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Analysis of financial statements comparability of keeping operational cash

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Abstract:

The information flow is a key parameter in an economic activity and operates as a main criteria in the creation, stability and efficiency of asset markets. The goal of this study is the analysis of financial statements comparability of keeping operational cash. To achieve this, the data related to the accepted companies in securities exchanges from 1388 to 1396 were extracted and the combinational data regression model was used to test the study hypothesis. Study results show that the equality of financial report, comparability and the financial provision limitation have a meaningful effect on keeping operational cash. On the other hand, the effect of organizational ownership on keeping cash is not confirmed. In the end, the results indicate that keeping cash is a function of comparability and liquidity changes caused by financial report quality changes and has the ability of swing comparing.

Keywords: Financial report quality; Comparability finance; Provision and organizational ownership.

Análise da comparabilidade das demonstrações financeiras de manutenção de caixa operacional

Resumo

O fluxo de informações é um parâmetro-chave em uma atividade econômica e atua como principal critério na criação, estabilidade e eficiência dos mercados de ativos. O objetivo deste estudo é a análise da comparabilidade das demonstrações financeiras para manter o caixa operacional. Para tanto, foram extraídos os dados referentes às empresas aceitas em bolsas de valores de 1388 a 1396 e o modelo de regressão combinatória de dados foi utilizado para testar a hipótese do estudo. Os resultados do estudo mostram que a igualdade do relatório financeiro, a comparabilidade e a limitação da provisão financeira têm um efeito significativo na manutenção do caixa operacional. Por outro lado, o efeito da propriedade organizacional na manutenção das alterações de comparabilidade e liquidez causadas por alterações na qualidade dos relatórios financeiros e tem a capacidade de comparar os balanços.

Palavras-chaves: Qualidade do relatório financeiro; Comparabilidade, provisão financeira e limitação de propriedade organizacional

1. Introduction:

The investors and validators always try to make the best choices by gaining intel from the financial and operational status of companies and comparing them with the rival companies. Without any doubt, companies financial reports are of the most useful resources in this field. The usefulness of these reports is derived from their multiple qualitative features which include comparability. The financial accounting standards association defined comparability in 1980:



comparability is a qualitative feature of information which makes users able to identify and understand the similarities and differences between two sets of financial events. Defranco, Coutari and Verdi (2011) also consider the accounting system a system which its responsibility is to draw maps of economical events in the form of financial statements. They believe that if the accounting system of two companies produce similar financial statements for the same set of economical events, these two systems are comparable. Comparability causes faster process of information and quicker understanding of similarities and differences in reports and reduces the costs and errors related to the information processing by investors and analyzers. In other words, the more increase in accounting numbers comparability, the more clear these information become for the users out of the organization and market activists (Sven, 2016). Therefore, investors are interested in receiving reports which are more comparable. Comparability is a relative feature and is not absolute and independent like other accounting features.

The information flow is a key parameter in a economical activity and operates as a main criteria in the creation, stability and efficiency of asset markets (Stealings, 2004). The information flow in the market affects market activists. It's natural for market activists to have different shares of this information cycle. It's experimentally obvious too that people have different information. Their information affects their behavior in many cases. This indicates the information asymmetry between two sides of a deal (laory,2003). This asymmetry comes from different information cycles between market activist.

The information environment in which the investors make deals is constantly changing with the flow of information. This change in the flow of information will lead to risk reevaluation by investors. Information risk is caused by different factors. The thing that becomes more important than before, is the existence of a information environment which reduces ambiguity and lack of certainty, and therefore increase the ability of prediction and investor's analysis. Using accounting and financial information to maintain the balance between risk and efficiency will lead to the improvement of investors' decision making. Because, financial decisions are often made without certainty and having enough information will lead to the needed certainty. The common thing between researches is that accounting information is the most important information environment resource which is defined as a system of information transfer and reducing uncertainty, and this the informational approach to accounting. The accounting information will allow the investors to evaluate the company and its risks.



About keeping operational cash, there are two main features: The source of these resources and their consumption. In fact, operational cash could be differentiated into two parts in the form of financial information: The part related to its access resource and the part related to its consumption. Reduction in comparability will weaken the relationship between accounting numbers and economical facts and therefore leads to a swing in keeping cash by increasing risks. Therefore, the existence of a pleasant and efficient information environment, will increase the power of financial reports regarding transferring the company's information will lead to a more equal distribution of resources between different opportunities of investing. Therefore, the responsibility is reducing uncertainty and removing ambiguity.

In this research, the reflection of any of these two features, comparability and the accounting information environment, will be analyzed regarding keeping cash. Therefore, the main study questions are as followed:

- (1) What are the hidden and visible variables while evaluating the comparability?
- (2) What are the effective variables on keeping operational cash?
- (3) Are there any other effective variables on keeping operational cash?
- (4) Could the relationship between the features of the information environment and keeping operational cash be analyzed consedering the comparability?

2. Research history

Comparability could affect keeping cash in several ways. Considering the theory of investor's recognition (Merton, 1987), these investors will most likely invest in companies which are obviously good or judged to be good. If comparability increases, company's visibility increases too and the public information process costs reduce, therefore, comparability will lead to more deals from unaware investors (Brown and Hiligist, 2007). Diamond (1985) also states that publishing general information will make the dealers believes more homogeneous and will reduce the intensity of promissory notes form aware dealers.

Previous research also indicates that comparability has a negative relationship with private information events number. Galeb and Zarovin (2002) and Landhelm and Mayers (2002) found out that when comparability is high, the efficiency of current share reveals some information about future profits. These results show that bringing future to present reduces the comparability of all of the information about future profits which could be discovered privately about the company (Brown and Hiligist, 2007)/ Since these information are less available to



be discovered, we expect for the private information events abundance to be reduced while the reduction of search motives.

Lambert and the others (2012) showed that when the market is completely competitive and the investors act as price accepters (same as CAPM model and most of logical expectation models), information asymmetry could affect keeping operational cash, to the extent of investors' information precision average. In this situation, the comparability in efficient markets could reduce the information asymmetry between investors and reduce the keeping of operational cash. But this effect only occurs because increasing both of the above factors in the same time increases the investors' information precision average, not because it reduces the information asymmetry itself.

The quality of financial report and keeping cash

The best summarized financial information qualitative features may be the same Wakery (1985) definition which states "the features which will make the information valuable". For some information to be valuable, it should has some qualitative features. These features will make the information presented in the financial reports useful for the users to evaluate the financial situation, performance and flexibility. The main qualitative features related to the information content are "being related" and "reliability". These two features consist of other features themselves. For the information to be related, they must be worthy of predicting and confirming and present the feature which could be stated in terms of the money unit. On the other hand, for the information to be reliable, it must be complete, neutral and conservative and honest, and must be gathered and presented while preferring the content to the form.

Atias (1987) presents some experimental evidences stating that the comparability of a company changes positively with the size of the company. Therefore, it's expected that the companies with lower comparability will create more opportunities for the market maker to make aware deals and therefore it increases the cost of wrong choices. But in some cases, theory predicts the positive relationship between comparability and keeping cash. These situations will immediately happen around information events (Von Buskirk, 2011).

However, findings differ regarding the effect of comparability on company's information environment and especially the quality of financial reports. The researches have shown that the quality of financial report reduces the information asymmetry by making the access to flat and reliable information possible for investors (Vercia, 1983, Bushman, 1991, Landholm, 1991). Diamond and Vercia (1991) have stated that the quality of financial report, will increase asset cost by increasing the wrong options and risks. The experimental results about keeping cash differ, too. Economical theories and previous experimental observations (Cohen, 2003, Leaves and Vercia, 200) show that if higher comparability leads to less information asymmetry, companies with higher asymmetry have stronger motives to choose higher comparability to reduce asymmetry. Theoretical models such as Diamond 1985, Diamond and Virginia 1991, predict that the comparability using a higher quality of information brings less asymmetry of information among market agents; therefore because of a reduction in the cost of capital and risk, the benefits of the company will be kept and there will be no need for store of much of liquidity.

Financing and holding cash

In the theory of financing, one of the most important theories unified in Agency Theory is the theory of Optimum Financing. It is to say that the more debt a company has, the less interest will be laid for investments in opportunities with positive net worth; because the advantages of such investigations are transferred upon creditors; therefore the companies with more promises have fewer report quality.

Mac Nichols and Stuben (2008) claim that the altered financial statements hide the development pace of incomes and benefits; therefore any increase in the real level of incomes and benefits leads to a limitation in the vision of unknowing persons towards benefit alteration. It is possible that the investors of the company count on the false pace of company's development since they count these alterations harmless for the development of the company or they are not aware of it so they begin to invest; on the other hand it is possible that the company's investors are aware of the incorrect incomes, benefits and development pace of the company, however they take the risk and do investments in the company.

Clarity leads to the unreliability of market about the future decisions of lawmakers; as a result it increases the predictability of monetary policies and the efficiency of financial markets. Lack of clear information in financial markets is a key factor in the entrance of a huge amount of foreign capital and its quick exit in case of any crisis. Lack of transparency in making decisions and unorganized presentation of information about meeting the rational needs, forces the private enterprise to increase the ability of alteration in the value of its belongings and investments with more analyzing of information; therefore there will be a huge risk in their investments. This increase in the investment risk can lead to an increase of expected efficiency



rate and financing cist. However, general and accurate presentation of information can lessen the problems. (Khaleghi Moghaddam and Khalegh, 2009)

Institutional Ownership and Cash keeping

Institutional ownership is defined as the percentage of asset invested by a legal investor which has an important role in the operation of managers' plans. (Dahlkvist and Robertson, 2001) They explain that institutional owners complete the strategic decisions and neutralize managerial decisions in inefficient use of company's asset. The institutional owners have more controlling powers than managers of the company in countries enjoying a solid law.

It is expected that the institutional ownership reduces the amount of information asymmetry and as a result, the agency problems; (Juvo, 2005, Dahlkvist and Robertson, 2005) because the institutional ownership can efficiently control manager's information altering. (Juvo, 2005) the institutional owners try to do their best and create a logical liability of the quality of financial statement and an increase in the benefits of investments to the benefit of investors. (Juvo, 2005)Therefore opportunistic behaviors such as cash flow abuse in the companies in which the asset is kept by the institutional owners are reduced. The increase in institutional ownership leads to appropriate operation of the company's decisions and reliability of efficiency of taking the advantage cash flow.

Experimental Background

Nabatdoost and Mohammadzadeh (2016) observed the effect of the quality of auditing on the comparability of audits of the listed company's in Tehran's stock exchange and concluded that there is a relation between the quality of auditing and the comparability the audits.

Mehrvarz and Marfo (2016) analyzed the relation between the comparability of audits and informative being of the stock value of future profits. According to them, there isn't a positive relation between comparability of audits and informative being of the stock value and the comparability the audits does not reflect the information around the future profits of industry and reflection of future net profit of company during current stock value.

Roodposhti, Vakilifar and Lak (2015) analyzed the auditor style and the comparability the audits. The outcome of this research indicated that the employers of other auditing institutes which are members of Official Accountants Community, enjoy a more resemblance in terms of profit structure in comparison with the employers of auditing organization during the same



industry and year, also the employers of an auditing organization enjoy a more resemblance in terms of profit structure in comparison with non-employers of the same organization. The results of this research indicated that auditor's style is effective on the comparability the audits and to reach the comparability, auditors play key roles along with even accounting standards.

Foroughi and Ghasemzad (2016) analyzed the effect of the comparability the audits on the stock price synchronicities. Share price synchronicities are a factor which is used inversely for examining the information content of stock price. The results of this research showed that the comparability of audits effects negatively on stock price, also the companies with less synchronicity enjoy less asymmetry of information; therefore the comparability of audits causes more amount of company's exclusive information to be reflected in share prices.

Analyzing the role of ownership structure and interorganizational on information asymmetry, Lin, Chen and Tsai (2017) concluded that controlling investors can easily access to the information, and its effect on the method and time of its launch to asset market. An increase of this information asymmetry changes the profit pace of the company and reduces it; most of which is out of controlling structure of the company.

Choy, Choy, Mayer and Zibart (2014) analyzed the relation between the comparability of audits and informative being of the stock price of future profit. The research indicates that the informative being of the share price in the companies enjoying a more capability of being compared with other companies in the same industry field is more.

Mergntaller, Chen, Collin and Croat (2014), Analyzed the relation between the comparability of audits and the efficiency of deciding on the company's educating process and concluded that the more comparable that educating company's financial statement is with its industry's financial statement, the better decisions that company will make on education process through the process of buying a company's share. In other words, the comparability of audits makes the financing process more efficient.

Considering the background of the researches and their theoretical basis and the fact that the goal of this research is analyzing the effect of comparability of audits on operative cash holding, the theories of this research are as following:

First theory: Comparability has a meaningful effect on operative cash holding.

Second theory: The quality of financial reportage has a meaningful effect on the relation between comparability and cash holding.



Third theory: The limitation of financing has a meaningful effect on the relation between ability of comparing and cash holding.

Fourth theory: Institutional ownership has a meaningful effect on the relation between comparability and cash holding.

Fifth theory: Comparability leads to the difference in cash holding between the companies with higher or lower comparability.

3. Models and parameters of this research

Models of this research

This research's goal is to analyze the effect of comparability of audits on operative cash holding, for following models are applied for analyzing the theories 1 to 7.

Theories 1 to 4:

$$\begin{split} & CashHolding_{i,t} = \alpha_0 + \alpha_1 \text{ ROA}_{i,t} + \alpha_2 \text{ Size}_{i,t} + \alpha_3 \text{ LEV}_{i,t} + \alpha_3 \text{ BTM}_{i,t} + \alpha_4 \text{ SIGMA}_{i,t} + \alpha_5 \text{ STDRET}_{i,t} \\ & + \lambda_1 \text{ Inst}_{i,t} + \lambda_2 \text{ DAC}_{i,t} + \lambda_3 \text{ KZ}_{i,t} + \lambda_4 \text{ Comparability}_{i,t} + \lambda_5 \text{ Inst}_{i,t} \times \text{ Comparability}_{i,t} + \lambda_6 \text{ DAC}_{i,t} \\ & \times \text{ Comparability}_{i,t} + \lambda_7 \text{ KZ}_{i,t} \times \text{ Comparability}_{i,t} + \epsilon_{i,t+1} \end{split}$$

Cashholding: The amount of company's operative cash to company's early asset.

Sigma: Standard deviation of operative cash flow which is one of the controlling factors and it equals the tree-year standard deviation of cash flow to company's early-period asset.

STDRET: Standard deviation of return on stock which is one of the controlling factors and equals to the tree-year standard deviation of return on stock.

ROA: The efficiency of the asset is one of the controlling factors and equals to the ration of the net profit to the total early-period asset.

Size: One of the controlling factors which equals to the natural logarithm of the asset market value until the end of year t.

LEV: One of the controlling factors which equals to the ratio of company's debts during the year t to the total asset in the end of the year t.

BTM: The parameter of the ratio of market value to book value of the share i during the year t. KZ: Kaplan-Zinglaes is used for calculating the financing limitation of business entity. Its adjusted model in security exchange of Tehran is used through following explanation. The companies in the fourth and fifth quintet are companies with financial limitation.

KZ = 17.330 - 37.486 * C - 15.216 * DIV + 3.394 * LEV - 1.402 * MTB



In the afore mentioned model, C is the ratio of cash balance, DIV is the divided share, LEV is financial leverage and MTB is the ration of the market value to the book value. Comparability: in order to explain the specifications of the accounting system of a company, the following regression is estimated for company's each year applying six-month data for a recent-four-year period ending up to the end of year t, so that α and β is calculated for the company. In the following equation, profit is defined as the net profit of a six-month period which is unscaled according to the value of capital market in the end of each period. Efficiency

here means the efficiency of half-year.

Equation 1

$Earnings_{it} = \alpha_0 + \beta_1 return_{it} + \in$

As the first step, α and β are estimated for company's each year according to Equation 1 and the data of 5 half-year (the current half-year and previous 4 half-year). α and β factors of each company, each year, indicates the specifications of accounting system of that company in the same year. As the next step, α and β were place in the second equation and the expected profit of the company i was estimated. If the assumption is based on the similarity of accounting system of company i and j, the displayed number of the estimated profits of the two companies using α and β factor must be the same (Equations 2 and 3).

Equation 2

$$E(Earnings)_{iit} = \widehat{\alpha}_i + \widehat{\alpha}_1 return_{it} + \in$$

Equation 3

$$E(Earnings)_{ijt} = \widehat{\alpha}_{i} + \widehat{\alpha}_{1}return_{jt} + \in$$

The more comparable the two companies' accounting system is, the less difference is expected from the two expected profits; therefore accounting comparability of the companies i and j will be:

Equation 4

$$CompAcct_{it} = -\frac{1}{5} * \sum_{t=4}^{t} |E(Earnings)_{iit} - E(Earnings)_{ijt}|$$

Accounting comparability for all company pairs like i and j in every industry is counted for the observing i-j years; which means that according to equation 4, company i's expected amount of profit based on this company's equation and company j's equation which is active in the same industry as company i, is estimated and the differences in the amount of expected profit will be the result. The difference in the amount of expected profit of each company and



other companies active in the same industry must be calculated for each year and the difference in the expected amount of profit must be known. After sorting the formulas in a descending order for company i, parameter M\$-CompAcct is found by calculating the average of the four bigger numbers than the amount of accounting comparability of each company during each year.

DAC: In this research the model of Francis and coworkers is used for examining the quality of financial reporting:

 $TCA_{j,t} = \alpha_0 + \alpha_1 CFO_{j,t-1} + \alpha_2 CFO_{j,t} + \alpha_3 CFO_{j,t+1} + \alpha_4 \Delta REV_{j,t} + \alpha_5 PPE_{j,t} + \epsilon_{j,t}$

In which TCA is the overall promised items of company j duting year t, CFO is the cash flow resulted by company's operations. ΔREV is the change in income and EPP is the net stable observable asset of the company. The above mentioned model is taken as information quality parameter for estimation of each industry year and the reverse of three-year standard deviation except for the error.

INST: The amount of institutional ownership which is calculated from calculating the total amount of shares in banks, insurance companies, holdings, investment companies, pensioner's fund, governmental institutions and governmental on the whole published share of the company.

In the abovementioned regression, the factor which is taken for examining the role of comparability on the cashholding and the comparability-cashholding relation factor and it is the factor of their correlation for examining the role of the quality of financial reporting, financing limitation and institutional ownership in cashholding. The factors of the financial reporting quality, financing limitations and institutional ownership in fact show the distinct effect of these three parameters and the correlation factor, show the extra pricing in addition to distinct factors.

The exam of fifth theory is the exam of capital expenditure and the specifications of data environment.

In order to test these two theories and modeling the relations, following steps are to be taken:

- 1- Companies, according to comparability index, are divided into five quintiles. It is expected that the quintiles with the lowest (highest) index value, have incomplete(almost complete) chashholding.
- 2- Then the companies are divided into five quintiles according to quality level index of financial reporting. Although it is hard to directly observe the quality level of financial reporting, it is expected that the quintile with the lowest (highest) index value has the lowest (highest) financial reporting. The following table 1 shows the quintet division.



3-

According to comparability	
Incomplete O_{40} O_{30} O_{20}	
(Q_{50}) (4.0 (3.0 (2.0)) Q_{10}	
Oct Oct Oct Oct Oct	Accordin
$Q_{51} = Q_{41} = Q_{31} = Q_{21} = Q_{11} = quality)Q_{01}$	g to the
Q52 Q42 Q32 Q22 Q12 Q02	quality
	index of
Q53 Q43 Q33 Q23 Q13 Q03	financial
	reporting
Q_{54} Q_{44} Q_{34} Q_{24} Q_{14} Q_{04}	
High reporting	
Q_{55} Q_{45} Q_{35} Q_{25} Q_{15} quality) Q_{05}	

Table 1: Divisions of quality of financial reporting

- (1) After sorting the companies into 25 Portfolios (5*5), the the cash keeping for the cover portfolio which acquire the purchase position in the companies with the highest level of financial report quality, and the sale position in the companies with the least financial report quality is calculates.
- (2) if operational cash is meaningfully more than zero, the companies with low financial report quality will earn the cash keeping with more risks comparing to the companies with high financial report quality.
- (3) In this phase, the meaningfulness of the factor variables is tested at 10, 5 and 1 percent levels using t statistic.

The statistical society and the method of choosing companies

The statistical society of this paper is all of the confirmed companies in the Tehran shares between 1388 to 1396. To choose the sample from between all companies, the companies which didn't have the following features were removed and the remaining companies were chosen for the test:

1- the companies must be accepted before 1388 in Tehran security shares.

2- to increase the comparability, the companies' financial period must end in Esfand.

3- the statistical sample doesn't include medium, investment, Lazing, Banks and insurance companies due to their assets' different nature.

4- the companies must not have changed their activity or financial period during the said time.5- their data must be available.



Finally, the accepted companies in this research include 120 confirmed companies.

4. Study findings **Descriptive statistics**

To present a general view of the calculated variables' important features, some of the descriptive statistics of these variables are presented in the table 2 below such as average, middle, diversion, minimum and maximum.

variables	average	middle	diversion	max	min
Keeping cash	0182/0	0117/0	0200/0	1615/0	0300/0
Comparability	-0844/0	-0822/0	0497/0	-0014/0	-2891/0
Financial report quality	0653/0	0404/0	0709/0	3032/0	0003/0
Financial provision limitation	1470/0	0000/0	0369/0	0000/1	0000/0
Organizational ownership	7250/0	8157/0	2597/0	9900/0	0100/0
Asset efficiency	1199/0	0514/0	2051/0	2046/1	-4323/0
The size of the company	8967/5	8419/5	6125/0	5200/8	2654/4
Financial lever	6537/0	6518/0	2339/0	8244/1	0964/0
Market notebook value	8727/0	8960/0	1165/0	7428/1	5189/0
Cash flow diversion	0140/0	0099/0	0146/0	1206/0	0100/0
Efficiency diversion	3597/0	3051/0	2273/0	9800/0	1056/0

Table 2: The descriptive statistics of study variables

The average of cash keeping equals to 0.0182 by analyzing the quantitative results of descriptive statistics, which indicates the limitation of cash keeping by the said companies, which is justifiable considering their 14 percent provision limitation. The possessive structure of the company includes 72.0 aware shareholders. The average of the financial report quality equals 0.0653 which indicates the limited cash flow swings used by the studied companies. The average of operational cash flow diversion and the size of the company equal 0.0140 and 5.8967. In other words, because the calculated variable registers the diversion and operational cash flow changes, the less value shows more quality regarding the operational cash flows. The average of financial lever is 0.6537. In other words, the companies have done more financial provision than debts. Also, the values 0.1199 and 0.3597 for asset efficiency and efficiency diversion, indicates that for each invested Rial, the profit was 12 Rials. The average of office value in the market was 0.8727 and could be stating that the balance shit information and the conservative approach of the companies are not related. The intentional part of these changes are because of inflation. The average value of comparability is -0.844, and considering the



comparability average we can state that the different industries average is not that far from this industry's.

The diversion, Kurtosis and Skewness statistics (presented in the attachments) are also used to check the normality of data distribution (Kler and Varag, 2003). The independent and dependent variables' data distribution is normal because the variables have the minimum distance from the presented value for Kurtosis. Vavoos (2002) states that whenever the size of the sample in bigger than 100, they are most probably normally distributed.

Hypothesis tests

Before fitting the data, it's necessary to carry out Lamer F test to evaluate the use of sign data method with fixed effects against the combinational data method. The results of F Lamer test are presented in table 2.

Table 3: The results of F Lamer test

Research model	statistic	The error level	Confirmed method
Model 1	6441/1	0003/0	Fixed effects

As seen, the F statistic has become meaningful at 4 percent error level, therefore, the Limier test rejects the similarity of origin interception in all periods. Therefore, the fixed effects method is approved for this test. Considering the statistic and the error level of F limier test and the rejection of H0 for research pattern, it's necessary to also perform the Hausman test to choose between the sign data pattern with fixed effects of sign data with random effects. The results of Hausman test are shown in table 3.

Table 4: The results of Hausman test

Research model	The statistic error level		Confirmed method		
Model 1	8323/40	0001/0	Fixed effects		

As seen in table 3, evidences indicate the invalidity of H0 theory for the research pattern, therefore the sign data pattern with fixed effects is preferred. Therefore, the sign data method with fixed effects is used to estimate the research pattern. In the current study, Durbin-Watson



test has been used to identify model's self-correlation. If the Durbin-Watson value is close to 2, the model error sentence dependency could be accepted. Furthermore, Fisher test is used to analyze the meaningfulness of the whole model. Table 5 shows the results of adding research models. Based on the first model of the above table, the error level was the probability of not having a meaningful relationship between comparability and keeping cash, equals to 0.0152 which is less than 0.50, therefore, H0 is rejected. Therefore, there is a meaningful relationship between comparability and keeping cash.

probability	T data	coefficients	variables		
0152/0	-4337/2	-0058/0	Comparability		
0044/0	8561/2	0325/0	Financial report quality		
0589/0	8922/1	2847/0	Financial provision limitation		
0199/0	-3334/2	-0057/0	Organizational ownership		
0416/0	0416/2	2090/0	Comparability * financial report quality		
0021/0	0014/2	0727/0	Comparability * financial provision		
0021/0	0914/5	0727/0	limitation		
8026/0	1250/0	0452/0	Comparability * organizational		
8926/0	-1350/0	-0452/0	ownership		
0001/0	-8161/3	-0211/0	Financial lever		
0168/0	3975/2	0478/0	Asset efficiency		
0000/0	9520/6	7543/0	Cash flow diversion		
1328/0	5050/1	0034/0	The size of the company		
8197/0	-2304/0	-0134/0	Efficiency diversion		
1996/0	2839/1	0058/0	Market notebook value		
1367/0	-4901/1	-0437/0	Intercept of origin		
	4953/0		Determination coefficient		
	4102/0		Balanced determination coefficient		
	7224/1		Durbin-Watson statistic		
	8195/5		F statistic		
	0000/0		F statistical probability		

 Table 5:
 results of adding research models

The error level related to H0 stating that the organizational ownership affects the relationship between comparability and keeping cash equals 0.8926 which is larger than 0.50, therefore, H0 is rejected. So, organizational ownership doesn't have a meaningful effect of the comparability and keeping cash.

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The error level related to H0 stating that the financial provision limitation affects the relationship between comparability and keeping cash equals 0.0021 which is less than 0.50, therefore, H0 is rejected. So, financial provision limitation has a meaningful effect of the comparability and keeping cash.

The error level related to H0 stating that the financial report quality affects the relationship between comparability and keeping cash equals 0.0416 which is less than 0.50, therefore, H0 is rejected. So, financial report quality doesn't have a meaningful effect of the comparability and keeping cash.

Fifth hypothesis: Testing the role of comparability in change of keeping cash

The fifth hypothesis test is actually the test of keeping cash and information environment features. To test this hypothesis, companies are categorized into 5 quantiles based on their comparability. Then, the companies are categorized based on the financial report quality. The result of each quantile is as follows.

The cover Portfolio of fina	ncial report quality u	sing comparability
		financial report quality (Q1-
		Q5)
	First quantila	0329/0
	First quantile	1217/3
	Second	0167/0
	quantile	3329/3
Comparable quantiles	Third quantila	0782/0
Comparable quantiles	Third quantile	4516/3
	Fourth	1194/0
	quantile	1709/2
	Eifth quantila	1720/0
	riiui quantile	9826/3

Table 6: The cover Portfolio of financial report quality

Regarding the above table, we can state done the less comparability level (from first to fifth quantile), the more financial report quality such that in the first quantile the coefficient is the least. The results of change of keeping cash related to this hypothesis are as bellow:



Financial report quality										
	cover		lowest)	owest) Q1 (hi				Q1 (highest)		
T data	coefficient	T data	coefficient	T data	coefficie nt	variable	ile	ile		
5042/1	3124/0	6961/1	4312/0	8716/1** *	1017/0	Keeping cash		-		
3519/0		4205/0			3017/0	Determination coefficient	Q1	C		
0025/0		0116/0			0187/0	F statistic probability		Compara bility		
9352/3*	0314/0	2108/2	0570/0	4633/2**	0254/0	Keeping cash		-		
3946/0		4217/0			3415/0	Determination coefficient	Q5			
0048/0		0105/0		00	15/0	F statistic probability				
***, **, * indicate the meaningfulness at 10, 5, 1 percent in order.										

Table 7: Change of keeping cash

The variable in the fifth hypothesis is the change of keeping cash. Of keeping cash is meaningfully more than zero, the companies with high financial report quality will earn less cash keeping than the companies with high cash keeping. Based on the table above and the first and last quantiles and by comparing them, it could be stated that the fifth hypothesis of the research is confirmed using to comparability and financial report quality factors. In other words, the is a meaningful difference between the highest and lowest quantiles of the financial report quality from the aspect of cash keeping, and it could be stated that changes in comparability lead to changes in cash keeping.

5. Conclusion

In this study, the pricing of information distribution is analyzed based on the comparability and inefficiency of the market.

The first hypothesis's results match with the thorny basis of this hypothesis based on the meaningful relationship between the comparability and cash keeping. Considering the theory of investor's recognition (Merton, 1987), these investors will most likely invest in companies which are obviously good or judged to be good. If comparability increases, company's visibility

increases too and the public information process costs reduce, therefore, comparability will lead to more deals from unaware investors (Brown and Hiligist, 2007). Diamond (1985) also states that publishing general information will make the dealers believes more homogeneous and will reduce the intensity of promissory notes form aware dealers. This paper's results match the paper of Lambert and colleagues (2012).

The second hypothesis's results match with the theory basis of this hypothesis based on the meaningful relationship between the comparability and cash keeping. The organizational owners do their best to fulfill their duties in the best way possible and create logical trust towards the financial report quality, protecting shareholder's profits and increasing the profits of investing (Yevou, 2005). Therefore, the probability of Opportunistic actions such as using cash flow inappropriately for the companies which their shares are held by organizational owners is reduced. Along with the increase of organizational ownership, the management decisions of the company are guided well and some actions are taken to make assurance of efficiency and effectiveness of using cash flows. This paper's results match the paper of Dalcoupist and Robertson (2001).

The third hypothesis's results match with the theory basis of this hypothesis based on the meaningful relationship between the financial provision limitation and cash keeping. The optimal provision theory is one the most important theories in representation theory. The theory of optimal financial provision states that the more the debts of the company, the less the motives of shareholder-manager union to control the company to invest in opportunities with current positive value, because the benefits of such investments are transferred from shareholders to credit providers. Therefore, the companies with more commitments have less financial report quality which leads to the lack of efficient use of company's cash resources. This paper's results match the paper of McNikol and Stoben (2008).

The fourth hypothesis's results match with the theory basis of this hypothesis based on the meaningful relationship between the financial report quality and cash keeping. Based on the prediction of the information economy theory, financial report quality reduces the information asymmetry between the managers and the shareholders and therefore reduces the cash keeping. The financial report quality models predicted that company's exposure could hold the upper hand in gaining private information of act as an alternative for the information kept by the aware shareholders by which reduces the motive or ability of the shareholders to gain private



information. Therefore, the unaware dealers tend to trade in companies which have lots of exchanges and fluidity. This is because that more clarity strengthens the share market's fluidity and reduces the transaction costs for the company's share (Diamond and Vercia, 1991). This paper's results match the paper of Von Buskirk (2011).

Based on the results it's recommended for the shareholder to pay attention to not only the possessive structure but the effective factors on how to use the company resources. Because the decision which are made by the management in such cases could be the efficiency affected by the company's possession.

Based on the obtained results it turned out that in companies with high financial provision limitation, paying attention to the quality and comparability of financial states could lead to an increase in the value of cash keeping. Also, when financial report quality rises, the profit conflicts reduce. In such a case, the company's performance enhances while using the cash resources. Therefore, it's suggested to prepare the conditions for effective investment of resources while paying attention to the financial report quality.

References

- Akins, B., Ng, J and Verdi, R. (2012); "Investor competition over information and the pricing of information asymmetry", The Accounting Review, Vol. 87 No. 1, pp.35–58.
- Armstrong, C., J. Core, D. Taylor, and R. Verrecchia. 2011. When does information asymmetry affect the cost of capital? Journal of Accounting Research 49 (1): 1 -40.
- BadAvar Nahandy, y, Taghizade Khangah and... 1396. The effect of paying shares' profit and maintaining the bad new on the danger of share price reduction while emphesizing on the information asymmetry, the seasonal magazine of accounting analysis, 24(1), 19-40.
 - Biddle, G., Hilary, G. Verdi, R.S. 2010. How does financial reporting quality relate to investment efficiency?, Journal of Accounting and Economics, 49(1-2), 58-74.
 - Botosan, C., and M. Plumlee, 2002, A re-examination of disclosure level and the expected cost of equity capital, Journal of Accounting Research, 40(1), 21–40.
 - Brown, S. & Hillegiest, S. A. 2007. "How Disclosure Quality Affects the Level of Information Asymmetry". Review of Accounting Studies. 12: 443 -477.
 - Chang, E., Lin, T., Ma, X., 2014. Governance through trading and corporate investment decisions. Working paper, University of Hong Kong.
 - Chang, E., Lin, T., Ma, X., 2014. Governance through trading and corporate investment decisions. Working paper, University of Hong Kong.
 - Chen, C., Xiumin M., Roychowdhury, S., Xin W., and Matthew, B. 2016. Clarity Begins at Home: Internal Information Asymmetry and External Communication Quality. Forthcoming the Accounting Review.
 - Choi, J.-H., Choi, S., Myers, L. & Ziebart, D. 2014. Financial Statement Comparability and the Ability of Current Stock Returns to Reflect the Information in Future Earnings, available at: http://ssrn.com/abstract=2337571.



- Cohen, D., 2008, Does Information Risk Really Matter? An Analysis of the Determinants and Economic Consequences of Financial Reporting Quality, Asia Pacific Journal of Accounting and Economics 15, 69-90.
- De Franco, G., Kothari, S., Verdi, R. 2011. The benefits of financial statement comparability. Journal of Accounting Research, 49 (4), 895–931.
- Diamond, D., and R. Verrecchia. 1991. Disclosure, liquidity and the cost of capital. Journal of Finance 46 (4): 1325 -1359.
- Dou, Y., Hope, O., Thomas, W., Zou, Y., 2015. Blockholder exit threats and financial reporting quality. Working paper, University of Toronto.
- Easley, D., and M. O'Hara. 2004. Information and the cost of capital. Journal of Finance 59 (4):1553-1583.
- Fakhari, H, Rezaii Pine Noei, E. Presenting a model for the evaluation of the company's information environment 1396.
- Fishman, M., and Hagerty, K. (1992) Insider trading and the e¢ ciency of stock prices, RAND Journal of Economics 23, 106-122.
- Forougi, D. Ghasemzad, P. 1395. The effect of comparability on the financial faces. Financial accounting Researches, 8(1), 39-54
- Fu, R., Kraft, A. and Zhang, H. 2012. Financial reporting frequency, information asymmetry, and the cost of equity, .Journal of Accounting and Economics, 54(2-3), 132-149.
- Gomes, A., G. Gorton, and L. Madureira, 2006, SEC Regulation Fair Disclosure, Information, and the Cost of Capital, Working Paper: Washington University; University of Pennsylvania; Case Western Reserve University.
- Kyle, A. 1985. Continuous auctions and insider trade. Econometrica 53, 1315–1335.
- Lambert, R., C. Leuz, and R. Verrecchia. 2012. Information asymmetry, information precision, and the cost of capital. Review of Finance (forthcoming).
- Lambert, R., and Verrecchia, R.. 2010. "Cost of Capital in Imperfect Competition Settings." Working paper, University of Pennsylvania.
- Lauri, A. 2003. Asymmetric Information : Theory and Applications. Tu-91.167 Seminar in Strategy and International Business.
- Leuz, C., and R. Verrecchia. 2000. The economic consequences of increased disclosure. Journal of Accounting Research 38 (Supplement): 91 -124.
- Levitt, A., 1998, The Importance of High Quality Accounting Standards, Accounting Horizons 12, 79-82.
- Lin Tsui-Jung, Yi-Pei Chen b, Han-Fang Tsai. 2017. The relationship among information asymmetry, dividend policy and ownership structure. Finance Research Letters 20.
- Lundholm, R. and L. Myers (2002). "Bringing the future forward: The effect of disclosure on the returnsearnings relation". Journal of Accounting Research 40(3): pp 809.
- Mehrvarz, F, Marfou', M. 1395. The relationship between the comparability of financial faces and spreadin the awareness of share prices regarding future benefits. The seasonal magazine of management accounting, 12(49), 83-110.
- Merton, R., 1987, A Simple Model of Capital Market Equilibrium With Incomplete Information, Journal of Finance 43, 483-510.
- Michael J Imhof, Scott E. Seavey, and David B. Smith (2017) Comparability and Cost of Equity Capital. Accounting Horizons: June 2017, Vol. 31, No. 2, pp. 125 -138.
- Nabat Doost; H. Mohammadzade Salete, H. 1395. Analysis of the accounting quality on the comparability of financial states in the confirmed companies of Tehran. Accounting science seasonal magaze, 16(62), 159-176.



- Pourzamani, z. And mansouri, F. 1394. The effect of exposure, being conservative and their mutual relationship on the normal share asset costs. Financial accounting researches. 7(25),79-96.
- Roudposhti guide, F, and Kilifred, H. R., Lac, F. 1394. The accounting style and the comparability of financial states. The seasonal magazine of management accounting, 8(25), 29-47.
- Sohn, B. C. 2016. The effect of accounting comparability on the accrual-based and real earnings management. Journal of Accounting and Public Policy, 35(5), 513–539.
- Stiglitz L. 2003. Estimating the components of the bid/ask spread. Journal of Financial Economics 21 (1): 123 -142.
- Stiglitz L. 2004. Bid, ask, and transaction prices in a specialist market with hetergeneously informed traders. Journal of Financial Economics 14 (1): 71 -100.
- Van Buskirk, A. 2012. Disclosure frequency and information asymmetry. Review of Quantitative Finance and Accounting, 38, 411–440.
- Verrecchia, R. 2001. Essays on disclosure. Journal of Accounting and Economics, 32, 97-180.