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Assessing Need and Level of Agreement among Market Participants in Adopting Book Building Pricing in Nepal

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ABSTRACT

This paper aims at assessing the need of book building pricing of IPOs as well as the level of agreement among market participants on its application in the context of Nepal. This study is based on a cross-sectional analysis of survey data of 71 respondents comprising 19 issue managers, 16 portfolio managers, six share registrars, 10 mutual funds, nine stock brokers and 11 retail investors, for the months of January and February 2020. Mainly, descriptive statistics and inferential statistics like one-way ANOVA have been used in the study to assess the need and level of agreement in adopting book building pricing. The study revealed that there is an urgent need of adopting book building mechanisms of IPO pricing in Nepal because the existing primary market is inefficient and there is a huge wealth loss of existing shareholders in terms of higher underpricing on equity offerings. The role of institutional investors followed by underwriters is found crucial especially to discover price band and final price i.e. cut-off price, of offerings under book building. Further, the level of agreement in adopting book building pricing in Nepal's capital market is positive because (i) the price band is determined with the active support of qualified institutional investors, (ii) it lowers the degree of underpricing of IPOs than that of par value method, and (iii) book building help prevents 'random free riders' from overwhelming the process of IPOs. Mainly, more active market participants, like issue managers, portfolio managers, and stockbrokers, have a high level of agreement in adopting book building pricing. The study findings associated with book building pricing are crucial and highly applicable in order to formulate policies and implementation of new pricing mechanism in Nepal. Implementation of book building pricing will contribute to reduce level of underpricing, attract real sector companies and/or foster the primary market efficiency in future.

KEYWORDS: IPOs, Book building pricing, underpricing, price band, cut-off price

INTRODUCTION

In the international arena, there is an ongoing debate regarding the best way to price and place initial public offerings (IPOs) of common stock. Bringing IPOs to market requires a process that would determine who would be the initial investors, how many shares each of them would obtain, and what price they would pay (Jagannathan et al., 2010). The possibilities of IPO pricing include mainly fixed price public offer, book building, and auctions as well as their various hybrids. Historically, fixed price public offer is the dominant approach of IPO pricing in the UK and its former colonies like India and Singapore, and in most of Europe (Benveniste & Busaba, 1997). Most US IPOs have traditionally been priced and sold using the book building method (Kumar, 2007), which has now been wider acceptance and becoming popular worldwide. In another case, auction pricing is originally allowed in Vietnam and sporadically used even in the US (Jagannathan et al., 2010). However, fixed price public offer is at the center of the debate because of acceleration in the number of IPO issues in some markets. Moreover, the movements toward privatization, which resulted in some unusually large issues amidst American book building is becoming the method of choice (Benveniste & Busaba, 1997).

In a fixed price public offer, the issuer will set the offer price of IPOs in consultation with the merchant banker or underwriter prior to the offer and allocation of stocks (Kumar, 2010). The offering price is established without first formally soliciting investor interest (Benveniste & Busaba, 1997). Investors, however, may apply for the IPOs at the stated offer price. In case of excess demand, shares are allotted on a pro-rata basis or on a lottery of draws. Jagannathan et al. (2010) stated that the price and allocation rules are set before information on demand is received and shares are allocated according to the rules announced earlier in fixed price public offers. In book building pricing, the issuer will only provide an indicative price range to the underwriter and the underwriter conducts road-shows especially to the institutional investors who give nonbinding indications of interest, known as book building process. Once the book building process is over, the issuing firm and the underwriter set an offer price of IPOs (Derrien & Womack, 2003). The underwriter possesses complete discretion in the allocation of shares once the offer price is arrived (Kumar, 2010). Similarly, the price sealed bid is used and auctioneer chooses the highest price in auction pricing of IPOs. Kumar (2010) stated that in a typical auction investors are invited to submit bids indicating both the number of shares and the price they are willing to pay and from the bids the market clearing price is determined. The shares will be issued to all the successful bidders at a uniform price, popularly known as Dutch auction that is set at the level of the bid of the lowest successful bidder. Thus, the auction price is based on investor bids, but unlike book building, auction allocations are usually determined by rules that are set, and publicly announced, prior to bidding, thus eliminating underwriter discretion with respect to allocations (Jagannathan et al., 2010). This mechanism is particularly successful for the largest security issue markets like the US treasury securities as well as frequently used for new preferred stock issues, particularly for government-owned entities, in the UK (Jagannathan & Sherman, 2006).

As stated above, different mechanisms of IPO pricing have their own features and merits as well. The pricing implications of each of these mechanisms will vary for both issuer and investors. The underpricing of IPOs of common stock under the fixed price public offer is higher than that of the book building mechanism since the interest of investors is ignored in the fixed price public offer; consequently, firms leave a considerable amount of money on the table while going public (Benveniste & Busaba, 1997). Derrien and Womack (2003) found that the auction mechanism is associated with relatively less underpricing and lower variance of underpricing.

Nepal has been adopting the fixed price method of IPO pricing since the inception of IPO market in 1936 while firms are going public through the offer of common stocks. A few studies like Dahal (2007) found 53.25 per cent market-adjusted excess rate of return of IPOs while it was extremely high i.e. 503.4 per cent by Subedi (2012). Similarly, Gurung (2019) found 276.87 per cent under pricing in IPOs of Nepal's enterprises. The expansion of primary market is rather difficult due to higher degree of under pricing and the ignorance demerits of existing par value method of pricing in Nepal. The real sector companies, in real sense, are not motivated due to such market problems. This paper, thus, has made an attempt to assess the need and agreement of market participants on book building pricing of IPOs in Nepal. Further, SEBON has also been making several efforts for implementing book building pricing in the Nepali IPO market. This study, therefore, will contribute to the field of book building pricing of IPOs in Nepal, in particular, in formulating policies associated with the new pricing mechanism.

REVIEW OF LITERATURE

Book Building and Price Discovery

Book building is one of the most important price discovery mechanisms that favor the market and/or investors' interest. The role of the underwriter and institutional investors is crucial in book building. The fundamental assumption underlying the use of this mechanism is that the underwriter has the best understanding of market conditions and an access to potential investors both institutional and non-institutional as to how much they are willing to pay for the shares for determining the final offer price of IPOs (Kumar, 2010).

An important step in the pricing process commences with the underwriter preparing the Red Herring Prospectus that contains *inter alia* an indicative price range (or price band) arrived at based on the valuations efforts of the underwriter and the minimum acceptable price for the issuer (Kumar, 2010). The underwriter conducts a pre-offer marketing effort in which it solicits non-binding indications of interest from potential investors (Benveniste & Busaba, 1997). Specifically, the underwriter or merchant banker engages in road-shows (or, presentations) to elicit non-binding contingent indications of interest (or, pre-orders) in terms of price and size of stocks within the specified band in the new issue from investors, many of which will be a large pool of institutions with formidable financing potential. A lead underwriter builds a book by accepting orders from investors indicating a number of shares they desire and the price they are willing to pay, hence the name. This process provides valuable information for setting the offer price. Once this period of book building is over, the books are closed and the underwriter and issuing firm will agree to a final offer price. The final price is determined which is the weighted average of all the bids that have been received by the underwriter. The final price is also known as the cut-off price or strike price. The price of IPO is, thus, not set according to any pre-specified rule, but at the discretion of the underwriter in consultation with the issuing firm (Cornelli & Goldreich, 2001). Once the final offer price is determined, the underwriter has complete discretion in the allocation of shares to the investors. Generally, the institutional investors who submit the most aggressive bids to the underwriter will 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. Thus, book building is an efficient mechanism of price discovery of IPOs. It helps reduce the information asymmetries that surround the IPO decision going public at a fair price.

Two types of book building procedures are most commonly used: One is strictly equivalent to the American procedure; the other is a hybrid book-building/public offer. In the former case, all the investors have an equal chance of bidding for price and then underwriter determines the offer price. Instead of general or retail investors, underwriter invites bids from certain eligible institutional bidders or investors in the latter case. Based on their bids, a weighted average of the prices is created and the cut-off price is decided. This cut-off price is then offered to the retail investors as a fixed price. Therefore, the bidding only happens at an institutional level and not at a retail level. Hybrid book building is also an efficient mechanism to discover prices. The costs and complications involved in conducting a hybrid book building are substantially low. Hybrid book building/public offer is perhaps even more popular than pure book building. Hybrid offerings have been used by France, Hongkong, Hungary, Indonesia, Malaysia, and the Philippines, among others (Jagannathan et al., 2010).

Book Building and other Mechanisms

There is a growing literature, both theoretical and empirical, that studies and compares the methods for marketing and pricing of IPOs. Bora et al. (2012) states that book building mechanism is preferred to the fixed price method for price discovery, though the fixed price mechanism is more promising in the long-run. When investors have correlated information, Benveniste and Busaba (1997) stated that the fixed price method is used as a strategy of creating cascading demand while an underwriter builds a book to aggregate investor information into the offer price before the offer is sold. Book building involves road shows and one-to-one meetings with potential investors that allow the underwriter to discover investor valuations i.e. indications of interest, prior to setting the offer price (Kakarni, 2008). The fixed price mechanism uniquely offers the potential to exploit the market structure by pricing the issue low enough to lure early investors and generate an immediate buying frenzy whereas the underwriter, by collecting and publicizing investor information, diffuses any possibility of a cascade paying a price in the form of issue underpricing to induce truthful indications of interest in book building (Benveniste & Spindit, 1989). As a result, book building generates higher expected proceeds than fixed price (Benveniste & Wilhelm, 1990; Spatt & Srivastava, 1991). It indicates that underpricing in book building is reasonably lower than that of fixed price mechanism. It results lower amount of money leaving on the table while going public under book building since underpricing is the cost of going public to the firms. As such, book building is a free pricing mechanism also known as market-oriented pricing of IPOs. In regard to allocations, certain rules are set before information on demand is received with a fixed price while the underwriter has substantial discretion over allocations, with those customers who helped in pricing the issue and those with long term relationships with the underwriter tending to get more favorable treatment under book building (Jagannathan et al., 2010). Additionally, issuing firm has the flexibility to revise price range or price band during the bidding period as well as there is freedom to revise the issue size of stocks based on the demand in the market (Kumar & Anees, 2012), which is not easier in the fixed price method.

Since IPO auctions are open to everyone, issuers can sell their new shares to a greater number of investors at a price, which more accurately reflects the market demand for the shares, significantly reducing the first day returns (Pukthuanthong et al., 2005). Derrien and Womack (2003) found that in the French IPO market, both the mean and variance of underpricing are lower for IPOs that have been priced and sold through auctions than book building. However, despite these advantages of the auction process, except France, Israel, Taiwan, and the US seem to have abandoned them entirely that have been used in more than half of the 50 countries of the world (Jagannathan & Sherman, 2006). By the late 1990s, the book building mechanism gradually replaced auctions in Europe and Asia. The reasons for book building becoming more popular are: a) book building is better at overcoming the informational frictions in the IPO process, between the issuer and investors that each party do not wish to share private information, which prevent issuers from achieving their goals (Benveniste & Spindt, 1989); b) the expected proceeds from book building are higher as there is a greater risk of under subscription in auctions when too few bidders chose to enter (Sherman, 2005); c) the marketing of IPOs under book building is to only a selected, arguable more sophisticated group of investors which may reduce the possibility of attracting 'free-riders' who have not carefully evaluated the IPOs and have little understanding of its value (Pukthuanthong et al., 2005; Sherman, 1993; Wilhelm, 2005); and d) IPO auctions fail to provide reasonable returns to investors because of high entry and over-bidding in one hand while low bidders becoming less willing to participate because they do not expect their entry and remain their poor access in IPOs on the other hand (Jagannathan & Sherman, 2006).

The IPO pricing mechanisms generally have found the following special features in terms of information, allocational discretion, IPO pricing, and underpricing.

Table 1
Comparison of IPO Pricing Mechanisms

	Auction	Book-building	Fixed-Price Public Offer
Information extraction from investors	Yes	Yes	No
Underwriter or investment bank has its discretion on allocation	No	Yes	No
Underpricing and its variance	Lowest	Low	Highest
Determination of offer price	Determined during subscription through different price bids	Determined before subscription	Determined before subscription

Source: Adapted and adjusted from Shengfeng (2010)

Kumar (2010) stated that the investors reward for truthful disclosure will typically takes the form of getting larger allocations and a little underpricing or any combination of allocation and underpricing and those investor who lie will get smaller or no allocations at all under book building. Further, Kumar viewed that book building with discretionary allocations will not only help price discovery in general but also benefits the issuing firms specifically by way of larger issue proceeds. Thus, book building is an efficient mechanism of price discovery of IPOs. It helps reduce the information asymmetries that surround the IPO decision, to go firm public relatively at a fair price.

Ljungqvist et al. (2000) using a sample of 2051 offerings from different countries observed that the average under pricing of the fixed price offers at 20.5 per cent fares similar to that of book built issues under pricing of 20.1 per cent. Derrien and Womack (2003) examined the French IPOs over the period 1992 to 1998 offered through book building, fixed price offer, and the auction modes. They documented that the underpricing levels as 16.9 per cent, 8.9 per cent and 6.5 per cent respectively, thus, concluding that auctions are a better way of pricing. Ranjan and Madhusoodanan (2004) documented that fixed price public offers were underpriced to a larger extent than book built issues during 1999 to 2003. Similarly, Bubna and Prabhala (2007) studying data that spans over 2000 to 2006 revealed that book built issues experience lesser underpricing than fixed price offers while the mechanism loses its efficiency once the underwriter is deprived of the discretionary allocation powers. However, Busaba and Cheng (2002) showed that unless the underwriter targets a small group of informed investors, a fixed price public offer is less costly than a book built offer and the former method can maximize the issue proceeds. Similarly, Kaneko and Pettway (2003) based on IPO performance documented that IPO returns from book built issues are significantly higher than those of auctions.

Book Building Practices

The book building mechanism was once rare outside the US but is now becoming common. Benveniste and Spindt (1989) suggest that the American book building procedure is efficient since it encourages investors to reveal their beliefs about the issue's value, at a cost of initial underpricing. Experimentation with book building exploded in the mid-1990s, and the method seems to have stuck in most countries, again as a hybrid with fixed price public offer (Jagannathan et al., 2010). In India, book building was first introduced in the 1990s but was not popular for many years. Eventually, after regulatory changes, book building became more popular, but in 2005 the Indian regulator began mandating pro-rata allocation among bidders, thus effectively banning book building. In 2009, book building came with the option of having "anchor" investors at the first stage before the public offer (Bubna & Prabhala, 2014). At the end of 2004, China Securities Regulatory Commission enacted the 'Circular on Several Issues Concerning the Book Building Procedures for IPOs', which marked the introduction of the free pricing mechanism in the Chinese securities market. Moreover, the 'Administrative Measures for Securities Issuance and Underwriting', was issued in September 2006 that explained the pricing and share allotment under book building. With the numerous amendments in regulations, the book building method was introduced on March 5, 2009 in Bangladesh to ensure the fair price in the IPOs for the entrepreneurs whose companies will go public (Rashida, 2013). The book building mechanism in IPO was initially introduced by the Securities and Exchange Commission of Pakistan in 2008 through amendments to the listing regulations of the stock exchanges. However, the provision of both fixed price and book building mechanisms of IPOs pricing have been found in Pakistan. Sri Lanka has also followed both fixed price and book building mechanisms of pricing IPOs. Price of IPOs under fixed price method and price band of IPOs under book building mechanism should be determined with the help of independent auditor and all the details of processes followed while pricing of IPOs should be disclosed through the prospectus in Sri Lanka (Tamrakar, 2019).

Most recently, SEBON has made a third amendment in its "Securities Registration and Issuance Regulation, 2073 (2016)" with the provision of implementing book building mechanism for initial public offerings of securities with effect from February 13, 2020 (2076/11/01). The regulation has explained about the provisions and necessary conditions for public issue through the book building mechanism along with defining the types of institutional investors such as a) listed corporate bodies; b) non-banking financial institutions established under the special act; c) mutual fund managers; d) mutual fund schemes; e) merchant bankers; f) eligible retirement funds; and g) other funds or company or organization as prescribed by the board. Similarly, SEBON has also made an amendment in "Mutual Fund Regulation, 2067 (2010)" with the provision of "Insurance company and non-banking financial institutions established with a special act can also operate mutual fund schemes." The new provision aims to increase the number of mutual funds and ensure involvement of more small investors in the capital market for productive investment. The amendments in these regulations aim at bringing a structural improvement in the primary market, consequently real sector companies can be attracted which ultimately help develop and expand the capital market of Nepal.

RESEARCH METHODS

This study seeks to assess the need of book building pricing of IPOs in Nepal. Descriptive research design was employed to assess the opinions of respondents with respect to the need and agreement of book building pricing of IPOs. The data employed in this study are completely quantitative in nature. The sources of data have been the primary one. The questionnaire survey was conducted to record the opinions, perceptions, and characteristics of issue managers, portfolio managers, share registrars, mutual funds, stock brokers and retail investors to assess the need and importance of book building pricing of IPOs in the primary market. A well-structured set of questionnaire was prepared to survey the responses of each of the respondents. The questionnaire contained questions of mixed types such as institutional details, closed-end multiple choice as well as dichotomous questions, ranking scales, and Likert scale items.

With a long series of discussion with the officers of SEBON, the study on the said topic was finalized. Similarly, the various pioneer papers, and seminal works and subsequent publications were thoroughly reviewed and the questionnaire was designed accordingly along with pilot testing of questionnaire with the five proposed respondents to ensure the validity of the study. Internal consistency of Likert scale items were measured using Cronbach's Alpha (0.661) that ensures reliability of the questionnaire.

This study has altogether 71 sample respondents. The sample comprised of 19 issue managers, 16 portfolio managers, six share registrars, and 10 mutual funds. Similarly, nine stock brokers and 11 retail investors were approached. The study is completely based on the purposive sampling method because the selected respondents were assumed as the experts of the primary market and expected the correct response on the questions since book building is completely a new concept in Nepal.

Descriptive statistics such as graph, percentage, mean, and standard deviation, minimum, and maximum values as well as composite or weighted average/mean and overall ranking on scale items responses were employed to assess the need and agreement on book building pricing. Further, the inferential statistics like one-way ANOVA for testing equality of mean level of agreement on book building pricing across various types of market participants was used for analysis.

However, the busy schedule of most of the respondents due to stock market booming during the data collection period, i.e. January and February 2020; the researcher could not cover the views of all the prospective respondents, and most of them were not fully aware about the concepts and issues of book building pricing mechanism since it is a new concept in the case of Nepal. Of the 113 questionnaires, only 71 were usable for the study, so the non-response rate was 37.17 per cent. Those who responded on the questionnaire might not have fully aware. This study also could not collect the opinions of a large set of general/retail investors. Operational issues of book building pricing were remained untouched though they have a lot of scope and use in implementing book building mechanism. These were some of the major limitations for this study.

RESULTS AND ANALYSIS

Assessing Existing Primary Market

IPOs have undertaken in the primary market. The history of the Nepali primary market is as old as the issuance of shares of Biratnager Jute Mills Limited in 1936. It became more extended only after the restoration of democracy in 1990. However, the primary market is primarily concentrated in equity issuance with regulated pricing or par value method even today. Only a few IPO issues were undertaken at premium prices in Nepal viz. Standard Chartered Bank Nepal Ltd at Rs. 1500 (2004), Nepal Telecom at Rs. 600 (2008), Chilime Hydropower Company Ltd at Rs. 408.36 (2011), Vaidya (2012) and Shivam Cements Ltd. at Rs. 200 (2019).

The opinions of respondents with respect to existing primary market of Nepal have been summarized in Table 2. The table shows the number and percentage of respondents with their responses on current position of Nepalese IPO market, existing regulations, role of institutional investors, market inclusiveness and pricing of IPOs. 'Frequency' represents the number of respondents and 'percentage' refers to the percentage of response in each response category out of total.

Table 2
Assessing Existing Primary Market

S.N.	Opinion	Frequency	Percent
1	*How do you assess the current position of Nepalese IPO market?*		
	Efficient	5	7.0
	Partially efficient	39	**54.9**
	Inefficient	27	38.0
2	*What is the level of adequacy of existing regulations of Nepalese primary market?*		
	Adequate	1	1.4
	Moderately adequate	46	**64.8**
	Inadequate	24	33.8
3	*To what extent the role of institutional investors presence in the primary market?*		
	Adequate	2	2.8
	Moderately adequate	14	19.7
	Inadequate	55	**77.5**
4	*Whether the IPO market is inclusive with wider opportunities of investment to the investors in Nepal?*		
	Yes	5	7.0
	No	66	**93.0**
5	*How do you assess the relevance of existing IPO pricing mechanism i.e. par value and/or premium pricing?*		
	Relevant	3	4.2
	Moderately relevant	41	**57.7**
	Irrelevant	27	38.0
6	*Is existing price discovery process of IPO efficient in Nepalese primary market?*		
	Yes	3	4.29
	No	68	**95.8**

Source: Questionnaire survey 2020

Table 2 shows that based on the opinion of respondents, the overall market does not seem efficient. The majority of the respondents opined that the existing price discovery process of IPOs is inefficient in the Nepali primary market as it has still been adopting regulated pricing. To sum, existing regulatory frameworks, presence of institutional investors, and the market coverage of IPO in the primary market have been still lagging behind which directs to the ultimate overwhelming of the market.

Preference for Pricing Mechanisms

Internationally, three different approaches have been used to price the securities: fixed pricing, book building, and auction in which book building and auction come under free pricing methods of IPOs. In some markets, for example in Bangladesh, listing by the pricing approach has also been followed where the stock market determines the IPO price in the secondary market itself.

Table 3 shows the responses on pricing mechanisms that seems appropriate to the Nepali primary market. ‘Frequency’ represents the number of respondents and ‘percentage’ refers to the percentage of response in each response category out of total.

Table 3

Preferences for Pricing Mechanisms

Pricing mechanisms	Frequency	Percent
Fixed price public offer	3	4.2
Book building pricing	61	85.9
Auction pricing	3	4.2
Secondary market pricing	4	5.6
Total	71	100.0

Source: Questionnaire survey 2020

Table 3 depicts that the majority of the respondents feel that the book building pricing mechanism will be the most appropriate pricing of IPOs in the primary market of Nepal. It indicates that the issue price of IPO would better to obtaining market feedback rather than other ones. Under book building, pricing of IPOs is fair because it helps to gather and report the optimal level of information required for fair price discovery, and hence it lowers the degree of underpricing of IPOs in comparison to the fixed price public offer (Shengfeng, 2010). Likewise, as the pricing of IPOs are relatively fair, the question of under subscription might not arise in book building.

Alternatives of Book Building Mechanism

The alternative book building mechanisms which can be applicable in Nepali primary market, and their responses is depicted in Figure 1. The figure shows the simple bar graph of various forms of book building pricing mechanisms. The vertical axis measures the frequencies in percentage and the horizontal axis measures the various forms of book building pricing.

Figure 1

Preference of Book Building Pricing Mechanisms

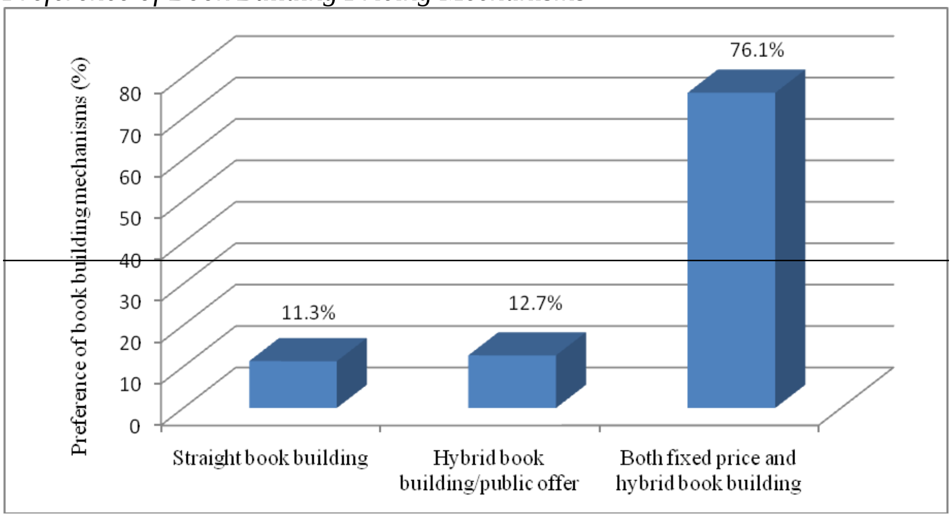


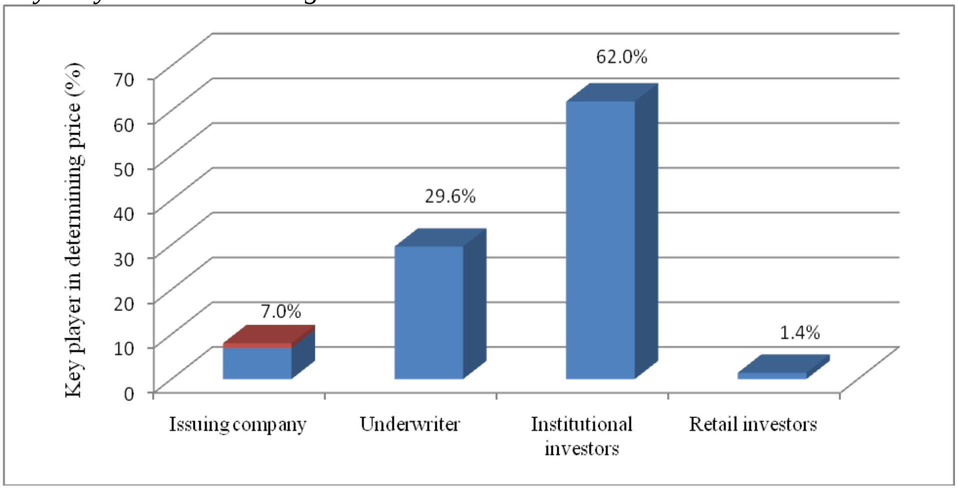
Figure 1 presents that the majority of respondents opined that the most appropriate alternative of pricing would be both fixed price and hybrid book building/public offer which accounts 76.1 per cent. This finding is consistent with the opinions of Karki (2016) and Phuyal (2016) in which they stated, "We can implement other IPO models rather than the 100 per cent free pricing since the Nepali stock market is yet to develop." It implies that as the market is just approaching to enter into a new pricing mechanism so it will not to better to apply only book building in practice rather both methods like prior fixed price as well as new hybrid book building/public offer should go hand in hand. In this regard, Vaidya (2012) further recommended that a fixed pricing method is proposed for companies offering shares to raise small capital while book building should be allowed to companies offering shares to raise capital more than the threshold amount.

Key Player(s) in Determining Price

Issuing firm, underwriter or lead manger (merchant banker), institutional investors, regulators as well as retail investors come into the picture during the course of price discovery. The study found that the institutional investors followed by underwriters could be the key players that discover price band and final price under book building which is depicted in Figure 2. The figure shows the simple bar graph of opinions on "As book building is one of the mechanisms of free pricing which has been widely used. In this regard, who would be the key player that discover price band and determine the cut-off price under book building mechanism?" The vertical axis measures the frequencies in percentage and horizontal axis measures the various types of market participants.

Figure 2

Key Player in Determining Price



Institutional investors have the capacity and zeal to work as the compelling force for the public companies to follow proper corporate governance and also can play significant role to safeguard retail investors' investments. The result shows that the role of retail investors in determining price is non-existent. Almost all the respondents (95.8 per cent) opined that institutional investors have a crucial role in the capital market development and effective application of book building pricing in particular since institutional investors are directly involved in road-shows with their 'indications of interest' at different prices within the underwriter's proposed price range and order size of IPOs (Benveniste & Spindt, 1989).

Merchant Banker's Role as Underwriter

Merchant bankers are licensed investment bank and regulated by Securities Board of Nepal (SEBON) under the Securities Related Act 2063 in Nepal. In regard to the role of existing merchant bankers, respondents of 45.1 per cent opined that they can play the role of underwriter or lead manager under book building. About 32.0 per cent respondents were unknown that whether they can perform the role of underwriter followed by 22.5 per cent respondents opined that they cannot undertake the role of underwriter under book building pricing. Their views like "Don't know" imply that respondents are not willing to express their views explicitly about the capacity of Nepali merchant bankers. These facts indicate that majority of the respondents viewed that Nepali merchant bankers are not capable in taking the responsibility of underwriter under book building. This also implies that the existing role and capacity of merchant bankers need to be strengthened for the adoption of book building pricing mechanism.

Table 6 shows the answer to the survey question, "Which of the following role of merchant bankers needs to be strengthened most from existing work mandates for book building pricing?" Please rank in order of their importance by assigning 1 to the most important one, 2 to the next important one and so on up to 7 to the least important one." Weighted mean rank for each work is presented in the table which is calculated as the sum of the product of the response percentage and the important value across all seven important values (i.e. 1, 2, 3, 4, 5, 6 and 7). For example, the weighted mean for the first row i.e. "managing public issues including IPO pricing" is calculated as follows: 0.380*1+0.437*2 +0.183*3 = 1.8. Also reported are standard deviations and overall ranks associated with each statement.

Table 6

Strengthening Work Mandates of Merchant Bankers

Strengthening roles of merchant bankers	Ranking of Importance (1 = Most Important; 3 = Least Important)			Weighted	Std.	Ranking
	1	2	3	Mean	Dev.	
Managing public issues including IPO pricing	38.0%	43.7%	18.3%	1.80	0.73	II
IPO grading to ensure issuing firm's quality and credibility	52.1%	31.0%	16.9%	1.65	0.76	I
Financial consultancy and advisory services to investors to make informed investment decisions	9.9%	23.9%	66.2%	2.56	0.67	III
Total	100.0%	100.0%	100.0%			

Source: Questionnaire survey 2020

Table 6 displays that 'IPO grading to ensure issuing firm's quality and credibility' appears the most important work that needs to strengthen among merchant bankers. This work accounts for 52.1 per cent of the responses ranked the number one. Of the responses ranked the number two in importance, 'managing public issues including IPO pricing' dominated the outcomes and accounted for 43.7 per cent of such replies. 'Financial consultancy and advisory services to investors to make informed investment decisions' is found to be a less important work that needs to strengthen among merchant bankers under book building pricing. As such, IPO grading of firms to ensure firm quality and credibility followed by IPO pricing would be the major work that needs to be strengthened among merchant bankers in order to effective application of book building pricing in Nepali primary market.

Book Building is a Tool to Motivate Real Sector Companies

IPO pricing mechanism in Nepal limits the role of market in determining the price. Consequently, the issue price does not reflect the true and fair price rather the prices are corrected only in the aftermarket (Vaidya, 2012). Underpriced and overpriced securities offerings, in effect, are the cost to the issuers and investors respectively. High underpricing of IPOs lead to the wealth loss of promoters as it represents the part of the cost of going public and this might have prevented the potential issuers from going public (Dahal, 2007) through book building. Subedi (2012) and Gurung (2019) found 503.44 per cent and 276.78 per cent underpricing of Nepali IPOs respectively and Vaidya (2012) and Upadhyay (2019) argued that such a high degree of underpricing has become one of the reasons of de-motivating firms from going public especially the real sector companies. Book building that lowers the degree of underpricing can be considered as one of the ways of motivating companies from real sectors of the economy into the capital market of Nepal.

Figure 3 shows the simple bar graph of opinions on, “Do you think that IPO pricing under book building mechanism motivates real sector companies to join in the main stream of capital market?” The vertical axis measures the frequency or percentage and the horizontal axis measures the options of possible answers from “Yes”, “No” to “Don’t know”.

Figure 3

Opinion on Motivating Real Sector Companies into Capital Market

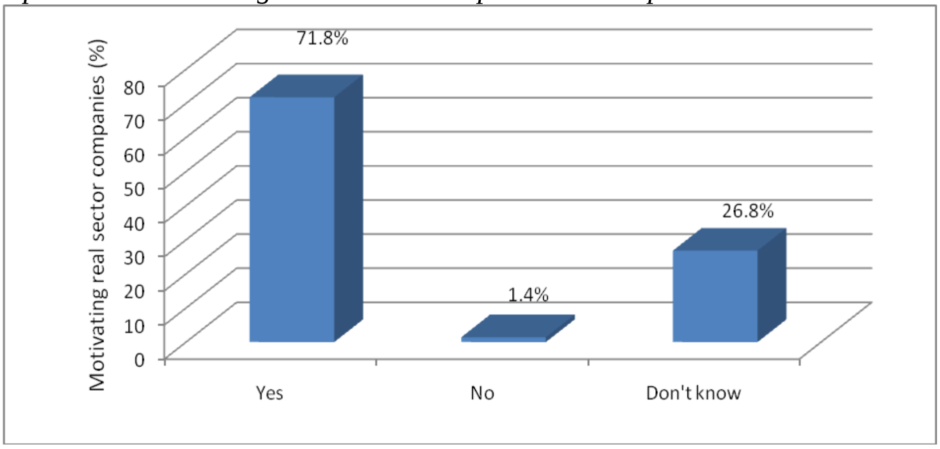


Figure 3 depicts that the majority of the respondents (71.8 per cent) viewed that book building pricing of IPOs would motivate real sector companies into the main stream of capital market. As book building mechanism lowers the degree of underpricing than fixed price public offer (Shengfeng, 2010), the real sector companies might be encouraged to go public through its offerings to raise capital at a fair price. This finding is consistent with the views of Agrawal (2016) in which he stated that allowing companies to issue shares at ‘premium’ or ‘fair value’ will resolve one of the major barrier for real sector companies to become listed. This indicates that adopting book building pricing will motivate the real sector companies into the capital market.

Conditions for Attracting Real Sector Companies

Nepalese stock market is largely dominated by the banking industry since the last two decades. Historically many real sector companies listed on the stock exchange but did not perform well. Manufacturing and processing, hotel, airlines as well as trading sectors have a poor presence in the capital market. Government of Nepal incorporated a provision of incentive package in terms of tax rebate of 15.0 per cent in its budget of 2016/17 in order to attract real sector companies to be listed in the stock exchange (Karki, 2016). However, any one factor by itself may have limited impact (Agrawal, 2016), several conditions like regulations, presence of institutional investors, ease of exit etc. are needed to ensure the desired result. Hence, an attempt has been made to examine the major conditions for attracting real sector companies into the main stream of capital market in Nepal.

Table 7 shows the answer to the survey question, "In Nepal, real sector companies can be attracted into the main stream of capital market in order to raise capital under the following conditions." Please rank in order of their importance by assigning 1 to the most important one, 2 to the next important one and so on up to 7 to the least important one." Weighted mean rank for each work is presented in the table which is calculated as the sum of the product of the response percentage and the important value across all seven important values (i.e. 1, 2, 3, 4, 5, 6 and 7). For example, the weighted mean for the first row i.e. "minimizing legal hassle and comply with bureaucratic process" is calculated as follows: 0.056*1+0.197*2+0.282*3+0.211*4 +0.239*5+0.140*6+0.000*7 = 3.24. Also reported are standard deviations and overall ranks associated with each statement.

Table 7

Conditions for Attracting Real Sector Companies

Conditions for attracting real sector companies	Ranking Importance (1 = Most Important; 7 = Least Important)							Weighted	Std.	Overall
	1	2	3	4	5	6	7	Mean	Dev.	Rank
Minimizing legal hassle and comply with bureaucratic process	5.6%	19.7%	28.2%	21.1%	23.9%	1.4%	0.0%	3.42	1.25	III
Offering tax holidays for certain years	8.5%	9.9%	21.1%	39.4%	11.3%	4.2%	5.6%	3.70	1.45	IV
Allowing IPO issue at premium price	39.4%	36.6%	15.5%	2.8%	1.4%	1.4%	2.8%	2.06	1.32	I
Allowing IPO issue at perceived market price	40.8%	23.9%	11.3%	11.3%	1.4%	4.2%	7.0%	2.49	1.83	II
Allowing divestment of owned shares as a means of offering shares to public	0.0%	1.4%	16.9%	9.9%	22.5%	16.9%	32.4%	5.34	1.51	VI
Reduction in capital gain tax on divestment	1.4%	2.8%	0.0%	5.6%	22.5%	38.0%	29.6%	5.77	1.23	VII
Strengthening institutional investors to go/invest into equity market	4.2%	5.6%	7.0%	9.9%	15.5%	35.2%	22.5%	5.23	1.68	V
Total	100%	100%	100%	100%	100%	100%	100%			

Source: Questionnaire survey 2020

Table 7 reveals that the variable 'allowing IPO issue at premium price' accounts for the lowest weighted mean of 2.06, and, hence, is the most important condition for attracting real sector companies into the capital market perceived by the respondents. 'Allowing IPO issue at perceived market price' ranked the number two as the condition for attracting the real sector companies which accounted for 2.49 weighted mean ranking. Other two important conditions for attracting the real sector companies as per the perception of respondents are – 'minimize legal hassle and comply with bureaucratic process' and 'offering tax holidays for certain years' with weighed mean of 3.42 and 3.70 respectively.

A significant number of respondents have assigned modest ranking to conditions like 'strengthening institutional investors to go/invest into equity market' and 'allowing divestment of owned shares as a means of offering shares to public.' 'Reduction in capital gain tax on divestment' is found to be the least important condition for attracting the real sector companies with weighted mean of 5.77. This pessimism regarding reduction in capital gain tax on divestment implies the reduction in capital gain tax is not the major issue for attracting real sector companies into the main stream of the capital market.

Agreement on Book Building Pricing

The book building mechanism of IPO pricing is one of the popular and widely used methods across the world. It involves the binding bids by relatively exclusive groups of institutional investors (Vaidya, 2012) while determining a fair price of IPOs. The underwriter or lead book runner and institutional investors are apparently active while the issuing firm as well as sometimes retail investors also gets involved in the course of price discovery. The agreement associated with the book building mechanism among the market participants is presented in Table 8. The table presents answers to the survey question: "Please specify your level of agreement or disagreement associated with following statements regarding book building mechanism." Then tick the one which you feel the best (on a scale of 1 to 5, where 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neither Disagree Nor Agree (N), 4 = Agree (A), and 5 = Strongly Agree (SA)). Mean score, standard deviation, minimum and maximum values along with samples size of each of the eight Likert items has been reported in the table.

Table 8

Descriptive Statistics of Level of Agreement on Book Building Pricing

Items	Mean	Std Dev	Min	Max	n
X1 Book building lowers the degree of underpricing of IPOs than that of par value method	4.13	1.04	1	5	71
X2 "Indicative price" should be determined supporting by a large group of qualified institutional bidders (QIBs) from various categories like merchant bankers, mutual funds, listed/unlisted companies, employee provident funds, citizen investment trust, etc.	4.52	0.71	2	5	71
X4 Underwriter or lead book runner is entrusted to the discretionary role of allocating shares under book building	3.18	1.13	1	5	71
X5 Initiate collaborating with stock exchange and CDS and Clearing for efficient, fair and transparent	3.15	1.04	1	5	71

price discovery and allocation of securities under book building					
X7 Book building ensures uninformed investors to induce participation in and scrutinize the issue	3.13	0.83	2	5	71
X8 Book building help prevents 'random free riders' from overwhelming the process of IPOs	3.80	0.55	2	5	71
X9 Book building protects the right of small investors' investment opportunities alternatively by promoting mutual funds	2.82	0.72	1	4	71
X11 Book building pricing will drive away general investors from the capital market and will serve the interest of issuing companies and institutional investors only [reverse coded]	3.41	0.89	1	5	71
Average	3.52	0.48			

Notes. 1. Cronbach's Alpha value is 0.661.
2. Items X10 and X11 are negatively phrased, so they are reverse-coded.
3. Items X3, X6 and X10 are deleted based on item-total statistics "if item deleted".
Source: Questionnaire survey 2020

Table 8 depicts that all the items have mean score of more than three except item nine (X9) which indicates that all the respondents tend to agree on merits of the book building pricing mechanism. Among the respondents, most of them feel "indicative price" should be determined with the collective support of diverse group of qualified institutional investors (QIIs). This also implies that the QIIs are the key players under book building pricing. Similarly, respondents agreed that book building lowers the degree of underpricing of IPOs than that of par value method which is consistent with the findings of Shengfeng (2010). They also agreed that book building help prevent 'random free riders' from overwhelming the process of IPOs which is consistent with the findings of (Jagannathan & Sherman, 2006). However, the weighted mean score of small investors' investment opportunities of 2.82 implies that mutual funds operating in Nepal have not been effectively playing the role of collective investment vehicle in protecting the rights of small investors by mobilizing scattered savings into productive sectors.

Table 9 presents the summary statistics of weighted mean, and standard deviations along with sample sizes of level of agreement on book building pricing mechanism. It is also reported as F-value and p-value along with degrees of freedom.

Table 9
ANOVA Test for Testing Equality of Mean Level of Agreement in Adoption of Book Building Pricing Mechanism Across the Types of Market Participants

Respondent Type	Mean	Std. Deviation	n
Issue manager	3.84	0.24	19
Portfolio manager	3.12	0.58	16
Share registrar	3.77	0.17	6
Mutual fund	3.63	0.25	10
Stock broker	3.03	0.08	9
Retail investor	3.72	0.41	11
Total	3.52	0.48	71

Note: F-value = 11.471, df = 5, 65 and p-value = 0.000
Source: Questionnaire Survey 2020

Table 9 reveals a one-way ANOVA to compare the effect of types of respondents or market participants classified as issue manager, portfolio manager, share registrar, mutual fund, stock broker and retail investor, on level of agreement in adoption of book building pricing mechanism. There is a significant effect of various types of respondents on the level of agreement of book building pricing at 5 per cent level. The post hoc comparisons using the Least Significant Difference (LSD) test also indicated that the mean level of agreement on the book building pricing mechanism for the issue managers is significantly different than the portfolio manager as well as stock brokers. However, the mean level of agreement of share registrar does not significantly differ from mutual fund as well as retail investors. These results suggest that the types of respondents or market participants do have an effect on level of agreement on the book building pricing mechanism. Specifically, the results suggested that the more active market participants like issue manager, portfolio manager and stock brokers, have a high level of agreement or motivation in adopting book building pricing in Nepal.

CONCLUSION AND SUGGESTIONS

In Nepal, assessing the status of the primary market as well as empirical evidences of wealth loss of existing shareholders i.e. leaving money on the table, in terms of higher underpricing on stock offerings through the par value method, there is an urgent need of adopting a book building mechanism of IPO pricing. Since it is a widely used mechanism of pricing than other mechanisms, it provides ample benefits for both issuers and investors. The book building will also help bring the real sector companies in the main stream of the capital market especially through IPOs. Further, it is concluded that the institutional investors followed by underwriters are the key players that discover the price band and final price under the book building pricing. Moreover, institutional investors have a crucial role in the sustainable development of the capital market and effective implementation of book building pricing in particular.

Another conclusion of this study is that the level of agreement in adopting book building pricing in Nepali capital market is positive because (i) the price band is determined with the active support of qualified institutional investors, (ii) book building lowers the gap of underpricing of IPOs than that of par value method, and (iii) book building help prevents ‘random free riders’ from overwhelming the process of IPOs. Among the respondents, the more active market participants like issue managers, portfolio managers, and stockbrokers are highly agreed in adopting book building pricing. In a nutshell, book building offers: a) ample benefits to all three parties – issuers, underwriters, and investors, as it ensured to have a fair price of IPO stocks; and b) (S. Mainali, personal communication, December 20, 2019) argues that secondary market trading goes smoothly at a fair market price so that the problem of liquidity may not appear in the market right after the first-day trading.

Based on the above conclusions, the following suggestions are recommended for the effective implementation of book building pricing:

- As one of the reasons of primary market inefficiency is due to inappropriate regulations of SEBON in promoting IPO market, it requires overwhelming of regulations with necessary amendments for both demand side regulations i.e. regulators, and supply side regulations i.e. other market participants, in order to make it friendly to the new pricing mechanism.
- Instead of 100 per cent book building, both fixed price and hybrid book building/public offer methods of IPO pricing should go hand in hand because the market is just approaching to enter into a new pricing mechanism. Moreover, it

would better to demarcate the eligibility of firms going public through book building.

- Institutional investors are the key players especially in discovering price band under book building as well as sustainable development of the capital market, so their roles should be defined clearly and enhance their capacity that configured to the market.
- As there is a doubt about the capability of Nepali merchant bankers in taking the responsibility of underwriter, so their roles and capacity should be highly strengthened allowing for IPO grading and valuation along with financial consulting. When they become fully equipped then only the implementation of book building pricing will be effective because merchant bankers should play the role of the lead book runner or lead manager in this system. Moreover, the underwriter should be entrusted with the discretionary role of allocating shares because it helps gaining true information and expertise in price discovery and also help issuing firms especially by way of larger issue proceeds.
- In order to attract the real sector companies in the mainstream of capital market book building pricing should be implemented for their appropriate choice. Moreover, a hassle-free bureaucratic process followed by tax holidays for certain years should be offered to attract the real sector companies in the capital market.
- SEBON should promote mutual funds as an alternative vehicle for investment with the aim of protecting the rights of small investors' investment opportunities in the capital market through units.
- It would further suggest to the future researchers that the studies on operational issues like drafting prospectus, conducting road-shows, and collecting indications of interests, determination of cut-off price, lock-up periods, and some policy matters are still remaining under the scope. Moreover, the opinions of general/retail investors should be included while conducting further researches in this field for more generalizability of the results.

Finally, the present study is, therefore, very much crucial and carried out at the right time when the SEBON has been undertaking various efforts in adopting book building pricing, so it will be highly useful in order to formulate relevant policies and implementation of new pricing mechanism in Nepal. The adoption of book building pricing of equity offerings will contribute to reduce the level of underpricing, attract real sector companies in the mainstream of the capital market, and enhance the primary market efficiency in the days to come.

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