

Preface

The objective of this study is to develop a mathematical model and a conceptual framework which integrates the principles of corporate governance, capital markets and capital budgeting to maximise shareholder wealth. These different principles are applied to two case studies. The results of this study provide useful information about the investment appraisal process, incorporating multiple issues in capital budgeting decision making which cannot be achieved using the existing capital budgeting models and framework. The proposed framework can be applied in all capital budgeting exercises and frameworks.

With information technology pervading the current global environment, the traditional discounted cash flow techniques used in capital budgeting are not adequate to handle the interdisciplinary impacts of corporate governance, capital market, risk management, accounting practices and regulation on capital budgeting decisions. Therefore, there is a need for developing a new integrated framework for modelling and analysing capital budgeting issues by simultaneously considering these impacts.

The purpose of this research is to develop a new integrated approach or conceptual framework for investment appraisal which integrates the principles of corporate governance, capital markets and risk management in a multi-criteria capital budgeting process.

This research adopts decision making and capital market research in an accounting perspective in a discounted cash flow analysis and multi-objective optimisation modelling. This study uses two case studies. The Tom.com case study is a real-life case study, while the World Airways case study is a hypothetical one. In terms of data collection, a case study approach is initially taken, using a real-life case study involving an e-commerce company, <http://www.tomgroup.com/investor/report>. Data is collected from the annual reports for the last 5 years of its operations (see also Rayport and Jaworski (2002)). This study also uses a hypothetical case study, World Airways (Levary & Seitz 1990), where multiple flight routes, the purchasing of wide and narrow-body airplanes, borrowing and lending money, debt capital, debt equity ratio and agency costs are all examined. This study uses a multiple objective linear programming model, which is based on a capital budgeting model

of Levary and Seitz (1990), and it is solved by Solver which is one of the add-in options in Microsoft's Excel software program.

The results from this research provide an appropriate investment appraisal framework and an appropriate capital budgeting model. They show an improvement in NPV ranging from \$1,835.11 to \$1,865.35 million. The model integrates capital market interactions, risk management, agency costs and cash flow based on multiple criteria objectives as critical in an institutionalised capital budgeting process. It provides operational processes which can be applied by any organisations making decisions in capital investments.

This new integrated approach to investment appraisal has wide implications for most industries, which make capital investments, in general; and for the e-commerce sector and the airline industry; in particular. This study supports the argument for the interdisciplinary nature of capital budgeting decisions that the integration of corporate governance, debt equity ratio, agency costs and interest rates affect choice of borrowing and discount rate, cost of capital, project selection and capital allocation which in turn impact on decisions in investment appraisal. Therefore, there is a need to revisit the theory of capital budgeting as presented in textbooks and adopt an integrated multidisciplinary approach to capital budgeting. Financial managers should consider the impact of multi-criteria objectives, such as cash flow, risk management, interest rates and agency costs as the norm rather than the exception in the current economy which predominately uses information technology when making investment appraisal decisions.

This study has developed a new integrated framework for modelling and analysing capital budgeting issues. The model integrates corporate governance principles using agency costs, capital markets interactions using interest rates, capital budgeting principles using present value and risk analysis using sensitivity and scenario analysis. The model considers multiple criteria objectives to evaluate capital projects in general and projects in the e-commerce sector and the airline industry in particular.

The authors would like to express their sincere thanks to Siti Nuryanah, Margarita Kumnick, Gayathri Mekala, Ruchi Gupta and Neelam Maharaj for proofreading this book and providing their academic and editorial comments. The first author would like to acknowledge the support, love and encouragement from his wife Winnie and son Albert. This book is dedicated to Apuuli (RIP) who taught him the value of hard work and education, and also prepared him for the challenges of this world – thank you Apuuli. The authors take responsibility for all the errors in this book.

Queensland, Australia
Melbourne, Australia

Dr. Baliira Kalyebara, PhD
Prof. Sardar M. N. Islam, PhD, LL.B

Corporate Governance, Capital Markets, and Capital
Budgeting

An Integrated Approach

Kalyebara, B.; Islam, S.M.N.

2014, XX, 244 p., Hardcover

ISBN: 978-3-642-35906-4

A product of Physica-Verlag Heidelberg