NEAR EAST UNIVERSITY

**FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES**

**DEPARTMENT OF BANKING AND FINANCE**

**B A N K 4 1 0**

**GRADUATION PROJECT**

# "INVERSE RELATIONSHIP BETWEEN MONEY MARKETS AND CAPITAL MARKETS"

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**July 2008**

## ACKNOWLEDGEMENTS:

First of all I would like to thank to my advisor Dr. Turgut Türsoy, who supported me all of the time, encouraged met o finish my work easily.

Special thanks deeply from my hearth to my family members, who raised me up to be a good man, they suffered with me, they were happy with me, and never left me alone for a second. My father, MUSTAFA İNAL, always adviced me, how to cope with all difficulties that I faced and ı will face in this life. I'm promise him to make him proud of me, I hope I did. And my mother, NEVİN VESİLE İNAL, who always supported me and will support.

By the way, I will never forget the support of my sister, DEMET NUR İNAL, and my uncles, NABİ TEMÜROĞLU and MUSTAFA TEMÜROĞLU, great thanks for them.

## ABSTRACT

The primary objective of this paper is to assess and analyze the inverse relationship between foreign exchange market and stock market fort he year 2006. The monthly foreign exchange rates are taken from the Central Bank of Republic of Turkey and averages are calculated. Then ISE(İstanbul Stock Exchange) national 30 index for the year 2006 is taken and applied the both to Philippe Jorion (1990) model. The simple regression and OLS tecniques are used in my study.

**Context :**

## CHT 1: INTRODUCTION

## 1.1 Aim of the Study:

The aim of this is to proof the relationship between capital market and foreign Exchange market with using simple regression model.There are commonly accepted perception about the inverse relation between stock returns and exchange rate in Turkey. Therefore the study attend to investigate the relationship between stock returns and exchange rates.

## 1.2 Methodology of the Study

In this study, to investigate the relationship OLS will be used and necessary data fort this calculation was obtained from the ISE web site. The data was monthly and the period covered Jan-2006-Dec 2006.

## 1.3 Structure of the study

The first chapter shows the aim of this study, methodology and the structure of the study.

The second chapter starts with defining the Financial Markets in Turkey with giving information about history of ISE and detailed informations.

The third chapter starts with the definitions of the Money Market and the Capital Markets , corresponding them and a study about they are related.

The fourth chapter is about the literature review, there are lots of examples of authors' articles that are related with the relationship between the money markets and the capital markets.

The fifth chapter shows the methodology and the results of the empirical analysiz.

The sixth chapter is about the conclusion.

The seventh chapter shows the referances with authors' of articles, internet addresses, and any other institutions.

Appendix shows the all related tables about the stock returns and the exchange rate(Dollar) in 2006 with ISE-30 index.

# CHT 2: FINANCIAL MARKET IN TURKEY

## 2.1 History of ISE:

The Istanbul Stock Exchange (ISE) was established in early 1986. The ISE is the only securities exchange in Turkey established to provide trading in equities, bonds and bills, revenue-sharing certificates, private sector bonds, foreign securities and real estate certificates as well as international securities. The ISE is governed by an Executive Council composed of five members elected by the General Assembly. Mr. Huseyin ERKAN was appointed as the Chairman and Chief Executive Officer of the ISE by the government on November 2, 2007. Four other members of the Council represent the three categories of Exchange members: development banks, commercial banks and brokerage houses.

As an autonomous, professional organization, the ISE enjoys a high degree of self-regulation. Its revenues are generated from fees charged on transactions, listing procedures and miscellaneous services. The profits of the ISE are retained to meet expenses and to undertake investments and are not distributed to any third parties. The ISE has its own budget.

### 2.1.1 Chairman and Chief Executive Officer

The Chairman and Chief Executive Officer of the Istanbul Stock Exchange Mr. Huseyin ERKAN is appointed by the Turkish government for a term of five years and acts as an intermediary between the members and higher authorities including the Capital Markets Board, the regulatory and supervisory authority for the Turkish capital markets, and related government departments.

### 2.1.2 Committees

Various committees were established to include the voice of the ISE Members in certain areas such as the development of trading technology, introduction of new financial instruments including derivatives, and the promotion of the ISE.

### 2.1.3 Supervision of the Istanbul Stock Exchange

The Istanbul Stock Exchange is supervised by the Capital Markets Board (the regulatory and supervisory authority for the Turkish capital markets) which ensures the proper operation of both the Istanbul Stock Exchange and its members and protects the interests of both the public and the investing community.

### 2.1.4 Trading and Order Execution Systems

The fully computerized trading system of the Istanbul Stock Exchange (ISE) was completed in mid-November 1994. The system enables the ISE members to trade in stocks and rights coupons. The stock trading activities are carried out in two separate sessions, one session in the morning and the other in the afternoon. Computerized trading significantly improved the speed of execution and increased the daily trading capacity.

Prices are determined on a "multiple price-continuous auction" method, utilizing a computerized system that automatically matches buy and sell orders on a price and time priority basis. The buyers and sellers enter the orders into the computer system through their workstations located at the ISE building and also in their head offices. It is a blind order system with trading ISE members identified upon matching. All information regarding transparency, except standing order IDs, are displayed in the trading system during the sessions. At present approximately 1000 workstations in ISE building and each brokerage house has one remote workstation in their head offices.(ISE,2008)

### 2.1.5 ISE Stock Market Indices

ISE indices are composed in order to calculate price and return performances of all shares as well as on the basis of relative markets and sectors. Until the end of 1996, the ISE used to compute only the ISE-100, Financials and Industrials price indices. As from 1997, the ISE began to calculate sector and sub-sector indices on the basis of prices and total return.

ISE price indices are computed and published throughout the trading session while the return indices are calculated and published at the close of the session only. The ISE National-100 Index is used as a main indicator of the National Market.

ISE National-All Shares Index is composed of all National Market companies except investment trusts.

ISE National-30 is composed of National Market companies except investment trusts and will also be used for trading in the Derivatives Market. The constituent 30 companies are selected on the basis of pre-determined criteria directed for the companies to be included in the indices.

ISE National-50 is composed of National Market companies except investment trusts. The constituent 50 companies are selected on the basis of pre-determined criteria directed for the companies to be included in the indices. ISE National-50 Index contains the ISE National-30 Index companies.

ISE National-100, which has been calculated since the inception of the ISE, is composed of National Market companies except investment trusts. The constituents of the ISE National-100 Index are selected on the basis of pre-determined criteria directed for the companies to be included in the indices. ISE National-100 Index contains the ISE National-50 and ISE National-30 Index companies.(ISE,2008)

## 2.2 Selection Criteria for the Companies to be included in the ISE National-30, ISE National-50 and ISE National-100 Indices:

ISE Executive Council shall determine the stocks to be included in the ISE indices following the evaluation of market data on a quarterly basis.

The constituent companies of the ISE National-30, ISE National-50 and ISE National-100 indices must fulfill the following pre-requisites:

a) The stocks of the company traded in the National Market should have been traded on the Exchange for at least 60 days in order to be included in the ISE National-30, ISE National-50 and ISE National-100 Indices. A company which starts to be traded in the National Market within the Evaluation Period and the market value of its stocks offered to the public is equal or greater than

the 2% of the total market value of National Market stocks those kept in custody at Takasbank (Except those kept in non-fungible accounts) as of the date of public offering, is not subject to this rule.

b) For companies having more than one group of stocks (e.g. group A, group B, group C etc.) only one group is included.

The stocks are ranked according to the highest market value (3-month average number of stocks kept in custody at Takasbank are used in calculation of market value) and daily average traded values (The traded values of the first 20 trading days of the stocks those started to be traded within the Evaluation Period are excluded) and those stocks which have the highest market values and daily average trading values are included in the ISE National-30, ISE National-50 and ISE National-100 indices. (ISE , 2008 )

## 2.3 Financial position of Turkey:

Emerging markets have recently been of great importance to the worldwide investment community. The market capitalization, volatility, and returns have increased dramatically in these markets. While emerging markets are more volatile than developed markets, they tend to be relatively uncorrelated with each other and with developed markets .Many global investors choose to diversify their funds across these markets to reduce portfolio risk.Unfortunately, financial crisis characterized by dramatic fluctuations in stock and foreign exchange markets has been a common phenomenon in recent years in emerging countries. This realization directed researchers to investigate the link between stock market performance and the exchange rate. Makurjee and Naka (1995)and Ajayi and Mougoue (1996) found that stock market price is cointegrated with the exchange rate in eight industrial economies(Mukherjee and Naka,1995; Ajayi and Mougoue,1996). Koutoulas and Kryzanowski (1996) provided evidence that stock market volatility responds significantly to exchange rate volatility in Canada (Koutoulas and Kryzanowski, 1996). Kearney (1998) found similar results for Ireland (Kearney,1998). Fang (2000) found a negative depreciation effect in the stock return process in Taiwan over the Asian crisis (Fang,2000).

My goal in this paper is to contribute this body of literature by examining the relationship between stock prices and exchange rates in an emerging market , namely Turkish market. Turkey provides an interesting arena to investigate interrelations between stock and exchange

markets for two reasons .First İstanbul stock exchange ( ISE) is one of the fastest growing emerging stock markets. Market capitalization and number of listed companies have increased dramatically in recent years.At the end 1990, according to ISE, the market capitalization value was $ 18.74 billion and the the number of listed company was 110. At the end of 2001, on the other hand, the market capitalization had increased to $ 47.69 billion and the number of companies had increased to 310. Second Turkish economy witnessed two major financial crises in recent years. The stock and foreign exchange markets suffered fluctuations from these financial crises , which broke out in 1994 and in 2001. For example , the stock index dropped from a peak of 288.84 at the beginning of January 2001 and dropped to 8022.72 at the end of March. Turkish lira depreciated 57.98 % in that period. During the times of financial crises the Turkish Central Bank intervened in the foreign exchange market to dampen the prevailing expectations of depreciation in the Turkish Lira. The performance of the stock market is clearly linked to situations of the foreign exchange market. Although some studies investigated the İstanbul Stock Exchange (ISE) , none of them examined the causality relation between stock prices and exchange rates. Knowing the linkage between the two markets is important to global fund investors who are planning to invest in a small and open stock market such as Turkey (Kasman,2003).

## 2.4 Financial Markets in Turkey

Starting from the 1980s, Turkey entered a new era in the sense that structural adjustments, liberalization attempts and institutional changes made possible reorganization of the economic system. The capital market, the Istanbul Stock Exchange and the interbank money market became operational in 1986. Number of banks actively trading in the market was 52 and transactions heavily occurred in overnight. Overnight funds and interest rates showed significant fluctuations even in the same day. Transaction limits in the interbank money market set for banks according to the Government bond and Treasury bills that deposited at the Central Bank as a collateral. Finally, foreign exchange deposits were introduced. In 1987, the introduction of institutional changes were furthered by the beginning of public auctions for government securities on weekly basis (CBRT, Annual Report, 1986).

The beginning of 1988 was marked with an instability in the financial markets due to excess liquidity. To adjust this instability, some measures were taken on interest rates. Foreign exchange market started its operations on August 1988, with daily fixing sessions so that exchange rates would be determined by the market. 2.2 billion dollars worth of total 6382 operations including fixing were realized. In 1989, the foreign exchange market led to overvaluation of the domestic currency in real terms. In 1990, real interest rates were above the

rates of 1989 on average. The Central Bank announced the monetary program and implemented successfully. Real appreciation of the Turkish Lira continued. Restrictions on foreign exchange were removed to a great extent, and the transfer of the Turkish lira to foreign currencies became possible by a decree. This development was considered as a step toward the convertibility of the Turkish currency (Aysoy,Balaban,Kogar,Özcan; 1996).

1991 was a difficult year with regard to monetary policy implementation. Large deposits were withdrawn from the Turkish banking system due to the Gulf War. Since foreign exchange rates were unstable due to the elections and the Gulf War, the Central Bank sold foreign exchange in the market in order to meet liquidity requirements. Monetary expansion together with uncertainty led to an increase in inflationary expectations and interest rate. Therefore, a monetary program was announced in January 1992. Despite the real interest rates, the growth of foreign exchange deposits was above the growth of deposits denominated in the Turkish Lira and the Turkish lira was devaluated in real terms. The volume of transactions in the interbank money market was below the level of 1991. Quotation limit lowered and the Central Bank preferred to be supplier. Generally, 1992 was a liquid year for the markets. The number of the banks increased in 1993. In the foreign exchange market, the volume of transactions increased because of the increase in banking sector's demand for foreign currency. Due to the inability of rolling the maturing government securities and the rise in dollar-mark parity, excess liquidity increased, and the Central Bank was the net purchaser. Short-term foreign capital inflow was realized via banks as foreign exchange credits (Aysoy,Balaban,Kogar,Özcan; 1996).

In 1995, one sided volume of the interbank money market reached 68 percent of GNP. Interest rates in the market tended to rise by the last quarter of the year. The excess liquidity was withdrawn by the Central Bank via net purchases. In the foreign exchange market, the volume reached 20.6 billion US dollars in 1995. Demand for foreign exchange rose because banks tried to reduce their short positions. Elections and inflationary expectations also played an important role. As a new instrument in the Turkish financial system, foreign exchange futures were temporarily used in the second half of 1995 in order to reduce volatility and high expectations about the depreciation of the Turkish lira via announcement effect. The rate of increase in the foreign exchange was behind the inflation rate throughout 1995 (Aysoy,Balaban,Kogar,Özcan; 1996).

# C H T 3: MONEY MARKET AND FOREIGN EXCHANGE MARKET

## 3.1 THE MONEY MARKET VS. THE CAPITAL MARKET

The flow of funds through financial markets around world may be divided into different segments depending on the characteristics of financial claims being traded and the needs of different investors.One of the most important divisions in the financial system is between the Money market and the capital market.

The Money market is designed for the making of short term loans. It is the institution through which individuals and institutions with temporary surpluses of funds meet the needs of borrowers who have temporary funds shortages. Thus, the Money market enables economic units to manage their liquidity positions. By convention, a security or loan maturing within one year or less is considered to be a Money market instrument. One of the principal functions of the Money market is to finance the working capital needs of corporations and to provide governments with short term funds in lieu of tax collections. The Money market also supplies funds for speculative buying of securities and commodities.

In contrast, the capital market is designed to finance long term investments by business , governments and households. Trading of funds in the capital market makes possible the construction of factories, highways, schools and homes. Financial instruments in the capital market have original maturities of more than one year and range in size from small loans to multimillion dolar credits.

Who are the principal suppliers and demanders of funds in the Money market and the capital market? In the Money market, commercial banks are the most important institutional supplier of funds (lender) to both business firms and governments. Nonfinancial business corporations with temporary cash surpluses also provide subtantial short term funds to the Money market. On the demand for funds side , the largest borrower in the U.S Money market is the Treasury Department, which borrows billions of dollars weekly. Other governments around the world are very often among the leading borrowers in their own domestic Money markets. The largest and best known corporations and securities dealers are also active borrowers in Money markets

around the world. Due to the large size and strong financial standing of these well known Money market borrowers and lenders , Money market instruments are considered to be high quality.

The principal suppliers and demanders of funds in the capital market are more varied than in the Money market. Families and individuals, for example, tab the capital market when they borrow to finance a new home. Governments rely on the capital markets for funds to build schools and highways and provide essential services to the public. The most important borrowers in the capital market are businesses of all sizes that issue long term IOUs to cover the purchase of equipment and construction of new facilities. Ranged against these many borrowers in the capital market are financial institutions, such as insurance companies , mutual funds, security dealers, and pension funds, that supply the bulk of capital market funds(Peter S. Rose ).

## 3.2 EXCHANGE RATES AND STOCK PRICES : ARE THEY RELATED ?

In this study I offer a simple extension to the prevailing set of economic arguments relating stock price changes to changes in exchange rate. The conventional expectation that stock prices of multinationals with significant foreign sales will fall when the value of the dollar rises is based primarily on consideration of their (declining) competitiveness in foreign markets. It ignores the effect on stock prices of changes in the domestic economy associated with changes in the value of the dollar. According to the monetary theory of exchange rates, the dollar is expected to increase in value if the domestic GNP increases, *ceteris paribus.* Thus, if an increase in the value of the dollar is associated with a strengthening of the domestic economy then the reduced demand for a multinational's higher priced exports when the dollar is strong is at least partially offset by the increased demand for its products in the strong domestic economy ( Pritamani, Shome, Singal,2002).

Similarly, when the dolar weakens, the increased demand for a multinational's now lower priced exports may be offset by the reduced demand for its products in the weakening domestic markets. The domestic and foreign market impacts of a change in exchange rate on the value of the firm are at least partially offsetting and this may explain why the expected inverse relation between exchange rate changes and stock returns is not observed for U.S. multinationals. The extent of the offset would be larger the size of a firm's domestic market relative to its foreign market. Such a conclusion is consistent with the findings of He and Ng (1998) and Doidge, Griffin and Williamson (2000) that U.S. firms (with relatively higher domestic to foreign market ratio) exhibit lower exposure than Japanese firms.

When the dollar strengthens, the demand for the products of importing firms increases both because of the lower price of imports and because of higher consumer income in the strengthening domestic economy. Sales and profits of the Mall of America increase because of cheaper Asian imports *and* higher buying power in the expanding U.S. economy. Similarly, a weakening dollar is associated with reduced demand in the domestic markets because of higher price of imports *and* a weakening domestic economy. In the same vein, while a strengthening dollar will not affect the competitiveness of domestic firms (with insignificant foreign trade or foreign competition), it will imply a greater demand for their products owing to a stronger economy. Stock returns for domestic firms and importing firms would, therefore, be positively correlated with changes in currency value.

### *3.2.1 Relation Between GDP and Exchange Rate Changes*

Since exchange rates act like asset prices, the best way to examine the relationship is to study changes in exchange rates around releases of new information pertaining to economic growth. In this way, we are able to isolate the relation between GDP and exchange rates without the influence of changes in other factors. None of the previous work has investigated short-term currency returns around announcements of economic growth. Though we use announcements for *past* quarters of economic growth, we reason that any surprise in GDP growth is likely to cause market participants to change their beliefs about *future* economic growth in the direction of the surprise. Thus, any observed changes in exchange rates as a consequence of surprises in past economic growth probably arise from a revision in beliefs about future economic growth.

### *3.2.2 Stock and Currency Returns*

As discussed earlier, changes in currency values have two potential effects. First, trade with foreign consumers will be affected. A stronger currency will have a negative effect on exporting firms but a positive effect on importing firms. Second, a stronger currency is probably associated with a stronger economy that will have a positive effect on most, if not all, firms. Considering both these effects, importing firms are helped by a stronger currency both due to cheaper

imports and due to a stronger economy. In the case of exporting firms, however, there will be an offsetting effect: the loss of value due to weakness of sales in foreign markets will be fully, partially, or more than offset by the strength of the domestic market.

# CHT 4: LITERATURE REVIEW

There is a wide spectrum of variations in studies of the exchange rate—stock prices relation that try to capture possible explanations for the contradicting evidence. Ajayi and Mougoue (1996), for example, report that an increase in aggregate domestic stock prices has a negative short-run effect on domestic currency value and positive long run effect. Currency depreciation has a negative both short- and long-run effect on the stock market. Study by Ma and Kao (1990) have found that relation between exchange rates and stock prices differs for export vs. import dominated countries: for export dominated countries currency appreciation will have a negative impact on stock markets and for import dominated countries (such as US) currency appreciation will have positive impact on stock prices.

Solnik (1987), on the other hand, has found a negative relation between real stock-return differentials and changes in real exchange rates over a period 1973–1983 and only weak positive relation over the sub-period 1979–1983. His conclusions support the idea that it is the anticipated real growth that has a positive influence of the exchange rate. Malliaropulos (1998) also reports a negative relation between international stock return differentials and changes in real Exchange rate between US and other countries (France, Japan, and UK were examined). Boldin (1999) has concluded from his study that exchange rate has little effect on the general economy of the US (as measured by the domestic firm activity) and rather demonstrates confidence in the US financial and monetary systems.

It is suggested in this paper that relationship between stock prices and exchange rate depends on the level of international exposure. Hodder (1982) has theorized that purely domestic firms as well as multinational firms are exposed to the exchange rate movements. A study by Jorion (1990) has looked at the effect of the exchange rate on the value of US multinationals and the author has reported that this relation is positively correlated with degree of foreign involvement for multinational corporations, but it did not matter for domestic firms.

The contradictions of the previous studies might be explained by the different time periods examined, given a strong affect that a chosen time period has on the relation for the US data. A study of the underlying factors that cause the relation between stock prices and exchange rates to reverse might be interesting and appropriate for future research in this area. Such an attempt has been done by Obstfeld (1985) where the author suggests that Federal Reserve policy of

monetary growth can have strong positive effect on US currency but at the same time ambiguous effect on stock prices.

The significance of monetary policy for both exchange rate and level of stock prices has been theorized previously by Dornbusch (1976), where he suggests that monetary expansion will result in depreciation in the exchange rate and increase in domestic prices.

Later Patelis (1997) has also pointed to the significance of monetary policy, proposing that changes in monetary policy change the risk structure of the economy, and, therefore, the risk characteristics of the stocks. Patelis (1997) concludes that monetary policy indicators can also act as stock return indicators.

For instance, the goods market hypothesis (e.g., Dornbusch & Fischer, 1980) suggests that changes in exchange rates affect the competitiveness of multinational firms and hence their earnings and stock prices. A depreciation of the local currencymakes exporting goods cheaper and may lead to an increase in foreign demand and sales. Consequently, the value of an exporting firm would benefit from a depreciation of its local currency. On the other hand, because of the decrease in foreign demand of an exporting firm's products when the local currency appreciates, the firm's profit will decline and so does its stock price. In contrast, for importing firms the sensitivity of firm value to exchange rate changes is just the opposite. An appreciation (depreciation) of the local currency leads to an increase (decrease) in the firm value of importing firms. Additionally, variations in exchange rates affect a firm's transaction exposure. That is, exchange rate movements affect a firm's future payables (or receivables) denominated in foreign currency. For an exporter, an appreciation of the local currency reduces profits, while a depreciation of the local currency increases profits. Furthermore, stock prices could be affected by exchange rate movements because such movements will induce equity flows.

Adler and Dumas (1984) point out, even domestic firms – firms that have minimal international activities – can face exchange rate exposure if their input prices, output prices, or the demand of their products are affected by exchange-rate movements. Therefore, on a macro basis, the impact of exchange rate fluctuations on stock prices seems to depend on both the importance of a country's international trades in its economy and the degree of the trade imbalance.

Conversely, stock price fluctuations can influence exchange rate movements. For instance, according to the portfolio balance approach, exchange rates, like all commodities, are determined by market mechanism. A blooming stock market would attract capital flows from foreign investors and hence causes an increase in the demand of a country's currency and vice

versa. As a result, rising (declining) stock prices are related to an appreciation (depreciation) in exchange rates. Moreover, foreign investment in a country's equity securities could increase over time due to the benefits of international diversification that foreign investors would gain.3 In addition to returns, capital flows can be induced by less risky investment climate of a country. An improvement in a country's investment climate (e.g., a stable political system, a fair legal system, financial openness and liberalization, etc.) will lead to capital inflows and a currency appreciation. Furthermore, movements in stock prices may influence exchange rates since investors' wealth and money demand may depend on the performance of the stock market (e.g., Gavin (1989)). For example, during the time of a crisis (e.g., the 1997 Asian financial crisis), a sudden dislocation of asset demands may incur because of the herding behavior of investors or the loss of confidence in economic and political stability. This dislocation usually results in the shift of portfolio preference from domestic assets to assets denominated in other currencies (e.g., the U.S. dollar), implying a decrease in the demand of money. This will lead to a decrease in the domestic interest rate and in turn lead to capital outflows. Consequently, the currency will depreciate.

On a macro level, Ma and Kao (1990) find that a currency appreciation negatively affects the domestic stock market for an export-dominant country and positively affects the domestic stock market for an import-dominant country. Abdalla and Murinde (1997) document that a country's monthly exchange rates tend to lead the stock prices, but not the other way around.

On the other hand, Chow et al. (1997) using monthly data for the period 1977e1989 found no relationship for monthly excess stock returns and real exchange rate returns. When repeating the exercise, however, with longer than six months horizons they found a positive relationship between a strong dollar and stock returns.

# CHT 5 : METHODOLOGY AND EMPIRICAL ANALYSIZ

## 5.1 Introduction :

There are four models related with this subject but I chose the one that is useful than others.

The first model is:

The relationship between domestic and foreign stock markets and the exchange rate can be represented by;

$$P_t^{PBC} = \alpha + \alpha_1 S_t^{PBC} + \alpha_2 P_t^{US} + v_t$$

where $P_t^{PBC}$ is the domestic stock price, $P_t^{US}$ is the US stock price, both expressed in real terms, $S_t^{PBC}$ is the real exchange rate defined as domestic prices relative to foreign prices multiplied by the nominal exchange rate and $v_t$ is a disturbance term.

All data are transformed by natural logarithms. We use the real exchange rate instead of the nominal because it reflects the beter the competitive position of an economy with the rest of the world. The US stock market, which has been taken to represent the world capital markets, has been included as a possible conduit through which the foreign exchange and the local stock markets are linked .(Phylaktis,Ravazzolo)

**The second model is :**

Five Pacific Basin countries were selected for the empirical analysiz: Hong Kong , Malaysia , Singapore , Thailand and Philippines. The data consist of monthly stock market index prices (1990=100) expressed in local currency , local bilateral spot exchange rates expressed as domestic currency per U.S. dollar, and consumer price index (1990=100). All the observations were obtained from the *International Financial Statistics* data base in *Datastream* and are end-of- the month observations. All the series are expressed in logarithmic form. The real exchange rate is defined as :

$$\ln S_t^{PBC} = \ln CPI_t^{PBC} - \ln e_t^{PBC} - \ln CPI_t^{US}$$

where $CPI_t^{PBC}$ is the consumer price index for the Pasific Basin country, $e_t^{PBC}$ is the nominal exchange rate and $CPI_t^{US}$ is the consumer price index for US. (Phylaktis,Ravazzolo)

**The third model is:**

There is a large body of literature by examining the effect of exchange rate changes on product prices in different industries and countries.The typical model specification is :

$$\ln P_t = \alpha + \delta \ln X_t + \gamma \ln E_t + \Phi Z_t + \varepsilon_t$$

where p is the importing country's price in the local currency , X is the exporter's cost, E is the exchange rate expressed in units of local currency per unit of exporter's currency, and Z are the other control variables.(Pritamani,Shome and Signal, 2002)

**The last model that chose to use in my subject:**

I test for the relation between stock returns and changes in currency values after controlling for the broader market. Jorion*(1990)* controls for market movements by specifying the model as in:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \gamma_i g_t + \varepsilon_{it}$$

Where $R_{it}$ is the stock return for stock *i*, $R_{mt}$ is the market return, and $g_t$ is the change in exchange rate measured in foreign currency per dollar.(Pritamani, Shome and Signal,2002)

$$R_{it} = \alpha_i + \beta_i R_{mt} + \gamma_i g_t^0 + \varepsilon_{it} \quad \text{where} \quad g_t = \alpha^0 + \delta R_{mt} + g_t^0$$

**Empirical Results :**

In this study we used Jorion (1990) Model for surveying the relationship between 30 stocks return and exchange rate.

The period of January-December 2006 monthly data was used to analyze the relationship between the stock returns and exchange rate. Also we used the monthly average of ISE 30 index for independent variable

## Table 5.1: THE REGRESSION TABLE OF ISE 30 INDEX

$$R_{it} = \alpha_i + \beta_i R_{mt} + \gamma_i g_t + \varepsilon_{it}$$

| | FIRMS | (α) INTERCEPT | (β1) COEFFICIENT FOR EXCHANGE RATE | (β2) COEFFICIENT FOR INDEX |
|---|---|---|---|---|
| 1 | AKBANK | -31,23760483 | 22,02837475 | 1,342849145 |
| | p-values | 0,464367696 | 0,459081765 | 0,0026162452264093 ** |
| 2 | ARÇELİK | 9,26892025 | -6,497413578 | 1,576998166 |
| | p-values | 0,809938769 | 0,808782461 | 0,000507402667908949 *** |
| 3 | DENİZBANK | 39,23743516 | -24,61397385 | 0,630633668 |
| | p-values | 0,403080082 | 0,449802249 | 0,111072450908438 * |
| 4 | DOĞ.HOLD. | -12,72757899 | 10,04658721 | 1,690587888 |
| | p-values | 0,85080049 | 0,831276293 | 0,0104637996442778 ** |
| 5 | DOĞ. YAY. HOLD. | 27,55058719 | -19,35549525 | 1,403314378 |
| | p-values | 0,357625271 | 0,35376887 | 0,00016138187359141 *** |
| 6 | DOĞUŞ OTO | 57,61013656 | -39,58988493 | 2,070652427 |
| | p-values | 0,391382297 | 0,397574605 | 0,00286591952285542 ** |
| 7 | EREĞLİ D.Ç. | -108,0745389 | 75,97543692 | 1,213540296 |
| | p-values | 0,046013348 | 0,044455006 | 0,0099357904232382 * |
| 8 | FİNANS B. | 6,816820625 | -3,268090349 | 0,525083362 |
| | p-values | 0,879106724 | 0,916606796 | 0,165293142291699 * |
| 9 | DIŞBANK | -35,51749372 | 24,20343892 | 1,753628768 |

| | | | | |
|---|---|---|---|---|
| | p-values | 0,481988801 | 0,491336868 | 0,00141281619630301 *** |
| 10 | GARANTİ B. | -20,49791957 | 14,77343801 | 2,009913408 |
| | p-values | 0,548652235 | 0,535218444 | 0,0000314167589474606 *** |
| 11 | GSD HOLD. | -55,38546758 | 36,6719883 | 1,486108864 |
| | p-values | 0,208017619 | 0,229483929 | 0,00136667942440361 *** |
| 12 | HÜRRİYET | -16,59883358 | 10,01100445 | 1,231602462 |
| | p-values | 0,709548613 | 0,746863726 | 0,00598549372035862 * |
| 13 | İŞ C | -29,01680852 | 19,34132425 | 1,614963685 |
| | p-values | 0,44563084 | 0,464906713 | 0,000351127493109842 *** |
| 14 | İŞ GMYO | -28,51289919 | 20,47102904 | 1,733231444 |
| | p-values | 0,452363377 | 0,439113687 | 0,000207039646546293 *** |
| 15 | KOÇ | -11,76024276 | 8,589678871 | 1,884930871 |
| | p-values | 0,76081288 | 0,749669772 | 0,000140707509902119 *** |

| | | | | |
|---|---|---|---|---|
| 16 | MİGROS | 17,45140178 | -8,750179764 | 1,612411254 |
| | p-values | 0,734264876 | 0,806679064 | 0,00286988548237302 ** |
| 17 | PETKİM | -85,17193448 | 57,1920096 | 1,265862996 |
| | p-values | 0,011050975 | 0,013303228 | 0,00021929051764234 *** |
| 18 | P.OFİSİ | 103,1966224 | -72,98870177 | 0,507526481 |
| | p-values | 0,233767643 | 0,227268786 | 0,451806155101493 * |
| 19 | SABANCI | -22,895197 | 17,43481222 | 2,192247852 |
| | p-values | 0,577960794 | 0,543778506 | 0,0000687943549361963 *** |
| 20 | ŞEKERBANK | 130,8992222 | -90,616574 | 1,813941302 |
| | p-values | 0,03028006 | 0,031094894 | 0,00158027460613528 ** |
| 21 | ŞİŞECAM | -17,76385563 | 13,33944213 | 1,656249134 |
| | p-values | 0,70404374 | 0,682401448 | 0,00132542374549563 ** |
| 22 | T.S.K.B | -8,663857112 | 5,97684862 | 2,163388925 |
| | p-values | 0,818066978 | 0,819805032 | 0,0000406002951656174*** |
| 23 | TOFAŞ | 6,085308761 | -0,277086524 | 1,742018417 |
| | p-values | 0,91647457 | 0,994529014 | 0,00379844006300369 ** |
| 24 | TURKCELL | -70,2377723 | 49,69671013 | 1,089873633 |
| | p-values | 0,164981269 | 0,159153139 | 0,0165358455102718 ** |
| 25 | TÜPRAŞ | -9,22263735 | 6,82580374 | 0,850755043 |
| | p-values | 0,85857868 | 0,849875378 | 0,0631261563368722 * |
| 26 | T.H.Y. | -55,59344087 | 37,25271149 | 1,299854877 |
| | p-values | 0,186317992 | 0,202057872 | 0,00233799796936792 *** |
| 27 | ÜLKER GIDA | -6,969789604 | 3,941294838 | 1,347451108 |
| | p-values | 0,888692423 | 0,909532164 | 0,00685990509177593 * |
| 28 | VAKIFLAR B. | -2,247047696 | 1,916421044 | 1,820578933 |
| | p-values | 0,932321761 | 0,917204632 | 0,0000096635936636154 *** |

| | | | | |
|---|---|---|---|---|
| 29 | VESTEL | -27,15033045 | 17,52695897 | 1,323905495 |
| | p-values | 0,560566981 | 0,589161191 | 0,00498363951461164 ** |
| 30 | YAPI VE KREDİB. | 2,449782836 | -1,252616025 | 1,639434189 |
| | p-values | 0,956020731 | 0,967711994 | 0,00103813498732588 ** |

# *C H T 6:* ***CONCLUSION***

I chose the ISE 30 index and apply the model. But I found that three firms in ISE 30 in year 2006 that have the relation between foreign Exchange rate (Dollar ). Because this relationship can differ with time and with firms, and it can also differ country to country.

Many investors in Turkey believe that any change in Exchange rate will cause a change in stock indices. For example, if Exchange rate increases then they expect to see a decrease in stock prices. The reason for this is that investors would prefer to sell their stock to buy foreign currency.

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# *APPENDIX*

THE AVERAGES OF TWELVE MONTHS IN 2006 OF DOLLAR EXCHANGE RATES

| | January | | |
|---|---|---|---|
| Date | Buy | Sell | Average |
| 02.01.2006 | 1,3441 | 1,3506 | 1,34735 |
| 03.01.2006 | 1,3419 | 1,3484 | 1,34515 |
| 04.01.2006 | 1,3317 | 1,3381 | 1,3349 |
| 05.01.2006 | 1,3298 | 1,3362 | 1,333 |
| 06.01.2006 | 1,3284 | 1,3348 | 1,3316 |
| 16.01.2006 | 1,327 | 1,3334 | 1,3302 |
| 17.01.2006 | 1,3277 | 1,3341 | 1,3309 |
| 18.01.2006 | 1,3313 | 1,3377 | 1,3345 |
| 19.01.2006 | 1,3301 | 1,3365 | 1,3333 |
| 20.01.2006 | 1,3301 | 1,3365 | 1,3333 |
| 23.01.2006 | 1,3208 | 1,3277 | 1,32425 |
| 24.01.2006 | 1,3177 | 1,3235 | 1,3206 |
| 25.01.2006 | 1,3156 | 1,3219 | 1,31875 |
| 26.01.2006 | 1,3183 | 1,3247 | 1,3215 |
| 27.01.2006 | 1,3183 | 1,3247 | 1,3215 |
| 30.01.2006 | 1,3219 | 1,3283 | 1,3251 |
| 31.01.2006 | 1,3199 | 1,3263 | 1,3231 |
| | | Average | 1,329941 |

| | February | | |
|---|---|---|---|
| Date | Buy | Sell | Average |
| 01.02.2006 | 1,3177 | 1,3241 | 1,3209 |
| 02.02.2006 | 1,3213 | 1,3277 | 1,3245 |
| 03.02.2006 | 1,3193 | 1,3257 | 1,3225 |
| 06.02.2006 | 1,3232 | 1,3296 | 1,3264 |
| 07.02.2006 | 1,3229 | 1,3293 | 1,3261 |
| 08.02.2006 | 1,3281 | 1,3345 | 1,3313 |
| 09.02.2006 | 1,324 | 1,3304 | 1,3272 |
| 10.02.2006 | 1,3208 | 1,3272 | 1,324 |
| 13.02.2006 | 1,3242 | 1,3306 | 1,3274 |
| 14.02.2006 | 1,3211 | 1,3275 | 1,3243 |
| 15.02.2006 | 1,3322 | 1,3386 | 1,3354 |
| 16.02.2006 | 1,3246 | 1,331 | 1,3278 |
| 17.02.2006 | 1,3202 | 1,3266 | 1,3234 |
| 20.02.2006 | 1,3093 | 1,3156 | 1,31245 |
| 21.02.2006 | 1,3114 | 1,3177 | 1,31455 |
| 22.02.2006 | 1,3245 | 1,3309 | 1,3277 |
| 23.02.2006 | 1,3127 | 1,319 | 1,31585 |
| 24.02.2006 | 1,3145 | 1,3208 | 1,31765 |
| 27.02.2006 | 1,3113 | 1,3176 | 1,31445 |
| 28.02.2006 | 1,306 | 1,3123 | 1,30915 |
| | | Average | 1,32265 |

| | March | | |
|---|---|---|---|
| Date | Buy | Sell | Average |
| 01.03.2006 | 1,3075 | 1,3138 | 1,31065 |
| 02.03.2006 | 1,2979 | 1,3042 | 1,30105 |
| 03.03.2006 | 1,2964 | 1,3027 | 1,29955 |
| 06.03.2006 | 1,3006 | 1,3069 | 1,30375 |
| 07.03.2006 | 1,3225 | 1,3289 | 1,3257 |
| 08.03.2006 | 1,3358 | 1,3422 | 1,339 |
| 09.03.2006 | 1,3362 | 1,3426 | 1,3394 |
| 10.03.2006 | 1,344 | 1,3505 | 1,34725 |
| 13.03.2006 | 1,3377 | 1,3442 | 1,34095 |
| 14.03.2006 | 1,3432 | 1,3497 | 1,34645 |
| 15.03.2006 | 1,3289 | 1,3353 | 1,3321 |
| 16.03.2006 | 1,3264 | 1,3328 | 1,3296 |
| 17.03.2006 | 1,3161 | 1,3224 | 1,31925 |
| 20.03.2006 | 1,3269 | 1,3333 | 1,3301 |
| 21.03.2006 | 1,335 | 1,3414 | 1,3382 |
| 22.03.2006 | 1,3426 | 1,3491 | 1,34585 |
| 23.03.2006 | 1,3323 | 1,3387 | 1,3355 |
| 24.03.2006 | 1,3408 | 1,3473 | 1,34405 |
| 27.03.2006 | 1,3386 | 1,3451 | 1,34185 |
| 28.03.2006 | 1,3464 | 1,3529 | 1,34965 |
| 29.03.2006 | 1,3562 | 1,3627 | 1,35945 |
| 30.03.2006 | 1,3427 | 1,3492 | 1,34595 |
| 31.03.2006 | 1,3417 | 1,3482 | 1,34495 |
| | | Average | 1,333489 |

| | April | | |
|---|---|---|---|
| Date | Buy | Sell | Average |
| 03.04.2006 | 1,3389 | 1,3454 | 1,34215 |
| 04.04.2006 | 1,3319 | 1,3383 | 1,3351 |
| 05.04.2006 | 1,33 | 1,3364 | 1,3332 |
| 06.04.2006 | 1,3308 | 1,3372 | 1,334 |
| 07.04.2006 | 1,3295 | 1,3359 | 1,3327 |
| 10.04.2006 | 1,337 | 1,3434 | 1,3402 |
| 11.04.2006 | 1,3331 | 1,3395 | 1,3363 |
| 12.04.2006 | 1,336 | 1,3424 | 1,3392 |
| 13.04.2006 | 1,3409 | 1,3474 | 1,34415 |
| 14.04.2006 | 1,344 | 1,3505 | 1,34725 |
| 17.04.2006 | 1,3424 | 1,3489 | 1,34565 |
| 18.04.2006 | 1,3366 | 1,343 | 1,3398 |
| 19.04.2006 | 1,3239 | 1,3303 | 1,3271 |
| 20.04.2006 | 1,3233 | 1,3297 | 1,3265 |
| 21.04.2006 | 1,3224 | 1,3288 | 1,3256 |
| 24.04.2006 | 1,3181 | 1,3245 | 1,3213 |
| 25.04.2006 | 1,3168 | 1,3232 | 1,32 |
| 26.04.2006 | 1,3216 | 1,328 | 1,3248 |
| 27.04.2006 | 1,3195 | 1,3259 | 1,3227 |
| 28.04.2006 | 1,3155 | 1,3218 | 1,31865 |
| | | Average | 1,332818 |

| | May | | |
|---|---|---|---|
| Date | Buy | Sell | Average |
| 01.05.2006 | 1,3131 | 1,3194 | 1,31625 |
| 02.05.2006 | 1,3157 | 1,322 | 1,31885 |
| 03.05.2006 | 1,3104 | 1,3167 | 1,31355 |
| 04.05.2006 | 1,3178 | 1,3242 | 1,321 |
| 05.05.2006 | 1,3132 | 1,3195 | 1,31635 |
| 08.05.2006 | 1,3124 | 1,3187 | 1,31555 |
| 09.05.2006 | 1,3321 | 1,3385 | 1,3353 |
| 10.05.2006 | 1,3431 | 1,3496 | 1,34635 |
| 11.05.2006 | 1,3545 | 1,361 | 1,35775 |
| 12.05.2006 | 1,3909 | 1,3976 | 1,39425 |
| 15.05.2006 | 1,4498 | 1,4568 | 1,4533 |
| 16.05.2006 | 1,4484 | 1,4554 | 1,4519 |
| 17.05.2006 | 1,4185 | 1,4253 | 1,4219 |
| 18.05.2006 | 1,4878 | 1,495 | 1,4914 |
| 22.05.2006 | 1,5055 | 1,5128 | 1,50915 |
| 23.05.2006 | 1,5173 | 1,5246 | 1,52095 |
| 24.05.2006 | 1,5368 | 1,5442 | 1,5405 |
| 25.05.2006 | 1,5396 | 1,547 | 1,5433 |
| 26.05.2006 | 1,5229 | 1,5302 | 1,52655 |
| 29.05.2006 | 1,5227 | 1,53 | 1,52635 |
| 30.05.2006 | 1,5368 | 1,5442 | 1,5405 |
| 31.05.2006 | 1,56 | 1,5675 | 1,56375 |
| | | Average | 1,428398 |

| | June | | |
|---|---|---|---|
| Date | Buy | Sell | Average |
| 01.06.2006 | 1,5607 | 1,5682 | 1,56445 |
| 02.06.2006 | 1,5271 | 1,5345 | 1,5308 |
| 05.06.2006 | 1,5765 | 1,5841 | 1,5803 |
| 06.06.2006 | 1,5559 | 1,5634 | 1,55965 |
| 07.06.2006 | 1,548 | 1,5555 | 1,55175 |
| 08.06.2006 | 1,5463 | 1,5538 | 1,55005 |
| 09.06.2006 | 1,5371 | 1,5445 | 1,5408 |
| 12.06.2006 | 1,539 | 1,5464 | 1,5427 |
| 13.06.2006 | 1,6005 | 1,6082 | 1,60435 |
| 14.06.2006 | 1,5897 | 1,5974 | 1,59355 |
| 15.06.2006 | 1,5844 | 1,592 | 1,5882 |
| 16.06.2006 | 1,5833 | 1,5909 | 1,5871 |
| 19.06.2006 | 1,5942 | 1,6019 | 1,59805 |
| 20.06.2006 | 1,6088 | 1,6166 | 1,6127 |
| 21.06.2006 | 1,6414 | 1,6493 | 1,64535 |
| 22.06.2006 | 1,6607 | 1,6687 | 1,6647 |
| 23.06.2006 | 1,6934 | 1,7016 | 1,6975 |
| 26.06.2006 | 1,6836 | 1,6917 | 1,68765 |
| 27.06.2006 | 1,6375 | 1,6454 | 1,64145 |
| 28.06.2006 | 1,6118 | 1,6196 | 1,6157 |
| 29.06.2006 | 1,6029 | 1,6106 | 1,60675 |
| 30.06.2006 | 1,5697 | 1,5773 | 1,5735 |
| | | Average | 1,597139 |

| | July | | |
|---|---|---|---|
| Date | Buy | Sell | Average |
| 03.07.2006 | 1,5679 | 1,5755 | 1,5717 |
| 04.07.2006 | 1,535 | 1,5424 | 1,5387 |
| 05.07.2006 | 1,5699 | 1,5775 | 1,5737 |
| 06.07.2006 | 1,5878 | 1,5955 | 1,59165 |
| 07.07.2006 | 1,5475 | 1,555 | 1,55125 |
| 10.07.2006 | 1,551 | 1,5585 | 1,55475 |
| 11.07.2006 | 1,5379 | 1,5453 | 1,5416 |
| 12.07.2006 | 1,5436 | 1,551 | 1,5473 |
| 13.07.2006 | 1,5778 | 1,5854 | 1,5816 |
| 14.07.2006 | 1,5748 | 1,5824 | 1,5786 |
| 17.07.2006 | 1,5841 | 1,5917 | 1,5879 |
| 18.07.2006 | 1,5751 | 1,5827 | 1,5789 |
| 19.07.2006 | 1,5681 | 1,5757 | 1,5719 |
| 20.07.2006 | 1,5456 | 1,5531 | 1,54935 |
| 21.07.2006 | 1,5434 | 1,5508 | 1,5471 |
| 24.07.2006 | 1,5459 | 1,5534 | 1,54965 |
| 25.07.2006 | 1,5296 | 1,537 | 1,5333 |
| 26.07.2006 | 1,5169 | 1,5242 | 1,52055 |
| 27.07.2006 | 1,4994 | 1,5066 | 1,503 |
| 28.07.2006 | 1,4954 | 1,5026 | 1,499 |
| 31.07.2006 | 1,4811 | 1,4882 | 1,48465 |
| | | Average | 1,550293 |

| | August | | |
|---|---|---|---|
| Date | Buy | Sell | Average |
| 01.08.2006 | 1,4958 | 1,503 | 1,4994 |
| 02.08.2006 | 1,4994 | 1,5066 | 1,503 |
| 03.08.2006 | 1,4879 | 1,4951 | 1,4915 |
| 04.08.2006 | 1,4827 | 1,4899 | 1,4863 |
| 07.08.2006 | 1,4593 | 1,4663 | 1,4628 |
| 08.08.2006 | 1,4581 | 1,4651 | 1,4616 |
| 09.08.2006 | 1,4478 | 1,4548 | 1,4513 |
| 10.08.2006 | 1,4446 | 1,4516 | 1,4481 |
| 11.08.2006 | 1,4414 | 1,4484 | 1,4449 |
| 14.08.2006 | 1,4529 | 1,4599 | 1,4564 |
| 15.08.2006 | 1,4657 | 1,4728 | 1,46925 |
| 16.08.2006 | 1,4452 | 1,4522 | 1,4487 |
| 17.08.2006 | 1,4313 | 1,4382 | 1,43475 |
| 18.08.2006 | 1,4365 | 1,4434 | 1,43995 |
| 21.08.2006 | 1,4483 | 1,4553 | 1,4518 |
| 22.08.2006 | 1,4477 | 1,4547 | 1,4512 |
| 23.08.2006 | 1,4505 | 1,4575 | 1,454 |
| 24.08.2006 | 1,4729 | 1,48 | 1,47645 |
| 25.08.2006 | 1,4729 | 1,48 | 1,47645 |
| 28.08.2006 | 1,478 | 1,4851 | 1,48155 |
| 29.08.2006 | 1,4682 | 1,4753 | 1,47175 |
| 31.08.2006 | 1,4478 | 1,4548 | 1,4513 |
| | | Average | 1,464202 |

| | September | | |
|---|---|---|---|
| Date | Buy | Sell | Average |
| 01.09.2006 | 1,4608 | 1,4678 | 1,4643 |
| 04.09.2006 | 1,4507 | 1,4577 | 1,4542 |
| 05.09.2006 | 1,442 | 1,449 | 1,4455 |
| 06.09.2006 | 1,4521 | 1,4591 | 1,4556 |
| 07.09.2006 | 1,4722 | 1,4793 | 1,47575 |
| 08.09.2006 | 1,4708 | 1,4779 | 1,47435 |
| 11.09.2006 | 1,4762 | 1,4833 | 1,47975 |
| 12.09.2006 | 1,4699 | 1,477 | 1,47345 |
| 13.09.2006 | 1,4622 | 1,4693 | 1,46575 |
| 14.09.2006 | 1,4702 | 1,4773 | 1,47375 |
| 15.09.2006 | 1,4667 | 1,4738 | 1,47025 |
| 18.09.2006 | 1,455 | 1,462 | 1,4585 |
| 19.09.2006 | 1,4618 | 1,4689 | 1,46535 |
| 20.09.2006 | 1,4648 | 1,4719 | 1,46835 |
| 21.09.2006 | 1,4687 | 1,4758 | 1,47225 |
| 22.09.2006 | 1,5252 | 1,5326 | 1,5289 |
| 25.09.2006 | 1,502 | 1,5092 | 1,5056 |
| 26.09.2006 | 1,5168 | 1,5241 | 1,52045 |
| 27.09.2006 | 1,4872 | 1,4944 | 1,4908 |
| 28.09.2006 | 1,4919 | 1,4991 | 1,4955 |
| 29.09.2006 | 1,4971 | 1,5043 | 1,5007 |
| | | Average | 1,47805 |

| | October | |
|---|---|---|
| Date | Buy | Sell |
| 02.10.2006 | 1,5069 | 1,5142 |
| 03.10.2006 | 1,4936 | 1,5008 |
| 04.10.2006 | 1,5085 | 1,5158 |
| 05.10.2006 | 1,4895 | 1,4967 |
| 06.10.2006 | 1,4853 | 1,4925 |
| 09.10.2006 | 1,4952 | 1,5024 |
| 10.10.2006 | 1,492 | 1,4992 |
| 11.10.2006 | 1,4827 | 1,4899 |
| 12.10.2006 | 1,4824 | 1,4895 |
| 13.10.2006 | 1,4651 | 1,4722 |
| 16.10.2006 | 1,4692 | 1,4763 |
| 17.10.2006 | 1,4689 | 1,476 |
| 18.10.2006 | 1,4701 | 1,4772 |
| 19.10.2006 | 1,4552 | 1,4622 |
| 20.10.2006 | 1,4501 | 1,4571 |
| 26.10.2006 | 1,4447 | 1,4517 |
| 27.10.2006 | 1,442 | 1,449 |
| 30.10.2006 | 1,4501 | 1,4571 |
| 31.10.2006 | 1,454 | 1,461 |
| | | Average |

| | Nov. | | |
|---|---|---|---|
| Date | Buy | Sell | Average |
| 01.11.2006 | 1,4481 | 1,4551 | 1,4516 |
| 02.11.2006 | 1,4533 | 1,4603 | 1,4568 |
| 03.11.2006 | 1,4602 | 1,4672 | 1,4637 |
| 06.11.2006 | 1,4414 | 1,4484 | 1,4449 |
| 07.11.2006 | 1,4354 | 1,4423 | 1,43885 |
| 08.11.2006 | 1,4488 | 1,4558 | 1,4523 |
| 09.11.2006 | 1,4424 | 1,4494 | 1,4459 |
| 10.11.2006 | 1,4401 | 1,447 | 1,44355 |
| 13.11.2006 | 1,4432 | 1,4502 | 1,4467 |
| 14.11.2006 | 1,4414 | 1,4484 | 1,4449 |
| 15.11.2006 | 1,4427 | 1,4497 | 1,4462 |
| 16.11.2006 | 1,4324 | 1,4393 | 1,43585 |
| 17.11.2006 | 1,4369 | 1,4438 | 1,44035 |
| 20.11.2006 | 1,4496 | 1,4566 | 1,4531 |
| 21.11.2006 | 1,4512 | 1,4582 | 1,4547 |
| 22.11.2006 | 1,4653 | 1,4724 | 1,46885 |
| 23.11.2006 | 1,4703 | 1,4774 | 1,47385 |
| 24.11.2006 | 1,4705 | 1,4776 | 1,47405 |
| 27.11.2006 | 1,4597 | 1,4667 | 1,4632 |
| 28.11.2006 | 1,4756 | 1,4827 | 1,47915 |
| 29.11.2006 | 1,46 | 1,467 | 1,4635 |
| 30.11.2006 | 1,4458 | 1,4528 | 1,4493 |
| | | Average | 1,45415 |

| | Dec. | | |
|---|---|---|---|
| Date | Buy | Sell | Average |
| 01.12.2006 | 1,44 | 1,4469 | 1,44345 |
| 04.12.2006 | 1,4501 | 1,4571 | 1,4536 |
| 05.12.2006 | 1,4454 | 1,4524 | 1,4489 |
| 06.12.2006 | 1,4395 | 1,4464 | 1,44295 |
| 07.12.2006 | 1,4267 | 1,4336 | 1,43015 |
| 08.12.2006 | 1,4276 | 1,4345 | 1,43105 |
| 11.12.2006 | 1,4269 | 1,4338 | 1,43035 |
| 12.12.2006 | 1,4174 | 1,4242 | 1,4208 |
| 13.12.2006 | 1,4202 | 1,427 | 1,4236 |
| 14.12.2006 | 1,4165 | 1,4233 | 1,4199 |
| 15.12.2006 | 1,4154 | 1,4222 | 1,4188 |
| 18.12.2006 | 1,419 | 1,4258 | 1,4224 |
| 19.12.2006 | 1,427 | 1,4339 | 1,43045 |
| 20.12.2006 | 1,4224 | 1,4293 | 1,42585 |
| 21.12.2006 | 1,4216 | 1,4285 | 1,42505 |
| 22.12.2006 | 1,4186 | 1,4254 | 1,422 |
| 25.12.2006 | 1,4222 | 1,4291 | 1,42565 |
| 26.12.2006 | 1,4198 | 1,4266 | 1,4232 |
| 27.12.2006 | 1,4192 | 1,426 | 1,4226 |
| 28.12.2006 | 1,4131 | 1,4199 | 1,4165 |
| 29.12.2006 | 1,4056 | 1,4124 | 1,409 |
| | | Average | 1,427917 |

# MONTHLY RETURNS OF ISE 30 INDEX IN YEAR 2006

| | AKBANK | ARÇELİK | DENİZBANK | DOĞAN HOLDİNG | DOĞAN YAYIN HOLDİNG | DOĞUŞ OTOMOTİV | EREĞLİ DEMİR ÇELİK | FİNANSBANK |
|---|---|---|---|---|---|---|---|---|
| | 6,28 | 34,11 | 31,29 | 21,30 | 17,81 | 27,63 | 4,50 | 27,08 |
| | 17,76 | 0,25 | 10,01 | 34,75 | 2,70 | 16,93 | (2,23) | (2,98) |
| | (17,92) | (12,16) | (7,41) | (14,48) | (4,21) | (8,53) | (10,32) | 4,10 |
| | (0,71) | 2,91 | 1,99 | 4,48 | 10,22 | 22,94 | (1,74) | (8,60) |
| | (26,63) | (22,82) | 4,51 | (28,17) | (24,48) | (48,16) | (27,00) | (7,73) |
| | (0,74) | (8,22) | (4,05) | 11,80 | (10,56) | (18,42) | 12,83 | 1,36 |
| | 0,40 | 8,91 | 9,01 | 11,41 | (0,69) | 11,76 | 7,38 | 5,04 |
| | 13,67 | 3,95 | 0,88 | 3,97 | (2,55) | 7,59 | (4,38) | 1,42 |
| | (6,32) | (3,30) | 3,51 | (9,48) | (5,30) | 11,77 | (8,71) | 1,75 |
| | 10,27 | 1,88 | (1,10) | 10,01 | 22,16 | 4,43 | 28,14 | (2,14) |
| | (1,25) | (13,42) | 3,32 | (16,62) | (8,41) | (10,68) | 2,96 | 1,44 |
| | 8,54 | 6,70 | (4,68) | (9,69) | 0,44 | (7,67) | 7,65 | 4,64 |

| YEAR | DIŞBANK | GARANTİ BANKASI | GSD HOLDİNG | HÜRRİYET GAZETECİLİK | İŞ BANKASI (C) | İŞ GMYO | KOÇ HOLDİNG | MİGROS |
|---|---|---|---|---|---|---|---|---|
| 06/01 | 7,01 | 26,56 | 1,20 | 5,50 | 4,27 | 16,77 | 16,87 | 13,30 |
| 06/02 | 7,56 | (1,42) | 10,21 | 1,98 | 5,28 | 12,36 | 10,76 | 20,45 |
| 06/03 | (17,69) | (18,20) | (19,89) | (9,68) | (12,79) | (13,99) | (13,00) | (6,58) |
| 06/04 | (5,29) | 12,10 | (1,21) | (3,95) | 2,36 | 4,44 | 3,42 | 12,38 |
| 06/05 | (31,96) | (26,97) | (22,79) | (23,32) | (30,11) | (34,94) | (29,05) | (31,48) |
| 06/06 | (18,73) | (17,04) | (0,62) | (25,46) | (15,74) | (7,91) | (15,41) | (2,91) |
| 06/07 | 7,08 | 15,66 | (4,54) | 13,18 | 8,70 | 16,58 | 16,76 | 0,97 |
| 06/08 | 15,42 | 1,83 | 1,50 | 2,89 | 8,06 | 3,08 | 7,22 | 19,21 |
| 06/09 | (5,49) | 1,22 | (10,20) | 5,60 | (7,87) | (4,02) | (13,76) | 4,25 |
| 06/10 | 16,38 | 22,96 | 28,49 | 13,26 | 20,87 | 13,11 | 19,70 | 13,80 |
| 06/11 | (6,05) | (9,40) | (13,90) | (3,28) | (9,86) | (2,90) | (11,36) | (9,01) |
| 06/12 | 20,99 | (0,13) | (2,90) | (4,30) | 10,51 | 6,54 | 13,60 | 23,84 |

| *YEAR* | PETKİM | PETROL OFİSİ | SABANCI HOLDİNG | ŞEKERBANK | ŞİŞE CAM | T.S.K.B. | TOFAŞ OTO. FAB. | TURKCELL |
|---|---|---|---|---|---|---|---|---|
| 06/01 | 0,37 | (8,10) | 35,55 | 43,34 | 11,39 | 24,87 | 50,34 | 12,20 |
| 06/02 | (4,15) | 24,32 | 3,05 | 5,37 | 22,65 | 6,43 | 5,40 | 6,09 |
| 06/03 | (17,23) | 24,65 | (11,09) | (12,59) | (10,45) | (17,88) | (5,33) | (11,88) |
| 06/04 | 0,36 | (3,16) | 0,65 | 25,95 | 3,77 | 5,65 | 1,51 | (0,38) |
| 06/05 | (27,33) | (24,20) | (33,04) | (17,74) | (33,11) | (32,86) | (21,27) | (24,96) |
| 06/06 | (4,37) | (26,63) | (13,19) | (31,25) | (7,47) | (24,38) | 6,59 | 18,69 |
| 06/07 | 12,21 | 9,83 | 17,86 | 0,20 | 14,81 | 15,57 | 3,42 | (2,06) |
| 06/08 | (0,54) | (0,39) | 19,28 | (6,75) | (2,07) | 16,15 | 1,29 | 3,83 |
| 06/09 | (6,98) | (17,41) | (6,78) | (0,85) | 5,34 | 2,66 | (1,84) | 9,50 |
| 06/10 | 14,18 | 14,04 | 18,36 | 17,58 | 19,21 | 17,14 | 22,24 | 4,97 |
| 06/11 | (7,51) | (3,26) | (7,61) | (3,96) | (6,55) | (10,96) | 4,32 | (12,88) |
| 06/12 | 1,86 | (6,71) | 1,04 | (7,62) | (2,04) | (4,54) | 0,80 | 8,16 |

| *YEAR* | TÜPRAŞ | T.H.Y | ÜLKER GIDA | VAKIFLAR BANKASI | VESTEL | YAPI VE KREDİ BANK. |
|---|---|---|---|---|---|---|
| 06/01 | 12,73 | (0,75) | 4,16 | 16,59 | 6,32 | 18,60 |
| 06/02 | (7,20) | 4,74 | 14,20 | 7,23 | 10,69 | 5,88 |
| 06/03 | (8,64) | (15,75) | (6,97) | (17,77) | (6,89) | (10,25) |
| 06/04 | 20,50 | (0,07) | (4,62) | 15,87 | (11,36) | 12,27 |
| 06/05 | (14,92) | (31,96) | (29,56) | (26,47) | (28,02) | (30,63) |
| 06/06 | (0,62) | (7,41) | (21,74) | (11,98) | (15,72) | (6,85) |
| 06/07 | 12,98 | 1,12 | 17,03 | 7,69 | 15,78 | 4,65 |
| 06/08 | (3,13) | 0,33 | 6,28 | 9,61 | 4,47 | 23,98 |
| 06/09 | (15,77) | 10,93 | 2,39 | (4,01) | (11,31) | (11,41) |
| 06/10 | 6,94 | 15,29 | 8,17 | 17,57 | 12,27 | 10,04 |
| 06/11 | (0,26) | (5,57) | (8,14) | (15,21) | (4,64) | (8,77) |
| 06/12 | 3,72 | 2,03 | 2,32 | 6,05 | 3,42 | (0,38) |

# THE RETURNS AND REGRESSION RESULTS OF ISE 30 INDEX

| AKBANK | | | | |
|---|---|---|---|---|
| | | | GETİRİ (ABD$ BAZLI) | |
| | BORSA | | *RETURN (US$ BASED)* | |
| TARİH | FİYATI | | BİLEŞİK | AYLIK (%) |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| 06/12 | 8,60 | | 4,92 | 8,54 |
| 06/11 | 8,15 | | 4,53 | (1,25) |
| 06/10 | 8,30 | | 4,59 | 10,27 |
| 06/09 | 7,75 | | 4,16 | (6,32) |
| 06/08 | 8,00 | | 4,44 | 13,67 |
| 06/07 | 7,20 | | 3,91 | 0,40 |
| 06/06 | 7,60 | | 3,89 | (0,74) |
| 06/05 | 9,30 | | 3,92 | (26,63) |
| 06/04 | 11,00 | | 5,34 | (0,71) |
| 06/03 | 11,30 | | 5,38 | (17,92) |
| 06/02 | 13,40 | | 6,56 | 17,76 |
| 06/01 | 11,50 | | 5,57 | 6,28 |

| SUMMARY OUTPUT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| *Regression Statistics* | | | | | | | | |
| Multiple R | 0,808118 | | | | | | | |
| R Square | 0,653054 | | | | | | | |
| Adjusted R Square | 0,575955 | | | | | | | |
| Standard Error | 8,312501 | | | | | | | |
| Observations | 12 | | | | | | | |
| | | | | | | | | |
| ANOVA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| Regression | 2 | 1170,56 | 585,2801 | 8,470329 | 0,008534 | | | |
| Residual | 9 | 621,8791 | 69,09768 | | | | | |
| Total | 11 | 1792,439 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| Intercept | -31,2376 | 40,88154 | -0,7641 | 0,464368 | -123,718 | 61,24285 | -123,718 | 61,24285 |
| AVERAGE EXCHANGE RATE | 22,02837 | 28,48024 | 0,773462 | 0,459082 | -42,3984 | 86,45514 | -42,3984 | 86,45514 |
| PERCENTAGE CHANGE IN INDEX VALUE | 1,342849 | 0,326307 | 4,115296 | 37<br>0,002616 | 0,604692 | 2,081007 | 0,604692 | 2,081007 |

| ARÇELİK | | | | |
|---|---|---|---|---|
| | | | GETİRİ (ABD$ BAZLI) | |
| | BORSA | | *RETURN (US$ BASED)* | |
| TARİH | FİYATI | | BİLEŞİK | AYLIK (%) |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| **06/12** | 8,35 | | 144,98 | 6,70 |
| **06/11** | 8,05 | | 135,89 | (13,42) |
| **06/10** | 9,35 | | 156,94 | 1,88 |
| **06/09** | 9,45 | | 154,05 | (3,30) |
| **06/08** | 9,45 | | 159,30 | 3,95 |
| **06/07** | 9,30 | | 153,24 | 8,91 |
| **06/06** | 9,05 | | 140,71 | (8,22) |
| **06/05** | 9,80 | | 153,32 | (22,82) |
| **06/04** | 11,20 | | 198,65 | 2,91 |
| **06/03** | 11,10 | | 193,03 | (12,16) |
| **06/02** | 12,30 | | 219,75 | 0,25 |
| **06/01** | 12,40 | | 219,20 | 34,11 |

| MARY PUT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| ression istics | | | | | | | | |
| ple R | 0,876109 | | | | | | | |
| are | 0,767567 | | | | | | | |
| sted R re | 0,715915 | | | | | | | |
| ard r | 7,609208 | | | | | | | |
| ations | 12 | | | | | | | |
| | | | | | | | | |
| VA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| ession | 2 | 1720,838 | 860,4191 | 14,86042 | 0,001407 | | | |
| dual | 9 | 521,1004 | 57,90005 | | | | | |
| l | 11 | 2241,939 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| ercept | 9,26892 | 37,42268 | 0,247682 | 0,809939 | -75,3871 | 93,92491 | -75,3871 | 93,92491 |
| NGE NGE E | -6,49741 | 26,07062 | -0,24922 | 0,808782 | -65,4732 | 52,47842 | -65,4732 | 52,47842 |
| NTAGE GE IN N E | 1,576998 | 0,298699 | 5,279554 | 0,000507 | 0,901294 | 2,252702 | 0,901294 | 2,252702 |

## ENİZBANK

| | | | | |
|---|---|---|---|---|
| | | | GETİRİ (ABD$ BAZLI) | |
| | BORSA | | *RETURN (US$ BASED)* | |
| TARİH | FİYATI | | BİLEŞİK | AYLIK (%) |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| | 13,90 | | 5,60 | (4,68) |
| | 15,00 | | 5,88 | 3,32 |
| | 14,60 | | 5,69 | (1,10) |
| | 15,20 | | 5,75 | 3,51 |
| | 14,20 | | 5,55 | 0,88 |
| | 14,40 | | 5,51 | 9,01 |
| | 14,00 | | 5,05 | (4,05) |
| | 14,50 | | 5,26 | 4,51 |
| | 11,70 | | 5,04 | 1,99 |
| | 11,70 | | 4,94 | (7,41) |
| | 12,30 | | 5,33 | 10,01 |
| | 11,30 | | 4,85 | 31,29 |

| OUTPUT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| *Regression Statistics* | | | | | | | | |
| Multiple R | 0,577617 | | | | | | | |
| R Square | 0,333642 | | | | | | | |
| Adjusted R Square | 0,185562 | | | | | | | |
| Standard Error | 9,092953 | | | | | | | |
| Observations | 12 | | | | | | | |
| | | | | | | | | |
| ANOVA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| Regression | 2 | 372,5847 | 186,2924 | 2,253124 | 0,160948 | | | |
| Residual | 9 | 744,1362 | 82,6818 | | | | | |
| Total | 11 | 1116,721 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| Intercept | 39,23744 | 44,71986 | 0,877405 | 0,40308 | -61,9259 | 140,4008 | -61,9259 | 140,4008 |
| AVERAGE EXCHANGE RATE | -24,614 | 31,15421 | -0,79007 | 0,449802 | -95,0897 | 45,86176 | -95,0897 | 45,86176 |
| PERCENTAGE CHANGE IN INDEX VALUE | 0,630634 | 0,356943 | 1,766761 | 0,111072 | -0,17683 | 1,438096 | -0,17683 | 1,438096 |

# DOĞAN HOLDİNG

| | | | | |
|---|---|---|---|---|
| | | | **GETİRİ (ABD$ BAZLI)** | |
| | **BORSA** | | *RETURN (US$ BASED)* | |
| **TARİH** | **FİYATI** | | **BİLEŞİK** | **AYLIK (%)** |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| **06/12** | 2,23 | | 11,99 | (9,69) |
| **06/11** | 2,54 | | 13,28 | (16,62) |
| **06/10** | 6,25 | | 15,92 | 10,01 |
| **06/09** | 5,85 | | 14,48 | (9,48) |
| **06/08** | 6,25 | | 15,99 | 3,97 |
| **06/07** | 6,15 | | 15,38 | 11,41 |
| **06/06** | 5,85 | | 13,81 | 11,80 |
| **06/05** | 5,20 | | 12,35 | (28,17) |
| **06/04** | 6,30 | | 17,19 | 4,48 |
| **06/03** | 6,15 | | 16,45 | (14,48) |
| **06/02** | 7,00 | | 19,24 | 34,75 |
| **06/01** | 5,25 | | 14,28 | 21,30 |

| SUMMARY OUTPUT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| *Regression Statistics* | | | | | | | | |
| Multiple R | 0,735092 | | | | | | | |
| R Square | 0,540361 | | | | | | | |
| Adjusted R Square | 0,438219 | | | | | | | |
| Standard Error | 13,36848 | | | | | | | |
| Observations | 12 | | | | | | | |
| | | | | | | | | |
| ANOVA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| Regression | 2 | 1890,921 | 945,4604 | 5,29029 | 0,030261 | | | |
| Residual | 9 | 1608,446 | 178,7162 | | | | | |
| Total | 11 | 3499,366 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| Intercept | -12,7276 | 65,74722 | -0,19358 | 0,8508 | -161,458 | 136,003 | -161,458 | 136,003 |
| AVERAGE EXCHANGE RATE | 10,04659 | 45,80298 | 0,219344 | 0,831276 | -93,567 | 113,6601 | -93,567 | 113,6601 |
| PERCENTAGE CHANGE IN INDEX VALUE | 1,690588 | 0,524779 | 3,221524 | 0,010464 | 0,503455 | 2,87772 | 0,503455 | 2,87772 |

| DOĞAN YAYIN HOLDİNG | | | | | |
|---|---|---|---|---|---|
| | | | GETİRİ (ABD$ BAZLI) | | |
| | BORSA | | *RETURN (US$ BASED)* | | |
| TARİH | FİYATI | | BİLEŞİK | AYLIK (%) | |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* | |
| 06/12 | 4,98 | | 2,34 | 0,44 | |
| 06/11 | 5,10 | | 2,33 | (8,41) | |
| 06/10 | 5,60 | | 2,55 | 22,16 | |
| 06/09 | 4,72 | | 2,08 | (5,30) | |
| 06/08 | 4,82 | | 2,20 | (2,55) | |
| 06/07 | 5,06 | | 2,26 | (0,69) | |
| 06/06 | 5,40 | | 2,27 | (10,56) | |
| 06/05 | 6,00 | | 2,54 | (24,48) | |
| 06/04 | 6,70 | | 3,37 | 10,22 | |
| 06/03 | 6,20 | | 3,06 | (4,21) | |
| 06/02 | 6,30 | | 3,19 | 2,70 | |
| 06/01 | 6,20 | | 3,11 | 17,81 | |

| MARY OUTPUT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| *egression Statistics* | | | | | | | | |
| iple R | 0,910325 | | | | | | | |
| are | 0,828691 | | | | | | | |
| sted R Square | 0,790622 | | | | | | | |
| dard Error | 5,778113 | | | | | | | |
| ervations | 12 | | | | | | | |
| | | | | | | | | |
| VA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| ression | 2 | 1453,538 | 726,7691 | 21,7683 | 0,000356 | | | |
| dual | 9 | 300,4793 | 33,38659 | | | | | |
| l | 11 | 1754,017 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| ercept | 27,55059 | 28,41721 | 0,969503 | 0,357625 | -36,7336 | 91,83479 | -36,7336 | 91,83479 |
| RAGE EXCHANGE RATE | -19,3555 | 19,79693 | -0,9777 | 0,353769 | -64,1393 | 25,42827 | -64,1393 | 25,42827 |
| CENTAGE CHANGE IN EX VALUE | 1,403314 | 0,22682 | 6,18692 | 0,000161 | 0,890213 | 1,916416 | 0,890213 | 1,916416 |

# DOĞUŞ OTOMOTİV

| | | | | | |
|---|---|---|---|---|---|
| | | | **GETİRİ (ABD$ BAZLI)** | | |
| | **BORSA** | | *RETURN (US$ BASED)* | | |
| **TARİH** | **FİYATI** | | **BİLEŞİK** | **AYLIK (%)** | |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* | |
| **06/12** | 5,70 | | 1,00 | (7,67) | |
| **06/11** | 6,35 | | 1,08 | (10,68) | |
| **06/10** | 7,15 | | 1,21 | 4,43 | |
| **06/09** | 7,05 | | 1,16 | 11,77 | |
| **06/08** | 6,10 | | 1,04 | 7,59 | |
| **06/07** | 5,80 | | 0,97 | 11,76 | |
| **06/06** | 5,50 | | 0,87 | (18,42) | |
| **06/05** | 6,70 | | 1,06 | (48,16) | |
| **06/04** | 10,90 | | 2,05 | 22,94 | |
| **06/03** | 9,35 | | 1,66 | (8,53) | |
| **06/02** | 9,95 | | 1,82 | 16,93 | |
| **06/01** | 8,60 | | 1,56 | 27,63 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MMARY OUTPUT | | | | | | | | |
| | | | | | | | | |
| *Regression Statistics* | | | | | | | | |
| ltiple R | 0,827305 | | | | | | | |
| quare | 0,684434 | | | | | | | |
| usted R Square | 0,614308 | | | | | | | |
| ndard Error | 13,01026 | | | | | | | |
| servations | 12 | | | | | | | |
| | | | | | | | | |
| OVA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| gression | 2 | 3304,114 | 1652,057 | 9,760079 | 0,005571 | | | |
| dual | 9 | 1523,401 | 169,2668 | | | | | |
| al | 11 | 4827,515 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| ercept | 57,61014 | 63,98546 | 0,900363 | 0,391382 | -87,135 | 202,3553 | -87,135 | 202,3553 |
| ERAGE EXCHANGE RATE | -39,5899 | 44,57565 | -0,88815 | 0,397575 | -140,427 | 61,24724 | -140,427 | 61,24724 |
| RCENTAGE CHANGE IN DEX VALUE | 2,070652 | 0,510717 | 4,054403 | 0,002866 | 0,91533 | 3,225975 | 0,91533 | 3,225975 |

# EREĞLİ DEMİR ÇELİK

| | | | | | |
|---|---|---|---|---|---|
| | | | **GETİRİ (ABD$ BAZLI)** | | |
| | **BORSA** | | *RETURN (US$ BASED)* | | |
| **TARİH** | **FİYATI** | | **BİLEŞİK** | **AYLIK (%)** | |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* | |
| **06/12** | 9,00 | | 85,75 | 7,65 | |
| **06/11** | 8,60 | | 79,66 | 2,96 | |
| **06/10** | 8,40 | | 77,37 | 28,14 | |
| **06/09** | 6,75 | | 60,38 | (8,71) | |
| **06/08** | 7,15 | | 66,14 | (4,38) | |
| **06/07** | 7,65 | | 69,17 | 7,38 | |
| **06/06** | 7,55 | | 64,42 | 12,83 | |
| **06/05** | 6,65 | | 57,09 | (27,00) | |
| **06/04** | 7,90 | | 78,21 | (1,74) | |
| **06/03** | 8,20 | | 79,59 | (10,32) | |
| **06/02** | 8,90 | | 88,75 | (2,23) | |
| **06/01** | 9,20 | | 90,78 | 4,50 | |

| MARY OUTPUT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| *Regression Statistics* | | | | | | | | |
| tiple R | 0,774489 | | | | | | | |
| uare | 0,599833 | | | | | | | |
| usted R Square | 0,510907 | | | | | | | |
| ndard Error | 9,500809 | | | | | | | |
| servations | 12 | | | | | | | |
| | | | | | | | | |
| OVA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| gression | 2 | 1217,736 | 608,868 | 6,745311 | 0,016221 | | | |
| sidual | 9 | 812,3883 | 90,26537 | | | | | |
| tal | 11 | 2030,124 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| tercept | -108,075 | 46,72573 | -2,31296 | 0,046013 | -213,775 | -2,3736 | -213,775 | -2,3736 |
| ERAGE EXCHANGE RATE | 75,97544 | 32,55161 | 2,334 | 0,044455 | 2,338587 | 149,6123 | 2,338587 | 149,6123 |
| RCENTAGE CHANGE IN DEX VALUE | 1,21354 | 0,372954 | 3,253862 | 0,009936 | 0,36986 | 2,05722 | 0,36986 | 2,05722 |

# FİNANSBANK

| | | | | | |
|---|---|---|---|---|---|
| | | | **GETİRİ (ABD$ BAZLI)** | | |
| | **BORSA** | | *RETURN (US$ BASED)* | | |
| **TARİH** | **FİYATI** | | **BİLEŞİK** | **AYLIK (%)** | |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* | |
| **06/12** | 5,90 | | 50,07 | 4,64 | |
| **06/11** | 5,80 | | 47,85 | 1,44 | |
| **06/10** | 5,75 | | 47,17 | (2,14) | |
| **06/09** | 6,05 | | 48,21 | 1,75 | |
| **06/08** | 5,75 | | 47,38 | 1,42 | |
| **06/07** | 5,80 | | 46,71 | 5,04 | |
| **06/06** | 7,70 | | 44,47 | 1,36 | |
| **06/05** | 7,55 | | 43,88 | (7,73) | |
| **06/04** | 6,90 | | 47,55 | (8,60) | |
| **06/03** | 7,70 | | 52,03 | 4,10 | |
| **06/02** | 7,20 | | 49,98 | (2,98) | |
| **06/01** | 7,50 | | 51,52 | 27,08 | |

| MMARY OUTPUT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| *Regression Statistics* | | | | | | | | |
| tiple R | 0,463454 | | | | | | | |
| quare | 0,21479 | | | | | | | |
| usted R Square | 0,040299 | | | | | | | |
| ndard Error | 8,857698 | | | | | | | |
| servations | 12 | | | | | | | |
| | | | | | | | | |
| OVA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| gression | 2 | 193,1576 | 96,57881 | 1,230949 | 0,33685 | | | |
| dual | 9 | 706,1293 | 78,45881 | | | | | |
| tal | 11 | 899,2869 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| ercept | 6,816821 | 43,56285 | 0,156482 | 0,879107 | -91,7292 | 105,3628 | -91,7292 | 105,3628 |
| ERAGE EXCHANGE RATE | -3,26809 | 30,34818 | -0,10769 | 0,916607 | -71,9205 | 65,38427 | -71,9205 | 65,38427 |
| CENTAGE CHANGE IN EX VALUE | 0,525083 | 0,347709 | 1,510125 | 0,165293 | -0,26149 | 1,311655 | -0,26149 | 1,311655 |

| DIŞBANK | | | | |
|---|---|---|---|---|
| | | | GETİRİ (ABD$ BAZLI) | |
| | BORSA | | *RETURN (US$ BASED)* | |
| TARİH | FİYATI | | BİLEŞİK | AYLIK (%) |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| 06/12 | 5,34 | | 6,46 | 20,99 |
| 06/11 | 4,54 | | 5,34 | (6,05) |
| 06/10 | 4,86 | | 5,68 | 16,38 |
| 06/09 | 4,30 | | 4,88 | (5,49) |
| 06/08 | 4,40 | | 5,17 | 15,42 |
| 06/07 | 3,90 | | 4,48 | 7,08 |
| 06/06 | 3,86 | | 4,18 | (18,73) |
| 06/05 | 4,72 | | 5,14 | (31,96) |
| 06/04 | 5,85 | | 7,56 | (5,29) |
| 06/03 | 6,30 | | 7,98 | (17,69) |
| 06/02 | 7,45 | | 9,70 | 7,56 |
| 06/01 | 7,00 | | 9,02 | 7,01 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MARY OUTPUT | | | | | | | | |
| | | | | | | | | |
| *egression Statistics* | | | | | | | | |
| ple R | 0,834401 | | | | | | | |
| are | 0,696226 | | | | | | | |
| sted R Square | 0,62872 | | | | | | | |
| dard Error | 9,847243 | | | | | | | |
| ervations | 12 | | | | | | | |
| | | | | | | | | |
| VA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| ession | 2 | 2000,189 | 1000,095 | 10,31364 | 0,004693 | | | |
| dual | 9 | 872,7137 | 96,96819 | | | | | |
| l | 11 | 2872,903 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| cept | -35,5175 | 48,42951 | -0,73339 | 0,481989 | -145,073 | 74,03768 | -145,073 | 74,03768 |
| AGE EXCHANGE RATE | 24,20344 | 33,73856 | 0,717382 | 0,491337 | -52,1185 | 100,5254 | -52,1185 | 100,5254 |
| ENTAGE CHANGE IN EX VALUE | 1,753629 | 0,386553 | 4,53658 | 0,001413 | 0,879185 | 2,628073 | 0,879185 | 2,628073 |

# GARANTİ BANKASI

| | | | | |
|---|---|---|---|---|
| | | | **GETİRİ (ABD$ BAZLI)** | |
| | **BORSA** | | *RETURN (US$ BASED)* | |
| **TARİH** | **FİYATI** | | **BİLEŞİK** | **AYLIK (%)** |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| **06/12** | 4,68 | | 14,30 | (0,13) |
| **06/11** | 4,82 | | 14,32 | (9,40) |
| **06/10** | 5,35 | | 15,81 | 22,96 |
| **06/09** | 4,48 | | 12,86 | 1,22 |
| **06/08** | 4,28 | | 12,70 | 1,83 |
| **06/07** | 4,30 | | 12,47 | 15,66 |
| **06/06** | 3,94 | | 10,78 | (17,04) |
| **06/05** | 4,72 | | 13,00 | (26,97) |
| **06/04** | 5,45 | | 17,80 | 12,10 |
| **06/03** | 5,00 | | 15,88 | (18,20) |
| **06/02** | 5,95 | | 19,41 | (1,42) |
| **06/01** | 6,10 | | 19,69 | 26,56 |

| SUMMARY OUTPUT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| *Regression Statistics* | | | | | | | | |
| Multiple R | 0,931985 | | | | | | | |
| R Square | 0,868597 | | | | | | | |
| Adjusted R Square | 0,839396 | | | | | | | |
| Standard Error | 6,688437 | | | | | | | |
| Observations | 12 | | | | | | | |
| | | | | | | | | |
| ANOVA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| Regression | 2 | 2661,363 | 1330,681 | 29,74574 | 0,000108 | | | |
| Residual | 9 | 402,6166 | 44,73518 | | | | | |
| Total | 11 | 3063,979 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| Intercept | -20,4979 | 32,89426 | -0,62315 | 0,548652 | -94,9099 | 53,91406 | -94,9099 | 53,9140 |
| AVERAGE EXCHANGE RATE | 14,77344 | 22,91588 | 0,644681 | 0,535218 | -37,0659 | 66,61275 | -37,0659 | 66,6127 |
| PERCENTAGE CHANGE IN INDEX VALUE | 2,009913 | 0,262554 | 7,655231 | 3,14E-05 | 1,415974 | 2,603852 | 1,415974 | 2,60385 |

# GSD HOLDİNG

| | | | | |
|---|---|---|---|---|
| | | | **GETİRİ (ABD$ BAZLI)** | |
| | **BORSA** | | *RETURN (US$ BASED)* | |
| **TARİH** | **FİYATI** | | **BİLEŞİK** | **AYLIK (%)** |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| **06/12** | 1,18 | | 0,76 | (2,90) |
| **06/11** | 1,25 | | 0,78 | (13,90) |
| **06/10** | 1,46 | | 0,91 | 28,49 |
| **06/09** | 1,17 | | 0,71 | (10,20) |
| **06/08** | 1,26 | | 0,79 | 1,50 |
| **06/07** | 1,27 | | 0,78 | (4,54) |
| **06/06** | 1,41 | | 0,81 | (0,62) |
| **06/05** | 1,41 | | 0,82 | (22,79) |
| **06/04** | 1,54 | | 1,06 | (1,21) |
| **06/03** | 1,59 | | 1,07 | (19,89) |
| **06/02** | 2,41 | | 1,34 | 10,21 |
| **06/01** | 2,21 | | 1,21 | 1,20 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MARY OUTPUT | | | | | | | | |
| | | | | | | | | |
| egression Statistics | | | | | | | | |
| le R | 0,836202 | | | | | | | |
| are | 0,699234 | | | | | | | |
| ted R Square | 0,632397 | | | | | | | |
| ard Error | 8,302548 | | | | | | | |
| vations | 12 | | | | | | | |
| | | | | | | | | |
| A | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| ession | 2 | 1442,31 | 721,1551 | 10,46179 | 0,004488 | | | |
| dual | 9 | 620,3907 | 68,9323 | | | | | |
| l | 11 | 2062,701 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| ept | -55,3855 | 40,83258 | -1,3564 | 0,208018 | -147,755 | 36,98425 | -147,755 | 36,98425 |
| GE EXCHANGE RATE | 36,67199 | 28,44613 | 1,289173 | 0,229484 | -27,6776 | 101,0216 | -27,6776 | 101,0216 |
| NTAGE CHANGE IN VALUE | 1,486109 | 0,325916 | 4,559789 | 0,001367 | 0,748835 | 2,223382 | 0,748835 | 2,223382 |

| HÜRRİYET GAZETECİLİK | | | | |
|---|---|---|---|---|
| | | | GETİRİ (ABD$ BAZLI) | |
| | BORSA | | *RETURN (US$ BASED)* | |
| TARİH | FİYATI | | BİLEŞİK | AYLIK (%) |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| 06/12 | 3,74 | | 19,69 | (4,30) |
| 06/11 | 4,02 | | 20,57 | (3,28) |
| 06/10 | 4,18 | | 21,27 | 13,26 |
| 06/09 | 3,80 | | 18,78 | 5,60 |
| 06/08 | 3,48 | | 17,79 | 2,89 |
| 06/07 | 3,46 | | 17,29 | 13,18 |
| 06/06 | 3,24 | | 15,27 | (25,46) |
| 06/05 | 4,32 | | 20,49 | (23,32) |
| 06/04 | 4,85 | | 26,72 | (3,95) |
| 06/03 | 5,15 | | 27,82 | (9,68) |
| 06/02 | 5,55 | | 30,80 | 1,98 |
| 06/01 | 5,50 | | 30,20 | 5,50 |

| MARY OUTPUT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| *Regression Statistics* | | | | | | | | |
| iple R | 0,767985 | | | | | | | |
| uare | 0,5898 | | | | | | | |
| sted R Square | 0,498645 | | | | | | | |
| dard Error | 8,778218 | | | | | | | |
| ervations | 12 | | | | | | | |
| | | | | | | | | |
| OVA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| ression | 2 | 997,1606 | 498,5803 | 6,470269 | 0,018133 | | | |
| dual | 9 | 693,514 | 77,05711 | | | | | |
| al | 11 | 1690,675 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| ercept | -16,5988 | 43,17197 | -0,38448 | 0,709549 | -114,261 | 81,06294 | -114,261 | 81,06294 |
| ERAGE EXCHANGE RATE | 10,011 | 30,07587 | 0,332858 | 0,746864 | -58,0253 | 78,04735 | -58,0253 | 78,04735 |
| CENTAGE CHANGE IN EX VALUE | 1,231602 | 0,344589 | 3,574125 | 0,005985 | 0,452089 | 2,011116 | 0,452089 | 2,011116 |

# İŞ BANKASI (C)

| | | | | |
|---|---|---|---|---|
| | | | **GETİRİ (ABD$ BAZLI)** | |
| | **BORSA** | | *RETURN (US$ BASED)* | |
| **TARİH** | **FİYATI** | | **BİLEŞİK** | **AYLIK (%)** |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| **06/12** | 6,50 | | 31,80 | 10,51 |
| **06/11** | 6,05 | | 28,77 | (9,86) |
| **06/10** | 9,45 | | 31,92 | 20,87 |
| **06/09** | 8,05 | | 26,41 | (7,87) |
| **06/08** | 8,45 | | 28,67 | 8,06 |
| **06/07** | 8,00 | | 26,53 | 8,70 |
| **06/06** | 7,80 | | 24,41 | (15,74) |
| **06/05** | 9,20 | | 28,97 | (30,11) |
| **06/04** | 11,10 | | 41,44 | 2,36 |
| **06/03** | 11,20 | | 40,49 | (12,79) |
| **06/02** | 12,50 | | 46,42 | 5,28 |
| **06/01** | 12,00 | | 44,10 | 4,27 |

| MMARY OUTPUT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| *Regression Statistics* | | | | | | | | |
| ltiple R | 0,880594 | | | | | | | |
| quare | 0,775445 | | | | | | | |
| usted R Square | 0,725544 | | | | | | | |
| ndard Error | 7,397151 | | | | | | | |
| servations | 12 | | | | | | | |
| | | | | | | | | |
| OVA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| gression | 2 | 1700,592 | 850,2959 | 15,53965 | 0,001205 | | | |
| sidual | 9 | 492,4606 | 54,71785 | | | | | |
| tal | 11 | 2193,053 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| tercept | -29,0168 | 36,37977 | -0,79761 | 0,445631 | -111,314 | 53,27995 | -111,314 | 53,27995 |
| ERAGE EXCHANGE RATE | 19,34132 | 25,34407 | 0,76315 | 0,464907 | -37,9909 | 76,67359 | -37,9909 | 76,67359 |
| RCENTAGE CHANGE IN DEX VALUE | 1,614964 | 0,290375 | 5,561652 | 0,000351 | 0,95809 | 2,271837 | 0,95809 | 2,271837 |

# İŞ GMYO

| | | | | |
|---|---|---|---|---|
| | | | **GETİRİ (ABD$ BAZLI)** | |
| | **BORSA** | | *RETURN (US$ BASED)* | |
| **TARİH** | **FİYATI** | | **BİLEŞİK** | **AYLIK (%)** |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| **06/12** | 2,90 | | 1,53 | 6,54 |
| **06/11** | 2,80 | | 1,44 | (2,90) |
| **06/10** | 2,90 | | 1,48 | 13,11 |
| **06/09** | 2,64 | | 1,31 | (4,02) |
| **06/08** | 2,66 | | 1,37 | 3,08 |
| **06/07** | 2,64 | | 1,32 | 16,58 |
| **06/06** | 2,40 | | 1,14 | (7,91) |
| **06/05** | 2,59 | | 1,23 | (34,94) |
| **06/04** | 3,42 | | 1,90 | 4,44 |
| **06/03** | 3,34 | | 1,82 | (13,99) |
| **06/02** | 3,78 | | 2,11 | 12,36 |
| **06/01** | 3,40 | | 1,88 | 16,77 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MMARY OUTPUT | | | | | | | | |
| | | | | | | | | |
| *Regression Statistics* | | | | | | | | |
| ltiple R | 0,894337 | | | | | | | |
| Square | 0,799839 | | | | | | | |
| justed R Square | 0,755358 | | | | | | | |
| ndard Error | 7,381086 | | | | | | | |
| servations | 12 | | | | | | | |
| | | | | | | | | |
| NOVA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| gression | 2 | 1959,318 | 979,6588 | 17,98185 | 0,000718 | | | |
| idual | 9 | 490,3239 | 54,48043 | | | | | |
| tal | 11 | 2449,641 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| ercept | -28,5129 | 36,30076 | -0,78546 | 0,452363 | -110,631 | 53,60513 | -110,631 | 53,60513 |
| ERAGE EXCHANGE RATE | 20,47103 | 25,28903 | 0,809483 | 0,439114 | -36,7367 | 77,67878 | -36,7367 | 77,67878 |
| RCENTAGE CHANGE IN DEX VALUE | 1,733231 | 0,289744 | 5,981937 | 0,000207 | 1,077785 | 2,388678 | 1,077785 | 2,388678 |

# KOÇ HOLDİNG

| | | | | |
|---|---|---|---|---|
| | | | **GETİRİ (ABD$ BAZLI)** | |
| | **BORSA** | | *RETURN (US$ BASED)* | |
| **TARİH** | **FİYATI** | | **BİLEŞİK** | **AYLIK (%)** |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| **06/12** | 5,50 | | 85,56 | 13,60 |
| **06/11** | 4,98 | | 75,31 | (11,36) |
| **06/10** | 5,65 | | 84,97 | 19,70 |
| **06/09** | 4,86 | | 70,98 | (13,76) |
| **06/08** | 5,45 | | 82,31 | 7,22 |
| **06/07** | 5,20 | | 76,77 | 16,76 |
| **06/06** | 4,72 | | 65,75 | (15,41) |
| **06/05** | 6,10 | | 77,73 | (29,05) |
| **06/04** | 7,25 | | 109,55 | 3,42 |
| **06/03** | 7,15 | | 105,93 | (13,00) |
| **06/02** | 8,00 | | 121,76 | 10,76 |
| **06/01** | 7,30 | | 109,94 | 16,87 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MARY OUTPUT | | | | | | | | |
| | | | | | | | | |
| *Regression Statistics* | | | | | | | | |
| ple R | 0,904889 | | | | | | | |
| are | 0,818824 | | | | | | | |
| ted R Square | 0,778563 | | | | | | | |
| ard Error | 7,619851 | | | | | | | |
| vations | 12 | | | | | | | |
| | | | | | | | | |
| VA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| ession | 2 | 2361,705 | 1180,852 | 20,33774 | 0,000459 | | | |
| ual | 9 | 522,5591 | 58,06213 | | | | | |
| | 11 | 2884,264 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| cept | -11,7602 | 37,47503 | -0,31382 | 0,760813 | -96,5346 | 73,01416 | -96,5346 | 73,01416 |
| AGE EXCHANGE RATE | 8,589679 | 26,10708 | 0,329017 | 0,74967 | -50,4686 | 67,648 | -50,4686 | 67,648 |
| ENTAGE CHANGE IN VALUE | 1,884931 | 0,299117 | 6,301653 | 0,000141 | 1,208281 | 2,56158 | 1,208281 | 2,56158 |

| MİGROS | | | | |
|---|---|---|---|---|
| | | | GETİRİ (ABD$ BAZLI) | |
| | BORSA | | *RETURN (US$ BASED)* | |
| TARİH | FİYATI | | BİLEŞİK | AYLIK (%) |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| 06/12 | 18,30 | | 135,76 | 23,84 |
| 06/11 | 15,20 | | 109,63 | (9,01) |
| 06/10 | 16,80 | | 120,48 | 13,80 |
| 06/09 | 15,20 | | 105,87 | 4,25 |
| 06/08 | 14,10 | | 101,55 | 19,21 |
| 06/07 | 12,10 | | 85,19 | 0,97 |
| 06/06 | 12,70 | | 84,37 | (2,91) |
| 06/05 | 13,00 | | 86,90 | (31,48) |
| 06/04 | 18,40 | | 126,83 | 12,38 |
| 06/03 | 16,70 | | 112,86 | (6,58) |
| 06/02 | 17,40 | | 120,81 | 20,45 |
| 06/01 | 14,60 | | 100,30 | 13,30 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MARY OUTPUT | | | | | | | | |
| | | | | | | | | |
| *Regression Statistics* | | | | | | | | |
| ple R | 0,813833 | | | | | | | |
| uare | 0,662324 | | | | | | | |
| sted R Square | 0,587285 | | | | | | | |
| dard Error | 10,13335 | | | | | | | |
| ervations | 12 | | | | | | | |
| | | | | | | | | |
| OVA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| ression | 2 | 1812,673 | 906,3364 | 8,826391 | 0,007555 | | | |
| idual | 9 | 924,1634 | 102,6848 | | | | | |
| al | 11 | 2736,836 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| ercept | 17,4514 | 49,83662 | 0,350172 | 0,734265 | -95,2869 | 130,1897 | -95,2869 | 130,1897 |
| RAGE EXCHANGE RATE | -8,75018 | 34,71882 | -0,25203 | 0,806679 | -87,2896 | 69,78925 | -87,2896 | 69,78925 |
| CENTAGE CHANGE IN EX VALUE | 1,612411 | 0,397784 | 4,053482 | 0,00287 | 0,712561 | 2,512262 | 0,712561 | 2,512262 |

| PETKİM | | | | |
|---|---|---|---|---|
| | | | GETİRİ (ABD$ BAZLI) | |
| | BORSA | | *RETURN (US$ BASED)* | |
| TARİH | FİYATI | | BİLEŞİK | AYLIK (%) |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| 06/12 | 5,10 | | 0,64 | 1,86 |
| 06/11 | 5,15 | | 0,62 | (7,51) |
| 06/10 | 5,60 | | 0,67 | 14,18 |
| 06/09 | 5,05 | | 0,59 | (6,98) |
| 06/08 | 5,25 | | 0,63 | (0,54) |
| 06/07 | 5,40 | | 0,64 | 12,21 |
| 06/06 | 5,10 | | 0,57 | (4,37) |
| 06/05 | 5,30 | | 0,59 | (27,33) |
| 06/04 | 6,15 | | 0,82 | 0,36 |
| 06/03 | 6,25 | | 0,82 | (17,23) |
| 06/02 | 7,35 | | 0,98 | (4,15) |
| 06/01 | 7,75 | | 1,03 | 0,37 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MARY OUTPUT | | | | | | | | |
| | | | | | | | | |
| *Regression Statistics* | | | | | | | | |
| tiple R | 0,901011 | | | | | | | |
| uare | 0,811821 | | | | | | | |
| sted R Square | 0,770004 | | | | | | | |
| dard Error | 5,433152 | | | | | | | |
| ervations | 12 | | | | | | | |
| | | | | | | | | |
| OVA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| ression | 2 | 1146,135 | 573,0673 | 19,41342 | 0,000544 | | | |
| dual | 9 | 265,6722 | 29,51914 | | | | | |
| al | 11 | 1411,807 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| ercept | -85,1719 | 26,72067 | -3,18749 | 0,011051 | -145,618 | -24,7256 | -145,618 | -24,7256 |
| ERAGE EXCHANGE RATE | 57,19201 | 18,61503 | 3,072357 | 0,013303 | 15,08189 | 99,30213 | 15,08189 | 99,30213 |
| CENTAGE CHANGE IN EX VALUE | 1,265863 | 0,213278 | 5,935269 | 0,000219 | 0,783394 | 1,748332 | 0,783394 | 1,748332 |

| PETROL OFİSİ | | | | |
|---|---|---|---|---|
| | | | GETİRİ (ABD$ BAZLI) | |
| | BORSA | | *RETURN (US$ BASED)* | |
| TARİH | FİYATI | | BİLEŞİK | AYLIK (%) |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| 06/12 | 4,58 | | 8,88 | (6,71) |
| 06/11 | 5,05 | | 9,52 | (3,26) |
| 06/10 | 5,25 | | 9,84 | 14,04 |
| 06/09 | 4,74 | | 8,63 | (17,41) |
| 06/08 | 5,55 | | 10,45 | (0,39) |
| 06/07 | 5,70 | | 10,49 | 9,83 |
| 06/06 | 5,50 | | 9,55 | (26,63) |
| 06/05 | 7,45 | | 13,02 | (24,20) |
| 06/04 | 8,45 | | 17,17 | (3,16) |
| 06/03 | 8,90 | | 17,73 | 24,65 |
| 06/02 | 6,95 | | 14,23 | 24,32 |
| 06/01 | 5,65 | | 11,44 | (8,10) |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MARY OUTPUT | | | | | | | | |
| | | | | | | | | |
| *Regression Statistics* | | | | | | | | |
| tiple R | 0,489365 | | | | | | | |
| uare | 0,239478 | | | | | | | |
| sted R Square | 0,070473 | | | | | | | |
| ndard Error | 16,43939 | | | | | | | |
| ervations | 12 | | | | | | | |
| | | | | | | | | |
| OVA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| ression | 2 | 765,8929 | 382,9465 | 1,41699 | 0,291744 | | | |
| idual | 9 | 2432,282 | 270,2535 | | | | | |
| al | 11 | 3198,175 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| ercept | 103,1966 | 80,85021 | 1,276393 | 0,233768 | -79,6993 | 286,0925 | -79,6993 | 286,0925 |
| ERAGE EXCHANGE RATE | -72,9887 | 56,32452 | -1,29586 | 0,227269 | -200,404 | 54,42622 | -200,404 | 54,42622 |
| CENTAGE CHANGE IN EX VALUE | 0,507526 | 0,645327 | 0,786463 | 0,451806 | -0,95231 | 1,967359 | -0,95231 | 1,967359 |

# SABANCI HOLDİNG

| | | | | |
|---|---|---|---|---|
| | | | **GETİRİ (ABD$ BAZLI)** | |
| | **BORSA** | | *RETURN (US$ BASED)* | |
| **TARİH** | **FİYATI** | | **BİLEŞİK** | **AYLIK (%)** |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| **06/12** | 5,55 | | 3,77 | 1,04 |
| **06/11** | 5,65 | | 3,74 | (7,61) |
| **06/10** | 6,15 | | 4,04 | 18,36 |
| **06/09** | 5,35 | | 3,42 | (6,78) |
| **06/08** | 5,55 | | 3,66 | 19,28 |
| **06/07** | 4,76 | | 3,07 | 17,86 |
| **06/06** | 4,28 | | 2,61 | (13,19) |
| **06/05** | 4,90 | | 3,00 | (33,04) |
| **06/04** | 6,25 | | 4,48 | 0,65 |
| **06/03** | 9,50 | | 4,46 | (11,09) |
| **06/02** | 10,40 | | 5,01 | 3,05 |
| **06/01** | 10,20 | | 4,86 | 35,55 |

| MARY OUTPUT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| *egression Statistics* | | | | | | | | |
| iple R | 0,918544 | | | | | | | |
| uare | 0,843723 | | | | | | | |
| sted R Square | 0,808995 | | | | | | | |
| dard Error | 8,065461 | | | | | | | |
| ervations | 12 | | | | | | | |
| | | | | | | | | |
| VA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| ession | 2 | 3160,865 | 1580,433 | 24,29504 | 0,000236 | | | |
| dual | 9 | 585,465 | 65,05166 | | | | | |
| | 11 | 3746,33 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| cept | -22,8952 | 39,66657 | -0,57719 | 0,577961 | -112,627 | 66,83682 | -112,627 | 66,83682 |
| AGE EXCHANGE RATE | 17,43481 | 27,63383 | 0,630923 | 0,543779 | -45,0772 | 79,94687 | -45,0772 | 79,94687 |
| CENTAGE CHANGE IN EX VALUE | 2,192248 | 0,316609 | 6,924142 | 6,88E-05 | 1,476028 | 2,908468 | 1,476028 | 2,908468 |

| ŞEKERBANK | | | | |
|---|---|---|---|---|
| | | | GETİRİ (ABD$ BAZLI) | |
| | BORSA | | *RETURN (US$ BASED)* | |
| TARİH | FİYATI | | BİLEŞİK | AYLIK (%) |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| 06/12 | 4,76 | | 1,24 | (7,62) |
| 06/11 | 5,30 | | 1,35 | (3,96) |
| 06/10 | 5,55 | | 1,40 | 17,58 |
| 06/09 | 4,86 | | 1,19 | (0,85) |
| 06/08 | 4,74 | | 1,20 | (6,75) |
| 06/07 | 5,20 | | 1,29 | 0,20 |
| 06/06 | 5,50 | | 1,29 | (31,25) |
| 06/05 | 7,95 | | 1,87 | (17,74) |
| 06/04 | 8,15 | | 2,28 | 25,95 |
| 06/03 | 6,60 | | 1,81 | (12,59) |
| 06/02 | 7,35 | | 2,07 | 5,37 |
| 06/01 | 7,05 | | 1,96 | 43,34 |

| MARY OUTPUT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| *Regression Statistics* | | | | | | | | |
| ple R | 0,884684 | | | | | | | |
| are | 0,782667 | | | | | | | |
| ted R Square | 0,73437 | | | | | | | |
| dard Error | 10,36389 | | | | | | | |
| rvations | 12 | | | | | | | |
| | | | | | | | | |
| VA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| ession | 2 | 3481,278 | 1740,639 | 16,20552 | 0,00104 | | | |
| dual | 9 | 966,6926 | 107,4103 | | | | | |
| | 11 | 4447,971 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| rcept | 130,8992 | 50,97044 | 2,56814 | 0,03028 | 15,59607 | 246,2024 | 15,59607 | 246,2024 |
| RAGE EXCHANGE RATE | -90,6166 | 35,5087 | -2,55195 | 0,031095 | -170,943 | -10,2903 | -170,943 | -10,2903 |
| CENTAGE CHANGE IN EX VALUE | 1,813941 | 0,406834 | 4,458675 | 0,00158 | 0,893619 | 2,734264 | 0,893619 | 2,734264 |

| ŞİŞE CAM | | | | |
|---|---|---|---|---|
| | | | GETİRİ (ABD$ BAZLI) | |
| | BORSA | | *RETURN (US$ BASED)* | |
| TARİH | FİYATI | | BİLEŞİK | AYLIK (%) |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| 06/12 | 5,00 | | 58,29 | (2,04) |
| 06/11 | 5,25 | | 59,50 | (6,55) |
| 06/10 | 5,65 | | 63,67 | 19,21 |
| 06/09 | 4,88 | | 53,41 | 5,34 |
| 06/08 | 4,48 | | 50,71 | (2,07) |
| 06/07 | 4,68 | | 51,78 | 14,81 |
| 06/06 | 4,32 | | 45,10 | (7,47) |
| 06/05 | 4,64 | | 48,74 | (33,11) |
| 06/04 | 5,85 | | 72,87 | 3,77 |
| 06/03 | 5,75 | | 70,22 | (10,45) |
| 06/02 | 6,25 | | 78,42 | 22,65 |
| 06/01 | 5,15 | | 63,94 | 11,39 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MARY OUTPUT | | | | | | | | |
| | | | | | | | | |
| *Regression Statistics* | | | | | | | | |
| ple R | 0,83823 | | | | | | | |
| are | 0,702629 | | | | | | | |
| sted R Square | 0,636546 | | | | | | | |
| dard Error | 9,209705 | | | | | | | |
| ervations | 12 | | | | | | | |
| | | | | | | | | |
| VA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| ression | 2 | 1803,686 | 901,8428 | 10,6326 | 0,004264 | | | |
| dual | 9 | 763,368 | 84,81867 | | | | | |
| l | 11 | 2567,054 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| ercept | -17,7639 | 45,29405 | -0,39219 | 0,704044 | -120,226 | 84,69841 | -120,226 | 84,69841 |
| RAGE EXCHANGE RATE | 13,33944 | 31,55423 | 0,422747 | 0,682401 | -58,0412 | 84,72007 | -58,0412 | 84,72007 |
| CENTAGE CHANGE IN EX VALUE | 1,656249 | 0,361527 | 4,581266 | 0,001325 | 0,838419 | 2,474079 | 0,838419 | 2,474079 |

# T.S.K.B.

| | | | | |
|---|---|---|---|---|
| | | | GETİRİ (ABD$ BAZLI) | |
| | BORSA | | *RETURN (US$ BASED)* | |
| TARİH | FİYATI | | BİLEŞİK | AYLIK (%) |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| 06/12 | 2,58 | | 13,01 | (4,54) |
| 06/11 | 2,78 | | 13,63 | (10,96) |
| 06/10 | 3,14 | | 15,31 | 17,14 |
| 06/09 | 2,76 | | 13,07 | 2,66 |
| 06/08 | 2,60 | | 12,73 | 16,15 |
| 06/07 | 2,29 | | 10,96 | 15,57 |
| 06/06 | 2,10 | | 9,48 | (24,38) |
| 06/05 | 2,76 | | 12,54 | (32,86) |
| 06/04 | 5,20 | | 18,68 | 5,65 |
| 06/03 | 5,02 | | 17,68 | (17,88) |
| 06/02 | 5,95 | | 21,53 | 6,43 |
| 06/01 | 5,65 | | 20,23 | 24,87 |

| MARY OUTPUT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| *Regression Statistics* | | | | | | | | |
| ple R | 0,928902 | | | | | | | |
| are | 0,862859 | | | | | | | |
| sted R Square | 0,832384 | | | | | | | |
| dard Error | 7,43738 | | | | | | | |
| ervations | 12 | | | | | | | |
| | | | | | | | | |
| VA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| ression | 2 | 3132,252 | 1566,126 | 28,31306 | 0,000131 | | | |
| idual | 9 | 497,8316 | 55,31462 | | | | | |
| | 11 | 3630,084 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| ercept | -8,66386 | 36,57762 | -0,23686 | 0,818067 | -91,4082 | 74,08047 | -91,4082 | 74,08047 |
| RAGE EXCHANGE RATE | 5,976849 | 25,4819 | 0,234553 | 0,819805 | -51,6672 | 63,62091 | -51,6672 | 63,62091 |
| CENTAGE CHANGE IN EX VALUE | 2,163389 | 0,291954 | 7,410034 | 4,06E-05 | 1,502943 | 2,823835 | 1,502943 | 2,823835 |

# TOFAŞ OTO. FAB.

| | | | | |
|---|---|---|---|---|
| | | | **GETİRİ (ABD$ BAZLI)** | |
| | **BORSA** | | *RETURN (US$ BASED)* | |
| **TARİH** | **FİYATI** | | **BİLEŞİK** | **AYLIK (%)** |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| **06/12** | 4,90 | | 1,84 | 0,80 |
| **06/11** | 5,00 | | 1,82 | 4,32 |
| **06/10** | 4,82 | | 1,75 | 22,24 |
| **06/09** | 4,06 | | 1,43 | (1,84) |
| **06/08** | 4,00 | | 1,46 | 1,29 |
| **06/07** | 4,04 | | 1,44 | 3,42 |
| **06/06** | 4,14 | | 1,39 | 6,59 |
| **06/05** | 3,86 | | 1,30 | (21,27) |
| **06/04** | 4,24 | | 1,66 | 1,51 |
| **06/03** | 4,26 | | 1,63 | (5,33) |
| **06/02** | 4,38 | | 1,72 | 5,40 |
| **06/01** | 4,20 | | 1,64 | 50,34 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MMARY OUTPUT | | | | | | | | |
| | | | | | | | | |
| *Regression Statistics* | | | | | | | | |
| ltiple R | 0,796618 | | | | | | | |
| quare | 0,6346 | | | | | | | |
| usted R Square | 0,553401 | | | | | | | |
| ndard Error | 11,47188 | | | | | | | |
| servations | 12 | | | | | | | |
| | | | | | | | | |
| NOVA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| gression | 2 | 2057,048 | 1028,524 | 7,815287 | 0,010776 | | | |
| idual | 9 | 1184,437 | 131,6041 | | | | | |
| al | 11 | 3241,485 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| ercept | 6,085309 | 56,41963 | 0,107858 | 0,916475 | -121,545 | 133,7154 | -121,545 | 133,7154 |
| ERAGE EXCHANGE RATE | -0,27709 | 39,30489 | -0,00705 | 0,994529 | -89,1909 | 88,63676 | -89,1909 | 88,63676 |
| CENTAGE CHANGE IN DEX VALUE | 1,742018 | 0,450328 | 3,86833 | 0,003798 | 0,723305 | 2,760732 | 0,723305 | 2,760732 |

# TURKCELL

| | | | | |
|---|---|---|---|---|
| | | | **GETİRİ (ABD$ BAZLI)** | |
| | **BORSA** | | *RETURN (US$ BASED)* | |
| **TARİH** | **FİYATI** | | **BİLEŞİK** | **AYLIK (%)** |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| **06/12** | 7,15 | | 0,64 | 8,16 |
| **06/11** | 6,80 | | 0,59 | (12,88) |
| **06/10** | 7,85 | | 0,68 | 4,97 |
| **06/09** | 7,70 | | 0,65 | 9,50 |
| **06/08** | 6,80 | | 0,59 | 3,83 |
| **06/07** | 6,70 | | 0,57 | (2,06) |
| **06/06** | 7,25 | | 0,58 | 18,69 |
| **06/05** | 7,20 | | 0,49 | (24,96) |
| **06/04** | 8,40 | | 0,65 | (0,38) |
| **06/03** | 8,60 | | 0,65 | (11,88) |
| **06/02** | 9,50 | | 0,74 | 6,09 |
| **06/01** | 9,05 | | 0,70 | 12,20 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MARY OUTPUT | | | | | | | | |
| | | | | | | | | |
| *egression Statistics* | | | | | | | | |
| ple R | 0,71737 | | | | | | | |
| are | 0,514619 | | | | | | | |
| ted R Square | 0,406757 | | | | | | | |
| ard Error | 9,44941 | | | | | | | |
| vations | 12 | | | | | | | |
| | | | | | | | | |
| VA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| ession | 2 | 852,0317 | 426,0158 | 4,771077 | 0,03867 | | | |
| dual | 9 | 803,6221 | 89,29135 | | | | | |
| | 11 | 1655,654 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| cept | -70,2378 | 46,47294 | -1,51137 | 0,164981 | -175,367 | 34,89132 | -175,367 | 34,89132 |
| AGE EXCHANGE RATE | 49,69671 | 32,3755 | 1,53501 | 0,159153 | -23,5418 | 122,9352 | -23,5418 | 122,9352 |
| ENTAGE CHANGE IN X VALUE | 1,089874 | 0,370936 | 2,938171 | 0,016536 | 0,250758 | 1,928989 | 0,250758 | 1,928989 |

| TÜPRAŞ | | | | |
|---|---|---|---|---|
| | | | GETİRİ (ABD$ BAZLI) | |
| | BORSA | | *RETURN (US$ BASED)* | |
| TARİH | FİYATI | | BİLEŞİK | AYLIK (%) |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| 06/12 | 24,20 | | 21,41 | 3,72 |
| 06/11 | 24,00 | | 20,64 | (0,26) |
| 06/10 | 24,20 | | 20,69 | 6,94 |
| 06/09 | 23,30 | | 19,35 | (15,77) |
| 06/08 | 26,75 | | 22,97 | (3,13) |
| 06/07 | 28,25 | | 23,71 | 12,98 |
| 06/06 | 26,50 | | 20,99 | (0,62) |
| 06/05 | 26,50 | | 21,12 | (14,92) |
| 06/04 | 28,00 | | 24,82 | 20,50 |
| 06/03 | 23,70 | | 20,60 | (8,64) |
| 06/02 | 25,25 | | 22,55 | (7,20) |
| 06/01 | 27,50 | | 24,30 | 12,73 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MARY OUTPUT | | | | | | | | |
| | | | | | | | | |
| *Regression Statistics* | | | | | | | | |
| iple R | 0,579495 | | | | | | | |
| uare | 0,335814 | | | | | | | |
| sted R Square | 0,188217 | | | | | | | |
| dard Error | 10,22707 | | | | | | | |
| ervations | 12 | | | | | | | |
| | | | | | | | | |
| VA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| ression | 2 | 475,9421 | 237,9711 | 2,27521 | 0,1586 | | | |
| dual | 9 | 941,3369 | 104,593 | | | | | |
| l | 11 | 1417,279 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| rcept | -9,22264 | 50,29754 | -0,18336 | 0,858579 | -123,004 | 104,5583 | -123,004 | 104,5583 |
| RAGE EXCHANGE RATE | 6,825804 | 35,03992 | 0,194801 | 0,849875 | -72,44 | 86,09162 | -72,44 | 86,09162 |
| CENTAGE CHANGE IN EX VALUE | 0,850755 | 0,401463 | 2,119136 | 0,063126 | -0,05742 | 1,758928 | -0,05742 | 1,758928 |

| TÜRK HAVA YOLLARI | | | | |
|---|---|---|---|---|
| | | | GETİRİ (ABD$ BAZLI) | |
| | BORSA | | *RETURN (US$ BASED)* | |
| TARİH | FİYATI | | BİLEŞİK | AYLIK (%) |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| 06/12 | 6,10 | | 0,99 | 2,03 |
| 06/11 | 6,15 | | 0,97 | (5,57) |
| 06/10 | 6,55 | | 1,03 | 15,29 |
| 06/09 | 5,85 | | 0,89 | 10,93 |
| 06/08 | 5,10 | | 0,80 | 0,33 |
| 06/07 | 5,20 | | 0,80 | 1,12 |
| 06/06 | 5,45 | | 0,79 | (7,41) |
| 06/05 | 5,85 | | 0,85 | (31,96) |
| 06/04 | 7,25 | | 1,26 | (0,07) |
| 06/03 | 7,40 | | 1,26 | (15,75) |
| 06/02 | 8,55 | | 1,49 | 4,74 |
| 06/01 | 8,25 | | 1,42 | (0,75) |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ARY OUTPUT | | | | | | | | |
| | | | | | | | | |
| egression Statistics | | | | | | | | |
| le R | 0,815307 | | | | | | | |
| re | 0,664725 | | | | | | | |
| ed R Square | 0,59022 | | | | | | | |
| rd Error | 7,901202 | | | | | | | |
| vations | 12 | | | | | | | |
| | | | | | | | | |
| A | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| ssion | 2 | 1113,961 | 556,9807 | 8,921828 | 0,007317 | | | |
| al | 9 | 561,8609 | 62,42899 | | | | | |
| | 11 | 1675,822 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| ept | -55,5934 | 38,85873 | -1,43066 | 0,186318 | -143,498 | 32,31111 | -143,498 | 32,31111 |
| GE EXCHANGE RATE | 37,25271 | 27,07104 | 1,376109 | 0,202058 | -23,9862 | 98,49166 | -23,9862 | 98,49166 |
| NTAGE CHANGE IN VALUE | 1,299855 | 0,310161 | 4,1909 | 0,002338 | 0,598221 | 2,001488 | 0,598221 | 2,001488 |

MARY OUTPUT

# ÜLKER GIDA

| | | | GETİRİ (ABD$ BAZLI) | |
|---|---|---|---|---|
| | BORSA | | *RETURN (US$ BASED)* | |
| **TARİH** | **FİYATI** | | **BİLEŞİK** | **AYLIK (%)** |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| **06/12** | 3,78 | | 1,02 | 2,32 |
| **06/11** | 3,80 | | 1,00 | (8,14) |
| **06/10** | 4,16 | | 1,09 | 8,17 |
| **06/09** | 3,96 | | 1,01 | 2,39 |
| **06/08** | 3,74 | | 0,98 | 6,28 |
| **06/07** | 3,60 | | 0,93 | 17,03 |
| **06/06** | 3,26 | | 0,79 | (21,74) |
| **06/05** | 4,14 | | 1,01 | (29,56) |
| **06/04** | 5,05 | | 1,43 | (4,62) |
| **06/03** | 5,40 | | 1,50 | (6,97) |
| **06/02** | 5,65 | | 1,62 | 14,20 |
| **06/01** | 5,00 | | 1,41 | 4,16 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| *egression Statistics* | | | | | | | | |
| ple R | 0,762915 | | | | | | | |
| are | 0,582039 | | | | | | | |
| sted R Square | 0,489158 | | | | | | | |
| ard Error | 9,843212 | | | | | | | |
| rvations | 12 | | | | | | | |
| | | | | | | | | |
| VA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| ession | 2 | 1214,317 | 607,1585 | 6,266548 | 0,019729 | | | |
| ual | 9 | 871,9995 | 96,88883 | | | | | |
| | 11 | 2086,316 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| cept | -6,96979 | 48,40969 | -0,14398 | 0,888692 | -116,48 | 102,5405 | -116,48 | 102,5405 |
| AGE EXCHANGE RATE | 3,941295 | 33,72475 | 0,116867 | 0,909532 | -72,3494 | 80,23197 | -72,3494 | 80,23197 |
| ENTAGE CHANGE IN X VALUE | 1,347451 | 0,386395 | 3,487239 | 0,00686 | 0,473365 | 2,221537 | 0,473365 | 2,221537 |

## VAKIFLAR BANKASI

| | | | | |
|---|---|---|---|---|
| | | | **GETİRİ (ABD$ BAZLI)** | |
| | **BORSA** | | *RETURN (US$ BASED)* | |
| **TARİH** | **FİYATI** | | **BİLEŞİK** | **AYLIK (%)** |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| 6/12 | 6,65 | | 1,23 | 6,05 |
| 6/11 | 6,45 | | 1,16 | (15,21) |
| 6/10 | 7,65 | | 1,37 | 17,57 |
| 6/09 | 6,70 | | 1,17 | (4,01) |
| 6/08 | 6,75 | | 1,22 | 9,61 |
| 6/07 | 6,30 | | 1,11 | 7,69 |
| 6/06 | 6,20 | | 1,03 | (11,98) |
| 6/05 | 7,00 | | 1,17 | (26,47) |
| 6/04 | 8,35 | | 1,59 | 15,87 |
| 6/03 | 7,35 | | 1,37 | (17,77) |
| 6/02 | 8,70 | | 1,67 | 7,23 |
| 6/01 | 8,20 | | 1,56 | 16,59 |

## VAKIFLAR BANKASI

| | | | | |
|---|---|---|---|---|
| | | | GETİRİ (ABD$ BAZLI) | |
| | BORSA | | *RETURN (US$ BASED)* | |
| TARİH | FİYATI | | BİLEŞİK | AYLIK (%) |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| 6/12 | 6,65 | | 1,23 | 6,05 |
| 6/11 | 6,45 | | 1,16 | (15,21) |
| 6/10 | 7,65 | | 1,37 | 17,57 |
| 6/09 | 6,70 | | 1,17 | (4,01) |
| 6/08 | 6,75 | | 1,22 | 9,61 |
| 6/07 | 6,30 | | 1,11 | 7,69 |
| 6/06 | 6,20 | | 1,03 | (11,98) |
| 6/05 | 7,00 | | 1,17 | (26,47) |
| 6/04 | 8,35 | | 1,59 | 15,87 |
| 6/03 | 7,35 | | 1,37 | (17,77) |
| 6/02 | 8,70 | | 1,67 | 7,23 |
| 6/01 | 8,20 | | 1,56 | 16,59 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MARY OUTPUT | | | | | | | | |
| | | | | | | | | |
| *Regression Statistics* | | | | | | | | |
| tiple R | 0,949048 | | | | | | | |
| uare | 0,900692 | | | | | | | |
| usted R Square | 0,878623 | | | | | | | |
| dard Error | 5,231855 | | | | | | | |
| ervations | 12 | | | | | | | |
| | | | | | | | | |
| OVA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| ression | 2 | 2234,322 | 1117,161 | 40,81354 | 3,06E-05 | | | |
| dual | 9 | 246,3508 | 27,37231 | | | | | |
| al | 11 | 2480,672 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| ercept | -2,24705 | 25,73067 | -0,08733 | 0,932322 | -60,4539 | 55,95978 | -60,4539 | 55,95978 |
| ERAGE EXCHANGE RATE | 1,916421 | 17,92535 | 0,106911 | 0,917205 | -38,6335 | 42,46637 | -38,6335 | 42,46637 |
| CENTAGE CHANGE IN EX VALUE | 1,820579 | 0,205376 | 8,864604 | 9,66E-06 | 1,355986 | 2,285172 | 1,355986 | 2,285172 |

## ESTEL

| | | | | |
|---|---|---|---|---|
| | | | **GETİRİ (ABD$ BAZLI)** | |
| | **BORSA** | | *RETURN (US$ BASED)* | |
| **TARİH** | **FİYATI** | | **BİLEŞİK** | **AYLIK (%)** |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| 2 | 3,68 | | 0,29 | 3,42 |
| 1 | 3,66 | | 0,28 | (4,64) |
| 0 | 3,86 | | 0,29 | 12,27 |
| 9 | 3,54 | | 0,26 | (11,31) |
| 8 | 3,86 | | 0,29 | 4,47 |
| 7 | 3,78 | | 0,28 | 15,78 |
| 6 | 3,46 | | 0,24 | (15,72) |
| 5 | 4,08 | | 0,28 | (28,02) |
| 4 | 4,78 | | 0,40 | (11,36) |
| 3 | 5,50 | | 0,45 | (6,89) |
| 2 | 5,75 | | 0,48 | 10,69 |
| 1 | 5,25 | | 0,43 | 6,32 |

| MMARY OUTPUT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| *Regression Statistics* | | | | | | | | |
| tiple R | 0,776523 | | | | | | | |
| uare | 0,602987 | | | | | | | |
| sted R Square | 0,514762 | | | | | | | |
| dard Error | 9,135389 | | | | | | | |
| ervations | 12 | | | | | | | |
| | | | | | | | | |
| OVA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| ression | 2 | 1140,777 | 570,3883 | 6,834654 | 0,015654 | | | |
| dual | 9 | 751,0979 | 83,45533 | | | | | |
| al | 11 | 1891,874 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| ercept | -27,1503 | 44,92856 | -0,6043 | 0,560567 | -128,786 | 74,48513 | -128,786 | 74,4851 |
| ERAGE EXCHANGE RATE | 17,52696 | 31,29961 | 0,559974 | 0,589161 | -53,2777 | 88,33159 | -53,2777 | 88,3315 |
| CENTAGE CHANGE IN EX VALUE | 1,323905 | 0,358609 | 3,691777 | 0,004984 | 0,512675 | 2,135136 | 0,512675 | 2,1351 |

| YAPI VE KREDİ BANK. | | | | |
|---|---|---|---|---|
| | | | GETİRİ (ABD$ BAZLI) | |
| | BORSA | | *RETURN (US$ BASED)* | |
| TARİH | FİYATI | | BİLEŞİK | AYLIK (%) |
| *DATE* | *PRICE* | | *COMPOUND* | *MONTHLY (%)* |
| 06/12 | 2,46 | | 51,64 | (0,38) |
| 06/11 | 2,54 | | 51,84 | (8,77) |
| 06/10 | 2,80 | | 56,82 | 10,04 |
| 06/09 | 2,62 | | 51,64 | (11,41) |
| 06/08 | 2,86 | | 58,29 | 23,98 |
| 06/07 | 2,36 | | 47,02 | 4,65 |
| 06/06 | 2,39 | | 44,93 | (6,85) |
| 06/05 | 2,55 | | 48,23 | (30,63) |
| 06/04 | 3,10 | | 69,53 | 12,27 |
| 06/03 | 7,10 | | 61,94 | (10,25) |
| 06/02 | 7,70 | | 69,01 | 5,88 |
| 06/01 | 7,35 | | 65,18 | 18,60 |

| MMARY OUTPUT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| *Regression Statistics* | | | | | | | | |
| ltiple R | 0,851223 | | | | | | | |
| quare | 0,724581 | | | | | | | |
| usted R Square | 0,663377 | | | | | | | |
| ndard Error | 8,784689 | | | | | | | |
| servations | 12 | | | | | | | |
| | | | | | | | | |
| OVA | | | | | | | | |
| | *df* | *SS* | *MS* | *F* | *Significance F* | | | |
| gression | 2 | 1827,212 | 913,6058 | 11,83876 | 0,00302 | | | |
| sidual | 9 | 694,5369 | 77,17077 | | | | | |
| tal | 11 | 2521,749 | | | | | | |
| | | | | | | | | |
| | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upp 95.0* |
| tercept | 2,449783 | 43,20379 | 0,056703 | 0,956021 | -95,284 | 100,1836 | -95,284 | 100,1 |
| ERAGE EXCHANGE RATE | -1,25262 | 30,09804 | -0,04162 | 0,967712 | -69,3391 | 66,83389 | -69,3391 | 66,83 |
| RCENTAGE CHANGE IN DEX VALUE | 1,639434 | 0,344843 | 4,754153 | 0,001038 | 0,859346 | 2,419522 | 0,859346 | 2,419 |