# Preface

Real estate accounts for a large portion of overall wealth, and it is a means of production and consumption, as well as an investment asset. For the reasonable conduct of these activities, it is essential to know their value, even when they are not the subject of a sale. While the most frequent reason for obtaining a Property Valuation is an impending sale, during which usually both the seller and the buyer make their valuation of the asset to get an idea of its "true" value, there are many other situations where it is still necessary to make an estimate.

Banks, for example, systematically resort to an asset valuation that will act as collateral for the loan granted and, on that basis, will be able to determine the amount of the loan. Again, in the case of successions or spin-off, the value of properties must often be determined. The International Financial Reporting Standards (IFRS) themselves require a regular valuation of properties at their Market Value. Other cases in which valuation is necessary are to determine the value of a property for insurance coverage purposes or as a basis for the calculation of property taxes.

However, unlike securities, each property is unique, and there is no equivalent sold on a regulated market for which the actual dealing price is known with certainty. The fact that the valuation is based on a prediction of more or less uncertain future events shows why the valuation process is so important and why it has to ensure generality (it has to ignore the characteristics of the parties involved in the negotiation and their respective contractual strengths and the valuer must avoid or use with care any data and parameters vitiated by anomalous or unusual situations, which may boost or reduce the value of the property), rationality (it has to determine the value using a logical, clear and mutually agreeable system) and demonstrability (the data used must be credible and objective).

The value is therefore different from the price as the former is an estimated *ex-ante* amount, based on future forecasts, and therefore by definition uncertain, while the latter is an ascertainable *ex-post* and therefore specific amount. If the market accepts an estimated value, it may become a potential exchange value, and therefore a sale price, assuming that market players consider the value fair and complete the transaction.

It is also appropriate, however, to distinguish between value and cost, where cost means either the price paid for a given asset or the total expenses necessary to develop such an asset. While in the first case, in certain circumstances, price, cost, and value may coincide (e.g. a transaction that is concluded between the parties at a price corresponding to the estimated Market Value, and which therefore becomes the purchase cost of the asset for the buyer), in the second case an alignment between them is unlikely. For example, consider the case of a Development Project, where the production cost of the Building should theoretically be lower than the selling price of the same, at least in the case of a transaction that guarantees a positive margin for the developer; or the case of a property with specific characteristics not suitable for alternative use whose Market Value will therefore presumably be lower than the cost of constructing it.

Property Valuation is, therefore, a fundamental activity in the modern economy and, as such, there is an extensive literature on the topic. However, as academics and professionals, we have always found that many of them mostly focus on the technicalities providing complex and lengthy formulas which, if on one side are irreproachable from a mathematical point of view, on the other leave vast space to the discretionary choice of inputs.

At this point, the reader will be asking himself what he/she will be able to find innovative in the book and what instead he/she will not find at all.

Provided that there is nothing new to be created in Property Valuation, even though valuation techniques are on a continuous evolution, let's think about the impact of artificial intelligence or the use of big data among the others, why or where should this book be different from many others? The book differentiates in providing a new perspective of Property Valuation. It does not start from formulas where it might be hard to identify the right data to input, but rather from reasonings which might guide the reader in identifying, with a higher degree of awareness, the right methods and the best parameters to apply in different circumstances.

The aim of this book, therefore, is to provide the reader with an easy to understand and clear introduction to Property Valuation, with a well-defined approach to the topic, a description of the different valuation methods and an application to some typical cases. Not having the ambition to cover all the issues related to Property Valuation, the book focuses in particular on:

1. The Market Value estimation, the objective perspective of an external appraiser and not the subjective one of a specific investor (as in the estimate of the Investment Value).
2. The Commercial Properties, which represent the primary real estate investment category, even though Residential is an essential part of the property market.
3. The Income Capitalisation Methods. The methods based on the Market Approach and those based on the Cost Approach, even if briefly described, will not be analysed in-depth because they are both very well explained in other textbooks and their application in the valuation of Commercial Properties is limited. On the other side, the Book will analyse rigorously the topic of real estate cap and discount rates, which often represent a grey area not only in practice but also in some textbooks. What exactly do Property Return Rates represent? What are the parameters to take into account in their construction? What is the relationship between the cap rate and the discount rate? The book tries to provide answers to these and other questions, even if there is the awareness that there is not a unique solution and that the primary reference regarding actual or expected returns should always be represented by market players.

In this perspective, the authors suggest that the reader should look at each property as a company, whose value directly depends on the product offered to the market, the use of Space, whose measurement and economic quantification of costs and benefits require technical, economic and financial competences and tools.

Property Valuation does not represent at all an exact science, and often there is not even an absolute agreement on the best approach in order to value a specific property; therefore, a conscious, reasoned and justified choice allows to minimise the margin of error and to strengthen the Property Valuation.

The reader will also find a straightforward description of the economic characteristics of properties and of their risks, in order to assess which are the fundamental parameters to take into account in valuation and how to estimate them, together with practical support on how to prepare a valuation report.

The book is based on the professional and academic experience of the authors. In their professional experience as advisors, risk managers and board members, the authors have been involved in hundreds of real estate valuations, either directly as valuers or indirectly as users of valuation reports written by other valuers. This experience has allowed the authors to acquire expertise in the elements of strength and weakness. Their academic activity, based on research and teaching in masters and executive programmes, recently led to the publication of an Italian language textbook[1] on real estate valuations, from which this book has partially taken inspiration.

The experience of the authors will guide the reader in distinguishing what is suggested by the theory from what is necessary or effectively possible to apply in practice, in an ideal comparison between "classroom" and "real world". In contrast to textbooks full of formulas that forget to help the reader on how to find "data" on the market, this book instead puts much effort on the underlying reasoning. Some evidence will also be provided on the most common mistakes in Property Valuation, in order to allow those who are not professional valuers to be able to read a valuation report critically. To this end, we highlight the importance of the selection of data, in their interpretation and in their processing.

Conversely, the book does not aim to debate around methods, definitions and classifications, but proposes some simplifications of all these in order to help the reader in understanding the principles and techniques to estimate the value of properties in a modern economic perspective, which finds its foundation in the market. The use of capital letters is not, therefore, oriented to give more importance to particular terms, which might not be so "strict" from a legal or economic point of view, but rather, as it is commonly used in contracts, to simplify the reading and to specify univocally certain concepts that will always be used in the book with the same meaning (and whose definitions will be found in the glossary at the end of the book).

Concerning the content,[2] the first eight chapters are mostly dedicated to theory and the different valuation "methods", while the last four chapters are dedicated to practise, with some case studies included. In order to balance theory and practice, but at the same time to keep the book effective in every country, some contents have been kept general on purpose. An outline of each chapter follows:

- ***Chapter 1*** provides an introduction to the subject of Property Valuation. A definition of the valuation requirement (i.e. the valuation subject, purpose and date, and the value basis to be estimated) is provided. Next, the chapter focuses on the different bases of value, in particular distinguishing between Market Value, Investment Value and other commonly used definitions. Finally, a brief description is given of the leading associations operating in the field of Property Valuation and which aim to raise operating standards and standardise international valuation practices.
- ***Chapter 2*** provides an interpretation of the economic features of properties, illustrating their characteristics and providing a preliminary classification for valuation purposes. In order to estimate the value of an asset correctly, it is essential to start by assessing the economic characteristics that determine the demand from potential users and buyers. These economic characteristics are also fundamental for choosing the correct valuation method, as they identify which market data is required to allow the value of the asset to be estimated. On the other side, it is also essential to identify the main types of risk involved

in the real estate sector so that the risk of property investment can in some way be adequately considered. The chapter will, therefore, also provide the reader with a description of the main elements of risk, although it is correct to refer to these as uncertainty, in order to identify an overall risk that can be associated with a specific property being valued, for which an expected return rate may need to be estimated.

- ***Chapter 3*** provides an overview of the economic and property market analysis which is the foundation of any Property Valuation.
- ***Chapter 4*** describes the valuation methods that will be analysed in-depth in the following chapters, proposing a new classification, not in order to introduce a new theory of Property Valuation or in order to impose new criteria, but rather to guide the reader in the estimate of properties value as a function of their economic characteristics. A brief description of the Depreciated Cost Approach Methods is provided in order to highlight their limits.
- ***Chapter 5*** presents the Sales Comparison Approach Methods, starting with the principles on which they are based, subsequently describing in greater detail the main application criteria – the Direct Comparison Approach and the Hedonic Pricing Model – showing how each one is used, and discussing their main advantages and limitations.
- ***Chapter 6*** provides a detailed description of the Income Capitalisation Comparison Approach Methods, of the two main application criteria – the Direct Capitalisation Approach and the Discounted Cash Flow Approach – and of the Residual Value Methods, which, based on the same models, allow for the estimation of the value of greenfields, brownfields and, more in general, all properties at the end of their life cycle.
- ***Chapter 7*** is dedicated to Property Return Rates (cap rate and discount rate), whose estimate is still one of the most critical aspects in the application of the Income Capitalisation Methods and which is often a source of mistakes or appraisals not sufficiently supported by empirical evidence.
- ***Chapter 8*** describes the main elements of what is known as a "valuation report", i.e. the document relating to the appraisal of a property.

The book is also enriched with examples and in-depth analysis, which are enclosed in boxes named respectively "Example" and "A Closer Look" which can be easily identified.

Needless to say, although the book aims at outlining factors common to any real estate valuation, and – hence – sets out principles, rules, and techniques applicable internationally, as a matter of convention, the examples are presented in euros. Of course, nothing would change were the pound sterling, US dollar, Lao kip or any other currency to be used. The choice to refer to the euro in the examples appeared the best way to express the international outreach of this book, as it is a symbol of internationalisation, having brought together a range of countries within a single currency.

As previously mentioned, the last four chapters are dedicated to several case studies representative of the methods previously described, in order to allow the reader to verify how they can be practically applied. These chapters focus in particular on the application of the Income Capitalisation Methods with the valuation of an office building, a high street retail unit, a hotel, and, through the application of the Multiple Periods Residual Value Approach, a mixed-use condominium development.

The case studies, even if all adapted from real valuation reports, are presented in an exemplifying and didactic form, which allows for reflection more on the identification of the economic characteristics of the properties, the choice of the valuation method, and on the right inputs to use, rather than on the technical criticalities or the mathematical calculations to apply. At the same time, the case studies presented do not complete the entire possible spectrum of potential properties to be valued, even though they represent a sample that, with the right adaptations, might be applied to a pretty wide array of properties.

Moreover, it must be taken into account the fact that the practical application of different methods by different valuers might lead to the choice of different solutions. As mentioned before, Property Valuation is not an exact science and therefore, as in any estimate, there is a certain degree of uncertainty. In this sense, the choice of writing different case studies jointly with different authors allows also having some examples of contrasting approaches used in the real estate industry.

In valuations aimed at determining the Market Value of properties, the logical and mathematical formulas are reduced to few calculations and, differently from investment analysis, the technicalities are pretty simple. It is, instead, crucial to underline everything that is behind the final calculation and therefore the identification of the economic characteristics of the properties, the choice of the proper valuation method, the market analysis, and the choice of the correct input data to use.

This is why all the case studies presented are simplified regarding property description, omitting all that information – technical, cadastral, urban planning, etc. – which is usually an essential part of valuation reports, while they focus on the choice of the valuation method, on the market analysis and, finally, on the application of the right criteria.

The book is combined with a dedicated website (www.cpv-mb.com) with:

- Microsoft Excel spreadsheet files with formulas of valuation examples, to assist the reader's understanding, and for instant pedagogical use.
- Microsoft PowerPoint presentations in order to synthesise for the reader the topics of each chapter and which represent a useful tool for teaching purposes.
- Links to websites mentioned in the text and to others of interest on related topics.
- An interactive bibliography with the ability to directly consult articles and documents mentioned, with links to the sources.

Any comments, critiques, suggestions, or information from readers are very welcome. Please feel free to contact the authors by email at info@propertyfinance.it.

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Naturally, responsibility for all errors lies solely with the authors.

Finally, the authors strive always to sustain in the course of their work and research the fundamental principles of independence, integrity, objectivity, the respect of others and the profession, the assumption of responsibilities and the need to continually work to raise their own professional standards and to encourage the same in others.

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## NOTES

1. Morri G., Benedetto P. (2017), *Valutazione Immobiliare – Metodologie e casi*, EGEA, Milan (Italy).
2. The Book is the product of joint work of the Authors; however, Chapters 2, 4, 5, 6 and 7 are mostly attributable to Giacomo Morri, while Chapters 1, 3, 8 and 9 are mostly attributable to Paolo Benedetto.