

# A Comparative Analysis of Dividend Policy of Public and Private Sector Banks in India

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## Abstract

Theories of Dividend Distribution are one of the hotly debated topics in corporate finance. In this research paper forty banking sector companies in India are taken into account, for analysis. Out of these, twenty four are public sector banks, whereas sixteen are private sector banks. The statistical analysis showed that there is no significant difference in Dividend Pay-out Ratio of public and private sector banks. The data is considered for five financial years, i.e. 2010-11, 2011-12, 2012-13, 2013-14, and 2014-15.

**Keywords:** Banks, Dividend Pay-out Ratio, Private, Public

## 1. Introduction

Distribution of profit to shareholders is termed as dividend<sup>29</sup>. Profit earned by companies can be retained by them for future usage, or can be returned to shareholders as dividends. Each business organization, has their own unique circumstances to take a very strategic decision with regards to the money generated through profit, i.e. whether to keep retain it or to return it to the shareholders. A number of conflicting theories have also been developed with respect to this<sup>3</sup>. The pertinent in this respect to note that, "The harder we look at the dividend picture the more it seems like a puzzle, with pieces that just do not fit together"<sup>10</sup>. There are different theories on dividend payment, and they deal with whether dividend payment increases or decreases the valuation of the company. It is not difficult to identify the variables which affect the dividend payment decisions, however, what is difficult to determine is how these factors interact among themselves<sup>31</sup>.

Most of the existing researches have focussed on developed Western Europe and the Northern American regions. Whereas emerging economies as a whole attracted very little attention in this respect<sup>25</sup>.

Models developed in the western world, may or may not be applicable to emerging markets, due to their unique social as well as corporate culture, regulations and nature of investors<sup>25</sup>. Decisions to pay dividend and its impact on valuation of shares, is also widely debated in the literature of corporate finance, one set of argument put forth says that, dividend payment and increase in its amount, increases the valuation of the firm, whereas another line of argument says that, it decreases the valuation of the firm, still there are other researchers who think, dividend payment decisions have no impact on the valuation of the shares<sup>7</sup>. Modigliani and Miller<sup>22</sup> proposed that dividend payment decisions are irrelevant from the equity valuation perspective.

Dividend payment decisions are signals to the investors regarding, what the incumbent management thinks about the future of the company. According to Bishop et al<sup>9</sup>, profits earned can be ploughed back into the business or kept by the management for investment for capital expenditure in future projects. In taking these decisions, what is pertinent to consider is not only how much money is needed for fresh capital expenditure, but also, what effect the capital expenditure will have on the share price of the company, thus affecting wealth of the shareholders

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of the company. Also firms should not drastically change, their dividend pay-out ratio, as it will impact the planned future investments<sup>1</sup>.

## 2. Literature Review

Krishman<sup>19</sup> propagated a bird in the hand theory, regarding dividend distribution. According to this theory investors are risk averse by their very nature. Linter<sup>20</sup>, Gordon and Shapiro<sup>14</sup> got support for this theory, through their research. The underlying logic for this behaviour was that returns from the equity market is uncertain, also there is considerable information asymmetry in the system, as a result, investors will like dividend payment, as it transfers money from the company to the investors.

On the other hand 'Agency Theory', propagated by Jensen<sup>16</sup>, argues that the dividend payment restricts the fund available to managers, as far as investment in new projects is concerned.

Lintner<sup>20</sup> focussed on the behavioural side of the policy regarding Dividend Payment Decisions. He concluded that the managers take the decisions to increase the proportion of Dividend Payment, only when they are certain that the firm's earnings have increased permanently. Brittain<sup>12</sup> studied the Dividend Payment Policy and tax structure, over a long period (1919-1960) of time and concluded that, the principal determinant of Dividend Payment Policy decisions are Cash Flow of firms, and not the Net Profit figure. On the other hand Fama and Babiak<sup>13</sup>, concluded that Net Profit is a better determinant of Dividend Payment, than either the Cash Flow figures or the Net Profit and the Depreciation figures are taken separately, they reached this conclusion, on the basis of data analysed of 392 major firms, on a timeframe of 1946 to 1964.

In the Indian context, there are certain studies, in this regard. For example, Rao and Sarma<sup>30</sup> concluded that Lintner model can explain the Dividend Payment Decisions, in industries such as coal mining, sugar, jute textiles, chemical, and cement industries.

Bhattacharya<sup>8</sup> was of the view that bird in hand hypothesis is not proper. Moreover, it was further suggested, that the firm's level of risk assumption affects the level of dividend. Bhat and Pandey<sup>16</sup> found support of Lintner's model in the Indian context, which proved that Indian managers increased the level of dividend, only when they became absolutely

certain about the permanent nature of the increase in profitability.

Mishra and Narender<sup>23</sup> tested the Lintner's model of Dividend Payment on Public Sector Units (PSUs) in India. The study concluded that, the number of Dividend Paying PSUs compared to the total number of PSUs is quite small. The study also came to the conclusion that, the Dividend Payment Ratio (DPR), remain constant for most of the companies, even if the Earning per Share (EPS) figure shows a constant improvement. On the other hand Saxena<sup>32</sup> found that, past revenue growth rate, future earnings forecast, how many shareholders a company has, and systematic risk act as the Determinants of Dividend Pay-out Policy.

Naceur, Goaid and Belanes<sup>26</sup> tested Lintner's model in the context of Tunisian companies. This research found that, Tunisian firms follow a stable dividend policy; it also found that the primary determinant of Dividend Payment decisions is current earnings, instead of past Dividend Payment decisions.

Husam et al.<sup>15</sup> examined the determinants of corporate dividend policy in the context of Jordanian companies. This research endeavour found that, the proportion of ownership by insiders and the government are important determinants of Dividend Payment decisions; other determinants are size, age, and profitability of the firm.

Naeem and Nasr<sup>15</sup> concluded on the basis of their research on Pakistan based companies, that the companies are either reluctant to pay dividends or pay very less amount of dividend. The main determinants of Dividend are Profitability of the companies and their previous year's Dividend Pay-out Ratio.

Kapoor<sup>18</sup> examined the determinants of Dividend payment decision in the India's Information Technology (IT) sector. The time period of this study was 2000-2006. This study found that only liquidity and year to year variation in profit are the only two determinants of this decision.

Musa<sup>24</sup> in his study in the context of Nigerian firms came to the conclusion that current year's earnings, previous year's dividend, as well as cash flow act as the Determinant of Dividend Payment decisions.

Okpara and Godwin Chigozie<sup>28</sup> found that in the context of Nigeria, three factors act as the determinant of Dividend Pay-out Ratio, they are current year's Profitability, Current Ratio and previous year's Dividend Pay-out Ratio.

Asif et al.<sup>5</sup> found that there is a negative relationship between Leverage of firms and their Dividend Pay-out Ratio. This conclusion was reached on the basis of research done on Pakistani firms, in the time period of 2002-2008.

Bose and Husain<sup>11</sup>, explored the Dividend Pay-out policy of five sectors in India, these five sectors were Software, Finance, Steel, Electrical Machinery, and Pharmaceutical. Profitability of the companies is found to be the sole Determinant of Dividend Pay-out decisions.

Summinder and Prabhjot<sup>33</sup> concluded that Indian Manufacturing MSMEs Dividend policy is in accordance with Lintner's model, Britain's first model and Darling's model hold well in case of Indian Manufacturing MSMEs.

Kuwari<sup>3</sup> researched on Determinants of Dividends in the context of Gulf Co-operation Council (GCC) countries, this particular study found that, the primary intention of paying dividend is reduction of agency cost. This study also found that, the firms do not look for long term target as far as Dividend Pay-out Ratio is concerned. The study concluded that, Dividend Pay-out Ratios have strong positive correlation with Ownership Structure, Firm Size, Firm Profitability, and negative correlation with the Leverage Ratio.

### 3. Motivation of the Research

There is a perception, among the market participants, that the PSU banks and Private sector banks differ as far as DPR is concerned. In this research, it will be analysed threadbare whether it is true.

### 4. Objective of the Research

In this research endeavour, the objective is to check whether the Dividend Pay-out Ratio (DPR) of the listed Public and Private sector banks differ with statistical significance.

### 5. Hypotheses of the Research

The null hypotheses of the research are depicted below:

H01 - There is no difference between public sector and private sector banks, as far as Dividend Pay-out Ratio (DPR) is concerned for the financial year 2014-15.

H02 - There is no difference between public sector and private sector banks, as far as Dividend Pay-out Ratio (DPR) is concerned for the financial year 2013-14.

H03 - There is no difference between public sector and private sector banks, as far as Dividend Pay-out Ratio (DPR) is concerned for the financial year 2012-13.

H04 - There is no difference between public sector and private sector banks, as far as Dividend Pay-out Ratio (DPR) is concerned for the financial year 2011-12.

H05 - There is no difference between public sector and private sector banks, as far as Dividend Pay-out Ratio (DPR) is concerned for the financial year 2010-11.

## 6. Research Methodology

In this research endeavour Dividend Pay-out Ratio of banks vis. a vis. their ownership structure (whether private or public) is analysed.

Dividend Pay-out Ratio =  $\frac{\text{Dividend Paid}}{\text{Face Value per Share}} \times 100$ .

The following public sector banks are considered:

1. Allahabad Bank.
2. Andhra Bank.
3. Bank of Baroda.
4. Bank of India.
5. Bank of Maharashtra.
6. Canara Bank.
7. Central Bank.
8. Corporation Bank.
9. Dena Bank.
10. Indian Overseas Bank.
11. IDBI Bank.
12. Indian Bank.
13. Oriental Bank.
14. Punjab and Sind Bank.
15. Punjab National Bank.
16. State Bank of Travancore.
17. State Bank of Bikaner.
18. State Bank of India.
19. State Bank of Mysore.
20. Syndicate Bank.
21. UCO Bank.
22. Union Bank.
23. United Bank.
24. Vijaya Bank.

The following private sector banks are considered:

1. Axis Bank.
2. City Union Bank.
3. Development Credit Bank.
4. Dhanlaxmi Bank.
5. Federal Bank.
6. HDFC Bank.
7. ICICI Bank.
8. IndusInd Bank.
9. ING Vysya Bank.
10. J&K Bank.
11. Karnataka Bank.
12. Karur Vysya Bank.
13. Kotak Mahindra Bank.
14. Lakshmi Vilas Bank.
15. South Indian Bank.
16. Yes Bank.

The DPR for five financial years' i.e.2010-11, 2011-12, 2012-13, 2013-14, and 2014-15 are taken into account.

### 6.1 Data Used

The source of the data for this research has been Capital Market database. All the listed entities in the banking sector are taken into account. The classification of the Banks is done, as per the Capital Market database classification. The period of the study, which is taken into account, is five financial years, i.e. financial year 2014-15, 2013-14, 2012-13, 2011-12, 2010-11. In total twenty four public sectors, and sixteen private sector banks are taken into account.

### 6.2 Tools Used

Data regarding DPR of Banks is put through Q-Q Plot to understand, whether the data is normally distributed. The results showed that the data is not normally distributed; as a result, non-parametric statistical tool in the Kruskal-Wallis Test is used.

## 7. Empirical Results

Arithmetic Mean of % of Dividend Paid Over 5 Financial Years (From 2010-11 to 2014-15) by PSU and Private Sector Banks.

Table number 3 shows that the p value (Asymp.Sig.) is 0.534, which is way above the acceptable p-value are 0.05 or less. So, we failed to reject null hypothesis number 1.

**Table 1.** Characteristics of dividend pay-out by public and private sector banks

Type of Banks	Average of Dividend Pay-Out Ratio (in %)	Standard Deviation of Dividend Pay-Out Ratio
PSU Banks	91.16	61.52
Private Sector Banks	85.23	70.34

**Table 2.** Ranks table of Kruskal-Wallis test for the financial year 2014-15

	Ranks		
	1 = PSU Banks, 2 = Private Sector Banks	N	Mean Rank
DPR	1	24	21.98
	2	16	19.62
	Total	40	

**Table 3.** Table of test statistics of Kruskal-Wallis test for the financial year 2014-15

Test Statistics <sup>a,b</sup>	
	DPR
Chi-Square	.387
Df	1
Asymp. Sig.	.534

- a. Kruskal Wallis Test.  
 b. Grouping Variable: 1 = PSU Banks, 2 = Private Sector Banks.

**Table 4.** Ranks table of Kruskal-Wallis test for the financial year 2013-14

	Ranks		
	1 = PSU Banks, 2 = Private Sector Banks	N	Mean Rank
DPR	1	24	24.78
	2	16	18.52
	Total	40	

**Table 5.** Table of test statistics of Kruskal-Wallis test for the financial year 2013-14

Test Statistics <sup>a,b</sup>	
	DPR
Chi-Square	.427
Df	1
Asymp. Sig.	.423

- a. Kruskal Wallis Test.  
 b. Grouping Variable: 1 = PSU Banks, 2 = Private Sector Banks.

Table number 5 shows that the p value (Asymp.Sig.) is 0.423, which is way above the acceptable p-value are 0.05 or less. So, we failed to reject null hypothesis number 2.

Table number 7 shows that the p value (Asymp.Sig.) is 0.322; in this case also, the p value is way above the acceptable level of 0.05 or less. So, we failed to reject null hypothesis number 3.

Table number 9 shows that the p value (Asymp. Sig.) is 0.123, which is above the acceptable p-value of

**Table 6.** Ranks table of Kruskal-Wallis test for the financial year 2012-13

Ranks			
	1 = PSU Banks, 2 = Private Sector Banks	N	Mean Rank
DPR	1	24	28.18
	2	16	15.12
	Total	40	

**Table 7.** Table of test statistics of Kruskal-Wallis test for the financial year 2012-13

Test Statistics <sup>a,b</sup>	
	DPR
Chi-Square	.325
Df	1
Asymp. Sig.	.322

a. Kruskal Wallis Test

b. Grouping Variable: 1 = PSU Banks, 2 = Private Sector Banks.

**Table 8.** Ranks table of Kruskal-Wallis test for the financial year 2011-12

Ranks			
	1 = PSU Banks, 2 = Private Sector Banks	N	Mean Rank
DPR	1	24	33.78
	2	16	15.54
	Total	40	

**Table 9.** Table of test statistics of Kruskal-Wallis test for the financial year 2011-12

Test Statistics <sup>a,b</sup>	
	DPR
Chi-Square	.314
Df	1
Asymp. Sig.	.123

a. Kruskal Wallis Test.

b. Grouping Variable: 1 = PSU Banks, 2 = Private Sector Banks.

**Table 10.** Ranks table of Kruskal-Wallis test for the financial year 2010-11

Ranks			
	1 = PSU Banks, 2 = Private Sector Banks	N	Mean Rank
DPR	1	24	26.28
	2	16	16.52
	Total	40	

**Table 11.** Table of test statistics of Kruskal-Wallis test for the financial year 2010-11

Test Statistics <sup>a,b</sup>	
	DPR
Chi-Square	.475
Df	1
Asymp. Sig.	.113

a. Kruskal Wallis Test

b. Grouping Variable: 1 = PSU Banks, 2 = Private Sector Banks.

0.05 or less. So, we failed to reject null hypothesis number 4.

Table number 11 shows that the p value (Asymp.Sig.) is 0.113, which is higher than the acceptable p-value of 0.05 or less. So, we failed to reject null hypothesis number 5.

The empirical results depicted above clearly shows that, there is no statistically significant difference, as far as DPR of Private and Public sector banks are concerned. According to the empirical results of the Kruskal Wallis tests, the p-values for all the Null Hypotheses are higher than, 0.05 levels, so we fail to reject all the null hypotheses.

## 8. Conclusions

The present research endeavour shows that, Private sector and Public sector banks do not differ as far as DPR is concerned. This result may not be surprising, as banking remains a highly regulated sector, and the key parameters of Bank profitability like reserve requirements, priority sector lending etc. remains same for the both public as well as private sector banks.

However, more comprehensive analysis can be done on the basis of size of the banks. Another research area can be new and old private generation banks, and whether they differ as far as DPR is concerned.



## References

1. Abdullahi, R. (2011). Determinants of Dividend Growth Pattern of the Deposit Money Banks in Nigeria (A Study of Selected Banks). A Thesis Submitted for the Degree of Masters of Science (M.Sc) in Accounting and Finance of Ahmadu Bello University, Zaria.
2. Al-Twajiry, A. A. (2007). Dividend policy and Payout Ratio: Evidence from the Kuala Lumpur Stock Exchange. *The Journal of Risk Finance*, 8(4), 349–363.
3. Al-Kuwari, D. (2009). Determinants of the Dividend Payout Ratio of Companies Listed on Emerging Stock Exchanges: The Case of the Gulf Cooperation Council (GCC) Countries. *Global Economy and Finance Journal*, 2(2), 38–63.
4. Al-Malkawi, H. (2007). Determinants of Corporate Dividend Policy in Jordan: An Application of the Tobit Model. *Journal of Economics and Administrative Sciences*, 23(2), 44–70.
5. Asif, Rasool & Kamal (2011). Impact of Financial Leverage on Dividend Policy: Empirical Evidence from Karachi Stock Exchange-Listed Companies. *African Journal of Business Management*, 5(4), 1312–1324.
6. Amidu, M. & Abor, J. (2006). Determinants of Dividend Payout Ratios in Ghana. *Journal of Risk Finance*, 7, 136–145.
7. Anupam, M. (2012). An Empirical Analysis of Determinants of Dividend Policy - Evidence from the UAE Companies. *Global Review of Accounting and Finance*, 3(1), 18–31.
8. Bhattacharya, S. (1979). Imperfect information, dividend policy, and the “bird in the hand” fallacy. *Bell Journal of Economics*, 10, 259–270.
9. Bishop, S. R., Harvey, R. C., Robert, W. F., & Garry, J. T. (2000). *Corporate Finance*. Sydney: Prentice Hall Inc.
10. Black, F. (1976). The Dividend Puzzle. *The Journal of Portfolio Management*, 2(2), 5–8.
11. Bose, S. and Husain, Z. (2011) Asymmetric Dividend Policy of Indian Firms: An Econometric Analysis. *International Journal of Applied Economics and Finance*, 5(3), 78–85.
12. Brittain, J. A. (1966). The Tax Structure and Corporate Dividend Policy. *American Economic Review*, 54(3), 1–10.
13. Fama & Blasiak (1968). Dividend Policy: An Empirical Analysis. *Journal of American Statistical Association*, 1132–1161.
14. Gordon, J. & Shapiro, E. (1956). Capital Equipment Analysis: The Required Rate of Profit. *Management Science*, 3, 102–110.
15. Husam, A. N. & Al-Malkawi. (2007). Determinants of Corporate Dividend Policy in Jordan: An Application of the Tobit Model. *Journal of Economic and Administrative Sciences*, 23(2), 44–70.
16. Jensen, M. C. (1986). Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *The American Economic Review*, 76 (2), 323–329.
17. Kania, S. L. & Bacon, F. W. (2005). What factors motivate the corporate dividend decision? *American Society of Business and Behavioral Sciences E-Journal*, 1(1), 97–107.
18. Kanwal, A. & Kapoor, S. (2008). Determinants of Dividend Payout Ratios - A Study of Indian Information Technology Sector. *International Research Journal of Finance and Economics*, 15, 63–71.
19. Krishman, J. E. (1963). *Principles of Investment*. McGraw Hill, New York.
20. Lintner, J. (1956). Distribution of Incomes of Corporations among Dividends, Retained Earnings and Taxes. *The American Economic Review*, 46(2), 97–113.
21. Mehta, A. (2012). An Empirical Analysis of Determinants of Dividend Policy-Evidence from the UAE Companies. *Global Review of Accounting and Finance*, 3(1), 18–31.
22. Miller, M. H. & Modigliani, F. (1961). Dividend Policy, Growth and the Valuation of Shares. *The Journal of Business*, 34(4), 411–433.
23. Mishra, C. & Narender, V. (1996). Dividend Policies of State Owned Enterprises in India – An Analysis. *Finance India*, 10(3), 632–645.
24. Musa, I. (2009). The Dividend Policy of firms quoted on the Nigerian Stock Exchange: An Empirical Analysis. *African Journal of Business Management*, 3(10), 555–566.
25. Musiega, M. G., Alala, O. G., Musiega, D., Maokomba O. C. & Egessa, R. (2013). Determinants of Dividend Pay out Policy among Non-Financial Firms on Nairobi Securities Exchange, Kenya. *International Journal of Scientific & Technology Research*, 2(10), 253–266.
26. Naceur, S. B., Goaid, M. & Belanes, A. (2006). In the Determinants and Dynamics of Dividend Policy. *International Review of Finance*, 6(1-2), 1–23.
27. Naeem, S., & Nasr, M. (2007). Dividend Policy of Pakistani Firms: Trends and Determinants. *International Review of Business Research Papers*, 3(3), 242–254.
28. Okpara, A., & Godwin, C. (2010). A Diagnosis of the Determinants of Dividend Pay-Out Policy in Nigeria: A Factor Analytical Approach. *American Journal of Scientific Research*, 8(1), 57–67.
29. Pandey, M. (2004). *Financial Management*. Vikas Publishing House Private Limited.
30. Rao & Sarma. (1971). Dividends and retained Earnings of public and private limited companies in India. *The Journal of Finance*, 26(3), 783–785.
31. Ross, S. A., Westerfield, R. W. & Jaffe, J. F. (2009). *Corporate Finance Fundamentals*. (8th ed.). McGraw Hill.
32. Saxena, A. K. (1999). Determinants of Dividends Payout Policy: Regulated Vs Unregulated Firms. Retrieved from [www.westiga.edu/bquest/payout.htm](http://www.westiga.edu/bquest/payout.htm)
33. Sumninder, B. K., & Prabhjot K. (2012). Impact of Dividend Policy on Shareholder's Wealth: An Empirical Analysis of Indian Information Technology Sector. *Asia-Pacific Finance and Accounting Review*, 1(3), 17–24.