Residential Real Estate introduces readers to the economic fundamentals and emerging issues in housing markets. The book investigates housing market issues within local, regional, national and international contexts in order to provide students with an understanding of the economic principles that underpin residential property markets. Key topics covered include:

- Location choice in urban areas
- Housing supply and demand
- Housing finance and housing as an asset class
- Demographic shifts and implications for housing
- Sustainable homes and digitalisation in housing

Drawing on market-level information, readers are encouraged to recognise the supply and demand drivers and modelling of dynamic housing markets at various spatial scales and the implications of trends within an urban and regional context, e.g. urbanisation, ageing population, migration, digitalisation. With research-based discussions and coverage of relevant literature, this is an ideal textbook for students of residential real estate, property and related business studies courses at UG and PG levels, as well as a reference book with research topics for researchers. This book will also be of interest to professionals and policymakers.

Anupam Nanda is Professor of Urban Economics and Real Estate, and Research Division Lead (Real Estate & Planning) at the Henley Business School, University of Reading, UK. Anupam grew up in India, and before joining the University of Reading, he worked with Deloitte & Touche in Mumbai and the National Association of Home Builders (NAHB) in Washington, DC. Anupam has also taught undergraduate Economics and Public Finance at the University of Connecticut, US, from where he obtained his PhD in Economics. Anupam holds professional fellowships of FRSA (Fellow of the Royal Society of Arts), FRGS (Fellow of the Royal Geographical Society), FRSS (Fellow of the Royal Statistical Society) and FHEA (Fellow of the Higher Education Academy, UK). His academic papers have been published in leading journals including Journal of Urban Economics, Regional Studies, Energy Economics, Energy Policy, Review of International Economics, Real Estate Economics and Applied Linguistics.
Residential Real Estate
Urban & Regional Economic Analysis

Anupam Nanda
I dedicate this book to my parents and other members of my circle of trust.
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First and foremost, this book is for the housing researchers and students. I would like to thank all the students who took housing economics classes from me for their questions and queries which have helped me immensely, and my former teachers, doctoral students, fellow researchers and co-authors whose works have informed this book’s content and my understanding of the subject.

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1 Introduction

Housing is a basic human need, regardless of socio-economic status or any other factors and considerations. Everybody needs a house – a shelter to protect us from elements and any other physical danger; to raise a family; to rest after a day’s work. A cluster of houses creates a community – a key building block for the society. This basic ‘consumption’ needs and aspects of housing have not changed since the dawn of the human civilisation. However, housing has become much more than that, through the advent of money, conceptualisation of investments and returns, formation of towns and cities with a concentration of jobs and economic activities within those, and through the creation of governments at various territorial levels and other social and financial institutions to support the system. Things have simply become more complex, convoluted and fraught with conflicts of interests, anxieties of decision-making, speculations about the future and so forth. The ‘investment’ need has started to interfere and encroach the space for the basic ‘consumption’ needs, and in some cases and times, it has even started to dominate over the consumption needs. Despite all these complications, especially since the industrial revolutions, formation of several institutions and financial markets over the last century, the basic needs are still intact and very relevant. At the same time, with the internet, online technology revolution and easy availability of information, we are facing new challenges and embracing changes and hoping for new opportunities. Huge amounts of information is being generated; with ever-increasing computing ability, we are able to analyse the information. Our understanding of ‘how things work’ is deepening. Driverless cars, human-carrying drones and other autonomous technologies will change the urban form, locational attributes and desirability of location. While these can bring in new possibilities, they can also disrupt some traditional ways of functioning of urban markets, which can cause much tensions, anxieties, tussles among groups and associated challenges. Indeed, artificial intelligence and machine learning applications will lead to faster decision-making, optimised resource utilisation and automation of various activities. This can potentially reduce inefficiencies in transactions, close information gaps and bring processes together across the board. However, unless governed appropriately and carefully with a singular focus on human wellbeing and societal prosperity, it can also lead to increased inequalities, weakened social cohesion and public unrest with deep divisions among communities. That would not bear well for human civilisation.

It is often commented by several experts that humanity is facing few big challenges or mega-trends: humanity is living longer (ageing population); humanity is getting more and more urbanised; humanity is on the move (massive displacement of people and migration) and humanity is facing climate change. All these mega-trends are being reflected by activities that are performed in various forms of buildings. Housing is perhaps the most significant part of that. According to some estimates from Savills, 2016 and the World Bank, the global
Introduction

The real estate market is massive – valued at almost $217 trillion – and 75% of this is residential property or housing. We are talking about a huge asset class that touches all of humanity in various ways and forms throughout our life cycles.

The broad principles of economic science provide answers to many questions, conundrums and puzzles in the housing market. In this book, I rely heavily on tools and concepts of economic science to explain the fundamentals and analyse the emerging issues. My objective is to remind ourselves of the basics with open and objective views towards the new things that are cropping up in the market. Therefore, at times, the discussion crosses and transcends the disciplinary boundaries as I analyse issues both from urban and regional contexts. While a considerable amount of discussions, due to availability of data, concentrate around advanced countries, references to emerging economies are often made, and the issues of global relevance are highlighted wherever applicable.

This book is not of an introductory nature and is not a pure-play textbook either, and it is not the most comprehensive collection of issues in the housing market. It can serve as a text or reference book for final year undergraduate and post-graduate courses. It covers a significant ground in housing analysis with in-depth coverage of the key issues. And, it can be an effective reference companion for research studies as I provide an overview of key relevant literature, refer to works of several other scholars and highlight the research issues and methods. Some parts of the book assumes prior knowledge of economics and some mathematics and statistics.

I start with a discussion of how housing is a fundamentally unique economic good. Beyond obvious economics, what are the perspectives towards housing? And how are housing and sentiment so interlinked? Chapter 2 lays the foundation of understanding housing in urban and regional contexts. It provides a framework that can address many issues in the market.

Chapter 3 puts housing in the national economy framework and provides a description and analysis of demand and supply factors in the housing market. It shows challenges and gaps in our understanding of the market forces.

Building on the previous chapter, Chapter 4 brings demand and supply sides together to characterise market equilibrium (and disequilibrium). It provides an overview of the most important and talked about concept in the market – the house price. It shows existing models of price estimation and highlights the challenges and issues.

Chapter 5 puts housing issues more formally into urban and regional contexts, with models of urban areas and land-use planning, and it analyses the most important aspects of house price variation – locational or neighbourhood attributes.

Chapter 6 deals with housing choices – weighs various options of owning and renting. It explains the standard search process of buying and selling a house, highlighting the transaction dynamics and roles of intermediaries. An international comparison of the housing transaction process is presented.

Chapter 7 broadens out the most fundamental driver of housing – population with its size and composition. How are various stages of the human life cycle attached to housing needs? It deals with housing issues of people who are migrating and of those who are young and also those who are elderly.

Chapter 8 analyses the housing finance system. Mortgage market fundamentals, lessons from financial crises and international comparisons are made.

Chapter 9 formally and explicitly deals with housing as an investment class – from the big institutional investors to foreign investors and to new forms of investment channels.

Chapter 10 takes a critical view of technology in the housing market – how smart homes, smart or intelligent cities and the technologically and digitally enhanced urban environment would change how we live and work and implications for the housing market.
All chapters highlight how the tools and concepts can come together to demonstrate the functioning of the economic models. Several sections also highlight how the economic models can be built and an empirical estimation can be performed to address key research questions. Data is key in understanding the scale and nature of the housing market. Throughout the book, I have tried to provide a comprehensive account of real data as much as possible. The readers are encouraged to consult the sources of these data for further and deeper understanding.

I have tried to provide as much international focus as practicable across the topics. While some topics have been dealt with specific references to certain countries, the issues and implications can be common and lessons and insights can be applied. Lack of useable and publicly available information has played a role in not being able to cover some of the countries.


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