University of Technology Sydney

School of Accounting

Continuous Disclosure

Mark Russell

Supervisors

Associate Professor Peter Wells University of Technology, Sydney

Professor Anne Wyatt The University of Queensland

A thesis submitted in fulfillment of the requirements for the degree of Doctor of Philosophy (Accounting). Year of Submission 2011

Certificate of Authorship / Originality

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

Signature of Student

Mark Russell

ACKNOWLEDGEMENTS

I thank my supervisors Associate Professor Peter Wells and Professor Anne Wyatt for their assistance and feedback.

I am grateful for the comments of Zoltan Matolcsy, Terry Walter, Stephen Taylor, Robert Czernkowski, Jere Francis, Greg Clinch, Peter Easton, Mark Rossiter, and participants at the 2010 AFAANZ Conference at Christchurch, and at the 2010 UTS research seminar series.

I acknowledge financial support from the UTS School of Accounting and FIRN. Data supplied by the Securities Industry Research Centre Asia-Pacific on behalf of the ASX and Aspect Financial.

	Table of Contents	
	Abstract	ix
	Chapter 1 Introduction and Overview	
1	Introduction	1
2	The Continuous Disclosure Regulation (CDR).	2
3	Motivation	4
4	Main Results	5
5	Contribution	6
6	Structure of the thesis	6
	Chapter 2 Continuous Disclosure and Information Asymmetry	
	Abstract:	7
1	Introduction	8
2	Institutional Background and Hypothesis Development	12
	Hypothesis 1	18
	Hypothesis 2	22
3	Empirical Analysis	22
3.1	Sample and Data	22
3.2	Measurement of Price Sensitive Information Disclosures	23
3.3	Measurement of Information Asymmetry	26
	Bid-Ask Spread	26
	Trading Volume	27
	Price Volatility	27
	Alternate Explanations for the Level of Information Asymmetry	28
3.4	Empirical Models	29
3.5	Descriptive Statistics	35
3.6	Results	37
3.7	Additional Tests	39
4	Conclusion	43
	Appendix 1. Self-Section Bias and Endogeneity	60
	Appendix 2. Additional Testing	69
	Appendix 3. Causality and Simultaneity	103
	Chapter 3 Continuous Disclosure and Price Discovery	
	Abstract:	111
1	Introduction	112
2	Continuous Disclosure Regulation	114
3	Theory Development and Hypothesis	115

iv

	Hypotheis 1	116
	Completeness of Price Discovery	116
	Hypothesis 2	117
	Hypothesis 3	117
	Other Determinants of Price Discovery	117
4	Research Design and Sample	119
	The Timeliness of Price Discovery	119
	Completeness of Price Discovery	120
	Timeliness of Price Discovery Variables	122
	Completeness of Price Discovery variables	124
	Information Disclosure Proxy	125
	Sample	125
	Descriptive Statistics	126
5	Results	128
	Disclosure and Price Discovery	128
	Completeness of Price Discovery	129
	Sensitivity	130
6	Conclusion	130
	Appendix 1	145
	Appendix 2	147
	Timeliness of Price Discovery - Additional Testing and Endogeneity	147
	Appendix 3 Additional Testing for Standard Errors in Clustered Samples	157

Chapter 4 Conclusion

1	Research Question	160
2	Results	160
3	Contribution	161
4	Limitations and Suggestions for Further Studies	161

References	163

List of Figures and Tables

Chapter 1 Introduction and Overview	
Figure 1 Flow of information to share price	2
Chapter 2 Continuous Disclosure and Information Asymmetry	
Table 1 Comparative Continuous Disclosure Regulation	46
Table 2 Descriptive Statistics for the Variables used in Tests of Hypothesis 1	47
Table 3 Descriptive Statistics for the Variables used in Tests of Hypothesis 2	48
Table 4 Correlations for the Disclosure Analysis and EconomicCharacteristics of the Firms in Hypothesis 1	50
Table 5 Correlations in Equation (2) Variables Testing Hypothesis 2.	51
Table 6 Correlations in Equation (3) Variables Testing Hypothesis 2.	52
Table 7 Results for Hypothesis 1 Price Sensitive Disclosures and Economic Characteristics of the Firm	54
Table 8 Results for Hypothesis 2 Association between InformationAsymmetry and Price Sensitive Disclosures	55
Table 9 Results for Hypothesis 2 Association between Information Asymmetry, Price Sensitive Disclosures and Economic Characteristics of the Firms	57
Table 10 Results for Hypothesis 2 using Lagged Stock Price Volatility Deciles	59
Table 11 Price Sensitive Disclosures and Economic Characteristics of the Firm	64
Table 12 Heckman Second Stage Estimates - Association betweenInformation Asymmetry and Price Sensitive Disclosures	67
Table 13 Descriptive Statistics for the Variables in Tests of Hypothesis 2	76
Table 14 Correlations in Equation (2) Variables, Full Sample ASX firms	77
Table 15 Correlations in Equation (3) Variables Full Sample ASX firms	78
Table 16 Association between Information Asymmetry and Price Sensitive Disclosures	80
Table 17 Association between Information Asymmetry, Price Sensitive Disclosures and Economic Characteristics of the Firms	82
Table 18 Association between Information Asymmetry, Price SensitiveDisclosures and Economic Characteristics of the Firms	84
Table 19 Annual Analysis of the Association between InformationAsymmetry and Price Sensitive Disclosures	86
Table 20 Results for Hypothesis 2 Association between Daily Changes in Information Asymmetry and Price Sensitive Disclosures	88
Table 21 Results for Hypothesis 2 Information Asymmetry Analysis using Lagged Stock Price Volatility Deciles	90

Table 22 Results for Hypothesis 2 Information Asymmetry Analysis using Clustered Standard Errors by Firm and Year	91
Table 23 Results for Hypothesis 3 Information Asymmetry Analysis using Clustered Standard Errors by Firm and Year	92
Table 24 Results for Hypothesis 2 Information Asymmetry Analysis using Fixed Effects by Year	94
Table 25 Results for Hypothesis 3 Information Asymmetry Analysis using Fixed Effects by Year	95
Table 26 Results for Hypothesis 1 Determinants of Price Sensitive Disclosure as a Binary Outcome	97
Table 27 Descriptive Statistics for Variables in Tests of Hypothesis 2, Smallest 1,500 ASX-Listed Firms by Size	100
Table 28 Panels A and B, OLS Results for Hypothesis 2 and 3 Analysis of Information Asymmetry in Small Size Firms	101
Table 29 Two Stage Least Squares Results for Hypothesis 1 Price-Sensitive Disclosures, Information Asymmetry and Economic Characteristics of the Firm	106
Table 30 Two Stage Least Squares Results for Hypothesis 3 Information Asymmetry Analysis	109

Chapter 3 Continuous Disclosure and Price Discovery

Figure 1 Timeliness of Price Discovery	116
Table 1 Panel A Descriptive Statistics Daily Timeliness of Price Discovery Analysis	132
Table 1 Panel B Descriptive Statistics Half Year Timeliness of Price Discovery Analysis	133
Table 1 Panel C Descriptive Statistics New Continuous Disclosure Information Analysis	134
Table 2 Panel A Correlations for the Daily Timeliness of Price Discovery Analysis	135
Table 2 Panel B Correlations for the Half Year Timeliness of Price Discovery Analysis	136
Table 2 Panel C Correlations for the New Continuous Disclosure Information Analysis, Arithmetic terms.	137
Table 2 Panel D Correlations for the New Continuous Disclosure Information Analysis, Logarithmic terms.	138
Table 3 Panel A Daily Association between Timeliness, Price Sensitive Disclosures and Economic Characteristics of the Firms	139
Table 3 Panel B Half-Year Association between Timeliness, Price Sensitive	141
Disclosures and Economic Characteristics of the Firms Table 4 Association between Financial Year Returns, Price Sensitive Disclosure Returns, and Earnings Announcement Returns	143

Table 5 Association between Earnings Announcement Returns and PriceSensitive Disclosure Returns	144
Table 6 Association between Timeliness, Logarithm of Price SensitiveDisclosures and Economic Characteristics of the Firms	145
Table 7 Descriptive Statistics for the Probit Disclosure Analysis	149
Table 8 Correlations for the Probit Disclosure Analysis	151
Table 9 Panel A OLS and Heckman First Stage Estimates of Determinants of Price Sensitive Disclosures	152
Table 9 Panel B Heckman Second Stage Estimates of Timeliness of Price Discovery and Price Sensitive Disclosures	155
Table 10 Results for Hypothesis 1 Timelinesss Analysis using Clustered Standard Errors by Firm	158

Abstract

This thesis evaluates the operation of Continuous Disclosure Regulation (CDR) in Australia and considers whether it is effective in reducing uncertainty about the value of the firm. A feature of the CDR is that it adopts a principles-based approach to prescribing disclosure, and in general terms it requires that listed companies disclose price sensitive information to the market on a timely basis. A consequence of adopting this approach is that firms must exercise considerable discretion in applying the regulation. Those judgments relating to whether information is price sensitive are addressed in chapter 2, while those relating to when the information should be disclosed are addressed in chapter 3. Evidence is provided in Chapter 2 that disclosures made under the regulation are generally associated with a reduction in information asymmetry. Although, there is some evidence that when firms disclose bad news this may actually increase information asymmetry. In chapter 3 there is evidence that disclosures under CDR result in timelier price discovery, with this result strongest for loss firms and firms reporting high returns. Accordingly, this is supportive of the CDR meeting at least some of its objectives. However, there is evidence of cross sectional variation in the application of the regulation which suggests that firm disclosure practices are still influenced by firm characteristics such as size, the nature of the news, and managerial incentives.