## Chapter 1

# Introduction

## Susan J. Smith, Beverley A. Searle, and Gareth Powells

### 1.1 Introduction

Finally, housing is a hot topic for economics. The reasons are clear. At the dawn of the twenty-first century, on the crest of a wave of home-price appreciation, the wealth of nations appeared to be accumulating faster through housing than in any other way. Residential property formed the largest single class of assets in the economy, and became a key component of personal wealth (Muellbauer 2008). This is particularly true in those "home ownership" societies of North-Western Europe (especially the UK), North America (especially the USA), and Australasia (primarily Australia and New Zealand) that are profiled in this book.

In the wake of rising property prices, households in the English-speaking world also encountered a cascade of mortgage innovation. On the one hand, the integration of housing, mortgage and capital markets enabled previously-excluded households to buy into home ownership. On the other hand, it encouraged established buyers to borrow more, using loans secured against their accumulating housing wealth. A mix of other factors underpinned this, including low interest rates, competition among lenders, and limited regulation. Together, they conspired to extend the reach of owner occupation, whilst making housing wealth more fungible – or usable – than ever before, enabling it to fund consumption of all kinds. This nexus kept whole economies afloat in periods of recession (Nothaft 2004), just as it provided owner-occupiers with a flexible financial buffer, and an asset-base for welfare (Benito 2007; Parkinson et al. in press). Then the tenuous threads holding the housing economy together began to unravel.

At first, the problem seemed distinctive to the USA, as a ripple of subprime mortgage defaults made waves across the wider economy. The storm broke towards the end of 2006, when Housing International, the subprime face of HSBC in the USA, suspended its operation. By March 2007, the future of one of the largest subprime lenders in the country – New Century Financial – was also in doubt. The most profitable sector of the mortgage market was suddenly set to fail. Then a tide of defaults spread from the margins to the mainstream: the home price bubble burst,

a raft of foreclosures followed, and the consequences spilled into every sector of the economy (Case and Quigley 2008). Housing was not the only culprit. Arguably, it was a hasty and excessive relaxation of US monetary policy after "9/11" which set the stage on which a crisis of residential lending and borrowing played out. Whatever the reason, not since Washington shut down Wall Street in 1914 had financial fortunes of the USA looked so precarious (Silber 2007).

A more alarming discovery still was that events in the North America were just the start. Flowing from and feeding into a mounting credit crisis, home prices began to falter or fall across the owner-occupied housing world. Banking ground to a halt, and a round of massive government bail-outs began. Somehow, the failure of a niche mortgage market in a single jurisdiction had generated a shock sufficient to tip the global economy from growth into decline. It followed that, early in 2009, when world leaders met with the explicit aim of reversing the slide to recession, the housing economy would – for the first time in history – top the agenda of a G20 summit.

This sketch does little justice to the scale or complexity of recent shocks to the global financial system, or to the human consequences of this unprecedented economic failure. It does, however, serve to highlight three important features of the encounter between housing and economy.

First, it suggests that these links are close and critical. Housing has far-reaching implications for macroeconomic resilience; and some of the elements once thought to add stability (e.g., complete mortgage markets) seem equally to contribute fragility. There has been progress in recent years in explaining how, why, and with what effects housing impacts on the wider economy, but there is clearly much more to learn about the interweaving of home prices, mortgage debts, and consumption. Just as there is more to know about the links between all of these, the business cycles, and other indicators of economic wellbeing.

Second, the links between housing and other sectors of the economy are multidirectional. It has always been clear that macroeconomic analyses need firm microeconomic foundations. But it is increasingly apparent that financial shocks are transmitted in many directions, and variously amplified through complex networks that span all scales of the economy. The world is adjusting to a major financial dislocation triggered by budgeting crises among a handful of households (in global terms at least) whose homes account for maybe one-tenth of the value of the US housing stock (itself worth around \$20 trillion in 2005). The entire banking system ground to a halt because of its links to a geographically concentrated and socio-economically selective subprime lending spree. To be sure, this degree of overlending was unsustainable, exacerbated as it was by a perverse system of incentives in which fees were paid to intermediaries irrespective of whether loans were viable (Quigley 2008). But even at the height of its popularity, and immediately prior to its demise, subprime accounted for just 20 percent of the US mortgage market. To be sure the sector was large - perhaps \$700 billion per annum at its peak, with loans totaling \$1.3 trillion outstanding among over seven and a half million households by early 2007. And the "near-prime" (so called "Alt-A") sector may have doubled this. But the US housing stock was worth much more, and overall the equity it contained far exceeded the debt stacked up against it (which totaled \$11.2 trillion by the end of 2007). So the shock of the failure is enormous, and

the fact that its fallout spread beyond the USA is highly significant. It implies that the links between housing and mortgage markets and the wider economy operate globally, as well as nationally and locally, and that events at any of these scales impact on the fortunes of the others. This adds a whole new dimension to the analysis of housing and the macroeconomy.

Third, recent events indicate that the nexus of housing and mortgage markets, which has been a traditional focus of interest, cannot be considered apart from the changing role of capital or financial markets – arenas which, for a while, looked set to form the "new gold" of international exchange (Bryan and Rafferty 2006). It is, of course, this third element of the equation – the role of financial markets – that accounts for the transmission of localized housing shocks across national boundaries. After all, the ups and downs of housing have been weathered before; even the regulatory gamble that prompted the savings and loan debacle of the late 1980s (Barth 1991) soon passed. Arguably, a crisis in a single, restricted, sector of the US mortgage market should not have caused home prices to tumble across the globe, much less have brought the world's banking system to its knees. The fact that it did – and the reason things went so comprehensively wrong for so much of the housing economy within and beyond the USA on this occasion – has to do with the establishment and growth of the mortgage bond market and the capital markets that traded them.

Mortgage bonds most commonly take the form of mortgage-backed securities (MBS). They are wrappers for bundles of debt. By attracting capital from a wide investment community, a growing, and increasingly complex, market for MBS (totaling about \$7 trillion at its height) substantially increased the flow of mortgage finance to borrowers. At the same time, however, it exposed investors around the world to a rising tide of unserviced loans. This is what Hamnett (2009) calls "the madness of mortgage lenders"; an unprecedented frenzy of risk-taking, whose subsequent failure was shared by hedge funds, investment banks, and other large actors. This occurred when the bonds (by now mixed with other securitized debt – in the form of collateralized debt obligations (CDOs)) lost all value. The derivatives markets invented to "insure" them (credit default swaps (CDS)) could not bear the loss. As a result, banks could no longer value their assets, interbank lending ceased and mortgage funds dried up. For struggling home buyers, refinancing became out of the question, as credit constraints tightened and a new era of mortgage rationing dawned.

And so the circle from home occupiers (mortgagors whose income streams could not support their housing outlays), through lenders (who had sold off their loan book but run out of funds), into the world economy (whose banks no longer trusted each other enough to circulate cash or credit) and back again (to borrowers who cannot buy into a falling market, or refinance to save their home) is complete. Housing has turned into a highly complex and risky financial business. In consequence, it has never been so urgent to recognize and specify the close, commutative links between three core themes. Namely: the microeconomic decisions and behaviors of households, intermediaries, and institutions; the operation of housing and mortgage markets; and the wider economy comprising whole nations, entire world regions, and capital markets.

This book is one contribution to that goal. The 25 chapters that follow, and the 42 authors who wrote them, present new data, original analyses, and innovative

ideas. They help explain how it was possible for the collapse of housing and mortgage markets in some states and neighborhoods to reverberate throughout the wider economy of the USA. They further consider what the quite different housing systems in Europe and Australasia bring to this mix. They document the extent to which globalizing housing markets interact with national and local economies, as well as with households' patterns of savings, spending and debt, to change the shape of society and alter the course of politics. The book as a whole thus recognizes just how interrelated the macro- and microscales of economics have become. It acknowledges, too, that the boundaries between economics, psychology, sociology, and politics are fuzzy, arguing that they cannot, indeed should not, be maintained where housing is concerned. In short, and above all, this collection underlines the centrality of the housing economy to almost everything else in life.

To set the scene, the remainder of the introduction falls into three sections. First, it examines the uneasy encounter between the topic of housing and the discipline of economics. Even today, it is surprising how peripheral housing is to the disciplinary mainstream; and it is curious to see what is, and is not, addressed by the vibrant subdiscipline of "housing economics" created to redress the balance. Second, there is a comment on the scope and rationale of the "Economics of Housing" as embodied by this collection. The difference between the two phrases – "housing economics" and "the economics of housing" - may sound like a semantic slip. But the distinction is deliberate. It implies that the housing economy is too large and unwieldy to be contained wholly within economics; that the challenge today is truly interdisciplinary. Third, and finally, the shape of the volume itself is explained: its mix of authors and approaches; a focus on three world regions; an emphasis on the English-speaking world; a preoccupation with owner-occupation; and a glimpse across three unevenly integrated – housing, mortgage and capital – markets. These are the foundations of a unique platform from which to view the unfolding of some quite extraordinary financial events.

## 1.2 Housing, Economics, and "Housing Economics"

In many economies, credit markets and housing markets play far more economic roles at the macro level, as well as at the micro and spatial levels, than will be found in most economics text books. (Muellbauer and Murphy 2008, p. 26)

Housing and mortgage markets made headlines as never before in the year these words were printed. Yet housing markets are cyclical; their ups and downs are well-rehearsed, and it is perhaps difficult to understand why they have not always been a more central concern for economics as a discipline. It is true that housing systems have gone global only recently (Renaud and Kim 2007). Price cycles were previously less co-ordinated and arguably of less interest to mainstream macroeconomists. Likewise, lending is no longer the national affair that it used to be; the tangled world of mortgage and financial markets infuses the wider economy to an unprecedented extent. It could therefore be argued that the

significance of housing for the international economy, as well as for cities, regions, and states, is increasing, and that this inevitably will move it to the center of the economics stage.

Nevertheless, housing assets, mortgage debt, the residential property construction industry, and the myriad intermediaries and ancillaries in the housing business are not new. Neither are their economic effects. Housing investment is widely recognized as a leading indicator for the business cycle. Indeed, in the 1950s and 1960s, when Keynesian economics was in its prime, the housing construction sector was viewed as central to pump priming during an expansionary phase of fiscal policy that was designed to lower unemployment rates. All this notwithstanding, there is – in the silence around housing in much of the economics literature – still a trace of the truths set out by Lionel Needleman (1965) over 40 years ago. In one of the earliest texts on the economics of housing, he noted that "there can be few subjects of comparable importance that have been discussed so much and analysed so little" (p. 14).

Times *have* changed; but not that much. Undergraduate economics, for example, has – on the whole – rather little housing content. To be sure, most standard texts have a section or two on residential investment. But only one best-selling economics textbook covers housing as anything other than a sideline (Case et al. 2009; though see also Griffiths and Wall 2007); and there are few courses in economics that attract students specifically on a housing platform. This pretty much mirrors the wider academic field. The Nobel Prize for Economics for example has been awarded every year for more than four decades. But, so far, no recipient has been especially known for their work on the housing economy; none is a housing economist.

The underlying research effort has until recently, tended to mirror this silence. Even as late as 2004, in a round-up of research on housing and the macroeconomy, Leung (2004) made the "shocking" observation that "'mainstream macroeconomics', simply put, ignores the housing market" (p. 250). It is hardly surprising, in the wake of recent events, that this vacuum is attracting more attention. We turn to this next – to a new wave of interest in the housing economy which is building on Leung's critique. It is drawing, too, on a scattering of earlier work embracing the interactions between housing and the "new (flexible, volatile, and internationalizing) economy" of the 1990s (Gibb and Hunter 1998; Elmer and Landis 2002).

Some of this macroeconomic work is country-specific. For the US market, for example, a "primer" on the economics of housing policy has been developed by Green and Malpezzi (2003); for the UK, Gibb et al. (1999) and Oxley (2004) continue a tradition of work on housing finance; and for Australia a steer is given by Ellis (2006). Other works aim for a more explicitly international sweep. Goodhart and Hofmann (2006), for example, gathered a wide range of evidence together to support their book-length account of the two-way link between home prices and the macroeconomy. Similar topics are introduced in Edelstein and Kim's (2004) theme issue of *Journal of Housing Economics*, and elaborated in a recent issue of the *Oxford Review of Economic Policy* (Cameron et al. 2008). These works are mostly preoccupied with the upswing of the housing cycle. They all consider the various channels by which home prices might interact with economic activity, as well as with credit markets and financial stability.

The latter theme (credit, debt, and resilience) also resonates with Leece's (2004) work on the *Economics of the Mortgage Market*. It is central to the prolific tide of analysis (itself profiled in this volume) produced by the Economics Department of the Organization of Economic Co-operation and Development (OECD). It has inspired renewed interest in the predictors of variability in the provision of housing finance (Warnock and Warnock 2008). And, of course, it underpins a growing concern to document the consequences of mortgage market deregulation (Stephens 2007).

Then there is a raft of new research on the downside of the cycle. Works hot off the press so far (and many more are in train) include Green et al.'s (2008) special issue of the *Journal of Housing Economics* on subprime mortgage lending, the *Journal of Economic Perspectives*' symposium on the early stages of the credit crunch (2009), and Gabriel et al.'s (2009) collection of papers on the "mortgage meltdown" published in *the Journal of Economic Analysis and Policy*. This latter collection also profiles the economic policy dimensions of the housing economy, complementing the wide policy arena and focus embraced in O'Sullivan and Gibb's (2002) earlier collection.

Notwithstanding a surge of new interest in housing and the macroeconomy, however, many of the gaps identified by Leung (2004) remain. There is still a great deal of work to be done to fully understand the wider effects of housing taxation, to document the links between housing and business cycles, to explore the collateral effects of home price dynamics and to explain the long waves of home prices. Many contributors to this volume – and in particular those writing in Part I – aim specifically to address these themes.

Microeconomics came under scrutiny for its marginalization of housing somewhat earlier. At the beginning of the 1980s, for example, Maclennan (1982) used the peculiar features of property to argue for more a nuanced account of the operational features of the major markets than prevailing general equilibrium approaches allowed. Neoclassical economics, he argued, placed most emphasis on refining theories of price and resource allocation at high levels of abstraction. This eased the derivation of elegant proofs of the determination of equilibrium prices. But this, Maclennan argued, directed attention away from critically important features of markets (e.g. asymmetric information) that shape performance. In light of this he made the case for "more reasonable structural assumptions," a more contextual approach, and an interest in how consumers and producers in specific markets "really behave," as the preface - perhaps - to a more general and workable microeconomic theory. There has, as Watkins (2008) shows in his review of a growing literature on the economic analysis of local housing markets, been some success in this regard. In the UK and Europe in particular, there have been many new attempts to address the complex spatial processes underpinning neighborhood segmentation. Less evident, however, has been an interest in the microeconomic dimensions of some common macroeconomic themes. For example, there has been a surge of interest in recent years in the size of housing's "wealth effect" on the wider economy (summarized in Case et al. 2005; Smith and Searle 2008). Yet there is rather little parallel interest in the impacts of housing wealth and mortgage debt at the micro-scale, where they infuse the everyday financial decisions of

households and individuals. Many of the papers in Part II of this collection have been written to fill that gap.

In addition to the scattering of books and theme issues which have, in recent years, begun to put housing into economics in a more concerted way, there is the ongoing work of an entire subdiscipline – housing economics – which was created specifically to deal with the housing "gap" at the heart of economic analysis. Insight into the content and direction of the core work here can be gleaned from the resulting "house" publication, *the Journal of Housing Economics* (JHE). First published in 1991, the editor then, as now – Henry Pollakowski – saw the JHE as the home for a previously fragmented research effort, which had scattered key substantive findings on the operation of the housing economy across a diverse range of specialist and technical outlets. "It is hoped" he wrote "that by providing a forum for the broad spectrum of topics and approaches which comprise the subject of housing economics, this journal will enhance the research process . . ." (1991, p. 1). Ten years, nine volumes (volume three having spanned two calendar years), and over 150 papers later, a cumulative subject index was published which shows how, to a substantial extent, that vision was achieved.

Figure 1.1 is based, in part, on the JHE's own subject index. It shows that the lion's share of the first decade of papers addressed questions of affordability, home (and land) prices, methods, mortgages, and models of housing markets. The editors of the present volume, with the help of Catherine Alexander, attempted to classify the papers published in the JHE since (in the period 2001–2008). This exercise used the same categories as a starting point, but paid particular attention to emerging themes and debates. It is hard to say whether we used exactly the same counting rules; ideally the same team would need to classify both sets of papers to achieve a comparable outcome. But it is interesting that the "top five" themes for the more recent period again include models, affordability, and prices. At the same time, specifically methodological papers are, together with several other main categories, much less prominent now, having been displaced by a new preoccupation with "risk" of various kinds.

"Risk" is the only distinctively new theme to emerge in the second classification exercise. It does, moreover, gather up works that may have been classed as mortgage-related in the earlier review. But more generally it is a label which covers a much wider range of risks – associated with both housing wealth and mortgage debt – than was apparent in the earlier period. Ongoing concerns around mortgage delinquency and underwriting risks (Diaz-Serrano 2000; Groverstein et al. 2005) thus sit alongside concerns about investment risks (Quigley 2006), financial risks more generally (Bradley et al. 2001), the role of housing in compounding the risk of persistent deprivation (Ayala and Navarro 2007), and the relevance of housing wealth as part of a wider strategy of risk management or self insurance (Buckley et al. 2003; Eroll and Patel 2005). Risk, in short, has become the touchstone for discussions of the housing economy today. It is a theme that runs through this entire volume, and one whose nature and implications are very squarely addressed in the papers published as Part III.

Looking forward, the Companion as a whole picks up some enduring and emerging trends identified in this very specific cut across housing economics. Authors



**Figure 1.1** Continuity and change in the thematic focus of articles in the *Journal of Housing Economics* before and after the millennium. The denominator is the total number of articles published in each period (not the total of both periods together). A single article may be tagged with more than one theme, though it is rare for an article to fall into more than two categories.

*Note:* The x axis is labelled with article themes. The y axis refers to the proportion of articles devoted to a given theme in each of the two time periods.

Source: Authors' analysis of articles published in the Journal of Housing Economics

place the spotlight on home prices, and their link (through consumption, fueled by secured borrowing) to the wider economy. They examine the microeconomic implications of the changing character of housing wealth and its growing role as a financial buffer. They addressed the questions of risk and risk mitigation that this raises. But even more notable than any alignment these essays have with "housing economics" *sensu stricto* is the indication they give that this subdisciplinary steer marks the beginning rather than the end of the analytical story. The contents of the one journal devoted specifically to housing economics do – as the publishers currently claim – provide "a focal point for the publication of economic research related to housing encouraging papers that bring to bear careful analytical techniques on important housing-related questions." But as we go on to explain,

the project represented in this book is, of necessity, both broader in sweep and more focused in content than the label "housing economics" conveys.

## **1.3** The Economics of Housing

It could never be expected that a single journal would – even at the height of its popularity – contain everything of interest and merit written by economists on the topic of housing, much less that it would publish everything of significance on the housing economy. The journal Real Estate Economics (REE) (the house journal of the American Real Estate and Urban Economics Association) first published in 1973, the Journal of Real Estate Research (JRER) established in 1986, and the Journal of Real Estate Finance and Economics (JREFE) dating from 1988, all include work on the economics of *residential* real estate, for example. Indeed more than half the articles in the first volume of REE had an explicitly housing focus, and the first issue of JRER contained one of the first published attempts to account for intercity differences in home price appreciation (Manning 1986). At the same time, JREFE pays close attention to housing, mortgage, and financial markets, and to the comparison and contrasts between residential and commercial real estate. Nevertheless, there are many more broadly-based journals which publish both economic and other research relating to the housing economy; and it is the relevance of taking this broader sweep that is considered next.

### 1.3.1 An interdisciplinary project

The themes profiled in this book – home prices, housing wealth, mortgage debt, housing risk, and capital markets - are central to the housing economy, and to housing economics. The extent to which they penetrate the wider literature can be appreciated in a number of ways. We choose to illustrate this here with reference to a structured literature search for the period 1998-2009. The approach we took is analogous to the systematic review -a method of research synthesis developed to combine the results of randomized control (clinical) trials in medicine. This very stringent methodology has since been adapted to embrace the wider world of education and health interventions, where it is used to summarize large volumes of research in order to provide manageable, balanced reviews of the effectiveness of different interventions for professionals in policy and decision-making environments. The structured search methods employed outside the world of randomized control trials tend to be less formalized and more inclusive than those adopted for the standard systematic review. The argument is that even where it is not possible to combine results across studies, there are merits nevertheless in using clearly specified and transparent rules of inclusion in order to collate and summarize a large volume of articles across a firmly defined field (see Curtis et al. 2008).

This "relaxed" systematic review is the style adopted here. Sixty-six search terms were entered into the ISI Web of Knowledge database, using various combinations of housing, prices, wealth, mortgages, and economics in a bid to cast the net as widely as possible. The results were transferred to a bespoke database, where papers

are organized into themes, disciplines, and sources, among a variety of other characteristics. Over 2055 articles were returned by the search, of which somewhat over a quarter -561 – refer squarely to the housing economy. As is usually the case, the majority of recovered articles were excluded from final review because they do not relate directly to the core field, despite being caught by the search terms. (An article on the cost of animal housing, for example, would have been returned by the search, but not included in the final review.) On the other hand, the advantage of the wide parameters set at the outset is that the search as a whole is unlikely to have missed key papers in any peer-reviewed journal listed by ISI.

Among the papers included in the review, just under half (n = 253; 45 percent) were submitted by authors who are economists or who work in Economics departments. Nearly two-thirds of the papers were published in mainstream economics or housing and urban economics journals (n = 337; 60 percent); about one-third (n = 188; 34 percent) could be described as traditionally neoclassical in approach. On the other hand, just *over* half those writing on the housing economy are from other disciplines. These are often, but not always, cognate to economics, and include geography, sociology, psychology, political science, and urban studies. Furthermore, relevant articles were recovered from over 140 ISI-listed journals, and nearly half the papers included in the review appeared in journals linked primarily to disciplines other than economics.

This may suggest that Pollakowski's concerns about the fragmentation of a subdiscipline are well-founded, and that this splintering is ongoing. Such an interpretation is underlined by the fact that there remains in housing economics a substantial "grey literature"; indeed many of the most significant papers of the past decade have been published outside ISI as on-line working or institutional papers, or in a new range of e-journals. A systematic review of these would be a far bigger project than the time-line for a book like this allows. The point we wish to make, however, is that the wide span of publications outlets for peer-reviewed work on the economics of housing may place the process of "splintering" in a more positive light. Effectively it is a way of recognizing that the housing economy is too broad, too complex, too interesting, and too important to be left solely to economics.

To be sure, articles published in the JREFE, the JHE, and REE are in the top five by volume of those recovered in the search. But so too are works published in the more interdisciplinary *Journal of Housing Studies* and *Journal of Urban Studies*. The rest of the top ten includes the *Journal of Urban Economics* and JRER, as well as *Regional Science and Urban Economics*. But the more sociologically orientated *Environment and Planning A*, together with *Housing Policy Debate* also feature.

In all, the disciplinary spread of papers is very wide, even for subjects pertaining to core themes, such as home prices. For example, a total of 141 recovered papers focus on home prices: two-thirds (n = 89) are standard neoclassical analysis; 23 use hedonic modeling to describe and explain price outcomes. A third of the papers on price, however (n = 52), present other perspectives; from geography, urban planning or policy studies; and from material sociology and cultural economy (ideas we will come back to shortly). This same complexity, across all aspects of the economics of housing is illustrated in Figure 1.2.

Figure 1.2 confirms that research on the housing economy is indeed dominated by economics – the discipline whose very rationale is to explore and explain the



**Figure 1.2** Disciplinary breakdown of articles from 1998 to 2008 showing disciplines with more than five results.

Source: Authors' analysis of articles published in the Journal of Housing Economics

economy using economic tools. But it is striking how many other disciplines have – in the past decade – made an active and sustained contribution to this "housing economy" project. In addition to politics and planning, disciplines including sociology, geography, and legal studies are now injecting both theoretical and empirical insights into how housing, mortgage, and financial markets work, charting the way they impact on both the macroeconomy of states and the microeconomy of households. And it is this mix that we seek to recognize in the title "The Economics of Housing." This is the phrase we propose to describe a collaborative attempt to "join up" the various elements, and scales of operation, of the housing economy. Such disciplinary mixing is significant for many reasons. Most importantly, it is a mode of integration that places the housing economy at the cutting edge of a much broader paradigm shift at the interface of economics, sociology, and public policy. It represents the extent to which an enduring division of labor between economists and "the rest" is beginning to break down.

#### 1.3.2 An integrated approach

One version of a division of labor between economists and other scholars of society, in which the housing economy has been caught, is that it represents an historic intellectual "deal." The story is that, as long ago as the 1950s, the sociologist Talcott Parsons – in the midst of a bid to annex practically all of social science within a grand design for his own discipline – settled for a "pact" with powerful economists to the effect that: "You will have claim on the economy. We will study the social relations in which economies are embedded" (Stark 2000, p. 1). Another version of this split is more structural, suggesting that the act of

separating out a range of "essential" economic mechanisms from wider sociological and political scrutiny has hitherto been necessary for economics, economies, and welfare states to function as they do (Smith et al. 2009). But whatever its origins, the pact is under threat. This is not to imply that the transition is entirely comfortable or that its passage can be taken for granted. The trend in university economics teaching departments, in fact, has been to merge with business schools where economics is often more, not less, isolated from the wider social sciences. On the other hand, in so far as there is a sea-change at the interface of economy and society, there is a sense in which work on the housing economy is in the vanguard.

It is, in that context, worth noting that as well as forming the crest of a new wave of collaboration across the divide between economic and social research, the broad sweep of housing studies, particularly in Europe and Australasia, has always had a tradition of bringing these fields together. One of the Economic and Social Research Council's first large research center initiatives in the UK, for example, created the interdisciplinary Centre for Housing Research at Glasgow University in the mid-1980s. Nevertheless the end of the so-called "Parson's pact" in the present decade does mark some new, possibly fruitful, directions for analyzing the economics of housing.

Our sketch of this begins on a somewhat ironic note, observing that, just as sociology, anthropology and human geography are making overtures to economics, a significance branch of that subject – behavioral economics – has effectively eloped with psychology. We refer of course to the surprising turn of intellectual events in which the Nobel Prize for Economics was awarded to psychologist Daniel Kahneman in 2002. "At the core of behavioural economics" write Camerer and Leowenstein (2004) "is the conviction that increasing the realism of the psychological underpinnings of economic analysis will improve the field of economics." Since this has produced an explosion of interest in almost every field of psychology and economics, it is hardly surprising that Camerer and Leowenstein (2004) pick out housing as a huge but relatively neglected area which is "full of interesting opportunities to do behavioural economics" (p. 16).

More of a puzzle is the discovery that only a small number of studies (less than 5 percent) recovered in the structured search reported above actually adopt a behavioral approach. Most work to date has focused on the question of mortgage choice (Essene and Apgar 2007). There is surprisingly little interest in applying behavioral economics to decisions around home purchase. This is despite that fact that almost every hedonic analysis of home prices included in the reviews refers to problems, limitations, or the need for new approaches to handle the complexity of price. Accounting for price - for the costs buyers will bear and the debts they are able or willing to accrue to that end – is certainly one of the areas where the alliance of psychology and economics might be most fruitful. This is clear in Simonsohn and Leowenstein's (2003) reflections on "mistake 37" - just one among the many irrationalities exposed in Gary Eldred's (2002) "106 common mistakes homebuyers make . . .". In a refreshing attempt to recognize that "preferences" in markets are unstable, actions contextual and outcomes driven by whim (or at least by "salient cues that are difficult to justify normatively"), these authors show how the same prices for similar properties can mean different things to different home buyers, depending where they come from. They argue, contrary to previous economic assumptions, that even very significant behavioral decisions can be affected by "arbitrary cues" in broadly predictable ways.

Nevertheless, the only sustained program of writing on the relevance of behavioural economics and finance to the dynamics of home prices is that of Yale economist Robert Shiller. Shiller originally employed the concept of "irrational exuberance" to account for the booms and busts of the stock market. In recent years, however – notably in the second, updated, edition of his book on this theme – he has used the same idea to help explain the amplitude and geography of the current housing cycle (Shiller 2005). This work has, in particular, helped catalyze debate on the extent to which housing cycles are driven by emotional energy or economic fundamentals. The question, in a nutshell, is whether housing "bubbles" reflect questions of space and supply in "superstar cities" as Gyourko et al. (2006) claim they do; or whether they are about the scramble to secure a place on the housing escalator in the "glamour cities" identified by Case and Shiller (2003) - those housing "hot spots" where the fear of missing out on potentially high rates of return drive prices to unsustainable heights. In short, do volatile home prices reflect "rational" adjustments to the ups and downs of interest rates, user costs, and other fundamentals (Himmelberg et al. 2005), or are they driven more by "animal spirits" (Akerloff and Shiller 2009).

Positions in this debate seem increasingly polarized. However, few argue that there are no nonrational drivers in the housing economy. In light of this one of the surprising features of the behavioral turn is how little discussion or debate there is concerning just how the emotional housing economy might work. To the extent that much at all is written on the behavioral housing economy, the tendency is to take for granted the operation of a particular kind of psychological motivation: one rooted in individual responses to a limited range of impulses including fear, greed, and herd behavior. More generally, and notwithstanding its claim to methodological eclecticism (spanning laboratory and field experiments, computer simulation, and brain scanning), the core of behavioral economics and finance relies increasingly on the findings of experimental psychology, neurophysiology, and neuroscience, to model and interpret larger scale survey data. Rather less attention is paid to the "close dialogue" that might also help to formulate some newly emerging "stylized facts" of housing market activity.

Other disciplines, nevertheless, promise to enlarge the behavioral dimension using a wide range of research. These studies borrow from the ethnographic approaches of economic anthropology or the qualitative interviewing skills associated with the sociology and economic geography of finance. The importance of this broader approach is underlined by Strauss (2008), who concludes her wide-ranging review of the fall and rise of rationality, contextuality, and economic behavior by arguing for "an approach to economic decision-making that combines insights from behavioural economics and cognitive science with both quantitative and qualitative methods and the theorisation of context, embeddedness and the role of institutions" (p. 151). The relevance of this vision for understanding the microstructures of the housing market is set out in a collection edited by Smith and Munro (2009). This set of essays makes the case for a sociological – as well as psychological – understanding of the emotional relations infusing housing markets, on the grounds that this can add to the explanatory power of existing behavioral approaches (see especially Christie et al. 2008; Munro and Smith 2008).

Debates around the "behavioral turn" conspire, in the end, to make one very substantial point; namely that while the existing knowledge base for the housing economy has been constructed almost entirely from quantitative studies – only 3 percent of studies included in the structured review use a wider mix of methods – there is growing interest in monitoring the beliefs, experiences and behaviors of individuals in the housing economy using novel qualitative approaches. The importance of this is recognized in the papers that follow, particularly in Part II, which exposes the wide range of risks that individuals both manage and encounter as they negotiate their place at the intersection of housing, mortgage, and financial markets.

More generally, the title of this volume reflects the extent to which charting the economics of housing in an increasingly risky financial word is a multidisciplinary venture. It demands new alliances between economics and a range of other social science disciplines with an interest in economy. This is a challenge for all the disciplines concerned. It is not simply a matter of urging economics to be open to other fields, or about asking other subjects to get to grips with econometrics. It is about creating the new interdisciplinary collaborations that are required to address multifaceted economic themes.

In short, the vast majority of work on the housing economy in the past has been completed by economists. The character of this volume reflects that. But it is time for other disciplines to attend to such themes. This collection is equally designed to capture that trend. The chapters contain ample evidence of what the interdisciplinary shift has already achieved. They show, too, how fruitful any continuing alliance will be in meeting the challenge of understanding and managing the housing economy in 2010 and beyond.

## **1.4** The Housing Wealth of Nations

This book profiles the housing systems of the English-speaking world, drawing examples from societies in which home ownership, enabled by mortgage finance, is the norm. Such heavily leveraged owner-occupation represents a style of "residential capitalism" (Schwartz and Seabrooke 2008) to which nations increasingly subscribe. It is built on the integration of housing, mortgage, and capital markets, and this has a bearing on the extent and distribution of personal wealth, the patterning of debt, the structures of welfare, and the resilience of economies. It impacts too on the character, scale, and uneven experience of housing's financial risks. So although owner-occupation by no means subsumes or represents the entire housing economy, its changing fortunes – and the changing fortunes of the economies it most infuses – do serve as a barometer for the merits and limitations of a housing strategy that has set the pace for the past half century.

Adam Smith, the "invisible figure" in the subtitle of this collection, and of this chapter, was wary of claims pertaining to the wealth in residential property. "A dwelling house as such" he wrote in *The Wealth of Nations*, "contributes nothing to the revenue of its inhabitants." This might change if the property were rented,

but the cost would be borne by the tenant (as well as by owner-occupiers whose "imputed rents" for housing services would also rise). Hence, "the revenue of the whole body of the people can never be in the smallest degree increased by it."

This style of argument recently prompted Buiter (2008) to engage in a protracted debate around the claim that "Housing wealth isn't wealth." His point is that housing is a service; if prices rise (or fall), so do the costs of consuming those benefits. So there is in theory no net gain (or loss) in a system where everyone consumes housing and markets generally clear. But there are, of course, distributional effects, between places and across cohorts, as well as important systematic variations in the way rising (or falling) home prices impact on the borrowing (including equity withdrawal) and trading (including equity release through sale) decisions of home buyers. These behaviors and effects – and their implications for micro- and macroeconomic wellbeing – are what is critical about "the housing wealth of nations"; accordingly they underpin many of the ideas and analyses in this book.

There is another trace of Adam Smith infusing the housing economies under scrutiny here, and that has to do with the presumptions they contain concerning the merits of a deregulated financial world populated by self-provisioning subjects. There is an ideology as well as an economy of owner-occupation to which many individuals, as well as their governments, subscribe. The home ownership societies are saturated with notions of free markets as a source of enrichment and a resource for welfare. In these contexts, housing wealth may not be tradeable for whole nations but it is certainly usable for the households that own it; and the appeal and sustainability of owner-occupation is increasingly linked to this.

The idea of a free market for delivering the entirety of economic and social policy is not necessarily one that we – the editors – subscribe to. Nor is it one that, in the wake of the credit crisis of 2007, many governments can completely defend. Neither does the public's "buy-in" to very high rates of owner-occupation seem set to last as prices fall and debts cease to be sustainable. Indeed, one of the challenges taken up in this collection is to consider whether the risks of residential capitalism can be better managed, its rewards more widely shared, and its dominant tenure type – owner-occupation – modified in order to better secure the financial fortunes of both households and whole economies.

#### 1.4.1 Owner-occupation: the heart of the housing economy

The three jurisdictions most closely profiled in the chapters that follow are the USA, the UK and Australia; though there are chapters addressing New Zealand, a variety of European jurisdictions and the whole of the OECD (the countries of the more developed world). Figure 1.3 is a stylized view of the steady expansion of owner-occupation across the twentieth century in the three "anchor" economies. This figure does not show all the nuances of history, but it does serve as a reminder that three jurisdictions that look quite similar today may be on rather different trajectories.

The UK for example has experienced a series of "tenure experiments" over the past century. In the early 1900s only 10 percent of households were owner-occupiers (the rest were private renters); by the late 1950s over a third were council tenants,



**Figure 1.3** A century of owner-occupation. *Source*: Survey of English Housing; US Census; Australia Bureau of Statistics

as social renting and home ownership expanded hand in hand. It was only in the 1980s (after social renters received the "right to buy" their homes at a discounted price) that owning began to expand at the expense of all the rented sectors, and so became both dominant and normalized. And it was only in the 1990s that today's very high rates of owner-occupation – around 70 percent – were achieved.

In contrast, for the entirety of the twentieth century, more than half Australia's households owned or were buying their homes. The social sector there has always been small, but a boost to owner-occupation occurred in the mid-1950s with a new Commonwealth-State Housing Agreement in 1956. This act tipped the balance by not only encouraging the construction of new homes for private ownership, but enabling social tenants to buy what rented stock there was (Murphy 1995). Accordingly, by 1960, rates of home ownership in Australia had achieved the very high levels (nudging 70 percent) that prevail today.

The USA has never had a substantial public rented sector, though private renting was common for the first half of the twentieth century. Since 1960, home ownership has dominated, however, with rates achieving over 60 percent ever since. The subprime experiment helped boost the sector into the twenty-first century by which time it accommodated over two-thirds of USA households. Rates peaked just a little lower than the UK and Australia, at about 68 percent.

The high rates and steady expansion of owner-occupation represented in this graph mark out housing as the only asset class that is so widely distributed among the general population and across the socio-economic spectrum. In these societies, two-thirds to three-quarters of the population inhabit a tenure sector which accommodates most of the rich and at least half the poor (Burrows 2003). So on the one hand, owner-occupation is – not least by virtue of its size – a highly heterogeneous sector, offering a wide variety of housing experiences. But on the



**Figure 1.4** Growth in value of housing stock, selected countries 2000–2005. *Source*: OECD

other hand, it has a similar role across the bulk of the socio-economic spectrum, as (with pensions) the only style of wealth-holding to which the majority of households have access, and (uniquely) as the vehicle in which most people hold the majority of any wealth – and certainly of any potentially realizable wealth – that they have. There are a wide variety of measures of this in the literature, so the figures often seem contradictory and can be confusing. Suffice to say that across the countries of the OECD, housing wealth generally accounts for more than half of all personal wealth, and as much as three-quarters of owner-occupiers' assets.

As the current home-price cycle approached its zenith, annual rates of home price appreciation reached double figures across the more developed world (with one or two notable exceptions, such as Germany and Japan). Even in the long run, and without the surge of prices in the early 2000s, housing performed relatively well, despite numerous ups and downs. This is especially true in the UK, where home prices appreciated by an average of almost 4 percent per year (in real terms) between 1971 and 2002. Growth rates over the same period in Australia reached just over 2 percent, and in the USA, just under that figure (Catte et al. 2004). By adding to this the effects of the twenty-first century housing "bubble." it is possible to track an astonishing increase in the value of residential wealth holdings across the first five years of the millennium. This is shown in Figure 1.4, which indicates that the USA, the UK, and Australia were at the very forefront of the trend. By 2005, not only did more people own more property in the more developed world than ever before, but that property – which exceeded the value of equities and bonds combined – had more wealth stored within it than any other asset class.

Housing has also, of course, been the anchor for a growing burden of debt. Just as housing forms the centerpiece of personal wealth portfolios, so mortgage



**Figure 1.5** Mortgage debt as a proportion of disposable income. *Source*: OECD; Reserve Bank of Australia

finance underpins the majority of households' borrowings. Even in the decade to 2002, residential mortgage debt in Australia doubled as a proportion of GDP, from 24 percent to 51 percent. From a higher base, borrowing increased from 45 percent to 58 percent of GDP in the same period in the USA, and from 56 percent to 64 percent in the UK (Catte et al. 2004). This increase in indebtedness is shown in Figure 1.5 as a proportion of disposable income. Again the UK, the USA, and Australia were at the crest of the (borrowing) wave. In that period, the mean size of loans granted to first time buyers increased by 68 percent in Australia and by an astonishing 83 percent in the UK.

A key reason that so much debt is stacked against home assets is that, as price rises outstrip incomes, home buyers have to borrow more simply to access the market. Another important consideration, however, is the trend in "mortgage equity withdrawal" (MEW). Broadly, this refers to the practice of using loans secured against residential property to fund nonhousing consumption. Such "equity borrowing" may be an important channel between housing wealth and consumption. Its macro- and microeconomic implications are considered at length in the first two Parts of the book, which together profile the changing role and relevance of the link between home prices, housing wealth, mortgage debt, consumption, and the rest of the economy.

The conceptualization and measurement of MEW is itself fraught with difficulty (for a discussion of this, see Smith and Searle 2008). In the USA, its most



**Figure 1.6** Home prices and cash-out refinancing in the USA. *Source*: S&P Case–Shiller Index, Freddie Mac, conforming loans

common form is known as "cash-out refinancing". This is a method of remortgaging that – as its name implies – allows borrowers also to withdraw cash to spend at their discretion. When credit constraints are relaxed, and collateral values are rising, this is a cheap and easy way to borrow compared, for example, to personal or credit card loans (where interest charges can be much higher). If interest rates fall against this background – as they did into the early 2000s – it is even possible to release equity in this way without increasing housing outlays. It is not, therefore, surprising to see in Figure 1.6 that, as US home prices rose across the millennium, so the proportion of refinanced loans (remortgages) used to extract cash (rather than reduce or maintain balances) also increased from 38 percent to 62 percent at its peak in 2006. In that year, the value of this style of mortgage equity withdrawal rose as high as \$3 trillion (\$318.3 billion) – a figure which accounted for almost a third (29.1 percent) of the total value of all refinancing involving conforming loans.

Remortgaging is also an important channel for MEW in the UK and Australia, but in these jurisdictions it is much more common to have a drawdown facility attached to existing mortgages. An aggregate figure (embracing all styles of equity borrowing) thus captures the trend more effectively. Figure 1.7 for example shows the close links between changes in home prices in the UK and trends in mortgage equity withdrawal since the turn of the millennium. The peaks in 2003 and 2007 reflect low interest rates as well as rising prices. In 2003, mortgage equity withdrawal totaled almost £57 billion, and was accounting for more than 8 percent of post-tax income by the end of the year. The 2007 peak was a little lower, at just



**Figure 1.7** Mortgage equity withdrawal and home price change in the UK. *Source*: Halifax House Price Index; Bank of England

over £42 billion, accounting for around 6 percent of disposable incomes in the most active quarter.

Figures of this magnitude serve to underline the impact which home prices, housing wealth, and equity borrowing might make to overall economic resilience, as well as to households' financial wellbeing, as the cycle of prices and borrowing runs its course. The complexities of all this are drawn out in the papers comprising Parts I and II of the book, which also, of course, point to the astonishing story of how housing booms can unwind. A flavor of this concerted "unwinding" is given in Figure 1.8, which shows price indexes falling in the USA from early 2006, in the UK from late 2007 and in Australia – less certainly – towards the end of 2008. These countries again lead the trend as growth rates slow across the OECD, turning negative – just – by the fourth quarter of 2008. In tandem with this, as Figure 1.9 indicates, a growing proportion of banks (in this case in the Euro Area) report that demand for household borrowing has been falling.

As these trends set in, the financial risks infusing the housing economy are once again laid bare. We have already tracked the cascade of price, liquidity, and credit risks that recent economic shocks set into motion. Part III of the book picks up on this, showing just how limited our understanding of the financial risks around housing have been, and asking whether there are more effective ways of recognizing, managing, and mitigating them.

To further set the scene for the essays that follow, the concluding section of this chapter provides a brief introduction to the wider contents of the Companion. More dedicated overviews are provided as the text unfolds; an editorial prefaces each of the three Parts of the text. What follows here is a crude "road map" – a rough guide to some key themes.



**Figure 1.8** Home price changes in OECD and selected countries 2000–2008. *Note:* Graph shows the quarterly changes in national home price indexes and, for the OECD as a whole, the annual average price change.

*Source*: OECD, Case–Shiller Home Price Index, Australian Bureau of Statistics, Halifax House Price Index





*Note:* Surveyed Banks were asked: "Over the last three months, how has the demand for loans to households changed at your bank, apart from normal seasonal fluctuations?" *Source:* European Central Bank, The Euro Area Bank Lending Survey (various years)

#### 1.4.2 Mapping the housing economy

*Part I* contains a collection of papers collectively labeled *Banking on Housing*. This title signifies the extent to which banks, governments, and the public – as well as whole economies – have come to rely in different ways on the value of residential property. The essays in this section therefore address an enduring macroeconomic question concerning the link between home prices, consumption, and the wider economy. They focus in particular on the close integration of housing and mortgage markets, directing attention to the way this nexus contributes to economic resilience (e.g., by channeling housing wealth into consumption, or by impacting on savings rates).

There is extensive coverage in this part of the book of the changing character of housing's "wealth effects." Authors engage in particular with the vexed question of precisely how home prices are channeled into consumption, shedding new light on a long-running debate. They examine, for example, the extent to which the link is indirect, noting that rising prices can be sufficient to prompt people to spend from their wider wealth portfolio. They ask whether the channel is direct and causal, thanks to the effects of equity release when homes are sold, or due to the mechanism of mortgage equity withdrawal, which releases cash for consumption. They also consider whether the link is secondary or artefactual, recognizing that both home prices and consumption may vary with other factors. Finally, they raise the equally pressing question of whether consumption adjusts to falling prices in the same way or to the same extent as it does to price appreciation.

Engaging with these themes, this Part of the book contains a round up of evidence from several world regions, as authors trace the accumulation of assets into housing, and chart the myriad patterns of spend from housing wealth. Clear links between housing wealth, mortgage debt, and consumption of all kinds are observed across the OECD, and in the individual countries of the USA, the UK, Australia, and New Zealand. To the extent that there is a consistent theme, it is that "complete" mortgage markets have a potentially (though not inevitably) stabilizing effect, because of the financial flexibility they introduce. Particularly important are the "collateral" effects of housing wealth (the possibility for mortgage equity withdrawal), which increased across the upswing of the recent housing cycle, alongside a relaxing of income (and other) constraints on borrowing.

Substantively, therefore, this set of papers contributes most to explanations of the impact of home prices and mortgage borrowing on consumption. The authors draw attention to the growing interchangeability of housing wealth with the wider economy, recognizing that – thanks to innovations in mortgage markets – the much-vaunted "wealth effects" of housing may be more accurately described as "collateral effects" (Muellbauer and Murphy 2008). The papers thus underline the growing importance of mortgage equity withdrawal as a mechanism transmitting home prices into the wider economy. And as much as this raises questions about the contribution of home prices and mortgage debt to macroeconomic resilience or fragility, it profiles too the changing role of housing assets and equity borrowing in households' strategies around savings, investments, spending, and debt. This microeconomy of housing is addressed in Part II.

#### Introduction

The essays in *Part II* on *The Role of Housing Wealth as a Financial Buffer* are concerned less with the implications of housing for whole regional, national, and international economies, and more with its microeconomic significance for households' budgets and welfare. Authors therefore consider the changing role and relevance of housing wealth and mortgage debt in everyday financial affairs. Context for these analyses is provided by two key ideas. On the one hand is Benito's (2007) suggestion that equity borrowing enables housing wealth to form a financial buffer. On the other hand is Kemeny's (2005) concern that governments have made a "really big trade-off" between extending housing wealth to individuals and providing a more comprehensive collective safety net for those who are vulnerable to financial risk. Linking these themes, this group of papers considers the opportunities for, and limitations of, using owned homes as an asset base for welfare. That is, as well as asking whether and to what extent people engage in home equity release or mortgage equity withdrawal, this Part of the book asks why they do so, and, crucially, what they do with the money.

Part II comprises a wide-ranging set of papers, which use both conventional quantitative measures and innovative qualitative techniques. They tackle traditional questions concerning the extent to which housing wealth is being, or could be, mobilized to meet the needs of older age. They profile too the changing character and consequences of mortgage equity withdrawal, asking what precisely this is for. They cast light on the extent to which people engage in equity borrowing to add value to the housing stock, pursue lifestyle aspirations, or boost consumption of all kinds. They raise the possibility, too, that far from funding "champagne moments", such funds are used to accommodate adverse or uninsurable life events, substitute for earnings, cover for loss of income, meet the costs of accidents, emergencies and illness, or manage subsistence needs.

The findings also question the broader strategy of widening access to home ownership simply in order to extend this style of asset-holding into previously underserved markets. They expose the limited extent to which individual households and national governments can realistically look to housing wealth to promote welfare and wellbeing. They point to the severe implications for this kind of strategy that appear when the tide turns: when home asset prices fall, credit is restricted, and a financial buffer – which might have become central to social welfare – fails. Above all the papers in this section underline the extent to which the risks associated with high rates of owner-occupation impact not only on the fortunes of whole economies, but also on the welfare of individuals. The final Part of the collection reflects on these risks, and considers whether they can be more effectively managed.

The *third* set of essays are collected under the title *Mitigating Housing Risk*. They expose the wide range of financial risks that now permeate the housing economy, thanks to the uneven integration of housing, mortgage, and financial markets. Key concerns include the risks of depending too squarely on the accumulation of wealth into property, as well as the danger of being unable to service and sustain the debts consolidating against it. Conventionally it is the latter risks that attract attention, linked as they are with mortgage arrears and repossession. And mitigating such risks is of course high on the agenda, at a time when approximately one in four subprime loans in the USA are in default.

At the same time, the risks of overinvestment into, and overdependence on, housing as a financial resource, are less well appreciated. Yet they are equally pernicious, particularly at a time when households and policy makers are looking towards an uncertain store of wealth to meet fairly routine financial needs. At the peak of the US housing cycle, for example, borrowers had about \$14 trillion of unmortgaged equity in their homes. As this book goes to press, this has – thanks to falling prices – probably halved to about \$7 trillion; and by the time prices start to recover, the size of this equity cushion might be as low as \$4 trillion. Already, over 15 million US residents have mortgage debts in excess of the value of their property. The picture may not be as dire in the rest of the developed world, but trends are pointing that way. The spectre haunting new visions of housing as an asset-base for welfare is that property booms are unwinding: an era of cheap credit is over, and the assets that secured it are dwindling.

It seems timely therefore that the essays in this Part should ask whether there is a more effective way to manage the distinctive mix of credit, investment, and welfare risks embedded in today's housing markets. In particular, and perhaps controversially, they ask whether the integration of housing and mortgage markets with financial markets – a process which has undoubtedly led to the current financial turmoil – might also hold the key to creating a more sustainable financial future for home occupiers. To consider this, the authors in this section evaluate some neglected financial innovations. They consider the merits and limitations of instruments which have been specifically designed to spread the risks, and share the gains, of home price volatility and mortgage market instability. The appeal of this exercise is rooted in the truism that, even today, residential real estate is the largest and most widely distributed asset class in the world, and is anomalous in being the only significant style of wealth holding (and the only wealth holding widely dispersed among the population at large) whose risks cannot be hedged, or managed, with innovations invented for that purpose. Effectively, therefore, this Part of the book is about the problems and potential of harnessing, regulating – perhaps transforming – financial markets, in the interests of better managing the welfare of home occupiers while also securing the stability of housing systems and the resilience of whole economies.

## 1.5 Conclusion

The authors contributing to this volume span a mix of disciplines and professions: they include housing economists, experts in the social study of finance, and specialists in qualitative research; they draw together analysts from the national Banks, the OECD, IMF, and other financial institutions, as well as academic researchers, financial engineers, and practitioners in financial markets. This mix encourages innovative thinking, and provokes a range of new research ideas. That is the spirit of this collection. It is not a comprehensive, technical guide to the conduct and achievements of housing economics. Rather, it is offered as an accessible introduction to, and overview of, the achievements and potential of the interdisciplinary collaboration required to explore the housing economy. There is no obvious beginning, nor indeed any clear end, to this project; but some signposts follow, and the journey is fascinating.

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