An Analysis of the Stock Price Impact on the TSE and Accrual Management

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Abstract

This study examined the role of positive and negative discretionary accrual management in the stock price impact. A sample of 66 firms listed in Tehran Stock Exchange was selected for a ten-year period (2008-2017). Accrual management was found to lead to significant changes in stock prices, and uninformed investors incur trading costs caused by the stock price impact. The results showed two key points. First, the mispricing of discretionary accrual components in the market leads to an increase in the stock price impact, and second, the management of positive discretionary accruals has a greater effect on stock price impacts than negative discretionary accruals. Using positive discretionary accruals, investors overvalue the firm and engage in trading stocks. Due to the mispricing of positive discretionary accruals, an asymmetric behavior is formed in the stock price impact.

Keywords

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Introduction

Over the past decade, trading costs have had a significant role in investors' decisions. Trading cost is a measure of market liquidity that is considered an important indicator of the capital market efficiency and motivates informed investors to achieve a high liquidity through their insight into the firm's internal data. Recently, capital market research has shown that trading costs are a key indicator of performance assessment and have a pivotal role in financial markets. In many of these studies, trading costs are discussed as illiquidity, in a way that they are deemed a determinant of market liquidity and return on assets [ROA] (Cepoi, 2014). The analysis of trading costs is a consequence of the microstructure of the capital market that has many advantages for portfolio managers and traders since it can be used to assess their performance and improvement in portfolio formation (Baker, 2013). The stock price impact is a component of trading costs that represents indirect trading costs. Unlike explicit trading costs, these costs are not reflected in accounting reports; for example, when large buyers raise prices and sellers lower their prices, the impacts of these prices are considered as trading costs (Demsetz, 1968; Huang, 2013).

Although the review of literature on the stock price impact shows that many factors affect its exacerbation, the issue of information asymmetry among investors has a more pronounced role in the stock price impact. Moreover, the intensification of information asymmetry through accrual management makes investors misinterpret the financial statements (Wasan & Boone, 2010; Lei, 2013; Park at al., 2018). Moreover, investors in capital markets incur a great deal of loss due to the trading costs caused by their misinterpretation of accruals (Lei, 2013). This issue has therefore attracted great attention from researchers.

Investors' interpretation of the components of financial statements' items and their decisions about whether to buy, sell or keep stocks are issues that have received a lot of attention from researchers. Along with other sources of information (such as financial statements), accrual components have had a prominent role in capital allocation in financial markets over the past two decades due to their relevance. The study of accrual anomaly by Sloan (1996) offers a new approach to the pricing of accruals in the capital market. Sloan (1996) with

documents on the US stock market for the first time showed that investors misprice accruals because they focus on the amount of profit. Nonetheless, investors' focus on accruals has been the focus of a large number of other studies. Examples include studies by Xie (2001), Beneish and Vargus (2002), Thomas and Zhang (2002), Kraft et al. (2003), Zach (2004), Kothari (2005), Richardson et al. (2005), Khan (2008), Papanastasopoulos (2017), Alawadhi et al. (2017), Beer et al. (2018), Park et al. (2018), Cordeiro et al. (2019), and Fedyk et al. (2019). In recent accounting literature, the anomaly of accruals has been considered as one of the most prominent rules of asset pricing. Accrual mispricing systematically leads to accrual anomaly (Lewellen & Resutek, 2016). Managers project different signals about the value of the firm through the management of accrual components so as to intensify the information asymmetry in order to achieve their goals and position in the market (Wasan & Boone, 2010, Park et al., 2018). The increased adverse selection risk that results from information asymmetry changes stock prices significantly and causes the market to face with problems in optimal capital allocation, as investors have different responses and evaluations with regard to accrual-based earning pricing. In other words, anomalies in accruals challenge the hypothesis of efficient market and risk-based theories, which suggest that risk factors dominate the cross-sectional expected returns. Accrual anomaly is therefore regarded as a worrisome phenomenon, since it suggests that market players do not fully reflect information in the stock prices (Park et al., 2018).

The asymmetric distribution of information on accruals in the capital market imposes heavy costs on the investors. Several studies including the ones conducted by Kyle (1985), Easley and O'Hara (1987), Glosten and Harris (1988), and Glosten (1989) argued that the stock illiquidity impact caused by the asymmetric distribution of information is likely to be manifested in the price impact or trading costs (Huh, 2014). From a theoretical point of view, understanding the price impact is a fundamental mechanism of price formation (Cont et al., 2010), because the permanent price impact of a trade can represent the informational content embedded in the trade (Ryu, 2013).

With the launch of Tehran Stock Exchange in 1967 and the entry of firms into this market, investment in this area boomed. Since then,

different types of trading costs such as stock price impacts have been identified for issues related to the Iranian capital market, for the investors' decision-making, and also for academic research. Since one of the current discussions in the field of capital market is the stock price impact, identifying and understanding the price impact is a fundamental mechanism of price formation (Cont et al., 2010). Also, as one of the consequences of the microstructure of the capital market, understanding stock price impact has many advantages for portfolio managers and traders.

For this reason, the present study set out to examine the role of accrual management on the stock price impact of firms listed in Tehran Stock Exchange from 2008 to 2017. More specifically, positive and negative accrual items were investigated in order to answer the question of which accrual components (positive and negative) affected the stock price impact more and how this effect came to be. As per the hypothesis testing, three new empirical findings were achieved. First, total accruals were found to be significantly related to the stock price impact. The mispricing of total accruals in the market is a greater reflection of the stock price impact that makes investors incur more trading costs. According to the results obtained by Xie (2001), a large part of the mispricing of total accruals can be attributed to the subjective nature of accruals. Second, the role of discretionary accruals was assessed as an indicator for the earning management on stock price impact. Stock price impact was shown to grow with an increase in discretionary accruals. Since discretionary accruals comprise an indicator of the earning management, managers can easily achieve their goals and objectives by this means, and the mispricing of these items by investors leads to great changes in stock prices with a small volume of trade and causes the market to face illiquidity. Third, positive discretionary accruals were found to be more related to stock price impact compared to negative discretionary accruals. This finding implies that when discretionary accruals are positive, investors overestimate the firm's value and stability compared to when they are negative, and the mispricing of these items causes the market to face illiquidity, and uninformed investors then incur trading costs.

This paper analyzes and expands on the other aspects of the

consequences of the microstructure of the capital market, i.e. the stock price impact, which have not been considered in previous studies. Efforts were made to elucidate the stock price impact on Tehran Stock Exchange using the Amihud and Mendelson (1986) hybrid model and examine the role of discretionary accrual components in it using the multivariate regression model. The findings may therefore have important implications for investors and other users of financial statements. First of all, the results of this paper help expand the theoretical foundations of the literature on accrual components and stock price impacts. Second, they encourage investors to pay attention to the subjective features of accruals on earnings and engage in trading stocks with the correct pricing of accruals and enable them to profit from their trade. Firms must provide additional information to investors about their stock price changes. Investors also need to be informed of the incentives for accrual management that lead to substantial changes in stock price impact. Third, as a scientific achievement, the results of this paper can offer useful information to other potential and actual users. Fourth, they can inspire new ideas for research about the capital market structure and it as a microstructure.

Literature review and research hypothesis

From a theoretical point of view, understanding stock price impact is a fundamental mechanism of price formation and is vital to understand whether it makes a systematic difference in the future trading price impacts on the volume of stock exchange. This question forms one of the current debates in the field of capital market (Ryu, 2013). Price impact refers to the relationship between an order of buying or selling and its subsequent price changes. The interpretation of price impact is also far from obvious and may even lead to contradictions. The question that arises is that whether a given trade is a fair deal between the buyer and the seller? Why is there a price impact then? Various aspects of price impact have been studied to date, but there is little agreement on how it works (Bouchaud, 2009). The only consensus appears to be on the imbalance between the price supply and demand (Bouchaud, 2010). Stock price impact is recognized as a market liquidity source that can be divided into two categories: Ppermanent and temporary price impacts. Permanent price impact refers to the

accumulation of price changes caused by trades over time. Meanwhile, temporary price impact is concerned with price changes during certain periods after the trade (Isaenko, 2010).

The stock price impact definition proposed by Amihud (2002) refers to stocks with high illiquidity that undergo great price changes by a small volume of trade. This criterion measures price impact in the interval between the buying of an asset and its selling. In other words, it measures the extent to which that trade changes the stock price. Chang et al. (2013) argued that a trade that does not contain new information should have zero price impact. Conversely, if a trade has an informational incentive, it may show substantial price changes with a small volume of trade. Studies by Kyle (1985) and Admati and Pfleiderer (1988) have shown that stock illiquidity is a function of the interaction between informed and uninformed traders in the market while price impact is a function of the accuracy of the information between these traders, to the extent that the release of new information reduces information asymmetry and improves stock liquidity.

Among researchers who examined this area, Kyle (1985) investigated the changes in the price of each unit of the net stock order flow in the market and found that these changes are affected by an increase in information asymmetry and uninformed order flow. Brennan and Subrahmanyam (1996) found a positive relationship between the price impact and the return on equity. DeJong et al. (1996) presented evidence for trading size having a positive relationship with the stock price impact. Brennan et al. (1998) demonstrated that the price impact has significant effects on asset pricing. Defur and Engel (2000) suggested that a long trading period is associated with less stock price impact compared to a short trading period; in other words, a long period has a negative effect on the informational content of a trade. Chiyachantana et al. (2004) indicated that market conditions are the main determinant of price impact. In markets with an ascending trend, institutional owners' purchase price impact is higher than their sales price impact. In markets with a descending trend, however, the opposite is true, and the price impact depends on the order features, the firm's specific factors and the differences between the countries. Ben Sita and Westerholm (2006) found that liquidity and the effect of information have a positive

impact on price changes. Ren and Zhong (2012) demonstrated that there is an asymmetric behavior among institutional investors in buying and selling stocks, and institutional investors' sales of stocks has a higher price impact than their purchase of stocks. Nonetheless, this asymmetric effect is less in this group than their stock market counterparts. A study by Bowe et al. (2013) showed that short and long periods of trade have both a positive and a negative effect on price changes, and when the volume of trade increases, price changes tend to decrease. In addition, an increase in order flow has a positive effect on price changes, although this is less than the effect of the duration of the trade. Ryu (2013) found that bigger trades have a greater price impact than smaller ones. Also, the effect of permanent price impact by the seller when he initiates the trade is significantly greater than when the trade is initiated by the buyer, which indicates that sellers' trades are more informed than buyers' trades

Usually, when new information is released about the status of firms in the market, it is analyzed by analysts, investors and other users, and decisions about whether to buy and sell the stocks is based on these analyses. Accruals and their components are effective items in the financial statements of firms based on which investors buy and sell stocks. Accruals are defined as the difference between accounting earnings and cash flows from operations. They are an important indicator of the quality of earnings and are used in stock evaluation (Hashemi & Behzadfar, 2011). They include many subjective assessments that lead to information asymmetry between market participants (Grossman & Stiglitz, 1980). If information about accruals is distributed asymmetrically in the capital market, the issue of making wrong choices becomes more prevalent, and with the mispricing of accruals, investors incur trading costs imposed by the price impact. The first hypothesis of the study is thus developed as follows:

The first hypothesis: There is a positive and significant relationship between total accruals and the stock price impact.

As one of the components of accruals, discretionary accruals are an indicator of earnings management. Jones (1991) introduced discretionary accruals as activities and events within the firm that are not related to external factors and can be manipulated by the

management; that is, discretions such as removal, early detection, and delays are possible in the registration and reporting of these items. These items may have deviations due to the managers' deliberate manipulation (i.e. earnings management) or the application of personal views. In order to access informational content on the value of accruals, investors have to incur costs for the processing and interpretation of this information, because mispricing creates an imbalance between the supply and demand of the stock and affects the relationship between the received (buying or selling) order and its subsequent price changes. Balsam et al. (2002) showed that this informed and uninformed difference increases the information asymmetry between the institutional owners and the other investors. Trueman and Titman (1988) found that a prerequisite of earnings management is the asymmetry of the information among investors in the capital market. When information asymmetry in the market is intense, investors do not have enough resources to make decisions and learn from the managers' earnings management incentives. In these cases, due to the heterogeneous interpretation of discretionary accruals, they price them falsely and the stock price impact caused by inaccurate informational choices increases in prevalence. The stock price impact is therefore expected to increase with an increase in discretionary accruals. The second hypothesis of the research is developed based on these arguments:

Second hypothesis: There is a positive and significant relationship between discretionary accruals and the stock price impact.

Discretionary accrual components can be either positive or negative. Managers can drive the profits up and down by this means. Positive discretionary accruals represent a higher earnings management compared to negative discretionary accruals. When discretionary accruals are positive, investors overestimate the firm and trade their stocks. The mispricing of positive discretionary accruals creates an asymmetric behavior in stock price impact. Conversely, when accruals are negative, investors underestimate the firm, and in this case, informed investors trade stocks and make a profit. In this scenario, uninformed investors incur trading costs caused by stock price impacts. For instance, a firm may have a higher sales growth with its positive non-discretionary accrual component. Accordingly,

investors may consider this high sales growth to be stable, overvalue the firm, and engage in trading stocks. Conversely, when the non-discretionary accrual component is negative, the firm may have a lower sales growth, investors underestimate the firm, and they make mistakes in the pricing of positive and negative discretionary accrual components (Chan et al., 2001; Qianhua, 2013). The mispricing of positive and negative discretionary accrual components thus increases the stock price impact. The third hypothesis of the research then is formed as follows:

Third hypothesis: The effect of positive discretionary accruals is higher on the stock price impact compared to negative discretionary accruals.

Data and research model design
The present article is based on a quasi-experimental scientific study in the field of accounting. Data about the study variables have been extracted from the databases of Rahavard Novin Software, the Tehran Securities Exchange Technology Management Co. website, and the Department of Research, Development and Islamic Studies of the Securities and Exchange Organization. The study used a panel data. The statistical population of the study consisted of the firms listed in Tehran Stock Exchange in a ten-year period from 2008 to 2017, which were selected as samples in accordance with the following inclusion criteria:

1. Having no fiscal year changes during the study period.
2. Having a fiscal year ending on March 20th.
3. Not being a member of financial intermediary, investment, banking and insurance industries.
4. Having no more than six months of stock trading halts.
5. Considering these criteria and using removal sampling, 66 firms were selected as the sample and the final sample contained 660 firm-year observations

In this research, a multiple regression model has been used to test the hypotheses. Model 1 was used to test the first hypothesis and Model 2 to test the second and third hypotheses.

$$Price\_imp_{it} = \beta_0 + \beta_1 Accrul_{it} + \beta_2 Size_{it} + \beta_3 Price_{it} + \beta_4 Volatility_{it} + \\ \beta_5 Volume_{it} + \sum Year_{it} + \sum Ind_{it} + \varepsilon_{it} \tag{1}$$

$$Price\_imp_{it} = \beta_0 + \beta_1 DA_{it} + \beta_2 DA_{it} \times DUM1 + \beta_3 DA_{it} \times DUM2 + \beta_4 Size_{it} + \\ \beta_5 Price_{it} + \beta_6 Volatility_{it} + \beta_7 Volume_{it} + \sum Year_{it} + \sum Ind_{it} + \varepsilon_{it} \tag{2}$$

The dependent variable was the stock price impact. In order to estimate the stock price impact on trades, the hybrid model proposed by Amihud (2002) and Hasbrouck (2009) was used from a study by Qianhua (2013), and was calculated as a natural logarithm. D is the sum of days with non-zero volume. R and Vol are the return and trading amount on days with a non-zero volume.

$$Price\ impact = \frac{1}{D_i} \sum_{d=1}^{D} \sqrt{\frac{|R_d|}{VOLd}} \times 10^6 \tag{3}$$

The independent variables included accruals and discretionary accruals. Accruals are derived from the difference in operating earnings minus operating cash flow. Discretionary accruals are one of the components of accruals that can be measured using the modified Jones model, developed by Dechow et al. (1995).

$$Accrul_{it} = OP\_Earning_{it} - CFO_{it} \tag{4}$$

$$\frac{TAC_{i.t}}{TAS_{i.t-1}} = a_0 + a_1 \left(\frac{1}{TAS_{i.t-1}} \right) + a_2 \left(\frac{\Delta REV_{it} - \Delta REC_{it}}{TAS_{i.t-1}} \right) + a_3 \left(\frac{PPE_{it}}{TAS_{i.t-1}} \right) + \varepsilon_{it} \tag{5}$$

$$DA_{i.t} = \frac{TAC_{i.t}}{TAS_{i.t-1}} - \left(a_0 + a_1 \left(\frac{1}{TAS_{i.t-1}} \right) + a_2 \left(\frac{\Delta REV_{it} - \Delta REC_{it}}{TAS_{i.t-1}} \right) + a_3 \left(\frac{PPE_{it}}{TAS_{i.t-1}} \right) \right) \tag{6}$$

In equations (5) and (6) TAC_{it} is the total accruals estimated as the operating earning minus the cash flows from operations for industry i in year t; $TAS_{i.t-1}$ is the total assets of the previous year; ΔREV_{it} is the change in revenue; ΔREC_{it} is the change in accounts receivable; PPE_{it} is the property, plant and equipment; and ε_{it} is the error term. Equation 6 shows how the discretionary accruals (DA) are calculated. The DUM1 variable is equal to one if the discretionary accruals are

positive; otherwise, it is zero, and DUM2 is equal to one if the discretionary accruals are negative; otherwise, it is zero.

The control variables of the research are the factors affecting the stock price impact variable and include firm size, stock price, stock return volatility, and stock trading volume. The variable of firm size is calculated as the natural logarithm of the firm's total assets at the end of the year. The variable of stock price is calculated as the annual average of the stock's last daily trading price. The variable of stock return volatility is calculated as the standard deviation of daily returns. The variable of stock trading volume is calculated as the natural logarithm of the average daily trading volume of the stock.

Table 1. Variable definitions

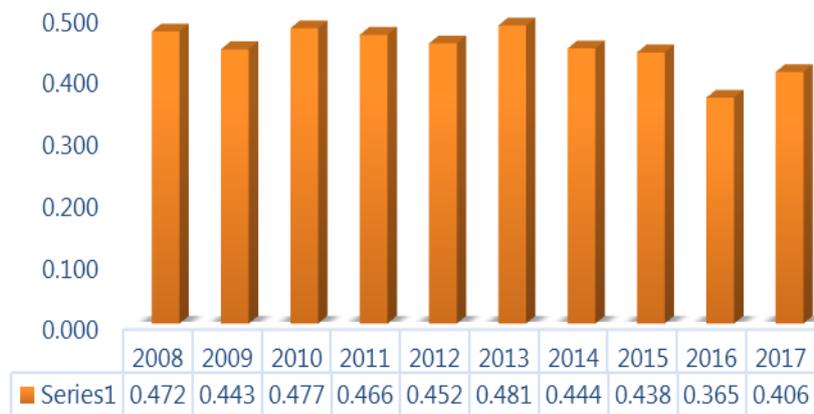| Variable	Definition
Price-imp	Natural logarithm of equation. (3)
Accrual	Accrual, calculated according to equation. (4)
DA	Discretionary Accruals, calculated according to equation. (6)
DUM1	Dummy variable; when DA is positive, Dum1 is 1, otherwise 0
DUM2	Dummy variable; when DA is negative, Dum2 is 1, otherwise 0
Size	Natural logarithm of total assets
Price	Average stock price in the year
Volatility	Standard deviation of stock returns in the year
Volume	Natural logarithm of average trading volume in the year
Year	Year fixed effects
Industry	Industry fixed effects

Research finding
Descriptive statistics
Table 2 shows the results of the descriptive statistics, including measures of central tendency and dispersion indices of the study variables. The maximum and minimum price impacts were 0.997 and 0.001. The mean stock price was IRR 5942, and the difference between the highest and lowest stock prices shows that the sample firms had declared a variety of stock prices. The difference between the highest and lowest stock return volatility is the result of the firms' returns and their performance in the stock market. According to the natural logarithm of the stock trading volume, the highest and lowest values show that the sample firms were in a similar situation in terms of their stock trading volume.

Table 2. Descriptive statistics

Variable	Mean	Median	Max	Min	St. dev.
Price_imp	0.444	0.424	0.997	0.001	0.258
Accrual	0.065	0.038	0.641	-0.200	0.141
DA	0.002	-0.003	0.567	-0.292	0.129
size	13.52	13.46	18.45	9.797	1.451
price	5942	3622	3622	805	6396.6
volatility	0.032	0.026	0.287	0.006	0.023
volume	11.27	11.05	17.120	5.508	1.793

Figure 1 shows the fluctuations of the intensity of stock price impact for the studied years. The years 2008 and 2017 had the most and the least stock price impacts, respectively. The firms listed in Tehran Stock Exchange have a lower stock price impact in the last three years; in other words, they have a better liquidity compared to the preceding years. Figure 2 shows the intensity flow of the stock price impact for 2013. The trend of this year shows that Tehran Stock Exchange has faced fluctuating liquidity and high trading costs. However, Figure 3 shows that Tehran Stock Exchange had the lowest liquidity cost in 2016due to the price impact of the trades.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Series1	0.472	0.443	0.477	0.466	0.452	0.481	0.444	0.438	0.365	0.406

Fig. 1. The fluctuation of intensity of stock price impact in years 2008-2017
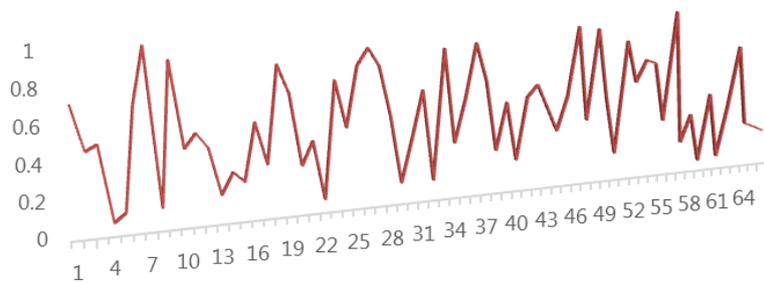
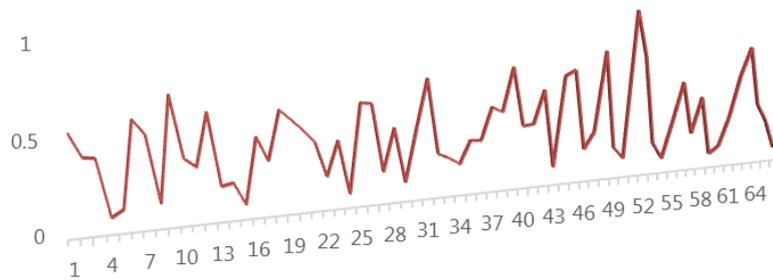**Fig. 2. The fluctuation of intensity of stock price impact in year 2013**

Fig. 1. The stock price impact in 2016

Empirical results

First hypothesis

Table 3 illustrates the results of of the testing of the first hypothesis with Model 1. The obtained results show that the F-statistic has a P-value less than 0.01, suggesting that the regression model is significant at the 99% confidence level. The coefficient of the total accruals is positive and significant at the 95% confidence level, which indicates a positive and significant relationship between the total accruals and the stock price impact, and also that the mispricing of accruals in the capital market increases the stock price impact. The first hypothesis is thus accepted at the 95% confidence level. The results on the control variables suggest that the firm size has a reverse and significant effect on the stock price impact at the 99% confidence level, and the firm's stock price has a positive effect on the stock price impact at the 99% confidence level. This finding suggests that managers, with their poor disclosure of information on stock prices,

exacerbate information asymmetry among investors and create a higher stock price impact. The daily stock return volatility coefficient is also positive at the 99% confidence level, which suggests that firms with a high volatility experience a high risk, and the stock price impact increases as a result of this factor. In addition, the stock trading volume coefficient is negative at the 99% confidence level; that is, with a higher trading volume, the stock price impact decreases.

Table 3. The results of testing the first hypothesis

Variable	Coefficient	t-stat
Accrual	0.041	2.136[**]
Size	-0.043	-4.525[***]
Price	0.023	3.190[***]
Volatility	0.170	0.914
Volume	-0.023	-5.455[***]
Const.	1.103	7.411[***]
Year	Control	
Industry	Control	
F-value	31.22	
Probability	0.000	
Adjusted-R^2	0.762	
N	660	

***,** Significant at p = 0.01 and 0.05 levels, respectively

Second and third hypotheses

Table 4 presents the results of the testing of the second and third hypotheses using Model 2. The statistical results of the F-statistic indicate that the regression model is significant at the 99% confidence level. The coefficient of discretionary accruals is positive and significant at the 99% confidence level, suggesting a positive and significant relationship between discretionary accruals and the stock price impact. The second hypothesis is thus accepted at the 99% confidence level. Moreover, the coefficient of discretionary accruals is positive and significant at the 99% confidence level; positive discretionary accruals thus increase the stock price impact, while the coefficient of negative accruals is positive but not significant at the 99% confidence level. Considering that the coefficient of the positive discretionary accruals is significant compared to the negative discretionary accruals, it can be concluded that positive discretionary

accruals have a greater effect on the stock price impact compared to negative discretionary accruals. The results of the third hypothesis are thus accepted at the 99% confidence level.

Table 4. The results of testing the second and third hypotheses

Variable	Coefficient	t-stat
DA	0.731	2.938***
DA × DUM1	0.569	3.946***
DA×DUM2	0.075	0.504
Size	-0.041	-3.504***
Price	0.020	2.614***
Volatility	0.187	0.960
Volume	-0.024	-5.289***
Const.	0.915	6.965***
Year	Control	
Industry	Control	
F-value	26.57	
Sig	0.000	
Adjusted-R^2	0.768	
N	660	

***,** Significant at p = 0.01 and 0.05 levels, respectively

Conclusion

The review of literature showed that stock price impact has a practical role in price formation and affects the trading volume of stocks. Although various dimensions of the stock price impact have been studied to date, the supply and demand for price formation change with the way firms' data is introduced to the stock market. Furthermore, with the entry of new and valuable trading information, small transactions cause massive price changes and higher liquidity. That is, stock price impact is a function of information accuracy among informed and uninformed traders. In general, managers might use discretionary accruals as a kind of leverage for their own gain, and such a management mechanism increases information inefficiency, intensifies the stock price impact, and slows down trading; however, if they provide the market with adequate, reliable and early stock price data, information inefficiency decreases and trading costs increase.

The role of discretionary accrual components on the stock price impact was examined using the data from 66 firms listed in Tehran

Stock Exchange from 2008 to 2017. The results showed that there is a positive and significant relationship between accruals and the stock price impact. This finding shows that accruals increase pricing errors by the investors as they are subjective in relation to future events. With the mispricing of total accruals, the effect of the stock price on the volume of trade increases. The stock price impact also increases with an increase in discretionary accruals. Since discretionary accruals are an indicator used for earnings management, managers can easily achieve their goals by this means. As a result, with the mispricing of discretionary accruals, investors may create a situation in which significant stock price changes occur with a small volume of trade and thus cause the market to face illiquidity. Based on the results obtained by Xie (2001), a major part of the mispricing of total accruals can be said to be related to discretionary accruals, which is due to the subjective nature of accruals. Moreover, positive discretionary accruals have a greater effect on the stock price impact than negative discretionary accruals. This finding implies that when discretionary accruals are positive, investors overestimate the firm's value and stability compared to the time discretionary accruals are negative. They incur trading costs caused by the stock price impact with the mispricing of these positive and negative discretionary accruals and face losses.

The findings of this research provide users with many scientific achievements and added values. First, they reinforce and broaden the literature on accruals management and the stock price impact in a newly emerging market such as Iran. Second, because of the effect of stock price impact (trading costs) on efficiency and liquidity, the Stock Exchange Organization is recommended to issue guidelines for the greater disclosure of information about sudden changes in the closing stock prices, so that investors can be secured against these sudden increases in price impact. Third, investors are recommended to seek help from financial and capital market analysts to gain a better knowledge of the microstructural issues of the market (stock price impact) and profit from their trading. Fourth, uninformed investors are recommended to learn more about the components of accruals (both positive and negative) when making investments, since accruals are the source of profit management and can increase information asymmetry among them.

This study had three main limitations that warn against the incautious generalization of its results. First, it was conducted solely on manufacturing, service and trading firms listed on Tehran Stock Exchange; therefore, generalizing the obtained index to financial institutions such as banks, investment companies, etc., could be problematic. Second, due to their trading delays, some firms were excluded from the study sample. Third, there was no fixed criterion for measuring the stock price impact (i.e. implicit trading costs) and this impact had not been disclosed in the audit reports.

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