

**CAPITAL BUDGETING PRACTICES OF  
LISTED COMPANIES  
IN MALAYSIA**

**A thesis submitted to the Graduate School in partial  
fulfillment of the requirements for the degree  
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**by  
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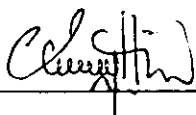
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## **ABSTRACT (BAHASA MALAYSIA)**

Tujuan utama kajian ini adalah untuk mengenalpasti kaedah-kaedah atau teknik-teknik yang digunakan di dalam mengkaji keputusan pelaburan ke atas projek-projek jangka panjang syarikat-syarikat Malaysia yang disenaraikan. Walaupun terdapat banyak kaedah atau teknik-teknik yang dianjurkan oleh teori, ini tidak bermakna bahawa syarikat-syarikat mahu atau bersedia menerima dan mengaplikasikan teknik-teknik tersebut dalam kegiatan mereka sehari-harian. Oleh itu, kajian ini adalah bertujuan untuk mengenalpasti teknik-teknik yang digunakan oleh syarikat-syarikat terbabit dalam lingkungan belanjawan modal. Bagi mencapai matlamat tersebut, satu set soalan telah dihantar kepada syarikat-syarikat yang tersenarai di Papan Utama Bursa Saham Kuala Lumpur (BSKL). Soalan-soalan tersebut meliputi topik-topik seperti teknik-teknik analisa kewangan yang digunakan di dalam mengkaji pelaburan modal, analisa risiko dan penetapan kadar diskaun. Daripada 140 syarikat yang dihubungi, cuma 31 syarikat yang memberi respon kepada soalan-soalan yang ditanya. Daripada maklumat yang diterima, nilai bersih terkini dan kadar pulangan perakaunan adalah dua teknik yang paling banyak digunakan dalam mengkaji pelaburan modal. Selain daripada itu, analisa keadaan dan analisa kepekaan adalah dua teknik utama yang paling banyak digunakan oleh syarikat-syarikat untuk mengkaji risiko sesuatu projek. Dari segi penetapan kadar diskaun, kadar faedah yang dikenakan ke atas modal hutang adalah cara yang paling digemari untuk menentukan kadar diskaun. Kajian yang dilakukan ini adalah bertujuan untuk meneruskan lagi usaha-usaha bagi menambahkan maklumat dalam bidang belanjawan modal. Diharapkan keputusan yang diperolehi mampu meluaskan lagi pengetahuan, terutamanya di kalangan para akademik dan pengurus-pengurus.

## **ABSTRACT (ENGLISH)**

The purpose of this study is to identify the reality of the practice in investment appraisal techniques within the context of listed Malaysian companies. Even though there are many methods or techniques suggested by the theory, it does not mean that companies are willing or ready to accept and apply them in their day-to-day activities. Because of that, this survey is intended to find out the realities of the practice within the capital budgeting framework. In achieving the intended purpose, questionnaires have been sent to companies listed on the Main Board of Kuala Lumpur Stock Exchange (KLSE). Questions in the questionnaire include topics such as financial analysis techniques used in the evaluation of major investment projects, risk analysis and the determination of a discount rate. Out of 140 companies, only 31 companies replied to the questionnaires. The data obtained from the questionnaires indicate the prevalent use of NPV and accounting rate of return in evaluating major capital investment projects. Besides, sensitivity and scenario analysis have been found to be the most popular techniques in assessing risk of a major project. In terms of the determination of a discount rate, interest payable on debt capital is the most preferred way of determining a discount rate. This survey is a part of continuous research effort carried out to enrich information within the area of capital budgeting context. The results obtained from this study are hopefully able to widen the knowledge, especially among academicians and managers.

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**Sabariah Nordin**

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# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 Background**

Capital budgeting technique has become one of the fundamental criteria for a company proposing an investment. The techniques used in capital budgeting help a company to estimate the value of its project. This value depends on the cash flows that a project may bring where it has a direct link to the maximization of shareholder's wealth. Normally, the existence of a company is associated to maximizing the value of the company or the shareholder's wealth. Shareholders' wealth are generally known as "the aggregate market value of the common shares, which in turn is assumed to be the present value of the cash flows which will accrue to shareholders, discounted at their required return on equity" (Randall and Woods, 1989, p 86). Shareholders are the owners of a company. They provide the capital to run its business activities. Therefore, they expect the creation of value out of their investment. In short, capital budgeting techniques create a link between the "value" and the shareholder's wealth. Maximizing the value of a company means making the most of the shareholder's wealth. Because of this, capital budgeting is considered as the most important decision tool to assist in investment decision-making.

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## REFERENCES

- Blazouske, J.D., Carlin, I. and Kim, S.H. (1988) 'Current Capital Budgeting Practices in Canada.' *CMA Magazine*. March, pp 51-54.
- Block, S. (1997) 'Capital Budgeting Techniques Used by Small Business Firms in the 1990s.' *The Engineering Economist*. Summer, v.42, no.4, pp 289-301
- Downes, J. and Goodman, J.E. (1990) *Finance and Investment Handbook*. 3<sup>rd</sup>. ed. New York
- Drury, C. and Tayles, M. (1996) 'UK Capital Budgeting Practices: Some Additional Survey Evidence.' *European Journal of Finance*. pp 371-388.
- Graham, J.R. and Harvey, C.R. (1999) 'The theory and Practice of Corporate Finance: Evidence from the Field.' December 8. *Harvard Business School / Journal of Financial Economics Conference*.  
([www.duke.edu/~charvey/Research/indexr.htm](http://www.duke.edu/~charvey/Research/indexr.htm).)
- Han, C.K. (1986) 'The sophistication of Capital Budgeting in Malaysian Companies.' *Omega* 14 (No.2), pp 175-181.
- Hatfield, P., Hill, D. and Horvath, P. (1998) 'Industrial Buying and the Divergence of Capital Budgeting Theory and Practice: An Exploration.' *The Journal of Applied Business Research*. v.15, no.1, Winter, pp 37-45.
- Jain, P.K., Jain, S.K. and Tarde, S.M. (1995) 'Capital Budgeting Practices of Private Corporate Sector in India – Some Empirical Evidence.' *The Management Accountant*. November, pp 813-820.
- Jog, V.M. and Srivastava, A.K. (1995) 'Capital Budgeting Practices in Corporate Canada.' *Financial Practice and Education*. Fall/Winter, v.5, Issue 2, pp 37-43.
- Kester, G.W. and Tsui, K.C. (1998) 'Capital Budgeting Practices of Listed Firms in Singapore.' *Singapore Management Review*. January, v.20, no.1, pp 9-23.
- Kester, G.W., Chang, R.P., Echanis, E.S., Haikal, S., Md. Isa, M., Skully, M.T., Tsui, K.C. and Wang C.J. (1999) 'Capital Budgeting Practices in the Asia-Pacific Region: Australia, Hong Kong, Indonesia, Malaysia, Philippines, and Singapore.' *Financial Practice and Education*. Spring / Summer, pp 25-33.
- Klammer, T. (1972) 'Empirical Evidence of the Adoption of Sophisticated Capital Budgeting Techniques.' *Journal of Business*. v.5, no.3, pp 387-397.

- Pinches, G.E. and Lander, D.M. (1997) 'The Use of NPV in Newly Industrialized and Developing Countries: a.k.a. What Have We Ignored?' *Managerial Finance*. v.23, no.9, pp 24-43.
- Randall, M.R. and Woods, J.C. (1989) 'The Net Present Value of Future Investment Opportunities: Its Impact on Shareholder Wealth and Implications for Capital Budgeting Theory.' *Financial Management*. Spring, pp 85-92.
- Ross, M. (1986) 'Capital Budgeting Practices of Twelve Large Manufacturers.' *Financial Management*. Winter, pp 15-22.
- Ross, S.A., Westerfield, R.W. and Jaffe, J.F. (1999) *Corporate Finance*. Singapore. Irwin / McGraw-Hill.
- Shao, L.P. and Shao, A.T. (1993) 'Capital Budgeting Practices Employed by European Affiliates of U.S. Transnational Companies.' *Journal of Multinational Financial Management*. v.3(1/2), pp 95-109.
- Shao, L.P. and Shao, A.T. (1996) 'Risk Analysis and Capital Budgeting Techniques of U.S. Multinational Enterprises.' *Managerial Finance*. v.22, no.1, pp 41-57.
- Wong, K.A., Farragher, E.J. and Leung, R.K.C. (1987) 'Capital Investment Practices: A Survey of Large Corporations in Malaysia, Singapore and Hong Kong.' *Asia Pacific Journal of Management* 4 (No.2, January), pp 112-123.