

## Table of Contents

|   |             |
|---|-------------|
| <b>Title page</b> .....                                       | <b>i</b>    |
| <b>Motto</b> .....  | <b>iii</b>  |
| <b>Foreword</b> .....   | <b>iv</b>   |
| <b>Abstract</b> .....   | <b>v</b>    |
| <b>Table of Contents</b> .....                                | <b>viii</b> |
| <b>List of tables</b> .....                                   | <b>viii</b> |
| <b>List of Figures</b> .....                                  | <b>ix</b>   |
| <b>Chapter 1.</b> .....                                       | <b>1</b>    |
| <b>Introduction</b> .....                                     | <b>1</b>    |
| 1.1 Background to the Research .....                          | 1           |
| 1.2 Statement of the Problem .....                            | 14          |
| 1.3 Statement of the Purposes .....                           | 16          |
| 1.5 Research Questions .....                                  | 17          |
| 1.6 Research Originality .....                                | 18          |
| 1.7 Assumptions/Theoretical Limitations .....                 | 20          |
| <b>Chapter 2.</b> .....                                       | <b>21</b>   |
| <b>Review of Literature</b> .....                             | <b>21</b>   |
| 2.1 Multifractal Detrended Fluctuation Analysis (MFDFA) ..... | 21          |
| 2.2 Value Relevance .....                                     | 24          |
| 2.2.1 Ohlson Model (1989) .....                               | 26          |
| 2.2.2 Easton & Harris Model (1991) .....                      | 27          |
| 2.3 Grand Theoretical Model .....                             | 29          |
| 2.3.1 Modern Approach to EMH .....                            | 29          |
| 2.3.2 Fractal Market Hypothesis .....                         | 32          |
| 2.4 Empirical Research Model .....                            | 34          |
| 2.5 Review of Relevant Literature .....                       | 36          |
| 2.6 Hypothesis Development .....                              | 42          |
| 2.6.1 Hypothesis 1 .....                                      | 42          |
| 2.6.2 Hypothesis 2 .....                                      | 48          |
| 2.6.3 Hypothesis 3. ....                                      | 51          |
| <b>Chapter 3.</b> .....                                       | <b>56</b>   |
| <b>Method and Procedures</b> .....                            | <b>56</b>   |
| 3.1 Research Design .....                                     | 56          |
| 3.2 Participants or Sample .....                              | 56          |

**FEB UNDIP**

|  |     |
|--|-----|
| 3.3 Variables and Model Specification .....                      | 58  |
| 3.3.1 Multifractal Detrended Fluctuation analysis (MFDFA).....   | 58  |
| 3.3.2 The Ohlson model (1989) .....                              | 60  |
| 3.3.3 Interactive Regression Model .....                         | 61  |
| 3.4 Instrumentation .....  | 62  |
| 3.4.1 Multifractal Detrended Fluctuation Analysis (MFDFA) .....  | 62  |
| 3.4.2 Runs Signs Test.....                                       | 69  |
| 3.4.3 GARCH .....  | 70  |
| 3.4.4 Rolling Window Hurst Exponent.....                         | 72  |
| 3.4.5 <i>Breusch-Pagan</i> Test .....                            | 74  |
| 3.4.6 The <i>Durbin Watson</i> Test .....                        | 75  |
| 3.5 Research Procedure.....                                      | 76  |
| 3.5.1 Data Collection .....                                      | 76  |
| 3.5.2 Data Analysis .....  | 77  |
| <b>Chapter 4.</b> .....  | 79  |
| <b>Data Analysis</b> .....                                       | 79  |
| 4.1 Data Analysis-Overview .....                                 | 79  |
| 4.2 Data collection and Data Pre-processing .....                | 80  |
| 4.3 Empirical Results-Descriptive Statistics .....               | 81  |
| 4.4 Regression Results Analysis .....                            | 86  |
| 4.4.1 Regression Results Ohlson Model .....                      | 87  |
| 4.4.2 Regression Results Easton-Harris Model .....               | 90  |
| 4.4.3 Regression Results Interactive Model .....                 | 93  |
| <b>Chapter 5.</b> .....  | 96  |
| <b>Discussion and Results</b> .....                              | 96  |
| 5.1 Discussion and Results-Overview .....                        | 96  |
| 5.2 Hypothesis Results Discussion .....                          | 97  |
| <b>Chapter 6 Conclusions and Implications</b> .....              | 101 |
| 6.1 Overview .....   | 101 |
| 6.2 Conclusions .....  | 102 |
| 6.3 Implications .....   | 102 |
| 6.3.1 Theoretical Implications for Value Relevance Studies ..... | 102 |
| 6.3.2 Implications for Accounting Policy .....                   | 104 |
| <b>Reference</b> .....   | 106 |
| Appendix .....   | 119 |

**FEB UNDIP**