# How Are Fenebahçe's And Beşiktaş's Stock Returns Reacted To The Match-Fixing Announcement?<sup>1</sup>

Fenerbahçe ve Beşiktaş'ın Hisse Senedi Getirileri Şike Duyurusuna Nasıl Tepki Verdi?

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## ÖΖ

Bu çalışma, şike iddiası öncesi ve sonrası dönemlerde Beşiktaş ve Fenerbahçe Spor kulüplerinin UEFA Avrupa Liginde yakaladıkları başarılarının borsadaki performanslarını karşılaştırmayı amaçlamaktadır. Çalışmada iki ayrı dönem incelenmiştir; Beşiktaş için şike öncesi dönem 2010-2011 sezonunu ve şike sonrası dönem 2011-2012 sezonu olarak belirlenmiştir. Fenerbahçe için ise şike öncesi dönem 2009-2010 ve şike sonrası dönem ise 2012-2013 sezonu olarak belirlenmiştir. Çalışmada olay çalışması metodu kullanarak play-off maçlarında başarılı olup grup maçlarına geçen takımların bu başarısının günlük hisse senedi getirisi üzerindeki etkisi incelenmiştir. Takımların grup maçlarına yükseldiğinin ilan edilmesi her iki takımın da hisse senedi hareketlerini pozitif etkilemiştir. Diğer taraftan, şike sonrası dönemde hem Beşiktaş hem de Fenerbahçe hisse senetlerinin getirileri grup maçlarına yükseldikleri duruma rağmen negatif etkilenmiştir. Çalışmada dikkat çeken sonuçlardan birisi de Fenerbahçe hisse senedi getirilerinin Beşiktaş hisse senedi getirilerine göre daha sert bir negatif etki ile karşılaşmasıdır.

#### ANAHTAR KELİMELER

Beşiktaş, Fenerbahçe, Futbol, Şike, Olay Çalışması

#### ABSTRACT

Football is one of the most important sports activities worldwide, where stock prices are very sensitive to game results. On 3rd of July 2011 Beşiktaş and Fenerbahçe, the two major Turkish soccer teams are accused of match-fixing which suddenly dampen their share prices. This study assesses to compare the stock market performances of both Beşiktaş and Fenerbahçe when they earn the right to enter group stages in UEFA European League before the match-fixing and after the match-fixing announcement by using event study method. The results indicate that the announcement of entering group stages in the UEFA European League before the match-fixing process has a positive impact on both teams' stock movements. On the other hand, after the announcement of match-fixing, the negative effect is achieved for both of the teams, even they earn the right to enter group stages. Interestingly the evidence shows that Fenerbahçe's stocks are affected heavily during the match-fixing process while the same negative effect is not strong for Beşiktaş. The findings of this study will contribute to the literature as it is the only study that compares the effect of the match-fixing process on the stock market returns of both Beşiktaş and Fenerbahçe when these teams are successful in international areas by considering UEFA European League as the case.

#### **KEYWORDS**

Beşiktaş, Fenerbahçe, Soccer, Match-Fixing, Event Study

	Makale Geliş Tarihi / Submission Date 05.12.2019	Makale Kabul Tarihi / Date of Acceptance 09.04.2020
Atıf	Karacaer Ulusoy, M. ve Ünlü, H. (2020). How Are F Fixing Announcement? . Selçuk Üniversitesi Sosya	Fenebahçe's And Beşiktaş's Stock Returns Reacted To The Match- l Bilimler Meslek Yüksekokulu Dergisi, 23 (1), 154-163.

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<sup>&</sup>lt;sup>1</sup> This study was orally presented at the 22nd International Business Research Conference held between 9th–10th September 2013, Madrid, Spain and only the abstract was published in the conference booklet.

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## **INTRODUCTION**

Football has become one of the most important sports activities worldwide. One of the good descriptions of the football is made by Stephen Morrow (2003), which is "The Game of People". From developed to undeveloped countries, from wealthy nations to poor nations football takes an enormous attraction around the world. According to Deloitte's 2019 Annual Review of Football Finance report, the total revenues in the European football market for the 2017/18 season have reached  $\in$  28.4 billion while Turkey's have also reached  $\notin$ 731m for the same period; which makes Turkey the 6th highest revenue generating league in Europe. This rapid growth of the sports economy has led to many processes like match-fixing, incentive premiums, and other prohibited acts and behaviors.

On 3<sup>rd</sup> of July 2011 Beşiktaş and Fenerbahçe, the two major Turkish soccer teams are accused of matchfixing. In this study, we investigate the effects of the match-fixing process on the stock prices of both Beşiktaş and Fenerbahçe. As in the literature, a bad news announcement will harm stock markets (Akhtar et al. 2011). To test this, we divide our samples into two groups; the first one is when our soccer teams earn the right to enter the group stage of the UEFA European League before the match-fixing process and the second one is when they enter during the match-fixing process.

In other words, we focus on the stock prices of Beşiktaş and Fenerbahçe before and after they are accused of match-fixing. Beşiktaş and Fenerbahçe are members of Turkey's Spor Toto Super League and their stocks are trading on BIST (Borsa Istanbul). It will be better to give some detailed information about the Turkish Spor Toto Super League and UEFA European League to better understand our analysis. In Spor Toto Super League, there are 18 teams. The UEFA Europa League comprises three qualifying rounds, a play-off round, a group stage, and five knockout rounds. The winner of Super Toto will automatically enter the group stage of the Champions League. Runners-up qualify for the third qualifying round of the Champions League, third place qualifies for the third qualifying round of the Europa League, and fourth place qualifies for the second qualifying round of the Europa League. If the Turkish Cup winner has already qualified for European competition through their league finish, then the runners-up take their place in the play-off round. If the runners-up have also qualified, the next highest placed club in the league takes their place.

We believe that our findings will be a distinctive contribution to the researchers and shed light on the literature. The rest of the paper is organized as follows. The literature review is in Section II. The data methodology and method are shown in Section III, while our findings are presented in Section IV. Finally, some concluding ideas are provided in Section V.

### **1. LITERATURE REVIEW**

Extensive studies are proving that game results affect investor's decisions, which in turn affect sports teams' stock returns. When a team has a good performance, its fans will feel happy and show a positive reaction, while they will feel bad and react negatively to poor performance. As the mood of the fans is affected by the performance of the sports teams, it is highly possible that fans' mood can affect their investment decisions. Samagaio et al. (2009) indicate that there is a strong relation with sporting performance and financial performance and support this with the 0.95 correlation coefficient. In the literature, generally wins are associated with positive returns; while losses are associated with negative returns (Castellani et al. 2011). On the other hand, there is a 'negativity effect' which should also be taken into consideration after the results of soccer matches. For example, Akhtar et al. (2011) the announcement of bad news has a significant negative announcement day effect on the returns of the equity market.

Renneboog and Vanbrabant (2000) indicate that during national Cup and European competitions across English and Scottish teams while it is possible to obtain positive returns after win, defeats or draws are penalized by negative returns. Pinnuck and Potter (2006) find an association between the on-field football success of clubs and their level of off-field financial performance. Edmans et al. (2007) study international soccer, cricket, rugby, ice hockey, and basketball branches by applying the GARCH method and show that losses in international soccer matches are associated with negative returns. Benkraiem et al. (2010) make an interesting contribution to the literature by revealing that the magnitude of the stock market reaction depends on the nature of the result; whether it is a defeat, a draw or a win and depends on the game venue; whether it is home or away. Gerlach (2011) presents an interesting result; different from the literature the changes in investor sensitivity after national team matches do not affect stock market returns.

After the match-fixing announcement of the two major Turkish soccer teams, many studies turn their attention to Turkeys' soccer clubs. Demir and Danis (2011) investigate the effects of Turkeys' 4 big soccer clubs game results on their stock returns and they reveal that returns react asymmetrically to wins and losses.

Özdurak and Ulusoy (2013) show that the match-fixing process has a significant effect on stock returns of Fenerbahçe, which is in line with our results. Furthermore, the elimination from a major international soccer tournament is penalized with a loss on stock prices (Edmans et al. 2007) that is again in line with our results for Fenerbahçe. Saraç and Zeren (2013) analyze the effect of game performances of Beşiktaş, Fenerbahçe, and Galatasaray on their stock returns. Their research reveals that soccer returns are both significantly and positively associated with the stock returns for all three teams; where returns are higher and more significant in Beşiktaş case. Tufan and Hamarat (2014) also investigate the performance of 4 big soccer clubs in Turkey after the match-fixing announcement and conclude that Trabzonspor and Fenerbahce returns are significantly affected by the condemnation. Cam (2015) investigates the relationship between game results and stock returns of 4 big Turkish soccer teams and reveals that losses affect stock returns negatively. Gökten and Karatepe (2015) analyze the effect of the match-fixing announcement on stock market returns of Turkeys' 4 big soccer clubs and reveal that during the match-fixing process it is significant to have abnormal returns. Elitas et al. (2016) look at the effects of the match-fixing process on the returns of Turkish soccer clubs. The writers conclude that after the match-fixing process, the interaction between Beşiktaş, Fenerbahçe and Trabzonspor and the national BIST100 index decreases, while these three clubs are more affected by their shocks. Uludağ and Sigali (2016) analyze the effects of the sporting performance of Turkeys' four big soccer teams on financial performance. Their results show that for all of the four teams defeats and draws significantly affect returns; while defats are penalized with higher negative and stronger reactions, compared to draws. The writers also believe that fans of both Beşiktaş and Fenerbahçe are exposed more negative returns than Galatasaray and Trabzon fans in case of defeats and draws, which is probably because of fan emotions. Sultanoğlu et al. (2018) analyze the effect of the match-fixing announcement on the stock prices of Fenerbahçe and conclude that both positive and negative announcements affect the stock prices.

### 2. METHODOLOGY AND DATA

Our study is based on the effect of the match-fixing process on the return of the Besiktas's and Fenerbahce's stock prices when these teams are successful in international areas such as attending the UEFA leagues. The success of the UEFA matches is expected to affect stock prices positively for both teams. To be able to identify the effect of being accused of match-fixing even though teams show the success of UEFA matches, it is important to use a control group. Our sample is divided into two groups, Stock prices before and after the match-fixing announcement of both teams. As we early mention, the match-fixing announcement day is the 3<sup>rd</sup> of July 2011. Borsa Istanbul and FINNET2000 online data resources are used for taking the daily closed prices. It is preferred to use simple returns to obtain less loss of information. Mackolik is our guide of the team's performance and the event dates which have been used throughout our analysis. 2010-2011 season is used for Besiktas, as a pre-match-fixing process. As they are the winner of the Turkish Cup they join the playoff round of UEFA and passing the play-offs they own the right to enter the group stages. During match-fixing process of Beşiktaş is specified in the 2011-2012 season. They are the 4<sup>th</sup> team in Super Toto, so again they join the play-off round of UEFA and again passing the play-offs they own the right to enter group stages. For Fenerbahçe we first use the 2009-2010 season as a pre-match-fixing process because they could not pass the group stages in the 2010-2011 season. At the end of the 2009-2010 season, Fenerbahçe is the 2<sup>nd</sup> team of the Spor Toto League. After passing the play-off round, they own the right to enter the group stages of the UEFA European League. During the match-fixing process of Fenerbahce, we use the 2012-2013 season because they are prohibited from UEFA European League for the 2011-2012 season.

With the event dates specified, we select a 41-day event window, comprise of 20 pre-event days, the event day, and 20 post-event days. For the estimation window, we use the 250-trading day period. Our null hypothesis is that the effect of the event does not occur on the stock returns. In our study, the event is defined as entering the group stages in the UEFA European League. We also try to compare two different seasons of the leagues which differ from the process of match-fixing.

The frequently ask question in finance is to measure the effectiveness of an economic event on the value of a firm and the return of a firm. An event study is an analysis of whether there is a statistically significant reaction in financial markets to past occurrences of a given type of event that is hypothesized to affect public organizations' market values. The event that affects an organization's market value may be directly related to the organization or the effect may come through outside of the organization. The Capital Asset Pricing Model is commonly used in event studies to model the return of the stocks during the 1970s. Nowadays, many academicians are not willing to use this model in event studies because of the doubts on the validity of the restrictions imposed by the CAPM on the market model. Literature suggests using the market model since it

has more relaxed assumptions. In this study the Sharpe-Litner market model (Campbell et al. 1996) is preferred to the usage of modeling market-wide changes on stock returns:

$$R_{i,t} = \alpha_i + \beta_i R_{m,t} + u_{i,t}$$

$$E(u_{i,t}) = 0$$

$$Var(u_{i,t}) = \sigma_{i,t}^2$$
(1)

Here  $R_{i,t}$  and  $R_{m,t}$  are the period-t equity returns for stock i and the market portfolio respectively using closing daily prices and  $u_{i,t}$  is the zero mean disturbance term. We use the BIST100 index as an approximation for the market return. For each teams' stock i and event day-t, equation (1) is used to calculate abnormal return  $AR_{i,t}$  as follows;

$$AR_{i,t} = R_{i,t} - \hat{\alpha}_i - \hat{\beta}_i R_{m,t} \tag{2}$$

Cumulative abnormal returns are described as follows;

$$CAR_{i,t} = \sum_{i=1}^{t} AR_{i,t} \tag{3}$$

The parametric tests propose in the literature rely on the important assumption that an individual firm's abnormal returns are normally distributed. The standard statistic is;

$$t = \frac{CAR_{i,t}}{St.D(AR_{i,t})} \tag{4}$$

where  $AR_{i;t}$  is defined as above and  $St. D(AR_{i,t})$  is an estimate of the standard deviation of the abnormal returns. We employ the above t-test to examine the significance of the results. If the announcement has an impact on the stock, then we should be able to find significant differences in the return of the stock before and after the announcement.

When we apply this for Fenerbahçe

$$RFenerbahçe_{i,t} = lpha_i + eta_i RBIST100_{m,t} + u_{i,t}$$
  
 $E(u_{i,t}) = 0$   
 $Var(u_{i,t}) = \sigma_{i,t}^2$ 

and

Abnormal RFenerbahçe<sub>i,t</sub> = RFenebahçe<sub>i,t</sub> -  $\hat{\alpha_{\iota}} - \hat{\beta_{i}}$ RBIST100<sub>m,t</sub>

Finally, the cumulative abnormal return is

Cumulative Abnormal RF enerbahç
$$e_{i,t} = \sum_{i=1}^{t} Abnormal RF enerbahç $e_{i,t}$$$

where RFenerbahçe is Fenerbahçe's daily return and RBIST100 is the market return.

Same procedure applies for Beşiktaş stock prices

$$RBeşiktaş_{i,t} = \alpha_i + \beta_i RBIST100_{m,t} + u_{i,t}$$
$$E(u_{i,t}) = 0$$
$$Var(u_{i,t}) = \sigma_{i,t}^2$$

and

Abnormal RBeşiktaş<sub>i,t</sub> = Return Beşiktaş<sub>i,t</sub> -  $\hat{\alpha}_i - \hat{\beta}_i RBIST100_{m,t}$ 

Finally, the cumulative abnormal return is

Cumulative Abnormal RBeşiktaş<sub>i,t</sub> = 
$$\sum_{i=1}^{t}$$
 Abnormal RBeşiktaş<sub>i,t</sub>

where RBeşiktaş is Beşiktaş's daily return and RBIST100 is the market return.

## **3. RESULTS**

Table 1 summarize game scores for Beşiktaş. Beşiktaş's rival is HJK Helsinki at the play-offs during the 2010-2011 season which is before the match-fixing announcement. On the first game, Beşiktaş plays at home and win the game with a score of 2-0, and at the second game, Besiktas (guest) win the game with a score of 0-4. After the match-fixing announcement, Beşiktaş's rival is Alania Vladikavkaz at the play-offs during the 2011-2012 season. On the first game, Beşiktaş plays at home and win the game with a score of 3-0. In the second game, the game is lost by Beşiktaş with a score of 2-0. After the match-fixing announcement, Beşiktaş plays at home and win the game with a score of 3-0. In the second game, the game is lost by Beşiktaş with a score of 2-0. After the match-fixing announcement, Beşiktaş plays at home and win the game with a score of 3-0. In the second game, the game is lost by Beşiktaş with a score of 2-0. After the match-fixing announcement, Beşiktaş plays at home and win the game with a score of 3-0. In the second game, the game is lost by Beşiktaş with a score of 2-0. After the match-fixing announcement, Beşiktaş plays at home and win the game with a score of 3-0. In the second game, the game is lost by Beşiktaş with a score of 2-0. After the match-fixing announcement, Beşiktaş plays at home and win the game with a score of 3-0. In the second game, the game is lost by Beşiktaş with a score of 2-0. After the match-fixing announcement, Beşiktaş plays at home and win the game with a score of 3-0. In the second game, the game is lost by Beşiktaş with a score of 2-0. After the match-fixing announcement, Beşiktaş plays at home and win the game with a score of 3-0. In the second game, the game is lost by Beşiktaş with a score of 2-0. After the match-fixing announcement, Beşiktaş plays at home and win the game with a score of 3-0.

	Beşiktaş													
Befe	ore the match-f (2010	fixing announceme 0-2011)	ent	After the match-fixing announcement (2011-2012)										
Game type	Date	Rival	Score	Game type	Date	Rival	Score							
Play-off I	17.08.2010	Hjk Helsinki (Guest)	2-0	Play-off I	18.08.2011	Alania Vladikavkaz (Guest)								
Play-off II	26.08.2010	Hjk Helsinki (Home)	0-4	Play-off II	25.08.2011	Alania Vladikavkaz (Home)	2-0							
Beşiktaş p round ar stages of	basses the UEFA and earns the rig the UEFA Eur	A European League ht of playing at the opean League. 26.0	play-off group 8.2010	Beşiktaş pa and earn	asses the UEFA is the right of p UEFA Europe	A European League play-o laying at the group stages an League. 26.08.2011	off round of the							

### Table 1. Game days and scores for Beşiktaş and Event days

Table 2 summarize game scores for Fenerbahçe. Fenerbahçe's rival is Sion at the play-offs during the 2009-2010 season which is before the match-fixing announcement. In the first game, Fenerbahçe plays outside and win the game with a score of 0-2. In the second game, the game draws with a score of 2-2. After the match-fixing announcement, Fenerbahçe's rival is Spartak Moscow at the play-offs during the 2012-2013 season. In the first game, Fenerbahçe plays outside and lost the game with a score of 2-1. In the second game, the game draws with a score of 1-1. After the match-fixing announcement, Fenerbahçe passes the UEFA European League play-off round and earns the right of playing at the group stages.

#### Table 2. Game days and scores for Fenerbahçe and Event days

Fenerbahçe												
Befo	re the match-fi (2009	xing announcemen -2010)	t	After the match-fixing announcement (2012-2013)								
Game type	Date	Rival	Score	Game type	Date	Rival	Score					
Play-off I	20.08.2009	Sion (Home)	0-2	Play-off I (C.L)	21.08.2012	Spartak Moscow (Home)	2-1					
Play-off II	27.08.2009	Sion (Guest)	2-2	Play-off II (C.L)	29.08.2012	Spartak Moscow (Guest)	1-1					

Fenerbahçe passes the UEFA European League play-	Fenerbahçe could not pass the Champions League play-off
off round and earns the right of playing at the group	round but earns the right of playing at the group stages of the
stages of the UEFA European League. 27.08.2009	UEFA European League. 31.08.2012

Graph 1 shows the cumulative abnormal returns of Beşiktaş and Fenerbahçe for pre and after match-fixing periods. For Beşiktaş the cumulative abnormal returns are following a parallel path for both periods. On the other hand for Fenerbahçe while there is an increase in stock returns during the pre-match-fixing process, returns experience a sharp decrease after the match-fixing announcement.

## Graph 1. The Cumulative Abnormal Returns of Beşiktaş (BJK) and Fenerbahçe (FB) Before and After Match-Fixing Announcement



Table 3 shows the event windows before and after the match-fixing announcement for both teams. The tstatistics are examined especially on the game day, one day before the game day and after the game day for all seasons and both Beşiktaş and Fenerbahçe. Our findings show that the announcement of entering group stages in the UEFA European League before the match-fixing process has a positive impact on both teams' stock movements. On the other hand, after the announcement of match-fixing, we find a negative effect for both Beşiktaş's and Fenerbahçe's stock movements even they earn the right to enter group stages. Interestingly, the evidence shows that Fenerbahçe's stocks are affected heavily during the match-fixing process. The same negative effect is not strong for Beşiktaş.

Table 3 also provides that on the game day the abnormal return is positive and statistically significant with a t value of 3,19 at a 5% significance level. On the second round of the play-off, Fenerbahçe draws with a score of 2 -2. As a result, we do not reject our null hypothesis which is the effect of the event does not occur on the stock returns. The perception of the stockholders changes as Fenerbahçe win the first game with a different score. This shows that they take some risk as they do not know the result of the second game. Whereas stockholders of Beşiktaş do not prefer to take the risk without waiting for the results of the second game.

When we investigate after the match-fixing period, our results show that the day after the first round of the play-off (the game date is Eid holiday), the abnormal returns of Fenerbahçe are negative and statistically significant with a t value of -2,59 at 5% significance level. On the second round of the play-off, Fenerbahçe draws with a score of 1-1 which is also defined as an event date in our study. We observe that on the day of the match, without knowing the results of the game, negative returns are taken by the investors. After the game day, the negativeness of the abnormal returns continue and it is statistically significant with the value of -2,81. It is negatively understood by the stockholders because the team is eliminated from the Champions League even, the team earns the right to enter group stages of the UEFA European League. This result is not surprising as the bad news affects stockholders to sell the stocks which are a rational behavior of financial decision-makers. Here the interesting point is that while we are expecting the same rational behavior from Beşiktaş's stockholders they prefer to give positive reactions to bad news.

	Beşiktaş							Fenerbahçe								
	Before the mai	tch-fixing an	nouncement		After the match-fixing announcement			Befor	e the match-fi	ixing announcer	nent	After the match-fixing announcement				
Event Window	Dates	AR	CAR	t Stat.	Dates	AR	CAR	t Stat.	Dates	AR	CAR	t Stat.	Dates	AR	CAR	t Stat.
-20	29.07.2010	0.008	0.008	0.220	29.07.2011	-0.019	-0.019	-0.432	30.07.2009	-0.004	-0.004	-0.117	31.07.2012	0.016	0.016	0.393
-19	30.07.2010	-0.023	-0.015	-0.425	1.08.2011	-0.007	-0.026	-0.594	31.07.2009	-0.012	-0.015	-0.502	1.08.2012	-0.004	0.011	0.284
-18	2.08.2010	0.014	-0.001	-0.026	2.08.2011	0.021	-0.005	-0.120	3.08.2009	-0.004	-0.019	-0.635	2.08.2012	-0.036	-0.025	-0.618
-17	3.08.2010	0.006	0.005	0.141	3.08.2011	-0.006	-0.011	-0.252	4.08.2009	0.001	-0.019	-0.616	3.08.2012	-0.004	-0.029	-0.712
-16	4.08.2010	0.012	0.017	0.497	4.08.2011	0.008	-0.003	-0.074	5.08.2009	0.016	-0.002	-0.081	6.08.2012	0.000	-0.028	-0.707
-15	5.08.2010	0.029	0.046	1.310	5.08.2011	0.068	0.065	1.461	6.08.2009	0.020	0.018	0.587	7.08.2012	0.000	-0.028	-0.703
-14	6.08.2010	-0.021	0.025	0.711	8.08.2011	-0.031	0.033	0.756	7.08.2009	-0.006	0.012	0.403	8.08.2012	0.011	-0.018	-0.442
-13	9.08.2010	-0.001	0.024	0.686	9.08.2011	-0.015	0.019	0.419	10.08.2009	-0.017	-0.004	-0.142	9.08.2012	-0.004	-0.022	-0.553
-12	10.08.2010	0.002	0.026	0.736	10.08.2011	0.015	0.033	0.757	11.08.2009	0.018	0.013	0.439	10.08.2012	-0.013	-0.036	-0.885
-11	11.08.2010	-0.011	0.015	0.427	11.08.2011	0.063	0.097	2.186	12.08.2009	-0.010	0.004	0.123	13.08.2012	-0.021	-0.057	-1.414
-10	12.08.2010	0.024	0.039	1.122	12.08.2011	0.023	0.119	2.705	13.08.2009	0.006	0.010	0.327	14.08.2012	-0.016	-0.073	-1.808
-9	13.08.2010	0.010	0.049	1.397	15.08.2011	0.095	0.215	4.862	14.08.2009	-0.007	0.003	0.104	15.08.2012	-0.021	-0.093	-2.327
-8	16.08.2010	0.007	0.056	1.604	16.08.2011	-0.001	0.214	4.839	17.08.2009	-0.008	-0.005	-0.162	16.08.2012	0.003	-0.090	-2.247
-7	17.08.2010	0.004	0.061	1.731	17.08.2011	-0.032	0.182	4.112	18.08.2009	0.030	0.025	0.820	17.08.2012	0.003	-0.087	-2.164
-6	18.08.2010	0.055	0.116	3.299	18.08.2011	-0.013	0.169	3.822	19.08.2009	0.009	0.034	1.121	22.08.2012	-0.017	-0.104	-2.596
-5	19.08.2010	0.142	0.258	7.346	19.08.2011	-0.010	0.159	3.601	20.08.2009	0.067	0.101	3.320	23.08.2012	0.001	-0.104	-2.582
-4	20.08.2010	0.191	0.449	12.803	22.08.2011	-0.036	0.123	2.788	21.08.2009	-0.045	0.056	1.839	24.08.2012	0.023	-0.081	-2.013
-3	23.08.2010	0.089	0.538	15.351	23.08.2011	0.013	0.136	3.086	24.08.2009	-0.012	0.044	1.456	27.08.2012	-0.003	-0.084	-2.083
-2	24.08.2010	-0.058	0.481	13.705	24.08.2011	-0.014	0.122	2.765	25.08.2009	-0.010	0.035	1.137	28.08.2012	0.021	-0.063	-1.564

Table 3: Event windows for both Beşiktaş and Fenerbahçe

Selçuk Üniversitesi Sosyal Bilimler Meslek Yüksekokulu Dergisi, Yıl: 2020 Cilt: 23 Sayı:1

-1	25.08.2010	0.024	0.504	14.384	25.08.2011	0.090	0.212	4.802	26.08.2009	-0.009	0.026	0.837	29.08.2012	-0.002	-0.065	-1.612
0	26.08.2010	0.043	0.547	15.610	26.08.2011	-0.078	0.135	3.046	27.08.2009	0.007	0.033	1.074	31.08.2012	-0.048	-0.113	-2.814
1	27.08.2010	0.014	0.561	15.995	2.09.2011	0.030	0.165	3.734	28.08.2009	-0.018	0.015	0.487	3.09.2012	-0.010	-0.123	-3.063
2	31.08.2010	-0.040	0.521	14.864	5.09.2011	0.042	0.207	4.683	31.08.2009	-0.010	0.004	0.145	4.09.2012	-0.003	-0.126	-3.129
3	1.09.2010	-0.077	0.444	12.666	6.09.2011	-0.013	0.193	4.378	1.09.2009	-0.030	-0.025	-0.825	5.09.2012	-0.017	-0.142	-3.546
4	2.09.2010	-0.008	0.436	12.432	7.09.2011	0.000	0.193	4.373	2.09.2009	-0.039	-0.064	-2.098	6.09.2012	-0.007	-0.150	-3.732
5	3.09.2010	-0.011	0.425	12.109	8.09.2011	-0.022	0.172	3.883	3.09.2009	-0.007	-0.071	-2.313	7.09.2012	-0.010	-0.160	-3.987
6	6.09.2010	0.024	0.449	12.798	9.09.2011	0.002	0.173	3.925	4.09.2009	0.013	-0.057	-1.885	10.09.2012	0.003	-0.158	-3.923
7	7.09.2010	0.072	0.521	14.864	12.09.2011	-0.006	0.167	3.780	7.09.2009	0.041	-0.017	-0.552	11.09.2012	0.003	-0.155	-3.860
8	13.09.2010	0.087	0.608	17.340	13.09.2011	-0.005	0.162	3.661	8.09.2009	-0.025	-0.042	-1.365	12.09.2012	-0.013	-0.168	-4.180
9	14.09.2010	0.054	0.662	18.884	14.09.2011	0.000	0.162	3.671	9.09.2009	-0.007	-0.049	-1.594	13.09.2012	-0.001	-0.169	-4.205
10	15.09.2010	0.123	0.785	22.389	15.09.2011	0.026	0.188	4.252	10.09.2009	0.004	-0.045	-1.469	14.09.2012	-0.019	-0.188	-4.681
11	16.09.2010	0.024	0.810	23.088	16.09.2011	-0.039	0.149	3.380	11.09.2009	-0.001	-0.045	-1.487	17.09.2012	-0.014	-0.202	-5.018
12	17.09.2010	-0.061	0.749	21.361	19.09.2011	-0.009	0.140	3.176	14.09.2009	0.007	-0.039	-1.271	18.09.2012	-0.007	-0.209	-5.204
13	20.09.2010	-0.024	0.725	20.686	20.09.2011	-0.060	0.080	1.817	15.09.2009	0.015	-0.024	-0.777	19.09.2012	0.021	-0.189	-4.693
14	21.09.2010	0.087	0.813	23.180	21.09.2011	0.007	0.088	1.985	16.09.2009	-0.004	-0.028	-0.914	20.09.2012	-0.007	-0.196	-4.867
15	22.09.2010	0.043	0.856	24.401	22.09.2011	0.027	0.115	2.605	17.09.2009	-0.001	-0.029	-0.939	21.09.2012	-0.026	-0.221	-5.513
16	23.09.2010	-0.016	0.840	23.958	23.09.2011	0.013	0.128	2.894	18.09.2009	-0.029	-0.058	-1.904	24.09.2012	0.010	-0.212	-5.275
17	24.09.2010	0.061	0.901	25.684	26.09.2011	-0.008	0.120	2.724	23.09.2009	0.004	-0.054	-1.786	25.09.2012	-0.038	-0.250	-6.222
18	27.09.2010	0.012	0.913	26.040	27.09.2011	-0.012	0.108	2.455	24.09.2009	0.003	-0.051	-1.677	26.09.2012	-0.014	-0.264	-6.583
19	28.09.2010	-0.023	0.890	25.386	28.09.2011	-0.014	0.094	2.129	25.09.2009	0.004	-0.048	-1.561	27.09.2012	-0.035	-0.299	-7.448
20	29.09.2010	0.009	0.900	25.656	29.09.2011	-0.030	0.064	1.453	28.09.2009	0.060	0.012	0.400	28.09.2012	0.028	-0.271	-6.749

#### CONCLUSION

Football is one of the most important sports activities in the worldwide, where stock prices are very sensitive to game results. Moreover, it is not just a part of enjoyment or sports activities but also one of the popular options as an investment tool. The difference from the other stocks is that the stockholders could be a fan of the team or just an ordinary investor. For this reason, Football companies' stocks have a special importance in stock exchange market of the countries.

On 3rd of July 2011 Beşiktaş and Fenerbahçe, the two major Turkish soccer teams, are accused of matchfixing which suddenly dampen their share prices. This study investigates the effect of the match-fixing process on the return of the Beşiktaş's and Fenerbahçe's stock prices when they are successful internationally. In the study we consider the success as entering the group of UEFA European League. The success of the UEFA matches is expected to affect stock prices positively for both teams compared to after-match-fixing announcement. In this regard we divide our sample into two groups: Stock price returns for pre and after matchfixing announcement. Borsa Istanbul and FINNET2000 online data resources are used for taking the daily closed prices.

The underlying idea of this study is to examine the reactions of bad-good news on the soccer team's stock returns. We have chosen events as the announcement of entering group stages in the UEFA European League. Reactions are studied in two selected seasons; before the match-fixing process and during the match-fixing process. By this way, we prove the hypothesis that the match-fixing announcement have impacts on stock returns. We use an event study method to show the effect of passing play-off matches and entering group stages existed on both Beşiktaş's and Fenerbahçe's daily simple returns.

Our results provide that the announcement of entering group stages in the UEFA European League before the match-fixing process has a positive impact on both teams' abnormal stock returns. On the other hand, after the announcement of match-fixing, as one expects, we find a negative effect for both teams' abnormal stock returns even they earn the right to enter group stages.

Interestingly the evidence shows that Fenerbahçe's stocks' cumulative abnormal returns decline desperately during the match-fixing process even they earn the right of entering the UEFA European League, whereas Beşiktaş's cumulative abnormal returns continue to increase during both situations, only a small difference is observed in the analysis. This brings to mind the following question: "Are they only fans of the team or fans of the firm?". The findings of the study show that shareholders of Beşiktaş behave more irrational than of Fenerbahçe.

We may conclude that the stockholders of Fenerbahçe seem to be close to being fans of the firm rather than being fans of the team. In other words, they are more finance related. Another thing is that the investors who invest in Fenerbahçe, gain a positive return on the day of the game or previous day of the game and more surprisingly after the game day even Fenerbahçe wins, without considering the success of the team stockholders are faced with negative returns.

On the other side, when we analyze the results of the Beşiktaş's stock returns, the bad news which is the accusing of match-fixing does not affect Beşiktaş as much as Fenerbahçe. One reason could be related directly to supporters of the teams. Beşiktaş is a soccer club whose supporters have a high level of fanaticism and support by their fans not only on the football field but also on the stock exchange market of Turkey. They somehow eliminate the effect of negative news on the returns. These let us think about the match-fixing process more deeply. To make it clear it is important to take care that because of the match-fixing announcement Fenerbahçe's president Aziz Yildirim send to jail whereas Beşiktaş's president Yildirim Demirören does not.

The findings of this paper, unfortunately, do not include enough information to argue the different behavior of two teams after the same bad news announcement. Finally, it must be considered that the football economy forces investors to behave differently because of fanaticism.

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