

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

Testing Accruals Based Earnings Management Models in an International Context

A thesis presented in partial fulfilment of the
requirements for the degree of

Master of Business Studies
in
Accountancy

at Massey University, Albany, New Zealand

Hawazin Kashmiri

2014

ABSTRACT

The main purpose of this thesis is to extend the study by Dechow, Hutton, Kim and Sloan (2012) in two ways: firstly by comparing the specification and power of the McNichols (2002) model with a newer model, Dunmore (2013). Secondly, the Dechow et al. (2012) study is extended into an international context using data from China, Japan and the United Kingdom to examine the specification and power of the models as a result of institutional factors. Data was collected for the years 1993 to 2012 and comprises a total of 13,238 firm years from China, 44,005 firm years from Japan and 7,782 firm years from the United Kingdom. The study finds that both the McNichols (2002) and the Dunmore (2013) models are well specified and the test power is improved by the incorporation of reversals. However, the study also finds that the McNichols (2002) model outperforms the Dunmore (2013) model. Finally, the results are quite different for each country, but not in the way that is predicted by the institutional factors.

ACKNOWLEDGEMENTS

I am indebted to my thesis supervisor Professor Paul V. Dunmore for his guidance and support, especially for his help and patience in explaining to me some of the mathematical models and R programming.

I am also grateful to the Dr Daniel C. I. Walsh, lecturer in statistics at the Institute of Information and Mathematical Sciences at Massey University, Albany Campus, for his help with the R programming codes for the pooled regressions.

I would also like to thank the School of Accountancy, Massey University for access to Global Vantage database and their general support.

I would like to thank my family for their encouragement.

TABLE OF CONTENTS

Contents	
ABSTRACT	ii
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	vii
LIST OF APPENDIX TABLES	vii
LIST OF FIGURES	viii
LIST OF APPENDIX FIGURES	viii
LIST OF ABBREVIATIONS	ix
CHAPTER 1 INTRODUCTION	1
CHAPTER 2 EARNINGS MANAGEMENT	3
2.1 Theoretical Background	3
2.1.1 Accounting Choice	3
2.1.2 Significance of Earnings in Accounting	4
2.2 Earnings Management	6
2.2.1 Defining Earnings Management	6
2.2.2 Ethics of Earnings Management	10
2.3 Types of Earnings Management	13
2.3.1 Accruals Management	13
2.3.2 Real Activities Management	16
2.3.3 Changes to the Accounting Process	21
2.3.4 Choosing between Earnings Management Types	22
CHAPTER 3 MOTIVATIONS FOR EARNINGS MANAGEMENT	26
3.1 Contracts	26
3.1.1 Debt Covenants	26
3.1.2 Executive Compensation	30
3.1.3 Implicit Claims	33
3.2 Asset Pricing	34
3.2.1 Initial Public Offerings (IPOs)	34
3.2.2 Seasoned Equity Offerings (SEOs)	35
3.2.3 Stock for Stock Acquisitions and Mergers	37

3.2.4 Management Buyouts (MBOs).....	38
3.3 Influencing External Parties	39
3.3.1 Political Costs	39
3.3.2 Achieving Earnings Prices.....	40
3.4. Earnings Management in an International Context.....	42
3.4.1 Institutional Factors	43
CHAPTER 4 DETECTING EARNINGS MANAGEMENT.....	51
4.1 Generalised Accruals Based Earnings Management Detection Models	51
4.2 Healy Model	53
4.3 Jones Model.....	54
4.4 Modified Jones Model.....	57
4.5 Performance Matched Discretionary Accruals.....	58
4.6 Dechow and Dichev Model: Cash Flows and Working Accruals.....	62
4.7 McNichols Model: An Integrated Approach.....	63
4.8 Dechow, Hutton, Kim and Sloan Model: A Reversals Approach.....	64
4.9 Dunmore Model: An Alternate Solution	65
CHAPTER 5 RESEARCH.....	67
5.1 Research Questions	67
5.2 Models	70
5.2.1 McNichols Model with Reversals	70
5.2.2 Dunmore Model.....	71
5.3 Tests.....	72
5.3.1 Non-inducement Tests	72
5.3.2 Inducement Tests	73
5.3 Data	74
5.3.1 Data Collection	74
5.3.1 Descriptive Statistics.....	76
CHAPTER 6 RESULTS	80
6.1 Non-Inducement Test Results	80
6.2 Inducement with Reversals at 10% Increments.....	82
6.3 Inducements with Increasing Sample Sizes	90
CHAPTER 7 DISCUSSION AND CONCLUSIONS	93
7.1 Discussion	93

7.2 Conclusions	95
REFERENCES.....	97
APPENDICES	105
Appendix A: Details of Missing Data	105
Appendix B: Dunmore Model Calculations	108
Appendix C: Results of Increasing Sample Size at Intervals of 100.....	111
Appendix D: Instructions for R Programming Codes	113
Appendix E: R Programming Codes	116

LIST OF TABLES

Table 1 Data on Institutional Factors	68
Table 2 Firm Statistics	77
Table 3 Summary Statistics for Assets.....	77
Table 4 Summary Statistics of Variables	78
Table 5 Non-Inducement Regression Results	80

LIST OF APPENDIX TABLES

Table B1 Results of 4 Variable Regression for UK (unconstrained)	108
Table B2 Results of 6 Variable Regression or UK (unconstrained)	108
Table B3 Results of 7 Variable Regression or UK (unconstrained)	108
Table B4 Intercept and Matrix Coefficients – China	109
Table B5 Intercept and Matrix Coefficients – Japan	109
Table B6 Intercept and Matrix Coefficients – UK.....	110

LIST OF FIGURES

Figure 1 China Inducement Results	84
Figure 2 Japan Inducement Results.....	86
Figure 3 UK Inducement Results	88
Figure 4 Inducements with Increasing Sample Size.....	91-92

LIST OF APPENDIX FIGURES

Figure A1 Missing Data in China	105
Figure A2 Missing Data in Japan.....	105
Figure A3 Missing Data in UK	106
Figure C1 Inducements with Increasing Sample Size – China.....	111
Figure C2 Inducements with Increasing Sample Size – Japan	111
Figure C3 Inducements with Increasing Sample Size – UK.....	112