

## The Relationship Between Information Asymmetry, Disclosure and Cost of Equity Capital in Companies Listed in Tehran Stock Exchange

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**Abstract:** The aim of this study is to examine the impact of information asymmetry between the cost of capital in 94 active and passive companies listed in Tehran exchange from 2006-2013. Results show that there is a significant relationship between active investors and information asymmetry as well as between active investors and capital costs in companies listed in Tehran Stock Exchange. Also, there is a significant relationship between passive investors and lack of information asymmetry as well as between passive investors and the cost of capital in companies listed on Tehran Stock Exchange.

**Key words:** Information asymmetry, disclosure, cost of capital, active and passive shareholders, Iran

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### INTRODUCTION

The efficiency of the market is one of the important points on the stock exchange that all information available in market reflects its effect on stock prices on its basis. The reason behind the presence of accounting probably is information asymmetry from the perspective of efficient market hypothesis in which one of the exchange parties possess more information than the other party. This is due to intra-group transactions and information. To determine and create optimal capital structure and or move toward it can affect corporate value and shareholder wealth. The company cannot decide on the tool to collect funds for long-term investments without knowing the cost of capital and economic units should select a combination of financial resources with the minimum cost of capital due to limitations on resources (Vakilifard and Wahab, 2010).

Investors base their decisions on the distinction between risk and return. They estimate risk and return for future investors based on data reported by the company and other evidence. The amount of uncertainty in estimating of expected returns is reduced whatever the higher quality information provided and thus information risk decreases.

Information must be such as to effectively evaluate the former performance and profitability of the possible expected measurement on future activities to reported earnings is able to allow users to evaluate the performance and the profitability of the company, based on their expected efficiency gains estimated.

The amount of information available is less transparent in case of the increase in recurring financial reports as long as this information could be influenced by other authorities. So, this may change some invisible characteristics of commercial establishments such as risk, the repeated reports and financial information asymmetry and this is raising fears of institutions.

This study explores the impact of information asymmetry on cost of capital among active and passive shareholders' in stock exchange, given the importance and role of investors in the corporation contestant survival and the impact of information asymmetry.

**Theoretical backgrounds:** Currently, investment is among the most important factors determining the economic fate of the country. Capital markets have the duty of optimal allocation of capital in line with other markets such as money, labor and product market. Information plays a crucial role in the functioning of the capital market in order to guide capital allocation decisions for most decisions, including investment decisions are taken in a state of uncertainty (Bulow, 2007). Optimal capital allocation occurs when market participants own reliable, impartial and fair information in regard to commercial effects of trading. Information users seek increased reliability and reduced risk. But a lot of information does not lead to increased reliability but that transparency of information reduces uncertainty (Chi *et al.*, 2009).

Access to transparent information is among people's basic rights in democratic societies. Transparency and appropriate disclosure that reduces

information asymmetry is as an integral part of corporate governance. According to the research, companies that have more transparency are evaluated more intense than other companies in the market. Usually when new information of companies is released in the market, this information is used by analysts, investors and other users and they decide to buy or sell stocks based on it. Thus, investors react differently in the case of confidential and uneven information release, due to information asymmetry in the capital market that will be in line with the misleading and false analysis of the current market situation. In this case, small investors will be reluctant to invest and this ultimately leads to an increase in the cost of capital to risk that must be tolerated by investors (Lambert *et al.*, 2007).

On the other hand, cost of capital is one of the most important and fundamental tools in many financial and management decisions that are influenced by several factors.

The cost of capital concept rests on the assumption that a firm's is to maximize shareholder wealth. This will cause application of other concepts out of cost of capital and each of the interest groups desire a measure of the rate of return on that are suitable to risk. Cost of capital is the minimum rate of return that the company has acquired to provide investment returns in the company desired by investors.

Hara and Oldfield (1986) argue that information asymmetry impact on prices and is as an indicator of corporate cost of capital. They argue that information asymmetry among trader's leads to the maintenance of diverse portfolios. Therefore, traders with little information will try to hold assets that can compensate for the weakness of disparate data. This decreases price and liquidity of securities with information asymmetry and increases cost in the buying and selling.

Investors demand more compensation for the added transaction costs paid, thus the company costs of capital increases. Companies will be able to reduce the information asymmetry and securities trading costs and thus cost of capital by reducing the information asymmetry by disclosing private information and improve the quality of disclosure. According to studies, still the consequences of information asymmetry in capital markets and especially its relationship with the accuracy of information provided to shareholders and cost of capital is controversial. Thus, the current study aims to study information asymmetry impact among investors on the cost of capital in companies listed in Tehran Stock Exchange.

#### Research hypothesis:

- There is a significant relationship between active investors and information asymmetry in companies listed in Tehran Stock Exchange
- There is a significant relationship between active investors and cost of capital in companies listed in Tehran Stock Exchange
- There is a significant relationship between passive investors and information asymmetry in companies listed in Tehran Stock Exchange
- There is a significant relationship between passive investors and information asymmetry in companies listed in Tehran Stock Exchange

#### MATERIALS AND METHODS

This study uses regression analysis to examine the relationship between variables. Also, Basu (1997)'s model and Ball and Shivakumar (2005) were used to measure information asymmetry in passive institutional investors and active institutional investors.

Basu (1997) using the following model found that dividend asymmetry in good news and bad news reflection leads to different degrees of stability.

#### In this model:

- NI: Net earnings before unusual items divided by equity market value
- RET: Annual stock returns of companies
- DR: Virtual variable equal to one for companies with  $RET < 0$  otherwise zero

In this model, positive return represents good news and negative returns represent bad news if the stock return is positive, it will be obtained by  $NI = \alpha + \beta_2 RET + \epsilon$  where  $\beta_2$  represents the sensitivity of earnings response to the good news. If stock return is negative, it will be obtained by  $NI = \alpha + \beta_1 + (\beta_2 + \beta_3) RET + \epsilon$  where  $\beta_2 + \beta_3$  represents the sensitivity of earnings response to the bad news. In other words,  $\beta_2 < \beta_2 + \beta_3$  and thus  $\beta_3 > 0$  and  $\beta_3$  is called the coefficient of earnings asymmetry time that represents conservatism.

The above mentioned variables are added to the model in order to evaluate the effect of institutional ownership and its variants (active and passive) on conservatism:

#### Basu model-institutional ownership:

$$NI = \alpha + \beta_1 DR + \beta_2 RET + \beta_3 RET \times DR + \beta_4 INST + \beta_5 INST \times DR + \beta_6 INST \times RET + \beta_7 INST \times RET \times DR + \epsilon \quad (1)$$

Positive (negative) and the significance of  $\beta 7$  indicate that information asymmetry in earning report is more (less) by increasing institutional ownership.

**Basu model-type of institutional ownership (active and passive):**

$$NI = \alpha + \beta 1 DR + \beta 2 RET + \beta 3 RET \times DR + \beta 4 ACINST + \beta 5 ACINST \times DR + \beta 6 ACINST \times RET + \beta 7 ACINST \times RET \times DR + \beta 8 INACINST + \beta 9 INACINST \times DR + \beta 10 INACINST \times RET + \beta 11 INACINST \times RET \times DR + \varepsilon \quad (2)$$

Where:

INST = Ratio of common stock held by institutional investors

ACINST = Ratio of common stock held by institutional active investors (institutional investors with representative on the board of directors)

INACINST = Ratio of common stock held by institutional passive investors (institutional investors without representative on the board of directors) positive (negative) and the significance of  $\beta 7$  indicate that increasing active institutional ownership, conservatism increase (decrease) in earning reports. Positive (negative) and the significance of  $\beta 11$  indicate that increasing passive institutional ownership, conservatism increase (decrease) in earning reports

**Variables:**

- ACC: total accruals equal to net earnings plus depreciation minus operating cash flow
- CFO: operating cash flow changes
- DC: dummy variable equal to one if negative CFO otherwise is zero
- DCFO: equal to one if the company's operating cash flow is negative, otherwise is zero
- INST: ratio of common stock held by institutional investors
- ACINST: ratio of common stock held by institutional active investors (institutional investors with representative on the board of directors)
- INACINST: ratio of common stock held by institutional passive investors (institutional investors without representative on the board of directors)

**Independent variables:** Information asymmetry is the independent variable. Venkatesh and Chiang (1986) model was used to calculate the information asymmetry:

$$SPREAD = \frac{1}{D} \sum \frac{(AP-BP)}{\frac{AP+BP}{Z}}$$

Where:

SPREAD = Difference between bought and sold shares bid

D = Number of trading days during the year

AP (ASK PRICE) = Average daily stock best bids sales in the studied period

BD (BID PRICE) = Average daily stock best purchase offer price in the studied period

Difference between bought and sold shares bid is calculated as the such that first the daily data concerning the shares sell bid for each sample companies, over the years is extracted and then the days of the year meeting the following criteria are determined: (highest purchase bid), best shares purchase bid) lowest sell bid) and (best sell bid).

**Dependent variable:** Cost of capital is the dependent variable in this study and is calculate using Gordon model (Saghafi and Bulow, 2009). The model assumptions are:

- Retained earnings are the only source of financing. That's why Gordon assumes dividend and investment decisions as that of Walter model
- The rate of return on investment remains constant
- The growth rate is a function of retained earnings and return rate. This assumption is related to the first two assumptions
- Cost of capital is fixed for companies but larger than the growth rate
- The company has an unlimited life
- There is no income tax

Gordon first suggested the following model for stock valuation but later revised it for risk as:

$$P_0 = \frac{E_0(1-b)}{k-br}$$

Where:

$P_0$  = Price per share at the beginning of year zero

$E_0$  = Earnings per share at the end of year zero

B = Retained earnings

k = Rate of return expectations of shareholders, r return on investment

br = Growth rate earnings per share and dividends

It must be said about the Gordon model:

- The rate of return is equal to the discount rate ( $r > k$ ) so when dividend payout ratio ( $D/E$ ) decreases, the price per share increases and dividend payout ratio is not affected
- The rate of return is less than discount rate ( $r < k$ ), so when dividend payout ratio ( $D/E$ ) increases, the price per share decreases. Accordingly, Gordon model prescribes application of policies similar to Walter version with other logic
- The optimum dividend payment for a growing company ( $r > k$ ) is zero ( $D = 0$ )
- The dividend payment for a typical company does not affect stock value
- The optimum dividend payment for a dwindling company ( $r < k$ ) is one hundred percent or one ( $b = 1$ )

Gordon later revised his initial model by adding risks. So that  $R_{i,t}$ : Rate of return on equity for the period  $t$ .  $R_{mp,t}$ : Market rate of return for the period  $t$ . To calculate the beta, the estimated duration and time interval are of particular importance to calculate the efficiency. Previous studies indicate that the optimal period for calculating beta is 1 year.

In this study, the estimated duration index of one year is considered and beta was calculated using daily data.

**Basu conservatism model:** In the Basu conservatism model, positive returns represent good news and negative returns represent bad news. The model is as the following:

$$\frac{E_{i,t}}{P_{i,t-1}} = \beta_0 + \beta_1 D_{i,t} + \beta_2 R_{i,t} + \beta_3 D_{i,t} R_{i,t} + \varepsilon_{i,t}$$

Where:

- $E_{i,t}$  = Accounting earning in the year  
 $P_{i,t-1}$  = The market value of the company's equity at the end of the year (beginning of the year  $t$ )  
 $D_{i,t-1}$  = The virtual variable that is one in the presence of bad news and zero otherwise  
 $R_{i,t-1}$  = Stock returns in the year  $t$  as the difference between the price per share at the end of the period and the price per share at the beginning of the period plus adjustments associated with stock returns (including dividends, bonus shares, etc.) divided by the price per share in each period

In this model, positive non-zero  $\beta_3$  indicates conservatism calculated for each company separately in each year.  $(\beta_2 + \beta_3)$  is reaction of earning to bad news as  $\beta_2 + \beta_3 > \beta_2$ . So,  $\beta_3$  is positive and is the earning time asymmetry coefficient which measures income conservatism. The study uses Basu conservatism model to test hypotheses:

$$\begin{aligned} \frac{E_{i,t}}{P_{i,t-1}} = & \beta_0 + \beta_1 D_{i,t} + \beta_2 R_{i,t} + \beta_3 D_{i,t} R_{i,t} + \beta_4 BIG_T + \\ & \beta_5 BIG_T D_{i,t} + \beta_6 BIG_T R_{i,t} + \beta_7 BIG_T D_{i,t} R_{i,t} + \\ & \beta_8 ACINST_T + \beta_9 ACINST \end{aligned}$$

Where:

- $E_{i,t}$  = Accounting earning in the year  
 $P_{i,t-1}$  = Equity market value at the end of the year (beginning of  $t$ )  
 $R_{i,t}$  = Stock returns in year  $t$   
 $D$  = Virtual variable equal to one if a stock return is negative; otherwise is zero  
 $BIG$  = The percentage of shares owned by the largest shareholder in each company  
 $ACINST$  = The percentage of shares owned by active institutional investors  
 $INACINST$  = The percentage of shares owned by passive institutional investors  
 $INDV$  = The percentage of shares owned by real shareholder  
 $MAN$  = The percentage of shares owned by members of the board of directors  
 $SIZE$  = Natural logarithm of total assets at the end of the fiscal year (control variable)

Changes in the ratio of total debt to total assets ratio (control variable). Positive (negative) and the significance of  $\beta_7$ ,  $\beta_{11}$ ,  $\beta_{15}$ ,  $\beta_{19}$  and  $\beta_{23}$  show the greater (less) conservatism in reported earnings information with institutional ownership increase.

A sample of the population consisted of listed companies in Tehran Stock Exchange during the years 2006-2013 including 94 companies that were selected by systematic elimination. SPSS and Excel were used for calculations and test of the assumptions. The statistical methods were "mixed data". Basu and Shyvakvmar (2005) unit root test, F-test and t-test were used to examine the reliability of test variables.

**Normality of the dependent variables:** Normal distribution was tested using Kolmogorov-Smirnov test. The results

Table 1: Normality of the dependent variables test

Variables	Kolmogorov-Smirnov test		
	Test statistics	Degree of freedom	Significance
E	0.933	624	0.200
CSORE	0.891	624	0.840

Table 2: Basu model hypothesis test statistical analysis results

Significance F	F-statistic	Durbin-Watson statistic	R <sup>2</sup> adjusted
0	27.66	1.829	0.231

Table 3: Basu model hypothesis test statistical analysis results

Variables	$\beta$ standardized	Statistics	Significance (p-value)	Linearity tests	
				Tolerance	Variance inflation factor
R	0.422	9.205	0.000	0.588	1.702
INDV*R	11.655	4.601	0.000	0.884	1.197
BIG*R	-11.517	-4.546	0.000	0.754	1.275
ACINST*DR	0.119	2.741	0.005	0.653	1.531
MAN*DR	0.091	2.136	0.033	0.687	1.455
LEV*DR	-0.139	-3.874	0.000	0.955	1.047
SIZE	0.159	4.460	0.000	0.977	1.023

Table 4: Correlation coefficients and significance level

Variables	Earning	Return	Investment in fixed assets	Concentration ratio	Competition score	The number of firms in an industry	Market size	Leverage	Market value to book
I_EARN	1								
I_RET	0/44	1							
I_DUM	-0/43	-0/65							
DIFF	0/19	0/18							
MKSIZE	0/33	0/07							
PPE_ENTCOT	0/33	-0/01	1						
HINDEX	0/23	0/07	0/11	1					
ICOMP_SCOER	0/14	0/00	-0/52	-0/32	1				
N_FIRMS	-0/00	-0/11	-0/13	-0/52	0/77	1			
I_MAK	0/27	0/27	0/08	0/10	0/41	0/32	1		
I_LEV	0/15	-0/060	0/56	-0/00	-0/19	0/07	-0/00	1	
I_MTB	0/13	0/36	-0/02	-0/06	-0/06	-0/04	0/26	0/00	1

\*\*Significant at 1%; \*Significant at 5%

are shown in Table 1. The null hypothesis is rejected at the 95% level of confidence if the significance level is <5%.

According to the significant level achieved assumption of normality of the dependent variable as one of the underlying regression assumptions is confirmed.

**Basu model hypothesis test results:** Table 2 shows stepwise regression results after 7 different models fitted. Based on the adjusted coefficient of determination, about 23.1% change in the dependent variable explained by independent and control variables. Durbin-Watson statistic was used to study autocorrelation in regression. This statistic value is always between 0 and 4 and the accepted threshold of the amount of 2 for this statistic is indicative of absence of autocorrelation that is the ideal state of the regression analysis. The value <2 shows positive consecutive correlation and the value >2 shows negative

consecutive correlation in the residual. Table 3 shows the Durbin-Watson statistic equal to 0.422 which indicates the lack of correlation between the errors of the regression model.

**Correlation coefficient:** Table 4 shows the Pearson correlation coefficients among the firm level variables. Table results show a positive significant relationship between companies earning and return, also there is a positive significant correlation between the ratio of sales to operating costs, demand, volume of investments in property and equipment, company size and concentration ratio. There is a positive insignificant correlation between the leverage and market value to book value ratio and accounting earning. In the interpretation of a positive relationship between competition and earning it can be wrote that the companies have attracted more competitors. In justifying insignificant we can say that the firm resorts to conservatism and avoid reporting

Table 5: Descriptive statistics

Variables	Min.	Max.	Average	SD
INST	0/00	0/98	0/43	29
ACINST	0/00	0/95	0/29	29
INACINST	0/00	0/46	0/12	0/07
NI	-0/73	3/52	0/23	0/25
ACC	-3/42	3/23	0/02	0/32
RET	-0/48	4/78	0/38	0/73
DR	0/00	1/00	0/22	0/42
CFO	-0/35	3/99	0/19	0/30
DCFO	0/00	1/00	0/07	0/21

more earnings to face increasing competition. Ideally Table shows five dimensions that compete with the competition score (I-COMP\_ACINST) in all cases except for substitution, the relationship is significant and 0.14 as expected. Table 3 achieved five dimensions that were significant at 1 and 5% meaning that chosen dimensions are sufficient to measure the competitiveness.

Table 5 shows that institutional investors own on average 43% of company's shares and most of them (29%) are active. While, on average, passive institutional investors constitute a lower percentage of ownership (12%). Net earnings before extraordinary items in sample companies is on average (23%) of their market value equity. Also, sample companies operating cash flow is (19%) of market value of their equity. The sample company's return is 38% on average.

## RESULTS AND DISCUSSION

According to Pearson correlation coefficients there is a positive significant relationship between accounting returns and market returns and a negative insignificant relationship between accounting returns and negative returns (DUM). This means financial information (earnings) in Iran has an important effect on market prices. In addition financing through debt financing in the year and the year before has no significant impact on the accounting returns. Basu results are as follows.

**The first hypothesis:** There is a significant relationship between active investors and information asymmetry in companies listed in Tehran Stock Exchange. Table 6 shows the first model (Basu model without distinction between the types of ownership).

The results have been evaluated using the two Basu and Wing Shyvavmar models and the results of each model are as follows: Table 7 shows that about 60% of dependent variable changes are explained by the independent variables. Also, there is a positive correlation between institutional ownership and conservatism given positive and significant correlation coefficient. The first research hypothesis that there is a significant relationship

Table 6: The results of the first model (Basu model-institutional ownership)

Equation 1	$\beta$	t-values	Sig.
Constant	0/25	15/52	0/00
RET	-0/03	-1/20	0/069
DR	-0/05	-1/22	0/253
RET*DR	-0/12	-2/25	0/020
INST	-0/06	0/37	0/528
INST*RET	0/01	1/35	0/054
INST*DR	0/12	2/36	0/003
INST*RET*DR	0/90		
R <sup>2</sup>	60%		
F	4/03		

Table 7: The results of the third model (Wing Shyvavmar model-institutional ownership)

Equation 1	$\beta$	t-values	Sig.
Constant	0/21	14/75	0/00
CFO	-0/71	-15/20	0/00
DCFO	-0/03	-1/17	0/210
CFO*DCFO	-1/09	-2/13	0/002
INST	-0/04	2/37	0/001
INST*CFO	0/21	1/13	0/025
INST*DCFO	0/10	2/08	0/125
INST*CFO*DCFO	2/75	2/12	0/028
R <sup>2</sup>	51%		
F	95/71		

between active investors and information asymmetry in companies listed in Tehran Stock Exchange is confirmed.

**The second hypothesis:** There is a significant relationship between active investors and cost of capital in companies listed in Tehran Stock Exchange. Table 8 shows the third model (Wing Shyvavmar model without distinction between the types of ownership). Table 9 shows that about 51% of dependent variable changes are explained by the independent variables. Also, there is a positive correlation between institutional ownership and conservatism given positive and significant correlation coefficient. Therefore, Wing Shyvavmar model confirms that there is a significant relationship between active investors and cost of capital in companies listed in Tehran Stock Exchange.

Then, the results are investigated based on active and passive institutional ownership distinctions. Table 9 shows the results of the second model (Basu model-institutional ownership distinction). The results were evaluated using the two Basu and wings Shyvavmar models as follows.

**The third hypothesis:** There is a significant relationship between passive investors and information asymmetry in companies listed in Tehran Stock Exchange. Table 8 shows that about 9% of dependent variable changes are explained by the independent variables. Also, there is a positive correlation between active institutional ownership and conservatism according to positive and significant correlation coefficient. Thus, the third

Table 8: The results of the 3rd model (Wing Shyvavmar model-institutional ownership)

Equation 1	$\beta$	t-values	Sig.
Constant	0/28	14/05	0/00
RET	-0/02	-1/23	0/124
DR	-0/07	-2/15	0/021
RET*DR	-0/24	-1/27	0/118
ACINST	-0/03	-1/87	0/037
INACINST	-0/17	-1/85	0/048
ACINST*RET	0/01	0/43	0/518
ACINST*DR	0/09	1/30	0/143
ACINST*RET*DR	0/65	2/14	0/023
INACINST*RET	-0/04	-0/32	0/573
INACINST*DR	0/11	1/62	0/523
INACINST*RET*DR	1/46	2/13	0/023
R <sup>2</sup>	9%		
F	3/02		

Table 9: The results of the 4th model (Wing Shyvavmar model with institutional ownership distinction)

Equation 1	$\beta$	t-values	Sig.
Constant	0/24	14/80	0/00
CFO	-0/97	-14/36	0/00
DCFO	-0/06	-1/32	0/110
CFO*DCFO	-1/27	-2/71	0/002
ACINST	-0/05	-2/21	0/018
INACINST	-0/39	-3/90	0/00
ACINST*CFO	0/16	1/03	0/287
ACINST*DCFO	0/07	0/39	0/601
ACINST*CFO*DCFO	1/03	0/52	0/489
INACINST*CFO	1/29	4/08	0/00
INACINST*DCFO	0/46	1/60	0/078
INACINST*CFO*DCFO	9/11	2/15	0/020
R <sup>2</sup>	58%		
F	63/68		

hypothesis that there is a significant relationship between passive investors and information asymmetry in companies listed in Tehran Stock Exchange is confirmed. There is a positive correlation between net earnings and annual stock return of companies with conservatism given positive and significant correlation coefficient. Therefore, the third hypothesis that there is a significant relationship between passive investors and information asymmetry in companies listed in Tehran Stock Exchange is confirmed. The results were evaluated using the two Basu and Wings Shyvavmar models as follows.

**The fourth hypothesis:** There is a significant relationship between passive investors and information asymmetry in companies listed in Tehran Stock Exchange. Table 9 shows the results of the third model (Wing Shyvavmar model with institutional ownership distinction). Table 9 shows that about 58% of dependent variable changes are explained by the independent variables t. Also, given statistic and institutional ownership coefficient, there is no significant relationship between active variable and conservatism.

Thus, according to this model, the hypothesis that there is a significant relationship between passive

investors and information asymmetry in companies listed in Tehran Stock Exchange is rejected. There is a positive correlation between passive institutional ownership and conservatism given positive and significant correlation coefficient. As a result that there is a significant relationship between passive investors and information asymmetry in companies listed in Tehran Stock Exchange is confirmed.

## CONCLUSION

The information asymmetry between active investors using the first model (Basu model without the type of ownership distinction) was examined and the results show that there is a positive relationship between institutional ownership and earning conservatism and thus the first hypothesis is confirmed.

The results are inconsistent with that of Lambert *et al.* (2007). The results are consistent with that of Vsayny and Hermann also domestic investigation by Ghaemi and Vatanparastx (2005). The relationship between active investors and the cost of capital was evaluated using the third model (Wing Shyvavmar model without institutional ownership distinction). The results show that there is a positive correlation between institutional ownership coefficients and earning conservatism and thus the first research hypotheses is confirmed.

The results are inconsistent with that consistent with that of armstrong and armstrong also domestic investigation Ghaemi and Vatanparastx (2005). The relationship between passive investors and asymmetry was evaluated using the third model (Wing Shyvavmar model with institutional ownership distinction). The results indicate that there is a positive relationship between passive institutional ownership, INACINST $\times$  RET $\times$ DR and earning conservatism and thus the third research hypotheses is confirmed.

When the market is in a state of imperfect competition this is not the case. In other words, there is a positive relationship between information asymmetry and cost of capital. The relationship between passive investors and cost of capital was evaluated using the fourth model (Wing Shyvavmar model with institutional ownership distinction). The results show that there is a positive correlation between passive institutional ownership coefficients and earning conservatism and thus the fourth research hypotheses is confirmed.

The results are inconsistent with that of consistent with that domestic investigation Ghaemi and Vatanparastx (2005). Information asymmetry and uncertainty in information leads to an increase in the cost of capital.

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