

## Table of Contents

|  | <b>Page</b> |
|--|-------------|
| Acknowledgements.....  | ii          |
| List of Tables.....  | vii         |
| List of Figures.....   | x           |
| Abstract.....  | xi          |
| Chapter  |             |
| 1. Introduction.....   | 1           |
| 2. Literature Review.....                                      | 9           |
| 2.1 Sunk Cost Effect.....                                      | 9           |
| 2.2 House Money Effect.....                                    | 12          |
| 2.2.1 House Money Effect.....                                  | 12          |
| 2.2.2 Experimental Evidence of the House Money Effect.....     | 13          |
| 2.2.3 Asset Pricing Model Considering the House Money Effect.. | 14          |
| 2.2.4 Empirical Evidence of the House Money Effect.....        | 15          |
| 2.3 Size and Hedonic Depreciation of House Money.....          | 17          |
| 2.3.1 Size of House Money.....                                 | 17          |
| 2.3.2 Hedonic Depreciation of House Money.....                 | 17          |
| 2.4 Reference Point.....                                       | 18          |

|  |    |
|--|----|
| 2.5 Underdiversification and Familiarity bias.....   | 25 |
| 2.5.1 International Diversification Puzzle.....  | 25 |
| 2.5.2 Local Equity Preference in Domestic Portfolios.....  | 26 |
| 2.5.3 Investment in the Most Familiar: the Employer's Stock.....                                 | 28 |
| 2.6 Availability Bias.....   | 28 |
| 3. Data and Methodology.....   | 34 |
| 3.1 Data.....  | 34 |
| 3.2 Methodology.....   | 37 |
| 3.2.1 Trading Profit.....  | 38 |
| 3.2.2 Risk Taking.....   | 42 |
| 3.2.3 House Money Effect Measure.....  | 44 |
| 4. Empirical Results.....  | 49 |
| 4.1 The House Money Effect.....  | 49 |
| 4.2 The Size of a Prior Gain should be Large Enough to be Perceived<br>as the House's Money..... | 51 |
| 4.3 The Hedonic Depreciation of the House Money Effect.....                                      | 54 |
| 4.4 Underdiversification and Familiarity Bias.....   | 56 |
| 4.5 Reference Point.....   | 59 |
| 5. Conclusions.....  | 62 |

|                 |     |
|-----------------|-----|
| Appendix A..... | 64  |
| Appendix B..... | 67  |
| Reference.....  | 68  |
| Tables.....     | 79  |
| Figures.....    | 150 |

## List of Tables

| <b>Table</b>   | <b>Page</b> |
|--|-------------|
| Table 1 Summary Statistics of Individuals' Trading Activities.....                   | 79          |
| Table 2 Summary Statistics for the Sample of 3S3B.....                               | 80          |
| Table 3 Summary Statistics for the Sample of 4S4B.....                               | 82          |
| Table 4 Summary Statistics for the Sample of 3S4B.....                               | 84          |
| Table 5 Summary Statistics for the Sample of 3S5B.....                               | 86          |
| Table 6 Summary Statistics for the Sample of 3S10B.....                              | 88          |
| Table 7 Investment Performance for the Sample of 3S3B.....                           | 90          |
| Table 8 Investment Performance for the Sample of 4S4B.....                           | 93          |
| Table 9 Investment Performance for the Sample of 3S4B.....                           | 96          |
| Table 10 Investment Performance for the Sample of 3S5B.....                          | 99          |
| Table 11 Investment Performance for the Sample of 3S10B.....                         | 102         |
| Table 12 The House Money Effect of Individual Investors.....                         | 105         |
| Table 13 Reinvestment in Same Stocks and the House Money Effect.....                 | 107         |
| Table 14 Absolute Price Change and the House Money Effect.....                       | 109         |
| Table 15 Timing and the House Money Effect by FIFO Profit<br>Calculation Method..... | 110         |

|  |     |
|--|-----|
| Table 16 Timing and the House Money Effect by LIFO Profit                    |     |
| Calculation Method.....  | 112 |
| Table 17 Timing and the House Money Effect for G1 (Large Gain) by FIFO       |     |
| Profit Calculation Method.....   | 114 |
| Table 18 Timing and the House Money Effect for G1 (Large Gain) by LIFO       |     |
| Profit Calculation Method.....   | 116 |
| Table 19 Summary Statistics for the Sample of Three Types of Investors.....  | 118 |
| Table 20 Familiarity Bias and the House Money Effect.....                    | 122 |
| Table 21 Familiarity Bias and the House Money Effect for G1(Large Gain)...   | 124 |
| Table 22 Reference Points and the House Money Effect.....                    | 126 |
| Table 23 Reference Points and the House Money Effect for G1 (Large Gain)..   | 128 |
| Table A1 House Money Effect Measure by the Volatility and the Firm Size..... | 130 |
| Table B1 Summary Statistics of Individuals' Trading Activities               |     |
| (Whole Sample).....  | 131 |
| Table B2 House Money Effect Measure by the Percentage of more                |     |
| Volatile Stocks.....   | 132 |
| Table B3 The House Money Effect for Whole Sample.....                        | 133 |
| Table B4 Reinvestment in Same Stocks and the House Money Effect.....         | 135 |
| Table B5 Timing and the House Money Effect.....                              | 137 |
| Table B6 Timing and the House Money Effect for G1 (Large Gain).....          | 139 |

|  |     |
|--|-----|
| Table B7 Familiarity Bias and the House Money Effect.....                    | 141 |
| Table B8 Familiarity Bias and the House Money Effect for G1 (Large Gain).... | 143 |
| Table B9 Reference Points and the House Money Effect.....                    | 145 |
| Table B10 Reference Points and the House Money Effect for G1 (Large Gain)..  | 147 |

## List of Figures

| <b>Figure</b>   | <b>Page</b> |
|---|-------------|
| Figure 1 The value Function of Prospect Theory.....                 | 149         |
| Figure 2 Timing and the House Money Effect for G1 (Large Gain)..... | 150         |