

**CONTRIBUTION OF PRIVATIZATION TO CAPITAL MARKET  
DEVELOPMENT: THE CASE OF COMPANIES PRIVATIZED AT  
THE NAIROBI STOCK EXCHANGE.**

**BY**

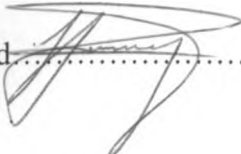
**LOTIENO MARTIN KELLY**

**A Management Project Submitted in Partial Fulfilment of the  
requirement for the M.B.A. Degree, Faculty Of Commerce University of  
Nairobi.**

**• OCTOBER 2003**

**DECLARATION**

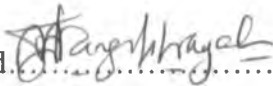
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Signed  ..... Date 14/11/2003 .....

OTIENO MARTIN KELLY

D61/7034/2001

This project is submitted for examination with my approval as University Supervisor.

Signed  ..... Date 15/11/2003 .....

CYRUS IRAYA

LECTURER, DEPARTMENT OF ACCOUNTING  
UNIVERSITY OF NAIROBI

## **DEDICATION**

This project is dedicated to my late father Mr. Eliud Ogwang' who believed in hard work and also understood the importance of education and to my mother Elizabeth whose tireless efforts has seen me reach where I am today.

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## ABSTRACT

In 1954, the Nairobi Stock Exchange (NSE) was constituted as a voluntary association of stockbrokers registered under the Societies Act. The business of dealing in shares was then confined to the resident European community, since Africans and Asians were not permitted to trade in securities until after the attainment of independence. This marked an important milestone in the effort toward the development of a functioning capital market for the mobilization and allocation of long-term capital to the private sector. As at December 2002, 53 companies were listed at the NSE, nine of which were privatized through initial public offer by the government.

The state of the capital markets will restrict both the pace of privatization, in terms of how many enterprises could be put up for sale, and the methods available for broadening ownership. This limitation has been of great concern to all governments, and a lot of effort is going into capital market development alongside financial sector reforms. The scope and pace for further divesting government-owned assets and shares in the large enterprises will depend on progress in capital market development. A synergy exists between privatization and capital markets development, because the sale of state assets provides a tremendous impetus to stock market activity. Quite apart from freeing government resources for re-deployment to the poor, privatization has positive overall welfare effects.

This study sought to find out if the government privatization program through public floatation improved the pace of privatization, in terms of how many enterprises could be put up for sale. The study also sought to establish if the Privatization Implementation Unit and Parastatal Reform and Privatization Committee, should still pursue the objectives of the widening of participation by the people in the ownership and management of these parastatals as well as developing the local capital market, in their privatization programs and to what extent has the privatization programme contributed to the Nairobi Stock Exchange capitalization and the quantity of share issues.

The population of the study consisted of 11 state owned enterprises that were privatized at the Nairobi Stock Exchange. However, due to lack of consistent data the study carried out analysis for those companies that were privatized in the 1990's and subsequent public share issues done during this period for those companies that were privatized before 1990. Thus, only nine companies were analyzed. Microsoft Excel Statistical tool was used to conduct data analysis.

This study shows that the privatized companies contributed significantly to the total market capitalization over the period under study. However, the analysis shows that with subsequent share issue the proportion of the company's market capitalization to the total market capitalization declined over the two-year period under consideration. The study also shows that all the market development indicators had average positive growth over the years albeit declining trend due to harsh economic conditions that has been prevailing in the country.

Findings show that the quantity of shares issued at the stock exchange has been increasing with every new initial public offer. Subsequent share issues by the already privatized companies have also been increasing in quantity.

## CHAPTER ONE: INTRODUCTION

### 1.1 Background of the Problem

Stock markets provide global investors with attractive absolute returns as well as an avenue for diversifying their portfolios. Evidence indicates that investors reaped such benefits in the first half of the 1990s, but that the gains disappeared between 1995 and 2001. This deterioration in the performance of emerging market equities gave rise to tactical investors, whose opportunistic behavior is likely to increase volatility of capital inflows into emerging markets. The underperformance of emerging market equities from a longer-term perspective does not appear to be primarily due to overvaluation, though price/earnings ratios in emerging market equities have been high in some years. The sharp fall in domestic equity issuance in 2000 and 2001 raises doubts, however, on the long-term prospects of initial public offerings in local markets as an alternative financing mechanism going forward, an issue that is largely related to the increasing internationalization of equity markets (Brooks and Luis 2001).

#### 1.1.1 Global Outlook of Capital Market Development

The economic recovery that began in USA and Asia during the first quarter of 2002 has brought improvements in financial market conditions. Mature equity and bond markets have further stabilized. Most emerging market countries continue to have access to international capital markets, and their bond spreads have declined. The near-term outlook thus appears largely free of imminent threats to global financial stability. However, one important source of uncertainty remains the recovery and quality of corporate profits in mature markets. Questions surrounding the quality of reported corporate profits, in the aftermath of Enron's failure, continue to have an adverse impact on international equity and corporate bond markets.

While financial systems in emerging market economies have traditionally been dominated by commercial banks, the experience of the late 1990s (especially with the

Asian crisis) has suggested that it would be desirable to develop local securities markets to provide alternative and more stable sources of domestic funding. With proper underpinnings, local securities markets could enhance the stability of domestic financing flows and might also have an “insurance value” with regard to reliance on international capital flows (Global Financial Stability Report, 2002).

Emerging equity markets significantly out performed global equity markets during the first quarter of 2002. Emerging Asia was the best performing region, on the back of the exceptionally strong performance by Korea which was up 28.4 percent and solid gains by Malaysia of 11.9 percent, Taiwan Province of China increased by 8.6 percent, and India by 6.9 percent. The impressive gains by tech-heavy Asian markets stand in sharp contrast to the 5.4 percent decline in the Nasdaq, reflecting the differences in product mix, balance sheets, and valuations of technology and telecom companies in emerging markets and those in developed ones. China was the worst performing market in Asia, posting negative returns of -3.6 percent due to concerns about the overvaluation of stocks and oversupply of shares as the government plans to divest its asset holdings through initial Public Offers (IPOs) as well as stepped up regulatory investigations (Goldman Sachs & Company, 2002).

### **1.1.2 Continental Outlook of Capital Market Development**

In a paper presented at the conference of African ministers in April 1997, the vice minister of finance of Mauritius, Chateau de Baylon observes that capital market development underscores the importance, and indeed the urgency, of establishing and strengthening the stock markets as vital instruments for the mobilization of increased resources for African development, from internal as well as external sources. These markets could be particularly effective in the supply of long-term capital and optimal allocation of resources to productive sectors. Their role in providing risk capital has been particularly acknowledged. The evolution of capital markets in Africa in recent years arises from such recognition, and the need to attract foreign investment. In Africa, over the past few years, activity picked up in a number of old markets, while new markets

have emerged or are planned. The momentum has been boosted by a number of positive economic and political factors. The strengthening of the private sector and the privatization of public-sector enterprises has also provided additional impetus. However, some of the fundamental prerequisites for the evolution of successful financial markets are still lacking.

There are a number of stock exchanges in Africa, most of which are very small by world standards. The Johannesburg Stock Exchange (JSE) in South Africa is the largest and most developed bourse on the continent. Regionalization is considered by many to be inevitable for African stock markets as they struggle to consolidate in order to overcome poor liquidity and to attract more foreign investment.

In Africa, the first phase of privatization began against a background of poor economic performance; public mistrust due to concerns about corruption, ownership, and unemployment; weak institutional capacity; and weak or virtually non-existent capital markets. Efforts were largely directed to privatizing small and medium size enterprises, most of which were loss making.

In an Annual Meeting Symposium on "Private Sector Development In Africa" in 1997 Jean-Louis Sarbib contends that, despite the myriad of constraints facing African governments and their implementing agencies, privatization is moving ahead throughout the continent. More and more countries have embraced privatization, with activity reported in at least 41 of the 48 countries in sub-Saharan Africa (Sarbib, 1997).

He further adds that the state of the capital markets has restricted both the pace of privatization, in terms of how many enterprises could be put up for sale, and the methods available for broadening ownership. That limitation has been of great concern to all governments, and a lot of effort is going into capital market development alongside financial sector reforms.

The need for greater scope to broaden ownership – using such mechanisms as investment funds and public offerings – and the need for secondary markets for tradable instruments, privatization has given the spur that was needed to create and develop capital markets in Africa. Capital market development has come late, but at long last it is happening.

Sarbib further observes that the scope and pace for further divesting government-owned assets and shares in the large enterprises will depend on the progress in capital market development, progress in financial sector reforms and judicial reforms – including the enforcement of updated corporate, insolvency, labor and property laws - which will determine the level of improvement in the investment climate and corporate governance of businesses generally, and improvements in the performance of the large part-privatized enterprises.

### **1.1.3 Regional Outlook of Capital Market Development**

The Nairobi Stock Exchange catered for the three East African countries of Kenya, Uganda and Tanzania during the colonial era. The number of companies listed was therefore much larger than it is today. However, with independence, each country developed its own economic system. Tanzania adopted the socialist system while Uganda became a military state. Both regimes could not allow for the development of a stock market. In the mid 1980s, regimes changed in these countries and their economies became more liberalized, thereby permitting the establishment of stock markets. Thus, apart from Kenya, the other two East African countries did not have stock markets until 1996. But even then, their stock markets are still in a very rudimentary stage.

### **1.1.4 Kenyan Perspective**

The government began its privatization efforts in 1992 as part of its structural adjustment program. In this first generation of privatizations there were 168 non-strategic enterprises out of an original total of 240 operating in the various sectors of the economy. Of the total, 33 enterprises were classified as strategic and not considered for immediate divestiture (GOK, 1992).

About six strategic enterprises, including Kenya Electricity Corporation, Kenya Post and Telecommunication Corporation, Kenya Railways, and Kenya Ports Authority, were restructured. Of the 33 strategic enterprises, two Rehabilitation Advisory Services and Nyayo Bus Service, were liquidated in 1997 and 1998 respectively. Today, about 31 strategic and 39 non-strategic public enterprises remain in the public sector portfolio. With the exception of Kenya Airways, all the companies were small, and total proceeds represented about one percent of GDP.

In June 2000, the government passed, through the cabinet, its Privatization Program Strategy and Policy Framework and subsequently discussed the strategy in parliament to raise awareness and build political consensus around an extremely ambitious program focusing on privatization and private participation in all basic infrastructure services (World Bank, 1996).

Divestiture took the form of flotation of 11 firms on the Nairobi stock exchange, 16 firms through competitive bidding, 14 firms were liquidated, 20 firms placed under receiverships, 54 firms divested through preemptive rights, and one management or employee buyout.

### **1.1.5 The Role of the Stock Exchange and Privatization in the Economy**

In a presentation to the students of the Columbia Business School, Kibuga Kariithi, Chief Executive of Nairobi Stock Exchange identifies the major role that the stock exchange has played, and continues to play in many economies. He contends that stock markets promote a culture of thrift, or saving. Secondly, the stock exchange assists in the transfer of savings to investment in productive enterprises as an alternative to keeping the savings idle. Thirdly, 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. Fourthly, stock markets promote higher standards of accounting, resource management and transparency in the management of business. Fifthly, the stock exchange improves the access to finance of



different types of users by providing the flexibility for customization. Sixth, and most important, is that the stock exchange provides investors with an efficient mechanism to liquidate their investments in securities (Kibuga, 2002).

There is widespread agreement that the primary engine that can pull the African economies is the private sector – both domestic and foreign direct investment and that there must be a public-private partnership. This is where privatization comes in. Privatization is not an end in itself, but it is a key tool for improving the efficient allocation of resources, for mobilizing investment, and for stimulating private sector development. Privatization does this because it brings into the open the inefficiency of state run businesses, makes investment opportunities available, highlights the need and becomes the catalyst for capital market development, and contributes towards openness by forcing government dialogue with the public (World Bank, 1996).

### **1.1.6 Measures of Capital Market Development**

Existing models suggest that stock market development is a multifaceted concept, involving issues of market size, liquidity, volatility, concentration, integration with world capital markets, and institutional development. Using data on 44 developed and emerging markets from 1986 to 1993, Demirguc-Kunt and Levine (1996) find that large stock markets are more liquid, less volatile, and more internationally integrated than smaller markets. Furthermore, institutionally developed markets with strong information disclosure laws, international accounting standards, and unrestricted capital flows are larger and more liquid markets.

Using pooled data from fifteen industrial and developing countries from 1980 to 1995, Garcia and Liu (1999) examine the macroeconomic determinants of stock market development, particularly market capitalization. They focused on stock market capitalization as the proxy for stock market development. The study concentrated on market capitalization rather than constructing a composite index of stock market development because market capitalization is a good proxy for such general development

and it is less arbitrary than any other index. In addition, Demirguc-Kunt and Levine (1996) have shown that different individual measures and indexes of stock market development are highly correlated.

This study considered the market capitalization, market turnover, and stock market index as the measures of capital market development. Thus it considered the contribution of privatization at the Nairobi Stock Exchange on market capitalization. The study considered the trend over time of privatization on the market capitalization, market turnover, the NSE 20 share index, and the AIG (EA) 27 share index respectively at the Nairobi Stock Exchange. The AIG (EA) 27 share was used as a measure of market development for the period after it was introduced as a measure of activity at the Nairobi Stock Exchange.

## **1.2 Statement of the Problem**

The efficiency of social and economic infrastructure has been recognized generally to be a critical factor in the development of an economy. State owned enterprises (SOE's) have been proved empirically to be relatively inefficient and often constitute a drain on public treasury (Megginson & Netter, 2001). It is against this background that the concept of privatization has evolved and globally embraced as a means of repositioning an economy in the hands of private sector operators who have been acknowledged for their efficiency and competitive spirit.

The state of the capital markets will restrict both the pace of privatization, in terms of how many enterprises could be put up for sale, and the methods available for broadening ownership. This limitation has been of great concern to all governments, and a lot of effort is going into capital market development alongside financial sector reforms. The scope and pace for further divesting government-owned assets and shares in the large enterprises will depend on progress in capital market development, progress in financial sector reforms and judicial reforms which will determine the level of improvement in the investment climate and improvements in the performance of the large part-privatized enterprises (Sarbib, 1997). The companies included in the Kenyan privatization program represent about 10 percent of GDP, but their performance is characterized by low productivity, high losses, and rising debts, which place a concurrent burden on the banking system, public finances, and the balance of payments (World Bank, 1996).

A synergy exists between privatization and capital markets development, because the sale of state assets provides a tremendous impetus to stock market activity. Quite apart from freeing government resources for re-deployment to the poor, privatization has positive overall welfare effects (Pfeffermann, 1995). Countries with better developed capital markets also have better developed banks and non-bank financial intermediaries. Countries with weak stock markets tend to have weak financial intermediaries.

In a developing country where capital is scarce, the absence of a developed capital market is a hindrance to capital formation and economic growth. Large stock markets can lower the cost of mobilizing savings and thereby facilitate investment in the most productive technologies. One of the main reasons for privatization is to improve efficiency of the SOE's whose outcome will be manifested in the growth and development of among other things the local markets. Thus governments need to pursue as an integral objective the need to develop their capital markets in the privatization programs.

Some of the objectives that the government of Kenya pursues in the process of privatizing its parastatals are the widening of participation by the people in the ownership and management of these parastatals as well as developing the local capital markets. So far the government has divested 11 firms through public floatation at the Nairobi Stock Exchange (GOK, 1992). But has it managed to achieve the crucial objective of developing the Nairobi Stock Exchange? Has government privatization program through public floatation improved the pace of privatization, in terms of how many enterprises could be put up for sale? Should the Privatization Implementation Unit and Parastatal Reform and Privatization Committee, still pursue these objectives in their privatization programs? To what extent has the privatization programme affected the Nairobi Stock Exchange capitalization, the quantity and range of share issues? To what extent can we attribute the changes in the market capitalization, turnover, and market index to the privatization of SOE's?

This study seeks to establish whether the government is succeeding in meeting its objective of developing the capital market through privatization of its parastatals.

### **1.3 The Objectives of the Study**

The objective of this study will be:

- a) To conduct a comparative analysis of the stock market performance.

- b) To determine the extent of contribution of privatization programme on the Nairobi Stock Exchange market capitalization.
- c) To determine the extent of contribution of privatization programme on the quantity and range of issues of shares at the NSE.

#### **1.4 Significance of the Study**

Many studies have been done to examine the performance of emerging capital markets in developing countries. However, many of these studies have not tried to isolate the direct contribution of privatization on the development of capital markets. This study will be important to:

##### **Decision Makers Involved in Privatization Programme:**

The study will provide useful insight about the ability of privatization programmes to develop the capital market and widen the ownership of the SOEs to the Privatization Implementation Unit (PIU) and the Parastatals Reform Programme Committee in their policy formulation process.

##### **The Government:**

The study will show what role the government, the development agencies and all other stakeholders have played in the privatization program and what lessons they can draw from this experience.

##### **Investors:**

This study will be important for all the investors and companies who are interested in buying these companies earmarked for privatization.

##### **Academicians:**

This study will be a useful material for academicians and bodies of knowledge in coming up with other researches of the same nature as well as providing reference material on issues relating to privatization.

Additionally, policy lessons from this study may be applicable to other African countries that share similar problems with Kenya.

## CHAPTER TWO: LITERATURE REVIEW

### 2.1 Introduction

This review seeks to examine the existing literature about the meaning of privatization, the methods of privatization laying emphasis on the share issue privatizations (SIPs), identify objectives of privatization and reasons why governments pursue SIPs. The literature review will also focus on the effects of privatization and especially effects of SIPs on the capital market growth, constraints of public offering, the effects of capital market development on growth of the economy and the constraints of market development. The review will finally, outline a brief history of the Nairobi Stock Exchange (NSE).

### 2.2 Privatization

According to Kerf and Smith (1996), Megyery and Sader (1996), Boubak (1999), and Donaldson and Wagle (1995) privatization is a response to the unsatisfactory performance of State Owned Enterprises (SOEs) and to an increasingly competitive international environment. Privatization has also been referred to as the transfer of ownership to the private sector from the government.

The emphasis of privatization is on improving the efficiency of all parastatal enterprises, whether retained or divested. Most governments have decided to distance themselves from direct involvement in business, and thus divest most of their interests whether in loss making or in profit making parastatal enterprises. All commercial SOE's will become available for both foreign and local participation using suitable methods of divestiture including liquidation where necessary.

### 2.3 Privatization Methods

Oyugi and Okelo (1997) observe that in Kenya, there is no one method, which could be used for privatization in all cases as circumstances differ with enterprises. Privatization can be undertaken in many ways and different forms of divestiture are possible

depending on the type of enterprise considered. The Executive Secretariat and Technical Unit (ESTU) indicated that it would use any of the known privatization techniques. These techniques include:

- a) Competitive bidding,
- b) Public offering of shares,
- c) Sale of shares by private placement,
- d) Negotiated sales in so far as pre-emption rights exist and have been exercised,
- e) Sale of enterprise assets (including liquidation),
- f) New private investment in enterprises,
- g) Employee or management buy-out,
- h) Leasing or award of management contract and,
- i) Public competitive tendering

(GOK, 1994)

The choice of option would be determined by the ESTU according to the following criteria:

- a) Objectives pursued by the government for each sale,
- b) Record of performance and economic prospects,
- c) Size of the enterprise and the ability to mobilize private funds.

Privatization methods, which involve the floatation of shares at the stock exchanges, are mainly the pre-emptive rights and public offering of shares.

### **2.3.1 Pre-emptive Rights**

Pre-emptive rights are those given to shareholders of a company to purchase shares on a priority basis when the enterprise is being privatized. The pre-emptive right clauses are written in Memorandum of Association and Articles of Association of the enterprise which would like to have them. The rights protect the minority shareholders or existing shareholders from dilution and control when new shares are issued. It enables the

shareholders to purchase new issues before they are offered to others. (Oyugi and Okelo 1997)

### **2.3.2 Public Offering of Shares**

In public offering, the state sells all or large portions of its stock held in a wholly or partially-owned SOE to the general public. If only part of the state's shares are being sold this results in a joint state and private ownership, the resulting company is often known as "joint stock company" and may be the first deliberate step towards full privatization. The process involves the preparation of a prospectus for the public offering using the services of an investment banker. A syndicate to underwrite - guarantee the purchase of unsold shares - the public offering of new shares may also be considered. Furthermore, the public offering may be on a fixed price or tender basis with options of convertible debentures or stock warrants.

A convertible debenture is where no new investment is made but a debt instrument for the privatized state enterprise is issued to the shareholders. Stock warrants is where new shares will be issued when the warrants are exercised which will result in to new equity investment for the SOE. Alternatively, the shares of a publicly traded company can be offered on local and or international stock exchanges to domestic and foreign investors.

A public offering is however, pegged on at least a few of the following factors;

- a) SOE is a sizeable going concern with reasonable earning potential, that is, the state of return on an investment in the privatized SOE is expected to be reasonable.
- b) That the full and truthful disclosure of the SOE's financial health is publicly available and easily accessible
- c) That the valuation of the SOE's assets and perhaps more importantly, its liabilities, is fairly reliable
- d) That there is sufficient liquidity in secondary capital markets and
- e) That the state encourages widespread ownership in such companies by the general public



According to Megginson and Netter (2001) sales methods to some extent and weak or ineffective institutions are a major part of the explanation to what accounts for the large sub-regional variation in privatization outcomes in transition states. Other reasons include fair and effective courts to enforce contracts, honest and competent administration to impose hard budgets, enforcement of prudential regulations in capital markets, and application of a transparent bankruptcy regime. The dilemma of transition states is that privatizing in advance of a minimal institutional framework produces poor results, but there is little evidence that keeping the firms in state hands while trying to build the needed institutions works any better.

## **2.4 Objectives of Privatization**

The following are the primary objectives, which have been defined in most Government's policy statement on Parastatal Sector Reform (GOK, 1986):

- a) Improve the operational efficiency of enterprises that are currently in the parastatal sector, and their contribution to the national economy,
- b) Reduce the burden of parastatal enterprises on the Government budget,
- c) Expand the role of the private sector in the economy, permitting the Government to concentrate public resources on its role as provider of basic public services, including health, education and social infrastructure, and
- d) Encourage wider participation by the people in the ownership and management of business.

In pursuing these primary objectives the Parastatal Sector Reform Committee (PSRC) aims to transform, through commercialization, restructuring and divestiture, the performance of most significant enterprises in the Parastatal Sector, and ensure liquidation of all non-viable Parastatal enterprises as soon as possible.

In so far as their pursuit is consistent with the primary objectives, the PSRC intends to ensure that divestiture meets the following secondary objectives:

- a) Create a more market-oriented economy,

- b) Secure enhanced access to foreign markets, to capital and to technology,
- c) Promote the development of the capital market, and
- d) Preserve the goal of self-reliance

Cordes, et al (1999) identifies other goals to be achieved by privatization as the following: contribution to maintain the social stability, settlement of the outstanding claims, especially settlement of the frozen foreign currency savings, material support for pension system financing, creation of material support for the restitution of previously confiscated and nationalized property and development of liquid capital market.

Davis, et al (2000) contends that privatization has been a key element of structural reform in many developing and transition economies during the last decade. Governments undertaking privatization have pursued a variety of objectives such as achieving gains in economic efficiency given the extensive prevalence of poor economic performance of public enterprises in many countries and limited success with their reform and improving the fiscal position, particularly in cases where governments have been unwilling or unable to continue to finance deficits in the public enterprise sector. In addition, liquidity-constrained governments facing fiscal pressures have sometimes privatized with a view to financing fiscal deficits with the proceeds. Other objectives have included the development of domestic capital markets.

Ziorklui, et al (2001) concluded that governments have been selling SOEs to private investors in order to improve these firms' performance through the discipline of private ownership, as well as to raise revenue without raising taxes. The specific objectives articulated for privatization programs are often very ambitious, and most tend to mirror the goals voiced by the British government during Thatcher's administration in the early 1980s, which were to raise new revenue for the state, promote economic efficiency, reduce government interference in the economy, promote wider share-ownership, provide the opportunity to introduce competition and develop the nation's capital markets.

Likewise the process of commercialization and restructuring will be designed so as to ensure that those parastatals that remain for the time being in the public sector are responsive to markets, cost-conscious and profit oriented, act as business entities without being required to carry out non-commercial activities except when explicitly compensated by government, do not encounter political interference in their operations including the banks, are guided by supervisory agencies to the minimum consistent with pursuit of consumers' interests, have boards and managements that are autonomous and accountable, and have effective performance monitoring systems.

Given the above objectives, the Parastatal Sector Reform Programme (PSRP) is expected to increase private sector savings and investment, both local and foreign, in all sectors of the economy which, in turn, will stimulate sustainable employment opportunities, increase tax collection from businesses that become more profitable after privatization, create an environment that will encourage private investment and the emergence of indigenous entrepreneurs, and improve the quality of delivery of utility and other public services.

## **2.5 Reasons for Share Issue Privatization**

According to Zayyad (1992), the decision to divest an enterprise through public offering is informed by factors like the need for wide share ownership and the development and strengthening of the capital market. Before an enterprise can qualify for public flotation on the Nigerian Stock Exchange it must have been profitable for five consecutive years with a track record of payment of dividends for three years running, and must offer at least 25 per cent of the equity capital.

Ziorklui, et al (2001) argues that despite the great popularity of asset sales, share-issue privatizations (SIPs) have clearly become the divestment method of choice for most privatizing governments. Furthermore, studies have shown that asset sales are preferred to SIPs in countries with relatively undeveloped capital markets. In addition to a maturation of the privatization technology and increasing comfort with capital market

tools, there are at least four other reasons why governments have come to see SIPs as their preferred divestment vehicle:

Firstly, from both an operational and a financial perspective SIPs are the only practical method of selling off the largest SOEs. For example, to whom could the Japanese government have sold a 35% stake in Nippon Telegraph & Telephone (NTT) in the late-1980s, if not to the public? Since the three NTT tranches in 1987 and 1988 raised almost \$80 billion, no other company could have raised the capital to buy NTT outright or marshaled the managerial resources to run the newly acquired company with 300,000 employees.

Secondly, a SIP is by far the most transparent method of selling corporate assets. This feature is often extremely important to a government trying to convince skeptical voters that the nation's economic "crown jewels" are being sold fairly and honestly.

Thirdly, governments have realized that they can modify the share allocation, pricing, and other terms of a public share offering to achieve political—as well as economic—objectives. For example, governments can provide favored domestic investors with an immediate capital gain on the shares they purchase by deliberately setting the initial offering price low, and then allocating more shares to these investors than to foreign or institutional investors.

And finally, SIPs marketed to domestic investors have vastly increased the total capitalization and trading volume of almost every major non-US stock market. Developing a national capital market is usually a major objective of privatization programs, and SIPs have the capacity to transform these markets. As mentioned previously, almost without exception, SIPs have been the largest stock offers in any nation's history.

Furthermore, the 1997 conference of Council of African Ministers of Finance passed a unanimous declaration on the need for speedy development of capital markets and privatization of state-owned enterprises through capital markets. Privatization of state-owned enterprises is considered key to the future development and growth of African economies.

## **2.6 Effects of Share Issue Privatizations on Capital Market Development**

Meggison and Netter (2001) reviewed 61 empirical studies of the effects of privatization and concluded that privately-owned firms outperform state-owned enterprises, that privatization improves firm performance, regardless of the geographic setting, that governments generate significant resources from privatization, and that privatization generally contributes to the development of local stock exchanges and capital markets, and benefits investors who purchase shares in privatized firms.

Ziorklui, et al (2001) identifies one of the immediate effects of privatization in some African countries as being the establishment of capital markets and the revision of financial sector regulations. This is due to the fact that privatization issues usually have a higher profile than other issues and involve a larger number of players. Moreover, some of the assets to be privatized tend to concentrate on certain sectors such as energy, mining, finance or transport. There is, of course, the sheer size and volume of such sales and all these factors require the development and strengthening of capital markets. The stock exchanges of Dar es Salaam and Lusaka are examples of the direct effect of privatization on capital markets.

Ziorklui, et al (2001) further concludes that, on the whole, privatization programmes have led to marked increases in stock market capitalization as well as increases in the quantity and range of issues traded on the market. The stock exchange has attracted a considerable number of players to the market leading to increased competition within the capital market. The structure and function of capital markets affect the availability of capital, influence investment processes and also influence the ways in which business managers

who approach investors, project the current performance and future potential of their enterprises.

Zayyad (1992) in referring to the Nigerian capital market after privatization and commercialization notes that there have been more offerings of primary issues in the last five years than in all the past thirty years of the existence of the stock exchange. He talks of the demystification of the capital market operations as the ordinary Nigerian no longer regards the capital market as an elitist affair. "There is no local government in Nigeria today where there are no shareholders", he adds. In giving reasons as to why the SIPs have become more preferred method of divestiture he contends that SIPs marketed to domestic investors have vastly increased the total capitalization and trading volume of almost every major non-US stock market. He summarizes that, developing a national capital market is usually a major objective of privatization programs, and SIPs have the capacity to transform the capital markets.

Zayyad concluded that governments have also promoted the development of their domestic capital markets through SIPs in order to develop capital markets large enough to support a privately financed, fully funded pension system and to promote the formation of capable and sophisticated institutional investors. This is especially important for those countries with rapidly aging populations (such as Japan and the countries of Western Europe), which have come to understand the dangers posed by reliance on a pay-as-you-go, government-run system of pension financing.

## **2.7 Constraints to Share Issue Privatizations Practice**

In sub-saharan African (SSA) countries with a high level of illiteracy, public offer for sale of SOEs has its limitations due to cumbersome formalities in the preparation of prospectus as well as complicated application forms, banking facilities are concentrated in urban centers hence the use of public offer in privatization works to the disadvantage of those in rural areas with few banking facilities (Zayyad, 1992).

A survey conducted by Ziorklui, et al (2001) in Tanzania revealed that investors might not be attracted to the stock exchange because of limited investor awareness of the Dar es Salaam Stock Exchange (DSE), because of its infancy, lack of adequate investment instruments, lack of adequate tax incentives, and lack of confidence in the financial system. However, they recognized that most of the above problems of the DSE could be attributed to its infancy. It is expected that with time, those problems would be resolved. The introduction of new products through privatization and introduction of debt instruments would enhance its attractiveness. The government's policy of tax incentives and fiscal discipline would also enhance the confidence of investors in the DSE.

In another case study conducted in Ghana by Ziorklui, et al (2001), it emerged that role of the stock exchange in promoting capital market deepening is also hampered by the government's divestiture programs, which emphasize privatization through strategic investor financing rather than through the stock exchange. Furthermore, the lack of automated trading practices has led to inefficiency of trading and settlement.

In view of the current thinness and illiquidity in the stock exchange, any attempt to hold back any shares from being traded on the exchange would undermine its development and efficiency. The proposed establishment of the Privatization Trust Fund (PTF) should be reviewed to conform to the current developments.

However, privatization efforts have been constrained by the shortage of capital in the private sector. This is a direct result of the underdevelopment of capital markets in SSA. Thus, a well-functioning capital market would raise needed capital for purchases of state-owned enterprises, the start of new enterprises, and the expansion of existing companies.

## **2.8 Effect of Capital Market Development on Growth**

Evidence in more advanced countries and rapidly emerging capital markets of Southeast Asia and Latin America confirm the overall positive association between capital market

development and economic growth. Several benefits are ascribed to capital (securities) market development. These include:

- a) Mobilization of long-term savings for long-tenured investments,
- b) Providing risk capital (equity) to entrepreneurs,
- c) Broadening ownership of firms, and
- d) Improving the efficiency of resource allocation through competitive pricing.

McKinnon (1973), Gelb (1989) and Fry (1988), Montiel (1995), among others, stress the positive contribution of capital market development to growth, while King and Levine (1993) and Ghani (1992) find strong correlation between measures of banking development and economic growth. Calamanti (1983) posits that the securities market can positively contribute to growth if supported by appropriate government policies.

Richards (1996) observes that the growth of stock markets increases the volume of long-term investments. Similarly, Levine and Zervos (1996) and Singh (1997) show that stock market development is positively and robustly associated with long-run economic growth. The stock markets are seen to provide a means for risk diversification, acquisition of information about firms, efficient allocation of funds and tying manager compensation to stock performance. Internationally integrated capital markets make diversification of risk possible, apart from the inflow of financial resources.

In his study published in *The Journal of Economic Literature*, Levine (1997) reviewed a body of literature that has bearing on the debate concerning the linkage between capital market development and real sector growth. In that study, he discussed the linkage between four different proxies of capital market development and real sector growth. These capital market proxies include

- 1) Liquid liabilities (comprising currency plus demand deposits of banking and non-banking financial institutions),
- 2) Bank credit as a ratio of total credit by the banking sector,
- 3) Credit allocated to the private sector as a ratio of total credit, and



#### 4) Credit extension to the private sector divided by GDP.

Levine postulates a positive relationship between the above proxies of capital market development and real sector growth as represented by per capita income.

Atje and Jovanovic (1993) test the hypothesis that the stock markets have a positive impact on growth performance. They find significant correlations between economic growth and the value of stock market trading divided by GDP for 40 countries over the period 1980-88.

In addition, using cross-country data for 47 countries from 1976-93, Levine and Zervos (1998) find that stock market liquidity is positively and significantly correlated with current and future rates of economic growth, even after controlling for economic and political factors. They also find that measures of both stock market liquidity and banking development significantly predict future rates of growth. They, therefore, conclude that stock markets provide important but different financial services from banks.

Furthermore, using data from 44 industrial and developing countries from 1976 to 1993, Demirguc-Kunt and Levine (1996) investigate the relationships between stock market development and financial intermediary development. They find that countries with better-developed stock markets also have better-developed financial intermediaries. Thus, they conclude that stock market development goes hand-in-hand with financial intermediary development. They also find that further gains to the economy arise due to lower cost of equity for firms and the discipline imposed on corporate managers since movements of share prices reflect managers' performance, existence of mechanisms for appropriate pricing and hedging against risk and increased inflows of funds to the thriving domestic stock market.

Theory also points out a rich array of channels through which the stock markets - market size, liquidity, integration with world capital markets, and volatility - may be linked to economic growth. For example, Pagano (1993) shows the increased risk-sharing benefits from larger stock market size through market externalities, while Levine (1991) and Bencivenga, et al (1996) show that stock markets may affect economic activity through the creation of liquidity. Similarly, Devereux and Smith (1994) and Obstfeld (1994) shows that risk diversification through internationally integrated stock markets is another vehicle through which the stock markets can affect economic growth. Besides stock market size, liquidity, and integration with world capital markets, theorists have examined stock return volatility. For example, DeLong et.al. (1989) argue that excess volatility in the stock market can hinder investment, and therefore growth.

## **2.9 Constraints to Capital Market Development**

Major constraint of capital market development is financial repression together with weak and unclear legal framework. Key elements of financial repression include restrictions on entry into banking, often combined with dominating public ownership of major financial institutions. These include high reserve requirements on deposits, statutory ceilings on bank lending and deposits, quantitative restrictions on credit allocation, restrictions on capital transactions and foreign exchange transactions.

Ogwumike and Omole (1997) observe that in Nigeria the stock exchange is constrained by government policies that do not promote mobilization of industrial finance. At one time, it was noted that interest rate policies favored growth of the money market rather than the capital market. The problem of awareness is also cited as a reason for reluctance of companies to go public. This explains low supply of securities. Informational constraints relate to inadequate disclosure of information due to the underdevelopment of information technology and manpower training.

Osei (1998) examines the institutional factors that affect the development of the Ghana stock market and finds that the legal and regulatory framework that ensures protection

and security of investors is important. Using survey data, the study identifies such factors as low income, level of education, and information about the capital market as crucial.

Financial liberalization is aimed at removing financial repressive practices in order to contribute to growth through improved efficiency of financial intermediation, efficiency of capital stock, and an increase in the saving rate. Improved financial intermediation leads to higher savings and capital accumulation. The efficiency of capital markets is promoted as funds are channeled to high-productive projects. The transition from a repressed financial regime to a market oriented financial system will be greatly enhanced by the role of the government in providing an enabling environment. According to Montiel, (1996, pp. 76-9) at the minimum, the government should ensure a more conducive macroeconomic environment that can support the institutional framework that is necessary for the development of a well-functioning capital market.

Ziorklui, et al (2001) in another case study of Ghana based on the analysis of the primary and secondary data, showed that the financial sector reform has addressed some of the major constraints toward the development of the capital market in Ghana. The commitment of the government to a comprehensive structural and financial sector reform began to bear useful results. The restructuring of the banking sector and the liberalization of interest rates have strengthened the banking sector as a competitive sector that complements the capital market institutions, mobilizing and allocating credit to the productive sectors of the economy. The policy environment has been greatly improved because of various initiatives to bring about liberalization of the foreign exchange market, privatization of state-owned public enterprises, and other market-based policy changes that have the potential to deepen the capital market.

## **2.10 History of the Nairobi Stock Exchange**

In Kenya, dealing in shares and stocks started in the 1920's when the country was still a British colony. There was however no formal market, no rules and no regulations to govern stock broking activities. Trading took place on gentlemen's agreement in which

standard commissions were charged with clients being obligated to honor their contractual commitments of making good delivery and settling relevant costs.

In 1951, An Estate Agent by the name of Francis Drummond established the first professional Stock broking firm. He also approached the then finance minister of Kenya, Sir Ernest Vasey and impressed upon him the idea of setting up a stock exchange in East Africa in consideration to the then existing situation. The two approached London Stock Exchange officials in July of 1953 and the London officials accepted to recognize the setting up of the Nairobi Stock Exchange as an overseas stock exchange.

In 1954, the Nairobi Stock Exchange (NSE) was constituted as a voluntary association of stockbrokers registered under the Societies Act. The business of dealing in shares was then confined to the resident European community, since Africans and Asians were not permitted to trade in securities until after the attainment of independence in 1963.

In the first three years of independence, marked by steady economic growth, confidence in the market was once again rekindled and the exchange handled a number of highly oversubscribed public issues. The first privatization through the NSE is the successful sale of the government's 20% stake in Kenya Commercial Bank in 1988.

In 1991, NSE was registered under the Companies Act and phased out the "Call Over" trading system in favor of the floor based Open Outcry System.

The NSE 20-Share Index recorded an all-record high of 5030 points on Feb. 18, 1994. The NSE was then rated by the International Finance Corporation as the best performing market in the world with a return of 179% in dollar terms.

The Kenyan Government relaxed restrictions on foreign ownership in locally controlled companies subject to an aggregate limit of 20% and an individual limit of 2.5% in 1995. Currently, these limits have been revised to 40% and 5% respectively.

In 1996, the largest share issue in the history of NSE, the privatization of Kenya Airways, came to the market. More than 110,000 shareholders acquired a stake in the airline. The Kenya Airways privatization team was awarded the World Bank Award for Excellence for 1996 for being a model success story in the divestiture of state-owned enterprises. Trade is conducted on ordinary shares, preference shares, debentures, corporate bonds and Government bonds. Trading takes place on Mondays through Fridays between 10.00 am and 12.00 noon.

## **CHAPTER THREE: RESEARCH METHODOLOGY, DATA AND SOURCES**

### **3.1 Population of the Study**

The population of this study included all the State Owned Enterprises (SOE's), which the government has divested through the Nairobi Stock Exchange (NSE). Only 11 SOE's have so far been privatized through public floatation at the stock exchange. Therefore the population of this study included all these 11 firms, listed at the Nairobi Stock Exchange.

The study intended to analyze all the 11 enterprises in a bid to determine the contribution they have had on the development of the capital market in Kenya. Thus, a census study was carried out. However, the study analyzed only nine enterprises since two of the privatized companies were delisted from the Stock exchange. Before the year 1990 data available was inconsistent and in some instances non-existent at all. Thus only those companies privatized after 1990 were considered. Analysis was also carried out for the period after 1990 for those companies, which were privatized before 1990 and had subsequent public share issue after 1990.

### **3.2 Data Collection**

The study used secondary data obtained from the Nairobi Stock Exchange trading activities, the AIG (EA) Investment Company and prospectus issued by the enterprises during the floatation process. The study collected data on stock market capitalization, market turnover, the NSE 20 share index points and AIG (EA) 27 share index points.

### **3.3 Data Analysis**

Microsoft Excel statistical data analysis tool was used in this study to calculate the average figures, determine the growth rates, calculate proportions, correlation coefficients and to draw trend as well as growth rate curves.

Yearly mean of the market capitalization, market turnover, the NSE 20 share index points as well as the AIG (EA) 27 index points were calculated and used to show the existing trend over a 10-year period. This was to achieve the first objective of the study.

Rates and proportions were calculated to show the extent of contribution of share issue privatization program on the market capitalization. Monthly means of the market capitalization was used. This was done for each of the nine enterprises individually. The proportion of each enterprise's market capitalization to the total market capitalization for a two-year period was calculated. This isolated the effect that the privatization of that particular enterprise had on the total market.

The study sought to establish whether the privatized enterprise contributed to an increase, decrease or had no effect on the total market capitalization. The study focused on establishing whether the privatized enterprise contributed to the capital market growth indicator, market capitalization, and did not intend to show the direction of causation. Hence a correlation coefficient for each privatized company's capitalization against the market capitalization was determined to establish if there was any relationship between the growth of market capitalization of a given company and the growth of total market capitalization.

The study also sought to establish if there were any significant changes to the quantity and range of issues of shares due to privatization of a given company.

## **CHAPTER FOUR: DATA ANALYSIS AND INTERPRETATION OF RESEARCH FINDINGS**

### **4.1 Data Organization**

The study intended to analyze 11 state owned enterprises (SOEs), which were privatized at the Nairobi Stock Exchange. However, due to the inconsistency of data for the period preceding 1990, the study only analyzed nine enterprises that were privatized in the 1990's as well as subsequent share issue of those SOEs privatized before 1990.

Collected raw data was classified for each enterprise separately for further processing using the Microsoft Excel statistical tool. Proportions and growth rates were then determined in order to show the contribution of share issue privatization of each SOE on the development of the capital market. Graphs were used to give a quick glance at the trend that existed over the period under study.

### **4.2 Data Analysis**

Analysis of the capital market development indicators i.e. market capitalization, market turnover and share index was carried out. Companies were considered individually and their contribution to the total market capitalization established. Finally, analysis of the quantity of outstanding shares was conducted to show the existing growth and trend over the period under consideration.

### **4.3 Market Analysis**

The whole market was considered and the trends and growth rates of the market capitalization, market turnover, the NSE 20 Share index as well as the AIG (EA) 27 Share Index was established. This section focused on achieving the first objective of the study, which sought to establish the performance of the stock market over the period under study.



### 4.3.1 Analysis of Market Capitalization

The study focused on the period 1990 to 2003 and sought to show the trend and the growth rate that existed in the total market capitalization.

The market capitalization has been growing steadily over the years since 1993. In 1991 the average growth rate was 13.83% while in 1992 the rate was 52.91%. The highest growth was in 1994, which occurred at a rate of 171.12% from an average of Kshs. 39.56 billion in 1993 to Kshs. 107.26 billion in 1994. The average annual growth rate fell in 1995 to negative 3.79% but increased again the following year to 1.98% and to 16.03% in 1997 only to fall to negative 4.78% in 1998. The annual market capitalization growth rate has since then been on the decline. The average growth rate over the 10-year period was 35.5%. This is summarized in Table 1 below:

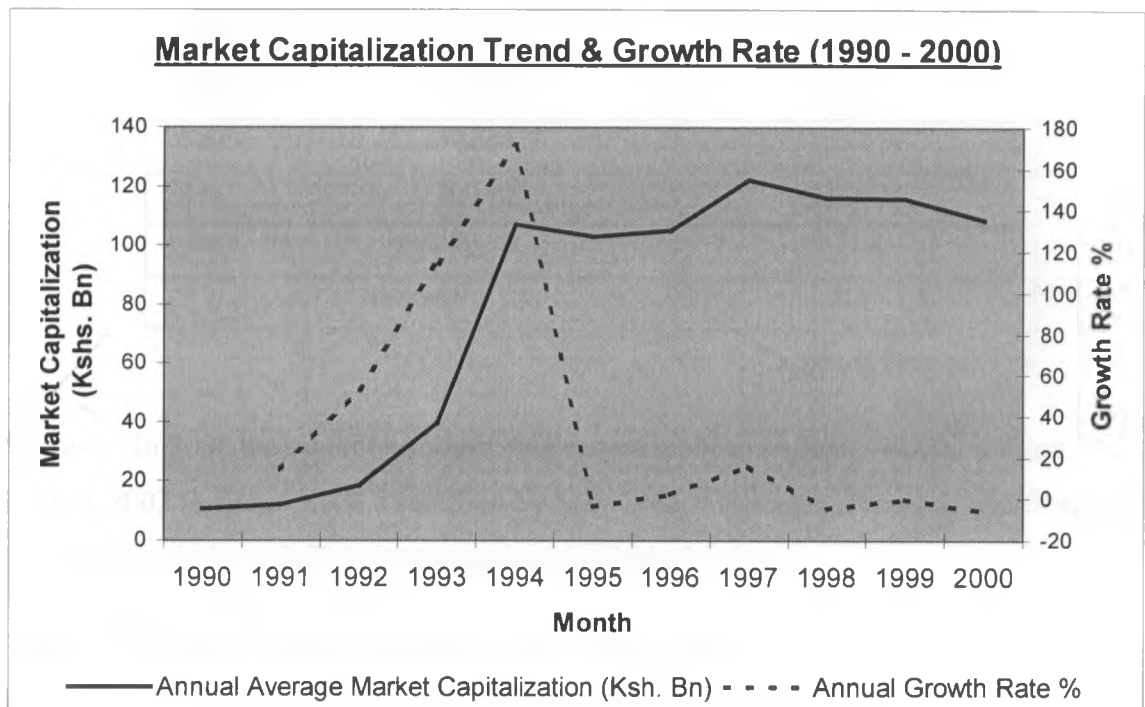
**Table 1: The Trend and Growth Rate of Market Capitalization (1990 – 2000)**

<b>Year</b>	<b>Annual Average Market Capitalization (KShs. Billion)</b>	<b>Annual Growth Rate %</b>
1990	10.62	
1991	12.08	13.83
1992	18.48	52.91
1993	39.56	114.10
1994	107.26	171.12
1995	103.20	(3.79)
1996	105.24	1.98
1997	122.11	16.03
1998	116.27	(4.78)
1999	115.73	(0.47)
2000	108.82	(5.97)
<b>Average</b>		<b>35.50</b>

Source: Research Data

The graph below shows the trend and the growth rates of the total market capitalization that has existed during the period 1990 to 2000. The steady growth that was prevailing in the market in the 1990's suddenly started to increase in 1992 and achieved the highest peak in 1993 where it maintained this level though unstable. The trend has since then been steady in nature. The market capitalization then started declining gradually since mid – 1997. The growth rate had been rising until 1993 when it fell drastically and has since been fluctuating slightly with negative and positive rates since 1995.

**Graph 1: Trend and Growth Rate of Market Capitalization**



#### 4.3.2 Analysis of Market Turnover

Consistent data on market turnover was only available for the period starting 1995 to 2003. On average the annual market turnover grew at a rate of 42.11% from Kshs. 225.61 million in 1995 to Kshs. 320.6 million in the year 1996. It further grew by 59.73% in 1997 but the growth rate fell in 1998 to negative 25.41% from Kshs. 512.09 million to Kshs. 381.99 million. The annual average market turnover has been declining since 1999

to Kshs. 240.32 million in 2002. The average growth rate for the period 1995 – 2002 was 5.39%. The summary of this is shown in the table below:

**Table 2: Growth in Market Turnover (1995 – 2002)**

<b>Year</b>	<b>Annual Average Market Turnover (Kshs. Million)</b>	<b>Growth Rate %</b>
1995	225.61	
1996	320.60	42.11
1997	512.09	59.73
1998	381.99	(25.41)
1999	429.84	12.53
2000	302.66	(29.59)
2001	260.16	(14.04)
2002	240.32	(7.62)
<b>Average</b>		<b>5.39</b>

Source: Research data

However, in 2003 the market turnover rose very sharply from Kshs. 742.02 million in January 2003 to Kshs. 1,706.88 million by May 2003 this was in sharp contrast from the preceding period trend. This is summarized in Table 3 below.

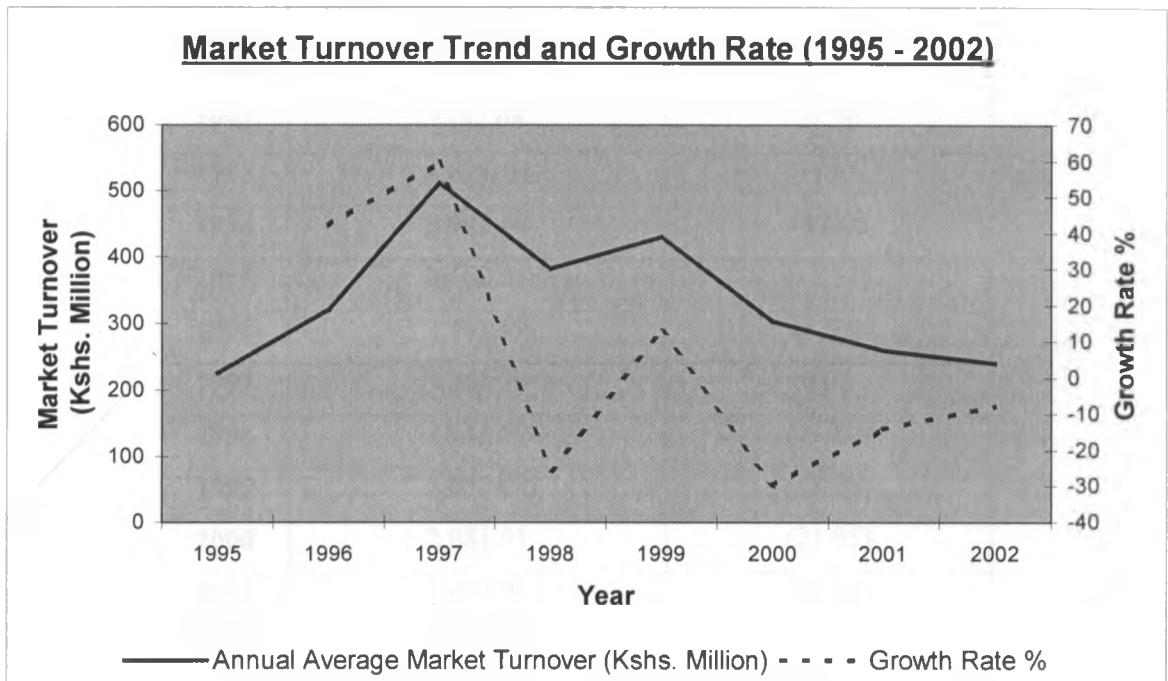
**Table 3: Market Turnover (January 2003 – May 2003)**

<b>Month</b>	<b>Market Turnover (Kshs. Million)</b>
Jan-03	742.02
Feb-03	454.55
Mar-03	573.00
Apr-03	876.45
May-03	1,706.88

Source: Research data

The trend in market turnover has been erratic over the years as illustrated by Graph 2 below. The highest amount of market turnover was attained in 1997 and since then the turnover has been declining. It recovered slightly in 1999 only to resume the downward trend soon afterwards. As evident from the graph the growth rate has been erratic with the highest rate recorded in 1997 after which it fell sharply till 1998. The rate rose to attain a peak in 1999 before it fell again only to rise gradually since 2000.

**Graph 2: Trend and Growth Rate of Market Turnover**



#### 4.3.3 Analysis of Nairobi Stock Exchange 20 Share Index

The NSE 20 Share Index is calculated for 20 companies listed at the stock market in order to determine the level of trading activity at the market (Appendix III). The index has been growing since 1991. It grew at a rate of 21.2% in 1992. It continued with the upward trend in 1993 and 1994 with a growth rate of 42.65% and 145.06% respectively. The index attained its all time highest of 5,137.08 points in the month of February 1994. It experienced an annual average decline in 1995 and 1996 at a rate of negative 13.54% and negative 8.93% respectively. In 1997 the index rose at a dismal rate of 6.93% to

stand at an average of 3,361.75 points. The index has since then been on the downward trend declining at a rate of negative 11.61% in 1998 and negative 11.26% in 1999. This downward trend persisted in the market for the remaining period till 2002 when the index grew at a negative rate of 29.36% in 2002. The average growth rate for the period 1991 – 2002 was 9.01%. This is summarized in Table 4 below.

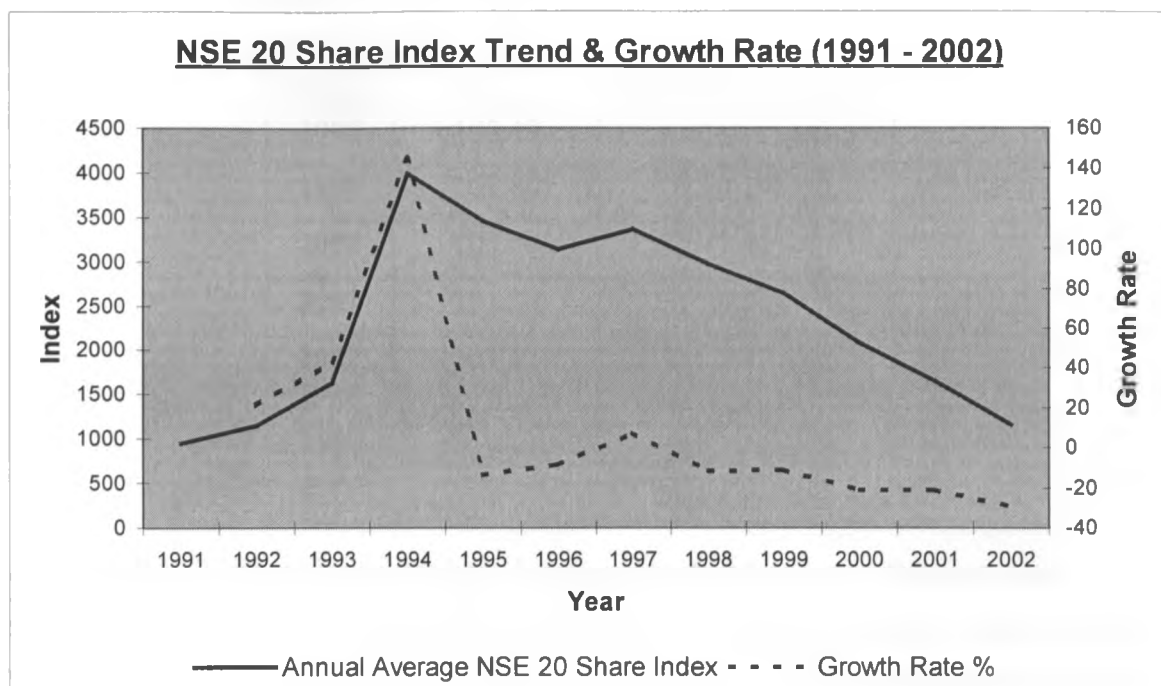
**Table 4: Growth in NSE 20 Share Index**

<b>Year</b>	<b>Annual Average NSE 20 Share Index</b>	<b>Growth Rate %</b>
<b>1991</b>	942.29	
<b>1992</b>	1142.08	21.20
<b>1993</b>	1,629.19	42.65
<b>1994</b>	3,992.44	145.06
<b>1995</b>	3,452.01	(13.54)
<b>1996</b>	3,143.89	(8.93)
<b>1997</b>	3,361.75	6.93
<b>1998</b>	2,971.57	(11.61)
<b>1999</b>	2,637.07	(11.26)
<b>2000</b>	2,081.91	(21.05)
<b>2001</b>	1,643.93	(21.04)
<b>2002</b>	1,161.29	(29.36)
<b>Average</b>		<b>9.01</b>

Source: Research data

The index experienced a steep growth in the 1994 from 1993 when it was gradually rising as is evidenced in the graph below. It then started falling although gradually at first, it stabilized briefly in 1997 but has since been falling. The growth rate attained a peak in 1994 and immediately fell the following year and rose slightly in 1997 but maintained the downward trend since then.

**Graph 3: Trend and Growth Rate of the NSE 20 Share Index**



**4.3.4 Analysis of AIG (EA) 27 Share Index**

The AIG (EA) 27 Share index was introduced in 1998 as a measure of trading activity in the market. It is calculated on 27 companies that are listed at the stock exchange (Appendix II). The index grew in 1999 by 4.17% from 105.49 points in 1998 to 109.89 points in 1999. For two successive years it declined at a rate of negative 3.91% and 4.21% in 2000 and 2001 respectively. In 2002 it rose to an average of 103.57 points up from 101.14 points in 2001 signifying a 2.4% growth. Over the period 1998 – 2002 the index grew at an average rate of negative 0.39%. This is summarized in Table 5 below.

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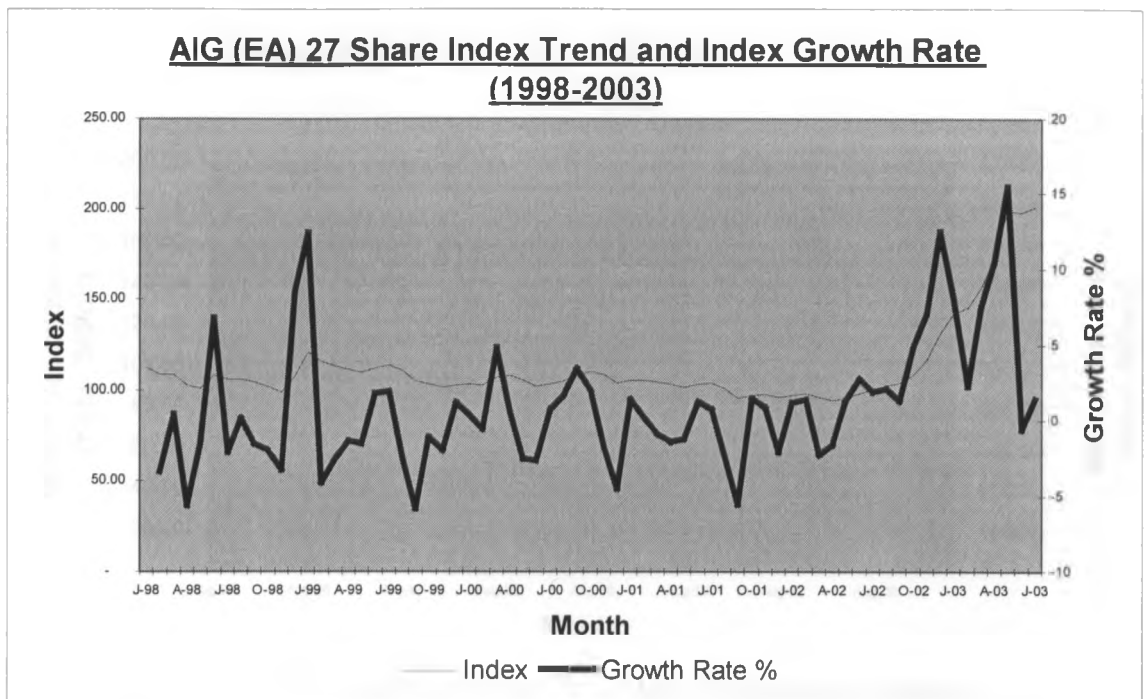
**Table 5: Growth in AIG (EA) 27 Share Index**

<b>Year</b>	<b>AIG (EA) Index</b>	<b>Growth Rate %</b>
<b>1998</b>	105.49	
<b>1999</b>	109.89	4.17
<b>2000</b>	105.59	(3.91)
<b>2001</b>	101.14	(4.21)
<b>2002</b>	103.57	2.40
<b>Average</b>		<b>(0.39)</b>

Source: Research data

The AIG (EA) 27 Share Index has been having a constant trend over the years since inception in 1998 as evidenced in the graph below. It experienced a sharp increase in July 2003 to stand at an average of 200.67 points. The index started on its upward trend since December 2002 and has maintained this course into the first half of year 2003. The growth rate however, has been quite erratic with lots of ups and downs. The index average growth rate hit a high of 12.42% in January 1999 and another high of 15.51% in May 2003.

**Graph 4: Trend and Growth Rate of AIG (EA) 27 Share Index**

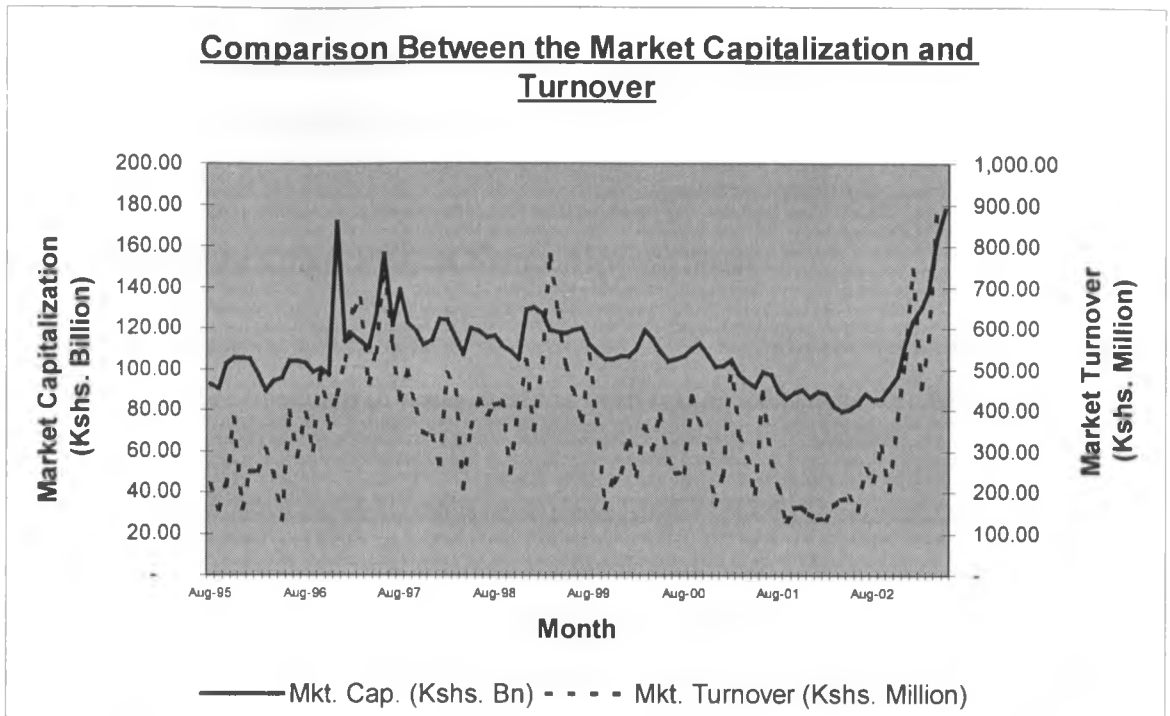


#### **4.3.5 Analysis of Market Capitalization Versus Market Turnover**

Graph 5 shows the comparison between the market capitalization and the market turnover over the period 1995 – 2002 for the stock market. Both graphs are exhibiting fairly the same trend pattern over the period. From August 1995 to August 1996, market capitalization and the market turnover are rising and almost attaining a peak at the same time. The two market indicators are falling from August 1997 to August 1998 and then rising again. The market capitalization and turnover are rising over the period August 2002 – August 2003. This is an indication of how the market was developing over the years



**Graph 5: Trend of the Market Capitalization and Turnover (1995 - 2002)**



Market capitalization has been growing steadily over the years since 1993 with the highest growth occurring in this year. The average growth rate over the 10-year period was 35.5%. Since 1995 the trend in the market turnover has been cyclical with erratic movements between the cycles. Over the seven-year period (1995 - 2002) the average growth rate was 5.39%. The NSE 20 Share Index points has been growing at an average rate of 9.01% over the period 1991 – 2002. The AIG (EA) 27 Share Index points' average growth rate for the period 1998 – 2002 was a negative 0.39%. The analysis of the market indicators shows that the market has been developing steadily over the years.

#### 4.4 Company Analysis

This section considered each privatized company individually for in-depth analysis. A two-year period was considered before the public issue of shares of a particular company and another two-year period immediately after the public issue (or date of listing) of shares of that company. This two-year period was divided into four equal periods consisting of six months each to allow for efficient analysis of data. The four periods

were subsequently referred to as first quarter, second quarter, third quarter and fourth quarter respectively beginning from the date of listing (or immediately after a public share issue) at the stock market. This section sought to meet the second objective of the study, which was to determine the extent of contribution of privatization programme on the Nairobi Stock Exchange market capitalization.

#### **4.4.1 Initial Public Offer (IPO) of Kenya Airways Shares**

After the initial public offer, Kenya Airways was listed at the stock exchange on 4<sup>th</sup> June 1996. The number of shares in issue as at the year ending 2002 was 461,615,484.

Kenya Airways market capitalization accounted for 4.71% of the total market in its first six months after privatization at the Nairobi Stock Exchange. The market on the other hand was growing at a rate of 0.32%. However, this proportion started falling in the subsequent quarters of the two-year period after privatization. In the second quarter the proportion was 3.15%, 2.82% in the third quarter and 2.73% in the last six months after privatization. On average, after two years, privatization of Kenya airways contributed 3.35% to the total market capitalization.

During this period the market capitalization grew at an average rate of 2.49%. This is despite the fall in growth rate in the third quarter to about negative 0.89%. This is summarized in Table 6 below.

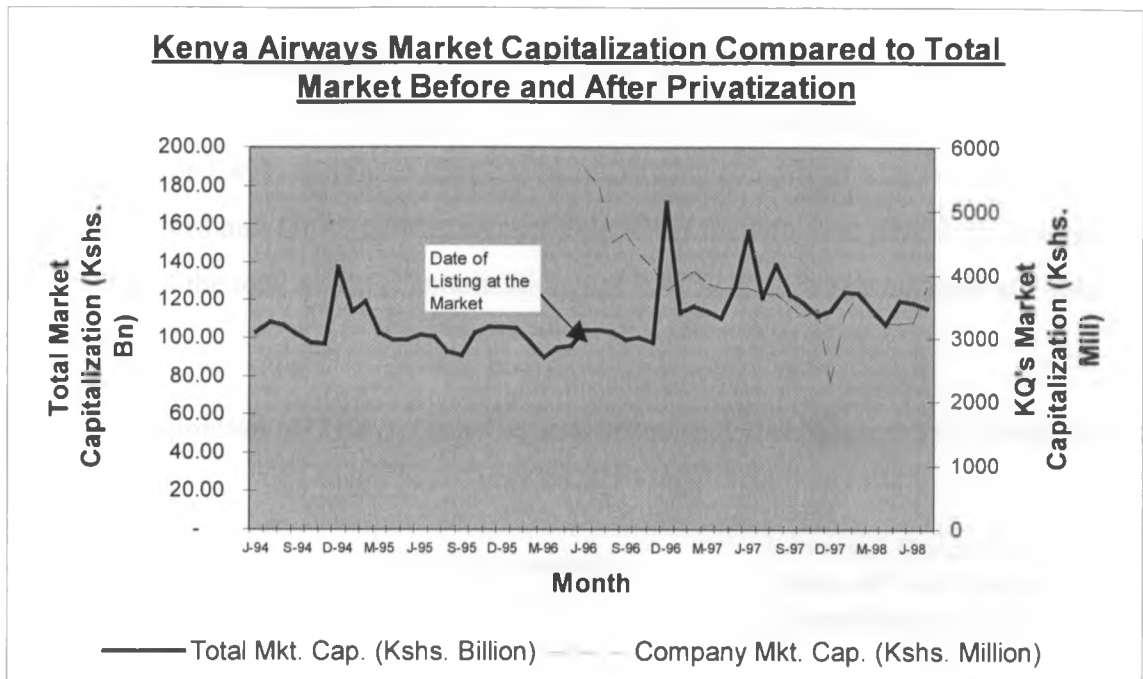
**Table 6: Proportion of Kenya Airways Capitalization to Total Market Two Years After Privatization**

<b>Quarter</b>	<b>Average Quarterly Proportion (%)</b>	<b>Average Quarterly Growth Rate of Total Market Capitalization (%)</b>
1 <sup>st</sup> Quarter ending Nov-96	4.71	0.32
2 <sup>nd</sup> Quarter ending May-97	3.15	9.12
3 <sup>rd</sup> Quarter ending Nov-97	2.82	(0.89)
4 <sup>th</sup> Quarter ending May-98	2.73	1.38
<b>Average</b>	<b>3.35</b>	<b>2.49</b>

Source: Research data

Total market capitalization was growing steadily two years before the privatization of Kenya Airways at the market. With the listing of Kenya Airways the trend became rather cyclical with a sharp rise in the total capitalization in the second quarter followed by a sharp decline the following quarter. Kenya Airways capitalization started falling immediately it was listed and this has been the trend throughout the two-year period. However, it experienced a reverse trend towards the end of 1997.

**Graph 6: Market Capitalization Trend for Kenya Airways Compared to Total Market Before & After Privatization**



The correlation coefficient of the total market capitalization to that of Kenya Airways was negative 0.32 (Appendix I). This implies that the trend in total market capitalization is slightly moving in the opposite direction from Kenya Airways market capitalization. So that when total market capitalization is rising, Kenya Airways market capitalization is slightly falling and vice versa.

#### **4.4.2 IPO of Tourism Promotion Services Limited (Serena Hotels) Shares**

After the initial public offer, Tourism Promotion Services Serena (TPS Serena) was listed at the stock exchange on 14<sup>th</sup> May 1997. The number of shares in issue as at the year ending 2002 was 38,679,000.

Upon listing at the Nairobi Stock Exchange the TPS Serena market capitalization accounted for 0.43% of the total market capitalization in the first six months. The proportion has been steady over the two-year period after privatization. The average

proportion of TPS Serena market capitalization to the total market capitalization was 0.42% over the two-year period.

Total market capitalization on the other hand grew at a rate of 2.56% in the first quarter after the privatization of TPS Serena, it then declined in the second quarter to grow at a negative rate of 1.49% and there after has been growing steadily at a rate of 0.39% and 1.8% in the third and fourth quarter respectively. Over the two-year period the average growth rate of the total market capitalization was 0.82%. This is summarized in Table 7 below.

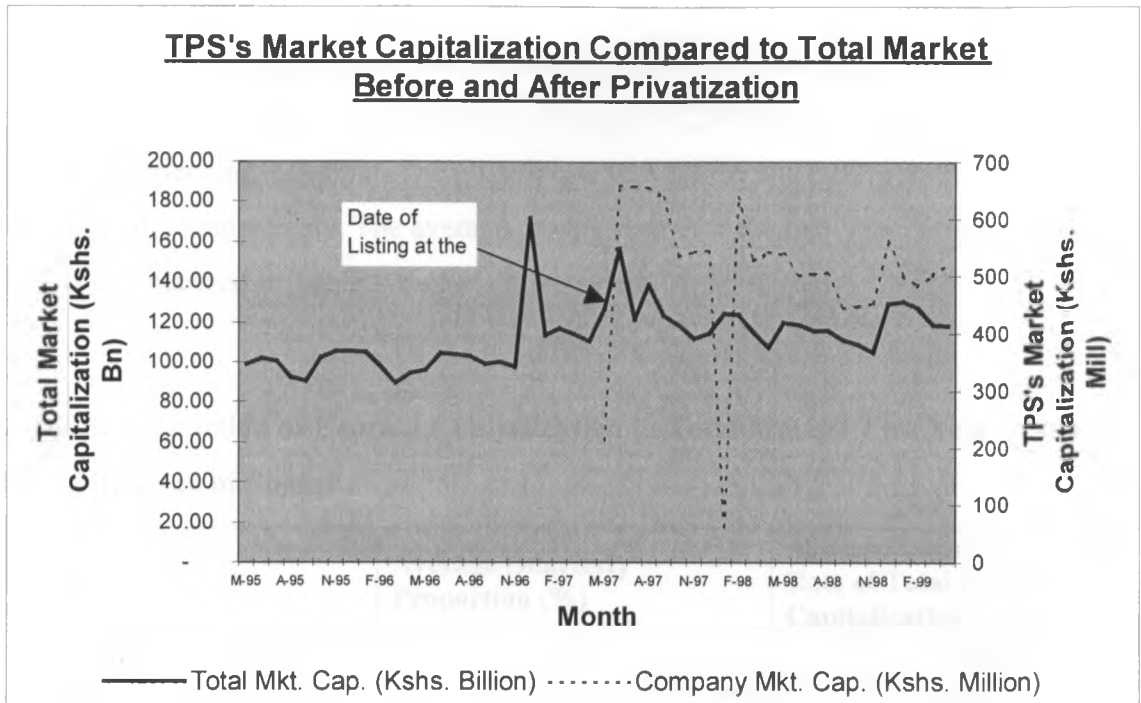
**Table 7: Proportion of TPS Serena Capitalization to Total Market Two Years After Privatization**

<b>Quarter</b>	<b>Average Quarterly Proportion (%)</b>	<b>Average Quarterly Growth Rate of Total Market Capitalization (%)</b>
1 <sup>st</sup> Quarter ending Oct-97	0.43	2.56
2 <sup>nd</sup> Quarter ending Apr-98	0.41	(1.49)
3 <sup>rd</sup> Quarter ending Oct-98	0.43	0.39
4 <sup>th</sup> Quarter ending Apr-99	0.42	1.80
<b>Average</b>	<b>0.42</b>	<b>0.82</b>

Source: Research data

Market capitalization trend was rising prior to privatization of TPS Serena. Both the total market capitalization and TPS Serena market capitalization were rising after the listing of the company at the stock market. While the total market capitalization was rising and falling steadily, TPS Serena's market capitalization was rising and falling sharply over the two-year period after privatization. This is shown in the graph below.

**Graph 7: Market Capitalization Trend for TPS Serena Compared to Total Market Capitalization Before & After Privatization**



The correlation coefficient between the total market capitalization and TPS Serena’s market capitalization was positive 0.20 (Appendix I) implying that the trend in the total market capitalization was slightly moving in the same direction as that of TPS Serena market capitalization.

**4.4.3 Public Share Issue of Uchumi Supermarkets Limited**

After the initial public offer, Uchumi was listed at the stock exchange on 1<sup>st</sup> February 1992. A second public issue of the company’s shares was floated into the market in 1995. The number of shares in issue as at the year ending 2002 was 60,000,000.

The proportion of Uchumi’s market capitalization to that of the total market capitalization was 2.41% in the first six months after the first share issue. This proportion fell in the second quarter to 1.72% then rose to 1.9% and 2.24% in the third and fourth quarter

respectively. Over the two-year period after privatization the average proportion of Uchumi market capitalization was 2.07% of the total market capitalization.

The total market capitalization grew at a rate of 8.29% over the first six months after the privatization of Uchumi. It grew further at a rate of 12.34% in the second quarter then started experiencing a decline. The growth rate was 8.67% and 6.01% in the third and fourth quarter respectively. The average growth rate over the two-year period was 8.83%. This is summarized in Table 8 below.

**Table 8: Proportion of Uchumi Capitalization to Total Market Two Years After the 1<sup>st</sup> Public Issue of Shares**

<b>Quarter</b>	<b>Average Quarterly Proportion (%)</b>	<b>Average Quarterly Growth Rate of Total Market Capitalization (%)</b>
1 <sup>st</sup> Quarter ending Jun-93	2.41	8.29
2 <sup>nd</sup> Quarter ending Dec-93	1.72	12.34
3 <sup>rd</sup> Quarter ending Jun-94	1.90	8.67
4 <sup>th</sup> Quarter ending Dec-94	2.24	6.01
<b>Average</b>	<b>2.07</b>	<b>8.83</b>

Source: Research data

After the second share issue the proportion of the Uchumi market capitalization to that of the total market capitalization was 1.99% in the first quarter. It fell in the second quarter to 1.48% and then rose in the third and fourth quarter to 1.61% and 1.62% respectively. Over the two-year period after the second share issue Uchumi contributed 1.67% to the total market capitalization.

The growth rate of the total market capitalization fell by negative 4.25% in the first six months after the second issue only to rise by 0.8% in the second quarter. The growth in market capitalization fell again in the third quarter to grow at a negative rate of 0.02%

and rose sharply at a rate of 11.61% in the fourth quarter. On average over the two-year period the growth rate of the total market capitalization was 1.97%. This is summarized in Table 9 below.

**Table 9: Proportion of Uchumi Capitalization to Total Market Two Years After the 2<sup>nd</sup> Public Issue of Shares**

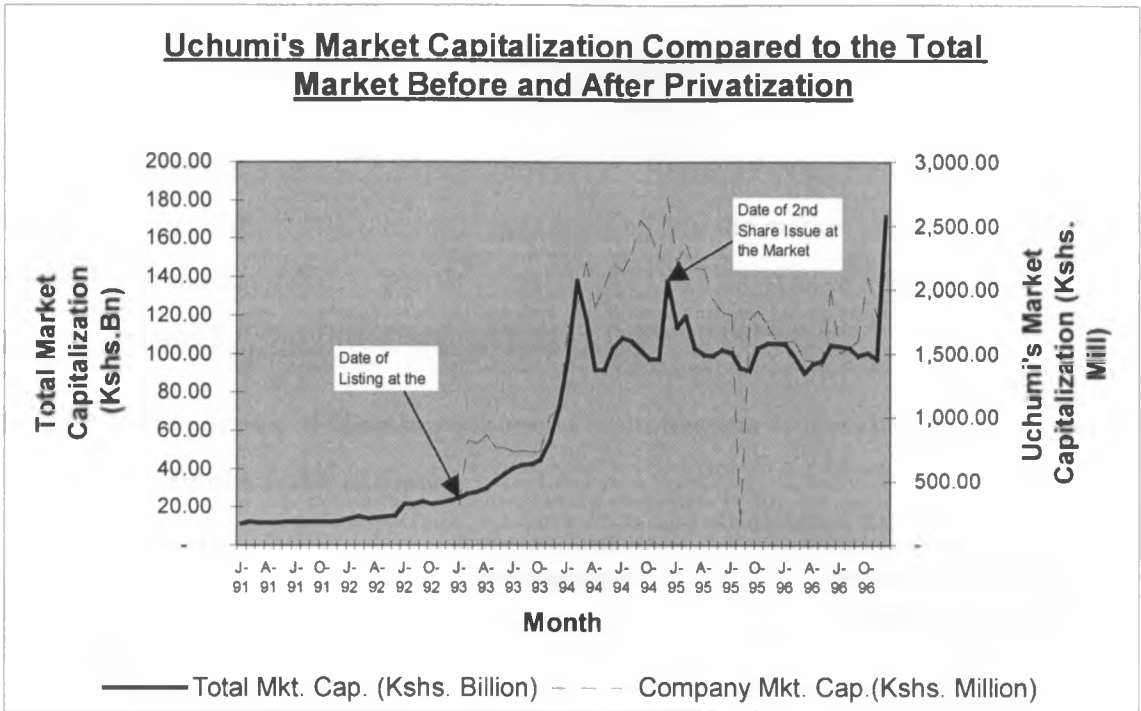
<b>Quarter</b>	<b>Average Quarterly Proportion (%)</b>	<b>Average Quarterly Growth Rate of Total Market Capitalization (%)</b>
1 <sup>st</sup> Quarter ending Jun-95	1.99	(4.52)
2 <sup>nd</sup> Quarter ending Dec-95	1.48	0.80
3 <sup>rd</sup> Quarter ending Jun-96	1.61	(0.02)
4 <sup>th</sup> Quarter ending Dec-96	1.62	11.61
<b>Average</b>	<b>1.67</b>	<b>1.97</b>

Source: Research data

The market capitalization trend of the total market was rising in the two-year period before the listing of Uchumi at the market. After privatization the total market capitalization rose sharply and maintained this level till 1994 when it started falling and rising. It rose sharply prior to the second share issue after which it has been rising and falling till 1996 when it experienced a sharp increase. This is shown in the graph below



**Graph 8: Market Capitalization Trend for Uchumi Compared to Total Market Before & After Privatization**



The correlation coefficient between Uchumi market capitalization and the total market capitalization was 0.8 (Appendix I). This implies that there was a strong relationship between the movement of the total market capitalization and Uchumi’s market capitalization. This was a positive relationship implying that as the Uchumi’s market capitalization was rising then the total market capitalization was also rising and vice versa.

**4.4.4 Public Share Issue of Housing Finance Company of Kenya Limited**

Housing Finance Company of Kenya, HFCK (later changed name to Housing Finance Company Limited) was listed at the stock exchange on 8<sup>th</sup> December 1992 after the initial public share issue. There was a second share issue in the year 1999 thus the number of shares in issue as at the year ending 2002 was 115,000,000.

The proportion of HFCK market capitalization to the total market in the first six months after the first share issue was 1.55%. In the second quarter it was 0.98% and 1.43% in the third quarter. In the last quarter it stood at 1.38%. Over the two-year period the average contribution to the total market capitalization by HFCK was 1.34%.

The market grew at a rate of 8.92% in the first quarter and further by 12.34% in the second quarter. The growth rate then started falling and the market grew at 8.67% and 6.01% in the third and fourth quarter respectively. Over the two-year period the average growth rate was 8.83%. This is summarized in Table 10 below.

**Table 10: Proportion of Housing Finance Capitalization to Total Market Two Years After the 1<sup>st</sup> Public Issue of Shares**

<b>Quarter</b>	<b>Average Quarterly Proportion (%)</b>	<b>Average Quarterly Growth Rate of Total Market Capitalization (%)</b>
1 <sup>st</sup> Quarter ending Jun-93	1.55	8.92
2 <sup>nd</sup> Quarter ending Dec-93	0.98	12.34
3 <sup>rd</sup> Quarter ending Jun-94	1.43	8.67
4 <sup>th</sup> Quarter ending Dec-94	1.38	6.01
<b>Average</b>	<b>1.34</b>	<b>8.83</b>

Source: Research data

Upon the second public issue, the proportion of HFCK's market capitalization to that of the total market was 1.32% in the first quarter. This has been declining in the subsequent quarters. The average proportion of HFCK's market capitalization to the total market capitalization for the two-year period was 1.09%.

The total market capitalization has been falling over this period after the second public share issue. Over the two-year period the average rate at which the total market capitalization was growing fell to negative 0.93%. This is summarized in Table 11 below.

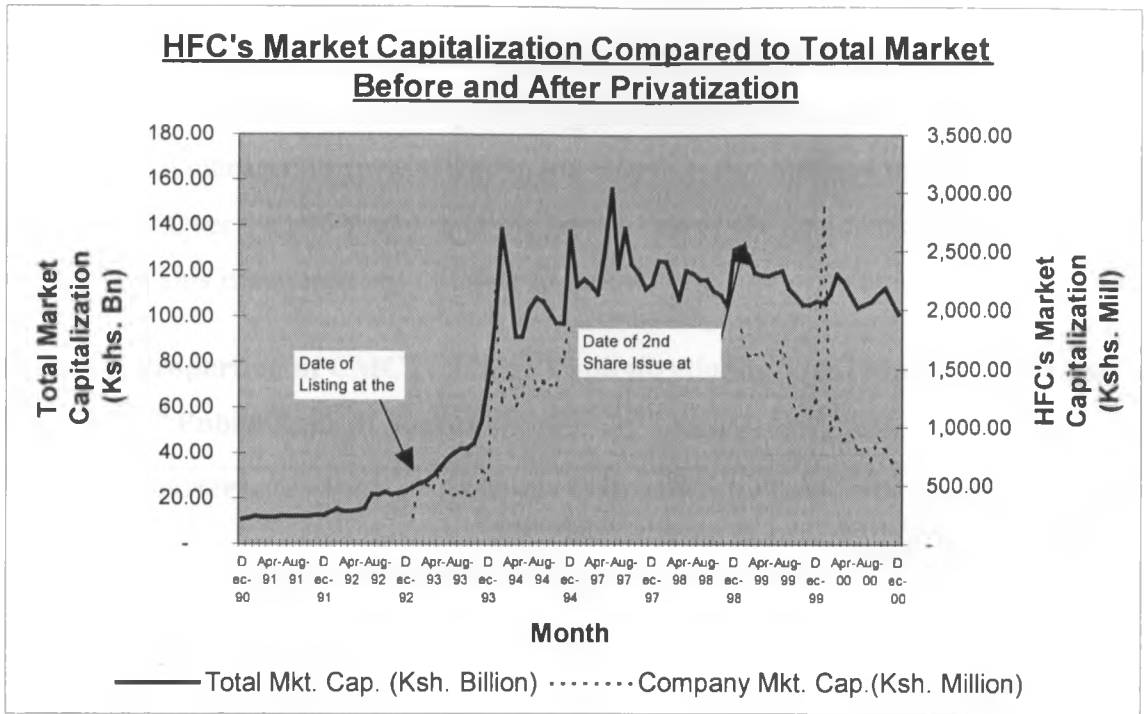
**Table 11: Proportion of Housing Finance Capitalization to Total Market Two Years After the 2<sup>nd</sup> Public Issue of Shares**

<b>Quarter</b>	<b>Average Quarterly Proportion (%)</b>	<b>Average Quarterly Growth Rate of Total Market Capitalization (%)</b>
1 <sup>st</sup> Quarter ending Jun-99	1.32	(1.30)
2 <sup>nd</sup> Quarter ending Dec-99	1.17	(1.76)
3 <sup>rd</sup> Quarter ending Jun-00	1.15	(0.34)
4 <sup>th</sup> Quarter ending Dec-00	0.71	(0.34)
<b>Average</b>	<b>1.09</b>	<b>(0.93)</b>

Source: Research data

The total market capitalization was rising prior to the first issue of HFCK's shares. With the listing of HFCK at the market the total market capitalization has been rising at the same time as that of HFCK's market capitalization. Over the first two-year period HFCK market capitalization and the total market capitalization has been moving in the same direction. After the second public issue both the total market capitalization and HFCK's market capitalization has been declining but HFCK's market capitalization briefly rose sharply in early 2000 then settled back to its downward trend.

**Graph 9: Market Capitalization Trend for Housing Finance Company Compared to Total Market Before & After privatization**



The correlation coefficient between the total market capitalization and HFCK market capitalization was positive 0.69 (Appendix I). This implies that there was a fairly strong relationship in the movement of total market capitalization and that of HFCK's market capitalization. Thus as total market capitalization was rising HFCK's market capitalization was also rising and vice versa.

**4.4.5 Public Share Issue of CMC Holdings Limited**

CMC was listed at the stock market in 1950. There was a second floatation of shares at the NSE in 1993 making the number of shares in issue as at the year ending 2002 to be 24,279,560.

In the first quarter after the second public share issue of CMC the proportion of the enterprise market capitalization to total market capitalization was 0.38%. It fell in the second quarter to 0.28% then rose to 0.40% and 0.60% in the third and fourth quarters

respectively. Over the two-year period the proportion of CMC market capitalization to the total market was 0.41%.

The total market capitalization grew at a rate of 8.38% in the first quarter after the second share issue of CMC. In the second quarter it grew further at a rate of 12.34% but started to decline and managed to grow at 8.67% and 6.01% in the third and fourth quarters respectively. Over the two-year period the growth rate of the total market capitalization was 8.85%. This is summarized in Table 12 below.

**Table 12: Proportion of CMC Holdings Capitalization to Total Market Two Years After the 2<sup>nd</sup> Public Issue of Shares**

<b>Quarter</b>	<b>Average Quarterly Proportion (%)</b>	<b>Average Quarterly Growth Rate of Total Market Capitalization (%)</b>
1 <sup>st</sup> Quarter ending Jun-93	0.38	8.38
2 <sup>nd</sup> Quarter ending Dec-93	0.28	12.34
3 <sup>rd</sup> Quarter ending Jun-94	0.40	8.67
4 <sup>th</sup> Quarter ending Dec-94	0.60	6.01
<b>Average</b>	<b>0.41</b>	<b>8.85</b>

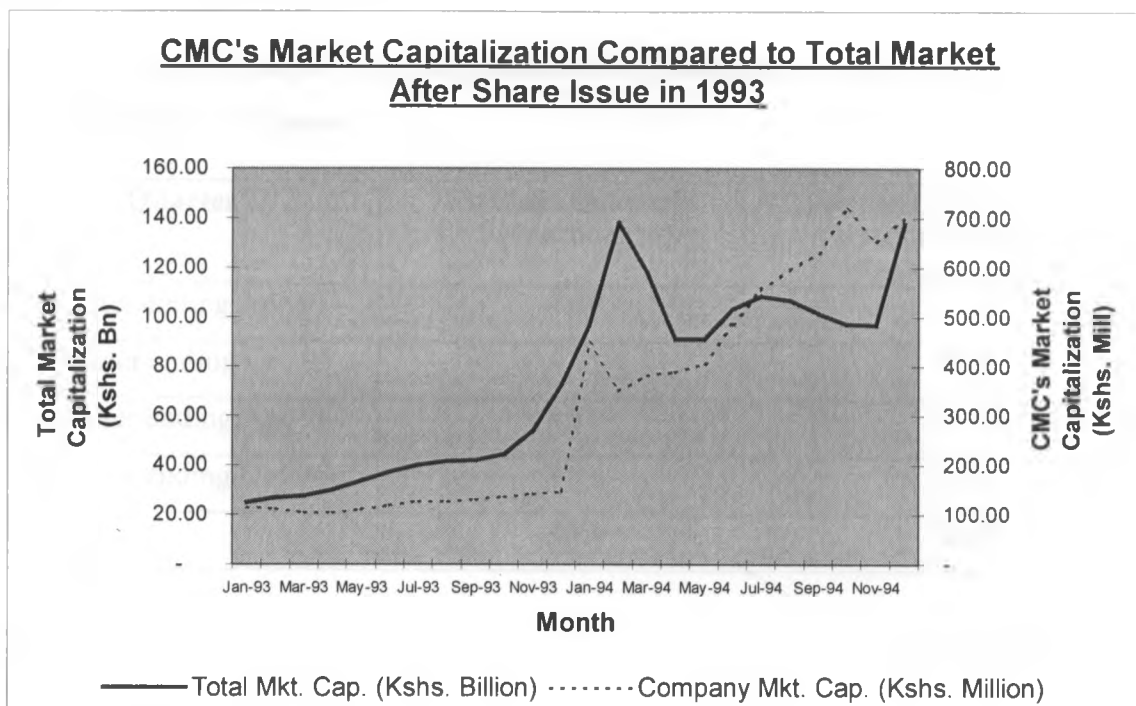
Source: Research data

The trend of the total market capitalization after the second share issue of CMC was rising steadily in the same pattern as that of CMC market capitalization. However, the market capitalization of CMC started rising much faster than the increase in the total market capitalization after 1993. This has since been the trend over the period under consideration.

The correlation coefficient between the total market capitalization and CMC market capitalization was positive 0.85 (Appendix I). This implies that there was a very strong positive relationship in the movement of total market capitalization and CMC's market

capitalization. As total market capitalization was rising then CMC market capitalization was also rising and vice versa.

**Graph 10: Market Capitalization Trend for CMC Holdings Compared to Total Market After Share Issue in 1993**



**4.4.6 IPO of National Bank of Kenya Limited Shares**

National Bank of Kenya (NBK) was listed at the stock market in 1994 after the initial public share issue. The number of shares in issue as at the year ending 2002 was 200,000,000.

The proportion of NBK's market capitalization to the total market capitalization in the first quarter after the first share issue was 3.39%. The proportion rose to 4.65% in the second quarter then started falling to 4.11% in the third quarter and 3.21% in the fourth quarter. Over the two-year period the average contribution to the total market capitalization by NBK was 3.84%.

The total market capitalization grew at a rate of 1.92% in the first quarter then fell over the succeeding two quarters by 0.8% in the second quarter and negative 1.24% in the third quarter. It slightly rose in the fourth quarter by 1.02%. Over the two-year period after the first public issue of shares the market capitalization grew by 0.62%. This is summarized in Table 13 below.

**Table 13: Proportion of NBK Capitalization to Total Market Two Years After the 1<sup>st</sup> Public Issue of Shares**

Quarter	Average Quarterly Proportion (%)	Average Quarterly Growth Rate of Total Market Capitalization (%)
1 <sup>st</sup> Quarter ending Apr-95	3.39	1.92
2 <sup>nd</sup> Quarter ending Oct-95	4.65	0.80
3 <sup>rd</sup> Quarter ending Apr-96	4.11	(1.24)
4 <sup>th</sup> Quarter ending Oct-96	3.21	1.02
<b>Average</b>	<b>3.84</b>	<b>0.62</b>

Source: Research data

The contribution of the NBK to the total market capitalization after the second public issue of shares was 4.11% in the first quarter of this period. The contribution however, declined over the rest of the period. It contributed 3.21%, 2.67% and 2.44% in the second third and fourth quarters respectively. On average NBK contributed 3.11% to the total market capitalization over the two-year period after second share issue.

The total market capitalization declined at a rate of negative 1.24% in the first quarter. It then started rising in the second and third quarters at a rate of 1.02% and 6.14% respectively only to fall again in the fourth quarter to grow at a rate of 2.56%. The average growth rate over the two-year period after second share issue was 2.12%. This is summarized in Table 14 below

**Table 14: Proportion of NBK Capitalization to Total Market Two Years After the 2<sup>nd</sup> Public Issue of Shares**

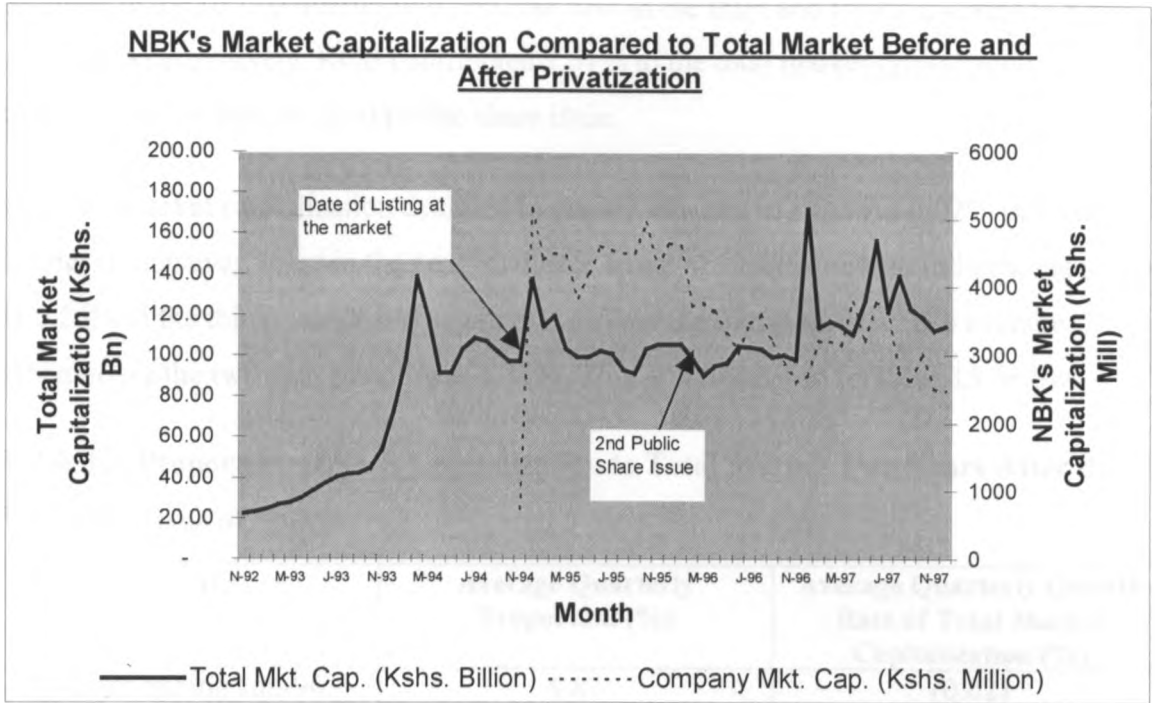
<b>Quarter</b>	<b>Average Quarterly Proportion (%)</b>	<b>Average Quarterly Growth Rate of Total Market Capitalization (%)</b>
1 <sup>st</sup> Quarter ending Apr-96	4.11	(1.24)
2 <sup>nd</sup> Quarter ending Oct-96	3.21	1.02
3 <sup>rd</sup> Quarter ending Apr-97	2.67	6.14
4 <sup>th</sup> Quarter ending Oct-97	2.44	2.56
<b>Average</b>	<b>3.11</b>	<b>2.12</b>

Source: Research data

Total market capitalization was falling before the listing of NBK at the market. Upon listing of NBK at the stock exchange both the total market capitalization and NBK's market capitalization rose dramatically. While NBK's market capitalization was fluctuating up and down that of the total market was fairly steady. Immediately prior and after the second public share issue NBK's market capitalization was falling and continued this trend well into the two-year period. The total market capitalization briefly rose sharply in early 1997 then started showing an erratic trend towards the end of the period.



**Graph 11: Market Capitalization Trend for National Bank Compared to Total Market Before & After Privatization**



The correlation coefficient between the total market capitalization and NBK's market capitalization was negative 0.13 (Appendix I). This implies that there was a low degree of relationship between the movement of the total market capitalization and NBK's market capitalization. However, the small relationship that existed was in the opposite direction. Such that as the total market capitalization was rising NBK's market capitalization was falling and vice versa.

#### **4.4.7 Public Share Issue of Kenya Commercial Bank Limited**

Kenya Commercial Bank (KCB) was listed at the stock market in 1989 after initial public issue of its shares. The company had a second subsequent floatation of shares at the stock exchange in 1990. There was another public issue of share in 1996 and the fourth public issue was in 1998. The number of shares in issue as at the year ending 2002 was 149,600,000.

Upon the third public share issue of KCB the percentage contribution of its market capitalization to the total market capitalization in the first quarter was 6.87%. This declined in the second quarter to 6.06% but rose in the third and fourth quarters to 8.8% and 8.32% respectively. KCB contributed 7.51% to the total market capitalization over two-year period after its third public share issue.

The total market capitalization declined in growth at a rate of negative 0.02% in the first quarter. It however, grew in the next quarter at a rate of 11.61% only to fall again at a rate of 0.26% in the third quarter and negative 4.41% in the fourth quarter. The average growth over the two-year period was 1.86%. This is summarized in Table 15 below.

**Table 15: Proportion of KCB Capitalization to Total Market Two Years After the 3<sup>rd</sup> Public Issue of Shares**

<b>Quarter</b>	<b>Average Quarterly Proportion (%)</b>	<b>Average Quarterly Growth Rate of Total Market Capitalization (%)</b>
1 <sup>st</sup> Quarter ending Jun-96	6.87	(0.02)
2 <sup>nd</sup> Quarter ending Dec-96	6.06	11.61
3 <sup>rd</sup> Quarter ending Jun-97	8.80	0.26
4 <sup>th</sup> Quarter ending Dec-97	8.32	(4.41)
<b>Average</b>	<b>7.51</b>	<b>1.86</b>

Source: Research data

The contribution of KCB to the total market capitalization after the fourth public share issue was 6.95% in the first quarter. The contribution has since been falling in the subsequent quarters to 6.21% in the second quarter, 4.68% in the third quarter and 3.73% in the fourth quarter. The average contribution over the two-year period after the fourth public share issue was 5.39%.

The total market capitalization grew marginally at a rate of 0.87% in the first quarter and 1.81% in the second quarter. However, the growth started declining in the third quarter at

a rate of negative 1.19% and negative 1.94% in the fourth quarter. The average growth rate over this period was negative 0.11%. This is summarized in Table 16 below.

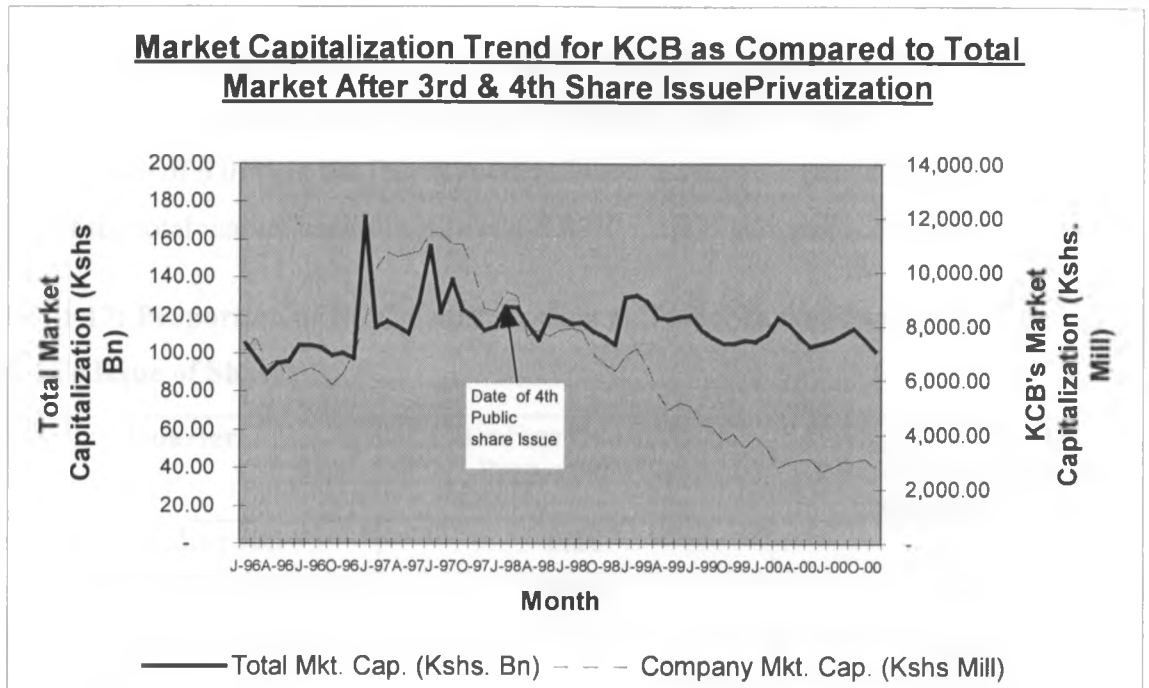
**Table 16: Proportion of KCB Capitalization to Total Market Two Years After the 4<sup>th</sup> Public Issue of Shares**

<b>Quarter</b>	<b>Average Quarterly Proportion (%)</b>	<b>Average Quarterly Growth Rate of Total Market Capitalization (%)</b>
1 <sup>st</sup> Quarter ending Jun-98	6.95	0.87
2 <sup>nd</sup> Quarter ending Dec-98	6.21	1.81
3 <sup>rd</sup> Quarter ending Jun-99	4.68	(1.19)
4 <sup>th</sup> Quarter ending Dec-99	3.73	(1.94)
<b>Average</b>	<b>5.39</b>	<b>(0.11)</b>

Source: Research data

The total market capitalization exhibited a steady trend immediately after the third public share issue. KCB's market capitalization was falling over this period then started rising sharply only to fall prior to the fourth public share issue. The total market capitalization trend was erratic and became stable after the fourth public share issue. KCB's market capitalization however, maintained its downward trend for the two-year period after the fourth public share issue.

**Graph 12: Market Capitalization Trend for KCB Compared to Total Market Before & After Public Share Issue**



The correlation coefficient between the total market capitalization and KCB's market capitalization was positive 0.44 (Appendix I). This implies that there was a weak positive relationship between the movement of total market capitalization and KCB's market capitalization. Such that when the total market capitalization was rising, KCB's market capitalization was also slightly rising and vice versa.

#### 4.4.8 Public Issue of Shares of BOC Kenya Limited

BOC (later changed its name to EA Oxygen) was listed at the stock market in 1969. The number of shares in issue as at the year ending 2002 was 19,525,000.

Following the public share issue in 1993 of BOC the percentage contribution to the total market capitalization in the first quarter of the two-year period after the issue was 0.88%. This proportion increased in the second quarter to 0.93%, in the third quarter to 1.4% and

in the fourth quarter declined to 1.36%. Over the two-year period the average contribution to the total market capitalization was 1%.

The total market capitalization grew in the first quarter at a rate of 8.29% and further by 12.34% in the second quarter. It declined in the third quarter to grow at a rate of 8.67% and at a rate of 6.01% in the fourth quarter. Over the two-year period the average growth rate of the total market capitalization was 8.83%. This is summarized in Table 17 below.

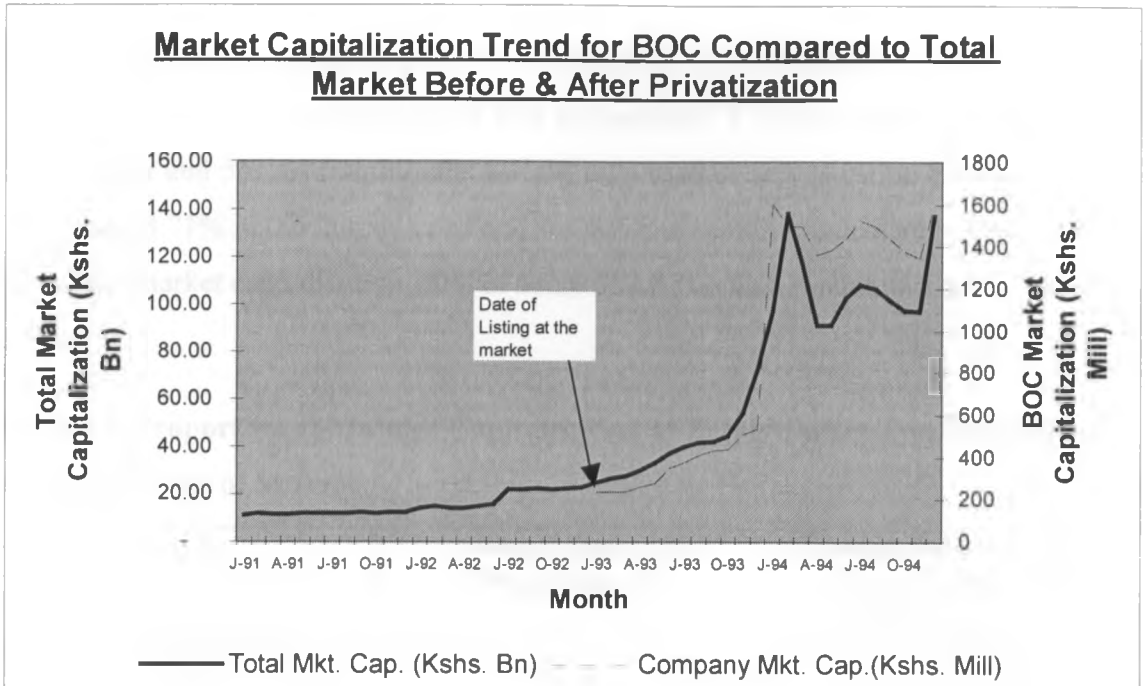
**Table 17: Proportion of BOC Capitalization to Total Market Two Years After the Public Issue of Shares**

<b>Quarter</b>	<b>Average Quarterly Proportion (%)</b>	<b>Average Quarterly Growth Rate of Total Market Capitalization (%)</b>
1 <sup>st</sup> Quarter ending Jun-93	0.88	8.29
2 <sup>nd</sup> Quarter ending Dec-93	0.93	12.34
3 <sup>rd</sup> Quarter ending Jun-94	1.40	8.67
4 <sup>th</sup> Quarter ending Dec-94	1.36	6.01
<b>Average</b>	<b>1.00</b>	<b>8.83</b>

Source: Research data

Total market capitalization before the public share issue in 1993 was rising steadily. It continued a steep rise after this issue and in late 1993. In early 1994 there was even a steeper rise in the total market capitalization. BOC's market capitalization after this share issue assumed a trend similar to that of the total market capitalization. Its market capitalization rose sharply in January 1994 and started gradual cyclic movements for the remaining period.

**Graph 13: Market Capitalization Trend For BOC Compared to Total Market Before & After Privatization**



The correlation coefficient between the total market and BOC’s market capitalization was positive 0.96 (Appendix I). This implies that there was a very strong relationship in the movement of the total market capitalization and that of BOC market capitalization. As the total market capitalization was rising then the BOC’s market capitalization was also rising and vice versa.

**4.4.9 IPO of Mumias Sugar Company Limited Shares**

After the initial public issue of shares, Mumias was listed at the stock market on 14<sup>th</sup> September 2001. The number of shares in issue as at the year ending 2002 is 10,000,000.

The contribution of Mumias to the total market capitalization in the first quarter after privatization at the stock market was 2.83%. The proportion however, started falling in the second quarter to 1.81%. It fell further in the third quarter and the last four months to

1.63% and 1.1% respectively. Over the period after privatization the average contribution to the total market capitalization was 1.84%.

The total market capitalization growth was declining in the first and second quarter at a rate of negative 0.11% and negative 0.47% respectively. This trend was reversed in the third quarter and the last four months and the total market capitalization grew at a rate of 7.36% and 8.71% in the third quarter and the last four months respectively. Over the period the market capitalization grew at a rate of 3.87%. This is summarized in Table 18 below.

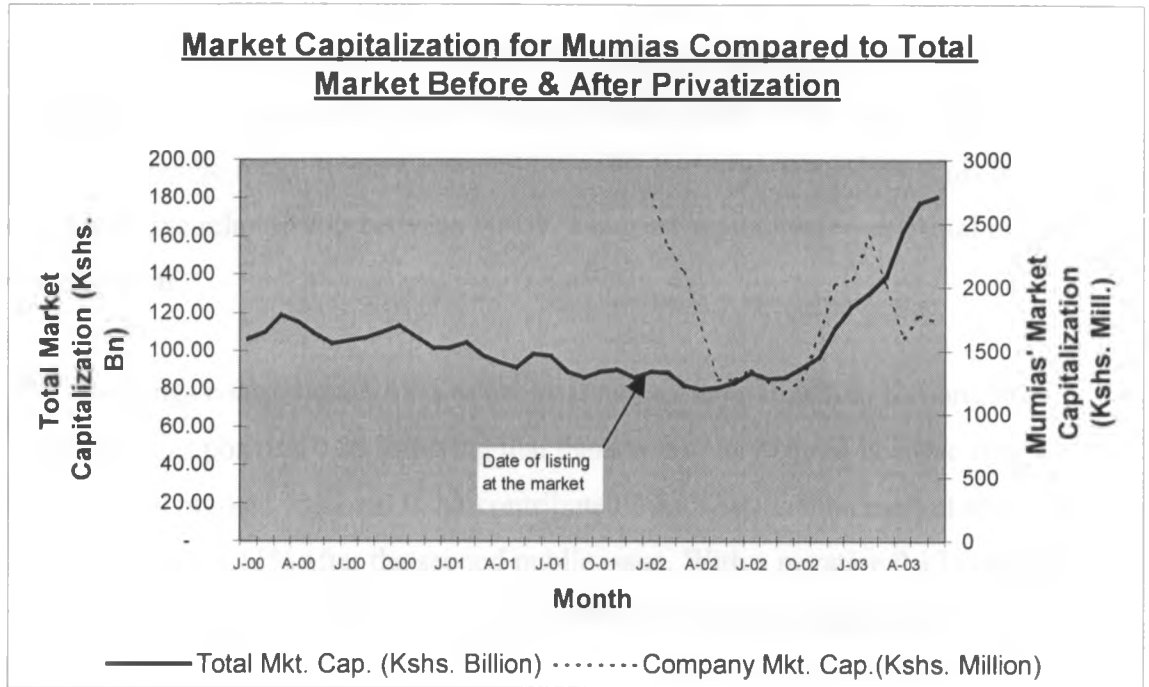
**Table 18: Proportion of Mumias Capitalization to Total Market Two Years After the Public Issue of Shares**

<b>Quarter</b>	<b>Average Quarterly Proportion (%)</b>	<b>Average Quarterly Growth Rate of Total Market Capitalization (%)</b>
1 <sup>st</sup> Quarter ending Feb-02	2.83	(0.11)
2 <sup>nd</sup> Quarter ending Aug-02	1.81	(0.47)
3 <sup>rd</sup> Quarter ending Feb-03	1.63	7.36
4 months ending Jun-03	1.10	8.71
<b>Average</b>	<b>1.84</b>	<b>3.87</b>

Source: Research data

The two-year period prior to the privatization of Mumias the total market capitalization was falling steadily until June 2002 when it assumed a gradual rise. Mumias market capitalization immediately fell after privatization until June 2002 when it stabilized and then started rising in October 2002. This trend was maintained for a while till early 2003 when the market capitalization started falling again.

**Graph 14: Market Capitalization Trend for Mumias Compared to Total Market Before & After Privatization**



The correlation coefficient between the total market and Mumias’ market capitalization was positive 0.19 (Appendix I). This implies that there was a very weak positive relationship between the movement in the total market capitalization and Mumias’ market capitalization such that if the total market capitalization was rising then Mumias’ market capitalization was slightly rising and vice versa.

**4.5 Summary of Company Analysis**

In the two-year period under study, Kenya Airways contributed 3.35% to the total market capitalization in an environment where the total market capitalization was growing at a rate of 2.49%. The correlation coefficient of negative 0.32 implies that Kenya Airways market capitalization was moving in the opposite direction from the total market capitalization. TPS Serena contributed 0.42% to the total market. With a positive correlation coefficient of 0.2, implies there was a low positive relationship with market.



Uchumi Supermarkets contributed 2.08% to the total market after the initial public issue. Its contribution however fell to 1.67% upon the second public issue. A correlation coefficient of positive 0.8 implies that the movement of Uchumi's market capitalization was having a very strong positive relationship with the total market capitalization. HFCK contributed 1.34% to the total market after the initial public share issue and 1.09% after the second public issue. It had a correlation coefficient of positive 0.69. This implied a strong positive relationship between HFCK's market capitalization and total market capitalization.

CMC Holdings contributed 0.41% to the total market capitalization. Its correlation coefficient was positive 0.85 implying that there was a very strong positive relationship with the total market. National Bank contributed 3.84% to the total market after the initial public offer and 3.11% after the second public issue. With a negative 0.13 correlation coefficient there existed a very low relationship with the total market and it was in the opposite direction.

Kenya Commercial Bank contributed 7.51% to the total market after the third public issue and 5.39% after the fourth public share issue despite a negative growth rate in the total market capitalization. KCB had a correlation coefficient of positive 0.44. Though implying a positive relationship, this relationship was quite moderate. BOC contributed 1% to the total market and had a correlation coefficient of positive 0.96. This was a very strong relationship in the same direction.

Mumias Sugar Company contributed 1.84% to the total market and with a correlation coefficient of positive 0.19 there was a weak relationship with the total market though in the same direction. This is further summarized in the table below.

**Table19: Summary of Company Analysis**

Company	IPO		Subsequent Issue	
	Contribution (%)	Market Growth Rate (%)	Contribution (%)	Market Growth Rate (%)
Kenya Airways	3.35	2.49		
TPS Serena	0.42	0.82		
Uchumi	2.07	8.83	1.67	1.97
HFCK	1.34	8.83	1.09	0.93
CMC	0.41	8.85		
NBK	3.84	0.62	3.11	2.12
KCB	7.51*	1.86	5.39**	-0.11
BOC	1***	8.83		
Mumias	1.84	3.87		

**Key:**

\* Third public share issue.

\*\* Fourth public share issue.

\*\*\* Second public share issue.

**4.6 Analysis of the Volume of Outstanding Shares**

This section sought to fulfill the third objective of the study of determining the extent of contribution of privatization programme to the quantity and range of issues of shares at the NSE.

The volume of shares outstanding has been growing over the years at an average growth rate of 22.46% in the period 1990 – 2001. The highest growth rate was in 1994 when the volume of outstanding shares grew at a rate of 77.94%. This could be attributed to the public share issue of 40,000,000 shares of Firestone, the initial public offer of 40,000,000 shares of National Bank of Kenya and the issue of 179,299,286 shares belonging to NIC

Bank. In 1996 the growth rate was 40.56%, which could be attributed to the floatation of 235,423,896 shares of Kenya Airways, second public issue of 40,000,000 National Bank's shares and the third public issue of 11,880,000 shares belonging to Kenya Commercial Bank (Appendix IV). In 2001 the volume of outstanding shares grew at a rate of 19.42% owing to the initial public offer of Mumias Sugar Company, which saw the floatation of 300 million shares. The average growth rate of volume of shares outstanding over the period 1990 – 2001 was 22.46%

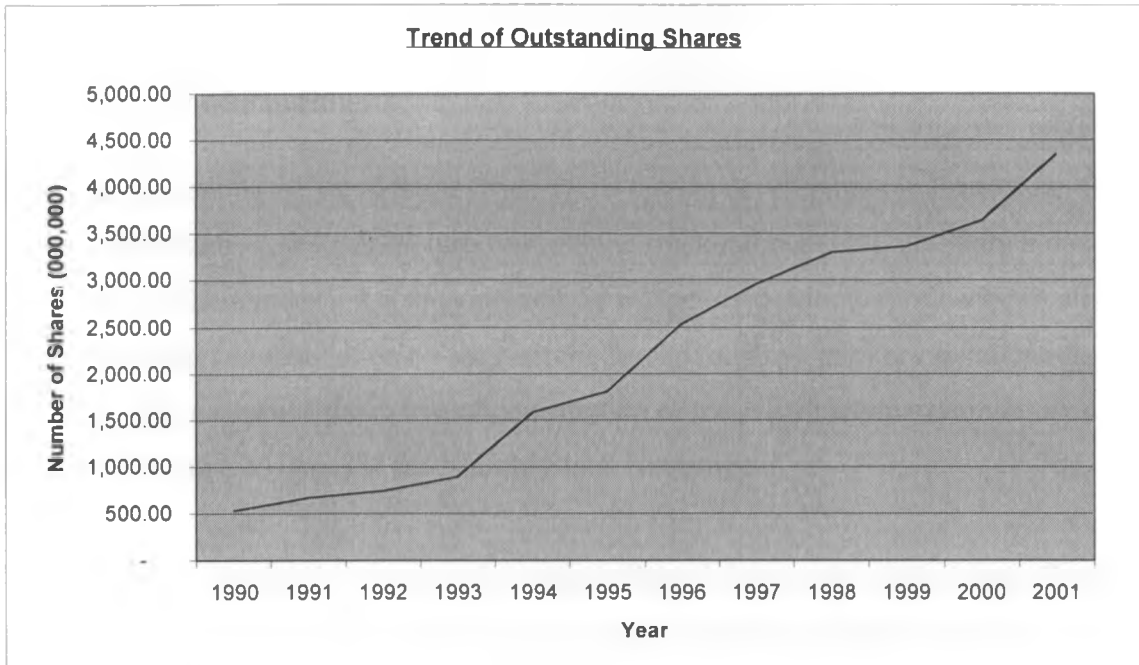
**Table 20: Trend of Outstanding Shares and the Growth Rate (1990 –2001)**

<b>Year</b>	<b>Shares Outstanding</b>	<b>Growth Rate %</b>
<b>1990</b>	531,830,846.00	
<b>1991</b>	668,429,849.00	25.68
<b>1992</b>	745,083,539.00	11.47
<b>1993</b>	890,833,931.00	19.56
<b>1994</b>	1,585,142,413.00	77.94
<b>1995</b>	1,800,606,660.00	13.59
<b>1996</b>	2,530,900,000.00	40.56
<b>1997</b>	2,965,430,000.00	17.17
<b>1998</b>	3,303,600,000.00	11.40
<b>1999</b>	3,360,400,000.00	1.72
<b>2000</b>	3,646,100,000.00	8.50
<b>2001</b>	4,354,300,000.00	19.42
<b>Average</b>		<b>22.46</b>

Source: Research data

Over the years the quantity of shares floated through the privatization process by the government has been growing from 16 million shares floated during the privatization of Uchumi Supermarkets to 40 million floated for National Bank of Kenya and 235,423,896 shares of Kenya Airways in 1996. The privatization of Mumias in 2001 saw the floatation of 300 million shares.

**Graph 15: Trend of Volume of Outstanding Shares of all Quoted Companies**



The volume of outstanding shares at the stock exchange has been increasing steadily over the period under consideration. Findings show that the quantity of shares issued at the stock exchange has been increasing with every new initial public offer. Subsequent share issues by the already privatized companies have also been increasing in quantity.

## **CHAPTER FIVE: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS**

### **5.1 Summary of Findings**

This study examined the trend that existed in the market development indicators i.e. the market capitalization, the market turnover and the stock indices (NSE 20 Share Index and AIG (EA) 27 Share index). It also examined the extent of contribution of each privatized enterprise market capitalization on the Nairobi Stock Exchange market capitalization. The study also examined the extent of contribution of the privatization programme on the quantity and range of issues at the Nairobi Stock Exchange.

In order to examine the above issues the study collected data on the market capitalization, market turnover and the stock indices from the Stock Market, respective company prospectus as well as the weekly reports from the daily newspapers.

This study utilized descriptive statistical analysis in showing the existing trend in the market development indicators. The study found that the market capitalization has been growing steadily over the years at an average rate of 35.5%. The trend in the market turnover has been cyclical with erratic movements within the cycles. Over the seven-year period (1995 - 2002) the average growth rate was 5.39%. The NSE 20 share index points has been growing at an average rate of 9.01% over the period 1991 – 2002. The AIG (EA) 27 Share Index has been having a constant trend over the years since inception. The growth rate however, has been quite erratic with lots of ups and downs. The index average growth rate for the period 1998 – 2002 was a negative 0.39%. The analysis of the market indicators shows that the market has been developing steadily over the years.

Kenya Commercial Bank made the greatest contribution to the total market capitalization during both its first and second public share issues at the Nairobi Stock Exchange. This occurred despite the fact that the overall market growth rate was at its lowest compared

to what was the case with the other enterprises. National Bank of Kenya was the second largest in its contribution to the total market capitalization despite a dismal growth rate in the overall market during the period it was floated to the public. CMC Holdings and TPS Serena contributed the least to the total market capitalization. However, all subsequent public floatation of shares at the stock market led to a decrease in the percentage contribution as compared to the previous public share issue.

Over the years the quantity of shares floated through the privatization process by the government has been growing in volume. Evidence also shows that the volume of shares of subsequent public issues of shares by the previously state owned enterprises increase in volume. Findings show that the quantity of shares issued at the stock exchange has been increasing with every new initial public offer. The quantity of share issued at the Nairobi Stock Exchange grew at a rate of 22.46% over the period 1990 to 2001.

## **5.2 Conclusion and Recommendations**

Evidence indicates that there was development in the capital market over the years since all the market indicators have been growing over time for the period under consideration. Further, the evidence also shows that the privatization of state owned enterprises contributes to the development of the capital market. There is also evidence that the movement in the market capitalization of the privatized companies affects that of the total market. The analysis also shows that the contribution to the total market capitalization by the privatized companies falls with subsequent public share issue. The quantity of shares issued also rises with subsequent public issue. Over the years the volume of shares floated at the market for initial public offer has been rising.

The study thus recommends that the government should be encouraged to undertake privatization of viable state-owned enterprises (SOEs) through the stock exchange rather than privatization through strategic investor channels in order to enhance the development of the capital market. The government should thus make development of capital market its primary objective in its privatisation programme.

### **5.3 Limitations of the Study**

1. There was lack of recorded data for privatized companies before the year 1990 and there were gaps in available data
2. The companies which were de-listed from the stock exchange were omitted from the study thus the findings should be interpreted with caution.
3. Time within which the project was to be completed and resources available were limited.

### **5.4 Suggestions for Further Research**

1. The scope of this study should be widened to cover other countries especially in the developing world like Africa in order to show the contribution of privatization to the development of the capital markets.
2. A study should be done to compare the proportion of a company's market capitalization to the total market capitalization in subsequent public share issue.

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## APPENDICES

### Appendix I: The Correlation Coefficients Between the Companies' Market Capitalization and the Total Market Capitalization

	<b>Company</b>	<b>Correlation Coefficient with the Total Market Capitalization</b>
1.	Kenya Commercial Bank	0.44
2.	Uchumi	0.80
3.	National Bank of Kenya	(0.13)
4.	Kenya Airways	(0.32)
5.	Tourism Promotion Services Serena	0.20
6.	Housing Finance Company	0.69
7.	BOC	0.96
8.	CMC holdings	0.85
9.	Mumias	0.19

Source: Research data

**Appendix II: Companies that Constitute the Calculation of AIG (EA) 27  
Share Index**

<b>No.</b>	<b>Company</b>
1.	Brooke Bond
2.	Sasini
3.	REA Vipingo
4.	Kakuzi
5.	Kenya Airways
6.	Uchumi
7.	TPS (Serena)
8.	Nation Media
9.	CMC
10.	Barclays Bank
11.	Standard Chartered
12.	KCB
13.	NIC Bank
14.	NBK
15.	Diamond Trust
16.	ICDCI
17.	Bamburi
18.	BAT
19.	EABL
20.	EA Portland
21.	Firestone
22.	KPLC
23.	KNM
24.	Total
25.	HFCK
26.	CFC Bank
27.	Unga Group

Source: AIG (EA) 27 Share Index presentation Dec 01

**Appendix III: Companies that Constitute the Calculation of NSE 20 Share Index**

<b>No.</b>	<b>Company Name</b>
1.	Brooke Bond Limited
2.	Williamson Tea Kenya Limited
3.	Kakuzi
4.	Sasini Tea and Coffee Limited
5.	Uchumi Supermarket
6.	Kenya Airways Limited
7.	TPS-Serena
8.	Nation Media Group
9.	Barclays Bank (K) Limited
10.	Diamond Trust Bank Kenya Limited
11.	Kenya Commercial Bank Limited
12.	Standard Chartered BANK Limited
13.	Bamburi Cement Limited
14.	British American Tobacco (K) Limited
15.	British Oxygen Company Kenya Limited
16.	East Africa Packaging Limited ( <i>to be removed</i> )
17.	East Africa Breweries Limited
18.	Firestone East Africa Ltd
19.	Kenya Power & Lighting Company Limited
20.	Total Kenya Limited

Source: NSE 2002 HANDBOOK



**Appendix III: Companies that Constitute the Calculation of NSE 20 Share Index**

<b>No.</b>	<b>Company Name</b>
1.	Brooke Bond Limited
2.	Williamson Tea Kenya Limited
3.	Kakuzi
4.	Sasini Tea and Coffee Limited
5.	Uchumi Supermarket
6.	Kenya Airways Limited
7.	TPS-Serena
8.	Nation Media Group
9.	Barclays Bank (K) Limited
10.	Diamond Trust Bank Kenya Limited
11.	Kenya Commercial Bank Limited
12.	Standard Chartered BANK Limited
13.	Bamburi Cement Limited
14.	British American Tobacco (K) Limited
15.	British Oxygen Company Kenya Limited
16.	East Africa Packaging Limited ( <i>to be removed</i> )
17.	East Africa Breweries Limited
18.	Firestone East Africa Ltd
19.	Kenya Power & Lighting Company Limited
20.	Total Kenya Limited

Source: NSE 2002 HANDBOOK

#### Appendix IV: Initial Public Offerings (I PO) at NSE 1990 – 2001

YEAR	COMPANY	SHARES FLOATED	ISSUE PRICE (KShs.)	SUBSCRIPTION RATE (%)	AMOUNT RAISED (KShs.)
1990	KCB	9,000,000	33.00	147.0	297,000,000
1991	KFC	3,261,970	12.50	110.0	40,800,000
1992	UCHUMI	16,000,000	14.50	103.2	232,000,000
1992	CROWN BERGER	8,638,000	16.00	104.0	138,000,000
1992	HFCK	18,000,000	7.00	400.0	126,000,000
1993	E A OXYGEN	1,600,000	26.50	100.0	42,400,000
1993	CMC	2,000,000	10.00	100.0	20,000,000
1994	FIRESTONE	40,000,000	33.50	101.0	1,420,000,000
1994	NBK	40,000,000	10.00	300.0	400,000,000
1994	NIC	179,299,286	52.00	77.0	718,000,000
1995	REA VIPINGO*	1,200,000	8.50	100.0	102,000,000
1996	REA VIPINGO	8,000,000	10.50	216.0	84,000,000
1996	KQ	235,423,896	11.25	194.6	2,664,000,000
1996	NBK	40,000,000	15.00	275.0	600,000,000
1996	KCB	11,880,000	50.00	150.0	560,000,000
1997	TPS	12,893,000	13.00	400.0	167,609,000
1997	ARM	23,000,000	12.25	250.0	281,750,000
1998	KCB	28,050,000	65.00		1,823,250,000
1999	HFCK	30,000,000	14.00	100.0	
2000	AFRICAN LAKES	4,000,000	94.50	150.0	378,000,000
2001	MUMIAS	300,000,000	6.25	60.0	1,125,000,000

\*Private Placement

Source: NSE 2002 HANDBOOK

**Appendix V: NSE 20-Share Index High and Low figures for the years 1971 to 2001**

YEAR	INDEX	MONTH	INDEX	MONTH
	HIGH		LOW	
1971	257.80	November	205.70	January
1972	264.00	June	230.50	October
1973	261.20	September	227.00	December
1974	243.60	March	174.30	December
1975	206.20	December	166.40	July
1976	229.40	December	187.30	July
1977	391.00	December	228.60	January
1978	441.80	August	396.10	January
1979	416.30	January	333.00	February
1980	385.80	September	352.80	January
1981	381.20	January	350.40	December
1982	359.70	July	343.50	October
1983	382.70	December	351.40	January
1984	386.60	November	383.00	January
1985	421.10	December	386.00	February
1986	506.00	December	423.20	January
1987	735.30	December	506.70	January
1988	858.40	December	751.68	January
1989	825.10	December	862.70	January
1990	930.60	November	799.53	February
1991	976.04	April	904.17	February
1992	1,098.07	November	941.18	January
1993	2,532.49	December	1,135.97	January
1994	5,137.08	February	2,533.89	January
1995	4,545.51	January	2,844.90	October
1996	3,449.66	January	2,897.43	April
1997	3,675.44	January	3,029.00	November
1998	3,388.56	January	2,510.77	November
1999	3,126.58	January	2,274.94	November
2000	2,313.75	January	1,832.50	December
2001	1,936.11	March	1,343.81	December

Source: NSE 2002 HANDBOOK

## Appendix VI: Time Series Data for Key Market Indicators

	N.S.E Index	Market Cap. (Kshs Bn.)	Shares Traded	Shares Outstanding (Kshs. Mill)	Turn- over ratio (shares) %	Value Traded (sales Mill)	Turnover ratio (Value)%	Number of Trans- actions (sales)	Av. Value per Transaction
<b>1990</b>	915.34	10.9	11,047,472	5,318.31	2.08	234.74	2.15	8,422	27,872.55
<b>1991</b>	958.29	12.71	16,648,404	6,684.30	2.49	301.52	2.37	8,742	34,490.87
<b>1992</b>	1,167.29	23.06	14,810,890	7,450.84	1.99	384.57	1.67	12,020	31,994.38
<b>1993</b>	2,513.74	72.39	27,292,007	8,908.34	3.06	824.31	1.14	17,885	46,089.23
<b>1994</b>	4,559.40	136.83	42,758,072	15,851.42	2.7	3,076.16	2.25	39,581	77,717.99
<b>1995</b>	3,468.88	112.88	59,385,414	18,006.07	3.3	3,345.30	2.96	54,280	61,630.46
<b>1996</b>	3,114.11	99.95	113,559.91	25,309.00	4.49	3,962.30	3.96	63,304	62,600.00
<b>1997</b>	3,115.14	114.31	43,583,761	29,654.30	4.84	6,148.50	5.38	80,546	76,300.00
<b>1998</b>	2,962.06	129.02	111,511,214	33,036.00	3.38	4,583.80	3.55	54,925	83,500.00
<b>1999</b>	2,303.18	106.74	157,487,473	33,604.00	4.69	5,158.10	4.83	45,887	112,400.00
<b>2000</b>	1,913.35	101.42	141,648,149	36,461.00	3.88	3,632.00	3.58	32,908	110,400.00
<b>2001</b>	1,355.05	86.1	109,191,240	43,543.00	2.22	3,121.00	3	28,225	110,100.00