AN EVALUATION OF THE EFFECT OF INITIAL PUBLIC OFFER ANNOUNCEMENTS ON RETURNS OF LISTED STOCKS AT THE NAIROBI STOCK EXCHANGE

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A Research Project Submitted to the Graduate School in Partial Fulfillment of the requirements for the award of a Masters Degree in Business Administration of Egerton University

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Recommendation

This report is the candidate's original work and has been prepared by our guidance and assistance; it has been presented for examination with our approval as the University supervisors.

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DEDICATION

Dedicated to the glory of Our Lord Jesus Christ who is my Lord and Savior.

ACKNOWLEDGEMENT

To claim that this work is a product of one individual person is a lie. Anyone undertaking this kind of work will always require the input of many. My case was not an exception. In the course of this work I interacted with friends and institutions, whose contributions suggestions, moral and material support made it a success. I am greatly indebted to them.

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ABSTRACT

Initial Public Offers (IPOs) attract much attention in World stock markets. The IPOs do not go unnoticed in emerging markets since they are focal points, particularly if listed alone, and stirs the whole market. As such a single large IPO can have a significant effect in a less developed market. In Kenya, several studies have been undertaken in the past on stock price response to earnings announcements, the effects of election period on stock returns at the Nairobi Stock Exchange, the information content of annual reports and accounts of companies listed at the Nairobi Stock Exchange .However, these studies focus on specific issues that may impact the market returns. Consequently, there is lack of information on the extent to which IPOs influence market returns at the Nairobi Stock Exchange (NSE) as well as exogenous factors that may have influenced the market return. Therefore, this study sought to evaluate the effects that IPO announcements had on the market return of listed stocks at the NSE. In addition, the study assessed the effects of the turnover and volume traded on the market return. The study incorporated all the seven recently floated IPOs at the NSE between January 2006 and March 2009.

The main results from the fitted linear regression model showed that all IPOs had a significant effect on the market return. In particular, Co-op bank, KenGen, and Volume traded had a negative effect while the remaining IPOs, elections and turnover had a positive impact on the market returns. The magnitude of these effects ranged from – 0.126 to 0.172. This study also employed logistic regression to evaluate the effect of the IPO announcement within the 60-day window period on the market index. The study found that all IPOs had positive a significant influence on the market return except Eveready and KenGen. The findings of this study contribute to the current knowledge on how the IPOs announcements, turnover, and volume traded affects market return. This will be a source of valuable information to the capital Markets Authority, Nairobi Stock Exchange as well as investors for decision making, legal and Policy formulation.

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LIST OF ABBREVIATIONS

AIMS	Alternative Investment Market Segment
CMA	Capital Market Authority
EMH	Efficient Market Hypothesis
FISM	Fixed Income Securities Market
FOMS	Futures and options market
IPO	Initial Public Offering
MIMS	Main Investment Market Segment
NSE	Nairobi Stock Exchange

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

An initial public offering (IPO) is generally perceived as one of the most important milestones in a firm's lifecycle. It allows the firm to access the public equity markets for additional capital necessary to fund future growth, while simultaneously providing a venue for the initial shareholders to sell their ownership stake. (Kim and Weisbach, 2005; Brealy and Myers (2003). Grundvall, Melin-Jakobsson and Thorell (2004) discuss additional motives that include: gaining of publicity and status, employee ownership and liquidity of shares. Despite the benefits that accrue with IPOs, organizations normally incur costs which may be direct or indirect. (Ritter, 2006). Directly, firms incur cost such as underwriting fees, auditors' and lawyers' fees for consultancy, and publication cost. Indirectly, management's time and effort devoted to conducting the offering and worthy noting is the offer price which is normally below the market price.

The stock market in Kenya is known as the Nairobi Stock Exchange (NSE). Constituting a voluntary association of stockbrokers, the NSE was formed in 1954. It has had a remarkable development to become amongst the most vibrant stock markets in Africa. According to NSE website, its market capitalization saw tremendous improvement hitting Ksh. 1.3 Trillion after listing of Safaricom Ltd. Over the last 5 years, turnover at the NSE has grown phenomenally from Sh2.9 billion in 2002 to Sh95 billion in 2006 while the number of CDSC accounts that have been opened have in the last 2 years increased from 80,000 in 2005 to over 1,000,000 investors to date (www.nse.co.ke). Currently, there are 55 stocks listed in the NSE, out of which 51 are actively traded. In the Commercial & Services sector, the stocks of Uchumi Supermarkets Ltd and Hutchings Biemer were suspended from trading. In the AIMS (Alternative Investments Markets Segment) Kenya Orchards and A Baumann & Co. Ltd have been suspended. NSE has continued to play an important role in economic development, especially concerning its role in financial intermediation. Securities traded at NSE are bonds and shares that constitute the markets two broad segments. The stock market is referred to as Floating Interest Rates market,

which is divided into two segments; the Main Investments Market Segment (MIMS) & Alternative Investments Market Segment (AIMS). MIMS has four segments namely Agricultural, Commercial and Services, Finance & Investment, and Industrial & Allied sector. Characterized by its liquidity, market capitalization and turnover, the NSE may be classified as both emerging market and frontier market .NSE is a model emerging market in view of its high returns, vibrancy and well developed market structure (Ogum et al, 2000). It is among the most vibrant African Bourse, and is the most developed security market in Eastern Africa. In the year 2009, the bourse introduced a market indicator named as the NSE All Share Index (NASI). Thus, it raises interest and sets a precedent for comparison with other emerging markets in Africa and the world at large.

Bach, Judge, and Dean (2008) define IPO success as the creation of market value above and beyond the resources invested in the venture since its inception. They mention that the determinants of the success of an IPO include: Imperfect information regarding possible outcomes, an under-exploited market opportunity, possession of superior knowledge regarding market opportunities (which include, entrepreneurial abilities in superior alertness, relevant education, and thoughtful anticipation of future conditions), patent protection, that is – patents provide one of the strongest property rights for aspects of competitive advantage that are most relevant in the technology industry – , organizational reputation, that is – the reputation of the organization, another potential isolating mechanism, can be thought of as the net effect of positive and negative perceptions regarding the organization at any one time –, contractual alliances, that is – partners, joint venture partners, channel partners licensees, franchisers, and any specific long-term contract identities.

In Benveniste and Spindt's (1989) model of IPO underpricing, underwriters induce potential investors by deliberately underpricing so that they truthfully reveal their interest in an IPO. According to Gajewski and Gresse (2006), IPOs are underpriced as a means of improving the secondary market's liquidity, as a strategy of pre-IPO shareholders to maximize the sale price, as a tool for managing litigation risk (in some countries, especially the US) and as a means of solving information related asymmetries. As a result of underpricing, there is very high possibility of high initial returns if investors acquire shares from the primary market.

This possibility of high returns tends to create interest among the investors to participate in an IPO. A robust stock market assists in the rational and efficient allocation of capital, which is a scarce resource. The fact that capital is scarce means systems have to be developed where capital goes to the most deserving user. An efficient stock market sector will have the expertise, the institutions and the means to prioritise access to capital by competing users so that an economy manages to realise maximum output at least cost. This is what economists refer to as the optimum production level. If an economy does not have efficient financial markets, there is always the risk that scarce capital could be channeled to non-productive investments as opposed to productive ones, leading to wastage of resources and economic decline. According to Welch (1992), the uninformed mimic the informed investors' behavior. By underpricing its shares, the firm induces both the informed and uninformed investors to buy in a domino effect. In support of this hypothesis, Amihud, Hauser and Kirsh (2003) observe that such domino effects may lead to large subscriptions.

1.2 Statement of the Problem

Braun and Larrain (2007) affirm that IPOs do not go unnoticed in emerging markets. They add that IPOs are focal points, particularly if they are listed alone and they can stir the whole market. A single large IPO can have a significant effect in a less developed market. The sheer size of these transactions attracts the attention of all big investors such as pension funds and international funds.

Studies conducted in different countries have shown that share prices normally react to the arrival of news in the market such as announcement of earnings and dividends. Other researchers have found that both political and economic events usually have an impact on the share prices of companies listed in the Stock Exchanges.

In Kenya, the behavior of share prices to announcement of operating results, events like elections have been studied. However, there is no empirical evidence that IPO affects the stock prices of other companies listed in the Nairobi Stock Exchange. Apparently, an IPO announcement is likely to influence investors in disposing off the shares in other listed companies in order to participate in the current IPO. This destabilizes the market leading to possible fluctuation in stock prices. This of course, is how inefficiency comes about. The investors, however, may lack

information concerning the Market response. This research therefore, sets out to establish whether there was any effect of an IPO on the market return of companies listed in the NSE.

1.3 Objective of the Study

The general objective of the study was to evaluate the effect that IPO announcements have on market returns at the NSE, between January 2006 and March 2009.

Specific Objectives

1. To characterize companies that issued IPOs between January 2006 and March 2009 in terms of profitability and share capital .
2. To establish the effect of IPO announcement on Market Returns determined using the NSE 20 share index.
3. To identify the effect of IPO announcement on Market Return with a market index of below or above 4000.
4. To assess the effect of Exogenous Factors on the Market return.

1.4 Hypotheses of the Study

1. There is no significant effect of IPOs announcements on the stock Market Returns between January 2006 and March 2009 at NSE.
2. There is no significant effect of IPO announcements with respect to changes in the stock market returns with NSE index of below or above 4000 at NSE.
3. There is no significant effect of exogenous factors (General Elections, Volume traded, and stock Market turnover) on the Stock Market return.

1.5 Significance of the study

The findings in this report could be useful to the investors as it creates awareness on the expected movement in share prices after an IPO. The policy makers (CMA and NSE) can also benefit from the findings as they could be aware of the expected trend in market returns after an IPO. The study has also added to the existing knowledge on IPOs that will serve as reference to the academic community. Lastly, the study has recommended areas that will shape future research in IPOs.

1.6 Scope and Justification

The study centered on companies listed in the NSE in January 2006 to March 2009. They include Kenya-Re, Access Kenya, Kengen, Safaricom, Scan group and the Co-operative Bank. These were the latest IPOs to be issued. The need to find out the effect of IPOs on the Market Return and the measures needed to be in place to avoid destabilization of the Market return are the rationale for the study.

1.7 Limitations of the study

Some securities were not traded on some days within the Period under study. The possibility of Joint hypothesis Problem was eliminated by using daily data.

1.8 Assumption

The market index above 4000 indicated robustness of the market, where 4000 was the average daily index between 2000 and 6000 over the study period.

1.9 Operational definition of terms

Capital Markets

A market in which individuals and institutions trade financial securities

Organizations/institutions in the public and private sectors also often sell securities on the capital markets in order to raise funds. Thus, this type of market is composed of both the primary and secondary markets.

Efficient Market Hypothesis

This theory states that the prices of securities fully reflecting the available information.

According to the EMH, stocks always trade at their fair value on stock exchanges, making it impossible for investors to either purchase undervalued stocks or sell stocks for inflated prices. As such, it should be impossible to outperform the overall market through expert stock selection or market timing, and that the only way an investor can possibly obtain higher returns is by purchasing riskier investments.

Primary Market

A market that issues new securities on an exchange. Companies, governments and other groups obtain financing through debt or equity based securities. Primary markets are facilitated by

underwriting groups, which consist of investment banks that will set a beginning price range for a given security and then oversee its sale directly to investors.

Underwriting Syndicate

Collection of specialized advisors who undertake the risk of the success or failure of a public floatation.

Stock Return

This is the discount rate which equates the present value of the dividend stream and ending price with the purchase price.

Stock Index

A stock index is a mathematical measurement of the performance of a number of shares as a group and indicates the market movement. They are constructed to provide a measuring point for portfolio comparisons; they are useful for large funds and private investors (Gough, 2001). Stock market indices are the barometers of the stock market. They mirror the stock market behavior. It is not possible to look at the prices of every stock to find out whether the market movement is upward or downward. The indices give a broad outline of the market movement and represent the market.

The NSE 20 share index

The index is an equi-weighed geometric mean of 20 large ordinary stocks traded on the Nairobi Stock Exchange (NSE, 2009).

Market Capitalization

Cameron, (2007) defines market capitalization as the total volume of shares traded multiplied by their prices. It is also the value of listed domestic shares on the country's exchanges. Market capitalization is often used as an indicator of size of stock market development (Cameron, 2007).

Stock Market Turnover

According to Benic and Franic (2008) turnover multiplies the volume and price of each transaction and represents a one-dimensional measure of trading activity

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter discusses the theories surrounding pricing of stocks and discloses the empirical findings on the effects of Initial Public Offers on market returns. The chapter further provides the theoretical and conceptual frameworks relevant for the study.

2.1 Stock Pricing Theories

Investors generally attempt to beat the market by identifying undervalued shares and buying them before their prices rise and look for overvalued shares in order to sell them before their prices fall (Fisher and Jordan, 1995). This implies that an investor's judgment of the true worth of the shares may be different from the stock market judgment as seen in the current price of the shares. Theoretical explanations for the pricing of securities according to Fisher and Jordan (1995) and Fama (1970) are; fundamental analysis, technical analysis, random walk and the Efficient market Hypothesis ideologies. These theories are discussed in turn.

2.1.1 Fundamental analysis

The fundamental analysts argue that stock price is a function of the expected earnings and capitalization rates corresponding to future time periods (Fisher and Jordan, 1995). Hence, in order to get the price of a share, investors have to discount the income streams from the security. The theory thus asserts that price changes occur due to changes in expectation, a major cause of which is the arrival of new information (Jensen, 1978). Jensen further argues that earnings, dividends, asset values and the (credibility of) management are the basic variables used in determining the underlying value of a security. The theoretical (intrinsic) value of the share is compared with the current price of the share and if the shares are worth more than the current market prices, the shares are bought, if not, they are sold (Fisher and Jordan, 1995).

2.1.2 Technical analysis

According to Fama (1970), technical analysts examine the past share price movement with an intention of discovering particular patterns of share price movements, which appear to recur. Once patterns have been identified, the current share price movements are observed if established patterns can be cited (Fama, 1970; Fisher and Jordan, 1995). This enables them to predict future share prices where a pattern has been cited. The authors thus suggest that technical analysis is based on the assumption that the underlying value of stock is dependent on the supply and demand hence, has little relationship with earnings and dividends as argued by fundamentalists. The demand and supply of shares are caused by rational and irrational factors including information, moods, opinions and guesses (Lumby, 1994). When these factors intermix, the result is a price movement that follows a pattern that persists for an appreciable length of time.Little empirical work has been conducted on the area of technical analysis (Fisher & Jordan 1975) and the results of the tests that have been done so far are inconsistent and inconclusive. However, most of the tests have yielded results that are not reassuring to the technical analyst.

2.1.3 Random walk theory

'Random' the stock market context does not mean, neither should it be taken to imply, that the price movements are whimsical and chaotic (Mlambo, 2003). All it means is that period-to-period price *changes* should be statistically independent and unforecastable if they are properly anticipated. Price movements are a perfectly rational response to information but since there is no reason to expect new information to be non-random, price changes based on this information is supposed to be random and uncorrelated to any observable trend (Fama, 1970).

The theory argues that the share price movements are independent of one another and unrelated. This happens in an efficient market where the current prices of securities represent unbiased estimates of their intrinsic values. The random theory holds that the prices move in a random manner hence, it is not possible to predict future prices. The price movement, whether up or down, occurs as a result of new information and since investors cannot predict the kind of new information (whether good or bad), it is not possible to predict future price movement.

The random walk theory clearly conflicts with technical analysis. The theory says that previous price changes or changes in returns are useless in predicting future prices, which implies that the work of a technical analyst is unnecessary. According to Fisher & Jordan (1995); Mlambo (2003) the random walk theory is a special case of a more general efficient market hypothesis and the two positions complement each other.

2.1.4 The Efficient Market Hypothesis

Lumby (1994) asserts that the theory of market efficiency and stock prices behavior is inseparable. In Lumby (1994), the efficient market has been defined as a market where prices of a company's shares (or other financial securities) rapidly and correctly reflect all relevant information as it becomes available. No undervalued securities exist in such a market hence, the share prices can be relied upon to correctly reflect the true economic worth of the shares. Jensen (1978) points out that a market is efficient with respect to information if it is impossible to make abnormal economic profits by trading on the basis of that information.

The assumptions underlying the efficient capital market are documented in Reilly and Brown (2000) as:-

- A large number of competing profit maximizing participants to analyze and value securities, each independently of others.
- New information regarding securities comes to the market in a random fashion i.e. the timing of the announcement is generally independent of others.
- Competing investors attempt to adjust security prices rapidly to reflect the new information.

Forms of Market Efficiency:

The three forms of market efficiency are the weak form of market efficiency, the semi-strong form of market efficiency and the strong form of market efficiency.

2.1.4.1 Weak-form market efficiency

In this form of market efficiency, current stock prices reflect all the past information available including historical sequence of price, rates of return, trading volume and market generated information. This implies that future share prices cannot be forecasted using past rates of return. Fama (1991) expanded the concept of the weak form to include predicting future returns with the use of financial market research, accounting or macro economical variables.

2.1.4.2 Semi -strong form market efficiency

The semi-strong form market efficiency argues that the current prices of stock reflect all the available information content of historical prices and the publicly available information about corporations. This implies that information is quickly impounded in the share prices as they become available. The investors who base their decisions on new information cannot make above average profit after the information is made. The semi-strong form of EMH encompasses the weak form and the availability of intraday data enables tests which offer evidence of public information impacting stock prices within minutes (Patel and Wolf son, 1984).Event studies that examine how stock prices adjust to specific significant economic events have been used to directly test semi-strong form efficiency. Events normally tested are stock splits, initial public offerings (IPO), company announcements (especially earnings and dividend announcements) other unexpected economic and other world events.

2.1.4.3 Strong form market efficiency

The strong form suggests that security prices reflect the available information and even private information. No group of participants has monopolistic access to the relevant information hence, no one makes above average profits. Seyton (1998) provides sufficient evidence that insiders profit from trading on information not already incorporated into prices hence, the strong form does not hold in a world of an even playing field.

2.1.5 Market Anomalies

The EMH became controversial especially after the detection of certain anomalies in the capital markets. Some of the main anomalies that have been identified include the January effect, the weekend effect, other seasonal effects, overreaction and under reaction.

2.1.5.1 The January effect

Rozeff and Kinney (1976) were the first to document evidence of higher mean returns in January as compared to other months. Using NYSE stocks for the period 1904-1974, they found that the average return for the month of January was 3.48% as compared to only 0.42% for the other months. Other documented studies indicated that the effect exists. For instance Eleswarapu and Reinganaum (1993), who observed the market from 1961-1990.

2.1.5.2 The weekend effect

The weekend effect is also known as Monday Effect. French (1980) analyzed daily returns of stocks in the U.S.A for the period between1953-1977. The study found that there is a tendency for returns to be negative on Mondays whereas they are positive on other days of the week. The study noted that these negative returns are caused only by the weekend effect and not by a general closed-market effect. A trading strategy, which would be profitable in this case, would be to buy stocks on Monday and sell them on Friday. Paul (2008) found out that there is no evidence of day of the week in Kenya after modeling the stock returns and accounting for market risk.

2.1.5.3 Other seasonal effects

Holiday and turn of the month effects have been well documented over time and across countries. Lakonishok and Smidt (1988) show that US stock returns are significantly higher at the turn of the month, defined as the last and first three trading days of the month. Ariel (1987) shows that returns tend to be higher on the last day of the month. Cadsby and Ratner (1992) found similar turn of monthly effects in some countries and not in others. Kunkel and Campton (1998) show how abnormal returns can be earned by exploiting this anomaly. Lakonishok and Smidt (1988), Ariel (1990) and Cadsby and Ratner (1992) all provide evidence to show that returns are, on average, higher the day before a holiday, than on other trading days. The latter paper shows this for countries other than the U.S. Brockman and Michayluk (1998) describe the pre-holiday effect as one of the oldest and most consistent of all seasonal regularities. Paul (2008) found out that the pre-holiday effect is not significant for Kenya while February returns are higher.

2.1.5.4 Overreaction and under reaction

The efficient markets hypothesis implies that investors react quickly and in an unbiased manner to new information. However, the widely publicized study by DeBondt and Thaler (1985) presents contradictory evidence. The study found that stocks with low long term past returns tend to have higher future returns and stocks with high long-term past returns tend to have lower future returns (Long term reversals). Their results appear to be inconsistent with the EMH. Although the issues are complex, recent research indicates that the findings might be the result of methodological problems arising from the measurement of risk (Fama, 1991) and once risk is measured correctly, the findings tend to disappear.

One of the most enduring anomalies documented in the finance literature is the empirical observation that stock prices appear to respond to earnings for about a year after they are announced. Prices of companies experiencing positive earnings tend to drift upward, while prices of stocks experiencing negative earnings tend to drift downward .This "post-earnings-announcement drift" was first noted by Ball and Brown (1968) and has since been replicated by numerous studies over different time periods and in different countries. After more than thirty years of research, this anomaly has yet to be explained.

Another study reported that stocks with high returns over the past year tended to have high returns over the following three to six months (short-term momentum in stock prices) This "momentum" effect is a fairly new anomaly and consequently more research is needed in this area. This effect nevertheless, is present in other countries and has persisted throughout the 1900s and 2000s with various anomalies being reported. Some indicate market overreaction to information, and others under-reaction. However, some of these finding are simply related to chance. Fama (1970) states that if data is analyzed enough, a given pattern could be found.

2.2 Stock Market Turnover

According to Benic and Franic (2008) turnover multiplies the volume and price of each transaction and represents a one-dimensional measure of trading activity.

Baker and Stein (2004) suggest that turnover or more generally, liquidity can serve as sentiment index; thus representing measures of investor's sentiment. Investor sentiment - pessimism or optimism of the investor is the propensity to speculate (Ogunmuyiwa, 2010). Sentiments drive the relative demand for speculative investment and so cause cross-sectional effects even if arbitrage forces are the same across stocks (Baker and Wurgler, 2006). An example is the late 1990's technology bubble.

Baker and Stein (2004) developed a model that helps to explain that an increase in liquidity predicts lower subsequent returns in both firm level and aggregate data. They posit that irrational investors participate only on over-valued market because of short sales and they over react to private signals about future fundamentals and this leads to sentiment shocks. They find that measure of equity insurance and share turnover are highly correlated and that sentiment indicators from market liquidity may be responsible for low expected returns. Delong et al. (1990) suggest that noise traders can affect stock prices because the risk aversion of irrational speculators keeps them away from taking large arbitrage positions.

2.2.1 Turnover as a Reflection of Investor Behavior

With respect to investor behavior, Ogunmuyiwa(2010) posits the existence of a class of irrationally overconfident investors, where he considers overconfidence as a tendency to overestimate the relative precision of one's own private signals. Overconfidence can be defined as the tendency for people to overestimate their knowledge, abilities and precision of their information (Deaves, 2006). He states that this form of overconfidence has two distinct manifestations. First, when overconfident investors receive private signals, they tend to overweight them; this leads to "sentiment shocks" that can be either positive or negative. Second, when overconfident investors observe the trading decisions of others, they tend to under-react to the information contained in these decisions, since they (erroneously) consider others to be less well-informed than they are. This aspect of overconfidence lowers the price impact of trades, thus boosting liquidity generally.

At some initial date, the irrational investors receive private signals about future fundamentals, which they overreact to, generating sentiment shocks (Ogunmuyiwa, 2010). The short-sales

constraint implies that irrational investors will only be active in the market when their valuations are higher than those of rational investors—i.e., when their sentiment is positive and when the market is, as a result, overvalued. When the sentiment of irrational investors is negative, the short-sales constraint keeps them out of the market altogether. At a subsequent date, there is a round of trading by an informed insider. Since the irrational investors also tend to make the market more liquid in the face of such informed trading, measures of liquidity provide an indicator of the relative presence or absence of these investors, and hence of the level of prices relative to fundamentals.

2.2.2 Stock market uncertainty and stock turnover

Stivers, Sun, and Connolly (2005) evaluated stock turnover as a second measure of stock market uncertainty. They based their view on prior literature which suggests several reasons for turnover including; asymmetric information with disperse beliefs across investors, changes in investment opportunity sets outside the traded stock market, and changes in the investment opportunity set of traded stocks (or changing stock return distributions). Wang (1994) for example, presents a dynamic model of competitive trading volume where volume conveys important information about how assets are priced in the economy.

One prediction from Wang is that "the greater the information asymmetry (and diversity in expectations), the larger the abnormal trading volume when public news arrives." Periods with relatively heavy volume are likely to be periods with large differences of opinion across investors. Thus, episodes of relatively high stock turnover may reflect periods with more diverse beliefs across investors or times with large changes in the investment opportunity set. It seems plausible to describe such times as having more stock market uncertainty. Further, Ogunmuyiwa, (2010) suggests that periods with high economic uncertainty are also likely to be periods with higher dispersion-in-beliefs across investors.

2.3 The Stock Market Index as a measure of Stock Market Behaviour

According to Gastineau and Kritzman (2001), an index is a number calculated by weighting a number of prices or rates according to a set of predetermined rules and measures the change in

some economic variable over time. They define a financial market index is a statistical construct that measures relative or absolute price changes and/or returns in stock, fixed-income, currencies, or futures markets. The purpose of the index calculation is usually to provide a single number whose behavior is representative of the movements of a variety of prices or rates and indicative of behavior in a market. "Indexes" serve as underlyings for a number of products, particularly in equity and fixed-income markets.

A stock index is a mathematical measurement of the performance of a number of shares as a group and indicates the market movement. They are constructed to provide a measuring point for portfolio comparisons; they are useful for large funds and private investors (Gough, 2001). Stock market indices are the barometers of the stock market. They mirror the stock market behavior. It is not possible to look at the prices of every stock to find out whether the market movement is upward or downward. The indices give a broad outline of the market movement and represent the market.

An index is not exactly the same as a portfolio. For instance, when a stock is added to or deleted from an index, the index level should not jump up or drop down; while a portfolio's value would usually change as stocks are swapped in and out (Standard and Poor, 2008). To assure than the index's value, or level, does not change when stocks are added or deleted, the divisor is adjusted to offset the change in market value of the index. Thus, the divisor plays a critical role in the index's ability to provide a continuous measure of market valuation when faced with changes to the stocks included in the index. In a similar manner, some corporate actions that cause changes in the market value of the stocks in an index should not be reflected in the index level. Adjustments are made to the divisor to eliminate the impact of these corporate actions.

According to Reilly and Brown, 2003, the Primary application is to use index values to compute total returns and risk for an aggregate market or some components of a market over a specified time period and use the computed returns as a benchmark to judge the performance of individual portfolio. A basic assumption in evaluating portfolio performance is that any investor should be able to experience a risk adjusted rate of return comparable to the market by randomly selecting a large number of stocks or bonds from the total market hence a superior portfolio manager should consistently do better than the market.

2.4 Reason and Timing of Going Public

Going public marks a watershed in the life cycle of a firm, while increased equity can support the firm's future plans of growth, the trade off for the firm is that of increased public scrutiny. Brealey and Myers (2005) document that in USA; the firms may seek private equity in their initial years and only go for public issues later. In their study of Italian firms, Pagano,et al(1998) found that firms going public are not necessarily seeking money for growth but are usually trying to rebalance their accounts after high investment and growth. The post-IPO period sees a reduction in leverage as well as investment. According to their findings, going public is a conscious choice that some firms make while some others prefer to remain private. Thus going public is not a natural element in the life cycle of a firm.

Lerner (1994) found that there are times (windows of opportunity) when the markets could be extremely optimistic about a particular industry and it may be a good time for the firms in that industry to go public (or this is the recommended time for the firms to go public). He found in the study of 350 venture capital-backed biotechnology firms that firms go public when the equity valuations are high, but when these are low, the firms choose the private placement route.

2.5 Valuation and allocation of IPO

Benveniste and Spindt (1989) found that underwriters try to resolve the information asymmetry problem between the firm and the investors by providing an incentive to the investors to reveal their private information about the firm. Kim and Ritter (1999) in their study of 190 firms found that under writers forecast the next year's earnings numbers and multiply them with Price Earning (PE) ratios of comparable firms in the industry to get the approximate price of the IPO. They argue that since most of the firms going public are young firms, it is difficult to adopt the Discounted Cash Flow techniques for valuing these firms as the future cash flows as well as discount rates to be adopted are uncertain.

However, they also found that PE ratios using historical earnings numbers do not give accurate results, contrary to the forecasted earnings which usually give more accurate valuations. Purnanandam and Swami Nathan (2002) found that IPOs are priced 50% higher than industry

peers and the more the IPO is overpriced, the worse its long term performance.The allocation mechanisms are specified by the regulators in different countries. Loughrannet et al. (1994) found three main categories across countries; Auctions, Fixed price offers and Book Building.

Benveniste and Spindt's (1989) model predicts that if the under writers are allowed to differentiate between investors by offering larger numbers of shares to those investors who have information that the firm does not have (for example the relative skills of its management) then the degree of under pricing can be reduced. However, according to Kevin and Paul (2008), there is no or little association between IPO underpricing and Post-Earnings.

2.6 Studies on Announcement effect on new Equity issues

Dierkens (1991) show that information asymmetry is a significant variable for equity issues. This was arrived at after performing tests using the cross-sectional regressions of the reaction at equity issue announcements, comparison of information asymmetry before and after the announcements, and the analyses of the timing behavior observed during the equity issue Process. Lucas and McDonald(1990) in their study of the Equity issues and Stock Price Dynamics found out that equity issues on average are preceded by an abnormal positive return on the stock , although some in firms, the issue is preceded by a loss. They concluded that equity issues on average are preceded by an abnormal rise in the Market.

Robert et al. (1992) found out that price drops at issue announcement and increases with time from the last information release. Michael and Robert (1988) used the intraday price data to determine announcement effects on new equity issues. They found out that the issue size, intended use of proceeds and estimated profitability of new investment are uncorrelated with the announcement effect. However, no studies have been done to find out the announcement effect on prices of existing companies at NSE.

2.7 Overview of Market Efficiency Studies at the Nairobi Stock Exchange

Ngoje (2006) studied the effects of election period on stock returns at the Nairobi Stock Exchange and found out that the mean returns of stocks tend to go down towards election period

as most people fear the instability that come with the political leadership. However, after election depending on the leadership at that moment, the investors revert back to the market. The findings of the study reveal that the mean returns pick upwards at a higher rate after election than before election. The study drew a number of conclusions:

1. That the election period affects stock returns at Nairobi Stock Exchange.

Election is therefore a factor that must be considered when analyzing factors that affect stock returns at the Nairobi Stock Exchange.

2. That the stocks at the Nairobi Stock Exchange are volatile to political and other factors.

For instance during the period of the study, the stocks exhibited volatility in returns.

3. That there is no correlation of stock returns between one election period and another.

There are other factors that shape returns of stocks at the Nairobi Stock Exchange. Additionally, there is high fluctuation in stock returns after than before an election period.

In his study on the effect of earnings announcement on stock returns of companies quoted at the Nairobi stock exchange, Oluoch (2002) found out that there is no systematic relationship between a firm's earnings (whether good or bad) and the timing of the release of annual reports. This implies that companies quoted at the NSE do not deliberately delay the announcement of poor results, an indication that there may be other factors explaining the delay in reporting.

A study by Russel and Torbey (2002), on the EMH confirmed that the market responds to new information, further clarifying the idea that information is not the only variable affecting security valuation. Later day researchers have provided thought provoking, theoretical arguments and supporting empirical evidence to show that security prices deviate from their equilibrium values due to psychological factors, fads and noise trading.

Ondigo (1995) studied the information content of annual reports and accounts of companies listed at the Nairobi Stock Exchange. The study was based on a sample of 18 blue chip companies and focused on the behavior of share prices before and after the release of annual reports. The study concluded that on average, the annual report of the sampled companies had no information content during the period of the study. This implies that investors may be in a

position to predict earnings such that the share prices before the earnings announcements have already adjusted to most of the information contained in the forthcoming annual reports. This finding may be confirmed by a research on the unexpected share price changes during the period shortly proceeding the Earnings announcement dates.

Onyango (2004) studied stock price response to earnings announcements. The findings were that the NSE is subject to the Semi-Strong Efficient with reference to the response of Stock prices.
The access of funds by different and diverse categories of users is a basic role of a stock market. Some established companies can raise short-term finance through commercial paper while small companies can raise long-term capital by selling shares. The government and even the municipal councils on the other hand can raise funds by floating various types of bonds as alternatives to foreign borrowing. The capital market therefore, should provide the investors with efficient mechanisms to liquidate their investments in securities. In Kenya, the behavior of share prices to announcement of operating results, events like elections have been studied.

2.8 Theoretical Framework

Theoretical framework of the study is based on market efficient hypothesis which indicates that IPOs are among the most important practical factors that can be used to predict the market performance (Market index). The Efficient Markets Hypothesis (EMH), popularly known as the Random Walk Theory, is the proposition that current stock prices fully reflect available information about the value of the firm, and there is no way to earn excess profits, more than the market over all, by using this information (Fama, 1970).

The primary purpose of EMH is that stock prices accurately and quickly reflect all available information in such a way that no one can earn abnormal returns. The time for adjusting any information is considered a critical factor. If the markets adjust more rapidly and accurately, it is considered more efficient.

Dyckman and Morse (1986) states that a security market is generally defined as efficient on condition that the prices of security traded in the market act as though they fully reflect all

available information, these prices react instantaneously, or nearly so and unbiased fashion to new information Market efficiency does not imply that no investor can be at the market at any time period or that stock prices cannot deviate from true value and also that no group of investors will be able to beat the market in the long run. However, market efficiency should mean that no investor should beat the market consistently but if this occurs, then it should be as a result of luck and not investment strategies.

The current study aims at trying to validate and test whether IPOs can influence the level of Market efficiency through the changes in the market index which is displayed by the conceptual framework in Figure 1.

2.9 Conceptual Framework

The Market Returns will be influenced by social and political factors, firm specific factors, economic factors and regulations of the Nairobi Stock Exchange players including listing requirements.

The independent variable is the event introducing information which is the IPO announcement. Dependent variable is the daily changes in the market index. This allows the study to use the dependent variables and the intervening factors as a measure of the effect of the independent variable hence, it is possible to infer that the event and the intervening factors are responsible for the Predictability of Market returns.

Intervening Factors

Independent Variables **Dependent Variable**

Source: **Adaptation from the reviewed studies**

Figure 1: Conceptual framework showing the relationship between Efficiency Predicability of the Market Returns and Intervening factors.

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CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter addresses the methodology adopted for the study. The research design, population of interest, data collection, analysis and presentation techniques used in the study are discussed.

3.1 Research Design

The study adopted the event studies 'research design as the purpose was to determine the effect that IPOs have on market returns. According to Fama (1991) event studies provide a better way of evaluating the magnitude of a measurement over time. In this case, the study sought to determine whether there were significant changes after the IPOs at the Nairobi Stock Exchange.

Empirical studies document that event studies can give a clear picture of the speed of adjustment of prices to information in the context of the stock exchanges. The period of interest for the test of the IPO events was January 2006 to March 2009. Hence, the justification of conducting the research using a longitudinal study.

3.2 Target Population

The population for the study consisted of all the companies that floated IPOs at the NSE commencing January 2006 to March 2009.

3.3 Data collection

Secondary data was used in the study. The data was extracted by use of data collection sheets (appendix 1).

3.4 Data Analysis

The natural logarithm of the NSE 20 share index was computed to transform the data to facilitate the analysis as well as interpretation of results. Adopting the approach by Brown and Warner (1994), the market return was defined as

$$log\left(\frac{P_t}{P_{t-1}}\right)$$

Where P is the NSE 20 share index at time t.

Data analysis was carried out by use of descriptive statistics. This was for purposes of exploring the characteristics of the seven floated IPOs, and assess the correlation patterns among IPOs. The multiple linear regression model (3.5.1) was also employed to evaluate the effect of the IPOs and other exogenous factors on the market return.

In this study the t-test as well as the partial F-test was used to assess individual and the overall effect of the explanatory factors on the market return. In order to determine the validity (plausibility) of the fitted multiple linear regression model, several diagnostics plots (Normal Probability, and Standardized Residual plots) and formal tests (Durbin-Watson test for independence of the error terms, the variance inflation factor, VIF, were performed. A maximum VIF value in excess of 10 is frequently taken as an indication that multicollinearity may be duly influencing the least squares estimates (Neter, et al, 1996). These also helped to verify the underlying assumptions when using the regression model.

In addition the logistic regression model was used after the response (market return) had been discretized into either a market index of below or above 4000 points. Since the market index was between 2000 and 6000 over the entire study period, an average of 4000 was adopted as the cut-off point to evaluate how IPOs impacted the robustness of the market. Furthermore, cross-tabulations were run in SPSS to assess the relationships between each IPO and the market return.

3.4.1 Analytical Models

3.4.1.1 Multiple Ordinary Regression Model

The research adopted the framework proposed by Zellner (1962), in which the multiple first-order ordinary regression modeled was of the form:

$$Y_i = \beta_0 + \beta_1(\text{AccessKE}) + \beta_2(\text{SafCom}) + \beta_3(\text{ScanGrp}) + \beta_4(\text{KenyaRE}) + \beta_5(\text{COOP}) + \beta_6(\text{Eveready}) + \beta_7(\text{KenGen}) + \beta_8(\text{Election}) + \beta_9(\text{Vol}) + \beta_{10}(\text{TurnOver}) + \beta_{11}(\text{Time}) + \varepsilon_i$$

.....(3.5.1)

Where Y_i represents the market return, the binary variables in parenthesis were the seven floated IPOs in which value 1 representing the 60 day window period when the announcement was made, and value 0 being the period outside the 60 day window period. The IPOs were assigned dummies with 1 represented the announcement Period whereas 0 represented the Period outside the announcement Period. While β_0 to β_{11} are the regression coefficients associated with the hypothesized explanatory factors i.e. the seven floated IPOs, some exogenous factors (elections, volume traded, the turnover), time (days), and ε_i is the error term. The estimates of the regression coefficients were obtained and chosen in such a way that the sum of squares of the prediction errors were minimal (Graybill & Iyer, 1994). However, in the multiple first-order regression model all the IPOs were binary (assigned 1 and 0) in nature, hence the analysis of variance (ANOVA) was used to make valid inferences of the market returns (Neter et al, 1996).

Confirmatory analysis was also done using Vector auto regression model.

3.4.1.2 The logistic Regression Model

Where Y_i represents the market index, while β_1 to β_7 are the regression coefficients associated with the hypothesized explanatory factors i.e. the floated IPOs and ε_i is the error term. The study adopted the approach by Owour et al (2007) and defined a logit model of the form:

$$D(1,0) = \text{logit}(P) = \log\left(\frac{p}{1-p}\right) = \beta_0 + \beta_i \mathbf{X_i} + \varepsilon_i \quad \text{..... (3.5.2)}$$

Where D is the indicator for a market index above 4000, which was taken as the average of NSE 20 share index. P is the probability that the market index rose over 4000, while $\mathbf{X_i}$ is a vector representing the listed IPOs with NSE 20 share index. B_0, β_i are the corresponding vector of parameters and ε_i is the disturbance term. Similar analytical methodology has been used by

Gamba et al (2006) as well as Green (2003). The parameters were estimated using the Maximum Likelihood procedure since for a binary response variable the error term no longer has a normal distribution or constant variability (Agresti, 1996).The model makes use of Odds Ratio which facilitates interpretation of results.

The number of observations for the logit was based on 800 daily observations of the market returns and this corresponded with IPOs whereby within the IPO window 1 was assigned announcement period of 60 days, outside the window was recorded as zero implying 1 would be the effect of IPO and zero otherwise.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 RESULTS

4.1.1 The characteristics of the floated IPOs

Table 1 The characteristics of floated IPOs on NSE between January 2006 and March 2009.

variables IPOs	Segment	Share Capital(ksh)	Profit prior to issue. (ksh)	Par Value(ksh)	Issue Price(ksh)
Access Kenya	Commercial &Services	199,885,978.	46,910,000	1.00	10
Safaricom	Commercial& Services	40,000,000,000	12,010,431,000	0.05	5
Scangroup	Commercial& Services	159,000,000	152,640,000	1.00	9.50
Kenya Re	Finance &Investment	600,000,000	390,449,000	2.50	9.50
Coop Bank	Finance & Investment	2,935,127,600	1,549,606,000	1.00	10
Eveready	Industrial &Allied	210,000,000	186,935,000	1.00	9.50
Kengen	Industrial &Allied	33,428,760	1,753,152,000	2.50	11.90

Source: Data from Prospectus of Floated IPOs.

Table 1 gives IPO characterization in terms of category, Share capital, Profits before Issue, The par value and the issue price. Access Kenya, Safaricom and scangroup are under the commercial services sector, Kenya Re and Co-op Bank are under the Financial Sector whereas Eveready and KenGen are under Industrial and Allied Sector. It is notable that Safaricom had the lowest par value of Ksh.05 with a corresponding issue price of ksh.5.

Table 2. The association between market index and IPOs

IPO	Announcement period		Market Index ≤ 4000	Market Index >4000	Total counts	Chi-square
AccessKe	Outside period	60-day	136 (121.9)	589 (603.1)	725	32.83***
	Within period	60-day	0 (14.1)	84 (69.9)	84	
Safcom	Outside period	60-day	136(121.2)	585(599.8)	721	34.50***
	Within period	60-day	0(14.8)	88(73.2)	88	
Scangroup	Outside period	60-day	136(122)	590(604)	726	32.42***
	Within period	60-day	0(14)	83(69)	83	
kenyaRe	Outside period	60-day	136(122.2)	591(604.8)	727	32.00***
	Within period	60-day	0(13.8)	82(68.2)	82	
Coop bank	Outside period	60-day	68(124.6)	673(616.4)	741	278.36***
	Within period	60-day	68(11.4)	0(56.6)	68	
Eveready	Outside period	60-day	136(122.2)	591(604.8)	727	32.00***
	Within period	60-day	0(13.8)	82(68.2)	82	
Kengen	Outside period	60-day	136(121.4)	586(600.6)	722	34.08***

Within period	60-day	0(13.8)	87(72.4)	87

*** *Means the p-value = 0.001*

** *Means the p-value = 0.05*

* *Means the p-value = 0.10*

Values in parenthesis are expected cell frequencies

From table 2 above, there was significant correlation between each of the IPOs and the Market return. Model 3.5.2 was used in the next section to quantify the overall effect of each of these IPOs on the Market Return.

4.1.2 Multiple Regression of IPOs and Exogenous Factors on Market Returns

In this subsection the various results of the fitted multiple linear regression model (3.5.1) were presented. Table 3 shows the results of the estimates, standard errors, T-test, and P-values of the parameters in model 3.5.1.

Table 3. The effect of IPOs and some exogenous factors on the market returns at the NSE between January 2006 and March 2009

Adjusted R^2=0.795	Number of Obs =800		Durbin =0.418	
Model Parameters	**Estimates**	**Std. Error**	**t**	**P-value**
(Constant)	3.000	.050	60.350	.000
ACCESS KENYA	.060	.005	11.737	.000
SAFARICOM	.059	.006	9.247	.000
SCANGROUP	.026	.005	5.073	.000
KENYA RE	.013	.005	2.448	.015
COOP Bank	-.126	.007	-19.264	.000
EVEREADY	.066	.005	13.157	.000
KENGEN	-.025	.005	-5.082	.000
ELECTION	.035	.005	6.505	.000
VOLUME	-.122	.010	-12.325	.000
TURNOVER	.172	.010	17.662	.000
TIME	8.549E-05	.000	7.563	.000

Dependent=Market return

Source: Research Data Findings

4.1.2a The Fitted Multiple Linear Regression Model

From Table 3, the fitted regression Model was

$$Y = 3.000 + 0.060(\text{AccessKE}) + 0.059(\text{Safaricom}) + 0.026(\text{Scangroup})$$

$$+0.013(\text{KenyaRE}) - 0.126(\text{COOP Bank}) + 0.066(\text{Eveready}) - 0.025(\text{KenGen})$$

$$+0.035(\text{Election}) - 0.122(\text{Volume}) + 0.172(\text{Turnover})$$

$$+8.549E-05(\text{Time})\text{----------}\quad 4.1.3$$

The results from the table 3 show that while some factors (Co-op bank, KenGen, and Volume traded) had a negative effect, the rest had a positive impact on the market returns. The magnitude of these effects ranged from –0.126 to 0.172. Furthermore, the t-test indicates that each of the factors in the fitted model had a significant effect on the market return at 5 percent level of significance.

Table 4: Assessing the overall goodness of fit of explanatory factors

Model	DF	SS	MSS	F	P-Value
Regression	11	4.210	0.383	282.772	<0.001
Residual	788	1.067	0.001		
Total (Corrected)	799	5.277			

Table 4 presents the ANOVA output, which shows a significant overall effect of the factors under this study on the market returns. The fitted multiple linear regression model (3.5.3) yielded an adjusted R Square value of 79.5 percent, showing that the explanatory factors in this model accounted for a large proportion of the variation that occurred in the observed market returns.

4.1.2b Multiple Linear Regression Model Diagnostics

This subsection presents graphical and formal tests used to explore and detect whether there were potential departures from the postulated multiple linear regression model 3.5.3. In Figure 2, the Normal Probability Plot suggests that this fitted multiple linear regression model provided a decent fit to the observed data. The same figure had no extreme isolated data point, suggesting

that there were no outliers present in the data with respect to the explanatory factors under this study.

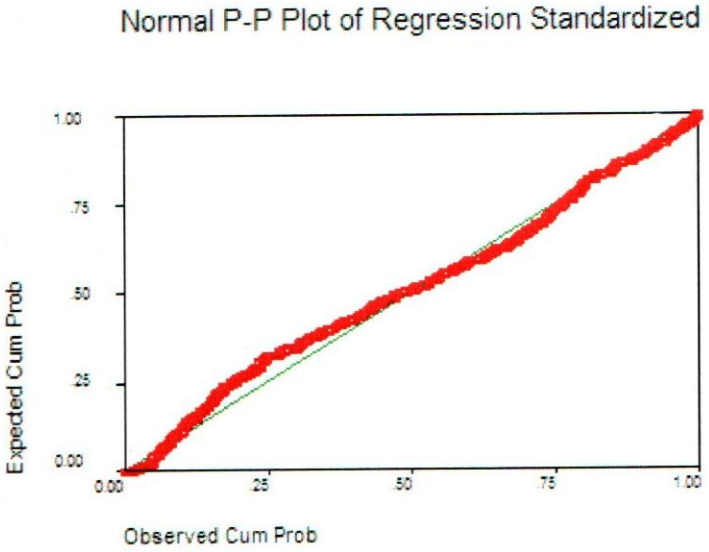


Figure 2: The Normal Probability Plot

Figure 2 shows, that the regression standardized residuals fell closely on a straight line, suggesting that the error terms were normal.

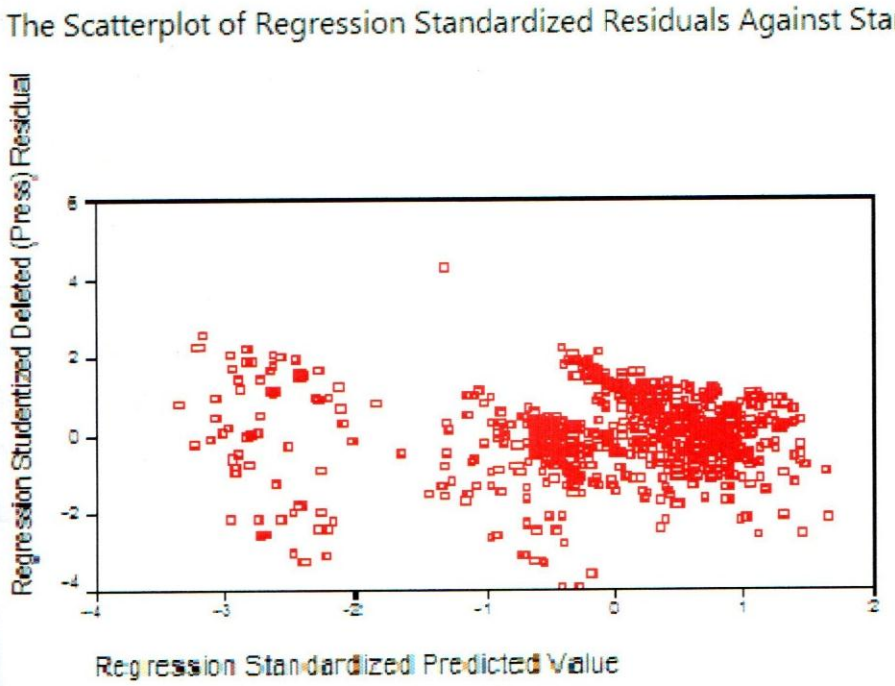


Figure 3: The Standardized Residual Plot

The residuals seemed to scatter randomly around the zero horizontal line of the regression (figure 3) without depicting any noticeable systematic pattern. This suggests the error terms were random and independently distributed since the same figure doesn't show a systematic spread in the pattern of residuals, this suggests that the variability of the error terms was fairly constant.

Durbin-Watson test performed indicated there was no significant serial correlation among the residuals (p-value = 0.418) as indicated in table 3.

The results for collinearity diagnostics carried out using the variance inflation factors (VIF) and tolerances for individual variables appear in Table 5.

Table 5: Collinearity Statistics

Predictors	Tolerance	VIF
ACCESS KENYA	.701	1.427
SAFARICOM	.443	2.257
SCANGROUP	.707	1.415
KENYA RE	.621	1.609
COOP Bank	.511	1.956
EVEREADY	.739	1.354
KENGEN	.730	1.370
ELECTION	.472	2.118
VOLUME	.163	6.153
TURNOVER	.214	4.680
TIME (Days)	.246	4.070

The largest variance inflation factor (VIF) among all predictor variables is often used as an indicator of the severity of multicollinearity. A maximum VIF value in excess of 10 is frequently taken as an indication that multicollinearity may be duly influencing the least squares estimates (Neter, et al, 1996). Multicollinearity was studied by computing the variance inflation factor (VIF) as shown in Table 5. As observed from these results, multicollinearity among explanatory factors was not a problem.

4.1.3 Logit Results

Table 6 depicts the results for various IPOs which made announcements within a 60 day period for a market index above 4000. The market index over 4,000 is represented by 1 and less than by 0.

Table 6: The Parameter Estimates for Listed IPOs with NSE 20 share index

Log likelihood = -18110.5	**n=800**			**LR $\chi 2$ =382.33, df = 7**	
	Co-efficient	Std error	P-value	Odds Ratio	95% Confidence Interval
Constant	1.451	0.028	0.000	4.27	1.395
AccessKE IPO (0,1)	0.312	0.044	0.000	1.37	0.225
Safaricom IPO (0,1)	0.006	0.043	0.894	1.01	-0.078
ScanGroup IPO (0,1)	0.211	0.042	0.000	1.23	0.128
KenyaKE IPO (0,1)	0.128	0.046	0.000	1.14	0.039
Coop Bank IPO (0,1)	0.738	0.050	0.000	2.09	0.639
Eveready IPO (0,1)	-0.186	0.043	0.000	0.83	-0.270
KenGen IPO (0,1)	-0.139	0.048	0.004	0.87	-0.232

Source: Research Data

From Table 6, all the listed IPOs with NSE 20 share index were significant, except Safaricom. Furthermore, the table indicates that all IPOs had a positive influence on the market index except Eveready and KenGen. This suggests that while the rest of these listed IPOs had an increased probability of a market share above 4000, both Eveready and KenGen had reduced probability of a market share above 4000 within the 60-day announcement period.

Thus, using (3.5.2), the fitted logistic model was:

$$\text{logit}(P) = 1.451 + .312(\text{AccessKE}) + .006(\text{Safaricom}) + .211(\text{Scangroup}) + .128(\text{KenyaRE}) + .738(\text{COOP Bank}) - .186(\text{Eveready}) - .139(\text{KenGen})$$

----------4.1.4

4.2 DISCUSSION OF MULTIPLE LINEAR REGRESSION AND LOGIT RESULTS

From the collinearity statistics, a weak association among the float IPOs was observed, indicating that there was no multicolinearity. This was also supported by the results obtained from the multiple linear regression model, in which the estimated regression coefficients had smaller standard error. Thus, the estimated regression coefficients may not differ widely from one sample to the next. As a result, the model provides only precise information about the individual true regression coefficient (Neter et al, 1996).

The estimation results show that the market returns were affected by all the listings. Apart from some factors (Co-op bank, KenGen, and Volume traded) which had a negative effect, the rest had a positive impact on the market returns. The magnitude of these effects ranged from –0.126 to 0.172. Furthermore, the t-test indicates that each of the factors in the fitted model had a statistically significant effect on the market return at 5 percent level of significance.
The estimated R-squared was about 79.50% indicating that the IPOs announcement and the analysed exogenous variables could be among other factors that explain the Changes in the observed Market Returns.

The results show that the constant was significant hence; other factors would have affected the market return. The overall F-test was used to determine whether none of the seven IPOs had a significant impact. The ANOVA output, which showed a significant overall effect of the factors under this study on the market returns. These results indicated that there was sufficient evidence to reject the null hypothesis; that all the IPOs had no significant effect on the Market return. It was not surprising since both the results found from the cross-tabulation analysis in Table 2 that there were significant relationships between the Market Return and each of the IPOs. These

outcomes meant that the announcements within the 60 window period had an effect on the Market return for each of the IPOs.

We further investigated the nature and strengths of these correlations using the Logistic regression 3.5.2. From the fitted logistic regression model we found that the estimated odds of a market index above 4000 for announcements made within a 60 day period by Access Kenya, Safaricom, Scan group, and Kenya RE, increased by 37%, 1%, 23%, and 14%, respectively. Also, the estimated odds of a market index above 4000 for the announcement made within a 60 day period by the Cooperative bank of Kenya doubled the estimated odds for the announcement outside the window period. However, the estimated odds of a market index above 4000 for announcements made outside a 60 day period by Eveready and KenGen increased by 20%, and 15%, respectively.

The likelihood Ratio test was done to check the model fit; to show whether the model described the data well.LR=-2(LO –L1) =382.33 where
LO represents the simplest Model of Log likelihood with logit of p being constant
and L1 represented the Fitted Model (3.5.2).More specifically, the study tested
Ho: $\beta i=0$ where i=1 …7(IPOs)
Ha: $\beta i \neq 0$ Atleast one i

It was observed LR X^2 to be 382.33 a very large value compared to the 7 degrees of freedom, thus rejecting the null hypothesis that all co-efficient in the model are equal to zero. Therefore, there was enough evidence that the fitted model provided a good fit to the sampled data. Hence, the Model with seven IPOs was acceptable.
The P values were used to determine whether or not each IPO had a significant contribution in the Fitted Model. It was observed that only Safaricom had a insignificant contribution in the model; p-value >0.025.However, since The Likelihood Ratio Test indicated that the fitted Model which included Safaricom among other IPOs was True, it shows that Statistical Significance is no longer important in this case. Therefore, Safaricom could be retained in the fitted model to facilitate interpretation rather than removing it on statistical ground when it seems to provide important information.

The results are in line with other related and relevant findings highlight effects on Equity issues. Research conducted by Dierkens (1991) show that information asymmetry is a significant variable for equity issues. Lucas and McDonald(1990) in their study of the Equity issues and Stock Price Dynamics found out that equity issues on average are preceded by an abnormal positive return on the stock , although some firms the issue is preceded by a loss. They concluded that equity issues on average are preceded by an abnormal rise in the Market. Robert et al. (1992) identified that price drops at issue announcement and increases with the time since the last information release. Michael and Robert (1988) used the intraday price data to determine announcement effects on new equity issues. They found out that the issue size, intended use of proceeds and estimated profitability of new investment are uncorrelated with the announcement effect. The findings are supported by other studies on the Nairobi Stock Exchange. Onyuma (2009) examined the NSE 20 Index of Kenyan Stock Market and he found that Monday and Friday present the lowest negative and highest positive returns respectively. Kakiya (2010) evaluated the effect of earning announcements on the Stock returns and she found that the Market had negative abnormal returns and Cumulative returns were negative.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 SUMMARY

The Study examined the effect of IPO announcement on the Market Prices of listed Companies on the NSE. Kenya is a medium economy and an emerging capital Market.

The Main Objectives of the Study were:

1. To characterize companies that issued IPOs between January 2006 and March 2009 in terms of profitability and share capital.
2.
3. To establish the effect of IPO announcement on Market Returns determined using the NSE 20 share index.
4. To identify the effect of IPO announcement on Market Return with a market index of below or above 4000.
5. To assess the effect of Exogenous Factors on the Market return.

This was a retrospective study in which the ordinary as well as the logistic regression models and the event study methodology were adopted. The IPO announcement and other factors represented the Independent variables while the Stock Market Return represented the Dependent Variable. The Study employed the use of secondary data which was extracted from the daily reports by the NSE and captured by use of a data capture sheets.

There were three hypotheses that were set for this study. All the three were rejected on the basis of statistical evidence obtained from the tests done and the p value estimates from the regression model. From the Study there was evidence that statistically, there was significant effect of the IPO announcement on the Stock Market Returns. In particular, the seven IPOs floated by companies had different characteristics in terms of financial, information technology, industrial and allied sector and communication. They also varied in terms of capital base and profitability prior to the issue of the IPO.

5.2 CONCLUSION

This study evaluated the effect of initial public offer announcements on returns of listed stocks at the Nairobi stock exchange. The study found out that IPO announcements had a significant effect on stock market returns. Before the issuance of IPOs, the firms that participated were profitable and stable in terms of capital base. Given the findings that most IPOs had a significant positive effect on the returns. It would imply therefore, that the NSE is not efficient at the semi-strong level of market efficiency as investors may be capable of Predicting the market.

5.3 RECOMMENDATIONS

5.3.1 Possible Policy Recommendations.

a) Regulation framework that would strengthen market oversight and surveillance. Market intermediaries will be supervised hence ensuring that information asymmetry does not exist.
b) Efforts should be directed towards further developing the market infrastructure in terms of the trading platform. The full automation of the market will provide the required trading engine that enable online trading capabilities. This will improve market efficiency.
c) The market should demutualise to improve Governance hence efficiency of the market. The market needs to be structured to separate the trading rights from ownership and management. This would remove the possibility of market intermediaries influencing the market. The market intermediaries sponsor IPOs, investors' trade through them and they give investment advice on the same. There is bound to be conflict of interest which might affect market price and returns.

5.3.2 Suggestions for further research.

a) Since this study could not evaluate all possible factors that contribute to fluctuation in stock returns including the effect of economic factors (inflation, foreign exchange rate, interest rates) on the stock returns and market speculation, the study therefore, recommends further research incorporating all endogenous and exogenous factors of change affecting the NSE index and their monthly indicators.

b) The study assumed an average daily market index of 4000 to assess the effect of IPOs on the market robustness. However, this study did not focus on the sensitivity analysis of possible cut-off points during the sub-analysis. Therefore, further research needs to be done to develop a theoretical framework on the cut-off criteria.

REFERENCES

Alan Agresti, (1996). *An Introduction to Categorical Data Analysis*. New York: John Wiley & Sons Press

Amihud Y., S. Hauser and A. Kirsh, (2003). Allocations, Adverse Selection and Cascades in IPOs. Evidence from the Tel-Aviv Stock Exchange, *Journal of Financial Economics*, 68(1), 137-158.

Ariel,R. A., (1987). A Monthly Effect in Stock Returns, *Journal of Financial Economics* 18:161-174

Baker M., and Stein J., (2004). Market Liquidity as a Sentiment Indicator. Journal of Financial Markets, 7: 271-299.

Baker M., and Wurgler J., (2006). Inventors Sentiment and the Cross-Section of Stock Returns. *Journal of Finance,* 61: 1-66.

Ball, R.J and Brown P., (1968). .An Empirical Evaluation of Accounting Income Numbers, *Journal of Accounting Research* 6:159-178

Benić V., and Franić I., (2008). *Stock Market Liquidity*: Comparative Analysis of Croatian and Regional Markets Financial Theory and Practice 32 (4) 477-498.

Benveniste, L.M. and Spindt P.A., (1989). How investment bankers determine the offer price and allocation of new issues .*Journal of Financial Economics,* 24:343-361

Bortolotti, de Jong, Nicodano and Schindele, (2007). Privatization and stock market liquidity *Journal of Banking & Finance* 31 297–316

Brealey, RA and Myers SC- (2003) .*Principles of Corporate Finance,* 7th edition, Tata McGraw

Brockman, P. and Michyluk D., (1998).*The Persistent Holiday Effect: Additional Evidence*, Applied Economic Letters 5:205-207

Brown,S and J.Warner(1980). Measuring security price performance, *Journal of Financial Economics* 8,205-258

Cadsby, B. and Ratner M., (1992).Turn of Month and Pre-holiday Effects on Stock Returns: Some International Evidence, *Journal of Banking and Finance* 16: 497-509

Cameron, Linda, Bryan Chapple, Davis N., Kousis A., and Lewis G., (2007). *New Zealand Financial Markets, Saving and Investment*, New Zealand Treasury Policy Perspectives Paper 07/01

Deaves, R. (2006). *What Kind of an Investor are You?: A Guide to the Investment Solution that is Right for You.* Insomniac Press.

Deborah J.K and Robert L.M., (1990).*Equity issues and Stock Price Dynamics*,*Journal of Finance* Vol.45.No.4 pp.1019-1043.

DeBondt, W.F.M. and R.H. Thaler (1985).Does the Stock Market Overreact? Journal of Finance 40:793-805

Eleswarapu, V.R and M. R. Reinganum (1993).The Seasonal Behaviour of the Liquidity Premium in Asset Pricing, *Journal of Financial Economics* 34: 373-386

Fama,E.(1970).Efficient Capital Markets: A review of Theory and Empirical Work . *Journal of Finance Vol.25:383-417*

Fama, E. (1991).*Efficient Capital Markets*, *Journal of Finance* 46: 1575-1617

Fisher, D.E and R.J Jordan (1995). *Security Analysis and Portfolio Management* 6th Ed. Prentice hall Publisher,India.

Gajewski, J. F., and Gresse, C., (2006), *A Survey of the European IPO Market.* ECMI Paper No. 2.

Gary L. Gastineau G. L., and Kritzman M., (2001). *Dictionary of Financial Risk Management*, 3rd Edition, John Wiley & Sons.

Grundvall, B., Melin-Jakobsson, A. & Thorell, P. (2004). Why are IPOs still attractive.*Journal of Financial Economics*, 55, 281-325.

Greene, W.H (2003).*Econometric Analysis.*5th Edition, Prentice Hall, New Jersey.

Gough, L. (2001). *How the Stock Market Really Works.* Great Britain: Pearson Education

Jensen, M. (1968).The Performance of Mutual Funds in the Period 1945-1964 *Journal of Finance* .

Hasbrouck, J., (2003). *Trading costs and returns for US equities:* The evidence from daily data. Working Paper, N.Y.U. Stern School of Business

Jensen, M and R. S. Ruback (1983). *The Market for Corporate Control*: The Scientific Evidence *Journal of Financial Economics* 11: 5-50

Kakiya, GG, (2010). *An evaluation of the effect of Earning Announcement on stock returns*: A Case Study of the NSE UnpublishedMBA Project. Egerton University.

Kevin,K and Paul, M(2008).*Underpricing in initial Public Offering*. International Business Review 17:642-662.

Kim, W., and Weisbach, M. S., (2005).*Do Firms go Public to Raise Capital*? National Bureau of Economic Research Series Working Paper 11197

Kim M and Ritter JR (1999).Valuing IPO's, *Journal of Financial Economics* 53:409-437

Kunkel, R. and W Compton (1998). A Tax-free Exploitation of the TOM Effect*: CR.E.F*", *Financial Services Review* 7:11-23

Lakonishok, J., Smidt, S., (1987). Are seasonal anomalies real? A ninety-year perspective. *Review of Financial Studies* 1, 403—425.

Lerner J (1994).Venture capitalists and the decision to go public. *Journal of Financial Economics* 35:293-316

Loughran T, Ritter JR and Rydqvist (1994).Initial Public Offerings: *international insights.Pacific Basin Finance Journal* 2:165-199

Lumby, S. (1994). *Investment Appraisal and Financial Decisions,* Chapman and Hall, London

MacKinlay, A.C (1997). *Event studies in Economics and Finance*. Journal of Economic Literature. Vol.35 pp13-39.

Mlambo,S(2003).Testing the Randomness of Thinly Traded Markets, *African Journal of Finance.*5:16-35

Michael, J.k and Robert L (1988).Announcement Effects of new equity issues and The use of Intraday Price data. *Journal of Financial Economics* Vol.21:71-99

Nathalie Dierkens., (1991).Information Asymmetry and Equity issues. *Journal of Financial and Quantitative Analysis,* Vol.26, No.2, pp181

Neter, J., Kutner, H.M., Nachtsheim, C.J., Wasserman, M.(1996). *.Applied Linear Statistical Models.*PP387, 4Ed. WBC/McGraw-Hill.

Ngoje., (2006).*Effects of election Period on Stock Returns:* A case Study of NSE Unpublished MBA Project.Egerton University.

Ogum, G., Beer, F., Nouyrigat, G. (2005).Emerging equity market volatility: an empirical investigation of markets in Kenya and Nigeria, *Journal of African Business,* Vol. 6 No.1/2, pp.139-54.

Ogunmuyiwa M. S., (2010). Investor's Sentiment, Stock Market Liquidity and Economic Growth in Nigeria. *Journal of Social Sciences* 23(1): 63-67

Oluoch, W., (2002). *Timing of Earnings Announcements*: A Case Study of the NSE UnpublishedMBA Project. Nairobi University.

Ondigo (1995). *Information content of Annual Returns:* A Case Study of the NSE, Unpublished MBA Project, Nairobi University.

Onyango,P.O., (2004).*Effects of Returns Announcement on Share Prices:*A Case Study of NSE, Unpublished MBA Project.Nairobi University.

Onyuma S.O (2009).day of the week and month of the year effect on the Kenya stock market returns. *Journal of East African social science Research Review* Vol XXV (2) June 53-74.

Owuor,G.,Ngigi, M, Ouma, A.S.,Birachi,E.A.,(2007).Determinants of Rural Poverty in Africa:The case of small holder farmers in Kenya. *Journal of Applied Sciences* 7(17)2539-2543

Pagano, M, Panetta and Zingales L (1998).Why do firms go public? An empirical analysis, *Journal of Finance* 53:27-64

Pastor, L., Stambaugh, R.F., (2003). Liquidity risk and expected stock returns. *Journal of Political Economy* 111 (3).

Patel, J. and wolfson., (1984).The intraday speed of adjustment of Prices to earnings and Dividend Announcements. *Journal of Financial Economics* 13:223-252.

Purnanandam AK and Swami Nathan B (2002).*Are IPOs under priced?* Working Paper (Cornell University, NY).

Reilly, F.K. and K.C. Brown (2000). Investment Analysis and Portfolio Management, the Dryden Press, Philadelphia.Roll R. (1984).Orange Juice and Weather. *American Economic Review 74.Journal of Financial Economics* 43: 541-566

Ritter, J. (2006).*Initial Public Offerings*, in Rutterford, J., Upton, M., and Kodwani D., Financial Strategy, (p.191-213), John Wiley & Sons Ltd

Robert A.K., Deborah J.L., MacDonald R.L., (1992).Equity issues with Time-Varying Asymmetric Information. *Journal of Financial and Quantitative Analysis* Vol.27.No.3 pp.397-417

Rozeff, M.S. and W. R. Kinney (1976) .*Capital Market Seasonality: The Case of Stock Returns*, *Journal of Financial Economics* 3: 379-402.

Seyton, N. (1998).Insiders' Profits, Costs of Trading and Market Efficiency, *Journal of Financial Economics* 16:189-212

Stivers C , Sun L. and Connolly R., (2005) .Stock Implied Volatility, Stock Turnover, and Stock Bond Return Relation, *Journal of Financial and Quantitative Analysis,* 40 :161 – 194.

Schoenfeld S., (2002). Perfection Impossible – Why simply 'Good' Indices Can Result in a More Perfect Solution, *Journal of Indices,* Second Quarter.

Standard and poor's (2008). *S&P Emerging Markets Index*: Index Methodology

Welch I., (1992). Sequential Sales, Learning and Cascades, *Journal of Finance*, 47(2), 695-732

Zellner, *A (1962). An Efficient Method of Estimating Seemingly Unrelated Regressions and Tests for Aggregation bias. Journal of the American Statistical Association* 3:48-68

APPENDIX I

Secondary Data

DATE TRADE	MKT INDEX	VOLUME	TURNOVER
03-Jan-2006	3,991.18	8,384,604.00	253,403,841.25
04-Jan-2006	4,011.80	4,369,691.00	232,499,310.45
05-Jan-2006	4,014.89	9,092,850.00	264,618,935.10
06-Jan-2006	4,030.97	10,669,722.00	287,622,594.60
09-Jan-2006	4,074.71	10,461,899.00	365,765,595.10
10-Jan-2006	4,072.46	8,825,371.00	356,309,288.15
11-Jan-2006	4,101.76	9,299,654.00	394,346,527.40
12-Jan-2006	4,125.40	8,938,949.00	399,995,001.70
13-Jan-2006	4,140.66	8,143,810.00	303,989,993.30
16-Jan-2006	4,177.24	6,835,667.00	250,785,564.00
17-Jan-2006	4,205.72	8,726,796.00	456,495,370.80
18-Jan-2006	4,217.37	8,996,635.00	454,341,054.30
19-Jan-2006	4,204.68	5,472,929.00	295,995,056.95
20-Jan-2006	4,199.53	6,931,525.00	321,270,097.90
23-Jan-2006	4,194.02	5,005,805.00	221,471,985.35
24-Jan-2006	4,183.91	4,713,342.00	263,719,495.70
25-Jan-2006	4,196.48	6,888,264.00	412,951,749.25
26-Jan-2006	4,159.16	4,756,498.00	259,245,574.30
27-Jan-2006	4,173.50	3,567,524.00	171,907,304.85
30-Jan-2006	4,169.99	3,412,304.00	179,102,184.50
31-Jan-2006	4,171.80	3,030,241.00	117,244,097.60
01-Feb-2006	4,167.14	3,777,467.00	176,859,603.00
02-Feb-2006	4,159.17	3,134,886.00	161,576,410.95
03-Feb-2006	4,163.64	2,694,663.00	136,153,362.35
06-Feb-2006	4,156.36	2,544,242.00	155,857,853.75
07-Feb-2006	4,137.82	2,398,970.00	145,898,876.75
08-Feb-2006	4,131.78	4,031,583.00	194,250,374.70
09-Feb-2006	4,119.25	3,347,974.00	208,217,964.25
10-Feb-2006	4,100.22	2,093,611.00	125,157,827.60
13-Feb-2006	4,101.26	2,507,036.00	134,107,884.65
14-Feb-2006	4,089.44	2,907,389.00	162,697,423.30
15-Feb-2006	4,088.26	2,707,431.00	213,248,692.25
16-Feb-2006	4,092.07	4,339,786.00	251,912,993.40
17-Feb-2006	4,071.00	3,297,897.00	156,226,349.55
20-Feb-2006	4,093.45	2,858,701.00	141,629,778.65

21-Feb-2006	4,068.81	3,348,055.00	157,754,696.10
22-Feb-2006	4,068.29	3,068,805.00	151,252,294.35
23-Feb-2006	4,069.16	3,550,161.00	183,444,594.30
24-Feb-2006	4,062.56	3,370,821.00	196,004,055.20
27-Feb-2006	4,050.14	3,539,006.00	190,301,661.10
28-Feb-2006	4,056.63	2,376,738.00	148,244,616.20
01-Mar-2006	4,045.13	2,300,269.00	129,657,741.35
02-Mar-2006	4,043.92	2,804,360.00	168,647,568.20
03-Mar-2006	4,055.78	2,474,238.00	150,429,034.60
06-Mar-2006	3,989.76	2,640,383.00	131,990,785.95
07-Mar-2006	3,916.55	3,292,330.00	157,163,567.75
08-Mar-2006	3,878.88	1,646,532.00	75,556,636.90
09-Mar-2006	3,872.21	3,306,378.00	218,315,304.20
10-Mar-2006	3,863.74	3,189,066.00	158,832,648.90
14-Mar-2006	3,887.59	2,646,202.00	151,472,660.30
15-Mar-2006	3,916.25	2,965,829.00	183,426,532.20
17-Mar-2006	3,955.42	2,098,509.00	149,083,384.00
20-Mar-2006	3,973.11	1,539,483.00	117,215,319.30
21-Mar-2006	3,973.75	3,171,013.00	115,178,085.50
22-Mar-2006	4,005.35	6,207,546.00	192,210,909.70
23-Mar-2006	4,038.55	4,124,615.00	179,710,323.25
24-Mar-2006	4,067.41	4,757,946.00	262,169,349.95
27-Mar-2006	4,085.61	2,813,568.00	135,358,615.75
28-Mar-2006	4,102.61	2,898,969.00	162,139,470.45
29-Mar-2006	4,115.90	4,611,110.00	343,216,842.25
30-Mar-2006	4,115.30	3,637,913.00	229,559,987.25
31-Mar-2006	4,101.64	3,343,328.00	128,514,924.90
03-Apr-2006	4,092.48	2,328,017.00	141,975,423.65
04-Apr-2006	4,086.27	1,932,746.00	110,517,598.30
05-Apr-2006	4,056.65	2,393,253.00	163,057,706.85
06-Apr-2006	4,048.36	2,078,089.00	116,207,473.80
07-Apr-2006	4,025.30	2,566,424.00	149,103,831.25
10-Apr-2006	4,000.41	2,171,783.00	103,478,084.50
11-Apr-2006	3,984.82	1,231,421.00	80,217,472.75
12-Apr-2006	3,976.32	1,093,919.00	87,453,445.85
13-Apr-2006	3,973.79	794,501.00	54,391,392.45
18-Apr-2006	3,995.83	1,579,238.00	122,536,393.70
19-Apr-2006	3,974.64	2,594,428.00	164,581,556.55
20-Apr-2006	3,960.19	5,888,594.00	199,301,810.50
24-Apr-2006	3,968.63	5,811,752.00	240,892,434.35

25-Apr-2006	3,986.74	4,645,837.00	259,950,735.45
26-Apr-2006	3,991.26	6,503,118.00	276,777,019.05
27-Apr-2006	4,004.48	9,770,158.00	359,094,336.35
28-Apr-2006	4,025.21	3,917,514.00	232,985,605.80
02-May-2006	4,040.05	4,975,431.00	279,032,319.90
03-May-2006	4,076.97	5,642,330.00	337,358,461.45
04-May-2006	4,114.41	8,673,495.00	549,132,119.70
05-May-2006	4,149.14	7,187,316.00	464,215,696.10
08-May-2006	4,190.32	10,780,371.00	605,581,183.20
09-May-2006	4,220.52	9,880,543.00	744,264,469.00
10-May-2006	4,278.55	7,321,632.00	581,513,363.05
11-May-2006	4,292.36	6,497,833.00	475,638,140.90
12-May-2006	4,316.72	5,657,675.00	447,416,671.60
15-May-2006	4,393.17	4,759,621.00	360,539,184.55
16-May-2006	4,451.41	7,393,351.00	700,136,844.60
17-May-2006	4,447.99	13,074,755.00	688,615,787.00
18-May-2006	4,441.54	12,312,496.00	615,375,401.35
19-May-2006	4,411.81	7,944,854.00	515,857,821.50
22-May-2006	4,389.69	8,735,652.00	484,111,595.30
23-May-2006	4,383.83	7,777,283.00	434,742,016.35
24-May-2006	4,363.97	10,425,835.00	619,922,289.10
25-May-2006	4,322.91	7,163,361.00	411,831,078.40
26-May-2006	4,338.42	11,600,346.00	616,125,009.80
29-May-2006	4,358.75	7,440,020.00	484,818,178.20
30-May-2006	4,365.90	8,903,481.00	619,875,214.35
31-May-2006	4,349.75	9,305,930.00	401,168,726.15
02-Jun-2006	4,339.47	4,441,807.00	249,134,720.70
05-Jun-2006	4,294.44	7,344,250.00	384,089,969.35
06-Jun-2006	4,280.96	7,712,382.00	371,047,295.60
07-Jun-2006	4,221.57	9,834,325.00	621,372,781.75
08-Jun-2006	4,204.34	8,353,046.00	433,487,668.85
09-Jun-2006	4,189.66	7,818,880.00	396,074,621.35
12-Jun-2006	4,194.59	8,292,588.00	457,337,969.20
13-Jun-2006	4,214.38	6,510,672.00	409,355,660.80
14-Jun-2006	4,216.79	7,595,023.00	446,903,231.70
15-Jun-2006	4,264.53	6,289,114.00	340,095,639.75
16-Jun-2006	4,272.43	6,508,522.00	373,984,072.20
19-Jun-2006	4,288.31	5,850,089.00	349,022,741.40
20-Jun-2006	4,284.19	7,145,811.00	462,040,865.90
21-Jun-2006	4,285.23	6,563,421.00	432,898,343.80

22-Jun-2006	4,286.30	5,505,134.00	420,788,615.60
23-Jun-2006	4,246.80	4,950,196.00	390,505,018.65
26-Jun-2006	4,227.16	4,514,340.00	271,743,975.00
27-Jun-2006	4,218.10	6,433,529.00	366,941,534.55
28-Jun-2006	4,250.20	7,696,555.00	535,915,860.60
29-Jun-2006	4,239.96	6,143,145.00	331,549,192.55
30-Jun-2006	4,260.49	6,502,406.00	396,754,439.10
03-Jul-2006	4,273.17	4,368,855.00	271,358,327.25
04-Jul-2006	4,263.59	4,254,098.00	305,634,792.25
05-Jul-2006	4,274.25	4,603,377.00	250,725,979.70
06-Jul-2006	4,246.38	4,312,255.00	289,325,736.50
07-Jul-2006	4,271.72	3,739,485.00	247,702,603.55
10-Jul-2006	4,271.99	3,059,125.00	216,593,735.20
11-Jul-2006	4,278.18	3,972,489.00	263,261,318.65
12-Jul-2006	4,271.10	4,462,880.00	254,937,765.50
13-Jul-2006	4,276.43	3,888,189.00	247,959,328.30
14-Jul-2006	4,272.50	4,342,135.00	265,527,026.40
17-Jul-2006	4,271.37	4,376,266.00	230,198,773.35
18-Jul-2006	4,246.38	4,960,921.00	314,697,675.00
19-Jul-2006	4,246.44	6,444,689.00	420,809,108.75
20-Jul-2006	4,242.51	5,176,546.00	318,917,613.00
21-Jul-2006	4,244.16	5,422,378.00	252,039,670.90
24-Jul-2006	4,245.29	5,428,430.00	331,997,578.15
25-Jul-2006	4,251.37	5,404,044.00	269,404,541.60
26-Jul-2006	4,268.00	4,314,196.00	241,645,036.20
27-Jul-2006	4,260.64	2,869,810.00	161,418,230.25
28-Jul-2006	4,271.68	4,749,031.00	250,521,484.20
31-Jul-2006	4,258.54	3,313,271.00	189,211,402.05
01-Aug-2006	4,242.50	3,622,598.00	240,833,350.65
02-Aug-2006	4,277.30	2,234,119.00	141,394,929.00
03-Aug-2006	4,314.44	4,388,882.00	325,978,566.00
04-Aug-2006	4,340.88	4,224,969.00	281,077,407.25
07-Aug-2006	4,384.35	3,317,127.00	222,119,642.55
08-Aug-2006	4,390.95	4,667,160.00	291,917,848.20
09-Aug-2006	4,396.09	5,320,275.00	297,255,326.85
10-Aug-2006	4,396.61	6,436,304.00	501,194,247.30
11-Aug-2006	4,407.54	4,119,259.00	244,360,809.15
14-Aug-2006	4,414.88	4,908,456.00	323,046,326.35
15-Aug-2006	4,429.49	6,096,362.00	527,238,667.65
16-Aug-2006	4,423.60	5,374,312.00	459,026,417.75

17-Aug-2006	4,424.17	6,205,939.00	384,522,444.10
18-Aug-2006	4,451.08	4,515,558.00	299,852,931.10
21-Aug-2006	4,467.40	4,359,076.00	435,269,628.55
22-Aug-2006	4,442.50	6,699,922.00	532,234,635.50
23-Aug-2006	4,467.36	5,312,321.00	485,744,580.35
24-Aug-2006	4,488.56	4,275,615.00	323,860,948.35
25-Aug-2006	4,469.60	5,902,614.00	400,736,166.60
28-Aug-2006	4,476.07	4,853,218.00	372,672,341.80
29-Aug-2006	4,489.60	7,742,823.00	377,469,671.80
30-Aug-2006	4,507.15	5,972,906.00	539,225,451.70
31-Aug-2006	4,486.07	7,058,117.00	464,455,913.30
01-Sep-2006	4,490.84	4,869,593.00	305,198,441.85
04-Sep-2006	4,481.70	6,635,388.00	367,316,256.25
05-Sep-2006	4,496.47	11,886,805.00	520,350,443.75
06-Sep-2006	4,507.99	9,010,193.00	485,961,020.25
07-Sep-2006	4,508.02	9,257,859.00	483,527,586.00
08-Sep-2006	4,523.80	9,294,144.00	661,208,951.80
11-Sep-2006	4,585.94	3,818,219.00	254,745,272.00
12-Sep-2006	4,601.22	6,555,201.00	484,342,860.25
13-Sep-2006	4,645.56	6,767,578.00	559,490,610.50
14-Sep-2006	4,684.57	6,522,316.00	416,310,579.70
15-Sep-2006	4,750.80	8,361,403.00	620,021,751.30
18-Sep-2006	4,839.24	9,157,025.00	814,189,606.15
19-Sep-2006	4,871.76	10,796,684.00	857,443,091.25
20-Sep-2006	4,876.13	9,805,967.00	811,937,376.00
21-Sep-2006	4,769.13	11,199,057.00	938,081,820.65
22-Sep-2006	4,778.35	8,485,029.00	616,425,195.20
25-Sep-2006	4,728.12	9,221,654.00	538,886,917.80
26-Sep-2006	4,781.37	6,484,334.00	563,546,111.50
27-Sep-2006	4,829.04	10,169,799.00	757,213,677.65
28-Sep-2006	4,881.10	10,432,454.00	694,401,290.00
29-Sep-2006	4,879.86	8,643,552.00	625,295,797.75
02-Oct-2006	4,843.23	7,144,093.00	550,267,601.40
03-Oct-2006	4,910.61	9,652,120.00	747,658,813.25
04-Oct-2006	4,937.20	10,544,325.00	1,061,809,316.45
05-Oct-2006	4,946.12	10,051,412.00	966,084,975.50
06-Oct-2006	4,903.90	10,644,498.00	840,248,693.25
09-Oct-2006	4,889.68	12,598,763.00	1,047,480,025.80
11-Oct-2006	4,893.03	5,690,308.00	482,038,424.10
12-Oct-2006	4,882.14	6,418,351.00	560,033,511.25

13-Oct-2006	4,906.49	7,532,752.00	623,753,411.50
16-Oct-2006	4,857.58	3,913,235.00	276,876,271.10
17-Oct-2006	4,851.97	6,930,454.00	592,140,741.00
18-Oct-2006	4,875.58	5,519,846.00	430,874,502.00
19-Oct-2006	4,864.02	7,231,835.00	575,026,886.25
23-Oct-2006	4,910.60	6,501,408.00	466,547,942.25
25-Oct-2006	4,963.22	9,447,048.00	606,174,598.75
26-Oct-2006	5,061.77	7,060,969.00	562,451,238.50
27-Oct-2006	5,106.65	7,954,079.00	913,995,434.25
30-Oct-2006	5,177.90	7,170,598.00	713,046,944.00
31-Oct-2006	5,314.36	19,240,785.00	1,072,849,782.60
01-Nov-2006	5,403.96	13,227,574.00	890,745,564.25
02-Nov-2006	5,529.50	7,492,489.00	552,212,883.00
03-Nov-2006	5,515.34	14,489,273.00	881,063,479.00
06-Nov-2006	5,555.23	10,187,159.00	733,487,307.50
07-Nov-2006	5,604.48	9,716,200.00	811,167,287.50
08-Nov-2006	5,638.00	10,486,735.00	938,792,311.50
09-Nov-2006	5,656.18	8,371,857.00	646,628,318.75
10-Nov-2006	5,654.46	7,694,174.00	716,701,732.00
13-Nov-2006	5,608.25	5,524,047.00	591,784,717.00
14-Nov-2006	5,585.81	10,495,392.00	655,574,930.00
15-Nov-2006	5,603.03	5,950,559.00	480,005,180.25
16-Nov-2006	5,602.40	8,618,160.00	650,563,951.00
17-Nov-2006	5,642.04	5,665,707.00	402,484,247.95
20-Nov-2006	5,676.05	6,609,357.00	666,402,735.50
21-Nov-2006	5,667.30	5,677,962.00	601,124,441.00
22-Nov-2006	5,665.07	7,094,860.00	578,616,728.75
23-Nov-2006	5,676.52	6,370,758.00	503,279,549.00
24-Nov-2006	5,752.57	3,509,191.00	354,819,495.25
27-Nov-2006	5,791.00	3,742,026.00	382,011,348.35
28-Nov-2006	5,762.20	7,096,005.00	588,906,752.25
29-Nov-2006	5,656.67	4,797,700.00	449,753,368.45
30-Nov-2006	5,615.20	7,084,956.00	572,557,877.75
01-Dec-2006	5,553.08	3,820,328.00	313,925,610.50
04-Dec-2006	5,490.20	3,696,004.00	261,922,563.75
05-Dec-2006	5,417.50	5,015,940.00	310,750,215.50
06-Dec-2006	5,429.02	4,398,466.00	293,211,827.50
07-Dec-2006	5,481.28	5,351,100.00	382,217,614.25
08-Dec-2006	5,477.86	3,768,101.00	266,283,845.75
11-Dec-2006	5,516.98	3,259,215.00	243,402,818.75

13-Dec-2006	5,525.38	5,090,098.00	474,978,442.75
14-Dec-2006	5,582.42	5,108,625.00	449,551,188.50
15-Dec-2006	5,589.64	4,586,585.00	401,944,114.00
18-Dec-2006	5,624.84	3,687,307.00	348,533,223.00
19-Dec-2006	5,572.10	4,346,473.00	323,940,364.50
20-Dec-2006	5,525.40	4,458,193.00	274,512,323.00
21-Dec-2006	5,509.97	5,845,524.00	390,855,882.50
22-Dec-2006	5,487.73	3,131,439.00	179,946,318.25
27-Dec-2006	5,522.81	2,165,090.00	165,032,173.00
28-Dec-2006	5,560.44	4,850,154.00	357,701,135.50
29-Dec-2006	5,645.65	4,844,968.00	331,959,711.75
03-Jan-2007	5,714.18	4,517,737.00	417,277,995.50
04-Jan-2007	5,811.58	6,406,015.00	600,045,596.50
05-Jan-2007	5,895.68	6,292,246.00	484,546,725.40
08-Jan-2007	5,962.46	6,576,934.00	569,388,005.50
09-Jan-2007	6,026.51	7,388,244.00	631,235,960.05
10-Jan-2007	6,085.59	7,445,463.00	651,328,698.50
11-Jan-2007	6,117.35	7,588,275.00	623,585,011.00
12-Jan-2007	6,161.46	9,631,765.00	753,902,792.00
15-Jan-2007	6,125.28	5,874,189.00	481,752,291.50
16-Jan-2007	6,066.66	6,925,334.00	561,811,217.25
17-Jan-2007	6,041.42	6,855,408.00	482,385,375.35
18-Jan-2007	6,030.83	5,726,508.00	453,323,913.50
19-Jan-2007	6,025.41	6,851,549.00	450,072,530.00
22-Jan-2007	6,027.17	4,749,168.00	347,104,906.50
23-Jan-2007	6,060.21	5,322,838.00	386,318,937.75
24-Jan-2007	6,016.47	6,794,351.00	440,911,102.50
25-Jan-2007	6,010.17	6,936,000.00	431,066,887.00
26-Jan-2007	5,961.61	5,646,930.00	403,419,546.00
29-Jan-2007	5,949.71	4,604,343.00	322,144,398.05
30-Jan-2007	5,870.68	5,521,727.00	365,255,765.45
31-Jan-2007	5,774.27	5,298,994.00	367,510,229.50
01-Feb-2007	5,739.05	4,762,618.00	299,076,655.95
02-Feb-2007	5,663.65	5,077,508.00	413,786,256.00
05-Feb-2007	5,633.61	4,686,231.00	351,663,397.25
06-Feb-2007	5,628.88	5,678,931.00	343,337,181.20
07-Feb-2007	5,649.99	5,200,051.00	366,893,065.95
08-Feb-2007	5,710.21	5,124,225.00	298,649,956.25
09-Feb-2007	5,817.04	5,361,479.00	377,348,864.00
12-Feb-2007	5,895.18	4,611,074.00	406,241,000.00

13-Feb-2007	5,884.26	5,466,175.00	384,116,578.85
14-Feb-2007	5,867.03	6,246,260.00	458,198,974.50
15-Feb-2007	5,773.29	5,265,173.00	351,852,065.50
16-Feb-2007	5,798.73	6,579,094.00	444,400,136.25
19-Feb-2007	5,766.46	6,122,813.00	457,288,935.50
20-Feb-2007	5,771.39	4,975,309.00	373,167,434.90
21-Feb-2007	5,816.77	6,544,758.00	502,446,390.00
22-Feb-2007	5,763.85	6,091,688.00	479,519,313.50
23-Feb-2007	5,732.67	5,350,215.00	414,221,065.25
26-Feb-2007	5,665.79	5,245,614.00	420,483,711.50
27-Feb-2007	5,534.20	5,821,406.00	311,377,941.50
28-Feb-2007	5,387.28	4,869,895.00	309,786,839.50
01-Mar-2007	5,237.68	4,750,853.00	275,101,005.00
02-Mar-2007	5,245.62	5,145,541.00	464,990,670.50
05-Mar-2007	5,292.14	4,701,866.00	304,518,499.00
06-Mar-2007	5,252.46	4,428,911.00	270,431,930.00
07-Mar-2007	5,254.52	4,596,423.00	290,399,745.50
08-Mar-2007	5,256.53	5,322,373.00	364,538,096.50
09-Mar-2007	5,268.99	5,542,222.00	285,658,026.75
12-Mar-2007	5,239.01	7,321,379.00	363,585,430.25
13-Mar-2007	5,250.04	7,633,085.00	473,124,455.20
14-Mar-2007	5,241.25	5,848,216.00	292,123,483.05
15-Mar-2007	5,200.75	6,629,793.00	385,308,147.35
16-Mar-2007	5,171.13	6,317,697.00	393,669,922.55
19-Mar-2007	5,103.83	3,652,884.00	253,350,693.85
20-Mar-2007	4,961.89	5,572,638.00	282,637,079.30
21-Mar-2007	4,809.72	4,340,321.00	219,029,956.80
22-Mar-2007	4,637.31	3,992,300.00	215,542,611.50
23-Mar-2007	4,465.09	3,518,728.00	158,293,248.25
26-Mar-2007	4,489.76	4,340,956.00	304,364,341.00
27-Mar-2007	4,614.40	3,683,434.00	238,831,538.35
28-Mar-2007	4,791.22	4,215,876.00	239,236,935.50
29-Mar-2007	4,978.93	7,641,660.00	550,106,019.90
30-Mar-2007	5,133.67	5,020,483.00	359,930,313.60
02-Apr-2007	5,154.76	5,653,898.00	317,254,544.40
03-Apr-2007	5,183.11	5,327,734.00	275,022,174.10
04-Apr-2007	5,216.68	6,871,444.00	326,127,697.00
05-Apr-2007	5,215.20	6,113,071.00	304,504,798.75
10-Apr-2007	5,227.81	3,832,756.00	158,340,027.30
11-Apr-2007	5,218.64	4,956,872.00	271,202,316.35

12-Apr-2007	5,228.75	4,125,823.00	187,124,545.90
13-Apr-2007	5,242.88	4,371,056.00	210,653,083.15
16-Apr-2007	5,228.88	3,645,242.00	146,969,056.05
17-Apr-2007	5,185.67	4,763,709.00	210,999,085.65
18-Apr-2007	5,085.89	3,013,203.00	128,800,156.45
19-Apr-2007	5,092.07	3,382,697.00	163,477,096.00
20-Apr-2007	5,099.00	4,374,322.00	219,609,583.70
23-Apr-2007	5,105.41	3,857,959.00	163,357,544.50
24-Apr-2007	5,178.07	6,798,964.00	474,574,529.75
25-Apr-2007	5,173.33	4,570,422.00	240,111,353.25
26-Apr-2007	5,211.27	5,198,155.00	225,628,545.75
27-Apr-2007	5,148.07	3,965,916.00	188,656,014.00
30-Apr-2007	5,199.44	2,631,707.00	129,968,109.05
02-May-2007	5,151.46	6,056,972.00	228,643,050.25
03-May-2007	5,169.53	4,032,719.00	183,363,923.60
04-May-2007	5,116.02	4,597,510.00	269,308,315.75
07-May-2007	5,091.12	4,765,352.00	241,249,309.50
08-May-2007	5,101.43	7,404,554.00	394,755,281.25
09-May-2007	5,067.74	4,447,675.00	192,875,107.50
10-May-2007	5,071.33	4,933,297.00	234,601,791.80
11-May-2007	5,114.17	4,715,774.00	231,447,180.35
14-May-2007	5,181.77	6,421,530.00	269,329,058.25
15-May-2007	5,169.28	5,991,627.00	437,269,928.20
16-May-2007	5,179.21	4,072,215.00	237,515,124.75
17-May-2007	5,175.11	10,793,787.00	519,437,072.75
18-May-2007	5,167.34	4,078,407.00	194,217,227.00
21-May-2007	5,191.53	7,595,141.00	307,418,270.25
22-May-2007	5,154.41	5,383,663.00	235,791,638.75
23-May-2007	5,108.69	4,674,373.00	211,343,813.00
24-May-2007	5,132.74	6,872,631.00	292,962,311.00
25-May-2007	5,134.51	5,694,395.00	326,490,086.75
28-May-2007	5,118.39	5,776,184.00	282,924,451.25
29-May-2007	5,048.23	5,363,813.00	383,805,669.00
30-May-2007	5,051.21	4,881,984.00	212,204,154.75
31-May-2007	5,001.77	5,170,832.00	337,970,739.20
04-Jun-2007	5,043.35	6,538,668.00	209,731,186.75
05-Jun-2007	5,063.98	7,295,827.00	215,599,953.50
06-Jun-2007	5,065.62	9,777,506.00	319,960,538.25
07-Jun-2007	5,054.35	9,312,417.00	408,026,243.50
08-Jun-2007	5,068.68	7,753,838.00	379,130,079.00

11-Jun-2007	5,064.57	5,031,322.00	218,825,916.50
12-Jun-2007	5,074.08	5,951,694.00	273,675,041.50
13-Jun-2007	5,089.22	6,634,814.00	288,118,326.75
14-Jun-2007	5,096.68	7,089,202.00	281,248,468.25
15-Jun-2007	5,137.45	6,628,493.00	306,736,529.00
18-Jun-2007	5,163.47	5,642,067.00	278,013,355.75
19-Jun-2007	5,141.52	7,109,842.00	341,994,248.00
20-Jun-2007	5,147.85	5,810,098.00	237,001,695.50
21-Jun-2007	5,144.93	5,815,605.00	226,406,446.50
22-Jun-2007	5,124.14	5,248,475.00	218,607,431.50
25-Jun-2007	5,052.08	10,343,459.00	323,782,075.50
26-Jun-2007	5,080.55	13,334,455.00	467,345,057.55
27-Jun-2007	5,093.51	9,255,578.00	380,499,645.75
28-Jun-2007	5,163.88	8,708,041.00	397,533,814.50
29-Jun-2007	5,146.73	7,848,766.00	307,192,330.50
02-Jul-2007	5,144.20	5,650,704.00	192,384,013.00
03-Jul-2007	5,127.16	8,146,645.00	315,595,411.25
04-Jul-2007	5,181.07	8,698,580.00	320,820,112.55
06-Jul-2007	5,160.89	11,887,501.00	302,884,249.75
09-Jul-2007	5,136.53	6,560,263.00	222,033,699.25
10-Jul-2007	5,120.40	10,500,976.00	353,465,276.75
11-Jul-2007	5,112.62	7,598,066.00	332,552,419.30
12-Jul-2007	5,095.68	11,146,169.00	461,901,169.75
13-Jul-2007	5,117.37	6,523,914.00	309,400,287.75
16-Jul-2007	5,121.08	6,687,482.00	292,645,329.50
17-Jul-2007	5,104.13	7,035,574.00	258,170,029.00
18-Jul-2007	5,123.23	8,791,108.00	295,030,515.75
19-Jul-2007	5,131.99	7,243,947.00	244,334,835.90
20-Jul-2007	5,137.51	5,772,306.00	249,842,562.25
23-Jul-2007	5,154.42	5,172,282.00	209,230,866.25
24-Jul-2007	5,193.14	5,800,417.00	216,364,022.75
25-Jul-2007	5,230.04	6,939,439.00	273,266,093.00
26-Jul-2007	5,296.22	6,073,362.00	270,775,638.25
27-Jul-2007	5,317.73	7,885,717.00	321,966,678.15
30-Jul-2007	5,329.56	5,940,520.00	251,377,231.25
31-Jul-2007	5,340.08	7,620,315.00	334,440,750.25
01-Aug-2007	5,321.19	10,525,320.00	397,359,326.00
02-Aug-2007	5,310.05	8,570,615.00	421,602,660.90
03-Aug-2007	5,320.42	8,443,600.00	344,479,695.00
06-Aug-2007	5,277.38	6,519,059.00	294,651,167.00

07-Aug-2007	5,263.46	8,754,885.00	350,374,140.75
08-Aug-2007	5,256.44	6,796,283.00	296,706,627.10
09-Aug-2007	5,246.57	7,126,167.00	341,100,457.50
10-Aug-2007	5,240.83	6,508,059.00	339,958,572.75
13-Aug-2007	5,256.76	4,958,304.00	273,981,567.50
14-Aug-2007	5,227.08	11,040,519.00	493,611,905.00
15-Aug-2007	5,184.29	7,741,678.00	338,643,946.50
16-Aug-2007	5,120.53	8,350,107.00	333,254,925.85
17-Aug-2007	5,171.30	8,071,948.00	432,966,363.75
20-Aug-2007	5,126.68	5,495,578.00	243,085,086.75
21-Aug-2007	5,156.33	7,520,770.00	359,768,471.00
22-Aug-2007	5,165.41	8,349,811.00	414,558,831.75
23-Aug-2007	5,181.75	5,417,484.00	279,652,049.75
24-Aug-2007	5,234.70	10,828,708.00	448,670,501.50
27-Aug-2007	5,274.53	20,297,558.00	497,180,349.55
28-Aug-2007	5,290.38	20,685,269.00	487,930,762.50
30-Aug-2007	5,341.16	24,926,242.00	737,958,501.85
31-Aug-2007	5,371.72	19,075,151.00	530,854,004.75
03-Sep-2007	5,387.76	13,252,516.00	455,158,062.70
04-Sep-2007	5,403.17	12,156,625.00	399,395,278.10
05-Sep-2007	5,419.63	14,094,926.00	431,744,637.55
06-Sep-2007	5,458.40	18,506,470.00	621,776,250.00
07-Sep-2007	5,560.23	19,591,748.00	674,777,278.95
10-Sep-2007	5,582.38	14,787,689.00	556,681,435.05
11-Sep-2007	5,611.05	22,564,568.00	710,427,696.05
12-Sep-2007	5,556.32	20,179,915.00	655,267,772.00
13-Sep-2007	5,470.14	17,150,164.00	574,430,411.85
14-Sep-2007	5,484.63	15,871,326.00	502,446,240.45
17-Sep-2007	5,507.30	9,773,205.00	336,594,928.00
18-Sep-2007	5,490.99	12,103,778.00	447,107,816.35
19-Sep-2007	5,488.20	18,062,102.00	542,480,699.60
20-Sep-2007	5,519.74	15,353,838.00	508,158,237.80
21-Sep-2007	5,491.27	7,041,926.00	262,425,930.75
24-Sep-2007	5,448.33	13,967,810.00	453,167,742.75
25-Sep-2007	5,384.46	11,426,691.00	506,151,804.95
26-Sep-2007	5,282.77	13,847,041.00	567,014,233.00
27-Sep-2007	5,176.88	10,761,124.00	378,205,453.00
28-Sep-2007	5,146.46	8,815,819.00	318,556,729.65
01-Oct-2007	5,163.11	6,323,420.00	235,388,537.45
02-Oct-2007	5,200.32	10,875,812.00	371,973,552.05

03-Oct-2007	5,181.63	9,772,563.00	393,543,431.05
04-Oct-2007	5,076.04	9,649,138.00	371,340,217.10
05-Oct-2007	5,005.89	8,768,789.00	331,281,208.90
08-Oct-2007	4,979.98	7,531,717.00	275,841,284.10
09-Oct-2007	4,900.89	7,216,650.00	258,030,723.85
11-Oct-2007	4,835.16	5,637,920.00	200,868,573.30
12-Oct-2007	4,884.75	7,642,484.00	314,193,275.65
15-Oct-2007	4,953.31	7,924,687.00	302,382,175.30
16-Oct-2007	5,069.50	9,537,548.00	349,628,221.45
17-Oct-2007	5,122.40	10,202,072.00	381,811,252.80
18-Oct-2007	5,162.14	15,544,502.00	576,415,369.00
19-Oct-2007	5,175.80	8,960,614.00	382,985,754.95
22-Oct-2007	5,164.78	5,812,015.00	219,125,386.65
23-Oct-2007	5,115.51	7,045,369.00	278,087,463.55
24-Oct-2007	5,087.14	7,090,695.00	283,267,227.75
25-Oct-2007	5,034.46	7,920,844.00	279,144,803.30
26-Oct-2007	5,034.55	6,632,047.00	316,240,565.45
29-Oct-2007	5,005.14	4,904,285.00	253,560,986.60
30-Oct-2007	4,989.02	10,497,886.00	493,369,134.55
31-Oct-2007	4,971.04	8,120,153.00	345,537,664.45
01-Nov-2007	5,003.99	7,054,884.00	334,356,439.65
02-Nov-2007	4,980.49	8,857,405.00	344,324,063.30
05-Nov-2007	5,009.87	6,917,302.00	304,967,589.00
06-Nov-2007	5,063.06	9,911,443.00	412,353,065.00
07-Nov-2007	5,075.85	8,566,126.00	374,536,048.55
08-Nov-2007	5,080.63	6,428,380.00	261,450,356.60
09-Nov-2007	5,124.31	8,646,594.00	322,746,288.90
12-Nov-2007	5,125.94	6,835,243.00	229,105,188.40
13-Nov-2007	5,106.23	8,361,935.00	350,643,026.15
14-Nov-2007	5,087.22	6,367,527.00	237,625,214.45
15-Nov-2007	5,095.47	6,811,122.00	287,624,424.65
16-Nov-2007	5,147.62	8,180,248.00	424,766,097.05
19-Nov-2007	5,156.90	16,360,635.00	449,647,272.45
20-Nov-2007	5,153.84	8,377,064.00	382,790,730.65
21-Nov-2007	5,181.29	7,773,292.00	346,270,482.80
22-Nov-2007	5,217.68	9,898,608.00	529,169,011.60
23-Nov-2007	5,198.23	9,441,694.00	500,202,513.00
26-Nov-2007	5,231.27	10,020,238.00	408,240,345.75
27-Nov-2007	5,222.12	7,810,897.00	366,019,117.60
28-Nov-2007	5,162.42	8,621,947.00	349,256,511.40

29-Nov-2007	5,215.36	6,876,292.00	306,029,913.20
30-Nov-2007	5,234.54	7,734,880.00	392,677,913.25
03-Dec-2007	5,205.06	6,517,898.00	306,086,016.30
04-Dec-2007	5,221.96	10,965,198.00	432,761,614.25
05-Dec-2007	5,246.16	7,725,151.00	283,208,472.10
06-Dec-2007	5,266.78	10,838,539.00	539,563,340.30
07-Dec-2007	5,265.15	9,267,144.00	420,200,969.45
10-Dec-2007	5,269.08	9,367,115.00	509,941,697.70
11-Dec-2007	5,332.03	11,684,620.00	780,842,882.90
13-Dec-2007	5,342.96	11,030,393.00	381,692,305.40
14-Dec-2007	5,339.80	7,665,272.00	301,097,189.45
17-Dec-2007	5,278.73	10,099,898.00	352,147,212.45
18-Dec-2007	5,291.69	10,751,566.00	371,726,368.50
20-Dec-2007	5,287.93	10,860,636.00	384,360,479.75
21-Dec-2007	5,339.75	11,503,313.00	449,121,268.35
24-Dec-2007	5,444.83	12,529,500.00	505,239,417.15
02-Jan-2008	5,167.18	4,789,566.00	188,192,875.80
03-Jan-2008	5,133.48	131,200.00	3,013,695.00
04-Jan-2008	5,015.50	1,800,053.00	57,060,012.50
07-Jan-2008	5,180.14	5,338,754.00	181,655,521.50
08-Jan-2008	5,419.93	13,128,396.00	502,855,358.45
09-Jan-2008	5,338.77	12,753,743.00	413,297,761.95
10-Jan-2008	5,341.82	12,633,432.00	415,110,202.90
11-Jan-2008	5,335.23	14,047,953.00	520,800,796.00
14-Jan-2008	5,207.16	11,183,208.00	368,132,259.75
15-Jan-2008	5,124.45	11,222,078.00	404,872,830.00
16-Jan-2008	5,206.15	8,563,203.00	314,227,792.45
17-Jan-2008	5,111.74	7,457,544.00	261,111,048.15
18-Jan-2008	5,098.48	6,415,090.00	294,132,138.65
22-Jan-2008	5,063.44	12,968,401.00	518,671,025.40
23-Jan-2008	4,942.30	10,762,520.00	330,467,609.55
24-Jan-2008	4,912.25	7,691,413.00	251,091,321.20
25-Jan-2008	4,967.88	11,169,157.00	446,540,064.25
28-Jan-2008	4,811.79	12,262,816.00	412,104,021.95
29-Jan-2008	4,576.31	9,245,297.00	320,949,939.50
30-Jan-2008	4,690.72	11,376,464.00	401,844,951.30
31-Jan-2008	4,712.71	12,198,080.00	440,006,622.95
01-Feb-2008	4,795.96	8,234,154.00	318,899,667.20
04-Feb-2008	4,724.57	6,592,334.00	197,888,431.45
05-Feb-2008	4,677.47	10,136,543.00	285,064,643.00

06-Feb-2008	4,637.45	7,525,346.00	236,647,016.25
07-Feb-2008	4,651.94	5,534,748.00	183,810,626.85
08-Feb-2008	4,657.60	6,976,769.00	266,333,899.25
11-Feb-2008	4,784.00	12,317,488.00	457,338,103.25
12-Feb-2008	4,857.64	13,812,980.00	598,108,206.90
13-Feb-2008	4,947.54	11,269,118.00	462,761,746.80
14-Feb-2008	4,996.08	7,601,611.00	341,969,510.85
15-Feb-2008	4,986.06	8,259,801.00	284,171,282.30
18-Feb-2008	4,958.80	6,931,700.00	275,383,297.95
19-Feb-2008	4,932.52	17,106,579.00	1,018,545,202.25
20-Feb-2008	4,951.86	7,043,715.00	263,189,642.55
21-Feb-2008	4,929.78	6,114,739.00	242,811,699.30
22-Feb-2008	4,924.35	7,290,757.00	347,625,335.05
25-Feb-2008	4,933.08	12,151,107.00	451,508,346.25
26-Feb-2008	4,909.76	6,945,251.00	396,033,145.35
27-Feb-2008	4,858.47	8,473,843.00	295,527,748.10
28-Feb-2008	4,843.75	8,168,747.00	287,236,986.35
29-Feb-2008	5,072.41	20,345,999.00	800,405,148.70
03-Mar-2008	5,142.27	11,879,691.00	539,021,845.80
04-Mar-2008	5,268.04	14,268,443.00	675,801,315.25
05-Mar-2008	5,377.60	21,879,475.00	938,373,145.25
06-Mar-2008	5,405.38	13,766,225.00	621,289,789.30
07-Mar-2008	5,354.68	9,634,064.00	403,335,531.45
10-Mar-2008	5,317.34	9,382,701.00	401,142,606.15
11-Mar-2008	5,205.38	9,880,954.00	487,737,566.50
12-Mar-2008	5,159.32	6,741,435.00	290,751,732.40
13-Mar-2008	5,111.01	7,836,254.00	262,283,796.50
14-Mar-2008	4,959.44	11,940,408.00	458,491,116.10
17-Mar-2008	4,886.98	8,207,914.00	265,599,275.95
18-Mar-2008	4,759.77	9,213,685.00	342,450,243.85
19-Mar-2008	4,809.26	5,331,402.00	229,755,806.60
20-Mar-2008	4,907.29	8,091,603.00	301,278,004.45
25-Mar-2008	4,905.77	8,743,231.00	282,951,579.30
26-Mar-2008	4,851.29	6,002,897.00	195,086,771.60
27-Mar-2008	4,835.26	6,830,816.00	259,485,537.50
28-Mar-2008	4,855.36	4,204,140.00	145,261,118.25
31-Mar-2008	4,843.17	6,808,365.00	220,450,005.15
01-Apr-2008	4,839.14	5,045,124.00	190,936,767.50
02-Apr-2008	4,838.08	5,936,577.00	207,090,596.75
03-Apr-2008	4,892.25	6,878,977.00	250,233,012.65

04-Apr-2008	4,951.73	5,554,050.00	202,475,194.75
07-Apr-2008	4,996.14	5,713,906.00	171,236,587.15
08-Apr-2008	5,015.29	7,342,633.00	260,293,984.05
09-Apr-2008	5,010.42	6,729,049.00	214,275,733.30
10-Apr-2008	5,035.08	4,498,775.00	131,943,795.65
11-Apr-2008	5,021.82	4,705,330.00	188,628,487.90
14-Apr-2008	5,070.81	6,104,574.00	262,113,614.15
15-Apr-2008	5,109.94	6,052,009.00	271,420,956.65
16-Apr-2008	5,107.23	6,034,576.00	190,560,328.40
17-Apr-2008	5,141.29	4,892,222.00	225,734,394.15
18-Apr-2008	5,141.62	6,701,063.00	327,011,209.40
21-Apr-2008	5,126.15	5,105,110.00	252,006,629.70
22-Apr-2008	5,126.26	5,100,270.00	214,471,559.10
23-Apr-2008	5,156.53	3,979,114.00	185,027,711.75
24-Apr-2008	5,184.06	10,363,248.00	462,116,590.60
25-Apr-2008	5,207.23	8,973,199.00	343,280,365.40
28-Apr-2008	5,240.39	7,374,760.00	294,345,105.80
29-Apr-2008	5,255.42	7,349,100.00	326,918,794.55
30-Apr-2008	5,336.03	11,332,759.00	463,448,309.05
02-May-2008	5,364.72	9,009,800.00	390,000,265.10
05-May-2008	5,355.02	9,119,492.00	393,279,196.35
06-May-2008	5,356.24	12,410,086.00	484,433,825.50
07-May-2008	5,384.81	7,666,413.00	384,050,833.30
08-May-2008	5,324.55	10,063,812.00	384,287,519.25
09-May-2008	5,274.44	11,215,623.00	440,007,525.40
12-May-2008	5,257.86	9,565,034.00	341,098,231.20
13-May-2008	5,229.28	8,602,423.00	373,026,237.05
14-May-2008	5,199.38	5,853,573.00	238,270,136.25
15-May-2008	5,169.22	8,021,900.00	389,314,831.10
16-May-2008	5,170.55	6,479,230.00	378,684,970.35
19-May-2008	5,153.13	5,047,375.00	179,219,082.75
20-May-2008	5,163.87	6,548,863.00	245,802,507.00
21-May-2008	5,132.85	8,068,552.00	351,220,083.30
22-May-2008	5,159.42	7,038,439.00	266,119,925.10
23-May-2008	5,149.46	5,509,339.00	191,759,567.20
26-May-2008	5,119.15	6,826,310.00	258,411,997.10
27-May-2008	5,094.21	5,981,375.00	225,509,059.30
28-May-2008	5,101.04	7,178,790.00	287,398,321.80
29-May-2008	5,090.36	7,518,592.00	253,301,056.30
30-May-2008	5,175.83	10,308,911.00	381,456,462.20

03-Jun-2008	5,253.53	8,961,603.00	316,508,549.60
04-Jun-2008	5,341.41	16,066,769.00	670,505,231.85
05-Jun-2008	5,401.76	21,483,688.00	781,319,455.65
06-Jun-2008	5,477.70	26,869,636.00	590,954,495.95
09-Jun-2008	5,445.67	426,813,058.00	3,380,911,029.55
10-Jun-2008	5,334.50	136,049,277.00	1,149,647,080.45
11-Jun-2008	5,309.08	192,698,211.00	1,619,548,124.95
12-Jun-2008	5,328.13	137,520,822.00	1,257,675,434.75
13-Jun-2008	5,320.28	260,101,113.00	2,399,513,553.55
16-Jun-2008	5,321.69	110,052,401.00	1,089,003,665.45
17-Jun-2008	5,307.71	128,002,930.00	1,331,978,453.40
18-Jun-2008	5,311.82	121,115,371.00	1,430,718,595.20
19-Jun-2008	5,284.08	66,076,626.00	787,384,695.75
20-Jun-2008	5,271.90	67,659,377.00	790,746,708.50
23-Jun-2008	5,251.72	107,989,852.00	1,025,927,569.65
24-Jun-2008	5,211.55	61,774,216.00	650,877,567.90
25-Jun-2008	5,180.67	73,933,487.00	730,462,094.25
26-Jun-2008	5,159.81	62,930,798.00	669,769,365.60
27-Jun-2008	5,152.03	87,228,081.00	958,053,608.40
30-Jun-2008	5,185.56	41,570,026.00	498,512,405.30
01-Jul-2008	5,190.29	45,886,222.00	487,569,922.80
02-Jul-2008	5,169.19	66,385,392.00	635,826,802.75
03-Jul-2008	5,158.81	55,877,753.00	553,103,767.65
04-Jul-2008	5,129.73	30,984,170.00	427,576,686.80
07-Jul-2008	5,112.16	33,604,044.00	366,131,336.15
08-Jul-2008	5,053.52	71,740,717.00	564,319,834.20
09-Jul-2008	5,047.78	53,012,955.00	633,053,508.45
10-Jul-2008	5,056.42	69,796,164.00	636,360,941.95
11-Jul-2008	5,081.34	32,484,532.00	488,856,063.80
14-Jul-2008	5,072.72	22,558,783.00	333,405,186.65
15-Jul-2008	5,048.59	37,243,481.00	545,233,531.65
16-Jul-2008	5,057.96	34,684,732.00	421,838,248.75
17-Jul-2008	5,058.89	23,721,524.00	337,354,438.20
18-Jul-2008	5,025.84	113,384,294.00	3,985,733,757.75
21-Jul-2008	5,011.44	25,765,777.00	290,027,081.50
22-Jul-2008	5,003.12	32,074,891.00	347,781,594.60
23-Jul-2008	4,985.82	27,003,909.00	347,667,382.85
24-Jul-2008	4,967.27	22,303,627.00	289,693,553.70
25-Jul-2008	4,963.46	121,223,321.00	1,063,708,145.15
28-Jul-2008	5,046.94	20,018,486.00	719,489,988.40

29-Jul-2008	4,993.76	37,641,422.00	460,059,188.00
30-Jul-2008	4,931.29	53,259,771.00	437,812,891.85
31-Jul-2008	4,868.27	22,163,527.00	262,186,182.30
01-Aug-2008	4,849.97	27,111,524.00	335,258,265.70
04-Aug-2008	4,878.70	54,394,022.00	442,246,508.25
05-Aug-2008	4,783.25	24,846,293.00	304,485,484.80
06-Aug-2008	4,719.28	12,854,374.00	181,344,897.00
07-Aug-2008	4,696.22	23,255,938.00	463,163,961.30
08-Aug-2008	4,676.90	9,550,152.00	171,409,647.90
11-Aug-2008	4,650.92	16,665,387.00	200,556,856.50
12-Aug-2008	4,588.27	20,274,530.00	207,202,972.45
13-Aug-2008	4,565.86	28,016,576.00	344,238,892.00
14-Aug-2008	4,609.13	13,217,864.00	306,273,821.50
15-Aug-2008	4,689.92	34,273,435.00	415,818,573.65
18-Aug-2008	4,746.80	15,095,233.00	349,486,332.70
19-Aug-2008	4,790.56	21,283,221.00	316,750,623.95
20-Aug-2008	4,801.41	15,975,033.00	267,338,055.55
21-Aug-2008	4,778.15	20,951,232.00	273,912,588.05
22-Aug-2008	4,774.75	10,172,768.00	158,291,393.60
25-Aug-2008	4,758.48	19,212,107.00	344,431,709.50
26-Aug-2008	4,717.55	24,037,092.00	1,060,913,080.25
27-Aug-2008	4,684.21	22,147,160.00	380,475,279.80
28-Aug-2008	4,665.03	26,846,985.00	334,135,023.60
29-Aug-2008	4,648.78	50,629,599.00	632,489,847.25
01-Sep-2008	4,622.61	12,250,918.00	246,387,012.50
02-Sep-2008	4,634.77	9,453,595.00	215,560,960.85
03-Sep-2008	4,594.35	17,384,525.00	235,502,685.65
04-Sep-2008	4,564.65	12,102,480.00	208,141,324.75
05-Sep-2008	4,541.93	19,056,225.00	331,944,281.35
08-Sep-2008	4,524.93	15,261,720.00	176,115,472.35
09-Sep-2008	4,481.40	15,245,423.00	365,508,393.35
10-Sep-2008	4,430.65	24,578,713.00	250,521,612.05
11-Sep-2008	4,348.61	16,676,495.00	524,882,307.90
12-Sep-2008	4,294.30	29,060,495.00	282,168,918.30
15-Sep-2008	4,225.53	7,871,123.00	118,539,976.75
16-Sep-2008	4,093.82	52,042,567.00	338,638,220.00
17-Sep-2008	4,004.02	11,624,517.00	234,257,494.70
18-Sep-2008	4,055.23	45,299,107.00	641,696,874.60
19-Sep-2008	4,244.83	40,312,604.00	480,922,792.75
22-Sep-2008	4,349.01	25,492,737.00	341,487,320.85

23-Sep-2008	4,343.26	29,120,816.00	429,836,051.60
24-Sep-2008	4,291.08	25,646,308.00	378,062,154.85
25-Sep-2008	4,266.38	36,769,754.00	303,623,925.95
26-Sep-2008	4,251.30	17,666,820.00	292,230,513.50
29-Sep-2008	4,261.38	10,001,775.00	201,432,251.85
30-Sep-2008	4,180.40	12,364,313.00	190,363,714.05
02-Oct-2008	4,180.34	6,965,162.00	166,424,639.85
03-Oct-2008	4,174.84	31,815,055.00	223,346,399.85
06-Oct-2008	4,161.06	12,617,811.00	127,271,804.95
07-Oct-2008	4,090.37	29,950,424.00	257,473,878.25
08-Oct-2008	3,979.12	22,050,873.00	321,767,053.50
09-Oct-2008	3,882.76	76,845,497.00	433,748,824.40
13-Oct-2008	3,815.64	20,408,168.00	184,539,746.25
14-Oct-2008	3,799.81	23,985,017.00	186,104,966.00
15-Oct-2008	3,794.29	20,205,517.00	208,800,636.25
16-Oct-2008	3,767.46	15,036,560.00	130,881,905.75
21-Oct-2008	3,630.03	12,277,258.00	125,896,040.50
22-Oct-2008	3,563.87	8,902,388.00	162,382,740.20
23-Oct-2008	3,459.33	12,276,536.00	163,162,749.65
24-Oct-2008	3,373.87	10,926,288.00	90,592,260.70
27-Oct-2008	3,297.49	13,081,582.00	213,436,436.50
28-Oct-2008	3,183.69	11,320,743.00	109,820,102.35
29-Oct-2008	3,106.14	12,404,998.00	97,275,406.35
30-Oct-2008	3,175.49	15,354,539.00	111,347,304.55
31-Oct-2008	3,386.65	26,992,118.00	173,638,665.55
03-Nov-2008	3,556.03	13,709,149.00	119,140,193.00
04-Nov-2008	3,753.64	18,861,545.00	236,460,433.95
05-Nov-2008	4,023.70	33,713,204.00	463,938,261.35
07-Nov-2008	3,918.78	31,048,182.00	491,739,592.50
10-Nov-2008	3,848.29	12,946,005.00	177,309,014.65
11-Nov-2008	3,801.71	28,115,022.00	369,555,412.75
12-Nov-2008	3,681.47	18,600,974.00	220,297,281.35
13-Nov-2008	3,662.50	7,495,399.00	93,132,535.20
14-Nov-2008	3,625.59	17,666,461.00	181,267,973.10
17-Nov-2008	3,609.99	8,917,200.00	196,605,547.30
18-Nov-2008	3,604.46	15,285,325.00	110,489,171.10
19-Nov-2008	3,560.51	10,403,922.00	124,337,177.20
20-Nov-2008	3,514.30	12,412,490.00	172,396,253.00
21-Nov-2008	3,527.50	20,453,379.00	187,573,801.25
24-Nov-2008	3,494.94	10,860,457.00	103,135,454.85

25-Nov-2008	3,453.65	9,387,648.00	183,901,725.90
26-Nov-2008	3,429.28	8,079,169.00	124,294,489.35
27-Nov-2008	3,397.95	3,211,154.00	55,031,675.60
28-Nov-2008	3,341.47	9,786,303.00	113,115,060.75
01-Dec-2008	3,309.56	4,300,752.00	102,160,921.35
02-Dec-2008	3,191.98	8,014,251.00	85,807,448.30
03-Dec-2008	3,168.05	4,996,121.00	120,820,146.70
04-Dec-2008	3,162.43	10,007,677.00	157,919,771.15
05-Dec-2008	3,160.12	7,201,151.00	74,241,841.15
08-Dec-2008	3,193.06	5,080,859.00	48,083,997.80
09-Dec-2008	3,196.51	8,527,911.00	104,717,606.50
10-Dec-2008	3,205.91	7,911,011.00	128,545,150.30
11-Dec-2008	3,251.03	4,764,631.00	83,102,534.20
15-Dec-2008	3,291.55	4,506,100.00	63,549,921.05
16-Dec-2008	3,318.18	8,080,374.00	60,733,613.80
17-Dec-2008	3,353.50	5,787,188.00	113,027,002.75
18-Dec-2008	3,367.07	8,301,175.00	141,673,221.40
19-Dec-2008	3,350.63	14,543,271.00	103,580,811.95
22-Dec-2008	3,367.24	5,645,866.00	71,244,292.10
23-Dec-2008	3,381.69	6,463,563.00	145,572,163.45
24-Dec-2008	3,406.34	6,360,424.00	50,569,402.25
29-Dec-2008	3,401.09	16,355,532.00	135,976,791.65
30-Dec-2008	3,459.97	28,326,730.00	2,622,723,066.50
31-Dec-2008	3,521.18	5,729,346.00	203,093,028.00
02-Jan-2009	3,589.16	3,750,683.00	49,429,757.00
05-Jan-2009	3,611.67	3,660,110.00	57,040,812.15
06-Jan-2009	3,624.00	6,824,236.00	124,138,227.90
07-Jan-2009	3,600.68	9,251,034.00	166,238,709.60
08-Jan-2009	3,546.01	6,167,965.00	83,488,242.70
09-Jan-2009	3,516.18	10,531,689.00	197,645,020.50
12-Jan-2009	3,513.09	7,228,964.00	128,205,173.60
13-Jan-2009	3,483.97	11,023,964.00	264,067,945.95
14-Jan-2009	3,455.88	6,165,702.00	97,299,011.10
15-Jan-2009	3,447.45	7,400,906.00	98,911,709.05
16-Jan-2009	3,427.87	11,931,137.00	159,789,026.10
19-Jan-2009	3,398.95	6,441,420.00	104,958,644.55
20-Jan-2009	3,341.09	9,631,643.00	137,617,815.90
21-Jan-2009	3,282.00	8,679,889.00	86,204,581.50
22-Jan-2009	3,272.49	8,401,702.00	102,340,962.60
23-Jan-2009	3,256.38	12,291,015.00	219,581,519.35

26-Jan-2009	3,269.04	10,760,068.00	166,386,044.70
27-Jan-2009	3,247.26	18,253,105.00	129,122,220.90
28-Jan-2009	3,267.60	5,480,762.00	76,664,428.35
29-Jan-2009	3,262.54	8,634,808.00	104,813,894.75
30-Jan-2009	3,198.90	5,042,518.00	70,446,877.95
02-Feb-2009	3,156.64	6,221,992.00	61,320,348.00
03-Feb-2009	3,046.34	11,229,406.00	222,970,615.85
04-Feb-2009	2,975.12	8,364,968.00	57,279,510.20
05-Feb-2009	2,950.25	11,923,698.00	126,421,665.35
06-Feb-2009	2,932.11	3,499,312.00	41,730,932.85
09-Feb-2009	2,927.66	4,392,554.00	50,470,672.55
10-Feb-2009	2,890.20	7,318,498.00	82,300,462.45
11-Feb-2009	2,862.54	6,325,752.00	52,375,462.30
12-Feb-2009	2,855.87	10,597,616.00	131,635,557.60
13-Feb-2009	2,848.24	7,332,977.00	130,481,257.10
16-Feb-2009	2,820.03	7,774,931.00	84,241,569.90
17-Feb-2009	2,792.05	6,602,290.00	71,702,890.45
18-Feb-2009	2,740.95	9,129,595.00	68,841,744.65
19-Feb-2009	2,714.49	8,603,593.00	83,601,055.65
20-Feb-2009	2,674.15	4,118,453.00	42,714,329.00
23-Feb-2009	2,638.31	7,032,806.00	43,254,028.70
24-Feb-2009	2,600.61	7,168,544.00	60,234,333.55
25-Feb-2009	2,576.74	9,178,889.00	82,787,586.25
26-Feb-2009	2,511.47	5,306,918.00	44,617,282.80
27-Feb-2009	2,426.15	8,517,129.00	106,296,745.00
02-Mar-2009	2,394.33	13,230,371.00	193,330,765.25
03-Mar-2009	2,363.99	10,133,293.00	138,001,209.20
04-Mar-2009	2,360.01	11,989,866.00	189,888,621.70
05-Mar-2009	2,375.01	6,589,810.00	95,939,693.30
06-Mar-2009	2,361.36	13,465,469.00	146,655,625.70
09-Mar-2009	2,364.72	7,141,720.00	77,541,502.75
10-Mar-2009	2,379.86	4,862,754.00	62,986,876.45
11-Mar-2009	2,453.36	3,780,685.00	69,283,174.30
12-Mar-2009	2,575.77	17,410,369.00	121,217,721.85
13-Mar-2009	2,689.19	11,009,330.00	138,759,465.85
16-Mar-2009	2,715.53	8,920,614.00	92,346,260.30
17-Mar-2009	2,684.57	10,279,225.00	143,393,862.55
18-Mar-2009	2,668.11	6,058,003.00	70,893,658.30
19-Mar-2009	2,646.58	11,393,117.00	178,065,781.10
20-Mar-2009	2,638.56	5,020,018.00	93,937,134.40

23-Mar-2009	2,614.00	5,097,807.00	69,811,816.55
24-Mar-2009	2,619.54	5,635,659.00	61,249,155.70
25-Mar-2009	2,663.19	19,410,312.00	130,577,038.00
26-Mar-2009	2,699.92	5,250,323.00	108,753,922.15
27-Mar-2009	2,754.64	9,292,300.00	78,178,445.65
30-Mar-2009	2,805.03	8,749,343.00	54,792,364.40
31-Mar-2009	2,805.03	12,669,164.00	98,516,458.20

APPENDIX II

Source----------

Year----------

I: NSE 20- SHARE INDEX

Mumias

Express

Rea Vipingo

Sasini

CMC

Kenya Airways

Housing Finance

Nation Media

Barclays Bank

Total Kenya

Kenya Commercial Bank

Standard Chartered

Bamburi Cement

British American Tobacco(K)

East Africa Portland

ICDC(Centum Investments)

East Africa Breweries Limited

Sameer Africa

Kenya Power and Lighting Company

Crown Berger

II. COMPANIES LISTED IN THE NAIROBI STOCK EXCHANGE

MAIN INVESTMENT MARKET SEGMENT (MIMS) Par Value

Agricultural

Kakuzi	5/-
Rea Vipingo Plantations Ltd	5/-
Sasini Ltd	1/-

Commercial and Allied

Access Kenya Group Ltd	1/-
Car & General (K) Ltd	5/-
CMC Holdings Ltd	0.50/-
Hutchings Biemer Ltd	5/-
Kenya Airways Ltd	5/-
Marshalls (E.A.) Ltd	5/-
Nation Media Group	5/-
Safaricom limited	0.05/-
Scangroup Ltd	1/-
Standard Group Ltd	5/-
TPS Eastern Africa (Serena) Ltd	1/-
Uchumi Supermarket Ltd	5/-

Finance and Investment

Barclays Bank Ltd	2/-
C.F.C Stanbic Bank Ltd	0.50/-
Diamond Trust Bank Kenya Ltd	4/-
Equity Bank Ltd	5/-
Housing Finance Co Ltd	5/-
Centum Investment Company Ltd	0.50/-
Jubilee Holdings Ltd	5/-
Kenya Commercial Bank Ltd	1/-
Kenya Re-Insurance Corporation Ltd	2.50/-
National Bank of Kenya Ltd	5/-
National Industrial Credit	5/-
Pan Africa Insurance Holdings Ltd	5/-
Standard Chartered Bank Ltd	5/-
Olympia Capital Holdings	5/-
Co-operative Bank Ltd	1/-

Industrial and Allied

Athi River Mining	5/-
B.O.C Kenya Ltd	5/-
Bamburi Cement Ltd	5/-
British American Tobacco Kenya Ltd	10/-
Carbacid Investments Ltd	5/-
Crown Berger Ltd	5/-
E.A.Cables Ltd	0.50/-
E.A.Portland Cement Ltd	5/-
East African Breweries Ltd	2/-

Eveready East Africa Ltd	1/-
Kenya Oil Co Ltd	0.50/-
Kenya Power & Lighting Ltd	20/-
KenGen Ltd	2.50/-
Mumias Sugar Co. Ltd	2/-
Sameer Africa Ltd	5/-
Total Kenya Ltd	5/-
Unga Group Ltd	5/-

ALTERNATIVE INVESTMENT MARKET SEGMENT(AIMS)

A. Baumann & Co. Ltd	5/-
City Trust Ltd	5/-
Eaagads Ltd	1/25
Express Ltd	5/-
Williamson Tea Kenya Ltd	5/-
Kapchorua Tea Co. Ltd	5/-
	5/-
Kenya Orchards Ltd	
Limuru Tea Co. Ltd	20/-