THE CONTEMPORANEOUS MOVEMENT BETWEEN CASH FLOW AND ACCRUALS-BASED ACCOUNTING NUMBERS: THE NEW ZEALAND EVIDENCE

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

Doctor of Philosophy
in
Accountancy

at Massey University

John Dowds

1995

ABSTRACT

Much attention has been focused on the *usefulness* of cash flow numbers as variables used in predicting the *future* cash flows of an entity. Paradoxically, little attention has been paid to how earnings move relative to cash flows over a sustained time period. This thesis addresses the issue and analyses the financial information from the annual reports of New Zealand listed companies for the 21 year period, 1971-1991. The evidence shows that there has been wide variation between earnings and the underlying cash flows during the 1980s. The two years following the 1987 stock market collapse appears to have had a reduced degree of variation between the earnings and cash flow variables. This suggests that post-crash the attention on financial reporting was influential in reducing the degree of variation between earnings and the underlying cash flows.

The study also examines the data scaled and with outliers removed. Scaling indicates that non-current accruals are more important for large companies while removal of outliers has little effect on the results.

Data on actual cash flows were analysed for the period 1989-1991. The results indicate that the variation between earnings and actual cash flows is quite high.

The contextual relationship between changes in each of the accounting variables (earnings and cash flows) and changes in macroeconomic indicators (gdp, money supply and inflation) was investigated. The evidence is that the association between changes in the macroeconomic indicators and changes in the accounting variables is not particularly strong and that changes in both money supply and inflation are of more importance than changes in gdp.

An industry by industry analysis provides evidence showing that for most industries there is little association between changes in the accounting variables and changes in economic indicators. There is evidence that some industries are more sensitive than others to macroeconomic changes. This evidence is enhanced when the data are partitioned in a way which allows low, medium and high changes in macroeconomic activity to be analyzed separately.

The conclusion of the study is that although the largest proportion of variation in accounting numbers is explained by factors other than changes in the economy there is sufficient evidence to suggest that for some industries the impact of changes in macroeconomic conditions is greater than for others.

ACKNOWLEDGEMENTS

In completing this thesis I owe a great deal of gratitude to a number of people. The staff of the Department of Accountancy who taught on courses with which I was associated, in particular, Heather Batley, are owed an immense amount of thanks. I would also like to acknowledge the encouragement of Joanne Locke, Mike Adams, Associate Professor Asheq Rahman and Dr Kazi Alam. For his good humour and patience I thank Andrew Rowatt who was always willing to help when computer problems arose. Thanks are also due to Professor Mohan Lal for his support. I would also like to acknowledge the assistance of the administrative staff, in particular, Sharryn Brickley, Justine Harding and Kirsty Bell.

A special mention in recognition of the efforts expended by my supervisors is appropriate. Professor Hector Perera of Massey University in his role as Chief Supervisor provided wise counsel and guidance. I am extremely appreciative of Professor Perera's willingness to have meetings to allow me to discuss issues as they became important. I am indebted to Professor Michael Bradbury of the University of Auckland for his willingness to supervise the project and for his subsequent guidance and advice. To Greg Arnold of the Department of Statistics at Massey University I am also indebted. I also acknowledge the advice of Dr Trevor Sweatman whose supervision during the early stages of the project was appreciated.

Dr Greg Tower must also be mentioned since without the many supportive electronic mail messages he sent from Australia the difficult times would have seemed much worse.

The proof-reading assistance given by Mrs Anne Austin of Editext Services at Massey University's Department of English is gratefully acknowledged.

I wish to express my appreciation to my wife, Ann, whose constant support and encouragement made it possible for me to undertake this project. Without her help this thesis would never have been completed. Finally, to my children, Adam and Rachel, I owe thanks for being tolerant of the demands which this work placed on our time.

TABLE OF CONTENTS

Appendices

LIST OF TABLES

LIST OF FIGURES