Determination of Dividend Policy: The Evidence from Saudi Arabia

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Abstract

The aim of this paper to examine the factors determining dividend represented by Dividends per share for companies in the Saudi Arabia stock exchanges (TASI). In this study we run a regression model and used a panel data covering the period from of 2004 to 2010 for 105 non- financial firms listed in the stock market. The model investigate the impact of Earnings per share (EPS), Previous Dividends represented by dividends per share for last year , Growth, Debt to Equity (D/E) ratio, Beta & Capital Size on Dividends per Share. The results consistently support that Saudi listed non-financial firms rely on current earnings per share and past dividend per share of the company to set their dividend payments.

Keywords: Dividends, Saudi Arabia, determinants, Previous dividends, Earning.

Introduction

Dividend policy has been one of the most significant topics in financial literature, which give it a considerable attention to solve the dividends vagueness. The decision of the firm regarding how much earnings could be paid out as dividend and how much could be retained, is the concern of dividend policy decision. This results a large number of conflicting theories. Starting from Dividends were irrelevant and had no influence on a firm's share price Miller and Modigliani (1961) when they believed in the world of efficient market, dividends policy does not affect the shareholders wealth, then The bird in hand theory by Myron Gordon (1963) and John Lintner (1962). After that, The tax preference theory introduced by Summer (Brennan, 1970; Elton and Gruber, 1970, Later on dividends signaling initiated and arguing that dividends changes send a signal to investors about the firm future earning and management perception Miller (1980). Another research is based on transaction cost and residual theory. This theory indicates that the firm will pay high transaction cost if it needs external finance. So firms tend to reduce the dividends to avoid such cost (Mueller, 1967; Higgins, 1972). In addition to Agency cost theory, firms with high dividends pay out are more valuable than firms with low dividends pay out (Rozeff, 1982; Easterbrook, 1984; Lloyd, 1985 ;).

This paper tend to examine determination of Dividend Policy for non-financial firms in the Saudi Arabia, the country with the economy with the largest proven crude oil reserves in the world at 266.7 billion barrels, representing 57% of the GCC reserves, almost 20% of the world total reserves. It ranks as the largest producer as well as exporter of petroleum in the world and plays a leading role in the OPEC, producing 28% of the total OPEC oil production.

This paper is organized as follow: the introduction in part one, then the literature review in part two, then Saudi Stock market overview in part three, after that data source & Methodology of analysis in part four and finally the conclusion in par five.

Literature Review

According to Miller and Modigliani (1961), dividends were irrelevant and had no influence on a firm's share price, they believed in the world of efficient market, dividends policy does not affect the shareholders wealth.

The original proponents of the Dividends policy since Miller and Modigliani is illustrated that dividends were irrelevant and had no influence on a firm's share price (the firms value is determined only by its basic earning power and its business risk). Under very strict assumptions, especially the absence of taxes and transaction cost. Then financial researchers and practitioners have disagreed with Miller and Modigliani's proposition and have argued that, they based their proposition on perfect capital market assumptions, assumptions that do not exist in the real world. Those in conflict with Miller and Modigliani's ideas introduced competing theories and hypotheses to provide empirical evidence to illustrate that when the capital market is imperfect, dividends do matter. Miller and Modigliani (1961)

The bird in the hand theory (Dividends Preference) criticized Miller and Modigliani's paper, explains that investors prefer dividends (certain) to retained earnings since the stock price risk declines as dividends increased. A return in the form of dividends is a sure thing, but a return in the form of capital gains is risky, therefore, firms should set a large dividend payout ratio to maximize firm share price. Myron Gordon (1963) and John Lintner (1962).

The tax preference theory introduced after that in 70th, this theory claims that investors prefer lower payout companies for tax reasons long-term capital gains allow the investor to defer tax payment until they decide to sell the stock. Because of time value effects, tax paid immediately has a higher effective capital cost than the same tax paid in the future. Summer (Brennan, 1970; Elton and Gruber, 1970; Litzenberger and Ramaswamy, 1979; Litzenberger and Ramaswamy, 1982; Kalay, 1982; John and Williams, 1985; Poterba and Summers, 1984; Miller and Rock, 1985; Ambarish et al., 1987)

Later, dividends signaling theory initiated and arguing that dividends changes send a signal to investors about the firm future earning and management perception. Management will not increase the dividends unless they certain about the future earning to meet the increase in dividends. And conversely dividend cuts are perceived as "bad news" if the firms reduce dividends, it sends to investors a negative message that future earning will be less than current .Miller (1980)

Another research introduce the transaction cost and residual theory, this theory indicate that the firm will pay high transaction cost if it need external finance. So firms to tend to reduce the dividends to avoid such cost (Mueller, 1967; Higgins, 1972; Crutchley and Hansen, 1989; Holder et al., 1998).

Later agency cost theory assumed Firms with high dividends pay out are more valuable than firms with low dividends pay out , since the investors will avoid to pay the agency cost to monitor management actions in inappropriate behaviors (Rozeff, 1982; Easterbrook, 1984; Lloyd, 1985; Crutchley and Hansen, 1989; Dempsey and Laber, 1992; Holder et al., 1998; Saxena, 1999).

After introducing the theories of dividends policies, now, we will discuss some of papers investigating the dividends determination in various countries.

Chen & Nont Dhiensir (2009) analyzed the determinants of the corporate dividend policy using a sample of firms listed on New Zealand Stock Exchange (NZSE). NZSE firms traditionally have high dividend pay-outs compared with companies in the US. This raises the question which the existing dividend theories are applicable in the NZSE firms. Their findings are mostly consistent with the agency cost theory. Ownership structure seems to be the most important determinant of dividend policy for NZSE firms. NZSE firms tend to have a high dividend payout ratio when they have high ownership dispersion. They tend to have a lower dividend payout ratio when they have high degree of insider ownership. Also their findings are partly consistent with the transaction cost and residual theory. In additions, they find that, firm that experience rapid growth in the recent past tends to pay lower dividend. Moreover, they find some evidence that the dividend imputation system provides firms with an incentive to pay higher dividends. Finally, they do not find evidence to support the dividend stability theory and the signaling theory.

Hafeez Ahmed & Attiya Y. Javid (2009) examines the dynamics and determinants of dividend payout policy of 320 non-financial firms listed in Karachi Stock Exchange during the period of 2001 to2006. For the analysis they use dividend model of Lintner (1956) and its extended versions in dynamic setting.

The results consistently support that Pakistani listed non-financial firms rely on both current earnings per share and past dividend per share to set their dividend payments. However, the dividend tends to be more sensitive to current earnings than prior dividends. The listed non-financial firms having the high speed of adjustment and low target payout ratio show the instability in smoothing their dividend payments. It is found that the profitable firms with more stable net earnings can afford larger free cash flows and therefore pay larger dividends. Furthermore the ownership concentration and market liquidity have the positive impact on dividend payout policy. Besides, the investment opportunities and leverage have the negative impact on dividend payout policy. The market capitalization and size of the firms have the negative impact on dividend payout policy which shows that the firms prefer to invest in their assets rather than pay dividends to their shareholders.

Okpara, Godwin Chigozie (2009), Investigate the factors determining dividend pay-out policy in Nigeria. To do this, factor analysis technique was first employed and then alternate econometric method used on the identified critical factors to ascertain the authenticity or validity of the identified factors. The results show that three factors-earnings, current ratio and last year's dividends impact significantly on the dividend payout and dividend yield in Nigeria. Earnings exert a negative impact on the payout ratio indicating that they are apportioned to retention (as they increase) for the growth of the firm. While current ratio and the previous year's dividend exert a positive impact on the payout ratio and dividend yield, showing firstly that firms are more willing to pay out dividends when they have no problem with meeting their short-term needs for cash, and secondly that firms try to increase their payout ratio from its previous level. The researchers therefore conclude that the three variables, earnings, current ratio and previous year's dividends are goods predictors of dividend payout policy in Nigeria. (Okpara, Godwin Chigozie)

Duha Al-Kuwari (2009) examined the determinants of dividend policies for firms listed on Gulf Co-operation Council (GCC) country stock exchanges. Seven hypotheses theories were investigated using a series of random effect Tobit models. The models considered the impact of government ownership, free cash flow, firm size, growth rate, growth opportunity, business risk, and firm profitability on dividend payout ratios. He has approved that the firms in which the government owned a proportion of the shares, paid higher dividends compared to the firms owned completely by the private sector. Furthermore, the results illustrated that the firms chose to pay more dividends when firm size and profitability were high. Also his study indicate that the leverage ratio is additional variable that affecting the dividend payout ratios of firms.

Santhi Appannan and Lee Wei Sim (2011), examine the leading determinants that affecting the dividend payment decision by the company management in Malaysia listed companies for food industries under the consumer products sector, on how the changes in dividend payment decision vary according with the predictors' variables. The relationship between independent variables with the current dividend per share as dependent variable is empirically analyzed through the Pearson correlation analysis and Regression Model. Sample companies selected, that declared cash dividend from year 2004 until 2008 chosen to be analyzed had confirmed that the fact that most of the food industries companies are relying on the debt equity ratio when deciding the dividend payment ratio. The debt equity ratio is proved to be positively correlated with the current dividend per share and affecting much of the firm's decision when setting the dividend policy.

Faris AL- Shubiri (2011), Investigate the determents of the dividend policies of the 60 industrial firms listed on the Amman stock exchanges (ASE) for the period of 2005-2009, and to explain their dividend payment behavior. This study used the Tobit regression analysis, and Logit regression analysis, and hence the random effects Tobit / Logit models are favorable than the pooled models. This paper show that, there is a significant effect of Leverage, Institutional Ownership, Profitability, Business Risk, Asset Structure, , Growth Opportunities , Firm Size on the dividend payout in listed firms of Amman stock exchange as the same determinations of dividends policy as suggested by the developed markets.

Saudi Stock Market Overview

We can split the Saudi Stock Market grown in two main periods: Source is Macroeconomic determinants of the stock market movements: empirical evidence from the Saudi stock market

Initial period (1930 - 2003)

Saudi joint stock companies had started in the mid 1930's, when the "Arab Automobile" company was established as the first joint stock company. By 1975 there were about 14 public companies. The Saudi stock market remained informal and primitive since the primary economic objectives were to build the infrastructure, develop human resources, and increase the standard of living for the Saudi citizens, and thus little effort was focused on developing the stock market.

The rapid economic expansion, besides the Saudisation of part of the foreign banks capital in the 1970's led to the establishment of a number of large corporations and joint stock banks. The market remained informal, until the early 1980's when the Saudi government aims to regulate and modernize the capital market to ensure safe and efficient functioning of the stock market when it embarked on forming a regulated market for trading together with the required systems. In 1984, a Ministerial Committee composed of the Ministry of Finance and National Economy, Ministry of Commerce and Saudi Arabian Monetary Agency (SAMA) was formed to regulate and develop the market. SAMA was the government body charged with regulating and monitoring market activities.

In 1984, the 12 commercial banks established the Saudi Share Registration Company (SSRC), which provides central registration facilities for joint stock companies and settles and clears all share transactions. In 1990, SAMA introduced an electronic system, Electronic Share Information System (ESIS). ESIS concentrates all multi-location equity trading into one single floorless market and processes buy-sell orders from order entry to transfer of ownership.

Restructured period (2003 - Present)

In July 2003 the Capital Market Authority (CMA) was established under the Capital Market Law (CML) by Royal Decree No. (M/30). The CMA is the sole regulator and supervisor of the capital market, it issues the required rules and regulations to protect investors and ensure fairness and efficiency in the market. The CMA is an independent government entity that reports directly to the Prime Minister of the Saudi government. Therefore, the CMA has the full authority to enforce and regulate all aspects of the Saudi capital market. The CMA's role is not restricted to supervising and monitoring participants in the capital market. The CMA has created many channels for increasing awareness and building a stock investment culture among Saudis and foreign residents in order to protect them from capital market risk.

The following points highlight some of the remarkable improvements that have been made to the Saudi stock market:

1. In 2007, the Saudi Stock Exchange (SSE) was established to be the sole entity authorized to carry out the trading of financial securities in Saudi Arabia
2. In April 2008, the CMA restructured the Saudi stock market sectors based on the nature of business of each listed company (see table 1) and its income and earnings structure. After the new market structure, the Saudi stock market consisted of 15 instead of its previous eight.

Table 1: New market sector in Saudi stock market

New Sectors	
Agriculture & Food Industries	Petrochemical Industries
Building & Construction	Real States
Cement	Retail
Energy	Telecommunication & Information Technology
Hotel & Tourism	Transport
Industrial Investment	Banks & Financial Services
Media and Publishing	Insurance
Multi-Investment	

3. Along with the previous advancement, the TASI and the new sector indices were calculated based on the actual tradable shares, and free-floating shares

4. Commercial banks no longer offer intermediary services for the participants in the Saudi stock market. Since the end of 2009, the CMA authorized up to 110 independent brokers and research houses to offer the intermediary services and promote competition within the Saudi stock market.
5. 2009, the CMA approved the trading of Sukuk19 and bonds for the first time in Saudi Arabia. This is considered to be a step towards launching a second regulated market

Table 2: History of growth of Saudi Stock Market

End of Period	Listed Companies		Value of Shares Traded (Billion RLs)		Share Price Index (1985= 1000)	
No.	No.	Growth %	No.	Growth %	Index	Growth %
1986	46.		0.83		646.03	
1990	57	24	4.40	430	979.80	52
1995	69	21	23.23	428	1367.60	40
2000	75	9	65.29	181	2258.29	65
2001	76	1	83.60	28	2430.11	8
2002	68	-11	133.79	60	2518.08	4
2003	70	3	596.51	346	4437.58	76
2004	73	4	1773.86	197	8206.23	85
2005	77	5	4138.70	133	16712.64	104
2006	86	12	5261.85	27	7933.29	-53
2007	111	29	2557.71	-51	11038.66	39
2008	127	14	1962.95	-23	4802.99	-56
2009	135	6	1264.01	-36	6121.76	27
2010	146	8	759.18	-40	6620.75	8

Data Source & Methodology

Data

The objectives of this study are to find out the determinants of dividend per share by testing the public nonfinancial companies in Saudi Arabia stock Exchange. The Data research is collected mainly from Gulf Base (Zughaibi & Kabbani Financial Consultants (ZKFC)) for seven years for the period between 2004 & 2010. Below our assumptions and conditions for the data:

1. The data collected annually for dividends & all other variables,
2. Since some of companies are new in the market, market risk is not available for these companies, so some of financial data are eliminated.
3. Some companies pay dividends in same -annual or quarterly, we summed up the during the year dividends as one year total.
4. Two companies issue their financial statements following the Hijri calendar; we considered them as Gregorian calendar. (Makah & Jabil Omer) in retail sector, since the effect is manor.
5. Four companies their financial year ended in 31st of March. We treat them as the majority of other companies (Al-Hukair, Sadafco, Tohammah and Ethad Atheeb companies).

Petrochemical Industries and Telecommunication & Information Technology are major sectors paying dividends among Saudi stock market; the drop in earnings in 2008 is due to huge loss in Kingdom Company from their investment outside Saudi market by 29b SAR in 2008. SABIC earning influence over all market earnings in 2009 when their net income to level 0f 9B SAR table 3 show more details of some statistic about Saudi stock market.

Table 3: summarize the key factors related to the stock change

Year	Sales Growth	Debt To Equity	Net Profit	EPS	Dividends
2004	36%	24%	33,878,549	8.45	21,550,676
2005	156%	23%	45,401,412	8.02	27,625,630
2006	20%	23%	50,830,042	23.28	32,554,628
2007	47%	31%	62,078,619	23.24	30,951,466
2008	30%	39%	22,565,348	2.22	32,494,161
2009	47%	47%	36,226,010	1.66	26,219,635
2010	19%	49%	55,554,121	1.84	34,092,651

The dividends payout ratio is one of major ratio used by companies to establish their dividends policy. Table 4 illustrates the average of dividends per share for the Saudi stock market and per new sectors for the investigated period. The energy sector is dividends payout is more than earnings per share due to that governments grantees 10% dividends from capital issued.

Table 4: The payout ratio for Saudi stock market

Row Labels	2004	2005	2006	2007	2008	2009	2010
Agriculture & Food Industries	20%	15%	24%	30%	44%	30%	25%
Building & Construction	19%	29%	23%	29%	35%	57%	35%
Cement	81%	67%	62%	69%	54%	59%	66%
Energy	157%	139%	137%	131%	170%	102%	93%
Hotel & Tourism	37%	25%	33%	32%	34%	14%	14%
Industrial Investment	52%	14%	25%	18%	30%	38%	47%
Media and Publishing	33%	24%	40%	54%	64%	29%	62%
Multi-Investment	9%	3%	0%	5%	16%	43%	68%
Petrochemical Industries	19%	14%	18%	18%	18%	40%	22%
Real States	81%	74%	85%	46%	69%	91%	24%
Retail	51%	14%	13%	20%	38%	34%	37%
Tele. & Information Technology	84%	37%	45%	51%	31%	28%	24%
Transport	41%	38%	18%	43%	77%	32%	61%
Grand Total	41%	29%	31%	32%	41%	45%	40%

Methodology

In this study, multiple regression analyses are run to explain the relationship between firm's dividends per share and earnings per share, Previous Dividends represented by dividends per share for last year, Growth, Debt to Equity ratio, Beta and Capital Size on Dividends per Share. Panel data for 105 non financial firms in Saudi Stock market for their annual financial ratio from the period 2004 to 2010 for each firm. We used SSPS program to analysis the data

Our Dividends per share model would be as follows:

$$DPS = ß_0 + ß_1 EPS + ß_2 PrevDPS + ß_3 Growth + ß_4 Leverage + ß_5 Beta + ß_6 Size + Ɛ$$

Item	Abbreviation
Dividends per Share	DPS
Earnings per Share	EPS
Growth	Growth
Debt to Equity (D/E)Ratio	Leverage
Market Risk	Beta
Size of Equity	Size
Previous Dividends per Share	PrevDPS

The following hypothesized relationships are predicted for each variable with respect to the dividends per share ratio:

H1: The Dividends per share is positively associated with Earnings per share.
H2: The Dividends per share is positively associated with Previous Dividends per share.
H3: The Dividends per share is negatively associated with Sales Growth.
H4: The Dividends per share is negatively associated with Debit to Equity Ratio.
H5: The Dividends per share is positively associated with Capital Size.
H6: The Dividends per share is positively associated with market risk.

Dividends per Share (DPS): is our dependent variable, what we expected will be affected by independent variables. The dividend per share ratio is the amount of dividends paid to stockholders relative to the total number of a company issued shares. DPS give unbiased result to earning Comparing with Dividends payout ratio.

1. **Earnings per share (EPS):** is the amount of earnings per each outstanding share of a company's stock, and calculated by dividing current Net profit on total outstanding shares. Is representing the capacity of corporation to pay dividends. A firm's Earning per share is considered to be an important factor that affects its dividend level. This is because firm is willing to pay higher amounts of dividends if firms increase their profitability level, and hence a positive relationship is expected between firm's earning per share and its dividend payments.
2. **Previous Dividends per Share Ratio**: is the company last year dividend per share, we anticipate it is highly significant to the current Dividends per share ratios, always consider past dividend as a more important benchmark for deciding the current dividend payment. Thus, companies attempt to maintain a high degree of consistency in their firms' dividends level by referring to the past dividend declared. This also consists with singling Hypothesis.
3. **Growth**: is calculated by dividing current sales to last year sales minus last year sales. Our expectation is firm which has high growth will have greater need for financing and thus firms with high growth and investment opportunities will need the external & internally generated funds to finance those investments, and thus tend to pay little or no dividends. This prediction is consistent with the pecking order Hypothesis.
4. **Debt Equity Ratio**: is playing a key role in explaining firm's dividend policy. It is negatively related to dividends. This means that firms with low debt ratios are willing to pay more dividends. This result is supported by the agency costs theory of dividend policy. Thus, firms with high leverage ratios have high transaction costs, and are in a weak position to pay higher dividends to avoid the cost of external financing. Debt Equity Ratio is calculated by dividing total long term debt to total Equity. Debt equity ratio (capital structure) can be considered as another feature which has a strong impact on dividend behavior.
5. **Capital Size**: firm's size is expected to explain the firm's dividends policy. Large firms are more likely to be mature and thus have easier access to capital markets, and should be able to pay more dividends. This indicates that, large firms can afford to pay higher dividends than the smaller ones. This relationship is supported by the transaction cost explanation of dividend policy. The company Capital size is calculated by level of capital and for our study, we segregated by three categories :

	Size of Equity	Size
0	Less than 500 Million	Small
1	More than 500 Million & less than 1000 Million	medium
2	More than 1000 Million	large

6. **Beta (Market Risk):** is a number describing the relation between firm price return with financial market as a whole. Assuming price return reflecting book value increased. It is argued that business risk is one of the determinants of firm's dividend policy. "A firm with stable earnings can predict its future earnings with a greater accuracy. Thus, such a firm can commit to paying larger proportion of its earnings as dividends with less risk of cutting its dividends in the future.

Empirical Result

Table 5 demonstrates the descriptive statistic for all regression variables. It present the average indicators of variables computed from financial statements. Also, it presents the standard deviation for the mean

Table 5: Data Descriptive Statistics

Descriptive Statistics					
Variable	N	Minimum	Maximum	Mean	Std. Deviation
DPS	665	.00	162.10	1.4818	7.61422
EPS	665	-30.97	1561.90	8.9654	80.97422
Growth	665	-1.79	654.00	3.7470	40.72174
Leverage	665	.00	5.66	.7822	.87766
Beta	551	.10	1.95	.9999	.23619
Size	665	.00	2.00	.6135	.65363
PrevDPS	665	.00	162.10	1.4334	7.72711

The correlation amongst all variables, show the range is between -0.30 (between market risk Beta & dividends per share) and 0.561(between Dividends per share & previous dividends per share). Also correlation among the independents variables show that the range between -.205 and .127 is highest correlations which is consider low correlation. See Appendix (1)

From the result we can build our estimation model as below equation:

DPS = 0.16+ 0.23 EPS + 0.596 PrevDPS + 0.0 Growth – 0.036Leverage + -0.165 Beta + 0.12 Size
Equation (1)

Table 6 illustrate the Model Summary and ANOVA for the regression, it show that Adjusted R square is 0.79, which mean that the variables can explain the model also the table show that F-statistic is significant since (F=345.5 and P< 0.05) at confidence interval level 95%, suggest that the model is capable to determine the variation in the criterion dividends per share.

Table 6: the Model summary & ANOVA result

Model Summary						
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1		.890	.792	.790	.78761	2.162
ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1285.871	6	214.312	345.480	.000[a]
	Residual	337.460	544	.620		
	Total	1623.330	550			

Table 7 Illustrate the coefficient for each variable with the dependant variable

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.160	.167		.960	.338	-.168	.488
	EPS	.231	.017	.371	13.315	.000	.197	.266
	Growth	-.001	.001	-.014	-.721	.471	-.002	.001
	Leverage	-.036	.041	-.018	-.887	.375	-.117	.044
	Beta	-.165	.154	-.023	-1.074	.283	-.467	.137
	Size	.120	.054	.046	2.230	.026	.014	.226
	PrevDPS	.596	.031	.573	19.508	.000	.536	.656

As predicted, the result of this study show that (see table 7) earnings per share, Size and previous dividends per share are significantly has positive relationship with dividends per share. So when firms increase their profitability we expect firms to raise their dividends per share. Similarly the search supported when firms looking to at least maintain their dividends level to not sending negative signals to investors. In addition, study approved that large firms are more likely to be mature and thus have easier access to capital markets, and should be able to pay more dividends.

The result also indicate that firms which experience more growth opportunity are more to reduce their dividends per share, since there is a negative relationship between increase in sales growth and dividends per share. However this relationship is not significant relationship with dividends per share in our predicted model, since the t. (-.721) statistic is low.

Also the outcome as expected show that firms which finance their assets from heavily from debt is more likely to reduce their level of dividends, sporting the negative relationship between debt to equity ratio and company dividends per share. However this result is not significant, since the t. (-.887) statistic is low.

In addition, our model cannot approve the positive relation between market risk and dividends per share, since our model show different negative relative between them. However the drop in Saudi stock market may in 2006 have major effect to show this result, since the market drop from 20,000 to 5,000 indexs, this result is not significantly sported by t. statistic is (-1.074)

Extending the Test: The second round of testing the model using stepwise the variables suggests the model of estimation the DPS can be explain by EPS and last year dividend level as below equation:

DPS = 0.31+ 0.618 EPS + 0.227 PrevDPS Equation (2)

Which is excluding four variables, Growth, Size, Beta & Debt Equity ratio from the previous model see table 10. When comparing the two models using the adjusted R square, Equation (1) = 0.790 to Equation (2) Adjusted R Square = 0.789. It obvious that the four variables adding little explanation for the model (0.001). See table 8. This result is supporting the low t. statistic in the model without excluding the four independents variables (Growth, Size, Beta & Debt Equity ratio). As will, is supported by F statistic in the second model (1,028.365) which is higher than F. statistic in first model (345.480).

Finally, we can conclude that, the determination of dividends in Saudi stock market is heavily depending on firms earning and firms last year dividends, as resulted from second model. See table 8.

Table 8 the Model summary & ANOVA result (stepwise)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.889[b]	.790	.789	.78945
a. Predictors: (Constant), PrevDPS				
b. Predictors: (Constant), PrevDPS, EPS				

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	1281.804	2	640.902	1028.365	.000[b]
	Residual	341.527	548	.623		
	Total	1623.330	550			
b. Predictors: (Constant), PrevDPS, EPS						
c. Dependent Variable: DPS						

Table 9 Illustrate the coefficient for each variable with the dependant variable

Coefficients						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
2	(Constant)	.031	.043		.726	.468
	PrevDPS	.618	.029	.594	21.397	.000
	EPS	.227	.017	.363	13.096	.000
a. Dependent Variable: DPS						

Table 10 Illustrate the Excluded Variables from the model

Excluded Variables						
						Collinearity Statistics
Model		Beta In	t	Sig.	Partial Correlation	Tolerance
2	Growth	-.013[b]	-.653	.514	-.028	.996
	Leverage	-.012[b]	-.605	.545	-.026	.987
	Beta	-.022[b]	-1.044	.297	-.045	.875
	Size	.037[b]	1.879	.061	.080	.984
b. Predictors in the Model: (Constant), PrevDPS, EPS						
c. Dependent Variable: DPS						

Conclusion

From our study, we may conclude that firm's profitability and the previous dividends level has significant influence on the company's decision to increase or decrease the level of dividends in Saudi Stock market. Their positive relationship with dividends policy show that the companies willing to pay more dividends when experience an increase in their level of profitability with high consideration of the level of last year dividends. This support that Saudi stock market take in his consideration the signaling theory.

One way to extend this study is to investigate the dividend per share ratios by disaggregating the firms into sectors, such as the Petrochemical Industries sector. Another way is extend this study to broaden the data for longer period. One more also, through include the firms' ownership between individuals & institutional owners.

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Appendix

1- Correlation among individual variable

		DPS	EPS	Growth	Leverage	Beta	Size	PrevDPS
DPS	Pearson Correlation	1	.101**	-.018	-.044	-.300**	-.021	.561**
	Sig. (2-tailed)		.009	.647	.262	.000	.586	.000
EPS	Pearson Correlation		1	-.009	.053	-.205**	-.080*	.036
	Sig. (2-tailed)			.818	.169	.000	.040	.349
Growth	Pearson Correlation			1	.170**	.076	.127**	-.015
	Sig. (2-tailed)				.000	.075	.001	.705
Leverage	Pearson Correlation				1	.167**	.166**	-.057
	Sig. (2-tailed)					.000	.000	.144
Beta	Pearson Correlation					1	.048	-.348**
	Sig. (2-tailed)						.263	.000
Size	Pearson Correlation						1	-.028
	Sig. (2-tailed)							.472
PrevDPS	Pearson Correlation							1
	Sig. (2-tailed)							