THE USE OF MANAGEMENT ACCOUNTING PRACTICES IN MALAYSIAN SMES

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to the
University of Exeter
as a thesis for the degree of

Doctor of Philosophy in Accountancy

May 2012
ABSTRACT

There have been the recent calls for additional research in order to enhance the understanding of the adoption of management accounting practices (MAPs) in small and medium sized enterprises (SMEs). This, allied to an increasing importance of SMEs around the world especially in developing countries, is the motivation for this research. This research explores the uptake of a broad range of MAPs in Malaysian SMEs; identifies the roles of MAPs in the management of SMEs; determines factors that affect the extent of use of MAPs in SMEs and lastly examines the relationship between the use of MAPs and organizational performance of SMEs. A postal questionnaire was conducted to 1,000 Malaysian SMEs in manufacturing sector which elicited 160 useable responses.

The results show that the majority of respondents have used the five management accounting areas identified. Use of the costing system, budgeting system and performance evaluation system are significantly higher than for the decision support system and strategic management accounting, which indicates that the uptake of traditional MAPs is greater than for sophisticated MAPs. The results indicate that medium sized firms make greater use of all MAPs as opposed to small sized enterprises. The most significant differences relate to the use of decision support system and strategic management accounting. The increased uptake of sophisticated MAPs by larger firms is in line with size being a contingent variable explaining the use of such practices.

The results also suggest that MAPs were perceived as playing very important roles in the management of Malaysian SMEs. Performance evaluation and controlling activities were the major roles of MAPs in the management of SMEs. Overall the study suggests
that MAPs are perceived by SMEs as relevant and useful in their management processes.

Further, the study found that four out of five contingent factors; size of the firm, intensity of market competition; participation of the owner/manager in the development of MAPs in firm and advanced manufacturing technology have a positive and statistically significant relationship with the use of certain MAPs. The research however found weak support for the positive relationship between the use of MAPs and organizational performance of SMEs.

This study enriches the existing body of knowledge of management accounting by providing information as to the use of MAPs in SMEs in Malaysia. The findings can be specifically informative for policy makers intent on developing management accounting skills among Malaysian SMEs. This research will provide valuable insights into the nature of MAPs in SMEs in a developing country and will promote interest among Malaysian researchers as well as researchers of other countries to make the SME sector a focus of interest in management accounting research.
# LIST OF CONTENTS

Declaration  
Abstract  
List of Contents  
List of Tables  
List of Figures  
List of Abbreviations  
Acknowledgment

## Chapter 1: Introduction

1.1 Introduction  
1.2 Background  
1.3 Problem statement  
1.4 Research objectives  
1.5 Research questions  
1.6 Hypotheses  
1.7 Importance of the study  
1.8 Research methodology  
1.8.1 Research process  
1.9 Organisation of the thesis  
1.10 Summary

## Chapter 2: Management accounting overview

2.1 Introduction  
2.2 History and development of management accounting  
2.2.1 The changing focus and innovation of management accounting  
2.2.2 The changing roles of the management accountant  
2.2.3 Definition of management accounting  
2.2.3.1 Institute of Management Accountant (IMA)  
2.2.3.2 Chartered Institute of Management Accounting (CIMA)  
2.2.3.3 International Federation of Accountants (IFACs)  
2.2.3.4 Summary  
2.3 Drivers of change in management accounting  
2.4 Summary

## Chapter 3: Small and medium-sized enterprises (SMEs) in Malaysia

3.1 Introduction  
3.2 The importance of SMEs  
3.2.1 The contribution of Malaysian SMEs  
3.3 The development of SMEs  
3.3.1 The Malaysian economy  
3.3.2 The role of the Malaysian government  
3.3.3 Opportunities and challenges for SMEs  
3.4 Definition of SMEs  
3.5 An overview of SMEs and their key sectors  
3.5.1 Number of establishments  
3.5.2 SMEs by sector  
3.5.3 Size of SMEs  
3.5.4 Size and sectors of SMEs
Chapter 6: Management accounting practices in Malaysian SMEs: Descriptive results

6.1 Introduction 163
6.2 Response rate 163
   6.2.1 Non-response bias 165
      6.2.1.1 Comparisons between the sample frame and the responding 166
            companies based on number of employees and type of manufacturing
            activities
      6.2.1.2 Comparison of the characteristics of the profiles of ‘early’ and
            ‘late’ respondents 168
6.3 Profile of respondents 169
6.4 Extent of the use of management accounting practices 171
   6.4.1 The use of management accounting practices 171
   6.4.2 The extent of the use of management accounting practices 174
      6.4.2.1 Part A: Costing system 174
      6.4.2.2 Part B: Budgeting system 178
      6.4.2.3 Part C: Performance evaluation system 182
      6.4.2.4 Part D: Decision support system 186
      6.4.2.5 Part E: Strategic management accounting 189
6.5 Factors which affect of the extent of the use of MAPS 192
   6.5.1 Part A: Intensity of market competition 192
   6.5.2 Part B: Accounting staff employment 193
   6.5.3 Part C: Participation of owner/manager of firms 194
   6.5.4 Part D: Use of advanced manufacturing technology 195
6.6 Performance of the firm 196
6.7 The roles of management accounting 197
6.8 Summary 198

Chapter 7: Bivariate analysis

7.1 Introduction 205
7.2 Bivariate association analysis 206
7.3 Tests for an association between management accounting practices and selected 206
    contingent factors
      7.3.1 Size of the firm (Annual sales turnover) 209
      7.3.2 Intensity of market competition 211
      7.3.3 Participation of owner/manager 213
      7.3.4 Advanced manufacturing technology (AMT) 214
      7.3.5 The level of qualification of accounting staff 217
      7.3.6 Tests for an association between the use of management accounting 219
          practices and industry type
7.4 Additional analysis: Tests for an association between the selected contingent 222
    factors and frequency of use of management accounting techniques
      7.4.1 Contingent variables and costing techniques 223
      7.4.2 Contingent variables and budgeting techniques 224
      7.4.3 Contingent variables and performance evaluation techniques 225
      7.4.4 Contingent variables and decision support techniques 226
      7.4.5 Contingent variables and strategic management accounting techniques 227
7.5 Association analysis of management accounting practices and perceptions of 231
    firm performance
      7.5.1 Costing system and perceptions of firm performance 233
      7.5.2 Budgeting system and perceptions of firm performance 234
7.5.3 Performance evaluation system and perceptions of firm performance 236
7.5.4 Decision support system and perceptions of firm performance 238
7.5.5 Strategic management accounting and perceptions of firm performance 239
7.5.6 Association analysis of industry type and perceptions of firm performance 241

7.6 Additional analysis: Test for an association of the frequency of use of management accounting techniques and perceptions of firm performance 243
7.6.1 Costing techniques and perceptions of firm performance 244
7.6.2 Budgeting techniques and perceptions of firm performance 246
7.6.3 Performance evaluation techniques and perceptions of firm performance 247
7.6.4 Decision support techniques and perceptions of firm performance 248
7.6.5 Strategic management accounting techniques and perceptions of firm performance 250

7.7 Summary 252

Chapter 8: The multivariate analysis

8.1 Introduction 259
8.2 Logistic regression analysis 259
8.2.1 Logit regression: Model and underlying assumption 261
8.2.2 Multicollinearity between independent variables 267
8.3 Important statistics in the logit regression analysis 270

8.4 Binary logistic regression analysis testing for a relationship between the use of management accounting practices and a range of contingent factors which affect the extent of the use of MAPS 272
8.4.1 Binary logit regression model 273
8.4.2 Factors that affect the use of a costing system 274
8.4.3 Factors that affect the use of a budgeting system 275
8.4.4 Factors that affect the use of a performance evaluation system 276
8.4.5 Factors that affect the use of a decision support system 277
8.4.6 Factors that affect the use of strategic management accounting 278
8.4.7 Additional analysis: Binary logistic regression analysis in factors related to the use of management accounting practices (with level of qualification of accounting staff) 279

8.5 Ordinal logistic regression analysis testing for a relationship between the use of management accounting practices and perceptions on the level of firm performance. 282
8.5.1 Background of ordinal logistic regression 282
8.5.2 The ordinal regression model (Cumulative odds (CO) logit models) 283

8.6 The ordinal regression between the use of management accounting practices and perception of firm performance. 285
8.6.1 Management accounting techniques and perceptions of performance in the level of productivity 289
8.6.2 Management accounting techniques and perceptions of performance in product quality 290
8.6.3 Management accounting techniques and perceptions of performance in the number of deliveries on time 292
8.6.4 Management accounting techniques and perceptions of performance in sales growth rate 293
8.6.5 Management accounting techniques and perceptions of performance in operating profit growth rate 294
8.6.6 Management accounting techniques and perceptions of performance in cash flow growth rate 296

8.7 Summary 297
8.7.1 Possible relationship between the use of management accounting practices and contingent factors 297
8.7.2 Comparison of results with previous research. 300
8.7.3 Possible relationship between perceptions of firm performance and the use of management accounting practices 303
Chapter 9: Conclusions, limitations and suggestions for further research

9.1 Introduction 306
9.2 The research problems and conclusions 306
9.3 Limitations of the study 312
9.4 Suggestions for future research 314
9.5 Summary 316

References 320
Glossary 345
Appendices 349

LIST OF TABLES

Chapter 3:
Table 3.1: Summary of the SME definition
Table 3.2: Number of SME establishments, 2003
Table 3.3: SMEs by sector, 2003
Table 3.4: SMEs by size, 2003
Table 3.5: Proportion of sizes within the sectors of SMEs
Table 3.6: SMEs by service sub-sector, 2003
Table 3.7: SMEs by agriculture sub-sectors, 2003
Table 3.8: Selected manufacturing sub-sectors of SMEs, 2003
Table 3.9: Total output, value added and employment per establishment, 2003
Table 3.10: Total output, value added and employment of SMEs by size, 2003
Table 3.11: Value of assets in the manufacturing sector by size, 2003

Chapter 4:
Table 4.1: List of contingency variables and the types of literature where they have appeared
Table 4.2: Organizational performance indicators used by a study by Jusoh et al. (2008).

Chapter 5:
Table 5.1: The proportion of establishments in the small and medium category based on number of establishments.
Table 5.2: The proportion of establishments in the small and medium category based on contribution in economic value-added, output and employment and salaries.
Table 5.3: Response rate from selected studies in Malaysian companies
Table 5.4: Sample size for each subgroup and the target number of responses

Chapter 6:
Table 6.1: Summary of survey response
Table 6.2: Analysis of the population and usable responses by number of employees
Table 6.3: Pearson chi-square based on number of employees and manufacturing activities
Table 6.4: Test of representativeness of response rate for small and medium firms (based on number of employees)
Table 6.5: Profile of the responding firms
Table 6.6: The results relating to the use of management accounting practices and the ranking of practices
Table 6.7: Descriptive statistics for the use of costing systems and the ranking of techniques
Table 6.8: Descriptive statistics for the use of budgeting systems and the ranking of techniques
Table 6.9: Pair usage of type of budget and their timing
Table 6.10: Descriptive statistics for the use of performance evaluation systems and the ranking of techniques
Table 6.11: Descriptive statistics for the use of decision support systems and the ranking of techniques
Table 6.12: Descriptive statistics for the use of strategic management accounting and the ranking of techniques
Table 6.13: Assessment of market competition by percentage of respondents
Table 6.14: Accounting staff employment by percentage of respondents
Table 6.15: Qualification of accounting staff by percentage of respondents
Table 6.16: Participation of owner/manager by percentage of respondents
Table 6.17: Use of advanced technology by percentage of respondents
Table 6.18: Performance of the firm: summary statistics shown by percentage of respondents
Table 6.19: Perceptions of the role management accounting by percentage of respondents

Chapter 7:
Table 7.1: A summary of the type of data of independent and dependent variables under the first hypothesis.
Table 7.2: Kendall’s tau correlation coefficient test results for the relationship between annual sales turnover and the use of specific management accounting practices.
Table 7.3: Kendall’s tau correlation coefficient test results for the relationship between intensity of market competition and the use of management accounting practices.
Table 7.4: Kendall’s tau correlation coefficient test results for the relationship between participation of owner/manager and the use of management accounting practices.
Table 7.5: Kendall’s tau correlation coefficient test results for the relationship between reported use of AMT and the use of management accounting practices.
Table 7.6: Kendall’s tau correlation coefficient test results for the relationship between individual AMT measures and the use of management accounting practices.
Table 7.7: Kendall’s tau correlation coefficient test results for the relationship between the level of qualification of accounting staff and the use of management accounting practices.
Table 7.8: Pearson chi-square and Cramer’s V correlation coefficient test results for a relationship between industry type and the use of management accounting practices.
Table 7.9: A summary of the type of data for the new dependent variables under the first hypothesis.
Table 7.10: Kendall’s tau correlation coefficient test results for a relationship between contingent variables and the frequency of use of costing techniques
Table 7.11: Kendall’s tau correlation coefficient test results for a relationship between contingent variables and the frequency of use of budgeting techniques
Table 7.12: Kendall’s tau correlation coefficient test results for a relationship between contingent variables and the frequency of use of performance evaluation techniques.
Table 7.13: Kendall’s tau correlation coefficient test results for a relationship between contingent variables and the frequency of use of decision support techniques.
Table 7.14: Kendall’s tau correlation coefficient test results for a relationship between contingent variables and the frequency of use of strategic management accounting techniques
Table 7.15: A summary of the type of data of independent and dependent variables under the second hypothesis
Table 7.16: Kendall’s tau correlation coefficient test results for the relationship between the use of costing system and the perceptions of firm performance.
Table 7.17: Kendall’s tau correlation coefficient test results for the relationship between the use of budgeting system and the perceptions of firm performance.
Table 7.18: Kendall’s tau correlation coefficient test results for the relationship between the use of performance evaluation system and the perceptions of firm performance.
Table 7.19: Kendall’s tau correlation coefficient test results for the relationship between the use of decision support system and the perceptions of firm performance.
Table 7.20: Kendall’s tau correlation coefficient test results for the relationship between the use of strategic management accounting and the perceptions of firm performance.

Table 7.21: Pearson chi-square and Cramer’s V correlation coefficient test results for a relationship between the type of manufacturing activities and the perceptions of firm performance.

Table 7.22: A summary of the type of data for the new independent variables.

Table 7.23: Kendall’s tau correlation coefficient test results for a relationship between the frequency of use of costing techniques and the perceptions of firm performance measured in seven ways.

Table 7.24: Kendall’s tau correlation coefficient test results for a relationship between the frequency of use of budgeting techniques and the perceptions of firm performance measured in seven ways.

Table 7.25: Kendall’s tau correlation coefficient test results for a relationship between the frequency of use of performance evaluation techniques and the perceptions of firm performance measured in seven ways.

Table 7.26: Kendall’s tau correlation coefficient test results for a relationship between the frequency of use of decision support techniques and the perceptions of firm performance measured in seven ways.

Table 7.27: Kendall’s tau correlation coefficient test results for a relationship between the frequency of use of strategic management accounting techniques and the perceptions of firm performance measured in seven ways.

Table 7.28: Positive results of a test for a statistically significant relationship between contingent variables and the use of management accounting practices.

Table 7.29: Positive results of a test for a statistically significant relationship between the use of management accounting practices and the perceptions of firm performance.

Chapter 8:

Table 8.1: Correlation matrix between five contingent variables.

Table 8.2: Correlation matrix between five main areas of management accounting practices.

Table 8.3: Collinearity statistics.

Table 8.4: A summary of the type of data of independent and dependent variables for testing the first hypothesis.

Table 8.5: Logistic regression analysis relating to the factors that affect the use of a costing system.

Table 8.6: Logistic regression analysis relating to the factors that affect the use of a budgeting system.

Table 8.7: Logistic regression analysis relating to the factors that affect the use of a performance evaluation system.

Table 8.8: Logistic regression analysis relating to the factors that affect the use of a decision support system.

Table 8.9: Logistic regression analysis relating to the factors that affect the use of strategic management accounting.

Table 8.10: Comparisons of models fitting and R squares with and without qualified accounting staff.

Table 8.11: Comparisons of significance value of predictors with and without qualified accounting staff.

Table 8.12: Results summary of ordinal regression analysis between the use management accounting practices and perceptions of firm performance.

Table 8.13: Details of independent variables developed from specific management accounting techniques.

Table 8.14: Ordinal logistic regression analysis relating to the level of use of management accounting techniques within nine categories and perceptions of performance measured by the level of productivity.

Table 8.15: Ordinal logistic regression analysis relating to the level of use of management accounting techniques and the perceptions of performance measured by product quality.
Table 8.16: Ordinal logistic regression analysis relating to the level of use of management accounting techniques and the perceptions of performance measured by the number of deliveries on time

Table 8.17: Ordinal logistic regression analysis relating to the level of use of management accounting techniques and the perceptions of performance measured by sales growth rate

Table 8.18: Ordinal logistic regression analysis relating to the level of use of management accounting techniques and the perceptions of performance measured by operating profit growth rate

Table 8.19: Ordinal logistic regression analysis relating to the level of use of management accounting techniques and the perceptions of performance measured by cash flow growth rate

Table: 8.20: Summary of statistically significant results from binary logistic regression tests

Table: 8.21: Summary of statistically significant results from ordinal regression tests for an association between nine accounting techniques and perceptions of firm performance

Chapter 9:

Table 9.1: Summary of the results of bivariate and multivariate analyses regarding factors affecting the use of MAPs

LIST OF FIGURES

Chapter 1:

Figure 1.1 Overview of research process

Chapter 2:

Figure 2.1: Evolution of Management Accounting.

Chapter 3:

Figure: 3.1: SME contribution to GDP in selected countries (% share)

LIST OF APPENDICES

Appendix 1: List of literature in management accounting

- Table A1: Major studies in management accounting practices
- Table A2: Costing
- Table A3: Budgeting
- Table A4: Performance evaluation system
- Table A5: Decision support system
- Table A6: Strategic management accounting

Appendix 2: List of performance measures in management accounting

- Table A7: Performance measures used by previous research

Appendix 3: Non-response bias test

- Table A8: Pearson chi-square result of early and late responses test
- Table A9: Mann-Whitney U test result of early and late responses test
Appendix 4: Ordinal regression analysis

- Table A10: Results summary of ordinal regression analysis between the use of management accounting practices and perceptions of firm performance using complementary log-log link

Appendix 5: Questionnaire

Appendix 6: Covering letter to target respondent

Appendix 7: Covering letter: 1st Follow-up

Appendix 8: Covering letter: 2nd Follow-up

ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>ABC</td>
<td>Activity-based Costing</td>
</tr>
<tr>
<td>ABCMA</td>
<td>Activity-based Costing and Management</td>
</tr>
<tr>
<td>ABMA</td>
<td>Activity-based Management Accounting</td>
</tr>
<tr>
<td>AIS</td>
<td>Accounting Information System</td>
</tr>
<tr>
<td>AMT</td>
<td>Advanced Manufacturing Technology</td>
</tr>
<tr>
<td>ARR</td>
<td>Accounting Rate of Return</td>
</tr>
<tr>
<td>BBRT</td>
<td>Beyond Budgeting Round Table</td>
</tr>
<tr>
<td>BSC</td>
<td>Balanced Scorecard</td>
</tr>
<tr>
<td>CAM-I</td>
<td>Consortium for Advanced Manufacturing International</td>
</tr>
<tr>
<td>CBM</td>
<td>Central Bank of Malaysia</td>
</tr>
<tr>
<td>CIMA</td>
<td>The Chartered Institute of Management Accountants</td>
</tr>
<tr>
<td>CSFs</td>
<td>Critical Success Factors</td>
</tr>
<tr>
<td>CVP</td>
<td>Cost-Volume-Profit</td>
</tr>
<tr>
<td>DOS</td>
<td>The Department of Statistics</td>
</tr>
<tr>
<td>DSS</td>
<td>Decision Support System</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
</tr>
<tr>
<td>FMAC</td>
<td>Financial Management and Management Accounting Committee</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>IRR</td>
<td>Internal Rate of Return</td>
</tr>
<tr>
<td>IFAC</td>
<td>International Federation of Accountants</td>
</tr>
<tr>
<td>IMA</td>
<td>Institute of Management Accountants</td>
</tr>
<tr>
<td>IMP</td>
<td>Industrial Master Plan</td>
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<tr>
<td>IT</td>
<td>Information Technology</td>
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<tr>
<td>JIT</td>
<td>Just-In-Time</td>
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<tr>
<td>KM</td>
<td>Knowledge Management</td>
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<tr>
<td>KPIs</td>
<td>Key Performance Indicators</td>
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<tr>
<td>MA</td>
<td>Management Accounting</td>
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<tr>
<td>MAP</td>
<td>Management Accounting Practice</td>
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<tr>
<td>MAS</td>
<td>Management Accounting Systems</td>
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<tr>
<td>MAT</td>
<td>Management Accounting Technique</td>
</tr>
<tr>
<td>MCS</td>
<td>Management Control System</td>
</tr>
<tr>
<td>MOA</td>
<td>Ministry of Agriculture and Agro-based Industries</td>
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<tr>
<td>MP</td>
<td>Malaysia Plan</td>
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<tr>
<td>NPC</td>
<td>National Productivity Corporation (Malaysia)</td>
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<td>NPV</td>
<td>Net Present Value</td>
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<td>NSDC</td>
<td>Malaysian National SMEs Development Council</td>
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<td>NZ</td>
<td>New Zealand</td>
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<tr>
<td>OC</td>
<td>Organizational Controls</td>
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<tr>
<td>PMS</td>
<td>Performance Measurement System</td>
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<tr>
<td>ROI</td>
<td>Return on Investment</td>
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<td>ROE</td>
<td>Return on Equity</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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</tr>
<tr>
<td>ROA</td>
<td>Return on Asset</td>
</tr>
<tr>
<td>ROS</td>
<td>Return on Sales</td>
</tr>
<tr>
<td>SMEs</td>
<td>Small and Medium sized Enterprises</td>
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<tr>
<td>SMIDEC</td>
<td>Small and Medium Industries Development Corporation</td>
</tr>
<tr>
<td>SMA</td>
<td>Strategic Management Accounting</td>
</tr>
<tr>
<td>TQC</td>
<td>Total Quality Control</td>
</tr>
<tr>
<td>TPM</td>
<td>Total Productive Maintenance</td>
</tr>
<tr>
<td>TQM</td>
<td>Total Quality Management</td>
</tr>
<tr>
<td>UNDP</td>
<td>The United Nations Development Program</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
</tr>
<tr>
<td>VBM</td>
<td>Value-based Management</td>
</tr>
<tr>
<td>VE</td>
<td>Value Engineering</td>
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<tr>
<td>ZBB</td>
<td>Zero-Based Budgeting</td>
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Acknowledgement

This thesis would not have been possible without the support and guidance of my supervisors, Professors Paul Collier and David Gwilliam of University of Exeter. To them goes my greatest thanks. I would also like to acknowledge my examiners Professor John Burns and Professor Robert Luther for their constructive feedback and opinion.

I am also grateful to all the many other members of staff at Exeter Business School who have helped me in various ways over the past three years. Special thanks to Helen Bell, the postgraduate administrator of University of Exeter Business School for her professional advice towards completing my study. Finally, I wish to thank my beloved husband, Shafie, my children Irshad and Safia Zarin, the rest of the family and friends for their continued love, support and companionship.
Chapter 1

Introduction

1.1 Introduction
This chapter is organized into five sections. The first section describes briefly the background to small and medium sized enterprises (SMEs) and the role of management accounting practices (MAPs) in the management of all organizations. Section two discusses the problem statement followed by the identification of research objectives, research questions, and hypotheses. Next the rationale and importance of this study is explained. The section ends with the development of a methodology and the specification of the organisation of the thesis.

1.2 Background
Small and medium-sized enterprises (SMEs) make up the vast majority of the business population in most countries in the world therefore they constitute a vital force in modern information-based economies (Mitchell and Reid, 2000). In Malaysia the SMEs population comprises approximately 99 per cent of all Malaysian businesses (The Department of Statistics, 2005). Therefore this sector plays a crucial role in the economy as an engine to generate economic growth in Malaysia. SMEs also contribute to the economy in other ways. Cook (2001) highlighted some of those which includes;

- the encouragement of entrepreneurship;
- the greater likelihood that SMEs will utilize labor intensive technologies and thus have immediate impact on employment generation;
- the fact that they can usually be established rapidly and put into operation to produce quick returns;
• the ability of SME development to encourage the process of both inter-and intra-regional decentralization; and

• the notion that they may become a countervailing force against the economic power of larger enterprises. More generally, the development of SMEs is seen as accelerating the achievement of wider economic and socio-objectives, including poverty alleviation.

In addition to the advantages stated above, Mitchell and Reid (2000) argued that part of the reason for stressing the importance of small firms or SMEs is that their flexibility makes them well suited to the niche opportunities which are so characteristic of the 'new' economy. Thus SMEs play a key role in stimulating economic expansion. In light of both their significant contributions and potentials, there is a growing focus on this sector by policy makers in most countries. In Malaysia, the role of SMEs became more important after the 1990s especially after the Asian Crisis in 1997-1998. The country learnt not to be overly dependent on foreign direct investment (FDI) in stimulating its economy and used SMEs as a new mechanism for generating the growth of its economy (Aris, 2007). The government has been called upon to put up clear policies, strategies and implementation matrixes to develop this sector through an integrated approach (Aris, 2007). For example in the 9th Malaysia Plan (2006 – 2010), the principal SMEs policy strives for the development of a competitive, innovative and technologically strong SME sector, capable of meeting the increasing demands of globalization and intensifying competition (NSDC, 2007). In consequence various initiatives have been set in motion to build the capacity and capability of SMEs. For example, there have been efforts to improve the management and business methods in production, quality improvement, marketing and accounting skill (SME Annual Report, 2007). However there is concern about a lack of exposure to management accounting among Malaysian SMEs since there is no specific reference to the use of MAPs. Previous research has
suggested that MAPs are an important tool through which management can promote efficiency, and potentially have an important influence on performance (see Ghosh and Chan, 1997; Lybaert, 1998; and Mitchell and Reid, 2000). In particular, within small firms, MAPs act as the key information system that plays a vital role as an efficient information-processing (Reid and Smith, 2002). Apart from that, the availability of financial and non-financial information provided by MAPs permits firms to effectively face competition in the market, coping with change, surviving and thereby improves performance (Mia and Clarke 1999 and Reid and Smith, 2002). Although good MAPs may not by themselves guarantee success, an absence of them or poorly implemented practices may significantly reduce the firm's competitive advantages (Folk et al., 2002). Therefore, given these advantages from MAP use, it is important to promote knowledge and awareness of MAPs among small business in Malaysia so that the firms may benefit advantages that have been highlighted above.

1.3 Problem statement

Much has been written about small business and in particular about small business failure rates (Watson and Everett, 1996). Richard (2000) stated that there are many reasons for the failure rate of start-up businesses, including lack of adequate working capital, poor market selection, and rapidly changing external market conditions. However, the most significant reason for this high failure rate is the inability of SMEs to make adequate use of essential business and management practices. Many small firms fail to develop an initial plan, and those that do establish a plan fail to continually adjust and use it as a benchmarking tool. Similarly, Wichmann (1983) argued that one of the reasons for business failure is poor management ability which includes accounting problem-solving. Further, Hopper et al. (1999) using data based on the results from Japanese companies’ concluded that a failure to adopt MAPs (i.e. cost
management systems) in a similar way to their larger counterparts and, at the margins, to experiment with new forms of control that are more profit oriented may be a factor in the currently high failure rate of SMEs. Based on these argument it can be suggested that MAPs are important for SMEs if they are to avoid failing.

Another driver of this thesis is the paucity of research into the use of MAPs among SMEs. Despite the increasing amount of research in management accounting in the past decade, little is known of its form and effectiveness within SMEs (McChlery et al., 2004). This lack of research based knowledge may have been based on a belief that the discipline in management accounting is best served by studying the most innovative and successful examples of practice that can be found in the leading western and Japanese firms (Mitchell et al., 1998). Consequently larger enterprises have been preferred for empirical management accounting research as expertise and a capacity to innovate and develop management accounting is more likely to exist in such enterprises (Mitchell and Reid, 2000). This situation creates a challenge into the study of MAPs in SMEs. However, Mitchell et al. (1998) contended that research into management accounting in SMEs provides possibilities of a different type which are nonetheless of great importance to the fundamental explanation and understanding of the discipline. Indeed, many of the research opportunities inherent in SMEs derive directly from the contrasts which they provide with large organisations. Mitchell et al. (1998) added that in the SME research setting all of the following advantages accrue.

1. The small size of the SME provides a less complex research setting than that provided by a large scale organisation. In the SME the nature, role and development of management accounting are more visible to the researcher and due to their smaller scale, more accessible. This enhanced visibility, combined with the
susceptibility of the SME to key contingencies such as phase of the business cycle and extreme financial and competitive pressures, provides an environment in which the effects of fundamental forces are marked and can therefore be studied more easily.

2. Prior research, e.g. Holmes and Nicholls (1989) in an Australian context, indicates that management accounting information (and its absence) is associated with success (and failure) in SMEs and is therefore potentially an important influence on performance within this economic sector. This, in combination with the relative importance of SMEs as generators of economic well-being reinforces the significance of this area of research.

3. In new and young SMEs the birth and early years of management accounting systems are observable. The existing research focusing on these formative stages concentrates mostly on the development of management control systems (MCS) in which only a few control systems are associated with management accounting (see for example Sweeting, 1991; Davila, 2005; Davila and Foster, 2007; Wisbaden and Sandino, 2007; and Hutzschenreuter, 2009). Hence there is a dearth of research material that specifically focuses on management accounting at these stages have been undertaken.

4. The absence, in many instances, of professional accounting support in the SMEs results in information provision which is derived purely from managerial demand. The 'producer' driven influence of the accountant is absent from the subject of study and consequently the SME setting provides a unique and pure insight into managerial information needs.

For these reasons SMEs offer a potentially rewarding location for investigating MAPs and exploring the factors underlying their development. At present in Malaysia there is a dearth of information on the extent of use of MAPs among SMEs. Given their small
size especially in the context of developing country, there is a possibility that SMEs do not use MAPs and fail to take full advantage of the opportunities that better accounting information might create. Also despite the claims of an association by many researchers, there is little information on whether or not there is any association between the use or extent of use of MAPs and the performance of firms, especially for Malaysian SMEs. The absence of data on MAPs in SMEs has perhaps prevented the Malaysian regulators/policy makers from taking actions that might improve the functioning of Malaysian SMEs. Consequently, there are significant gaps in the knowledge base relating to MAP usage in SMEs in Malaysia, which should be filled on the grounds that the information provided may underpin government policy towards the sector.

Therefore given the significant economic importance of SMEs and the gap in the literature, this research aims to obtain a broad overview of the use of MAPs within Malaysian SMEs, their roles in the management of SMEs, and to examine both the factors that lead to their use as well as their impact on performance. Following are the research objectives, research questions and research hypotheses developed for this study.

1.4 **Research objectives**

Based on the issues and problems discussed above, this study identifies four main objectives

1. To investigate the extent to which MAPs are employed by Malaysian SMEs.
2. To identify the roles played by MAPs in Malaysian SMEs’ management.
3. To determine the factors that affect the extent of use of MAPs among Malaysian SMEs.
4. To seek to demonstrate a positive relationship between MAP use and the performance of SMEs.

1.5 Research questions

These objectives can be expressed in the following research questions:

1. What is the extent of the use of MAPs by Malaysian SMEs?
2. What are the roles of management accounting in Malaysian SMEs’ management?
3. What factors affect the extent of the use of MAPs by Malaysian SMEs?
4. Is there a positive relationship between the use of MAPs and the performance of Malaysian SMEs?

1.6 Hypotheses

Research questions 3 and 4 can be expressed in terms of the following two general hypotheses for empirical testing:

\( H1: \) There are significant and positive relationships between selected contingent factors and the use of MAPs.

\( H2: \) There is a significant and positive relationship between the use of MAPs and organizational performance.

1.7 Importance of the study

This study will have useful implications for theory and practice. Regarding the potential implications for theory, the study will expand the existing management accounting literature in two main ways. First the study will provide new empirical evidence on the use of MAPs. Second, the study will contribute an additional study in the new context of Malaysian SMEs regarding what contingent factors affect the extent of MAP use.
Finally, the research will test for a relationship between the use of MAPs and the performance in the context of Malaysian SMEs. The focus on Malaysia is especially important because research on MAPs and SMEs is very limited in this country and developing countries more generally. Benefits for practice will include the following:

- the creation of an awareness among SME managers of the importance of management accounting as a means of improving performance and maintaining competitiveness in the marketplace.
- the provision of results that may assist policymakers, such as the level of use of MAPs among SMEs and factors that affect the use of MAPs, that may ensure that future policy decisions made by the Malaysian government, financial institutions, and other groups with an interest in SMEs are evidence based.

1.8 Research methodology

The quantitative data for descriptive purposes and empirical testing will be collected by a postal questionnaire. The questionnaire will examine and explore the state of MAPs within Malaysian SMEs in the manufacturing sector. The research concentrates only on one sector in order to avoid inappropriate distractions arising out of variations between sectors. Besides that the manufacturing sector in Malaysia plays a significant role in the Malaysian economy and therefore it is worthwhile to focus on this sector as a target population for this study. In addition the questionnaire will also explore the roles of MAPs as well as the factors that influence their use among SMEs. Lastly questions on the level of performance of SMEs and details of the profile of the firms will also be included. A postal questionnaire approach has been widely used in management accounting research (see for example, Drury et al., 1993; Firth, 1996; Chenhall and Langfield-Smith, 1998; Haldma and Laats, 2002; and Al-Omiri, 2003).
The information on the membership of the population will be derived from the directory of the Federation of Malaysian Manufacturers (FMM). This source, although not comprehensive, provides detailed information about SMEs in the manufacturing sector. This directory consists of comprehensive profiles of over 2,200 manufacturers from SMEs to large enterprises. For the sampling purposes, this research will focus on the small and medium category as the sampling unit. Thus in order to ensure every sub-sample gets an appropriate representation, a stratified random sampling procedure is used. This research will expect to receive between 120 to 150 responses from the 1,000 sample. This is based on past response rates in Malaysian studies. A detailed specification of the methodology is provided in Chapter 5.

1.8.1 Research process

Figure 1.1 shows the steps that will be employed in addressing the research problems.

Figure 1.1 Overview of research process

<table>
<thead>
<tr>
<th>STEP 1</th>
<th>Literature review</th>
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<tbody>
<tr>
<td>STEP 2</td>
<td>Identification of possible variables</td>
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<td></td>
<td>Development of survey questionnaire</td>
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<tr>
<td>STEP 3</td>
<td>Pilot testing - Postal questionnaire</td>
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<td></td>
<td>Approximately 2 months</td>
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<tr>
<td>STEP 4</td>
<td>Actual survey- postal questionnaire</td>
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<td></td>
<td>Approximately 4 months</td>
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<tr>
<td>STEP 5</td>
<td>Data analysis</td>
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</tbody>
</table>

The first step in the research process will be a literature search to ascertain the current state of knowledge in the field and ultimately to identify the relevant research design
References


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336


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