

Dividend Payment Decision and Earned/Contributed Capital Mix: A Test of Life Cycle & Catering Theory

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Purpose of this research is to examine the effects of catering incentives and earn contributed capital mix on propensity to pay and decision to change dividend for Pakistani manufacturing concerns. Basic intent is to validate the most recently developed dividends theories with respect to Pakistani sample i.e. catering theory and Life Cycle Theory.

This research is conducted on Pakistani non-financial companies duly listed on Karachi stock exchange from 1998 to 2009. Catering theory is measured by dividend premium, life cycle theory is measured by earned contributed capital mix, while the proxy used to measures dividend payment decisions are propensity to pay, and decisions to change dividend.

Company's age, Growth prospects, Market to book ratio, profitability, cash holding have positive impact on dividend increasing companies and negative to dividend decreasing. While catering incentives, taxation and leverage has negative impact on dividend paying companies vice versa for Decreasing and dividend omitting companies. Results confirm that catering theory holds in developing economy like Pakistan while life cycle theory provides little evidence. Pakistani stock exchange crises pose little effects on investors mind.

INTRODUCTION

Now in 21st century companies Dividend payout decision is considered to be the one of the hottest topic and investigated area of managerial finance. Dividends are the quantity of cash which are rewarded to company shareholders. Actually dividends are the component of total earnings, in literature lot of question raised regarding dividends policy as why manager decides to pay dividends.

In reality cash is treated as company's blood and considered oxygenated when derived from earnings, now manager have to take a decision either to pay as dividends or repatriate for future growth, if paid then it deteriorate company health and got disease of solvency, technically dividends payout pose negative

effects on firms value because of foregone future projects. So question arises why manager decides to pay dividends.

Dividends payment decreases retained earning which is used for company's future growth, with diminishing retained earnings and less growth Prospects, Company lose its market price per share which ultimately results in less capital gain, and Pakistani investor mostly move towards capital gain because of high market volatilities. So again this argument raises question about decision to pay dividends.

Dividends are normally paid by well-established and matured companies that depicts companies financial life cycle. Life cycle theory proposed that younger companies are having superfluous investment prospects but lacking in financial resources, so young companies normally have high dividend retention ratio as compared to distribution. On the other hand matured companies are mostly profitable but deficient of good investment prospects and possessed low growth opportunities thus these companies would have high propensity to pay dividend.

Studies of Fama & French (2001), Grullon et al. (2002), and DeAngelo & DeAngelo (2006) discussed the trade-off among dividend retention and distribution policy and explored the benefits of saving business flotation expenditures and disadvantages of profit retention in shape of agency conflicts for free cash flow.

These advantages and disadvantages changes the pattern of trade-off among profit retention and distribution thus have had a long history as increase in revenues and decline in growth opportunities, therefore propensity to pay dividends turn out to be gradually desirable as company's mature. Previous studies present vague empirical facts of the factors that distinguish companies that distribute dividend compared to who retain. Most distant, Fama & French (2001), explored that companies having high profitability ratio and lower growth prospects be likely to have high propensity to pay, on the other hand companies having low profitability and higher growth have high tendency to retain revenues.

We have tested the life cycle theory of dividends for Pakistani manufacturing companies and hypothesized that propensity to pay dividends is positively linked to earn contributed capital mix and or Pakistani manufacturing companies have moderately high retained earnings to total shareholder equity and companies having high retained earnings to total assets likely have high propensity to pay dividend.

On the other hand issuance of stock or payment of cash dividends increases companies operating cost which reduce growth prospects, so again why manager decides to pay dividends.

The dividend payment is considered to be enormously significant, in several countries and for developing countries like Pakistan, where people live below poverty line and prefer dividends instead of reinvesting. Interestingly in Pakistan, companies are yet enforced to pay cash dividend either through external financing which pose negative effects on company smooth running. Dividend payment and capital gain moves in opposite direction, dividends payment, certainly adored by risk avoider or long term investors, but in Pakistan mostly day trader and brokers are too much active and are mostly interested in capital gain, here raises a question what factors influence when deciding dividends and its propensity to pay dividends and factors which change manager mind to change level of dividends.

In Pakistan capital gain tax was exempted with in our study span and implemented in 2010, we want to analyze, Pakistani investors preference or desire for dividends which yet not been explored area. In Pakistan the dividend payment is voluntary. In most of developed nation like Korea, it is mandatory and its abide by law, all listed companies must have to pay the annual cash dividend divided by its share face value and at a point equivalent to the time deposit of one year and must be equal to market interest rate. So, majority of main shareholder are yet opposed the dividends payment and believe that stock market price rise is the main constituent of share proceeds.

Baker and wurgler in 2004, proposed that investors desire for dividends is motivated by catering theory, theory suggest that decision to pay or change dividends is backed by market desire for dividends paying stocks. They measured the catering incentive or dividend desire through dividends premium. In their pioneer work they suggest that dividends premium is one of the key determinants of payout policy.

Companies are likely to announce high dividends when shares prices exhibit high value for dividends paying companies. Simply high market to book ratio shows manager intensions to pay or announce more dividends.

Contribution of this research is in multiple folds; first no such study has been carried out in which Pakistani investors' attitude has been captured. Secondly we are going to test the most recent dividend theories i.e. Life Cycle theory and catering theory that was tested in most advance countries like USA and Canada; we want to propose evidence with respect to Pakistan or developing economies. Thirdly as Pakistan is developing economy and more than 50% population lives below poverty line, expectedly desire more profit, we want to contribute either Pakistani investors' demands for constant dividend or prefer capital gain. Fourthly Managers will be able to make market-timing to maximize market value with dividend payment decisions.

Lastly if proved that Pakistani investors prefer dividend paying firms than either this desire compel company to change the level of dividends.

So in nutshell, Purpose of this research is to examine the effects of catering incentives and earn contributed capital mix on propensity to pay dividends for Pakistani manufacturing concerns. Basic intent is to validate the most recently developed dividends theories with respect to Pakistani data sample i.e. catering theory and Life Cycle Theory.

LITERATURE REVIEW

Review of Related Literature:

Miller & Modigliani (1958), examined firms capital structure decision has no effect on company's market value. This MM proposition laid foundation of various corporate finance theories.

Modigliani & Miller (1961), proved that firm value has no connection with dividend payout policy, until and unless company investment policy remains appropriate. That is the reason why in perfect capital markets, dividend policy seems to have no effects on owner wealth.

Scholes & Miller (1978), examined the imperfections in market and proved that taxes (either personal or corporate) has no effect on dividend irrelevancy proposition.

Baker & Wurgler (2004a), examined investors desires towards dividends. They called this desire as catering incentives. Study suggested that investor's attitude is key factor which compel or force companies to pay dividend. They measured investors' desire for dividend by dividend premium. Results showed that companies changes dividend level when market desire for dividend paying stock, and dividend premium has significant effect on company's decisions to pay dividend.

Li & Lie (2006), extended the work of Baker & Wurgler model and adds changes in dividend payment level. Empirical study is based on sample of dividend increasing and decreasing firms'. Dividend premium strongly effect changes in dividend payment level. Furthermore companies increase dividend level when dividend premium is high. Companies opt the share repurchase strategy from market when coefficients of dividend premium is observed to be low.

Zhao & Li (2008), suggested that dividend premium has positive impact on dividends decision and claimed that companies increased dividends payment level by adding a control variable of company's risk factor and year effect.

Prabhala & Hoberg (2009), empirically examined firms payout policy of listed on AMEX, NASDAQ and NYSE for study span of 1963-2004. Proposed results are opposite to catering theory as found by previous researchers. They claimed that catering incentives is not significant factor which change dividend payment decisions or propensity to pay dividend. They claimed that 40% reduction in dividend is caused by increased risk factor and furthered dividend premium coefficients got insignificant when systematic risk variable included in the model. Ferris et al (2006), claimed that catering theory holds in United Kingdom market, and investor pose positive effect on decision to pay dividends.

Denis & Osobov (2008), examined that catering theory or incentive has little effect on decision to change dividends, while company's size, firm growth prospects and profitability are contributing factors which lessen the impact of catering incentive on decision to pay dividend.

Von & Megginson (2008), claimed that catering theory is not supported in fifteen European countries. Baker & Wurgler (2004b), examined the changes in dividend payment and relate these changes with market desire (catering incentives) for dividend paying companies. Results reveals positive impact of

catering incentives on propensity to pay dividend. They used market based variable “dividend premium” to capture the investors’ willingness to pay for dividend paying companies. Dividend premium is employed to capture changes in investors’ willingness to pay dividend paying stock as compared to nonpaying stocks. Study findings developed a market based model, that increase in share price is due to dividend payers decisions to increase dividend level and this decision is backed by catering incentives.

Fama & French (2001), suggested that high profitable companies are more curious to announce dividend than companies having growth oriented. While company’s profitability, firm size and assets level laid positive influence on decision to change dividend.

Research conducted by (Nazir., et al, 2010) elucidated the function of dividend payout policy with respect to Pakistan’s economy through a sample of 73 listed firms’ of Karachi Stock Exchange, choosing study span of 6 years ranging from 2003 to 2008. Results of study showed that stock price is significantly affected by Dividend Payout ratio and Dividend Yield. Whereas Size and company’s Leverage are not different from the zero and has negative and insignificant influences on stock price. Growth and firms earning have significant positive effects on Stock market Prices. Guluzar & Bern (2010), examined decision to announce dividend for companies listed at ISE, from 1991 to 2006. They claimed that financial crises specifically Asian (1997), Russian (1998) and banking (2001) observed to be significant factors which decreased dividend level in turkey. These crises increased companies’ systematic risk factors.

Chahyadi & Salas (2010), examined that 76% decrease in dividends payers from 1978 to 1998. They concluded that tax is not considered to be main factor and has no significant impact on company’s decision to pay dividends, as proposed in previous researches.

Tangjitprom (2013), examined the catering incentives of dividends which affects the dividend payout of companies in Thailand from 1992 to 2009. Catering incentive is measured by dividend premium. Results proposed that catering incentives very little effect on propensity to pay dividends and decision to change variable, while results got significant when added a dummy variable for Asian crisis.

Grullon et al. (2002) explored that company’s growth prospects weaken with the passage of time or company’s age, finding itself more probable that a company will start disbursing dividends when it turn out to be mature. But maturity rate vary with company to company.

DeAngelo et al. (2006), investigates the life-cycle hypothesis by using the proxy of earned/contributed capital mix and discover that it is expected that fluctuations in average companies maturity amid 1978 and 1998 appears to elucidate a huge percentage of the deterioration in the percentage of dividend payers throughout that period. Grullon et al. (2002), examined that companies are expected to pay dividends as they matured since companies life is associated with other dividend policy elements that are problematic to quantify e.g. growth prospects and surplus cash holdings.

After thoroughly studying the previous literature there exists a **literature gap** with respect to dividend paying behavior that is investors attitude towards dividend paying firms can motivate managers to increase or decrease dividends and another hypothesis that seems to be relevant with respect to Pakistan, is test of companies age with decision to change dividend. No inferences has been drawn with respect to life cycle theory and catering theory in Pakistan and how dividend premium can affect company as well as top management decision to pay dividend either to increase, decrease and makes no changing in dividend payment level.

ANALYSIS

Purpose of this research is to examine the effects of catering incentives and earn contributed capital mix on propensity to pay dividends for Pakistani manufacturing concerns. Basic intent is to validate the most recently developed dividends theories with respect to Pakistani data sample i.e. catering theory and Life Cycle Theory.

Data and Sample: data has been collected for all variables from state bank of Pakistan publications in order to accomplish study purpose. The selection criteria were as follows: 152 Companies data collected over the period of 12 years, or we can say 1824 firm year observation. However, unlisted,

financial firms were excluded from the sample. Moreover, in order to ensure that only resident companies of the respective countries were included in the respective country samples, two pivotal selection criteria were (i) principle operations or headquarters in local market and (ii) companies listed on at least one of each of the stock exchanges within a given country. Furthermore, for each sector it has been ensured to collect at least 30% companies or overall 20 firms, whichever is larger has been selected as sample.

DESCRIPTIVE STATISTICS

TABLE I

Year	Assets Growth %	EBIT/ Assets %	Market to book	% of Firms Paying Dividends	RETE	RETA
1998	2.898998	0.608933	0.721612	44	0.4105	0.522854
1999	2.911227	4.165174	0.737327	69.33	0.1138	0.538257
2000	2.929074	8.921969	2.965199	77	0.0982	0.577475
2001	2.969081	10.53263	0.724588	70	0.0256	0.54428
2002	2.989624	8.67142	0.759242	60	1.2329	0.54151
2003	3.033837	8.742113	0.695249	60	0.0748	0.504246
2004	3.131324	7.953631	0.61006	50	1.1087	0.477977
2005	3.221574	8.77351	0.641349	46	0.0652	0.473558
2006	3.294498	10.05809	0.650565	45	0.0626	0.44125
2007	3.320848	7.490421	0.583416	36	0.0379	0.423076
2008	3.376759	7.129994	0.586368	38	0.0099	0.416743
2009	3.390843	7.850661	0.580496	46	-0.1726	0.434879

Table I represents selected companies descriptive statistics, among them most important yearly percentage of companies paying dividends. This descriptive statistics is for panel of 152 firms for each year, with a total of 1824 firm year observations. Percentage of dividends paying companies are relatively very low specifically after 2004, reason for this low percentage is that, Pakistani stock market crashed twice in this era. Secondly there is no dividends payment rule and regulations so that companies abide by law. Prevailing law restricts companies to announce or pay dividends at least once within five years. As per this descriptive statistics it has been confirmed that dividends payment pose negative effects on future growth prospects, because as percentage of dividends paying firm decreases, growth rate of assets increase. Continuous financing system was considered responsible for 2005 stock market crash, and SECP sets out margin financing system in replacement of continuous financing system, but then what factor leads to 2008 crash. Here we can't say that 2008 crash was due to American stock market crash as Pakistani stock market crashed nine month before world crash. In 2008 less than 40% companies paid throughout selected era. Subsequently in 2009 recovery starts and this percentage risen up to 46.

Descriptive statistics documented a significant decline in earned contributed capital mix from 41% to negative 17% over selected sample period that is 1998 to 2009, that confirms that these sampled companies are matured and have high investment opportunities depicted by Assets Growth increase from 1998 to 2009.

Dividend Premium

Dividends premium is used as a proxy to capture investor desire for dividends and is calculated by taking difference of natural log value of average market-to-book ratio between dividends paying firms' and non-paying firms'. Companies are likely to announce high dividends when a shares price exhibits high value for dividends paying companies. Simply high market to book ratio shows manager intentions to pay or announce more dividends.

For this selected sample has been divided into two sub samples that are dividend paying and nonpaying companies. These cross sectional values are divided in to sub samples in order to calculate weighted average of each sub sample, the difference between both samples after taking natural log is dividend premium value.

DIVIDENDS PREMIUM IN PAKISTAN DURING 1998-2009

TABLE II

Market to book ratio			
Year	Payer	Non payer	Dividend premium
1998	0.721612	0.934181	-0.11213
1999	0.737327	1.013971	-0.11213
2000	2.965199	1.005276	0.469769
2001	0.724588	1.076234	-0.17182
2002	0.759242	1.020981	-0.12864
2003	0.695249	1.093633	-0.19673
2004	0.61006	0.951213	-0.19291
2005	0.641349	0.919629	-0.15652
2006	0.650565	0.923803	-0.15229
2007	0.583416	0.909464	-0.19281
2008	0.586368	0.949401	-0.20928
2009	0.580496	0.971008	-0.22342

Table II exhibits yearly average of market-to-book ratio among dividend paying and/or nonpaying companies. The investor desire is measured by dividend premium, which exhibits catering incentives (Baker and Wurgler, 2004a). Dividend premium is calculated by taking difference of averaged market to book ratio of dividend payer from non-payer companies. Investor desire or dividend premium is calculated by taking natural log of yearly averages of payer and non-payer then taking difference among both series. The coefficients obtained are negative and consistent with baker and wurgler (2004). Hence Pakistani investors are giving more preference to dividend non-paying companies and pay more for non-paying companies. This result confirms tax advantage in Pakistani market and mostly investors are day trader or short term investors. These are expected results as in Pakistan dividend income will be taxed 10% while capital gain is exempted¹. So it confirms that Pakistani investors are aggressive and prefer non-paying companies as non-payment boost up market price of stock which results in capital gain which is exempted from tax.

Propensity to pay dividends in Pakistan (1998-2009)

In 2001 Fama & French, calculated the propensity to pay dividend by subtracting the expected percentage of companies paying dividend from actual percentage of paying companies. Value of propensity to pay dividend will be greater than zero if dividend paying companies exceeds nonpaying companies' number. Binary logistic model has been employed in order to derive expected percentage of dividend paying companies, but it depends upon certain characteristics that have strong influence on dividend payment decisions. Company's size, profitability, assets growth, market to book ratio considered key variables that can change dividend payment decisions, so used as independent variables².

Binary logistic model is given as below:
 $Payer=1$

$$= \text{logit} \left\{ b_0 + b_1 \% RANK_i + b_2 \left(\frac{E}{A} \right) + b_2 \left(\frac{dA}{A} \right) + b_2 \left(\frac{M}{B} \right) + \varepsilon_i \right\} \quad (1)$$

Binary logistic equation has been run individually for each year ranging from 1998-2009 and obtained separate results for each year. For our final logit model, we calculated the Fama Macbeth statistics by obtaining the average of yearly calculated coefficient.

Subsequently, the final binary logistic model will be employed for estimation of expected percentage of dividend paying companies. Expected proportion of companies paying dividend is calculated by putting all coefficients results³ in equation (1) and then we get natural log of resultant figure, than put that results in equation (1A), in order to get final probability of expected percentage of companies paying dividend.

Where “e” is resulted log value.

$$\text{Expected proportion} = \frac{1}{1 + \frac{1}{e^{\text{var}}}} \quad (1A)$$

Year	Actual proportion of firm paying dividend (%)	Expected proportion of firm paying dividend (%)	Propensity to pay dividend
1998	44	83	-39
1999	69.33	84	-14.67
2000	77	55	22
2001	70	72	-2
2002	60	40	20
2003	60	78	-18
2004	50	39.35	10.15
2005	46	66.23	-20.23
2006	45	22.4	22.6
2007	36	28.45	7.55
2008	38	33.8	4.2
2009	46	9.3	36.7

Earned Contributed Capital Mix

We used earned/contributed capital mix as a rational proxy or substitution for the life cycle theory as mostly companies presently apprehends themselves as it quantifies the degree to which a company is self-financing or depends on external resources.

Companies with low retained earnings to total equity or retained earnings to total assets seem to be more matured and with abundant aggregate earnings tend to be primarily self-financing; henceforth are good contenders to pay dividends.

To Test the Relationship between Earned contributed capital mix, catering incentives on propensity to pay dividend

We have taken yearly averages for all variables and regressed earned contributed capital mix (RE/TE & RETA) and catering incentive (DP) on propensity to pay dividend (PTP). We have also introduced control variables i.e. taxation effect, market to book ratio and crisis dummy in order to elucidate the association.

. regress ptp taxes rete reta mb dp cd, noconstant vce(robust)

Linear regression

Number of obs = 12
 F(5, 6) = .
 Prob > F = .
 R-squared = 0.6988
 Root MSE = 16.453

ptp	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
taxes	-0.3630086	.2235131	-1.62	0.155	-0.9099255	.1839083
rete	19.0379	9.97527	1.91	0.105	-5.370708	43.4465
reta	-266.0199	112.4699	-2.37	0.056	-541.2239	9.184121
mb	115.2418	44.29413	2.60	0.041	6.857986	223.6256
dp	-158.2025	66.44195	-2.38	0.055	-320.7801	4.37513
cd	-21.24337	14.04228	-1.51	0.181	-55.60358	13.11684

Results shows that taxes have negative effects on propensity to pay dividends, confirms that Pakistani investors are giving more value to dividend not paying stocks. Earned contributed capital mix (RETA) has significant negative effects on propensity to pay dividend, shows that these sampled Pakistani companies are young and have high growth opportunities, thus repatriating the earnings into new investment opportunities.

The coefficients of dividend premium are significant negative, and results shows that investors are paying more value to dividend not paying companies, results confirms the tax advantages of capital gain. We also introduced stock market crisis dummy in order to we included a dummy variable for stock market crash, 2005 & 2008. Results suggest that dividend premium coefficient is significant at conventional level while dummy crisis variable is not statistically significant, while negative sign shows that it laid adverse effect on propensity to pay dividend, these results support 2008 crisis and stock market recovery period as with in nine month our stock market recovered from crisis. Results also suggest that during world economic crisis or American mortgage crisis which laid negative effects on all over the world, our stock market was performing well so we can deduce that these crisis have little effects on our stock market, another reason is that in Pakistan larger firms and brokerage houses are anticipating market crash so they can purchase in bulks at less rate.

YEAR WISE RESULTS

	RETE	RETA	Taxes	M/B	Assets Growth	Profitability
1998	-0.330248 (0.7412)	-0.569251 (0.5692)	-0.016711 (0.9867)	-3.699497 (0.0002)***	1.457798 (0.1449)	0.297375 (0.7662)
McFadden R-squared				0.166018		
1999	-0.125548 (0.9001)	-0.316564 (0.7516)	-0.028251 (0.9775)	-2.116004 (0.0343)**	0.539843 (0.5893)	3.760692 (0.0002)***
McFadden R-squared				0.319626		
2000	-1.086031 (0.2775)	-2.677642 (0.0074)***	-1.996683 (0.0459)*	-1.195780 (0.2318)	0.167754 (0.8668)	3.738060 (0.0002)***
McFadden R-squared				0.326030		
2001	-0.883745 (0.3768)	-3.138060 (0.0002)***	-0.519546 (0.6034)	-2.093541 (0.0363)*	1.703590 (0.0885)	4.848664 (0.0000)***
McFadden R-squared				0.407236		
2002	-0.810379 (0.4177)	1.031827 (0.3022)	-0.318952 (0.7498)	-2.461652 (0.0138)**	2.268436 (0.0233)**	1.925144 (0.0542)*
McFadden R-squared				0.193176		

2003	1.205782 (0.2279)	1.177620 (0.2389)	-0.637037 (0.5241)	-2.506282 (0.0122)**	3.054398 (0.0023)**	3.736801 (0.0002)***
McFadden R-squared 0.336622						
2004	0.776996 (0.4372)	-3.012072 (0.0003)**	-0.754373 (0.4506)	-3.175287 (0.0015)**	0.815067 (0.4150)	3.113396 (0.0018)**
McFadden R-squared 0.276567						
2005	0.195575 (0.8449)	-0.286543 (0.7745)	0.258735 (0.7958)	-2.732826 (0.0063)**	1.319036 (0.1872)	3.042072 (0.0023)**
McFadden R-squared 0.220190						
2006	0.600932 (0.5479)	0.725201 (0.4683)	-2.708823 (0.0068)**	1.542832 (0.1229)	1.214510 (0.2246)	4.552615 (0.0000)***
McFadden R-squared 0.277828						
2007	-0.590814 (0.5546)	-2.094013 (0.0361)**	-2.054353 (0.0399)**	-0.570106 (0.5686)	1.889429 (0.0588)*	5.190217 (0.0000)***
McFadden R-squared 0.416348						
2008	0.011800 (0.9906)	-0.508399 (0.6112)	-0.230368 (0.8178)	-3.280685 (0.0010)**	2.074023 (0.0381)**	4.761246 (0.0000)***
McFadden R-squared 0.384483						
2009	0.693805 (0.4878)	-3.877497 (0.0002)***	-3.864564 (0.0001)***	-0.159998 (0.8729)	0.774327 (0.4387)	4.956247 (0.0000)***
McFadden R-squared 0.422405						
****99%	**95%	*90%				

We have done time series logistic regression analysis across all sample year and found that coefficients of market to book value are significant and negative across the time series. This result exhibits that dividend paying companies have low market to book value, thus have good investment prospects. Results also confirm that profitable firms tend to pay high dividend. Corporate taxes have negative impact on probability to pay dividend, higher the taxes, lesser the companies who declare dividends. Companies' growth has positive effects on dividend paying companies. Results shows that dividend paying companies have negative coefficients of earned contributed capital mix thus have negative effects on dividend payment decision, these yearly RETA coefficients depicts company's intension towards retention strategy.

The test of effect of catering incentive and earned contributed capital mix on decision to change dividend

Change in dividend payment is captured by taking difference of current year dividend per year from previous year dividend. Further we categorize this change in dividend payment into levels e.g. increase, decrease and no change in payment. In order to check the effect of catering incentives on decision to change dividend, we employed multinomial logistics model. There are lots of other factors which has had an effect on dividend payment decision, so we introduced some control variables in order to control their effect or make them neutral so that catering incentives (Dividend premium) and earned contributed capital mix (life cycle theory) effect would be measured. So the control variable selection is induced by previous literature, corporate taxes, leverage, companies growth, profitability, cash holding and market to book ratio are employed as control variable⁴.

The final regression equation is given as follows:

$$\Delta DPS = b_0 + b_1 RETE + b_2 RETA + b_3 TAX + b_4 \frac{LTD}{TA} + b_5 \frac{E}{A} + b_6 \frac{Cash}{A} + b_7 \frac{M}{B} + b_8 AG + b_9 DP + \epsilon \quad (3)$$

Results of multinomial regression is divided into two models, first model includes dividend increasing and decreasing companies, while second model shows dividend increasing, decreasing and dividend omitting or have no change in dividend.

	Model I		Model II		
	Dividend Increasing (1)	Dividend Decreasing (0)	Dividend increasing (1)	Dividend Decreasing (0)	Dividend Omitting (2)
Taxes	-1.16 (0.245)	1.16 (0.245)	-1.03 (0.305)	0.69 (0.489)	-0.69 (0.489)
Dividend premium	4.95 (0.000)***	-4.95 (0.000)***	0.19 (0.847)	-12.84 (0.000)***	12.84 (0.000)***
RETE	0.83 (0.408)	-0.83 (0.408)	1.18 (0.239)	-0.16 (0.872)	0.16 (0.872)
RETA	1.84 (0.085)*	-1.84 (0.085)*	-1.17 (0.243)	0.40 (0.687)	-0.40 (0.687)
Assets Growth	3.07 (0.002)***	-3.07 (0.002)***	0.76 (0.449)	-3.95 (0.000)***	3.95 (0.000)***
M/B	0.94 (0.347)	-0.94 (0.347)	2.24 (0.025)**	-0.17 (0.863)	0.17 (0.863)
LTD/TA	-1.26 (0.208)	1.26 (0.208)	-0.91 (0.365)	1.43 (0.152)	-1.43 (0.152)
Profitability	2.06 (0.039)**	-2.06 (0.039)**	1.47 (0.141)	-2.92 (0.003)***	2.92 (0.003)***
C/A	0.64 (0.520)	-0.64 (0.520)	-0.25 (0.806)	-1.33 (0.184)	1.33 (0.184)
Prob > chi2	0.0000		0.0000		
Pseudo R2	0.2442		0.0854		

*10%

**5%

***1%

Basically here we have divided our model I into second model by segregating dividend decreasing coefficients into further two components, that is dividend cutting (decreasing) and dividend omitting.

Coefficients of earned contributed capital mix are found to be significant (10%) and positive for dividend increasing companies confirms that matured companies have low investment prospects and have high profitability, so these companies distribute dividends. While coefficient is found to be negative for dividend decreasing companies confirms the notion of dividend retention for future growth prospects.

In model I coefficients of dividend premium is significant and observed to be positive, while it pose negative relation with dividend omitting category in second model. Positive sign of Dividend premium with dividend increasing, confirm the notion, that invertors' in market are demanding and paying more value for dividend paying companies, thus that will compel or motivate manager's to increase the dividend level. Coefficient of DP found to be positive with dividend decreasing, probably because of dividend decreasing intensity, while DP observed to be significant and pose negative effect on dividend decreasing companies', thus confirms that dividend premium or investor's desire is main factor that can compel or motivate manager to change decisions regarding dividend payment. Interestingly market capitalization found to be insignificant in both model, means it have no connection with dividend payment decision with respect to Pakistani firms'. "leverage" found to be positive and statistically significant with dividend increasing companies in both models, because of tax shield advantage, while shows significantly negative effects on dividend decreasing companies, because of higher cost of debt, which ultimately reduce companies revenue, thus have less to distribute among shareholders. Market to book ratio found to have positive and significantly, shows that higher market to book ratio compel

manager to increase dividend level, while have inverse relation with dividend omitting behavior. Assets growth coefficient found to have insignificant. Coefficients of dividend yield are positive with dividend increase and statistically negative with decreasing and omitting.

Coefficients of assets growth are positive and statistically significant with dividend increasing in model I, which shows that companies which are increasing dividends are matured and have low investment opportunities, while coefficients are found to be statistically negative and significant for dividend decreasing companies confirms an inverse relation between growth and dividend payment. In model II we have segregated the dividend decreasing companies into further two categories i.e. Dividend decreasing and dividend omitting, results confirm that companies growth has found to be positive and statistically significant confirms that companies having extraordinary growth opportunities are not paying dividend.

Coefficients of M/B are found to be significant and positive confirms that investors are giving more value to dividend paying companies. Leverage has negative effect on dividend increasing and omitting companies, which confirms financial distress of dividend omitting companies.

Coefficients of profitability are statistically significant for both models, but found to be positive for dividend increasing companies and negative for dividend decreasing companies. Profitable companies tend to announce dividends frequently, in model II for dividend omitting companies, coefficient is found to be positive and significant confirms repatriation of profits.

Coefficients of cash holding are positive for dividend paying companies and negative for decreasing companies, confirms Pakistani manufacturing companies are announcing dividends to mitigate the agency conflict of free cash flow. Corporate taxation has negative effects on dividend paying companies, as dividends are taxed in Pakistan while capital gain is exempted.

CONCLUSION

Purpose of this research is to examine the effects of catering incentives and earn contributed capital mix on propensity to pay dividends for Pakistani manufacturing concerns. Basic intent is to validate the most recently developed dividends theories with respect to Pakistani data sample i.e. catering theory and Life Cycle Theory.

Coefficients of earned contributed capital mix confirm that matured companies have low investment prospects and have high profitability, so these companies distribute dividends. While coefficient is found to be negative for dividend decreasing companies confirms the notion of dividend retention for future growth prospects.

The coefficient of dividend premium suggest that Pakistani investors are more inclined towards capital gain instead of regular dividends payment because of tax advantage possessed by capital gain, as in Pakistan capital gain was exempted during 1998-2009, thus Pakistani investors are giving or paying more for non-dividend paying companies. So we deduce that Pakistani investors are more risk averse and demand regular stream of dividends. When we regress dividend premium on propensity to pay dividend it exhibits negative relation with propensity to pay dividend hence show investor are giving more value to dividend not paying company. Pakistani Stock market crash (2005, 2008) has little significant effects on propensity to pay dividends, as in Pakistan big joints and brokerage houses are waiting for market crash so they purchase in bulks at low rate.

Positive dividend premium compel companies to increase dividend level, While coefficient of dividend premium with dividend omitting behavior, proved that negative DP compel companies to omit dividends.

This study empirically examined the research question that why companies pay dividends specifically place where tax advantage prevailed like Pakistan, so catering incentives answer this question empirically. Companies adjust their dividend payments based on dividend premium, as companies initiate or pay dividend when dividend premium found to be high, and cut or omit when found to be negative or less significant. In nutshell catering theory holds in emerging economies like Pakistan.

Coefficients of assets growth are positive and statistically significant with dividend increasing in model 1, which shows that companies which are increasing dividends are matured and have low investment opportunities, while coefficients are found to be statistically negative and significant for dividend decreasing companies confirms an inverse relation between growth and dividend payment. In model II we have segregated the dividend decreasing companies into further two categories i.e. Dividend decreasing and dividend omitting, results confirm that companies growth has found to be positive and statistically significant confirms that companies having extraordinary growth opportunities are not paying dividend.

Coefficients of M/B are found to be significant and positive confirms that investors are giving more value to dividend paying companies. Leverage has negative effect on dividend increasing and omitting companies, which confirms financial distress of dividend omitting companies.

Profitable companies tend to announce dividends frequently, in model II for dividend omitting companies, coefficient is found to be positive and significant confirms repatriation of profits.

High cash holding confirms Pakistani manufacturing companies are announcing dividends to mitigate the agency conflict of free cash flow. Corporate taxation has negative effects on dividend paying companies, as dividends are taxed in Pakistan while capital gain is exempted.

VARIABLE MEASUREMENT

Variables	Proxy	Formula
Dividend premium	DP	Difference of weighted average market to book value of dividend payer and nonpayer firms.
Propensity to pay dividend	PPT	Difference between expected proportion firms paying dividend from actual proportion dividend paying firms.
Decision to change dividend	Δ DPS	Difference of dividend of current year from previous.
Company's Size	%Rank	Proportion of company having market capitalization fewer than or equivalent to that company.
Profitability	E/A	EBIT, divided by assets book value.
Market to book ratio	M/B	Market value of equity + the book value of liability divided by assets book value.
Assets Growth	d-A/A	Log of assets divided by total assets
Leverage	TL/TA	the ratio of long-term debt to total assets
Dividend yield	YD	Dividend per share
Taxes	Tax	Tax provision as % of net pre-tax profit
Earned contributed capital mix	RETA, RETE	Retained earnings/total shareholder equity Retained earnings/ total assets

ENDNOTES

1. Capital gain tax levied in 2010, while our study span is 1998-2009.
2. Variables proxy and measurement is given in annexure.
3. E-Views Results attached in annexure
4. Variable Measurement is given in Table I, and attached in Annexures

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