A survey on the Relationship Between Systematic Risk, Earning Per share and Dividend Per share and Cost of Capital in Accepted Companies in Securities Exchange of Tehran

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ABSTRACT

cost of capital is considered as an essential factor in making decisions on investment ,capital budgeting, managing of working capital, establishment of optimal financial structure, helping with performance measurement and determination of the firm value through helping in discounting cash flows.the present research aims at Survey of relationship between systematic risk, earnings per share(EPS) and dividend per share(DPS) as a in depended variables and cost of capital as a depended variable in accepted companies in securities exchange of Tehran in period of 2005-2010. Total of accepted companies in the securities exchange of Tehran have been seen as a statistic society. In order to conducting this research, 114 companies, random and with stipulate dimities, selected as research samples. In this research for estimation cost of equity capital we were used of Gordon growth model. It also for examination hypotheses of research we were used of partial correlation coefficient, step wise regression's and curve estimation regression test. The results indicate there were not significant relationship between systematic risk, earning per share and dividend per share with cost of capital in total time's dominion of the study. the yearly results show, there were significant relationship between systematic risk and cost of capital in 2007 from nonlinear aspect, between earning per share and cost of capital in 2007&2009 from linear aspect and in 2005,2006&2010,from nonlinear aspect and between dividend per share and cost of capital in 2007,2008&2009 from linear and nonlinear aspects.

Introduction

The cost of capital and its components (such as equity) are among the most important numbers in financial economics. An accurate measure of capital cost is necessary for financial managers and investors to make optimal investment and capital budgeting decisions. A vast literature in finance deals with the estimation of the cost/equity and the equity risk premium. (Mohsni,2008,p70)Systematic risk or beta factor indicates that the percentage of price changes of one share is what percentage of shares' total price indication changes.share holders are considered the owners of the firm,and there fore they prefer to invest in companich which have higher out put rate from firms having higher cost of capital and systematic risk. It can be concluded that the firms which have lower cost of capital,can provide investors' out put rate more easily (karimzadeh, 2004,p.p1-10). The main reason for considering earning pershare(EPS)(not total earnings of the firm) is related to the chief aim of the firm which is maximaizing sharholders'wealth.It should be taken for granted that the earning paid to share holders by the firm(DPS) has a close relationship with the earning that company gains. In calculating of the propertion of paid dividend, the valued belonged to EPS is used(Pay noo,2001,pp48-49).while a company take action due to announcing the earning regulary,the investors consider this stablity as the continuation of regular operating process.and a decrease in annouced earnning shares can be a sign of a potential problem in the firm for investors. For this reason, the

firm managers attempt to apply a stable payment policy and if the firm earninng decreases, they should increase the the dividend rate or even keep it in the same level as before (Setayesh,2008,p.p 2-3)

Modern corporate finance theory is founded on the proposition that financial capital is supplied to firms by investors who have an expectation of return, and reciprocally, such expectation represents the firm's cost of financial capital (SinYan,2008,p6)

Research history

Amir Abbas karimzadeh in his thesis from management and accounting school of shahid Beheshti university in2004, Tehran, investigated analytic relationship between systematic risk and cost of capital of companies accepted in Tehran security exchange stock market. He tested three hypotheses: first hypothesis: in a specific level of systematic risk there is negative relationship between financial leverage and systematic risk. Second hypothesis: there is a positive relationship between financial leverage and systematic risk of companies accepted in Tehran security exchange stock market. Third hypothesis: there is a positive relation ship between systematic risk and cost of capital of companies accepted in Tehran security exchange stock market. Systematic risk or beta factor of a share was calculated by Sharp regression model. Beta and financial leverage calculated were classified in three groups and each class was given a rank. Partial correlation coefficient was used to test the first hypothesis and student – t statically test and fisher test were

applied for earning second and third hypothesis. The results revealed that in a specific level of systematic risk, there is not a significant relationship between financial leverage and commercial risk in companies accepted in Tehran security exchange stock market. The results of the second hypothesis testing indicated that there is not a significant statistical relationship between financial leverage and systematic risk. In addition, in testing the third hypothesis, it was concluded that there is not a significant relationship between systematic risk and cost of capital of the accepted firms Tehran security exchange stock market(Karimzadeh,2004,p.p7-78)

Hamid Rasapoor in his thesis ,in a study, in management school of Shaid Beheshti university in 2004,investigated the relationship between earning per share and cost of capital in Iran. The purpose of this research was to determine the weighted average of cost of capital in accepted firms in Tehran security exchange stock market and examining the relationship between earning per share and cost of capital in Iran as well, the following hypothesis were investigated. The research time domain was a 5-year period from 1995-to-1999 and its location domain was accepted companies Tehran security exchange stock market. For calculating the cost of capital (CAPM) was used. Statistical methods of this research were correlation analysis and t and f test. The results revealed that there is not a significant relationship between earning per share and cost of capital in Iran. it is a recommended that investors should not use this criteria for assessing the shares of accepted firms in Tehran stock market.

Omran and Pointon(2004)performed a study titled "the determining factors of cost of capital through industry in a novel economy based on some evidence from Egypt". The samples participated in this study were 119 companies. by using multi-variable regression, the basic factor affecting cost of capital was specified. The obtained results showed that in general, growth and size were very crucial. Moreover ,specially commercial and financial risks are very important factors for active firms and heavy industries. As for real estates and also a contract having higher cost of capital. Fixed assets returns are recognized as key variable. In food industry liquidity is one of the main determining factors. but ultimately, there was not found a remarkable model to explain cost of capital in service section (Omran, Pointon,2004,pp237-254).

Nekrasov and Sheroff(2008), inserted earning systematic risks directly in institution value estimate and its cost of capital. Setting principles based on risk on evaluation model remained income is drown by covariance of out put rate surplus of shareholders salary with market extensive factors. in this study, risk modification covariance is adjusted in a way that easily can be used in practical appraisal structures. In the present research, a method is shown for estimating risk covariance not using normal pattern. Based on accounting beta and size betas and ledger factors to market on earning. Empirical analysis performing value of estimations which based on standard risk modification process using CAPM or Fama-3-factor model or French model. Eventually, it was concluded that institution, value out put done based on risk modification, demonstrate fewer evaluation mistakes and cost of capital out is performed better(Nekrasov,2007,pp1- 49)

Jorgensen and You (20040in an article titled "implied ordinary shares cost of capital in evaluation based on earning" investigated the ability of implied ordinary shares cost of capital relative dependence in 7 developed countries from 1993 to 2001. The findings indicated that in non-European countries implied cost of capital resulted from RIV models are more valid than OJ one. OJ and RIV are implemented in Europe. In this paper, there were a positive relationship between market Beta, the proportion of debt to market value, unusual risks and cost of capital, and there was a negative relationship between market value, shareholder salary and cost of capital. (Jorgensen, 2004, PP323-344)

Lee.N.G.Swaminathan(2003) in a study titled "an outline of cost of capital in international level" applied a new approach based on discount cash model to estimate cost of equity capital for companies in G7 countries. The results revealed that on firm characteristics such past frequencies, firm size, the proportion of B/M and analysts prediction of growth in country and industrial level of the firm belonging to that country, describes about 20 to 30 percent partial differences in risk premium. The research results in a specific period of time revealed that specific changes of a firm on output variation increases B/M size and long term growth of risk premium estimate validity. (Lee, Swaminathan, 2003,pp 16-132).

Cost of capital

Cost of capital is one of the most important benchmarks to evaluate the ability of firms to invest their funds and to evaluate the quality of their existing investments(Petruska ,2008,p13)

Its evaluation is very critical for managers since they can asses their investment projects. for this reason investors are very interested in evaluating general dangers and their expected profit to assess firm's activities(Pagano.2003.P23)

Firm's cost of capital is of interest to regulators, investors, accountants, academicians, and management for capital budgeting decisions, equity valuation, capital structure, and firm profitability (Easley and O'Hara, 2004).

The cost of capital is a measure of a firm's financial reporting credibility and transaction costs. Firms with a lower cost of equity capital are perceived to have higher financial reporting credibility. Determining the cost of equity capital is also relevant to understanding fundamental financial statement analysis and the valuation role of accounting. Cost of capital serves as a summary indicator measure of investors' resource allocations (Francis, 2004, PP967-1010).

Cost of capital components

Each of the firm capital components (financial supplying resources)has costs that are defined as the following:

K_i=cost of debt before tax

k_d= cost of debt after tax= $K_i(1-t)$

k_p= cost of excellent stock

k_s=cost of cumulative dividend(domestic cost of capital or available cost of equity

k_e= new cost of equity (foreign cost of capital)

K_o=total firm cost of capital (Weighted Average Cost of Capital) (Modares,2003,p92)

Cost of debt

While .long- term liabilities of a firm is in the form of bond ,liability cost of capital calculation is performed considering bond ,estimation or determining liability specific cost requires calculating liability effective cost and it should be expressed based on annual effective rate. cost of debt component for calculating capital average cost includes, debt interest rate(k_d),or each fixed earning rate paid to loan lender multiply(1-t) which t is tax rate(Weston etal.2007.p64).

In addition, the following formula is used to calculate and determine new cost of debt:

$$v_d = \sum_{k=0}^{n} \frac{I}{(1 + v_d)t} + \frac{BN}{(1 + r_d)t}$$

Here:

V_d = market value of debt

I = annual debt interest

BN = paying net interest in a year n

r_d = expected return rate in investment on net debt (Shim,1998,pp 43-52)

Excellent cost of stock:

Excellent cost of stock (kp), is obtained by dividend annual interest of excellent stock (dp),on obtained founds from sales:(Bakhtiyari,2000,p147)

$$k_p = \frac{dp}{p}$$

excellent cost of stock is a function of its declared interest. it is worth mentioning that this interest is part from the firm contractual financial commitment, but it is pay able based on management board. Therefore, in contrast to debt , it doesn't the risk of bankruptcy. However, from common stockholders, excellent shares don't have certain dividend paid in prior to their share interest. Most firm selling excellent stock prefer excellent stock with fixed dividends, because excellent stocks are without un due date (Dastgir.2006.p86)

Cost of cumulative dividend (ks)

Cost of cumulative dividend(ks)is also stockholders' expected return rate of dividend which firm is accumulating, the cause of considering cumulative dividend cost in calculating cost of capital is related to opportunity cost principle. The firm should obtain minimum returns or yield or cumulative dividends(kept) which shareholders themselves gain by investing on various capitals whit the similar risk(Brigam and Gapenski.2003.p428).For calculating special cost of cumulative dividend, it should be considered that cumulative dividend is normally a kind of earning belonged to shareholders and the firm, on behalf of them reinvest this amount in the firm. Therefore, on this base, shareholders expect that return rate for this reinvestment be the same as common share return rates, or more than that. As a result, capital special cost of cumulative dividend is the same as special cost of common stock capital. Considering this issue, which for using of this financial resource, there is no need to use common share issue costs and its distribution, market current price of common shares is applied (Barth.etal.2008.pp 629-664).

Cost of equity capital

The cost of equity capital can be defined as the expected rate of return of the current and prospective equity shareholders. It is the return demanded by the equity shareholders to bear the risks associated with the firm which in turn affects stock prices. As a firm becomes riskier, the investors demand a higher return resulting in a higher cost of equity capital (Saini,2010,p7).

There are three ways that commonly use to measure the cost of issuing common stock:

1-Gordon growth model or (Discounted cash flow) (DCF)

2-Capital Asset Pricing Model(CAPM)

3-Adjusted bond rate model(Bond yield plus premium risk)

Gordon growth model:

In their study of capital investment, Gordon and Shapiro (1956) estimate the rate of profit required for a firm's capital out lay. their research builds upon Lutz and Lutz (1951), Dean(1951), and Soule (1953) who show that firms maximize value when they set their capital budgets to equate the marginal return on investment with the rate of return at which the firm' stock sells in the market (Larocque,2009,p15)

He offered his famous formula for determining cost of shares based on sum of return on share dividend (based on next year dividend plus fixed growth rate of share dividend). It is assumed that in this model, firm value is established on the investor's expected share dividend flow in a period of time (Gordon, 1962, p27).

Based on Gordon growth model

$$p_0 = \frac{D_1}{r - g}$$

Here:

P_0 =(p_0 is share price at t=0)

D_1 =(the dividend paid at the end of first year)

r =the growth rate of investors' claim

g =the growth rate (that assumed to be constant during the time)

By using Gordon model where cost of equity capital is r:

$$r = \frac{d_1}{p_0} + g$$

$$k_s = \frac{d_1}{p_0} + g$$

It is important to say that k_s is submitted for r (Modares.2003.pp94-95)

Weighted Average Cost of Capital:

After calculating the rate of cost of capital for equity, cumulative dividend, excellent stocks and debt by calculating harmonic average of related capital costs, average rate of the firm cost of capital can be estimated (Tehrani.2008.pp408-409)

The total rate of capital cost is obtain by the following methods:

Peculiar cost of capital for every capital source is multiplied by its percentage then adds up all the obtained values. this sum is the harmonic average of cost of capital(Paynoo.2004.pp326-327).

The used multiplies in this average can be considered based on accounting items present in the firm balance sheet(ledger value) or the firm securities market values. Theoretically, this multiplies of a firm are logically close to market value weights (Brigham, Ferdstone,2009.p439).

Risk meaning and concept:

The probability that actual output on an investment become less than expected output is called risk(Vakilifard,2009,p20). While investors wish different output rate for their investments is in firms with various risks, financial cost for riskier firms is bigger, and for firm having less risk is smaller (Wang, 2008,p7).

Types of risk:

Investment modern analysts divide risk source in tow groups: systematic risk(general market risk) and un systematic risk(peculiar securities risk)((Jones,2002,p133).

Un systematic risk:

Un systematic risk is defined as a risk resulted from factors exclusive to a special firm. That part of total risk is securities which can be omitted by variety of investors (kim,2004,p13). Although all securities have partially unsystematic risk, this kind of risk; is more concerned with equity (P.jones 2000.p278).

Systematic risk:

The systematic risk measure "beta " is a key concept in modern finance theory (Masih & etal,2010,p10). this type of risk indicates a part of total risk of shares, created because of existence of factor of factors influencing the price of stock of all firms at a time(Francis,1991,pp66-264).The systematic risk of

firms listed in the securities market directly affects stock price by changing expected earnings of stock(Jeon, etal,2006,p869)

Measuring risk:

Financial analysts and researchers prefer to estimate systematic risk over intervals of several years to increase precision. But long intervals can increase the challenge of estimating the systematic risk of extreme performers, which have been known to experience very large equity beta shifts) Jones& Yeoman,2012,p1(

Calculating beta coefficient of an equity is not a difficult and complex job although it is some times frustrating. Beta correlation between securities output and market out put is measured by market variation (Kim, 2004,p13) (Masih,etal,2010,p13). Jorgensen and Kirschenheiter stated that the beta obtained by dividend share out put covariance and market out put is in accordance with the beta obtained empirically by regression method (Jorgensen, Kirschenheiter, 2003,p47)

The proportion of asset out put covariance and market out put on market output variance

In general three phase described below can be considered as steps of one share beta measurement :

The first step is to measure the understudy share output rate and market portfolio output on rate in a peculiar period of time.

The second step is to estimate covariance of out put rate of these shares and out put rate of market portfolio output rate variance.

The third step is to divide obtained covariance on market portfolio out put rate variance

Therefore the formula for beta coefficient of firm I is as the following :(Pay noo.2004.p314)

$$\beta = \frac{cov(i,m)}{v(m)}$$

Earnings per share (ESP)

EPS is the criteria for functioning of every share in the company comparing to interest, it is more related norm because it considered the size and amount of capital (the number of investors) (Hadadi.1390.p35).

Measuring earnings per share

It can be calculated as the following:

Total productivity(TP): (all sold products)(the price of every unit)

Total variable cost (TV): (all sold products)(variable cost of each unit) dividend before interest and tax: total variable cost – fixed cost - total productivity

Y=TP –TV –F

Y=T(P-V)-F

dividend before tax fraction:

dividend before interest and tax- interest (Y-I)

tax : (dividend before tax)(tax rate) (Y-I)(t)

dividend after tax fraction: dividend before tax- tax

 (Y-I)-(Y-I)t

(Y-I)(1-t)

dividend belonged to equity owners:

dividend after tax- excellent stock dividend(Y-I)(1-t)-E

$$earning\ per\ share = \frac{dividend\ after\ tax -\ \ excellent\ stock\ dividend}{number\ of\ distributed\ equity\ stocks}$$

$$EPS = \frac{(Y - I)(1 - t) - E}{N}$$

(Paynoo, 2001, p135)

Dividend per share

This proportion shows the amount of dividend which firm pays for every share. For calculating this proportion , the value dividend belonged to equity owners is divided on the number of distributed equity stocks

Dividend per

$$share = \frac{dividend\ belonged\ to\ equity\ bowners}{number\ of\ distributed\ equity\ stocks}$$

In this type of calculation, it is assumed that this amount of shares have been in the hands of stock holders in all these 12 months period if in one year, there is a meaningful change in the number of that shares, for measuring the related financial proportions per share, share number average should be used, the shares belonged to stock holders(Paynoo,2001.p49).

Research hypotheses

In this research we introduce and test three main hypotheses:

1- There is a significant relationship between systematic risk and cost of capital

2- There is a significant relationship between EPS and cost of capital

3- There is a significant relationship between DPS and cost of capital

Research methodology:

The present study is descriptive because of its way for collecting data and information and is a subdivision of descriptive research type called correlation research. In addition this study based on its purpose is an applied research.

Research statistical population:

The statistical population of this research is all firms and companies presented in Tehran security exchange market

Statistical sample**:**

The following formula was used for sampling

$$n_0 = \frac{(s)^2(t)^2}{d^2} \qquad n_1 = \frac{n_0}{1 + \frac{n_0}{population}}$$

Here:

n_0, Required out put for calculating sample size, s standard deviation, t the value of selected Alfa, d acceptable error margin, n_1 sample size. Which by replacing the value of each one, sample size is equal to:

$$n_0 = \frac{(1.54)^2(1.96)^2}{(.05)^2} = 119 \qquad n_1 = \frac{119}{1 + \frac{119}{390}} = 92$$

The one written by Bartlett.etal, 2001(Bartlett,2001,p48). 92 companies were randomely selected which by considering 25% mission,114 companies were chosen as the final sample, and among sample firms those not qualified were deleted and new firms were randomly replaced;

1- Their financial year ended in the last day of Esfand (last month in Shamsi year) and they did not change their statement of affairs during 1384-2010years.

2- They were active in stock market during these years and submitted their report to stock market

3- They were not included in investing companies and banks

4- Required data would be available

5- Would not change their financial year during the research

Data collecting method:

Collecting theoretical bases of research was done through studying and reading books and local and foreign articles(library research).

Required information for investigating and examining research hypotheses was performed through observing and

surveying firms' statement of affairs(reports distributed by Tehran Security exchange organization and security journal),and also by Rahavard novin soft ware.

Data analysis method:

In this research for calculating each one of research variables, related data to each one was assessed by using excel soft ware after calculating research variables. For investigating research hypotheses SPSS software was used. In order to examine the type and extent of the relationship between research variables and also delete control variable effects, partial coefficient correlation test was used. Then for investigating the linear or nonlinear relationship between variables , Stepwise regression and curve estimation regression were used respectively.

Research testing hypotheses:

In this research for testing the relationship between data correlation test was applied, for eliminating control variable effect, partial correlation coefficient was used. More over for testing linear relationship of dependent variable with independent variable, where correlation test was significant, linear regression test (Stepwise type)was applied. Furthermore, to know whether there is a nonlinear relationship between variables or not, curve estimation regression was performed.

Partial correlation coefficient test

Examining first hypothesis

H_0 :ρ=0   There is no significant relationship between systematic risk and cost of capital

H_1 :$\rho \neq 0$ There is significant relationship between systematic risk and cost of capital

Table (1) :partial correlation coefficient test between systematic risk and cost of capital

Examining second hypothesis

Here is significant relationship between EPS and cost of capital

H_0 :ρ= 0   There is no significant relationship between EPS and cost of capital

H_1 :$\rho \neq 0$ There is significant relationship between EPS and cost of capital

Examining third hypothesis

Here is significant relationship between DPS and cost of capital

H_0 :ρ= 0   There is no significant relationship between DPS and cost of capital

H_1 :$\rho \neq 0$ There is significant relationship between DPS and cost of capital

Stepwise regression test for research hypotheses

Results of curve estimation regression test for research hypotheses

We applied curve estimation regression to see whether there is nonlinear relationship between dependent variables and independent variables. The findings revealed that:

After using curve estimation regression to clarify the relationship between dependent and independent variables for research hypotheses as a whole and separately for each year, among 11types of curve estimation regression, some of the test results for our hypotheses in some years were significant, which the related -years' complete table in which the tests were significant is illustrated in table(5):

Examining first hypothesis

Here is significant relationship between systematic risk and cost of capital

Examining second hypothesis

Here is significant relationship between EPS and cost of capital on investigating different types of nonlinear tests, there

was no significant relationship between EPS and cost of capital during 6 years of research time and place domain totally. However, when test was applied separately the results were somehow different. In 2007-2009, among 11 curve estimation tests, three linear test, quadratic and 3-degree test, with significant level of 0.00, and in 2009, quadratic test and 3-degree test, could discover a significant and meaningful relationship between these two variables. Though low determination coefficient for every three test express rather weak explaining power of cost of capital variation by EPS in these years.

Examining third hypothesis

Here is significant relationship between DPS and cost of capital As it is shown in above table .it is only significant for 3-dgree and quadratic tets with significance level. Less than =α 0.05 deficiency level. Although 3- degree test determination coefficient amount (R^2=.099) is greater than quadratic test (R^2=.077), determination coefficient smallness for both tests indicates that DPS has been variation weak estimation of cost of capital in 2007.

In 2008,test significant level for all three test,i.e. linear regression, quadratic and 3- degree. was smaller than deficiency level of α= 0.05 demonstrating the significance of the results for these three tests, and 3-degree test with determination coefficient for every three tests. it can be concluded that DPS could not explain clearly the cost of capital variation in 2008

In 2009, the results was a little different in this year, similar to 2008, test level of significance was obtained for every three tests (linear,quardatic,3-degree) was smaller than error level of α= 0.05 which revealed that the results for every three tests for under-study. Variables were significant.

And among these three tests, determination coefficient for 3- degree test (R^2=0.689) was greater than quadratic test (R^2=0.647) and linear test (R^2=0.417). Therefore, it can be said that 3-degree regression test is the most qualified test for predicting cost of capital variations in terms of DPS in2009. R^2=0.689 for this test demonstrates that %0.69 of cost of capital variations in 2009 is explained clearly by DPS.

Comparing research hypotheses results with similar researches:

The result of the first hypothesis of the research emphasized in general, the whole time domain and also yearly separation. The results of Amir Abbas .Karimzadeh's research, investigating analytic relationship between systematic risk and cost of capital of the accepted firms in Tehran security exchange market confirmed our results. Karimzadeh, in his research, calculated systematic risk or Beta factor of share by sharp regression model. The only exception is related to 2007 which 3-degree and quadratic regression test for examining the relation ship of two variable was significant, however, these two test results can be ignored because the determination coefficient is low.

Moreover ,our research results rejects Nekrosov's research results. He and colleague (2008).concluded that institution value estimation done by risk adjustment, illustrates much less assessment errors and cost of capital estimation is performed better. Probably, its cause can be attributed to countries' internal factors and political issues, which two different results can be obtained in two different countries for two variables calculated based on financial data. The results of the second hypothesis, confirmed the whole time domain of research generally and also 2005, 2006, 2010 years.

Table (1) : partial correlation coefficient test between systematic risk and cost of capital

situation	Result	sig	Partial correlation coefficient	sig	The correlation coefficient Pearson) r(	year	test
There is No relationship	Confirm the hypothesis H0	0.806	0.024	0.7	0.36	2005	Partial correlation coefficient
There is No relationship	Confirm the hypothesis H0	0.957	-0.05	0.926	-0.009	2006	
There is No relationship	Confirm the hypothesis H0	0.492	-0.066	0.900	-0.001	2007	
There is No relationship	Confirm the hypothesis H0	0.684	-0.039	0.566	-0.054	2008	
There is No relationship	Confirm the hypothesis H0	0.064	-0.177	0.835	-0.020	2009	
There is No relationship	Confirm the hypothesis H0	0.322	-0.094	0.341	-0.090	2010	
There is No relationship	Confirm the hypothesis H0	0.981	-0.001	0.975	-0.001	total	

Table (2) - partial correlation coefficient test between EPS and cost of capital

situation	result	sig	Partial correlation coefficient	sig	The correlation coefficient Pearson (r)	year	test
There is no relationship	Confirm the hypothesis H0	0.545	0.058	0.552	0.056	2005	Partial correlation coefficient
There is no relationship	Confirm the hypothesis H0	0.898	-0.012	0.827	-0.012	2006	
There is relationship	refuse the hypothesis H0	0.00	0.690	0.000	0.455	2007	
There is no relationship	Confirm the hypothesis H0	0.575	0.054	0.0054	0.261	2008	
There is relationship	refuse the hypothesis H0	0.00	0.696	0.00	0.401	2009	
There is no relationship	Confirm the hypothesis H0	0.787	0.026	0.835	0.020	2010	
There is no relationship	Confirm the hypothesis H0	950.0	-.002	.9490	-.002	total	

Table(3)- partial correlation coefficient test between DPS and cost of capital

situation	result	sig	Partial correlation coefficient	sig	The correlation coefficient Pearson(r)	year	test
There is no relationship	Confirm the hypothesis H0	0.728	-0.033	0.854	0.017	2005	Partial correlation coefficient
There is no relationship	Confirm the hypothesis H0	0.625	-0.047	0.618	-0.047	2006	
There is no relationship	Confirm the hypothesis H0	0.00	-0.584	0.810	-0.023	2007	
There is relationship	refuse the hypothesis H0	0.029	0.206	0.00	0.322	2008/	
There is relationship	refuse the hypothesis H0	0.00	0.802	0.00	-0.646	2009	
There is no relationship	Confirm the hypothesis H0	0.260	-0.107	0.268	-0.105	2010	
There is no relationship	Confirm the hypothesis H0	0.808	-0.009	0.807	-0.009	total	

Table (4)- Stepwise regression test for research hypotheses table

sig	F	R^2( )	The correlation coefficient(R)	Variable	year	test
0.00	29.166	0.207	0.455	EPS	2007	stepwise regression
0.00	50.137	0.475	0.689	EPS, DPS		
0.00	12.989	0.104	0.322	DPS	2008	
0.00	80.134	0.417	0.646	DPS	2009	
0.00	124.270	0.691	0.831	DPS, EPS		

Table(5)-curve estimation regression test for the first hypothesis(2007)

Equation	Model Summary		
	R Square	F	Sig.
Linear	.000	.000	.990
Quadratic	.114	7.169	.001
Cubic	.115	4.750	.004

Table(6)-The results of curve estimation regression test for the second hypothesis

Equation	Model Summary								
	2007			2008			2009		
	R Square	F	Sig.	R Square	F	Sig	R Square	F	Sig.
Linear	.207	29.166	.000	.068	8.217	.99	.161	21.449	.000
Quadratic	.271	20.596	.000	.073	4.348	.015	.163	10.783	.000
Cubic	.272	13.728	.000	.085	3.420	.020	.163	7.124	.000

Table(7)-The results of curve estimation regression test for the third hypothesis

Equation	Model Summary								
	2007			2008			2009		
	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.
Linear	-	-	-	.104	12.989	.000	.417	80.134	.000
Quadratic	.077	4.600	.012	.118	7.409	.001	.647	101.598	.000
Cubic	.099	4.019	.009	.157	6.836	.000	.689	81.354	.000

The research results obtained by Hamid Rasapoor whose research investigated the relationship between earnings per share and cost of capital in Tehran security exchange market. revealed that there is no significant relationship between the variables. And in 2007,2008, for three test(linear,quardatic,3-degree) and 2008 for two tests (quadratic and 3-degree)Our obtained results reject their findings

The third hypothesis results, on research time domain as a whole, and Stepwise regression test results and curve estimation regression for 2010,2006,2005 confirmed that Merton , Milner and Franco Modiliani's theory of dividend per share was un related The main cause for un relatedness of dividend per share and cost of capital related to investors' decisions. Because the past few years they paid more attention on capital gain of the firm not for the dividends that firm divides between shareholders. The results for 2007 confirms Miron Gordon and John linter's theory. where as for 2008,2009 although we obtained a significant relationship between two variables, in contrast to Gordon and Linter's theory whish believes there is a reversed relationship between DPS and cost of capital the obtained relationship was direct. Stockholders' decisions in 2007, unlike the variation related to dividend per share was decided related to institution, or firm value, can be a reason that they believe this dividend variation can not be proof or main document and perhaps it is so because of firm face protection and capital gain could be the main cause or proof. Where as this type of shift in idea and though can be observed in 2008-2009 in share holders' decisions, which again they put more emphasize and value on dividend per share not on capital gain.

Research limitations:

In order to do this research, there were two main limitations such as: there are some factors affecting cost of capitals, but they are not under our control. The effecting of these factors may limit the generalization of research results. Various financial data of the firms in different formal sites of security exchange market and existing soft ware, synchronic usage of different information resources for completing research data encounter our research with some complications and limitation.

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