

## Antecedents of Dividend Policy: Empirical Evidence from Banking Sector of Pakistan

Rizwan Hamid<sup>1\*</sup>, Muhammad Shahbaz Yaqub<sup>2</sup>, Muhammad Mubashir Hussain Awan<sup>3</sup>

<sup>1</sup>Monnoo group of industries, Lahore Pakistan; <sup>2</sup>Department of Management Sciences Virtual University of Pakistan; <sup>3</sup>Management Studies Department Govt. College University, Lahore  
\*E-mail: rizwanhamid@monnoo.com

Received for publication: 02 November 2015.

Accepted for publication: 30 March 2016.

### Abstract

This paper explores the determinants of dividend policy of commercial banks operating in Pakistan. Dividend decision of any bank primarily depends upon its profitability, retained earnings, cash flows, corporate taxes and leverage. This study is an attempt to find out key determinants and their impact on cash payout and total payout ratios. It also aims to test the implication of dividend theories on Pakistani banks using data for a period of 8 years ranging from 2006 to 2013. Balanced panel data regression with fixed effects model has been used in this study. All independent variables - PAT, SLACK, EPS, CTA and TD<sup>1</sup> reported significant results. We found significant role of profitability theory, pecking order theory, free cash flow theory and agency cost theory in determining dividend policies whereas, tax effect and financial slack has no effect in banking sector of Pakistan.

**Keywords:** cash payout, stock payout, determinants of dividend policy, dividend theories.

### Introduction

A long history of corporate dividend policy reveals that dividend policy was bound up with the development of corporate finance itself (Frankfurter & Wood, 1997). In the early 16th century, in Great Britain and Holland, the captains of sailing ships on track started selling of financial claims to the investors. At the end of each voyage<sup>2</sup>, the capital and the profits were distributed according to their investments. Each venture ensured the distribution of profit to the investors at the end of its life (Baskin, 1988). That was the emergence of business as “going concern” and made a fundamental practice of the business to decide the percentage of business profit to be distributed to the owners. This produced the first dividend payment in the history. It also evolved the ownership structure of business houses into what presently known as joint stock companies.

In the middle of 17th century, the success of corporate form of business opened the doors for other business. Importance placed by the investors on dividend policy gave birth to another issue in modern corporate finance - paying the regular and constant dividend remained vital for the corporate managers during the 19th century (Frankfurter & Wood, 1997). In corporate finance, the finance managers face two operational decisions in their organizations - the investment decisions and the financing decisions. A 3rd decision is regarding distribution post-tax profits to the stockholders or plough back in the business operations. This decision needs a consideration of shareholders' wealth maximization while putting it into action.

---

<sup>1</sup> Profitability, retained earnings, earnings per share, cash flows, and leverage

<sup>2</sup>This type of business was called as Commenda. Under the commenda, the commendator provided the capital by the investors and the Commendatarius managed the investment (Walker, 1931, p.97).

The paper is organized as follows, Introduction describes objective of the study and lays down the hypothesis accordingly, Literature Review explores literature review on dividend policy, Data & Methodology describes the methodology, Results report the findings of the study and in Conclusion, Recommendations and Limitations there are conclusions and policy recommendations based on the empirical analysis along with stating few limitations.

### ***Objectives of the Study***

Objectives of this study are to:

1. investigate determinants of dividend policy of the commercial banks working in Pakistan;
2. investigate the relationship between dividend policy of Pakistani commercial banks and our selected independent variables, to what extent the dividend policies can explain, and identify the most influential independent variables of our models;
3. test the significance of dividend theories on Pakistani commercial banks.

### ***Research Questions***

- a) Is dividend policy<sup>3</sup> in Pakistani banking sector affected by tax, profitability, cash, retained earnings, earnings per share and leverage; &
- b) What kinds of relationship exist between them?

### ***Research Hypothesis***

H1: There is significant relationship between cash dividend payments and taxes, profit after tax, cash flows, retained earnings, earnings per share & leverage.

H2: There is significant relationship between total dividend<sup>4</sup> and taxes, profit after tax, cash flows, retained earnings, earnings per share & leverage.

### ***Literature Review***

The literature about dividend policy of banking sector is scarce due to unique characteristics – regulated sector. The major part of empirical studies on dividend policy in banking sector had been found excluded from the sample of financial sector (Lintner, 1956; Fenn & Liang, 2001). Being the most controversial issues in contemporary corporate finance, dividend policy may be ranked as one of the top ten unanswered issues in corporate finance (Brealey & Myers, 2005). Husam, Rafferty & Pillai (2010) reviewed rationalization and major theories on dividend policy and in ending supported the statement given by Fisher Black (1976) - the harder we look at the dividends pitcher, the more it seem like a puzzle, with the pieces, that just do not fit together is still valid. Contemporary finance offer diverse understandings on dividend policy – it increases the shareholders wealth (Gordon, 1959), it is irrelevant (Miller & Modigliani, 1961; Miller & Scholes, 1978), and it decreases the shareholders wealth, (Litzenberger & Ramaswamy, 1982).

The dividend policy addressed decision of finance managers about the distribution of profits to the shareholders, or reinvestment into the business operations (Allen & Micheally<sup>5</sup>, 2002). Dividend policy is irrelevant in perfect markets and does not affect a firm value as shareholders prefer capital gains to dividends (Miller & Modigliani, 1961). Bangladeshi banking sector evidenced no correlation between dividend policy and excess market return (Zaman & Sumaiya, 2011). Research in Italian banking sector shows that promotion of capital conservation under internationally agreed frame work proposed by the Basel committee had a significant negative effect on dividend policies of the European banks especially during economic downtrend, when the capital

---

<sup>3</sup>Total payout

<sup>4</sup>Both cash and stock (bonus) dividend

<sup>5</sup>Famous MM Theory.

decreased from the minimum capital requirement, retained earnings could be the primary source for maintaining the capital requirements for efficient and prudent banking system (Broqi, 2010).

Signaling and pecking order theories found positive relationship with the slack of capital and negative relationship among debt and profit distribution while deciding on dividend policies. The same evidence has been found for Brazilian banks (Prociandy and Weber, 2007). Gordon & Walter (1963) have given a unique theory on dividend policy - Bird in the Hand Theory. According to them, cash in hand is the major determinant of dividend policy. Baker & Wurgler (2004) supported Catering Theory, in which they stressed to cater the investor through paying smooth dividends. It is argued that clash among the shareholders and management of a firm can veritably prove agency theory (Jensen & Meckling, 1976).

Akpomi and Nnadi (2008) investigated impact of taxes on dividend policy on Nigerian banks sector of. They argued the significant correlation between dividend policy and corporate taxes, where profit was a major determinant of dividend decisions, and positive correlation between profits, corporate taxes and dividends payments in Nigerian banking sector was observed.

Okpara and Chigozie (2010) investigated drivers of dividend policy in Nigeria. They applied factor analytical approach and concluded three drivers namely, earning with negative impact, current ratio & last year's dividend with positive impact on dividend policy these drivers significant.

Agyei and Yiadom (2011) empirically examined the panel data period 1999-2003 within the Fixed and Random Effect Method, and concluded that profitability, debt, changes in dividends, collateral capacity, growth and age were significant and the determinants of dividend policy while cash had a negative and not significant factor for the banks working in Ghana. They also concluded that profitability theory, agency theory and life cycle theory supported the dividend policy but found no support from free cash flow theory in Ghana. Huda and Farah (2011) investigated key determinants of corporate dividend policy in Bangladesh using "Simple and Multiple Regression Techniques". They argued that the size, liquidity, retained earnings and profitability had a significant relationship with stock and cash payouts.

Haddad et al., (2011) examined dividend policy stability and dividend payout ratio of the banks listed at Amman Stock Exchange (ASE) for the period 2000-2006. They argued that the banks in Amman did not follow stable dividend policies they have targeted payout ratios.

Al-Zubi, Shariff & Al-Khasawneh (2012) investigated the propensity to pay dividends in US banking sector by using Fama & French's (2001) methodology. They concluded that most banks pay dividends at increasing rates, more banks have started paying dividends, and at the same time few had stopped paying dividends.

Irshad, Hashmi & Mehta (2014) empirically examined panel data of Pakistani banking sector having period of 2008-2011 within the Panel Regression Model. They concluded that income is negatively related with dividend payout, Reserves, EPS, and Interest Income also had significant impact on dividend payment pattern in the industry. Hamid et al., (2011) explored impact of taxes on the dividend decisions, concluded that tax rate was the determinant of dividend policy in Pakistani banking industry.

Khoury and Maladjin (2014) investigated factors determining dividend payout policy of Lebanese banks listed at Beirut Stock Exchange using OLS and the dynamic panel regressions on unbalanced panel dataset between the years 2005-2011. They concluded that dividend payout policies are positively affected by the firm size, risk and previous year's dividends, but are negatively affected by the opportunity growth and profitability. The results indicated that firms pay dividends with the aim of reducing agency conflicts and the managers take into consideration the stability of dividends while determining their dividend policies. They also concluded that the Lebanese listed firms prefer to invest their earnings to grow rather than to pay higher dividends.

## Data & Methodology

The research methodology for this study is constructed around the dividend policy of banking sector in Pakistan. It includes the generation of research hypothesis, research design, and definition of the variables, limitations and expected problems in research.

### Data Collection Procedure

This study is based on the secondary data collected available with Banking Supervision Department of State Bank of Pakistan, Security and Exchange Commission of Pakistan and online published audited annual reports of the sample commercial banks.

### Sample Selection

We selected the time period from 2006 to 2013. During the selection of our samples and period for our research, we found that the foreign banks and specialized banks in the banking sector of Pakistan did not pay dividends and finally the banks were selected on the basis of dividend payments whether regular or irregular in order to guard against selection bias (Kim & Mandala, 1992 & Deshmukh, 2003). Finally, only nineteen 19 commercial banks were qualified for our research out of thirty seven (37) banks working in Pakistan from 2006 to 2013.

### Estimation Model

The balanced panel data regression with fixed effects model was used to verify the null hypothesis. In all specifications tax, profitability, cash and cash equivalents, retained earnings, earning per share and leverage were divided by total assets in order to account for differences in size among the institutions and control for heteroskedasticity (Hardy & Patti, 2005). While descriptive analyses were also performed on the panel data for our research.

To investigate the relationship between dividend payouts and the related explanatory variables, the following model is used:

#### I. For cash payout:

$$CP_{it} = \alpha + \beta_1 TAX_{it} + \beta_2 PAT_{it} + \beta_3 CTA_{it} + \beta_4 SLACK_{it} + \beta_5 EPS_{it} + \beta_6 TDA_{it} + \epsilon_{it}$$

#### II. For total payout:

$$TP_{it} = \alpha + \beta_1 TAX_{it} + \beta_2 PAT_{it} + \beta_3 CTA_{it} + \beta_4 SLACK_{it} + \beta_5 EPS_{it} + \beta_6 TDA_{it} + \epsilon_{it}$$

All the notation used in the above models have been explained before,  $\alpha$  captures the unobserved entity-specific effects and  $\epsilon_{it}$  denotes the error term and subscripts  $i$  is for firm and  $t$  is for period of time.

### Rationale of Independent Variables

*Tax Effect<sup>6</sup> (TAX)* - The amount of income taxes paid on annual basis by the banks working in Pakistan used as proxy for tax influence on the profit distribution to the shareholders of the banks. Taxes are found to be the determinant of dividend policy with the significant relationship (Hamid et al., 2011). To account for differences in size among the sample banks and control for heteroskedasticity, taxes were divided by total assets (Graham, 2000).

*Bank Profitability (PAT)* - according to profitability theory, profit size of any bank is a major determinant of dividend policy. Generally, a bank's management recommends dividend payout when the bank earns enough profits. So, profitability works as a principle driver of dividend decision (Leithner & Zimmerman, 1993). We use the PAT (profit after taxes to total assets) as proxy for transaction cost and to account for differences in size among the sample banks and control for heteroskedasticity (Rozeff, 1982).

*Cash Flow (CTA)* - Cash and cash equivalent to total assets used as proxy of bank liquidity position, with free cash flow the managers will be engaged in extravagant practice, still when the

<sup>6</sup>The amount of Tax is the difference between profit/loss before tax and profit/loss after tax.

security for inventors improved (Khan & Ramirez, 1993). The company having free cash flow needs to pay more dividends, which reduces the agency costs of the free cash flow (Jensen, 1986).

*Financial Slack (SLACK)* - The amount of retained earnings is used to demonstrate the banks financial slack-equal to retained earnings divided by total assets. Companies with low growth and few investment opportunities have greater aptitude to pay high dividends (Rozeff, 1982).

*Earnings Per Share (EPS)* - Calculated as net earnings divided by number of shares, earnings per share after tax is used because dividend are paid out of earning after taxes. This study uses EPS has a fraction of total assets to account for differences in size among the sample banks and control for heteroskedasticity (Huda & Farha, 2011).

*Overall Leverage (TDA)* - The total liabilities as fraction of total assets of the bank has been used as proxy of risk (Nazir et al., 2010). Leverage also influences a firm's dividend policy. A high levered firm is more risky in its cash flows (Higgins, 1972)

### **Econometric Estimation**

*Fixed Effects Model* - In our study the cross sections included 19, total panel (balanced) observations are 152 and sample period: 2006 to 2013. The Fixed-Effects analysis can only support inference about the group of measurements, and the actual subject pool we looked at. The benefit of using the Fixed Effects Model is that it allows individual and/or time specific effects to be correlated with the independent variable. While the disadvantage of using the Fixed Effects Model is that the number of unknown parameter increases with the increase in the number of observations. The second disadvantage of using the Fixed Effects Model for estimation is that, it does not allow the estimation of the coefficients that variables are time-invariant (Neyman & Scott, 1948).

### **Hausman Specification**

The "Hausman specification test" was applied to test the significance of fixed effects model or random effects model for our estimations with the following hypothesis:

H<sub>0</sub>: Null Hypothesis: REM is consistent and efficient

H<sub>1</sub>: Alternate Hypothesis: REM is inconsistent

The test validates the results of fixed effects model with corresponding p-value of 0.0000. This confirms the application of fixed effect model.

### **Results**

#### **Model – 1: Combined Results of Regression and Descriptive Analysis**

The Table 1 shows descriptive analysis other results of panel data regression along using the following fixed effects model:

$$CP_{it} = \alpha_0 + \beta_1 TAX_{it} + \beta_2 PAT_{it} + \beta_3 CTA_{it} + \beta_4 SLACK_{it} + \beta_5 EPS_{it} + \beta_6 TDA_{it} + \epsilon_{it} \dots \text{ Model - I}$$

**Table 1: Model 1 Combined Results of Regression and Descriptive Analysis**

	Independent variables						
	C	TAX	PAT	CTA	SLACK	EPS	TDA
Coefficient	88.67523	-0.413720	1.178302	-0.629850	-0.736498	0.846465	-0.688323
Prob.	0.0003***	0.8208	0.0093***	0.0342**	0.1000*	0.0119**	0.00010***
Mean	-	0.59669	1.03318	10.7381	1.02128	3.68314	89.0560
Std. Dev	-	2.5423	5.16532	4.97013	9.7720	9.0811	7.4254
Observations	152	152	152	152	152	152	152

Level of Significance: \* 10%, \*\* 5%, \*\*\* 1%

Table 1 shows that all the variables are significant in explaining the dividend cash payout policy in banking sector of Pakistan except TAX. The F-statistic value of the model is 24.22211 with Prob.F statistic at 0.0000000 is showing that the model is significant at 1%. The value of R<sup>2</sup> is 0.81 -

relatively low due to irregular payments of cash dividend in banking sector of Pakistan. This R2 indicates variation in cash payout as well captured by the independent variables. The value of R2 and Durbin-Watson test value of 1.623351 shows best fit of the model without having any problem of autocorrelation. Further, PAT with 1% prob. with the mean value of 1.033% the maximum value of 26.94 and the minimum value of -10.43% is the highest influential variable in determining the Cash dividend Policy in banking sector of Pakistan followed by TDA with 1% prob. with the mean value of 89%, maximum value of 100.84% and minimum value of 50.23%, EPS with 5% prob. the mean value of 3.68% the maximum value of 24.47% and the minimum value of -41.29%, CTA with 5% prob. With the mean value 10.73% and SLACK with 10% prob. the mean value 1.022% the maximum value of 50.62% and the minimum value of 3.02%. These results supported profitability theory, packing order theory, free cash flow theory and agency cost theory but we found no support of tax theory in banking sector of Pakistan.

**Model – 2: Combined Results of Regression and Descriptive Analysis**

The Table 2 shows descriptive analysis other results of panel data regression along using the following fixed effects model.

$$TP_{it} = \alpha_0 + \beta_1 TAX_{it} + \beta_2 PAT_{it} + \beta_3 CTA_{it} + \beta_4 SLACK_{it} + \beta_5 EPS_{it} + \beta_6 TDA_{it} + \epsilon_{it} \quad \text{Model - II}$$

**Table 2: Model 2 Combine Results of Regression and Descriptive Analysis**

	Independent variables						
	C	TAX	PAT	CTA	SLACK	EPS	TDA
Coefficient	76.43785	-0.924171	1.058553	-0.494736	-0.785240	1.466718	-0.52475
Prob.	0.0002***	0.6525	0.0051***	0.1000*	0.1946	0.0023***	0.0133**
Mean	-	0.59669	1.03318	10.7381	1.02128	3.68314	89.0560
SD	-	2.5423	5.16532	4.97013	9.7720	9.0811	7.4254
Observations	152	152	152	152	152	152	152

Level of Significance: \* 10%, \*\* 5%, \*\*\* 1%

In the 2nd model, the regression results show that all the variables are significant in explaining the total dividend payout policy in banking sector of Pakistan except TAX, SLACK. The F-statistic value of our model is 21.04344 (Prob.F statistic 0.0000000) shows that our model is significant at 1% and all proxies of independent variables and dependent variable explaining each other. The value of R-squared is 80% which indicates the variation in independent variable is explained by the independent variables. The value of R-squared is less than and the value of Durbin-Watson test 1.824537 stat which shows that our model is best fit and there is no problem of autocorrelation. The dividend total payout was taken as dependent variable and TAX, PAT, CTA, SLACK, EPS and TDA were taken as independent variables. Balanced panel date regression with fixed effect was utilized to verify the null hypothesis. All of the independent variables - PAT, CTA, TDA and EPS reported statically significant results but TAX and SLACK reported insignificant results. The results also reveal that PAT is statically significant at 1% prob. with the mean value of 12.99%. The maximum value of 125% and minimum value of 0% is the highest influential variable in determining the dividend Policy in banking sector of Pakistan followed by the EPS is statically significant at 1% prob. with the mean value of 3.68% the maximum value of 24.47 and the minimum value of -41.29%. CTA is statically significant at 10% prob. with the mean value of 10.73% with the standard deviation 4.97 and the maximum and minimum values 28.05% and -3.02% respectively. These results support profitability theory, agency cost theory and free cash flow theory but don't support tax theory, and packing order theory in banking sector of Pakistan.

## **Conclusion, Recommendations and Limitations**

### ***Conclusion***

In the 1st model, dividend cash payout was taken as dependent variable and TAX, PAT, CTA, SLACK, EPS and TDA were taken as independent variables. Among all of the independent variables TAX reported insignificant results and PAT, SLACK, CTA, EPS, TDA reported significant and the determinant of Cash Dividend policy in the banking sector of Pakistan. In our findings PAT with 1% prob. with the mean value of 1.033% the maximum value of 26.94 and the minimum value of -10.43% is the highest influential variable in determining the Cash dividend Policy in banking sector of Pakistan followed by TDA with 1% prob. with the mean value of 89%, maximum value of 100.84% and minimum value of 50.23%.

The results of first model with Cash Payout as dependent variable, supported the profitability theory, packing order theory, free cash flow theory and agency cost theory and we found no support of tax theory in banking sector of Pakistan. The relationship of cash dividend with the interpreter variables could have been shown better scenario, if the banks shall pay cash dividend on regular basis. The 2nd model represents actual dividend policy taken by the banks in the banking industry of Pakistan between the periods 2006 to 2013.

For the 2nd model, total dividend - cash payout and stock dividend was taken as dependent variable and TAX, PAT, CTA, SLACK, EPS and TDA as independent variables. Among all of the independent variables PAT, CTA, TDA and EPS reported statically significant results and TAX and SLACK reported insignificant results.

In our findings PAT is statically significant at 1% prob. with the mean value of 12.99%. The maximum value of 125% and minimum value of 0% is the highest influential variable in determining the dividend Policy in banking sector of Pakistan followed by the EPS is statically significant at 1% prob. with the mean value of 3.68% the maximum value of 24.47 and the minimum value of -41.29%. CTA is statically significant at 10% prob. with the mean value of 10.73% with the standard deviation 4.97 and the maximum and minimum values 28.05% and -3.02% respectively.

The results of our second model with total payout as dependent variable supported only profitability theory, agency cost theory and free cash flow theory and we found no support of tax theory, packing order theory in banking sector of Pakistan. Our results are consistent with the findings of MsClusky & Broderick (2010) for Dublin and Irish Financial market, Procianny and Weber (2007) for Brazilian banking sector, Agyei & Yiadom (2011) for banking sector Ghana, Huda & Farha (2011) for banking sector of Bangladesh, Z.Sumaiya (2011) for Bangladesh, Al-Haddad, Al-Zorqan, Musa and Noor (2011) for Amman Stock Exchange, Kowalewaski (2007) for Poland, Broqi (2010) for Italian banking, Weber (2007) for Brazilian banking, Esteban and Perez (2001) for Europeans banking sector.

### ***Recommendations***

a) Our research is useful for the senior management of commercial banks as regards fixation of the dividend policy. It has been observed through various sources that management of banks, operating in Pakistan, is not paying more attention to the dividend policy, because there were found irregular patterns for both cash dividends and stock dividends. During 2006-13, on the average, banking industry only paid 9.6% cash dividend and 3.5% stock dividend on the face value of shares.

b) The amount of dividend payment is low due to high retention rate in the banking sector of Pakistan, so, Securities and Exchange Commission of Pakistan (SECP) should discourage the tendency of high plow back ratio.

c) We observed that profitability appeared to be the most significant determinant of dividend policy in the banking sector of Pakistan. Due to the vulnerability of bank's profitability and due to

the economic changes in Pakistan; it is not viable for banks to formulate a dividend policy that follows a constant payout but a minimum rate for dividend payments according to one year money market deposit rate can safeguard the interests of the risk averse investors in the market, and also, Agency Problem can be dealt with to a certain degree.

d) Our research opens the doors for the prospective researchers, and future studies can be helpful for tracing out the drivers of dividend policy for funds management companies (e.g. mutual funds) including insurance companies operating in Pakistan.

e) Capital gains must be a taxable income for the market participants.

### ***Limitations of the Study***

1) Initially, we took thirty seven commercial banks for our research but we found that the foreign banks and specialized banks operating in Pakistan did not pay any dividend during the study period. So, we finally selected only nineteen commercial banks, which paid dividends on regular or irregular basis during the period from 2006 to 2013.

2) Despite the significance of dividends, there is no conventional methodology for senior management to decide an appropriate level of payout for investors. The cash dividend rather than stock dividends is most commonly paid in banking industry.

3) According to the PR-11 of State Bank of Pakistan, banks shall not pay any amount of dividend on their shares unless:

a) they meet up the minimum capital requirements, such as laid down by the State Bank of Pakistan from time to time,

b) all their classified assets have been fully and duly provided for in accordance with the Prudential Regulations, to the satisfaction of the State Bank of Pakistan,

c) All the requirements laid down in Banking Companies Ordinance, 1962 relating to payment of dividend are fully complied.

4) There is a dearth of literature for this research with reference to Pakistan as no major work has so far been done in Pakistan on this issue.

5) The literature about dividend policy of banking sector is scarce. Due to the distinctive characteristics of banking system<sup>7</sup>. The major part of dividend policy in banking sector empirically founded, had been excluded from the sample of financial sector (Lintner, 1956; Fama & Babik, 1968; Razeffi, 1982; Alliet al. 1993; Fenn & Liang, 2001). Therefore, we cannot use these models in our research.

### **References**

- Afza, T., C., and Mirza, H. H. (2010). Ownership Structure and Cash Flows As Determinants of Corporate Dividend Policy in Pakistan. *International Business Research*, 3(3): 210–221.
- Agyei, S. K., & Marfo-Yiadom, E. (2011). Dividend Policy and Bank Performance in Ghana. *International Journal of Economics and Finance*, 3(4): 202–207.
- Ahmed, H. (2009). The Determinants of Dividend Policy in Pakistan. *International Research Journal of Finance and Economics*, 29(29): 111-125.
- Akpomi, M., and Nnadi, M. (2008). The Effect of Taxes on Dividend Policy of Banks in Nigeria. *International Research Journal of Finance and Economics*, 19(7): 48-55.
- Al-Amarneh, A., Al-Kilani, Q., and Kaddumi, T. (2011). Institutional Preferences: Evidence from the Jordanian Stock Market. *International Journal of Economics and Finance*, 3(5): 97–103.
- Al-Khasawneh, J., Shariff, M., and Al-Zubi, K. (2012). Propensity to Pay Dividends: Evidence from US Banking Sector. *International Journal of Economics and Finance*, 4(9): 130–141.

<sup>7</sup>Irregular patterns of dividend policy, difference in the nature, complexity and high speed of adjustments.



- Al-kuwari, D. (2009). Determinants of the Dividend Policy in Emerging Stock Exchanges : The Case of GCC Countries. *Global Economy & Finance Journal*, 2(2): 38–63.
- Al-kuwari, D. (2010). To Pay or Not to Pay : Using Emerging Panel Data to Identify Factors Influencing Corporate Dividend Payout Decisions. *International Research Journal of Finance and Economics*, 42(42): 30-36.
- Allen, F., Bernardo, A. E., & Welch, I. V. O. (2000). A Theory of Dividends Based on Tax Clienteles. *The Journal of Finance*, (6): 2499-2536.
- Alli, K. L, Khan, A. Q. & Ramirez, G. G. 1993. Determinants of Corporate Dividend Policy: A Factorial Analysis. *The Financial Review*, 28(4), pp. 523–547.
- Al-malkawi, H. N. (2007). Determinants of Corporate Dividend Policy in Jordan : An Application of the Tobit Model. *Journal of Economic and Administrative Sciences*, 23(2): 44–70.
- Al-malkawi, H. N., & Rafferty, M. (2010). Dividend Policy : A Review of Theories and Empirical Evidence. *International Bulletin of Business Administration*, 9(9): 171–200.
- Al-Malkawi, N. H., Rafferty, M., & Pillai, M. R. (2010). Dividend Policy: A Review of Theories and Empirical Evidence, *International Bulletin of Business Administration*, 9. 171-200.
- Alvarez, J., and Arellano, M. (1998). The Time Series and Cross-Section Asymptotic of Dynamic Panel Data Estimators. *Econometric Society European Meeting, Berlin. Working Paper, LV (6) 9808*.
- Al-Yahyaee, K. H., Pham, T., and Walter, T. (2010). Dividend Stability in a Unique Environment. *Managerial Finance*, 36(10): 903–916.
- Ameer, R. (2008). Product Market Competition, Regulation and Dividend Payout Policy of Malaysian Banks. *Journal of Financial Regulation and Compliance*, 16 (4): 318–33.
- Amidu, M. and Abor, J. (2006), Determinants of the Dividend payout ratio in Ghana, *The Journal of Risk Finance*. 7(2): 136-145.
- Amir Rubin and Daniel R. Smith.(2009) Institutional Ownership, Volatility and Dividends. *Journal of Banking and Finance*, 33(4): 627-639.
- Arellano, M. (2003b). Discrete Choices with Panel Data. *Simposio de Analisis Economico, Universita Autnoma de Barcelona, Bellaterra. Working Paper*, 19–21.
- Arellano, M. (2003c). Modelling Optimal Instrumental Variables for Dynamic Panel Data Models. *European Meeting of the Econometric Society, Venice. Working Paper*, (0310).
- Asif, A., Rasool, W., and Kamal, Y. (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.
- Baker, H. K. (n.d.). How Managers of Financial versus Non-Financial Firms View Dividends : The Canadian Evidence How Managers of Financial versus Non-Financial Firms View Dividends, *University of Ottawa, Working Paper* , (613): 1–28.
- Baker, M., and Wurgler, J. (2004). A Catering Theory of Dividends. *The Journal of Finance*, (3), 1125-1166.
- Barclay, M. J., Smith, C. W. Jr., and Watts, R. L. (1995). The Determinants of Corporate Leverage and Dividend Policies. *Journal of Applied Corporate Finance*, 7 (4), 214-229.
- Bodla, B. S., Pal, K., and Sura, J. S. (2007). Examining Application of Lintner's Dividend Model in Indian Banking Industry. *The IUP Journal of Bank Management*, 6 (4), 40-59.
- Boldin, R., and Leggett, K. (1995). Bank Dividend Policy as a Signal of Bank Quality. *Financial Services Review*, 4(1), 1-8.
- Brealey, R.A., S.C. Myers, et al., 2005. *Principles of Corporate Finance*, McGraw-Hill, New York.
- Chen, J. (2009). Determinants of Dividend Policy : The Evidence from New Zealand. *International Research Journal of Finance and Economics*, 34 (34), 18-28.

- Chigozie, G. (2010). A Diagnosis of the Determinant of Dividend Pay-Out Policy in Nigeria : A Factor Analytical Approach. *American Journal of Scientific Research*, 8(8), 57–67.
- Chigozie, O. G. (2010). A Diagnosis of the Determinant of Dividend Pay-Out Policy in Nigeria: A Factor Analytical Approach, *Journal of Scientific Research*, 8, 57-67.
- Clarke, P., Steele, F., and Vignoles, A. (2010). The Choice between Fixed and Random Effects Models, The Institute for the Study of Labor (IZA), Germany. Working Paper, No (5287), 1-34.
- Collins, M. C., Saxena, A. K., and Wansley, J. W. (1996). The Role of Insiders and Dividend Policy : A Comparison of Regulated and Unregulated Firms. *Journal of Financial and Strategic Decisions*, 9(2), 1–9.
- Dickens, R. N., Casey, K. M., and Newman, J. A. (2002). Bank Dividend Policy : Explanatory Factors. *Quarterly Journal of Business and Economics*, 41(2), 3-12.
- Eriotis, N. (2007). A Bird's Eye View of the Dividend Policy of the Banking Industry in Greece. *International Research Journal of Finance and Economics*, 11(11), 21-29.
- Frankfurter, George M., & Bob G. Wood. (1997). The Evolution of Corporate Dividend Policy. *Journal of Financial Education*, 23(1), 16–32.
- George W. Fenn & Nellie Liang (2001). Corporate Payout Policy and Managerial Stock Incentives. *Journal of Financial Economics*, 60(1), 45-72.
- Gordon, M. J. (1963). Optimal Investment and Financing Policy, *Journal of Finance* 18, 264-272
- Gordon, M.S., 1959. Osmotic and ionic regulation in Scottish brown trout and sea trout (*Salmo trutta* L.). *Journal of Experimental Biology*, 36(2): 253-260.
- Graddy, D. B., Karna, A. S., Quarterly, S., and Spring, N. (2011). Dividend Policy and the Return on Bank Holding Company Stock. *Quarterly Journal of Business and Economics*, 25(2): 3–21.
- Haddad, W. A.-. (2011). The Effect of Dividend Policy Stability on the Performance of Banking Sector Listed on Amman Stock Exchange. *International Journal of Humanities and Social Science*, 1(5), 201–205.
- Hamid, Z., Hanif, C. A., and Saif-ul-malook, S. (2012). The Effect of Taxes on Dividend Policy of Banking Sector in Pakistan. *African Journal of Business Management*, 6(8), 2951–2954.
- Higgins, (1972). The corporate dividend-saving decision, *Journal of Financial and Quantitative*, 7(2), 1527-1541.
- Huda, F., and Farah, T. (2011). Determinants of Dividend Decision : A Focus on Banking Sector in Bangladesh. *International Research Journal of Finance and Economics*, 77(77), 33-46.
- Javid, A. Y. (2011). The Dividend Policy in Manufacturing Sector of Pakistan: The Perception of Corporate Managers. *Journal of Economics and Behavioral Studies*, 3(1), 63–75.
- Jensen, M. C. (1986). Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *The American Economic Review*, 76(2), 323-329.
- Jensen, Michael C. & William H. Meckling. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownerships Structure, *Journal of Financial Economics*, 3(4), 305-306.
- Klaus Gugler.(2003) Corporate Governance, Dividend Payout Policy, and Interrelation between Dividends, R&D, and Capital Investment. *Journal of Banking & Finance*, 27(7), 1297-1321.
- Kowalewski, O., and Berlin, D. I. W. (2007). Corporate Governance and Dividend Policy in Poland. *World Economy Research*, 48 (22), 1–35.
- L. Oksendac. Dividend Policy in Norwegian Banking before 1914.(2011). *Financial History Review*, 18(02), 217-241.
- Lintner, John (1956). "Distribution of Incomes of Corporations among Dividends, Retained Earnings, and Taxes." *American Economic Review*, 46(2), 97-113.

- Lintner, John. (1962). Dividends, Earnings, Leverage, Stock Prices and the Supply of Capital to Corporations, *Review of Economics and Statistics*, 44(3): 243-269.
- Litzenberger, R.H. and K. Ramaswamy, (1982). The Effects of Dividends on Common Stock Prices Tax Effects or Information Effects? *The Journal of Finance*, 37(2), 429-443.
- Maladjian. Christopher & Khoury El. Rim (2014). Determinants of the Dividend Policy: An Empirical Study on the Lebanese Listed Banks. *International Journal of Economics and Finance*; 6(4), 240-256.
- Marfo-yiadom, E. (2011). Determinants of Dividend Policy of Banks in Ghana. *International Research Journal of Finance and Economics*, 61(61), 99-108.
- McCluskey, T., Broderick, A., Boyle, A., Burton, B., and Power, D. (2010). Evidence on Irish Financial Analysts' and Fund Managers' Views about Dividends. *Journal of Qualitative Research in Financial Markets*, 2(2), 80-99.
- McGraw-Hill. Black F., 1976, 'The Dividend Puzzle', *Journal of Portfolio Management*, (2), 5-8.
- MEHAR, A. (2011). Corporate Governance and Dividend Policy. *Pakistan Economic and Social Review*, 43(1), 93-106.
- Merton, H. Miller and Franco Modigliani, 1961. Dividend Policy, Growth and Valuation of shares. *Journal of Business*, 34(4), 411-433.
- Michaely, Roni & Allen, Franklin, Payout Policy (April 2002). Available at SSRN: <http://ssrn.com/abstract=309589> or <http://dx.doi.org/10.2139/ssrn.309589>
- Miller, M. and F. Modigliani, (1961), Dividend Policy, Growth Valuation of Shares. *Journal of Business*, 34(4), 411-433.
- Miller, M.H. and M.S. Scholes (1978). Dividends and taxes. *Journal of Financial Economics*, 6(4), 333-364.
- Ming Dong, Chris Robinson and Chris Veld., (2005). Why Individual Investors want Dividends. *Journal of Corporate Finance*, 12(1), 121-158.
- Mori, Naoya., (2010). Tax Clientele Effects of Dividends under Intertemporal Consumption Choices. *Journal of Banking & Finance*, 34(5), 1089-1097.
- Myers, S. C., and Majluf, N. S. (1984). Corporate Financing and Investment Decisions when Firms have Information that Investors Do Not Have. *Journal of Financial Economics*, 13 (2), 187-221.
- Nazir, M. S., and Ahmed, F. (2010). Determinants of Stock Price Volatility in Karachi Stock Exchange: The Mediating Role of Corporate Dividend Policy. *International Research Journal of Finance and Economics*, 55 (55), 100-107.
- Neyman, J. & Scott, E.J. (1948). Consistent Estimates Based on Partially Consistent Observations. *Econometrica*, 16 (1), pp. 1-32.
- Nnadi, M. A. (2008). The Effect of Taxes on Dividend Policy of Banks in Nigeria. *International Research Journal of Finance and Economics*, 19 (19), 48-55.
- P. Brockman, E. Uncu. (2011). Earned/Contributed Capital, Dividend Policy, and Disclosure Quality. *Journal of banking and Finance*, 35(7), 1610-1625.
- Patti. E. B. D. & Hardy. D. C. (2005). Financial Sector Liberalization, Bank Privatization, and Efficiency: Evidence from Pakistan. *Journal of Banking & Finance*, 29, (8-9), 2381-2406
- Rozeff, M. S. (1982). Growth, Beta and Agency Costs as Determinants of Dividend Payout Ratios. *Journal of Financial Research*, 5(3), 249-259.
- Sharon, L., and Frank, W. (1996). What Factors Motivate The Corporate Dividend Decision? *ASBBS E-Journal*, 1, 97-107.
- Smith, C. and R. Watts, (1992). The Investment Opportunity Set and Corporate Financing, Dividend and Compensation Policies, *Journal of Financial Economics*, 32, 263-292.

- The Banking Companies Ordinance, (1962). Government of Pakistan, (LVII of 1962):21.
- Theis, J., and Dutta, A. S. (2009). Explanatory Factors of Bank Dividend Policy: Revisited *Managerial Finance*, 35 (6), 501–508.
- Walter, J. E., (1963). Dividend Policy: Its Influence on the Value of the Enterprise, *Journal of Finance*, 18, 280-291.
- Wei, J. G., Zhang, W., and Xiao, J. Z. (n.d.). Dividend Payment and Ownership Structure in China. *Advances in Financial Economics*, 9 (04), 187–219.
- Zaman, S. (2011). Is Dividend Policy An Important Determinant Of Market Performance : Focus on Private Banks of Bangladesh. *World Review of Business Research*, 1(4), 135–141.
- Zameer H., Rasool S., Iqbal S., and Arshad U. (2013). Determinants of Dividend Policy: A Case of Banking Sector in Pakistan. *Middle-East Journal of Scientific Research*, 18 (3), 410-424.
- Zhou, P., and Ruland, W. (2011). Dividend Payout and Future Earnings Growth. *Financial Analysts Journal*, 62(3), 58–69.