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The Effect of Projected Cash Flows, the Volatility of Expected Returns and Cost of Equity Capital in Companies Listed in Tehran Stock Exchange

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ABSTRACT

The purpose of this study is to evaluate the impact of the expected cash flows and cost of capital on expected returns on equity in the accepted companies listed in Tehran Stock Exchange. The variables in this research include expected return on equity (dependent variable), expected cash flows, cost of capital and fluctuations in expected cash flows resulting from cost of capital as independent variables and size of the company, dividends, the arbitrary variable of profit appropriation, return on equity, accruals and financial leverage ratio as control variables. This is a causative analytic study and also a library research. The sampling method here is systematic omission (filtering). In this study the financial data of 109 listed companies in Tehran Stock Exchange in the period of 1387 to 1392 have been reviewed (654 firm year). The results of the study in relation with first hypotheses approval indicated the significant and direct effect of expected cash flows on expected returns on the company shares. By the same token, considering the analysis conducted regarding second hypothesis of the study, the results revealed the direct and significant effect of cost of capital on the expected return on company shares and eventually, considering the analysis conducted regarding the third hypotheses of the study the results revealed the direct and significant effect of expected cash flows fluctuations resulted from cost of capital on expected returns of the company shares.

Keywords: Expected cash flows, expected return on equity, cost of capital, projected cash flows fluctuations resulted from cost



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1. INTRODUCTION

Cash is a very important resource of any enterprise. Proper cash planning is one of the main elements for the continuation of the firm's activity. In many forecasts, financial decisions and cash flows' share pricing play a key role. Future cash flow's prediction leads to adopt the Efficient and effective decisions in the Operational/investment areas, ensuring the firm's future to stay in the competition. Using cash flows has the particular importance for analysts so that new financial analyses are increasingly utilizing them. A firm's ability to pay share profits stems from its ability to generate future cash flows. Therefore, in decisions related to investments, forecasting a firm's cash flows is a great factor to show the firm's ability to pay share profits for the coming period (Ibrahim, 2011). Since the value of the firm depends on its ability to acquire cash flow, then information about the latter will help users of financial statements to provide a basis for assessing the firm's ability to generate cash and its needs in the use of the funds. In addition, the economic decisions taken by users require assessing the enterprise's ability to generate cash, scheduling and ensuring it (International Accounting Standards, No.7).

Decision-making and judgment about the most appropriate investment style in terms of maximizing shareholders' wealth, is one of the important considerations in the field of financial management. Two suitable methods to achieve this goal include: increased revenues obtained from investments; minimization of capital. Accordingly, knowing the cost of capital has always had a fundamental role in the corporate decisions. Achieving an appropriate cost rate, has particular importance in determining the firms' optimal financial structure, especially in obtaining the best results from operations in the form of increased profitability and stock price (Mervyn, 2001). Cost of capital, is one of the main considerations both in the decision financial literature and in the Selection of optimum solutions for the investment funds and capital structure in order to increase the overall value of the enterprise. In this context, researchers focus generally on financing and particularly on the cost of capital. Financing in enterprises, occurs in different ways and by using various sources. Several factors contribute to choose the best financing option that the expenditure of finance is the best important. Investors are investing in the hope



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of achieving more wealth. One of the important factors that investors consider in their decision making is "stock return rate fluctuations" (Ang and Bkrt, 2007). Return on investment flow, is the driving force that will motivate investors and is considered as a reward for them (Len, 2002). In fact, each investor must be sure that will reach to principal capital, on the one hand, and acquire his anticipated return, on the other hand, in order to decide for investment (Eng Sted and Pdrsvn, 2010). For this reason, prediction of the firms' cash flows and cost of capital can help investors to achieve the projected return of the stock market.

2. RELATED WORK

Alhmary and Esmail (2014) examined the effects of free cash flows, firm performance and firm size on the forecast of income. The results showed that the role of institutional owners in predicting revenue is important to reduce the free cash flow. The results also showed that large firms are less accurate in predicting revenues than small firms.

Eugene Simlay (2013) examined the free cash flows and expected stock return. The results showed that for firms holding more cash, investors accept the higher risk for the expected return on investment in these firms.

Hu et al. (2007), in a study entitled "Forecast of cash flows, the cost of capital and expected return" began to examine the relationship between three variables. They, considering the forecasts regarding the company profits and assuming models and indicators related to cash flow projections and estimates, emphasized on corporate capital costs and examined a large sample of firms between 1968 and 2008. The results showed that profit forecast based on other forecasts is associated with forecasts of cash flows and is derived from the coefficients relating to profit forecasts. In addition, they, In connection with the cost of capital and its relation with the expected stock return, concluded that stock return-related forecast is expected return-related indicator. They also found evidence regarding the confirmation of a significant relationship between the levels of characteristics related to the firm expected return and projected cash flows and adjusted this relationship assuming the cost of capital basic model.

Lee, Eric and Wang (2011), in a study entitled "evaluating implied cost of capital



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estimates" estimated the expected returns through seven methods and compared them with the beta-based expected returns. The results showed that the real returns are not a good indicator to predict the expected return and the estimates related to each of the seven models surveyed in this study are more accurate than beta-based estimates.

Hashemi and Motallebian (1392) examined the relationship between abnormal operating cash flows and stock returns of firms listed in Tehran Stock Exchange. The results showed that there is a negative and significant correlation between abnormal operating cash flows and future stock returns.

Darabi et al. (1392) looked at the relationship between operating cash flow/operating profit and firms' stock returns and the impact of information asymmetry on this. The results obtained by them showed that the operating profit and operating cash flow contain important information for predicting stock returns. In this case, the information content of the operating profit is higher than the operating cash flow. On the other hand, more information asymmetry is the information content of operating profit and operating cash flow will be less and more, respectively.

Mahmoodabadi et al. (1392) studied the effect of free cash flow and agency costs on the performance of companies listed in Tehran Stock Exchange. The results showed a significant positive relationship between free cash flow and performance criteria. In contrast, there was no significant relationship between performance criteria and agency cost.

Babajani et al. (1391) studied the effect of accrual reliability on stock return. This hybrid research is a combination of applied and correlation ones; namely, it uses the combined data. The statistical population of this study consists of companies listed in Tehran Stock Exchange for the period 1380 to 1387 which a sample of 141 companies was selected from them. The findings show that there isn't a stronger negative relationship between the current period profit accruals with low reliability and future stock return.

Fakhari et al. (1389), in a research studied the relationship between institutional investors and stock return volatility in Companies listed on Tehran Stock Exchange. Results show that the presence of institutional investors, increases the amount of monitoring the



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managers' performance, reduces the information asymmetry, and finally, reduces the volatility of stock returns by increasing the percentage ownership of this group of shareholders. These findings can be used by policy makers of capital market in order to formulate regulations for the establishment and strengthening the role of institutional investors (in corporate governance) and by investors in order to provide a basis for reducing the risk of volatility of the return on investment.

Safarzadeh and Arabmazar Yazdi (1386) in their study, investigated the separation of profit in forecasting future operating cash flows on a sample of 41 firms listed in the Tehran Stock Exchange for the period of 1376-1384. In the Cash flows prediction model used in their research, Profits were divided into two components, namely cash and accrual ones. In addition, it was found that the earnings' components reflect different information about future cash flows. Moreover, the accrual component was separated into five subcomponents and also aforementioned researchers explored the ability of this model to predict future cash flows. The results showed that separation of accrual component into more ones, improves the explanatory power of the model in predicting cash flows.

3. RESEARCH HYPOTHESES

Managers, considering their proper performance, seek ways to increase the confidence of investors and their expectations of return on investment in the company. This will help to attract more investment and reduce the cost of capital. Managers believe that increasing investors expectation from investing in the company, In the present competitive situation, reduces the company's cost of capital, and in turn, According to the results of previous research, reducing the cost of capital, leads to increase return on investment. Thus, according to the principles outlined above, three hypotheses developed for this study are as follows:

- 1. Hypothesis 1: There is a positive and significant relationship between predicted cash flows and expected stock returns.
- 2. Hypothesis 2: There is a positive and significant relationship between capital cost and expected stock returns.
- 3. Hypothesis 3: There is a positive and significant relationship between projected cash



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flow's fluctuations due to capital cost and the expected stock returns.

4. RESEARCH METHODOLOGY

The present study is an applied research with respect to the nature and a descriptive-causal one with respect to objective. This research is based on Actual stock market information and financial statements of companies listed on Tehran Stock Exchange. Required data to test hypotheses have been gathered through directly extracting the required information from the financial statements, Rahavard Novin software, and SEO (Securities and Exchange Organization) website. After selecting the sample firms and their industry-level categorization, we've used Excel software to do some calculations. Stock Exchange categorization has been used for grouping the companies in various industries. We used multivariate linear regression models and Eviews software, to analyze the information. Accordingly, tests of Limer F and Hassman test are carried out to select the panel data with fixed effects.

4.1.Statistical Sample and Population

Statistical population of the research contains all industry groups in the Tehran Stock Exchange that have been active in the stock exchange since 1387 until 1392. Companies included in the samples have the following features:

- 1. According to the information required from 1387, Companies that have been accepted in Tehran Stock Exchange up to the end of March 1386 and their names have not been removed from the list by the end of 1392
- 2. Companies that are not a part of financial intermediation companies (investment, holding, leasing, banking and insurance)
- 3. For a better comparison, Shares of the companies surveyed, have been actively traded in the stock exchange and their trading interruptions are not more than six months.
- 4. For a better comparison of Shares of the companies surveyed, their financial period must end to 29 Esfand and there must not be any sign of changing financial period, in the period under study.
- 5. Their required information is available.
- 6. Considering the conditions of sample selection, we chose 109 companies from 482



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companies (constituents of statistical population) listed on the stock exchange by using the screening method (systematic elimination).

4.2.Data Collation Method

We preferentially use the library method for Data collection. Research theory information is collected from Latin and Persian books and articles. Furthermore, Information required for testing hypotheses, is collected from the following: the audited financial statements of the companies investigated; Report of activities of the Board of Directors; Tadbirpardaz databases; Rahavard Novin software; SEO website and other sites associated with the Stock Exchange.

4.3.Research Model

Model derived from Macleans research [2010] and adjusted variables of Hu et al. (2013) study, is estimated as follows:

$$E_{i,t} = a_0 + a_1 CFE_{i,t} + a_2 ICC_{i,t} + a_3 CFE_{i,t} * ICC_{i,t} + a_4 A_{i,t} + a_5 D_{i,t} + a_6 DD_{i,t} + a_7 Nege_{i,t} + a_8 AC_{i,t} + a_9 Lev_{i,t} + \pounds_{i,t}$$
(1)

4.4.Research Variables

Research Variables are: dependent variables; independent variables and control variables.

4.5.Dependent Variable

 \checkmark Expected stock return ($E_{i,t}$)

It means the estimated return of an asset that investors expect to obtain in a future period [Hu et al. 2006]

Sharp in his research that led to the capital asset pricing model has proven that the expected return of a unique security equals to the riskless return of an asset minus the product of the relative risk of security($^{\beta}$) in difference between the rate of return on market portfolio and the riskless return of an asset.

$$E_{ri} = r_f - \beta_i (r_m - r_f) \tag{2}$$

Where:

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 $E_{ri} =$ expected return

 r_f = riskless return of an asset

 β_i = relative risk of security

 r_m = rate of return on market portfolio

Rate of return on portfolio (total rate of return) is equivalent to the sum of price variation and cash dividend (CD) given the amount paid as a capital.

$$rm = \frac{\sum c_{i,t} \cdot D_{i,t} - \sum x_i p_i}{c_{i,t} p_{i,t} - 1} + \frac{TEP_t - TEP_{t-1}}{TEP_{t-1}}$$
(3)

 $TEP_t = \text{stock index at the end of the day}$

 $TEP_{t-1} =$ stock index at the beginning of the day

 $X_i P$ = shareholders cash contribution in capital increase

 C_i = number of stocks at end of period

 D_{it} = dividend per share (DPS)

 P_{it} = stock price at end of period

t = the period under investigation

4.6.In-Dependent Variables

Projected cash flow ($CFE_{i,t}$)

To calculate the cash flows projected by the Sloan survey [1996], and Francis et al. (2000), we apply the following formula:

$$CFE_{i,t} = \frac{\text{operating cash flows of year t+1}}{\text{book value of total assets}}$$
(4)

✓ cost of capital ($ICC_{i,t}$)

To compute the cost of capital of companies, we will use the formula calculated in the Gbardat and et al. [2001], as follows:

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$$ICC_{t} = \beta_{t} + \sum_{k=1}^{11} E_{t} \left[(ROE_{t+k} - R) + \beta_{t+k-1} \right] / (1 + R)^{k} + E_{t} \left[(ROE_{t+12} - R) \times \beta_{t+11} \right] / + R \times (1 + R)^{11}$$
(5)

Where:

 $ICC_t = cost of capital of company$

 E_t = expected stock return

 ROE_t = return on equity =

$$ROE_t = \frac{\text{profit before tax reduction}}{\text{Book value of equity}}$$
 (6)

 $R_t = \text{stock return of company}$

 \checkmark projected cash flow fluctuations due to cost of capital ($CFE_{i,t} * ICC_{i,t}$)

According to Hu et al. [2013], projected cash flow fluctuations due to cost of capital equals to the product of projected cash flows ($CFE_{i,t}$) and cost of capital ($ICC_{i,t}$).

4.7. Control Variables

 \checkmark firm size $(A_{i,t})$

To calculate the control variable "firm size", we utilize the Hong et al. (2000) research. Aforementioned variable is computed by calculating the natural logarithm of the book value of total assets.

 \checkmark Dividend per share $(D_{i,t})$

According to Klaus and Thomas (2001), to calculate the earnings per share, we will use the DPS stated by companies surveyed in the explanatory notes.

✓ dummy variable "profit split" ($DD_{i,t}$)

If the company pays dividends during the year under study, the value of this dummy variable is 1, and otherwise is 0 [Fama and French, 2000].

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✓ Variable "stock return" ($NegE_{it}$)

Method of determining the stock return is through the following formula [Dieter et al., 2002]:

$$R_{it} = \frac{(P_{it} - P_{it-1}) + DPS + (P_{it} - 1000)A + P_{it}B}{P_{it-1}} * 100$$
 (7)

Where:

 $P_{i,t}$ = stock price at the end of year t

 $P_{i,t-1}$ = stock price at the end of year t-1

DPS = dividend per share based on the number of shares at beginning of period

A = percent of capital increase derived from cash contribution

B = percent of capital increase derived from retained earnings or reserve

 \checkmark firm's accruals ($AC_{i,t}$)

In this study, to calculate the discretionary accruals, we will follow the basic model of Jones (1991) and Dechow et al [1995] and a modified version Kothari (2005).

At first, total accrual is estimated through the following formula:

$$\frac{TA_{it}}{A_{it-1}} = \alpha_1 \frac{1}{A_{it-1}} + \left(\frac{\Delta REV_{it}}{A_{it-1}} - \frac{\Delta AR_{it}}{A_{it-1}}\right) + \alpha_3 \frac{PPE_{it}}{A_{it-1}} + \alpha_4 \frac{NetIncome_{it-1}}{A_{it-1}} + \varepsilon_{it}$$
(8)

Where:

 α = a constant coefficient

 TA_{it} = total accrual

 $TA_{ir} = NI - OCF$

NI = net income

OCF = operating cash flows

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 A_{it-1} = accruals in the year before the current one

 ΔREV_{it} = firm sales changes =

$$= \frac{S_{i,t} - S_{i,t-1}}{S_{i,t-1}} \Delta REV_{i,t}$$
 (9)

 ΔREV_{it} = sales growth of firm i for year t

 $S_{i,t}$ = net sales of firm i for year t

 $S_{i,t-1}$ = net sales of firm i for year t-1

 ΔAR_{it} = changes in the company claims =

$$\Delta AR_{i,t} = \frac{AR_{i,t} - AR_{i,t-1}}{AR_{i,t-1}}$$
 (10)

 ΔAR_{it} = claims growth of firm i for year t

 $AR_{i,t}$ = claims of firm i for year t

 $AR_{i,t-1}$ = claims of firm i for year t-1

 PPE_{it} = net book value of property, plant and equipment

 $NetIncome_{it-1}$ = net income in the previous year under study

After calculating the total accruals and its placement in the estimated model, discretionary accruals, will be equal to the following formula:

$$DA_{it} = \varepsilon_{it} = \frac{TA_{it}}{A_{it-1}} - \left(\hat{\alpha}_{1} \frac{1}{A_{it-1}} + \hat{\alpha}_{2} \left(\frac{\Delta REV_{it}}{A_{it-1}} - \frac{\Delta AR_{it}}{A_{it-1}} \right) + \hat{\alpha}_{3} \frac{PPE_{it}}{A_{it-1}} + \hat{\alpha}_{4} \frac{NetIncome_{it-1}}{A_{it-1}} \right)$$
(11)

✓ financial leverage ratio ($Lev_{i,t}$)

High financial leverage ratio is likely to show increasing in the ratio of debt to accumulated cash funds of the company and will be more likely to cause financial bankruptcy of it. High financial leverage ratio indicates that level of cash funds will



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decrease with increasing debt. Accordingly, companies with more cash assets are able to cover these assets by cash fund levels and reduce the further debts. Lu (2007) and Yu (2000) came to the conclusion that there is a negative relationship between financial leverage and cash assets. Ferreira and Vilela [2004] showed that firms with higher debt levels are less able to reserve cash funds.

In this study, we will follow the Zeng's research (2011) in order to calculate financial leverage ratio ($Lev_{i,t}$) using the following formula:

$$Lev_{i,t} = \frac{\text{book value of sum of total debts}}{\text{book value of sum of total assets}}$$
 (12)

5.RESULTS

5.1.Descriptive Statistics

Table 1 contains the descriptive statistics of the variables tested.

Table 1 descriptive statistics of the research variables

				Project			Dum			
				ed cash			my			
	Expe	Proje	Cos	flow			varia	Stoc		Finan
	cted	cted	t of	fluctuat	Firm	divid	ble	k	accr	cial
	stock	cash	capi	ions	size	end	"prof	retur	uals	lever
	return	flows	tal	due to			it	n		age
				cost of			split			
				capital			,,			
maan	0.001	0.120	0.02	0.0030	13.4	0.002	0.94	0.04	0.28	0.632
mean	8	3	09	0.0030	402	1	55	82	85	2
media	-	0.120	0.00		13.4	0.000	1.00	-	0244	0.651
n	0.001 7	6	41	0.003	203	6	00	0.01 37	1	8
maxi	0.531	0.938	0.94	0.2066	19.6	0.059	1.00	15.3	0.99	0.998



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mum	0	7	40		180	2	00	100	07	3
minim um	- 0.392 9	0.772 2	0.00 69	0.0502	8.53 78	0.000	0.00	3.92 87	0.00 48	0.112

According to Table 1.4, mean of expected stock return of sample companies is 0.0018. Additionally, maximum and minimum are 0.531 and -0.3929, respectively. These numbers show that the expected return is low in exchange companies and differs between various companies. According to the descriptive statistics shown in the Table 4-1, mean of projected cash flows equals to 0.1203, showing that the average precision of forecasting cash flow is equivalent to 12%. Mean of cost of capital equals to 0.0209, showing that cost of capital is relatively low in exchange companies. Mean of projected cash flow fluctuations due to cost of capital equals to 0.030, showing that cost of capital fluctuations due to projected cash flows is low in exchange companies. Furthermore, on the one hand, positive means of firm size, earnings per share, and dummy variable "profit split" are equivalent to 13.4402, 0.0021 and 0.9455 respectively. On the other hand, the means of variable "stock return", accruals, and financial leverage ratio are equal to 0.0482, 0.2885 and 0.6322 respectively.

5.2.Dependent Variable Normality Test

To estimate the model parameter, we use the ordinary least squares' method. This technique is based on the assumption that the dependent variable is normally distributed, so that the non-normal distribution of the dependent variable leads to violation of the assumptions of this method for estimating parameters and failure to provide correct results. It is therefore, necessary to test the normality of the distribution of this variable. One of the regressive assumptions is normality of residuals of the regressive model, showing the regression model validity. Thus, the normality of the dependent variables, leads to normality of residuals of the model (Difference between the estimated values and the actual values). So we need to control the normality of the dependent variable before estimating the parameters and if this condition is not established, adopt the right solution



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to normalize them (including conversion of it).

Here, we explore the issue through Jarque – Bera (J-B) statistic. The null hypothesis is as follows:

If the level of statistical significance of the test is bigger than 0.05 (Prob>0.05), the hypothesis based on the normality of the variable distribution is accepted. In table 2, J-B test results for the dependent variable (expected stock return) of sample companies, is presented.

Table 2 test results of normality of research variables

Test type	value of	significance	skewness	Kurtosis
71	statistic	level		
Jarque – Bera	6.719741	0.053142	0.032126	2.429105

According to Table 2, since the level of statistical significance of J-B statistic for the dependent variable is higher than 0.5 (0.053142), this hypothesis is confirmed at the confidence level of 95%, showing that the dependent variable is normally distributed.

5.3.Investigation into Collinearity between Research Variable

Before carrying out the main research tests, we used the VIF test coefficient for better identification of the relationships between variables (see Table 3).

Table 3 collinearity Test of research variables (VIF)

Variables	VIF
Projected cash flows	1.000
Cost of capital	1.000
Projected cash flow fluctuations due to cost	1.000
of capital	
Firm size	1.000
Dividend	1.000
Dummy variable "profit split"	1.028



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Stock return	1.014
Accruals	1.024
Financial leverage	1.061

Coefficients derived from VIF test are in the range of between 1 and 5, showing that Relationship and correlation between variables are weak.

5.4.Heterogeneity of Variances Test

To evaluate the homogeneity of errors' variance, we use White test. The results are shown in Table 4.

Homogeneity of variance: H0 Heterogeneity of variance: H1

Table 4 results of heterogeneity of variance test

Significance level	Value of statistic	arch test type	
0.9939	1.657	F test	
0.9939	1	Lagrange test	
0.7737	1	coefficient	

As shown in Table 4, value of F-test and value of Lagrange's coefficient test related to all hypotheses are less than the critical value in the relevant statistical tables. Therefore, the null hypothesis based on homogeneity of errors variance is approved. In other words, there is no sign of heterogeneity of variance.

5.5.F-Limer Test

To evaluate the use the method of panel data with fixed effects versus method of pooled data, we use F-Limer test. Assumptions of this test are as follows:

H0= Pooled Model

H1= Fixed Effect Model

Table 5 shows the Results derived from F-Limer test.

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Accepted method	Value of statistic	Error level	
Method of pooled data	109.541	0.6863	

As seen in the above table, given that F-statistic of the research model isn't significant in error level of 5%, method of pooled data is better than method of panel data. Thus, by the rejection of the hypothesis H1, the models are tested by a pooled method.

5.6.Results Related To Goodness-Of-Fit of Hypotheses Test

Table 6 presents the results of model estimation. Estimated form of the model by using Eviews 8 software is as follows:

Table 6 results of goodness-of-fit test

Variables	Variables	t-statistic	Significance
	coefficients		level
Intercept	0.032	4.281	0.000
Projected cash flows	0.005	3.112	0.000
Cost of capital	0.009	3.704	0.000
Projected cash flow fluctuations due	0.101	5.672	0.000
to cost of capital			
Firm size	-0.003	-3.813	0.000
Dividend	-1.524	-5.462	0.000
Dummy variable "profit split"	0.022	5,424	0.000
Negative stock return	-0.005	-7.013	0.000
Accruals	-0.052	-7.652	0.000
Financial leverage	0.016	6.408	0.000
Coefficient of determination	0.0209	Modified	0.0207
		coefficient of	
		determination	
Durbin-Watson	1.901	F-statistic	170.722



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Significance level of F-statistic	0.000

5.7.First Hypothesis Test

✓ There is a positive and significant relationship between the projected cash flows and the expected stock return.

During the review of coefficients' significance considering the results presented in Table 6, Since the significance level related to the coefficient of variable "projected cash flows of companies" is smaller than 0.05 (0.000), then we can prove the influence of the projected cash flows on the expected stock return of companies with the confidence level of 95%. Therefore, the research's first hypothesis is acceptable ("projected cash flows" has a direct and significant effect on "expected stock return" with confidence 95%).

The positive sign related to the coefficient of this variable (0.005), shows that "projected cash flows" has a direct effect on "expected stock return of companies", so that with increasing "projected cash flows" by one unit, "expected stock return of companies" will increase by 0.005 units. Thus, according to the analysis conducted for approval of the first hypothesis, we can conclude that "projected cash flows" has a direct and significant effect on "expected stock return of companies".

5.8.Second Hypothesis Test

✓ There is a positive and significant relationship between the cost of capital and the expected stock return.

During the review of coefficients' significance considering the results presented in Table 6, Since the t-statistic probability related to the coefficient of variable "cost of capital of companies" is smaller than 0.05 (0.000), then we can prove the influence of the cost of capital on the expected stock return of companies in the confidence level of 95%. Therefore, the research's second hypothesis is acceptable ("cost of capital" has a direct and significant effect on "expected stock return of companies" with confidence 95%).

The positive sign related to the coefficient of this variable (0.009), shows that "cost of capital" has a direct effect on "expected stock return of companies", so that with



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increasing "cost of capital" by one unit, "expected stock return of companies" will increase by 0.009 units. Thus, according to the analysis conducted for approval of the second hypothesis, we can conclude that "cost of capital" has a direct and significant effect on "expected stock return of companies".

5.9. Third Hypothesis Test

✓ There is a positive and significant relationship between the projected cash flow fluctuations due to cost of capital and the expected stock return.

During the review of coefficients' significance considering the results presented in Table 6, Since the t-statistic probability related to the coefficient of variable "projected cash flow fluctuations due to cost of capital" is smaller than 0.05 (0.000), then we can prove the influence of the projected cash flow fluctuations due to cost of capital on the expected stock return of companies in the confidence level of 95%. Therefore, the research's third hypothesis is acceptable ("projected cash flow fluctuations due to cost of capital" has a direct and significant effect on "expected stock return of companies" with confidence 95%).

The positive sign related to the coefficient of this variable (0.101), shows that "projected cash flow fluctuations due to cost of capital" has a direct effect on "expected stock return of companies", so that with increasing "projected cash flow fluctuations due to cost of capital" by one unit, "expected stock return of companies" will increase by 0.101 units. Thus, according to the analysis conducted for approval of the third hypothesis, we can conclude that "projected cash flow fluctuations due to cost of capital" has a direct and significant effect on "expected stock return of companies".

During the review of significance of the total model, considering that value of F-statistic probability is smaller than 0.05 (0.0000). We can confirm significance of the whole model with confidence 95%. Furthermore, coefficient of determination of the model shows that 0.0209 percent of the expected stock return of companies is determined by the model's input variables.

6.CONCLUSION

During the review of coefficients' effect considering the results presented in Table 6,



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Since the t-statistic probability related to the coefficient of variable "projected cash flows of companies" is smaller than 0.05 (0.000), then we can prove the influence of the projected cash flows on the expected stock return of companies with the confidence level of 95%. Therefore, the research's first hypothesis is acceptable ("projected cash flows" has a direct and significant effect on "expected stock return of companies" with confidence 95%).

The positive sign related to the coefficient of this variable (0.005), shows that "projected cash flows" has a direct effect on "expected stock return of companies", so that with increasing "projected cash flows" by one unit, "expected stock return of companies" will increase by 0.005 units. Thus, according to the analysis conducted for approval of the first hypothesis, we can conclude that "projected cash flows" has a direct and significant effect on "expected stock return of companies". The reason is as follows: since forecasting the cash funds leads to high financial flexibility and helps the organization to achieve its strategic goals (namely, increasing owners' equity), then the expected stock return of companies will increase. The results derived from first hypothesis are in agreement with results obtained by Simlay [2013] and Hu et al. (2012).

During the review of coefficients' effect considering the results presented in Table 6, Since the t-statistic probability related to the coefficient of variable "cost of capital of companies" is smaller than 0.05 (0.000), then we can prove the influence of the cost of capital on the expected stock return of companies with the confidence level of 95%. Therefore, the research's second hypothesis is acceptable ("cost of capital" has a direct and significant effect on "expected stock return of companies" with confidence 95%) The positive sign related to the coefficient of this variable (0.009), shows that "cost of capital" has a direct effect on "expected stock return of companies", so that with increasing "cost of capital" by one unit, "expected stock return of companies" will decrease by 0.009 units. Thus, according to the analysis conducted for approval of the second hypothesis, we can conclude that "cost of capital" has a direct and significant effect on "expected stock return of companies". Because, owing to the increased cost of capital, as proven in this study, companies are seeking to increase the return. The results derived from second hypothesis



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are in agreement with results obtained by Simlay (2013).

During the review of coefficients' effect considering the results presented in Table 6, Since the t-statistic probability related to the coefficient of variable "projected cash flow fluctuations due to cost of capital of companies" is smaller than 0.05 (0.000), then we can prove the influence of the projected cash flow fluctuations due to cost of capital on the expected stock return of companies with the confidence level of 95%. Therefore, the research's 3rd hypothesis is acceptable ("projected cash flow fluctuations due to cost of capital" has a direct and significant effect on "expected stock return of companies" with confidence 95%). The negative sign related to the coefficient of this variable (0.101), shows that "projected cash flow fluctuations due to cost of capital" has a direct effect on "expected stock return of companies", so that with increasing "projected cash flow fluctuations due to cost of capital" by one unit, "expected stock return of companies" will decrease by 0.101 units. Thus, according to the analysis conducted for approval of the 3rd hypothesis, we can conclude that "projected cash flow fluctuations due to cost of capital" has a direct and significant effect on "expected stock return of companies". The results derived from third hypothesis are in agreement with results obtained by Alhmary (2014).

7.RESEARCH LIMITATIONS

This study, like other investigations, had limitations that made it difficult to generalize the results. Some of these are:

- There are some differences between the statistical data reported by the stock exchange website, and the information contained in the databases. In this case, we took advantage of the information provided by the stock exchange organization and its website.
- Although the data gathering was done with great effort and care, but Because of the weakness of information sources, especially about the expected stock return of companies, some companies were excluded from the test sample.

8.FUTURE WORK

In order to make greater use of research results and also help to clarify the relationship between effect of the projected cash flows and the cost of capital on the expected stock return of companies, researchers must consider into following topics in the future:



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- Evaluation of the impact of volatility of stock return and credit rating of companies on the expected stock return of companies
- Evaluation of the impact of return fluctuations, and systematic/nonsystematic risk on the expected stock return With emphasis on external factors
- Evaluation of the impact of macroeconomic variables such as inflation, crude-oil price, and currency rate on the expected stock return of companies
- Evaluation of the impact of the more trust in managers on the expected stock return of companies
- Evaluation of the impact of the capital expenditure fluctuations and productivity on the expected stock return

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