

Contents

| | |
|--|------------|
| <i>Contributors</i> | ix |
| <i>Foreword</i> | xv |
| <i>Preface</i> | xxi |
| <i>Abbreviations</i> | xxiii |
| 1 Introduction: Suitability Issues in Mass Appraisal Methodology | 1 |
| <i>Tom Kauko and Maurizio d'Amato</i> | |
| PART I MASS APPRAISAL PRACTICE AND RECOMMENDATIONS | 25 |
| 2 Data Issues Involved with the Application of Automated Valuation Methods: A Case Study | 27 |
| <i>John F. Thompson, Jr</i> | |
| 3 The Modified Comparable Sales Method as the Basis for a Property Tax Valuations System and its Relationship and Comparison to Spatially Autoregressive Valuation Models | 49 |
| <i>Richard A. Borst and William J. McCluskey</i> | |
| 4 Automated Valuation in the Dutch Housing Market: The Web-Application 'MarktPositie' Used by NVM-Realtors | 70 |
| <i>Dree Op 't Veld, Emma Bijlsma and Paulien van de Hoef</i> | |
| 5 Using Fuzzy Numbers in Mass Appraisal: The Case of the Belarusian Property Market | 91 |
| <i>Maurizio d'Amato and Nikolai Siniak</i> | |
| PART II CURRENT ADVANCED METHODS | 109 |
| 6 Mass Appraisal, Hedonic Price Modelling and Urban Externalities: Understanding Property Value Shaping Processes | 111 |
| <i>François Des Rosiers and Marius Thériault</i> | |
| 7 Residuals Analysis for Constructing 'More Real' Property Value | 148 |
| <i>Małgorzata Renigier</i> | |
| 8 The Hierarchical Trend Model | 164 |
| <i>Marc K. Francke</i> | |

| | |
|--|------------|
| PART III EMERGING METHODS | 181 |
| 9 Developing Mass Appraisal Models with Fuzzy Systems <i>Marco Aurélio Stumpf González</i> | 183 |
| 10 Utterly Unorthodox Modelling for the Purposes of Mass Appraisal: An Approach Based on Patterns and Judgments <i>Tom Kauko</i> | 203 |
| 11 Rough Set Theory as Property Valuation Methodology: The Whole Story <i>Maurizio d'Amato</i> | 220 |
| PART IV COMPARISON OF TOOLS USING A SET OF SPECIFIC CRITERIA | 259 |
| 12 Technical Comparison of the Methods Including Formal Testing of Accuracy and Other Modelling Performance Using Own Data Sets and Multiple Regression Analysis <i>Richard A. Borst, François Des Rosiers, Małgorzata Renigier, Marco Aurélio Stumpf González, Tom Kauko and Maurizio d'Amato</i> | 261 |
| 13 Property Market Classification and Mass Appraisal Methodology <i>Maurizio d'Amato and Tom Kauko</i> | 280 |
| PART V CONCLUSION | 305 |
| 14 Automated Valuation Methods, Empirical Modelling of Value, and Systems for Market Analysis <i>Tom Kauko</i> | 307 |
| <i>Glossary</i> | 321 |
| <i>Index</i> | 325 |