

Repeated Dividend Increases: A Collection of Four Essays

by

Scott Walker

**Submitted to UTS: Business in fulfilment of the requirements for the degree of Doctor
of Philosophy at the University of Technology, Sydney**

Sydney, 2015

CERTIFICATE OF ORIGINAL AUTHORSHIP

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:

Scott Walker

Date:

Acknowledgement

I am enormously grateful to my principal supervisor, Dave Michayluk, for many reasons. I have long been interested in dividend payments and Dave's suggestion that there are still unexplored areas that are worthy of a thesis proved irresistible to me. Throughout my candidature he provided constant encouragement, had a thirst for regular updates, and critiqued numerous revisions of my writing until the words finally made sense. He performed these duties with patience and good humour. His unwavering support has been invaluable.

I am also thankful to many of my colleagues in the Finance Discipline Group at UTS who have provided support by attending presentations, giving comments, and taking a genuine interest in my research. Writing this thesis in such a supportive environment has helped tremendously.

Table of Contents

Certificate of original authorship	i
Acknowledgement	ii
Table of Contents	iii
List of Figures	vii
List of Tables	viii
Abstract	xi
Chapter 1 - Introduction	1
1.1 Thesis Outline	1
Chapter 2 - The Dividend-Increase Repetition Reward	6
2.1 Introduction	6
2.2 Related Literature	9
2.2.1 Stock Returns Following Dividend Increases	9
2.2.2 Stock Returns and Earnings Track Records	10
2.2.3 Repeating Corporate Events	11
2.2.4 Dividend Track Records	12
2.2.5 Comparison of Results with Existing Literature	12
2.3 Sample Construction	14

2.4	Control Firm Identification	19
2.5	Annual Returns Measurement	22
2.6	Results	24
2.7	Earnings Track Records and Dividend Track Records	34
2.8	Conclusion	40
 Chapter 3 – Are Certain Dividend Increases Predictable? The Effect of Repeated Dividend Increases on Market Returns		 42
3.1	Introduction	42
3.2	Repeating Corporate Events	46
3.2.1	Dividend Payment Patterns	46
3.2.2	Earnings Repetition Patterns	46
3.2.3	Other Repeating Corporate Events	48
3.3	Sample Selection and Descriptive Statistics	49
3.3.1	Identifying Repeated Dividend Increases	49
3.3.2	Sample Statistics	50
3.3.3	Characteristics of Repeated Dividend-Increasing Firms	54
3.3.4	Correctly Attributing the Market Reaction to the Increase Announcement	60
3.3.5	Variable Correlations	63

3.3.6	Event Study Methodology	64
3.4	Results	65
3.4.1	Effect of the Dividend-Increase Number on Abnormal Returns	65
3.4.2	Multivariate Results	69
3.4.3	Sensitivity Analysis	72
3.5	Conclusion	79
Chapter 4 – Are all Dividends Created Equal? Australian Evidence of		
	Dividend-Increase Track Records	80
4.1	Introduction	80
4.2	Motivation	82
4.3	Prior Literature	84
4.4	Sample Construction and Empirical Methodology	87
4.4.1	Sample Construction	87
4.4.2	Identifying Dividend Increases	88
4.4.3	Counting the Number of Consecutive Dividend Increases	89
4.4.4	Variable Definitions and Descriptive Statistics	92
4.4.5	Empirical Methodology	103
4.5	Regression Model and Estimation Results	105
4.5.1	Multivariate Model	105

4.5.2	Estimation Results	108
4.6	Conclusion	111
Chapter 5 – When No-News is Good News: Failing to Increase Dividends		113
5.1	Introduction	113
5.2	Related Literature	116
5.3	Data	119
5.4	Identifying a Failure-to-Increase Event	121
5.5	Initial Sample Description	124
5.6	Construction of Final Sample	134
5.7	Calculating Abnormal Returns	135
5.8	Results	136
5.9	Regression Model	140
5.10	Conclusion	144
Chapter 6 – Conclusions		145
6.1	Thesis Summary	145
6.2	The Dividend-Increase Repetition Reward	146
6.3	Are Certain Dividend Increases Predictable? The Effect of Repeated Dividend Increases on Market Returns	147
6.4	Are all Dividends Created Equal? Australian Evidence of Dividend-Increase Track Records	148

6.5	When No-News is Good News: Failing to Increase Dividends	150
	References	152

List of Figures

Figure 2.1	Ten-Year Track Record Dividend Payment Pattern	15
Figure 2.2	Dividend History of TJX Companies, Inc.	16
Figure 4.1	Sonic Healthcare Limited Dividend History	90
Figure 5.1	Dividend History of FFY Financial Corp.	123

List of Tables

Table 2.1	Fiscal Quarter of Increase for Ten-Year Dividend Track Records	17
Table 2.2	Comparison of Sample Firm and Matching Firm's Characteristics	21
Table 2.3	Abnormal Returns Classified by Consecutively-Numbered Increase	25-27
Table 2.4	Comparison of Abnormal Returns using Overlapping and Non-Overlapping Intervals	29
Table 2.5	Annual Abnormal Returns for Firms Known to Survive to a Fifth Consecutive Dividend Increase	33
Table 2.6	Comparison of Earnings Track Record Length and Dividend Track Record Length	35
Table 2.7	Comparison of Abnormal Returns based on Earnings Track Record Length	38
Table 3.1	Distribution of Chain Length by Year of Announcement	51
Table 3.2	Summary Statistics for Initial Sample	55
Table 3.3	Dividend Increase Amount Summary Statistics	58
Table 3.4	Frequency Distribution of Dividend Increase Amount	59
Table 3.5	Descriptive Statistics for Dividend Increases without Concurrent News Announcements	61
Table 3.6	Correlation Matrix	63
Table 3.7	Mean Abnormal Return	66
Table 3.8	Mean Abnormal Return by Dividend Increase Amount	68

Table 3.9	Single and Multivariate Analysis of Abnormal Returns	71
Table 3.10	Robustness Checks	74
Table 3.11	Abnormal Returns for Different Announcement Period Window Lengths	75
Table 3.12	Multivariate Analysis of Abnormal Returns for Wider Announcement Period Window	78
Table 4.1	Number of Dividend Increase Announcements by Announcement Year for Initial Sample	91
Table 4.2	Number of Dividend Increase Announcements by Announcement Year for Final Sample	97
Table 4.3	Descriptive Statistics	99
Table 4.4	Frequency of Earnings and Dividend Surprise by Sign Pair	102
Table 4.5	Correlation Matrix	104
Table 4.6	Distribution of Dividend Increase Announcements by Month	106
Table 4.7	Distribution of Dates with Multiple Announcements	107
Table 4.8	Multivariate Regression Results	109
Table 5.1	Initial Sample Description	125
Table 5.2	Industry Affiliation	127
Table 5.3	Initial Sample Descriptive Statistics	129
Table 5.4	Characteristics of Firms with Ten-Year Dividend-Increase Chains	130
Table 5.5	Dividend Changes following a Failure-to-Increase	131

Table 5.6	Change in Earnings Per Share	133
Table 5.7	Distribution of Failure-to-Increase Announcements	135
Table 5.8	Mean Abnormal Returns	137
Table 5.9	Mean Abnormal Return by Earnings Change Sign	139
Table 5.10	Final Sample Descriptive Statistics	140
Table 5.11	Correlation Matrix	142
Table 5.12	Regression Results	143

Abstract

This thesis investigates firms with patterns of repeated cash dividend increases to answer two research questions. First, are firms rewarded for this particular type of dividend policy, and second, is there any evidence to support the hypothesis that the stock market learns to anticipate a dividend increase based on past history? Dividends are a particularly good corporate action to study because firms tend to increase dividends over time, and at regular intervals. This repetition leads to patterns of regularly-occurring dividend increases, which in some cases can extend for many decades. The analysis is presented in a collection of four essays. The first essay documents the prevalence of firms that sustain a pattern of consecutive annual dividend increases. These firms attract a stock market premium, providing evidence to support the belief that a steady dividend policy is rewarded. The next two essays further explore firms with a habit of regularly increasing the dividend to determine if the market eventually learns to expect future dividend increases. The second essay studies U.S. firms and Australian firms are investigated in the third essay. For both countries the stock market reaction to each consecutively-numbered increase within a pattern is different across each increase, with a smaller stock price reaction the more often the increase is repeated. The fourth, and final, essay examines firms that fail to continue an established dividend-increase pattern. A firm may be expected to maintain the same dividend-increase schedule, and the expectation should be higher the longer the length of the established pattern. When the pattern is interrupted and the expected increase does not eventuate, the stock market reaction is expected to be more pronounced the longer the length of the established pattern. The results presented in the last three essays provide evidence consistent with the market learning hypothesis. Combined, the four essays suggest that the stock market evaluates the information contained in a dividend announcement in conjunction with the length and pattern of past dividend payments.