

## TABLE OF CONTENTS

|                                                  |             |
|--------------------------------------------------|-------------|
| <b>COVER</b>                                     | <b>i</b>    |
| <b><i>HALAMAN PENGESAHAN</i></b>                 | <b>ii</b>   |
| <b><i>HALAMAN PERNYATAAN</i></b>                 | <b>iii</b>  |
| <b><i>NASKAH SOAL TUGAS AKHIR</i></b>            | <b>iv</b>   |
| <b>ACKNOWLEDGMENT</b>                            | <b>v</b>    |
| <b>PROLOGUE</b>                                  | <b>vi</b>   |
| <b>TABLE OF CONTENTS</b>                         | <b>ix</b>   |
| <b>LIST OF FIGURES</b>                           | <b>xii</b>  |
| <b>LIST OF TABLES</b>                            | <b>xiii</b> |
| <b>LIST OF APPENDICES</b>                        | <b>xv</b>   |
| <b>LIST OF NOTATIONS AND ABBREVIATIONS</b>       | <b>xvi</b>  |
| <b>ABSTRACT</b>                                  | <b>xvii</b> |
| <br>                                             |             |
| <b>CHAPTER I INTRODUCTION</b>                    | <b>1</b>    |
| 1.1. Research Background                         | 1           |
| 1.2. Problem Formulation                         | 3           |
| 1.3. Assumption and Problem Boundary             | 4           |
| 1.4. Research Objective                          | 4           |
| 1.5. Benefit of Research                         | 5           |
| <br>                                             |             |
| <b>CHAPTER II LITERATURE REVIEW</b>              | <b>6</b>    |
| <br>                                             |             |
| <b>CHAPTER III THEORETICAL BACKGROUND</b>        | <b>11</b>   |
| 3.1. Expected Utility Theory and Prospect Theory | 11          |
| 3.2. Extensive Game                              | 18          |
| 3.3. Parameter Estimation                        | 19          |
| 3.4. Sign Test                                   | 19          |

|                                                              |           |
|--------------------------------------------------------------|-----------|
| 3.5. Kruskal-Wallis Test                                     | 20        |
| <b>CHAPTER IV RESEARCH DESIGN</b>                            | <b>21</b> |
| 4.1. Respondent                                              | 21        |
| 4.2. Research Tools                                          | 21        |
| 4.3. Experiment Procedure                                    | 22        |
| 4.3.1.Introduction                                           | 22        |
| 4.3.2.Experiment Session I                                   | 23        |
| 4.3.3.Experiment Session II                                  | 23        |
| 4.4. Data Processing                                         | 25        |
| 4.4.1.Normality Test                                         | 25        |
| 4.4.2.Sign Test                                              | 25        |
| 4.4.3.Kruskal-Wallis Test                                    | 26        |
| 4.4.4.Parameter Estimation                                   | 26        |
| 4.4.5.Expected Utility Calculation                           | 26        |
| 4.5. Research Procedure                                      | 28        |
| 4.6. Research Flowchart                                      | 29        |
| <b>CHAPTER V RESULT AND DISCUSSION</b>                       | <b>30</b> |
| 5.1. Data Summary                                            | 30        |
| 5.1.1.Descriptive Statistic                                  | 31        |
| 5.1.2.Normality Test                                         | 31        |
| 5.1.3.Sign Test                                              | 33        |
| 5.1.4.Kruskal-Wallis Test                                    | 33        |
| 5.2. Utility Function                                        | 35        |
| 5.2.1.Utility function using median as the parameter         | 35        |
| 5.2.2.Utility function using mean as the parameter           | 40        |
| 5.3. The Extensive Game                                      | 44        |
| 5.3.1. Extensive game using EUT with median utility function | 44        |
| 5.3.2. Extensive game using PT with median utility function  | 45        |
| 5.3.3. Extensive game using EUT with mean utility function   | 49        |

|                                                           |               |
|-----------------------------------------------------------|---------------|
| 5.3.4. Extensive game using PT with mean utility function | 50            |
| 5.3.5. Comparison between actual and prediction           | 51            |
| <br><b>CHAPTER VI CONCLUSION</b>                          | <br><b>54</b> |
| 6.1. Conclusion                                           | 54            |
| 6.2. Recommendation                                       | 55            |
| <br><b>REFERENCES</b>                                     | <br><b>56</b> |
| <b>APPENDICES</b>                                         | <b>59</b>     |