



Determinants of Dividend Policy in Services Industry of China

Adnan Abbas, Muhammad Saad Ameer

Abstract—The dividend policy analysis based upon the service industry in china. The data is based on the most recent years from 2014 to 2016. It includes forty-two organizations of communication, information, and transportation sector. dividend pay-out determines the total revenue by the organization(positively). It is presumed that the total sale plays a positive part in deciding dividend pay-out ratio of the organization as it increases earning per share, and strength of equity. The debt equity ratio is significant but due to the dividend pay-out of the organization will decrease.

Keywords-dividend pay-out policy, firm sale, firm debt, China services industry, shareholder equity, firm profitability.

I. INTRODUCTION

Dividend policy is the vital part of the corporate financial management approach. Financial market analysts have engaged with outlined and examine dividend policy (DP). DP is of two types; one is managed and second is residuals. The residual dividend policy explains that the dividend is paid after making the investment using net present value basis. The dividend policy should reflect in the share price to satisfy the shareholders and investors. The best dividend policy should reflect in maximizing of the share price. The organization makes profits after the operations of one year, therefore top management makes decisions for distribution of profits and retained readings. The management also decides the portion of retained reading and dividend per share announcement.

Retained earnings and dividend pay-out:

The dividend is the amount of profit given to the shareholders against the share held by them. The organization may offer the dividend in shape of cash or stocks. The profits earned by the company has two aspects; firstly, to distribute in shape of dividend and secondly to retain the profits to make the investment to get more earnings. If the organizations make a large portion of the profit and invest in operations of business the share price increase reflects as the boom in business.

Modigliani-miller(MM) theorem:

The theory explains that the division of retained earnings(RA) in investment or dividend does not change the value of firms. The investment pattern and earnings from investment effect the share price or increase in the value of the asset.

There are following assumptions of the MM approach:

- The investor has rational behavior and has a perfect capital market.
- The information is freely available to investors
- There is no time lege and transaction cost
- Securities are divisible
- There is no flotation cost and taxes.
- The dividend decision does not affect the investment decisions.

Dividend irrelevant theory:

The theory explains that organizations dividend policy (DP) has no effect on market share value and cost of capital. The Modigliani and Miller (1961) explains that the dividend policy (DP) is passive residual determined by the need of investment for the firms.

As explained by Modigliani and Miller (1961), it doesn't matter how firms divide the earnings between internal retentions and dividend payments. In the MM views, the managers try to find out the optimal dividend policy. They develop the theory of assumptions given above.

Walter model:

It shows that the relevant dividend policy and bearing the share value. This theory also based on some assumptions which are as follows

- The only source of investment is retrained earnings. There is no option for external financing
- There is the consistent cost of capital and the return on investment. The risk on investment remains same even if the fresh investment is taken in business.
- Their business has endless life i.e. not closing in future
- The firm's decisions about the dividend to give or not to give based upon the strong relationship of investment and dividend.

Gorden model:

Myron J. Gorden develops a model which supports dividend relevant and believes that the regular dividends affecting the share price.The assumptions of the theory are same as Walter however the two additional assumptions proposed that product of retention ratio and rate of return given the growth rate of the firm.

II. LITRATURE REVIEW

In the modern finance, the dividend has remined the great enigmas. In the field of financial management, the dividend policy is major decision area. Therefore, the extensive literature is available on the subject. The distribution of

Adnan Abbas : Herbin Institute of Technology, Adnan.abbas001@yahoo.com
Muhammad Saad Ameer: National University of Modern Languages
Islamabad, saad209@gmail.com.com

earnings among the shareholders of the firms in preparation to the shareholding called dividend. The management long-term decision to utilize cash flows from various activities of business and the amount of return to shareholders called dividend policy (Khan and Jain, 2005).

III. FIRM PROFITABILITY

The study conducted by Adaoglu (2000), Amidu and Abor (2006), Belans et al (2007) shows that the total income has a significant and positive effect with dividend pay-out, thus it indicates the firm's positive EPS (earning per share) pay more dividend.

E.F Fama and K.R French (2001) stated that the dividend pay-out in the USA found declined sharply from 66% to 20% from 1978 to 1999. Only the one fifth companies paid the dividend. They also stated that the probability that firms would pay dividend positive associated with profitability.

Naceur et al (2006) studied the 48 firms for the dividend policy during the period of 1996-2002 listed in Tunisian Stock Exchange. The result shows that highly profitable firms could afford large cash flows thus paid a dividend in high value. Li and Lie (2006) stated that the profitable and large firms likely to rise dividends if past dividend policy (DP) shows low cash flows and debt ratio. Ferris et al. (2006) found that the relationship between firm's earnings and its ability to pay a dividend and shows that it was a positive association of relationship in unexpected dividend and earnings.

H1: the firm's profitability is positively associated with dividend policy:

IV. FIRMS SALES

E.F Fama and K.R French (2001) conducted the study in firms those paying dividends concludes that the top factor or dividend payment is firm size, investment opportunities, and profitability. The study of Baker and Powell's (2000) concludes that major determinate is an expected level of future earnings along with continuity with previous years dividends. The Aivazian, Booth, and Cleary (2003) stated that return of equity and profitability positively correlated with the pay-out ratio of dividend size.

H2: the turnover is significantly associated with dividend pay-out policy

V. SHAREHOLDER EQUALITY OF FIRM

Dickens, Casey, and Newman (2002) conducted the study in the impact of ownership and they conclude that management owned organizations have lessor pay-out ratio in the banking sector. The management owned firms have lessor agency cost., Dab Silva and Renneboog (2002) stated that the shareholders in relation to the banking industry omit their dividends. A study conducted by Holfer et al (2004) stated that institutional holding and bank control had not significantly determinant for dividend pay-out.

H3. The firm's shareholder equity positively associated with dividend pay-outs policy.

VI. FIRMS DEBT

If the firms unable to pay his debts as its fix financial charges contains capital amount plus interest leads to firm's liquidations. The relationship in debt investment and the dividend is similar in most of the countries. the theory of sale growth return on investment, current ratio, debt to equity ratio showing the estimated signals in a more reliable way where the organizations financed through the capital market. a study conducted by Hu and Liu, (2005) stated that there is a significant positive relationship in cash dividend and the cash pay-out earnings, also found that there is a negative relationship in debt to total asset and dividends. He claims that the current earnings do not reflect the firm's ability to pay a dividend.

H4: The firm's debt is positively associated with dividend pay outs policy.

VII. CONCEPTUAL MODEL

This framework includes discussion on determinants of dividend pay-out policy in the service industry (information communication and transport). The dependent variable is dividend payout policy. The independent variables are firm's profitability, it states the financial of the business. It shows the firm generating enough revenues, it unable the organization to pay out the dividend thus the firm's profitability is a crucial factor for the dividend pay-out. The second independent variable is sales. Sales determine the volume of the business. Increase in sale refers to the increase in profitability of the business. Another variable is shareholder equity, it refers to the amount of capital that contributed by the shareholders. There is also portion of the debt in the organization but the dividend only paid to shareholder. Another independent variable is firm's debt. There is two type of debts one is long term second is short term. While calculating the debt to equity ratio both type summed up and use for analysis. The foremost determinant of the dividend pay-out is a debt to equity ratio. If the organization has the high debt then it's not possible to pay out the dividend because of payment of interest. The data is gathered from financial statement of the organization to calculate the ratios.

VIII. ECONOMETRIC MODEL

The above conceptual model provided was used as a base to specify the econometric model as followings:

$$DP = \beta_0 + \beta_1FP + \beta_2FS + \beta_3TE + \beta_4TD + e$$

In this model DP stands for dividend pay-out, FP stands for firm's profitability, FS stands for firm sales, TD stands for total debts of the firm.

This model modified in this way that we have taken all variable in ratios i.e.,

$$TD TA= BO + B1NPTA + B2TSTA + B3TETA+ B4TDTE + E$$

IX. METHODOLOGY

To conclude this research quantitative method is used. This methodology relies on collection and analysis of data and statistics. The statistical tests applied and conclude the research are discussed.

This analysis of the dividend policy of selected China services industry, based on data for the most recent three years (20014, 2015 and 2016) time, and includes 42 organizations related to transportation, communication, and information sector of the services industry. The organizations selected randomly from the SSE (Shanghai Stock Exchange). The study required to investigate the relationship between the variable based on time. The data is collected from secondary resources and get from the financial statements of the respective organizations. Data is collected for all the variables form the financial statement.

The dividend policy analysis based upon the service industry in China. The data is based on the most recent years from 2014 to 2016. It includes forty-two organizations of communication, information, and transportation sector. dividend pay-out determines the total revenue by the organization(positively).

It is presumed that the total sale plays a positive part in deciding dividend pay-out ratio of the organization as it increases EPS (Earning per share) and strength of equity. The debt equity ratio is significant but due to the dividend pay-out of the organization will decrease.

X. DATA ANALYSIS

Linear Regression (LR)model used for analysis. Linear regression(LR) attempts to model the regression equations were developed for independent variable X and five determinants(X) each by using a dependent variable Y. Data for three years i.e. 20014, 2015 and 2016 based on SSE (Shanghai Stock Exchange) relationship between the variables.

XI. RESULTS AND DISCUSSION

Table 1 shows the details of descriptive statistics of variables that affect the Information, communication, and transportation in Chania services industry listed company in Stock SSE-100 during the period of 2014, 2015 and 2016. Dividend pay-out policy, which is the dependent variable in the model ranges from 0704 to .027496 with Mean value, standard deviation .02456.

Descriptive Statistics	N	Min	Max	Mean	Std. D
Dividend/ass ets-ratio	42	.0000	.0704	.027496	.0245655
Debt/Equity-ratio	42	.1795	2.9229	1.086238	.7055657

Equity/assets -ratio	42	.2549	.8478	.530590	.1660461
Profitability/ asset-ratio	42	.0143	.3032	.136790	.0851606
Sales/asset-ratio	42	.1042	1.0409	.545870	.2748350
Valid N (list wise)	42				

The ANOVAs table summarizes results from a leaner regression (LR) analysis. Anova shows the goodness of fit of the data. The level of significance was 5%. The P value shows the .000 which is less then alpha. Hence the data shows the goodness of fit.

ANOVA ^s						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.012	4	.003	8.415	.000 ^a
	Residual	.013	37	.000		
	Total	.025	41			
Predictors: (Constant), Profitability/asset-ratio Debt/Equity-ratio Equity/assets-ratio Sales/asset-ratio						
Dependent Variable: Debt/asset-ratio						

The explanatory variables for this model are Dividend pay-out policy, firm profit, firm sales firm shareholder equity and firm debt retention Ratio,

The table given below shows the value of anova. At the level of significance 5% the anova table shows the sig value which is less then alpha.

Liner regression is used to test the effect of firm profitability, firm sales, firm Shareholder equity and the firm debt in services industry on the dividend policy pay-out

The variables used in the analysis have been explained along with their significance to the dividend decision.

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.131	.045		2.887	.006
Profitability/as set-ratio	.054	.052	.186	1.029	.310
Debt/Equity-ratio	-.035	.013	-1.016	-2.632	.012
Equity/assets-ratio	.168	.053	1.136	3.171	.003

Sales/asset-ratio	.031	.017	.342	1.806	.079
a. Dependent Variable: Debt/asset-ratio					

CONCLUSION

It concluded that the total sale plays vital and positive role in determining dividend pay-out practices of the company as it increases dividend to shareholder, and strength of the equity in total assets, and debt-equity ratio are also statistically significant but due to these dividend pay-outs of the companies will decrease

In the services sector, the dividend pay-out determines by the total sale of the company (positive), the strength of the equity in total assets (negative), and the debt/equity ratio (negatively). Other factor determinants, net profit of the firms appear statistically insignificant. It concluded that total sale plays a vital and positive role in determining dividend pay-out practices of the company as it increases the dividend to shareholder, and strength of the equity in total assets, and debt-equity ratio are also statistically significant but due to this dividend pay-out of the companies will decrease.

REFERENCES

[1] Allen D. E. and Rachim V. S. (1996) "Dividend policy and stock price volatility: Australian Evidence", *Journal of Applied Economics*, Vol. 6 pp. 175-188.

- [2] Al-Malawi, H.N. (2007), Determinants of corporate dividend policy in Jordan: an application of the To bit model, *Journal of Applied Accounting Research*, Vol. 23, pp. 44-70.
- [3] Baskin, J. (1989), Dividend policy and the volatility of common stock, *Journal of Portfolio Management*, Vol. 15, pp. 19-25.
- [4] Bhattacharya, S. (1979), Imperfect information & dividend policy and the 'bird in hand' fallacy, *The Bell*
- [5] Black F. (1976), "The dividend puzzle", *Journal of Portfolio Management*, Vol. 2, pp. 5-8.
- [6] Cynthia A. Tama. (2012). *Company Disclosure In Indonesia: Corporate Governance Practice*,
- [7] Ownership Structure, Competition And Total Assets, *Asian Journal of Business and Accounting*, 5(1), 75-108.
- [8] Gordon, M.J. (1959), Dividend, Earnings and Stock Prices, *Review of Economics and Statistics*, 11, May, pp 99-105
- [9] Gordon, M.J. and Shapiro, E. (1956), Capital equipment analysis: the required rate of profit, *Management Science*, Vol. 3, pp. 102-10.
- [10] Hashemijoo, M., Aref M. Ardekani, and Nejat Y. Multimedia, (2012), "The Impact of Dividend Policy on Share Price Volatility in the Malaysian Stock Market", *Journal of Business Studies Quarterly*, Vol. 4, No. 1, pp. 111-129.
- [11] Hussainey, K., Mgbame, C. O., & Chijoke-Mgbame, A. M. (2011). Dividend Policy and Share Price Volatility: UK Evidence. *Journal of Risk Finance*, 12 (1), 57 - 68.
- [12] Jecheche, Petros (2012), Dividend policy and stock price volatility: a case of the Zimbabwe stockexchange. *Journal of Finance & Accountancy*; Vol.10, 1-13, available at:<http://connection.ebscohost.com/c/articles/78392038/dividend-policy-stock-price-volatility-case-zimbabwe-stock-exchange>.
- [13] Kleinbaum, D. G.; L. L. Kupper; K. E. Muller and A. Nizam (1998), *Applied Regression Analysis and Other Multivariate Methods*, 3rd Edition, Duxbury Press, Pacific Grove.
- [14] Miller, M.H. and Modigliani, F. (1961), Dividend policy, growth and the valuation of shares, *The Journal of Business*, Vol. 34, pp. 411-33.