

**A SURVEY OF OPINIONS ON USE OF BOOK BUILDING APPROACH FOR VALUATION
OF INITIAL PUBLIC OFFERS AT THE NAIROBI STOCK EXCHANGE**

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DECLARATION


I declare that this is my original work and has never been presented in any other college or examination body.

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This research project has been submitted for examination with my approval as the Nairobi University supervisor.

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Many thanks to the Almighty God for guiding me through the entire period of project making and to my family for their encouragement and support during this entire period

Many thanks too to my supervisors for their patience during this entire research period. You gave me the chance to see my best side.

In addition, thanks to my fellow staff members and friends for helping me with typesetting and proofreading of the document. This final document is as a result of your participation and input.

DEDICATION

This research project is dedicated to my family.

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ABSTRACT

There are three widely practiced approaches in pricing the initial public offerings (IPOs), namely public offer, tender or auction and book-building. To understand the dynamics of IPO pricing and the strategic information of prospectuses, it is important to recognize two separate streams of scholarly research. The first body of research examines the issue of IPO pricing, and whether or not new issues are regularly under priced or overpriced in the market. Often an IPO, or even a routine listing, will not proceed without firm commitments from institutional shareholders to purchase the designated shares. Book Building is basically a capital issuance process used in IPO which aids price and demand discovery. It facilitates adherence to the market fundamentals and foster transparency of the trading system used for marketing a public offer. Major fluctuations in prices, oversubscription and rush for IPOs in the recent times have been witnessed at the NSE and have been occasioned by high liquidity levels necessitating a move to book building of equity shares of a company.

The Objectives of the Study were to seek perceptions on use of book building approach for the valuation of IPOs at the NSE, to identify the techniques that companies employ in valuation of IPOs at NSE and to identify the challenges associated with use of book building approach for valuation of IPOs at NSE. This study will be of importance to investors, the public, regulators, the NSE and the government in helping investors and the public to redefine their existing policies and respond more proactively to their investments and other similar situations arising within the stock market. The research design used was a survey of firms that have issued IPOs at NSE. The population of study consisted of 55 companies which have issued IPOs in the Nairobi Stock Exchange, the Capital Markets Authority, and in various Stock Brokers firms. The study largely utilized primary data collected using open and closed ended questionnaires. The respondents were CEOs of respective companies or regulators. The data collected was coded and analyzed using a statistical analysis tool known as the Statistical Programme for Social Scientists (SPSS). From the findings the researcher concluded that the main advantage of the book building approach is that individuals play a major role in price discovery and is well suited for complex businesses that are either difficult to value or far removed from the public eye. The implication for IPOs is that book building may be unnecessary in the future given the timely access the internet offers to enumerable individual investors the public eye.

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CHAPTER ONE: INTRODUCTION

1.1 Background

There are three widely practiced approaches in pricing the initial public offerings (IPOs), namely public offer, tender or auction and book-building. The key difference between book-building and other IPO methods is that the book-building method gives underwriters control over the allocation of shares whereas others do not. Apart from the differences, all the mechanisms have one thing in common that is, pricing-relevant information is obtained directly from potential buyers in the primary market. Book-building, primarily used in North America in the 1980s, got momentum by the end of the 1990s, touched Europe, Asia and Latin America. However, public offer method is becoming less common worldwide except in smaller countries that rely mainly on retail investors while auction is becoming increasing rare.

Book-building dominates the IPO pricing mechanisms because it results in higher net proceeds, enables smaller and riskier firms to access public equity markets, enables issuers to raise larger amounts of capital, provides liquidity for early investors, places shares with preferred types of investors, and encourages underwriters to provide important aftermarket services. Book-building though is widely believed to be an expensive process compared to other alternatives. However, only cost differences between book-building and other approaches are not sufficient to outweigh the benefits investors perceive.

To understand the dynamics of IPO pricing and the strategic information of prospectuses, it is important to recognize two separate streams of scholarly research. The first body of research examines the issue of IPO pricing, and whether or not new issues are regularly under priced or overpriced in the market. This line of work draws primarily upon finance theory and its natural focus on the institutions and inner workings of equity markets. The second body of research comes from the world of entrepreneurship and corporate strategy. The primary argument here is that the strategies or business models of firms are critically important in understanding a new venture's success.

The paper develops a model of stock valuation and optimal IPO timing when investment opportunities are time-varying. IPO waves in the model are caused by declines in expected

returns, increases in expected profitability, or increases in prior uncertainty about average profitability. The model predicts that IPO waves are preceded by high market returns, followed by low market returns, and accompanied by high stock prices (stocks Kenya, 2006).

In the context of the restructuring of the public sector there has often been the dual requirement for a Strategic Equity Partner (SEP) and capital rising. The SEP would normally be expected to put up a significant portion of the required capital and assume management of the operations. To an extent, that was the scenario in the partial privatization and listing of Telkom a few years ago.

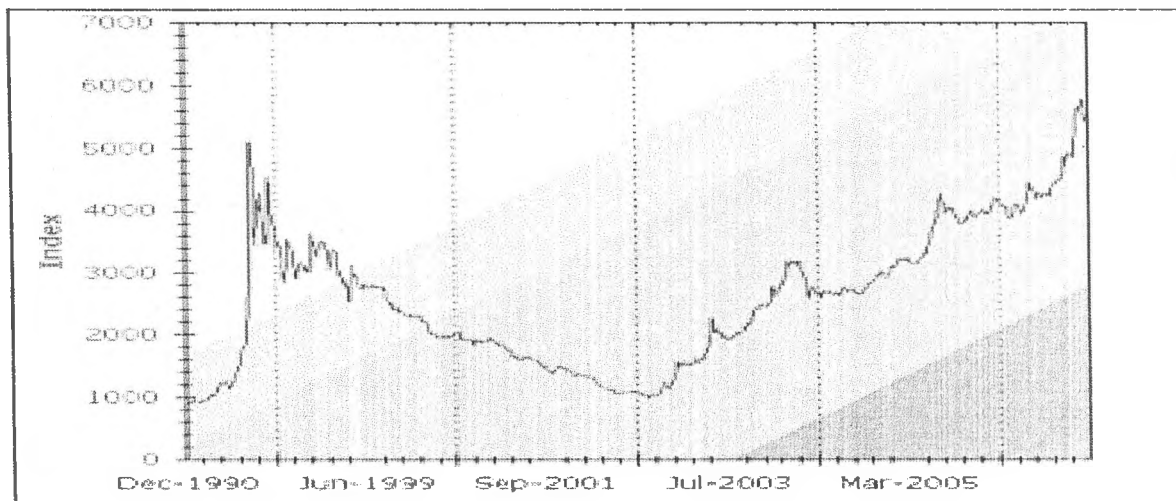
The government of Kenya recently conducted an initial public offering (IPO) with a difference. This was the public sale of a portion of its shareholding in the various companies which included Access Kenya Group, ScanGroup, Eveready East Africa, KenGen, Mumias Sugar and recently Kenya Re. The prospectus does not appear to set out any specific purpose for the IPO other than the furtherance of the government's policy of selling down its ownership in public entities and making members of the public shareholders. It is important to note that the IPO were not undertaken at the insistence of only the companies, but also at that of the shareholders, and the government.

While the government has caused some companies to list their shares to enable them to realize a portion of their investment, in the future, companies will bear all the costs associated with the listing of a public company, including additional reporting, corporate governance and general compliance with the requirements of the stock exchange.

The upside for companies is that instead of seeking a budget allocation from the government for funding shortfalls that it may experience, they can readily tap the capital markets for its capital expenditure requirements. They will, however, have to demonstrate viability and return to investors.

Often an IPO, or even a routine listing, will not proceed without firm commitments from institutional shareholders to purchase the designated shares. An underwriter to take up shares, in case the listing is not fully supported by prospective shareholders, is also a common feature.

Figure 1 NSE 20 Share Index since 1991



Source: 2006 stockskenya.com

From the graph, the NSE index had lowest troughs in 1992 and the end of 2002 when Kenya experienced a political wave that was characterized by a great anticipation of not only power changing hands but also other changes which the investors may not influence.

1.2 Book Building Approach

Book Building is basically a capital issuance process used in IPO which aids price and demand discovery. The method explores relevant market factors to discover the most appropriate price for an IPO listing in the stock market. It facilitates adherence to the market fundamentals and foster transparency of the trading system used for marketing a public offer of equity shares of a company. Bids are collected from investors at various prices, which are above or equal to the floor price. The process aims at tapping both wholesale and retail investors. The offer/issue price is then determined after the bid closing date based on certain evaluation criteria (Yava, 1996).

By offering stock for sale to the public, a company can access a substantial source of corporate funding. If a company needs to raise capital, it can sell stock (equity) or it can issue bonds (debt securities). A public company can contact more potential investors, which will increase its access to capital. An initial equity offering can bring immediate proceeds to a

company. These funds may be used for a variety of purposes, including growth and expansion, retiring existing debt, corporate marketing and development, acquisition capital and corporate diversity. Through a public offering, founders suffer less dilution when raising capital. Once public, a company's financing alternatives are increased. If investor interest in your company grows, you may obtain financing more easily in the future. A publicly traded company can return to the public markets for additional capital via a bond or convertible bond issue or secondary equity offering. A public status can also provide more favorable terms for alternative financing from public and private investors. In general, public companies have a higher valuation than private enterprises.

1.3 Statement of the Problem

Major fluctuations in prices, oversubscription and rush for IPOs in the recent times have been witnessed at the NSE. This has been occasioned by high liquidity levels necessitating a move to book building. Looking at the trend of the NSE 20 share index since the introduction of the multi-party system in 1992, it is evident that if investors anticipate change, the volume of trading reduces and the prices drop especially when there is an expected issue of new IPO.

Generally changes which occur very often have a profound impact on the stock market. Investors assume that changes will always adversely affect the bourse causing their returns to decline or even incur huge losses. Thus the periods just before or after a change are associated with a bear securities market.

Recent IPOs issued at the NSE there have been associated with oversubscriptions by would be investors. This has led to share allotment being restricted to a limited number and huge refunds to investors. Since most of the investors are short term investors, who are ready to move out of the market with slightest change in trends, they feel shortchanged and wait for the share prices to rise only after which they sell the shares and use the money or wait for another IPO issue which is also subsequently oversubscribed.

For the long term investors this is desirable not be a set back. For any changes in price, most short term investors start moving out. This pushes the share price down making the prices

cheaper and consequently undervalued. Long term investors can buy these undervalued shares cashing in on the change cycle.

This phenomenon seems to be caused by the valuation approaches involved in IPO's valuation. Major fluctuations have been witnessed in the IPOs issued in the recent past. This has been occasioned by high liquidity levels calling for a change in valuation of IPOs.

The kind of valuation witnessed at the NSE is more driven by consensus rather than the required valuation approaches and procedures supposed to be used (Yava, 1996). This is due to the eventualities that follow an IPO immediately after its offer. In an IPO, the issuers not only market and distribute the shares, but also determine a price at which the securities can be sold. There are three globally practiced methods for IPOs pricing. These are tender or auction, public offer (fixed price, open offer or universal offer), and book-building. Several studies have been done on various approaches to valuation. However, no known study has been undertaken on use of book-building for valuation of IPOs at the NSE. This study investigates the valuation approaches used by the companies which have recently issued IPOs. The study seeks opinions on use of book-building approach for IPO valuation, the extent of use of the book building approach, perceptions for the valuation of shares at the NSE and also identifies the challenges associated with the use of book-building approach for IPO valuation at NSE (Yava, 1996).

1.4 Objectives of the Study

1. To seek perceptions on use of book building approach for the valuation of IPOs at the NSE.
2. To identify the techniques that companies employ in valuation of IPOs at NSE.
3. To identify the challenges associated with use of book building approach for valuation of IPOs at NSE.

1.5 Research Questions

1. What is the extent of the use of the book building approach for valuation of IPOs at the NSE?
2. What techniques do companies employ in valuation of IPOs at NSE?
3. What challenges do companies experience in valuation of IPOs using the Book-building approach?

1.6 Justification of the Study

The study is aimed at contributing to research on book building valuation, and the impact on performance of IPOs issued. It is hoped that the study would be a part of efforts to improve on the current practice of IPOs pricing at the Nairobi Stock Exchange (NSE). In addition, the study will review general knowledge and current theories in IPO management as a basis for further research in the area and its impact on investments.

1.7 Importance of the Study

This study will be of importance to investors, the public, regulators, the NSE, and the government.

It is hoped that this study will help investors and the public to redefine their existing policies to be able to respond more proactively to their investments and other similar situations arising within the stock market.

Other users of the study include Regulators and the NSE. These parties will appreciate book building process as an alternative method of valuation of IPOs, and are likely to incorporate book building approach as a valuation approach in their works. Book building approach has been relegated to the periphery in Kenya as a valuation method. The government will also benefit in that the government may get an indication as to whether the stocks are properly valued by comparing the various valuation methods. The government may use the study in drafting guidelines that affect the NSE and the regulators.

CHAPTER TWO: LITERATURE REVIEW

2.1 Why Companies Go Public

2.1.1 Liquidity

By going public, a company creates a public market for its stock. In general, stocks in a public company is much more liquid than stock in a private enterprise. Liquidity is created for the investors, institutions, founders, owners and venture capital professionals.

Investors of the company may be able to buy or sell the stock more readily upon completion of the public offering. This liquidity can elevate the value of the corporation. The stock's liquidity is contingent on a variety of factors including registration rights, lock-up restrictions and holding periods. A public company has greater opportunity to sell shares of stock to investors. Ownership of stock in a public company may help the company's principals to eliminate personal guarantees. Liquidity can also provide an investor or company an exit strategy, portfolio diversity and flexibility of asset allocation (Weill, 2002).

2.1.2 Compensation

Many companies use stock and stock option plans to attract and retain talented employees. It is increasingly common to recruit and compensate executives with a combination of salary and stock. Stock in a public company can be issued as a performance based reward or incentive. This reward could be deemed desirable if the stock has a public market. Stock can be instrumental in attracting and keeping key personnel. Also, certain tax advantages are a consideration when issuing stocks to an employee. Generally, capital gains taxes are lower than ordinary income taxes. Owners and employees may have specific restrictions relating to the liquidity and sale of the stock. A public offering can create a market for the company's stock. This market can result in liquidity and reward for the company's employees. A stock plan for employees demonstrates corporate goodwill and allows employees to become partial owners in the company where they work. An allocation of ownership or division of equity can lead to increased productivity, morale and loyalty. This type of compensation is a way of connecting an employee's financial future to the company's success (Zhang, 2006).

2.1.3 Prestige

A public offering of stock can help a company gain prestige by creating a perception of stability thus improving the image of the company. A company's founders, co-founders and managers gain an enormous amount of personal prestige from being associated with a client that goes public. Prestige can be very helpful in recruiting key employees as well as marketing products and services. When sharing ownership with the public, the company spreads its reputation and increases its business opportunities. By selling stock on an exchange the company can gain additional exposure and become better known. This exposure may lead to improved recognition and business operations. The public status can be leveraged when marketing goods and services. Often a company's suppliers and consumers become shareholders, which may encourage continued or increased business. In this example, a public company could have a competitive advantage over a private enterprise. An IPO can indicate credibility to a company's customers, which may lead to increased sales and a greater corporate profile. Once public, lenders and suppliers may perceive the company as a safer credit risk, enhancing the opportunities for favorable financing terms. Also, a public offering can create publicity that is effective when marketing the company (Zhang, 2006).

2.1.4 Publicity

A public offering of stock can generate prestige, publicity and visibility, all of which is effective when marketing the company. Public companies are more likely to receive the attention of major newspapers, magazines and periodicals than a private enterprise. The proper use of press releases, interviews or news stories can increase investor awareness, shareholder value and demand for the stock. A strong Ad campaign coupled with media initiatives can potentially increase sales and revenue. The publicity received from a public offering encourages new business development and strategic alliances. Analyst reports and daily stock market tables contribute to the awareness of the consumer and financial community. A successful public offering can get your company's story out to the world and open an opportunity for investors that are not suited for an investment in a private company.

The publicity that a public offering brings can attract the attention of potential partners or merger candidates. Because the financial condition of a public company is subject to a higher scrutiny from the SEC reporting requirements, existing or future business relationships are strengthened. Tremendous exposure can be gained from a combination of radio, television, print and IPO publicity (Zhang, 2006).

2.1.5 Mergers and Acquisitions

Once a company goes public and the market for its stock is established, the stock can be considered as valuable as cash when acquiring other businesses. A successful IPO can have a dramatic effect on a company's profile, perceived competitiveness and stability. This perception can lead to expanded business relationships and added confidence by the consumer. A valuation of a private company often reflects ill-liquidity. A successful public offering will increase a company's valuation leading to a variety of opportunities for mergers and acquisitions. With the ability to raise additional capital by returning to the public markets for another offering, a public company is better able to finance a cash acquisition. A public company also has the advantage of using the market valuation when exchanging stock in an acquisition. SEC disclosure requirements offer merger candidates the assurance of shareholder scrutiny and accurate reporting of the financial condition or solvency of the public company. Using stock to acquire another company can be easier and less expensive than other methods. A public company's corporate strategy is outlined by annual reports and marketing brochures which encourage corporate growth, development and merger activity (Zhang, 2005).

2.1.6 Exit Strategy

One of the important benefits of a public offering is the fact that the company's stock eventually becomes liquid, offering reward and financial freedom for the founders and employees. Officers, directors and controlling shareholders may have a ready market for their shares, which means that they can sell their interest at retirement, for diversification or for other reasons. An IPO also creates a public market for the stock, which provides a potential exit strategy and liquidity to the investors. A psychological sense of financial success can be an added benefit of going public. A public offering can enhance the personal net worth of a

company's shareholders. Even if a public company's shareholders do not realize immediate profits, publicly traded stock can be used as collateral to secure loans (Zhang, 2005).

2.2 Mechanisms for pricing and Allocating IPOs

In an IPO, the issuers not only market and distribute the shares, but also determine a price at which the securities can be sold. There are three globally practiced methods for IPOs pricing, namely (1) tender or auction, (2) public offer (fixed price, open offer or universal offer), and (3) book-building. The following section discusses the three main methods for IPO valuation.

2.2.1 Auction

Auction requires the allocation of shares to be based on bids, without regard to any past relationship between certain bidders and the auctioneer. Then securities are priced and allocated according to explicit rules. Under auction or the open offer system, underwriters are free to do road shows and to ask for indications of interest. However, the auctions discriminatory pricing structure discourage bidding, making it difficult for underwriters to assess demand and limiting offering size; and due to low institutional involvement, pricing in the auctions was more heavily affected by market conditions than by fundamental value (Sherman, 2004).

Extensive theoretical research has established the superiority of auctions as a selling method in a wide range of circumstances. Sherman (2004) has identified the following situations where auction is most likely to be optimal for (1) large, well established companies; (2) companies with a large, dispersed customer or employee base; and (3) industries that are well established and widely understood.

Auctions were a well established selling method for IPOs in most parts of the world long before book-building was introduced. The two countries in which auctions are still the primary IPO method are Israel and Taiwan. Book-building is banned in Israel and it is restricted in Taiwan (Sherman, 2004). Among the several types of auctions, Brazil, Japan, the Netherlands, Singapore, Taiwan and the U.K. have used discriminatory auctions (pay what you bid), while Argentina, Australia, Brazil, Finland, France, Israel, New Zealand,

Norway, Singapore, Turkey, the U.K. and the U.S. have used uniform price auctions. Chile uses an auction on the exchange, which is similar to an English auction (open, ascending bid). Dirty auctions (where the price is set below market-clearing) have been used in Australia, Belgium, Finland, France, Hungary, New Zealand, the United Kingdom and the United States, and have been especially common for IPOs in Belgium, France and the U.K. (Biais and Faugeron-Crouzet 2002).

2.2.2 Public Offer

Public offer is also known as open offer or fixed price method as an approach where the offer price is set relatively early, before much information about the state of demand is known.

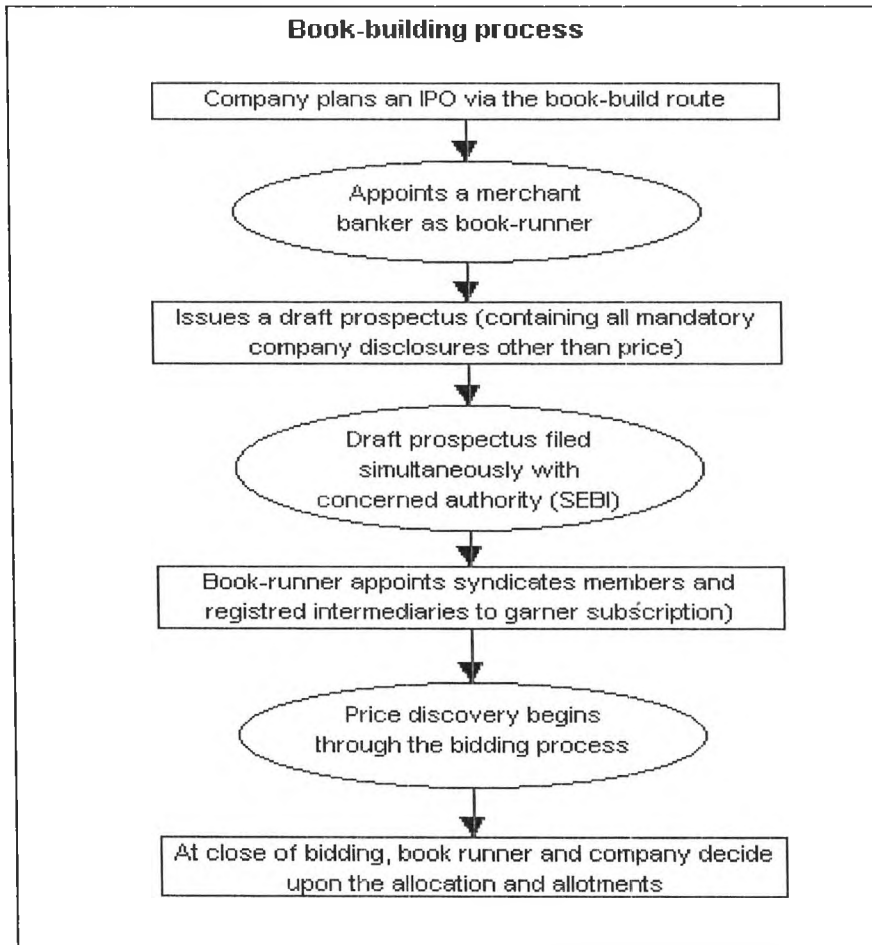
Orders are taken from investors who typically pay in advance for part or all of the shares that are ordered. In public offer, the issuer is allowed to price the shares as they wish. The basis for the price is explained in an offer document (e.g., prospectus) through qualitative and quantitative statements.

This offer document is filed with the stock exchanges and the registrar of companies. The open offer normally includes fairness rules which allow discrimination only on the basis of order size that may increase the cost of financing for issuers (Sherman, 2004).

2.2.3 Book-Building Method

Figure 2 Book Building and Price Decision

The entire book building process is illustrated in the chart below:



Source: Researcher 2007

Price discovery is basically a function of the demand for the stock at various prices. A weighted average of all the bids received is calculated to arrive at the final price. Sometimes, the pricing and allocation also takes into consideration the fact that the allotment should be made in such a way so as to leave some craving for the stock post its listing on the bourses, which would provide the support needed for the stock in its early days of trading.

Since this is a relatively new concept for the Kenyan markets, it will take some time for an average investor to grasp all the nitty-gritty's involved in the book building process. But then, one must remember, that Kenyan investors tend to adapt themselves quickly to changing systems and scenarios.

Book-building is a process by which an underwriter attempts to determine at what price an IPO should be offered based on demand from institutional investors. An underwriter builds a book by accepting orders from fund managers indicating the number of shares they desire and the price they are willing to pay hence the name. The book normally includes each bid submitted, the identity of the bidder, the number of shares (or dollar amount) requested, and any limit price. The book also shows the date when the bid was entered and any subsequent revision (or cancellation) of the bid. Underwriter retains sole discretion over allocation of the shares to investors.

Under Book-building, before setting the issue price for an equity offering, the investment bank sets a base price and a band within which the investor is allowed to bid for shares. Each bid is a request for a quantity of shares, and may include a limit price. In the U.S., book-building typically starts with the setting of a file price range, say \$14-16 per share, and the commencement of a road show that might last two weeks (Loughran and Ritter, 2002). The difference between the minimum and maximum price is almost always \$2. During the road show, institutional investors are canvassed in regard to the state of their demand. If there is unusually weak or strong demand, a revised price range might be filed with, say \$16-\$18 (in case of strong demand). The final offer price is set within the original file price range about 50% of the time, with about 25% of IPOs priced below the range and 25% above the range. This initial range is only indicative and the final issue price may be outside the band. Once the book building process is concluded, the investment bank aggregates the bids into a demand curve and chooses the issue price. Thus, the investment banker has a considerable amount of information available at the time he chooses the price.

The price is not set according to any pre-specified rule, but at the discretion of the investment banker in consultation with the issuing firm (Cornelli and Goldreich, 2003). The institutional investor(s) who submits the most aggressive bids to the book generally receive the largest

initial share allocations at the offering price and thus are in the best position to profit from a secondary market price increase.

Two types of book-building procedures are available: one is strictly equivalent to the American procedure, the other is a mixed book-building/fixed-price procedure (hybrid) in which the price and allocation rules are the same as in the book-building, except for a small fraction of the shares. Those shares, which are reserved for retail investors, are sold via a fixed-price procedure, at the price chosen in the book-building part of the offering. Hybrid book-building/public offer is perhaps even more popular than pure book-building. Hybrid offerings have been used by France, Hong Kong, Hungary, Indonesia, Malaysia, and the Philippines, among others (Kent, 2004).

2.3 Why Companies Use the Book-Building Approach to Value IPOs

Share prices are supposed to reflect confidence in the ability and capacity of a listed company to create more assets and wealth with available capital. This confidence is what determines and balances the demand and supply forces. There are various reasons why a company chooses to go through the book-building route when the conventional method (IPO) is still prevalent and the most apparent reason for this could be the price discovery mechanism, which is inherent in this process. Since institutional and retail investors have the option to bid for the equity, at or above a particular floor price, decided by the company in consultation with the merchant bankers, it helps the company realise the true value for its equity, or simply put, what the investors perceive the value (or rather intrinsic value) of the company to be. It also gives the company an insight into its credibility factor amongst the investors, which could be gauged by the demand generated for the purchase of equity up for sale. Also, through this route, the company saves on cost and time required to complete the issue.

There is an international trend toward increasing use of the U.S. book-building (firm commitment) method for IPOs (Sherman, 2000b). Book-building has been listed as an allowed method for pricing and allocating IPOs in many countries. To keep pace with the

global trend, Bangladesh is going to introduce this method replacing the existing year old lottery method.

Like other IPO methods, book-building has its merits and demerits. The book-building system is expected to attract good-performing local and foreign companies as they are ensured to have fair price for their shares. However, the critics have strongly opposed the idea as they believe the system will drive away general investors from the capital market and will serve the interest of the issuing companies only that may jeopardize the capital market's growth severely, which is evidenced from the recent scandals in the allocation of heavily under priced offerings in the United States, where book-building is widely practiced (Pons-Sanz, 2005).

2.4 The Rise of Book-Building

The book-building procedure for selling IPOs to investors has captured significant market share from auction alternatives in recent years, despite significantly lower costs in both direct fees and initial underpricing when using the auction mechanism. A number of papers have documented the decline of fixed-price mechanisms and auctions for selling IPOs in Europe, and the growth of book-building, such as Biais and Faugeron-Crouzet (2002), Sherman (2001), and Ljungqvist, Jenkinson, and Wilhelm (2003). Ljungqvist, Jenkinson, and Wilhelm (2003) examined 2,143 IPOs brought to market in 65 countries outside the U.S. between 1992 and mid-1999, of which about 1,300 involved a book building effort, that is, there is an international trend toward increased use of book-building method. By the end of the decade book-building had largely displaced traditional methods. What is more, this displacement took place even though the direct costs of book-building were about double those of local alternatives (Wilhelm, 2005). Sherman (2000a) reports that in 40 countries the book-building method of selling IPOs has increased and dominates other selling regimes.

Sherman (2004) has provided a broader list of countries regarding IPO pricing patterns. The initial impetus for the spread of book-building was the wave of privatizations, which were first made fashionable by Margaret Thatcher of the United

Kingdom. Privatization became popular in most parts of the world (including formerly communist Eastern Europe) in the late 1980s and the 1990s (Dewenter and Malatesta, 1997). Moreover, Sherman (2000a) concludes that book-building gives underwriter/issuer greater flexibility in designing a solution that reflects the individual issuer's preferences, generally leading to a more efficient outcome. Book-building also reduces uncertainty for both issuers and investors.

The allocation discretion given to underwriters in the book-building method is also what makes it possible for underwriters to have long-term relationships with regular investors. Benveniste and Spindt (1989) have illustrated the importance of long-term relationships to book-building IPOs. However, Sherman (2000b) shows that with costly information, a repeated setting allows the underwriter to lower the excess returns of uninformed investors, thus lowering the required level of underpricing and in this way discriminating in favour of a particular group of regular investors who will still receive abnormally large returns.

2.5 Book-Building versus other Mechanisms

There is a growing literature, both theoretical and empirical, that studies and compares the methods for marketing and pricing IPOs. At the centre of this literature are two commonly used methods (book-building and fixed price) that differ mainly in whether or not a price-discovery effort is undertaken prior to setting the offer price. However, book-building and auctions are distinguished by different sets of rules, with each set presumably designed to be optimal for the company and set of circumstances at hand.

Fixed price offerings are priced without first soliciting investor demand, with price discovery taking place mainly in the aftermarket. In contrast, book-building involves road shows and one-to-one meetings with potential investors that allow the underwriter to discover investor valuations prior to setting the offer price.

Moreover, if there is an oversubscription, allocation is pro rata in fixed price method and underwriter does not have any control over allocation like book-building. However, fixed price method has some similarities to book-building. For example, in both the methods, underwriter judges market conditions and underwriter/issuer set offering price.

Because auctions sell fewer shares on average, expected IPO proceeds are strictly higher for book-building, holding constant the amount spent on information acquisition. Regarding rules, book-building has its own too. But the difference is that the auction rules are explicit, whereas the book-building rules are implicit and provide considerable latitude for exercising human judgment (Benveniste and Wilhelm, 1997).

Book-building methods have resulted in a major change in the types of investors.

The auction system requires a wide distribution of new IPO shares among general investors, whereas under the book-building regime, the underwriter exclusively selects all investors without restriction as to their relationship to the firm or a limit as to the amount of new shares purchased. Thus, the auction methods objective of a wide distribution of shares among investors was dropped in favour of a more exclusive and underwriter-selected group of investors following book-building. This may be more efficient from an underwriter perspective, but the public policy objectives of a wide distribution of new shareholders and lower levels of initial return levels have not been achieved by the adoption of book-building methods in Japan (Kaneko and Pettway, 2001).

The riskiness of auctions, relative to book-building, is a major factor in their lack of popularity. Book-building allows the underwriter to co-ordinate the number of both informed and uninformed investors, ensuring that enough investors have an incentive to participate in and scrutinize the issue, and preventing random free riders from overwhelming the process. The reduced risk of book-building may be attractive even if it comes at the cost of greater under pricing (and its not clear, based on the empirical evidence so far, that auctions automatically lead to less underpricing).

Underpricing is an almost universal feature of the IPO market. Loughran, Ritter, and Rydqvist (1994) report that underpricing generally occurs in virtually all of the IPO markets around the world. In effect, IPO underpricing appears to be an obligatory cost to the issuer. However, some positive amount of underpricing appears to have positive benefits (Habib and Ljungqvist, 2001).

Several studies have confirmed that there is a difference in underpricing between auction and book-building system. Kutsuna and Smith (2001) shows that book-building may allow issuers to reveal their quality credibly to investors. Thus book-building allows them to obtain a higher price for their shares, but also entails a revelation cost that might take the form of higher underpricing. However, with respect to total issue cost, Kutsuna and Smith (2004) show that for large issues (by large, well-established firms), book-building is less costly than auctioning. For small issues (by small and young firms), auctioning is less costly. Allen and Faulhaber (1989), Grinblatt and Hwang (1989), and Welch (1989)

propose that the issuing firm in book-building, under prices IPOs to signal its quality so that the firm can subsequently issue seasoned equity at a higher price than would be the case without the underpricing signal. Rock (1986) and Beatty and Ritter (1986) show that the underwriter underprices IPOs to induce uninformed investors to purchase IPO shares. Baron (1982) and Muscarella and Vetsuypens (1989) show that the issuing firm lets the underwriter underprice IPOs to compensate itself for the use of its superior information about investor demand. Benveniste and Spindt (1989) shows that the underwriter uses underpricing and rationing as devices to entice selected investors in a road show to truthfully reveal their information.

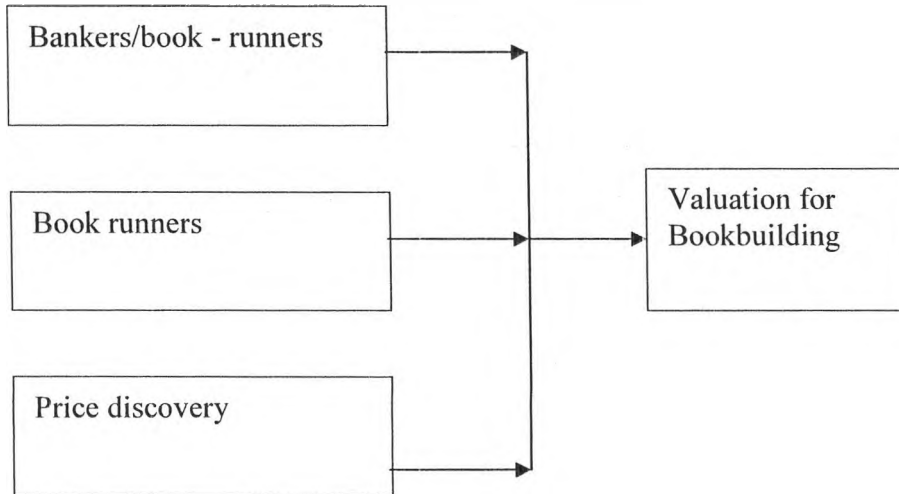
Regarding initial returns, Kaneko and Pettway (2001) shows in the Japanese capital market that auction pricing system produces significantly lower initial returns than does the book-building regime. The move from auction-priced to underwriter-priced IPOs in Japan has significantly reduced the wealth of issuing companies while increasing the wealth to underwriter-selected investors. The reason is initial price of the auction offerings incorporates more information about the current and recent past market conditions than in the book-building offerings (Derrien and Womack, 2003).

Finally, in a regime where all the methods are available, every issuer may select book-building even though collectively they would prefer an auction.

Kutsuna and Smith (2001) demonstrated in Japanese market that if book-building and auction are both available, and firms differ sufficiently in unobservable quality, some, and

potentially all, will select book-building, even if doing so results in higher average total issue cost and does not reduce underinvestment by enough to offset the higher cost.

2.5.1 Conceptual frame work



Source: Author (2008

Independent variable

Dependent Variable

Figure 2 above shows the conceptual framework used in the study. It shows the relationship between the Bookbuilding and Valuation of initial public offers.

CHAPTER THREE: RESEARCH METHODOLOGY

This chapter describes the methods that were used in collection of data pertinent in answering the research question. It is divided into research design, population and sample of the study, data collection and data analysis.

3.1 Research Design

The research design is a survey of firms that have issued IPOs at NSE.

3.2 The Population

The population of study consisted of the number companies which have issued IPOs between 1999 and 2007 in the Nairobi Stock Exchange, the Capital Markets Authority, NSE and Stock Brokers. There are 55 companies that have issued IPOs between 1999 and 2007.

3.3 Data Collection

The study largely utilized primary data collected using a questionnaire. The questionnaire consisted of both closed and open-ended questionnaires. The respondents were CEOs of respective companies/firms or the regulator. For responses that were not clear, follow-up interviews were conducted to seek clarification.

3.4 Data Analysis

The data collected was coded and analyzed using the statistical analysis tool known as the Statistical Programme for Social Scientists (SPSS) .Using this method, frequencies of responses from the companies were analyzed and interpreted to give the results of the study. Comparative analysis was undertaken to identify differences of views by quoted companies, CMA, NSE and Stock Brokers/Investment banks. The results are presented using tables, graphs and charts.

CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION

4.1 Introduction

This chapter presents the analysis of the data collected through semi-structured questionnaires. Fifty (50) questionnaires were sent to senior employees in companies which issued IPOs between 1999 and 2007 in the Nairobi Stock Exchange, the Capital Markets Authority, NSE and Stock Brokers. 44 questionnaires were collected from the respondents and all were used in the analysis. This represents 88% response rate.

4.2 Positions Held

The respondents were required to indicate the position which they served in the organisation. The results were as in table 1 below.

Table 1 Position held in the organisation

Position	Number	Percentage
General managers	21	47
Departmental managers	23	53
Total	44	100

The table above shows that 47 per cent of the respondents were general managers while 53 per cent were departmental managers. This finding indicates that most of the respondents were conversant with IPO valuation.

4.3 Advantages Associated With Book Building

The study sought to establish the main advantages of book building as perceived by different players in the industry. The main advantage is that the process aims at tapping both wholesale and retail investors. The offer/issue price is then determined after the bid closing date based on certain evaluation criteria. Price discovery is basically a function of the

demand for the stock at various prices. A weighted average of all the bids received is calculated to arrive at the final price. Sometimes, the pricing and allocation also takes into consideration the fact that the allotment should be made in such a way so as to leave some craving for the stock post its listing on the bourses, which would provide the support needed for the stock in its early days of trading.

4.4 Hindrances of Book Building as an IPO Valuation Method

The researcher sought to investigate the elements that hinder usage of bookbuilding as an IPO valuation method. The respondents were asked to show what they perceived as the major hindrance for use of book building approach in the NSE.

Table 2 Hindrances to the use of Book Building Approach

Stakeholder	Mean	STD DEV
The company	4.45	0.532
Facilitating banks	4.37	0.197
The public	4.23	0.146
The government	3.91	0.213
The NSE	3.23	0.236
Others	2.46	0.465

The findings indicate that the issuing company was considered as the biggest hindrance to the use of book building approach for IPO valuation. The other hindrances included the facilitating banks and the public while the government and NSE were not considered much of a hindrance for the use of book building. This can be attributable to the risk of under pricing which could adversely affect the price of an IPO.

4.4 Stakeholders Who Should be Involved in Valuation of IPO

The respondents were also asked to indicate stakeholders who should be involved in IPO valuation. Findings are presented in the table below.

Table 3 Stakeholders Who Should be Involved in IPO Valuation

Element	Mean	STD DEV
The company	4.45	0.532
Facilitating banks	4.37	0.197
The public	4.23	0.146
The government	3.91	0.213
The NSE	3.23	0.236
Any other	2.46	0.465

From the findings, it is evident that respondents felt that the company, facilitating banks and the public who are the investors should be the major stakeholders since they got a mean above 4. The government, NSE and other stakeholders were not found necessary to be included in the valuation of the IPOs. This can be attributable to the fact that the company, facilitating banks and the investors are the ones directly affected by the outcome of the valuation. The government and the NSE are facilitators and need not to be directly involved.

4.5 Other Valuation Approaches Available

A question was posed as to which other approaches of IPO valuation are available but are not used in the NSE. The approach that seemed to be widely used was the public offer which has been used in recent IPOs like Safaricom and KenGen. The other valuation approach of auction or open offer is not used. This can be attributable to the advancement in information technology of the Kenyan market and also the availability of information.

4.6 Usage of Book Building and Perception of IPO Valuation

The research was aimed at establishing the extent of the use of book building is applied in IPO valuation in Kenya. Using a likert scale, the respondent was required to indicate the extent of application of the steps indicated which were identified from the literature.

Table 4 Book Building and Perception of IPO Valuation

Factors	Mean	STD DEV
Book building is expensive to practice at NSE	4.45	0.532
There is conflict of interest among the major stakeholders	4.37	0.197
IPOs have affected stock trading at the NSE	4.73	0.146
Valuations is done freely and fairly	3.91	0.213
Book building should be used in IPO valuation	3.23	0.236
The public is shortchanged in IPO valuation	3.21	0.154
There is a lot of NSE intervention in an IPO	3.19	0.712
A company is solely responsible for its IPO valuation	3.17	0.459
Facilitating bank is responsible for a company's IPO	3.17	0.184
Book building is the best approach in IPO valuation	3.14	0.241
Most companies use book building in their IPOs at NSE	2.75	0.370
Book building is widely practiced at the NSE	2.62	0.355
Government is responsible for IPO valuation	2.57	0.211
There is a lot of government intervention in IPO valuation	2.57	0.377
Company suffers at IPO valuation	2.52	0.678
Government suffers at IPO valuation	2.46	0.465

According to the responses; book building is expensive to practice as there is a conflict of interest among the major stakeholders. IPOs have also affected trading in the NSE since this was by a mean of above 4 hence found to be significant.

4.7 Challenges Associated with Book Building Approach

The researcher set to determine the challenges that are associated with book building in valuation of an IPO. The major challenges were mentioned and were captured by the researcher are abuses related to the pricing and allocation of shares. But there may be additional reasons for its slow acceptance, including the lure of abusive side payments to corporate executives, made possible by the bookbuilding underwriter's discretion over share allocation.

4.8 Weaknesses in Current Laws on IPOs

The study sought to investigate the weaknesses in current laws regarding IPO valuation. From the respondents, the main weakness is the one that fails to combat collusion during a public issue in allocation or pricing of shares. The other weakness which respondents mentioned was failing to curb disclosure failures regarding all risks inherent in a company.

4.9 Future of IPO Valuation in Kenya

The study sought to investigate the future of IPO valuation in Kenya and from the findings, the respondents felt that the future of IPO valuation was in a hybrid method that incorporates book building and open offer bringing in the good qualities in each and minimizing the bad qualities in each. Respondents felt that since Kenya was a growing economy that embraces information technology, traditional book building do not perfectly fit the Kenya situation hence the need for a system that embraces information technology.

4.10 Complaints after an IPO

The study also sought to find out who the major complainants are after an IPO. The findings as indicated below are that most complaints are from the public, corporate buyers, stockbrokers brokers, banks, NSE, government and other companies listed at the NSE in that order

Table 5 Complaints After an IPO

Stakeholder	Mean	STD DEV
From the public	4.96	0.588
From corporate buyers	4.84	0.657
From stock brokers	4.72	0.762
From banks	4.47	0.331
From the NSE	4.41	0.331
From the government	4.37	0.452
From other companies listed at NSE	3.91	0.213

The findings indicate that the public, corporate buyers and stockbrokers are the most dissatisfied stakeholders after an IPO.

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of findings

The objectives of the study were to determine the extent of the use of the book building process in valuation of IPOs, at the NSE to identify the techniques that companies employ in valuation of IPOs at NSE, to seek opinions on use of book building approach for the valuation of IPOs at the NSE and to identify the challenges associated with book building approach on the IPO valuation at the NSE.

All the respondents were general managers or departmental managers in their respective firms. The findings indicate that most of the respondents were conversant with IPO valuation but according to the responses book building is expensive to practice as there is a conflict of interest among the major stakeholders.

The respondents indicated that the main hindrances to the use of book building in IPO pricing were the issuing company, the facilitating banks and the public or investors. The government, NSE and the stockbrokers in the NSE were not seen as a major hindrance.

The study also established that the investors that is the public and the institutional investors, the issuing company and the facilitating banks are the major parties that should be involved in IPO valuation.

The respondents indicated that the public, corporate buyers and the stockbrokers are usually the main complainants after an IPO. This can be attributable to the fact that they are the ones directly affected by the issue price of IPO. The other stakeholders are the government, NSE and the listed companies. These do not complain because they are indirectly affected by the price of the IPO.

The research findings also indicate that there are weaknesses in the current Kenyan laws governing IPO valuation mostly in combating collusion in allocation of shares and setting the issue price. The respondents felt that there are cases of corruption which should be dealt with stringently within the law to provide credibility to the book building method.

The researcher also established that to improve valuation of IPOs in Kenya, there must be a high degree of disclosure of all companies that are preparing to go public and all risks that are inherent in the company. This will give all the stakeholders the necessary information so that they can set a price on the company's shares.

5.2 Conclusions

From the findings the researcher concluded that the main advantage of the book building approach is that individuals play a major role in price discovery and is well suited for complex businesses that are either difficult to value or far removed from the public eye. Its main disadvantage is that it contributes to many of the abuses recently observed in investment banking.

One of the abuses is that offer prices have typically been under priced by material amounts.

The other abuse is that the underwriter has discretion over the share allocation, which always excludes the general population of individual investors but has occasionally included the abusive practices of spinning, laddering, or quid pro quo arrangements. Spinning involves preferential share allocations to the personal accounts of corporate executives in return for their company's future investment banking business. Laddering assigns preferential allocations to institutional investors in return for their commitment to buy additional shares in the aftermarket, and quid pro quo arrangements are similar, except that the institutional investors agree to pay excessive commissions in return for preferential allocations. The underwriting spreads in traditional book building are also seen to appear insensitive to competition and this is due to collusion by the investment banking industry.

The study also concludes that there are other valuation methods used in NSE. The one mostly used is the public offer while the auction method is rarely used.

The study also concluded that book building method faces hindrances mainly from issuing companies, facilitating banks and the public. For book building to be a success in Kenya, it must do away with the abuses associated with collusion in allocating shares and determining the issue price. Information should also be available to give prospective investors the information they require to make informed decisions on prices and the number of shares to bid for.

5.3 Recommendations

The implication for IPOs is that book building may be unnecessary in the future given the timely access the internet offers to enumerable individual investors. Internet auctions could result in lower fees and less under pricing than observed with book building, while still generating adequate information. In addition, less dependence on relationship-based networks in investment banking should reduce the opportunities for abuse. For example, spinning is not possible with an Open auction because share allocations are determined strictly by the auction results. The potential investors with access to the internet are now enumerable, and this has created the opportunity for vast innovations in financial markets and services. Thus, the Open auction appears to have definite potential under particular conditions, which suggests that it will survive to supplement, not substitute the book building method. In addition, some hybrid process should be invented that combines the information production of book building with the public access of the Open auction.

5.5 Areas for Further Research

For future research, the study recommends that a similar study be carried out on other valuation methods to establish their superiority or inferiority to the book building and other methods. The overall comparison of the methods against each other will aid conclusions regarding the best method that suits the Kenyan market and steps that can be taken to improve its workability.

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APPENDIX I: QUESTIONNAIRE

Book Building

Book Building is basically a capital issuance process used in IPO which aids price and demand discovery. The process used for marketing a public offer of equity shares of a company. Briefly, it is a mechanism where, during the period for which the book for the IPO is open, bids are collected from investors at various prices, which are above or equal to the floor price. The process aims at tapping both wholesale and retail investors. The offer/issue price is then determined after the bid closing date based on certain evaluation criteria.

STUDY QUESTIONNAIRE

1. Name of the firm _____
2. Age of the firm _____ years
3. Position of respondent in the company _____
4. Number of years the respondent has worked in the company _____
5. Department the respondent is working in _____
6. Please list the advantages associated with book building in your view
 - a.) _____
 - b.) _____
 - c.) _____
7. What are the challenges associated with book building
 - a.) _____
 - b.) _____
 - c.) _____

8. Please rate the statement below from strongly agree as 1 to strongly disagree as (5).

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
	5	4	3	2	1

Most companies use book building in their IPOs at NSE					
Book building is the best approach in IPO valuation					
Book building is widely practiced at the NSE					
Book building is expensive to practice at NSE					
Book building should be used in IPO valuation					
A company is solely responsible for its IPO valuation					
Facilitating bank is responsible for a company's IPO					
government is responsible for IPO valuation					
The public is shortchanged in IPO valuation					
Company suffers at IPO valuation					
Government suffers at IPO valuation					
There is a lot of government intervention in IPO valuation					
There is a lot of NSE intervention in an IPO					
Valuations are done freely and fairly					
There is conflict of interest					

among the major stakeholders					
IPOs have affected stock trading at the NSE					

9. Who are the major hindrances in using book building approach in the IPO valuation

- i) The company []
- ii) The government []
- iii) The NSE []
- iv) Facilitating banks []
- v) The public []
- vi) Any other (specify) _____

10. What are the major challenges that book building encounters in the valuation of IPOs as opposed to other approaches

- a.) _____
- b.) _____
- c.) _____

11. Who are the stakeholders who should be involved in the valuation of IPOs

- i) The company []
- ii) The government []
- iii) The NSE []
- iv) Facilitating banks []
- v) The public []
- vi) Any other (specify) _____

12. what are the (would) impacts of book building approach to the following

- i) The company
 - a.) _____
 - b.) _____
 - c.) _____
- ii) The government

a.) _____

b.) _____

c.) _____

iii) The NSE

a.) _____

b.) _____

c.) _____

iv) Facilitating banks

a.) _____

b.) _____

c.) _____

v) The public

a.) _____

b.) _____

c.) _____

vi) Any other (specify) _____

13. Who facilitated your IPO valuation at the NSE _____

14. Which approaches did they (it) advice you to use in the valuation

a.) _____

b.) _____

c.) _____

15. Which other approaches are there but are not practiced at the NSE

a.) _____

b.) _____

c.) _____

16. Please indicate how frequently did the company experience the following complaints after the IPO

	Not at all	Occasionally	Sometimes	Many times	All the times
	1	2	3	4	5
From the public					
From the government					
From other companies listed at NSE					
From the NSE					
From brokers					
From corporate buyers					
From banks					

17. What are some of the weaknesses in the current laws and regulations governing the IPO valuation in Kenya or at the NSE

- a.) _____
- b.) _____
- c.) _____

18. Please give your opinions on the future of IPO valuation in Kenya

- a.) _____
- b.) _____
- c.) _____

19. Please give your opinion on the future of book building process at NSE

- a.) _____
- b.) _____
- c.) _____

20. Give your suggestions on how to improve valuation of IPOs in Kenya and at the NSE

a.) _____

b.) _____

c.) _____

APPENDIX II: NSE registered brokers

Francis Drummond & Co. Limited

Ngenye Kariuki & Co. Ltd.

Dyer & Blair Investment Bank Ltd

Suntra Investment Bank Ltd

Francis Thuo & Partners Ltd (under statutory management)

Reliable Securities Ltd.

Nyaga Stockbrokers Ltd (under statutory management)

CFC Financial Services – Stock broking Division

Kestrel Capital (EA) Limited

Discount Securities Ltd.

Sterling Securities Ltd

African Alliance Kenya Securities.

Ashbhu Securities Ltd

Crossfield Securities Ltd

Apexafrica Investment Bank Ltd

Faida Securities Ltd.

Solid Investment Securities Ltd.

Standard Investment Bank Ltd

Bob Mathews Stockbrokers Ltd.