

**PROFITABILITY-LIQUIDITY TRADEOFF: THE EVIDENCE ON MALAYSIAN  
LISTED COMPANIES**

**A thesis submitted to the Faculty of Banking and Finance  
in partial fulfillment of requirement the degree of  
Master of Science (Finance)  
Universiti Utara Malaysia**

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## **ACKNOWLEDGEMENT**

Thanks to Allah s.w.t for providing me the guidance and blessing to succeed in completing this study.

I would like to express my gratitude to my lecturer, Dr. Rohani Mad Rus, of the Faculty of Banking and Finance, Universiti Utara Malaysia, for the valuable guidance and supervision throughout the accomplishment of this research. I am deeply honored to have her as my supervisor. Without her help, the preparation of this research would not have been completed smoothly.

My special thanks to the Dean of Faculty of Banking and Finance, PM Dr. Yusnidah Ibrahim, Universiti Utara Malaysia, for her careful review of this topic and her helpful comments and suggestions. Next, I would also like to extend my thanks to the all staff for their co-operation throughout my master programme. My gratitude also goes to group of colleagues, who have helped me a lot in completing this research. I am also thankful to all those who have assisted me in making this research a reality. Their contributions and advice are highly appreciated.

Last but not least, my heartfelt gratitude is also due to my beloved family for their concern and eternal love. With their support, I belief I can make this study as good as possible I am indebted to all of you.

Thank you.

## **ABSTRACT**

This study attempts to examine the determinant of companies' profitability in Malaysia. This study used the net operating income to measure profitability of company; current ratio and cash gap are used to measure liquidity and sales are used to measure the size of company. The sample of this study comprise of 166 companies listed on the Main Board of Bursa Malaysia covering period of 1998 to 2003. Overall, the regression models showed that the current ratio (CR) is consistently positive and significant with net operating income (NOI). However, the negatively significant relationship is found between profitability and liquidity as measures by cash gap (cash conversion cycle). This study finds that CR is the most important liquidity measure that affects profitability. This study has observed the relationship between size and profitability of company. Size is also found to bear some influence over profitability. Therefore, the regression model showed that Malaysian companies have a positive relationship between NOI and size. Finally, this study suggests that size, current ratio and cash gap are significant determinants of the variability of profitability.

## ABSTRAK

Kajian ini bertujuan untuk mengenalpasti penentu keuntungan bagi syarikat-syarikat di Malaysia. Kajian ini menggunakan pendapatan operasi bersih untuk mengukur keuntungan syarikat, nisbah semasa dan kekangan tunai digunakan untuk mengukur kecairan, dan jualan untuk mengukur saiz sesebuah syarikat. Sampel kajian ini merangkumi 166 syarikat yang disenaraikan, di Papan Utama Bursa Malaysia bagi tahun 1998 sehingga 2003. Keseluruhan model regrasi menunjukkan bahawa nisbah semasa mempunyai hubungan positif yang konsisten dan signifikan dengan pendapatan operasi bersih. Bagaimana pun, hubungan negatif ditunjukkan antara keuntungan dan kecairan apabila kekangan tunai digunakan bagi mengukur kecairan syarikat. Kajian ini mendapati bahawa, nisbah semasa adalah ukuran kecairan yang lebih penting dan memberi kesan kepada keuntungan syarikat. Kajian ini juga melihat kepada hubungan antara saiz dan keuntungan syarikat. Saiz juga mempengaruhi keuntungan. Model regrasi menunjukkan syarikat-syarikat di Malaysia mempunyai hubungan positif di antara pendapatan operasi bersih dan saiz. Akhirnya, kajian ini menunjukkan bahawa saiz, nisbah semasa dan kekangan tunai mempengaruhi kepelbagaian dalam keuntungan syarikat secara signifikan.

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## LIST OF ABBREVIATION

|        |   |                          |
|--------|---|--------------------------|
| CCC    | : | Cash Conversion Cycle    |
| CG     | : | Cash Gap                 |
| CGS    | : | Cash Gap in Days/ 100    |
| CR     | : | Current Ratio            |
| LOGS   | : | Logarithm of Sales       |
| LOGTA: |   | Logarithm of Total Asset |
| NOI    | : | Net Operating Income     |
| QR     | : | Quick Ratio              |

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# **CHAPTER 1**

## **INTRODUCTION**

### **1.0 Chapter Overview**

This chapter consists of 5 major areas i) introduction of the company's profitability and liquidity, ii) context of the research problem, iii) research objectives, iv) justification of the research, v) research scope, assumptions, limitations and vi) layout of the remaining chapter.

### **1.1 Introduction of the Company's Profitability and Liquidity**

The term of working capital refers to the difference between resources in cash or already convertible into cash (current assets) and organizational commitments for which cash will soon required (current liabilities). The objective of the working capital management is to maintain the optimum balance of each of the working capital components. This includes the funds that are held as cash in bank such as fixed deposits. However, such cash are more appropriately be 'invested' in other assets.

The working capital management enhances a company's need in maintaining their liquidity as it affects the performance of company. It received the major portion of

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## LIST OF REFERENCES

- Abuzar, 2004. Liquidity-Profitability Tradeoff: An Empirical Investigation in an Emerging Market, *IJCM*, Vol. 14, No. 2, pp. 48-61.
- Allmon .2004. Simple Regression and Financial Statement Analysis, *UNC Greensboro Journal of Students Research in Accounting Issues*, 1, 39-56.
- Beaver, and McNichols. 2001. Do Stock Prices of Property Casualty Insurers Fully Reflect Information about Earnings, Accruals, Cash Flows, and Development?, *Review of Accounting Studies*, Vol. 6, pp. 197-220.
- Bhattacharya, Anand Kishore. 1984. The influence of liquidity on corporate valuation. D.B.A. Thesis submitted to the Graduate School of Arizona State University.
- Brigham. 2003. A Focused Approach: Corporate Finance, United States of America, *South-Western*.
- Charitau, Clubb, and Andreou. 2000. The Value Relevance of Earning and Cash Flows: Empirical Evidence for Japan, *Journal of International Financial Management and Accounting*, Vol. 11, pp. 1-22.
- Checkley. 1999. Cash is Still King, United Kingdom, *Creative Print and Design*.
- Cobham. 2004. Sources of Finance for European Investment, Working Paper of European Integration, *Financial Systems and Corporate Performance (EIFC)*.
- Cotter. 1996. Accrual and Cash Flow Accounting Models: A Comparison of the Value Relevance and Timeliness of Their Components, *Accounting and Finance*, Vol. 36, pp. 127-150.
- Dechow. 1994. Accounting earnings and cash flows as measures of firm performance: The role of accounting accruals, *Journal of Accounting and Economics*, Vol.18, pp.3-42.
- Deloof. 2003. Does Working Capital Management Affect Profitability of Belgian Firms?, *Journal of Business Finance and Accounting*, Vol.30, pp. 573-587.
- Domowitz. 2001. Liquidity, Transaction Costs, and Reintermediation in Electronic Markets, *Pennsylvania State University*.
- Donaldson. 1969. The new corporate finance: where theory meets practice. (2<sup>nd</sup> ed.) United States of America: *McGraw-Hill International Editions*.

- Emery. 1981. Some Empirical Evidence on the Properties of Daily Cash Flow, *Financial Management*, Spring 1981, pp. 21-28.
- Fabozzi and Peterson. 2003. *Financial Management and Analysis*, United States of America, *John Wiley and sons, Inc.*
- Fairfield, and Yohn. 2001. Using Asset Turnover and Profit Margin to Forecast Changes in Profitability, *Review of Accounting Studies*, Vol. 6, pp. 371-385.
- Fairfield, Whisent, and Yohn. 2003. The differential Persistence of Accruals and Cash Flows for Future Operating Income versus Future Profitability, *Review of Accounting Studies*, Vol.8, pp. 221-243.
- Gaur, Fisher and Raman. 2002. Retail Inventory Productivity: Analysis and Benchmarking, *Working Paper Draft dated September 2002*.
- Gentry, Vaidyanathan, and Lee. 1990. A Weighted Cash Conversion Cycle, *Financial Management*, Vol.19, No. 1, pp. 90-99.
- Gilmer, R.H.Jr. 1985. The optimal level of liquid assets: An empirical tests. *Financial Management*, 14, 4, 3-43.
- Guenther, and Rosman. 2003. Differences between COMPUSTAT and CRSP SIC Codes and Related Effects on Research, *Journal of Accounting and Economics*, Vol. 18, pp. 115-128.
- Hampton, and Wagner. 1989 *Working Capital Management*, United States of America, *John Wiley & Sons, Inc.*
- Harney and Tower. 2003. Predicting Equity Returns Using Tobin's q and Price-Earnings Ratios, *The Journal of Investing*, Vol. 12, No. 3. pp. 58-69.
- Ismail. 1984. Liquidity management in relation to the financial performance of publicly held manufacturing companies in Indonesia. D.B.A. *Thesis submitted to the Graduate Faculty or the School of Business and Management of United States International University.*
- Kallberg, and Parkinson. 1984. *Current Asset Management: Cash, Credit, and Inventory*, Unites States of America, *Wiley-Interscience Publication.*
- Kharroubi .2004. Liquidity, Volatility and Growth, *Working Paper of DELTA.*
- Konings, and Roodhooft. 1997. Financial ratio cross-section dynamics: a non-parametric Approach, *Journal of Business Finances and Accounting*, Vol. 24, pp. 1331-1343.

- Lev, and Thiagarajan. 1993. Fundamental Information Analysis, *Journal of Accounting Research*, Vol. 31, pp. 190-215.
- Long, Malitz, and Ravid. 1993. Trade Credit, Quality Guarantees, and Product Marketability, *Financial Management*, Vol. 23, pp. 117-127.
- McRobert, and Hoffman. 1997. Corporate Collapse: An Early Warning System for Lenders, Investors and Suppliers, Australia, *McGraw-Hill*.
- Mian, and Smith. 1992. Accounts Receivable Management Policy: Theory and Evidence, *The Journal of Finance*, Vol. XLVII, No. 1, pp. 169-200.
- Mior. 1999. Managing Corporate Liquidity, United States of America, *Woodhead Publishing Ltd*.
- Moss and Stine. 1993. Cash Conversion Cycle and Firm Size: A Study of Retail Firms, *Managerial Finance*, Vol. 19, No. 8, pp. 25-34.
- Myers, Stewart, C. 1984. The search for optimal capital structure. In Donald H. Chew, Jr. *The New Corporate Finance*. (2<sup>nd</sup> ed.) United States of America: *McGraw Hill International Editions*.
- Myers, Stewart, C. 1984. Still searching for optimal capital structure. In Robert W. Kolb (editor). *The Corporate Finance Reader* (2<sup>nd</sup> ed). *Blackwell Massachusetts*.
- Nissim, and Penman. 2001. Ratio Analysis and Equity Valuation: From Research to Practice, *Review of Accounting Studies*, Vol. 6, pp. 109-154.
- Pohlman, Sabtiago, and Markel. 1988. Cash Flow Estimation Practices of Large Firms, *Financial Management*, Vol. 17, No. 2, pp. 71-39.
- Raja, and Schafer. 2004. Are Inventories a Buffer against Weak Legal Systems?, *German Working Papers in Law and Economics*, Vol. 2004, paper 11, pp.1-25.
- Richards and Laughlin. 1980. A Cash Conversion Cycle Approach to Liquidity Analysis, *Financial Management*, Vol.9, pp. 32-38.
- Scherr. 1996. Optimal Trade Credit Limits, *Financial Management*, Vol. 25, pp. 71-85.
- Sloan. 1996. Do Stock Prices Fully Reflect Information in Accruals and Cash Flows about Future Earnings? *The Accounting Review*, 71 , 289-315.
- Sloan. 2001. Discussion of: Contextual Fundamental Analysis through the Prediction of Extreme Returns, *Review of Accounting Studies*, Vol.6, pp. 191-195.

- Van Horne, C.J. and Wachowicz, Jr. J.M. 1992. Fundamentals of Financial Management. New Jersey. *Prentice-Hall International*.
- Vogt. 1994. The Cash Flow/Investment Relationship: Evidence from U.S Manufacturing Firms, *Financial Management*, Vol. 23, pp. 3-20.
- Wang. 2002. Liquidity Management, Operating Performance, and Corporate Value: Evidence from Japan and Taiwan, *Journal of Multinational Financial Management*, Vol. 12, pp. 159-169.
- Weinraub, and Visscher. 1998. Industry Practice Relating to Aggressive Conservative Working Capital Policies, *Journal of Finance and Strategic Decisions*, Vol.11, pp.11-18.