Abstract

Title Discounted Cash Flow Techniques and Non-Financial Measures in Capital Budgeting: A Contingency Approach Analysis
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This research examines project evaluation methods related to financial and non-financial measures for capital investment projects as used by Thai firms. It employs a contingency approach to test the conditions that fit both types of measures. Traditional discounted-cash-flow based project evaluation measures such as Net Present Value (NPV) and Internal Rate of Return (IRR) have been in use for decades for capital investment projects. Newer types of projects have recently emerged that make it rather impractical to use the discounted-cash-flow techniques for project evaluation and capital budgeting. These include important types of projects such as social ventures, technological innovations, and non-standard production projects. By the very nature of these projects, their cash flows are difficult to be estimated with desired accuracies. A contingency theory framework is therefore proposed in an attempt to capture the practical reality of capital budgeting practices, using Thai firms as the study population.

The research also uses the critical factor index technique to investigate the details of both the financial cash-flow based and non-financial measures for project evaluation. The aim is to find out the critical measures that are of particular concern to Thai firms so that top management can pay appropriate attention to the right measures.

The research results based on an opinion survey of financial managers indicated that most Thai firms used capital budgeting techniques for the analysis of investment projects (74.1%) and more than half (51.7%) of total corporate capital investment expenditures were screened by capital budgeting techniques. Discounted-cash-flow techniques were found to be used by the majority of the firms with Internal
Rate of Return (IRR) the most used project evaluation techniques. Moreover, risk is quantified on individual project basis in assessing risk in investment decisions. Shortening the desired payback period was used most among the risk analysis techniques and the most likely scenario received most attention in the financial justification in relation to risk.

Significantly, the results for the overall responses show the critical area for financial measures is the payback period measure, while the critical areas for non-financial measures are found to be in the customer orientation perspective. The focus on improvement in customer orientation is especially important for small firms and merchandizing firms. With the contingency approach analysis, it is found that firms with high degrees of technological innovation, social ventures and product varieties tend to use financial measures as well as non-financial measures tend to use in high degrees of social ventures and product varieties with 99% confidence level.

**Keywords**  
Cash Flow Techniques  
Non-Financial Measures  
Capital Budgeting