

# TABLE OF CONTENTS

|  |           |
|--|-----------|
| Zusammenfassung .....  | I         |
| Summary .....  | III       |
| Table of Contents .....  | V         |
| List of Abbreviation .....   | IX        |
| List of Figures .....  | X         |
| List of Tables.....  | XI        |
| <br>   |           |
| <b>I Introduction .....</b>  | <b>1</b>  |
| 1 Theoretical Frame .....  | 1         |
| 2 Scope and Research Questions.....  | 7         |
| 3 Contribution .....   | 9         |
| 4 Structure .....  | 11        |
| <br>   |           |
| <b>II A Literature Review of the Impacts of Simons' Levers of Control on<br/>Innovation.....</b> | <b>13</b> |
| Abstract .....   | 13        |
| 1 Introduction .....   | 14        |
| 2 Definition of Concepts .....   | 16        |
| 2.1 Innovation.....  | 16        |
| 2.2 Management Control Systems and Innovation .....  | 18        |
| 2.3 Simons' LOC Framework .....  | 19        |
| 3 Methodology of the Literature Review .....   | 22        |
| 3.1 Problem Formulation.....   | 23        |
| 3.2 Data Collection and Evaluation.....  | 23        |
| 3.3 Analysis and Interpretation .....  | 26        |
| 4 Results .....  | 27        |
| 4.1 Detection of Discrepancies.....  | 28        |
| 4.2 Discussion .....   | 36        |
| 5 Conclusion.....  | 41        |
| Appendix A: Journal Distribution .....   | 46        |
| Appendix B: Selected Articles .....  | 47        |
| Appendix C: Evidence of Qualitative Research.....  | 50        |
| Appendix D: Hypotheses of Quantitative Studies.....  | 55        |
| Appendix E: Matrix - Firm Size.....  | 60        |

|  |    |
|--|----|
| Appendix F: Overview of Research Models and Measurements ..... | 61 |
|--|----|

### **III Controlling Product and Business Model Innovation in Startups.....64**

|  |    |
|--|----|
| Abstract .....   | 64 |
| 1 Introduction .....   | 65 |
| 2 Theoretical Background and Development of Research Questions ..... | 69 |
| 2.1 Innovation in Startup Companies .....                            | 69 |
| 2.2 The Need for Formal Control in Innovative Settings.....          | 71 |
| 3 Methodology .....  | 74 |
| 3.1 Sampling, Data Collection and Questionnaire Design.....          | 75 |
| 3.2 Data Analysis .....  | 77 |
| 4 Results .....  | 79 |
| 4.1 Form of Innovation.....  | 79 |
| 4.2 Control of Innovation .....                                      | 81 |
| 4.3 LOC Framework for Formal MCS.....                                | 86 |
| 4.3.1 Boundary and Belief Systems.....                               | 86 |
| 4.3.2 Diagnostic and Interactive Control Systems.....                | 88 |
| 5 Discussion and Conclusion .....                                    | 90 |
| Appendix A: Dimensions of Innovation as an Outcome.....              | 95 |
| Appendix B: Semi Structured Interview Guide .....                    | 96 |
| Appendix C: Distribution of MCS .....                                | 97 |

### **IV External Financiers' Valuation of Management Control Systems in Startup Companies .....98**

|  |     |
|--|-----|
| Abstract .....   | 98  |
| 1 Introduction .....   | 99  |
| 2 Theoretical Background and Hypotheses Development .....                                      | 103 |
| 2.1 MCS in Startup Companies .....   | 103 |
| 2.2 Equity vs. Debt Financiers .....   | 105 |
| 2.3 Hypothesis Development .....   | 107 |
| 2.3.1 External Financiers' Valuation of Different Categories of MCS .....                      | 107 |
| 2.3.2 Differences in Equity and Debt Financiers' Valuation of Different Categories of MCS..... | 109 |
| 2.3.3 Effects of MCS Adoption on Financiers' Investment Decisions.....                         | 114 |
| 3 Research Methodology and Design.....   | 115 |
| 3.1 Data Collection.....   | 115 |

|  |            |
|--|------------|
| 3.2 Variable Measurement .....   | 117        |
| 4 Results .....  | 123        |
| 4.1 Hypotheses Tests.....  | 123        |
| 4.1.1 External Financiers' Valuation of Different Categories of MCS .....                      | 123        |
| 4.1.2 Differences of Equity and Debt Financiers' Valuation of Different Categories of MCS..... | 124        |
| 4.1.3 Effects of MCS Adoption on Financiers' Investment Decisions.....                         | 129        |
| 4.2 Additional Analysis.....   | 130        |
| 4.3 Discussion .....   | 132        |
| 5 Conclusion.....  | 134        |
| Appendix A: Descriptive Statistics .....   | 137        |
| Appendix B: Questionnaire Survey.....  | 138        |
| Appendix C: Results of Mann-Whitney Tests on Investors Influence.....                          | 140        |
| <b>V Final Conclusion.....</b>   | <b>141</b> |
| References .....   | 145        |
| Eidesstattliche Erklärung.....   | 165        |