

## Transparency of Trading in OTC Market: Some Evidence from Iran

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**Abstract:** Equity markets generally disseminate continuous pre-trade information, such as best quotations and, in some cases, information about unexecuted limit orders and also report immediately prices and sizes of completed trades. Over-the-counter (OTC) is one of the main instruments of the capital market. Today, the OTC market dwarfs exchange trading as the bulk of OTC markets are particularly important factors for developing investment, increasing trust and loyalty, of the investors. The main objective of current study is to illustrate the situation of OTC in Iran, by employing census method, the attitudes of institutional investors and brokers has considered in the current study by employing questionnaire; The results indicate the appropriate legal structure and regulatory mechanisms to increase transparency of Iran's OTC market transactions are adequate and sufficient; also there is no significant difference between institutional investors and brokers in perspective related variables considered.

**Key words:** Capital market • OTC • Market-trading transparency • Disclosure of information • Liquidity ratio and transaction costs

### INTRODUCTION

Lack of information and uncertainty are inexorable features of finance, since capital markets are engaged in uncertain trade not only in money but in information itself [1]. Essential information gathering undertaken by markets include selection of projects and monitoring of project performance. These present specific challenges. The fact that some firms have better information than lenders about the risk attached induces asymmetries of information which give rise to problems of adverse selection. The inability of lenders to observe the actions of borrower produces moral hazard. Enforcement or, monitoring is also subject to information problems. In order to elicit behavior by agents to generate a good profile of return, lenders have to design contracts that get around information problem (demand collateral), that provide good incentives and monitor borrowers. However, information will always be imperfect. No matter how well financial markets perform in gathering information, borrowers will always know more than lenders about how they will spend the loans, about their ability, effort and so forth. Under-supply of information occurs because individuals who monitor the performance

of firms or banks are providing a benefit to all shareholders or depositors, but invest resources in this monitoring only to the level of their private benefit, not the broader socially desirably level. Imperfect markets and credit rationing occurs because information is costly; credit rationing because those who are willing to pay higher interest rates may not be those who put the loans to best use. Contagion, as in bank panics, is evidenced when the troubles of one institution 'contaminates' perceptions of the entire industry. The failure of a financial institution, stock market crashes and recessions, may increase uncertainty, worsen information asymmetries and aggravate adverse selection problems.

Intellectual foundation of the financial rules based on greater transparency, increased disclosure and better managing risks and to maintain financial market stability and integrity; the factor mentioned above is necessary for market participants [2]. Among the benefits of transparency and the need is undeniable that in the long run should be tried for it [3]; so desired level of transparency lead to detailed analysis of the transaction observed in the market for fair competition between activists and participants, improve markets quality and efficiency increase the overall volume of transactions,

cash respondents, reducing risk and transaction costs, reduce the difference between the bids-Ask [4], reduce the number of traders unaware, set efficient prices, investors'.

Transparency is generally understood as the availability of comprehensive information, mostly on the financial position of the government, the foreign exchange position of the central banks, the condition of financial institutions and fiscal and monetary policy more generally. By making more information available to help differentiate between risks, transparency is thought to promote the potential efficiency of markets and reduce uncertainty in the decision making of private market participants. Transparency means that the market for news and information is always clear and the same is placed at the disposal [5]; in other words, the level of transparency about market conditions and transactions, based on a time particular, which often is referred to two previous clarity and transparency of trading after the deal.

Transparency has a central role in market rules and plays a fundamental role in the OTC market [6]; because the best way to encourage trading in the markets, are the communication and transparency [7]. Transparency of transactions, including the challenges and develop efficient markets can be - threaten to capital market especially OTC markets; so investors based on the expected trading profits can be. This is especially about the companies trading on the OTC need more opportunities to supply and lead to greater risk [8]. So much more to attract capital, develop and improve the efficiency and quality of markets and transactions and make it fair and competitive environment for market participants and activists must review and analyze trading transparency in the OTC market and addressed to overcome this challenge.

#### **Theoretical Issues and Review of Literature:**

Market-driven discipline encourages financial institutions to conduct their business in a sound and efficient manner. In essence it is balancing the drive for growth with exposure to risk that is, enabling financial institutions to provide products that respond to the needs of the marketplace, while at the same time preserving the benefits of a financial safety net to protect investors. This market-driven focus must be supported by a commitment to transparency by all participants – from governments and other entities that regulate the markets, to the public and private entities that operate in those markets and to the accountants and other professionals who participate in the financial reporting process.

While the markets provide vehicles for investments, they need information to operate efficiently. Transparency means that market participants have the information they need to allocate their resources within the market [9]. A lack of transparency thus has a direct impact on capital resource flows. It can inhibit the flow of capital; cause the financial services industry to suffer and with it, the financial markets and the economy in general.

The concept of transparency in stock market trading includes the following components: 1- Neutral (free from manipulation and deception and fraud); 2- Dissemination of information for everyone and prevent the use of private information [10]; 3- Simplicity rules, regulations and market structure; 4- Equal trading opportunities (all investors equal access to markets); 5- Published stocks: Stocks emissions enough so make sure the transaction has a large number of parties and thus determine the probability of price manipulation more efficient and lower price brings; 6-Protection and maintenance: protect investors against market manipulation, dysfunctional, especially bankruptcy services offered on the market [11]. Generally it can say trading transparency in the market generally free of manipulation and deception, more efficient information and better monitoring and quality will be improved market [12]. Transparency of the transaction consists of the purchase orders and sell orders after being found to fulfill all be released [13]. Lack of transparency creates risk information for investors [9]; because what causes the formation and changing capital market and investors expectations are the information from various sources; such changes in capital market to provide presence. Every investor, so that has a kind of expectation based on this information to shape their expected form rate of return determined and accordingly, for transactions, it is proposed price offers [7]. It is evident that fluctuations of the information and more importantly their lack of transparency that led to false expectations formation and finally the market prices are false and unrealistic. Result of such transactions is formed after the transaction, expectations before the deal with the reality that after the transaction occurs, would be very different because the lack of transparency and inconsistencies caused to process the transaction information and non-transparent rent kind of information occurs. The only benefit of such market is that the investors will act in the equation of unequal information, dependent on specific information resources based on this information. So such a market monopoly merely act not only impropriety of country, but also unfair distribution of wealth and its accumulation in

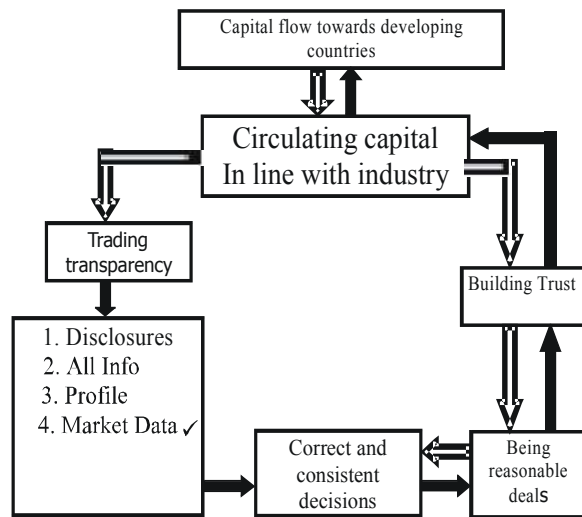


Fig. 1: Effect of transparency to economic development

the hands of some special factor and negative shock in coming into the country's economy deeply [7]. Hence to avoid this situation unfair trading market transparency should be increased to rent the information away.

As shown in Figure 1, the transparency of trading that is causing the disclosure of this information will lead to comprehensive information to be available to everyone. Insert figure 1 about here.

Structure and transparency of trading information is related with broad groups of market participants namely; brokers, investors and observers (legislators). Appropriate information, correctly and on time before and after the deal makes good decisions to be taken because the most important element in effective decision information [10]. Transparency in market transactions with high expectations of investors based on accurate information and appropriate forms and therefore their expected return rates will be reasonable and thus the trading process and programmable logic is pushed [7]. This approach is most transparent trading and market transparency, confidence building for investors for entry and survival in the market. Thus increase investor confidence, loyalty and their commitment to capital market is that loyalty leads to growth and capital market boom, tourism industry and capital in order to develop the country's economic development will eventually [11]. Also according to the Figure No. 1 there are economy developed and good working capital and capital markets growth and prosperity, a factor greater transparency and building confidence for investors and makes reasonable expectations and right decisions and transactions based on facts are taken.

Today, computer technology and electronic communication technology increases the speed and reduce transaction costs, increase efficiency, transparency and liquidity in financial markets have been so distributed electronic information can be activists and market participants the ability to access information and financial services increased and efficiency and transparency of securities markets. Considering the importance and necessity of transparency in financial transactions, much research on the role of various aspects of transparency in financial markets has been.

A result of the study conducted by, Gibson [4] about price transparency and essential component of efficient market showed that in the transparent markets, the difference between bids and demand is low. Also Gresse [14] states that transparency factor eliminates the price advantage in the market; in a transparent market, investors can their requests to provide the best price. Duffie *et al.*, [15] in the study showed that as much increased market transparency for the public, improve the price discovery function and market rules, increase competitiveness and efficiency of risk transfer because the conditions for investors to determine the usual and reasonable prices is easy. Zhang and Yu [16] state that transparency is one of the indicators of performance variability in financial assets has an effective role in capital markets. Baurch [17] showed that improving transparency of performance information before trading increased, causing prices suggested approaching - the time is requested. Boehmer *et al.*, [18] also confirms this finding. Bloomfield and O'Hara [19] showed that performance increased range of information and trading is done by increasing transparency. Also, Osei [20] states that the transaction transparency and information disclosure and fairness in a competitive market, causing prices to determine efficient, increasing trust and capital market transactions and will lead to its development.

Hendershott and Moulton [12] believe that increased transparency can lead to greater competition and lower cost in cash respondents to be traded. Farvaque *et al.*, [21] also in the study concluded that data transparency is desirable for shareholders because it reduces capital costs. Role in increasing the transparency of the review subjects, reduce variability and improve the quality of effective market knowledge and noted that trading volume significantly positive correlation with transparency. Charitou and Panayides [22] stated that the role of transparency in transaction cost reduction, especially among the uninformed investors, Boritz [9] believes that the relationship between transparency and capital cost

refers to more disclosure caused the stock of capital costs are lower. It also noted that the level of ambiguity and lack of transparency fully effective with the market growing more slowly, lower foreign investment, lower capital stock and lower dependent on volume of trade to GDP is as high transparency to create and maintain required quality high standards of accounting and regulatory rules. A study conducted by Edwards *et al.*, [23] showed that lower trading frequency of corporate bonds may reflect their relatively large trading costs, which in turn could be attributable to greater information asymmetries regarding underlying value for corporate bonds compared to government bonds. Alternatively, higher trading costs for corporate bonds could reflect rents extracted by dealers in the opaque environment. Further, corporate bonds are a favored investment for insurance companies and pension funds, whose long-horizon obligations can be matched reasonably well to the relatively predictable, long-term stream of coupon interest payments from bonds. Correspondingly, most or all of a bond issue is often absorbed into stable “buy-and-hold” portfolios soon after issue.

The results of Sakawa and Ubukata [13] confirmed a direct relationship between transparency and quality of trading before the market. Eom *et al.* [24] with a separate analysis before and after making changes disclosed in Korea Exchange in 2000 and 2002 on the quality, showed that the quality of trading before the market transparency increases. Also in this respect and others, Madhavan [25] empirically analyze the Tokyo stock exchange laws and they concluded that increased transparency of trading before the market quality is reduced. But Boehmer *et al.* [18] found that despite high transaction transparency before, the market will increase quality. Hendershott and Jones [12] also found that reducing the transparency of trading before the market quality is reduced. Baurch [17] showed that the increase in quality due to increased market transparency is traded before the same token, Flood *et al.* [26], empirical evidence showed that before

the deal clarify the difference between price and apply the proposed reduced. Madhavan [27] concluded that the transparency of trading before the market improves the quality of markets is large enough.

Doidge *et al.* [28] stated the role of institutional investors in the market pointed to increasing transparency. Schmiedel [29] also believes that transparency and market acceptance of automated trading systems significantly the operational efficiency of stock markets will affect.

Finally, Acharya and Bisin [30] show that OTC markets are ambiguous; they also predicted based on findings that greater level of transparency in transactions between market participants at least lead to improved risk assessment and pricing will participate. Therefore transparency, in every individuals economy have access to detailed information of each transaction based on the situation and will act information.

**Research Methodology:** The population of the study includes all institutional shareholders and brokers OTC market is Iran that their listed on Iran's OTC Market Information Center (to address [www.irfarabourse.com](http://www.irfarabourse.com)). Data was extracted and the census questionnaire method among all brokers and shareholders were distributed. Collected data using by Minitab software, Wilcoxon test and Mann-Whitney, Test were analyzed. Overall information is presented in Table 1.

**Objective of the Study:** The overall objective of current study is illustrating the transparency of Iran's OTC market as a complementary market in Tehran Stock Exchange. Transparency is precondition for and an important element in the prosperity and development of capital markets and creates trust, loyalty and increased incentives for investors entering the market. Thus the main objective study attitudes towards market participants as well as information about the transaction legal and regulatory aspects of the market is.

Table 1: Descriptive characteristics study

Percent	profusion	Items	Variable
Background activity	16	Only OTC Market	%19
	68	OTC and Exchange Market	%81
Field of the study	22	accounting	%26.20
	49	Financial Management	%58.30
	6	economy	%7.20
	7	other	%8.30
Level of the study	36	B.A	%42.90
	37	MA	%44
	8	PhD	%9.50
	3	other	%3.60

Table 2: Kolmogorov - Smirnov Results

Variable	Value statistics	D.f	Sig.
Question 1: Access to appropriate information	0.123	84	0.003
Question 2: The legal and regulatory mechanisms adequate and sufficient	0.126	84	0.002

**Research Questions and Hypotheses:** Whit given that information and its disclosure of the most important and most crucial element of clarity and transparency of market transactions depends on it as well as legal and regulatory mechanisms in determining the role of market information disclosure is in the following two questions: First, default were raised:

- Whether the information on Iran's OTC market for all market participants is appropriate?
- Do the legal and regulatory mechanisms of Iran OTC market is sufficient and appropriate?

According to the stated questions, the following hypotheses are postulated in the study:

**First Hypothesis:** There is a significant difference between institutional shareholders and brokers about the existence of appropriate information in Iran's OTC market.

**Second Hypothesis:** There is a significant difference between institutional shareholders and brokers about the legal and regulatory mechanisms in Iran's OTC market.

**Results of the Study:** To answer questions, at first attempted to determine Normality test or lack of normal data to determine the type of test (parametric or Non-parametric) was employed. The results have shown in Table 2.

As shown in Table 2 the significant the level of observed data for both questions is less than 0.05 (sig <0.05), so the assumption of normal data is rejected.

Hence to test the hypotheses nonparametric Wilcoxon Test is suitable.

The first hypothesis is:

$$\begin{cases} H_0: \mu \leq 3 \\ H_1: \mu > 3 \end{cases}$$

Table 3 shows that,  $M = 3$  vs.  $M > 3$  for question 1 (access to appropriate information) equal to 0.041 (legal and regulatory mechanisms suitable and sufficient) is equal to 0.001, which are both smaller than 0.05. So is both the null hypotheses are rejected. Therefore, answer both questions is positive; means that the statistical research community perspective, the information on Iran's OTC market for all market participants and the appropriate legal and regulatory mechanisms of Iran's OTC market is sufficient and appropriate.

Considering that information and legal and regulatory mechanisms OTC market from the perspective of the respondents was appropriate, a separate comment for review by community groups about the statistical variables, discuss their different perspectives were examined. Considering that data are not normal distribution, thus measuring the difference vision for the statistical community groups (institutional investors and brokers) nonparametric test Mann - Whitney is used.

$$\begin{cases} H_0: \mu_{\text{Institutional investors}} = \mu_{\text{Brokers}} \\ H_1: \mu_{\text{Institutional investors}} \neq \mu_{\text{Brokers}} \end{cases}$$

Table 3: Wilcoxon test results of single-sample questions

Hypotheses	Total	Mean	Value statistics	Significant level
Access to appropriate information	84	3.22	1937	0.041
Appropriate mechanisms and adequate legal and regulatory	84	3.61	2491	0.001

Table 4: Results of Mann Whitney Test

Variables	Groups	Total	Average Rating	Value statistics	Significant level
Access to appropriate information	Institutional investors	22	40.27	633.00	0.616
	Brokers	62	43.29		
Appropriate mechanisms and adequate legal and regulatory	Institutional investors	22	36.48	549.50	0.171
	Brokers	62	44.64		

Table 4 shows the results of Mann – Whitney test. As it shown, H0 for different groups for each hypothesis (access to appropriate information) and 0.616 for the hypothesis (the appropriate regulatory and legal mechanisms and sufficient) is equal to 0.171, both are larger than 0.05. So the null hypotheses are accepted and alternative hypotheses are rejected.

## CONCLUSION

Trading transparency plays an effective role in investment, increase trust and loyalty of investors and market participants - especially in OTC markets. So, investors and brokers' attitude towards the issue of transparency OTC market trading in the OTC market in Iran were analyzed. Research findings indicate that institutional shareholders and brokers of information and legal and regulatory mechanisms OTC market in Iran are proper and sufficient knowledge and there is a significant difference between their views. Generally, their perspective, Iran's OTC market has a good trading transparency. However, the studies conducted by Duffie *et al.* [15], Acharya and Bisin [30] and Osei [20] found that the transparency of OTC markets are not sufficient.

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