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Factors Affecting Borsa İstanbul Trading Volume and Overconfidence Bias[1]

Borsa İstanbul İşlem Hacmini Etkileyen Unsurlar ve Aşırı Güven Eğilimi

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Abstract: The aim of this study is to examine the factors affecting the trading volume of Borsa Istanbul within the framework of the overconfidence bias, one of the behavioral finance theories. For this purpose, stock market trading volume, BIST 100 index closing values, BIST 100 index historical volatility and credit default swaps (CDS) premium variables for the period covering the years 2010 – 2019 were used in the study. During the analysis process, firstly ADF, PP and KPSS unit root tests were performed and then Granger causality analysis was applied. The findings showed that the stock index and CDS premiums are the Granger cause of the trading volume, but volatility is not the Granger cause of the trading volume. The obtained findings were compared with the results in the literature and interpreted. It is interpreted that linking the earnings obtained with the increase in the stock market index to individual abilities, predictions and achievements may cause a tendency to overconfidence bias in investors. In addition, it is thought that this overconfidence may cause new transactions and thus an increase in the transaction volume. CDS premiums, on the other hand, give positive and negative signals about the future and are accepted as a risk indicator. It can be evaluated that investor who perceive risk as an opportunity and have a tendency to overconfidence bias will try to evaluate this situation with various positions and transactions and increase market trading volume. However, the fact that volatility is not the cause of trading volume can be explained by the perception that investors with high returns pay less attention to volatility and that their own forecasts are better than other investors' forecasting power. As a result, volatility is not effect the trading activity and investors focus on the value they have determined within the framework of overconfidence bias.

Keywords: Overconfidence, Trading Volume, BIST 100, CDS Premium, Volatility

JEL Classification: C58, G20, G41

Öz: Bu çalışmanın amacı, Borsa İstanbul işlem hacmini etkileyen unsurların davranışsal finans teorilerinden aşırı güven eğilimi çerçevesinde incelenmesidir. Bu amaçla çalışmada, 2010 – 2019 yıllarını kapsayan dönem için borsa işlem hacmi, BİST 100 endeksi kapanış değerleri, BİST 100 endeksi tarihsel volatilite değerleri ve kredi temerrüt swapları (CDS) primi değişkenleri kullanılmıştır. Analiz sürecinde öncelikle ADF, PP ve KPSS birim kök testleri yapılmış, ardından Granger nedensellik analizi gerçekleştirilmiştir. Sonuçta, borsa endeksi ve CDS primlerinin işlem hacminin nedeni olduğu, ancak volatilitenin işlem hacminin nedeni olmadığı bulgulanmıştır. Elde edilen bulgular literatürde yer alan sonuçlar ile karşılaştırılmış ve yorumlanmıştır. Buna göre, borsa endeksinin artmasıyla birlikte elde edilen kazancın bireysel yeteneklere, tahminlere ve başarılara bağlanmasının, yatırımcılarda aşırı güven eğilimine neden olabileceği yorumu yapılmaktadır. Ayrıca söz konusu aşırı güvenin yeni işlemlere ve dolayısıyla işlem hacminde artışlara sebebiyet verebileceği düşünülmektedir. CDS primleri ise geleceğe dair pozitif ve negatif sinyaller vermekte ve bir risk göstergesi olarak kabul edilmektedir. Riski fırsat olarak algılayan, aşırı güven eğilimine sahip yatırımcıların çeşitli pozisyonlar ve işlemler ile bu durumu değerlendirmeye çalışacağı ve işlem hacmini artıracağı değerlendirmesi yapılabilir. Bununla birlikte volatilitenin işlem hacminin nedeni olmaması, yüksek getiri elde eden yatırımcıların volatiliteyi daha az dikkate aldığı ve kendi tahminlerinin diğer yatırımcıların tahmin gücünden daha iyi olduğu algısıyla açıklanabilir. Sonuç olarak, volatilite alım satım faaliyetini etkilememekte ve yatırımcılar aşırı güven eğilimi çerçevesinde belirledikleri değere odaklanmaktadır.

Anahtar Kelimeler: Aşırı Güven, İşlem Hacmi, BİST 100, Kredi Temerrüt Swapları (CDS) Primi, Volatilite

JEL Sınıflandırması: C58, G20, G4

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1. Introduction

Stock exchanges, which are among essential elements for the development of countries and create serious resources for the economy by providing the funds flow, are the leading institutions that constitute the lifeblood of the economy. Although the trading volume in the stock exchanges has become huge number, there are many factors that affect the decision process of the investors. Even if it is assumed that each investor has the same level of information regarding these factors, investment preferences may differ from each other. Therefore, the factors caused by these different preferences, the factors that shape investor behavior, and the idea of other factors besides financial factors in the investment decision have brought a different dimension to the field of finance.

As an alternative area, behavioral finance focuses on issues such as the importance of the psychological and sociological factors that shape investors' investment activities, the quantity and quality of the risk factors considered in portfolio creation and management, as opposed to traditional finance, which argues that individuals act rationally (Bikas et al., 2013: 874). Developments in the financial markets over the past century have increased the interest in alternative approaches that examine the stock exchange movements and investors' decision making processes, and highlight the behavioral finance approach that argues that market movements cannot always be explained for rational reasons (Korkmaz and Ceylan, 2006: 609).

Trading volume is among the important factors that market participants take into account in their decision-making processes regarding their activities in the stock exchange. However, it is known that there are various factors that cause the trading volume to change periodically. The differences in the trading volume created in Borsa Istanbul as a developing market and the investigation of the reasons for this difference have been the subject of many studies. It is aimed to examine the factors affecting the trading volume of Borsa Istanbul within the framework of the overconfidence bias, which is one of the behavioral finance theories, in this study. For this purpose, in the following sections of the study, conceptual information about the subject has been given, literature review has been made, the method and methodology have been explained, the findings have been reported and the results have been evaluated.

2. Overconfidence Bias

Behavioral finance focuses on the situations in which traditional finance is inadequate in explaining the reasons why investors make irrational decisions. In other words, explaining the ultimate effect of psychological, sociological and anthropological factors affecting individuals and organizations' decision making processes on the markets is the subject of behavioral finance

(Humra, 2016: 23). The fact that various hypotheses such as the Efficient Markets Hypothesis and the Expected Benefit Hypothesis are not valid and people do not always act rationally are shown as the emergence point of behavioral finance (Patel et al., 1991: 233). However, behavioral finance theory took place in the literature as a result of the study by Daniel Kahneman and Amors Tversky (1974).

Research on investors shows that although investors want to maximize their earnings, diversify their portfolios and avoid risk, they cannot do this during real-life investment activities. It is stated that the main reason for this is psychological prejudices (Döm, 2003: 14). Therefore, the fact that the decisions taken are not rational and are based on the psychological intuition, feeling, emotion, experience and predictions of individuals, paved the way for the emergence of many theories in terms of behavioral finance.

One of these theories, which manifests itself as cognitive, emotional and social tendencies, overconfidence bias is defined as the tendency of people to value their own abilities more than other individuals, believing in the correctness of their beliefs or intuition. Studies show that overconfidence causes individuals to misconceive that their knowledge is more than that of other individuals, that the risks are less than they are, and that their dominance over events is more than they are (Bodie et al., 2009: 386). Overconfidence, which also affects individuals' attitudes towards risk, causes investors to misinterpret the accuracy of their information and overestimate their ability to analyze this information. This encourages investors to place too much confidence in their estimates of financial asset value and their own projections of future movements in financial asset prices. Overconfidence also causes bad investment decisions, excessive trading and taking more risks due to high return expectations (Nofsinger, 2001: 22-25).

Overconfidence bias seen as both the reason and the result of the increase in the trading volume in the stock exchanges, is explained by the fact that individuals who have made investments and earned income in the past period have a tendency to make more transactions in the future by attributing this gain to their knowledge and abilities. In other words, gains from past investments cause investors to show a tendency to overconfidence bias, and overconfidence affects the trading volume as it encourages individuals to buy and sell more in the market.

3. Literature

The trading volume, which is among the important factors that market participants take into consideration in their decision-making processes regarding the stock exchange activities, has

been the subject of many studies in both national and international literature. However, in related studies, it was observed that mostly the causes of the trading volume were investigated. Studies examining the causes of trading volume in terms of investor behavior are relatively few. Regarding the aim of this study, the studies in which the trading volume is analyzed within the framework of overconfidence bias and other behavioral finance theories are summarized in Table 1.

Table 1. Literature Review

Author(s) (Year)	**Country**	**Period**	**Variables**	**Method**	**Findings**
(Gervais and Odean, 2001)	USA	-	Trading volume, expected profit, volatility, expected price of stock	Multi-Term Market Model	Overconfidence and self-attribution bias increase the trading volume. Overconfidence increases volatility.
(Statman et al. , 2007)	USA	1962-2002	Trading volume, volatility	VAR	As investors get returns, they are overconfident and this affects the trading volume.
(Chuang and Lee, 2006)	USA	1963-2001	Trading volume, return, volatility	Causality	Investors who earn returns increase trading volume, increasing trading volume causes overconfidence and trading volume increases further. In addition, overconfidence is the cause of volatility.
(Korkmaz ve Çelik, 2007)	Turkey	1995-2006	Closing price, trading volume	Causality	Overconfidence is the cause of the trading volume and this excess trading volume also causes low level of volatility.
Gaygusuz (2008)	Turkey	1987-2007	ISE 100 index return, trading volume, volatility	Causality	A unidirectional causality has been determined from volatility to trading volume.
(Otluoğlu, 2009)	Turkey	2001-2009	ISE 30 index return, trading volume	Causality	Overconfidence is the reason for the trading volume. Overconfidence is not the cause of volatility.
Boyacıoğlu vd. (2010)	Turkey	1997-2009	ISE 100 index return, trading volume, volatility	Causality	A bidirectional causality has been determined between volatility to trading volume.
(Gazel, 2017)	Brazil, Indonesia, India, South Africa and Turkey	2006-2016	Volatility, trading volume	EGARCH	The mixed distributions hypothesis is valid in the relationship between trading volume and volatility.

Khelrabeey (2018)	Libya	-	-	Survey	Overconfidence and loss aversion have an impact on investor behavior.
(Tekin and Cengiz, 2018)	Turkey	-	-	Survey	It has been determined that overconfience and loss aversion have no effect on investment instrument preferences.
(Alsabban and Alarfaj, 2020)	Arabia	2007-2018	Return, volatility, trading volume.	VAR	There is a positive relationship between past market returns and trading volume, and investors are increasing trading volume by exhibiting overconfidence bias.

4. Data Set and Methodology

4.1. Data Set

As a result of the literature review, the variables to be used in the study were determined. Stock exchange trading volume, BIST 100 index closing values, Credit Default Swaps (CDS) premium[2] and BIST 100 Index historical volatility constitute the data set of the study. The data set used in the study covers the 2010 - 2019 period. The data frequency is on a monthly[3] scale and there are 120 observation units for each variable. In order to eliminate the effects of exponential growth and contradictory observation in the series, analyzes were performed by taking their natural logarithms (Franses and McAleer, 1998: 654). Information about the variables is given in Table 2.

Table 2. Information About The Variables

Variable	Format	Symbol	Web site	Frequency
Stock Exchange Trading Volume	Logarithmic	lnIH	datastore.borsaistanbul.com	Monthly
BIST 100 Index	Logarithmic	lnBIST100	datastore.borsaistanbul.com	Monthly
BIST 100 Index Volatility	Logarithmic	lnVOL	datastore.borsaistanbul.com	Monthly
Credit Default Swaps Premium	Logarithmic	lnCDS	tr.investing.com	Monthly

The relationship between trading volume and stock exchange index and return has been frequently examined in the literature. Here, in addition to the stock exchange index, volatility and CDS premium variables are included in the data set. Volatility refers to the stock exchange index and is calculated on the stock exchange index. However, the stock exchange index refers to the current and last change, while volatility refers to the cumulative change. In other words,

[2] It has been determined that CDS premiums are not yet the subject of a study in the context of stock market trading volume and behavioral finance within the framework of the date of the study and the literature reviewed. Here, by testing the relationship between CDS premium and stock market trading volume, an alternative proposition for overconfidence bias is tried to be put forward. It is thought that this initiative has originality and will contribute to the existing literature.

[3] Focused on monthly observations under the perspective that changes in investor overconfidence occur on a monthly or annual basis.

the stock exchange index shows the change compared to the previous value and volatility shows the change during the previous period. When evaluated from this point of view, index volatility is included in the study to represent trading transactions with different characteristics. Contrary to volatility, which refers to a retroactive process, CDS is a prudential indicator and is especially considered by international investors to measure and evaluate target country risk. CDS is the contract that protects the creditor against a default risk of financial credits in exchange for a price (the premium paid increases with the risk increases, otherwise decreases) (İltaş, 2019: 801). With the variables used, it was aimed to evaluate the trading volume from the perspectives of the past, current conditions and future.

4.2.Methodology

In order to eliminate the spurious regression problem, the stationarity of the series should be tested first in the time series analysis. Although there is a high correlation between variables in the case of spurious regression, the regression established does not reflect the true relationship (Granger, 2002: 111). The results of the stationarity tests for the series also affect the subsequent analysis process. In the literature, mostly unit root tests are used for testing stationarity. Among the unit root tests, Augmented Dickey Fuller (ADF) (1981), Phillips Perron (PP) and Kwiatkowski-Phillips-Schmidt-Shin (KPSS) (1992) tests are frequently preferred. The current study has implemented all of the ADF, PP and KPSS tests for stationarity. ADF and PP are tests in which the unit root presence is tested in the null hypothesis. The fact that the test statistics are larger than the critical values means that the null hypothesis is rejected. In this case, the series is stationary. In the KPSS test, the stationary hypothesis is reversed according to ADF and PP tests, while the null hypothesis advocates stationarity, the alternative hypothesis advocates the existence of unit root. Thus, an alternative perspective has been given to the inadequacies experienced in rejecting the hypothesis in unit root tests (Kwiatkowski et al., 1992). In the KPSS test, the fact that the test statistics are smaller than the critical values mean acceptance of the null hypothesis that expresses the stationarity of the series. The results of the stationarity tests are very important in terms of affecting the following analysis process.

The concept of causality was introduced by Norbert Wiener (1956), and the empirical framework was created by Granger (1969) (Bressler and Seth, 2011: 324). The cause-effect relationship between variables is determined through causality tests. The Granger causality test is expressed in two stationary variables (X and Y) and the nth order vector autoregressive (VAR) model as follows (Granger, 1969: 431):

$$X_t = \sum_{i=1}^{n} \alpha_i X_{t-i} + \sum_{j=1}^{n} b_j Y_{t-j} + \varepsilon_{x,t} \quad (1)$$

$$Y_t = \sum_{i=1}^{n} c_i Y_{t-i} + \sum_{j=1}^{n} d_j X_{t-j} + \varepsilon_{y,t} \quad (2)$$

Four results can be found in the causality relationship (Granger, 1969: 696; Tarı, 2011: 437):

1. X → Y = X affects Y or X is the Granger cause of Y. In this case, the lagged coefficients of Y in Equation 1 are $\sum b_i = 0$ and the lagged coefficients of X in Equation 2 are $\sum d_j \neq 0$.
2. Y → X = Y affects X or Y is the Granger cause of X. In this case, the lagged coefficients of Y in Equation 1 are $\sum b_i \neq 0$ and the lagged coefficients of X in Equation 2 are $\sum d = 0$.
3. X↔Y = X and Y affect each other, or there is a bidirectional causality between X and Y. In this case, the coefficients of the X and Y variables in both equations are statistically significant and different from zero.
4. X ↮ Y = X and Y do not affect each other or there is no causality relationship between X and Y. In this case, the coefficients of the X and Y variables in both equations are not statistically significant.

The Granger causality test is based on the VAR model. In the VAR model, lag lengths are of great importance and affect the reliability of the test. The choice of lag length is made according to the information criteria (Sevüktekin and Çınar, 2017). The cause and effect relationship between the series were analyzed with Granger (1969) test.

5. Findings

In the analysis process of the study, unit root tests, VAR model and Granger causality analysis were carried out respectively. First of all, the stationarity of the series was tested in order to eliminate the spurious regression problem. The results of ADF, PP and KPSS unit root tests are given in Table 3.

Table 3. The Results of Unit Root Tests

Unit Root Tests	**ADF**	**PP**	**KPSS**
Variables	Level	Level	Level
lnIH	-9.279***	-9.626***	0.105
lnBIST100	-3.506**	-3.496**	0.045
lnVOL	-7.287***	-7.602***	0.044
lnCDS	-3.190*	-3.152*	0.075

Notes: ***, ** and * show %1, %5 and %10 significance levels, respectively.
MacKinnon (1996) critical values were used for ADF and PP tests. The critical values for %1, %5 and %10 significance levels -4.038, -3.448 and -3.149 respectively.
Kwiatkowski-Phillips-Schmidt-Shin (1992) critical values were used for the KPSS test. The critical values for %1, %5 and %10 significance levels 0.216, 0.146 and 0.119 respectively.

It is seen that the results of unit root tests are compatible with each other. In the ADF and PP tests, the null hypothesis predicts the existence of unit root. The null hypothesis was rejected and the variables were found to be stationary at the level. In the KPSS test, the null hypothesis predicts stationarity. By accepting the null hypothesis, it was determined that the variables do not contain unit roots. Accordingly, each of the variables are stationary at level or integrated of order 0.

Following the determination of stationarity, Granger causality analyzes between variables are performed based on the VAR model developed by Sims (1980). For the VAR model, the appropriate lag length was estimated first. Then, the compatibility tests were made for the model established and selected lag length.

Table 4. Lag Length Selection Criteria Table of VAR Model

Lag	LogL	LR	FPE	AIC	SC	HQ
0	325.2985	NA	3.60E-08	-5.78916	-5.69152	-5.74955
1	599.7289	524.1374	3.42E-10	-10.4456	-9.957363*	-10.24752*
2	621.9431	40.82600*	3.06e-10*	-10.55753*	-9.67877	-10.201
3	632.9056	19.35733	3.36E-10	-10.4668	-9.19744	-9.95184
4	645.7246	21.71141	3.58E-10	-10.4095	-8.74956	-9.73608
5	661.2019	25.09827	3.64E-10	-10.4	-8.34958	-9.56823
6	676.0195	22.96064	3.77E-10	-10.3787	-7.93771	-9.38848
7	680.7632	7.008762	4.70E-10	-10.1759	-7.34433	-9.02723
8	693.9805	18.57567	5.07E-10	-10.1258	-6.90363	-8.81865

Notes: * refers to the length of lag selected according to the information criteria.
LR: Sequential modified LR test statistic (each test at 5% level); FPE: Final Prediction Error; AIC: Akaike Information Criteria; SC: Schwarz Information Criteria; HQ: Hannan-Quinn Information Criteria

When Table 4 is examined, the appropriate lag length is suggested as one according to the SC, HQ information criteria and two according to the other information criteria. When the lag length is accepted as one, both autocorrelation and heteroscedasticity problems were encountered in the residuals of the established model. It has been determined that these problems disappear when the lag length is selected as two. The graph of the reverse roots, which is the stability condition for the VAR (2) model, is given in Figure 1. The inverse roots of the autoregressive characteristic polynomial are located in the unit circle and the predicted VAR model is stable. Therefore, the created VAR (2) model is a suitable model.

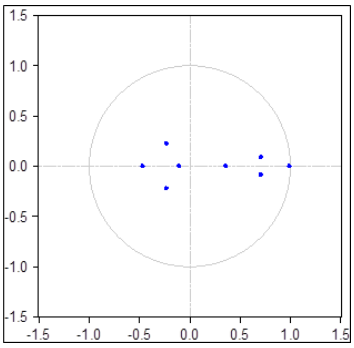

Figure 1. Stability Graph of VAR (2) Model

Whether the VAR model created has any structural problems or not has been checked with Autocorrelation LM and White Heteroskedasticity Test. The presence of autocorrelation in the residuals of the VAR (2) model was analyzed by the Lagrange Multiplier (LM) test and the test results are given in Table 5 / Panel A. The test of the heteroscedasticity in the model is given in Table 5 / Panel B.

Table 5. Autocorrelation and Heteroscedasticity Tests Results

Panel A: Autocorrelation LM Test		
Lag	**LM Statistics**	**Probability**
1	11.78907	0.7584
2	22.84185	0.118
3	17.74697	0.3389
4	12.86986	0.6822
5	17.04054	0.383
6	24.38681	0.0814
7	9.050724	0.9113
8	17.49531	0.3543
9	21.01195	0.1781
10	7.481842	0.9628
Panel B: White Heteroskedasticity Test		
χ^2	**Degree of Freedom**	**Probability**
150.4584	160	0.6939

When Table 5 is evaluated, it has been found that there is no autocorrelation in the residuals of the model at 5% significance level until the 10th lag. This means that the model does not have autocorrelation problems. In the heteroscedasticity test, the null hypothesis expresses the constant variance state (there is no heteroscedasticity) and the alternative hypothesis expresses the heteroscedasticity state. According to the White Heteroskedasticity Test results, the null hypothesis that the residual error term residuals have a constant variance is valid and the model does not have heteroscedasticity problem. After testing the compatibility of the VAR model, Granger causality test was applied. The findings obtained are listed in Table 6.

Tablo 6. VAR Granger Causality Test Results

Causality Relationship	χ^2	Probability	Result
lnBIST100 → lnIH	29.0983	0.0000	lnBIST100 is the cause of lnIH.
lnCDS → lnIH	8.517568	0.0141	lnCDS is the cause of lnIH.
lnVOL → lnIH	1.524447	0.4666	lnVOL is not the cause of lnIH.

The causality test results show that each variable is in different positions in the causality relationship. While volatility is not the Granger cause for trading volume, BIST 100 index and CDS premium variables are the Granger cause for trading volume. In other words, there is unidirectional causality from BIST 100 index and CDS premium to trading volume and not causality relationship between trading volume and BIST 100 index volatility. Although the CDS premium and BIST 100 index are the Granger cause of the trading volume, the causality from the BIST 100 index to the trading volume is stronger than the causality from the CDS premium to the trading volume. This situation can be interpreted as investors and other market participants primarily evaluate the current situation and at the same time consider prudential factors. According to historical data, it has been determined that volatility is not a strong factor that can affect the trading volume. The findings should be evaluated within the framework of overconfidence bias in line with the purpose of the study.

The general perception in the literature is that investors with overconfidence bias increase their trading volume. The result of the fact that BIST 100 index obtained from the study is the cause of the trading volume can be interpreted as follows: As the stock market index increases, the level of return will increase, and investors tend to show overconfidence with their earnings. Moreover, it is usual for investors who attribute financial gain to their individual abilities, forecasts and achievements to trade more and affect trading volume due to their overconfidence bias.

Volatility, another variable in the study, is a retrospective, cumulative-cumulative indicator. Studies examining the relationship between volatility and trading volume in the literature focus on two hypotheses: Sequential Arrival of Information Model and Mixture of Distributions Model. However, in this study, it was determined that there is no positive (fixed) relationship[4] between BIST trading volume and volatility. Therefore, neither Sequential Arrival of Information Model nor Mixture of Distributions Model between BIST trading volume and

[4] The relationship between the variables was observed with the impulse-response analysis, which allows to measure the reactions occurring in each of the variables as a result of the shocks to the system of equations. Model results are not included here for the sake of simplicity of the study, they will be presented by the authors upon request.

volatility for the analyzed period is valid. However, the fact that volatility is not the Granger cause of trading volume can be interpreted as high market returns make the investors overconfident in the sense that they underestimate the volatility of stock returns and believe their estimates is better than other investors' (Zaiane and Abaoub, 2009: 219). As a result, volatility is not effect the trading activity and investors focus on the value they have determined within the framework of overconfidence bias.

The strong relationship between CDSs, which are considered as a measure of risk and guide for future forecasts, and stock market indices is an important forward-looking indicator for investors. When the CDS premium, which is one of the variables of the study, is the cause of the transaction volume, evaluated from the perspective of overconfidence bias; CDS premiums gives positive and negative signals about the future and are accepted as a risk indicator. It can be said that investors who perceive risk as an opportunity and have a tendency to overconfidence will try to evaluate this situation with various positions and transactions and increase their trading volume. In addition, from a risk point of view, it is thought that investors with overconfidence tend to be more inclined to take risks and will affect the trading volume by making more transactions in line with the expectations of high earnings in the future.

6. Conclusion

Behavioral finance, which argues that there are factors that shape investors' decisions and behaviors and psychological and sociological factors besides financial factors in investment decision, has emerged as an alternative perspective in finance. Trading volume is among the important factors affecting the decision-making period of investors in stock exchange activities and is important because of the determination of the factors that cause changes in the trading volume. As explained in the previous sections, it is possible to say that the factors that cause the transaction volume to change are also related to overconfidence bias. For this reason, the aim of the study is to examine the factors considered as the cause of the BIST transaction volume within the framework of the overconfidence bias, which is one of the behavioral finance theories.

In the study, in which the effects of BIST-100 index value, volatility and CDS premiums on the trading volume are investigated and the results are interpreted within the framework of overconfidence, the data set consists of 120 observation, covering the years 2010-2019. The findings show the existence of a causal relationship from stock exchange index and CDS premium to trading volume for BIST. There is no causal relationship between volatility and

trading volume. It is concluded that investors are trading in terms of current conditions and forecasts rather than historical data.

The studies conducted by Gervais and Odean (2001), Statman et al. (2007), Chuang and Lee (2006), Korkmaz and Çelik (2007), Zaiane and Abaoub (2009), Otluoğlu (2009), Horasan and Bozkurt (2016) and Alsabban and Alarfaj (2020), who found that overconfidence and self-attribution increase the trading volume, support the same finding reached as a result of this study. In addition, Boyacıoğlu et al. (2010) and Gaygusuz (2008)'s finding that volatility is the Granger cause of trading volume contradicts the result of this study.

It has been observed that studies in the literature mostly investigate the causes of trading volume. On the other hand, there are few studies examining the reasons for trading volume in terms of investor behavior. This study, which aims to examine some of the factors thought to be the cause of the BIST-100 transaction volume within the framework of overconfidence bias, evaluates the transaction volume from both the perspectives of the past, current conditions and the future, unlike the studies in the literature. Extending the period examined for future studies, revising the variables and interpreting the subject for different theories with different analysis techniques is important in terms of being a guide and vision for stock market participants, especially investors and policy makers/regulators. In addition, studies in these and similar fields provide an alternative perspective to better understand and interpret related theories and investor behavior. Therefore, new studies in this field are recommended for the national literature.

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