RESEARCH ARTICLE

THE JANUARY EFFECT: EMPIRICAL EVIDENCE FROM MIDDLE EAST REGION

*,[1]Fatih KONAK and [2]EcemKübra ÇELİK

[1]Teaching Assistant Fatih KONAK (Phd), Hitit University FEAS Department of Business Administration, Turkey
[2]Hitit University Social Science Institute Department of Business Administration

ARTICLE INFO	ABSTRACT
	According to the Efficient Market Hypothesis developed by Eugene Fama, it is unlikely to predict price movements in the markets. However, deviation from the mean of stock returns is observed and patterns appeared during certain periods, so-called anomalies. In this perspective, this research endeavors to figure out the existence of January Effect in 10 countries in the regions of the Middle East (Egypt, Israel, Amman, Kuwait, Qatar, Bahrain, Morocco, Oman, Saudi Arabia and Turkey) by employing Power Ratio methodology. Although the results obtained within the range of the analyzed period differ from each other, only the outcomes of Turkey and Israel demonstrates the absence of January Effect. In other words, the predictable pattern or price movement emerged except that the two countries are in the Middle East.

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INTRODUCTION

Behavioural finance is concerned with the extent of the effect of human behaviour on the stock prices. The emergence of behavioural finance is mainly due to the point that hypotheses such as Efficient-Market Hypothesis about which investors are not always rational are not valid (Ege, Topaloğlu, & Coşkun, 2012). The prediction of prices in the market is impossible based on the assumption that it is based on the efficient market hypothesis. Researchers called these results meaning deviation from the normal that contradicts the Efficient Market Hypothesis anomaly by examining the factors that influence the prices of financial assets (Barak, 2006). While anomaly is defined as extraordinary behaviour, it is explained by every finding that contradicts the Efficient Market Hypothesis. Here, the extraordinary situation refers to the concept that the investors provide excessive (above normal) returns in the capital markets (Ege, Topaloğlu, & Coşkun, 2012). The Efficient-Market Hypothesis was put forward by Eugene Fama in 1970. Fama divided the markets into 3 groups according to their efficiencies by Efficient Market Hypothesis together with Random Walk Model price changes. These have been categorized as Weak Efficiency, Semi-strong Form and Strong Form respectively. (Konak & Kendirli, 2014).

Corresponding author: Fatih KONAK,
Teaching Assistant Fatih KONAK (Phd), Hitit University FEAS Department of Business Administration, Turkey.

Research on behavioural characteristics on stock returns was conducted in order to theoretically and empirically test the Efficient Market Hypothesis put forward by Eugene Fama in 1970. As a result of the conducted research, anomalies (deviations from the mean) were observed in stock returns at certain time intervals. Different anomaly models were developed in order to explain these deviations in the Efficient Market Hypothesis. These anomalies occurred in the stock market are categorized in the international literature in 2 ways as seasonal and value (non-seasonal) anomalies (Sönmez, 2010). Seasonal anomalies are categorized into three as day-of-the-month, beginning-of-the-month, and month-of-the-year anomalies. The main aim of the research, in terms of days, conducted on the day effect, day-of-the-week and the Friday 13th effect is to explain whether the stocks in the stock exchange generate higher or lower returns on certain day or days compared to the other days with anomalies (Barak, 2006). The main aim of the research, in terms of holidays, is to explain whether the stock returns show any extraordinary behaviour due to the religious or official holidays when the stock exchange is closed (Barak, 2006). In terms of months, January Effect, Turn-of-Year Effect and Month Effect, the aim is to explain whether the stocks in the stock exchange generate higher or lower returns on certain month of the year compared to the other months with anomalies and it has been identified that winter months generally generate higher returns compared

to the summer months (Barak, 2006). January anomaly is the most significant among the month-of-the-year anomalies. The stocks provide higher returns in January than in other months. The main reasons of this is that the risk is higher in January compared to the other months and investors can obtain more returns. Investors sell their stocks in December in order to reduce the tax base and they buy the stocks again in lower prices and obtain high returns (Ege, Topaloğlu, & Coşkun, 2012). In this study, the effect of January effect, as one of the seasonal anomalies in general, in the Middle Eastern countries was researched. Having a look at the literature, the lack of studies of January anomaly in the Middle Eastern countries is encountered as a deficiency. The January anomaly has been researched in the Middle Eastern countries in order to overcome this deficiency.

Literature Review

Different studies in both national and international field are available in the financial literature on abnormal returns. The first study on January anomalies was performed by Wachtel (1942) as a research in the capital market in the USA and the presence of January anomaly was put forward by identifying that the return of stocks in January was higher than the monthly mean returns of stocks in other months by calculating the monthly mean returns of stocks. Rozeffand Kinney (1976) were the first academics putting forward the January effect by observing the effect of seasonal returns in the New York stock exchange between 1904- 1974. As a result of the study, it has been identified that the January returns except the period between 1929-1940 brought higher returns compared to the other months, statistically significant differences were observed in January compared to the other months, and the average return of the stocks in January was 3,48% while the average return of the other 11 months was 0,42%.

Deviations from the mean (anomalies) were observed in the stock returns in certain periods were observed in the national and international studies. Having a look at the studies in the literature, (Ercan, 1995) analysed the month effects of ISE by using the BIST index daily data between January 1988- December 1993 and observed that, in addition of the January effect, June and September returns were higher compared to the other months. Bildik (2000) carried out an investigation on the daily index changing rates at ISE between 1988-1998 on a monthly basis. January was observed as the month with highest daily average returns and June, September and December followed this respectively. It has been identified that the lowest average annual returns were obtained in August and October, March and July followed this respectively. Similarly, (Özmen, 1997) investigated the stock returns of ISE between January 1988-May 1996 in a monthly comparative way and it has been identified that January had the highest return and October had the lowest return. Branch (1977) and Dyl (1977) identified in their own studies that the stocks generate higher returns in January and this return is higher in small firms, this may be due to the tax effect. Banz (1981) reached similar results supporting the January anomaly. In the study of Karan and Uygur (2001), 10 portfolios with the returns of the period between 1991-1998 were formed in ISE with the days-of-the-week and January effects and statistically significant Friday returns were

identified. As a result of the formed portfolios according to the index returns and the analysed periods, the presence of January effect was reported and it was stated that this case depends on the size of the firm. (ÖzerandÖzcan, 2002) carried out a research by using the monthly closing prices and monthly returns as well as 15786 observation data of the firms in ISE in order to research the January effect between 1988 – 1997 in ISE and suggested that the January effect is present in ISE but this effect is not continuous and is independent from the January returns (Erdoğan and Elmas, 2010) Individual investors carried out a survey of 410 people in Istanbul, Ankara, Izmir, Bursa, Antalya and Erzurum provinces to obtain the opinions on anomalies. As a result of the research, it has been stated that investors believe that high returns are generated in January, unlike the Efficient Market Hypothesis, despite the different applied techniques.

Having a look at the studies performed on country stock exchanges, findings which supported the anomaly were observed. In the research conducted by Gültekinve Gültekin (1983) on the stock exchanges of 17 different countries on January anomaly, the January anomaly has been identified in 12 of the countries (Germany, Australia, Belgium, Denmark, the Netherlands, England, Spain, Sweden, Switzerland, Japan, Canada and Norway) and it has been observed that this anomaly is partially due to the tax effect and found to have a relationship with firm size. Consequently, it has been observed that September and October are the months which cause a negative return for all the countries except Australia and January is the month which brings a positive return in all countries. Alrabadi and Al – Qudah (2012) researched the day-of-the-week and month-of-the-year effects by using OLS and GARCH models in the Amman Stock Exchange between 2002 – 2011 in their study and put forward the presence of January effect.

In the study of Aggarwal and Rivoli (1989), January anomaly was observed in all countries except Philippines as a result of 12 year data between 1976-1988 in Philippines, Hong Kong, Malaysia and Singapore Stock Exchanges and a high return was obtained. Ho (1990) investigated the daily returns of the stock exchanges of 12 countries (Australia, Hong Kong, Japan, Korea, Malaysia, New Zealand, Philippines, Singapore, Taiwan, Thailand, England, and the USA) covering the period between January 1975 - November 1987 and it has been identified that high returns were observed in January rather than other months in the USA, Hong Kong, England, Malaysia, Singapore and Taiwan. (Ege, Topaloğlu and Coşkun (2012) investigated the January effect by using the monthly closing price data of 2001-2011 by using the power rate analysis method in the ISE 30 and ISE 50 indexes and identified the existence of January effect. Agrawal veTandon (1994) observed the January effect in 14 of the 18 countries where the research was conducted and the lowest return month in 15 different countries was September. Lucey and Whelan (2004) identified the January anomaly in the study conducted on the Irish Stock Exchange. Having a look at the literature, abnormal returns are not observed the the stock returns and active markets are observed by the carried out studies. For example, Atakan (2008), Çinko(2008) performed studies in Istanbul Stock Exchange and no variations were observed in the January

returns and the January effect was not identified. Similarly, Küçüksille (2012) has tested the January effect and the January effect was observed in XU100 and XUSIN indexes according to the research results while it was not observed in the other indexes. Horosan (2008) investigated whether the firm size is directly proportional to the January returns by using 29736 data of 118 businesses between 2000-2006 in ISE and observed that. Hamarat and Tufan (2008) researched the Index returns of the Tourism Sector by using the daily and monthly closing prices of 1997-2005 in BIST. As a result of the study, days-of-the-week anomaly was observed and that the January anomaly was not identified. Tunçel (2012) investigated the daily closing prices of the periods 2000 – 2005 and 2006 – 2010 by using the regression analysis in BIST 100 index and researched the months-of-the-year effect. They found out that the months of the year effect was not observed as a result of the obtained findings. Yılancı (2013) research the Halloween effect in BIST 100 National Index and analysed the monthly closing prices of the period 1990-2010 by the least squares method. As a result of this study, the Halloween effect which suggests abnormal increases in January stock returns was not observed.

Data set and Method

In line with the purpose of this research, the presence of 'January' anomaly, as one of the most significant seasonal anomalies in the markets of 10 key countries in the Middle Eastern region, was tested. In this context, the required data set was obtained by using 'Datastream and Eikon' program. The countries examined in the context of this analysis and benchmark index researching the anomaly are given in Table 1.

Table 1. Countries considered under analysis

Country	Benchmark Endeks
Turkey	BIST 100
Egypt	Egypt Hermes Financial
Israel	Israel TA 100
Amman	Amman SE Financial Market
Kuwait	Kuwait SE Market IXP
Train	Qatar SE Index
Bahrain	Bahrain All Share
Morocco	Morocco All Share (MASI)
Oman	Oman Muscat Securities MKT.
Saudi Arabia	Saudi Tadawul All Share (TASI)

In order to identify the presence of 'January' effect in the Middle Eastern regions, in other terms in order to assess the activity of country markets within the framework of Efficient Market Hypothesis, the January anomaly has been research by "Power Rate Method", developed by Anthony YanxıangGu (2003). One of the most important reasons why this method is preferred is that the January return and the analysed annual return are opposite (Ege, Topaloğlu, & Coşkun, 2012). While January provides negative (positive) return, the case that the annual return is positive (negative) or both are negative can be shown as an example. The methodology used follows a sequence as follows:

- The monthly returns for each country and period are calculated by using the formula below.

$$G = Ln\,(P)_{t} - Ln\,(P)_{t-1} \qquad \text{................................ (1)}$$

Here;

G = Rate of Return,
$Ln\,(P)_{t}$ = "t" the last transaction closing price of the period,
$Ln\,(P)_{t-1}$ = "t-1" the last transaction closing price of the period.

- In the Power Rate Method, firstly "R_j" and "R_y" values are calculated.

$$R_j = (1 + \text{January Return})^{12} \qquad \text{.................... (2)}$$
$$R_y = (1 + \text{Annual Return}) \qquad \text{................. (3)}$$

"R_j" value is calculated by taking the 12th exponentiation of the relevant equation as one year contains 12 months, so the problem of negativity of the "R_j" value is eliminated by allowing it to be non-zero positive value. If "R_y"is value, the returns of the months except January are calculated. Similarly, the problem of negativity of the "R_y" value is eliminated and a non-zero positive value is obtained.

- The 'Power Rate' which is used to measure the level of efficiency of the markets is expressed by the formula below.

$$R_j / R_y \qquad \text{.................... (4)}$$

The possible situations that may arise in this case are shown below;

- If "R_j" / "R_y"= 1 , the January return is equal to the mean of other months.
- If "R_j" / "R_y" < 1 , the January return is less than the mean of other months.
- If "R_j" / "R_y" > 1 , the January return is more than the mean of other months.

The rate must be greater than 1 to talk about the presence of January anomaly. In the event that the "R_j" / "R_y"rate of more than half of the number of periods in the indexes in terms of periods and countries investigated in the study is above 1, it is argued that the market is not active while the presence of January anomaly is present.

Findings and analysis

One of the calender anomalies, 'January Anomaly' is tested for its presence in the leading 10 countries in the Middle East market. Table 2 shows the average index returns of 10 countries from 2004 to 2014. For example, Turkey achieved the highest annual return since 2009, while the lowest yield occurred in 2008. On the other hand, Saudi Arabia's highest return took place in 2005, while the lowest yield was observed in 2008. Despite the difference in the years of the highest returns among countries, the lowest return -with the effect of the financial crisis- was observed in all the countries except Amman in 2008. Also, the highest return was detected in Turkey in 2014, the lowest return took place in Oman with -0,007.

Table 2. Average index returns

	Turkey	Egypt	Israel	Amman	Kuwait	Train	Bahrain	Morocco	Oman	Saudi Arabia
2004	0.0304	0.0594	0.0089	0.0412	0.0197	0.0497	0.0245	0.0104	0.0157	0.0470
2005	0.0420	0.0726	0.0231	0.0498	0.0491	0.0284	0.0139	0.0236	0.0313	0.0660
2006	-0.0096	-0.0020	0.0085	-0.0320	-0.0145	-0.0344	0.0003	0.0430	0.0118	-0.0749
2007	0.0194	0.0370	0.0103	0.0312	0.0260	0.0339	0.0196	0.0272	0.0404	0.0380
2008	-0.0542	-0.0696	-0.0466	-0.0251	-0.0543	-0.0549	-0.0400	-0.0280	-0.0545	-0.0739
2009	0.0621	0.0330	0.0483	-0.0080	0.0004	0.0177	-0.0142	0.0071	0.0219	0.0265
2010	0.0191	0.0053	0.0112	0.0005	-0.0011	0.0262	-0.0023	0.0159	0.0060	0.0047
2011	-0.0209	-0.0402	-0.0157	-0.0207	-0.0149	-0.0053	-0.0191	-0.0145	-0.0188	-0.0051
2012	0.0335	0.0249	0.0029	0.0030	0.0026	-0.0027	-0.0077	-0.0116	0.0007	0.0069
2013	-0.0191	0.0174	0.0120	-0.0046	0.0189	0.0210	0.0133	0.0024	0.0172	0.0179
2014	0.0224	0.0191	0.0030	-0.0060	-0.0122	0.0060	0.0102	0.0098	-0.0067	-0.0020

Table 3. "Rj" Values

	Turkey	Egypt	Israel	Amman	Kuwait	Train	Bahrain	Morocco	Oman	Saudi Arabia
2004	1.8885	1.2369	0.9613	1.0480	1.6328	1.3188	1.2976	2.1217	1.0429	1.4188
2005	1.7571	9.1300	1.5278	1.4202	1.0467	5.5929	2.1381	1.1935	1.0488	3.0892
2006	1.5816	0.6041	0.5065	1.0322	0.9423	0.3296	1.5185	5.6559	1.4258	4.0046
2007	3.6998	1.6380	1.8444	3.3406	0.8514	0.3437	0.6921	2.6385	0.6139	3.8797
2008	0.2727	0.5697	0.5394	0.4530	1.3228	0.5053	0.9806	1.3704	0.9532	0.1011
2009	0.7071	0.0895	1.2293	0.7321	0.5119	0.5447	0.3581	1.8371	0.8381	1.1056
2010	0.5924	1.6658	1.1425	0.5465	1.7753	1.4568	1.2823	1.2367	1.4539	1.0339
2011	0.6298	0.0769	0.8916	0.4034	0.5143	0.5296	1.4235	0.7478	0.9174	0.4853
2012	4.2610	12.0369	0.8197	1.4190	1.7863	1.0323	1.0989	1.5132	1.1528	2.3960
2013	0.3973	1.2237	1.2506	1.1368	1.6503	1.2434	1.1548	0.8943	1.2013	1.0366
2014	0.6958	2.5270	0.8437	1.3657	1.1569	1.9086	1.7776	0.9848	1.0207	1.3082

Table 4. "Ry" Values

	Turkey	Egypt	Israel	Amman	Kuwait	Train	Bahrain	Morocco	Oman	Saudi Arabia
2004	1.0282	1.0632	1.0100	1.0446	1.0177	1.0521	1.0248	1.0054	1.0168	1.0486
2005	1.0414	1.0608	1.0220	1.0517	1.0532	1.0170	1.0092	1.0244	1.0338	1.0630
2006	0.9860	1.0016	1.0142	0.9649	0.9846	0.9705	0.9971	1.0328	1.0101	0.9071
2007	1.0107	1.0366	1.0065	1.0244	1.0296	1.0448	1.0241	1.0220	1.0477	1.0306
2008	0.9502	0.9282	0.9537	0.9785	0.9387	0.9451	0.9565	0.9671	0.9409	0.9351
2009	1.0703	1.0526	1.0511	0.9936	1.0054	1.0238	0.9920	1.0030	1.0252	1.0282
2010	1.0247	1.0019	1.0112	1.0050	0.9944	1.0257	0.9955	1.0158	1.0037	1.0049
2011	0.9806	0.9736	0.9838	0.9841	0.9886	0.9989	0.9764	0.9864	0.9801	0.9998
2012	1.0306	1.0094	1.0050	1.0044	1.0008	1.0000	0.9946	0.9778	1.0022	1.0024
2013	0.9859	1.0174	1.0114	0.9940	1.0167	1.0212	1.0134	1.0035	1.0174	1.0193
2014	1.0271	1.0136	1.0046	0.9910	0.9856	1.0015	1.0066	1.0108	0.9926	0.9958

Table 5. "Rj/Ry" Values

	Turkey	Egypt	Israel	Amman	Kuwait	Train	Bahrain	Morocco	Oman	Saudi Arabia
2004	1.8366	1.1635	0.9518	1.0032	1.6044	1.2535	1.2662	2.1102	1.0256	1.3530
2005	1.6873	8.6065	1.4950	1.3504	0.9938	5.4997	2.1185	1.1650	1.0145	2.9060
2006	1.6040	0.6031	0.4994	1.0698	0.9570	0.3396	1.5229	5.4761	1.4116	4.4145
2007	3.6606	1.5802	1.8326	3.2609	0.8269	0.3289	0.6758	2.5818	0.5859	3.7645
2008	0.2870	0.6138	0.5656	0.4630	1.4093	0.5347	1.0253	1.4171	1.0131	0.1081
2009	0.6606	0.0850	1.1695	0.7368	0.5092	0.5321	0.3610	1.8316	0.8175	1.0753
2010	0.5781	1.6627	1.1299	0.5438	1.7853	1.4203	1.2881	1.2176	1.4486	1.0288
2011	0.6423	0.0790	0.9063	0.4099	0.5202	0.5302	1.4578	0.7582	0.9360	0.4854
2012	4.1343	11.9251	0.8156	1.4127	1.7849	1.0323	1.1049	1.5475	1.1503	2.3903
2013	0.4030	1.2027	1.2365	1.1436	1.6232	1.2175	1.1395	0.8912	1.1808	1.0170
2014	0.6775	2.4932	0.8398	1.3781	1.1738	1.9058	1.7659	0.9743	1.0284	1.3138

The R j values found for all countries during the corresponding time frame used for calculating Power Method are shown in Table 3. For example, the highest January power rate in Turkey in 2007 was 3.700, while the lowest January power rate was determined as 0.273 in 2008 due to the global crisis. The highest January power rate for Egypt was detected in 2012 and the lowest rate was detected in 2011. After January power rates were detected, the annual yield formed by the average yield of the other months is found. In order for Ry values to be non-zero and positive, 1 is added to the average yields of other months than January. The R $_y$ values calculated for all countries taken into account in the context of the study are given in Table 4. As seen in the table, considering the highest and lowest values of the average yields of the months other than January, the highest values for Turkey and Israel were observed in 2009, the lowest values were observed in 2008. As a matter of course, 2008 has been the year in which the lowest R $_y$ values were observed for all countries. The power rates (R$_j$ / R$_y$ values) of the relevant periods and countries are given in Table 4. When this rate was equivalent to 1, the return of January was observed to be equivalent to the average index means of the other months, while, if this rate was higher than 1, January anomaly was observed and the January return was observed to be higher than the other months. Otherwise, if the rate was lower than 1, the January return was observed to be less than the average returns of the other months and it can be stated that the January anomaly was not present and the market activity can be referred. As seen in the table, this rate is 1 or more than 1 in only 5 of the total of 11 investigation years for Turkey and Israel and the case is interpreted -due to the applied methodology- as the presence of January anomaly is not available in neither of the countries and the markets are active. On the other hand, this rate was found 1 or more than one in the countries in the Middle Eastern region (Egypt, Amman, Kuveyt, Bahrain, Morocco, Oman, Saudi Arabia). In other terms, the presence of January anomaly is not available in these 8 countries and the markets are not active according to the Efficient Market Hypothesis.

RESULTS AND EVALUATION

According to the Efficient Market Hypothesis, investors and other stakeholders in a market are behaving rationally, they are running the price mechanism by analysing the current information and the information reaching the market fast and accurately, thus, it is not possible to obtain returns over the market average by using the existing information. However, time-bound, regular and predictable actions in price movements may lead to anomalies in the reverse direction with EPH and the rationality of investors. In this perspective, the frequently investigated presence of January anomaly in the Middle Eastern region (Turkey, Israel, Egypt, Amman, Kuwait, Bahrain, Qatar, Morocco, Oman, Saudi Arabia) was intended to be revealed for the 2004-2014 period by using the "Power Rate" method. As a result of the performed study, the presence of January anomaly was identified in 8 of the analysed 10 countries, and no predictable trends were observed in 2 countries (Turkey and Israel). In other terms, according to the findings obtained in terms of the power rate used in Israel and Turkey, the markets were observed to be active while the other 8 countries were concluded to be inactive in accordance with

the theory. Consequently, the existence of the market activity was revealed in Turkey and Israel which have relatively more advanced capital markets compared to other countries under the assumption and prudence that as the capital markets develop, the efficiency coefficient increases and it has been concluded that the market participants could not find the opportunity to generate above average returns by using different information sets and data. In addition, the Efficient Market Hypothesis was rejected in the countries except Turkey and Israel within the context of the used model and data set.

REFERENCES

Aggarwal, R. and Rivoli, P. 1989. On the Relationship Between the United States and Four Asian Equity Markets. *ASEAN Economic Bulletin,* 110-117.

Agrawal, A. and Tandon, K. 1994. Anomalies or Illusion? Evidence from Stock Markets in Eighteen Countries. *Journal of International Money and Finance,* 83-106.

Alrabadi, D. and Al-Qudah, K. A. 2012. Calendar Anomalies: The Case of Amman Stock Exchange. *International Journal of Business and Management,* 120-127.

Atakan, T. 2008. İstanbul Menkul Kıymetler Borsasında haftanın günü etkisi ve ocak ayı anomalilerinin ARCH GARC ile test edilmesi. İstanbul Üniversitesi İşletme Fakültesi Dergisi, 98-110.

Aytekin, S. and Sakarya, Ş. 2014. Ocak Ayı Anomalisi: Borsa İstanbul Endeksleri Üzerine Bir Uygulama. Uluslararası Yönetim İktisat ve İşletme Dergisi, 137-153.

Banz, R. 1981. The Relationship Between Return and Market Value of Common Stocks. *Journal of Financial Economics,* 3-18.

Barak, O. (tarih yok).

Barak, O. 2006. Hisse Senedi Piyasalarında Anomaliler ve Bunları Açıklamak Üzere Geliştirilen Davranışsal Finans Modelleri İMKB'de Bir Uygulama. Gazi Üniversitesi Sosyal Bilimler Enstitüsü İşletme Ana Bilim Dalı, 1-366.

Barak, O. 2008. İMKB'de Aşırı Reaksiyon Anomalisi ve Davranışsal Finans Modelleri Kapsamında Değerlendirilmesi. Gazi Üniversitesi İİBF Dergisi, 207-229.

Bildik, R. 2000. Hisse Senedi Piyasalarında Dönemsellikler ve İMKB Üzerinde Ampirik Bir Çalışma. İstanbul: İMKB Yayını.

Branch, B. 1977. A Tax Loss Trading Rule. *Journal of Business,* 198-207.

Çinko, M. 2008. İstanbul Menkul Kıymetler Borsasınd Ocak Ayı Etkisi. Doğuş Üniversitesi Dergisi, 47-54.

Dyl, E. 1977. Capital Gain Taxation and Year-End Stock Market Behavior. *Journal of Finance,* 165-175.

Ege, İ., Topaloğlu, E. E. and Coşkun, D. 2012. Davranışsal Finans ve Anomaliler: Ocak Ayı Anomalisinin İMKB'de Test Edilmesi. Muhasebe Finans, 175-190.

Ercan, B. 1995. İstanbul Menkul Kıymetler Borsası'nda Ocak Ayı Etkisi, Ömer Hayyam Etkisi, Ümit Yaşar Etkisi. Türkiye Cumhuriyet Merkez Bankası Araştırma Genel Müdürlüğü, Tartışma Tebliği, 231-252.

Erdoğan, M. and Elmas, B. 2010. Hisse senedi piyasalarında görülen anomaliler ve bireysel yatırımcılar üzerine bir araştırma. Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 1-22.

Ho, Y.-K. 1990. Stock Return Seasonalities in Asia Pacific Markets. *Journal of International Financial Management and Accounting,* 47-77.

Horosan, M. (tarih yok). Firma Büyüklüğünün Hisse Senedi Getirilerine Etkisi. 329-339.

Karan, M. B. and Uygur, A. 2001. İstanbul Menkul Kıymetler Borsası'nda haftanın günleri ve ocak ayı etkilerinin firma büyüklüğü açısından değerlendirilmesi. Ankara Üniversitesi Siyasal Fakültesi Dergisi, 103- 115.

Konak, F. and Kendirli, S. 2014. Yılın Ayları Etkisinin Borsa İstanbul 100 Endeksi'nde Garch (1,1) Modeli İle Test Edilmesi. Kahramanmaraş Sütçü İmam Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 137-145.

Küçüksille, E. 2012. İMKB Endekslerinde Ocak Ayı Etkisinin Test Edilmesi. Muhasebe Finans Dergisi, 129-138.

Lucey, B. and Whelan, S. 2004. Monthly and semi-annual seasonaliti in the Iris equity market. *Applied Financial Economics,* 203-208.

Özer, G. and Özcan, M. 2002. İMKB'da ocak etkisi, etkinin sürekliliği, firma büyüklüğü ve portföy denkleştirmesi üzerine deneysel bir araştırma. Süleyman Demirel Üniversitesi İİBF Dergisi, 133- 158.

Özmen, T. 1997. Dünya Borsalarında Gözlemlenen Anomaliler ve İstanbul Menkul Kıymetler Borsası Üzerine Bir Deneme. Ankara: Sermaye Piyasası Kurulu Yayını.

Rozeff, M. and Kinney, W. 1976. Capital market seasonality: The case of stock returns. *Journal of Financial Economics,* 379-402.

Sönmez, T. 2010. Davranışsal Finans Yaklaşımı: İMKB'de Aşırı Tepki Hipotezi Üzerine Bir Araştırma. Ankara.

Tunçel, A. K. 2012. İstanbul Menkul Kıymetler Borsasında Yılın Ay Etkisi. Yönetim Bilimleri Dergisi, 1-30.

Yılancı, V. 2013. Hallowen etkisinin İstanbul Menkul Kıymetler Borsasında Geçerliliğinin Testi. Siyaset, Ekonomi ve Yönetim Araştırmaları Dergisi, 21-30.

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