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Relationship between Transparency, Liquidity and Valuation

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***Abstract*—**Recent evidences on liquidity and valuation of securities in the capital markets clearly show the importance of stock market liquidity and valuation of firms. In this paper, relationship between transparency, liquidity, and valuation is studied by using data obtained from 70 companies listed in Tehran Stock Exchange during2003-2012. In this study, discriminatory earnings management, as a sign of lack of transparency and Tobin's Q, was used as the criteria of valuation. The results indicate that there is a significant and reversed relationship between earnings management and liquidity. On the other hand, there is a relationship between liquidity and transparency.The results also indicate a significant relationship between transparency and valuation. Transparency has an indirect effect on firm valuation alone or through the liquidity channel. Although the effect of transparency on the value of a firm was reduced by adding the variable of liquidity, the cumulative effect of transparency and liquidity increased.

***Keywords*—**Firm valuation, Earnings management, Liquidity, Tobin's Q, Transparency.

I. Introduction

INVESTMENT development attracts stagnate capitals and leads them to the productive sectors of the economy on one hand, and directs the financial resources gained from investments towards industries with lower risks and higher efficiency based on decisions taken by investors (risk and return oriented decisions) on the other hand; and the end, this will result in optimal resource allocation.

At capital markets is one of the most important economic and capital sectors of any country, the importance of which is evident to anyone. In this regard, the Stock Exchange Markets are the most important symbol of the capital market.These markets are effective on the financing choices] of economic units and have a role in attracting savings and channeling them to productive investments in the economy. Given the important role of this market in the economy, its growth and development in the past decades has been the focus of economic authorities in different countries. Investors who are the most important parameter in determining the fate of a long-term economy are also among the major players in the stock markets who seek maximum return from their investment, thus investing in stock markets is considered as one of their investment options. Several factors affect the investment returns; the most transparent of them is the clear financial information, being aware of the factors affecting share prices, and firm valuation and liquidity.

Financial statements are one of the most important outputs of financial accounting and the main goal is to provide the necessary information to evaluate the performance and profitability of the firms. The requirement to achieve this goal is to provide adequate disclosure so that it can provide the needs of decision making for users and to establish the information asymmetry between them.

Investors need the more available information about the companies to make optimal investing decisions in businesses and to properly allocate scarce resources in the society.

Reduced transparency causes increased transaction costs and reduced market liquidity can be associated with a certainty for investors to sell their shares in the stock market [8]. Transparency also gives this signal to the investors that the data has been symmetrically distributed and therefore they rely on their valuation of the firms' shares. Theoretically, although transparency is effective on liquidity and cost of capital, there is little empirical evidence on this issue. It requires researchers' assistance to satisfy this requirement through doing various and continuous researches.

This study examined whether or not transparency of financial information can be effective on factors that investors may consider in their decision models. In other words, the relation between liquidity and transparency or clearness of financial information and therefore firm valuation in Tehran Stock Exchange (TSE) will be examined.

The reminder paper is organized as follows: In the next part of the paper, the theoretical literature is discussed and the background of researches conducted in this field will also be examined. In the third part of the paper, the research method, which includes assumption, statistical population, variables and, research models, are presented. In the fourth part of the paper, the results of field researches hypotheses are discussed. Finally, the results of conducted field studies are interpreted and explained according to the statistical results of the research.

II. Research Literature

There is no doubt that transparency or clearness of financial reporting is very important, because people make important decisions about their investments based on financial reports. Each investor is willing to have better and more transparent information about firms' financial data. In fact, this issue implies the reporting quality which would help investors in making their relevant decisions. Irony is a tool which is used

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by the producers of financial reports. By this tool, they conceal the truth wisely instead of presenting accurate information. Investors should be careful when dealing with firms that lack transparency in operations, financial statements, or strategies. Investing in companies with complex business structure and mysterious financial structure are considered as low-value and high-risk investments [7].

The relationship between transparency, liquidity of stock market, and valuation of different companies was examined in 59 countries. The finding indicate that increased transparency, as reflected in reduced earnings management, higher quality auditing, a serious commitment to international accounting standards, increased analyst following, and smaller analyst forecast errors is associated with lower bid-ask spreads and greater liquidity. This study also suggests that increased liquidity and lower transaction costs are associated with lower cost of capital and higher valuation [12]. In the United States, some studies provided different evidences about the relationship between components of transparency, such as voluntary transparency, liquidity, and analysts' characteristics. For instance, the result of an empirical research is shown direct evidence that disclosure is impacted by unobservable firm-specific factors that are also correlated with cost of capital [15]; another study investigates the relation between analyst characteristics (number of analysts following a firm and their forecast dispersion) and market liquidity characteristics. While prior research has posited analysts as proxies for privately informed trade or as signals of information asymmetry, the researcher hypothesize that analysts provide public information, implying that analyst following (forecast dispersion) should have a positive (negative) association with liquidity. The results are both statistically significant and economically important. Granger-causality tests indicate that analyst characteristics lead market liquidity characteristics. These results clarify the role of analysts in providing information to financial markets and highlight benefits of increased analyst following [16]. According to [13] there is no evidence showing that selecting US Generally Accepted Accounting Principles (GAAP), instead of selecting International Accounting Standards (IAS), affects liquidity in the German capital markets' entities. Reference [4] also didn't find any evidence showing that the adoption of International Financial Reporting Standards (IFRS) is effective on the cost of capital of European companies. However, the other study provided evidences indicating that those companies that have adopted the IFRS have experienced the increased liquidity and reduced cost of capital [5].

Examining a sample of 19 countries, including emerging markets, concluded that liquidity acts as a priced risk factor [2]. This means that unexpected liquidity shocks are positively correlated with the unexpected return shocks occurring at the same time and are negatively correlated with the shocks of cash returns on equity.

Finally, several studies have examined the determinants of capital costs in certain circumstances. For instance, one of them provides evidences showing that countries with better legal institutions and countries that protect the interests of investors bitterly have less cost of capital [9]; and the other showed that companies entering into the stock market experience reduction in the cost of capital [10]. However, these studies do not directly examine the effect of liquidity on the capital cost and do not focus on the relationship between liquidity and transparency.

No research has been conducted in Iran to simultaneously study the relationship between transparency, liquidity, and firm valuation One of the related studies examined the selection of a portfolio using three criteria of returns, standard deviation, and liquidity in the TSE. The results showed that high level liquidity is effective on investors' decisions and therefore it affects the efficient frontiers [3]. Studying the role of liquidity factors and lack of liquidity risks on excess stock returns in the TSE for the period from April 1999 to March 2006 concluded that the effect of lack of liquidity and the size of a firm on the stock excess returns was negative, but the effect of market excess returns and ratio of book value to the market on stock excess returns was positive [17].

III. Research Methodology

Accounting and market data were collected from Tehran Stock Exchange's database over 2003 – 2012 time period, we require firm – year observation to have the necessary financial statements and to have sufficient market data to calculate the variables. In total, our sample contains 700 firm year observation (70 firms in 10 years).

TABLE I
Descriptive Statistic

VARIABLE	MEAN	STD	MIN	MAX
SMTH1	0/785045	0/48769	0/096	2/386
SMTH2	-0/62764	0/39918	-0/998	0/717
Dis SMTH	0/00089	0/00393	-0/007	0/015
Ln Assets	67/12	1/31820	10/019	16/768
Lev	0/66495	0/14645	0/141	1/026
BM	0/44133	0/36078	-0/097	2/326
OpSycle	2/55333	0/52788	1/210	4/508
SG	18/160	17/28987	0/507	76/733
Ave CFO	0/15075	0/09242	-0/079	0/506
Q Tobin	1030000	785626/513	118651	3883869
Liq	0/35978	0/23151	0/001	1/000
Ln MVE	244/26	1/44239	22/159	30/480
Std RET	427/10	6/06015	0/000	32/757
Cash_TA	0/04264	0/04512	0/001	0/546
Trans	0/99911	0/00393	0/985	1/007
Loss Percentile	0/03339	0/08232	0/000	0/400

Table I provides descriptive statistic for the variables we use in our tests, as well as several intermediate variables, grouped in the order in which they appear in subsequent tables.

Our typical sample firm has mean market value of equity (Ln MV) of 244.26 and mean total assets (Ln ASSTES) of 67.12 over the sample period. Mean leverage (LEV), measured as debt to total assets, is 0.66 and mean book- to – market ratio (BM) is 0.44. The mean sample firm reports

0.033 (LOSS) and has experienced 18.16% sales growth (SG) over recent years.

Due to the nature of information and research data that are based on the previous actual data, Multivariate regression was used to test the hypotheses. After testing goodness of fit of the regression models, the significant relationship between independent variables related to the test and their correlation with the dependent variable are analyzed. After correlation analysis, the test results and type of correlation (if any) are extended. .

The first hypothesis is that there is a direct relation between stock liquidity and transparency of financial information.

To test the first hypothesis, we were used the lang liquidity model [9]

$$LIQ_t = \propto_t + \beta_1 LNMVE_t + \beta_2 BM_t + \beta_3 LOSS_t + \beta_4 STDRET_t + \beta_5 DIS - SMTHC_t + FIXEDEFFECTS + \varepsilon_t$$

where:

LIQ: liquidity of each share (the number of days during which the shares have been traded divided by the total working days per year).

LNMVE: log of market value of equity at the end of year t.

BM: book value of common equity divided by the market value of equity

LOSS: a variable that is equal to one if net income before extraordinary items is negative and zero otherwise.

STDRET: annual standard deviation (volatilities) of monthly stock returns.

DIS-SMTHC: earning management measure that is average; percentile ranks of two measures of income smoothing (DIS-SMTH1 and DIS-SMTH2).

FIXED EFFECTS: which are considered for a given year and derived from deduction of the studied year from the first year of the study (2003).

A. Calculation of Discretionary Income Smoothing Measures (DIS-SMTH1 and DIS-SMTH2)

Measure of the income smoothing option (DIS-SMTHt) is equivalent to the residuals of the following regression:

$$SMTHt = \alpha_t + \beta_1 lnAssets_t + \beta_2 LEV_t + \beta_3 BM_t + \beta_4 STD\_SALES_t + \beta_5 \%LOSS_t + \beta_6 OPCYCLE_t + \beta_7 SG_t + \beta_8 OPLEV_t + \beta_9 AVECFO_t + \sum \alpha_b YEAR_i + \varepsilon_t$$

whwhere:

SMTHt: is the income smoothing measure that is calculated in two ways:

SMTH1 = standard deviation of net income before extraordinary items divided by the standard deviation of operating cash flow over 10 years (both of them are scaled by average total assets).

This earning smoothing measure (SMTH1) captures the volatility of earnings relative to the volatility of cash flows with the idea behind that, the more firms use accruals to manage earning, the smoother net income will be relative to cash flows [14], [6].

SMTH2 = correlation between operating cash flow and total accruals (both are scaled by average total assets); accruals (ACC) are derived from the difference between operating income and operating cash flow.

The idea behind this measure is that to extend managers create accrual reserves in good time and use them to compensate for poor cash flows in bad times, accruals and cash flows will be more negatively correlated [11], [1].

Ln Assets: log of total assets (a measure of firm size).

LEV: debts leverage (total debts divided by total assets, to capture the differences in financing choices).

STD_SALES: standard deviation of sales over the last 10 years (shows the volatility in the operating environment of the firm).

LOSS%: a proportion of years during which the company has had losses in the past 10 years.

OPCYCLE: the log days of accounts receivable plus inventories (to capture the length of the firm's operation cycle).

SG: average sales growth over past 10 years (as a measure of growth opportunities).

OPLEV: net fixed assets divided by total assets (as a measure of capital intensity).

AVECFO: average of operating cash flow divided by total assets during the past 10 years (to capture the general level of profitability of the firm).

YEAR: control variable in order to control macroeconomic cycles that may affect profit cycles of the companies (it is calculated through deduction of the studied year from the first year of the study (2003)).

Hypothesis 2: the firm value has a direct relationship with the liquidity and transparency of financial information.

Tobin's Q is used in this study as criteria of firm valuation. The model is as follows:

$$Q_t = \propto_t + \beta_1 LNASSETS_t + \beta_2 LEV_t + \beta_3 \text{CASH\_T} A_t + \beta_4 SG_t + \beta_5 ILLIQ_{t+} \beta_6 TRANS + FLXEDEFFECTS + \varepsilon_t$$

B. Book Value of Assets

Q: total assets less book value plus market value scaled by total assets.

CASH_TA: cash and equivalents at the end of a fiscal year that has been scaled by average total assets.

ILLIQ: is equal to 1 minus the liquidity (LIQ).

TRANS: is the transparency variable that is equal to 1 minus the income smoothing measure (1-DIS_SMTHC).

Other variables are defined as the previous model.

To test the second hypothesis and to determine the impact of transparency and liquidity on the valuation of the company, at first, the model with variable transparency (TRANS) was tested alone (no liquidity) and regression was fitted, then the liquidity variable was added to the model as 1 minus the liquidity (ILLIQ) and regression was fitted to examine the effects of transparency alone and together with liquidity.

IV. Test of Research Hypotheses

A. The First Hypothesis Was Proposed as Follows

There is a direct relationship between stock liquidity and transparency of financial information.

The following liquidity model is presented according to the model of the test of this hypothesis.

$$LIQ_t = \propto_t + \beta_1 LNMVE_t + \beta_2 BM_t + \beta_3 LOSS_t + \beta_4 STDRET_t + \beta_5 DIS - SMTHC_t + FIXEDEDDECTS + \varepsilon_t$$

As you can see earnings management measure (DIS_SMTHC) should be calculated to fit the model. Therefore, measures of earnings smoothing should be determined in the following models. Thus, the following models were first fitted:

Calculation of earnings management measures (DIS-SMTH1 and DIS-SMTH2):

$$SMTH_t = \beta_1 lnAssets_t + \beta_2 LEV_t + \beta_3 BM_t + \beta_4 STD\_SALES_t + \beta_5 \%LOSS_t + \beta_6 OPCYCLE_t + \beta_7 SG_t + \beta_8 OPLEV_t + \beta_9 AVECFO_t + \sum \alpha_b YEAR_i + \varepsilon_t$$

TABLE II
The Result of Regression Analysis of SMTH1

Estimated Period			
R2			2003- 2012
Adjusted R square			0/208
F			0/193
(P-Value)			13/692
r			0/000
Durbin-Watson			0/456
Variable	β	t	p-value
Intercept(| α0)	2/157	5/257	0/000
LnAssets	-0/192	-3/954	0/000
Lev	-0/135	-0/851	0/395
BM	-0/216	-3/360	0/001
StdSales	0/000001	2/965	0/003
LossPersentile	2/314	8/350	0/000
OpSycle	0/219	2/122	0/034
SG	-0/002	-1/091	0/276
OpLev	0/687	4/474	0/000
AveCFO	1/571	5/364	0/000
Year	0/024	2/397	0/017

TABLE III
Results of Regression Analysis of the SMTH2

Estimated Period			
R2			2003-2012
Adjusted R square			0/211
F			0/196
(P-Value)			13/908
R			0/000
Durbin-Watson			0/459
Variable	β	t	p-value
(α0)| Intercept	0/205	0/609	0/543
LnAssets	-0/106	-2/659	0/008
Lev	0/044	0/336	0/737
BM	-0/188	-3/566	0/000
StdSales	0/0000003	1/796	0/073
LossPersentile	1/059	4/656	0/000
OpSycle	0/009	0/107	0/915
SG	-0/002	-1/360	0/174
OpLev	0/404	3/206	0/001
AveCFO	1/671	6/953	0/000
Year	0/025	3/041	0/002

With regression fitting of both dependent SMTH1and SMTH2 variables, earnings management measures were determined and were considered as the inputs for the fitting of the liquidity model of the first hypothesis test. Residuals were determined after fitting these models and following determination of their percentile rankings and calculation of their average in each model; required variable (earnings management measure) for iquidity model fitting of the first hypothesis testing was collected and then the model was fitted, the results of which are summarized in Table IV.

TABLE IV
Results of Regression Analysis Related to the Test of the First Hypothesis (Liquidity Model)

$LIQ_t = \propto_t + \beta_1 LNMVE_t + \beta_2 BM_t + \beta_3 LOSS_t + \beta_4 STDRET_t + \beta_5 DIS - SMTHC_t + FIXEDEDDECTS + \varepsilon_t$

Estimates period			2003-2012
Rsquare			0.541
Adjusted R square coefficient of model			0.533
F			34.192
P-Value			0.000
R			0.735
			2.043
Variable name	β	T	p-value
Intercept (α=0)	2.5473	10.087	0.000
Ln MVE	0.121	6.533	0.000
BM	0.033	2.007	0.014
Loss	0.120	2.370	0.018
Std RET	0.532	1.936	0.043
Dis Smthc	1.936-	4.190	0.000
Fixed Effects	0.044	2.775	0.006

Source: Researchers' findings

As the significance level is very low (lower than 0.05), one can say that the goodness of fit of the model, (i.e. the F statistic) is significant. Consequently, the regression is significant and, therefore, the regression model can be estimated. But this general analysis is not to drive the aim of this study. Further analysis is required to achieve significance of the relationship between liquidity and transparency. In other words, one must examine whether or not the coefficients related to the variables of earnings management measures (Dis SMTHC) have a significant relationship with the dependent variable given the results mentioned in the table. Because Dis SMTHC coefficients have a significance level less than 0.05 (0.00<0.05), it is concluded that there is a significant and reversed relationship between this variable (earnings management) and the dependent variable (liquidity). Since transparency was defined as 1 minus the earnings management variable, the null hypothesis, which indicates the lack of direct relationship between liquidity and transparency, was rejected and the first hypothesis is accepted so that liquidity has a direct relationship with transparency.

B. The Second Hypothesis Was Proposed As Follows

The firm value has a direct relationship with the liquidity and transparency of financial information.

$$Q_t = \propto_t + \beta_1 LNASSETS_t + \beta_2 LEV_t + \beta_3 CASH + TA_t + \beta_4 SG_t + \beta_5 ILLIQ_t + \beta_6 TRANS + FIXEDEFFECTS + \varepsilon_t$$

To test the model provided for the second hypothesis, at first the transparency variable (TRANS) is added alone (without liquidity) into the model, then the regression was fitted (Table II) and liquidity variable was added to the mode as 1 minus the liquidity (ILLIQ). The results of regression fitting are shown in Table V.

TABLE V
RESULTS OF REGRESSION RELATED TO THE TEST OF SECOND HYPOTHESIS

$$Q_t = \propto_t + \beta_1 LNASSETS_t + \beta_2 LEV_t + \beta_3 CASH - TA_t + \beta_4 SG_t + \beta_5 TRADS + FIXEDEFFECTS + \varepsilon_t$$

Estimates period		2003-2012	
R square		0.411	
Adjusted R square coefficient of model		0.399	
F		31.795	
P-Value		0.000	
R		0.641	
Durbin Watson		1.879	
Variable name	β	T	p-value
Intercept (α=0)	1.452	5.465	0.001
Ln Assets	3.594-	3.264-	0.041
Lev	0.5207	7.095	0.000
Cash_TA	1.642	2.208	0.036
SG	0.431	4.507	0.030
Trans	1.860	8.156	0.000
Fixed Effects	0.082	6.510	0.000

Source: Researcher's findings

For a significant regression, the analysis of variance (F test) is used. According to data from the table and as the significance level (0.000) is less than 0.05, one can say that the goodness of fit of the model, i.e. the F statistic, is significant and consequently the regression is significant. Statistical significance means that the calculated correlation is different from zero with a certain degree of confidence.

Here, the coefficient is 0.411 indicating that the independent variables account for almost 42 percent of the dependent variable. The results show that there is a significant direct relationship between Tobin's Q, debt leverage, and sales growth and a negative significant relationship between Tobin's Q and the firm size. In other words, for smaller and more profitable companies, with higher debt leverage and higher growth, Tobin's Q is also higher.

Since here the coefficient of a transparency variable (TRANS) has a significance level of less than 0.05 (000<0.05), it is concluded that there is a direct and significant relationship between these variables (transparency) and the dependent variable (valuation). This strong and positive relationship indicates that investors have a higher value to firms with higher transparency.

In continuation, the results of regression fitting for the valuation model by adding the liquidity variable into the model (1minus liquidity) are presented.

TABLE VI
REGRESSION RESULTS OF THE TEST OF SECOND HYPOTHESIS

$$Q_t = \propto_t + \beta_1 LNASSETS_t + \beta_2 LEV_t + \beta_3 CASH - TA_t + \beta_4 SG_t + \beta_5 ILLIQ_t + \beta_6 TRANS + FIXEDEFFECTS + \varepsilon_t$$

Estimates period		2003-2012	
R square		0.584	
Adjusted R square coefficient of model		0.551	
F		29.830	
P-Value		0.000	
R		0.764	
Durbin Watson		1.841	
Variable name	β	T	p-value
Intercept (α=0)	2.543	6.215	0.000
LnAssets	-3.998	-4.656	0.031
Lev	0.760	5.532	0.000
CashTA	0.984	6.127	0.006
SG	0.307	3.334	0.048
IlliqS	-1.71	-6.098	0.009
Trans	0.901	5.343	0.000
Fixed Effects	0.181	5.045	0.000

Source: researchers' findings

For a significant regression, the variance analysis (F test) is used. According to data from the table and as the significance level (0.000) is less than 0.05, thus one can say that the goodness of fit of the model, i.e. the F statistic is significant and consequently the regression is significant. Statistically significance means that the calculated correlation is different from zero with a certain degree of confidence.

Here, the coefficient is 0.584 indicating that the independent variables account for almost 58 percent of the dependent variable. The results show that there is a significant direct relationship between Tobin's Q, debt leverage and sales growth and a negative significant relationship between Tobin's Q and the firm size. In other words, for smaller and more profitable companies, with higher debt leverage and higher growth, Tobin's Q is also higher.

In order to achieve significant relationship between liquidity and transparency and firm valuation, one must examine that according to the results of Table VI, whether there is a significant relationship between coefficients related to the variable of 1 minus the liquidity (ILLIQ) and transparency (trans) and the dependent variable (Tobin's Q) or not. In order the coefficient to be significant, it is enough to compare the probability value with the desired significance level (here is less than 0.05).

Here, as the coefficients of these two variables have significance levels of less than 0.05 (0.05> 0.009 and 0.000), therefore, it is concluded that there is a significant relationship between these two variables and firm valuation. The relationship between Tobin's Q and direct transparency and the relationship between Tobin's Q and 1minus liquidity is reversed. This means that the relationship between valuation and liquidity is direct. Therefore, the null hypothesis indicating the lack of association between liquidity and transparency with the firm value is rejected and the second hypothesis is accepted. Thus, liquidity and transparency have direct relationship with the firm value.

V. Conclusions

Results of the first hypothesis showed that independent variables account for almost 54 percent of the dependent variable. About control variables, the results showed that there is a significant positive relationship between liquidity and these variables. In other words, the larger the firms (Ln MVE) and the higher the ratio of book value to the equity market value (the amount of intangible assets and expected income growth), the higher is the liquidity.

The results also showed that there is a significant and reversed relationship between earnings management and liquidity. Since transparency was defined as 1 minus the earnings management variable, the null hypothesis indicating the lack of direct relationship between liquidity and transparency was rejected and the alternative hypothesis was accepted. In other words, transparency has a direct relationship with liquidity.

To test the second hypothesis (the firm value has a direct relationship with the liquidity and transparency of financial information), Tobin's Q was used as the valuation variable of the company. To test the model provided for the second hypothesis, the variable of transparency (TRANS) was first entered into the model alone (without liquidity) and then it was added to the model together with the liquidity variable as 1 minus the liquidity (ILLIQ) and regression was fitted.

The results showed that with the addition of the liquidity variable to the model, the effect of transparency on firm value decreased, but the cumulative effect of transparency and liquidity increased.

Reduced transparency is an important factor associated with the decline in the liquidity in shares of companies and this reduction will reduce the value of the firm. Increased transparency through the reduction of earnings management is related with the increased liquidity.

The results of this study are consistent with the Lang's findings [12].

References

[1] Barth,M.,Landsman,W.,Lang,M.,20008.I*nternational Accounting Standards and Accounting Qualities. Journal of Accounting research 46,467-496*

[2] Bekaert, G., C. R. Harvey, and C. Lundblad. "Liquidity and Expected Returns: Lessons from Emerging Markets." *Review of Financial Studies* 20.6 (2007): 1783-831

[3] Bigdeli Eslami, Gh, and A. Saranj. "Selection of Portfolio Using Three Measures of Average Returns, Standard Deviation of Returns and Liquidity in Tehran Stock Exchange." *Accounting and Auditing Studies* 53.15 (2008): 3-16.

[4] Daske, Holger. "Economic Benefits of Adopting IFRS or US-GAAP - Have the Expected Cost of Equity Capital Really Decreased?" *Journal of Business Finance and Accounting* 0.0 (2006): 329-73.

[5] Daske, Holger, Luzi Hail, Christian Leuz, and Rodrigo Verdi. "Mandatory IFRS Reporting around the World: Early Evidence on the Economic Consequences." *Journal of Accounting Research* 46 (2008): 1085-142.

[6] Francis,J.,LaFond,R.,Olsson,P.,Schipper,K. 2004.Cost of Equity and Earning Attributes. The Accounting Review 79, 967-1010.

[7] Gass, David. "Importance Of Transparency In Financial Reporting." (n.d.): n. pag. 04 Dec. 2006. <http://ezinearticles.com/?Importance-Of-Transparency-In-Financial-Reporting>.

[8] Glosten, Lawrence R., and Paul Milgrom. "Bid, Ask and Transaction Prices in a Specialist Market with Heterogeneously Informed Traders." *Journal of Financial Economics* 14.1 (1985): 71-100.

[9] Hail, Luzi, and Christian Leuz. "International Differences in the Cost of Equity Capital: Do Legal Institutions and Securities Regulation Matter?" *Journal of Accounting Research* 44.3 (2006): 485-531.

[10] Hail, Luzi, and Christian Leuz. "Cost of Capital Effects and Changes in Growth Expectations around U.S. Cross-listings." *Journal of Financial Economics* 93.3 (2009): 428-54.

[11] Lang,M.,Smith, Raedy,J.,Wilsom,W.,2006,Earning Management and Cross Listing: Are Reconciles Earnings Comparable to U.S. Earnings? Journal of Accounting and Economics 42, 255-283.

[12] Lang, Mark H., Karl V. Lins, and Mark Maffett. "Transparency, Liquidity, and Valuation: International Evidence on When Transparency Matters Most." *Journal of Accounting Research (JAR)* (2011): n. page.

[13] Leuz, Christian. "IAS versus U.S. GAAP: Information Asymmetry-Based Evidence from Germany's New Market." *Journal of Accounting Research* 41.3 (2003): 445-72.

[14] Leuz,C.,Nanda,D.,Wysocki,P.,2003.Earning Management and Investor Protection: An International Comparison. Journal of Financial Economics 69-505-527.

[15] Nikolaev, Valeri, and Laurence Van Lent. "The Endogeneity Bias in the Relation between Cost-of-debt Capital and Corporate Disclosure Policy." *European Accounting Review* 14.4 (2005): 677-724.

[16] Roulstone, Darren T. "Analyst Following and Market Liquidity." *Contemporary Accounting Research* 20.3 (2003): 552-78.

[17] Yahyazadefar, M., and J. Khorramdin. "The Role of Liquidity and Lack of Liquidity Risk on Excess Stock Returns in Tehran Stock Exchange." *Journal of Accounting and Auditing Reviews* 53 (n.d.): n. page.