

ANALYSIS ON SURVEY CONDUCTED TO EXAMINE THE TECHNIQUES THAT INDIAN BANKING AND INFORMATION TECHNOLOGY COMPANIES USE TO EVALUATE THEIR PROJECTS

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ABSTRACT

Investment practices are related to the selection of assets, short term and long term. There are two analyses, here presents the analysis of the survey conducted to examine the techniques that Indian Banking and Information Technology companies use to evaluate their projects there is another way of analysis i.e and working capital practices of the select industries.

Keywords: Break - Even Analysis, Internal Rate of Return (IRR), Market Value Added (MVA)

I INTRODUCTION

1.1 LONG TERM INVESTING PRACTICES

The search for a reliable method of long term project appraisal method dates back to decades. The issue not only continues to be a matter of concern for academics or managers, but is also becoming more and more important to investors and shareholders. A number of tools are available to determine the extent of profitability of a project. However, some of these methods are unable to accommodate the current changes in business environment, especially, where shareholder value is of prime importance. In addition, continuous application of investing techniques reveals significant limitations in their capacity to address the basic problems of investment appraisal and some of these methods require complex decision making processes. Thus, the choice of appropriate appraisal method is becoming a difficult task for project managers, which requires pragmatic attention of researchers. The traditional discounted cash flow (DCF) methods are the most commonly mentioned technique (Graham and Harvey, 2001). However, most of these proposals have got their own demerits. For instance, DCF method is condemned for its inadequacy to appropriately appraise soft projects, such as R&D, which leads the management to select such projects on intuition, experience and rule of thumb methods (Tam, 1992; Tyrrell, 1998).

Moreover, companies invest in different type of projects and the nature and type of project is invariably determined on the type of industry, in which they are operating. For instance, in the financial sector, Banks undertake various

projects, ranging from information technology to real estate. In its IT part, projects may range from installing ATM to Internet banking, including office automation. In this industry, both the DCF and qualitative techniques dominate the appraisal process (Akalu and Turner, 2001). Selection of appropriate investment appraisal technique is an important element in the creation of value to shareholders. Companies vary by their choice of project appraisal model. In general, project life span and the size of project spending are considered at the time of model selection. Accordingly, when the amount of spending is large and the life of a project is longer, companies tend to use more quantitative and advanced appraisal models.

In relation to capital budgeting, it is pertinent to mention that the results of few previous surveys have been in favor of Payback Period, NPV and IRR method. Pandey (1989) studied 14 Indian companies in 1984 and found that payback period method is most widely used followed by IRR as a capital budgeting technique. There is a lack of familiarity with the discounted cash flow methodology amongst the corporate managers. The project risk is generally assessed through sensitivity analysis and conservative forecasts. Bierman (1993) finds that 73 of Fortune 100 firms use discounted cash flow analysis, with IRR being preferred over NPV. The payback period method also remains a very popular method in practice, though not as a primary technique. 93% of the respondents use company-wide WACC for discounting free cash flows and 72% use the rate applicable to project based on its risk characteristics. Babu and Sharma (1995) survey 73 Indian companies and find that 73% of the respondents use DCF methodology in capital budgeting decisions. It reports wide use of IRR and payback period method. Graham, and Harvey (2001) survey 392 CFOs and find that large firms rely heavily on present value techniques and the capital asset pricing model, while small firms are relatively likely to use the payback criterion. The firms with high debt ratios are significantly more likely to use NPV and IRR than firms with low debt ratios. Large firms are more likely to use risk-adjusted discount rate than are small firms.

II OBJECTIVE AND METHODOLOGY

2.1 Objective: To explore the corporate investing practices of Indian Banking and Information Technology Industries.

2.2 The Methodology: Based on a careful review of the existing literature, a well structured questionnaire was administered on top management executives of sample companies. Three modes were used to send the questionnaire to the respondents. It was sent through courier to corporate offices of all the select thirty seven Banking companies and forty Information Technology companies. It was also communicated to more than 200 senior functionaries of the sample companies through e-mail and it was even faxed out to 25 chief financial officers as per their requirement to fill it. Despite all efforts, only fifty three duly filled up questionnaires were received, out of which forty eight questionnaires including nineteen from Banking companies and twenty nine from Information Technology companies were found fit for further analysis.

III SURVEY ANALYSIS AND DISCUSSIONS: BANKING INDUSTRY

Data is collected from the structured questionnaires which was prepared after a careful review of the existing literature. Fifty three filled questionnaires were received, out of which nineteen were found fit for further analysis from Banking companies and twenty nine from Information Technology companies. Respondents were asked to score relative importance of capital expenditure evaluation criteria on a scale of 0 to 5 (0 meaning "not used", 5 meaning "very important").

Table 1: Objectives of Financial Management

	Rank	Percentage
To optimize (EBIT / EPS)	4	74
To maximize Net Present Value	3 & 2	45
To maximize EVA (ROI minus WACC)	1	10
To maximize the market value added (MVA)	-	-
Any other (please specify)	5	90

Source: Survey

Maximization of Net Interest Income is the most imperative objective of Indian Banking Industry that governs all investment decisions; it was accounted by 90% respondents. It is followed by EBIT/EPS maximization objective, as 74% officials termed it important by giving it "4" rank. Maximization of NPV was given "3" and "2" rank by approximately 45% respondents. EVA maximization has not been taken up by the industry as their objective. Less than 10% respondents gave it "1" rank meaning unimportant and all other left it blank.

Table 2: Investment Appraisal Technique

	Rank	Percentage
Payback period	5	90
Accounting Rate of Return on investment (ARR)	-	-
Net Present Value (NPV)	2	22
Internal Rate of Return (IRR)	4	72
Profitability Index	-	-
Break - Even Analysis	4	80
Any other (please specify)	-	-

Source: Survey

Respondents from Banking Industry select Payback Period, Internal Rate of Return and Break-even Analysis as their most important capital budgeting technique. 90% officials marked Payback Period as the most important investment appraisal tool. In Banking Industry, this is the technique which is used in every project and given vital importance. 72% and 80% respondents marked IRR and Break-even Analysis as most important technique. 22% officials use Net Present Value for project evaluation and they mark it as “2”, indicating it to be slightly important. Similarly, Average Rate of Return and Profitability Index are given was left blank by the respondents.

Prime Lending Rate (PLR) or the interest on long term loan is the discount rate employed to discount the net cash flows of the Indian Banks. It was confirmed by 74% respondents. Other techniques that influence determination of discount rate are Capital Asset Pricing Method and Earnings Yield (EPS/MPS). These were selected as most important techniques by 35% and 32% respondents. Banking companies re-assess their discount rate used for selection of investment projects on continuous basis; this option was selected by 90% respondents.

Table 3: Assessment of Risk in Investment

	Rank	Percentage
Shorter payback period	5	96
Sensitivity analysis	4	78
Certainty Equivalent	-	-
Probabilistic (Monte Carlo) Simulation	-	-
Higher cut of rate for risky project	-	-
Scenario analysis	4	55
Decision Tree analysis	-	-

Source: Survey

For assessment of project risk, shorter payback period is the most important technique, as indicated by 96% respondents. It is followed by Sensitivity Analysis as it was chosen by 78% respondents. Scenario Analysis has also been selected by 55% officials as risk assessment technique.

IV SURVEY ANALYSIS AND DISCUSSIONS: IT INDUSTRY

Table 4: Objectives of Financial Management

	Rank	Percentage
To optimize (EBIT / EPS)	5	88
To maximize Net Present Value	4	65
To maximize EVA (ROI minus WACC)	3	35
To maximize the market value added (MVA)	-	-
Any other (please specify)	-	-

Source: Survey

Indian Information Technology Industry considers EBIT/EPS maximization as their top priority or objective for shareholders' value maximization. It was supported by 88% respondents and they named it most important. Maximization of NPV was supported as important objective and given the rank of "4" by 65% respondents. EVA also got rank "3" by 35% respondents. Other objectives were not appreciated by respondents from Information Technology Industry.

Table 5: Investment Appraisal Technique

	Rank	Percentage
Payback period	4	55
Accounting Rate of Return on investment (ARR)	-	-
Net Present Value (NPV)	4	50
Internal Rate of Return (IRR)	5	75
Profitability Index	-	-
Break - Even Analysis	2	34
Any other (please specify)	-	-

Source: Survey

IT industry makes use of all techniques of capital budgeting, namely, IRR, NPV, Payback Period and Profitability Index. Most important rank was given to IRR technique; 75% respondents described it as most important. It was followed by NPV and Payback Period method, both the techniques received “4” rank by 50% and 55% respondents respectively. ARR and Break even Analysis got rank “2” by 34% respondents, depicting its less importance in the industry. Discount rate used by the industry to calculate cash flows shows wide diversity; it varies between 9 and 13 percent. Techniques that influence calculation of discount rate are CAPM, Dividend Yield and Earning Yield. Most important one is CAPM, it is used by 78% respondents. Other two techniques were given rank “4” by 45% and 51% respondents respectively.

Table 6: Assessment of Risk in Investment

	Rank	Percentage
Shorter payback period	-	-
Sensitivity analysis	5	52
Certainty Equivalent	-	-
Probabilistic (Monte Carlo) Simulation	-	-
Higher cut of rate for risky project	-	-
Scenario analysis	3	34
Decision Tree analysis	4	34

Source: Survey

To assess the risk inherent in their investment project, industry makes use of Sensitivity Analysis, Scenario Analysis and Decision Tree Analysis. Sensitivity Analysis is termed as most important by 52% respondents. Scenario and Decision Tree Analysis was marked “3” and “4” by approximately 34% respondents. Other techniques are most probably not used in the industry as these were left blank by the respondents.

V CONCLUSION

Capital budgeting is a well-surveyed area of corporate finance. This effort is still continued today and scholars are constantly searching for the best way of making investment decisions and trying to bridge the gap between the prevailing theory and the current company practices. This survey is also an attempt to assess the theory-practice gap in capital budgeting. Major finding of the survey conducted is that the EBIT/EPS maximization is the most imperative objective of Indian Banking and IT industry that they follow while making investment decisions.

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