPA_{it} = \beta_0 + \beta_1 NPA_{i(t-1)} + \beta_2 DPR_{it} + \beta_3 DR_{it} + u_{it} \tag{Eq-2}$$

Where in addition to the equation 1 (the static model), lag of the endogenous variable is also present on the right-hand side of the equation. The error term is regular idiosyncratic error term.

IV. RESULTS

Static panel data analysis results are reported in Table 1. The proposed specification of the model (Equation 1) is estimated with the help of STATA 15. On checking for the individual effect of the cross-sectional data (banks), it is found that both the effects (Fixed effect and Random effect) are significant. Furthermore, RE model is estimated as Hausman test cannot be rejected. We estimated robust standard error as the RE static panel data model has the issues of heteroscedasticity as null of Wald test of heteroscedasticity of no heteroscedasticity is rejected (whereas there is no problem of autocorrelation in the data). The explanatory variable DPR is significant as the associated p-value of the DPR’s coefficient is less than 5% (at 5% level of significance). The control variable, debt ratio is also significant. Hence the outcome of static panel data results can be recapitulated as follows: the non-performing assets have positive significant association with DPR while controlling for the debt-ratio in the banks.

Table 1. Result of Panel Data Regression Analysis (Random Effect)

	DV: NPA	DV: NPA (Robust Estimates)
Constant	.3156, 2.7486 (.909)	.3156, 1.8621 (.865)
DPR	.0022, .0031 (.468)	.0022*, .0011 (.0500)
DR	4.4294, 3.0068 (.141)	4.4294*, 2.1087 (.036)
F-test (Model)	8.91* (.0116)	8.91* (.0116)
R-Square	.0102	.0102
F-test Fixed Effect	17.65* (.0000)	
Breusch-Pagan Test	123.17* (.0000)	
Hausman Test	.01 (.9048)	
Theta	.7583	
Regular Error Term (σ_{vit})	2.7444	
No of observations (n)	136	
Degree of freedom	100	
Wald test for Heteroscedasticity ¹	1.9*10 ⁵ *(.0000)	
Wooldridge Autocorrelation Test ² AR (1)	.2940 (.5914)	

Note: ¹Wald test of heteroscedasticity has the null of no heteroscedasticity. ²Wooldridge test of autocorrelation in panel has the null of no autocorrelation (with 1 lag). σ_{vit} is remainder idiosyncratic error term. Theta estimates the fitness of random effect model (higher is better). First value is coefficient followed by standard error. (value) has p-values. Robust estimates are estimated due to significant Heteroscedasticity and Autocorrelation. DV is dependent variable. NPA is non-performing asset. DR is dent ratio. DPR is dividend payment Ratio * sig at 5%. ** sig at 10%.



The dynamic panel data results are reported in the Table 2. Here as well, we find the problem of over-identification as null of no over-identification problem is rejected (test statistics value is 8.7818 and p-value is .0124 which is significant as 5% level of significance). Therefore, robust estimates of standard are reported. DPR is significant with NPA. The lagged values of NPA is also significant with the NPA. Whereas, debt-ratio as the control variable is not significant. It is recapitulated in the dynamic panel data estimates that DPR is significantly negatively associated with NPA levels in the banks while controlling for the debt-ratio (long-term solvency).

V. DISCUSSION

The hypothesis framed in the study that there is no association between DPR and NPA is rejected as both the models (Table 1 and Table 2) find evidence that DPR is significantly associated with the NPA in the banks. This contribution is unique as no other study is observed which links the DPR with the NPA of the banks.

Table 2. Dynamic Panel Data Regression

	DV: NPA	DV: NPA Robust Standard Error
Constant	-19.1093, 17.7993 (.2830)	-19.1093, 22.0153 (.3850)
NPA (-1)	-.7790*, .1725 (.000)	-.7790*, .3349 (.0200)
DPR	.0031*, .0003 (.0000)	.0031*, .00027 (.0000)
DR	28.5501, 19.8672 (.1510)	28.5501, 25.2755 (.2590)
Sargan Test	8.7818* (.0124)	8.7818* (.0124)
Arnello-Bond AR (1)	-.4429 (.6578)	-.4429 (.6578)

Note: NPA is the dependent variable. NPA (-1) is first lag of dependent variable as exogenous variable. DPR is dividend pay-out ratio, which is an explanatory variable. DR is debt ratio, used here as control exogenous variable. The null hypothesis of Sargan test is that there is no over-identification problem in dynamic panel data model. Arnello-Bond test used in the analysis is for serial autocorrelation in the first differenced error terms of the order 1. No autocorrelation is the Null of Arnello-Bond test. **First value is coefficient, second value is standard error and p-values are in parentheses (p-value).**

VI. CONCLUSION

This paper is on the NPA and dividend policy in the Indian banks. The findings of the paper accentuate that the dividend policy should add value to the shareholders and other stakeholder, not the other way round. Dividends are significantly affecting the NPA level is the testimony to the fact dividend policy does not add value to the banks in India. The allegiance of DPR with NPA while long-term solvency is controlled should be decoupled. Dividend should be linked to the profitability and performance of the firm, not a tool to bewitch the investors by the sham of high dividend pay-outs which may be a bereft of performance of the banks/firms. This paper does find out that dividends are linked to high non-performing assets. But, no policy on dividends is explored in the paper, which is a limitation of paper. A study on this line of inquiry would be a good future scope on the topic.

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This study has many implications. It is well explicated by the findings of the paper that dividends are positively and significantly linked to the NPA in the Indian banks. This untrammelled association of dividend with NPA need to be checked. This is not the ne plus ultra-approach for dividend distribution. The findings of the paper can check and provide the policy makers to devise newer ways to decide about the dividend policy. The problem of unscrupulous dividend could be replaced by a well-articulated dividend policy in the banks. This dialectical approach of dividend can be replaced by a policy of linking dividends with the free cash flow. It is not that the suggested dividend policy of linking it with free cash flow is bolt out of the blue. Whereas it is part of the ration approach for the dividend policy. It is not that this suggested policy will fly in the face of those shareholders who look for consistent dividend policy. Kernel of the truth is that this suggested policy should be in place all the time. The ultima ratio for catering to both set of investors is that there should be DVR (differential voting right) shares so that both type of investors will get the best of both the worlds (or approaches).

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