

# Corporate Finance and Governance

Herausgegeben von Dirk Schiereck

Band 9

Malte Helmut Raudszus

## Financial Return Risk and the Effect on Shareholder Wealth



PETER LANG

Internationaler Verlag der Wissenschaften

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# Financial Return Risk and the Effect on Shareholder Wealth

How M&A Announcements and Banking Crisis Events  
Affect Stock Mean Returns and Stock Return Risk

A Compendium of Five Empirical Studies  
across Selective Industries



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# Preface

Malte Raudszus has taken his first steps in corporate finance research back in the days before he graduated from European Business School (ebs) in 2007. Built on the learnings of a very well written seminar paper with a fellow student, his diploma thesis on “Risk behavior around convertible bond issuances” laid the basis for his ongoing focus on empirical studies investigating risk dynamics. Not surprising for a graduate from ebs he had various professional opportunities and proceeded with an initial career step in strategy consulting at The Boston Consulting Group (BCG).

In close communications throughout this time I was able to keep Malte convinced that a doctoral program in corporate finance would be a highly valuable experience and academic challenge to him. In the fall of 2009, I welcomed him back at the chair of corporate finance, now at Technische Universität Darmstadt, where I had routinely moved to in the meantime.

Until December 2009 Malte had yet achieved to finish a draft of his first study on corporate diversification with a focus on the construction industry. This enabled him to obtain admission to his primary academic conference, the annual meeting of the Academy of Economics and Finance (AEF), then held in Houston, Texas. Mid 2010 he submitted his manuscript to a top-tier international management journal where he is currently within the second round of the revision process.

Throughout the year 2010 Malte engaged in some cross-discipline research projects with a former fellow student from ebs. His spearheading partner Jan-Willem Olliges was then enrolled as a doctoral student in the field of real estate economics with a former colleague of mine at ebs being Karl-Werner Schulte. As I had a first manuscript on my desk I identified significant publishing potential and recommended to get an American A-list researcher on board to challenge the study. Today I am delighted to say that this planting of seeds has carried nice fruit as a first publication of Malte, Jan-Willem and Glenn R. Mueller from Denver University in the *Journal of Real Estate Portfolio Management* has been achieved.

In terms of the academic learning curve Malte has climbed up high throughout his time of active research at ebs and TU Darmstadt. Yet in his diploma thesis he applied advanced volatility modeling techniques from the so called GARCH family. Probably not anticipated by him either he reignited on this topic when starting his doctoral studies and thus developed empirical volatility and risk analyses as one of his core fields of academic competence.

This dissertation as a compendium of closely related chapters but nevertheless individual studies underlines his way of performing continuously advancing research. As the first part sheds light on corporate diversification through M&A and how related risk dynamics affect shareholder wealth, he carries over the methodology to external events in the second part of the book. In studies three and four Malte individually scrutinizes the adverse implications of bank failures and bank bailouts in the recent financial crisis from 2007 to 2009. As he finds opposing return shocks he identifies the limits of the standard GARCH (1,1) model and moves on to the more advanced EGARCH which incorporates the so called leverage effect. As observed of the behavior of financial market stock return data, volatility reacts asymmetrically to positive and negative return shocks. As Malte applies the EGARCH in his final study he can simultaneously scrutinize the adverse bank events with an appropriate econometric foundation.

Throughout Malte's various conference attendances at the annual meetings of the AEF, the American Real Estate Society (ARES) and the Deutsche Gesellschaft für Finanzwirtschaft (DGF) he has received an amount of valuable professional feedback and insight into the research economy that is by far not common for a two-year doctoral student. Currently, three of his studies are under review in major international journals, and as it is the objective of any serious academic scholar, he is talking the effort to finally achieve the respective publications. In this light interpret the present book as a small plant that is yet growing and hopefully further refined and advanced versions of the present studies will find their way into a premier publication.

I am a bit sad to have lost Malte again to the world of business. As he had been focused on banking and M&A back in the days as a strategy consultant it is again not surprising that he recently continued to work in that field. Starting as of January 2012 he moved to Deutsche Bank where he currently supports and drives the ongoing integration of a major German retail bank. I still hope he returns to academia soon as he is not just a gifted scholar in financial econometrics but also enjoys the teaching. He has yet done very well stepping in for me when I was on travels and would serve as outstanding role model for our discipline.

In any case I wish him all the best for his future endeavors.

*Prof. Dr. Dirk Schiereck*

# Acknowledgements

This dissertation origins not least from a seminar paper in finance which my good friend Alexander Ploch and I wrote during our final year of studies at the European Business School (ebs), Oestrich-Winkel. With his rigorous approach to econometric analysis he was a main driver of success to our joint work. Consecutively, we each wrote our diploma theses individually in the same field and I later continued on my academic path pursuing a PhD in finance. Therefore, I like to extend a special thanks to Alex as he clearly enabled me to take this way.

After graduation I took advantage of starting of my career at The Boston Consulting Group, even though I had yet committed myself to a doctorate program at ebs. I am very thankful to Dirk Schiereck, then Professor of Banking and Finance at ebs, that he showed himself obliging in extending another offer for a doctorate program to me, after he had moved to Technische Universität Darmstadt (TUD). Throughout my dissertation time he has been a great ‘doctor father’ and I am especially thankful for the countless times Professor Schiereck took the burden to provide me with valuable advice, comments, criticism, and suggestions.

Special thanks go to Ramit Mehta and Jan-Willem Olliges as they contributed significantly to three of the five studies this dissertation book comprises, to Professor Glenn Mueller from University of Denver, USA, and to various anonymous referees who put considerable effort into achieving publication in major academic journals. I am also grateful to my doctoral colleagues at TUD who engaged in insightful discussions and helped refine my thinking. In particular I want to thank Julian Trillig, Mehtap Ölger, and Mark Mietzner for their patience and effort in discussing econometric issues and technical transformations.

This book could hardly have been written without the support of my family and friends. Intensive studying, literature analysis, and econometric modeling need counterparts to keep up the mood. Therefore, I like to extend extra special thanks to my parents, Barbara and Frank, supporting me again for the time being. Another distinguished thanks goes to the ‘student horse riders’ at TUD who enabled me to pick up a unique sport and dive into a thrilling community that is very ambitious but also dedicated to a good bit of fun.

All remaining errors of this dissertation are mine alone.

*Malte H. Raudszus*



*To my families.*



# Content Overview

|                                                                                                              |      |
|--------------------------------------------------------------------------------------------------------------|------|
| Preface .....                                                                                                | V    |
| Acknowledgements .....                                                                                       | VII  |
| Content Overview.....                                                                                        | XI   |
| Table of Contents .....                                                                                      | XIII |
| List of Tables.....                                                                                          | XVII |
| List of Figures .....                                                                                        | XX   |
| List of Abbreviations.....                                                                                   | XXI  |
| List of Symbols .....                                                                                        | XXIV |
| 1. Introduction.....                                                                                         | 1    |
| 2. Does Vertical Diversification Create Superior Value?<br>Evidence from the Construction Industry .....     | 7    |
| 3. How Consolidation Changes the Risk Profile of a Whole Sector:<br>Evidence from the Brewing Industry ..... | 33   |
| 4. Bank Failures and Real Estate Investment Trust (REIT) Returns.....                                        | 57   |
| 5. Bank Bailouts: REITs and their Performance as Financial Stock .....                                       | 85   |
| 6. Banking Crisis and Government Intervention:<br>How Bailouts versus Failures Affect Financial Stocks ..... | 109  |
| 7. Concluding Remarks.....                                                                                   | 141  |
| References .....                                                                                             | 149  |
| Appendix .....                                                                                               | 163  |



# Table of Contents

|                                                                                                                 |          |
|-----------------------------------------------------------------------------------------------------------------|----------|
| Preface .....                                                                                                   | V        |
| Acknowledgements .....                                                                                          | VII      |
| Content Overview.....                                                                                           | XI       |
| Table of Contents .....                                                                                         | XIII     |
| List of Tables.....                                                                                             | XVII     |
| List of Figures .....                                                                                           | XX       |
| List of Abbreviations.....                                                                                      | XXI      |
| List of Symbols .....                                                                                           | XXIV     |
| <b>1. Introduction .....</b>                                                                                    | <b>1</b> |
| <b>2. Does Vertical Diversification Create Superior Value?<br/>Evidence from the Construction Industry.....</b> | <b>7</b> |
| 2.1. Introduction.....                                                                                          | 7        |
| 2.2. Literature Review.....                                                                                     | 10       |
| 2.2.1. M&A Motives across Transaction Directions .....                                                          | 10       |
| 2.2.2. Consolidation of the Construction Industry.....                                                          | 12       |
| 2.2.3. Hypotheses for Risk and Return Behavior.....                                                             | 13       |
| 2.3. Data and Methodology.....                                                                                  | 15       |
| 2.3.1. Data Selection .....                                                                                     | 15       |
| 2.3.2. Methodology .....                                                                                        | 16       |
| 2.4. Results .....                                                                                              | 20       |
| 2.4.1. Structure of the Results' Section.....                                                                   | 20       |
| 2.4.2. Short-term Risk and Return Behavior.....                                                                 | 20       |
| 2.4.3. Long-term Risk Behavior.....                                                                             | 25       |
| 2.4.4. Multivariate Regressions on Risk Behavior .....                                                          | 27       |
| 2.5. Conclusion.....                                                                                            | 30       |

|           |                                                                                                                   |           |
|-----------|-------------------------------------------------------------------------------------------------------------------|-----------|
| <b>3.</b> | <b>How Consolidation Changes the Risk Profile of a Whole Sector:<br/>Evidence from the Brewing Industry .....</b> | <b>33</b> |
| 3.1.      | Introduction .....                                                                                                | 33        |
| 3.2.      | Literature Review .....                                                                                           | 35        |
| 3.2.1.    | Evidence on Risk Changes and Wealth Effects around M&A .....                                                      | 35        |
| 3.2.2.    | Contribution to the Literature and Hypotheses .....                                                               | 38        |
| 3.3.      | Data and Methodology .....                                                                                        | 40        |
| 3.3.1.    | Data Selection .....                                                                                              | 40        |
| 3.3.2.    | Methodology of the Systematic Risk Analysis .....                                                                 | 41        |
| 3.4.      | Results of Risk Analysis around M&A .....                                                                         | 44        |
| 3.4.1.    | Acquirer Short-term Systematic Risk Changes .....                                                                 | 44        |
| 3.4.2.    | Rival Short-term Systematic Risk Changes .....                                                                    | 47        |
| 3.4.3.    | Summary of Acquirer and Rival Risk Changes .....                                                                  | 49        |
| 3.4.4.    | Determinants of Abnormal Risk Changes .....                                                                       | 50        |
| 3.5.      | Conclusion .....                                                                                                  | 54        |
| <b>4.</b> | <b>Bank Failures and Real Estate Investment Trust (REIT)<br/>Returns .....</b>                                    | <b>57</b> |
| 4.1.      | Introduction .....                                                                                                | 57        |
| 4.2.      | Literature Review .....                                                                                           | 59        |
| 4.2.1.    | Market Liquidity, Bank Failures, and REIT Behavior .....                                                          | 59        |
| 4.2.2.    | Contribution to the Literature and Hypotheses .....                                                               | 61        |
| 4.3.      | Data and Methodology .....                                                                                        | 62        |
| 4.3.1.    | Data Selection and Descriptive Statistics .....                                                                   | 62        |
| 4.3.2.    | Methodology of the Return and Risk Event Study .....                                                              | 64        |
| 4.4.      | Results .....                                                                                                     | 67        |
| 4.4.1.    | Bank Failures' Effect on the All-REIT Index .....                                                                 | 67        |
| 4.4.2.    | Bank Failures' Effect on Focused REIT Indices .....                                                               | 70        |
| 4.4.3.    | Robustness Analysis regarding Potential Biases .....                                                              | 76        |

|           |                                                                                                                  |            |
|-----------|------------------------------------------------------------------------------------------------------------------|------------|
| 4.4.4.    | Multivariate Regressions of Focused REIT Indices<br>on the All-REIT Index .....                                  | 80         |
| 4.5.      | Conclusion.....                                                                                                  | 82         |
| <b>5.</b> | <b>Bank Bailouts: REITs and their Performance<br/>as Financial Stock.....</b>                                    | <b>85</b>  |
| 5.1.      | Introduction .....                                                                                               | 85         |
| 5.2.      | Literature Review.....                                                                                           | 87         |
| 5.2.1.    | Market Liquidity, Bank Bailouts, and REIT Behavior.....                                                          | 87         |
| 5.2.2.    | Contribution to the Literature and Hypotheses.....                                                               | 89         |
| 5.3.      | Data and Methodology.....                                                                                        | 90         |
| 5.3.1.    | Data Selection and Structure of the Analysis .....                                                               | 90         |
| 5.3.2.    | Methodology of the Return and Risk Event Study .....                                                             | 92         |
| 5.4.      | Results .....                                                                                                    | 95         |
| 5.4.1.    | Bank Bailouts' Effect on REITs and Other Financial Stocks.....                                                   | 95         |
| 5.4.2.    | Bank Bailouts' Effect on Focused REITs.....                                                                      | 98         |
| 5.4.3.    | Bank Bailouts' Effect on Other Financial Stock Subsamples .....                                                  | 103        |
| 5.4.4.    | Robustness Analysis on Differences between Single Bailout Dates ....                                             | 104        |
| 5.5.      | Conclusion.....                                                                                                  | 106        |
| <b>6.</b> | <b>Banking Crisis and Government Intervention:<br/>How Bailouts versus Failures Affect Financial Stocks.....</b> | <b>109</b> |
| 6.1.      | Introduction .....                                                                                               | 109        |
| 6.2.      | Literature Review.....                                                                                           | 111        |
| 6.2.1.    | Financial Crisis and Government Intervention.....                                                                | 111        |
| 6.2.2.    | Contribution to the Literature and Basic Hypotheses .....                                                        | 113        |
| 6.3.      | Data and Methodology.....                                                                                        | 114        |
| 6.3.1.    | Data Selection and Descriptive Statistics .....                                                                  | 114        |
| 6.3.2.    | Methodology for Measuring Stock Return Risk.....                                                                 | 117        |
| 6.3.3.    | Structure of the Return and Risk Analysis.....                                                                   | 121        |

|           |                                                                |            |
|-----------|----------------------------------------------------------------|------------|
| 6.4.      | Results and Discussion.....                                    | 122        |
| 6.4.1.    | Average Stock Returns around Bank Events.....                  | 122        |
| 6.4.2.    | Abnormal Stock Returns around Bank Events .....                | 126        |
| 6.4.3.    | Stock Variance Adjustments around Bank Events .....            | 129        |
| 6.4.4.    | Shifts in Asset-to-market Correlation around Bank Events ..... | 133        |
| 6.4.5.    | Beta Shifts around Bank Events.....                            | 135        |
| 6.4.6.    | Determinants of Variance Adjustments and Daily Returns.....    | 137        |
| 6.5.      | Conclusion.....                                                | 139        |
| <b>7.</b> | <b>Concluding Remarks .....</b>                                | <b>141</b> |
|           | References .....                                               | 149        |
|           | Appendix .....                                                 | 163        |

# List of Tables

|            |                                                                                       |    |
|------------|---------------------------------------------------------------------------------------|----|
| Table 2.1: | GARCH Calibration and Tests: Sample Overview .....                                    | 18 |
| Table 2.2: | Standard Event Study: All Construction Industry M&A.....                              | 21 |
| Table 2.3: | Risk Event Study: All Construction Industry M&A .....                                 | 21 |
| Table 2.4: | Standard Event Study: Construction M&A along<br>Transaction Directions .....          | 22 |
| Table 2.5: | Risk Event Study: Construction M&A along<br>Transaction Directions .....              | 23 |
| Table 2.6: | Long-term Risk Analysis: Asset Beta Dynamics<br>along Transaction Directions .....    | 26 |
| Table 2.7: | Multivariate Long-term Risk Analysis:<br>OLS Asset Beta Changes .....                 | 29 |
| Table 3.1: | Sample Overview: Descriptive Statistics.....                                          | 41 |
| Table 3.2: | Total Sample Risk Characteristics .....                                               | 44 |
| Table 3.3: | Acquirer CAAB by Geographical Scope.....                                              | 45 |
| Table 3.4: | Acquirer CAAB of 30 Largest M&A by Transaction Value.....                             | 46 |
| Table 3.5: | Acquirer CAAB of “Big Four” .....                                                     | 47 |
| Table 3.6: | Rival CAAB among “Big Four” .....                                                     | 48 |
| Table 3.7: | Rival CAAB among “Big Four” in Mature Markets .....                                   | 49 |
| Table 3.8: | Multivariate Regressions on Acquirer CABs .....                                       | 52 |
| Table 3.9: | Multivariate Regressions on Rival CABs.....                                           | 53 |
| Table 4.1: | Risk/Return Event Study: All Bank Failure Dates .....                                 | 68 |
| Table 4.2: | Risk/Return Event Study: All Bank Failure Dates and<br>Time Period Subsamples .....   | 70 |
| Table 4.3: | Risk/Return Event Study: REIT-type Subsamples (I/III).....                            | 71 |
| Table 4.4: | Risk/Return Event Study: REIT-type Subsamples (II/III) .....                          | 75 |
| Table 4.5: | Risk/Return Event Study: REIT-type Subsamples (III/III) .....                         | 76 |
| Table 4.6: | Robustness Analysis on All-REIT Index Behavior .....                                  | 77 |
| Table 4.7: | Robustness Analysis on single REIT Behavior (I/II):<br>Outstanding Bank Failures..... | 79 |
| Table 4.8: | Robustness Analysis on single REIT Behavior (II/II):<br>Outstanding Bank M&As .....   | 80 |
| Table 4.9: | Multivariate Regressions: Drivers of FTSE NAREIT CARs<br>and CABs .....               | 82 |
| Table 5.1: | Risk/Return Event Study: Total Sample of REITs .....                                  | 96 |

|             |                                                                                             |     |
|-------------|---------------------------------------------------------------------------------------------|-----|
| Table 5.2:  | Risk/Return Event Study: Total Sample of FSIs .....                                         | 97  |
| Table 5.3:  | Mean Difference Test on CAAR of REITs and FSIs .....                                        | 97  |
| Table 5.4:  | Risk/Return Event Study: REIT-type Subsamples (I/II) .....                                  | 98  |
| Table 5.5:  | Risk/Return Event Study: REIT-type Subsamples (II/II).....                                  | 102 |
| Table 5.6:  | Risk/Return Event Study: FSI-type Subsamples .....                                          | 103 |
| Table 5.7:  | Risk/Return Event Study: Date Subsamples and<br>Total Sample REITs.....                     | 105 |
| Table 5.8:  | Risk/Return Event Study: Date Subsamples and<br>Total Sample FSIs.....                      | 106 |
| Table 6.1:  | Event Date Sample Overview: Bank Failures and<br>Bank Bailouts .....                        | 116 |
| Table 6.2:  | Descriptive Statistics on Market and Industry Daily Returns ....                            | 117 |
| Table 6.3:  | EGARCH (1,1) Estimation of Market and Industry Indices<br>for 2007-2010.....                | 119 |
| Table 6.4:  | Descriptive Statistics on Market and Industry Daily<br>EGARCH Variance Estimates .....      | 119 |
| Table 6.5:  | Descriptive Statistics on Daily Industry-to-market<br>Correlation and Beta Estimates.....   | 120 |
| Table 6.6:  | Average Returns of FSI and Other Industries around<br>Bank Failures and Bailouts .....      | 124 |
| Table 6.7:  | Average Returns of FSI Subsectors around Bank Failures<br>and Bailouts .....                | 125 |
| Table 6.8:  | Abnormal Returns of FSI Subsectors around Bank Failures<br>and Bailouts .....               | 128 |
| Table 6.9:  | Variance Adjustments of FSI and Other Industries around<br>Bank Failures and Bailouts ..... | 130 |
| Table 6.10: | Variance Adjustments of FSI Subsectors around<br>Bank Failures and Bailouts .....           | 132 |
| Table 6.11: | Correlation Adjustments of FSI Subsectors around<br>Bank Failures and Bailouts .....        | 134 |
| Table 6.12: | Beta Adjustments of FSI Subsectors around Bank Failures<br>and Bailouts .....               | 136 |
| Table 6.13: | Multivariate Regressions on FSI and the S&P 500 Returns<br>around Bank Events .....         | 138 |
| Table A2.1: | Sample Overview (I/II): 119 M&A Transactions between<br>1988 and 2007.....                  | 163 |

|             |                                                                                              |     |
|-------------|----------------------------------------------------------------------------------------------|-----|
| Table A2.2: | Sample Overview (II/II): M&As along Acquirers' and Targets' Countries of Origin.....         | 164 |
| Table A2.3: | Standard Event Study: Construction M&As along Transaction Volume.....                        | 165 |
| Table A2.4: | Risk Event Study: Construction M&As along Transaction Volume.....                            | 165 |
| Table A2.5: | Long-term Risk Analysis: Equity Beta Dynamics along Transaction Volume.....                  | 166 |
| Table A2.6: | Long-term Risk Analysis: Equity/Asset Beta across Economic Cycles .....                      | 167 |
| Table A2.7: | Multivariate Short-term Risk Analysis.....                                                   | 168 |
| Table A2.8: | Multivariate Long-term Risk Analysis: GARCH Equity Beta Changes.....                         | 169 |
| Table A3.1: | Acquirer CAABs of Overall Transaction Sample .....                                           | 170 |
| Table A3.2: | Acquirer CAABs of Domestic Transactions .....                                                | 170 |
| Table A3.3: | Acquirer CAABs by Relative Size of Transaction .....                                         | 171 |
| Table A3.4: | Acquirer CAABs by Date of Transaction Announcement .....                                     | 172 |
| Table A3.5: | Rival CAABs by Transaction Value.....                                                        | 173 |
| Table A3.6: | Rival CAABs by Date of Transaction Announcement.....                                         | 174 |
| Table A4.1: | Descriptive Statistics: Bank Failures Sample .....                                           | 175 |
| Table A4.2: | Descriptive Statistics: REIT and Market Return Data.....                                     | 177 |
| Table A6.1: | EGARCH (1,1) Estimation of Subindustry Indices for 2007-2010 .....                           | 178 |
| Table A6.2: | EGARCH (1,1) Estimation of selected Financial Stocks for 2007-2010 .....                     | 179 |
| Table A6.3: | Descriptive Statistics on Financial Industry Subindices.....                                 | 180 |
| Table A6.4: | Correlation Adjustments of FSI and Other Industries around Bank Failures and Bailouts.....   | 181 |
| Table A6.5: | Beta Adjustments of FSI and Other Industries around Bank Failures and Bailouts .....         | 182 |
| Table A6.6: | Multivariate Regressions on FSI's and the S&P 500's Variance Shifts around Bank Events ..... | 183 |

## List of Figures

|              |                                                                                      |     |
|--------------|--------------------------------------------------------------------------------------|-----|
| Figure 3.1:  | Daily Acquirer AABs throughout the Event Window.....                                 | 45  |
| Figure 3.2:  | Cumulative Acquirer AABs throughout the Event Window .....                           | 50  |
| Figure 4.1:  | Failed Banks' Total Assets at Default Distribution across<br>Bank Failure Dates..... | 62  |
| Figure A4.1: | Failed Banks' Total Assets Cumulated per Year<br>(01/1999 – 07/2010).....            | 175 |
| Figure A4.2: | Failed Banks' Total Assets Distribution per Year<br>(01/1999 – 12/2004).....         | 176 |
| Figure A4.3: | Failed Banks' Total Assets Distribution per Year<br>(01/2007 – 07/2010).....         | 176 |

# List of Abbreviations

|          |                                                                                            |
|----------|--------------------------------------------------------------------------------------------|
| ABS      | Asset-backed securities                                                                    |
| AER      | Aero [industry]                                                                            |
| a.o.     | among others                                                                               |
| ARCH     | Autoregressive conditional heteroscedasticity                                              |
| BEVER    | Beverages                                                                                  |
| Big Four | Four largest breweries worldwide: Anheuser-Busch Inbev, Heineken, SABMiller, and Carlsberg |
| Bil.     | Billion                                                                                    |
| CAPM     | Capital asset pricing model                                                                |
| CGI      | Consumer goods industry                                                                    |
| CON      | Construction                                                                               |
| CSI      | Consumer services industry                                                                 |
| DEF      | Defense                                                                                    |
| DG       | Drug                                                                                       |
| DS       | Datastream                                                                                 |
| DW       | Durbin-Watson [statistic]                                                                  |
| e.g.     | exempli gratia (for example)                                                               |
| EGARCH   | Exponential GARCH                                                                          |
| ELE      | Electric                                                                                   |
| ENG      | Engineering                                                                                |
| EQP      | Equipment                                                                                  |
| Fed      | Federal Reserve Bank                                                                       |
| FD       | Food                                                                                       |
| FDIC     | Federal Deposit Insurance Corporation                                                      |
| FIHI     | Financial Institution Health Index                                                         |
| FSI      | Financial services industry                                                                |
| FTSE     | Financial Times Stock Exchange [Index]                                                     |
| GARCH    | Generalized autoregressive conditional heteroscedasticity                                  |