# In Pakistani Service Industry: Dividend Payout Ratio as Function of some Factors

## Waseem KHAN[1]
## Naheed ASHRAF[2]

[1,2]The Islamia University Bahawalpur, [1]E-mail: waseemkhan_hcbf@yahoo.com, [2]E-mail: innocenthelp@gmail.com

**Abstract**     *The purpose of this paper is to find that dividend payout ratio is the function of Corporate Profitability, Cash Flow, Tax, Sales Growth and Debt to Equity ratio. For seeking out the dividend payout ratio relationship of with the Corporate Profitability, Cash Flow, Tax, Sales Growth and Debt to Equity ratio, data has been taken from financial statements of 26 firms listed on Karachi Stock Exchange (Pakistan). It has been find that dividend payout ratio is not the function of Corporate Profitability, Cash Flow, Tax, and Sales Growth except Debt to Equity ratio. Though in rest of the international markets dividend payout ratio is the function Corporate Profitability, Cash Flow, Tax and Sales Growth but in Pakistan its' contradictory to this phenomenon. The data has been taken limited. For increasing the size of data results can be changed at some extent. And these results show that in Pakistan, there are other factors which influence the dividend payout ratio. It is most probably behavioral factor. This paper predicts the presence of other factor which can be influence dividend payout ratio. It invites further investigations and provides the bases for research.*

**Key words**     Dividend Payout Ratio (Dependent Variable), Corporate Profitability, Cash Flow, Tax, Sales Growth and Debt to Equity ratio (Independent Variables)

## 1. Introduction

Dividend payout ratio is a subject of argument for financial researcher and academicians. Many theoretical models have been presented to solve this phenomenon. These models present some determinants to that manager should consider while making decisions about dividend policy. Mangers should consider determinants in deciding amount and size of cash distribution for share holders. The determinants which may affect dividend payout ratio include corporate profitability, cash flow, tax, debt to equity ratio and sales growth. Dividend ratio also has the impact of investor's behavior on it. Profit seeker likes to have high dividend payout ratio and wealth seeker goes with low dividend payout.

The influence by different determinants on dividend payout ratio presents their relation to it. On the strength of these relation managers may prioritize determinants.

### Corporation Profitability

Income of the corporation can be invested in some new project, operating projects, used to purchase securities, to pay back debt/liability, or to distribute to shareholders. This distribution may be cash dividends or company may buy back its shares. At the end, it shall be on decision makers' will either they decide for cash distribution or buy back shares. Company's decision makers decide dividend policy. This controversial situation comes to an end with ultimate affect on dividend payout ratio.

### Cash Flow

Company may decide to pay or not to pay dividend for different internal or external reasons. To payout dividend is important because; it shows company's financial strength, attract investors who look for secure investment, it help to manage market price per share. Though, these companies are taken as

negative because of lower cash status. The companies of no dividend history are taken positively when declare dividends. The decision of to payout dividend or not to payout affect dividend ratio.

### Tax

It's ever been presumed that investor expect and require higher return on investment. Taxation model of companies effect investor's decision for having maximum dividend. Company portfolio composition is responsible for investor's decision. Increase or decrease in tax liabilities has strong impact on dividend increase or decrease requirement.  Increase in tax liability may lead to the preference for increase in dividend payment. In the light of leverage frame work of company, investor chooses either to go for dividend or capital gain. So, it shows the positive relation between taxation and dividend payout ratio.

### Sales Growth

Highly growing companies prefer to pay low dividend as remaining will be invested in more projects. Growing companies need cash from sales for more operations. Sales growth has impact on dividend ratio. This impact can be positive or negative. It depends on company investment structure. If the company is growing and seeking growth then relation between sales and dividend payout ratio will be negative.

### Debt to Equity Ratio

 Leverage proportion used to finance the company operations indicates the risk affects for company's dividend policy. Highly growing companies come up with high debt financing and high dividend payout ratio. This show positive relation of debt to equity ratio but in some situations it creates negative relation. Negative relation can be established on the bases of debt risk and dividend payout ratio.

## 2. Literature Review

### Dividend Payout Ratio

Dividend payout ratio is widely research area of finance but still a puzzle for absolute contribution of factors. Dividend payout ratio decision is due consideration for its legal and financial factors.  Dividend as a part of earnings represent firm's current financial condition, past trend and future anticipations. Dividend reflects how efficiently management is utilizing its financial resources and ability to earn profits. Company's earning capacity ability can be seen in one snap shot through dividend payout ratio. Past behavior of dividend payout ratio can stand as symbol of investor's interest and trust on corporation's earnings.

### Corporate Profitability

Vivian, A. (2006) says that relation between corporation profitability and dividend payout ratio should be negative and it can be justified easily. Especially in the absence of external financing opportunity, when firm use optimal finance available to it. When firm want to increase its future earnings and retain earnings are the only source for further investments.

Arnott and Asness (2003) investigated relation of corporate earnings growth and dividend payout ratio. Dividends represent small portion of earnings. As the lower will be the dividend payout ratio higher will be the future profits because it will give high investment opportunity for future projects. Corporate profitability growth can be possible in the condition of cut off or offsetting transactions (e.g., dividends or shares buy backs). The growth of corporation's earrings and dividends are directly consistent to whole market growth. Investor's idea of shares buy back can increase earning faster than GDP brought different results that it just decrease number of share issuance instead of impacting profitability (Bernstein & Arnott, 2003). Dividend payouts and earnings are positively related. If the dividends will be high then profits will be high. High earrings draw high dividends (Parker, 2005).

### Cash Flow

Free cash flows of company have positive implication. These companies tend to pay large dividends. Cash flows and dividend payout relation have positive relation. Increase in free cash flows brings positive impact on dividend payouts (Thanatawee, 2011).

Manual calculation has been made of cash flows excluding taxes through formula:

(Free Cash Flows=Net cash flow from operations – Capital Expenditures)                    (1)

The result of this formula used to find out dividend payout ratio. Which shown that there is significant relation between dividend payout ratio and cash flows. Beta value in regression analysis of cash flows and dividend payout was 1.89 (for large cap). Cash flows play important role in determining dividend payouts (Hellstrom & Inagambaev, 2012).

Cash level shows liquidity position of firm. Consider the situation if firm has no cash for investment financing or need for equity capital. All this will create picture of firm's cash flows which will affect dividend payout ratio (John & Muthusamy, 2010).

Bradley et al., (1998) found the link between dividend payouts and cash flow volatility. The uncertain situation of cash flow can be a signal for market. Systematic risk attached with cash flows lower the share price. Firms with high cash volatility promise low dividends.

### Tax

Tax influence personal and managerial decisions as well. As the tax level increases, corporations' increases stock repurchases and decreases the dividend payouts. Tax level and dividend payout varies with the percentage of individual investments (Lightner, 2008). Tax variation affects personal income and stock value. And tax avoidance ways are not risk free and cost free. So, efforts to concise personal and corporation tax rates must make favorable structure of size and capital gain tax (Chen & Kane, 2003).

It's often predicted that tax has inverse relation with stock ownership. But here result showed that tax has positive relation with stock ownership. People prefer dividends on capital gain for the reason different tax treatment (Han *et al.,* 1999). Farah and Selwyn (1967) found that a part of the Equilibrium frame is selected, the individual investor. In addition, if the amount of personal and corporate leverage companies such as dividends or capital distributions can acquisition.

### Sales Growth

Sales growth is critical to company growth and dividend payout. In Swedish market sale growth has negative relation with dividend payout. In Swedish market, negative relationship to the sale growth rate inversely proportionate the signaling theory which states that higher growth should contribute to higher dividend (Hellstrom & Inagambaeev, 2012). Higher growth firms need higher financing. It is firms' need to set good reputation through high dividend payouts for access the high financing.  But empirical investigation showed that sale growth is negatively related to the dividend payouts (John & Muthusamy, 2010). Sales growth in the payout ratio could be affected. Determine the amount of dividends that are not quite the company's been after investing and financing decisions (Amidu and Abor, 2006); Rather, taken together with the investment and dividend decisions. *Funding decisions.* Partington (1983) the use of intellectual Company's dividend of goal orientation to pay motivation, and there are some decisions about dividends regardless of the investment policy.

### Debt to Equity

The debt benefits and efficiency ignored by mangers and it's called 'controlled hypotheses'. Free cash flow can be increased for dividend payouts or repurchasing of stock and thereby payout current cash which would otherwise be invested in low returning projects or wasted by firms. The leverage structure totally depends on firm's decision and it brings positive influence on dividend payouts (Al-Taleb, 2012).

 Leverage structure essentially contributes to the firm's ability to payout dividends. It measures firm's ability to manage capital. For Nigeria manufacturing firms, debt to equity structure is positively related to the dividend payout ratio (Oladipuo & Okafor, 2013).

With the literature point of view profitability, cash flows, tax, sales growth and debt to equity are contributing factors in determining dividend payout ratio. These factors have ultimate effect on dividend payout either positively or negatively but it's sure there is effect of these factors on dividend payout ratio.

### 3. Reasoning to study

Different studies defining and explaining Profitability, Tax, Cash Flow, Sales and Debt to Equity factors in relation to dividend payout ratio in context of international markets. But here in Pakistan these factors are not exactly contributing on the same terms as defined by other researchers according to other country markets.

### 4. Hypothesis

1. There is any relation between Dividend payouts and cash flows, tax, profitability, debt to equity ratio, sales.

2. If yes, then its positive relation or negative relation between dividend payouts and cash flows, tax, profitability, debt to equity ratio, sales.

### 5. Methodology & Data

This study is centered towards quantitative research as following previous research. This study measures the correlation and regression between dividend payout ratio and other variables (Cash Flow, Profitability, Tax, Sales Growth and Debt to Equity). Dividend Payout Model is as follows:

$$\text{Dividend PAYOUT}_i = b_0 + b_1 * \text{PROF}_i + b_2 * \text{CASH}_i + b_3 * \text{TAX} + b_4 * \text{GROW}_i + b_5 * D/E_i + \mu_{i,t} \qquad (2)$$

Where $b_0$ denotes the intercept of the regression equation, and $b_1$, $b_2$, $b_3$, $b_4$ and $b_5$ are the regression coefficients of Profitability, Cash Flow, Tax, Growth, and Debt to Equity.

Data was collected of 26 firms from service sector for the years 2011 and 2012. These all firms were listed of Karachi Stock Exchange of Pakistan. All the financial information used from their annual report. This secondary data is submitted to regularity institutions by firms of service sector.

***Descriptive Statistic Figures***

Table 1 showing the variables used in research and data collection. Increase or decrease in variable has been shown through **+** or **–** sign.

*Table 1.* Variables and their description

| S. No. | Variables | Increasing Or Decreasing Prediction Sign |
|---|---|---|
| 1 | Dividend Payouts | **+ / -** |
| 2 | Net Profits | **+ / -** |
| 3 | Cash Flow | **+ / -** |
| 4 | Tax | **+ / -** |
| 5 | Sales Growth | **+ / -** |
| 6 | Debt to Equity Ratio | **+ / -** |

Table 2 shows the static description of all the variables. It measures the dividend payout ratio (on Yearly bases) is 12.71% and Profitability is 1.28%, which means firms are holding 1.28% profits after Tax and pay about 13% of its profit as a dividend. The Cash Flow mean is 6.79 because of operating activities. Tax is 2.28% as firms are needed to pay very small amount as tax. Sales Growth is 1.49% and Debt to Equity ratio is 3.09.

*Table 2*. Descriptive Statistics of all variable involved is study

| | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|
| **Dividend Payout** | -1.80 | 2.19 | .1271 | .79751 |
| **Net Profits** | -8377.00 | 9903.00 | 1.2860 | 5042.82771 |
| **Total Cash Flow** | -8667.00 | 8964.00 | 6.7923 | 4367.82319 |
| **Tax** | -8912.00 | 80867.00 | 2.2807 | 16478.01020 |
| **Sales Growth** | -9624.00 | 9114.00 | 1.4942 | 4329.44416 |
| **Debt to Equity** | -1.41 | 31.72 | 3.0967 | 9.17777 |

*In Correlation Test Context:*

All the variables discussed in the paper, contribution of them in affect to dividend payout ratio as follows:

Corporate Profitability correlation with Dividend Payout Ratio is -0.2% and its' 99 times likely to occur. It means profitability has very weak correlation which is ignorable.

Cash Flow correlation with Dividend Payout Ratio is about -28% and its' 17 times likely to occur. It means cash flow has not a strong correlation.

Tax correlation with Dividend Payout Ratio is near about -9% and its' 67 times likely to occur. It means tax has very weak correlation.

Sales Growth correlation with Dividend Payout Ratio is about -36% and even it 7 times likely to occur. It means sales growth has weak correlation and even it can occur not very often.

Debt to Equity ratio has correlation with Dividend Payout Ratio is -53% and its likely to occur 0.5 times. It means profitability has averagely considerable correlation which can be acceptable.

It's observable that all the variables have negative correlation with dividend payout ratio. Profitability has a very weak negative correlation which can be considered as neutral at some extent. And debt to equity has much strongly negative impact on dividend payout as compare to other variables (see table 3).

*Table 3.* Correlation of Dividend Payouts with Profits, Cash Flows, Tax, Sales Growth and Debt to Equity Ratio

| S. No | Dimensions | | With Dividend Payout Ratio | Results |
|---|---|---|---|---|
| 1 | Net Profits | Personal Correlation | -0.002 | Rejected |
| | | Significance Level | 0.990 | |
| 2 | Cash Flow | Personal Correlation | -0.279 | Rejected |
| | | Significance Level | 0.167 | |
| 3 | Tax | Personal Correlation | -0.087 | Rejected |
| | | Significance Level | 0.671 | |
| 4 | Sales Growth | Personal Correlation | -0.359 | Rejected |
| | | Significance Level | 0.071 | |
| 5 | Debt To Equity | Personal Correlation | -0.534 | Accept |
| | | Significance Level | 0.005 | |

**. Correlation is significant at the 0.01 level (2-tailed).

*In Regression Test Results:*

In multi-collinear test: results shown that all the variance inflation factor (VIF) coefficients are less than 2.0 and tolerance coefficients are greater than 0.50 (see table 4).

*For Corporate Profitability:* results show that it relates to dividend payout ratio very weakly and quite ignorable impact. Though other studies show that it has positive impact on dividend payouts but in Pakistani service sector its' totally change scenario.

*Table 4.* Regression Co-linearity Check

| Model | Un-standardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|---|---|---|---|---|---|---|---|
| | B | Std. Error | Beta | | | Tolerance | VIF |
| (Constant) | .365 | .150 | | 2.432 | .025 | | |
| Net Profits | 5.181 | .000 | .033 | .189 | .852 | .942 | 1.061 |
| Cash Flow | -5.095 | .000 | -.279 | -1.547 | .138 | .867 | 1.154 |
| Tax | -7.045 | .000 | -.015 | -.083 | .935 | .909 | 1.100 |
| Sales Growth | -5.662 | .000 | -.307 | -1.763 | .093 | .928 | 1.077 |
| Debt to Equity | -.040 | .015 | -.461 | -2.675 | .015 | .949 | 1.054 |

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a. Dependent Variable: Dividend Payout

*For Cash Flow:* results show that it relates to dividend payout ratio weakly negative and not that much strong impact. Though other studies show that it has positive relationship with dividend payouts but in Pakistani service sector its' totally change scenario as its negative and quite weak.

*For Tax:* results show that it relates to dividend payout ratio weakly negative and not that much strong impact. Other studies show that it has positive relationship with dividend payouts but in Pakistani service sector its' totally change scenario as its negative and quite weak.

*For Sales Growth:* results show that it relates to dividend payout ratio weakly negative and not that much strong impact. Other studies show that it has significantly negative relationship with dividend payouts but in Pakistani service sector its' change scenario as its' weakly negative.

*For Debt to Equity:* results show that it relates to dividend payout ratio strongly negative and has a strong impact. Other studies show that it has not significant or weakly negative relationship with dividend payouts but in Pakistani service sector its' totally change scenario as it's strongly negative and quite significant.

### 6. Limitations

This study is of correlation between Dividend payout ratio, Corporate Profitability, Cash Flow, Tax, Sales Growth and Debt to Equity ratio and done in service sector of Pakistan. It was not experimental as firms have not participated on assigned condition. The results can vary at some extent on conditions or on sample size increase/decrease. If these variables are not having positive effect on dividend payout ratio then it means there are certainly other factors exist which can contribute. At some extent, it can be said dividend payout ratio can be a function of behavioral factor is Pakistani service sector. This aspect invites further investigation.

### 7. Conclusion

This study examined the some financial factors which were considered as influencing factor for dividend payout ratio. The results clarified that corporate profitability impact is quite neutral or it can be said quite ignorable. Tax, Sales Growth and Cash Flows are having negative relationship with dividend payouts which were considered positive in previous studies. And the relationship of these independent variables with dependent variable dividend payout ratio was found weak. But Debt to Equity ratio was significantly negative in relationship with dividend payout ratio which was considered not significant in other studies. This on hand study shattered the previous set phenomenon by other researchers. As it shown that in Pakistani service industry there must be other factors which are have strong impact on dividend payout ratio.

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