

To Nilüfer

LONG-RUN AND SHORT-RUN LINKS
AMONG
THE TURKISH STOCK MARKET AND DEVELOPED MARKETS

The Institute of Economics and Social Sciences
of
Bilkent University

by

ISMAIL DEMIRTAS

In Partial Fulfillment of the Requirements for the Degree
of
MASTER OF BUSINESS ADMINISTRATION

in

THE DEPARTMENT OF
MANAGEMENT AND THE GRADUATE SCHOOL OF BUSINESS ADMINISTRATION
BILKENT UNIVERSITY
ANKARA

September 2002

I certify that I have read this thesis and have found that it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Business Administration (Finance).

Assistant Prof. Dr. Levent Akdeniz (Supervisor)

I certify that I have read this thesis and have found that it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Business Administration (Finance).

Prof. Dr. Kürsat Aydoğan

I certify that I have read this thesis and have found that it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Business Administration (Finance).

Assistant Prof. Dr. Erdem Başçı

I certify that this thesis conforms the formal standards of the Institute of Economics and Social Sciences.

Prof. Dr. Kürsat Aydoğan
Director

ABSTRACT

LONG-RUN AND SHORT-RUN LINKS

AMONG

THE TURKISH STOCK MARKET AND DEVELOPED MARKETS

Ismail Demirtaş

M.B.A

Supervisor: Assistant Prof. Dr. Levent Akdeniz

September 2002

One of the striking facts about the international economy is the high degree of integration, or linkage, among financial, or capital markets. Careful examination of international stock market movements in recent years suggests that there exists a substantial degree of interdependence among national stock markets. This thesis tests the interdependence among the Turkish stock market and four major stock markets (US, UK, Germany, France) using daily closing index data for the period between January 1997 and June 2002. Results of the tests showed that the French and German stock markets have significant impacts on the Turkish stock market. The European and US stock markets influence each other in the long-run and short-run. US is the most influential market among the four developed markets. Developed markets almost move together. Therefore, International portfolio diversification among these national markets will not greatly reduce the portfolio risk.

Keywords: Cointegration, integration, Istanbul Stock Exchange, developed markets

ÖZET

TURKIYE BORSASI VE GELİŞMİŞ BORSALAR ARASINDA UZUN DONEM VE KISA DONEM BAĞLANTILAR

Ismail Demirtaş

M.B.A.

Tez Yöneticisi: Y. Doç. Dr. Levent Akdeniz

Eylül 2002

Uluslararası ekonomide dikkati çeken gerçeklerden biri de finans veya sermaye piyasalarındaki entegrasyon ve bağlantıların çokluğudur. Son yıllardaki borsa hareketlerinin dikkatli bir şekilde incelenmesi bize gösterir ki, ulusal borsalar arasında büyük ölçüde birbirine bağımlılık vardır. Bu çalışma ise Türkiye Borsası ile dört gelişmiş borsa (Amerika, İngiltere, Almanya, Fransa) arasındaki bağımlılığı, Ocak 1997 – Haziran 2002 tarihleri arasındaki günlük endex kapanış fiyatlarını kullanarak test etmektedir. Test sonuçları Fransa ve Almanya borsalarının Türkiye borsası üzerinde önemli etkilerinin olduğunu göstermiştir. Avrupa ve Amerika borsaları da birbirlerini uzun dönem ve kısa dönem de etkilemektedir. Amerikan borsası dört gelişmiş borsa arasındaki en etkili borsadır. Gelişmiş borsalar hemen hemen birlikte hareket ederler. Bu yüzden, değişik ülkelerin hisse senetlerine yatırım yapmak portföy riskini büyük ölçüde azaltmayacaktır.

Anahtar Kelimeler: Coentegrasyon, entegrasyon, İstanbul Borsası, gelişmiş borsalar

ACKNOWLEDGEMENT

I would like to express my gratitude to Assistant Prof. Dr. Levent Akdeniz for his guidance, support and encouragement for the preparation of this thesis. I would like to thank my other thesis committee members Prof. Dr. Kürsat Aydoğan and Assistant Prof. Dr. Erdem Bascı for their valuable comments and suggestions. I am grateful to Assistant Prof. Dr. Kıvılcım Metin Özcan, Prof. Dr. Kamil Kozan and Emin Ateş for their help and support. Finally, I would like to express my special thanks to my family especially to my wife for their support and encouragement during my M.B.A. education and this thesis.

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1. INTRODUCTION

At the beginning of the twenty-first century, national economies are becoming more closely interrelated, and the notion of globalization –that we are moving toward a single global economy- is increasingly accepted. Economic influences from abroad have powerful effects on almost every country. Economic policies of developed countries have even more substantial effects on developing countries. One of the striking facts about the international economy is the high degree of integration, or linkage, among financial, or capital markets. Increasing volume of international capital flows, flexible exchange rates and rapid advances, which reduce the costs of global communications, in information technology and computerization are some of the factors that encouraged the high degree of integration among world stock markets.

Today, we are living in a world environment in which we have much freer international movement of capital flows and information. The interactions among the World `s stock markets have received much attention from economists and investors. Investors have recognized the existence of international business. Portfolio managers shop around the world for the most attractive yields. The extent of international financial integration is one of the important discussion topics in recent years.

The aim of this thesis is to analyze cointegration and dynamic interactions among five stock exchanges which consists of one emerging and four developed markets.

The emerging stock market is Istanbul Stock Exchange, and the developed markets are New York Stock Exchange, Frankfurt Stock Exchange, London Stock Exchange and Paris Stock Exchange. Daily data was used for the period between January 1997 and June 2002. Turkey has one of the most liberal foreign exchange regimes in the world and there are no restrictions on foreign portfolio investors trading in Istanbul Stock Exchange since 1989. The Turkish stock and bond markets are open to foreign investors, without any restrictions on the repatriation of capital and profits. Turkish citizens also can buy foreign securities. The findings of this study indicate the possibility to estimate the movements in ISE or in one of the examined developed markets by analyzing the movements in other developed markets. Since ISE is the only young and developing market among the five markets, we will test whether ISE index can be predicted by the indices of four markets in recent years, but not vice versa. So this study can also be considered interesting in terms of providing recent evidence about the predictability of stock prices on ISE and four developed markets.

In this thesis, the testing procedure is as follows, first five series are tested for stationarity by applying the Dickey-Fuller Unit Root Test (Dickey and Fuller, 1981) and the Phillips-Perron Unit Root Test (Phillips and Perron, 1988) at levels and the first difference. Then Engle and Granger (1987) two-step cointegration technique is applied to test for cointegration. After applying cointegration analysis, we used the Vector Error Correction Model (VEC) which combines long-run information with a short-run adjustment mechanism.

2. LITERATURE REVIEW

Many studies analyzed the interdependence and cointegration of stock markets in the United States, Europe, Japan and Asian countries. Since the United States stock market is the most influential stock market in the world, it has been a major market that has been studied by many authors for analysis of interactions between national stock markets. Many studies have shown that the U.S. market had a significant influence on other markets and that it played a leading role.

Cointegration analysis and error correction models are widely used in the literature to examine the interaction between stock markets. Some studies examined the interaction among developed stock markets, while others examined the interaction between developed and emerging markets.

Careful examination of international stock market movements in recent years suggests that there exists a substantial degree of interdependence among national stock markets. Furthermore, unexpected developments in international stock markets seem to have become important “news” events that influence domestic stock markets (Eun and Shim, 1989).

The stock market crash of October 1987 is the most dramatic single event in world financial history. According to Furstenberg and Jeon (1989), the correlations among the world’s stock markets increased substantially after October 1987. They used daily data on stock prices from four major world stock markets (New York,

Tokyo, Frankfurt, London) and compared fluctuations before and after the crash of October 1987. A four variable vector auto regression (VAR) system was set up for investigating the interdependence of these markets. They concluded that the degree of co-movements in the four major stock markets increased significantly after the crash.

Arshanapalli and Doukas (1993) investigated the linkages and dynamic interactions between five developed capital markets: the German, British, French, Japanese, and US capital markets after the crash of October 1987. Daily market indices were used for the period between 1988 to 1990. The Dickey-Fuller and Augmented Dickey-Fuller unit root tests were employed to test for unit root in stock index series,. All stock index series were found to be $I(1)$. For the pre-crash period, cointegration test results reported that the French, German and UK stock markets are not related to the US stock market . For the post-crash period, however, they found that the three major European stock markets are strongly cointegrated with the US stock market. The US stock market was found to have a substantial impact on the French, German, and UK markets. In addition, no relationship was observed between the Japanese stock market and the European stock markets.

Malliaris and Urrutia (1992) investigated the relationship among five major European stock markets: The UK, France, Germany, Italy, and Belgium. Daily stock market indices were used for the period between 1989 to 1992. Vector error correction model was used to report long-term and short-term relationships. The results showed that significant long-term and short-term links exist among the

European markets. These findings showed that these markets are not independent but move together.

Becker, Finnerty and Gupta (1990) investigated the intertemporal relation between New York Stock Exchange and Tokyo Stock Exchange. Daily opening and closing data was used for the period, from 1985 to 1988. Correlations and regressions are calculated on the local and common currency returns. They found a high correlation between the open to close returns for U.S. stocks in the previous trading day and the Japanese equity market performance in the current period. While the U.S. performance greatly influences open to close stock returns in Japan the next day, they found that the change in Tokyo Stock Exchange has only a slight impact on the New York Stock Exchange performance the same day.

According to Eun and Shim (1989), a substantial amount of multi-lateral interaction exists among national stock markets. They used vector autoregressive analysis for nine markets using daily closing data from 1979 to 1985. The nine markets included in the study are Australia, Canada, France, Germany, Hong Kong, Japan, Switzerland, the United Kingdom, and the United States. As can be expected, the U.S. stock market turns out to be, by far, the most influential in the world. Innovations in the U.S. stock market are rapidly transmitted to other markets in a clearly recognizable pattern, whereas no single foreign market can significantly explain the U.S. market movements.

Bayar (2002), examined the cointegration between two developed markets which are France and Germany by the French stocks listing on the both Paris and Bourse

and the Frankfurt Stock Exchange. She applied Augmented Dickey-Fuller Unit Root Test and the Phillips-Perron Unit Root Test to test for unit root at levels and the first difference. It is illustrated that 25 of the 27 cross-listed logarithmic stock price series on the both markets are integrated of order one. Results of the Engle and Granger's Cointegration Test showed that the French stock market and the German stock market are cointegrated. Error correction model was used to examine price adjustment process between markets. When a deviation from equilibrium occurs, an adjustment towards the equilibrium is observed for all of the stock prices on the Frankfurt Stock Exchange. However, significant responses to price differentials are not observed for most of the stock prices on the Paris Bourse. She reported that the two developed markets are cointegrated and the price adjustment process occurs on both of the markets.

Hakim (2001) analyzed the integration and the interdependence of the Cairo Stock Exchange with seven stock markets (Amman, Bahrain, Casa, Istanbul, Kuwait, Saudi, New York) by using weekly closing data which covers the period May 1995, through May 2000. He uses Dickey-Fuller Unit Root Test, Granger Causality Tests, Johansen Cointegration Test and vector error correction model. He found that Cairo Stock Exchange has short-term links with Amman, Istanbul, Tel Aviv and the U.S. pairwise cointegration analysis between Cairo and seven other markets indicated that Cairo Stock Exchange has a stable and long-term relation only with the U.S. market.

Muradoglu and Metin (1999) investigated the integration between some emerging markets (Greece, Turkey, Portugal, Jordan, India, South Korea, Malaysia, Philippines, Taiwan, Thailand, Argentina, Brazil, Chile, Columbia, Venezuela, and

Mexico) and three developed markets (London, New York and Tokyo Stock Exchanges) between 1989 and 1998. They used the ADF Unit Root Test and the Engle and Granger Cointegration Test to test for unit root and cointegration respectively. They found that the three developed markets are cointegrated with each other and the emerging markets are affected by other emerging markets in the same region and by the three developed markets.

3. DATA

The data used in this study consists of time series of daily stock market indices at closing time for the following five stock markets: Istanbul (ISE National 100 Price Index - ISE 100), New York (Standard & Poors 500 Composite Price Index - S&P 500), Frankfurt (DAX 100 Performance Price Index - DAX 100), London (Financial Times Stock Exchange 100 Price Index – FTSE100) and Paris (France CAC 40 Price Index - CAC 40). The market capitalization of ISE, NYSE, LSE, FSE and PSE are about \$35 billion, \$12 trillion, \$3 trillion, \$1.5 trillion and \$1.5 trillion respectively. Daily closing data for all five indices have been collected over the period beginning January 1, 1997 and ending June 28, 2002. The sample consists of 1433 daily observations. The line charts of national stock indices (in log) can be seen in Appendices. Data is compiled from *Datastream*. When national stock exchanges were closed because of national holidays, natural disasters or other reasons, the index level was assumed to remain the same as that on the same previous trading day.

The ISE 100 Index is the main index of ISE stock market, consisting of 100 companies. Istanbul Stock Exchange is a dynamic and emerging market with an increasing number of publicly traded companies and strong foreign participation. Istanbul is now the dominant financial market in Middle East and North Africa Region. The S&P 500 Index is one of the best benchmarks in the world for large-cap stocks. By containing 500 companies it has great diversification, and accounts for around 70% of the U.S. market. The Dax 100 Index in Frankfurt represents over 60 % of the equity capitalization of all German Equities, consisting of 100 stocks. The

FTSE 100 Index which consists of the largest 100 UK companies ranked by market capitalization is the leading representative of a wide family of stock market indexes which has been jointly established by the Financial Times, the London Stock Exchange, and the Institute and Faculty of Actuaries. The FTSE 100 Index represents 70 percent of the equity capitalization of all United Kingdom equities. The CAC 40 index, which is the mainstay of the French index family, is the main indicator of the French stock market, consisting of 40 stocks.

4. METHODOLOGY

In this study, the methodology is based on Engle and Granger's (1987) Cointegration Analysis and the Vector Error Correction Model, VEC. The first step of Engle and Granger (1987) two-step procedure is to test for stationarity of the time series. Dickey-Fuller (DF) Unit Root Test (Dickey and Fuller, 1981) and the Phillips-Perron (PP) Unit Root Test (Phillips and Perron, 1988) were applied to test for stationary.

4.1. Unit Root Tests

A time series is a set of data connected in time with a definite ordering given by the sequence in which the observations occurred. Non-stationarity is a very serious matter: regression of one non-stationary variable on another is very likely to yield impressive-seeming regression results which are wholly spurious (Mukherjee, White,

& Wuyts,1998). A time series is stationary when its basic statistical properties (mean, variance, etc.) remain constant over time. The simplest and most widely used tests for unit roots were developed by Dickey and Fuller (1981). In this study, the stationarity of the logged index series is investigated for each index series applying the Dickey-Fuller (DF) Unit Root Test (Dickey and Fuller, 1981) and the Phillips-Perron (PP) Unit Root Test (Phillips and Perron, 1988) at levels and the first difference.

4.1.1. The Dickey-Fuller (DF) Unit Root Test

Dickey-Fuller Unit Root tests are based on regressions. Three such regressions are commonly employed, of which regression (1) is the most complicated (Davidson, & MacKinnon, 1993). The DF test statistics are calculated by using these regressions. The first regression includes both constant and trend. The second regression includes only constant, no trend. The third one has neither constant nor trend. Those three regressions used in this study are as follows:

$$\Delta Y_t = \mu + \beta t + \beta_0 Y_{t-1} + \varepsilon_t \quad (1)$$

$$\Delta Y_t = \mu + \beta_0 Y_{t-1} + \varepsilon_t \quad (2)$$

$$\Delta Y_t = \beta_0 Y_{t-1} + \varepsilon_t \quad (3)$$

Where

Y_t : National Stock Index on day t (in log)

μ : constant

β : coefficient for trend

β_0 : coefficient

ε_t : error term

t : time for t=1, ...,1433

Those specifications are used to test the following hypothesis:

$$\begin{aligned} H_0 & : \beta_0 = 0 \quad (\text{null hypothesis}) \\ H_1 & : \beta_0 < 0 \quad (\text{alternative hypothesis}) \end{aligned}$$

If the β_0 coefficient is significantly smaller than zero, then the null hypothesis that the index series contains unit root is rejected. Alternative hypothesis which means the index series Y_t is stationary accepted. More recently, MacKinnon (1991) has implemented a much larger set of simulations than those tabulated by Dickey and Fuller. So we will use MacKinnon (1991) critical values for rejection of null hypothesis.

4.1.2. The Phillips-Perron (PP) Test

The index series are also examined using the Phillips-Perron Test (PP) to test for a unit root at levels and the first difference. Phillips and Perron (1988) propose a nonparametric method of controlling for higher-order serial correlation in a series. We will employ three regressions to apply PP test. The first regression includes both constant and trend. The second regression includes only constant, no trend. The third one has neither constant nor trend. Phillips-Perron Test is employed using the following test regressions:

$$\Delta Y_t = \mu + \beta t + \beta_0 Y_{t-1} + \varepsilon_t \quad (4)$$

$$\Delta Y_t = \mu + \beta_0 Y_{t-1} + \varepsilon_t \quad (5)$$

$$\Delta Y_t = \beta_0 Y_{t-1} + \varepsilon_t \quad (6)$$

Where

Y_t : National Stock Index on day t (in log)

μ : constant
 β : coefficient for trend
 β_0 : coefficient
 \mathcal{E}_t : error term
 t : time for $t=1, \dots, 1433$

Those specifications are used to test the following hypothesis:

H_0 : $\beta_0 = 0$ (null hypothesis)
 H_1 : $\beta_0 < 0$ (alternative hypothesis)

If the β_0 coefficient is significantly smaller than zero, then the null hypothesis that the index series contains unit root is rejected. Alternative hypothesis which means the index series is stationary accepted.

In the Phillips-Perron test, the t-statistics are corrected for serial correlation using Newey-West (1987) Procedures. For the PP test, we have to specify a truncation lag (q) for the Newey-West correction, that is, the number of periods of serial correlation to include. As advised in Newey and West (1987), we used the formula $q = \text{floor}(4(T/100)^{2/9})$, where T is the number of observations. So, for our sample the truncation lag is $q = 7$.

4.2. Testing For Cointegration

After testing the stationarity of logged index series by the Dickey-Fuller Unit Root Test and Phillips-Perron Unit Root Test, the possible existence of a long-run relationship between the nonstationary index series, which are integrated of $I(1)$, is tested by using the two-step cointegration analysis developed by Engle and Granger (1987). To make an Engle and Granger cointegration test between two series, they must be integrated of the same order (both $I(1)$ or both $I(2)$ etc.). If the series are

integrated of different orders than it is possible to conclude that the two variables are not cointegrated.

The first step in Engle and Granger Cointegration Test is to estimate the long-run relationship between the markets by regressing the log levels of the national stock indices on each other. So that, we can obtain the ordinary least squares (OLS) regression residuals. The ordinary least squares (OLS) regression is as follows:

$$Y_t = a + b X_t + \varepsilon_t \quad (7)$$

Where

- Y_t : dependent variable (dependent index in log)
- X_t : independent variable (independent index in log)
- a : intercept
- b : slope of the regression line
- ε_t : error term
- t : time for $t=1, \dots, 1433$

Y_t is the dependent national stock market index which is affected by the independent national stock market index (X_t).

The second step is to test the existence of unit roots (that is, no cointegration) in the OLS residuals using the DF test. If the residuals from the cointegrating regression are stationary the variables are said to be cointegrated. We know that the residuals will have a zero mean and no trend by construction. We can proceed directly to the unit root tests without a constant or a trend (Mukherjee, White, & Wuyts, 1998). But we employed three regressions again to test the existence of unit root in the OLS residuals. The first regression includes both constant and trend. The second regression includes only constant, no trend. The third one has neither

constant nor trend. To test for a unit root in the OLS residuals, Dickey-Fuller Unit Root Test is employed using the following test regressions:

$$\Delta \hat{\varepsilon}_t = \lambda + \phi t + \psi_0 \hat{\varepsilon}_{t-1} + \omega_t \quad (8)$$

$$\Delta \hat{\varepsilon}_t = \lambda + \psi_0 \hat{\varepsilon}_{t-1} + \omega_t \quad (9)$$

$$\Delta \hat{\varepsilon}_t = \psi_0 \hat{\varepsilon}_{t-1} + \omega_t \quad (10)$$

Where

- $\hat{\varepsilon}_t$: residual (estimated random error on day t)
- λ : constant
- ϕ : coefficient for trend
- ψ_0 : coefficient
- ω_t : error term
- t : time for $t=1, \dots, 1433$

Those specifications are used to test the following hypothesis:

- H_0 : $\psi_0 = 0$ (null hypothesis)
- H_1 : $\psi_0 < 0$ (alternative hypothesis)

If the ψ_0 coefficient is significantly smaller than zero, then the null hypothesis that the OLS residuals contain unit root is rejected. Alternative hypothesis which means the OLS residuals are stationary accepted. Two logarithmic index series are said to be cointegrated when their linear combination is stationary ($\psi_0 < 0$) even though each variable is nonstationary. However, if there is no cointegration between two series, it means that the two series have no long-run link. MacKinnon's (1993) critical values are used to test the residuals of the regressions. If $X_t, Y_t \sim I(1)$ are cointegrated, then some mechanism must exist to ensure the long-run relationship.

4.3. Vector Error Correction Model (VEC)

If two variables are cointegrated, it is usual to proceed to estimation of the error correction model which contains information on both the long-run and short-run relationship between the variables. The full dynamic model is estimated applying the error correction model which embodies both the short-run dynamics and the long run constraint to produce forecasts of the national stock index. According to Engle and Granger (1987), the cointegrated series also have an error correction mechanism and cointegration and error correction models provide mechanisms to analyze long-run price adjustments in internationally linked stock markets. According to the Granger's representation theorem, if $X_t, Y_t \sim I(1)$ are cointegrated, there must exist an ECM representation for either Y_t or X_t (or both) and vice versa. That is, at least one of the variables must respond to (partially) remove the previous disequilibrium Z_{t-1} . The converse also holds, that is, if $X_t, Y_t \sim I(1)$ and an ECM representation holds for either Y_t or X_t , then X_t and Y_t must be cointegrated. The error correction model captures both long-run and short-run relationship between two variables. In this study, the following vector error correction model is employed:

$$Y_t - Y_{t-1} = \alpha_1 Z_{t-1} + \sum_{i=1}^m c_i (X_{t-i} - X_{t-i-1}) + \sum_{j=1}^m d_j (Y_{t-j} - Y_{t-j-1}) + \varepsilon_t \quad (11)$$

where $Z_{t-1} = Y_{t-1} - \alpha X_{t-1}$. The term Z_{t-1} , used in the error correction regressions was obtained from the OLS estimation of time series (equation 7). Note that, all variables in model are $I(0)$. The potential long-run and short-run impact of the series X on the series Y are in the VEC model decomposed as follows:

- a long-run component, represented by the cointegration term $\alpha_1 Z_{t-1}$, also known as the error correction term. The correction adjustments of Y_t to a

disequilibrium error from the previous period Z_{t-1} can spread over several periods of time, with the coefficient α_1 indicating the speed of the correction mechanism.

- a short-run component, given by the summation terms in the right hand side of equation (11). These two terms represent past changes in the variables X and Y and characterize the short-run dynamics. Specifically, the first summation term in equation (11) gives us the short-run impact of X on Y .

Similarly, the potential long run and short-run impact of the series Y on the series X can be expressed in the VEC model as follows:

$$X_t - X_{t-1} = \alpha_1 Z_{t-1} + \sum_{i=1}^m e_i (Y_{t-i} - Y_{t-i-1}) + \sum_{j=1}^m f_j (X_{t-j} - X_{t-j-1}) + \mu_t \quad (12)$$

The series X_t and Y_t are cointegrated when at least one of the coefficients of α_1 or α_1 is different from zero. In this case, the series X_t and Y_t exhibit long-run comovements. The significance and size of the coefficient α_1 shows the speed of adjustment how the series Y_t changes in response to disequilibrium in the long-run. The significance and size of the coefficients α_1 shows the speed of adjustment how the series X_t changes in response to disequilibrium in the long run. There is a short-term relationship between the series X_t and Y_t when at least one of the coefficients of c_i and e_i is different from zero. In the error correction model the lag lengths (m) are allowed to vary up to 4 lags. Akaike's Final Prediction Error (FPE) is calculated for each lag. The orders which have the lowest FPE value are chosen as the optimal.

The error correction model has the standard interpretation: the change in X_t is due to the immediate, short-run effect from the change in Y_t and to last period's

error, Z_{t-1} , which represents the long-run adjustment to past equilibrium. The error correction analysis is important for testing the cross-border market efficiency hypothesis since it describes the long-run dynamic adjustment process between two stock exchange markets.

5. RESULTS

Table 1 reports the characteristics of the data set. It reports the average daily returns and the standard deviations of returns calculated as the log differences of the national stock indices. All of the five national markets have positive average daily returns. ISE 100 has the highest standard deviation of return among the five markets. This result is consistent with the view that the emerging markets have higher volatility than the developed markets (Harvey, 1991). The last two columns of the table show the skewness and kurtosis coefficients. All national index return series have skewness coefficients of less than -0.5 , indicating negative skewness. ISE 100 has the highest kurtosis coefficient (3.291) which is greater than 3 indicating leptokurtosis.

In table 2 correlations of the all possible index pairs are calculated. Results illustrate that all of the correlation coefficients are positive and significant at 1 percent level. The smallest correlation coefficient is equal to 0.591 which is between ISE100 and FTSE100. All possible correlation coefficients between two developed stock markets is greater than 0.8.

Table 1. Descriptive Statistics

	Mean	Std. Deviation	Skewness	Kurtosis	Minimum	Maximum
ISE100	0.00157919	0.03468	-0.047	3.291	-0.20	0.18
S&P500	0.00020228	0.01237	-0.197	2.702	-0.07	0.05
DAX100	0.00027284	0.01480	-0.439	2.301	-0.08	0.06
FTSE100	0.00008566	0.01168	-0.164	1.090	-0.06	0.04
CAC40	0.00036339	0.01452	-0.192	1.488	-0.08	0.06

Table 2. Correlations

	ISE100	S&P500	DAX100	FTSE100	CAC40
ISE100	1.000	0.768***	0.825***	0.591***	0.901***
S&P500	0.768***	1.000	0.910***	0.938***	0.924***
DAX100	0.825***	0.910***	1.000	0.860***	0.956***
FTSE100	0.591***	0.938***	0.860***	1.000	0.808***
CAC40	0.901***	0.924***	0.956***	0.808***	1.000

*** refers to significant correlation at 1 percent level (2-tailed).

5.1 Unit Root Tests

The stationarity of the natural logarithmic index series are examined by the Dickey-Fuller and the Phillips-Perron Unit Root Tests at levels and first differences. DF and PP test results are calculated with the constant, constant and trend, no constant and no trend specifications. Columns of I (0) indicate the results of the tests at levels and columns of I (1) indicates the results of the test at first differences. Table 3 reports the results of DF and PP Unit Root Tests with only constant specification.

Table 3. Results of the Dickey-Fuller (DF) and the Phillips-Perron Unit Root Tests

Index	DF Unit Root Test (constant)		PP Unit Root Test (constant)	
	I (0)	I (1)	I (0)	I (1)
ISE100	-2.297027	-36.79218**	-2.277863	-36.80717**
S&P500	-2.380195	-38.12847**	-2.366000	-38.30187**
DAX100	-2.589634	-36.99213**	-2.591080	-36.98561**
FTSE100	-2.357178	-35.92315**	-2.262246	-35.99196**
CAC40	-2.187474	-36.67103**	-2.199127	-36.66854**

Notes: (1) DF and PP test statistics of I (0) and I(1) reported here are based on regressions with only constant specification. (2) The numbers on the table refer to β_0 coefficients. (3) * and ** refer to significance levels 5% and 1% respectively.

Table 4. Results of the Dickey-Fuller (DF) and the Phillips-Perron Unit Root Tests

Index	DF Unit Root Test (constant, trend)		PP Unit Root Test (constant, trend)	
	I (0)	I (1)	I (0)	I (1)
ISE100	-1.613590	-36.85104**	-1.678458	-36.85941**
S&P500	-1.372095	-38.25125**	-1.192851	-38.48578**
DAX100	-1.620440	-37.10602**	-1.625311	-37.09832**
FTSE100	-1.832797	-36.00751**	-1.657926	-36.12013**
CAC40	-0.807644	-36.79407**	-0.704578	-36.81652**

Notes: (1) ADF and PP test statistics of I (0) and I(1) reported here are based on regressions with constant and trend specification. (2) The numbers on the table refer to β_0 coefficients. (3) * and ** refer to significance levels 5% and 1% respectively.

Table 4 reports the results of DF and PP Unit Root Tests with both constant and trend specifications.

Table 5 reports the results of DF and PP Unit Root Tests without constant and trend specifications.

Table 5. Results of the Dickey-Fuller (DF) and the Phillips-Perron Unit Root Tests

<u>Index</u>	<u>DF Unit Root Test (no constant, no trend)</u>		<u>PP Unit Root Test (no constant, no trend)</u>	
	I (0)	I (1)	I (0)	I (1)
ISE100	1.512540	-36.73196**	1.451425	-36.75473**
S&P500	0.559327	-38.13115**	0.621642	-38.30155**
DAX100	0.630303	-36.99194**	0.624644	-36.98583**
FTSE100	0.243962	-35.93343**	0.272435	-36.00306**
CAC40	0.873583	-36.65917**	0.912561	-36.65380**

Notes: (1) DF and PP test statistics of I (0) and I(1) reported here are based on regressions without constant and trend specification. (2) The numbers on the table refer to β_0 coefficients. (3) * and ** refer to significance levels 5% and 1% respectively.

ADF and PP tests report that all of the logarithmic national stock index series have unit roots at levels, that is, they are not I (0) at 5 percent significance in all specifications. Five market indices are not stationary at levels. However, the DF and PP tests applied on the first differenced series does not exhibit a unit root, that is, all series are I (1) at 1 percent significance level in all specifications.

So both Dickey-Fuller and Phillips-Perron Unit Root Tests showed that all logarithmic national stock index series are not stationary at levels, but their first order differences are stationary at 1 percent significance. There is no difference between the results of DF and PP Unit Root Tests for our sample.

5.2 Cointegration Tests

Since all index series are I (1), cointegration analysis is conducted by using the cointegration technique developed by Engle and Granger (1987). MacKinnon's (1993) critical values are used to test the residuals of the regressions. Dickey-Fuller Unit Root Test results for the OLS residuals at levels are provided. Table 6 reports the results of cointegration tests with constant specification. Table 7 reports the results of cointegration tests with both constant and trend specifications.

Table 6. Results of the Engle and Granger Cointegration Test (constant)

	ISE100	S&P500	DAX100	FTSE100	CAC40
ISE100		-1.479348	-1.639973	-1.075072	-2.077016
S&P500			-3.349329**	-4.721552***	-3.250072**
DAX100		-3.450147***		-2.218268	-3.099909**
FTSE100		-4.800465***	-2.237025		-1.866252
CAC40		-3.055931**	-2.770893*	-1.258668	

Notes: (1) DF test statistics of OLS residuals at levels with constant specification. (2) The numbers on the table refer to ψ_0 coefficients. (3) *, ** and *** refer to significance levels 10%, 5% and 1% respectively.

Table 7. Results of the Engle and Granger Cointegration Test (constant, trend)

	ISE100	S&P500	DAX100	FTSE100	CAC40
ISE100		-2.618994	-3.049461	-2.755533	-2.637565
S&P500			-3.346814*	-7.430631***	-3.642620**
DAX100		-3.458252**		-2.757382	-3.861234**
FTSE100		-6.308779***	-2.654563		-2.797196
CAC40		-3.977974***	-4.101020***	-2.993030	

Notes: (1) DF test statistics of OLS residuals at levels with constant and trend specification. (2) The numbers on the table refer to ψ_0 coefficients. (3) *, ** and *** refer to significance levels 10%, 5% and 1% respectively.

Table 8 reports the results of cointegration tests without constant and trend specifications.

Table 8. Results of the Engle and Granger Cointegration Test (no constant, no trend)

	ISE100	S&P500	DAX100	FTSE100	CAC40
ISE100		-1.480576	-1.641224*	-1.076369	-2.078369**
S&P500			-3.350509***	-4.723362***	-3.251238***
DAX100		-3.451331***		-2.219212**	-3.100898***
FTSE100		-4.802322***	-2.238054**		-1.867169*
CAC40		-3.057101***	-2.771877***	-1.259559	

Notes: (1) DF test statistics of OLS residuals at levels without constant and trend specification. (2) The numbers on the table refer to ψ_0 coefficients. (3) *, ** and *** refer to significance levels 10%, 5% and 1% respectively.

All three types of test results report the cointegration between stock market index series according to the different specifications. Although there are differences among the DF test results of the OLS regression results according to the trend and intercept (constant) specifications, we can say that all three types of DF test results are similar. By looking at the three tables, we can say that table 8, which gives the DF test results without constant and trend specifications, has the most comprehensive results among three tables.

Table 8 reports that Turkey and France are cointegrated at 5 percent significance level. It also reports that cointegration exist between Turkey and Germany at 10 percent significance. These results suggest that the Turkish stock market is influenced significantly by the French and German markets in the long-run.

All three tables report that the US stock market and each of the European stock markets are highly cointegrated. The US stock market influence all three European markets at 1 percent significance level. In contrast, all three European markets influence the US stock market individually at 1 percent significance level.

On the other hand, table 8 reports that the null hypothesis of no cointegration between pairs of European stock markets is rejected. Germany, UK and France are cointegrated with each other at different significance levels. France and Germany are highly cointegrated at 1 percent significance level. Both markets are influenced by each other in the long-run. UK and Germany are cointegrated at 5 percent significance level. The UK market is influenced by the German market in the long-run and vice versa. On the other hand, UK and France are not strongly cointegrated. Table 8 indicates that the null hypothesis of the UK stock market is independent of the French stock market is rejected at 10 percent significance level. But the null hypothesis of the French stock market is independent of the UK stock market is not rejected. In other words, UK is influenced by France but not vice versa.

5.3 Vector Error Correction (VEC)

The findings of cointegration tests indicate that the null hypothesis of no cointegration between the pairs of developed stock markets (the US and European markets) is rejected. The Turkish stock market as an emerging market appears to be cointegrated with the French and German stock markets. According to the Granger's representation theorem, if two variables are cointegrated then there always exist an error correction formulation of the dynamic model and vice versa. So, we next examine the interactions among these markets by using the vector error correction

equations (11 and 12). The term Z_{t-1} , used in the vector error correction regressions was obtained from the OLS estimation of the cointegration equation (7). In long-run equilibrium, the error correction term (Z_{t-1}) is zero. However, if X_t and Y_t series deviated from long-run equilibrium last period, the error correction term is nonzero and each variable adjusts to partially the equilibrium relation. The results of the vector error correction equations are reported in Table 9.

The sign, significance and size of the coefficient a_1 shows the speed of adjustment how the dependent series changes in response to disequilibrium in the long-run. In table 9, if a_1 (the coefficient of the error-correction term) has a negative value and its “t-value” is significant, it indicates the speed of adjustment of the dependent index series (Y_t in equation 11) at day t to correct the previous disequilibrium at day $t-1$.

This result implies that the equilibrium error can be used to predict next period's index changes in that stock market. Error correction analysis also yields information about the “short run” influence of the change in one market on the performance of another market. The t-ratios of c_1, c_2, c_3, c_4 indicates a short-run relationship when at least one of the “t-ratio” of these coefficients is significant.

We will analyze the relations between Turkey and developed markets first. Next, the relations between the US market and the European markets will be analyzed. Finally, we will examine the relations among the three European markets.

Table 9. Vector Error Correction Results

Dependent	Independent	a1	c1	c2	c3	c4	d1	d2	d3	d4	F-statistics	R ²
ISE100	DAX100	-0.00265 (-1.255801)	0.146428 (2.291885)**	0.031455 (-0.490607)			0.01225 (-0.450116)	0.049486 (1.821532)*			(2.406212)**	0.0067
ISE100	CAC40	-0.005152 (-1.861233)*	0.131563 (2.009171)**	0.003042 (-0.046597)	0.08227 (-1.262332)	0.107567 (-1.644585)	0.016249 (-0.596659)	0.048251 (1.77563)*	-0.042164 (-1.551222)	0.041571 (-1.526439)	(2.579591)***	0.01433
S&P500	DAX100	-0.003838 (-0.985777)	0.05264 (1.985958)**	0.00506 (-0.20464)			-0.037981 (-1.272166)	-0.078012 (-2.461956)**			(2.131914)*	0.00595
S&P500	FTSE100	0.014931 (1.923942)*	0.075014 (2.265873)**	-0.036059 (-1.160953)			-0.034759 (-1.181782)	-0.065469 (-2.115718)**			(3.917826)***	0.01087
S&P500	CAC40	-0.001516 (-0.49137)	0.078515 (2.933363)***	0.039972 (1.476518)**	0.026647 (-1.059168)		-0.053575 (-1.791827)*	-0.104673 (-3.270874)***	-0.064638 (-2.056077)**		(2.726864)**	0.01137
DAX100	S&P500	-0.011483 (-2.624898)***	0.46889 (13.91039)***	0.0752 (2.053032)**	0.076623 (2.094375)**	-0.008484 (-0.236795)	-0.160723 (-5.369762)***	-0.083247 (-2.736314)***	-0.015822 (-0.52106)	0.059173 (2.131705)**	(27.84133)***	0.13559
DAX100	FTSE100	-0.011354 (-3.027314)***	0.188856 (4.018067)***	-0.082273 (-1.737885)*			-0.082196 (-2.210572)**	0.005982 (-0.160881)			(8.066377)***	0.02213
DAX100	CAC40	-0.014197 (-2.182393)**	0.193939 (4.451844)***	0.05717 (-1.304834)			-0.127678 (-2.96894)***	-0.079591 (-1.856213)*			(6.984093)***	0.01921
FTSE100	S&P500	-0.01264 (-1.823263)*	0.343834 (13.11776)***	0.069675 (2.480106)**	0.070126 (2.540327)**		-0.111013 (-3.735561)***	-0.155712 (-5.246347)***	-0.061595 (-2.21531)**		(34.5991)***	0.12731
FTSE100	DAX100	-0.00456 (-1.526351)	0.006652 (-0.225596)	0.017136 (-0.578144)	-0.015896 (-0.536473)	0.081994 (2.789084)***	0.043501 (-1.159767)	-0.123477 (-3.274985)***	-0.027762 (-0.737361)	-0.081289 (-2.160176)**	(4.08904)***	0.02252
FTSE100	CAC40	-0.001439 (-0.767737)	-0.00932 (-0.284263)	0.049811 (-1.518628)			0.062828 (-1.541085)	-0.153583 (-3.764576)***			(5.587451)***	0.01543
CAC40	S&P500	-0.009145 (-2.678679)***	0.413689 (12.52329)***	0.001049 (-0.030176)			-0.119739 (-4.044602)***	-0.053821 (-1.932863)**			(45.62696)***	0.11346
CAC40	DAX100	-0.004974 (-0.774972)	0.064985 (-1.531613)	-0.069092 (-1.633209)			-0.019284 (-0.448658)	0.010506 (-0.243036)			(2.31968)*	0.00647
CAC40	FTSE100	-0.005206 (-2.232682)**	0.068032 (-1.341111)	-0.153814 (-3.030017)***			-0.012327 (-0.302148)	0.049132 (-1.203831)			(4.540322)***	0.01258

Notes: (1) The t-ratios are given in parenthesis. (2) The joint significance of the indices is determined by the standard F-test. (3) *, **, and *** refer to significance level 10%, 5% and 1% respectively.

Table 9 reveals that when a deviation from the equilibrium occurs, Istanbul Stock Exchange reacts to make the necessary adjustment for the equilibrium in the long-run between Turkey and France. Coefficients of c_1 show that both Germany and France have important short-run effects on the Turkish market.

When a deviation occurs from the equilibrium between the US market and any of the European markets, the US market gives response only to the UK market to make the necessary adjustment to remove the disequilibrium. According to table 9, Germany, UK and France have significant a_1 coefficients which are -0.0115, -0.0126, -0.0092 respectively to response the disequilibrium with US. For example, when a deviation occurs between Germany and US at day $t-1$, 1.15% of the disequilibrium is removed by the reaction in Germany at day t and no reaction is observed from US. All three European markets react significantly to restore the equilibrium relation with US. Table 9 reports that the European markets have significant short-run impacts on the US market. The coefficients of c_1 , c_2 , c_3 which reports the impact of US on the European markets in the short-run are usually large and significant. This means that US exerts substantial amount of influence on the European markets.

When a deviation from long-run equilibrium occurs between Germany and UK or Germany and France, table 9 reports that Germany reacts to correct the deviation. In other words, Germany gives responses partially to restore both of the equilibriums. When a deviation from long-run equilibrium occurs between UK and Germany or UK and France, UK does not give any response to make the necessary adjustment to remove the previous disequilibrium. When a deviation from long run equilibrium is observed between France and UK, the French stock market reacts to remove the

fraction of the previous disequilibrium. In contrast, the French market does not react for the deviation from long-run equilibrium between France and Germany.

Among the European markets, France and UK have significant impacts on Germany in the short-run. UK is influenced by the German stock market in the short-run. France does not have a short-run impact on UK. Table 9 also reports that, France is influenced by UK in the short-run. Germany does not have a significant short-run impact on France.

6. CONCLUSION

Today, we are living in a world environment in which we have much freer international movement of capital flows and information. The interactions and integration among the World's stock markets have received much attention from economists and investors.

The aim of this thesis is to analyze long-run and short-run linkages and dynamic interactions among five stock exchanges which consists of one emerging and four developed markets. The emerging stock market is Istanbul Stock Exchange, and the developed markets are New York, Frankfurt, London and Paris. Cointegration analysis and vector error correction model were used. Daily stock markets indices at closing time were used for the period between January 1997 and June 2002. The sample consists of 1433 daily observations.

Tests of stationary allow us to conclude that all time series are non-stationary at levels at 5 percent significance, but first differenced series are stationary. Thus, all national stock market index series are integrated of order one, $I(1)$, and the use of cointegration analysis and error correction model is appropriate to test for long-run and short-run relationships between stock markets.

As an emerging and young market, Turkey is influenced significantly by the French and German markets both in the long-run and short-run. Moreover, when a

deviation from the equilibrium occurs between Turkey and France, Turkey reacts to make the necessary adjustment for the equilibrium in the long-run.

The US market and each of the three European markets are highly cointegrated. The European markets are influenced by the US market both in the long-run and short-run and vice versa. When a deviation from long-run equilibrium occurs between US and any of the three European countries, error correction results point out that index adjustment process occurs on that European stock market. US only gives reactions to UK to restore the equilibrium in the long-run. This result is consistent with the view that innovations in the US market are rapidly transmitted to other markets in a clearly recognizable fashion. Our results also prove that US is the most influential market among the four developed markets.

All possible pairs of three European markets are cointegrated and this shows the existence of links between any market pair. This can be explained by the fact that the three countries are members of the European Union. When a deviation from long-run equilibrium occurs between Germany and UK or Germany and France, index adjustment process occurs only on the German stock market but not on the other stock market. When a deviation from long-run equilibrium occurs between France and UK, index adjustment process occurs only on the French stock market but not on the UK market. UK seems to be the most influential market among the three European countries. The reason for this result can be explained by the fact that UK has the largest stock exchange in Europe.

Although cointegration exists between the pairs of developed markets, this does not indicate useful and profitable predictability. One should be careful in considering the closing time differences of these stock markets. The error correction may as well be the result of these time differences.

As a result, the markets have been globalized. Especially developed stock markets are not independent from each other but move together. Previous studies have made a strong case for international portfolio diversification to reduce risk. And it makes sense for the investors. However, this study reports that national stock markets lack interdependence is rejected for the examined stock markets because of significant reported short-run and long-run relationships. Therefore, diversification among national markets will not reduce the portfolio risk substantially.

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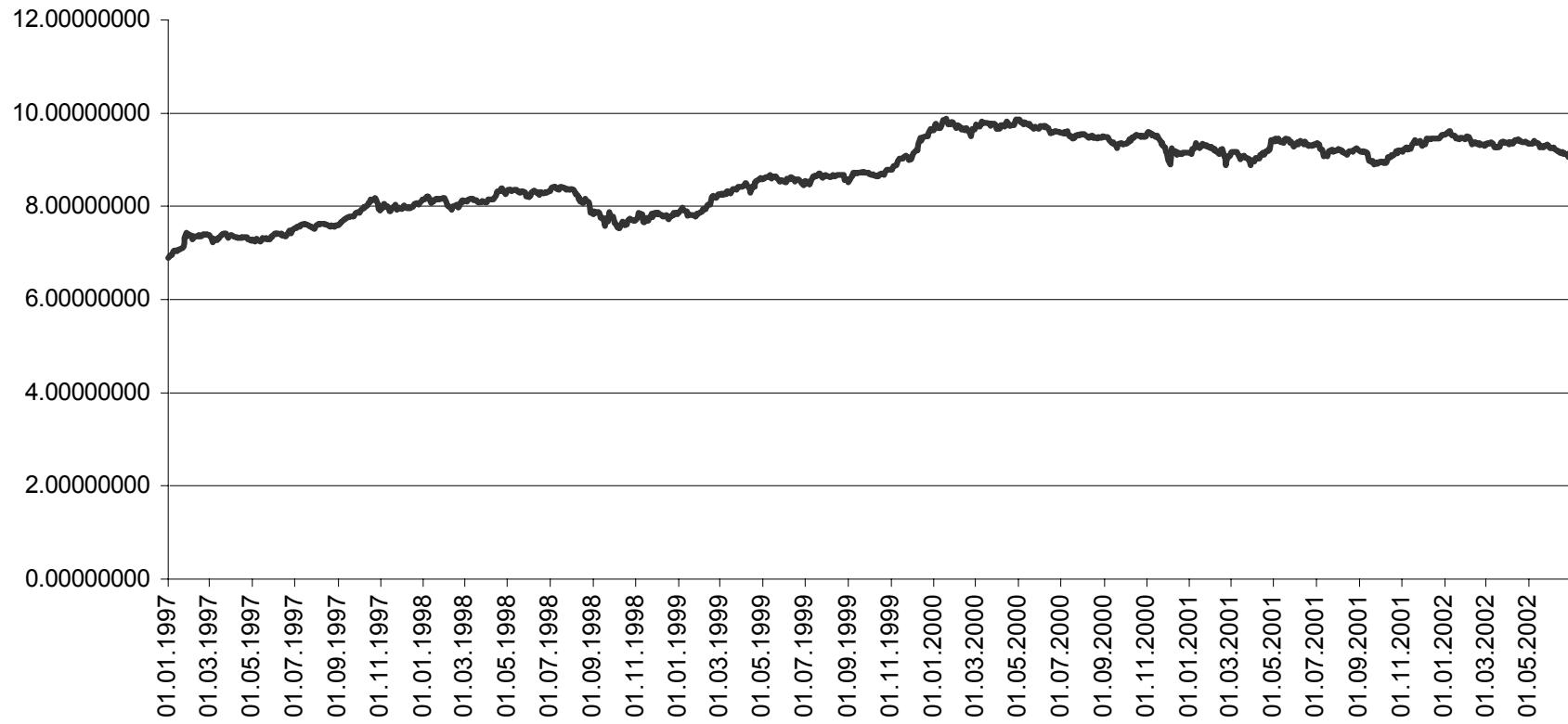
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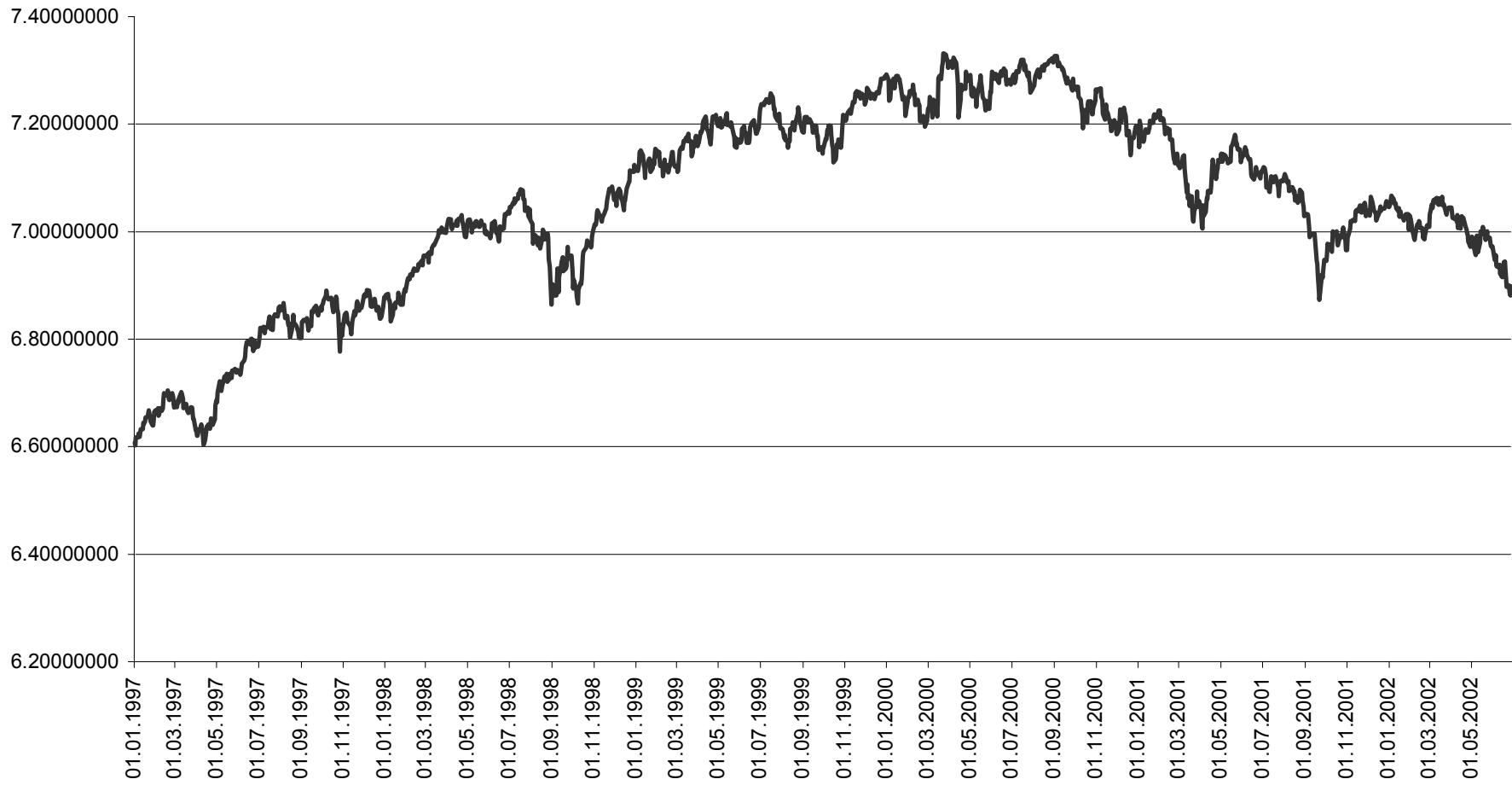
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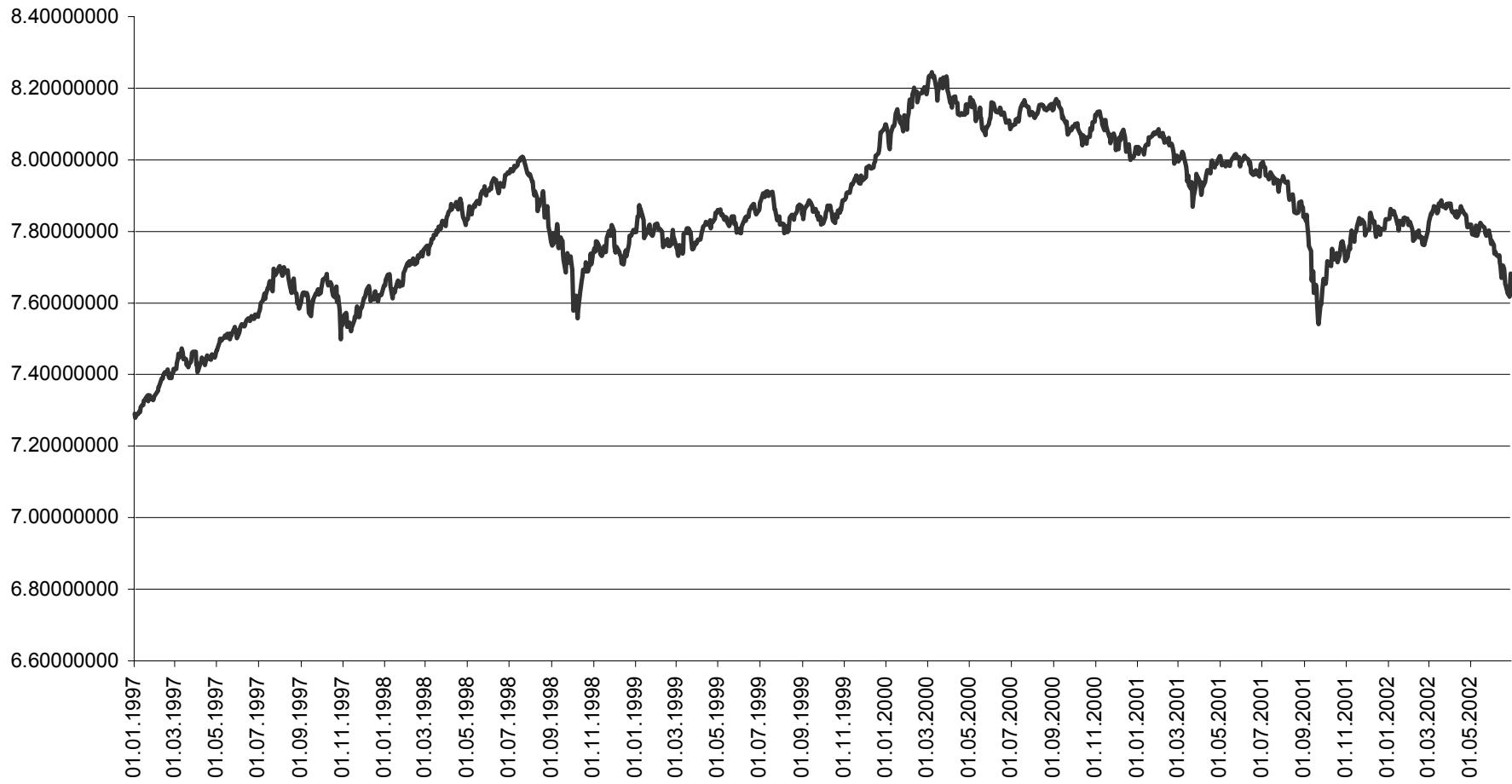
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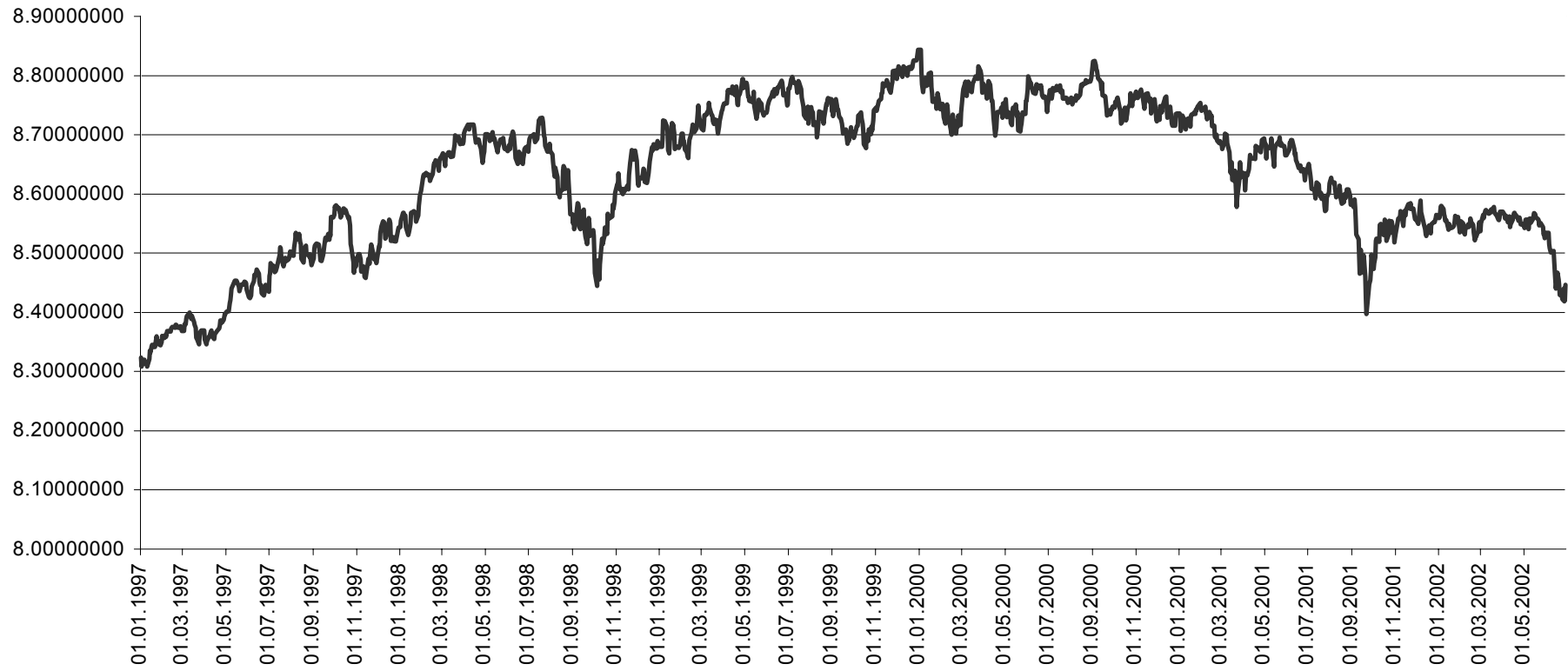
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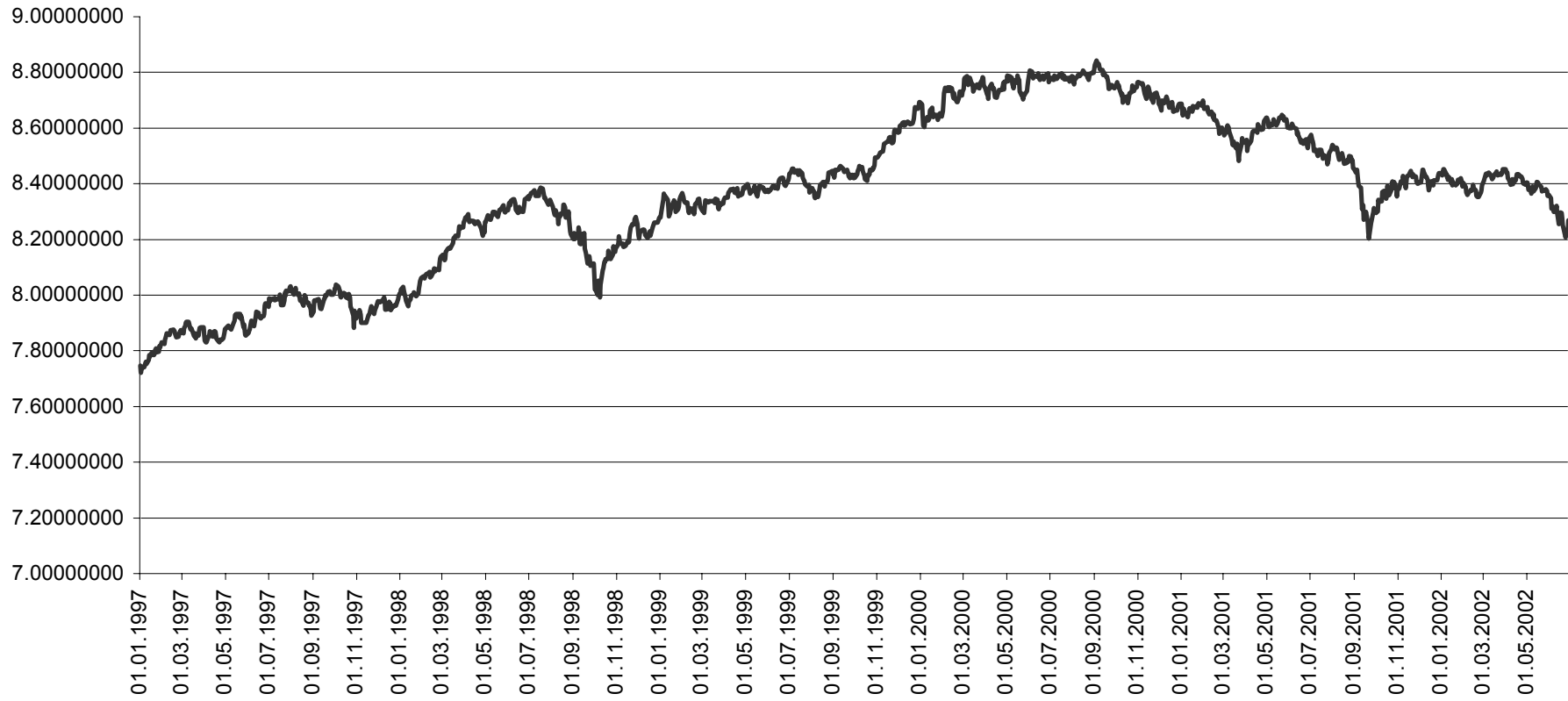
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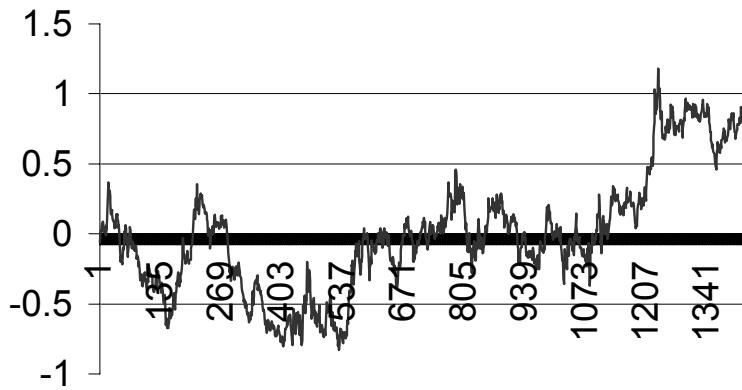
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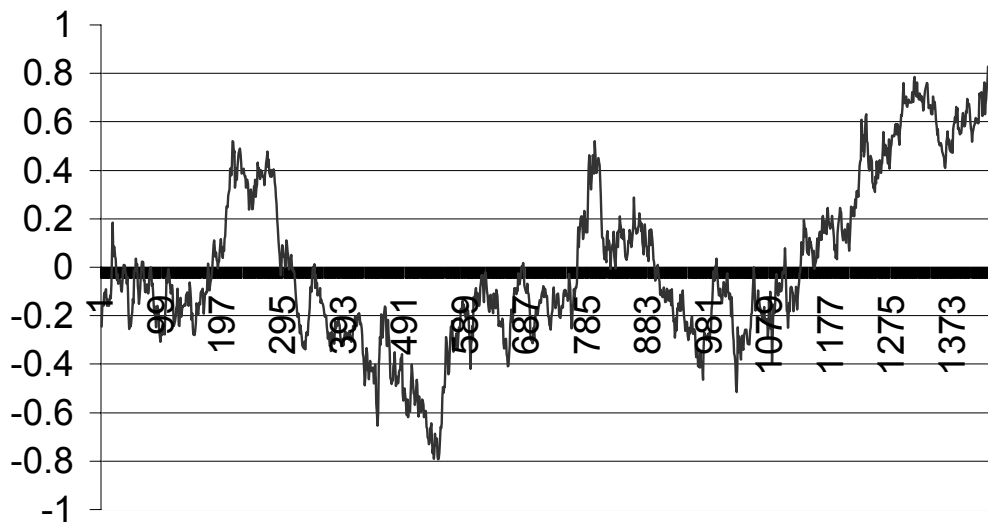
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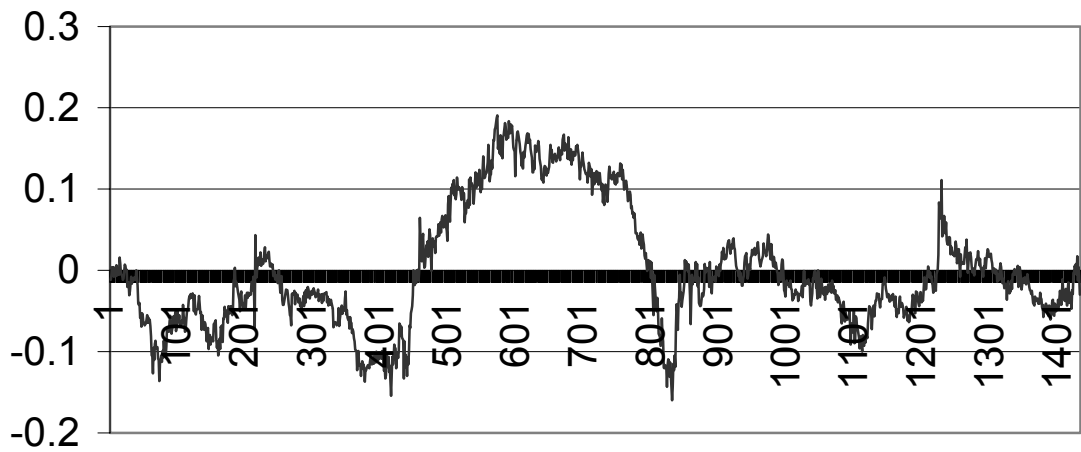
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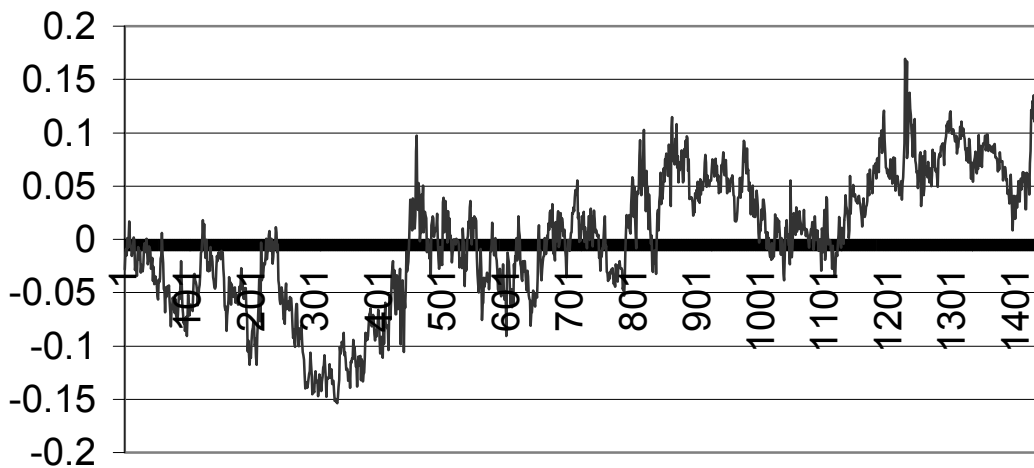
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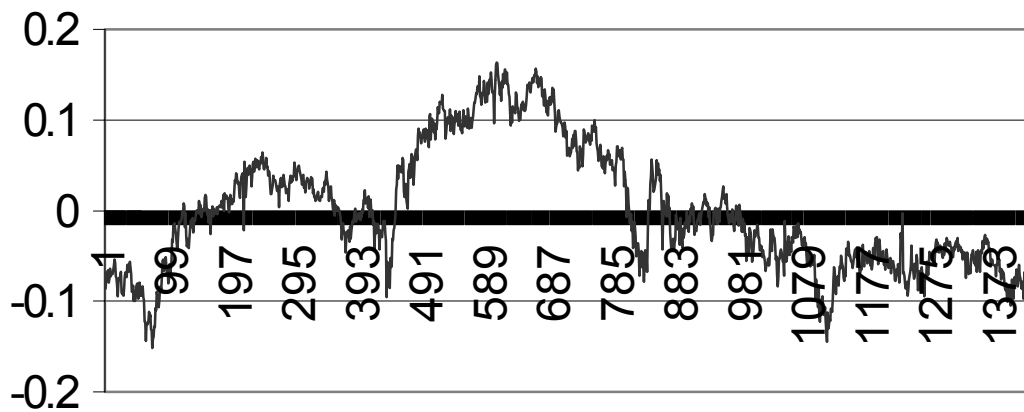
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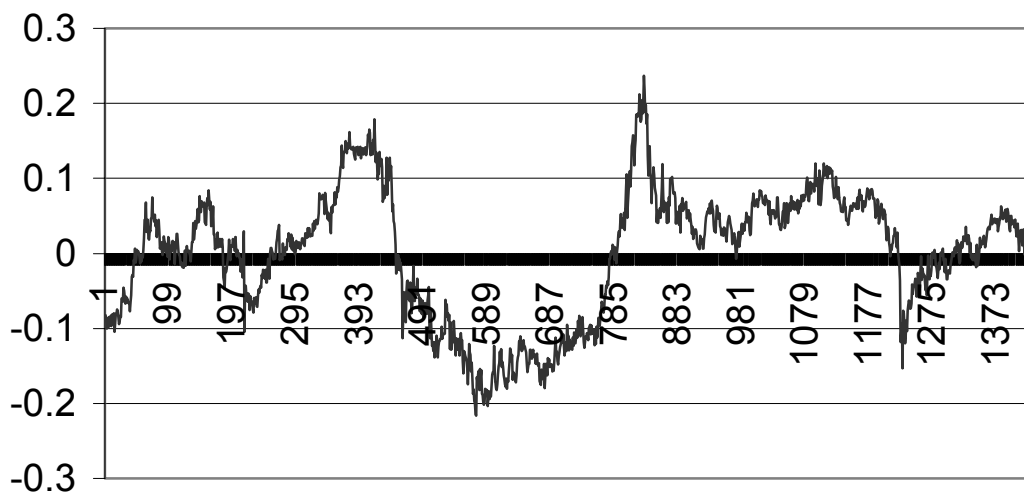
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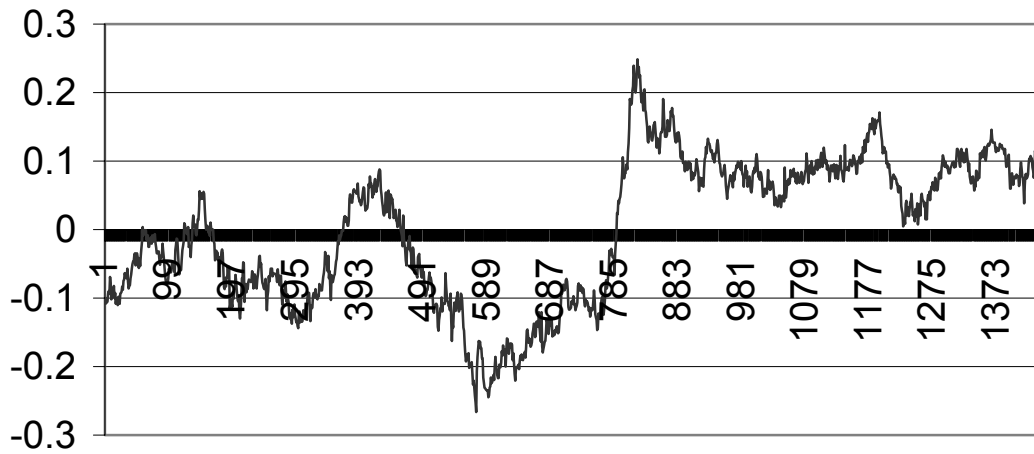
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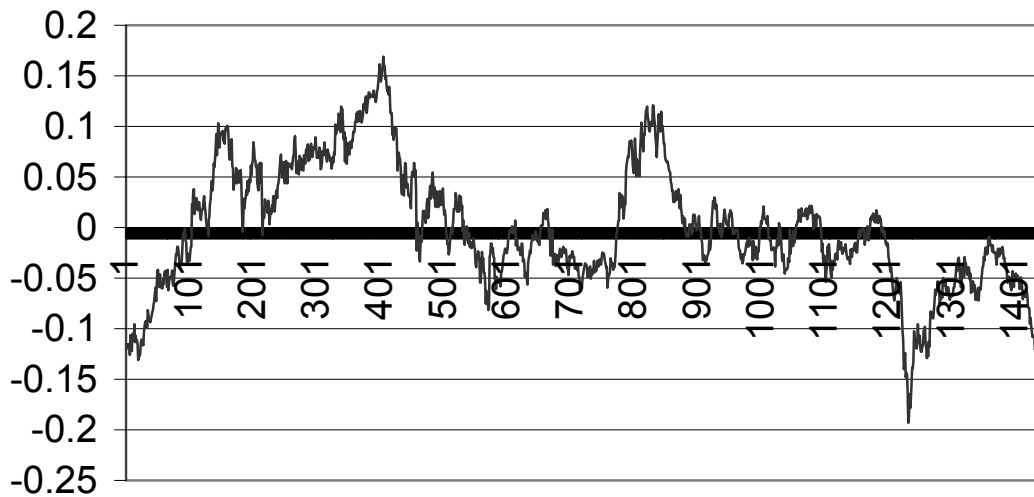
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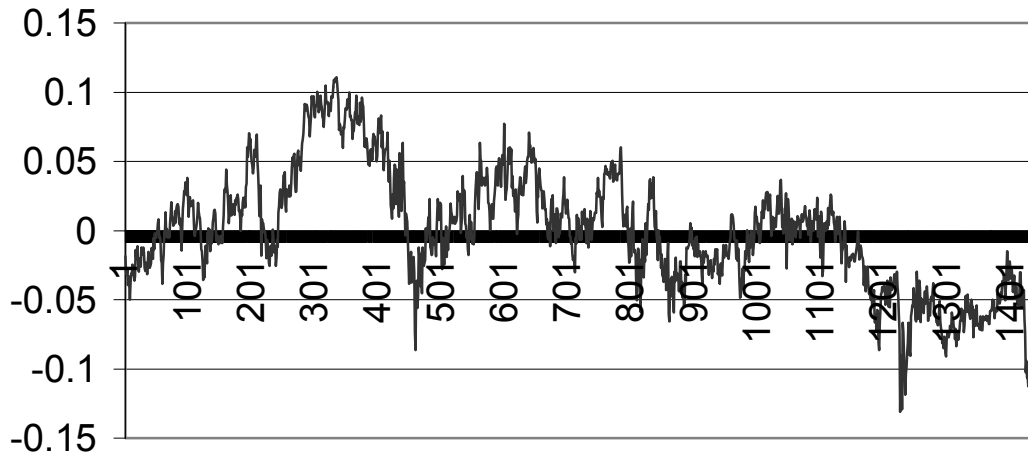
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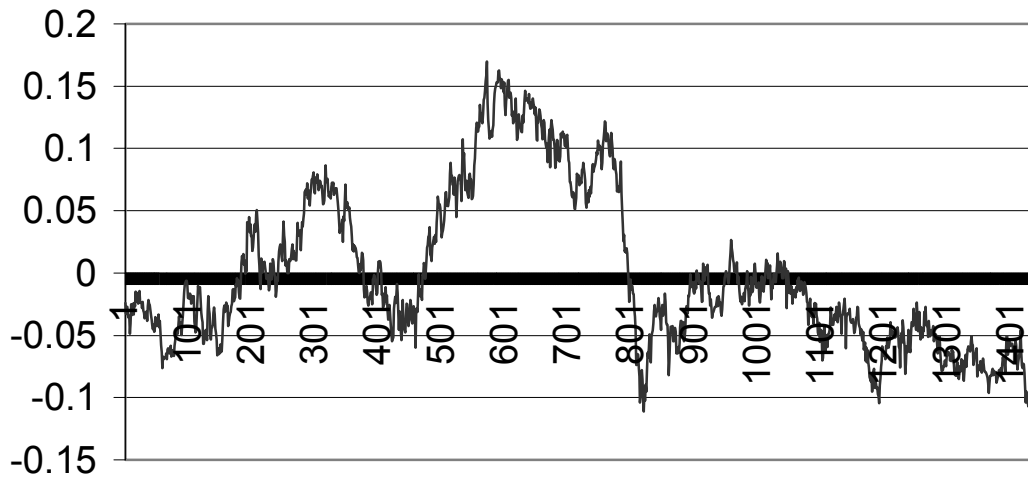
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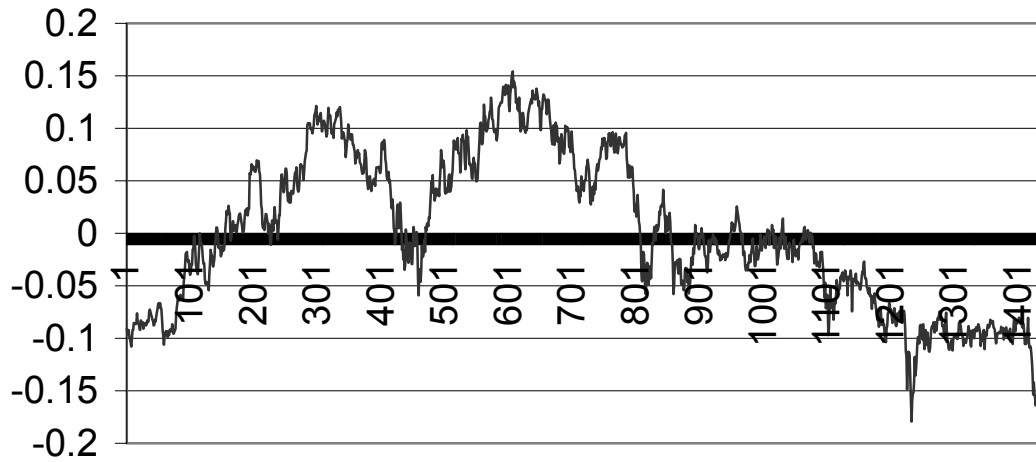
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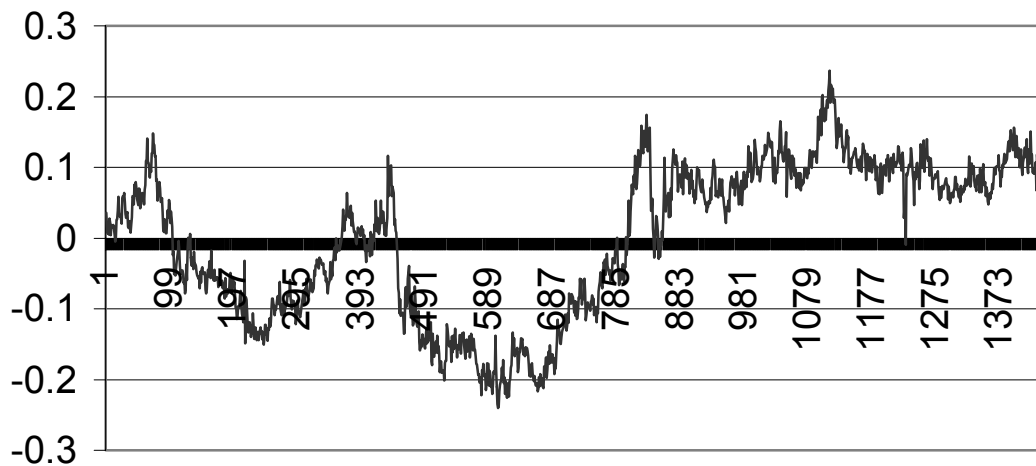
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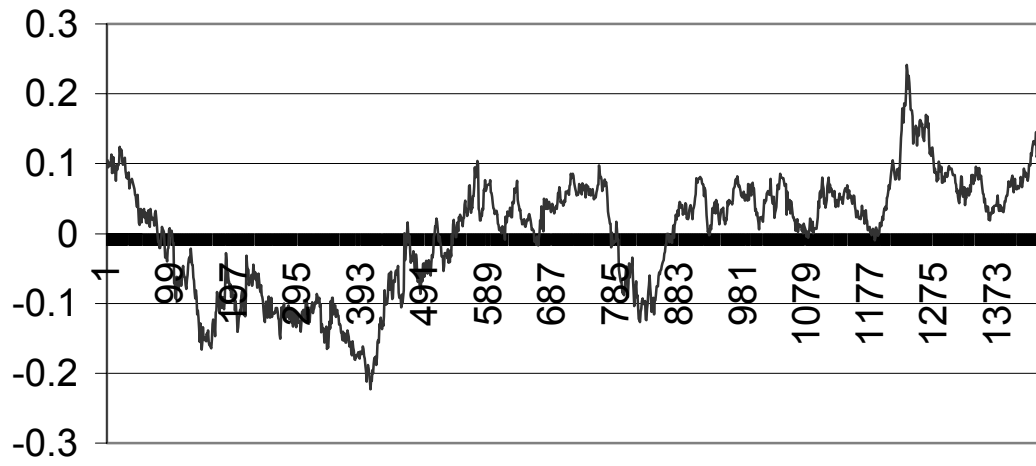
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(dep=FTSE100, indep=CAC40)



OLS RESIDUALS
(dep=CAC40, indep=S&P500)



OLS RESIDUALS (dep=CAC40, indep=DAX100)



DATA

Observation no.	Date	ISE 100	S&P 500	DAX100	FTSE 100	CAC 40
1	01.01.1997	975.89	740.74	1466.35	4118.50	2315.73
2	02.01.1997	995.00	737.01	1448.58	4057.40	2256.97
3	03.01.1997	1035.00	748.03	1454.69	4089.50	2282.76
4	06.01.1997	1054.00	747.65	1466.12	4106.50	2306.67
5	07.01.1997	1094.00	753.23	1467.83	4078.80	2301.69
6	08.01.1997	1144.00	748.41	1478.28	4087.50	2331.62
7	09.01.1997	1146.00	754.85	1473.21	4087.00	2349.08
8	10.01.1997	1153.00	759.50	1492.59	4056.60	2327.50
9	13.01.1997	1136.00	759.51	1504.18	4107.30	2361.27
10	14.01.1997	1165.00	768.86	1502.17	4168.20	2402.14
11	15.01.1997	1178.00	767.20	1521.70	4158.90	2387.98
12	16.01.1997	1180.00	769.75	1523.66	4197.50	2407.77
13	17.01.1997	1194.00	776.17	1529.41	4207.70	2425.10
14	20.01.1997	1201.00	776.70	1544.38	4194.00	2406.10
15	21.01.1997	1228.00	782.72	1518.54	4195.50	2409.88
16	22.01.1997	1251.00	786.23	1543.00	4219.10	2442.46
17	23.01.1997	1352.00	777.56	1544.71	4271.50	2461.25
18	24.01.1997	1503.00	770.52	1530.35	4218.80	2430.34
19	27.01.1997	1700.00	765.02	1527.43	4212.00	2435.17
20	28.01.1997	1551.00	765.02	1523.89	4237.40	2482.76
21	29.01.1997	1587.00	772.50	1528.32	4207.50	2465.01
22	30.01.1997	1643.00	784.17	1538.11	4228.40	2503.06
23	31.01.1997	1605.00	786.16	1546.59	4275.80	2516.56
24	03.02.1997	1575.00	786.73	1560.34	4257.80	2508.55
25	04.02.1997	1465.00	789.26	1563.49	4260.90	2503.07
26	05.02.1997	1492.00	778.28	1577.99	4281.50	2541.25
27	06.02.1997	1556.00	780.15	1581.32	4265.90	2558.43
28	07.02.1997	1553.00	789.56	1595.62	4307.80	2597.52
29	10.02.1997	1553.00	785.43	1616.97	4307.70	2595.37
30	11.02.1997	1553.00	789.59	1618.69	4304.30	2582.09
31	12.02.1997	1578.00	802.77	1633.45	4304.30	2599.33
32	13.02.1997	1599.00	811.82	1638.73	4327.10	2628.41
33	14.02.1997	1555.00	808.48	1647.39	4341.00	2627.42
34	17.02.1997	1554.00	808.48	1639.86	4337.80	2634.48
35	18.02.1997	1596.00	816.29	1660.19	4332.30	2617.52
36	19.02.1997	1614.00	812.49	1641.87	4357.40	2594.76
37	20.02.1997	1642.00	802.80	1624.37	4356.10	2575.24
38	21.02.1997	1615.00	801.77	1619.74	4336.80	2562.84
39	24.02.1997	1628.00	810.28	1619.20	4331.10	2567.85
40	25.02.1997	1641.00	812.10	1642.44	4344.70	2607.72
41	26.02.1997	1623.00	805.68	1644.33	4329.30	2602.17
42	27.02.1997	1599.00	795.07	1662.46	4339.20	2629.40
43	28.02.1997	1612.00	790.82	1656.49	4308.30	2607.55
44	03.03.1997	1522.00	795.31	1662.92	4307.10	2600.26
45	04.03.1997	1443.00	790.95	1690.26	4357.70	2651.69

46	05.03.1997	1372.00	801.99	1709.69	4360.10	2666.19
47	06.03.1997	1482.00	798.56	1734.18	4399.30	2698.92
48	07.03.1997	1443.00	804.97	1715.65	4420.30	2708.28
49	10.03.1997	1461.00	813.65	1744.23	4437.40	2709.21
50	11.03.1997	1471.00	811.34	1759.00	4444.30	2686.15
51	12.03.1997	1437.00	804.26	1739.32	4422.50	2641.70
52	13.03.1997	1504.00	789.56	1706.67	4397.70	2632.10
53	14.03.1997	1499.00	793.17	1711.51	4424.30	2645.62
54	17.03.1997	1586.00	795.71	1707.60	4373.30	2588.38
55	18.03.1997	1607.00	789.66	1679.38	4356.80	2573.95
56	19.03.1997	1636.00	785.77	1690.24	4332.20	2596.77
57	20.03.1997	1649.00	782.65	1668.21	4258.10	2553.72
58	21.03.1997	1654.00	784.10	1683.09	4254.80	2587.13
59	24.03.1997	1651.00	790.89	1694.93	4214.80	2579.28
60	25.03.1997	1577.00	789.07	1707.17	4270.70	2624.25
61	26.03.1997	1582.00	790.50	1738.03	4301.50	2648.73
62	27.03.1997	1511.00	773.88	1743.39	4312.90	2656.68
63	28.03.1997	1552.00	773.88	1743.39	4312.90	2656.68
64	31.03.1997	1613.00	757.12	1743.39	4312.90	2656.68
65	01.04.1997	1590.00	759.64	1682.34	4248.10	2581.82
66	02.04.1997	1592.00	750.11	1687.42	4236.60	2530.28
67	03.04.1997	1565.00	750.32	1646.61	4214.60	2514.52
68	04.04.1997	1570.00	757.90	1660.19	4236.60	2517.97
69	07.04.1997	1532.00	762.13	1691.95	4271.70	2572.31
70	08.04.1997	1548.00	766.12	1698.50	4269.30	2579.00
71	09.04.1997	1530.00	760.60	1714.49	4292.30	2617.55
72	10.04.1997	1514.00	758.34	1710.57	4313.20	2607.97
73	11.04.1997	1505.00	737.65	1707.09	4270.70	2574.56
74	14.04.1997	1502.00	743.73	1680.00	4251.70	2566.13
75	15.04.1997	1535.00	754.72	1702.58	4286.80	2620.63
76	16.04.1997	1523.00	763.53	1714.48	4294.60	2620.97
77	17.04.1997	1532.00	761.77	1726.75	4298.90	2615.18
78	18.04.1997	1532.00	766.34	1709.75	4310.50	2547.56
79	21.04.1997	1532.00	760.37	1709.90	4328.70	2522.67
80	22.04.1997	1532.00	774.61	1705.27	4346.10	2514.67
81	23.04.1997	1532.00	773.64	1728.66	4387.70	2533.64
82	24.04.1997	1457.00	771.18	1731.60	4388.50	2539.83
83	25.04.1997	1466.00	765.37	1722.16	4369.70	2536.26
84	28.04.1997	1441.00	772.96	1714.91	4389.70	2550.25
85	29.04.1997	1435.00	794.05	1723.88	4433.20	2602.86
86	30.04.1997	1427.00	801.34	1748.90	4436.00	2639.46
87	01.05.1997	1469.00	798.53	1748.90	4445.00	2639.46
88	02.05.1997	1431.00	812.97	1759.80	4455.60	2655.31
89	05.05.1997	1392.00	830.24	1791.10	4455.60	2672.84
90	06.05.1997	1433.00	827.76	1808.10	4519.30	2651.93
91	07.05.1997	1478.00	815.62	1801.15	4537.50	2643.31
92	08.05.1997	1459.00	820.26	1801.15	4580.40	2643.31
93	09.05.1997	1443.00	824.78	1806.91	4630.90	2633.91
94	12.05.1997	1395.00	837.66	1813.43	4669.60	2693.09
95	13.05.1997	1408.00	833.13	1824.01	4691.00	2719.58

96	14.05.1997	1437.00	836.04	1816.09	4686.90	2774.63
97	15.05.1997	1515.00	841.88	1812.56	4681.20	2776.01
98	16.05.1997	1492.00	829.75	1833.18	4693.90	2784.28
99	19.05.1997	1492.00	833.27	1833.18	4645.20	2784.28
100	20.05.1997	1510.00	841.66	1805.38	4607.50	2751.11
101	21.05.1997	1509.00	839.35	1832.13	4642.00	2786.35
102	22.05.1997	1471.00	835.66	1825.14	4651.80	2741.65
103	23.05.1997	1467.00	847.03	1836.13	4661.80	2762.90
104	26.05.1997	1470.00	847.03	1861.35	4661.80	2654.74
105	27.05.1997	1523.00	849.71	1869.05	4681.60	2680.34
106	28.05.1997	1565.00	847.21	1852.57	4677.50	2583.17
107	29.05.1997	1529.00	844.08	1852.57	4672.30	2579.24
108	30.05.1997	1595.00	848.28	1809.74	4621.30	2583.94
109	02.06.1997	1655.00	846.36	1836.18	4562.80	2601.45
110	03.06.1997	1659.00	845.48	1845.59	4557.80	2624.49
111	04.06.1997	1649.00	840.11	1863.97	4557.10	2635.37
112	05.06.1997	1675.00	843.43	1872.75	4576.20	2690.85
113	06.06.1997	1669.00	858.01	1882.30	4645.00	2719.25
114	09.06.1997	1647.00	862.91	1871.47	4686.70	2686.20
115	10.06.1997	1644.00	865.27	1870.64	4739.60	2664.18
116	11.06.1997	1660.00	869.57	1877.02	4724.80	2696.19
117	12.06.1997	1627.00	883.48	1890.80	4757.40	2760.27
118	13.06.1997	1583.00	893.27	1906.82	4783.10	2808.52
119	16.06.1997	1582.00	893.90	1915.50	4745.10	2795.87
120	17.06.1997	1551.00	894.42	1904.33	4682.20	2762.60
121	18.06.1997	1565.00	889.06	1900.55	4657.00	2751.74
122	19.06.1997	1601.00	897.99	1910.68	4653.70	2739.69
123	20.06.1997	1642.00	898.70	1927.14	4593.90	2757.10
124	23.06.1997	1774.00	878.62	1911.48	4575.80	2762.20
125	24.06.1997	1684.00	896.34	1912.44	4596.30	2784.76
126	25.06.1997	1673.00	888.99	1933.21	4640.00	2867.44
127	26.06.1997	1705.00	883.68	1935.24	4657.90	2893.64
128	27.06.1997	1815.00	887.30	1929.46	4640.30	2891.04
129	30.06.1997	1857.00	885.14	1923.91	4604.60	2858.26
130	01.07.1997	1851.00	891.03	1939.80	4728.30	2944.04
131	02.07.1997	1873.00	904.03	1956.01	4751.40	2909.45
132	03.07.1997	1912.00	916.92	1970.77	4831.70	2936.98
133	04.07.1997	1918.00	916.92	1995.55	4812.80	2934.48
134	07.07.1997	1953.00	912.20	2010.61	4810.70	2947.66
135	08.07.1997	1911.00	918.75	2026.10	4758.50	2929.81
136	09.07.1997	1951.00	907.54	2051.08	4762.40	2950.56
137	10.07.1997	1999.00	913.78	2021.35	4767.80	2929.09
138	11.07.1997	2027.00	916.68	2043.49	4799.50	2941.59
139	14.07.1997	2043.00	918.38	2082.03	4857.40	2941.59
140	15.07.1997	2036.00	925.76	2078.35	4899.30	2950.70
141	16.07.1997	2009.00	936.59	2114.70	4964.20	2988.01
142	17.07.1997	2006.00	931.61	2124.46	4949.00	2958.59
143	18.07.1997	2010.00	915.30	2110.04	4877.20	2876.69
144	21.07.1997	1955.00	912.94	2065.61	4805.70	2874.12
145	22.07.1997	1953.00	933.98	2120.95	4846.70	2921.13

146	23.07.1997	1919.00	936.56	2198.14	4874.50	3003.53
147	24.07.1997	1925.00	940.30	2165.03	4862.90	2973.53
148	25.07.1997	1889.00	938.79	2157.81	4851.50	3025.94
149	28.07.1997	1836.00	936.45	2183.16	4862.60	3022.20
150	29.07.1997	1850.00	942.29	2186.26	4876.60	3023.63
151	30.07.1997	1903.00	952.29	2206.06	4927.30	3069.30
152	31.07.1997	1953.00	954.29	2216.14	4907.50	3075.67
153	01.08.1997	1973.00	947.14	2204.76	4899.30	3049.44
154	04.08.1997	2036.00	950.30	2154.86	4895.70	2992.41
155	05.08.1997	2003.00	952.37	2158.33	4960.60	2984.10
156	06.08.1997	2034.00	960.32	2170.91	5026.20	3037.09
157	07.08.1997	2050.00	951.19	2209.40	5086.80	3056.34
158	08.08.1997	2040.00	933.54	2184.70	5031.30	2996.27
159	11.08.1997	2032.00	937.00	2173.82	5031.90	2983.44
160	12.08.1997	2036.00	926.53	2189.97	5075.80	2998.57
161	13.08.1997	2005.00	922.02	2151.01	5003.60	2924.04
162	14.08.1997	2016.00	924.77	2129.62	4991.30	2921.84
163	15.08.1997	2004.00	900.81	2093.88	4865.80	2921.84
164	18.08.1997	1952.00	912.49	2054.75	4835.00	2870.13
165	19.08.1997	1940.00	926.01	2101.25	4914.20	2936.16
166	20.08.1997	1930.00	939.35	2127.47	4958.40	2979.27
167	21.08.1997	1975.00	925.05	2140.58	4978.00	2957.23
168	22.08.1997	1966.00	923.55	2058.19	4901.10	2904.23
169	25.08.1997	1951.00	920.16	2051.29	4901.10	2898.57
170	26.08.1997	1925.00	913.02	1994.08	4886.30	2869.26
171	27.08.1997	1925.00	913.70	2008.57	4906.90	2871.70
172	28.08.1997	1973.00	903.67	1998.01	4845.40	2828.41
173	29.08.1997	1980.00	899.47	1968.08	4817.50	2770.49
174	01.09.1997	1978.00	899.47	2005.99	4870.20	2805.84
175	02.09.1997	2020.00	927.58	2031.80	4952.20	2921.15
176	03.09.1997	2054.00	927.86	2055.68	4976.90	2917.92
177	04.09.1997	2104.00	930.87	2042.66	4991.30	2926.99
178	05.09.1997	2124.00	929.05	2057.52	4994.20	2924.51
179	08.09.1997	2198.00	931.20	2042.51	4985.20	2940.89
180	09.09.1997	2235.00	933.62	2054.55	4950.50	2919.72
181	10.09.1997	2259.00	919.03	2035.46	4905.20	2874.57
182	11.09.1997	2293.00	912.59	1998.24	4854.80	2843.60
183	12.09.1997	2307.00	923.91	1943.69	4848.20	2834.07
184	15.09.1997	2362.00	919.77	1925.97	4902.90	2898.62
185	16.09.1997	2359.00	945.64	1961.42	4976.40	2940.55
186	17.09.1997	2410.00	943.00	2012.07	5013.10	2944.00
187	18.09.1997	2407.00	947.29	2009.20	5046.20	2978.37
188	19.09.1997	2390.00	950.51	2024.30	5023.80	2977.18
189	22.09.1997	2402.00	955.43	2050.85	5075.70	3017.45
190	23.09.1997	2413.00	951.93	2055.87	5027.50	2997.23
191	24.09.1997	2487.00	944.48	2057.50	5077.20	3023.77
192	25.09.1997	2555.00	937.91	2077.85	5065.50	3005.38
193	26.09.1997	2592.00	945.22	2045.50	5226.30	2985.63
194	29.09.1997	2644.00	953.34	2055.89	5220.30	2988.96
195	30.09.1997	2593.00	947.28	2082.99	5244.20	3008.26

196	01.10.1997	2584.00	955.41	2098.90	5317.10	3054.93
197	02.10.1997	2697.00	960.46	2132.32	5296.10	3052.07
198	03.10.1997	2752.00	965.03	2132.32	5330.80	3094.01
199	06.10.1997	2849.00	972.69	2147.44	5300.00	3077.98
200	07.10.1997	2854.00	983.12	2149.75	5305.60	3064.42
201	08.10.1997	2939.00	973.84	2167.55	5262.10	3024.08
202	09.10.1997	2954.00	970.62	2121.57	5217.80	2960.65
203	10.10.1997	2943.00	966.98	2096.99	5227.30	2955.11
204	13.10.1997	3048.00	968.10	2118.06	5300.10	3000.98
205	14.10.1997	3212.00	970.28	2106.82	5298.90	3005.54
206	15.10.1997	3223.00	965.72	2104.25	5263.70	2992.16
207	16.10.1997	3258.00	955.23	2068.11	5287.90	2992.87
208	17.10.1997	3451.00	944.16	2040.03	5271.10	2958.02
209	20.10.1997	3416.00	955.61	2030.58	5211.00	2946.71
210	21.10.1997	3442.00	972.28	2077.18	5225.90	2989.89
211	22.10.1997	3497.00	968.49	2092.19	5148.80	2958.06
212	23.10.1997	3543.00	950.69	2002.88	4991.50	2856.87
213	24.10.1997	3512.00	941.64	2036.97	4970.20	2849.03
214	27.10.1997	3119.00	876.99	1956.98	4840.70	2769.64
215	28.10.1997	2824.00	921.85	1804.46	4755.40	2651.33
216	29.10.1997	2824.00	919.16	1911.36	4871.80	2818.00
217	30.10.1997	2717.00	903.68	1878.94	4801.90	2739.47
218	31.10.1997	2846.00	914.62	1878.42	4842.30	2739.30
219	03.11.1997	2846.00	938.99	1936.13	4906.40	2787.96
220	04.11.1997	2972.00	940.76	1917.77	4897.40	2774.90
221	05.11.1997	3168.00	942.76	1944.02	4908.30	2822.42
222	06.11.1997	3163.00	938.03	1925.59	4863.80	2781.82
223	07.11.1997	2958.00	927.51	1868.34	4764.30	2699.71
224	10.11.1997	2983.00	921.13	1890.48	4806.80	2699.71
225	11.11.1997	2918.00	923.78	1879.77	4793.70	2699.71
226	12.11.1997	2801.00	905.96	1845.56	4720.40	2696.60
227	13.11.1997	2694.00	916.66	1862.15	4711.00	2700.66
228	14.11.1997	2692.00	928.35	1872.78	4741.80	2696.04
229	17.11.1997	2890.00	946.20	1901.55	4867.00	2772.99
230	18.11.1997	2962.00	938.23	1921.88	4845.40	2782.61
231	19.11.1997	2915.00	944.59	1921.30	4830.10	2790.56
232	20.11.1997	2969.00	958.98	1958.58	4908.40	2821.19
233	21.11.1997	3077.00	963.09	1977.43	4985.80	2861.70
234	24.11.1997	2787.00	946.67	1919.30	4898.60	2802.48
235	25.11.1997	2842.00	950.82	1925.91	4863.50	2786.26
236	26.11.1997	2902.00	951.64	1955.67	4891.20	2811.65
237	27.11.1997	2904.00	951.64	1973.14	4889.00	2829.01
238	28.11.1997	2879.00	955.40	1972.96	4831.80	2859.19
239	01.12.1997	2814.00	974.78	2027.00	4921.80	2918.48
240	02.12.1997	2923.00	971.68	2027.98	4977.60	2913.09
241	03.12.1997	2998.00	976.77	2032.59	4970.70	2902.35
242	04.12.1997	3053.00	973.10	2060.14	5082.30	2914.45
243	05.12.1997	2968.00	983.79	2074.68	5142.90	2910.09
244	08.12.1997	2857.00	982.37	2095.51	5187.40	2932.47
245	09.12.1997	2925.00	975.78	2078.78	5177.10	2959.40

246	10.12.1997	2940.00	969.79	2048.70	5130.70	2932.18
247	11.12.1997	2867.00	954.94	2008.97	5035.90	2828.45
248	12.12.1997	2843.00	953.39	2029.86	5045.20	2830.26
249	15.12.1997	2970.00	963.39	2018.05	5121.80	2838.27
250	16.12.1997	2953.00	968.04	2027.21	5203.40	2912.18
251	17.12.1997	3007.00	965.54	2061.52	5190.80	2893.25
252	18.12.1997	3058.00	955.30	2064.33	5168.30	2894.50
253	19.12.1997	3145.00	946.78	2023.69	5020.20	2822.90
254	22.12.1997	3177.00	953.70	2007.24	5018.20	2869.73
255	23.12.1997	3175.00	939.13	2042.45	5049.80	2858.13
256	24.12.1997	3129.00	932.70	2042.45	5013.90	2874.08
257	25.12.1997	3075.00	932.70	2042.45	5013.90	2874.08
258	26.12.1997	3183.00	936.46	2042.45	5013.90	2871.27
259	29.12.1997	3335.00	953.35	2076.04	5112.40	2939.46
260	30.12.1997	3459.00	970.84	2098.22	5132.30	2975.47
261	31.12.1997	3451.00	970.43	2098.22	5135.50	2998.91
262	01.01.1998	3451.00	970.43	2098.22	5135.50	2998.91
263	02.01.1998	3451.00	975.04	2129.67	5193.50	3040.14
264	05.01.1998	3711.00	977.07	2161.44	5262.50	3072.84
265	06.01.1998	3652.00	966.58	2147.47	5264.40	3037.73
266	07.01.1998	3683.00	964.00	2164.36	5224.10	3006.73
267	08.01.1998	3590.00	956.05	2146.09	5237.10	2954.94
268	09.01.1998	3587.00	927.69	2094.10	5138.30	2919.81
269	12.01.1998	3200.00	939.21	2024.25	5068.80	2862.54
270	13.01.1998	3414.00	952.12	2058.03	5083.90	2902.93
271	14.01.1998	3285.00	957.94	2075.82	5106.90	2919.80
272	15.01.1998	3295.00	950.73	2059.34	5165.80	2932.75
273	16.01.1998	3385.00	961.51	2076.25	5263.10	2976.09
274	19.01.1998	3513.00	961.51	2120.66	5273.60	2986.95
275	20.01.1998	3478.00	978.60	2128.56	5278.20	3008.34
276	21.01.1998	3524.00	970.81	2118.58	5272.30	2998.11
277	22.01.1998	3452.00	963.04	2092.59	5253.10	2988.59
278	23.01.1998	3460.00	957.59	2101.85	5181.40	2966.15
279	26.01.1998	3517.00	956.95	2097.21	5237.20	3000.47
280	27.01.1998	3515.00	969.02	2121.19	5326.30	3052.02
281	28.01.1998	3547.00	977.46	2171.17	5372.60	3088.26
282	29.01.1998	3547.00	985.49	2184.49	5422.40	3133.82
283	30.01.1998	3547.00	980.28	2193.88	5458.50	3172.14
284	02.02.1998	3367.00	1001.27	2230.32	5599.00	3187.50
285	03.02.1998	3249.00	1006.00	2235.02	5612.80	3188.43
286	04.02.1998	3035.00	1006.90	2217.80	5595.80	3166.26
287	05.02.1998	2982.00	1003.54	2245.31	5606.40	3189.60
288	06.02.1998	2987.00	1012.46	2222.04	5629.70	3216.66
289	09.02.1998	2848.00	1010.74	2253.28	5600.90	3220.94
290	10.02.1998	2777.00	1019.01	2233.60	5613.30	3235.76
291	11.02.1998	2927.00	1020.01	2261.43	5607.90	3240.00
292	12.02.1998	3008.00	1024.14	2240.80	5552.50	3178.70
293	13.02.1998	3015.00	1020.09	2224.83	5582.30	3187.73
294	16.02.1998	3037.00	1020.09	2233.80	5619.90	3225.12
295	17.02.1998	3103.00	1022.76	2271.29	5709.50	3280.45

296	18.02.1998	3105.00	1032.08	2284.01	5723.40	3281.71
297	19.02.1998	2908.00	1028.28	2264.58	5718.50	3250.63
298	20.02.1998	2973.00	1034.21	2276.79	5751.60	3262.50
299	23.02.1998	3307.00	1038.14	2302.56	5702.80	3273.48
300	24.02.1998	3226.00	1030.56	2274.63	5651.00	3262.63
301	25.02.1998	3333.00	1042.90	2291.75	5745.10	3348.20
302	26.02.1998	3402.00	1048.67	2317.15	5764.80	3397.03
303	27.02.1998	3272.00	1049.34	2326.23	5767.30	3421.92
304	02.03.1998	3347.00	1047.70	2337.77	5820.60	3446.70
305	03.03.1998	3354.00	1052.02	2347.37	5807.70	3414.87
306	04.03.1998	3321.00	1047.33	2326.54	5733.10	3381.32
307	05.03.1998	3406.00	1035.05	2288.60	5695.60	3395.80
308	06.03.1998	3470.00	1055.69	2331.60	5782.90	3483.22
309	09.03.1998	3514.00	1052.31	2364.47	5818.90	3525.85
310	10.03.1998	3529.00	1064.25	2389.13	5828.50	3521.51
311	11.03.1998	3519.00	1068.47	2387.42	5829.80	3539.43
312	12.03.1998	3493.00	1069.92	2392.20	5794.80	3526.57
313	13.03.1998	3389.00	1068.61	2418.08	5782.30	3540.23
314	16.03.1998	3377.00	1079.27	2416.69	5785.10	3598.26
315	17.03.1998	3397.00	1080.45	2446.44	5834.90	3661.63
316	18.03.1998	3306.00	1085.52	2434.13	5903.60	3652.52
317	19.03.1998	3248.00	1089.74	2442.07	5997.90	3688.68
318	20.03.1998	3270.00	1099.16	2471.43	5956.30	3688.91
319	23.03.1998	3267.00	1095.55	2458.01	5947.00	3680.13
320	24.03.1998	3241.00	1105.65	2482.37	5983.70	3738.54
321	25.03.1998	3301.00	1101.93	2513.15	5967.80	3818.71
322	26.03.1998	3338.00	1100.80	2487.50	5905.60	3783.78
323	27.03.1998	3314.00	1095.44	2506.52	5939.30	3810.23
324	30.03.1998	3223.00	1093.55	2476.42	5911.90	3800.23
325	31.03.1998	3259.00	1101.75	2517.66	5932.20	3875.81
326	01.04.1998	3260.00	1108.15	2542.01	6017.60	3883.31
327	02.04.1998	3344.00	1120.01	2553.99	6052.80	3935.88
328	03.04.1998	3443.00	1122.70	2576.62	6064.20	3932.02
329	06.04.1998	3443.00	1121.38	2595.99	6105.80	3986.75
330	07.04.1998	3443.00	1109.55	2635.23	6094.00	3903.27
331	08.04.1998	3443.00	1101.65	2596.42	6055.20	3873.87
332	09.04.1998	3443.00	1110.67	2618.67	6105.50	3894.48
333	10.04.1998	3443.00	1110.67	2618.67	6105.50	3894.48
334	13.04.1998	3645.00	1109.69	2618.67	6105.50	3894.48
335	14.04.1998	3663.00	1115.75	2646.18	6104.10	3867.66
336	15.04.1998	3822.00	1119.32	2650.42	6074.10	3884.61
337	16.04.1998	4054.00	1108.17	2621.63	6002.00	3845.94
338	17.04.1998	4121.00	1122.72	2596.38	5922.20	3861.58
339	20.04.1998	4101.00	1123.65	2673.55	5954.10	3885.69
340	21.04.1998	4266.00	1126.67	2653.30	5955.00	3860.40
341	22.04.1998	4366.00	1130.54	2642.97	5931.10	3835.07
342	23.04.1998	4366.00	1119.58	2593.73	5898.10	3822.13
343	24.04.1998	4090.00	1107.90	2541.93	5863.90	3783.34
344	27.04.1998	4021.00	1086.54	2512.26	5722.40	3685.83
345	28.04.1998	3874.00	1085.11	2482.76	5806.60	3777.23

346	29.04.1998	3983.00	1094.63	2523.10	5833.10	3733.93
347	30.04.1998	4194.00	1111.75	2525.53	5928.30	3880.92
348	01.05.1998	4231.00	1121.00	2525.53	6010.30	3880.92
349	04.05.1998	4265.00	1122.07	2619.88	6010.30	3974.25
350	05.05.1998	4259.00	1115.50	2582.94	5986.50	3944.91
351	06.05.1998	4218.00	1104.92	2581.38	5992.40	3947.45
352	07.05.1998	4094.00	1095.14	2560.18	5938.00	3906.36
353	08.05.1998	4210.00	1108.14	2592.17	5969.80	3906.36
354	11.05.1998	4254.00	1106.64	2631.99	6028.30	4017.24
355	12.05.1998	4224.00	1115.79	2613.44	5956.70	3987.33
356	13.05.1998	4261.00	1118.86	2646.85	5972.90	4019.76
357	14.05.1998	4230.00	1117.37	2641.70	5948.50	4011.98
358	15.05.1998	4137.00	1108.73	2656.80	5917.80	3990.23
359	18.05.1998	3970.00	1105.82	2632.94	5826.20	3945.31
360	19.05.1998	3970.00	1109.52	2654.88	5877.80	3980.84
361	20.05.1998	4094.00	1119.06	2709.13	5907.40	4047.92
362	21.05.1998	4122.00	1114.64	2709.13	5935.60	4047.92
363	22.05.1998	4108.00	1110.47	2732.31	5955.60	4049.78
364	25.05.1998	4077.00	1110.47	2738.85	5955.60	4108.71
365	26.05.1998	3995.00	1094.02	2768.44	5970.70	4115.88
366	27.05.1998	3667.00	1092.23	2700.70	5870.20	4017.37
367	28.05.1998	3751.00	1097.60	2696.32	5862.30	4014.92
368	29.05.1998	3728.00	1090.82	2736.11	5870.70	4041.16
369	01.06.1998	3605.00	1090.98	2736.11	5837.90	4041.16
370	02.06.1998	3753.00	1093.22	2741.38	5842.30	4086.98
371	03.06.1998	3774.00	1082.73	2755.58	5898.40	4149.37
372	04.06.1998	4012.00	1094.83	2749.17	5860.80	4119.03
373	05.06.1998	4080.00	1113.86	2791.85	5947.30	4185.05
374	08.06.1998	4193.00	1115.72	2832.39	6037.80	4204.58
375	09.06.1998	4108.00	1118.41	2821.52	6019.80	4201.86
376	10.06.1998	4033.00	1112.28	2819.48	5987.40	4208.60
377	11.06.1998	4021.00	1094.58	2819.48	5852.50	4141.61
378	12.06.1998	4028.00	1098.84	2779.95	5769.80	4050.76
379	15.06.1998	3793.00	1077.01	2713.09	5715.70	4005.33
380	16.06.1998	3911.00	1087.59	2736.55	5729.70	4013.28
381	17.06.1998	4047.00	1107.11	2787.92	5832.70	4092.92
382	18.06.1998	3966.00	1106.37	2792.55	5812.10	4052.27
383	19.06.1998	4007.00	1100.65	2780.50	5748.10	4027.32
384	22.06.1998	3908.00	1103.24	2762.46	5712.40	4018.64
385	23.06.1998	4005.00	1119.49	2792.25	5772.00	4065.04
386	24.06.1998	3980.00	1132.88	2817.82	5804.90	4126.33
387	25.06.1998	4056.00	1129.28	2854.86	5858.90	4203.81
388	26.06.1998	4014.00	1133.20	2856.32	5877.40	4215.70
389	29.06.1998	4120.00	1138.49	2876.83	5884.50	4248.24
390	30.06.1998	4100.00	1133.84	2868.65	5832.50	4203.45
391	01.07.1998	4125.00	1148.56	2876.11	5919.90	4260.68
392	02.07.1998	4293.00	1146.42	2879.39	5960.20	4252.09
393	03.07.1998	4485.00	1146.42	2902.59	5988.40	4304.38
394	06.07.1998	4497.00	1157.33	2886.62	5990.30	4311.10
395	07.07.1998	4471.00	1154.66	2905.93	6003.40	4333.09

396	08.07.1998	4506.00	1166.38	2932.01	6009.60	4339.91
397	09.07.1998	4403.00	1158.56	2928.67	5969.70	4319.18
398	10.07.1998	4344.00	1164.33	2919.31	5929.70	4256.35
399	13.07.1998	4224.00	1165.19	2937.19	5958.20	4256.35
400	14.07.1998	4373.00	1177.58	2971.04	6100.20	4256.35
401	15.07.1998	4435.00	1174.81	2975.90	6151.50	4344.30
402	16.07.1998	4531.00	1183.99	2968.84	6116.80	4358.13
403	17.07.1998	4515.00	1186.75	2994.96	6174.00	4388.48
404	20.07.1998	4478.00	1184.10	3006.26	6179.00	4368.91
405	21.07.1998	4378.00	1165.07	3001.58	6132.70	4322.08
406	22.07.1998	4365.00	1164.08	2975.56	5989.60	4220.12
407	23.07.1998	4366.00	1139.75	2952.85	5976.20	4235.89
408	24.07.1998	4270.00	1140.80	2941.22	5892.30	4205.41
409	27.07.1998	4326.00	1147.27	2871.61	5836.10	4139.53
410	28.07.1998	4276.00	1130.24	2871.64	5835.80	4122.35
411	29.07.1998	4231.00	1125.21	2852.27	5844.10	4139.19
412	30.07.1998	4317.00	1142.95	2864.84	5910.70	4197.64
413	31.07.1998	4322.00	1120.67	2861.22	5837.00	4177.31
414	03.08.1998	4254.85	1112.44	2807.05	5809.70	4095.03
415	04.08.1998	4128.35	1072.12	2806.41	5736.10	4047.88
416	05.08.1998	3977.38	1081.43	2747.59	5632.50	3976.40
417	06.08.1998	3889.31	1089.63	2697.06	5594.10	3968.59
418	07.08.1998	3941.94	1089.45	2729.05	5680.40	4041.88
419	10.08.1998	3715.60	1083.14	2682.54	5587.60	3939.45
420	11.08.1998	3432.48	1068.98	2582.27	5432.80	3845.98
421	12.08.1998	3554.51	1084.22	2642.10	5462.20	3945.70
422	13.08.1998	3311.60	1074.91	2617.49	5399.50	3951.69
423	14.08.1998	3351.74	1062.75	2661.14	5455.00	3994.91
424	17.08.1998	3170.61	1083.67	2666.24	5467.20	3983.81
425	18.08.1998	3230.91	1101.20	2716.33	5648.20	4123.25
426	19.08.1998	3358.58	1098.06	2729.36	5694.30	4125.72
427	20.08.1998	3533.02	1091.60	2681.63	5667.40	4087.49
428	21.08.1998	3372.29	1081.24	2535.94	5477.00	3943.68
429	24.08.1998	3292.75	1088.14	2561.28	5553.70	3937.43
430	25.08.1998	3253.24	1092.85	2619.75	5654.40	4029.32
431	26.08.1998	2997.25	1084.19	2556.75	5545.40	3913.17
432	27.08.1998	2603.99	1042.59	2474.10	5368.50	3745.64
433	28.08.1998	2672.01	1027.14	2437.58	5249.40	3708.97
434	31.08.1998	2635.14	957.28	2367.03	5249.40	3651.85
435	01.09.1998	2524.55	994.26	2345.12	5169.10	3646.29
436	02.09.1998	2665.53	990.47	2428.55	5235.80	3729.67
437	03.09.1998	2540.22	982.26	2357.88	5118.70	3646.46
438	04.09.1998	2637.71	973.89	2362.28	5167.00	3690.75
439	07.09.1998	2640.19	973.89	2410.68	5347.00	3695.35
440	08.09.1998	2658.39	1023.46	2492.07	5344.20	3803.74
441	09.09.1998	2600.04	1006.20	2467.44	5311.30	3762.13
442	10.09.1998	2487.97	980.19	2335.86	5136.60	3589.35
443	11.09.1998	2328.68	1009.06	2329.63	5118.60	3578.34
444	14.09.1998	2304.97	1029.72	2400.31	5268.60	3714.81
445	15.09.1998	2198.95	1037.68	2367.59	5281.70	3698.00

446	16.09.1998	2127.01	1045.48	2378.12	5291.70	3729.32
447	17.09.1998	1948.42	1018.87	2289.44	5132.90	3525.26
448	18.09.1998	2278.33	1020.09	2252.62	5055.60	3465.22
449	21.09.1998	2141.65	1023.89	2177.26	4990.30	3342.65
450	22.09.1998	2342.75	1029.63	2244.57	5103.30	3347.98
451	23.09.1998	2401.08	1066.09	2295.93	5214.70	3423.78
452	24.09.1998	2635.71	1042.72	2273.91	5167.60	3381.13
453	25.09.1998	2336.90	1044.75	2235.06	5061.00	3310.59
454	28.09.1998	2322.92	1048.69	2275.60	5093.50	3337.64
455	29.09.1998	2386.23	1049.02	2243.31	5108.70	3337.05
456	30.09.1998	2265.94	1017.01	2193.23	5064.40	3197.95
457	01.10.1998	2085.50	986.39	2077.78	4908.20	3038.01
458	02.10.1998	2079.75	1002.60	1954.07	4750.40	3039.14
459	05.10.1998	1892.45	988.56	1982.55	4648.70	2979.89
460	06.10.1998	1923.95	984.59	2038.98	4854.00	3136.48
461	07.10.1998	1858.28	970.68	2006.08	4828.90	3097.69
462	08.10.1998	1852.28	959.44	1915.41	4698.80	2959.97
463	09.10.1998	1946.05	984.39	1957.29	4823.40	3092.90
464	12.10.1998	2160.72	997.71	2066.49	5037.60	3263.32
465	13.10.1998	2102.66	994.80	2090.13	4990.10	3278.85
466	14.10.1998	1997.34	1005.53	2115.18	5038.40	3361.04
467	15.10.1998	1985.36	1047.49	2154.89	5056.30	3362.26
468	16.10.1998	1990.73	1056.42	2193.31	5133.10	3390.10
469	19.10.1998	2022.06	1062.39	2181.44	5077.50	3395.35
470	20.10.1998	2177.40	1063.93	2239.08	5251.90	3492.52
471	21.10.1998	2226.43	1069.92	2206.73	5206.60	3440.78
472	22.10.1998	2210.21	1078.48	2180.83	5229.90	3420.92
473	23.10.1998	2274.78	1070.67	2182.46	5217.10	3393.76
474	26.10.1998	2226.15	1072.32	2237.75	5231.50	3449.48
475	27.10.1998	2218.66	1065.34	2291.96	5331.20	3550.75
476	28.10.1998	2196.38	1068.09	2224.03	5293.90	3493.60
477	29.10.1998	2196.38	1085.93	2231.50	5358.50	3483.43
478	30.10.1998	2196.38	1098.67	2288.16	5438.40	3522.93
479	02.11.1998	2276.55	1111.60	2329.59	5525.50	3569.60
480	03.11.1998	2407.72	1110.84	2307.90	5503.90	3583.64
481	04.11.1998	2595.26	1118.67	2372.77	5622.90	3684.16
482	05.11.1998	2447.85	1133.85	2356.50	5479.80	3596.18
483	06.11.1998	2554.71	1141.01	2370.65	5491.00	3588.63
484	09.11.1998	2533.64	1130.20	2340.27	5433.90	3585.32
485	10.11.1998	2516.79	1128.26	2291.21	5432.30	3544.74
486	11.11.1998	2141.09	1120.97	2315.65	5476.80	3544.74
487	12.11.1998	2102.77	1117.69	2279.03	5448.90	3560.23
488	13.11.1998	2115.41	1125.72	2278.48	5463.20	3562.23
489	16.11.1998	2308.16	1135.87	2342.51	5510.50	3621.85
490	17.11.1998	2221.70	1139.32	2303.69	5502.70	3601.57
491	18.11.1998	2182.43	1144.48	2304.78	5474.00	3612.50
492	19.11.1998	2243.09	1152.61	2342.19	5606.20	3706.76
493	20.11.1998	2333.53	1163.55	2394.12	5717.50	3802.70
494	23.11.1998	2561.81	1188.21	2442.48	5848.40	3845.81
495	24.11.1998	2368.35	1182.99	2418.07	5798.30	3839.38

496	25.11.1998	2470.62	1186.87	2409.69	5755.30	3849.84
497	26.11.1998	2564.13	1186.87	2453.53	5827.90	3915.53
498	27.11.1998	2604.52	1192.33	2482.17	5844.20	3950.94
499	30.11.1998	2577.54	1163.63	2446.67	5743.90	3843.38
500	01.12.1998	2504.76	1175.28	2340.37	5537.40	3688.34
501	02.12.1998	2598.40	1171.25	2300.35	5507.20	3649.91
502	03.12.1998	2604.50	1150.14	2338.87	5566.10	3715.67
503	04.12.1998	2534.57	1176.74	2335.89	5581.90	3738.59
504	07.12.1998	2493.05	1187.70	2310.84	5576.70	3771.22
505	08.12.1998	2487.95	1181.38	2303.35	5615.70	3765.41
506	09.12.1998	2385.42	1183.49	2286.65	5669.10	3772.61
507	10.12.1998	2402.23	1165.02	2276.22	5660.30	3746.97
508	11.12.1998	2412.94	1166.46	2231.48	5541.70	3695.70
509	14.12.1998	2458.55	1141.20	2224.28	5534.50	3663.21
510	15.12.1998	2435.97	1162.83	2247.09	5557.10	3673.76
511	16.12.1998	2277.46	1161.94	2287.95	5630.40	3707.47
512	17.12.1998	2240.13	1179.98	2314.24	5685.20	3751.17
513	18.12.1998	2339.68	1188.03	2274.59	5741.90	3691.89
514	21.12.1998	2418.60	1202.84	2339.06	5876.50	3803.41
515	22.12.1998	2421.06	1203.57	2357.00	5843.30	3820.47
516	23.12.1998	2470.39	1228.54	2410.59	5908.80	3872.42
517	24.12.1998	2492.55	1226.27	2410.59	5867.20	3872.42
518	25.12.1998	2607.83	1226.27	2410.59	5867.20	3872.42
519	28.12.1998	2584.73	1225.49	2449.78	5867.20	3873.10
520	29.12.1998	2579.48	1241.81	2443.95	5941.50	3891.10
521	30.12.1998	2534.79	1231.93	2434.72	5882.60	3942.66
522	31.12.1998	2597.91	1229.23	2434.72	5882.60	3942.66
523	01.01.1999	2597.91	1229.23	2434.72	5882.60	3942.66
524	04.01.1999	2758.36	1228.10	2545.08	5879.40	4147.50
525	05.01.1999	2823.45	1244.78	2544.40	5958.20	4200.78
526	06.01.1999	2885.98	1272.34	2625.42	6148.80	4294.82
527	07.01.1999	2763.47	1269.73	2575.57	6101.20	4230.67
528	08.01.1999	2721.51	1275.09	2600.73	6147.20	4245.42
529	11.01.1999	2670.55	1263.88	2548.79	6085.00	4201.90
530	12.01.1999	2667.78	1239.51	2516.95	6033.60	4100.70
531	13.01.1999	2447.53	1234.40	2394.35	5850.10	3958.72
532	14.01.1999	2554.59	1212.19	2435.98	5820.20	3997.06
533	15.01.1999	2482.30	1243.26	2411.12	5941.00	4054.81
534	18.01.1999	2482.30	1243.26	2442.46	6123.90	4151.68
535	19.01.1999	2482.30	1252.00	2452.44	6027.60	4115.99
536	20.01.1999	2482.30	1256.62	2481.88	6105.60	4190.01
537	21.01.1999	2482.30	1235.16	2489.18	6022.20	4154.03
538	22.01.1999	2482.30	1225.19	2427.19	5861.20	4019.33
539	25.01.1999	2408.87	1233.98	2409.56	5880.90	4050.80
540	26.01.1999	2440.20	1252.31	2412.10	5885.70	4071.28
541	27.01.1999	2552.09	1243.17	2448.29	5876.40	4098.10
542	28.01.1999	2513.75	1265.37	2457.51	5872.50	4199.67
543	29.01.1999	2568.16	1279.64	2486.05	5896.00	4251.80
544	01.02.1999	2656.15	1273.03	2496.34	6012.40	4303.92
545	02.02.1999	2621.38	1261.99	2485.47	6013.00	4243.57

546	03.02.1999	2671.30	1272.07	2451.45	5940.30	4188.84
547	04.02.1999	2791.58	1248.49	2450.92	5939.90	4167.42
548	05.02.1999	2747.82	1239.40	2456.69	5855.30	4147.30
549	08.02.1999	2814.67	1243.77	2439.25	5834.90	4154.02
550	09.02.1999	2924.20	1216.14	2385.66	5779.90	4038.49
551	10.02.1999	2970.32	1223.55	2335.77	5770.20	4001.93
552	11.02.1999	3035.35	1254.04	2356.83	5888.50	4072.34
553	12.02.1999	3088.85	1230.13	2379.54	5950.70	4060.36
554	15.02.1999	3095.02	1230.13	2374.99	6023.20	4065.19
555	16.02.1999	3355.38	1241.87	2387.11	6108.60	4052.32
556	17.02.1999	3621.33	1224.03	2346.35	6078.40	3985.49
557	18.02.1999	3652.90	1237.28	2361.48	6074.90	4039.41
558	19.02.1999	3718.24	1239.22	2343.99	6031.20	4130.48
559	22.02.1999	3636.35	1272.14	2357.99	6069.90	4165.86
560	23.02.1999	3557.13	1271.18	2417.52	6155.20	4207.95
561	24.02.1999	3599.07	1253.41	2450.60	6307.60	4213.70
562	25.02.1999	3768.48	1245.02	2406.26	6206.50	4152.56
563	26.02.1999	3890.83	1238.33	2385.78	6175.10	4092.94
564	01.03.1999	3893.17	1236.16	2328.09	6060.90	4032.05
565	02.03.1999	3817.47	1225.50	2334.69	6061.30	4048.63
566	03.03.1999	3916.41	1227.70	2291.34	6048.30	4004.16
567	04.03.1999	3787.69	1246.64	2279.77	6101.40	4087.99
568	05.03.1999	3858.10	1275.47	2348.74	6205.50	4189.56
569	08.03.1999	3847.44	1282.73	2327.18	6208.90	4175.97
570	09.03.1999	3962.28	1279.84	2313.97	6237.70	4159.80
571	10.03.1999	3887.31	1286.84	2294.38	6241.50	4162.31
572	11.03.1999	4088.61	1297.68	2310.59	6335.70	4184.38
573	12.03.1999	4124.11	1294.59	2424.53	6282.20	4175.03
574	15.03.1999	4047.21	1307.26	2433.33	6206.80	4185.12
575	16.03.1999	3909.05	1306.38	2459.71	6201.90	4186.35
576	17.03.1999	4067.84	1297.82	2452.23	6140.60	4170.01
577	18.03.1999	4169.88	1316.55	2427.34	6114.30	4152.37
578	19.03.1999	4308.85	1299.29	2462.74	6163.20	4219.65
579	22.03.1999	4316.27	1297.01	2432.05	6152.80	4197.06
580	23.03.1999	4315.09	1262.14	2383.10	6060.50	4079.47
581	24.03.1999	4220.14	1268.59	2322.71	6016.70	4058.16
582	25.03.1999	4415.63	1289.99	2361.10	6085.00	4137.01
583	26.03.1999	4554.07	1282.80	2324.01	6139.20	4115.71
584	29.03.1999	4554.07	1310.17	2367.13	6252.90	4153.65
585	30.03.1999	4554.07	1300.75	2357.25	6264.10	4141.98
586	31.03.1999	4554.07	1286.37	2371.86	6295.30	4197.88
587	01.04.1999	4554.07	1293.72	2383.27	6330.02	4229.85
588	02.04.1999	4554.07	1293.72	2383.27	6330.02	4229.85
589	05.04.1999	4706.09	1321.12	2383.27	6330.02	4229.85
590	06.04.1999	4896.66	1317.89	2404.26	6415.28	4304.48
591	07.04.1999	4926.92	1326.89	2442.44	6473.22	4318.04
592	08.04.1999	4737.81	1343.98	2449.68	6437.87	4330.70
593	09.04.1999	4606.96	1348.35	2473.71	6472.83	4363.14
594	12.04.1999	4375.57	1358.64	2488.02	6441.16	4355.00
595	13.04.1999	3986.02	1349.82	2506.77	6513.08	4367.41

596	14.04.1999	4381.57	1328.44	2500.21	6493.56	4349.26
597	15.04.1999	4350.87	1322.86	2497.39	6466.13	4310.64
598	16.04.1999	4582.15	1319.00	2487.46	6420.61	4300.91
599	19.04.1999	4562.64	1289.48	2519.23	6515.34	4379.34
600	20.04.1999	5018.70	1306.17	2463.13	6319.76	4253.27
601	21.04.1999	4981.06	1336.12	2491.57	6310.95	4291.60
602	22.04.1999	5154.20	1358.82	2515.25	6413.55	4291.85
603	23.04.1999	5154.20	1356.85	2505.82	6427.99	4262.43
604	26.04.1999	5305.13	1360.04	2529.48	6503.59	4284.40
605	27.04.1999	5295.64	1362.80	2570.80	6593.62	4390.92
606	28.04.1999	5483.68	1350.91	2572.39	6598.77	4374.70
607	29.04.1999	5440.27	1342.83	2567.37	6497.60	4371.53
608	30.04.1999	5354.03	1335.18	2592.45	6552.18	4405.35
609	03.05.1999	5393.78	1354.63	2589.00	6552.18	4442.84
610	04.05.1999	5451.84	1332.00	2593.93	6533.14	4438.55
611	05.05.1999	5580.36	1347.31	2563.09	6401.67	4368.17
612	06.05.1999	5590.71	1332.05	2550.45	6406.59	4333.24
613	07.05.1999	5606.47	1345.00	2559.34	6356.03	4289.56
614	10.05.1999	5668.61	1340.30	2521.07	6348.82	4347.15
615	11.05.1999	5811.13	1355.61	2539.52	6378.26	4349.98
616	12.05.1999	5457.68	1364.00	2537.34	6343.12	4354.79
617	13.05.1999	5405.44	1367.56	2537.34	6456.62	4415.88
618	14.05.1999	5656.23	1337.80	2505.47	6300.42	4323.83
619	17.05.1999	5543.69	1339.49	2475.72	6165.79	4248.94
620	18.05.1999	5703.15	1333.32	2495.90	6206.43	4312.74
621	19.05.1999	5703.15	1344.23	2508.78	6266.73	4375.91
622	20.05.1999	5653.35	1338.83	2534.55	6368.18	4421.91
623	21.05.1999	5496.50	1330.29	2545.72	6353.10	4398.13
624	24.05.1999	5272.00	1306.65	2545.72	6322.10	4398.13
625	25.05.1999	5086.00	1284.40	2491.27	6249.32	4373.78
626	26.05.1999	5077.00	1304.76	2498.31	6236.77	4376.68
627	27.05.1999	5265.00	1281.41	2472.31	6199.47	4326.44
628	28.05.1999	5247.00	1301.84	2431.15	6226.22	4315.04
629	31.05.1999	5069.22	1301.84	2456.02	6226.22	4351.29
630	01.06.1999	5126.00	1294.26	2437.01	6250.03	4313.69
631	02.06.1999	4964.00	1294.81	2427.16	6302.23	4315.34
632	03.06.1999	4986.17	1299.54	2427.16	6348.58	4354.52
633	04.06.1999	5366.95	1327.75	2473.51	6361.48	4344.25
634	07.06.1999	5298.55	1334.52	2511.11	6412.03	4404.24
635	08.06.1999	5288.29	1317.33	2519.29	6431.54	4407.58
636	09.06.1999	5289.12	1318.64	2538.03	6453.01	4422.39
637	10.06.1999	5560.28	1302.82	2515.38	6403.41	4380.99
638	11.06.1999	5531.82	1293.64	2542.56	6484.79	4385.83
639	14.06.1999	5402.09	1294.00	2541.37	6430.15	4372.39
640	15.06.1999	5241.07	1301.16	2574.33	6451.24	4418.18
641	16.06.1999	5081.53	1330.41	2590.67	6504.88	4481.75
642	17.06.1999	5262.55	1339.90	2603.88	6493.61	4508.77
643	18.06.1999	5321.58	1342.84	2613.14	6527.81	4539.56
644	21.06.1999	5289.15	1349.00	2632.56	6581.25	4545.09
645	22.06.1999	5219.17	1335.88	2633.14	6552.42	4538.04

646	23.06.1999	5129.59	1333.06	2602.26	6496.47	4481.66
647	24.06.1999	5090.07	1315.78	2570.74	6416.69	4434.21
648	25.06.1999	4941.56	1315.31	2558.52	6435.43	4416.89
649	28.06.1999	4680.97	1331.35	2583.33	6405.75	4465.23
650	29.06.1999	4676.39	1351.45	2585.63	6307.08	4503.83
651	30.06.1999	4950.21	1372.71	2597.56	6318.53	4536.61
652	01.07.1999	5159.98	1380.96	2645.82	6488.90	4609.26
653	02.07.1999	4860.88	1391.22	2663.56	6491.92	4620.67
654	05.07.1999	5030.67	1391.22	2713.32	6592.00	4697.84
655	06.07.1999	4819.79	1388.12	2707.90	6620.63	4692.51
656	07.07.1999	4755.23	1395.86	2698.50	6597.42	4662.20
657	08.07.1999	4877.20	1394.42	2687.02	6557.34	4631.13
658	09.07.1999	5128.79	1403.28	2726.30	6562.60	4647.83
659	12.07.1999	5620.78	1399.10	2729.28	6545.47	4662.28
660	13.07.1999	5574.99	1393.56	2693.91	6445.62	4594.65
661	14.07.1999	5782.71	1398.17	2711.68	6473.14	4594.65
662	15.07.1999	5763.43	1409.62	2717.96	6574.99	4665.67
663	16.07.1999	5676.26	1418.78	2719.66	6563.25	4656.79
664	19.07.1999	5924.83	1407.65	2724.80	6483.72	4618.75
665	20.07.1999	5990.79	1377.10	2670.69	6391.99	4548.31
666	21.07.1999	6003.66	1379.29	2635.91	6329.83	4501.27
667	22.07.1999	5865.34	1360.97	2595.03	6297.75	4489.57
668	23.07.1999	5782.91	1356.94	2596.56	6207.42	4440.45
669	26.07.1999	5529.45	1347.76	2516.15	6169.13	4401.58
670	27.07.1999	5759.54	1362.84	2540.84	6262.83	4426.12
671	28.07.1999	5694.05	1365.40	2538.92	6297.22	4428.71
672	29.07.1999	5710.42	1341.03	2543.61	6117.53	4306.40
673	30.07.1999	5805.45	1328.72	2486.63	6231.93	4382.06
674	02.08.1999	5681.79	1328.05	2494.80	6288.29	4377.87
675	03.08.1999	5706.64	1322.18	2486.04	6250.65	4354.75
676	04.08.1999	5687.28	1305.33	2491.07	6235.43	4326.20
677	05.08.1999	5596.69	1313.71	2427.10	6101.61	4240.70
678	06.08.1999	5603.73	1300.29	2441.19	6121.00	4223.64
679	09.08.1999	5807.16	1297.80	2475.45	6126.45	4292.90
680	10.08.1999	5755.46	1281.43	2436.48	5978.35	4245.35
681	11.08.1999	5675.04	1301.93	2445.67	6014.44	4268.95
682	12.08.1999	5627.61	1298.16	2495.03	6153.34	4365.66
683	13.08.1999	5786.55	1327.68	2537.19	6245.13	4434.28
684	16.08.1999	5807.11	1330.77	2556.57	6235.41	4458.75
685	17.08.1999	5807.11	1344.16	2557.22	6166.45	4479.75
686	18.08.1999	5807.11	1332.84	2543.85	6201.78	4479.26
687	19.08.1999	5807.11	1323.59	2523.01	6117.98	4408.90
688	20.08.1999	5807.11	1336.61	2551.39	6180.84	4472.00
689	23.08.1999	5807.11	1360.22	2573.34	6322.11	4487.35
690	24.08.1999	5807.11	1363.50	2584.42	6315.06	4540.40
691	25.08.1999	5807.11	1381.79	2619.16	6369.49	4629.23
692	26.08.1999	5204.07	1362.01	2614.04	6383.93	4629.37
693	27.08.1999	5277.31	1348.27	2628.76	6375.16	4642.71
694	30.08.1999	5277.31	1324.02	2617.36	6375.16	4657.44
695	31.08.1999	5018.28	1320.41	2560.54	6246.44	4589.22

696	01.09.1999	5137.75	1331.06	2583.98	6276.18	4633.38
697	02.09.1999	5230.09	1319.11	2526.93	6195.60	4550.60
698	03.09.1999	5358.64	1357.24	2591.92	6332.15	4672.37
699	06.09.1999	5823.86	1357.24	2621.55	6375.70	4668.04
700	07.09.1999	5799.78	1350.45	2620.44	6309.51	4679.93
701	08.09.1999	6094.96	1344.15	2625.33	6253.57	4680.61
702	09.09.1999	6118.18	1347.66	2642.55	6260.58	4717.42
703	10.09.1999	6178.29	1351.66	2663.01	6191.01	4745.48
704	13.09.1999	6050.78	1344.13	2646.42	6168.97	4716.78
705	14.09.1999	6142.83	1336.29	2625.83	6115.96	4697.39
706	15.09.1999	6108.29	1317.97	2616.77	6067.69	4662.02
707	16.09.1999	6150.69	1318.48	2578.82	6014.61	4640.55
708	17.09.1999	6165.84	1335.42	2579.51	6039.80	4644.32
709	20.09.1999	6221.99	1335.53	2598.91	6056.53	4680.49
710	21.09.1999	6173.83	1307.58	2567.30	5957.34	4612.93
711	22.09.1999	6121.25	1310.52	2544.59	5913.93	4568.12
712	23.09.1999	6252.06	1280.41	2570.28	5969.71	4601.24
713	24.09.1999	6179.27	1277.36	2520.01	5937.64	4540.87
714	27.09.1999	6092.78	1283.31	2539.58	6078.58	4596.60
715	28.09.1999	6086.93	1282.20	2488.48	6007.18	4543.92
716	29.09.1999	6096.66	1268.38	2496.84	6020.64	4535.08
717	30.09.1999	6071.12	1282.70	2507.55	6029.84	4591.42
718	01.10.1999	5961.53	1282.81	2496.12	5970.73	4550.57
719	04.10.1999	5850.46	1304.59	2535.55	6052.88	4603.24
720	05.10.1999	5822.21	1301.34	2570.80	6084.51	4661.13
721	06.10.1999	5923.37	1325.40	2592.46	6097.53	4691.72
722	07.10.1999	5855.24	1317.64	2621.93	6200.45	4742.26
723	08.10.1999	5794.82	1336.02	2623.53	6199.39	4721.93
724	11.10.1999	5699.77	1335.20	2620.50	6234.78	4722.35
725	12.10.1999	5782.41	1313.03	2594.67	6174.85	4658.54
726	13.10.1999	5701.53	1285.55	2566.40	6113.36	4602.85
727	14.10.1999	5718.90	1283.42	2533.20	6039.40	4583.63
728	15.10.1999	5930.82	1247.41	2515.17	5907.33	4524.42
729	18.10.1999	5998.02	1254.13	2500.36	5869.18	4495.30
730	19.10.1999	5970.06	1261.31	2561.26	5993.69	4591.20
731	20.10.1999	5912.19	1289.42	2558.61	6006.68	4577.83
732	21.10.1999	5839.90	1283.61	2538.10	5939.34	4602.39
733	22.10.1999	6160.52	1301.66	2588.14	6058.91	4677.80
734	25.10.1999	6403.43	1293.63	2572.28	6009.36	4669.28
735	26.10.1999	6545.55	1281.91	2601.76	6092.40	4706.59
736	27.10.1999	6509.92	1296.70	2589.83	6045.70	4695.05
737	28.10.1999	6556.05	1342.44	2639.95	6149.10	4748.62
738	29.10.1999	6556.05	1362.92	2662.72	6255.72	4888.62
739	01.11.1999	6534.73	1354.13	2665.19	6283.97	4888.62
740	02.11.1999	6542.23	1347.74	2672.69	6252.00	4898.52
741	03.11.1999	6843.69	1354.92	2680.10	6280.84	4917.84
742	04.11.1999	7043.06	1362.64	2714.20	6331.33	4943.74
743	05.11.1999	7132.54	1370.23	2724.49	6356.61	4975.90
744	08.11.1999	7176.19	1377.01	2719.32	6374.34	4994.77
745	09.11.1999	7593.54	1365.28	2739.08	6435.45	4997.56

746	10.11.1999	7918.44	1373.46	2760.17	6446.96	5051.83
747	11.11.1999	8057.58	1381.45	2785.58	6551.44	5132.08
748	12.11.1999	8298.62	1396.06	2780.05	6511.58	5141.51
749	15.11.1999	8364.85	1394.39	2810.64	6533.64	5178.13
750	16.11.1999	8334.77	1420.06	2832.66	6582.99	5191.01
751	17.11.1999	8244.89	1410.70	2816.43	6555.69	5178.23
752	18.11.1999	8329.07	1424.94	2851.38	6550.75	5246.33
753	19.11.1999	8509.37	1422.00	2852.92	6482.25	5263.23
754	22.11.1999	8879.79	1420.94	2791.73	6441.99	5147.96
755	23.11.1999	8656.79	1404.64	2787.52	6534.20	5152.87
756	24.11.1999	8554.66	1417.08	2788.96	6561.76	5189.38
757	25.11.1999	8525.82	1417.08	2853.49	6682.76	5352.60
758	26.11.1999	7994.87	1416.62	2810.64	6684.79	5396.99
759	29.11.1999	8104.75	1407.83	2822.77	6692.31	5373.91
760	30.11.1999	8459.48	1388.91	2826.20	6597.17	5341.62
761	01.12.1999	8776.20	1397.72	2839.59	6645.97	5381.41
762	02.12.1999	9211.81	1409.03	2840.05	6653.67	5354.19
763	03.12.1999	9408.20	1433.30	2919.85	6742.17	5468.05
764	06.12.1999	9861.08	1423.33	2925.06	6694.01	5509.97
765	07.12.1999	10076.25	1409.17	2931.43	6660.92	5534.51
766	08.12.1999	9849.61	1403.88	2911.42	6619.38	5487.12
767	09.12.1999	10336.75	1408.11	2916.01	6680.84	5548.62
768	10.12.1999	11467.84	1417.03	2907.61	6739.52	5481.10
769	13.12.1999	12911.24	1415.22	2919.25	6710.71	5535.76
770	14.12.1999	12064.20	1403.17	2946.79	6702.08	5564.47
771	15.12.1999	12560.05	1413.32	2965.96	6633.82	5530.13
772	16.12.1999	12979.52	1418.78	3016.58	6671.98	5540.16
773	17.12.1999	13206.08	1421.03	3014.22	6724.58	5502.40
774	20.12.1999	13433.95	1418.09	3032.54	6731.19	5521.11
775	21.12.1999	13479.97	1433.43	3051.97	6707.50	5529.24
776	22.12.1999	13583.99	1436.13	3090.62	6728.65	5621.29
777	23.12.1999	13428.58	1458.34	3217.55	6776.81	5731.35
778	24.12.1999	14403.77	1458.34	3217.55	6806.51	5852.50
779	27.12.1999	15747.94	1457.09	3240.41	6806.51	5834.47
780	28.12.1999	15208.78	1457.66	3248.84	6806.51	5827.08
781	29.12.1999	15208.78	1463.45	3248.67	6835.91	5837.75
782	30.12.1999	15208.78	1464.47	3293.54	6930.20	5958.32
783	31.12.1999	15208.78	1469.25	3293.54	6930.20	5958.32
784	03.01.2000	17199.25	1455.22	3207.42	6930.20	5917.37
785	04.01.2000	17512.19	1399.42	3129.99	6665.86	5672.02
786	05.01.2000	16932.00	1402.11	3088.17	6535.90	5479.70
787	06.01.2000	16200.02	1403.45	3072.08	6447.24	5450.11
788	07.01.2000	15837.36	1441.47	3210.19	6504.75	5539.61
789	10.01.2000	15837.36	1457.59	3276.16	6607.71	5646.12
790	11.01.2000	16347.39	1438.56	3276.16	6518.94	5613.90
791	12.01.2000	16933.59	1432.25	3275.06	6532.84	5582.50
792	13.01.2000	18138.20	1449.67	3295.09	6531.46	5633.24
793	14.01.2000	19110.30	1465.16	3394.20	6658.18	5787.44
794	17.01.2000	18458.25	1465.16	3433.56	6669.46	5842.78
795	18.01.2000	19577.27	1455.14	3347.82	6504.57	5672.95

796	19.01.2000	18414.00	1455.91	3355.20	6445.45	5649.46
797	20.01.2000	18030.76	1445.56	3363.81	6348.73	5709.74
798	21.01.2000	17257.96	1441.36	3313.48	6346.31	5681.32
799	24.01.2000	17663.58	1401.53	3282.41	6379.83	5690.86
800	25.01.2000	17218.73	1410.03	3228.05	6274.10	5597.50
801	26.01.2000	18014.37	1404.09	3305.10	6375.60	5646.32
802	27.01.2000	18098.64	1398.56	3378.48	6440.97	5688.35
803	28.01.2000	18172.32	1360.16	3347.61	6375.61	5731.05
804	31.01.2000	16714.95	1394.45	3243.39	6268.54	5659.81
805	01.02.2000	16342.23	1409.28	3344.98	6290.93	5773.42
806	02.02.2000	16040.49	1409.12	3394.35	6302.83	5946.86
807	03.02.2000	16096.86	1424.97	3486.50	6324.33	6149.67
808	04.02.2000	16870.62	1424.37	3528.19	6184.98	6275.72
809	07.02.2000	16377.87	1424.18	3455.98	6118.64	6203.58
810	08.02.2000	16050.29	1441.75	3578.04	6285.81	6297.66
811	09.02.2000	15433.40	1411.70	3613.84	6315.41	6271.60
812	10.02.2000	15829.58	1416.83	3647.59	6279.81	6207.52
813	11.02.2000	15598.19	1387.13	3600.98	6193.32	6287.01
814	14.02.2000	15237.40	1389.94	3605.12	6068.62	6268.32
815	15.02.2000	15859.28	1402.05	3498.28	6005.19	6092.63
816	16.02.2000	15833.74	1387.67	3540.57	6147.38	6046.27
817	17.02.2000	15341.54	1388.27	3581.30	6209.34	6154.96
818	18.02.2000	15363.59	1346.09	3584.52	6164.96	6062.72
819	21.02.2000	14569.00	1346.09	3588.98	6081.62	5967.28
820	22.02.2000	13994.19	1352.17	3591.81	6014.73	5963.31
821	23.02.2000	13447.08	1360.69	3632.05	6144.10	6031.25
822	24.02.2000	14652.08	1353.42	3612.29	6086.70	6078.78
823	25.02.2000	15618.18	1333.36	3649.43	6197.98	6188.64
824	28.02.2000	15315.29	1348.05	3579.26	6099.64	6102.73
825	29.02.2000	15945.93	1366.42	3609.46	6232.56	6190.96
826	01.03.2000	17199.25	1379.19	3656.53	6364.89	6256.32
827	02.03.2000	16939.68	1381.77	3759.66	6432.10	6477.55
828	03.03.2000	16783.53	1409.17	3769.06	6487.46	6514.11
829	06.03.2000	16563.36	1391.28	3776.23	6567.81	6545.98
830	07.03.2000	17223.19	1355.63	3806.28	6466.54	6441.85
831	08.03.2000	17344.16	1366.70	3765.50	6411.21	6344.97
832	09.03.2000	18314.72	1401.69	3752.91	6532.11	6423.43
833	10.03.2000	17841.25	1395.07	3769.10	6568.73	6510.28
834	13.03.2000	17841.25	1383.62	3645.51	6466.87	6336.93
835	14.03.2000	17841.25	1359.15	3626.37	6487.11	6350.35
836	15.03.2000	17841.25	1392.15	3518.36	6446.99	6188.94
837	16.03.2000	17841.25	1458.47	3596.99	6557.25	6258.53
838	17.03.2000	17841.25	1464.47	3652.31	6557.99	6304.28
839	20.03.2000	17443.92	1456.63	3735.96	6624.51	6352.51
840	21.03.2000	17545.57	1493.88	3703.36	6617.87	6320.87
841	22.03.2000	16823.26	1500.64	3690.41	6609.62	6279.29
842	23.03.2000	17439.05	1527.34	3640.33	6594.61	6268.31
843	24.03.2000	17669.19	1527.45	3750.42	6738.50	6364.26
844	27.03.2000	17612.22	1523.86	3733.25	6687.17	6450.85
845	28.03.2000	17277.23	1507.73	3764.37	6650.14	6524.30

846	29.03.2000	16951.35	1508.52	3729.72	6598.83	6505.48
847	30.03.2000	15686.08	1487.92	3615.29	6445.17	6313.82
848	31.03.2000	15920.10	1498.58	3603.96	6540.22	6286.05
849	03.04.2000	15760.80	1505.97	3496.34	6462.12	6130.27
850	04.04.2000	16216.02	1494.73	3519.99	6427.03	6221.94
851	05.04.2000	15863.39	1487.38	3447.12	6379.32	6036.94
852	06.04.2000	16916.72	1501.34	3514.38	6451.14	6224.02
853	07.04.2000	16900.84	1516.34	3549.12	6569.88	6308.04
854	10.04.2000	16855.32	1504.45	3556.63	6533.38	6364.90
855	11.04.2000	16558.71	1500.59	3504.15	6379.22	6261.42
856	12.04.2000	16902.82	1467.17	3487.64	6350.80	6238.70
857	13.04.2000	17746.34	1440.52	3493.24	6357.00	6264.34
858	14.04.2000	18367.31	1356.56	3384.26	6178.12	6065.71
859	17.04.2000	17245.54	1401.44	3374.61	5994.57	6060.54
860	18.04.2000	16708.94	1441.61	3384.57	6074.04	6147.44
861	19.04.2000	16809.37	1427.47	3394.39	6184.91	6166.46
862	20.04.2000	16938.84	1434.53	3381.51	6241.22	6234.51
863	21.04.2000	16985.87	1434.53	3381.51	6241.22	6234.51
864	24.04.2000	17002.13	1429.86	3381.51	6241.22	6234.51
865	25.04.2000	17955.70	1477.44	3423.35	6282.97	6320.29
866	26.04.2000	18582.02	1460.98	3477.60	6256.53	6390.87
867	27.04.2000	18470.06	1464.92	3394.35	6179.27	6247.86
868	28.04.2000	19205.71	1452.42	3478.61	6327.43	6419.72
869	01.05.2000	19059.41	1468.25	3478.61	6327.43	6419.72
870	02.05.2000	19406.02	1446.28	3549.70	6373.39	6562.41
871	03.05.2000	19092.13	1415.09	3464.14	6184.79	6435.65
872	04.05.2000	18027.86	1409.56	3456.03	6199.58	6491.74
873	05.05.2000	18086.12	1432.63	3524.25	6238.84	6545.76
874	08.05.2000	17344.82	1424.17	3464.42	6216.30	6514.42
875	09.05.2000	17973.99	1412.14	3395.14	6123.81	6369.61
876	10.05.2000	17777.13	1383.05	3322.72	6100.65	6263.34
877	11.05.2000	17896.70	1407.81	3389.84	6245.88	6380.13
878	12.05.2000	17557.46	1420.95	3396.29	6283.45	6449.27
879	15.05.2000	17013.03	1452.36	3358.17	6247.70	6392.27
880	16.05.2000	17492.53	1466.03	3446.07	6318.36	6557.39
881	17.05.2000	16925.31	1447.80	3365.63	6196.22	6453.05
882	18.05.2000	16449.27	1437.20	3351.91	6232.95	6451.97
883	19.05.2000	16449.27	1406.95	3253.53	6045.38	6196.05
884	22.05.2000	16241.29	1400.72	3228.84	6035.54	6094.17
885	23.05.2000	15583.92	1373.86	3245.70	6086.79	6148.56
886	24.05.2000	15819.80	1399.05	3192.37	6118.62	6027.10
887	25.05.2000	16329.19	1381.52	3268.30	6231.11	6129.66
888	26.05.2000	15922.27	1378.02	3257.90	6216.92	6129.15
889	29.05.2000	15884.12	1378.02	3289.81	6216.92	6205.13
890	30.05.2000	15769.47	1422.45	3342.59	6359.57	6325.49
891	31.05.2000	16206.42	1420.59	3345.93	6359.35	6426.26
892	01.06.2000	16770.16	1448.81	3419.22	6470.54	6599.71
893	02.06.2000	16520.05	1477.27	3501.99	6626.38	6673.52
894	05.06.2000	16629.05	1467.63	3490.13	6546.65	6656.26
895	06.06.2000	16719.50	1457.84	3471.14	6546.75	6589.77

896	07.06.2000	16192.37	1471.36	3427.66	6503.82	6498.50
897	08.06.2000	16662.95	1461.67	3410.73	6496.57	6523.66
898	09.06.2000	16461.32	1456.95	3409.33	6443.78	6549.05
899	12.06.2000	15902.91	1446.00	3403.25	6430.88	6549.05
900	13.06.2000	15613.66	1469.44	3411.19	6447.11	6532.84
901	14.06.2000	15183.92	1470.54	3449.07	6536.29	6608.10
902	15.06.2000	14966.02	1478.73	3439.30	6490.81	6512.98
903	16.06.2000	14351.40	1464.46	3381.07	6526.01	6456.26
904	19.06.2000	14543.90	1486.00	3394.77	6490.22	6505.16
905	20.06.2000	14748.22	1475.95	3402.48	6526.93	6554.92
906	21.06.2000	14659.26	1479.13	3353.27	6477.76	6490.76
907	22.06.2000	14885.15	1452.18	3332.95	6413.82	6474.88
908	23.06.2000	14930.88	1441.48	3303.60	6391.49	6545.35
909	26.06.2000	14632.86	1455.31	3321.89	6405.17	6586.26
910	27.06.2000	14663.49	1450.55	3327.87	6375.33	6568.09
911	28.06.2000	14790.19	1454.82	3328.12	6313.53	6607.96
912	29.06.2000	14404.95	1442.39	3248.80	6238.98	6400.82
913	30.06.2000	14466.12	1454.60	3260.24	6312.71	6446.54
914	03.07.2000	14348.44	1469.54	3288.58	6470.43	6508.47
915	04.07.2000	14200.89	1469.54	3285.00	6416.99	6494.77
916	05.07.2000	14638.28	1446.23	3289.45	6382.46	6462.70
917	06.07.2000	14180.32	1456.67	3289.43	6419.59	6453.97
918	07.07.2000	14343.87	1478.90	3334.74	6497.54	6565.97
919	10.07.2000	14868.62	1475.62	3345.51	6466.24	6487.42
920	11.07.2000	14061.19	1480.88	3316.06	6475.84	6490.35
921	12.07.2000	13857.72	1492.92	3342.80	6518.50	6536.51
922	13.07.2000	13394.10	1495.84	3396.88	6475.73	6570.36
923	14.07.2000	13521.81	1509.98	3448.58	6475.36	6570.36
924	17.07.2000	12801.78	1510.49	3497.75	6525.45	6619.25
925	18.07.2000	12736.96	1493.74	3490.41	6450.54	6514.54
926	19.07.2000	13238.66	1481.96	3471.81	6465.45	6495.11
927	20.07.2000	12923.43	1495.57	3521.32	6469.01	6563.77
928	21.07.2000	13601.46	1480.19	3478.08	6378.42	6464.12
929	24.07.2000	13719.88	1464.29	3459.26	6381.31	6502.57
930	25.07.2000	13875.62	1474.47	3460.22	6390.74	6463.91
931	26.07.2000	13698.67	1452.42	3448.48	6387.09	6493.00
932	27.07.2000	13713.50	1449.62	3398.13	6352.13	6511.53
933	28.07.2000	14130.21	1419.89	3377.41	6335.69	6415.72
934	31.07.2000	13870.23	1430.83	3409.14	6365.26	6542.49
935	01.08.2000	14100.26	1438.10	3395.31	6379.35	6532.29
936	02.08.2000	14104.49	1438.70	3383.77	6391.28	6529.91
937	03.08.2000	14036.77	1452.56	3354.58	6317.13	6354.93
938	04.08.2000	13789.00	1462.93	3348.87	6363.51	6461.35
939	07.08.2000	13464.74	1479.32	3391.61	6387.78	6519.04
940	08.08.2000	13233.08	1482.80	3392.10	6358.12	6532.44
941	09.08.2000	12903.70	1472.87	3434.55	6413.97	6570.18
942	10.08.2000	12945.09	1460.25	3459.41	6387.27	6562.54
943	11.08.2000	13304.00	1471.84	3475.16	6384.46	6553.00
944	14.08.2000	13586.09	1491.56	3477.07	6419.93	6609.36
945	15.08.2000	12990.07	1484.43	3470.16	6475.52	6636.61

946	16.08.2000	12972.84	1479.85	3471.61	6532.05	6684.08
947	17.08.2000	12961.42	1496.07	3454.50	6518.17	6635.34
948	18.08.2000	13196.91	1491.72	3434.95	6543.66	6594.35
949	21.08.2000	12776.02	1499.48	3421.54	6542.19	6571.63
950	22.08.2000	12711.87	1498.13	3444.18	6584.82	6513.71
951	23.08.2000	13185.83	1505.97	3439.56	6566.24	6501.70
952	24.08.2000	13158.73	1508.31	3438.18	6557.04	6461.93
953	25.08.2000	13051.52	1506.45	3471.24	6563.71	6595.11
954	28.08.2000	12960.69	1514.09	3486.61	6563.71	6615.02
955	29.08.2000	13308.02	1509.84	3465.54	6586.27	6633.99
956	30.08.2000	13308.02	1502.59	3420.99	6615.12	6634.62
957	31.08.2000	13132.06	1517.68	3433.15	6672.66	6625.42
958	01.09.2000	13070.15	1520.77	3486.38	6795.01	6813.66
959	04.09.2000	13192.70	1520.77	3531.52	6798.06	6922.33
960	05.09.2000	13167.63	1507.08	3512.19	6752.48	6856.76
961	06.09.2000	13039.63	1492.25	3490.48	6694.73	6796.79
962	07.09.2000	12297.44	1502.51	3504.01	6689.19	6834.46
963	08.09.2000	12172.54	1494.50	3461.56	6600.74	6703.36
964	11.09.2000	11562.80	1489.26	3435.09	6581.96	6675.01
965	12.09.2000	11630.88	1481.99	3401.40	6555.52	6697.80
966	13.09.2000	11769.59	1484.91	3345.68	6478.19	6568.89
967	14.09.2000	11498.92	1480.87	3367.95	6555.50	6637.91
968	15.09.2000	11466.21	1465.81	3337.64	6417.30	6614.65
969	18.09.2000	10862.21	1444.51	3296.33	6410.15	6522.38
970	19.09.2000	10378.43	1459.90	3315.96	6403.50	6529.95
971	20.09.2000	11190.70	1451.34	3242.62	6279.87	6405.43
972	21.09.2000	11320.78	1449.05	3198.36	6199.16	6254.77
973	22.09.2000	11320.78	1448.72	3219.77	6205.92	6258.58
974	25.09.2000	11514.87	1439.03	3245.52	6257.13	6336.28
975	26.09.2000	11360.45	1427.21	3238.64	6213.21	6294.06
976	27.09.2000	11294.62	1426.57	3261.00	6269.34	6319.79
977	28.09.2000	11293.28	1458.29	3271.98	6264.06	6311.03
978	29.09.2000	11350.30	1436.51	3263.33	6294.24	6266.63
979	02.10.2000	11411.53	1436.23	3294.89	6284.46	6349.24
980	03.10.2000	11567.43	1426.46	3294.89	6345.04	6400.43
981	04.10.2000	11694.39	1434.32	3270.05	6334.94	6296.13
982	05.10.2000	11744.98	1436.28	3300.38	6381.98	6335.12
983	06.10.2000	12460.18	1408.99	3250.41	6391.23	6258.41
984	09.10.2000	12070.97	1402.03	3206.48	6264.84	6110.06
985	10.10.2000	13009.39	1387.02	3206.95	6247.68	6143.30
986	11.10.2000	12874.09	1364.59	3150.20	6117.63	5956.12
987	12.10.2000	13145.09	1329.78	3105.24	6131.94	5990.70
988	13.10.2000	13015.35	1374.17	3191.32	6209.58	6064.21
989	16.10.2000	13900.56	1374.62	3175.91	6285.73	6088.04
990	17.10.2000	13764.46	1349.97	3139.66	6203.25	6067.15
991	18.10.2000	13521.96	1342.13	3117.09	6148.24	5937.35
992	19.10.2000	13534.53	1388.76	3175.46	6218.91	6066.48
993	20.10.2000	13581.38	1396.93	3173.92	6276.27	6149.44
994	23.10.2000	13205.36	1395.78	3176.90	6315.90	6182.34
995	24.10.2000	13603.09	1398.13	3257.92	6438.38	6323.74

996	25.10.2000	13361.10	1364.90	3234.95	6367.83	6277.90
997	26.10.2000	13354.29	1364.44	3243.23	6302.32	6208.42
998	27.10.2000	13227.84	1379.58	3311.09	6366.55	6268.93
999	30.10.2000	13347.24	1398.66	3315.28	6388.40	6296.84
1000	31.10.2000	13538.44	1429.40	3379.45	6438.42	6397.66
1001	01.11.2000	14079.07	1421.22	3373.78	6457.61	6409.05
1002	02.11.2000	14516.18	1428.32	3389.99	6392.01	6400.31
1003	03.11.2000	14802.95	1426.69	3405.81	6385.44	6398.92
1004	06.11.2000	14369.45	1432.19	3412.23	6430.99	6352.24
1005	07.11.2000	14215.33	1431.87	3384.43	6466.91	6386.07
1006	08.11.2000	13581.34	1409.28	3362.28	6477.37	6336.03
1007	09.11.2000	13740.15	1400.14	3338.09	6442.19	6271.15
1008	10.11.2000	13801.05	1365.98	3290.96	6400.22	6147.49
1009	13.11.2000	13269.38	1351.26	3237.72	6274.80	6037.73
1010	14.11.2000	13299.10	1382.95	3332.47	6412.90	6225.98
1011	15.11.2000	13526.50	1389.81	3328.70	6432.30	6301.78
1012	16.11.2000	13183.07	1372.32	3278.81	6430.40	6283.06
1013	17.11.2000	12831.55	1367.72	3239.87	6440.10	6161.92
1014	20.11.2000	11916.85	1342.62	3177.87	6344.98	6021.79
1015	21.11.2000	11313.97	1347.35	3199.74	6382.15	6081.02
1016	22.11.2000	11554.45	1322.36	3120.36	6221.36	5944.70
1017	23.11.2000	11186.85	1322.36	3160.19	6287.26	6053.04
1018	24.11.2000	10808.54	1341.77	3192.66	6327.55	6145.65
1019	27.11.2000	10596.50	1348.97	3207.26	6374.69	6171.33
1020	28.11.2000	9641.68	1336.09	3173.70	6249.80	6069.22
1021	29.11.2000	9512.51	1341.91	3165.34	6164.88	6060.65
1022	30.11.2000	8747.68	1314.95	3063.50	6142.20	5928.08
1023	01.12.2000	7977.83	1315.23	3118.75	6170.42	5928.50
1024	04.12.2000	7329.61	1324.97	3069.67	6158.67	5791.51
1025	05.12.2000	8755.29	1376.54	3172.69	6298.98	5994.89
1026	06.12.2000	10387.38	1351.46	3171.41	6273.32	5985.24
1027	07.12.2000	9364.17	1343.55	3148.59	6231.37	5984.69
1028	08.12.2000	9799.48	1369.89	3202.43	6288.33	5939.32
1029	11.12.2000	9753.63	1380.20	3242.02	6370.35	6077.88
1030	12.12.2000	9626.87	1371.18	3219.49	6390.41	6047.66
1031	13.12.2000	9010.50	1359.99	3172.99	6402.96	5962.29
1032	14.12.2000	9500.43	1340.93	3109.06	6263.81	5905.65
1033	15.12.2000	9422.71	1312.15	3049.16	6175.81	5839.54
1034	18.12.2000	9172.94	1322.74	3073.76	6246.48	5887.49
1035	19.12.2000	9346.52	1305.60	3111.34	6294.98	5958.86
1036	20.12.2000	9185.45	1264.74	3008.27	6176.71	5766.30
1037	21.12.2000	9200.59	1274.86	2980.95	6115.48	5758.92
1038	22.12.2000	9437.21	1305.97	3002.59	6097.53	5783.73
1039	25.12.2000	9437.21	1305.97	3002.59	6097.53	5783.73
1040	26.12.2000	9437.21	1315.19	3002.59	6097.53	5783.73
1041	27.12.2000	9437.21	1328.92	3034.12	6218.17	5857.15
1042	28.12.2000	9437.21	1334.22	3058.58	6223.22	5920.60
1043	29.12.2000	9437.21	1320.28	3088.24	6222.46	5926.42
1044	01.01.2001	9437.21	1320.28	3088.24	6222.46	5926.42
1045	02.01.2001	9467.07	1283.27	3030.91	6174.74	5798.90

1046	03.01.2001	9137.44	1347.56	3086.05	6039.89	5684.05
1047	04.01.2001	10198.15	1333.34	3062.14	6185.62	5815.99
1048	05.01.2001	10007.30	1298.35	3064.81	6198.09	5758.02
1049	08.01.2001	10560.43	1295.86	3063.17	6149.60	5732.80
1050	09.01.2001	10861.04	1300.80	3060.64	6088.14	5663.19
1051	10.01.2001	11539.99	1313.27	3024.48	6059.86	5653.35
1052	11.01.2001	11264.89	1326.82	3088.84	6114.89	5702.78
1053	12.01.2001	10964.89	1318.32	3102.17	6165.53	5834.34
1054	15.01.2001	10425.63	1318.32	3116.91	6170.30	5833.38
1055	16.01.2001	10505.11	1326.65	3106.57	6083.29	5761.67
1056	17.01.2001	10944.75	1329.47	3176.46	6197.36	5884.09
1057	18.01.2001	10927.92	1347.97	3168.51	6209.87	5860.16
1058	19.01.2001	11400.70	1342.54	3173.33	6209.32	5845.73
1059	22.01.2001	11093.73	1342.90	3186.58	6231.98	5882.76
1060	23.01.2001	10882.97	1360.40	3206.50	6214.66	5839.73
1061	24.01.2001	10884.58	1364.31	3204.37	6264.36	5900.32
1062	25.01.2001	10980.43	1357.51	3217.77	6255.63	5934.68
1063	26.01.2001	10742.79	1354.95	3201.59	6294.34	5925.62
1064	29.01.2001	10607.66	1364.17	3229.40	6316.98	5887.90
1065	30.01.2001	10421.07	1373.73	3226.12	6334.53	5917.15
1066	31.01.2001	10685.07	1366.01	3249.17	6297.53	5998.49
1067	01.02.2001	10638.23	1373.47	3212.13	6251.83	5899.72
1068	02.02.2001	10546.66	1349.47	3185.60	6256.43	5826.37
1069	05.02.2001	9952.59	1354.31	3181.60	6269.21	5823.49
1070	06.02.2001	10187.21	1352.26	3211.63	6293.43	5852.35
1071	07.02.2001	9724.09	1340.89	3161.25	6225.65	5752.14
1072	08.02.2001	9658.90	1332.53	3186.17	6206.10	5773.46
1073	09.02.2001	9545.86	1314.76	3128.51	6164.25	5712.36
1074	12.02.2001	9075.33	1330.31	3156.92	6241.38	5759.48
1075	13.02.2001	9385.06	1318.80	3154.50	6228.49	5739.03
1076	14.02.2001	9971.69	1315.92	3122.19	6176.22	5644.23
1077	15.02.2001	9763.90	1326.62	3168.06	6197.89	5704.53
1078	16.02.2001	10169.50	1301.53	3103.97	6088.28	5595.13
1079	19.02.2001	8683.01	1301.53	3115.96	6093.95	5584.75
1080	20.02.2001	8768.52	1278.95	3106.34	5980.12	5548.74
1081	21.02.2001	7180.60	1255.27	3063.31	5972.35	5474.37
1082	22.02.2001	7890.40	1252.82	3034.09	6003.13	5452.48
1083	23.02.2001	8344.94	1245.86	2947.97	5943.69	5322.84
1084	26.02.2001	8880.33	1267.65	2998.90	5916.75	5415.10
1085	27.02.2001	8665.88	1257.94	3015.05	5941.21	5437.76
1086	28.02.2001	8791.60	1239.94	3008.22	5917.88	5367.48
1087	01.03.2001	9406.65	1241.23	2965.40	5908.59	5341.34
1088	02.03.2001	9513.77	1234.18	2981.77	5858.56	5291.92
1089	05.03.2001	9513.77	1241.41	3003.76	5931.29	5368.83
1090	06.03.2001	9513.77	1253.80	3035.55	6012.02	5457.28
1091	07.03.2001	9513.77	1261.90	3050.14	6001.81	5483.68
1092	08.03.2001	9513.77	1264.74	3030.30	6003.17	5438.66
1093	09.03.2001	9513.77	1233.42	3000.51	5917.27	5368.89
1094	12.03.2001	8647.01	1180.16	2927.73	5826.52	5242.40
1095	13.03.2001	8484.46	1197.66	2885.37	5720.74	5186.87

1096	14.03.2001	8150.78	1166.71	2805.82	5625.95	5115.50
1097	15.03.2001	8525.40	1173.57	2851.71	5729.22	5177.66
1098	16.03.2001	8763.42	1150.54	2776.60	5562.83	5104.77
1099	19.03.2001	8522.41	1170.81	2746.85	5551.55	5048.60
1100	20.03.2001	8860.57	1142.62	2803.31	5646.80	5138.40
1101	21.03.2001	8629.21	1122.14	2728.31	5540.74	5023.76
1102	22.03.2001	8402.85	1117.58	2614.83	5314.75	4824.82
1103	23.03.2001	8365.64	1139.83	2690.14	5402.33	4951.13
1104	26.03.2001	8331.29	1152.69	2771.50	5576.60	5124.80
1105	27.03.2001	7959.69	1182.17	2865.00	5728.13	5235.60
1106	28.03.2001	7614.78	1153.29	2813.04	5614.01	5150.43
1107	29.03.2001	7159.66	1147.95	2843.25	5588.42	5157.92
1108	30.03.2001	8022.72	1160.33	2828.90	5633.73	5180.45
1109	02.04.2001	7855.67	1145.87	2798.59	5618.47	5210.48
1110	03.04.2001	7806.12	1106.47	2702.36	5463.13	5004.00
1111	04.04.2001	8117.75	1103.25	2717.52	5535.72	5071.82
1112	05.04.2001	8457.15	1151.44	2796.18	5621.77	5158.56
1113	06.04.2001	8236.80	1128.43	2765.43	5601.46	5139.71
1114	09.04.2001	8359.55	1137.59	2800.67	5663.30	5183.22
1115	10.04.2001	8312.17	1168.38	2856.40	5803.00	5331.23
1116	11.04.2001	8657.84	1165.89	2873.45	5788.07	5361.53
1117	12.04.2001	9026.32	1183.50	2897.06	5766.62	5372.71
1118	13.04.2001	8940.25	1183.50	2897.06	5766.62	5372.71
1119	16.04.2001	9378.99	1179.68	2897.06	5766.62	5372.71
1120	17.04.2001	9057.84	1191.81	2868.54	5761.08	5340.98
1121	18.04.2001	9069.85	1238.16	2970.05	5890.20	5505.08
1122	19.04.2001	9448.61	1253.70	2976.82	5871.63	5480.05
1123	20.04.2001	9658.35	1242.98	2953.30	5879.83	5449.34
1124	23.04.2001	9658.35	1224.36	2918.55	5871.28	5396.85
1125	24.04.2001	10131.10	1209.47	2949.87	5840.28	5424.43
1126	25.04.2001	10113.01	1228.75	2943.96	5827.47	5407.84
1127	26.04.2001	10890.07	1234.52	2948.75	5868.32	5481.73
1128	27.04.2001	12363.01	1253.05	2972.51	5951.39	5575.97
1129	30.04.2001	12367.36	1249.46	3011.75	5966.95	5640.03
1130	01.05.2001	12093.41	1266.44	3011.75	5928.02	5640.03
1131	02.05.2001	12008.54	1267.43	2991.23	5904.20	5572.91
1132	03.05.2001	12829.84	1248.58	2936.46	5765.81	5457.07
1133	04.05.2001	12529.69	1266.61	2955.47	5870.29	5455.55
1134	07.05.2001	12203.45	1263.51	2950.10	5870.29	5498.52
1135	08.05.2001	12727.95	1261.20	2945.94	5886.40	5516.93
1136	09.05.2001	12276.33	1255.54	2926.40	5893.67	5492.08
1137	10.05.2001	12143.29	1255.18	2967.95	5963.99	5606.46
1138	11.05.2001	11779.31	1245.67	2959.50	5896.77	5567.25
1139	14.05.2001	11896.35	1248.92	2929.08	5690.47	5487.72
1140	15.05.2001	11572.45	1249.44	2932.10	5842.91	5544.13
1141	16.05.2001	12298.73	1284.99	2965.95	5884.03	5522.69
1142	17.05.2001	12373.47	1288.49	2978.60	5904.55	5592.65
1143	18.05.2001	12738.55	1291.96	2987.38	5914.98	5638.24
1144	21.05.2001	12607.24	1312.83	3016.43	5941.59	5652.04
1145	22.05.2001	12643.75	1309.38	3026.61	5976.62	5693.47

1146	23.05.2001	12052.38	1289.05	3002.63	5897.45	5630.74
1147	24.05.2001	11616.58	1293.17	3030.89	5915.91	5656.47
1148	25.05.2001	11967.96	1277.90	3007.00	5889.80	5581.94
1149	28.05.2001	11230.62	1277.90	3003.53	5889.80	5606.32
1150	29.05.2001	11060.95	1267.94	2963.68	5863.87	5542.27
1151	30.05.2001	10687.10	1248.08	2927.00	5796.85	5444.27
1152	31.05.2001	10879.83	1255.83	2962.78	5796.15	5454.19
1153	01.06.2001	11270.98	1260.67	2966.27	5809.60	5432.71
1154	04.06.2001	11760.99	1267.11	2989.44	5856.50	5432.71
1155	05.06.2001	11296.73	1283.57	3015.05	5922.55	5516.27
1156	06.06.2001	11733.14	1270.03	2994.52	5901.49	5496.49
1157	07.06.2001	12006.30	1276.96	2991.67	5948.30	5453.39
1158	08.06.2001	12138.26	1264.96	2996.07	5950.58	5439.93
1159	11.06.2001	11635.96	1254.39	2983.41	5860.53	5418.47
1160	12.06.2001	11429.40	1255.85	2939.77	5804.01	5311.94
1161	13.06.2001	11284.40	1241.60	2963.64	5820.21	5353.63
1162	14.06.2001	12016.98	1219.87	2924.78	5752.55	5297.07
1163	15.06.2001	11839.75	1214.37	2873.81	5722.97	5243.84
1164	18.06.2001	11082.13	1208.43	2857.79	5671.62	5160.28
1165	19.06.2001	10794.40	1212.58	2884.47	5680.37	5199.41
1166	20.06.2001	10822.40	1223.14	2861.91	5699.58	5170.49
1167	21.06.2001	10982.98	1237.04	2884.68	5641.38	5134.97
1168	22.06.2001	11119.75	1225.35	2895.64	5665.67	5183.67
1169	25.06.2001	10805.48	1218.60	2875.56	5661.88	5213.46
1170	26.06.2001	11039.38	1216.76	2851.50	5555.68	5090.73
1171	27.06.2001	11164.22	1211.07	2843.47	5607.93	5057.72
1172	28.06.2001	11084.94	1226.20	2904.29	5638.41	5133.56
1173	29.06.2001	11204.24	1224.42	2943.11	5642.50	5225.33
1174	02.07.2001	11513.57	1236.72	2963.66	5716.68	5296.51
1175	03.07.2001	11153.06	1234.45	2942.07	5639.91	5205.78
1176	04.07.2001	11082.27	1234.45	2923.78	5600.49	5175.13
1177	05.07.2001	11175.75	1219.24	2916.13	5549.61	5123.83
1178	06.07.2001	10168.80	1190.59	2853.32	5479.24	4999.36
1179	09.07.2001	10048.02	1198.78	2854.71	5468.86	5027.37
1180	10.07.2001	9469.46	1181.52	2832.20	5467.90	4973.40
1181	11.07.2001	8730.04	1180.18	2822.09	5391.86	4914.68
1182	12.07.2001	9122.56	1208.14	2861.63	5481.58	4961.43
1183	13.07.2001	8940.84	1215.68	2880.03	5536.98	5025.24
1184	16.07.2001	9080.01	1202.45	2848.64	5517.12	5022.76
1185	17.07.2001	8688.59	1214.44	2842.81	5427.76	4978.54
1186	18.07.2001	9105.92	1207.71	2789.33	5404.59	4867.50
1187	19.07.2001	9715.37	1215.02	2833.00	5437.43	4930.39
1188	20.07.2001	9684.55	1210.85	2804.61	5387.05	4880.70
1189	23.07.2001	10034.94	1191.03	2817.54	5405.28	4911.92
1190	24.07.2001	10100.63	1171.65	2761.60	5320.16	4855.60
1191	25.07.2001	9535.23	1190.49	2725.15	5275.73	4773.17
1192	26.07.2001	9857.23	1202.93	2765.45	5286.07	4842.12
1193	27.07.2001	9765.10	1205.82	2806.89	5403.10	4967.15
1194	30.07.2001	9832.59	1204.52	2818.15	5446.66	5033.71
1195	31.07.2001	9914.61	1211.23	2850.08	5529.05	5085.51

1196	01.08.2001	10211.44	1215.93	2839.44	5546.93	5112.48
1197	02.08.2001	10066.86	1220.75	2816.89	5584.54	5088.70
1198	03.08.2001	10101.58	1214.35	2798.94	5547.56	5031.29
1199	06.08.2001	9868.60	1200.48	2801.48	5526.43	5066.25
1200	07.08.2001	9639.95	1204.40	2804.34	5536.80	5051.62
1201	08.08.2001	9577.66	1183.53	2742.71	5476.49	4986.23
1202	09.08.2001	9381.50	1183.43	2696.12	5402.93	4888.30
1203	10.08.2001	9400.63	1190.16	2664.64	5427.20	4846.02
1204	13.08.2001	9075.65	1191.29	2677.67	5431.08	4920.35
1205	14.08.2001	8919.92	1186.73	2705.67	5507.77	4962.64
1206	15.08.2001	9233.62	1178.02	2677.11	5461.58	4933.97
1207	16.08.2001	9537.90	1181.66	2635.38	5389.77	4882.62
1208	17.08.2001	9736.95	1161.97	2575.30	5342.13	4777.37
1209	20.08.2001	9654.76	1171.41	2566.54	5357.45	4791.43
1210	21.08.2001	9654.86	1157.26	2570.85	5430.31	4834.87
1211	22.08.2001	9625.95	1165.31	2572.79	5408.67	4812.14
1212	23.08.2001	9891.63	1162.09	2587.00	5396.53	4809.50
1213	24.08.2001	10049.66	1184.93	2644.91	5471.88	4916.56
1214	27.08.2001	10293.55	1179.21	2654.82	5471.88	4905.79
1215	28.08.2001	10238.69	1161.51	2614.41	5434.65	4815.72
1216	29.08.2001	9990.20	1148.56	2608.82	5417.64	4834.89
1217	30.08.2001	9990.20	1129.03	2542.18	5332.67	4703.87
1218	31.08.2001	9878.88	1133.58	2550.89	5344.97	4689.34
1219	03.09.2001	9616.34	1133.58	2509.41	5312.12	4629.80
1220	04.09.2001	9598.55	1132.94	2557.50	5379.62	4673.98
1221	05.09.2001	9630.41	1131.74	2486.54	5316.05	4571.56
1222	06.09.2001	9805.75	1106.40	2407.95	5204.33	4480.75
1223	07.09.2001	9628.06	1085.79	2340.58	5070.29	4413.51
1224	10.09.2001	9517.92	1092.54	2309.16	5033.68	4383.74
1225	11.09.2001	9295.93	1092.54	2126.75	4745.98	4059.75
1226	12.09.2001	9295.93	1092.54	2156.25	4882.12	4114.26
1227	13.09.2001	8465.84	1092.54	2180.83	4943.61	4113.87
1228	14.09.2001	7937.87	1092.54	2054.24	4755.75	3909.49
1229	17.09.2001	7766.92	1038.77	2102.83	4898.85	4015.46
1230	18.09.2001	7703.49	1032.74	2083.43	4848.70	3970.18
1231	19.09.2001	7899.40	1016.10	2016.05	4721.69	3888.93
1232	20.09.2001	7651.78	984.54	1903.51	4556.90	3738.18
1233	21.09.2001	7306.38	965.80	1884.00	4433.69	3652.87
1234	24.09.2001	7515.33	1003.45	2003.11	4613.86	3861.19
1235	25.09.2001	7644.94	1012.27	1991.17	4663.42	3902.85
1236	26.09.2001	7477.42	1007.04	2035.25	4696.10	3975.53
1237	27.09.2001	7414.41	1018.61	2076.05	4763.63	4013.23
1238	28.09.2001	7625.87	1040.94	2136.26	4903.39	4079.02
1239	01.10.2001	7729.37	1038.55	2107.85	4785.63	4004.57
1240	02.10.2001	7843.50	1051.33	2138.25	4832.34	4044.66
1241	03.10.2001	7669.85	1072.28	2194.25	4881.81	4024.25
1242	04.10.2001	7805.05	1069.63	2245.95	5016.24	4195.80
1243	05.10.2001	7598.91	1071.38	2222.17	5036.03	4164.76
1244	08.10.2001	7499.02	1062.44	2222.84	5032.71	4172.21
1245	09.10.2001	7637.58	1056.75	2213.77	5009.79	4176.97

1246	10.10.2001	8048.28	1080.99	2275.04	5153.06	4319.38
1247	11.10.2001	8626.53	1097.43	2325.39	5164.92	4330.68
1248	12.10.2001	8431.49	1091.65	2286.86	5145.50	4336.88
1249	15.10.2001	8577.10	1089.98	2254.31	5067.26	4213.91
1250	16.10.2001	8631.39	1097.54	2290.23	5082.58	4308.49
1251	17.10.2001	8960.64	1077.09	2296.90	5203.41	4411.51
1252	18.10.2001	8818.09	1068.61	2265.02	5116.03	4338.09
1253	19.10.2001	8822.63	1073.48	2238.35	5017.69	4264.89
1254	22.10.2001	9305.31	1089.90	2281.37	5070.42	4341.29
1255	23.10.2001	9667.37	1084.78	2321.62	5193.34	4455.76
1256	24.10.2001	9578.17	1085.20	2368.13	5167.60	4486.35
1257	25.10.2001	9342.87	1100.09	2326.52	5086.59	4378.45
1258	26.10.2001	9915.52	1104.61	2373.77	5188.65	4478.63
1259	29.10.2001	9915.52	1078.30	2302.23	5085.89	4383.24
1260	30.10.2001	9919.81	1059.79	2247.09	5003.60	4251.93
1261	31.10.2001	9848.76	1059.78	2252.73	5039.71	4341.29
1262	01.11.2001	9634.61	1084.10	2285.37	5071.23	4366.94
1263	02.11.2001	10069.72	1087.20	2267.30	5129.54	4369.40
1264	05.11.2001	10291.85	1102.84	2342.38	5209.12	4485.34
1265	06.11.2001	10456.16	1118.86	2321.74	5214.06	4461.69
1266	07.11.2001	10363.44	1115.80	2388.93	5216.27	4493.27
1267	08.11.2001	10457.31	1118.54	2446.81	5278.09	4573.04
1268	09.11.2001	10080.92	1120.31	2410.75	5244.21	4514.28
1269	12.11.2001	10327.83	1118.33	2370.73	5146.23	4376.58
1270	13.11.2001	10165.80	1139.09	2428.16	5277.07	4565.68
1271	14.11.2001	10636.17	1141.21	2430.55	5240.75	4575.09
1272	15.11.2001	11193.28	1142.24	2451.31	5238.20	4577.28
1273	16.11.2001	11370.89	1138.65	2477.01	5290.98	4587.30
1274	19.11.2001	12263.22	1151.06	2532.69	5337.96	4660.49
1275	20.11.2001	11794.85	1142.66	2494.48	5298.69	4593.52
1276	21.11.2001	11617.16	1137.03	2491.17	5313.78	4557.03
1277	22.11.2001	11856.00	1137.03	2508.19	5345.94	4599.80
1278	23.11.2001	11719.40	1150.34	2520.68	5293.21	4573.82
1279	26.11.2001	12062.84	1157.42	2501.56	5302.45	4564.38
1280	27.11.2001	11721.91	1149.50	2478.49	5265.96	4485.82
1281	28.11.2001	11129.27	1128.52	2414.34	5205.23	4445.50
1282	29.11.2001	10961.03	1140.20	2423.31	5208.51	4445.87
1283	30.11.2001	11633.93	1139.45	2448.94	5203.55	4476.06
1284	03.12.2001	11467.24	1129.90	2448.67	5164.64	4463.84
1285	04.12.2001	11308.43	1144.80	2462.93	5212.14	4529.24
1286	05.12.2001	11930.64	1170.35	2568.46	5333.53	4677.55
1287	06.12.2001	12687.29	1167.10	2569.45	5369.78	4679.38
1288	07.12.2001	12662.84	1158.31	2538.35	5264.74	4642.94
1289	10.12.2001	12645.29	1139.93	2502.46	5185.04	4556.29
1290	11.12.2001	12549.85	1136.76	2511.75	5160.77	4551.94
1291	12.12.2001	12719.11	1137.07	2473.19	5119.99	4510.68
1292	13.12.2001	12655.77	1119.38	2429.97	5074.86	4410.66
1293	14.12.2001	12761.86	1123.09	2402.25	5061.02	4340.02
1294	17.12.2001	12761.86	1134.36	2472.31	5136.31	4485.17
1295	18.12.2001	12761.86	1142.92	2463.81	5151.08	4480.10

1296	19.12.2001	12788.89	1149.56	2440.03	5120.55	4467.92
1297	20.12.2001	12679.17	1139.93	2418.87	5080.23	4426.72
1298	21.12.2001	12721.20	1144.90	2456.82	5159.23	4499.34
1299	24.12.2001	12686.33	1144.65	2456.82	5177.41	4502.10
1300	25.12.2001	12875.79	1144.65	2456.82	5177.41	4502.10
1301	26.12.2001	13068.43	1149.37	2456.82	5177.41	4502.10
1302	27.12.2001	13608.99	1157.13	2502.17	5213.22	4591.16
1303	28.12.2001	13782.76	1161.02	2525.34	5242.42	4624.58
1304	31.12.2001	13782.76	1148.08	2525.34	5217.35	4624.58
1305	01.01.2002	13782.76	1148.08	2525.34	5217.35	4624.58
1306	02.01.2002	14077.98	1154.67	2528.08	5218.29	4580.44
1307	03.01.2002	14272.67	1165.27	2575.74	5318.79	4681.20
1308	04.01.2002	14272.67	1172.51	2598.68	5323.76	4682.79
1309	07.01.2002	14999.51	1164.89	2561.35	5293.57	4615.54
1310	08.01.2002	14878.91	1160.71	2561.38	5250.37	4568.09
1311	09.01.2002	14042.80	1155.14	2583.24	5228.46	4587.01
1312	10.01.2002	13818.59	1156.55	2556.71	5190.70	4515.52
1313	11.01.2002	13616.21	1145.60	2549.40	5198.57	4554.69
1314	14.01.2002	13638.55	1138.41	2486.29	5113.50	4453.97
1315	15.01.2002	13348.01	1146.19	2484.05	5166.00	4518.42
1316	16.01.2002	12758.91	1127.57	2447.88	5127.58	4425.50
1317	17.01.2002	12893.57	1138.88	2515.10	5138.45	4475.64
1318	18.01.2002	13012.20	1127.58	2511.34	5126.79	4448.85
1319	21.01.2002	12629.37	1127.58	2492.10	5138.53	4423.80
1320	22.01.2002	12639.15	1119.31	2482.82	5149.19	4446.72
1321	23.01.2002	12910.24	1128.18	2533.48	5180.65	4450.81
1322	24.01.2002	13026.08	1132.15	2535.13	5233.14	4508.07
1323	25.01.2002	12871.10	1133.28	2529.95	5193.05	4484.31
1324	28.01.2002	12764.55	1133.06	2530.86	5223.62	4541.16
1325	29.01.2002	12514.98	1100.64	2499.12	5131.40	4476.10
1326	30.01.2002	12539.01	1113.57	2484.83	5089.32	4407.27
1327	31.01.2002	13252.32	1130.20	2511.85	5164.78	4461.87
1328	01.02.2002	13375.36	1122.20	2506.90	5189.68	4455.56
1329	04.02.2002	13074.69	1094.44	2456.75	5167.31	4397.54
1330	05.02.2002	12520.61	1090.02	2435.28	5093.36	4307.75
1331	06.02.2002	12257.41	1083.51	2376.89	5073.81	4273.81
1332	07.02.2002	11702.06	1080.17	2399.60	5127.03	4295.65
1333	08.02.2002	11255.27	1096.22	2389.00	5128.09	4299.04
1334	11.02.2002	11675.15	1111.94	2434.35	5161.78	4353.21
1335	12.02.2002	11616.25	1107.50	2409.70	5135.71	4337.95
1336	13.02.2002	11826.87	1118.51	2431.46	5153.92	4364.45
1337	14.02.2002	11845.33	1116.48	2446.59	5208.75	4429.31
1338	15.02.2002	11478.59	1104.18	2399.62	5182.48	4377.00
1339	18.02.2002	11270.72	1104.18	2403.33	5154.29	4347.05
1340	19.02.2002	11517.28	1083.34	2354.18	5092.50	4256.36
1341	20.02.2002	11091.91	1097.98	2363.50	5024.15	4238.99
1342	21.02.2002	11165.82	1080.95	2394.42	5073.31	4287.22
1343	22.02.2002	11165.82	1089.84	2347.71	5050.84	4245.20
1344	25.02.2002	11165.82	1109.43	2397.97	5100.74	4305.44
1345	26.02.2002	10931.75	1109.38	2414.23	5138.95	4340.86

1346	27.02.2002	11186.75	1109.89	2443.20	5178.44	4424.71
1347	28.02.2002	11055.67	1106.73	2477.55	5100.96	4462.99
1348	01.03.2002	11470.86	1131.78	2504.62	5169.02	4486.42
1349	04.03.2002	11665.30	1153.84	2568.78	5241.98	4607.44
1350	05.03.2002	11418.64	1146.14	2559.83	5214.03	4580.75
1351	06.03.2002	11346.69	1162.77	2586.83	5245.54	4588.14
1352	07.03.2002	11621.16	1157.54	2588.65	5282.14	4616.50
1353	08.03.2002	11704.93	1164.31	2619.28	5285.65	4629.11
1354	11.03.2002	11336.31	1168.26	2610.66	5258.93	4586.75
1355	12.03.2002	10842.11	1165.58	2582.11	5252.50	4550.65
1356	13.03.2002	10594.02	1154.09	2569.14	5271.96	4523.77
1357	14.03.2002	10614.28	1153.04	2581.39	5261.42	4546.84
1358	15.03.2002	10771.86	1166.16	2636.39	5292.73	4588.33
1359	18.03.2002	10604.90	1165.55	2647.75	5299.93	4625.81
1360	19.03.2002	10643.70	1170.29	2663.07	5316.07	4644.93
1361	20.03.2002	10776.31	1151.85	2622.39	5266.90	4603.80
1362	21.03.2002	11471.06	1153.59	2615.94	5253.30	4579.90
1363	22.03.2002	11791.59	1148.70	2623.74	5250.50	4601.57
1364	25.03.2002	12016.53	1131.87	2601.43	5203.61	4588.36
1365	26.03.2002	11639.28	1138.49	2632.65	5195.46	4628.07
1366	27.03.2002	11862.56	1144.58	2613.29	5214.70	4623.20
1367	28.03.2002	11808.74	1147.39	2637.70	5271.76	4688.02
1368	29.03.2002	11679.43	1147.39	2637.70	5271.76	4688.02
1369	01.04.2002	11621.55	1146.54	2637.70	5271.76	4688.02
1370	02.04.2002	11827.22	1136.76	2599.16	5251.44	4627.33
1371	03.04.2002	11276.94	1125.40	2584.98	5247.84	4632.26
1372	04.04.2002	11796.06	1126.34	2574.28	5209.46	4538.31
1373	05.04.2002	11863.50	1122.73	2579.08	5233.63	4515.70
1374	08.04.2002	11455.88	1125.29	2542.80	5178.55	4431.88
1375	09.04.2002	11904.49	1117.80	2539.75	5179.56	4463.91
1376	10.04.2002	12030.94	1130.47	2581.69	5229.12	4521.83
1377	11.04.2002	12257.30	1103.69	2537.34	5137.43	4441.54
1378	12.04.2002	12240.23	1111.01	2549.39	5161.02	4468.29
1379	15.04.2002	12605.92	1102.55	2573.94	5201.44	4502.49
1380	16.04.2002	12220.26	1128.37	2618.29	5259.88	4598.74
1381	17.04.2002	12263.26	1126.07	2607.06	5263.88	4597.30
1382	18.04.2002	12010.09	1124.47	2582.89	5229.37	4588.83
1383	19.04.2002	11970.94	1125.17	2592.15	5243.60	4606.42
1384	22.04.2002	11759.72	1107.83	2558.89	5221.47	4559.46
1385	23.04.2002	11759.72	1100.96	2554.94	5190.99	4562.55
1386	24.04.2002	11775.13	1093.14	2540.47	5218.17	4528.00
1387	25.04.2002	11800.49	1091.48	2493.79	5197.54	4455.99
1388	26.04.2002	12041.19	1076.32	2470.23	5159.01	4453.08
1389	29.04.2002	11657.26	1065.45	2473.26	5153.86	4430.38
1390	30.04.2002	11441.50	1076.92	2488.25	5165.58	4462.74
1391	01.05.2002	11479.72	1086.46	2488.25	5125.51	4462.74
1392	02.05.2002	11321.90	1084.56	2455.05	5174.06	4421.56
1393	03.05.2002	11469.04	1073.43	2420.06	5203.05	4354.92
1394	06.05.2002	11447.25	1052.67	2419.15	5203.05	4367.26
1395	07.05.2002	11655.40	1049.49	2412.31	5119.90	4296.40

1396	08.05.2002	12117.17	1088.84	2479.07	5209.10	4404.02
1397	09.05.2002	11944.79	1073.01	2451.05	5197.58	4386.86
1398	10.05.2002	11638.90	1054.99	2411.51	5171.24	4329.84
1399	13.05.2002	11669.23	1074.56	2455.98	5204.84	4375.39
1400	14.05.2002	11613.90	1097.28	2488.82	5239.47	4447.12
1401	15.05.2002	11402.18	1091.07	2499.87	5259.11	4471.27
1402	16.05.2002	11218.98	1098.23	2488.30	5248.53	4466.36
1403	17.05.2002	10609.89	1106.59	2481.50	5217.98	4442.94
1404	20.05.2002	10761.73	1091.88	2468.01	5208.10	4400.75
1405	21.05.2002	10895.70	1079.88	2460.01	5197.21	4399.20
1406	22.05.2002	10603.24	1086.02	2429.27	5151.89	4326.29
1407	23.05.2002	10774.21	1097.08	2411.30	5175.31	4341.59
1408	24.05.2002	10894.27	1083.82	2419.68	5169.07	4337.43
1409	27.05.2002	11199.04	1083.82	2446.50	5136.26	4360.71
1410	28.05.2002	10934.65	1074.55	2426.04	5074.22	4339.57
1411	29.05.2002	10806.54	1067.66	2409.59	5082.98	4334.85
1412	30.05.2002	10508.09	1064.66	2355.69	5040.75	4260.14
1413	31.05.2002	10413.70	1067.14	2379.25	5085.07	4274.64
1414	03.06.2002	10316.91	1040.68	2349.39	5085.07	4227.15
1415	04.06.2002	10386.99	1040.69	2293.14	5085.07	4065.88
1416	05.06.2002	10383.36	1049.90	2291.87	4989.15	4079.51
1417	06.06.2002	10488.19	1029.15	2305.35	4957.63	4098.18
1418	07.06.2002	10151.02	1027.53	2282.96	4920.40	4020.27
1419	10.06.2002	9866.48	1030.74	2273.86	4928.21	4024.94
1420	11.06.2002	9721.38	1013.60	2281.70	4934.82	4109.37
1421	12.06.2002	9704.09	1020.26	2236.56	4851.67	4004.76
1422	13.06.2002	9774.39	1009.56	2218.51	4771.91	3957.33
1423	14.06.2002	9464.52	1007.27	2141.70	4630.77	3843.07
1424	17.06.2002	9230.70	1036.17	2218.29	4756.75	4010.36
1425	18.06.2002	9575.19	1037.14	2197.56	4702.01	4004.93
1426	19.06.2002	9378.43	1019.99	2159.75	4652.43	3935.58
1427	20.06.2002	9179.35	1006.29	2108.52	4580.34	3832.07
1428	21.06.2002	9220.48	989.14	2098.89	4605.35	3799.53
1429	24.06.2002	8984.58	992.72	2047.50	4541.87	3669.24
1430	25.06.2002	9094.77	976.14	2083.20	4630.96	3766.40
1431	26.06.2002	8627.42	973.52	2032.59	4531.01	3701.13
1432	27.06.2002	9009.19	990.64	2107.67	4540.65	3742.78
1433	28.06.2002	9379.92	989.81	2167.88	4656.36	3897.99