CAPITAL BUDGETING PRACTICES: EVIDENCE FROM SRI LANKAN LISTED COMPANIES

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Abstract- Capital budgeting one of the most important functions of corporate finance. The present study examined the capital budgeting practices of Sri Lankan companies. The survey sample included 44 Sri Lankan listed companies covering five major sectors. We found that discounted as well as non-discounted methods are equally used by the Sri Lankan companies for the capital budgeting decisions. According to the data gathered by the survey, majority of the respondents (80%) used NPV, IRR and Payback as their important or very important capital budgeting method. It is worth to notice that fair number of respondents use Real Option techniques for the capital budgeting decisions.

Key Words- Capital Budgeting, Net Present Value, Internal Rate of Return, Payback

I. BACKGROUND

Investment decisions are one of the main responsibilities of the financial manager. Capital budgeting practices or investment appraisal methods are the tools used to make investment decisions. Investment appraisal methods can be categorized into two categories as discounted methods and non-discounted methods. Net present value (NPV), internal rate of return (IRR), modified IRR, profitability index (PI) and discounted payback (DPB) method are main discounted investment appraisal methods. Pay back (PB) and accounting rate of returns (ARR) are main non discounted investment appraisal methods. Among the project appraisal methods text books recognize NPV as the best method.

Finance literature reports that the NPV and IRR techniques are the most frequently used capital budgeting techniques in developed countries (Graham & Harvey, 2001; Brounen et al, 2004; Drury & Tayles,1997 ). However, in some developing countries Payback and accounting rate of return were more frequently used than NPV and IRR (Patterson, 1989; Rishi & Rao, 2005). At the same time, some other studies proves that both discounted and non-discounted investment appraisal methods were used simultaneously (Arsiraphongphisit, Kester and Skully, 2000; Troung, Partington and Peat, 2008; Guiding and Lamminmaki, 2007)

Literature shows that capital budgeting practices have been extensively studied in the developed markets and in some emerging markets. However, in the local context budgeting practices have not been surveyed in a proper manner. Therefore, this study has attempted to investigate the capital budgeting practices used in Sri Lankan Listed Companies. The rest of the paper is organized as follows. In section 2 literature relevant to the capital budgeting practices are reviewed. Section 3 describes the survey sample and data collection process. Section 4 provides the survey results and the section 5 conclude the paper.

II. REVIEW OF LITERATURE

2.1 Developed countries

Klammer (1972) showed that based on a sample of 184 large U.S. companies, 19 percent indicated that they used DCF methods as their primary method to evaluate projects. The majority of companies used either PB (34 percent of the total sample ) or ARR methods (34 percent) as their primary method of evaluation. Later, Graham & Harvey (2001) and Hendricks (1983) reported that the popularity of DCF methods has surpassed the popularity to non-DCF methods in USA. Graham & Harvey(2001) found that the NPV and IRR techniques are the most frequently used capital budgeting techniques. Their survey reported that 75 percent of the CFOs always use NPV and 76 percent always or almost always used the ARR method and only 56.74% use Payback method.

Brounen et al (2004) replicated the Graham & Harvey (2001) survey in four European countries (U.K., France, Germany and the Netherlands; total sample was 313 companies) and found that for the U.K. companies in their sample 47 per cent states that NPV was (almost) always used as a tool of evaluating projects, where as 69 percent (almost) always use the Payback method. For the Netherlands these figures were comparable (70and 65 percent, respectively); for France and Germany the figures are even lower (42-50 percent and44-51percent, respectively).

Shinoda (2010) conducted a survey in the form of a questionnaire sent to 225 companies listed at Tokyo Stock Exchange, with a focus on capital budgeting practices. The results showed that Japanese firms
manage their decision-making by a combination of Payback method and NPV method. However the usage rate of these capital budgeting methods are above average.

Troung, Partington and Peat (2008) analysed the capital budgeting practices of Australian companies and found that that 94 percent of respondents to their survey used NPV, followed by Payback (91 percent) and IRR (80 percent). Discounting is usually by the WACC. The CAPM is widely used while other asset pricing models are not popular.

2.2 Emerging Markets
Patterson(1989) found that payback and ARR were more frequently used than NPV and IRR on the New Zealand Stock Exchange. However, at least one DCF technique was used at “least sometimes” by 75 percent of the responding companies. ARR was used as the primary measure by 53 percent of the responding companies. Payback was used as the primary measure by 42 percent of the responding companies.

In a survey of companies listed on the Stock Exchange of Thailand in 1998, Arsiraphongphisit, Kester and Skully (2000) found that the most important evaluation technique was IRR, followed by payback and then NPV. Leon, Isa and Kester (2008) found that the majority use non discounted Payback method as the primary measure for evaluating capital investment proposals among Indonesian listed companies.

III. SAMPLE DATA AND SURVEY PROCESS

3.1 Method
By the time of designing the survey there were 294 companies listed in the Colombo Stock Exchange. However the population of the study comprised of 217 companies due to the omission of 77 companies register under the section of Bank, Finance and Insurance. Out of the 217 companies, 128 companies were selected covering largest five (in terms of number of companies and market capitalization) sectors of the CSE.

The survey questionnaire is same as the questionnaire used by Troung, Partington and Peat (2008). This study employed 10 six member groups of MBA student those who are following the MBA at university of Kelaniya to collect data. Questionnaires were directed to chief financial officer of the company. We were able to collect data for 44 companies that is 34% of the total number of questionnaires issued Some respondents did not answer all the questions in the questionnaire. Therefore, in the discussion of findings, the percentage of respondents refers to the percentage of respondents answering the particular question under discussion vary from section to section Overall response rate was 34% and majority of the responses are from Hotel & Travel sector and Manufacturing sector. The size of the sample firms measured in terms of annual revenues. It shows that sample is well distributed in terms of the size of the companies. Majority of the companies have average level of annual turnover and number of stream size firms less than 20% each. In Sri Lanka private sector retirement age is year 55 in the private sector and it is generally accepted that above 35 is the maturity age. Accordingly 53 percent of the respondents represent the young age category. However, data revealed that out of 37 respondents 29 have professional qualifications in the field of accounting and finance. All the respondents have either a basic degree in the relevant field or professional qualifications. Hence, even though the majority of respondents are relatively young they are well qualified to answer for the questionnaire.

IV. SURVEY RESULTS

In order to identify the capital budgeting techniques used we included eight capital budgeting techniques in the questionnaire and asked respondents to mark techniques used according to their importance. Five rankings were provided: Not Applicable, Not Important, Moderately Important, Important and Very Important.

The table 01 reports findings on evaluation technique usage of Sri Lankan companies. The questionnaire included eight different techniques and respondent companies were considered as using a particular technique if they ticked any of the rankings except for “Not Applicable box.

<table>
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<th>Table 01 Capital Budgeting Techniques Used</th>
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As shown in the table, IRR, NPV and Payback period were the techniques most frequently used by the respondent companies. It is surprising to note that the Real Option technique is used by 34% of the respondent companies. This figure is almost equal to the developed country application of real option method in capital budgeting decisions.

The majority of the companies did not rely on a single method for evaluating capital budgeting projects. Assuming that techniques ranked moderately important, or higher, were used regularly, 30% of respondent companies regularly use one to three techniques and 70 percent of the respondents used more than three techniques.
CONCLUSIONS

Capital Budgeting decisions are one of the most important decisions in corporate finance. Literature shows that there are some mismatch between theory and practice between capital budgeting. This study surveyed the capital budgeting practice of listed companies in Sri Lanka. The survey sample included 46 questionnaires. Eight project evaluation techniques were included in the questionnaire but respondents mostly used NPV, IRR and Payback methods for the capital budgeting decisions. All most all the companies did not rely upon a single capital budgeting technique. In Sri Lanka Real Option is not included in most of the academic curriculums as a capital budgeting technique. However the findings of the study indicates that it is necessary to include Real Option as a capital budgeting technique in academic curriculums.

REFERENCES


