Property Ownership and Planning Regulation:
Insider Influences on Urban Consolidation Policies in Melbourne

A thesis in fulfilment of the requirements for the degree of
Doctor of Philosophy

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Declaration

I certify that, except where due acknowledgement has been made, the work is that of the author alone; the work has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the thesis is the result of work that has been carried out since the official commencement date of the approved research program; any editorial work, paid or unpaid, carried out by a third party is acknowledged; and that ethics procedures and guidelines have been followed.

Elizabeth Taylor

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Abstract

This thesis explores the interests and activities of property owners who, as groups with an existing stake in the housing market, may seek to influence the planning system in their favour. The focus is on the role of property owner groups in conflicts around urban consolidation policies in Melbourne. The overarching research question is: Are the housing market interests of property owners, as 'insiders', reflected in activities that influence urban consolidation policies in Melbourne?

Planning regulations have the capacity to influence housing markets, either intentionally or unintentionally. Because of this, property owners have an interest in influencing planning outcomes. Planning allocates and reallocates property rights, and these allocations have economic value. Planning interventions may be cast as managing private property for the greater good; as an unnecessary distortion of markets; or (as in the critical literature on exclusionary zoning) as protecting the property interests of privileged groups. In an endogenous model of planning and housing markets, planning is assumed to be influenced by insider interest groups with an existing stake in housing market outcomes. This is related to the 'capture' theory of regulation. There is evidence to suggest that planning reform agendas tend to be not implemented, to be appropriated, or to be actively thwarted as a result of existing property rights interests in planning. As a case in point, urban consolidation policies are usually introduced as an alternative to traditional suburban zoning, a form of land use control historically preferred by homeowners.

Urban consolidation policies, pursued in most Australian cities since the early 1980s, promote the densification of existing urban areas and seek to slow the outward expansion of traditional low-density housing. Such policies originally sought to increase housing densities in part because of a critical view of zoning and its exclusionary effects. Yet much of the literature looking at the potential impact of planning on housing affordability has focused on the effects of urban consolidation – particularly Urban Growth Boundaries (UGBs). Although urban consolidation measures can be viewed as either improving or hindering housing affordability, in this thesis I argue that in practice property owner groups are likely to contest and shape the ways in which consolidation policies are implemented. This process of interaction and conflict has implications both for planning and for housing affordability.

The study includes three areas of empirical investigation examining the links between urban consolidation, housing affordability and property owner groups in Melbourne. A mixed-methods approach is used. Parts of the study are based on a detailed dataset of
property-level transactions and valuations data, and utilise quantitative techniques including regression analysis, hedonic modelling and Geographical Information Systems (GIS). The thesis also draws on key policy documents, and makes use of qualitative discourse and content analysis methods. Economic perspectives are used to shed light on activities around planning policy by housing developers, existing homeowners and landowners on the urban fringe.

The first empirical investigation concerns the media and policy coverage of links between housing affordability and urban consolidation in Australia. Key patterns in the local debates about planning and housing are documented. The content analysis also highlights shifts in the perceived role of urban consolidation in housing affordability outcomes. To explore patterns of ‘backlash’ against densification by existing homeowners, I examine data on planning permit applications and rates of objections and planning disputes, and their relationships with local house prices and socioeconomic characteristics. The findings have implications for policies that direct new housing to existing high-demand areas. I also explore the interests of landowners on the urban fringe, with reference to the expansion of Melbourne’s UGB and a proposed taxation on landowner betterment, the Growth Areas Infrastructure Charge (GAIC). The series of changes to the UGB and the GAIC may be understood as a response to a range of policy pressures from property owners.

The research supports the notion that the activities of groups with an existing interest in the housing market do follow certain predictable patterns, and have played an important role in the contestation and negotiation of urban consolidation policies in Melbourne. I argue that the net effect is that urban consolidation policies seem to create substantial price premiums in the land and housing market, which are then redistributed in response to the premium-seeking investment of insiders. The costs of this process are likely to be passed on to housing market outsiders. The findings from the research have a bearing on contemporary reforms to planning that seek to ‘streamline’ planning but underestimate the conflicts with, and influences of, interest groups in planning processes.
Chapter 1

Introduction

On the other side of Babbitt lived Howard Littlefield, Ph.D. ... Littlefield was the great scholar of the neighbourhood; the authority on everything in the world except babies, cooking, and motors. He was a Bachelor of Arts of Blodgett College, and a Doctor of Philosophy in economics of Yale. He was the employment-manager and publicity-counsel of the Zenith Street Traction Company. He could, on ten hours’ notice, appear before the board of aldermen or the state legislature and prove, absolutely, with figures all in rows and with precedents from Poland and New Zealand, that the streetcar company loved the Public and yearned over its employees; that all its stock was owned by Widows and Orphans; and that whatever it desired to do would benefit property-owners by increasing rental values, and help the poor by lowering rents.

Sinclair Lewis, Babbitt (1923)

1.1 Project beginnings

I began this research project in 2007, during a time of continued house price increases in Australian cities. The costs of entering home ownership had risen to unprecedented levels. The idea of a housing affordability crisis had established itself as a widespread theme in policy and research, and was the topic of considerable media coverage. Public inquiries, notably the Productivity Commission Inquiry Report on Home Ownership (2004) and the Senate Select Committee on Housing Affordability in Australia (2008), articulated a widespread policy concern with housing affordability and particularly with access to first homeownership. Escalating housing costs were reported and analysed, fluctuating between worrying statistics about housing stress levels and
price-to-income ratios on the one hand, and a disbelieving fascination with the improbably steep climb of property prices on the other. The latter was accompanied by a host of home renovation shows reflecting the saying that in Australia property speculation is a national pastime.

One aspect of this public discussion was the role of land use planning regulations, with a burst of interest in the relationship between planning mechanisms, land supply and housing prices (Menzies Research Centre 2003; Productivity Commission 2004; Cox 2005; Moran 2005; Moran 2006). When I started the thesis I was interested in testing the high-profile claims about the impacts of planning regulations on housing affordability. What has resulted, however, is a thesis that looks at these debates and issues from essentially the opposite direction: exploring the activities of housing market interest groups and their potential influence on the planning system, and on urban consolidation policies in particular.

This shift in perspective came about through a growing interest in understanding why, when, and in whose interests planning came to be so prominent in Australian housing affordability debates. It also arose from a familiarisation with the literature on exclusionary zoning, and other concepts describing the historical use of planning to protect the interests of existing homeowners. For me, this literature highlighted a certain paradox surrounding the role of planning, or indeed any regulation, in housing markets. Higher house prices are a form of exclusion, regardless of whether they arise from restricted supply or from increased demand. And as pressing an issue that housing affordability may be, the interests of existing homeowners are also a major factor in housing policies. Hence the quote from Sinclair Lewis’s 1923 novel Babbitt. In Lewis’s narrative, whatever the streetcar company desired to do “would benefit property-owners by increasing rental values, and help the poor by lowering rents.” The effect is oxymoronic: the two equally beguiling goals clearly cancel each other out.

But the apparent absurdity of Babbitt is not so far removed from contemporary debates around planning and housing markets. This was aptly (if perhaps unintentionally) highlighted by former prime minister John Howard, who in the midst of the mounting ‘housing affordability crisis’ of the early 2000s retorted: “I don’t get people stopping me in the street and saying John, you’re outrageous, under your government the value of my house has increased” (Berry and Dalton 2004 p70). The cynical professionalism of Howard Littlefield (PhD) makes the world of Babbitt doubly familiar, with his “figures all in rows and precedents from Poland and New Zealand” mirroring the lobbying of the industry groups that periodically realign their interests with political juggernauts of the
motherhood issue’ variety. For some time, housing affordability has been one such juggernaut in Australia, and urban consolidation policies have sat squarely in its sights.

Particularly during the period 2005–2008, a number of high-profile critics blamed planning, and urban consolidation measures especially, for distorting housing supply and causing a housing affordability crisis. The Great Australian Dream Project and its website, set up by a coalition of industry groups and think tanks, framed the argument. This critical view of the suite of planning controls intended to curb urban sprawl had an impressive reach, perhaps best illustrated by the then federal treasurer, Peter Costello, launching Alan Moran’s book *The Tragedy of Planning: Losing the Great Australian Dream* (Smith and Marden 2008). This and similar publications made unambiguous links made between urban consolidation measures and affordability problems. For example:

Australian urban areas have adopted so-called ‘smart growth’ or ‘urban consolidation’ policies that ration land…Rationing raises prices and rationing land raises house prices. Urban areas that have avoided land rationing policies have retained far more affordable housing (Cox 2005 p57)

These critical claims about urban consolidation are not without grounding in the existing theory and evidence. An extensive body of literature looking at relationships between land use planning and housing affordability has speculated that planning mechanisms may undermine housing affordability. The potential causal links lie in the proposition that planning influences the price of land. It may do so by restricting the amount of land available, or through the introduction of factors like ‘red tape’, planning delay, taxes and charges, and compliance costs. This view of the relationship between planning and housing markets takes the potential inflationary effects of planning on house prices as an uncontroversial starting point (Green 1999). A significant amount of this literature has been critical of urban containment policies (Nelson 2000).

However, and crucially, within the Australian debate the criticisms of planning policy had not been based on any empirical evidence. The debate had instead tended to focus on reducing or removing prescriptive restrictions on greenfield housing supply – a kind of magic bullet cure for housing affordability problems. This idea has been parodied by critics as “The Great Australian Dream Swindle” (Gleeson 2008 p2655) and is mostly reliant on the enormous emotive power of homeownership. Originally, I had sought to address this paucity of evidence by using empirical evidence to assess the claims made about urban consolidation. In sifting through the claims made, however, I came to focus less on the alleged impacts of the policies and more on the
debates themselves; on their underlying assumptions and ultimately on the policy changes that stemmed from them.

Because of this shift in focus I came to explore a range of literature that posed less dichotomous views of planning and markets. I increasingly looked at theories of property owners or ‘insiders’, and at the idea that planning policy may be shaped by these and other self-motivated actors. Crucially, actions around policy can have market outcomes. This endogenous perspective on regulation now sets a framework for the research. The thesis tests the idea that groups with an existing stake in housing markets will engage in activities to influence planning outcomes in their favour. It explores ways in which property owner or ‘insider’ groups in the housing market – homeowners, landowners and housing developers – may seek to influence the planning system in Melbourne to their own economic benefit. The conflicts around urban consolidation (containment) policies in the city are the focus. The thesis argues that the endogenous or ‘insider–outsider’ effect on planning has implications for planning policy implementation, and ultimately for housing affordability outcomes.

1.2 The issues

The research has been motivated by six key issues.

1. The growing interest in planning and housing supply
Firstly, the research has been motivated by the growing interest in the relationship between planning mechanisms, land supply and housing prices (Bramley 2007; Glaeser and Ward 2009). Both Australian and international studies and initiatives have emerged that are concerned with the confluence of planning and housing markets. Much of this interest is attributable to the critical view that planning restricts land supply, increases the cost of developing land and impedes the construction of cheaper dwellings. The view that planning pushes up the price of housing is now a prominent part of the housing affordability discussion in Australia (Gurran 2008). These criticisms have been made specifically about urban consolidation polices in Melbourne (Moran and Staley 2007), with urban consolidation viewed critically by key stakeholders including the housing and development industry (Smith and Marden 2008).
2. Assumptions about planning and housing

Secondly, criticisms of the role of planning in the housing affordability crisis have given a relatively high profile to calls to abolish or relax planning. This type of criticism can lead to the view that ‘no planning’ or less planning is therefore possible or preferable (Gurran 2008 pp103-104). Likewise there has arisen the simplified view that only some planning policies (namely urban consolidation) influence the housing market. Much of the Australian material critical of the role of growth controls in reducing housing affordability either implicitly or explicitly advocates the relaxation of planning regulations, and particularly urban consolidation. This view can predetermine a reduction in regulatory planning. Gleeson and Low (2000) argue that interest and political groups have pursued a systematic campaign against planning and land regulation as a whole, seeking to “reduce the regulatory and political scope of planning” (p8). On the other side of this view of planning is an apparent lack of engagement of planners with economic ideas – even, crucially, a lack of awareness of the economic justifications for planning.

3. Assumptions about housing affordability

The dichotomous nature of the debate also extends to housing affordability, with the public profile of housing supply and affordability often concerned only with homeownership and with housing in greenfield areas. However, there is also the view that planning mechanisms can be used to promote housing affordability. Various international examples exist of ‘inclusionary zoning’ policy (Gurran 2007; Gurran, Milligan et al. 2008), for example the use of Section 106 agreements in the UK (Gallent, Mace et al. 2002; Whitehead 2007). Inclusionary zoning involves planning requirements placed on developments, requiring an increase in housing choice or the direct provision of affordable housing. These are often key components of urban consolidation policies (Nelson 2000; Nelson, Pendall et al. 2002; Voith and Crawford 2004; Aurand 2010). Inclusionary zoning mechanisms have not been introduced in Melbourne, despite a stated strategic planning goal in the city’s metropolitan plan, Melbourne 2030: Planning for Sustainable Growth, of “encouraging the supply of well located affordable housing” (Department of Sustainability and Environment 2002 pp116-117). I am interested in examining these different concepts of affordability and the role of planning within them.

4. Policy responses that presume impacts

Despite a lack of evidence, government reforms have been introduced in Australia that presume the existence of impacts on housing affordability from planning controls. With housing costs in major cities continuing to increase, the problems of housing
affordability and its connections to housing supply and urban planning have continued
to have a high profile on the policy agenda. Supply-side issues have put the focus on
land use planning policies. This is indicated through a range of housing supply
initiatives including the COAG Housing Supply and Affordability Reform Agenda, the
Housing Affordability Fund, and the Housing Supply Council. It is also seen, notably, in
the expansions to Melbourne’s Urban Growth Boundary (UGB) on the basis of cited
fears of inadequate land supplies (Department of Planning and Community
Development 2008; State Government of Victoria 2010), and in initiatives to streamline
planning processes including the Productivity Commission inquiry into planning and
zoning (Productivity Commission 2010).

5. Inclusion and exclusion in planning
A further consideration is that the policy debate in Australia has tended to ignore
important literature on the history of planning and its use by different groups. Notably, it
ignores the history of exclusionary zoning and the affordability impacts of the traditional
suburban form (Fischel 2004; Pogodzinski and Sass 1994; von Hoffman 2009). Jacobs
and Paulsen (2009) argue that planning “has been used to secure and protect the
property rights interests of the affluent and influential classes and races” (p134).
Becoming familiar with this literature and this alternative perspective on planning – as
something that can be of both economic value and cost to different groups – has been
a key motivation for me in this research. I am interested in the idea that the interests of
existing property owners in property values are a factor in the adoption or relaxation of
planning controls (Pogodzinski and Sass 1994; Fischel 2004; Fischel 2005; von
Hoffman 2009). In the absence of formal planning controls, homeowners will often
voluntarily adopt private equivalents (restrictive covenants) to achieve the same price
effects. Such controls are apparently “of financial value to residents who have willingly
paid a premium to live in controlled areas” (Evans 2004 p53). These ideas are similar
to economic theories of ‘public interest’ or ‘capture’ effects in regulation (Posner 1974;
Peltzman 1989).

Within the practice of planning there is a significant lack of awareness of this history, or
of the “darker side of community” (Campbell 2005). Von Hoffman (2009 p231) argues
that the history of planning and housing has been influenced by powerful homeowner
groups, with “major efforts [by planners] for social change … defeated or diluted,
sometimes with the very planning tools that were created for reform purposes”. Hence
planners may have inclusionary goals, but planning may have exclusionary outcomes.
Evans (2004 p8) argues that public participation in planning, a change intended to be
socially progressive, was appropriated to instead further the representation of those
already inside the system: “the effect of ‘public participation’”, he contends, “was to
reinforce the status quo and the position of those in possession”. An awareness of how and why property owner groups can influence planning in their favour is, I would argue, crucial to understanding the relationships between planning and housing.

6. Understanding urban consolidation conflicts

Finally, without taking a position on the merit of urban consolidation policies, I am interested in shedding light on the interactions between property interest groups, planning policies and planning conflicts. The fact that planning both allocates and redistributes property rights means that attempted changes to planning systems tend to be contested and appropriated by stakeholders. There is evidence to suggest that, because of property rights influences, altruistically motivated reform agendas (and equally, economically motivated reforms of planning) are either not implemented (Downs 2005), are appropriated (Evans 2004), or are actively thwarted (Schill 2005). Urban containment – or urban consolidation, as it is known in the Australian context – is a case in point.

The extent to which urban consolidation has actually been enacted in Australia is debated. It has nonetheless been something pursued – at least in principle – in most Australian cities since the early 1980s (Yates 2001; Searle 2004; Searle 2005). Urban consolidation policies seek to encourage densification in existing areas, and to slow the outward expansion of traditional low-density housing. Traditional suburban zoning, thought to have originated in response to demand from homeowners, is centred on the separation and protection of low-density detached housing. Urban consolidation policies represent a redistribution of the property rights embedded in suburban zoning controls, upsetting the status quo of existing homeowners, housing developers and landowners on the urban fringe. Downs (2005 p367) discusses the gap between the goals of smart growth (a similar concept) and their implementation, arguing that “smart growth is more talked about than actually carried out in practice” because the acceptance and implementation of different facets of smart growth may depend on the impacts on existing property owners (Downs 2005; O’Connell 2008; O’Connell 2009).

In Melbourne, the UGB introduced in 2002 has been the subject of ongoing debates and changes. Similarly, although the official policy for some time has been to direct a greater proportion of new housing to established areas, there has been considerable backlash from homeowners (Lewis 1999), with unpopular infill housing becoming a political issue at the local and state levels. My interest in these conflicts also arises from my own early experiences as a planning consultant in Melbourne, and the antagonism surrounding planning applications for higher-density housing. Planners were sandwiched between two sets of interests. Objections rolled in, often in the form
of crisp letters from judges and doctors, likening proposed developments unfavourably to certain Asian cities and predicting the death of leafy suburban streets “of value to the whole of Melbourne” (Huxley 2002). Butting against these were opportunistic developers seeking to cram as much housing as possible onto each site, armed with consultants spouting ambitious interpretations of the planning guidelines and threats of “taking it to VCAT” (the Victorian Civil and Administrative Tribunal, the planning appeals tribunal).

In this thesis I try to disengage from the questions of whether urban consolidation policies are more sustainable or desirable; or whether (and if so, why) they contribute to housing price increases. I focus instead on trying to understand planning conflicts around urban consolidation and housing affordability using economic perspectives. The contention of the research is that the conflicts around urban consolidation, fuelled by insider self-interests, represent a cost. Time and money are spent on establishing, and then moving, growth boundaries; on the high-profile campaigns against them; on the lobbying to have them moved; and on the objections and disputes that define the front line between established suburbs and unpopular housing developments. These processes add delay and uncertainty to housing supply and to planning, but are interactions that are not widely understood by policymakers. The policy debate in Australia has tended to ignore studies of the impacts on housing supply of flexible or unpredictable planning systems (Ball, Allmendinger et al. 2008; Glaeser and Ward 2009). It is this gap in the research that this thesis the research intends to address.

1.3 Approach

Scope and focus of thesis

This thesis explores the interests and activities of property owners or 'insiders' who, as a group with an existing stake in the housing market, may seek to influence the planning system in their favour. The focus is on the role of property owner groups (housing developers, homeowners and landowners) in conflicts around urban consolidation policies in Melbourne. The overarching research question is:

Are the housing market interests of property owners, as 'insiders', reflected in activities that influence urban consolidation policies in Melbourne?

At its broadest level the thesis is about the relationships between housing markets and planning. The thesis does not engage in depth with either planning or housing markets, but is instead concerned with the ways in which they may interact. Within these
interactions, it is then interested in the potential role of property owners. At a narrower level the thesis examines the relationships between housing affordability and urban consolidation. These interact in different ways, including through the policymaking process. The framework for my research (its key concepts and focus) is set out in Figure 1.1. The focus of the thesis (shown as the shaded area) is on the potential relationships between urban consolidation and housing affordability; and within these interactions, on the potential interests and actions of property owners.

**Figure 1.1: Key concepts and focus of the research**

![Figure 1.1: Key concepts and focus of the research](image)

**Assumptions**
The research uses an economic perspective to examine the key concepts and issues. In its approach and underlying assumptions it is broadly aligned with empirical studies of planning regulations and their relationships to housing markets and affordability (Michaels and Smith 1990; Donovan and Neiman 1995; Malpezzi 1996; Green 1999; Glaeser, Gyourko et al. 2003; Cervero and Duncan 2004; Song and Knaap 2004; Cheshire and Sheppard 2005; Burge and Ihlaneldt 2006; Hess and Almeida 2007; Gyourko, Saiz et al. 2008; Cheung, Ihlaneldt et al. 2009; Glaeser and Ward 2009). It is, ultimately, an empiricist piece of research that uses quantitative techniques broadly premised on the idea of individual incentives.

An implicit assumption of the research is that individual economic interests will cause people (property owners) to act in ways that can be observed and measured, albeit imperfectly. Based on a hypothesis developed from the review of existing theory and evidence, the research expects that property owners will have some kind of interest in the interactions of housing markets and planning. It assumes that they act on these interests and that their activities will be reflected – to some extent – in policies, policy
debates and activities in the planning system. The research focuses on and measures these phenomena. Conceptually, the analysis in this thesis is therefore situated at an institutional level. Although statistical techniques are used (including regression and hedonic analyses), this is not an economics thesis. There is an equal or greater focus on planning ideas and histories.

In terms of conceptual framework, the research is situated within the body of research that assumes a non-dichotomous approach to issues surrounding planning and housing. As with other work looking in detail at the intersection of planning and housing, the research makes a basic assumption that there is limited value in the idea of a planning–market dichotomy. That planners often underestimate markets, and economists often underestimate planning, is suggested by the ongoing conflicts between these disciplines (Evans 2003). The conceptual framework for the research is similar to that of market-aware planning: the relationships between planning and markets are dynamic and involve many actors (Tiesdell and Allmendinger 2005). Its goals mirror those of Jones and Watkins (2009), in that it seeks to shed new light onto planning issues, rather than to argue for or against planning:

It is not our intention to add another voice to those that have used the mainstream economic theory as a basis to attack the planning system. Rather it is hoped that we offer a constructive assessment of the strengths and weaknesses of planning policy and practice. The need for an effective planning system should be taken as a given (Jones and Watkins 2009 p5).

With this thesis I do not suggest that an economic framework is the only or even the most important way of understanding planning, urban consolidation or housing affordability. What I do propose is that economic perspectives on planning and housing issues can bring useful insights to issues with real-world implications. Ultimately, this research is linked to the continuing policy debates in Australia around urban consolidation, planning reforms and housing affordability.
Analytical methods and data sources

A mixed-methods approach is used. The methodology integrates a range of quantitative analytical techniques including simple regression analysis and hedonic models. It also makes use of more qualitative discourse analyses, drawing on key policy documents.

The early chapters of the thesis consist of an exploration of the existing theory and evidence around links between planning and housing markets, and between urban consolidation and housing affordability. These chapters draw on the literature from different fields of study, including economics, planning and urban history. Within each field there are different underlying assumptions about the relationships between planning and markets. The review is both a summary of the evidence from different disciplines, and also a deconstruction of key assumptions. The existing literature is used to develop a theoretical framework based on studies that apply an endogenous perspective on planning and housing markets. From this theoretical basis, assumptions about the effects of urban consolidation on property owners in Melbourne are developed.

The latter part of the thesis consists of three areas of empirical investigation around the links between urban consolidation, housing affordability and property owner groups in Melbourne. Using different methods, these explorations seek to shed light on the activities around urban consolidation policy by developers, homeowners and landowners. These empirical exercises consider aspects of the implementation of urban consolidation on the urban fringe and in the established urban areas where housing is directed. The empirical investigations broadly comprise analyses of links between property owners and urban consolidation policies in terms of ‘booms and barriers’, ‘backlash’ and ‘betterment’. These are outlined in section 1.4, below.

The quantitative analyses use regression and hedonic price analysis techniques often used in studies of land and housing markets. They also use descriptive statistics and Geographical Information Systems (GIS) mapping.

Parts of the quantitative analysis are based on the use of a detailed property dataset, which I designed and created for this research project. This dataset combines unit-record level data on property transactions and valuations in Melbourne, with spatial measures and indicators of planning controls. The property dataset is a spatial dataset compiled from administrative records at the unit-record (individual property) level. The dataset covers Melbourne municipalities across the period 1990–2008, and is
integrated into a GIS environment. This then provides a set of information that is suited to
dynamic spatial analysis of the Melbourne land and housing market. The database is
described in detail at Appendix 1. The property database is particularly important to the
UGB-related chapters 7 and 8. It is also used for the ‘anatomy of housing crises’ part of
Chapter 4 (section 4.3) and the analysis of planning disputes in Chapter 5.

Chapter 5 also uses published data on planning statistics (planning applications and
objections) and planning tribunal data. Data from the Census of Population and
Housing, economic indicators, and planning schemes are used at different points in the
thesis. These data sources have all been reformatted and integrated into customised
datasets for Melbourne. A detailed explanation of methodology is given within each
chapter.

The research is also based on content analysis methods, using documents as sources of
data (Bryman 2004). This aspect of the method includes the review of public
submissions to the recent Urban Growth Boundary inquiry (Chapter 6). It also involves
the review of a range of housing and planning documents including newspapers,
academic journals and historical planning strategies (Chapter 4).

1.4 Thesis outline

The thesis is structured around the overarching research question:

Are the housing market interests of property owners, as ‘insiders’, reflected in activities that influence urban consolidation policies in Melbourne?

The thesis is in two main parts. The background and theoretical framework is contained in two chapters. There are then three areas of empirical investigation and hypothesis testing, (with a total of five empirical chapters). Each chapter addresses sub-research questions. The thesis structure is summarised in Figure 1.2, and in the outline below.

Background: the existing theory and evidence

The thesis begins with two chapters forming a review of the existing theory and evidence. These background sections of the thesis address the following research questions:

1. What does the existing theory and evidence tell us about the potential relationships between housing markets and planning?
2. What does the existing theory and evidence tell us about the potential links between urban consolidation policies and housing affordability?

3. What does the existing theory and evidence tell us about the interests of property owners in planning and in urban consolidation policies?

The first part of the review (Chapter 2) positions the research within the context of different economic perspectives on planning. The economic justifications for planning are outlined and the historical rationales for planning regulations are reviewed within this framework. The review then surveys the critical literature, taking a Coasian view of planning and housing markets, based on the idea that regulations distort markets and add to housing costs. Finally, Chapter 2 identifies the literature of a third perspective on the relationships between planning and housing markets. This is an endogenous model, where planning is assumed to be influenced by interest groups (actors) with a stake in housing market outcomes.

In the second chapter of the review of existing theory and evidence (Chapter 3), the endogenous model is applied to the policy issues of urban consolidation and housing affordability. Different perspectives on the links between planning and housing mean that urban consolidation policies can be viewed as either promoting or hindering housing affordability. Conflict with property interest groups may mean that, in practice, urban consolidation strategies can have unintended effects on housing supply. This chapter develops a theoretical framework based on an endogenous perspective on housing markets and planning. This is then applied to the issues around urban consolidation and housing affordability in Melbourne.

**Booms and barriers: urban consolidation and the housing affordability agenda in Australia**

The first area of empirical investigation deals with the media and policy coverage of the links between housing affordability and urban consolidation in Australia, and in Melbourne particularly, focusing on a 20-year period. It addresses the following research questions:

4. What have been the key policy changes and conflicts concerning the links between planning, urban consolidation and housing affordability in Melbourne? What has been the involvement of property owner groups in these debates?

5. How, when and why has housing affordability featured on the planning agenda in Melbourne?

6. How, when and why has planning featured on the housing affordability agenda in Australia?
Chapter 4 examines the public discourse around planning, urban consolidation and housing affordability in Melbourne. It seeks to systematically document key patterns in the local ‘polemic’ of planning and housing debates, focusing on two distinct periods of housing affordability crisis and on the perceived roles of urban consolidation within these. The goal is to identify, on the one hand, when and how planning and urban consolidation have been a part of the housing affordability agenda in Australia. Equally, the chapter examines the reverse question, of how and why housing affordability became a part of the planning agenda. The associated conflicts around urban consolidation policies in Melbourne, and the role of housing interest groups in these debates, are examined. A mix of historical discourse analysis and more systematic content analysis is applied. The analysis in Chapter 4 is based on an initial review of historical planning documents, and on a content analysis of a sample of public documents comprising newspaper coverage, academic journals from different disciplines, and policy documents. The relative degree of coverage of housing affordability issues across two ‘housing crisis’ periods is documented. The extent to which planning has featured within this coverage is assessed, focusing on the role of urban consolidation policies.

**Backlash: homeowners and planning disputes**

The second empirical investigation examines objections to planning permit applications in Melbourne. It addresses the following research questions:

7. To what extent do the interests of existing homeowners (‘insiders’) in their housing values appear to influence patterns of objection and dispute around planning applications in Melbourne?

8. Are planning permit applications in areas of higher value housing objected to more often, and do they proceed more often to arbitration at the Victorian Civil and Administrative Tribunal?

Chapter 5 looks at the relationships between planning disputes, housing prices, planning controls and socioeconomic characteristics. It provides a statistical examination of the incidence of planning objections and appeals across Melbourne municipalities. The term ‘homevoters’ refers to owner-occupiers whose decisions, including the adoption of planning controls, are driven by the protection of property values (Fischel 1990; Fischel 2004; McDonald and McMillen 2004; Fischel 2005). The hypothesis in this chapter is that patterns in planning objections and disputes will reflect the economic interests of homeowners and their preferences for traditional suburban
development controls “that put the single-family, owner-occupied home at the pinnacle of uses to be protected” (Fischel 2004 p317).

Betterment: landowners and the Urban Growth Boundary
In the third area of empirical investigation, presented in chapters 6 to 8, the thesis looks at the effect of urban consolidation policies on landowners on Melbourne’s urban fringe, and addresses the following research questions:

9. In their public submissions, what claims do landowners make about betterment (planning gain) resulting from expansions to the Urban Growth Boundary (UGB), and about the proposed taxation of it? What pressures do they place on planning policy?
10. Controlling for other differences in land characteristics, has the introduction of the UGB, and changes to it, resulted in a measurable betterment value for land prices on Melbourne’s urban fringe?
11. What is the estimated level of betterment to large landowners on Melbourne’s urban fringe as the result of planning changes to expand the UGB?
12. What would have been the effective tax rate, on this betterment, of the proposed and modified formats of the Growth Areas Infrastructure Contribution (GAIC)?
13. Do the perceived interests of landowners appear to have influenced the modifications made to Melbourne’s urban containment policies and proposed betterment tax? Which landowners seem to have benefited most from the changes?

Existing landowners on the urban fringe stand to benefit from urban expansion, through the uplift of rural land values resulting from the demand for urban land and from planning changes unlocking this demand. In the chapters on betterment, the interests of such landowners in Melbourne are examined with reference to the expansion of the UGB and the proposed taxation on landowner betterment, the GAIC. The study begins with a content analysis of public submissions by landowners in response to the proposed expansion and tax. The claims made by landowners about betterment and the effects of the GAIC on them are documented, as are their calls for changes to the UGB and the proposed tax.

The quantitative analysis explores these claims by using modelling techniques to estimate the extent of planning betterment to large landowners resulting from expansion of the UGB and rezoning for residential development. This analysis makes use of the detailed unit-record level dataset of property sales and characteristics (see
Appendix 1). The potential financial effects of the proposed tax on betterment, in its original and modified forms, are estimated. They are then compared to the claims made by landowners and policymakers, and ultimately to the changes made to policy.

The thesis concludes by drawing together the potential policy implications of endogenous housing market effects on planning, in terms of both planning policy and housing affordability outcomes. The basic structure of the thesis is set out at Figure 1.2, below.

**Figure 1.2: Thesis outline**

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<table>
<thead>
<tr>
<th>Background:</th>
<th>Theoretical framework</th>
</tr>
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<tbody>
<tr>
<td>Planning and housing markets</td>
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<td>Urban consolidation and housing</td>
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<td>affordability</td>
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<tr>
<th>Empirical work:</th>
<th>Evidence and hypothesis testing</th>
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<td>Booms and Barriers</td>
<td></td>
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<tr>
<td>Backlash</td>
<td></td>
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<tr>
<td>Betterment</td>
<td>Chapters 6, 7, 8.</td>
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</tbody>
</table>

| Conclusions                     |                                 |
|---------------------------------|                                 |
Chapter 2
Planning and Housing Markets

The economic arguments both for and against planning are fundamental to understanding why property owners may have an interest in the planning system, and how and why they may seek to influence it. As Green (1999 p146) surmised, one commonality between both the defenders of zoning and its critics is that each recognises that it may increase the cost of housing. This chapter is the first of two background chapters exploring the existing theory and evidence surrounding the interests of property owners or ‘insiders’ in relation to urban consolidation policies in Melbourne. It positions the research in the context of different economic perspectives on planning and housing markets.

This task is an important one for setting up the research. Much of the high-profile policy debates around urban consolidation tend to assume only one view of planning and housing markets, in which planning is an obstruction to an efficient market, driving up prices by distorting supply. There are, however, strong economic arguments for planning regulations. This chapter considers both the potential supply impacts of planning, as well as the economic value of planning regulations and the market failures (particularly externality effects) on which planning is based. Each view has repercussions for property owners.

The chapter addresses the following question: What do the existing theory and evidence tell us about the potential relationships between housing markets and planning? It begins by establishing some key concepts for the discussion: planning and housing markets. Literature on the three basic potential relationships between planning and housing markets is then reviewed. First, the economic justifications for planning – welfare economics and the concepts of market failures and externality effects – are outlined. Historical rationales for planning regulations are considered within this context. The chapter then looks at the literature taking a critical Coasian view of
planning and housing markets: that regulations distort markets and add to cost by making supply inelastic and adding unnecessary transaction costs.

Finally, the chapter establishes a third perspective on the relationships between planning and housing markets. This is a model where planning is not introduced externally to housing markets, but is endogenous or internal to it. In the endogenous model, planning is assumed to be influenced by interest groups with a stake in the planning system. This influence arises from the capacity of planning regulations to influence housing markets, either intentionally or unintentionally. The concept is related to the ‘capture’ theory of regulation (Posner 1974). This endogenous perspective of planning and housing markets is the focus of the thesis. In the next chapter, this perspective will be applied to the literature on links between urban consolidation and housing affordability.

2.1 Key concepts

2.1.1 Planning

The field of planning began at two extremes, with its "physical and utopian origins" (Thompson 2007 p12) comprising a mix of physical improvements to tackle serious everyday urban problems, and idealised design concepts in pursuit of a preferred city form (LeGates and Stout 2003 p299). The scope of planning has been constantly renegotiated (Klosterman 2003), however, and its dominant paradigms have shifted markedly (Freestone and Hamnet 2000). Contemporary planning is typically occupied with a much broader, and more contested, mix of concerns than was the case at its inception. It is widely understood that planning is no longer "about physical land use and nothing else" (Evans 2004 p10). Models of planning also vary between countries and cities, and have shifted radically over time. Attempts to describe changes in planning tend to refer to an "Anglo-Americocentric" field of vision (Hall 2006 p6). Nonetheless, this narrow view of planning is the most applicable to Australian cities, given that Australian planning is understood to be based, both in principal and in its legal precedents, on an amalgam of the US and UK planning models (Freestone and Grubb 1998; Freestone and Hamnet 2000; Hutchings 2000).

Urban policy overlaps with other disciplines. Planning, however, is a “well established field of activity” specifically concerned with the spatial arrangement of cities (Neutze 1986 p87). Planners are concerned – at the very least by definition – with the future, but also with designing and undertaking activities to bring this future about. In planning there may be a distinction between plan makers (concerned with planning ideas and
the formulation of plans) and bureaucrats (concerned with administering plans and urban development processes) (Neutze 1986). Thompson (2007) conceptualises planning as made up of guiding principles, substantive issues, enabling structures, professional behaviour, and challenges of the time. Hall (2002) distinguishes between plans, planners and planning. Campbell and Fainstein (2006 p2) also suggest that a gap exists between plans and planning, arguing that “the field of planning is divided among those who define it according to its object and those who do so by its method”. Hamnett and Freesone (2000) divide planning into its components of ideas, institutions, ideologies, major concerns and challenges, and events.

Figure 2.1 illustrates a basic conceptual arrangement of the different parts of planning, shown here as independent of the influences (vested interests in housing markets) that are the focus of this thesis. It comprises a loop between the articulation of planning problems; the formation of planning ideals that respond to these problems; the plans made to enact these planning ideals; planning regulations to implement the plans; and planners, who enforce regulations (and who also articulate the planning problems at the start of the loop). Planning texts tend to focus on the plan and its underlying ideals. Economic texts tend to focus on the regulatory mechanisms used to enforce the plan.

Figure 2.1: Simplified components of planning

There is a distinction between ‘positive’ and ‘negative’ (not necessarily a pejorative term), or ‘prescriptive’ versus ‘enabling’ planning. Positive planning entails direct action by planners to achieve urban goals and plans. Urban design projects, infrastructure
provision, land acquisition and the creation of housing projects are examples. In positive planning, planners can be directly involved in the urban land market (Gleeson and Coiacetto 2007). The link between plan, planning regulations and planners is reasonably direct. In ‘negative’, ‘reactive’ or ‘regulatory’ planning, by contrast, the planner relies on shaping the actions of private actors in order to implement plans. Zoning and growth boundaries are both examples of negative planning.

Positive planning has been practiced much more widely in the UK and other European countries than in the USA or Australia. Planning in Australia has been based on an “essentially traditional approach which relied on the negative zoning mechanism” (Alexander 1986 p117). Planning was, and remains, almost entirely regulatory and thus reliant on shaping the actions of private developers. Public land agencies formed in the early 1970s constituted one of Australia’s only significant examples of positive planning (Gleeson and Coiacetto 2007).

2.1.2 Housing markets

Numerous studies have sought to explain housing market dynamics at different scales. There are studies of national-level changes in house prices, inter-metropolitan studies that compare differences in house prices between whole city regions, and intra-metropolitan studies that compare house price differences between areas within the same city. Housing prices reflect elements of the land (its location, accessibility, attractiveness, size) and of the building (its newness, size and quality) (Maher 1994). Potepan (1996 pp223-224) summarised metropolitan housing markets as comprising “three interrelated submarkets: (1) the market for housing services; (2) the market for housing capital (houses, apartments, buildings, etc.); and (3) the market for urban land on which to build housing capital”.

At the national level, two recent major Australian government inquiries into housing costs – the Productivity Commission Inquiry Report on Home Ownership (Productivity Commission 2004) and the Senate Select Committee on Housing Affordability in Australia (The Senate 2008) – demonstrate typically cited demand and supply drivers of (owner-occupied) housing market and house price change. On the demand side are higher incomes, economic growth, population and demographic change, rents (influencing demand for owner-occupied housing over rental housing), lower interest rates, greater credit availability, speculative demand, and taxation. On the supply side are the structure of the house building industry, construction material costs, industrial relations and labour force factors, land availability (relative to submarket demand),
infrastructure and servicing, planning restrictions, and planning processes (Productivity Commission 2004; The Senate 2008).

Knaap (1998 p270) argues that studies of house prices tend to show housing characteristics (size, age, facilities) determining a large part of house prices, along with characteristics of the surrounding area. Land prices, by contrast, reflect only differences in the surrounding area, and the overall size of land. Within this, the characteristics of the surrounding area include its socioeconomic characteristics. ‘Neighbourhood effects’ refer to the shared characteristics of residents who can afford to live in an area. These have been shown to be a significant component of the price paid for housing (Malpezzi 1996; Berry 2001; Ihlanfeldt and Scafidi 2004; Lynch and Rasmussen 2004; Ball and Vincent 2007; Atkinson 2008). Jones and Watkins (2009 p3) emphasise the need to recognise multiple housing markets, and variations between them. They argue that acknowledging recognising the complexity of housing market geographies is particularly important in the planning policy realm.

2.2 Planning and housing markets: the case for planning

2.2.1 Market failures and welfare economics

Three basic economic perspectives may be applied to the relationships between planning and housing markets. The first is a view that underlies the historical origins of planning. Fundamentally, the economic case for planning rests on a welfare economics perspective, which is in turn based on the concept of market failure. The welfare economics perspective holds that because of important market failures in unregulated markets for urban land and development, economic welfare can be maximised through planning interventions.

Neoclassical economics provides two contrasting theoretical models for analysing urban policy, with the concept of market failure the key point of difference. The perfectly competitive model explains the price of land by the interaction of supply and demand, meaning that the central policy question is “how far policy directly affects the overall quantity of supply and demand” (Adams, Dunse et al. 2005). This model assumes that markets are perfectly competitive – that there are many buyers and sellers; that full information is available; that there are only negligible transaction costs; and that these costs only affect those party to the transaction (Evans 2004). The imperfect competition or market failure model identifies important failures in housing markets that distort their operation. Given these identified failures, “the most important
question then becomes how far policy is able to overcome market failure” (Adams, Dunse et al. 2005 p18). The Pigouvian or welfare economics case for planning is an established viewpoint, underpinned by market failures:

The welfare economics case for planning has been established for a long time, resting on the basic premise that land and property markets left to their own devices fail in a number of important ways. That is, they result in socially inefficient allocations of land and land-related resources (Webster 1998 p54).

This model of planning and housing markets is illustrated in Figure 2.2, below. In the first section of this model, planners identify concerns and problems (market failures). In response to these, they devise planning interventions in the land and housing market.

**Figure 2.2: Planning and housing markets – planning case**

<table>
<thead>
<tr>
<th>Planners identify</th>
<th>Concerns and problems (market failures)</th>
</tr>
</thead>
<tbody>
<tr>
<td>And devise</td>
<td>Regulatory interventions</td>
</tr>
<tr>
<td>Which ideally provide</td>
<td>Improved urban amenity, accessibility</td>
</tr>
<tr>
<td>And thus cause</td>
<td>Increased demand</td>
</tr>
<tr>
<td>Which results in</td>
<td>Higher land and house prices</td>
</tr>
<tr>
<td>Which necessitates and allows the adoption of</td>
<td>Inclusionary zoning policies for affordable housing</td>
</tr>
</tbody>
</table>

Two basic types of market failures are commonly cited to justify the use of planning interventions in land and housing markets: externality effects and public goods. Of these, the principal failure in urban land markets is that the effects of transactions are not felt only by those directly participating in them (Evans 2004 p14), as the use and development of land have impacts on surrounding land. These effects are known as external economies or negative externalities. The welfare economics justifications for planning hold that the market will under-supply solutions to externality or ‘spillover’ effects. Both negative and positive externalities are endemic to urban areas. Planning seeks to maximise positive externalities such as accessibility and to minimise negative
externalities. Knaap (1998) cites typical disamenities (negative externalities) such as air pollution, water contamination, airport noise, flood risk, waste facilities, transmission lines, and other undesirable land uses.

The second commonly cited economic justification for planning interventions is public goods. Public goods are non-rivalrous and non-excludable services that the market would under-supply. These types of public essentials generally cannot be easily provided by the private sector, given difficulties in coordinating supply and in charging on an individual basis (Forster 2004 p141). In the planning realm, some of the most obvious and tangible examples are roads, sewers and parks. Planning produces both tangible public goods and policy public goods. Policy public goods provided by planning include information about future land use patterns, and policies for minimising externalities. These are also goods that would be under-supplied by the market, in part because of the potential for free riders (Webster 1998).

### 2.2.2 Historical context

Typical planning controls, such as the separation of incompatible land uses, are designed to minimise negative impacts on surrounding land uses. An awareness of failures in unregulated urban land markets emerged very publicly in late-nineteenth-century reform movements, which sought to combat serious everyday urban problems. Modern land use planning is generally understood to have originated in the social reform movements of the late nineteenth century (Hall 2006; Freestone 2007). The chaos of early large industrial cities, particularly London, created not only an awareness of the putrid or “pestilential” conditions of the millions living in slum areas, but also perhaps a certain anxiety over the social foment these conditions might have created (Hall 2006 p16-17). These conditions were exposed partly through muckraker journalism (Hall 2006; von Hoffman 2009). Middle-class reformists concerned with housing conditions and poor sanitation drew attention to the physical conditions endemic to rapid urbanisation.

Attempts to address the serious everyday problems of nineteenth-century industrial cities gave impetus to the first forms of planning regulation. Epidemics, lack of light and air, and the unsanitary environments of crowded housing areas led to the setting of minimum building standards for tenement housing (notably the New York Tenement House Act 1901), and to public investment in sewerage infrastructure. On a small scale, initiatives to control the urban environment began in the 1880s (including height limitations and nuisance laws) but spread the most rapidly through cities in the
immediate post-war period, including in Australia (Freestone and Grubb 1998). Australian cities did not have areas of slum housing as vast as those found in European or American industrial cities – a product of higher incomes, a more commercial economy, and of less-restrictive historical building fabric (Forster 2004 p11). The problems of sanitation were similar, however, and local authorities had little or no control over urban development or the provision of utility services. Dissatisfaction with urban disorder, and ideas to combat this, laid the way for town planning and garden city ideals to gain popularity in Australia in the early twentieth century (Garnaut 2000 p51).

Town planning gained international momentum during the 1910s and 1920s, when legal and bureaucratic mechanisms to implement planning ideas were established and tested, and a series of international conferences was held on the subject of planning. Comprehensive city plans and zoning regulations to implement them spread rapidly (Freestone and Grubb 1998 p129). The effects on living areas of noxious industries, such as slaughterhouses, led to the separation of incompatible uses through zoning. Negative externalities are a key explanation for the adoption of zoning. Zoning consists of the formal separation of land uses, and the specification of controls on what can be built and where. It functions to minimise spillover effects by limiting the potential for one piece of land to be used in a way that reduces the capacity for free use of other, neighbouring land. Zoning originated in Germany and sought to provide separate residential areas for working-class households (Ward 2002 p73). It gained popularity most rapidly in US cities, beginning with Los Angeles in 1908 and New York City in 1916.

Negative externalities underpinned Village of Euclid Ohio v. Ambler Realty Company (1926), the case that provided the legal foundation for zoning in the USA (Jacobs and Paulsen 2009 p136). This precedent was also exported to Australia (Freestone and Grubb 1998). The case concerned an apartment development, described as having potentially ‘parasitic’ effects on the surrounding neighbourhood of detached housing. Legally, the courts upheld zoning as an appropriate use of police power: that is, a balance of the impingement of individual rights against community rights, in this case the rights to “public health, safety, morals, and general welfare” (Thomas and Ritzdorf 1997 p281). The apartment building was not built, as the case law secured the village with the right to zone the land for detached housing only. Usually a means of implementing plans, zoning was employed in the absence of plans in some American cities (Ward 2002 p113). The use of zoning was an idea imported to Australia, where the regulation of planning ideals began in the 1920s (Freestone and Hamnet 2000 p6). The Plan of General Development (Metropolitan Town Planning Commission 1929)
was Melbourne’s first comprehensive plan, albeit one never officially adopted (Freestone and Grubb 1998). The plan provided a model for voluntary land use zoning by local governments.

These policy responses to problems of early urbanisation (sewerage works, building codes, zoning) may be interpreted in welfare economics terms – public health impacts are a form of negative externality and urban infrastructure is a public good. The terminology of welfare economics closely mirrors planning concepts: urban amenities and incompatible land uses are synonymous with positive and negative externalities. In a modern context, welfare economics justifications also underpin the sustainability arguments for planning. Impacts on the environment are conceived of as the externality effects of private development. Planning texts refer to modern, comparatively unregulated megacities as evidence that “the market will not regulate itself in the consumption of congestible urban infrastructure” (Webster 1998 p55). Welfare economics holds that although the unregulated market may, in response to such problems, provide private agreements to address them, these would be under-supplied because of difficulties with transaction costs. Welfare economics provides robust justifications for the use of planning regulations. Planners themselves, however, “may not generally view their job in such terms” (Webster 1998 p55).

2.2.3 Planning and housing demand

One implication of the welfare economics perspective on planning is that, even in this ‘best-case scenario’, planning regulations can be expected to increase housing prices, on account of increasing demand. This is represented in the middle part of the illustration at Figure 2.2. In this model, planners devise regulations in response to market failures. The effect of these initiatives is to improve amenity and, as a result, demand. Its control of externalities and provision of urban amenities will be valued by buyers and thus reflected positively in housing prices (Malpezzi 1996).

Planning has traditionally sought to improve the quality, efficiency and attractiveness of housing and areas. Even when pursued for altruistic purposes, these improvements, where successful, can logically be expected to be capitalised into housing prices. Zoning in particular is linked to the protection of residential property values. Karkkainen (1994) and Green (1999) surmised that the defenders and critics of zoning have certain views in common, in “that they all recognise that zoning increases the cost of housing” (Green 1999 p146). Thus the success of planning is sometimes measured in higher house prices:
As the value of privately owned land may be increased by changes in the public land use infrastructure, town planning can be seen as a means of increasing the values of private and profitable uses of land (Balchin, Bull et al. 1995 pp106-7).

Property values are sometimes a stated goal of planning policies. Planning controls that aim to protect or increase property values, particularly for owner-occupiers of detached housing, date to the legal origins of planning (Fischel 2004). Proponents of the first comprehensive zoning ordinance, in New York City in 1916, argued that zoning was “necessary to protect or enhance property values” (Karkkainen 1994 p4), via the control of negative externalities. In Melbourne, property values were important to the early proponents of planning for the city. The rationale for planning and zoning at the outset was the stabilisation of property values, expressed in the 1929 Plan of General Development:

A city-wide scheme of zoning would have a very beneficial effect by stabilising the value of property. Each particular zone could be located, not only in regard to the necessary amenities, but its area would be regulated in accordance with the probable future demand for space within the district. (Metropolitan Town Planning Commission 1929 p155)

Some studies of zoning and planning seek to identify the benefits intentionally conferred by planning, expressed through the higher house prices paid by bidders who value planning services. Malpezzi (1996) sought to identify the true ‘cost’ of planning by looking at differences in house prices between cities while controlling for differences in urban amenities, including pollution and congestion. Likewise, academic debates over urban consolidation policies often boil down to whether price increases are due to demand-side amenities or to supply-side restrictions (Nelson, Pendall et al. 2002). Advocates of planning restrictions in Portland, Oregon, as the most famous example, argue that the city’s planning strategy has increased the aesthetic appeal of the city and therefore demand for housing (Dawkins and Nelson 2002; Jun 2006; O’Connell 2009):

Housing prices reflect the price of land, the price of the home and the value of amenities. Urban containment policies change housing costs for two reasons. First, land prices change when land supply is altered. Second, if urban containment increases the value of the amenity package associated with a house then that, too, will cause a change in house prices (Nelson 2000 p46).
This tension around the role of urban consolidation in housing price issues explored in the next chapter. The net effect is that ‘good’ planning can be expected to add to housing prices:

From a neo-classical perspective, value will thus be lost and not merely shifted if ‘bad’ planning produces a less efficient allocation of uses causing users to locate less optimally, reducing their utility and profitability and causing them to bid less for land. Conversely, ‘good’ planning must have the potential to add value, by improving accessibility and complementarities within a city, so enhancing utility and profitability and enabling users to make higher bids (Adams, Dunse et al. 2005 pp28-29).

Accordingly, planning is explicitly interested in increasing demand for housing in situations of decline, in which the ‘negative’ planning mechanisms typical to high-growth situations, such as restrictive zoning, have limited effect in the sense that they are not actually enforceable without underlying growth (Green 1999). Planning to address decline includes tax incentive zones that are “a combination of special tax relief and simplified planning controls in decayed areas” (Hall 2002 pp150-153), urban renewal partnerships, job creation, major projects, and brownfields planning (Adams, Dunse et al. 2005; Townshend 2006). In the UK, two distinct suites or “speeds” of planning policies operate, each interested in housing prices for different reasons. In high-demand areas, housing affordability goals are pursued. In low-demand areas, other problems are diagnosed, where “the housing market has displayed serious symptoms of low demand and, in extreme cases, housing abandonment, with serious adverse impacts on local communities” (Bramley and Leishman 2005 p2214). Urban renewal projects seek to add infrastructure and amenities to low-demand areas, along with favourable regulatory environments, with the expectation that these will be capitalised into property values. Reflecting this relationship, several studies have used hedonic and panel methods to test for the effect on house prices of new public transport infrastructure (Bowes and Ihlanfeldt 2001; McMillen and McDonald 2004; Hess and Almeida 2007).

Partly because of this potential relationship between planning and housing demand, planning policies that seek to provide affordable housing typically rely on non-market housing. Planning approaches to addressing housing affordability problems characteristically involve harnessing market demand to provide subsidised affordable housing opportunities (Zorn, Hansen et al. 1986; Williams 2000; Porter 2004; Norris and Shiels 2007; Whitehead 2007). This response is illustrated as the last step in Figure 2.2. Higher demand both necessitates and allows for the use of planning regulations to facilitate subsidised housing opportunities. Ordinarily, inclusionary housing is applied in a high-value market (Paris 2007). Historically, affordable social
housing was an explicit component of the early garden city movement, which proposed development that was “pre-planned, with affordable housing and a surrounding agricultural belt”, but not of early zoning regulations (Freestone and Grubb 1998 p130). The relationships between planning and housing affordability in the case of urban consolidation policies are reviewed in more detail in the next chapter.

2.3 Planning and housing markets: the critical view

2.3.1 The critical Coasian or neoliberal view

The second economic perspective on planning and housing markets is more critical of planning. The Coasian view of planning holds that planning regulations distort markets and add to the cost of land and housing by making supply inelastic and adding unnecessary transaction costs. They may do so through restricting the land available for new housing, or through the introduction of factors such as red tape, delays and compliance costs to the housing supply process (Webster 1998; Evans 2004; Oxley 2008). In this case the planning regulations are assumed to be introduced externally, by usually well-intentioned planners whose interventions unintentionally – but arguably inevitably – have unforeseen housing market consequences. This view of the relationship between planning and housing markets takes the potential inflationary effects of planning on house prices as an uncontroversial starting point:

Land use regulation generally increases the cost of housing. This should not be a controversial statement: land use regulation limits the supply of a commodity and therefore increases its price. (Green 1999 p144)

The Coasian perspective on planning (based on the Coase Theorem) looks critically at the welfare economics justifications for planning. While acknowledging some of the reasoning behind planning interventions – in particular, the externality problem – Coase (1960) and Coasian authors argue that these interventions may be inefficient and themselves add costs. The Coasian perspective questions the concept that market failures may be addressed efficiently with regulation: it serves to “challenge the implicit comparison of an imperfect market allocation with an ideal administrative process of allocation” (Webster 1998 p59). The term ‘public failure’ refers to the idea that government (planners) may not necessarily be any better placed than the market to efficiently allocate resources. The costs of administering and complying with planning regulations instead result in market distortions and inefficiencies.
This model of planning and housing markets is illustrated in Figure 2.3, below. As in the welfare economics model, the first section of the model comprises planners devising planning interventions in the land and housing market. These measures then have the (usually unintentional) effect of causing supply restrictions and market inefficiencies. These, in turn, increase housing costs.

Figure 2.3: Planning and housing markets – critical Coasian view (exogenous planning)

2.3.2 Planning and supply

The critical Coasian perspective on planning identifies several means by which planning can distort new housing supply. Firstly, planning may directly restrict the amount of land available for housing. Direct restrictions on the amount of land available for housing are common, and include zoning and growth boundaries. Secondly, planning may limit construction relative to demand and thus limit the amount of housing that ‘filters’ down to lower price segments. Filtering is an important source of affordable market housing, particularly in the rental sector. Affordable market housing is rarely produced directly, but instead filters down to lower cost segments over time (Glaeser and Gyourko 2003; Skaburskis 2006; Glaeser and Ward 2009).

Housing supply problems gained a very high profile in the UK with the Barker Review of Housing Supply (Barker 2004), which found that British supply elasticities were lower than those in most comparable countries, and that supply elasticities in the 1990s and onwards had fallen to very low levels (Bramley 2007 p222). The planning system was
one part of the housing supply process described critically by the review, although the extent to which planning issues were focused on depended on the political context. Bramley describes this cynically as a “sudden rediscovery” of housing supply (Bramley 2007). Similarly, a critical view of planning – and of urban consolidation in particular – gained greater prominence during the recent period of housing affordability crisis in Australia, characterised by a sustained surge in housing prices. Several high-profile critics in Australia blamed planning intervention in land and housing markets for the crisis itself (Menzies Research Centre 2003; Productivity Commission 2004; Cox 2005; Moran 2005; Moran 2006; Moran and Staley 2007).

Planning may also add processing delays and holding costs to the housing development process. Ball et al. (2008) reviewed the total time taken to gain planning approval – on average eleven months per application, equating to one week per new dwelling – in high-demand areas of the UK. They argued that the cost of taking housing proposals through lengthy planning processes makes supply less responsive.

In addition to supply distortions, planning systems may also apply taxes and charges to development. Impact fees and other forms of betterment tax are controversial examples (Burge and Ihlanfeldt 2006). Uncertainty and delay will influence to what extent such charges are absorbed by the seller or passed on to the developer and, ultimately, the housing consumer; this is a subject of ongoing debate (Oxley 2004). Uncertainty in the planning system is linked to speculative costs, negotiation costs, risk costs and possible corruption – all represent efficiency losses and potential supply inelasticities. Lengthy and uncertain planning processes may impact on the behaviour of housing suppliers; for example, influencing private sector submarketing, or creating minimum market entry costs which deter opportunistic players (Ball 2003). Coiacetto (2006) looked at submarket targeting by developers in Brisbane and found different developer types operated in different submarkets and had differing capacities to absorb delays and risks.

Growth is important to the critical Coasian perspective on planning. Many of the regulatory mechanisms upon which such critical perspectives concentrate will, logically, only exist when there is existing demand. Green (1999 p148) observed that underlying growth is what makes planning mechanisms fundamentally enforceable: “land use controls, no matter how stringent they might be, will be largely irrelevant [without growth]: regulation cannot prevent housing construction that the market would not have undertaken to begin with”. Therefore Coasian perspectives do not tend to study the demand effects of planning, but instead focus on the supply responses to changes in demand. Glaeser et al. (2006) look particularly at boom periods, using the term
‘demand shocks’ to refer to the periods of growth which enforce and test the supply side of urban management policies:

The elasticity of housing supply helps determine the extent to which increases in productivity will create bigger cities or just higher paid workers and more expensive homes (Glaeser, Gyourko et al. 2006 p82).

A Coasian perspective may be used to argue that, although externality effects are a potential market failure, planning is not necessary to correct for externality costs – that “there are ways of tackling externalities other than conventional development control” (Webster 1998 p58). Instead, provided that transaction costs are negligible, a Coasian perspective on land markets argues that externalities may feasibly be traded in a market. Coasian theory proposes that private markets for externality effects may exist and serve a similar function to planning, and more efficiently (Clinch, O’Neill et al. 2008). Alternatively, Coasian theory may only identify bureaucracies as significant actors in the operation of markets, but not necessarily conclude how efficiently markets would operate without planning. Coasian solutions to externality problems take various forms but are based on negotiated solutions (for example, between polluters and neighbours) (Clinch, O’Neill et al. 2008) rather than on zoning or regulation. Houston, Texas, is famous for its absence of government zoning regulations. However, the city employs private equivalents (covenants) with a similar function (Buitelaar 2009).

2.3.3 Measuring price effects

One of the difficulties of studying the supply impacts of planning is that discrete measures of ‘planning’ must be identified. Partly for this reason, economic studies of planning tend to focus on legal and bureaucratic tools (planning regulations), rather than the other components of planning (Tiesdell and Allmendinger 2005). To quantify the regulatory environment, studies may compare cities on the basis of a derived measure of the degree of restriction (e.g. scales from ‘restrictive’ to ‘permissive’), or on the presence of particular planning regulations such as growth boundaries, urban containment policies or minimum standards regulations. Although Glaeser, Gyourko et al. (2006) use a proxy measure, density, of the degree of restriction on new construction, they also refer to the difficulty of identifying one unit or measure with which to assess the impact of planning on housing:

The regulatory environment has become exceedingly complex, thus making the severity of regulatory constraints difficult to measure. The very richness of the regulatory environment means that there is no one law or regulatory structure that would allow us
to identify some metropolitan areas as being more onerously regulated compared with others (Glaeser, Gyourko et al. 2006 p81).

In an influential study by Green (1999), the presence and strength of minimum density requirements in comparable ‘high growth’ Wisconsin counties were correlated with the cost of housing, and specifically with the availability of affordable housing. Malpezzi (1996) measured the level of restriction presented by land use planning on new housing in cities, as well as also a range of indicators to capture the goals of planning (for example, lower pollution). He argued that while reduced externalities justify planning burdens (at least to ‘insiders’), where the increase in regulation is not accompanied by improved urban outcomes, the regulation is inefficient. Anthony (2003) examined the effects of the staggered adoption of Growth Management Act (GMA) legislation across counties in Florida. Burge and Ihlanelldt (2006) used a panel model to estimate the effects of planning fees on higher-density construction levels. Shuetz (2009) examined the impact of zoning on the availability of rental housing, a significant source of housing for lower-income groups.

Studies of planning impacts often compare different cities or the same city over time, with or without a particular planning control. This is a ‘natural experiment’ or ‘difference in difference’ approach, in which the planning regulation is the treatment effect. The apparent effects on a measure of housing price are then quantified. Alternatively, studies may use proxy indicators of housing market efficiencies, such as construction rates. The time taken by the planning system to enforce regulations is also used as a measure of supply distortion. Land costs are often used as a measure of scarcity cost, or as the residual from a component cost analysis. The residual land costs are taken to represent the contribution of regulatory costs and restrictions, taking potential quality changes in housing out of the equation.

Repeat-sales methods and hedonic price estimation are common analysis techniques. Hedonic analyses use the price of land or housing as the dependent variable in a regression model integrating a range of housing and land characteristics, including land use policies. This allows estimates of the implicit price of different housing characteristics, including the value of planning policies in different areas (Knaap 1998). A range of specific studies (described in Dawkins and Nelson 2002) have tracked housing trends in cities such as Portland, Oregon, since the introduction of its UGB (Nelson 2000; Bento, Franco et al. 2006; Jun 2006; Nuissl and Schroeter-Schlaack 2009).

Other studies compare the rate of increase in house prices or construction components to land price increases. Land costs should in theory only increase in line with inflation
or with other housing components: the difference is taken to indicate supply problems. House price inflation, house prices in relation to income, taxes and charges, lower construction levels, density, and planning delay are examples of measures used to assess regulatory impacts on housing (Malpezzi 1996; Quigley and Raphael 2004; Quigley, Raphael et al. 2004; Burge and Ihlanfeldt 2006; Xing, Hartzell et al. 2006; Gurran, Ruming et al. 2008; Gyourko, Saiz et al. 2008; Glaeser and Ward 2009).

Black and Hoben (1985) characterise growth restraints as ‘restrictive’, ‘normal’ and ‘permissive’. In this vein, the Demographia survey of affordability characterises cities by whether they have ‘smart growth’ principles or not, then compares this to the relation between median income and median house prices – as in Moran (2005). This type of approach is the most simplistic in terms of the implied understanding of planning regulations. A significant proportion of the critical literature on planning has focused on ‘smart growth’ or urban containment measures (Nelson 2000). However, US studies in particular have also examined the effects of traditional suburban zoning mechanisms. The contrast between these is discussed in detail in the next chapter.

2.4 Planning and housing markets: the endogenous view

2.4.1 The endogenous view of planning

The third perspective on the relationships between planning and housing markets is a model in which planning originates from – is endogenous to – the housing market. In this model, planning is assumed to be influenced by interest groups with a stake in housing market outcomes. Planning regulations are likely to be designed to defend the interests of ‘insiders’, and property owners will tend to engage in activities that aim to influence the outcomes of the planning system in their favour. Such activity may rely on ‘heresthetics’ (intentional manipulation of the system) or on ‘happenstance’ (the unintentional alignment of altruistic goals with rent-seeking ones) (Clingermayer 2004). In the case of happenstance, property owners may argue in good faith for altruistic reasons (e.g. the local environment). These altruistic reasons are also unavoidably aligned with their own economic interests. In the case of heresthetics, property owners argue for more acceptable concepts to intentionally disguise a different rationale (e.g. property values).

The preceding sections have established that, whether planning is viewed critically or positively, a commonality is that planning may increase housing prices. Both the welfare economics and critical views of planning also recognise that externalities are a
problem in housing markets, and that there is potential value to property owners in regulating against negative externality effects:

There is a benefit provided by land use control, whether freedom from negative externalities now or the security of freedom from future negative externalities. This benefit, whether obtained through zoning or through covenants, is of financial value to residents who have willingly paid a premium to live in controlled areas (Evans 2004 p53).

Although economic welfare may be improved through this process of interaction between property owners and the planning system, the private property interests of planning can nonetheless sit uncomfortably with its social reform goals (Jacobs and Paulsen 2009; von Hoffman 2009). Planning is a form of intervention in property rights, which it limits, allocates and reallocates (Downs 2005). This intervention may be cast as either “managing private property for the greater good” or, more critically, as “protecting the property interests of privileged social and racial groups” (Jacobs and Paulsen 2009 p135).

Studies of ‘endogenous zoning’ examine planning controls that are determined by local political processes (Pogodzinski and Sass 1994). Endogenous zoning models integrate the characteristics of the community into the analysis of planning’s effects on the housing market. Rather than treating zoning or planning controls as an externally introduced factor to housing markets, they assume that some aspects of zoning come from within the community being zoned. Evidence from endogenous zoning models “strongly confirm[s] the proposition that zoning behaviour can be explained” (Knaap 1998 p274). The theory of endogenous zoning is conceptually related to the economic theory of regulation (Posner 1974; Morgan 2008). The ‘public interest’ and ‘capture’ theories have been proposed to explain the self-interested influence of groups in pursuing particular forms of regulation. Adams and Tiesdell (2010 p190) surmise that although planning and markets are sometimes presented or perceived in opposition, planners are intrinsically caught up in markets – “making the relationship between planning and the market symbiotic rather than dichotomous”. Proponents of ‘market-aware planning’ argue that planners should be more conscious of the motivations of different actors and their impacts on the development process (Tiesdell and Allmendinger 2005 pp56-57).

The endogenous model of the relationship between planning and housing markets is illustrated at Figure 2.4, below. In this model, because of the influence of planning on housing markets (either intentionally or unintentionally, and either through demand or supply), interest groups with a stake in housing markets seek to exert influence on the
planning system. The result of this influence may be that the planning system reflects these ‘insider’ interests, causing either supply restrictions or increased demand. This in turn increases housing prices, which then increase the stakes that interest groups have in the housing market. A key characteristic of this perspective on planning is that, although planning processes may represent insider interests, they tend to overlook ‘outsiders’ to the planning system, including those seeking affordable housing opportunities. This is the ‘insider–outsider’ problem.

Figure 2.4: Planning and housing markets – the endogenous view

2.4.2 Homeowners (‘homevoters’) and planning

Critical accounts of planning have pointed to homeowners as key drivers of planning controls. The term ‘homevoters’ refers to owner-occupiers whose decisions, including the adoption of planning controls, are driven by the protection of property values (Fischel 2004; McDonald and McMillen 2004; Fischel 2005). Jacobs and Paulsen (2009 pp134-139) argue that planning “has been used to secure and protect the property rights interests of the affluent and influential classes and races”, and describe middle-class property owners as planning’s “most durable and important clientele”. Property owners may elect to have planning regulations for a number of economic reasons. Pogodzinski and Sass (1991; 1994) identify four rationales for the voluntary adoption of planning controls, arguing that “zoning regulations are not randomly
assigned; rather, they are determined by political forces within local communities” (1991 p601). Possible rationales for homeowners to adopt planning controls include externality effects, property values, fiscal zoning and exclusionary zoning. These are defined as follows:

- **Externality effects:** a preference for greater control over surrounding land uses. This may stem from largely aesthetic or altruistic concerns, or from a desire to protect property values.
- **Property values:** the interest in maintaining or increasing the value of a housing investment.
- **Fiscal zoning:** the desire to exclude residents with a higher consumption of public services.
- **Exclusionary zoning:** the desire to exclude particular groups on the basis of race or class.

The complex codetermination of relationships among these factors is described by Pendall (2000 p128) as the “chain of exclusion”. Property values, social and racial exclusion, and planning regulations have tended to be closely interlinked historically. The different rationales for homeowners to adopt planning controls or to seek to influence the planning system are distinguished by their *intent* rather than their *effect*. An endogenous model of potential relationships between homeowners and the planning system is shown at Figure 2.5. Possible motivations for homeowners to try to influence the planning system are numbered at the right. A key aspect of the model is that, in terms of the housing market, the effects of planning regulations influenced by ‘insider’ interests are similar regardless of intentions behind the influence.

To take a typical example, existing homeowners may wish to protect the existing low densities and front setbacks of their residential area (1). Planning controls to exclude commercial uses, mandate lot sizes and dwelling setbacks, and prohibit higher-density housing are maintained. The regulations may increase demand for housing on account of the improved amenity valued by residents. They may also simply reduce housing supply in the area. The potential effect of both will be to increase housing values, whether this is (2) or is not (1) the goal of the homeowner. Increasing property values have the effect of excluding lower-income groups and altering the social composition of the area. This exclusion may (3) or may not (1 and 2) be the intention of the homeowner: higher housing prices are a form of exclusion regardless, even when as a result of urban amenity or other positive planning outcomes. Likewise, any form of growth reduction will change the composition of an area’s population (Donovan and Neiman 1995; Lynch and Rasmussen 2004). In the case of fiscal zoning (4), the
homeowner may be interesting in reducing the fiscal burden of new residents, particularly those with a high consumption of local social services.

**Figure 2.5: Homeowner influence on planning: possible rationales and effects**

![Diagram showing homeowner influence on planning]

**Motivations for homeowner influence**
1. Externality effects
2. Property values
3. Exclusionary zoning
4. Fiscal zoning

**Externalities**

The first possible rationale for endogenous planning is externality effects. Particularly for homeowners, the enjoyment of property and its value can be affected by neighbouring land uses. This leads to a preference for greater control over surrounding land uses. Studies of endogenous zoning demonstrate that owner-occupiers place a value on protection from externalities, even where this protection limits their own capacity to develop land (Malpezzi 1996; Thorsnes 2000; Cervero and Duncan 2004). The rationale is that homeowners trade off the potential for greater profits for the assurance that neighbours will not develop their land in a way that negatively affects surrounding properties.

The legal precedent underlying zoning, *Euclid v. Ambler* (1926), was decided on the grounds of the rights of ‘single family housing’ (detached owner-occupied housing). Increasing homeownership rates may have been a factor in the spread of planning (Fischel 1990; Fischel 2004; McDonald and McMillen 2004). This so-called ‘homevoter’ concept is consistent with some of the welfare economics justifications for planning, but holds a less positive view of the motivations for planning and of who benefits from it.
Fischel argues that planning regulations in the USA arose in response to a demand from homeowners amid populations spreading along transport routes to the suburbs:

The roles of planners, progressives and lawyers were, I believe, supply responses to a popular demand for zoning. This popular demand did not manifest itself as direct democracy. It was filtered through housing developers, who … found that they sell homes for more profit if the community had zoning (Fischel 2004 p319).

**Property values**

Another potential motivation for endogenous effects in planning cited by Pogodzinski and Sass (1991 and 1994) is property values. Early proponents of zoning argued that it was “necessary to protect or enhance property values” (Karkkainen 1994 p4), via the control of negative externalities. Karkkainen argues that the interests of homeowners in their homes, and therefore in planning, extend beyond the simple financial value of housing and to their consumer interests in their homes and areas in a broader sense. Housing costs and policy decisions are sometimes codetermined (Ihlanfeldt 2004). Zoning is thought to originate from middle-class homeowners, and to represent a transfer of housing wealth – “generally from developers and low-income residents (or potential residents) to middle and upper-income residents” (Clingermayer 2004 p378).

Some controls may intend this effect on property values, whereas others do not. Nelson, Pendall et al. (2004 p125) argue that although newer urban containment measures may have unintentional impacts on housing affordability, the intent of traditional suburban planning controls has always been specifically premised on protecting property values:

Growth management may have exclusionary tendencies, but there must be no mistaking the fundamental and explicit purpose of traditional land use controls, which was to exclude undesirable land uses – and often people – from entering a community.

In terms of social equity, planning controls that seek to protect or increase property values have exclusionary impacts on outsiders. However, in economic terms the difference between demand-induced and supply-induced increases in local house prices is considered significant to their overall economic efficiency. For example, if existing owners benefit from local improved amenity, there is some economic justification for the control, as argued by Ihlanfeldt (2004 p262):

If price rises because of a reduction in supply, there is an efficiency loss – in the sense that the jurisdiction is using its monopoly power to cause a scarcity of housing. However, if price rises because a regulation produces an amenity effect, then net social benefits may be positive, even if low-income households are excluded from the jurisdiction.
Although the direction of causality is difficult to test empirically, higher-value areas are more likely to adopt exclusionary regulations (Ihlanfeldt and Scafidi 2004; Ihlanfeldt 2004; McDonald and McMillen 2004). Economic exclusion in the housing market is protected by exclusionary planning regulations, with the combined effects of both higher housing costs and restrictive regulations then compounding over time. Homeowners in more affluent areas have a greater interest in influencing the planning system, in part because they rely on planning to support existing capital investments, and also because of an (often closely related) notion of aesthetic taste (Mitchell 1997; Huxley 2002). Duncan and Duncan (2001 p390) argue that, with increasing wealth, communities exert greater and greater control over their housing and surrounds:

The richest in towns such as Bedford [New York, USA], having both the greatest resources and the greatest feeling of entitlement, attempt to control long distance views and often go to great lengths to ensure that nothing they see from their own property and nothing they pass by when they drive around their town is unattractive.

**Fiscal zoning**

A third possible motivation for endogenous zoning is fiscal zoning – the desire to exclude residents with a higher consumption of public services, such as low-income households (Pogodzinski and Sass 1994). Fiscal zoning is driven by the financial considerations of local taxes and services. Tiebout (1956) theorised that households will migrate or shop for housing locations that reflect their preference for government services and taxes. Fiscal zoning, by contrast, suggests that households will manipulate the arrival of new residents to an area, again to optimise their own expenditures.

Fiscal zoning assumes that existing residents have a financial interest in maintaining the socioeconomic status of neighbouring residents in order to minimise the subsidisation of neighbourhood services. This means excluding residents thought to carry a high social cost, and maximising residents thought to have financially positive neighbourhood effects. Fiscal zoning is driven by the financial considerations of local government services, which may include education, policing and neighbourhood amenities. The fiscal zoning model particularly applies to contexts where local government services are extensive and variation in property taxes is high (Fernandez and Rogerson 1997). In the US, local governments deliver a wider and more expensive range of services (such as policing and education) than do their Australian counterparts. This is likely to create additional policy incentives: smaller government jurisdictions which have to generate more revenue from their local tax base are thought to be more influenced by fiscal zoning considerations. Woman and Goldsmith (1992)
suggest that local government in the USA has traditionally been fragmented and competitive, as compared to the UK, where governance is more centralised.

Even with local tax burdens constant, certain neighbourhood ‘costs’ and ‘services’ – the social and economic composition of the area – nonetheless vary and are associated with higher house prices. In their study of house prices and neighbourhood attributes, Lynch and Rasmussen (2004 p287) conclude that:

House value is most secure when the dwelling is well buffered from unwanted population characteristics by a wide band of households with high socioeconomic characteristics. The demand for protecting house value and the related concerns over schooling quality and public safety, suggest that the impact of neighbourhood on house values may not be confined to a relatively small area around a dwelling.

Studies suggest that there is a large and persistent price value placed by homebuyers upon racial and economic exclusion (Cervero and Duncan 2004; Lynch and Rasmussen 2004). Neighbourhood effects – the shared characteristics of residents who can afford to live in an area – have been shown to be a significant component of the price paid for housing (Malpezzi 1996; Berry 2001; Ihlanfeldt and Scafidi 2004; Ihlanfeldt 2004; Lynch and Rasmussen 2004; Ball and Vincent 2007; Atkinson 2008; Ihlanfeldt and Mayock 2009).

**Exclusionary zoning**

The social and economic composition of a neighbourhood is a factor in housing demand. Fiscal zoning is thus closely related to a fourth motivation for endogenous zoning, known as exclusionary zoning. Whereas fiscal zoning refers to the desire to minimise local public costs, exclusion arises from the desire – of itself – to exclude particular groups on the basis of race or class. This darker side to planning emerged initially with the racial zoning ordinances of the early twentieth century, beginning with the Los Angeles Chinese Laundry laws (Silver 1997).

Fiscal zoning and exclusionary zoning are both used to describe similar land use planning regulations, which are usually traditional suburban zoning controls. These types of controls have the effect of excluding housing that is lower in value, or would be thought likely to lower the value of surrounding housing, and be accessible to lower income residents. Especially in the context of the USA, the term ‘exclusionary zoning’ also refers to the exclusion of residents with particular socioeconomic characteristics. Exclusion may happen directly or indirectly, and intentionally or unintentionally (see Figure 2.5). Exclusionary zoning refers to the regulations that both reflect and support economic exclusion through the housing market. Commonly cited exclusionary
mechanisms are minimum lot size requirements, prohibition of higher-density developments, setback regulations, and heritage and character preservation controls. These traditional zoning tools have been associated with social, economic and racial exclusion, particularly in US studies (Silver 1997; McDonald and McMillen 2004). Some studies argue that smart growth principles that benefit existing property owners (for example, growth moratoriums) have also been adopted by communities as a form of exclusionary zoning (Donovan and Neiman 1995; Glaeser and Ward 2009; O'Connell 2009). Clingermayer (2004 p378) outlines the function of exclusionary zoning as follows:

Land-use controls such as minimum lot sizes, restrictions on multi-family dwellings and mobile homes, and architectural design specifications often have substantial impacts upon the availability of housing at prices that low-income families can afford. Whether intentional or not, these practices – often called exclusionary zoning – have the effect of limiting access to many local jurisdictions, particularly in suburban communities.

The influx of migrants to northern US cities in the early twentieth century has been identified as significant to the take up of planning regulations, and particularly of zoning. Racial zoning ordinances were common in American cities in the early twentieth century (Silver 1997). However, the US Supreme Court rejected explicit racial zoning in *Buchanan v. Warley* (1917). In the wake of judicial decisions against explicit racial zoning, racial zoning or similar ordinances resembling racial zoning became legally problematic. Fischel (2004 p330) argues that instead, exclusionary zoning mechanisms were devised to achieve the same objectives, by:

reducing potential contact between races, or between high and low income people, by the facially neutral expedient of insisting on large lots and single-family homes in residential districts. Racial anxieties could not, of course, be mentioned in any public document as a reason for the ordinance.

Externalities are, in part, culturally defined (Evans 2004 pp15-16), which is one factor to explain why some planning ideas were more politically achievable than others. Zoning began as a reformist effort to improve the quality of working-class areas, but frequently refocused on forms of zoning “protecting property values and excluding undesirables” (Silver 1997 p24), which had considerable political traction. In American cities, many of the first zoning laws were racial (Silver 1997).

The precise motivations for exclusionary zoning are varied and can be difficult to measure empirically. Fischel (1990; 2004; 2005) and others argue that exclusionary regulations (at least in the American context) have their origins in the overtly
discriminatory regulations of racial zoning laws, but that they now retain a similar purpose hidden behind facially neutral language. The term ‘facially neutral’ refers to regulations that have a socially and legally acceptable purpose but which covertly function in the same way as illegal openly discriminatory regulations. Similarly, Clingermayer (2004 p377) argues that “much exclusionary regulation is justified (and rationalised) by arguments that divert attention from the undesired incidence upon the poor and minorities by referring to other values”. Heresthetics and happenstance represent, in planning, a tangled association of sometimes noble, altruistic intentions with their less noble, but inevitable, exclusionary consequences. Some types of controls “may not intentionally seek to exclude lower-income households, but de facto may have this effect” (Ihlanfeldt 2004 p263). Regardless of their intent, neutral terms are far more likely to be cited in the justification of exclusionary planning controls than are concerns relating to race, class or property values.

Reformist planning policies such as inclusionary zoning, ‘fair share’ and ‘anti-snob’ laws have sought to counter the historically exclusionary effects of planning controls, with varying success. Where public planning is not consistent with homeowner preferences, a market for private planning equivalents may emerge. These usually involve restrictive covenants attached to property titles. They specify the type and style of housing that may be built on a particular parcel of land, and are often associated with ‘gated communities’ and privatised community assets. Predating formal zoning controls, private planning equivalents have now regained popularity since the advent of ‘smart growth’. Thorsnes (2000) finds that in Houston, Texas, which has no zoning, private covenants command a premium similar to that in areas with public land use regulations. This suggests that “private regulation of household behaviour apparently substitutes for public regulation” (p398). Much like the early origins of public planning, this appears to be in response to consumer demand for more exclusionary controls:

Now, developers and homeowners are using restrictive covenants to supplement public zoning, presumably because zoning offers inadequate protection of property values for those who can afford to live in these communities (Jacobs and Paulsen 2009 p140).

2.4.3 Public participation: the insider–outsider problem

A limitation to all endogenous effects in planning, regardless of motivation or outcome, is that they will more likely serve the interests of these ‘insiders’ (existing property owners) above those of ‘outsiders’ (for example, the potential residents of new housing were the planning restrictions not applied) (Evans 2004 p8). This is referred to as the insider–outsider problem. Typically, insiders demonstrate their preference for planning
outcomes via local political processes. They may also interact with planning via public participation channels. These processes are integral both to the democratic model and to the participative ideals of planning, particularly as developed from the 1960s onwards. By participating in these processes, insiders can influence what planning regulations are adopted and what development applications are approved. The insider–outsider effect does not suggest that these public participation practices are themselves problematic – public participation represents universally accepted ‘motherhood’ values. Instead, an endogenous view of planning and housing markets suggests that the implications of who is represented, to what degree and why, may be viewed more critically:

The idea of citizen participation is a little like eating spinach: no one is against it in principle because it is good for you. Participation of the governed in their government is, in theory, the cornerstone of democracy – a revered idea that is vigorously applauded by virtually everyone. The applause is reduced to polite handclaps, however, when this principle is advocated by the have-nots … And when the have-nots define participation as a redistribution of power, the American consensus on the fundamental principle explodes into many shades of outright racial, ethnic, ideological and political opposition (Arnstein 1996 p245).

A shift from authoritarian to participative ideas of planning has been one of the more significant changes to occur in planning in its history. The rational comprehensive model of planning pursued in the post-war period held planning as a technocratic profession: planners followed ideas of modernity and scientific efficiency to organise development. The normative views behind this came under question during the social changes of the late 1960s. Jane Jacobs’s influential work on American cities (Jacobs 1961) questioned the wisdom of modernist planning ideas and their effects on those areas then considered problematic by planners. Planning, in collaboration with housing agencies, pursued physical changes to the older neighbourhoods where many poorer residents then resided, and sought to replace them with ‘urban renewal’ projects (Hall 2002 pp216-217). Jacobs argued that planners incorrectly identified inner city areas as problems to be addressed, and that the ‘towers in the park’ solutions they imposed were dehumanising. Public participation in planning began with opposition to these high-rise public housing and freeway construction projects. Issues with rational comprehensive planning were most noticeable (to residents) in the poorer and older areas of cities. Robert Goodman (1972) contended that modernist planning ideas aggravated the problems of poorer citizens. As discussed, in other areas planning controls were often a favourable tool for existing residents.
Public opposition to renewal projects increasingly led to advocacy models of planning, which emphasised public participation and consultation, and greater questioning of planning solutions (Beider 2007). Third-party appeal rights were given greater priority in planning legislation, amid "a paradigm shift in planning towards more communication and collaboration" (Willey 2006 pp372-373). Participative planning questioned the authority of planners, and also the validity of the ideas that plans and planning regulations were based on. This meant that although planning could be internally ‘successful’ in the sense that plans were carried out, it could still be fundamentally flawed in its underlying assumptions. The shift from authoritative to participative planning signified a critical view of planning and a greater emphasis on what planners ‘do’ rather than on the ‘plan’: “a view of planning not as a technocratic process outside the political system, but a ‘multi-dimensional political act’” (Evans 2004 p7). Evans (2004 p7) characterises this as the move from ‘professional’ to ‘political’ planning. Evans dates political or participatory planning in the UK to the Report of the Skeffington Committee in 1969, which recommended greater public participation in the planning system. This shift “changed the character of planning practice as the planning system had to take on board the views of the planned”.

This critical view of the power biases in planning decision-making led to increased public participation, through consultation processes and expanded objection rights. The planning system itself changed significantly through the participation model. In Melbourne the 1981 Metropolitan Strategy emphasised process rather than plan, stating that: “planning is an evolutionary process. As part of this process planning polices must be reviewed regularly and be responsive to the aspirations and goals of the community” (MMBW 1981 p4). The intention behind public participation in planning was thus progressive and inclusionary. However, speaking of the UK, Evans (2004) argues that planning became – as an unintended result of greater public consultation – increasingly political from the 1970s onwards. Evans claims that a change intended to be socially progressive was appropriated, leading instead to further representation of those already inside the system: “the effect of ‘public participation’”, Evans contends, “was to reinforce the status quo and the position of those in possession”. Public consultation and participation in planning provided an additional forum for property owners to influence planning outcomes:

Among other things, it allowed land use planning to survive the Thatcher era relatively unscathed when one would have thought that the notion of ‘planning’ would have been a red rag to the libertarian bull. This was because, in practice, public participation was peculiarly imbalanced. If, for example, a housing development was proposed near to a village, the residents of the village could participate in the process (and would inevitably object to the proposal), but the future residents who would live in the houses if the
development went ahead did not and could not participate because they were unidentified and unidentifiable (Evans 2004 p8).

Objection and lobbying are important means by which communities may influence local planning outcomes (Ellis 2004; Willey 2006). From an endogenous perspective, objection – like private planning – is more likely in contexts where planning pursues an outcome that is inconsistent with the interests of ‘insiders’. Reformist planning goals such as urban consolidation and social housing placement have proven notoriously unpopular with homeowners (Department of Housing and Urban Development Office of Policy Development and Research 1991; Iglesias 2003; Department of Housing and Urban Development Office of Policy Development and Research 2004; von Hoffman 2009). The potential implications of this for consolidation policies in Melbourne are discussed further in the next chapter.

Property owners and people of higher socioeconomic backgrounds are both more inclined, and better equipped, to actively participate in planning objection processes. Those with higher-value houses have more to lose from negative externalities, perceived or real. This has led to the unflattering term NIMBY (Not in My Backyard), which is used refer to vocal and self-interested objector groups seeking to influence land use outcomes (Hillier and Van Looij 1997; Rowe 1998; Iglesias 2003; Emrath 2007; Davis and Bali 2008; Schuetz 2009). NIMBY syndrome is perhaps best known in relation to noxious facilities such as landfill and waste treatment (Feinerman, Finkelshtain et al. 2004), but is also documented in response to children’s group homes (Cameron and Crewe 2006), community mental health facilities (Cowan 2003), emergency response housing after natural disasters (Davis and Bali 2008), and dedicated low-income housing. In the USA, proposals for dedicated low-income housing developments are well known for inciting resistance and opposition from existing residents. Developments encounter a range of local opposition, including litigation and delays (Hillier and Van Looij 1997; Rowe 1998; Iglesias 2003; Department of Housing and Urban Development Office of Policy Development and Research 2004; Emrath 2007; Davis and Bali 2008; Schuetz 2009). Proposals may be rejected, deferred or adapted in response to resident concerns:

The development of affordable housing and services for low and moderate income households has been plagued by ‘local opposition’, commonly referred to as the not-in-my-back-yard or ‘NIMBY’ syndrome, for decades. In combination with exclusionary zoning, some developers’ responses to actual or anticipated local opposition against specific development proposals maintain and increase racial and economic segregation (Iglesias 2003 p179).
Case examples of resident opposition cited by Iglesias (2003 p78) include a proposed 398-unit, low-income apartment complex unanimously rejected in Merced, California, during which dispute “neighbours showed up in force, saying the project would invade their privacy, lower property values in the area, bring about an increase in crime and create a traffic nightmare”. In a study of community opposition to an AIDS care facility, Balin (1999 p64) found that decisions about the centre’s placement threw up prejudices and motivations which would be “unsavoury even to those holding them”. Community members concerned with the perceived negative impacts of the facility were considered by some to be motivated by property values. In this case, those expressing concern about the facility sometimes used the comparatively neutral theme of property values as a more acceptable way of putting across less socially acceptable (exclusionary) motivations. For example, a local opponent asked:

What about the security of our property values? The fact is, I might not be worried about currently addicted IV drug users in the facility, but … people don’t want to buy property next door to people they think are drug addicts or contagious (Balin 1999 p43).

Pointing to the role of social and economic characteristics in planning objections, comments by another resident imply that having middle-class residents in the area was important to the community’s case against the proposed facility:

They figured since most of us up here are older black people that they could get away with sneaking the AIDS home in behind our backs! They probably figured we had no power to oppose the home anyway. They don’t realize the number of lawyers, doctors, and professionals that live up this way, people with real influence in the city. They don’t know how long we’ve been organized to protect this neighbourhood from unwanted developments (Balin 1999 p66).

Gentrification has been identified as a factor in planning participation processes (Skaburskis 2006; Skinner 2008). In Australia, the Housing Commission undertook clearance projects in inner Melbourne in the 1960s (Sandercock 1975). These projects and the Sydney Green Bans in 1971 – where trade unions placed a ban on work on projects which demolished houses or built on land valued by residents (Zehner and Marshall 2007) – bought inner urban residents very publicly into battle with planners. In the Australian context, the areas designated for renewal changed their sociodemographic character to such a point that the housing characterised in the mid-1950s as “not up to present-day standards for good living” and “increasingly unattractive for living purposes” (MMBW 1956 p37) became popular and renewed with private capital through the process of gentrification. Opposition to urban renewal projects in Carlton was spearheaded by organised resistance groups of “new middle-
income professional and managerial residents” (Logan 1986 p141). Although the interests of marginalised populations were the basis for participative planning methods, gentrification was a major factor in organised resistance to urban renewal projects (Skaburskis 2006; Howe 2009; Jacobs and Paulsen 2009; von Hoffman 2009). Regarding the role of residents groups (referred to as ‘the gentry’) in Carlton and other inner suburbs of Melbourne in the 1970s, Logan (1986 p141) recalls that:

Certainly the gentry in inner Melbourne were able to dominate the public-participation exercises and were able to win many environmental improvements from the MCC which had an impact on property values.

The literature around objection and the NIMBY phenomenon suggests that public objection processes are, like planning itself, neither inherently equitable nor inequitable. The origins of participative planning lie in an important acknowledgement that planning professionals can fail to understand or protect the interests of communities, particularly those of disadvantaged communities. Difficulties inherent to defining a single community interest have been acknowledged within the participative or collaborative planning tradition (Healey 1997; Hillier 2002). Participative planning does not assume an uncomplicated ‘public’; rather, it sees a reduction in the assumed authority and knowledge of planners, and places a greater emphasis on process or planning systems than on outcomes (Zehner and Marshall 2007). The endogenous perspective on planning and housing markets argues that planners are, however, insufficiently aware of the historical context of relationships between property owners and planning. Planning decisions may thus be weakened by the assumption of unproblematic ideas of planners, publics and public good:

There is some truth in the critics’ claim that planning protects the property interest of the middle and upper classes, cloaking actions that further specific class, racial and property interests in the language of the public interest. When planners fail to understand this history, they often misunderstand the nature of the conflict that emerges over planning proposals (Jacobs and Paulsen 2009 p141).

2.4.4 Capitalism and planning

Marxist critiques of planning overlap with the endogenous model, in that the Marxist view of planning points to the use of planning regulations to further the power and interests of certain groups. Castells (1977) and Foglesong (1996) link the early adoption of planning controls to failures of the capitalist system. They also argue that, because of capitalist interests, this adoption of planning was highly selective. In this
account, comprehensive planning and zoning provide solutions to pressing urban problems with mounting implications for both consumers and producers, hence their widespread adoption: “the market system cannot meet the consumption needs of the working class in a manner capable of maintaining capitalism, this … is the reason for the growth of urban planning and state intervention” (Foglesong 1996 p103). By contrast, more radical planning ideas calling for collective ownership or more proactive roles of government have only been experimented with in Australia (Hamnett and Freestone 2000). Private property, Castells submits, is the “central contradiction” of capitalist urbanisation. His contention is that capitalism requires controls on land for a number of practical reasons, however, these same interests limit the pursuit of more redistributive planning ideas:

Yet the institution of private property stands as an impediment to attempts to socialise the control of land to meet these collective needs. Thus, if urban planning is necessary for the reproduction of the capitalist system on the one hand, it threatens and is restrained by the capitalist system on the other (Foglesong 1996 p104).

This tension is apparent in the early origins of planning and zoning in Melbourne. Property values were important but, at the same time, property concerns also presented the main stumbling block to active planning implementation in the city, described as “piecemeal”:

Their mandate often broke down when specific recommendations negatively affected the property interests of their main constituency. Ultimately, they could not resolve what Foglesong terms the ‘property contradiction’; the tension between the collectivist urges of planning and the inherent individualism of its putative supporters (Freestone and Grubb 1998 p129).

Critical class perspectives have also been applied to early planning reformers. In retrospect, it is clear that the chief problem of slum dwellers was poverty, and the problems of early industrial cities expressed broader changes of the time: they were “patterns of land use as well as contrasts in living conditions that clearly reflected the economic system and class structure of industrial capitalism” (Forster 2004 p2). Planning responses were limited, albeit necessarily, to addressing the physical conditions of slum areas. The regulations used to bring about these small-scale solutions were able to be appropriated by middle-class interests to protect residential areas (von Hoffman 2009). Thus the effects of planning can be obscured by their reformist ideals. Yiftachel (2001) argues that the progressive ideals of planning in Israel have masked the use of planning, particularly in the case of development towns, to reproduce inequality and marginalise peripheral groups.
A critical Marxist view on post-war comprehensive planning also emerged in several Australian texts over the 1970s and 1980s. These highlighted the symbiotic relationships between land developers and planners. Marxist authors identified the capitalist system and dependence on private developers as a major constraint on implementing planning ideas, as “many planning strategies, supposedly in the public interest, have been interpreted by the affected property owners as a direct threat to the viability of their investments” (Alexander 1986 p114). Marxist authors linked the powerful lobbying of property interests in Australia to the tendency for planning to be implemented selectively and to the advantage of landowners. Most notably, Sandercock (1975; Sandercock and Berry 1983) criticised the relationship between private developers and the planning process in Melbourne, which she described as a system of “capitalism, crude and uncivilised” (Sandercock 1975 p145). She cited instances of political pressure successfully applied by developers and landowners to limit Melbourne’s planning system to best serve their own interests. Alexander (1986 p113) also argued that “the results of metropolitan planning have been of mixed value from both a social and economic point of view”, linking the post-war planning system to the accumulation of capital by property interest groups.

2.5 Implications

This chapter has positioned the research within the contexts of different economic perspectives on planning. After considering both the economic justifications for planning and criticisms of it, the discussion focused on an endogenous model of planning and housing markets, where planning is assumed to be influenced by interest groups with a stake in housing market outcomes. This interest is based on the capacity of planning to increase the demand for housing or to decrease its supply. Planning may be economically efficient, by controlling negative externalities and achieving improvements to the urban environment that are capitalised into housing values. Alternatively, planning may be inefficient, merely increasing housing costs by causing supply restrictions and market inefficiencies.

Either role of planning in the housing market is important in terms of understanding why property owners may have an interest in influencing the planning system in their favour. Planning allocates and reallocates property rights, and these allocations have economic value. This underscores the potential for conflict around planning and the appropriation of planning processes. Property values, social and racial exclusion, and planning regulations have tended to be closely interlinked historically. Planning is not
just the result of planners and planning ideals. I have argued that homeowners and property developers have played important roles in its history and in conflicts around planning. Understanding, in economic terms, the conflicts that emerge over planning and housing is a focus of this research. In the next chapter, concepts from the endogenous perspective on planning will be used to analyse the debates around urban consolidation policies and their claimed links to housing affordability.
Chapter 3

Urban Consolidation and Housing Affordability

The overarching research question of this thesis is are the housing market interests of property owners, as ‘insiders’, reflected in activities that influence urban consolidation policies in Melbourne? This chapter is the second of two which explore the existing theory and evidence concerning the interests of property owners in planning, and in urban consolidation in particular. The preceding chapter positioned the research in the contexts of three different economic perspectives on planning and housing markets. Its focus was the endogenous perspective on planning and housing markets, in which planning is expected to be influenced by groups with an existing stake in the housing market and therefore in the planning system. This chapter applies these perspectives to a prominent policy issue: the question of whether urban consolidation worsens housing affordability outcomes. Housing affordability has been a key part of the reasoning behind urban consolidation policies, and also of the criticisms made of them.

This debate is made up of two basic concepts. One is the planning goal of urban consolidation, usually in comparison to traditional suburban zoning controls or to a (theoretical) situation of ‘no planning’ (Gurran 2008 pp103-104). The other is housing affordability. Different economic approaches to the relationship between planning and housing prices suggest very different perspectives on each of these concepts, as well as the implications of urban consolidation for housing affordability. Urban consolidation measures can be viewed as either a move for, or a hindrance to, housing affordability depending on the definitions applied (Carlson and Mathur 2004 p146).

The chapter begins by defining the key concepts of urban consolidation and housing affordability. It then considers the literature forming three basic ideas of the potential relationships between urban consolidation and housing affordability. The critical view is considered first, as this has been the more prominent in the policy discourse. The chapter then considers the planning justifications for urban consolidation and its
intended role in housing affordability outcomes. The bulk of the chapter reviews the implications of an endogenous perspective on housing markets. Drawing on the property rights literature in particular, the chapter argues that although consolidation may in theory either improve or undermine housing affordability, in practice property interest groups are likely to contest and shape the ways in which consolidation policies are implemented. Through this review of the existing evidence I contend that this interactive process of conflict (Hall 1973) itself has implications for housing affordability and planning. This theoretical framework will be applied to the subsequent empirical chapters.

3.1 Key concepts

3.1.1 Housing affordability

The terminology of ‘housing affordability’ and ‘affordable housing’ varies by context and can be difficult to pin down (Paris 2007). In broad terms, housing affordability problems occur when housing costs increase more than incomes (Yates 2008).

Within the broad housing affordability concept there is a distinction between upfront housing costs (housing accessibility), and recurrent costs. Recurrent costs are often discussed with reference to ‘housing stress’, meaning difficulties in servicing ongoing housing costs such as rent or mortgage payments in relation to income. A household that spends more than 30 per cent of its income on housing costs is commonly defined as being in housing stress. The ‘30/40’ rule is more stringent, and limits the definition of housing stress to households in the bottom 40 per cent of the equivalised income distribution. This approach to housing stress is widely used within academic and policy sectors (National Housing Strategy 1991; Berry and Hall 2002; Seelig and Phibbs 2006).

Upfront costs – or housing accessibility - may refer either to the cost of constructing or purchasing a new house, or of purchasing an existing house, sometimes of a particular type or quality. This concept is often applied in the context of home purchase (Wood and Stoakes 2006; Elsinga, Haffner et al. 2008). Focusing on housing affordability in the context of owner occupation, the main components of affordability are dwelling prices, lending conditions and income levels. Although housing prices and housing affordability may sometimes appear to be used interchangeably, housing prices are only one component of housing affordability. Prices are the main potential link between
housing affordability and planning, as the other components of housing affordability – including incomes and lending conditions – are assumed to be largely unrelated.

An ostensibly identical term, ‘affordable housing’, is sometimes used interchangeably with ‘housing affordability’. It can refer to housing in the private market – owner-occupied or privately rented – that meets the criteria for housing affordability. Both the terms ‘housing affordability’ and ‘affordable housing’ may be defined with respect to the incomes of low- to moderate-income households. Affordable housing can also be used to refer specifically to subsidised non-market housing. In Australia, Housing, Planning and Local Government Ministers have worked with a broader definition of affordable housing as being housing that is “appropriate for the needs of low to moderate income households” (Gurran 2007 p18).

Although these are typical policy uses of the terms, an economic view of housing affordability problems tends to carry different meanings. Housing affordability problems in economic terms arise when housing is expensive relative to its fundamental costs of production. Glaeser and Gyourko (2003) analyse the difference between the costs of production and the cost of housing in the USA during the housing affordability crisis at that time. Conceptualising housing costs for owner-occupied housing is further complicated given that the home functions as a capital asset as well as a consumer item (Quigley and Raphael 2004).

The discussion of housing affordability in Australia appears to take two distinct forms, often operating in tension with each other (Beer, Kearins et al. 2007). Each envisions different tenures and target groups. Largely because of this, each also sees different roles for planning in housing. On the one hand is the discussion of housing stress, which concerns the “provision of affordable housing for the most vulnerable groups in society” (Beer, Kearins et al. 2007 p14). This debate has traditionally been undertaken by welfare groups and academics, and favours a stronger role for government. In terms of tenure, this debate is often focused on rental housing (Yates and Wood 2005; Seelig and Phibbs 2006). Research has suggested that affordability problems in Australia predominantly impact on households in the private rental market – and that the problems of these households are the more severe (Yates and Gabriel 2006). As an example, Milligan et al. (2004) consider potential mechanisms for providing subsidised affordable housing in Australia.

On the other side is the debate concerning access to affordable homeownership – usually focused on the young and ‘average’ Australians (Troy 1997; Troy 2003). The latter debate is typically centred on the market provision of new suburban housing, and
on housing accessibility, and tends to be premised on free market ideas (Klosterman 2003). Yates (2008 p201) observes that the widespread media coverage of affordability in Australia is focused on home purchasers. As an example, in a text very critical of planning Moran and Staley (2007) approach housing affordability in terms of accessibility to low-cost first home ownership.

In this thesis, the terms ‘housing affordability’ and ‘affordable housing’ are used to refer mainly to owner-occupied housing. These terms are used in limited ways because the thesis focuses on housing markets and on housing transactions data. This thesis also engages with Australian media and policy documents that themselves assume a focus on access to low cost home ownership. This being said the planning implications of differing definitions of, and assumptions about, housing affordability form a focus of this chapter (3) and the next chapter (4) in particular.

### 3.1.2 Urban consolidation

Urban consolidation is an Australian term interchangeable with the term ‘urban containment’ used in other countries. ‘Smart growth’ refers to similar planning concepts. The objectives of urban consolidation are typically a more compact urban form, higher densities particularly in areas accessible to public transport, and the preservation of rural landscapes (Downs 2005 p368). The most basic common aspect of urban consolidation is some form of perimeter dividing urban land uses from land where only rural or very low-density uses are permitted. Contemporary urban consolidation policies are based on a critical view of traditional planning practices and their tendency to produce sprawl. ‘Sprawl’ may either mean non-contiguous, poorly serviced or laissez-faire development, or can be used in a more general and pejorative way to refer to all low-density, car-based suburban development. A key reason usually cited for the pursuit of urban consolidation is the mitigation of broader environmental and social impacts bought about by car-based, low-density development.

Within the town planning profession, low-density suburban expansion was identified as problematic very early on (Hall 2002 p27). The loss of productive farming land and increased traffic congestion were key concerns. Green belts, as a part of the garden city model, are earlier forms of urban containment policies. Formal green belts were first implemented around major cities in Great Britain in the post-war period (Nelson, Dawkins et al. 2007 p8), with the preservation of rural landscapes a key goal (Hall 1973).
Nelson et al. (2007) distinguish between growth controls and growth management. Growth controls limit the overall level of development, for example with growth moratoriums to preserve landscape and amenity values. Growth management, by contrast, attempts to accommodate growth in strategic ways, seeking to minimise the adverse effects of growth and to maximise positive urban outcomes such as quality of life (Nelson, Dawkins et al. 2007 p7). Growth management is often concerned with curtailing or redirecting suburban growth. It seeks to “address the failure of individually rational behaviour to yield socially optimal results” by leveraging public policy to modify individual behaviour and urban form (Jacobs and Paulsen 2009 p139). Urban containment (consolidation) is a typical ‘framework’ for growth management.

Urban Growth Boundaries (UGBs) are common components of urban consolidation strategies, and serve to demarcate the boundary of urban and rural land uses. A UGB is a defined metropolitan boundary intended to confine development within an urban area and restrict development outside of it. UGBs may be fixed or flexible (Evans 2004 p58): ‘hard’ (fixed) as in London, or ‘soft’ as in Melbourne. Urban consolidation policies also usually contain a housing affordability goal, implementing inclusionary zoning or other ‘upzoning’ strategies to encourage increased housing densities and mix in existing areas (Nelson, Dawkins et al. 2007 p93).

Urban consolidation has been pursued – at least in principle – in most Australian cities since the early 1980s (Yates 2001; Searle 2004; Searle 2007). Urban consolidation policies seek to redirect urban growth away from the traditional suburban, low-density urban fringe and towards existing urban areas. Their goals in doing so include reduced infrastructure costs, more efficient use of public transport, and environmental conservation. The development of urban consolidation policies in Melbourne will be reviewed in later chapters.

3.2 Consolidation and affordability: the critical perspective

An extensive body of literature looking at relationships between land use planning and housing affordability has speculated that planning mechanisms may undermine housing affordability. In this context, housing affordability is viewed in terms of the market price of housing. The potential causal link lies in the proposition that planning influences the price of land by introducing inflexibility into housing supply. Much of the literature that looks critically at the potential causal link between planning and housing affordability focuses on the effects of urban consolidation (Donovan and Neiman 1995; Nelson 2000; Dawkins and Nelson 2002; Nelson, Pendall et al. 2004; Jun 2006). Urban
consolidation mechanisms are criticised for driving prices up directly; restricting developer competition; changing the social and demographic composition of areas (meaning that they are, unintentionally, exclusionary); and limiting the filtering down of housing to lower-cost housing segments. Such criticism is presented in contrast to a (theoretical) situation with no planning, to private equivalents to planning (covenants), or to a traditional suburban zoning system (Nelson, Pendall et al. 2004).

The economic literature on supply-side impacts of planning has particularly pointed to the impact of urban growth boundaries as policy instruments that artificially limit the supply of new housing (Nelson 2000; Nelson, Pendall et al. 2004; Voith and Crawford 2004; Cox 2005; Jun 2006; Landis 2006). The literature establishes a theoretical basis for the expected inflationary effect of growth boundaries on housing prices. Artificial growth boundaries such as UGBs will, in neoclassical theory, distort the price of new housing by limiting or adding a scarcity cost to available new housing. A UGB introduces a barrier to the natural curve by which undeveloped farming land is absorbed into the expanding urban area. Land inside of the growth boundary will then operate in a separate market to comparable land outside the growth boundary, and be inflated in price in comparison (Evans 2004). UGBs can be expected to increase the demand for urban land and its price, to reduce the demand for rural land outside the UGB and its value, and to segment land on the urban fringe into urban and rural submarkets (Nelson 1985).

The available evidence does not reach strong conclusions as to whether growth containment effects can be measured in practice, or whether any effect may be due to increased demand or decreased supply. Jun (2006 p239) surmised that “although the evidence is not overwhelming, there are many empirical studies indicating that UGBs and other means of urban containment lead to higher land prices by limiting the supply of developable land”. Dawkins and Nelson (2002 p10) concluded that, based on a review of existing evidence, “urban containment programs do affect land prices, and that housing producers do not always respond to higher land prices by increasing the density of development”. In the absence of ‘carrot’ incentives (Voith and Crawford 2004) such as inclusionary zoning or density bonuses, ensuring growth occurs in designated areas, the ‘stick’ functions of growth management (limiting new housing in certain areas) are considered to have potential consequences for housing costs and affordability.

There are potential market behaviour effects that may arise from containment policies. Nelson, Pendall et al. (2002) argue that containment policies constrain the number of “players in the land market” and that inefficient speculative costs are introduced by
“dual predictability” – the fact that while there is more certainty on which land can and cannot be developed, there is also the knowledge that it will become exhaustible. Coiacetto (2006) looked at submarket targeting by developers in Brisbane and found that different developer types operated in different submarkets and had differing capacities to absorb delays and risks. This has implications for urban consolidation and affordability. He argues that the introduction of a UGB would affect the housing industry in that “some of the more established developers have already banked land, whereas smaller and opportunistic developers will have greater difficulty in finding land” (2006 p271).

Increased density may also be an issue for urban consolidation and housing prices. Knaap (1998) notes that there is a “nearly universal finding” that standardised land values (land values per acre, for example) will fall with lot size. Thus, larger lots are less expensive per unit of land than are smaller lots. The potential reasons are debated, but include transaction costs, economies of scale, and diminished utility. A significant aspect of this trend (smaller lots of land being more expensive using a standardised measure) is that it “implies that there are limits to reducing housing costs by reducing lot size” (Knaap 1998 p270). Furthermore, the economics of construction may impede efforts to reconcile urban consolidation and housing affordability goals. It has been suggested that there are increased developer risks, and greater construction costs, associated with higher density housing in existing urban areas (Productivity Commission 2010 p106; Kelly 2011 pp30-35).

Infrastructure charges that may be passed on to consumers are also part of the critical housing affordability discourse. Affordability problems have been linked to the taxation burden on new housing development (Burge and Ihlanfeldt 2006; Moran 2006; Gurran, Ruming et al. 2009) and to policies that limit or slow development on the urban fringe. There is debate as to whether the cost of such taxes are absorbed by the seller of the land or passed on to the final housing consumers (Oxley 2008). Critical perspectives on inclusionary zoning and similar development levies argue that the costs are taxes, simply passed on to the final consumers of market-rate housing (Crook 2008; Oxley 2008).

Critical Coasian or neoliberal policy approaches to housing affordability problems and planning usually seek to remove barriers to the free operation of land and housing markets. Price signals, where planning controls are overridden when housing prices indicate affordability problems, are a policy based on this perspective (Cheshire and Sheppard 2005; Whitehead 2007).
3.3 Consolidation and affordability: the planning perspective

Although critiqued on housing affordability grounds, urban consolidation measures have more often than not been implemented as a means of improving housing affordability. In part this apparent disjuncture is due to differing concepts of housing affordability. Rather than focusing on owner-occupied detached housing, urban consolidation strategies usually emphasise mechanisms to increase the supply of affordable rental housing. Urban containment can potentially increase purchase costs for some kinds of housing, but at the same time increase the supply of affordable rental housing. These tensions are explored in Carlson and Mathur (2004). Historically, affordable social housing was an explicit component of the same early garden city movement that conceived of green belts. The garden city model proposed development that was “pre-planned, with affordable housing and a surrounding agricultural belt”; by contrast, early zoning regulations tended to focus on the protection of property values (Freestone and Grubb 1998 p130).

This section considers, in economic terms, the justifications for the role of urban consolidation in housing affordability outcomes. In practice, however, the debates around planning and housing affordability tend to overlook the economic arguments for urban consolidation. They instead typically revolve around what are effectively simplifications of the role of planning in housing markets and the environment: presenting dichotomies of ‘red tape’ against the ‘concreting over’ of landscapes (Jones and Watkins 2009 p4).

A planning or welfare economics perspective on the potential impacts of urban consolidation on housing affordability counters the neoclassical perspective in several key ways. Firstly, the planning justifications for urban consolidation hold that, in theory, containment strategies will not restrict housing supply but will redirect it by providing greater opportunities for new housing in existing urban areas. Secondly, in critical works on urban ‘sprawl’ authors have argued that the true costs of unbridled sprawl are not factored into markets, due to market failures and the presence of subsidies on owner occupation. Thus urban expansion is not as ‘cheap’ as it appears, although the market may appear to demand it. Nelson and Dawkins et al. (2007 p13) argue that land markets are fundamentally inefficient and that, “in the end, private land owners never fully internalise their marginal social costs and they never know their marginal social benefits”. They argue that this justifies the use of urban consolidation interventions to contain sprawl.
An additional factor in the planning perspective on urban containment and housing affordability is that price increases occurring from urban consolidation may be attributable to demand and not to supply impacts. The argument is that better-planned urban areas will command higher prices. Finally, planning policies seek to offset this effect with the use of inclusionary zoning mechanisms to provide affordable subsidised housing in high-demand locations. These points are discussed below.

3.3.1 Growth redistribution

The intention of urban consolidation policies is typically not to limit total urban growth, but to redistribute it and maintain an integrated land supply strategy. Containment strategies seek to maintain a certain supply of land within the boundary and growth boundaries move outwards in response to supply signals. Containment strategies thus typically maintain an integrated land supply strategy. This process will in theory increase development opportunities in some areas but limit or stop development opportunities in others (Grimes and Liang 2009). Nelson and Dawkins et al. (2007) argue that urban growth controls are coupled with greater opportunity to develop housing in existing areas. They claim that the perception that urban consolidation necessarily decreases housing affordability is superficial only, and that in most cases the use of growth boundaries at the fringe is offset by densification strategies in the existing urban area:

Urban containment ‘regimes’ include ‘upzoning’ of land to accommodate more housing units, emphasis on increasing the attached-housing share of all housing, various low and moderate income housing inclusionary practices, and other techniques to increase not only the supply of housing generally but affordable housing in particular (Nelson, Dawkins et al. 2007 p93).

Because of this, a planning perspective on urban containment argues that the potential effect on price is ambiguous because demand is redistributed rather than restricted (Dawkins and Nelson 2002; Jun 2006; O'Connell 2009). Overall housing supply is not affected. This argument acknowledges, however, that higher-density housing and rental housing may not be a perfect substitute for housing at the fringe.

3.3.2 Demand effects

A planning perspective on urban consolidation and housing markets emphasises demand effects rather than supply. Alongside their limitation of housing supply at the
urban fringe, containment strategies are also usually designed to encourage infrastructure and amenity improvements to existing built-up areas. Academic debates over urban consolidation policies often boil down to whether price increases are due to demand-side amenities or to supply-side restrictions (Nelson, Pendall et al. 2002). Advocates of planning restrictions in Portland, Oregon, as the most famous example, argue that the city’s planning strategy has increased the aesthetic appeal of the city and therefore demand for housing (Dawkins and Nelson 2002; Jun 2006; O’Connell 2009):

Housing prices reflect the price of land, the price of the home and the value of amenities. Urban containment policies change housing costs for two reasons. First, land prices change when land supply is altered. Second, if urban containment increases the value of the amenity package associated with a house then that, too, will cause a change in house prices (Nelson 2000 p46).

A commonality between the welfare economics and critical views of planning is that land values outside a UGB are expected to be lower than those inside the UGB. The critical view holds that this effect is due to land scarcity, and is passed on to housing costs throughout the city. The planning view is that the price of agricultural land is kept low and free of speculation, thus protecting agricultural production. At the same time, the higher price of urban land reflects demand and amenity values, with the amenities and efficiencies of urban consolidation capitalised as higher land prices (Nelson, Dawkins et al. 2007 p17). The difference between demand-induced and supply-induced increases in local house prices is significant to assessing the overall economic efficiency of regulations, as argued by Fischel (1990) and Ihlanfeldt (2004):

If price rises because of a reduction in supply, there is an efficiency loss – in the sense that the jurisdiction is using its monopoly power to cause a scarcity of housing. However, if price rises because a regulation produces an amenity effect, then net social benefits may be positive, even if low-income households are excluded from the jurisdiction (Ihlanfeldt 2004 p262).

Although economic welfare may be improved through this process, such increases can nonetheless sit uncomfortably with the social reform goals of planning (von Hoffman 2009), given that regardless of the reasons for price increases, the exclusion of poorer households through price effects will occur. This effect was discussed in the preceding chapter. The impact of increased demand on affordability is an issue for urban consolidation and for planning in general – ‘good’ planning is, even if unintentionally, exclusionary. Where neighbourhoods or regions filter up through gentrification, these processes directly affect housing affordability in the private market, particularly for
renters. This is especially important as the filtering down of housing to lower-income households is an important source of affordable housing (Yates and Wood 2005; Skaburskis 2006; Rosenthal 2008). Voith and Crawford (2004 pp89-90) compare the effects of gentrification to urban consolidation policies:

The value of a house that enjoys benefits that are unique to its location will exceed its production cost. This is an important issue with regard to the implications of smart growth policies for housing affordability. If smart growth policies make entire neighbourhoods or even regions more attractive than others, those policies could in effect raise the prices of all housing in the market – even those housing types favoured by smart growth policies. This issue is similar, on a larger scale, to that of gentrification, whereby improvements in location neighbourhoods increase house values and reduce affordability.

Thus the dilemma for planning is that in the absence of subsidies, any urban improvements achieved by urban consolidation will tend to result in reduced affordability – whereas decline, and worsened urban amenity overall, often represents an improvement in housing affordability. Porter surmises that “only following growth controls’ successful enhancement of community quality, and consequent increases in housing prices, does affordability begin to surface as a community issue” (Porter 2004 pp212-214). Talen (2010) argues that new urbanism, like urban consolidation and planning more generally, is constrained in its affordability and diversity goals by this fundamental paradox. Higher prices are paid for housing in amenity-rich areas, and there is a resultant unlikelihood of income diversity (Talen 2010 p507). This again underscores the role of upzoning and inclusionary zoning mechanisms, which are common features of urban containment strategies. The planning perspective acknowledges potential demand effects as a by-product of successful planning, and seeks to offset them. Underlying this response is the welfare economics assumption that planners are equipped to efficiently intervene in housing markets. The Coasian perspective, by contrast, submits that planners may intend to achieve certain outcomes with planning interventions, but ultimately add inefficiencies to the market and drive up costs.

### 3.3.3 Inclusionary zoning

Inclusionary zoning policies are a common feature of urban consolidation strategies. Their role is to attempt to compensate for potentially higher land prices with mechanisms that increase housing choice or that require the direct provision of affordable housing (Nelson 2000; Nelson, Pendall et al. 2004; Gurran 2007; Whitehead
Inclusionary zoning only works in strong housing markets, with high increases in land values needed to absorb program costs (Porter 2004 pp212-214). With urban consolidation, it is implicit that the higher land prices may be expected as a function of higher amenity and demand (Nelson, Pendall et al. 2002; Carlson and Mathur 2004).

Exactly what type of housing affordability is implied by inclusionary zoning – and how this may be mandated – varies by policy, but non-market housing or smaller housing types are usually involved. ‘Affordable housing’ usually refers not to low-cost market housing but to housing that is affordable to low- to moderate-income households (up to 120 per cent of the median household income). The definition is tenure neutral but it implies market interventions. Such policies usually form part of the development approval process. By requiring a proportion of dedicated affordable housing, inclusionary zoning is intended to ensure well-located, affordable housing with access to jobs, community and services. It is implicit that this balance would not be possible in the private housing market (Gurran 2007). Ordinarily, inclusionary zoning is applied in high-value markets, where the value of planning betterment is substantial (Paris 2007). Inclusionary zoning is in effect reliant on higher property values to harness planning gain for the provision of subsidised affordable housing (Porter 2004; Bramley and Leishman 2005). Critical perspectives on planning and housing view inclusionary zoning as an implicit betterment tax, passed on to the purchasers of market housing (Crook 2008; Oxley 2008).

Planning systems in countries such as the UK, the USA and Ireland make use of inclusionary zoning policies (Porter 2004; Norris and Shiels 2007; Whitehead 2007; Wheaton 2008). In the UK they are known as Section 106 agreements. American cities have investigated and implemented inclusionary zoning mechanisms alongside urban consolidation controls since as early as the 1970s, particularly in California (Zorn, Hansen et al. 1986). Gurran (Gurran 2007; Gurran 2008; Gurran, Milligan et al. 2008) reviews the comparatively limited extent to which inclusionary zoning mechanisms have been pursued in Australian cities, despite the high profile of housing affordability problems. Although Melbourne 2030 contains a goal to “increase the supply of well located affordable housing” (Department of Sustainability and Environment 2002 Policy 6.1), it contains no inclusionary zoning mechanisms to instigate this goal. Planning deregulation and constraints on government are possible explanations (Gabriel and Jacobs 2006; Beer, Kearins et al. 2007; Gurran, Milligan et al. 2008).

In the context of inclusionary zoning, planning is really used to ensure that housing is provided for low-income groups, rather than to lower the cost of market housing. Urban
consolidation strategies seek to leverage forms of non-market affordable housing into locations of higher amenity and accessibility than the market would provide. Several studies of urban consolidation and housing affordability have sought to quantify the dedicated affordable housing contribution against impacts on the cost of market housing (Pendall 2000; Nelson, Pendall et al. 2004; Aurand 2010). In high-value markets where inclusionary zoning mechanisms are more likely to be used, the affordability impacts are very different depending on the concept of ‘housing affordability’ applied (Carlson and Mathur 2004; Porter 2004; Voith and Crawford 2004).
3.4 Containment and affordability: an endogenous perspective

This chapter has so far considered two basic perspectives on the potential relationships between urban consolidation and housing affordability. A fundamental difference between these perspectives is that one contrasts an efficient market with imperfect and inefficient interventions that restrict affordable housing opportunities. The other contrasts an imperfect, inefficient market with perfect interventions that create affordable housing opportunities. A commonality between them is their basis on planning controls that are applied exogenously to land and housing markets. In the planning account of urban consolidation, the model is one of planners devising policy interventions to address market failures. In the critical account, planners may intend to address perceived market failures but in so doing inadvertently create public failures. In both cases, the planners and the planning policies are introduced essentially independently from the (perfect or imperfect) housing market – like ‘manna from heaven’.

Table 3.1 Contrasting economic perspectives on urban consolidation and affordability

<table>
<thead>
<tr>
<th>Perspective</th>
<th>Consolidation policies</th>
<th>Housing supply</th>
<th>Growth boundaries</th>
<th>Housing affordability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning view</td>
<td>Efficient interventions in an imperfect, inefficient market, creating affordable housing opportunities</td>
<td>'Managed': strategically redirected to existing areas</td>
<td>Demarcate urban and non-urban uses</td>
<td>Affordable opportunities are created through upzoning and inclusionary zoning</td>
</tr>
<tr>
<td>Critical view</td>
<td>Inefficient interventions in an efficient market, restricting affordable housing opportunities</td>
<td>Reduced and distorted</td>
<td>Inflate urban land values</td>
<td>Housing affordability is reduced: fewer new housing opportunities, less filtering of stock</td>
</tr>
<tr>
<td>Endogenous view</td>
<td>Redistribution of property rights, creating winners and losers and associated conflicts</td>
<td>Intended redistribution of growth may be opposed and influenced by interest groups, resulting in distortions</td>
<td>Increase betterment values and influence developer and landowner behaviour</td>
<td>Proposed affordability strategies conflict with the interests of homeowners and developers: may be opposed and influenced by interest groups</td>
</tr>
</tbody>
</table>

This section now considers the potential links between consolidation and affordability from an endogenous perspective on housing markets and planning. It focuses on the interests of property owner groups, and assumes that planning will to some extent be influenced by these groups and by their preferences for particular planning
interventions that work in their favour. Key differences between the planning or welfare economics view, the critical Coasian view, and the endogenous view are summarised at Table 3.1, above. Each entails different views of the relationship between urban consolidation policies and the housing markets, the effects of consolidation on housing supply, the effects of growth boundaries on land values, and the effects of consolidation on housing affordability.

3.4.1 The alternative: traditional suburban zoning

In examining urban consolidation policies and their implications for property owners, it is necessary to consider the alternatives to these policies. Situations of ‘no planning’ are, in Australia and similar countries, only theoretical (Gurran 2008; Jones and Watkins 2009). Certain basic aspects of land use control – externality control through the separation of incompatible land uses – have been established and ingrained as a part of modern life over the course of a century (Jones and Watkins 2009 p12). In practice, urban consolidation policies are considered in comparison to traditional suburban zoning and to equivalent private covenants.

Urban consolidation policies originally sought to increase housing densities, in part because of a critical view of traditional suburban housing and its exclusionary impacts. Traditional zoning typically sets minimum lot sizes, amenity or urban character standards, minimum set backs, restrictions on higher-density housing forms, and (in the USA) restrictions on rental housing and on the nature of occupancy (such as the number of unrelated individuals). Nelson, Pendall et al. (2004) argue that although newer urban consolidation measures may have unintentional impacts on housing affordability, the intent of traditional suburban planning controls has always been specifically premised on protecting property values.

Studies of traditional zoning and housing prices (Pendall 2000; Clingermayer 2004; Fischel 2004; Ihlanfeldt 2004; Lynch and Rasmussen 2004; McDonald and McMillen 2004; Fischel 2005) often focus on the motivations for residents and local officials in adopting suburban zoning controls. These were reviewed in the previous chapter. One of the motivations for homeowners to influence the planning system may be the exclusion of lower-cost housing and its occupants. Green suggests that “when a community puts in place zoning that prevents the construction of smaller, denser housing, it prevents low-income households from consuming housing” (Green 1999 p146). The exclusionary effects of suburban zoning may be considered economically efficient or rational, even if socially undesirable (Fischel 1990 p146; Ihlanfeldt 2004), in
the sense that they accurately represent the interests of homeowners (Knaap 1998 p274).

The use of exclusionary zoning regulations traces back to the *Euclid* decision in 1926, which gave a suburban community the right to refuse an apartment development. The history of planning has also seen many areas fiercely resist the introduction of any public housing (von Hoffman 2009). On account of their relationship to housing prices, zoning regulations have been the subject of legal challenges and ‘anti-snob’ laws. Legislation such as the *Fair Share* (New Jersey) and *Anti-Snob* (Massachusetts) acts arose in the 1970s and 1980s in response to the effects of traditional suburban zoning on housing prices. The state of New Jersey’s *Fair Share Housing Act* was established by judicial precedent through the Mount Laurel (1975 and 1983) cases. The National Association for the Advancement of Colored People (NAACP) filed the case on civil rights grounds (Haar 1996). These acts encourage or remove policy barriers to a greater mix of housing types and tenures than under typical suburban zoning (Department of Housing and Urban Development Office of Policy Development and Research 1991; Department of Housing and Urban Development Office of Policy Development and Research 2004). These cases highlight that urban consolidation is an alternative to an underlying status quo of suburban zoning, which is typically supported by homeowners and developers but has potentially negative consequences for housing affordability. Comparable reforms prompted urban consolidation policies in Melbourne; this history is explored further in the next chapter.

### 3.4.2 Urban consolidation and property owners

A key implication for the potential links between urban consolidation and housing affordability is the observed difficulty of enforcing consolidation ideas. In both the United States (Voith and Crawford 2004; Ben-Zadok 2005; Downs 2005; Filion and McSpurren 2007; Scott 2007) and Australia (Bounds 1993; Lewis 1999; Searle 2004; Searle 2005; Randolph 2006; Searle 2007), there is a gap between the theory of urban consolidation and its implementation. Despite a strong (but not uncontested) planning consensus on the pursuit of urban consolidation or ‘smart growth’ ideas, the level of implementation has been mixed (Yates 2001; Downs 2005; Filion and McSpurren 2007; Gurran and Phibbs 2008; O’Connell 2009). Viewed endogenously, the impacts of urban consolidation for existing property owners are one explanation. Urban consolidation represents a redistribution of property rights, in that “planning allocates and reallocates property rights, and these decisions have real distributional consequences” (Jacobs and Paulsen 2009 p140). The acceptance of
different facets of smart growth may depend on the impacts on existing property owners (Downs 2005; O'Connell 2008; O'Connell 2009).

Downs (2005) discusses the gap between smart growth goals and the implementation of smart growth objectives, arguing that “smart growth is more talked about than actually carried out in practice” (p367). He found that only the least controversial aspects of smart growth tended to be enforced. In Australia, Gurran and Phibbs (2008) found that sustainability ideals in planning only translated comparatively rarely into specific regulations. Urban consolidation policies may not be strictly implemented and will be under pressure to change, in part because of their impacts on the property interests of certain groups. Housing stakeholders have typically benefited from the pre-existing systems of traditional suburban zoning controls. Historical evidence suggests that there is a demand from homeowners for these controls, and that an established model of housing production is structured around this. There are winners and losers from urban consolidation. It “greatly alters the potential benefit structure currently embodied in the status quo, turning some now likely future gainers into losers, and vice versa” (Downs 2005 p369). This perspective provides one means of understanding the conflicts around urban consolidation policies, and the selective nature of their implementation:

Smart growth policies will affect families, business, developers, and politicians. Smart growth policies will never create ‘win-win’ situations, because they lower some prices and raise others. In addition, because they represent a significant departure from past practices, these policies will frustrate the expectations of investors who did not anticipate them (Voith and Crawford 2004 p98)

The implications of common aspects of urban containment policies for different property owner groups, and two non-owner or ‘outsider’ groups for comparison, are summarised at Table 3.2. The owner groups are homeowners, landowners and housing developers. The policy aspects shown are containment at the fringe (UGBs), higher-density development of existing areas, inclusionary zoning and betterment taxes. From the table it is apparent that urban consolidation is neither wholly negative nor wholly positive in its impacts on any one group. Likewise, none of the policy aspects are entirely positive or negative for all groups.
Table 3.2 Urban consolidation policies: likely implications for property interest groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Aspect of urban consolidation policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Containment at the fringe (UGBs)</td>
</tr>
<tr>
<td>Existing homeowners</td>
<td>✓ Increased demand and scarcity result in increased value</td>
</tr>
<tr>
<td>Landowners: inside the UGB</td>
<td>✓ Increased betterment values</td>
</tr>
<tr>
<td>Landowners: outside the UGB</td>
<td>x Loss of betterment values</td>
</tr>
<tr>
<td>Housing developers</td>
<td>x Reduced capacity for supply, higher investment cost</td>
</tr>
<tr>
<td>Outsiders: prospective buyers</td>
<td>x Reduced opportunities to buy</td>
</tr>
<tr>
<td>Outsiders: renters</td>
<td>✓ / x Increased services, but also increased rents</td>
</tr>
</tbody>
</table>

Urban consolidation presents both potential positive and negative externality effects for homeowners. Existing homeowners benefit from containment policies at the urban fringe due to the increased demand for their housing or its increased scarcity value. They also benefit from the increased services and amenities directed to existing areas. Existing homeowners will, however, tend to simultaneously favour low-density zoning and exclusionary zoning in their own ‘backyard’, or suburb. The pressure from urban consolidation strategies to accommodate higher-density housing and, potentially, lower-cost housing and lower-income households, is likely to be perceived as a negative (Voith and Crawford 2004). Densification policies threaten the ‘insurance’ effect of traditional zoning, as they do not protect existing owners from threats to the value of their homes due to land use developments with (real or perceived) negative externalities. Apartment buildings were the foundation of the *Euclid v. Ambler* (1926) decision that provided the legal basis for zoning.

Inclusionary zoning policies are also likely to be a negative for existing homeowners, as they may result in lower-income residents living in areas where they would otherwise be excluded by housing prices (Downs 2005 p370). Although openly exclusionary sentiments are unlikely to be expressed in public debates, the evidence demonstrates
that neighbourhood composition is a major factor in the price paid for housing. Historically, the placement of social housing has been highly controversial (von Hoffman 2009). This divisive aspect of the relationships between communities and planning continues to be apparent in Melbourne, with recent fierce opposition to new public housing (Dowling 2009).

The position of housing developers regarding urban consolidation policies is quite different. Table 3.2 suggests that the interests of housing developers tend to be closely aligned with one of the ‘outsider’ groups, prospective home purchasers. Housing developers stand to gain from higher-density development because of the increased capacity for supply in existing areas. By comparison, they stand to lose from containment policies that restrict supply on the fringe. This is particularly the case in Australia, where large parts of the building industry are dependent on greenfield land and established low-density construction methods (Coiacetto 2006; Coiacetto 2007).

There are other, less immediate, impacts from urban consolidation on housing developers. The increased value of betterment resulting from urban consolidation increases the ‘premium-seeking investment’ of housing developers in seeking planning permission. The subsequent delays may be longer, but the planning gains higher. Conflicts around housing proposals often translate to time and supply inelasticities (Ball, Allmendinger et al. 2008). Downs identifies what he terms “innovative real estate developers”, who seek planning permission for higher-density projects. These developers are typically larger firms that can absorb delays and risks, and field the associated barriers (p368). These findings are mirrored in Coiacetto (2006), and in a recent Australian study that identified policy uncertainty and flexibility as a key influence on the structure of the housing development industry in Australia (Gurran, Ruming et al. 2009). Housing developers in Australia have been particularly critical of what they claim is the complexity and lack of transparency in urban development charges (Housing Industry Association 2008; Urban Development Institute of Australia 2009). Evans (2004) discusses the effort, including the appointment of consultants and lawyers, invested by firms in capturing the increase in value offered by planning permission:

The differences in land values induce owners, or would-be owners, either to seek to obtain planning permission for some alternative use, or to lobby to seek to change the use for which their land is zoned, depending on the planning system in force ... Planning permission ... becomes a valuable commodity which people are willing to spend money and resources to obtain (Evans 2004 p89).
Housing developers benefit from densification policies opening up existing urban areas for more intensive development. They seem, however, still likely to market new housing using private tools essentially similar to zoning. Private planning equivalents – covenants – modelled on suburban zoning (Berry 2001; Clinch, O'Neill et al. 2008; Buitelaar 2009) have seen a resurgence in popularity in response to more reformist planning models, indicating demand for more intentionally exclusionary forms of planning:

Now, developers and homeowners are using restrictive covenants to supplement public zoning, presumably because zoning offers inadequate protection of property values for those who can afford to live in these new communities (Jacobs and Paulsen 2009 p140).

For landowners on or near the urban fringe, the key implication of urban consolidation is that it reduces the potential to harness increases in land values resulting from metropolitan growth. Landowners are disadvantaged by containment policies at the urban fringe if their land is outside the boundary. There are also ‘winners’. Landowners inside a UGB will benefit from any increased development value of their land – relative to land outside the UGB – that results from the policy. If a containment policy demarcates urban and non-urban values (because of demand or supply, depending on perspective), then this also gives incentives to landowners outside the boundary to alter the policy. Where there is difficulty and time required to obtain planning permission for development, the gains in value from planning permission are higher.

Urban consolidation policies represent a change in expectations for landowners. On the urban fringe, rural landowners and developers are likely have an expectation of urban expansion and betterment. In Melbourne, regulation on the urban fringe in the post-war planning era functioned as a kind of marketing tool or speculator’s guide, providing certainty to consumers and developers but essentially acting as a laissez-faire, homeownership-led approach to development (Sandercock 1975). In comparison, growth curtailment reduces the potential for owners of land on or near the fringe to harness increases in land value. The selective adoption of urban consolidation controls and the policy disputes surrounding them may be attributable to contexts where gradual urban expansion has been the status quo (Voith and Crawford 2004).

In considering landowners on the urban fringe, a distinction can be made between interests in the planning system based on development gain, and the interests of rural owner-occupiers in low-density suburban and rural communities. The strong influence of rural home owners and pressure groups on planning policy has been documented in the UK (Duncan and Duncan 2001; Woods 2005) and the USA (Green 1999; Woods...
This influence is greater where there are valuable or “aestheticised” landscapes. Restrictive planning controls in this context are of obvious benefit to existing owners as they protect desirable landscapes near to urban areas. Rural communities in high-demand areas often mobilise to prevent overdevelopment, as defined by successive waves of new arrivals, seeking to reduce the amount of new housing. Duncan and Duncan (2001) characterise this type of control of valuable rural landscapes as being a reflection of power.

Both landowners and developers have a logical interest in maximising betterment – the financial gains from a favourable result in the planning system. The taxation of betterment is disadvantageous for landowners, developers and prospective homebuyers. The cost of betterment tax is, however, relative to the potential benefits of planning permission, and to the likelihood of passing the costs on to others. The impacts of betterment taxes – who they will actually be absorbed by – have been debated (Oxley 2004). For housing developers, planning permission is of value and compliance costs may be passed on directly to housing consumers or back to landowners. Thus betterment taxes are undesirable for developers but not, potentially, as undesirable as they are likely to be for the vendors of undeveloped land or for homebuyers. To developers, inclusionary zoning policies are also a form of tax likely to reduce profits and requiring greater regulatory conformance. Theories of premium-seeking investment suggest that housing developers will seek to either build more market housing to offset the cost of the betterment tax, or will charge more for the market housing.

3.4.3 Urban consolidation and planning conflict

Attempts to change planning systems are potentially limited by endogenous effects in the form of pressure from interest groups (Evans 2003; Schill 2005). Studies suggest that economically motivated reforms are often appropriated (Evans 2004) or are actively deflected (Schill 2005), and that resistance from existing homeowners (including the NIMBY syndrome) is part of this. An endogenous perspective expects that alternative means of influence by interest groups (objection, litigation, delay) will be significant factors in planning processes (Rowe 1998; Clingermayer 2004; Downs 2005; Fischel 2005; Schill 2005; Searle 2005; Willey 2006; Ball, Allmendinger et al. 2008; O’Connell 2009). Attempts to reform planning systems to reduce either their inefficiencies or their exclusionary effects can mirror their underlying tensions. Schill (2005), for example, found property interests to be the main barrier to the City of New York’s attempts to remove regulatory barriers to affordable housing: “zoning reform ran
afoul of the powerful political forces that have an interest in the status quo" (p19). Von Hoffman (2009) argues that local opposition has been an important barrier to using planning to achieve reformist housing goals:

Local property owners, business leaders, and political officials have been able to exploit the framework of the American political system to appropriate or defeat idealistic housing and planning schemes ... the weak point in carrying out progressive goals has been the inability to overcome local opposition (p241).

Evans (Evans 2003; Evans 2004) argues that regulatory planning, in general, creates a somewhat perverse situation where planners are reliant upon the private sector to implement plans. He argues that this creates an inherently negative perspective on development: undesirable outcomes can be vetoed by the system, but the desired outcome cannot be created. In negative planning there exists a disjuncture between planning ideals and plans, and their implementation. Regulatory planning is also only enforceable where growth exists (Green 1999).

During the Thatcher era in the UK, neoliberal reforms extended to attempts to deregulate the planning system. Hall (2002) recalls that the vision of free housing market construction did not unfold as smoothly as hoped, particularly in the high-demand areas of the south-east. Despite a broad government commitment to free market principles, in practice the attempts to deregulate the planning system proved unpopular. Unregulated housing markets presented negative implications for the main conservative constituents, rural landowners. Likewise, the Massachusetts Comprehensive Permit Act (Chapter 40B) has experienced consistent efforts at delay and litigation over its history. Communities and local authorities have challenged the law, sometimes on fiscal grounds (Citizens' Housing and Planning Association 2003; Flint 2004; McKim 2009). The implication of ‘anti-snob’ policies is that the preferences of homeowners may be inconsistent with the demand for new housing supply, particularly of higher-density housing or affordable housing. Conflicts around the implementation of policy reforms can bring this relationship into focus.

Urban containment has its own history of conflict. Hall (1974), in describing the complex stouthes over England’s containment policies from the 1950s to the 1970s, noted that in analysing these conflicts he found himself using “terminology appropriate to boxing or all-in wrestling”, and that he was “afraid that more than once in our chronologies that seemed particularly appropriate” (p394). The story of the containment of urban England stands, in some ways, in contrast to Australian cities. Although the subject of constant negotiation and pressure, London’s green belt has ‘held’ since the post-war period. An important aspect to the understanding of this history is that
conservative rural landowners – and their political support for urban consolidation on aesthetic grounds – have been central to the maintenance of the green belt (Hall 1973; Evans 2003). Evans (1991) argues that the green belts of the UK have been largely influenced by powerful rural landowner interest groups, such as the Council for the Protection of Rural England. Symbolically, the landowners’ magazine *Country Life* campaigned for the retention of green belts through the 1980s. Although they were some of the Conservative government’s more important constituents, on planning issues the *Country Life* readership butted heads with the free market principles of the Thatcher government. For example, a 1986 article warned of speculative development plans for the green belt:

> Developers wheel like vultures in the air above the M25. They must be resolutely shot down. I am optimistic. Those who live in the Green Belt, the vast majority of them, want it kept green. The Green Belt is part of the heartland of solid Conservative seats. It would be electoral suicide for a Conservative government to be seen to connive at the urbanisation of London’s Green Belt (Winter 1986 pp1510-1511).

Earlier, Hall (1974) gave a critical account of the net effects of containment policies in England, emphasising their benefits for rural landowners:

> In many ways, the effect of planning has been to give more to those that already had most, while taking away from the poor what little they had. The biggest gains have gone to those with the largest stake in the property market, whether they were property developers in the city centres, or rural property owners … One group that has gained a great deal is the whole group of what Stanley Vince once called the adventitious rural population – those who treat the countryside as a way of life. The planning system on the whole has guaranteed that this way of life will not be rudely distorted by alien intrusions from the town (Hall 1974 p407).

This account of planning is similar to critical accounts in Australia linking urban consolidation to reduced affordable housing opportunities, such as Alan Moran’s publication *The Tragedy of Planning* (Moran 2006). Both critical views of urban containment present a planning ‘noir’ or dark side to planning processes, and the groups overlooked by them. Hall’s account emphasises the role of powerful interest groups in determining planning policies. The recent Australian discourse is instead based on criticism of planners and planning ideas (Gleeson 2008). Bunker et al. (Bunker et al., 2002; Bunker et al., 2005) note with reference to Australian city planning as a whole that “the reaction and response of local government authorities and communities [to urban consolidation] has been mixed and increasingly hostile”. Searle (2007) reviewed Sydney’s experience and “the way in which planning power, political power and market power have been used to make urban consolidation happen in the
face of community opposition”. Searle highlights that consolidation has, from the outset, been opposed at the local level in Australian cities, including resistance by local government and resident objection.

The implementation of urban consolidation in Australian cities has also been characterised by political conflict, but with owner groups and developers aligned against different aspects of containment and densification (Bunker, Gleeson et al. 2002; Bunker, Holloway et al. 2005; Randolph 2006). These situations are made distinctive by the differing interests of property owners and the policy outcomes. Interest groups and the surrounding conflict, on the other hand, seem to be the constant factors in urban consolidation.

3.5 Implications

Applying an endogenous perspective to links between urban consolidation and housing affordability has several implications. Firstly, urban consolidation is not usually introduced as an alternative to ‘no planning’ but to traditional suburban zoning – a form of land use control that is historically preferred by homeowners. Zoning has tended to be exclusionary, seeking to stabilise property values, and often to purposefully exclude smaller, lower-cost or dedicated affordable housing. Urban consolidation policies represent a redistribution of this system. These redistributions and their impacts on different property owners are sources of conflict in planning. The account of urban containment in the UK differs from US and Australian studies. From an endogenous perspective, a key commonality is conflict and political pressure, although the contexts and outcomes differ.

Conflict with and resistance from property owner groups may mean that the housing affordability goals of urban containment are not met. Although in theory urban consolidation plans seek to redirect growth to existing urban areas, there may in reality be resistance from existing homeowners due to real or perceived negative externalities (Voith and Crawford 2004). On the urban fringe, the increased value of betterment in an urban consolidation increases the ‘premium-seeking investment’ of housing developers and landowners seeking planning permission. Urban consolidation hinges on redistributing housing growth and on leveraging affordable housing. Conflict with property owner groups may mean in practice that urban consolidation strategies can have unintended effects on housing supply, or a limited capacity to enact housing affordability goals (Carlson and Mathur 2004; Nelson, Pendall et al. 2004; Whitehead 2007). Crucially, higher-density housing and inclusionary zoning are the key strategies
proposed by urban consolidation to offset any housing affordability impacts of containment. The fact that they often conflict with the interests of homeowners is important to understanding urban consolidation policies and their potential housing market impacts.

Having examined the existing theory and evidence to establish potential links between urban consolidation, housing affordability and property owners, the thesis will now turn to the first of the empirical investigations.
Chapter 4

Booms and Barriers: Urban Consolidation and the Housing Affordability Agenda in Australia

The preceding two chapters set out ways in which policy debates about urban consolidation and housing affordability often stem from different economic perspectives on housing markets and planning. Depending on the perspective applied, urban consolidation measures can be viewed as either a move towards or a hindrance to housing affordability (Carlson and Mathur 2004). Housing affordability has been both part of the reasoning behind urban consolidation, and of the criticisms made of it. However, the endogenous view of planning expects planning systems to be influenced by groups with an existing stake in the housing market. As a consequence, I argue, in practice property owner groups are likely to contest and shape the ways in which consolidation policies are implemented. This process of interaction and conflict has implications both for planning and for housing affordability.

The overarching research question of this thesis is are the housing market interests of property owners, as ‘insiders’, reflected in activities that influence urban consolidation policies in Melbourne? This chapter applies the theoretical perspectives developed in the preceding chapters to an examination of the public discourse around planning, urban consolidation and housing affordability in Melbourne. It seeks to systematically document key patterns in the local ‘polemic’ of planning and housing debates, focusing on two distinct periods of housing affordability crisis and the perceived roles of urban consolidation within these. The goal is to identify, on the one hand, when and how planning and urban consolidation have been a part of the housing affordability agenda in Australia. Equally, the chapter addresses the reverse question, of how and why housing affordability became a part of the planning agenda. The associated conflicts around urban consolidation policies in Melbourne, and the role of housing interest groups in these debates, are reviewed.
The analysis is based on a review of historical planning documents and on a content analysis of sampled public documents over the period of two distinct housing affordability crises between 1989 and 2008. The economic characteristics of these crises are documented and used to shed light on possible rationales for planning debates. A mix of historical discourse analysis and more systematic content analysis is applied.

The research questions addressed in this chapter are as follows:

- What have been the key policy changes and conflicts concerning links between planning, urban consolidation and housing affordability in Australia? What has been the involvement of property owner groups (housing owners, housing developers) in these debates?
- How, when and why has housing affordability featured on the planning agenda in Melbourne?
- How, when and why did planning, and urban consolidation in particular, become part of the housing affordability agenda in Australia?

4.1 Method

The chapter is based on two basic methods. The first half of the chapter is based on an historical discourse analysis of policy documents. The second half applies more systematic content analysis methods. The chapter begins with an historical review of planning strategy documents in Melbourne. Over time, these planning strategy documents have been known variously as plans, schemes and strategies. Five main documents are reviewed, beginning with the 1929 Plan of General Development, noting references to housing and to different aspects of urban consolidation policy. The origins of restrictive zoning and building codes – and subsequently, of reform programs to limit the use of these same tools – are considered. The conflicts around urban consolidation are outlined. These include resident ‘backlash’ against reforms to allow higher-density housing in suburban areas. Likewise, the chapter reviews the origins of Melbourne’s Urban Growth Boundary (UGB), and the conflicts centred on housing industry groups and the boundary’s claimed housing affordability impacts.

The next section sets the scene for a content analysis of public links made between housing affordability and planning during a key study period covering two decades, from 1987 to 2009. This period purposefully takes in two distinct housing affordability crisis periods, as well as a period of recession. A basic ‘anatomy’ of each housing crisis is set out first. These profiles of housing crises draw on a range of economic and
housing market indicators, including population growth rates, interest rates, housing construction, housing component costs and housing prices.

The chapter then looks in detail at Melbourne’s planning strategies over the period 1987–2008. It uses content analysis methods to document the profile of housing affordability issues across these crises, and the role of urban consolidation policies within the debates. Patterns of debate are interpreted with reference to the ‘anatomy’ of the housing market at different points. The content analysis also looks at samples of Australian newspapers, academic journals and housing policies. Mentions of housing affordability, planning and urban consolidation are coded and compared over the two crisis periods. For each type of material a slightly different sample frame, unit of analysis and coding method is applied. As well as considering trends over time in the inclusion of land use planning within housing affordability debates in Australia, the chapter reviews the changing representation of different views of urban consolidation.

Although the content analysis methods applied are broadly similar to a standard literature review, the difference lies in content analysis methods, which consist of a sample frame, a unit of analysis and a coding method. Particularly important to the content analysis approach is that the sources are compared in the same way over time. Content analysis methodologies emphasise that the unit of analysis and the sample frame should be clearly specified, and that the sample and the coding technique should be replicable and transparent (Krippendorf 2004). The other key consideration in content analysis is the need to be realistic about resources and coverage when reporting the findings (Franzosi 2010). Content analysis is one way of providing a consistent insight into what might be considered the public agenda of different interest groups at different times.

4.2 Housing affordability and urban consolidation on the planning agenda in Melbourne

4.2.1 Zoning and lot sizes

The 1929 Plan for General Development (Metropolitan Town Planning Commission 1929) was Melbourne’s (and Australia’s) first comprehensive plan, albeit one never officially adopted (Freestone and Grubb 1998). The plan provided a model for voluntary land use zoning by municipalities between 1929 and 1944. The 1929 plan acknowledged that the city already had some de facto planning controls. Early health reform and town planning regulations in Melbourne had set minimum house lot sizes
and allowed for the separation of residential land uses. Regulations were developed to control the minimum size (and thus set a maximum density) of housing, and were initially prompted by social and health reforms focusing on slum housing areas. These included the Minimum Allotment, Anti-Slum and Housing Crusade Committee of 1914, which originated with reformist community groups and called for minimum dwelling allotment sizes.

In more affluent residential areas, early attempts had been made to set minimum lot sizes and other restrictions keeping housing in new subdivisions to an exclusive standard. These occurred through local by-laws or, more commonly, through the use of private covenants. The early subdivision of Moreland in 1882 by Montague Dare was maintained by a covenant “banning shops, hotels, or low-value housing” (costing less than £400) (Brown-May and Swain 2005). The 1915 Local Government Act established powers of basic building regulation for municipalities. An amendment to this act, the Local Government Amending Act of 1921, effectively gave municipalities planning and zoning powers. Municipalities were given the capacity to declare residential areas and to set minimum sizes for house allotments.

The 1929 plan was predominantly concerned with traffic and transport, but contained two housing-related sections. Like much early planning regulation, the plan pursued concurrent goals both of social reform and the protection of property values. Social reform goals sought the abolition of small allotments and slums, and proposed affordable housing models. Property values were also important to Melbourne’s early proponents of planning. The 1929 plan proposed three classes of residential development zone, each with corresponding minimum lot sizes (Metropolitan Town Planning Commission 1929 pp169-172). Drawing on the American zoning on which the plan was modelled, the rationale for zoning was the stabilisation of property values:

A city-wide scheme of zoning would have a very beneficial effect by stabilising the value of property. Each particular zone could be located, not only in regard to the necessary amenities, but its area would be regulated in accordance with the probable future demand for space within the district. (Metropolitan Town Planning Commission 1929 p155)

Melbourne’s 1929 plan was, however, followed immediately by the Great Depression. Planning and zoning dropped in political priority. Municipalities continued to voluntarily pursue restrictions on housing size and separation of land uses via the Local Government Act. As at 1929, 27 of 34 councils had implemented lot size regulations. Interest in social reform and in ‘substandard’ housing continued after the plan, with the
1936 Housing Investigation and Slum Abolition Board pointing to areas of overcrowding and poor ventilation.

The next plan for Melbourne came in 1954, this time as a compulsorily enforced city plan facilitated by the *Town and Country Planning Act* (1944). This scheme (Melbourne and Metropolitan Board of Works 1956) was accompanied by a report of surveys and analysis. The 1954 plan listed “sprawling low density development” as its first problem, and proposed “limitation of the urban area” as its primary planning response (MMBW 1956). At the same time, the 1954 plan also expressed a reluctance to use regulatory mechanisms to directly curb urban expansion or to force the use of higher-density housing. The scheme expressed scepticism about attempting to change housing preferences. Regarding the Melbourne preference for low-density detached housing, the scheme (somewhat grudgingly) stated that:

> It must be accepted that this is the general desire here. Any attempt to impose some other form of living on people, however good the intentions and however sound the reasons, will certainly meet with failure. It is certain that, over the period for which this planning scheme has been designed, the predominant housing will be the single family type (Melbourne and Metropolitan Board of Works 1956 p34).

Planning became closely linked to suburban models of living in this post-war period (Hall 2006; von Hoffman 2009). It both facilitated suburban development, through zoning, and sought to control its effects (Alexander 2000). Zoning controls that supported the orderly and efficient conversion of rural land to urban land; protected low-density, owner-occupied housing; and provided separate areas for employment connected by car-based transport, were predominant (Alexander 1986). Efficiency was a key word in Melbourne’s 1954 plan, which sought “to find out what is efficient and what is not, to show how faults can be remedied and the city made more pleasant, more convenient and more efficient” (Melbourne and Metropolitan Board of Works 1956). In the post-war period, despite concerns about sprawl, plans for the deliberate curtailment of outward expansion of the city were successively relaxed (Sandercock 1975 pp149-150).

The 1954 scheme discussed housing conditions in inner areas at some length, focusing on older nineteenth-century housing that had been built at higher densities than contemporary building standards would allow. The 1954 Metropolitan Planning Scheme includes a chapter on “housing, redevelopment and land subdivision”. Within this is a section on “The Problem of the Inner Suburban Areas”, in which problematic “substandard” older housing is considered. These areas were considered planning issues because of their ages and densities:
Originally developed as residential areas in accordance with the standards of the middle of last century, the inner suburbs are characterised by housing which has reached or is rapidly approaching the end of its useful life. Many dwellings are built on allotments which in size fall far short of present-day minimum standards. (Melbourne and Metropolitan Board of Works 1956 p37)

The 1954 scheme for Melbourne engaged with the idea of affordable housing, suggesting the need for a mix of dwelling types and densities, according to ability to pay (Melbourne and Metropolitan Board of Works 1956 p38). However, the scheme and the Melbourne and Metropolitan Board of Works (MMBW) were not directly responsible for housing (p33). While the scheme cited a general public preference for low-density suburban housing, it was also critical of the effects of this preference. While not precluding a higher proportion of flats and units (p34), the plan stressed a need to provide housing in forms responsive to apparent market demand:

> Whatever type of housing is provided, whether by private individuals or by public housing authorities, whether for new settlements or re-development schemes, it is important that it should appeal to the public taste. If it does not, it will ultimately become unpopular, its value, and the rental which it can command will fall, its maintenance will tend to be neglected, the type of occupant will become less desirable, and as the properties become older, the area will decline to slum conditions (Melbourne and Metropolitan Board of Works 1956 p34).

Building codes work alongside or as part of planning schemes and historically have been an important regulation of housing density in Melbourne. The 1954 scheme includes as an addendum a list of the Melbourne municipalities and their implementation of the Uniform Building Regulations. The Uniform Building Regulations were in place from 1944 and were updated in 1954, 1969 and 1974. The regulations prescribed five “columns” of minimum allotment sizes and corresponding minimum setbacks and frontages for housing. It is notable that, as with the 1954 scheme, building regulations were not uniformly applied across the city. For example, Ringwood, Camberwell, Doncaster, Templestowe and Mulgrave had minimum residential lot sizes 2.4 times as large (7800 square feet) as inner municipalities had. These included Fitzroy, Brunswick and Port Melbourne (3300 square feet).

The fact that these important controls on density operated as council technicalities is consistent with the critical view that planning in Australia came to be considered “a fancy name for subdivision”, with Hutchings claiming that “it is not surprising that local government planning took decades to rise above being a minor municipal technicality”
These regulations could also be construed as exclusionary in that they set minimum housing sizes and standards, and were differentially applied by local governments.

4.2.2 Early growth management

The 1967 metropolitan strategy the *Future Growth of Melbourne* (Melbourne and Metropolitan Board of Works 1967) was formulated in response to population growth, and focused on proposing and considering different options for accommodating growth. It was this plan that led to a formalisation of the ‘growth corridor’ model of development for Melbourne. Of the five growth options identified, this plan emphasised growth corridors as “the most reasonable and practicable solution for outward growth” (p3). The plan argued that two types of growth – redevelopment (large scale urban renewal projects in the problematic inner suburbs) and new suburban development on greenfield land – should be provided for (p11). Aspects of the growth corridor option have elements of urban consolidation policies, with higher-density housing proposed around growth centres and transport:

This pattern is one whereby a major part of outward growth is encouraged to occur in corridors which are based on public transport and freeway systems, with wedges of open countryside … Along the transport routes, growth centres … these centres would be surrounded by areas of relatively high density residential accommodation (Melbourne and Metropolitan Board of Works 1971 p16).

As in the 1967 plan, housing in the inner suburbs was still considered problematic, described as “very old and largely worn-out … frequently inter-mixed with industrial and other forms of development” (Melbourne and Metropolitan Board of Works 1967 p6-7). Indicating a strong demand for suburban and fringe locations with high landscape values, the plan referred to the influence of the higher-income population whose demand for housing caused an “imbalanced distribution of population” – meaning population losses in the inner city (p5). The plan sought to redirect demand to inner areas and to the northern and western suburbs through the provision of infrastructure and amenities. Neither the 1967 nor 1971 (Melbourne and Metropolitan Board of Works 1971) plans discuss housing at length, however, except in the context of growth management and the discussion of patterns of housing demand. Both plans are largely concerned with infrastructure provision, reflecting the MMBW’s responsibilities (Melbourne and Metropolitan Board of Works 1967 p21-22).
The 1967 plan discussed the recent trend for a greater construction of walk-up flats in the middle suburbs of Melbourne. The location of flats at that time was largely determined by the differential use of municipal flat codes and building standards. Although considered suitable for certain demographic groups, flats (and other higher-density housing types) were not cited as important to the overall plan for Melbourne. Both the 1967 and 1971 planning strategies were again sceptical about the idea of directing increasing shares of housing demand into higher-density housing:

Although modern flats are attracting considerable numbers of people suited to apartment living this has not been the case with young families. For the young families detached modern houses still appear to be the most favoured form of accommodation … Since this form of living has some social status and as it affords children and adults a good environment with all the features traditionally regarded as important to the Australian life it seems unlikely that any significant change will occur in the preference for housing with these characteristics (Melbourne and Metropolitan Board of Works 1971 p25).

A de facto growth boundary was introduced in Melbourne in the early 1970s as part of the 1971 Metropolitan Plan, Planning Policies for the Melbourne Metropolitan Region (Melbourne and Metropolitan Board of Works 1971). This plan formally implemented the growth corridor and green wedge development plan flagged in the 1967 plan, with designated fringe growth areas separated by non-urban land uses. A differentiation between urban and non-urban zones was introduced, which then functioned as a de facto limit to the urban area. Objectives of this model included the “orderly settlement of new population” and “the conservation of open areas of forest, bush and farmland”. Conservation areas of high amenity value were identified for protection with low-density living zones.

The 1971 plan is also notable for two shifts in theme. Firstly, the discussion of environmental concepts, particularly pollution control and environmental management, is somewhat different to preceding plans, which tended to discuss the environment only in terms of landscape. By this stage the inner suburbs of Melbourne were gentrifying (Logan 1986), with more affluent residents proving a sticking point for proposed urban renewal projects. The 1971 plan refers to “growing resistance to change in and around the CBD” (Melbourne and Metropolitan Board of Works 1971 p7). The involvement and participation of the public in the planning process was cited as a goal, which reflects the shift toward participatory and politicised planning at this time in Australia and in the UK (Evans 2004 p7).
4.2.3 Deregulation and densification

Although preceding plans had pursued forms of growth management – including the growth corridor concept – the 1980 plan for Melbourne was the first to explicitly state urban consolidation goals and presented an openly critical view of suburban expansion. The document describes itself as a strategy that:

represents a modest, but significant shift in emphasis in Melbourne's development – a shift necessitated by changes in social and economic conditions, but which nonetheless would lead to a more diverse, more interesting and more dynamic metropolis (Melbourne and Metropolitan Board of Works 1981 p1).

From the 1980s onwards, planning policies in Melbourne have typically emphasised increasing housing densities and mixed land uses (Bunker, Gleeson et al. 2002; Bunker, Holloway et al. 2005; Randolph 2006; Searle 2007). The objectives for housing in the 1980 plan included the facilitation of higher-density housing near activity centres and public transport and the accommodation of “a wider range of housing types and densities selectively throughout the metropolitan area” (Melbourne and Metropolitan Board of Works 1981 p47). This is consistent with the planning perspective of urban consolidation and housing affordability set out in Chapter 3, in which urban consolidation improves housing affordability by allowing increased housing supply and mix in existing areas. The 1980 plan was concerned with “the present lack of variety in housing types” and “the need to maintain housing opportunities for low-income households” (p46). Unlike the containment strategies in US cities of the time (Zorn, Hansen et al. 1986), inclusionary zoning strategies directly providing affordable housing were not introduced or discussed in this plan.

The 1980 plan was significant for setting an agenda to review and reduce the restrictiveness of planning and building controls that set minimum sizes for housing. This plan introduced dual-occupancy provisions: the allowance of two dwellings (a flat attached to a house) on one lot. This became ‘as of right’ in residential areas, subject to building code standards (p47). The use of minimum lot sizes under the building regulations was also identified for review, with these described as “unnecessarily restrictive”. The right of local councils to use flat codes to prevent higher-density housing in certain areas was rescinded. The goals of reducing restrictive and exclusionary planning tools used by local councils were linked to densification and to housing affordability outcomes. Such changes were prompted by an emergent critical view of restrictive planning and building codes, as presented in the 1978 Inquiry into
Housing Costs (Committee of Inquiry into Housing Costs 1978) and in the (housing industry funded) report A Mansion or No House (Patterson, Yencken et al. 1976). Concern had arisen that the use of building and flat codes by local councils was associated with housing affordability problems:

These provisions came to be criticised as excessive, and were blamed for increasing the cost of servicing allotments, raising the price of house sites, and thus excluding poorer home buyers from the market (Lewis 1999 p73).

The move toward densification was also prompted by infrastructure and funding issues. The 1979 MMBW report The Challenge of Change (Melbourne and Metropolitan Board of 1979) pointed to what it saw as the inefficiencies and costs of continued urban expansion. The 1980 metropolitan strategy reviewed low-density suburban expansion critically (Melbourne and Metropolitan Board of Works 1981 p2). The plan did not, however, propose particularly strict controls on the urban fringe, over and above the growth corridor policy. One of the points of reluctance about urban consolidation was that reduced suburban growth would potentially limit the filtering down of new housing, and thus threaten “low income housing opportunities in the inner areas” (p27). Subsequent metropolitan plans for Melbourne in 1987 (Shaping Melbourne’s Future) and 1992 (A Place to Live) were also modelled on urban consolidation ideas, and again proposed increased densities in existing areas. Although very critical of the impacts of sprawl, the plans did not state support for strictly curtailing suburban expansion. This was also linked to housing affordability:

The Government does not intend, however, to place artificial restraints on outward growth to achieve its objective of urban consolidation. Such a policy would distort the operation of the market and could lead to inflated land prices and disadvantage to house buyers at the urban fringe (State Government of Victoria 1987 p36).

In 1989, modified and less restrictive building regulations were introduced with the Residential Development Provisions, which later became the Victorian Code for Residential Development – Subdivision and Single Dwellings (1992), commonly known as VicCode 1. These regulations allowed for smaller lot sizes and other aspects of greater flexibility allowing the construction of medium- and high-density housing. The planning reforms meant that ‘flat codes’ specifically limiting the construction of high-density housing were replaced with design guides. The goals were greater efficiency, flexibility and greater freedom for private development industry. In 1995 the Good Design Guide for Medium Density Housing furthered the reforms, allowing medium-density housing in nearly all residential areas of Melbourne, with relatively few exceptions. Councils had less control over the location of higher-density housing.
Unlike other plans of the 1980s and 1990s, the 1995 strategy *Living Suburbs* (Victoria 1995) did not use the word ‘sprawl’ or give a critical view of suburban growth. This strategy was prepared in conditions of economic bust, with a main agenda of promoting economic recovery. It still discussed urban consolidation but did so primarily in terms of increasing housing choices in existing urban areas. Melbourne’s planning framework and local government structures were also overhauled during this period of conservative government under Jeff Kennett. The reforms saw local governments amalgamated and the Victoria Planning Provisions (VPPs) – standardised planning schemes and state-designated content – introduced. The number of medium- and higher-density housing developments increased, with political opposition from suburban residents (Lewis 1999). Lewis argues that although flats had been common in the 1960s (as indicated by discussions in the 1967 and 1971 planning schemes), the use of flat codes had meant that these were located mainly in less desirable areas (1999). The reason suburban backlash became such a prominent issue under the planning reforms of the 1990s was that the reforms allowed higher-density development in areas that otherwise would have employed exclusionary planning and building codes to prevent it. Lewis surmised the highly political situation in the late 1990s as follows:

The reason why the reaction against [multi-unit developments in the 1990s] has been stronger is that they are less concentrated in older, mixed use, inner areas, and instead are distributed widely throughout desirable suburbs, particularly in the south-east. In the 1960s the middle classes confronted flats in quite limited locations, notably South Yarra, but today no residential street is immune (Lewis 1999 p95).

Huxley (2002) reviewed the campaigns of the Save Our Suburbs group and around 70 other action groups protesting against ‘inappropriate development’ in middle-class suburbs. Huxley interprets the disturbance caused by densification policies as representing an upset to the established “hierarchy of power”, one in which the more affluent residential areas of Melbourne relied on planning controls for protection from new housing development:

A hitherto more or less comfortable but unspoken balance of power was destabilised: a broadly tripartite balance between middle-class residential interests in the preservation of neighbourhood character, heritage, amenity and property values; state government planning policies and land-use regulations; and the activities of the development industry (Huxley 2002 p5).
Huxley applies Pierre Bourdieu’s concepts of embedded economic, cultural, social and symbolic capital to interpret the arguments used by resident action groups. In arguing that “this suburb is of value to the whole of Melbourne” (a comment by resident action groups in response to accusations of NIMBY motivations), Huxley argues that resident groups sought to strategically align their localised interests in property values and amenities with the more persuasive ideals of cultural value and ‘distinction’ (Bourdieu 1984). This resistance to planning deregulation may also be interpreted in terms of what Clingermayer (2004) would call ‘happenstance’ (the unintentional alignment of altruistic goals with rent-seeking ones) or ‘heresthetics’ (intentional manipulation of the system). After the 1999 election, some aspects of the design guides for medium-density housing were tightened, with the new ResCode requiring the consideration of “neighbourhood character”. Backlash, however, has remained high profile, particularly with objections to specific major projects such as the Camberwell Station redevelopment, and against the intensifying development of the gentrifying northern suburbs (Woodcock, Dovey et al. 2009). Patterns of planning objection and dispute are explored empirically in Chapter 5.

This series of centralised reforms sought to override the local use of restrictive codes, and to allow the development of denser, more varied, and (it was initially thought) more affordable housing. The reforms are also considered part of a general pursuit of deregulation, prompted by neoliberal ideas of governance, which has instigated major changes to planning, particularly in the UK and Australia since the 1980s. Hall (2002) argues that in the UK during the 1980s, “the thrust of Thatcherite planning policy was strongly anti-interventionist” and “strongly emphasized the theme of unleashing private initiative” (Hall 2002 p152). In Australian cities, reforms to planning systems to “support standardised and simplified development assessment frameworks” (Hamnet 2000) were undertaken from the 1980s onwards. In some regards these reforms can be construed as being based on an in-principle negative view of planning regulations. Gleeson and Low (2000) argue that interest and political groups have used neoliberal ideas to pursue a systematic campaign against planning and land regulation as a whole, seeking to “reduce the regulatory and political scope of planning” (2000 p8).

Planning reforms have been supported, and in some cases designed by, the housing development industry. The preceding chapter suggested that housing developers benefit from the densification aspect of urban consolidation policies, but not from growth boundaries. Thus the concept of heresthetics and happenstance can be applied to the activities of the housing and development industry and the strategic alignment of their interests with the motherhood issue of housing affordability. This alignment has been used both for and against urban consolidation. The housing and development industry in Australia has argued for the densification of the existing urban area, and has
campaigned against a formal UGB (see below). The 1976 report *A Mansion or No House* (Patterson, Yencken et al. 1976), arguing for the allowance of higher housing densities, was commissioned by the Urban Development Institute of Australia. In a press release from 1996, “Victoria Slashes Planning Red Tape”, the Property Council of Australia (a representative group for major property owners and developers) interpreted the introduction of new reforms to the planning system as being something of their own design, as follows:

Rob Maclellan, Victorian Planning Minister, gave the property industry an early Christmas present announcing a bold package to streamline the State’s Planning System. By adopting 90 per cent of the proposals in the Property Council’s blueprint – *Planning for Change*, Victoria has secured its reputation as the nation’s leader in planning reform …. the package simplifies Victoria’s development control system [and] members can expect reduced approval times, lower holding costs and greater flexibility for developers” (Property Council of Australia 1996).

The success of such planning reforms in achieving their aims of reduced times and costs is disputed (Gleeson and Low 2000; Hamnet 2000; Buxton and Goodman 2003; Buxton, Goodman et al. 2003; Beer, Clower et al. 2005; Beer, Kearins et al. 2007). For planning practice in Australia, neoliberalism has clear legacies for the way plans are prepared and administered, with an emphasis on flexibility and fewer prescriptive regulations (Searle 2004; Goodman, Buxton et al. 2010). Although the housing and development industry has been instrumental in instigating the densification side of urban consolidation policies, it has also been highly instrumental (as is discussed below) in opposing the aspect of urban consolidation applicable to the urban fringe. These positions are consistent with the preceding analysis based on the endogenous theory of housing markets and planning – refer to Table 3.2.

### 4.2.4 The Urban Growth Boundary

In 2002, a formal Urban Growth Boundary (UGB) was introduced to Melbourne as part of the *Melbourne 2030* metropolitan planning strategy. *Melbourne 2030* was again based on urban consolidation principles, albeit phrased in vague terms seeking to "encourage" a more compact urban form, with new housing “directed” to major strategic sites and to areas with established services. One of the few prescriptive initiatives of *Melbourne 2030* was the introduction of the formal UGB. The UGB, as described in its supporting documentation, “follows the existing boundary defined by urban zones and growth strategies for the majority of the urban areas in metropolitan Melbourne”. Its purpose was to provide “a new and easily understood way of defining where urban
growth will be encouraged or not permitted” (Department of Sustainability and Environment 2002). The UGB was introduced in interim form in October 2002. Following a consultation period, the final boundary was legislated in November 2003. Unlike the previous system of non-urban zones, which could be amended through local amendments, shifting the UGB would require legislative change at the state level.

The new UGB policy provided for reviews of the boundary, based on the monitoring of future land supply. Accordingly, on the basis of land supply assessments the UGB was expanded in 2005, with additional land brought inside the UGB as part of the Plan for Melbourne’s Growth Areas (Department of Infrastructure 2005). The expansion was based on claimed linked to affordability concerns. Additional land brought inside the UGB was intended to provide “adequate availability of land [to] protect housing affordability” (Department of Infrastructure 2005). UGB expansions were designed to “release more land for future housing and employment growth for at least the next 25 years”. Thus despite its name, the boundary is modelled more on flexible growth management tools than on fixed growth controls.

After the UGB’s introduction, criticisms of the impact of planning (particularly urban consolidation) on land supply and housing affordability became very prominent in the public discourse. These pressures appear to have been reflected in further policy changes. A critical view of planning appears to have broadly informed policy initiatives such as the Housing Affordability Fund¹ and the National Housing Supply Council², in that each is tasked with addressing costs introduced by planning to the housing supply process. The Housing Affordability Fund addresses “holding costs incurred by developers as a result of long planning and approval waiting times” (Australian Government 2008). Most obviously, it is evident in the progressive expansions to Melbourne’s UGB citing housing affordability concerns.

In June 2008 all land inside the UGB and previously zoned as farming land was rezoned by the minister as a new ‘fast track’ zone, the Urban Growth Zone (UGZ). The goal of this change was to speed up the development of land for housing inside the UGB by removing the need for additional planning processes in “the transition of non-urban land to urban land”. The changes, which the government claimed would “cut

¹ The Housing Affordability Fund (HAF) is a 5 year, $450 million Australian Government program aiming to help reduce the cost of new homes for homebuyers. It targets holding costs incurred by developers as a result of planning and approval times; and infrastructure costs. Begun in 2008, as at mid 2011 there had been seventy five projects funded through the HAF.

² The National Housing Supply Council (NHSC) was established by the Australian Government in 2008 to monitor housing demand, supply and affordability in Australia, and to highlight current and potential gaps between housing supply and demand from households. The NHSC publishes an annual State of Supply Report on the adequacy of land supply and construction activity to meet demand and improve affordability.
thousands of dollars per block in development costs and significantly increase the supply of new housing” (The Age 2008), sought to “help bring forward the development of more than 90,000 new homes in the five growth areas” (Growth Areas Authority 2008).

In December 2008 the state government released an ‘update’ to the Melbourne 2030 strategy, titled Melbourne 2030: a planning update – Melbourne @ 5 Million. A key component of the update was a proposed further expansion of the UGB, with the document identifying “investigation areas” of around 50,000 hectares to be considered for inclusion within the new UGB. As with the 2005 expansions, the changes to the UGB were based on population projections and a stated “need to maintain an adequate and competitive land supply to meet future housing needs” (Department of Planning and Community Development 2008). The expansions were described by the planning minister as being needed “to ensure we have access to the necessary land to accommodate projected population growth and maintain housing affordability” (State Government of Victoria 2010). The Melbourne @ 5 Million update also proposed the introduction of a form of betterment tax, the Growth Areas Infrastructure Contribution (GAIC). After a set of modifications, the GAIC was passed in June 2010 and the UGB expansion was approved in July of the same year. Chapters 6 through 8 develop empirical analyses of key changes to UGB and GAIC policy.

A critical view of planning – and of urban consolidation in particular – seemed to gain greater prominence during the recent period of housing affordability crisis in Australia, characterised by a sustained surge in housing prices. Several high-profile critics in Australia blamed planning intervention in land and housing markets for the crisis itself, arguing that housing affordability was reduced by regulatory planning costs (Menzies Research Centre 2003; Productivity Commission 2004; Cox 2005; Moran 2005; Moran 2007). Urban consolidation policies at the urban fringe were singled out by critics, for example:

Australian urban areas have adopted so-called ‘smart growth’ or ‘urban consolidation’ policies that ration land … Rationing raises prices and rationing land raises house prices. Urban areas that have avoided land rationing policies have retained far more affordable housing (Cox 2005 p57).

This public link appeared at its most obvious during 2007 and 2008. Smith and Marden (2008) give an account of the Great Australian Dream campaign by lobby groups in Australia at this time. In this campaign, claims that planning controls were affecting the affordability of access to first homeownership were prominent in the media. Housing industry peak body the Housing Industry Association (HIA), for example, formed a
Housing Affordability Taskforce focused on publicising the supply impacts of planning regulations (Housing Industry Association 2007). It also established a Taskforce to Confront the Housing Affordability Crisis, aiming “to work with governments at all levels to find the answers and stop the avalanche of regulation that has eroded housing affordability”. Another industry group, the Urban Development Institute of Australia (UDIA), published the Industry Report into Affordable Home Ownership in Australia (August 2007). The Property Council includes a leadership group, the Residential Development Council, which ran the website affordablehome.com.au. Gleeson (2008) describes these lobbyists as being part of “The Great Australian Dream Swindle”, focused on a homeownership narrative demonising urban consolidation controls:

This tale of planning noir bemoans a stolen generation of homeownership dreams. A cinema-scoped fable of hopeful newlyweds in wagons turned back from suburban frontiers by unfeeling black-robed bureaucrats. The black robes have halted the natural order of suburban things by slowing the tide of brick veneer (Gleeson 2008 p2655).

The activities of the housing and development industry regarding the UGB and housing affordability may be interpreted as ‘premium-seeking investment’. Parts of the UGB policy debate comprise strategic political pressure on the part of the housing industry, aligning housing affordability claims with their interest in avoiding regulatory constraints on urban expansion. Housing developers are constrained by the existing industry structure, in which large parts of the industry are dependent on greenfield land and established low-density construction methods (Coiacetto 2006; Coiacetto 2007).

Developers may also have existing development plans for specific pieces of land outside the UGB. Reports in Melbourne suggest that many land parcels adjoining the four growth corridors have been purchased or optioned by development companies (Department of Planning and Community Development 2008). While the extent of ownership is not known, what is known is that several of these companies engaged consultants to pressure for urban designation for their land (Millar and Schneiders 2007; Millar 2008; Millar and Dowling 2010). For example, developer Jayaland Corporation, which had a major land interest in Rockbank, campaigned for the UGB expansion to allow the development of a new suburb. Jayaland engaged consultants MacroPlan to report on “how the delivery of [affordable housing] can be implemented within the Rockbank development” (Macroplan Australia 2005). Developer Delfin Lend Lease lobbied for UGB changes on the basis of a holding of farmland, the Lockerbie estate in Kalkallo (Millar and Schneiders 2007; Millar 2008; Millar 2008). Both development sites have subsequently been brought inside the expanded 2010 UGB. The latter site was reportedly sold to another developer, Stockland, for $900 million in late 2010 (Green 2011).
4.3 *The anatomy of two housing affordability crises*

This chapter will now focus on the debates around housing affordability, planning and urban consolidation during two distinct periods of housing affordability crisis. The first part of this analysis will examine the framework of economic characteristics that made each period a crisis. These characteristics provide a context for understanding why different aspects of housing affordability would have been more noticeable, and of more concern, to different groups at different times. From an endogenous perspective on housing markets and planning, it is expected that conditions in the housing market at different times will influence the interests that groups have in the planning system. The following section considers the ‘anatomies’ of the housing market and the broader economic conditions of each housing crisis. These characteristics will then be linked to the housing and planning debates observed during each period.

4.3.1 *Boom to bust, 1989–1991*

The first housing crisis considered is the period 1989 to 1991, a time of economic boom leading into a recession in Australia. Housing prices increased substantially in the last years of the 1980s. Based on published Valuer General residential transaction data, the median Melbourne house price increased 47 per cent in the two years to 1990, reaching $131,000 (Department of Sustainability and Environment 2008). The Australian Bureau of Statistics (ABS) Melbourne price index of established housing (ABS 2009 Cat.6416.0) also had strong increases in this period, rising 37 per cent between 1988 and 1990.

From late 1989 the housing market, and broader economic trends, took a very different turn. Higher housing prices were increasingly accompanied by extremely high interest rates and very high levels of inflation. In the March quarter of 1990, annual inflation was at 8.6 per cent (ABS 2009 Cat 6401.0). The standard bank variable home loan interest rate peaked at 17 per cent in September 1989 and stayed at this level until March 1990 (Reserve Bank of Australia 2009). High interest rates, illustrated at Figure 4.1, were a key feature making this earlier period a housing affordability crisis. As a result of lending conditions, the costs of maintaining housing payments were at unsustainable levels, putting pressure on existing buyers and eventually on the demand for new housing.
The pressure placed on existing homebuyers at this time is illustrated at Figure 4.2. Using data from the property database (for details see Appendix 1), this graph shows median imputed monthly mortgage repayments for Melbourne. These are based on house and unit transactions; standard loan assumptions (25-year terms and a 10 per cent deposit); and on applicable quarterly standard variable mortgage interest rates. The imputed repayments are shown as a percentage of a simple measure of income, the Average Full Time Adult Weekly Earnings (AWE) in each quarter (ABS 2009 Cat. 6302.0). Through 1990 and 1991 repayments accounted for an extremely high proportion of incomes. In 1990, median imputed monthly mortgage repayments accounted for the majority (79.8 per cent) of average earnings. In 1991 median repayments accounted for 58.9 per cent of average earnings. Similar ratios were not seen again until 2008, after over a decade of steep increases in housing prices.

This first crisis was a situation of overheated ‘boom’ leading to stagflation, or ‘bust’. Spiralling inflationary pressures and an overheated economy led eventually to a slump and recession. While beginning with a rapid increase in housing costs, the period concluded with low demand and stagnant house prices. Consistent quarters of negative growth in GDP defined the 1990–1991 period as a recession (ABS 2009 Cat. 5206.0). The rate of annual inflation dropped to negligible levels (1.2. per cent) at the bottom of the recession in June 1992. Unemployment increased rapidly, from 5.9 per cent in June 1989 to 10.6 per cent in June 1992 (ABS 2009 Cat. 1350.0). This trend is illustrated at Figure 4.3. The State of Victoria fared particularly badly during the recession, and migration to the state decreased. By September 1993 Victoria was experiencing a quarterly net population loss of 8573 persons to other parts of Australia (ABS 2009 Cat. 3101.0).

After the panic of the boom, the issues of low housing demand and stagnated growth in the economy, population and housing prices became major policy concerns. Nominal median house prices in Melbourne did not increase above 1990 levels ($131,000) until December 1996, therefore falling in real terms. This slump presented obvious problems for housing developers. With demand constrained – by lending conditions, unemployment, low wage inflation and reduced migration – monthly housing construction in Victoria dropped off from 3264 dwellings in June 1989 to only 1918 dwellings six months later (ABS 2009 Cat. 8731.0). Although housing construction numbers recovered gradually from 1992 onwards, the first half of the 1990s was, overall, a period of depressed housing market conditions for Melbourne. During this first crisis, housing developers would logically have had a strong interest in bringing down interest rates or otherwise propping up demand in order to keep the industry...
afloat. Supply-side issues, by comparison, were likely to have been of comparatively little importance.

Figure 4.1: Standard bank variable home loan interest rates, 1986–2008 (Australia)

![Standard Bank Variable Home Loan Interest Rate, 1986-2008](image)

Source: Reserve Bank of Australia (2009) – Indicator Lending Rates

Figure 4.2: Imputed monthly mortgage payments, as % of monthly average earnings, median by sale type, Melbourne, 1990-2008

![Imputed Monthly Mortgage Repayments as % of Monthly Average Earnings, Median by Sale Type](image)

Source: Author’s calculations, based on property sales data (see Appendix 1) and ABS Cat. 6302.0.
4.3.2 Housing price boom, 1996–2008

From 1996, unemployment levels in Australia decreased consistently but slowly. By 2003 the unemployment rate fell below 6 per cent and by June 2004 was at 5.5 per cent. Home loan interest rates stayed below 8 per cent from March 1997 to March 2007. Rates were at their lowest, 6.05 per cent, in March 2002. With wages increasing, these factors fuelled housing demand and in turn created the conditions of the second housing affordability crisis, a period of unprecedented housing price increases through 1996 to 2008, during which increases in incomes and lower interest rates were eventually outstripped by increases in housing prices.

From 1996 onwards, established house price trends in Melbourne and other Australian capital cities changed dramatically. Melbourne median house prices increased by $94,000 or 72 per cent in nominal terms from 1996 to 2001, reaching $225,000. Prices then increased by a further $162,000 or 72 per cent in the following seven years from 2001 to 2008, reaching $387,000. Overall, between 1996 and 2008 Melbourne’s median house price increased by $265,000, and thus effectively tripled. Prices for units and apartments experienced similar rapid increases, although at slightly lower levels. These trends are illustrated at Figure 4.4. Between December 1996 – when the Melbourne index began to increase above 1990 levels – and June 2002, the Melbourne index of established house prices more than doubled, showing a 104 per cent increase.
Source: Author’s calculations, based on property sales data (see Appendix 1).

Figure 4.5: Population increases and new dwelling approvals, Victoria 1986–2008

Growth in earnings, population and the economy coupled with low unemployment and low interest rates created strong and sustained demand for housing. Higher prices represented wealth gains to owners and income to the housing industry. However, supply-side issues with meeting the demand for housing became more noticeable and
problematic. During the second crisis, construction levels were high but not in keeping with population increases and thus relatively inelastic. From June 1996, monthly construction levels in Victoria trended upwards. Over the period 2003–2008, monthly construction levels were on average very high (3429 dwellings) but experienced a large degree of variation and an overall downward trend from 2003. By late 2008, dwelling construction had dropped to levels similar to those in the 1998–1999 period. At the same time there were much larger relative increases in Victoria’s population, as illustrated at Figure 4.5, above. Demand factors increased the price of housing, pushing up against real or perceived supply constraints.

From 2003 onwards, housing supply became a point of increasing political focus in Australia. The period 2003–2008 saw public concern mount regarding the cost of accessing or maintaining housing, and use of the term ‘housing affordability crisis’ was widespread (Yates 2008). Part of this focus may be understood by considering the interests of the housing and development industries. Given the underlying unmet demand, housing suppliers would have an interest in freeing up any supply-side barriers to construction.

Although the underlying reasons for each housing affordability crisis were different, some of their effects were the same. Figure 4.6 shows the proportion of house and apartment sales in Melbourne that would have been ‘affordable’ on an average full-time wage, meaning with imputed repayments that would account for 30 per cent or less of income. This measure is not an accurate reflection of affordability for a number of reasons. Individual and not household incomes are used; only new transactions are covered; and gross incomes are used rather than net. This measure does, however, provide a basic indication of the changing relationships between housing costs and incomes, and of the declining accessibility of housing in Melbourne for some groups. In both crisis periods the proportion of house sales that would have been ‘affordable’ on an average wage was very low: below 10 per cent in 1990 and 1991, and again from 2006 onwards. As at 2008, 4 per cent of house sales and 8.9 per cent of unit/apartment sales in Melbourne would have been affordable on an average wage, assuming standard lending conditions. Affordability was highest in 1997 and 1998, when over half of house sales in Melbourne would have been affordable based on this measure. In this sense, housing price increases in the later period have had a similar effect to 17 per cent interest rates of the earlier period.
Figure 4.6: Imputed affordable transactions (<=30% of average earnings), as percentage of sales by type, Melbourne 1990-2008

Source: Author’s calculations, based on property sales data (see Appendix 1) and ABS Cat. 6302.0.

Figure 4.7: Sale prices as a multiple of annual average wages, median by sale type

Source: Author’s calculations, based on property sales data (see Appendix 1) and ABS Cat. 6302.0.

Gains in housing prices since 1996 have been well ahead of earnings changes. Using the property database to give a simple measure of housing prices relative to changes in incomes, residential property sales in Melbourne over the period 1990–2008 were computed as a multiple of annual Average Full Time Adult Weekly Earnings (AWE) in
the quarter of property sale. This illustrates the number of years of gross average earnings that would be required to purchase housing in Melbourne at different times. Trends in this measure are shown at Figure 4.7, above. At the start of the 1990s median house prices in the city were the equivalent of 4.4 years of average earnings, with unit and apartment prices lower at 3.8 years of earnings. This ratio fell in the early 1990s, with stagnant house prices and (albeit slowly) increasing wages. From 1996 onwards, the cost of housing relative to incomes increased steadily, returning to 4.4 years of income by 2000. More dramatic increases in the price-to-earnings ratio were seen from 2001 onwards. In 2003 median house prices in Melbourne were 5.9 times average earnings, and by 2008 median house prices were up to 6.3 years of full-time adult earnings.

These housing price increases were unevenly distributed across Melbourne, with booming prices mainly concentrated in the inner and eastern suburbs. The strongest increases in price were for detached houses in inner and middle areas. The gap between housing within 5 kilometres of the CBD and housing more than 15 kilometres from the CBD grew wider over much of the study period. In 1990 the median price of dwellings close to the CBD was $134,000, compared to $122,000 for dwellings more than 15 kilometres from the CBD. This gap of $12,000 or 9.8 per cent between inner and outer rings increased to a gap of $144,500 or 74.9 per cent in 2000. The city became increasingly polarised, as illustrated in Figure 4.8, below. This map shows the extremely low percentages of housing sales, in the inner and middle parts of the city, that were in the lowest quartile (25 per cent) of Melbourne sales as at 2008. In the inner suburbs of Melbourne, only 8 per cent of all dwelling sales in 2008 were in the lowest quartile of sales across the city. Of these, essentially all (96.6 per cent) were not detached houses but rather units or apartments. Similarly, in the middle ring suburbs only 14.9 per cent of dwelling sales were in the lowest quartile for Melbourne. Of these, 79.4 per cent were units and apartments.

Two important characteristics were present during both affordability crises and across the study period. Firstly, housing construction costs were consistently low (ABS 2009 Cat. 6427.0). The costs of housing construction in cities have not increased above inflation over the period 1986–2008 (a 62.7 per cent increase). Likewise, the cost of project homes (the cost of constructing a typical new home) in Melbourne only increased at a rate equivalent to or lower than general inflation (65.6 per cent since 1986) (ABS 2009 Cat. 6416.0). Secondly, there was very limited actual downward movement in house prices. The implication of the first of these characteristics is that the housing industry is relatively efficient in supplying housing. This increases the industry’s critical interest in any external factors seen to reduce housing supply
responses. The implication of the second point is that homeownership has been an important source of wealth for Melbourne homeowners, and one that is largely untaxed. These factors are key to an understanding of debates surrounding housing affordability and urban consolidation.

Figure 4.8: House sales by suburb – percentage of suburb sales in the lowest quartile for Melbourne, 2008

Source: Author’s calculations, based on property sales data (see Appendix 1).

4.4 Planning strategies during two housing affordability crises

The analysis now considers the content of Melbourne’s four metropolitan planning strategies covering the period 1987–2008, for which housing market and broader economic conditions were examined in detail in the preceding section. The goal in the following analysis is to identify changes in the level and type of planning policy concerned with housing affordability issues, and in the role of urban consolidation policies in this. This analysis is linked to the ‘anatomies’ of housing market conditions.

The state government prepares Melbourne’s metropolitan planning strategies, which sometimes contain or are linked to statutory policies, but more often comprise general
statements about planning policies and motivations. It would be misrepresentative to interpret metropolitan strategy content as embodying all planning policy on a particular issue. Given that planning in Victoria is controlled at the state level, however, metropolitan planning strategies provide a reasonable proxy for analysing the reasoning behind planning policy at different times.

The four strategy documents reviewed are *Shaping Melbourne’s Future* (State Government of Victoria 1987), applicable from 1987 to 1991; *A Place to Live* (Victoria 1992), in place from 1992 to 1995; *Living Suburbs* (Victoria 1995), applicable from 1995 to 2002; and *Melbourne 2030* (State Government of Victoria 2002), introduced in 2002 and currently still applicable. Each strategy document was reviewed to identify how often and how prominently issues of housing affordability or related terms were mentioned. Also noted was the extent to which the strategy appeared to prioritise urban growth management or growth promotion. As will be discussed, the economic and political context of each document is important to the interpretation. This context is summarised in Table 4.1, below.

Table 4.1: Political and economic context for Melbourne metropolitan strategy documents

<table>
<thead>
<tr>
<th>Document</th>
<th>Economic conditions</th>
<th>Housing prices</th>
<th>Federal government</th>
<th>Victorian state government</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shaping Melbourne’s Future (1987)</td>
<td>Boom</td>
<td>Boom</td>
<td>Labor</td>
<td>Labor</td>
</tr>
<tr>
<td>A Place to Live (1992)</td>
<td>Bust</td>
<td>Plateau, drops in real terms</td>
<td>Labor</td>
<td>Labor</td>
</tr>
<tr>
<td>Melbourne 2030 (2002)</td>
<td>Boom</td>
<td>Boom</td>
<td>Coalition</td>
<td>Labor</td>
</tr>
</tbody>
</table>

4.4.1 *Shaping Melbourne’s Future* (1987)

The 1987 *Shaping Melbourne’s Future* document (State Government of Victoria 1987) was prepared under a Labor government in boom conditions. Under the section “Social Needs” it contains a subsection of identified problems, one of which is “Housing choice and affordability”. This is repeated under the “Framework for Melbourne’s development” section, “Housing choice and affordability”, and also in the “Implementation” section. Pages 22 to 24 contain discussions of housing choice and affordability as a problem, and pages 44 to 46 discuss proposed planning responses to affordability problems. Affordability is also mentioned on four other pages. In this
document, affordability is conceived of explicitly in terms of choice, as in “housing choice and affordability – providing a wider range of housing choices and improving housing affordability”.

*Shaping Melbourne’s Future* is clearly geared toward urban consolidation. The first heading of the “Framework for Melbourne’s Development” is “Urban Consolidation”, followed by “Future Outward Growth”. Urban consolidation is presented as a means of improving housing affordability, via reduced infrastructure costs and also by providing smaller housing:

Young adults moving out of these family homes to form their own households will move to the fringe if they have no affordable housing choices in the established suburbs. More medium-density housing could accommodate these young households without children, and also older people who might move from large detached houses, which would then be freed for growing families (State Government of Victoria 1987 p6).

In *Shaping Melbourne’s Future*, the government proposes to “facilitate the construction of more affordable housing and increase housing choice by encouraging greater diversity in housing types”. At the same time, the strategy document implies an awareness of criticisms of the potential negative effect of planning on housing affordability. The discussion of why housing affordability was a problem at the time includes a tacit acceptance that planning could facilitate cheaper urban fringe housing:

Higher development standards, levies and costs of providing services have all contributed to price increases for new houses and land. While there is limited potential for Government to influence prices for established houses, there does appear to be scope to contain or reduce costs for new residential development. (State Government of Victoria 1987 p24)

For reasons of housing costs, the strategy does not state explicit support for abruptly curtailing suburban expansion:

The Government does not intend, however, to place artificial restraints on outward growth to achieve its objective of urban consolidation. Such a policy would distort the operation of the market and could lead to inflated land prices and disadvantage to house buyers at the urban fringe (State Government of Victoria 1987 p36).

The 1987 strategy does discuss employment and economic growth issues, however, jobs and employment are discussed in terms of “trends” in jobs and locations; examples include the subsection headings of “the metropolitan economy: employment
trends” and “employment distribution”. Overall the strategy reflects the boom conditions of the time. The contexts in which housing affordability is mentioned reflect the ideas of planners that increased housing densities and choices could be a means of improving affordability.

4.4.2 A Place to Live (1992)

The A Place to Live planning document (Victoria 1992) was prepared under a Labor government in recession conditions. Like the 1987 strategy, the 1992 strategy A Place to Live also clearly states urban consolidation goals. Reflecting the bust period during which it was prepared, however, jobs and development take a far more prominent place. Reflecting the stagflation conditions of the time, the state government in the mid-1990s focused on drawing investment and growth back to Melbourne. In the introduction section headed “The Principles”, “Jobs for the Future” is the first and most strongly emphasised point. The phrase ‘jobs for the future’ is often used, as seen in the following example:

This strategy is shaped by the belief that the goal of equitable and sustainable development is best served by generating jobs for the future, making the most of competitive strengths, creating communities for living, conserving the environment, improving communications and building more compact cities (Victoria 1992 p1).

Urban consolidation, referred to in this strategy as “compact cities”, is the last of the six headline principals of the 1987 strategy. Criticisms of sprawl (p15), and proposals for increased housing densities, reuse of vacant sites and containment at the fringe are discussed at length. Urban consolidation is again cited as a means of improving housing choice and affordability. Stating this perspective on the relationship between urban consolidation and affordability clearly, the document maintained that: “One of the greatest benefits of urban consolidation will be increased housing affordability” (p34).

The 1992 strategy implies a negative view of the housing market, referring to market failure concepts. For example, it claims that “all the evidence we have suggests that the steadily increasing costs of home ownership can be blamed on rising expectations and the failings of the market” (p34), and attributes increased land prices to “speculators bidding up the price of raw land on the urban fringe”. That a Labor state government is in place is significant to this perspective on the market. Despite the growth management aspects of A Place to Live, the economic limitations of Melbourne at that time permeate the document. The terms ‘job’ and ‘employment’ appear on at least one in three pages, and statements are often contingent upon economic growth:
“we can only change the pattern of settlement by changing the distribution of jobs … employment is the key to regional growth and a central theme of this strategy” (Victoria 1992 p4).

4.4.3 **Living Suburbs** (1995)

The 1995 strategy *Living Suburbs* (Victoria 1995) was prepared in bust conditions under a Liberal government, with a strong agenda of promoting economic recovery for Melbourne. It is the only one of the four planning strategies over the study period that does not contain a section or heading concerned with housing affordability. Its only explicit references to affordability issues are to public housing, and to state government developer the Urban Land Authority.

As with the 1992 strategy, jobs and employment are the major theme in *Living Suburbs*, reflecting the economic circumstances in which it was produced. Reflecting its political context, *Living Suburbs* is, more specifically, concerned with business. The first “direction” listed is to “Provide a business environment conducive to sustainable long-term economic growth”. The first three directions of five are business or job related. Unlike the preceding strategies, which implied imperfect markets contrasted with perfect interventions, this strategy implies perfect markets with minimal interference. It openly expresses hope that the market, and not planning, will shape Melbourne’s future: “doing more business – creating more wealth – will enable us to make a great city even better”.

Urban consolidation is not the major principle of *Living Suburbs*, although the document does discuss it – mainly in terms of increasing densities and housing choice in existing urban areas (for example, the strategy suggests that the government “encourage the more efficient use of land and infrastructure and greater housing choice”, p56). This can be attributed in part to the close links of the then government with housing and development lobby groups (Lewis 1999; Gleson and Low 2000). The Property Council claimed credit for the neoliberal-based planning reforms allowing more intensive development of existing areas (as discussed in Section 4.2.3). Unlike the other strategies analysed here, *Living Suburbs* does not present a sceptical view of suburban expansion – the word "sprawl" is not used.

It is evident in the policy wording that the document was produced under a pro-market Liberal government – although it does not discuss housing affordability, *Living Suburbs* is the strategy that communicates the most negative view of planning intervention on
markets. Gleeson and Low characterise a shift in urban policies from ‘social democratic managerialism’ under Labor State Governments until the early 1990s, to ‘full-blown neoliberalism’ during the 1990s (Gleeson and Low 2000 p11). While not confined to the political Right, this style of market oriented planning is consistent with the small government ethos of the Liberal party – which is committed “to a lean government that minimises interference” (Liberal Party 2011). In this vein, Living Suburbs boasts of the existing program-style reforms to the Victorian planning and building approvals system: “Victoria has already established a significant lead in removing unnecessary regulatory obstacles to growth and reducing compliance costs for business and the community” (Victoria 1995 p17).

Living Suburbs is shorter and contains less policy content than the other strategies examined here. However, it is noted that more urban consolidation, in the form of higher-density housing in established suburbs, occurred during the Living Suburbs era than while the other strategies were in place. This was the period of intense suburban backlash to densification, as described at section 4.2.3. It was also applicable to the period of strongest house price gains (1996–2003) in Melbourne.

4.4.4 Melbourne 2030 (2002)

Melbourne 2030 was prepared under a Labor government in boom conditions. The strategy document includes, under the direction “A fairer city”, a policy to “increase the supply of well-located affordable housing” (Policy 6.1). It also proposes a range of initiatives to improve housing affordability, and mentions housing affordability or affordable housing on at least 15 pages. Of the four metropolitan strategies examined here, Melbourne 2030 devotes the greatest amount of space given to housing affordability, and has the most policies about affordability. Melbourne 2030 is also based around urban consolidation principles. Yet compared to the 1987 and 1992 strategies, it expresses far less certainty about the idea that increased densities and housing mix can, of itself, be a means of addressing housing affordability. Housing choice is mentioned throughout and there are statements consistent with the welfare economics case for urban consolidation and housing affordability:

Locations will have to be found for higher density housing across the metropolitan area. Such strategies will also help provide a greater range of affordable housing to meet the changing needs of the population (State Government of Victoria 2002 p172).
However, urban consolidation itself is not directly cited as the main means of providing affordable housing. The main sections on housing affordability in *Melbourne 2030* refer to the monitoring of the housing market, and to inclusionary zoning “options” and “pilot programs” (although no actual provisions are made for inclusionary zoning). This represents an alternative view of planning’s role in housing markets, one based on addressing market failure:

A significant proportion of new development, including new development at activity centres and strategic redevelopment sites, must be affordable for households on low to moderate incomes, especially those that are experiencing housing stress but are unlikely to gain access to public or social housing. Ways of achieving this will be explored. The monitoring of housing affordability will be important in finalising eligibility criteria for these dwellings (State Government of Victoria 2002 p117).

*Melbourne 2030* is also careful to distinguish between “cheap” housing provided by the market, and “affordable” housing. Although it does not clearly promote containment as a way of providing affordable housing, *Melbourne 2030* does not consider urban consolidation to be inconsistent with goals for affordable housing. Like the earlier documents, the *Melbourne 2030* strategy seeks to direct new housing to major strategic sites and to areas with established services (“direction 1.3: locate a substantial proportion of new housing in or close to activity centres and other strategic redevelopment sites that offer good access to services and transport”). Higher-density housing is cited as an aim on at least twenty pages. *Melbourne 2030* also introduced an UGB – albeit a flexible boundary intended to “include 10-15 years of land supply”, and one based on existing de facto growth boundaries – alongside its housing affordability goals.
4.5 Planning on the housing affordability agenda during two housing affordability crises

4.5.1 Government interest in housing affordability

The past three decades have seen the following national-level, government-backed studies of, and inquiries into, housing costs or housing affordability in Australia:

- *The Cost of Housing: the Report of the Committee of Inquiry into Housing Costs* (Committee of Inquiry into Housing Costs 1978)
- The 1989 *Special Premiers’ Conference on Housing* (including the *Graham Report*).
- The 2008 Senate Select Committee report *A Good House is Hard to Find: Housing Affordability in Australia* (The Senate 2008)
- The National Housing Supply Council’s *State of Supply* reports (National Housing Supply Council 2008; 2010)

This list provides a simple benchmark of the apparent level of federal government interest in housing affordability and planning. No federal inquiries, committees, or similar were undertaken between 1992 and 1995, the slump period, nor in the subsequent recovery period. The only item dating from a slump period, the 1992 report of the *Housing Costs Study*, was from a study commissioned in 1990. Interest in housing affordability has instead clustered toward the ends of housing boom periods.

Each of the inquiries and committees noted here considered the influence of land use planning on housing affordability. The tone of these documents underwent a shift with regards to urban consolidation. As discussed, the 1978 *Inquiry into Housing Costs* was a key influence in the rescission, in the early 1980s, of restrictive flat codes and building standards in Melbourne. Later, the *Graham Report*, as part of the *Special Premier’s Conference on Housing* (1989), “called attention to the substantial effects on

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housing costs of local and State government building regulations and planning controls” (Wiggins 1992), and the Housing Costs Study (1992) “viewed zoning regulations as severe impediments to the working of market forces in the production of housing” (Abelson 1993).

The National Housing Strategy (1991) included an issues paper on “The efficient supply of affordable land and housing: the urban challenge”, with sections on the impact of planning. These earlier studies discussed, albeit cautiously, urban consolidation as a possible means of improving affordability. In particular, they pointed to dual-occupancy and medium-density housing provisions as possible responses to housing supply and affordability challenges. The National Housing Strategy recommended removing barriers facing higher-density housing undertaking further research demonstrating the affordability benefits of smaller housing forms (National Housing Strategy 1991 p18-22).

The Productivity Commission’s Inquiry Report on First Home Ownership (2004) included sections on planning impacts on new housing supply, and the Senate Select Committee report (2008) considered the critiques of UGBs and planning approvals processes. The Productivity Commission report agreed that issues with housing supply and planning existed, and recommended that planning approval times and “unnecessary impediments to supply” be addressed. Nonetheless, the commission concluded that planning restrictions on supply had not been a major cause of housing price inflation (Productivity Commission 2004 p154). Neither report accepted that affordability problems could be addressed by simply removing restrictions on fringe land release. Yet by the time of these later reports, the government discussion of urban consolidation had largely shifted, with both it and housing affordability most often discussed in terms of policy trade-offs. The idea that urban consolidation would improve affordability was referred to only as an outdated concept, for example:

> Urban consolidation policies that introduce constraints on fringe development, including through ‘urban growth boundaries’, are likely to increase the scarcity value of land. Their effects on housing affordability depend on the scope to increase housing densities. This may have been overestimated. (Productivity Commission 2004 p123)

Each cycle of national policy concern with housing affordability has been associated with subsequent national codes and programs seeking to reform planning. These include the following:

- The Local Approvals Review Program (LARP) (1992)
The LARP arose from the *Housing Costs Study* findings. The AMCORD was spearheaded by the Joint Venture for More Affordable Housing (JVMAH) (Howe and Alexious 1989). The Housing Affordability Fund (2008) emerged via the newly elected Commonwealth government, in response to the controversy over housing affordability issues around the 2007 election. Each of these programs seeking to reform planning practices originated at the tail end of a boom period.

The Development Assessment Forum (DAP) (1998) emerged at a different point in the housing cycle. The DAP formed in 1998 to “recommend ways to streamline development assessment and cut red tape – without sacrificing the quality of the decision making”. Linked to the reports *Time for Business* (1996) and *Unfinished Business* (1997), the function of the DAP has been, Gleeson and Low (Gleeson and Low 2000) argue, to represent interest groups that have pursued a systematic campaign against planning as a whole. There are apparent cyclical trends of interest in housing affordability and planning. While each of these cycles of interest has been concerned with planning ‘red tape’, the perceived role of urban consolidation has shifted. In addition, some political and pressure groups (mainly from the housing and development industries) have consistently sought a scaling back of the level of planning intervention, a movement which has influenced the structure of the planning system in Victoria.

The Property Council of Australia, a development industry group, claimed credit for the planning reforms of the mid-1990s, and claimed that “Victoria has secured its reputation as the nation’s leader in planning reform” (Property Council of Australia 1996). There is a level of irony in the fact that the same organisation, along with other industry groups, has continued to express concern over the efficiency of the Victorian planning system. The Productivity Commission report noted the role of the housing industry in publicly associating urban containment with housing affordability problems (Productivity Commission 2004 p124). The Senate Select Committee report drew on submissions from housing industry groups including the Housing Industry Association, the Urban Development Institute of Australia and the Property Council.
4.5.2 Academic journals and housing affordability

Considered now is the coverage of housing affordability issues in a sample of Australian academic journals from the fields of urban issues, planning and economics. The journals included are *Australian Planner*, *Urban Policy and Research* and *The Australian Economic Review*. The goal in reviewing this material is to see whether there are patterns in academic interest in links between housing affordability and planning. The exercise is intended as a barometer of the levels of academic interest at different points.

Electronic and manual search methods were used. In each case, articles mentioning housing affordability or similar terms in their title, abstract or first page were identified. The articles were characterised as having ‘high’ focus on housing affordability if the topic was included in the title or the main section of the abstract, and as having a ‘lower’ focus on affordability if it was only introduced as an aside in the abstract or later in the article. Where housing affordability was mentioned, the article was also scanned for references to planning. They were again coded as having high or low degrees of focus (in this case on planning issues), or as not mentioning planning.

Two further classifications were applied. Articles discussing planning (this necessarily involved all articles identified in *Australian Planner*) were reviewed to ascertain the role of planning discussed – ‘positive’ (as in ‘planning for affordability’) or ‘negative’ (as in ‘the impacts of planning on affordability’), with close attention to mentions of urban consolidation. Some articles considered both roles.
Within the sample of journals, 38 articles were identified that contained a high level of emphasis on housing affordability. A total of 64 articles were identified as having at least minor coverage of housing affordability. Of the 38 key articles, the majority (28 articles) were also occupied with planning issues to a significant extent (refer to Table 4.2). The distributions of publication dates were clustered around housing boom periods: 1989–1991 (12 articles) and 2005–2008 (18 articles). Thus 80 per cent of the housing affordability articles were published in a comparatively small number of years (seven of 20).

In the earlier housing affordability crisis period, between 1989 and 1991, only one of the 12 articles about housing affordability did not also focus on planning. The main reason is that planners at the time were debating the merits of urban consolidation as a policy response to housing affordability. The identified articles all debated urban...
consolidation as a possible means for improving affordability. While not necessarily endorsing the proposition, these articles either promoted or questioned the potential for consolidation strategies to improve housing affordability. Scepticism amongst academics about the ability of urban consolidation to improve housing affordability was evident. These articles in large part relate to the fact that planning strategies in many Australian cities were, at that time, promoting medium-density housing for affordability reasons. As discussed above, Melbourne’s planning strategies in this period made confident links between urban consolidation and affordability. Academic planning articles expressed doubt about these claims, and debated the points for and against these policies. For example:

The twin objectives of cheaper housing and cost efficient services, coupled with environmental preservation, might be seen as an ideal response within the current economic and political climate. However, this planning panacea has not gone unchallenged within the wider spheres of debate (Shaw and Houghton 1990).

Urban consolidation is one means — the latest means – of achieving that elusive goal, a reliable supply of affordable fully-serviced, energy efficient and high quality accommodation (Kirwin 1991).

Australian planners during the earlier housing crisis thus at least considered planning tools, such as urban consolidation, as a possible means of addressing housing affordability problems. In this aspect, the earlier crisis period is in clear contrast to the public discourse of the more recent crisis period, between 2005 and 2008. In the later period, academic journal coverage of housing affordability was more mixed, with seven of the 18 articles discussing housing affordability without reference to planning. Between 2005 and 2008, 11 sampled articles discussed both housing affordability and planning. The majority of these were published in 2007 and 2008. Notably, all discussed the potentially negative influence of urban consolidation on housing affordability. Most presented a defence of the alleged role of planning and urban consolidation in creating housing affordability problems. The articles during the 2005–2008 crisis period often noted the extent of public criticism of planning at the time.

Those four articles that did discuss planning and affordability in a positive way were more likely to suggest inclusionary zoning mechanisms, rather than urban consolidation in general. The content of the selected academic journal articles suggests that discussion of potential links between planning and housing affordability have been disproportionately published at the ends of housing booms. Also apparent is a clear change in the tone and direction of this academic discussion. The notion that urban consolidation itself could improve housing affordability has been replaced with
defences against claimed impacts of consolidation on housing affordability, as well as proposals for mechanisms for non-market affordable housing, such as inclusionary zoning.

4.5.3 Newspaper coverage and housing affordability

This chapter will now consider the coverage of housing affordability issues in a sample of Victorian print media. The goal in reviewing this material is to identify whether there are patterns in the level of public interest in links between housing affordability and planning.

Assessing ‘the Victorian media’ presented a difficult prospect in terms of resources, particularly given that the time period of interest extends back to a point (the late 1980s) for which electronic media databases have limited coverage. A small sample frame that can be compared consistently over time has been selected, comprising the first 10 pages of The Age (broadsheet) and the first 15 pages of the Herald Sun (tabloid), as well as the first two pages of the Business Age and Herald Sun Business sections, for each weekday paper in the first quarter (January, February, March). Manual collection techniques (microfilm) were used for the years 1989 to 1994, inclusive. Electronic collection techniques (the Factiva search facility) were used for the years 2003 to 2008, inclusive.

The manual collection, a time-intensive process, involved reviewing the applicable pages of each newspaper using microfilm, and noting any article containing the search terms “housing cost”, “home costs” or “housing affordability”. For any identified article, the first paragraph and key terms were recorded, noting any relating to planning. The electronic method initially searched for the “housing affordability” related keywords, with the search results refined to include only those articles on the relevant dates and pages.

The identified newspaper articles were characterised by whether they covered housing affordability negatively, as ‘bad news’ (for example, “record levels of housing unaffordability will worsen in 2008”), or positively, as ‘good news’ (such as, “Homes More Affordable, Says Report”). The vast majority (100 articles) of the 110 housing affordability articles identified are characterised as ‘bad news’ type coverage (refer to Table 4.5). The ‘good news’ articles published in the 1992–1995 period mostly

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5 For the years 1989 and 1990, the former Sun News-Pictorial is substituted for the Herald Sun, which began publication part-way through 1990 after the merger of the Sun News-Pictorial and The Herald.
comprised the ‘good news’ side to economic disaster, for example, “Victoria’s Loss to Queensland May Prove House Buyers’ Gain”.

Table 4.4: Sampled housing affordability newspaper articles by type of coverage and year

<table>
<thead>
<tr>
<th>Years</th>
<th>Bad news</th>
<th>Good news</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989–1991</td>
<td>29</td>
<td>2</td>
<td>31</td>
</tr>
<tr>
<td>1992–1994</td>
<td>1</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>2003–2005</td>
<td>13</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>2006–2008</td>
<td>57</td>
<td>0</td>
<td>57</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>10</td>
<td>110</td>
</tr>
</tbody>
</table>

Source: Coding of articles from a sample of Melbourne newspaper articles, see text.

Table 4.5: ‘Bad news’ housing affordability newspaper articles by mention of planning

<table>
<thead>
<tr>
<th>Years</th>
<th>No planning mention</th>
<th>Planning mentioned or blamed</th>
<th>Total</th>
<th>% planning related</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992–1994</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2003–2005</td>
<td>8</td>
<td>5</td>
<td>13</td>
<td>38</td>
</tr>
<tr>
<td>2006–2008</td>
<td>25</td>
<td>32</td>
<td>57</td>
<td>56</td>
</tr>
</tbody>
</table>

Source: Coding of articles from a sample of Melbourne newspaper articles, see text.

Focusing on negative coverage of housing affordability, during the period 2003–2008 37 articles (or 53 per cent) of 70 identified articles mentioned planning controls as a factor in housing affordability problems. The years 2007 and 2008 saw the greater share of housing affordability news coverage (25 and 26 articles, respectively), and also of the housing affordability articles mentioning planning. These included pieces directly critical of planning approval times and of urban consolidation policies, particularly land release policies, developer charges and UGBs. Other articles reported on the findings of government and industry reports, or included commentary from critical stakeholders. Typical examples include: “Peter Costello has suggested the best way to deal with housing affordability is for state and local governments to release more land” and “The cost increases are partly produced by rising government taxes, charges and regulatory requirements on houses, but, above all, they are due to planning restrictions”.

Regardless of specific arguments, all of these articles would have served, on some level, to make a negative link between housing affordability and planning. This public link appeared at its most obvious during 2007 and 2008. Smith and Marden (2008) give an account of the Great Australian Dream campaign by Australian lobby groups against planning at this time. This second affordability crisis period saw not only increased interest in housing supply and criticism of land use planning, but also various initiatives that sought to ease entry to homeownership and keep home purchase increasing along
with demand. These included increases in the First Home Owners Grant (FHOG), low-or no-deposit housing finance offers, and pressure to remove or reduce transaction costs on housing purchases.

By contrast, in the years 1989–1991 negative mentions of the role of planning featured in only four of 29 articles related to housing affordability. Importantly, media coverage linking planning and affordability mentions the view of urban consolidation as a route to housing affordability. In one unusual article, “Keating Blames Home Owners for House Costs” from 1989, the then federal treasurer “blamed housing price rises on Sydney home owners who objected to higher density housing in their suburbs”. For the most part, however, housing affordability articles from the earlier housing crisis period concerned the high interest rates of the time (19 of 29 articles). As the Reserve Bank was not then independent, many articles contained calls to the government to lower interest rates. Measures to combat “front loading problems”, such as staggered interest rate loans, were devised during the extreme housing cost situation of the first crisis, which was due to high interest rates. The policy debate centred on interest rates and the overheated economy, and housing interest groups sought means of maintaining housing demand.

The content of selected newspaper articles suggests that the public link between housing affordability and planning has become far more prominent in recent years. Although print media coverage of housing affordability was quite extensive over the 1989–1991 period, planning was not a significant component of this coverage, especially not in comparison to reporting of the issue in 2006–2008. In the latter period, debates focused on claims that urban consolidation had exacerbated housing affordability problems.

4.6 Key findings

This chapter used historical planning documents to assess the changing role of urban consolidation policies in Melbourne, and the changing planning interests in housing affordability. One key finding was that the relationships between planning, urban consolidation and housing affordability do seem to run in both directions. Housing costs and policy decisions are sometimes codetermined (Ihlanfeldt 2004). Economic and political contexts are associated with the level of interest in links between housing affordability and planning in Australia. Political, public and academic interest in housing affordability is clustered around the tail end of boom periods, with the political interest then appearing to inform periodic attempts to reform or simplify land use planning.
Such reforms, particularly in Victoria, have been premised on Coasian ideas, with the planning system becoming progressively more flexible.

This correlation is unsurprising, in that politics respond to circumstances. It is also consistent with Green (1999) and the idea that many planning controls only become enforceable (and thus contentious) in situations of growth. Not only is the housing affordability agenda more pressing during boom periods, but the potential role of planning and growth control becomes more noticeable, particularly to the housing industry. The nature of the more recent housing affordability crisis – in which strong underlying demand pushed up against supply restrictions – provides one means of understanding the recent polemic against urban consolidation, and subsequent policy changes. The influence of housing markets on planning may tie in with Australia’s high rate of home ownership. Beer, Kearins et al. (2007) argue that recent housing inquiries in the UK (Barker 2004; Bramley 2007) have come to reflect the same homeownership-driven cycles seen in Australia, as a result of the UK’s own decreasingly interventionist approach to housing policy.

This chapter also demonstrates that, in Australia, the notion that urban consolidation could improve housing affordability of itself has more or less disappeared. Early proponents of consolidation argued that the redistribution of growth and the provision of more varied housing options would increase affordable housing opportunities. These views underpinned the review of restrictive planning and building codes over the 1980s and 1990s. The lack of inclusionary zoning strategies has, however, made this positive spin on urban consolidation and affordability relatively difficult to maintain (Yates 2001). During the housing affordability crisis of the late 1980s, planners debated the merits of urban consolidation for addressing housing affordability problems. In more recent times, academic and planning discussions of housing affordability and planning have instead defended planning against the claimed impacts of containment on affordability. Some make proposals for inclusionary zoning mechanisms, although these have not been introduced in Melbourne. This shift corresponds with sharp patterns in the public discourse – the media analysis shows that planning and urban consolidation became a far more contentious component of public coverage of housing affordability issues at the end of the recent boom period.

The analysis of metropolitan planning strategies confirmed that urban consolidation has been an ongoing planning concern in Melbourne for several decades. However, it also found that components of urban consolidation policy have been renegotiated over time. Housing interest groups have been a factor in these changes. Early planning regulations in Melbourne, based on traditional suburban zoning controls, sought to
decrease housing densities. The motivations for these controls included both social and health reforms, and the protection of property values. The 1970s and 1980s saw the use of restrictive flat codes and building codes, which prevented higher-density housing in some locations, increasingly viewed as an issue for housing affordability. Eventually, the local use of these codes became the focus of planning reforms. These included dual-occupancy provisions and the revision of building codes, and an eventual scaling back of local control over higher-density housing. This process of densification and policy reform was backed by the housing and development industries. Equally, the process was met with resistance – in the form of planning disputes and political pressure – from existing homeowners. Resistance has been most noticeable in the city’s more affluent suburbs, where residents were previously protected from higher-density housing through the use of local restrictive controls. The next chapter will look empirically at patterns of planning objection and dispute in Melbourne.

Meanwhile, de facto growth boundary policies in Melbourne date to the early 1970s with the introduction of the “growth corridor” model of development. Although continuing (with the exception of the 1995 strategy) to view urban expansion as problematic, successive planning strategies have been reluctant to apply strict growth curtailment measures in Melbourne. The Urban Growth Boundary of 2002 was a surprisingly prescriptive measure to delineate urban and non-urban areas. Over the course of eight years this boundary has, however, been successively expanded in response to concerns about land supply and housing affordability. Particularly in recent years, the housing and development industry has been instrumental in drawing negative links between housing affordability problems and the use of fringe growth controls. Chapters 6, 7 and 8 contain empirical analyses of recent changes to UGB and GAIC policy.
Chapter 5

Backlash: Patterns of Planning Objection and Dispute in Melbourne

The higher one goes up the scale of wealth in a community, the more control the owners of property expect to have over their residential spaces. In the poorest neighbourhoods, people may have little control over even the interiors of their houses or apartments ... The richest in towns such as Bedford [New York, USA], having both the greatest resources and the greatest feeling of entitlement, attempt to control long distance views and often go to great lengths to ensure that nothing they see from their own property and nothing they pass by when they drive around their town is unattractive.

(Duncan and Duncan 2001 p390)

One of the themes of the previous chapter was that state planning policy changes in Victoria since the early 1980s have tended to reduce the level of direct local government control over new housing developments in Melbourne. A process of centralised policy reform, based on principles of urban consolidation, has resulted in a greater flexibility in the location of high-density housing across the city. Reforms to the local use of restrictive building and flat codes, which previously set minimum lot sizes for housing, originated in housing affordability concerns in the late 1970s and 1980s. As was explored in the preceding chapter, urban consolidation originated, in part, with the idea of improving housing affordability. By contrast, urban consolidation policies have more recently been implicated in causing housing affordability problems.

Although the notion that urban consolidation may improve housing affordability has effectively dropped out of the Australian policy debate, for a variety of other reasons – including environmental concerns and infrastructure costs – Melbourne’s planning strategies have continued to emphasise, if not strictly implement, urban consolidation.
A series of planning strategies in Melbourne since the early 1980s have sought to redirect urban growth away from the traditional suburban, low-density fringe, and towards the densification of existing urban areas. The preceding chapter discussed the way in which the latter aspect of urban consolidation has met with resistance from existing homeowners. It was also suggested that conflicts around planning reforms and higher-density housing have been the most noticeable in Melbourne’s more affluent suburbs, which were previously protected from higher-density housing by local restrictions. The overarching research question of this thesis is are the housing market interests of property owners, as ‘insiders’, reflected in activities that influence urban consolidation policies in Melbourne? As part of this, this chapter looks empirically at selected indicators of the role of homeowners in the ‘backlash’ against urban consolidation.

Although the use of local prescriptive measures against higher-density housing is now more difficult for local authorities, an important facet of the Victorian planning system is that third-party appeal rights on planning decisions are comparatively strong (Willey 2006). Any interested party may lodge an objection to a planning permit application, and parties may appeal to an independent tribunal (VCAT) against the decisions made by local authorities. In this context, where planning policies are not strictly local in content but interested parties may oppose individual development proposals, planning objections and appeals are an important recourse for existing property owners to engage with the planning system. Objections and appeals are particularly important in Melbourne as the reformed planning legislation puts a high proportion of land uses in the discretionary or ‘permit required’ category (Buxton and Tieman 2005).

This thesis has explored the existing theory and evidence from an endogenous perspective on housing markets and planning, in which groups with an existing stake in the housing market engage in activities to influence planning outcomes in their favour. I have argued that although urban consolidation may be seen either as a move for, or a hindrance to, housing affordability, in practice property owners are likely to contest and shape the ways in which consolidation policies are implemented. The critical literature has highlighted the historical importance of traditional suburban zoning to homeowners. It is important to remember that unwanted apartment buildings in an area of detached housing were the foundation of the Village of Euclid Ohio v. Ambler Realty Company (1926) case, the outcome of which provided the fundamental legal basis for zoning. Urban consolidation policies represent a redistribution of the property rights embedded in suburban zoning (Downs 2005), and in so doing create potential points of conflict with property owners.
The preceding chapters have suggested that existing homeowners benefit from some aspects of urban consolidation. Containment policies at the urban fringe benefit existing owners because the policies will increase the demand for or increase the scarcity value of existing housing. Homeowners will, however, tend to favour both low-density zoning and exclusionary zoning in their own ‘backyard’ or suburb. The pressure from urban consolidation strategies to accommodate more high-density housing, and potentially low-cost housing and low-income households, is likely to be perceived negatively (Voith and Crawford 2004). Fischel’s term ‘homevoters’ refers to owner-occupiers whose decisions are driven by the protection of property values (Fischel 2004; Fischel 2005). The activities of these ‘homevoters’ have implications for the implementation of planning policies.

A related concept is the ‘insider–outsider’ problem (Evans 2003; Evans 2004), in which planners (and local political processes) are more accountable to the interests of existing residents than to potential residents. Critics such as Jacobs and Paulsen (2009) and Von Hoffman (2009) argue that the socially progressive goals of planning have been consistently appropriated, with planning often used as a tool to protect the interests of affluent property owners. Evans (2004) argues that public participation in planning, a change intended to be socially progressive, has been co-opted to instead further the representation of those already inside the planning system.

This chapter looks empirically at the patterns of planning objection and dispute in Melbourne, exploring these patterns with reference to the concepts of the ‘insider–outsider’ problem and ‘homevoters’. The hypothesis is that patterns in planning disputes will reflect the economic interests of homeowners and their preferences for traditional suburban zoning controls. Based on the existing theory and evidence, it is expected that planning backlash – rates of planning objections and planning appeals – will be higher in areas of higher housing values and in areas of comparative social and economic advantage, where property owners have more at stake in the housing market, and thus in the planning outcomes. Residents in these areas also have the greatest resources to engage with the planning system, and potentially (to use the terminology of Duncan and Duncan) the greatest feeling of entitlement (2001 p390).

Quantitative methods are used to observe whether and to what extent evidence of the ‘homevoter’ hypothesis can be measured in activities in the Melbourne planning system. I argue that property owner groups with a greater stake in the housing market and a greater capacity to negotiate the system are more likely to seek to influence planning outcomes. Public participation channels such as third-party objection and appeal rights are one means of doing so. Planning application and planning tribunal
data for local governments in Melbourne over a number of years are used to model variations in the numbers and rates of planning objections and disputes in different municipalities. Relationships between levels of planning objection and appeal, housing prices, planning controls and the socioeconomic characteristics of residents are examined. The chapter addresses the following research questions:

- To what extent do the interests of existing homeowners (‘insiders’ or ‘homevoters’) in their housing values appear to influence patterns of objection and dispute around planning applications in Melbourne?
- Are planning permit applications in areas of higher housing value objected to more often, and do they proceed more often to arbitration at the Victorian Civil and Administrative Tribunal (VCAT)?
- Controlling for other spatial and temporal differences between areas, can relationships between property values and objection and dispute levels be explained by:
  - residents having a greater financial interest in planning outcomes;
  - and/or residents in higher-value areas having greater educational and professional resources to draw upon in dealing with the planning system;
  - and/or residents in higher-value areas having greater recourse to object through the planning system (because of additional permit triggers)?

The process of objection and dispute will not necessarily have a direct influence on planning outcomes. However, objection and dispute processes do add time and uncertainty to the housing supply process; for this reason, expanded third-party appeal rights have not been adopted in the UK or in other Australian states (Willey 2004; Clinch 2006; Willey 2006). The trade-offs may be greater public representation, greater legitimacy of planning decisions, and the potential for improved planning decisions. Through the analysis in this chapter I do not address the merits of densification policies, nor of third-party appeal rights. I focus on the possible interactions of these factors in Melbourne’s planning system.

The chapter begins by outlining the relevant regulatory environment, then the data sources and methods used. Descriptive results are presented, looking at the distribution of planning objections and planning disputes and at their correlations with key variables – particularly housing prices. Finally, I will present the results of a regression analysis, in which, holding other differences between areas constant, the statistical influence of housing prices and socioeconomic characteristics on the rates of planning dispute is identified.
5.1 The regulatory environment

5.1.1 Victoria Planning Provisions (VPPs)

There has been a stated policy commitment at the state level to urban consolidation policies in Victoria since the early 1980s. To facilitate the development of higher-density housing in existing areas, local planning and building controls on minimum lot sizes have been successively relaxed, with the review of codes prohibiting smaller lot sizes and flat developments. Since the 1990s, the standardised planning tools introduced by the Victoria Planning Provisions (VPPs) have also meant that local governments are relatively restricted in their capacity to implement planning regulations that directly reflect local resident interests – in particular, reducing the capacity to prohibit higher-density housing. Municipalities may choose from a limited range of planning tools, and must integrate state policy content.

Melbourne’s entire planning framework and local government structure was essentially overhauled in a period of reform in the early to mid-1990s. The reforms saw the amalgamation of local governments and introduction of the VPPs – standardised planning schemes and state-designated content. Prior to the VPPs, local authorities had greater independence in preparing and applying their own zoning specifications. Under the VPPs, local authorities may apply only standard zones and overlays selected from a list prepared by the state government. All local planning scheme content must be approved at the state level. The decision-making process established by the VPPs is comparatively flexible, with a high share of discretionary (permitted subject to permit) uses and limited scope for prescriptive regulations. Medium- and high-density housing is now typically neither prohibited nor allowed as of right, but requires a planning permit. Planning permit applications are dealt with first by the responsible authority, which is in most cases the local council. In some cases the Minister for Planning may ‘call in’ an application (usually major projects), to make the Minister for Planning the responsible authority. Decisions on permit applications may be appealed at VCAT.

5.1.2 Planning and building permit processes

In Victoria planning permits are required for certain uses and developments, dependent on the zoning of the land. Each zone stipulates uses as either ‘as of right’ (permit not required), permit required (use allowable with a planning permit) and prohibited. Under
the VPPS there is a high share of discretionary (permitted subject to permit) uses and limited scope for prescriptive regulations. The most prevalent zoning for housing, the Residential 1 Zone, does not require a planning permit for many dwellings. A permit is required, however, for any land subdivision, construction of a dwelling on a lot size of 0–300 square metres, construction of a residential building (meaning apartments or high-density housing), or construction of more than one dwelling on a lot (meaning dual-occupancy, infill or medium-density housing). Medium- and high-density housing is typically neither prohibited nor allowed as of right, but requires a planning permit.

Within the framework, municipalities may specify whether a permit is required to construct a dwelling on a medium-sized lot of 300 to 500 square metres. For semirural areas, a typical low-density type residential zone will require a permit for any subdivision below 0.4 hectares (1 acre). Planning overlays apply additional permit triggers to land. These include heritage controls, neighbourhood character controls and special landscape controls. Under a planning overlay, permits are typically required to demolish or remove a building, to remove vegetation or to undertake most external works.

Planning permits and building permits are related, but represent different (overlapping) processes. Building permits are required for most building and construction work over a certain value, regardless of whether a planning permit is also required. The last chapter discussed how building permit codes in Victoria were reformed over the 1980s and 1990s to allow smaller lot sizes and higher-density housing. Previously, the building codes were more restrictive and constituted a more important regulatory determinant of the form of new housing. With the more flexible codes, building permits now fundamentally indicate that the dwelling has been deemed structurally sound. All new dwellings require a building permit, and the ABS uses residential building permits as an indicator of new residential building activity. There are no third-party appeal rights on building permits.

Not all new dwellings require a planning permit, but where a planning permit is required there are third-party appeal rights on the decision to grant a permit. The planning permit process requires general public notification (such as signage or newspaper notifications), as well as the direct notification of any affected parties. Public notifications and objections form a part of the permit application process. Victoria’s third-party appeal rights on planning decisions are comparatively strong (Willey 2006). The system for third-party appeal rights means that any interested person may object to a permit application. The authority is bound to consider the objections, but receiving objections does not mean that the responsible authority will not approve an application.
If the authority grants a planning permit, the objectors have the right to appeal the decision at VCAT. If the authority refuses a permit or places conditions upon it, the applicant has the right to appeal the decision at VCAT.

5.1.3 VCAT appeals

The Victorian Civil and Administrative Appeals Tribunal (VCAT) is an independent tribunal in Victoria that presides over dispute resolutions, including those relating to the planning decisions of local authorities that are not resolved to the satisfaction of either planning permit applicants or of objectors. VCAT has the power to uphold, vary, set aside or substitute the decision of local authorities on planning cases. Cases are determined on merit, including consistency with state planning policy. Except on points of law, there are no appeal rights on VCAT decisions. The types of planning dispute cases heard under the planning list include:

- applications by objectors about the decision of the authority to grant a planning permit;
- applications by permit applicants about the decision of the authority to refuse to grant a planning permit;
- applications by permit applicants about the decision of the authority to impose conditions on a planning permit; and
- applications by permit applicants about the failure of the authority to decide on a planning application (within the statutory time frame).

The local planning scheme determines whether a use or development will require a planning permit. Regulatory restrictions are the first part of the sequence shown at Figure 5.1, below. Where a planning permit is required, there are two basic possible outcomes: the development is approved, or the development is not approved. There are 10 paths through the planning system to reach these outcomes, of which six involve VCAT appeals and four do not. These paths are simplifications of the processes involved; in particular, they ignore the possibility for revising or restarting applications. Factors determining the paths comprise the possible paths for a planning permit and whether it arrives at a VCAT dispute; whether there are objections lodged; whether the local authority approves the application; whether an appeal is lodged against the authority’s decision; and whether VCAT approves the application.

The following are the paths by which a permit application may result in a VCAT dispute (and be ultimately approved or rejected at VCAT):
- There are no objections lodged but the local authority rejects the planning permit application. The applicants lodge a VCAT appeal against this decision (a ‘refusal’ case).
- There are objections lodged and the local authority rejects the planning permit application. The applicants lodge a VCAT appeal against this decision (another ‘refusal’ case).
- There are objections lodged and the local authority approves the planning permit application. The objectors lodge a VCAT appeal against this decision (an ‘objection’ case).

Figure 5.1: Planning permit applications and possible outcomes
5.2 Method

5.2.1 Approach

The analytical approach in this chapter uses descriptive statistics and regression modelling techniques to profile the relationships between spatial attributes, planning system attributes, development applications, and the volumes and rates of planning objections and disputes. The analysis is limited to the municipality (Local Government Area) level, as planning permit, objection and tribunal data is only available at this level of aggregation. The 31 municipalities in Melbourne are covered for the period 2003–04 to 2007–08. This time period is determined by data availability: planning permit activity has only been published since 2003–04.

The descriptive statistics are used to profile where and when planning disputes have been most prevalent. The descriptive statistics look at planning appeals and also at planning objections (data for the latter item was available for one year only). The regression model section of the analysis is used to explore different explanations for endogenous housing market effects in the planning system. The dependent variable for the model is the rate of planning appeals (disputes) as a percentage of planning permit applications received. The model seeks to estimate to what extent certain variables are associated with variations in dispute levels, while controlling for a range of other differences between municipalities. Simple regression techniques allow the relative impact of one variable (particularly house prices) to be estimated while holding constant the influences of others.

5.2.2 Data sources

Data has been sourced from the following:

- A database (described at Appendix 1) of property sales and property valuations, linking transaction data to housing characteristics and spatial data indicating the coverage of planning regulations;
- Planning Permit Activity Reports, providing measures of planning applications received, number of applications approved or refused, and objections received (including custom data on objections to types of residential applications, for 2007–08 only);
- Victorian Civil Administrative Appeals Tribunal (VCAT), providing data on the number and type of planning list disputes proceeding to VCAT;
- Planning Schemes Online, used to source planning scheme text and schedules;
- ABS Census of Population and Housing (Census), providing measures of local resident characteristics (education, occupation, homeownership);
- BITRE Economic Growth Database, providing measures of local taxable income levels;
- ABS Building Approvals, providing data on the number of new dwelling starts (building permits by dwelling type).

5.2.3 Variables

Dependent variables
Two types of dependent variables are used. Each refers to different stages of the planning permit sequence as illustrated previously at Figure 5.1. The rate of objections lodged by third parties is used for descriptive analysis only, as the data was only available for one year. The rate of VCAT planning disputes (applications that proceed to arbitration) is used in both the descriptive analysis and as the dependent variable for the regression model. The data sources used to construct the dependent variables are summarised in Table 5.1.

Data on the number of planning permit applications with objections lodged against them, by local government area and type of residential permit application, were obtained for 2007–08 only. The measures derived from this data are:

- percentage of permit applications for one new dwelling with objections lodged against them (2007–08);
- percentage of permit applications for two or more new dwellings with objections lodged against them (2007–08).

The first of the above measures equates to the number of single-dwelling permit applications that were objected to, as a proportion of permit applications received for single dwellings. The second is the number of larger development applications (for two or more dwellings) that were objected to, as a proportion of multiunit permit applications received. It is expected that larger development applications will receive more objections. Objections do not necessarily result in changes to a development
outcome, or in a VCAT dispute. Patterns in these non-time-varying measures of objections are explored in the descriptive analysis only.

Table 5.1: Planning objections and disputes model – dependent variables (input data)

<table>
<thead>
<tr>
<th>Dependent variables</th>
<th>Source</th>
<th>Definition</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCAT planning list cases (nominator)</td>
<td>VCAT Planning &amp; Environment List Survey</td>
<td>Number of planning list cases heard at VCAT tribunal, by municipality. Two planning case types are included: <em>Third-party ‘objection’</em> cases are brought by a third party to a planning application, who objects to the decision of the authority to grant a planning permit. <em>Applicant ‘refusal’</em> cases are bought by the planning applicant, who objects to the decision of the authority to refuse to grant a planning permit, or to impose conditions on a permit.</td>
<td>Financial years 2001–02 to 2007–08, inclusive</td>
</tr>
<tr>
<td>Planning permit applications received (denominator)</td>
<td>Planning Permit Activity Reporting (PPAR) annual reports</td>
<td>The number of planning permit applications received in year, by municipality. Different land uses are as of right, permit required or prohibited, depending on the zoning of the land and whether there are additional planning controls. Planning permit applications have to meet advertising requirements and any interested party may lodge an objection.</td>
<td>Financial years 2003–04 to 2007–08, inclusive</td>
</tr>
<tr>
<td>VCAT planning list cases as a percentage of permit applications (ratio)</td>
<td>VCAT Planning &amp; Environment List Survey, PPAR annual reports</td>
<td>Number of VCAT objection and refusal cases (see above) as a percentage of the number of planning permits received.</td>
<td>Financial years 2003–04 to 2007–08, inclusive</td>
</tr>
<tr>
<td>Percentage of single dwellings with objections</td>
<td>Planning Permit Activity Reporting (PPAR) – custom data</td>
<td>Number of planning permit applications for one new dwelling that had objections lodged against them, as a proportion of permit applications received for one new dwelling.</td>
<td>Financial year 2007–08 only</td>
</tr>
<tr>
<td>Percentage of large developments with objections</td>
<td>Planning Permit Activity Reporting (PPAR) – custom data</td>
<td>Number of planning permit applications for two or more new dwellings that had objections lodged against them, as a proportion of permit applications received for two or more new dwellings.</td>
<td>Financial year 2007–08 only</td>
</tr>
</tbody>
</table>

Data on the number of VCAT planning list cases (planning disputes and appeals), by local government area and type of case, were obtained for the years 2001–02 to 2007–08. The measure derived from this data is:

- VCAT planning list objection and refusal cases as a percentage of planning permit applications received.

This is the dependent variable used for the regression model. It measures the rate (relative to the number of planning permit applications received) of planning tribunal disputes at the planning tribunal, VCAT, in each municipality in each financial year. Two planning case types have been included: ‘objection’ cases, and ‘refusal’ cases, as
described previously. The denominator used is the number of planning permits received by the municipality by year. Although this analysis focuses on ‘objection’ and ‘refusal’ cases, VCAT also hears cases where the authority has failed to grant a permit within the statutory time frame, and cases where the applicant objects to conditions placed on a permit. The key difference between ‘objection’ and ‘refusal’ cases is that the latter is bought by the applicants, and the former is bought by objectors to a proposed development. In both cases, the appeal is in response to the decision of the local authority.

Key variables
Applying the endogenous perspective of homeowners, insiders and planning, it is hypothesised that several of the steps in the planning permit application process (see Figure 5.1) are more likely to occur where an area is of higher housing value. Firstly, a planning permit is more likely to be required, because of tendencies to prefer exclusionary suburban zoning. Although the actual exclusion of new dwellings is comparatively difficult under the VPPs, the number and type of dwellings that require a planning permit will vary by municipality – with additional permit requirements based on local character or heritage controls, for example.

Secondly, objections are more likely to be lodged, because of the greater interest of homeowners in planning outcomes, and their greater resources and legitimacy in engaging with the system. The local authority is also more likely to reject the application, because of its political accountability to existing homeowners. Finally, it is expected that if the authority does approve the application, objectors are more likely to appeal this decision at VCAT – again, because of their greater interest in the outcome, and their greater resources to pursue the appeal. Accordingly, the key variables used to test the hypothesis comprise measures of the housing market, the socioeconomic characteristics of the area, and planning controls. These are as follows:

- median house price of the municipality;
- income levels of residents (using taxable incomes);
- education levels of residents (the proportion of residents with a tertiary education);
- levels of outright homeownership; and
- the presence and extent of different planning controls in the municipality.
### Table 5.2: Planning objections and disputes model – key variables

<table>
<thead>
<tr>
<th>Key variables</th>
<th>Source</th>
<th>Definition</th>
<th>Type</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Housing market</strong></td>
<td>Valuer-General property sales</td>
<td>Median house price for LGA</td>
<td>Continuous</td>
<td>2001–02 to 2007–08</td>
</tr>
<tr>
<td><strong>Socioeconomic characteristics</strong></td>
<td>BITRE household wealth database</td>
<td>Real taxable income for the municipality, per tax payer</td>
<td>Continuous</td>
<td>2001–02 to 2007–08</td>
</tr>
<tr>
<td><strong>Percentage tertiary educated</strong></td>
<td>Census</td>
<td>Percentage of adults with a bachelor degree or higher</td>
<td>Continuous</td>
<td>2001, 2006</td>
</tr>
<tr>
<td><strong>Homeownership</strong></td>
<td>Census</td>
<td>Percentage of private dwellings that are owned outright by the occupier</td>
<td>Continuous</td>
<td>2001, 2006</td>
</tr>
<tr>
<td><strong>Planning controls</strong></td>
<td><strong>Per cent LGA with heritage overlay</strong></td>
<td>The land subject to heritage overlays as a percentage of the total municipality size</td>
<td>Continuous</td>
<td>2009</td>
</tr>
<tr>
<td><strong>Per cent LGA with design or character overlays</strong></td>
<td><strong>VicMap planning</strong></td>
<td>The land subject to design and development overlays and neighbourhood character overlays, as a percentage of the total municipality size</td>
<td>Continuous</td>
<td>2009</td>
</tr>
<tr>
<td><strong>Per cent LGA with environmental overlays</strong></td>
<td><strong>VicMap planning</strong></td>
<td>The land subject to environmental overlays (special landscapes, environmental audit overlays) as a percentage of the total municipality size</td>
<td>Continuous</td>
<td>2009</td>
</tr>
<tr>
<td><strong>Per cent LGA with low-density zoning</strong></td>
<td><strong>VicMap planning</strong></td>
<td>The land subject to low density residential zoning (low density residential zone, rural conservation zone) as a percentage of the total municipality size</td>
<td>Continuous</td>
<td>2009</td>
</tr>
<tr>
<td><strong>Per cent LGA with R1Z zoning</strong></td>
<td><strong>VicMap planning</strong></td>
<td>The land subject to Residential 1 zoning as a percentage of total municipality size</td>
<td>Continuous</td>
<td>2009</td>
</tr>
<tr>
<td><strong>Per cent LGA with CDZ or DZ zoning</strong></td>
<td><strong>VicMap planning</strong></td>
<td>The land subject to comprehensive development zoning or Docklands zoning as a percentage of total municipality size</td>
<td>Continuous</td>
<td>2009</td>
</tr>
<tr>
<td><strong>Per cent LGA with MUZ zoning</strong></td>
<td><strong>VicMap planning</strong></td>
<td>The land subject to mixed-use zoning as a percentage of total municipality size</td>
<td>Continuous</td>
<td>2009</td>
</tr>
<tr>
<td><strong>Per cent LGA with UGZ zoning</strong></td>
<td><strong>VicMap planning</strong></td>
<td>The land subject to urban growth zoning as a percentage of total municipality size</td>
<td>Continuous</td>
<td>2009</td>
</tr>
<tr>
<td><strong>Permit required for lot 300–500 sq m?</strong></td>
<td><strong>VicMap planning</strong></td>
<td>Whether the municipality specifies in the Residential 1 Zone schedule that a permit is required for a house lot of 300-500 sq m</td>
<td>Dummy</td>
<td>2009</td>
</tr>
</tbody>
</table>

The data sources used to construct the key variable measures are summarised in Table 5.2, above. Dummy calendar year variables are also used, with the year 2003–04 as the base. Median prices are included as a measure of the financial interest that property owners may have in the housing market and the planning outcome. Homeownership is a related measure. The income and education measures are
included as indicators of levels of financial and professional resources. The planning measures in the model refer to certain aspects of the planning system that apply additional planning permit triggers – principally, planning overlays (including heritage protection, environmental significance and neighbourhood character controls); and more restrictive zoning (residential 1 zones, and low-density residential zones). As the analysis is restricted to the municipality level, planning measures refer to the percentage of the municipality covered by the control.

The measure of whether the municipality requires a permit for houses on medium-sized plots (300–500 square metres) is in dummy (yes/no) form. Other planning measures capture certain aspects of the planning system that make residential development less restricted, including mixed-use zoning, and different ‘incentive’ or ‘fast tracking’ zones. The planning controls are as at the end of the study period. This means there is the risk of changes in planning controls between the date of the application or dispute, and 2008. The limited availability of historical planning data forces the sample design to make this assumption. However, institutional features change slowly and abruptly. To limit the study to a cross-section would have resulted in the loss of much of the much of the richness of the time varying data.

Control variables
The final components of the model take into account the existing built form of the municipality and the scale and type of new development occurring there. As specified at Table 5.3 below, these control variables comprise the density of the municipality, the total number of building permits issued in each year, and the percentage of new building permits that were for higher-density housing (not detached housing). The literature provides two possible reasons for inclusion of the density measure, and two possible interpretations of it. Under the welfare economics model, negative externalities may be more noticeable in more built-up areas. Alternatively, based on the endogenous model, housing in lower-density areas may have a greater scarcity value – prompting greater interest in objecting to new development.

In either case, the literature on urban consolidation suggests that objections and disputes will be more prevalent in response to higher-density housing development. In including these variables in the model, the hypothesis is that the key variable will still be an important determinant of planning dispute levels, even after controlling for differences in built form and development. The previous chapter suggested that conflicts around planning reforms and higher-density housing have been the most noticeable in Melbourne’s more affluent suburbs. These are not, however, the only
locations where higher-density housing has been built. The regression model brings these interactions into focus.

<table>
<thead>
<tr>
<th>Control variables</th>
<th>Source</th>
<th>Definition</th>
<th>Type</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGA density</td>
<td>Census</td>
<td>Number of occupied private dwellings per sq km in size of the municipality</td>
<td>Continuous</td>
<td>2001, 2006</td>
</tr>
<tr>
<td>Number of building permits – all dwellings</td>
<td>ABS Building Approvals Cat. No. 8731.0</td>
<td>Total new dwellings with building approval</td>
<td>Continuous</td>
<td>2003–04 to 2007–08</td>
</tr>
<tr>
<td>Percentage high-density permits</td>
<td>ABS Building Approvals Cat. No. 8731.0</td>
<td>Higher-density dwellings (not detached houses) as a proportion of new dwellings with building approval</td>
<td>Continuous</td>
<td>2003–04 to 2007–08</td>
</tr>
<tr>
<td>Average residential lot size (sq m) 2008</td>
<td>Property and valuations dataset</td>
<td>Average size of residential lots, in square metres</td>
<td>Continuous</td>
<td>2008</td>
</tr>
</tbody>
</table>

### 5.3 Findings – descriptive results

#### 5.3.1 Objections and disputes

Planning permit application and VCAT dispute data are summarised by financial year at Table 5.4. The table shows the average, level of variation, and total sum of the number of permit applications received; the number of VCAT objection and refusal cases; and the rate of VCAT cases. The average annual number of planning permit applications received by municipalities was 1089 across all years, with this number falling slightly between 2003–04 and 2006–07 (from 1082 to 1010) but increasing again in 2007–08 (with an average of 1246 applications). There was a high level of variation in the number of planning permits received, with a standard deviation of 478 from the mean. Municipalities typically received between around 600 and 1600 planning permit applications each year.

Compared to this, the average annual number of VCAT planning disputes was low, with an average of 46 planning disputes per municipality per year. The average number of VCAT disputes by municipality fell from 52.71 in 2003–04 to 39.52 per year in 2006–07, but increased again in 2007–08 to 43.48. Total dispute numbers tended to decrease over time. There were 1634 objection and refusal disputes in Melbourne municipalities in 2003–04, falling to 1225 in 2006–07 but increasing again to 1348 in 2007–08. Variation in the number of VCAT disputes was very high, with a standard deviation of 29.03 cases from a mean of 46.01. Thus, somewhere between 15 and 75 VCAT planning dispute cases were typically heard at VCAT for each municipality in each year. However, in some years and municipalities, over 100 VCAT objection and dispute cases were heard.
Table 5.4: Planning dispute levels in Melbourne LGAs 2003-04 to 2007-08: average, standard deviation, and total values by year

<table>
<thead>
<tr>
<th>Year</th>
<th>Variable</th>
<th>Average</th>
<th>Standard deviation</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003–04</td>
<td>Planning permit applications</td>
<td>1,081.52</td>
<td>491.64</td>
<td>33,527</td>
</tr>
<tr>
<td></td>
<td>Number of VCAT objection and refusal cases</td>
<td>52.71</td>
<td>33.53</td>
<td>1,634</td>
</tr>
<tr>
<td></td>
<td>VCAT objection and refusal cases as percentage of applications received</td>
<td>4.96</td>
<td>2.64</td>
<td>-</td>
</tr>
<tr>
<td>2004–05</td>
<td>Planning permit applications</td>
<td>1,069.71</td>
<td>461.41</td>
<td>33,161</td>
</tr>
<tr>
<td></td>
<td>Number of VCAT objection and refusal cases</td>
<td>48.26</td>
<td>30.42</td>
<td>1,496</td>
</tr>
<tr>
<td></td>
<td>VCAT objection and refusal cases as percentage of applications received</td>
<td>4.59</td>
<td>2.42</td>
<td>-</td>
</tr>
<tr>
<td>2005–06</td>
<td>Planning permit applications</td>
<td>1,035.84</td>
<td>448.45</td>
<td>32,111</td>
</tr>
<tr>
<td></td>
<td>Number of VCAT objection and refusal cases</td>
<td>46.10</td>
<td>27.67</td>
<td>1,429</td>
</tr>
<tr>
<td></td>
<td>VCAT objection and refusal cases as percentage of applications received</td>
<td>4.40</td>
<td>2.06</td>
<td>-</td>
</tr>
<tr>
<td>2006–07</td>
<td>Planning permit applications</td>
<td>1,009.61</td>
<td>441.92</td>
<td>31,298</td>
</tr>
<tr>
<td></td>
<td>Number of VCAT objection and refusal cases</td>
<td>39.52</td>
<td>24.66</td>
<td>1,225</td>
</tr>
<tr>
<td></td>
<td>VCAT objection and refusal cases as percentage of applications received</td>
<td>3.81</td>
<td>1.80</td>
<td>-</td>
</tr>
<tr>
<td>2007–08</td>
<td>Planning permit applications</td>
<td>1,246.00</td>
<td>536.29</td>
<td>38,626</td>
</tr>
<tr>
<td></td>
<td>Number of VCAT objection and refusal cases</td>
<td>43.48</td>
<td>28.31</td>
<td>1,348</td>
</tr>
<tr>
<td></td>
<td>VCAT objection and refusal cases as percentage of applications received</td>
<td>3.37</td>
<td>1.74</td>
<td>-</td>
</tr>
<tr>
<td>All Years</td>
<td>Planning permit applications</td>
<td>1,088.54</td>
<td>478.22</td>
<td>168,723</td>
</tr>
<tr>
<td></td>
<td>Number of VCAT objection and refusal cases</td>
<td>46.01</td>
<td>29.03</td>
<td>7,132</td>
</tr>
<tr>
<td></td>
<td>VCAT objection and refusal cases as percentage of applications received</td>
<td>4.23</td>
<td>2.21</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Author’s calculations based on VCAT planning list and PPAR planning permit activity data. See text.

The rate of VCAT planning disputes as a percentage of planning permit applications received was on average 4.23 per cent. This figure decreased consistently over the study period, from 4.96 per cent in 2003–04 to and average of 3.37 per cent in 2007–08. The most likely explanation is the introduction of legislation to ‘cut red tape’ in planning (State of Victoria Department of Sustainability and Environment 2006). In combination with increasing numbers of ‘fast tracked’ applications, these reforms have progressively reduced the number of uses and zones in which third-party appeal rights are available. On average, one in every 24 planning permits proceeded to a VCAT appeal.

The overall rate of VCAT dispute was low, but variation between municipalities was still high. The five municipalities with the greatest number of VCAT planning disputes (set out in Table 5.5) were Boroondara, Port Phillip, Stonnington, Monash and Mornington Peninsula. These five municipalities each had over 400 planning dispute cases over the period 2003–04 to 2007–08, and collectively accounted for a third (33 per cent) of all the disputes over the study period. In some years these municipalities had over 100 VCAT disputes each. At the lower end of the scale, some municipalities (including Hume, Wyndham, Frankston and Brimbank) had fewer than 100 VCAT planning
disputes each across the whole study period and tended to have fewer than 20 in any given year.

Table 5.5: Average rates of planning objection and dispute in Melbourne LGAs, 2003-04 to 2007-08

<table>
<thead>
<tr>
<th>Name</th>
<th>VCAT planning disputes as a % of planning permits: 2003–04 to 2007–08</th>
<th>% of single-dwelling applications objected to (2007–08)</th>
<th>% of multi-dwelling applications objected to (2007–08)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banyule (C)</td>
<td>5.59</td>
<td>0</td>
<td>3.4</td>
</tr>
<tr>
<td>Bayside (C)</td>
<td>6.22</td>
<td>12.3</td>
<td>31.7</td>
</tr>
<tr>
<td>Boroondara (C)</td>
<td>7.96</td>
<td>27.0</td>
<td>43.5</td>
</tr>
<tr>
<td>Brimbank (C)</td>
<td>1.90</td>
<td>1.1</td>
<td>26.3</td>
</tr>
<tr>
<td>Cardinia (S)</td>
<td>2.32</td>
<td>3</td>
<td>36.7</td>
</tr>
<tr>
<td>Casey (C)</td>
<td>3.26</td>
<td>0</td>
<td>7.9</td>
</tr>
<tr>
<td>Darebin (C)</td>
<td>5.85</td>
<td>33.3</td>
<td>42.4</td>
</tr>
<tr>
<td>Frankston (C)</td>
<td>1.87</td>
<td>5.6</td>
<td>39.0</td>
</tr>
<tr>
<td>Glen Eira (C)</td>
<td>6.58</td>
<td>34.0</td>
<td>55.1</td>
</tr>
<tr>
<td>Greater Dandenong (C)</td>
<td>2.04</td>
<td>0</td>
<td>31.8</td>
</tr>
<tr>
<td>Hobsons Bay (C)</td>
<td>6.49</td>
<td>35.1</td>
<td>37.5</td>
</tr>
<tr>
<td>Hume (C)</td>
<td>1.05</td>
<td>4.5</td>
<td>18.8</td>
</tr>
<tr>
<td>Kingston (C)</td>
<td>4.59</td>
<td>1.2</td>
<td>19.2</td>
</tr>
<tr>
<td>Knox (C)</td>
<td>3.43</td>
<td>12.0</td>
<td>38.0</td>
</tr>
<tr>
<td>Manningham (C)</td>
<td>3.56</td>
<td>0</td>
<td>50.0</td>
</tr>
<tr>
<td>Maribyrnong (C)</td>
<td>4.41</td>
<td>24.0</td>
<td>36.2</td>
</tr>
<tr>
<td>Maroondah (C)</td>
<td>3.37</td>
<td>38.7</td>
<td>60.2</td>
</tr>
<tr>
<td>Melbourne (C)</td>
<td>3.60</td>
<td>90.0</td>
<td>57.4</td>
</tr>
<tr>
<td>Melton (S)</td>
<td>4.27</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Monash (C)</td>
<td>7.57</td>
<td>43.2</td>
<td>48.0</td>
</tr>
<tr>
<td>Moonee Valley (C)</td>
<td>4.41</td>
<td>32.8</td>
<td>62.7</td>
</tr>
<tr>
<td>Moreland (C)</td>
<td>5.05</td>
<td>27.7</td>
<td>53.2</td>
</tr>
<tr>
<td>Mornington Peninsula (S)</td>
<td>2.80</td>
<td>26.7</td>
<td>48.5</td>
</tr>
<tr>
<td>Nillumbik (S)</td>
<td>3.17</td>
<td>29.8</td>
<td>70.4</td>
</tr>
<tr>
<td>Port Phillip (C)</td>
<td>6.10</td>
<td>70.6</td>
<td>78.4</td>
</tr>
<tr>
<td>Stonnington (C)</td>
<td>7.05</td>
<td>55.1</td>
<td>71.9</td>
</tr>
<tr>
<td>Whitehorse (C)</td>
<td>4.81</td>
<td>44.9</td>
<td>59.5</td>
</tr>
<tr>
<td>Whittlesea (C)</td>
<td>3.26</td>
<td>0</td>
<td>7.8</td>
</tr>
<tr>
<td>Wyndham (C)</td>
<td>1.55</td>
<td>0</td>
<td>35.3</td>
</tr>
<tr>
<td>Yarra (C)</td>
<td>4.81</td>
<td>47.7</td>
<td>63.0</td>
</tr>
<tr>
<td>Yarra Ranges (S)</td>
<td>2.02</td>
<td>12.6</td>
<td>39.5</td>
</tr>
<tr>
<td>All Municipalities</td>
<td><strong>4.23</strong></td>
<td><strong>23.0</strong></td>
<td><strong>41.1</strong></td>
</tr>
</tbody>
</table>

Source: Author’s calculations based on VCAT planning list and PPAR planning permit activity data. See text.

Regarding planning disputes as a percentage of planning permit applications received, the municipalities with the highest rates of VCAT dispute over the study period (refer to Table 5.5) were Boroondara, Monash, Stonnington, Glen Eira and Hobsons Bay. In these municipalities, rates of VCAT dispute were over 6 per cent of permit applications. Thus the equivalent of one in every 12 to 15 permit applications in these municipalities resulted in a VCAT dispute. By contrast, overall rates of dispute in the municipalities of Hume, Wyndham, Frankston and Brimbank were under 2 per cent, equivalent to one in every 50 or more permit applications proceeding to a VCAT dispute.
Figure 5.2: Number of VCAT planning disputes, Melbourne LGAs 2003-04 to 2007-08.

Source: Author’s calculations based on VCAT planning list data. See text.

Figure 5.3: VCAT planning (objection and refusal) disputes as percentage of permit applications received, Melbourne LGAs 2003-04 to 2007-08.

Source: Author’s calculations based on VCAT planning list and PPAR planning permit activity data. See text.
Spatial trends are important to understanding the distribution of planning disputes. The map at Figure 5.2, above, shows municipalities grouped by their total number of VCAT objection and dispute cases over the study period. The top quintile of municipalities, each having over 345 disputes in the period 2003–04 to 2007–08, are shaded in the darkest colour. These are located in the inner east and south-east of the city. Inner municipalities to the north of the city also had relatively high numbers of disputes. The western municipalities, including inner and middle ring areas, have low numbers of VCAT disputes. The map at Figure 5.3 shows the spatial distribution of VCAT disputes as a proportion of permit applications received. In this map, the municipalities with higher dispute rates are again shaded in the darkest colour. Similar to Figure 5.2, the municipalities with the highest rates of dispute are concentrated in the middle eastern and south-eastern suburbs. The exception to this is Hobsons Bay (including, importantly, the high-cost suburb of Williamstown) to the west.

Turning to the 2007–08 data on the proportion of permit applications for new dwellings that had objections lodged against them, across all municipalities an average of 23 per cent of applications for a single dwelling received objections, equivalent to around one in four applications. This rate of planning objection varied widely (see Table 5.5), up to some surprisingly high levels. Over 50 per cent of single-dwelling applications in the
inner municipalities of Melbourne, Port Phillip and Stonnington received objections. At the lower end of the scale, many municipalities either had no objections against single dwellings (partly because of fewer permit regulations requiring permits for single dwellings), or had objection rates of less than 10 per cent. As expected, applications for developments of more than one dwelling were more widely objected to, with an average objection rate of 41.1 per cent across all municipalities. In many municipalities, over half of all multiunit applications received objections.

5.3.2 Dispute levels and house prices

The research tests the idea that rates of planning objection and dispute will be higher in areas with higher house prices. Median house prices by municipality are mapped at Figure 5.5. In Table 5.6, Melbourne municipalities have been grouped by median house price into quintiles (five equal count groups). For each group (the lowest 20 per cent of median house prices, to the top 20 per cent), the average number of VCAT disputes in each year is shown. This relationship is shown again in graph form at Figure 5.6.

Figure 5.5: Median house price by Melbourne LGA, 2007–08

Source: Author’s calculations based on property sales data (see Appendix 1).
The municipalities in the lowest 20 per cent of house prices had, on average, 25.83 disputes per municipality in 2003–04. This number fell consistently in each year, to an average of 13.50 in 2007–08. Across all years, the average number of VCAT disputes for these lowest-priced municipalities was 18.03. By contrast, in the top quintile of house prices, the average number of disputes was 79.17 disputes – around four times as high as in the lowest priced areas. Average dispute numbers for the municipalities with the highest house prices were greatest in 2003–04 at 85.00 on average, lowest in 2006–07, and increased again in 2007–08 to an average of 82.33 disputes per municipality. In all years, the highest quintile of house prices had the highest average number of disputes, and the lowest group of house prices had the least average number of disputes. Average dispute numbers also increased consistently across each other price quintile – with areas of low to mid house prices having, for example, an average of 34.40 VCAT planning disputes annually.

Table 5.6: Median house price quintiles and average number of VCAT disputes, Melbourne LGAs 2003-04 to 2007-08, by year

<table>
<thead>
<tr>
<th></th>
<th>1. Bottom 20% of house prices</th>
<th>2. Low–mid house prices</th>
<th>3. Middle 20% of house prices</th>
<th>4. Mid–high house prices</th>
<th>5. Top 20% of house prices</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003–04</td>
<td>25.83</td>
<td>37.33</td>
<td>53.57</td>
<td>61.67</td>
<td>85.00</td>
<td>52.71</td>
</tr>
<tr>
<td>2004–05</td>
<td>17.50</td>
<td>35.17</td>
<td>53.86</td>
<td>56.33</td>
<td>77.50</td>
<td>48.26</td>
</tr>
<tr>
<td>2005–06</td>
<td>17.50</td>
<td>34.67</td>
<td>45.29</td>
<td>52.33</td>
<td>80.83</td>
<td>46.10</td>
</tr>
<tr>
<td>2006–07</td>
<td>15.83</td>
<td>32.17</td>
<td>35.14</td>
<td>45.00</td>
<td>70.17</td>
<td>39.52</td>
</tr>
<tr>
<td>2007–08</td>
<td>13.50</td>
<td>32.67</td>
<td>42.00</td>
<td>47.17</td>
<td>82.33</td>
<td>43.48</td>
</tr>
<tr>
<td>All Years</td>
<td>18.03</td>
<td>34.40</td>
<td>45.97</td>
<td>52.50</td>
<td>79.17</td>
<td>46.01</td>
</tr>
</tbody>
</table>

Source: Author’s calculations based on property sales data (see Appendix 1); and VCAT planning list and PPAR planning permit activity data (see text).

Table 5.7: Median house price quintiles and rate of VCAT dispute, Melbourne LGAs 2003-04 to 2007-08, by year

<table>
<thead>
<tr>
<th></th>
<th>1. Bottom 20% of house prices</th>
<th>2. Low–mid house prices</th>
<th>3. Middle 20% of house prices</th>
<th>4. Mid–high house prices</th>
<th>5. Top 20% of house prices</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003–04</td>
<td>3.92</td>
<td>2.89</td>
<td>5.74</td>
<td>5.57</td>
<td>6.53</td>
<td>4.96</td>
</tr>
<tr>
<td>2004–05</td>
<td>2.13</td>
<td>2.73</td>
<td>5.92</td>
<td>5.45</td>
<td>6.47</td>
<td>4.59</td>
</tr>
<tr>
<td>2005–06</td>
<td>2.27</td>
<td>2.80</td>
<td>4.82</td>
<td>5.42</td>
<td>6.61</td>
<td>4.40</td>
</tr>
<tr>
<td>2006–07</td>
<td>2.02</td>
<td>2.49</td>
<td>3.99</td>
<td>4.56</td>
<td>5.95</td>
<td>3.81</td>
</tr>
<tr>
<td>2007–08</td>
<td>1.48</td>
<td>1.94</td>
<td>3.76</td>
<td>3.79</td>
<td>5.70</td>
<td>3.41</td>
</tr>
<tr>
<td>Total</td>
<td>2.40</td>
<td>2.57</td>
<td>4.85</td>
<td>4.96</td>
<td>6.25</td>
<td>4.24</td>
</tr>
</tbody>
</table>

Source: Author’s calculations based on property sales data (see Appendix 1); and VCAT planning list and PPAR planning permit activity data (see text).

Table 5.7 again shows municipalities grouped by median house prices. In this table (and again at Figure 5.2), the average rate of VCAT disputes relative to the number of planning permits received is shown. Again, lower house price areas recorded consistently lower rates of planning disputes. Municipalities in the lower quintile of...
house prices had an average of 2.40 per cent of planning permit applications proceed to a VCAT dispute. For municipalities in the top quintile of house prices, average rates of VCAT dispute were two to three times as high, at 6.25 per cent of permit applications. In all quintiles the rate of dispute decreased over time. Although higher-priced areas consistently had the highest planning dispute rates, and correspondingly the lower-priced areas consistently had the lower dispute rates, variation in some years is seen in the middle price categories. In 2003–04 and 2004–05, the municipalities in the middle 20 per cent of house prices (quintile 3) had higher average rates of VCAT dispute than the next most expensive group (quintile 4).

Figure 5.6: Median house price quintiles by number of VCAT planning disputes, Melbourne LGAs 2003-04 to 2007-08

Planning Disputes:
Average number of VCAT Objection and Dispute Cases
By House Price Quintile of Municipality, and Financial Year

Housing prices and dispute levels are also graphed against each other at Figure 5.8, showing a positive correlation. Overall, these patterns in rates of VCAT disputes appear consistent with the expectation that higher house prices are associated with higher rates of planning dispute. This relationship is descriptive only, and will be explored in more detail in the regression model.

Source: Author’s calculations based on property sales data (see Appendix 1); and VCAT planning list and PPAR planning permit activity data (see text).
Figure 5.7: Median house price quintiles by rate of VCAT planning disputes, Melbourne LGAs 2003-04 to 2007-08

Planning Disputes:
Average number of VCAT Objection and Dispute Cases, as % of Permit Applications
By House Price Quintile of Municipality, and Financial Year

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Bottom 20% house prices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Low-Mid house prices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Middle 20% of house prices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Mid-High house prices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Top 20% of house prices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s calculations based on property sales data (see Appendix 1); and VCAT planning list and PPAR planning permit activity data (see text).

Figure 5.8: Median house price by rate of VCAT planning dispute, Melbourne LGAs 2003-04 to 2007-08

Source: Author’s calculations based on property sales data (see Appendix 1); and VCAT planning list and PPAR planning permit activity data (see text).
5.3.3 Objection levels, house prices and new development

Differences in rates of planning disputes may also reflect differences in the type of planning applications received. This possibility is difficult to exclude entirely, without details of the proposed applications that proceeded to VCAT. An alternative to the endogenous model is that proposed developments may be more intensive, and involve more negative externalities, in higher-value areas. A welfare economics explanation would suggest that the nature of these proposals is what might cause greater conflict. In either case (from the welfare economics or endogenous perspective), it is expected that larger developments and higher-density developments are more likely to be sources of conflict.

For this reason, the levels of objection (for 2007–08) to both single dwelling and multi-dwelling applications are considered. Table 5.8 shows the extent to which single- and multi-dwelling permit applications in 2007–08 received third-party objections, again grouped by housing price quintile. The same data is illustrated at Figure 5.9. A strong association between higher-priced housing areas and rates of planning objection is apparent. Objection rates for single-dwelling applications were, for municipalities in the top quintile of house prices, nearly 50 per cent. Thus every second permit application for a single dwelling was objected to in higher-value areas. It is not necessarily larger housing developments that drive differences in objection levels between different value areas. In lower-value areas, fewer than 2 per cent of permit applications for single dwellings received objections in 2007–08. The rate of objection to single-dwelling applications increased consistently with increases in house price quintile.

As expected, applications for developments of more than one dwelling recorded much higher levels of objection in all price groups. In the lower quintile of house prices, 20.84 per cent of multi-dwelling applications were objected to. In the upper 20 per cent of house prices, the rate of objection was again higher, with over half (56.35 per cent) of multi-dwelling applications receiving objections. The rate of objection in higher-value areas was not dissimilar between single dwellings and multi-dwellings. In other areas the difference in rates was greater.

An additional way of looking at this relationship is to consider the areas where objection and dispute levels were greater, and whether these were the also areas where higher-density housing was predominantly built. The maps at Figures 5.2, 5.3 and 5.4 illustrated that the municipalities with the highest numbers and rates of planning objection and dispute were in the eastern suburbs and to a lesser extent the inner metropolitan areas (including Boroondara, Monash, Stonnington and Glen Eira). The
map at Figure 5.10 shows the municipalities where the greatest numbers of higher-density dwellings were built over the study period. The municipalities with the highest number of high-density dwellings were in the inner and northern municipalities of Melbourne, Port Phillip, Moreland, Darebin and Yarra. The areas with the highest rates of planning dispute had high shares of higher-density housing compared to outer municipalities, but were similar to the inner western municipalities, which had low rates of dispute. The effects of housing prices and higher-density housing may be interactive. These relationships are explored in the regression model.

Table 5.8: Median house price quintiles and rate of local objection to permit applications (2007–08)

<table>
<thead>
<tr>
<th>House Price Quintile of Municipality</th>
<th>Percentage Objected to Applications for a Single Dwelling</th>
<th>Percentage Objected to Applications for Multi-Dwelling Developments (2+ dwellings)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Bottom 20% house prices</td>
<td>1.44</td>
<td>20.84</td>
</tr>
<tr>
<td>2 Low–mid house prices</td>
<td>9.47</td>
<td>34.11</td>
</tr>
<tr>
<td>3 Middle 20% of house prices</td>
<td>26.93</td>
<td>43.31</td>
</tr>
<tr>
<td>4 Mid–high house prices</td>
<td>28.29</td>
<td>50.40</td>
</tr>
<tr>
<td>5 Top 20% of house prices</td>
<td>48.18</td>
<td>56.35</td>
</tr>
<tr>
<td>Total</td>
<td>23.0</td>
<td>41.1</td>
</tr>
</tbody>
</table>

Source: Author’s calculations based on property sales data (see Appendix 1); and PPAR planning permit activity data (see text).

Figure 5.9: Median house price quintiles and rate of objection to planning permit applications, Melbourne LGAs 2007–08

Source: Author’s calculations based on property sales data (see Appendix 1); and PPAR planning permit activity data (see text).
Figure 5.10: Number of higher-density dwellings constructed, Melbourne LGAs 2003–04 to 2007–08

Source: ABS Cat. 8731.0.
5.3.4 Income and education

The hypothesis is also based on the potential influence of socioeconomic characteristics on planning disputes. These are indicators of greater resources in dealing with the planning system. In Table 5.9, Melbourne municipalities have been grouped by average taxable incomes into quintiles (five equal count groups). For each group (the lowest 20 per cent of incomes, to the top 20 per cent), the average rate of VCAT disputes in each year is shown.

Table 5.9: Taxable income quintiles and rates of VCAT dispute, Melbourne LGAs 2003-04 to 2007-08, by year

<table>
<thead>
<tr>
<th>VCAT objection and refusal cases as percentage of applications received</th>
<th>1 Bottom 20% taxable incomes</th>
<th>2 Low–mid taxable incomes</th>
<th>3 Middle 20% of taxable incomes</th>
<th>4 Mid–high taxable incomes</th>
<th>5 Top 20% of taxable incomes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003–04</td>
<td>3.92</td>
<td>2.89</td>
<td>5.74</td>
<td>5.57</td>
<td>6.53</td>
<td>4.96</td>
</tr>
<tr>
<td>2004–05</td>
<td>2.13</td>
<td>2.73</td>
<td>5.92</td>
<td>5.45</td>
<td>6.47</td>
<td>4.59</td>
</tr>
<tr>
<td>2005–06</td>
<td>2.27</td>
<td>2.80</td>
<td>4.82</td>
<td>5.42</td>
<td>6.61</td>
<td>4.40</td>
</tr>
<tr>
<td>2006–07</td>
<td>2.02</td>
<td>2.49</td>
<td>3.99</td>
<td>4.56</td>
<td>5.95</td>
<td>3.81</td>
</tr>
<tr>
<td>2007–08</td>
<td>1.48</td>
<td>1.94</td>
<td>3.76</td>
<td>3.79</td>
<td>5.70</td>
<td>3.41</td>
</tr>
<tr>
<td>Total</td>
<td>2.40</td>
<td>2.57</td>
<td>4.85</td>
<td>4.96</td>
<td>6.25</td>
<td>4.24</td>
</tr>
</tbody>
</table>

Source: Author’s calculations based on BITRE household wealth database; and on VCAT planning list and PPAR planning permit activity data (see text).

Table 5.10: Education quintiles and rates of VCAT dispute, by year

<table>
<thead>
<tr>
<th>VCAT objection and refusal cases as percentage of applications received</th>
<th>1 Bottom 20% tertiary education</th>
<th>2 Low–mid tertiary education</th>
<th>3 Middle 20% of tertiary education</th>
<th>4 Mid–high tertiary education</th>
<th>5 Top 20% of tertiary education</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003–04</td>
<td>3.92</td>
<td>2.89</td>
<td>5.74</td>
<td>5.57</td>
<td>6.53</td>
<td>4.96</td>
</tr>
<tr>
<td>2004–05</td>
<td>2.13</td>
<td>2.73</td>
<td>5.92</td>
<td>5.45</td>
<td>6.47</td>
<td>4.59</td>
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<tr>
<td>2005–06</td>
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<td>6.61</td>
<td>4.40</td>
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<tr>
<td>2006–07</td>
<td>2.02</td>
<td>2.49</td>
<td>3.99</td>
<td>4.56</td>
<td>5.95</td>
<td>3.81</td>
</tr>
<tr>
<td>2007–08</td>
<td>1.48</td>
<td>1.94</td>
<td>3.76</td>
<td>3.79</td>
<td>5.70</td>
<td>3.41</td>
</tr>
<tr>
<td>Total</td>
<td>2.40</td>
<td>2.57</td>
<td>4.85</td>
<td>4.96</td>
<td>6.25</td>
<td>4.24</td>
</tr>
</tbody>
</table>

Source: Author’s calculations based on ABS 2006 Census; and on VCAT planning list and PPAR planning permit activity data (see text).

The rate of VCAT planning disputes relative to the number of permits received was higher in the top quintile of incomes (averaging 6.25 per cent) than in lower income municipalities. Municipalities in the lower 20 per cent of incomes had an average rate of VCAT disputes of 2.40 per cent. Table 5.10 shows municipalities grouped by levels of education (the proportion of adults with a university degree), against their corresponding levels of VCAT dispute. Again, more highly educated areas have higher rates of VCAT dispute.
Figure 5.11: Average annual taxable income and rate of VCAT planning disputes, Melbourne LGAs 2003-04 to 2007-08

Source: Author’s calculations based on BITRE household wealth database; and on VCAT planning list and PPAR planning permit activity data (see text).

Figure 5.12: Tertiary education and rate of VCAT dispute, Melbourne LGAs 2003-04 to 2007-08

Source: Author’s calculations based on ABS 2006 Census; and on VCAT planning list and PPAR planning permit activity data (see text).
What is also immediately apparent from the tables is that the areas of highest education and the areas of high income are the same. This is also seen in Figure 5.11 and Figure 5.12, which show the correlations between incomes and planning disputes, and between education and planning disputes, respectively. There is clearly a very high level of multicollinearity between the measures of house price, income and education. On the one hand, this supports the research hypothesis – there are definite patterns to the types of areas where rates of planning objection and dispute are higher. It also presents issues for modelling in that many of the key variables appear to measure essentially the same thing. The approach to this issue is discussed in the next section.

5.4 Findings – modelling results

This part of the chapter explores findings from an ordinary least squares regression model developed to explain rates of planning disputes by municipality. The model tests the hypothesis that patterns in planning disputes will reflect the economic interests of homeowners and their preferences for traditional suburban zoning controls. The existing theory and evidence expects that planning backlash – in this case, rates of planning appeals – will be higher in areas of higher housing values and in areas of comparative social and economic advantage.

The preceding descriptive analyses suggested that there are some strong correlations at the municipal level between some of the key variables (housing prices, income, education) and the rates of planning dispute. The purpose of the regression model is to identify the influence of the key variables while controlling for other factors – including changes over time, and differences in built form and development. The modelling approach is important as it allows interrelationships between different explanations for endogenous effects in the planning system to be explored. Higher-value areas may have higher rates of dispute in part because of planning requirements, or in part because of higher existing housing densities. The model seeks to identify to what extent the key variables are significant determinants of variation in dispute levels, while controlling for a range of other differences.

The first part of the model comprises the median house price, and dummy (binary) year variables. In the second part of the model, additional key variables – measures of income, education and homeownership – are included. Due to the very high extent of collinearity (see previous section), it was elected to drop tertiary education from the model and to retain taxable income. The third part of the model integrates a range of
measures of planning regulation. These include the coverage of different planning overlays, and the coverage of different zones that either mean that residential development is subject to fewer controls and permit triggers, or is subject to more regulatory mechanisms. These were described in Section 5.2.3. In the fourth, final part of the model, other variables are added to capture the density of existing development, and the scale and density of new housing development. Descriptive statistics for the variables used in the model are shown at Table 5.11. The model findings are summarised in Table 5.12 and Table 5.13.

Table 5.11: Descriptive statistics for planning disputes model variables (Melbourne LGAs 2003-04 to 2007-08)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of VCAT objection and refusal cases</td>
<td>46.01</td>
<td>40.0</td>
<td>29.03</td>
</tr>
<tr>
<td>VCAT objection and refusal cases as percentage of applications received (%)</td>
<td>4.23</td>
<td>3.81</td>
<td>2.21</td>
</tr>
<tr>
<td>Median house price ($)</td>
<td>428,437</td>
<td>370,000</td>
<td>191,018</td>
</tr>
<tr>
<td>Real taxable income per tax payer ($)</td>
<td>51,691</td>
<td>47,498</td>
<td>11,445</td>
</tr>
<tr>
<td>Percentage tertiary educated (%)</td>
<td>19.18</td>
<td>18.20</td>
<td>9.41</td>
</tr>
<tr>
<td>Percentage outright owned (%)</td>
<td>34.56</td>
<td>35.97</td>
<td>8.24</td>
</tr>
<tr>
<td>Percentage LGA with heritage overlay (%)</td>
<td>9.17</td>
<td>2.70</td>
<td>13.10</td>
</tr>
<tr>
<td>Percentage LGA with design or character overlays (%)</td>
<td>11.19</td>
<td>6.80</td>
<td>15.08</td>
</tr>
<tr>
<td>Percentage LGA with environmental overlays (%)</td>
<td>24.52</td>
<td>12.80</td>
<td>31.14</td>
</tr>
<tr>
<td>Percentage LGA with low density zoning (%)</td>
<td>6.55</td>
<td>.20</td>
<td>13.30</td>
</tr>
<tr>
<td>Percentage LGA with Residential 1 zoning (%)</td>
<td>37.52</td>
<td>37.06</td>
<td>27.01</td>
</tr>
<tr>
<td>Percentage LGA with Comprehensive Development or Docklands zoning (%)</td>
<td>1.28</td>
<td>.09</td>
<td>3.23</td>
</tr>
<tr>
<td>Percentage LGA with mixed use zoning (%)</td>
<td>.79</td>
<td>.17</td>
<td>1.54</td>
</tr>
<tr>
<td>Permit required for house lot 300-500 sq m?</td>
<td>.35</td>
<td>.00</td>
<td>.48</td>
</tr>
<tr>
<td>LGA Density (dwellings per sq km)</td>
<td>6.36</td>
<td>5.78</td>
<td>5.25</td>
</tr>
<tr>
<td>Average residential lot size, 2008 (sq m)</td>
<td>829</td>
<td>681</td>
<td>742</td>
</tr>
<tr>
<td>Average house floor size, 2008 (sq m)</td>
<td>164</td>
<td>162</td>
<td>27</td>
</tr>
<tr>
<td>New dwellings built (building approvals)</td>
<td>897</td>
<td>655</td>
<td>656</td>
</tr>
<tr>
<td>New higher density dwellings as percentage of total new (%)</td>
<td>33.81</td>
<td>32.65</td>
<td>22.68</td>
</tr>
</tbody>
</table>

Source: Author’s calculations based on planning disputes model. See text.

Before the results are discussed, some caveats should be placed on the model and its interpretation. Firstly, there is always the possibility of omitted variable bias. Unobserved variables not included in the model (for example, other differences between municipalities) may be the cause of differences in rates of planning dispute. Secondly, there is the risk of simultaneity bias where the independent variables are correlated. These issues are difficult to avoid for this type of analysis, but should be kept in mind.
Table 5.12: Planning disputes model (Melbourne LGAs 2003-04 to 2007-08): summary of results

<table>
<thead>
<tr>
<th>Model (Planning disputes as % of permit applications)</th>
<th>$R$</th>
<th>$R$ square</th>
<th>Adjusted $R$ square</th>
<th>Standard error of the estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – house price, year</td>
<td>.658</td>
<td>.433</td>
<td>.414</td>
<td>1.689</td>
</tr>
<tr>
<td>2 – house price, year, income, homeownership</td>
<td>.683</td>
<td>.467</td>
<td>.441</td>
<td>1.649</td>
</tr>
<tr>
<td>3 – house price, year, income, homeownership, planning regulations</td>
<td>.777</td>
<td>.604</td>
<td>.561</td>
<td>1.461</td>
</tr>
<tr>
<td>4 – house price, year, income, homeownership, planning regulations, density, development</td>
<td>.788</td>
<td>.621</td>
<td>.571</td>
<td>1.444</td>
</tr>
</tbody>
</table>

Source: Author’s calculations based on planning disputes model. See text.

Table 5.13: Planning disputes model (Melbourne LGAs 2003-04 to 2007-08): coefficients

<table>
<thead>
<tr>
<th>Model (Planning disputes as % of permit applications)</th>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – house price, year</td>
<td>Constant</td>
<td>2.280</td>
<td>.408</td>
<td>.000</td>
</tr>
<tr>
<td>Median house price in $100,000s</td>
<td>.729</td>
<td>.074</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>2004–05</td>
<td>-.464</td>
<td>.029</td>
<td>.282</td>
<td></td>
</tr>
<tr>
<td>2005–06</td>
<td>-.887</td>
<td>.030</td>
<td>.041</td>
<td></td>
</tr>
<tr>
<td>2006–07</td>
<td>-1.991</td>
<td>.032</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>2007–08</td>
<td>-2.544</td>
<td>.038</td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>

| 2 – house price, year, income, homeownership          | Constant | 2.439       | 1.367          | .076 |
| Median house price in $100,000s                       | 1.057    | .225        | .000           |      |
| 2004–05                                               | -.378    | .083        | .369           |      |
| 2005–06                                               | -.824    | .041        | .056           |      |
| 2006–07                                               | -2.094   | .027        | .000           |      |
| 2007–08                                               | -2.701   | .036        | .000           |      |

| 3 – house price, year, income, homeownership, planning regulations | Constant | 4.303      | 1.803          | .018 |
| Median house price in $100,000s                       | .617     | .253        | .016           |      |
| 2004–05                                               | -.406    | .035        | .281           |      |
| 2005–06                                               | -.781    | .030        | .051           |      |
| 2006–07                                               | -1.808   | .030        | .000           |      |
| 2007–08                                               | -2.344   | .030        | .000           |      |

| Permit required 300-500 sq m lot                       | 1.144    | .454        | .013           |      |
| Percentage LGA with heritage overlays                 | .006     | .024        | .810           |      |
| Percentage LGA with design or character overlays      | -.011    | .010        | .266           |      |
| Percentage LGA with environmental overlays            | -.016    | .005        | .001           |      |
| Percentage LGA with low-density zoning                | .004     | .013        | .745           |      |
| Percentage LGA with R1Z zoning                        | .019     | .007        | .006           |      |
| Percentage LGA with CDZ or DZ zoning                  | -.033    | .059        | .573           |      |
| Percentage LGA with MUZ zoning                        | -.130    | .157        | .411           |      |

*continued*
### Table 5.13: Planning disputes model: coefficients (continued)

<table>
<thead>
<tr>
<th>Model (Planning disputes as % of permit applications)</th>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 – house price, year, income, home ownership, planning regulations, density, development</td>
<td>Constant</td>
<td>4.856</td>
<td>2.036</td>
<td>.018</td>
</tr>
<tr>
<td></td>
<td>Median house price in $100,000s</td>
<td>.604</td>
<td>.266</td>
<td>.025</td>
</tr>
<tr>
<td></td>
<td>2004–05</td>
<td>-.391</td>
<td>.375</td>
<td>.298</td>
</tr>
<tr>
<td></td>
<td>2005–06</td>
<td>-.857</td>
<td>.445</td>
<td>.056</td>
</tr>
<tr>
<td></td>
<td>2006–07</td>
<td>-1.946</td>
<td>.518</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>2007–08</td>
<td>-2.513</td>
<td>.537</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Real income per tax payer in $1000s</td>
<td>-.033</td>
<td>.038</td>
<td>.376</td>
</tr>
<tr>
<td></td>
<td>Percentage fully owned</td>
<td>-.029</td>
<td>.034</td>
<td>.399</td>
</tr>
<tr>
<td></td>
<td>Permit required 300-500 sq m lot</td>
<td>1.233</td>
<td>.499</td>
<td>.015</td>
</tr>
<tr>
<td></td>
<td>Percentage LGA with heritage overlays</td>
<td>-.024</td>
<td>.042</td>
<td>.567</td>
</tr>
<tr>
<td></td>
<td>Percentage LGA with design or character overlays</td>
<td>-.012</td>
<td>.010</td>
<td>.243</td>
</tr>
<tr>
<td></td>
<td>Percentage LGA with environmental overlays</td>
<td>-.016</td>
<td>.005</td>
<td>.002</td>
</tr>
<tr>
<td></td>
<td>Percentage LGA with low-density zoning</td>
<td>.004</td>
<td>.013</td>
<td>.774</td>
</tr>
<tr>
<td></td>
<td>Percentage LGA with R1Z zoning</td>
<td>.014</td>
<td>.011</td>
<td>.191</td>
</tr>
<tr>
<td></td>
<td>Percentage LGA with CDZ or DZ zoning</td>
<td>-.107</td>
<td>.066</td>
<td>.109</td>
</tr>
<tr>
<td></td>
<td>Percentage LGA with MUZ zoning</td>
<td>-.102</td>
<td>.174</td>
<td>.559</td>
</tr>
<tr>
<td></td>
<td>LGA density (dwellings per sq km)</td>
<td>-.064</td>
<td>.107</td>
<td>.550</td>
</tr>
<tr>
<td></td>
<td>New dwellings (building permits) in 100s</td>
<td>-.002</td>
<td>.028</td>
<td>.830</td>
</tr>
<tr>
<td></td>
<td>Higher-density dwelling permits as % of total</td>
<td>.032</td>
<td>.013</td>
<td>.015</td>
</tr>
</tbody>
</table>

Note: The use of bold text indicates statistically significant coefficients.

Source: Author’s calculations based on planning disputes model. See text.

The model results are summarised at Table 5.12, above. This shows the high adjusted $R^2$ square values for each version of the model, ranging from .433 in the first to .621 in the last version. The implication is that a high portion (40 per cent to 60 per cent) of variation in VCAT dispute levels can be explained by the model variables.

Table 5.13 shows the coefficients for the variables in each model. The results show that variation in house price is positively and significantly associated with higher rates of VCAT dispute in each version of the model. In the first model, controlling for changes in dispute levels over time, an increase of $100,000 in median house prices resulted in an increase of 0.73 percentage points (from a mean of 4.2 percent) in the rate of VCAT dispute over the study period. The dummy year variables are negatively associated with the rate of dispute, with the later years (2005–06, 2006–07 and 2007–08) explaining a significant portion of variation in dispute rates over time, with dispute levels falling systematically. This is a significant pattern over time. The decreasing rates of dispute appear to be a product of policy changes introduced in recent years. These include streamlined approvals processes (State of Victoria Department of...
Sustainability and Environment 2006), greater use of zones with lesser appeal rights (such as the Mixed Use Zone), moves to shift more uses into the ‘as of right’ categories of the VPPs, and increased use of ‘call-in’ powers by the minister (overriding local decision processes on major projects). Importantly, these measures all reduce the capacity for third parties to oppose planning applications.

In the second version of the model, house price remains a positive and significant determinant of VCAT dispute levels when including variation in taxable income and homeownership levels. Perhaps surprisingly, income increases were negatively associated with dispute levels, although this effect was not significant. The high degree of multicollinearity between income, education and house prices is an issue for the model. Homeownership, however, is significantly and positively associated with increased dispute levels in this model.

In the third version of the model, variations in planning regulation are integrated. House prices and year dummies remain significant predictors in this version model, however, homeownership and income are not significant. The main planning regulations found to have a strong relationship with dispute levels include whether the municipality required a permit for dwellings on lots 300–500 square metres (associated with a 1.14 percentage point increase in VCAT disputes); the proportion of the municipality zoned Residential 1; and the proportion of the municipality covered by environmental overlays. Controlling for other factors, a greater proportion of Residential 1 zoning and the inclusion of permit requirements for medium-sized plots had positive and significant effects on the rate of planning dispute. Environmental overlays were a negative predictor. Other planning differences had negative effects where expected (mixed-use zoning and comprehensive development zoning reduced the rate of dispute), but not to significant levels. Some had negative effects that were not expected, including the coverage of heritage and design overlays, which unexpectedly reduced the level of dispute. Neither, however, is statistically significant.

In the final version of the model, control measures of density and of the scale and type of new development are added in. The density of municipalities is not statistically significant in this model, nor is the number of new dwellings constructed in the municipality. Thus disputes are not necessarily more or less prevalent in higher-density areas, or areas where more housing development is occurring. The variable for the percentage of new development in a municipality that was higher density (not detached houses) was found to be positive and significant. This is important as it means that in areas where most new development is higher density, dispute rates are higher. This fits with the evidence on urban consolidation, densification and conflict. In some ways this
finding is inconsistent with the endogenous model as it indicates that disputes are a function of the type of development being proposed rather than the existing housing market.

However, in the version of the model that includes density and new medium-density development, median house prices are still a positive and significant determinant of the rate of planning dispute. House prices retain a similar coefficient to the previous versions of the model (.604). This means that planning disputes are more likely in relation to higher-density housing development, but will be much more likely again where the value of existing housing is higher. This pattern is consistent with the maps in the descriptive results. Other features of the final version of the regression model are that year dummies remain significant, along with the permit requirements for medium-sized lots. Environmental overlays remained significant and negative.

5.5 Key findings

This chapter explored the level of variation in planning objections and planning disputes across municipalities in Melbourne. The analysis explored to what extent planning permit applications in areas of higher-value housing were objected to more often, and proceeded more often to tribunal dispute cases.

The results show high levels of variation in planning dispute levels across municipalities. The descriptive analyses found strong links between house prices and the levels of planning objection and dispute, supporting the endogenous perspective. Planning dispute cases are much more prevalent, both in volume and in proportion to the number of permit applications made, in municipalities with higher housing prices. This pattern includes a surprisingly high level of local objection to developments comprising only one new dwelling. In higher-value areas, typically one in two permit applications for single dwellings is objected to, and one in 12 of all permit applications proceeds to a VCAT dispute. This contrasts strongly to areas of lower-value housing.

A regression model was developed to explore the high levels of variation in VCAT disputes, supporting theoretical links between the characteristics of housing markets and residents, the planning system and the levels of planning dispute observed in municipalities. The model results support the proposition that housing prices are a significant and positive determinant of dispute levels. Certain planning controls that apply more permit triggers are also significant to explaining variations in planning disputes. Housing prices and key planning controls remained significant determinants
of dispute levels when controlling for density. Year effects were also strong, with overall dispute levels falling over time. Homeownership was initially a predictor but reduced in significance with the inclusion of the planning system and control variables.

Although existing density and the scale of new housing development are not significant predictors of planning disputes, the proportion of new development comprised of higher-density housing was. The implication is that in areas where most new development is higher density, dispute rates are higher. When controlling for this effect, however, median house prices are still a positive and significant determinant of the rate of planning dispute. This is reflected in the descriptive data: the highest-value areas have had reasonably high levels of higher-density housing but a disproportionate level of planning objection and dispute. Much of the higher-density housing development in Melbourne has occurred in the inner north rather than in the eastern suburbs. Planning disputes are more likely in relation to higher-density housing development, but will be much more likely again where the value of existing housing is higher.

Thus the results show that controlling for other factors, rates of planning objection and dispute are strongly related to higher housing prices. This property owner conflict or ‘backlash’ has implications for urban consolidation policies, which seek to direct new housing to higher-density forms and to existing well-serviced areas. In Melbourne, many such parts of the city previously made use of flat codes and other regulatory restrictions on the location of higher-density housing. Planning reforms have made it more difficult to use prescriptive tools against higher-density housing. A corresponding increase in ‘backlash’ in more affluent areas via public participation and political pressure has been documented (Lewis 1999), and seems to be supported by the results in this chapter.

A further finding of interest is that the rate of VCAT planning disputes has decreased over the study period 2003–04 to 2007–08. Policy reforms to reduce the influence of objection and appeal processes are the most likely explanation. The implication is that endogenous effects in planning are of concern to policymakers. Although VCAT disputes as a percentage of permit applications have reduced, any effects of policy changes on approval times, planning or housing supply outcomes are not known.

Moving on from the role of existing homeowners in densification policies, this thesis will now explore the endogenous planning perspective as it applies to another aspect of urban consolidation policies. The next chapter will examine the activities of landowners on the urban fringe impacted by the UGB and a proposed betterment tax.
Chapter 6

Betterment: Landowner Submissions and the Expanding Urban Growth Boundary

Your tax is a capital gains tax on residential properties – whatever you call it you are thieves, I don’t know how you sleep!

*Submission 1322 to the Melbourne @ 5 Million inquiry*

The endogenous perspective on planning and housing markets expects planning to be influenced by groups that have a stake in the housing market, and a resulting interest in planning outcomes. Urban consolidation policies represent a redistribution of the property rights embedded in traditional suburban zoning controls (Downs 2005) – controls thought to have arisen from property owner preferences (Fischel 2004). Because of this, urban consolidation policies can potentially create points of conflict with property owners. I have argued that although urban consolidation may be viewed either as promoting or hindering housing affordability, in practice property owners are likely to contest the ways in which consolidation policies are implemented. The associated conflicts may have implications both for the implementation of planning policies and for housing affordability outcomes.

The overarching research question of this thesis is *are the housing market interests of property owners, as ‘insiders’, reflected in activities that influence urban consolidation policies in Melbourne?* The preceding chapters have investigated different conflicts and debates around urban consolidation and housing affordability policies in Melbourne, focusing on the role of property owner groups. So far in this thesis an endogenous perspective has been used to explore the roles of housing developers in the shifting policy agendas around urban consolidation and housing affordability in Melbourne, and the role of existing property owners in contesting policies to increase housing densities
in existing areas. Major landowners on the urban fringe are another property owner group with an interest in urban consolidation policies.

The most obvious implication of consolidation policies for landowners on the urban fringe is that containment mechanisms such as Urban Growth Boundaries reduce the potential to harness the expected ‘betterment’ values from urban expansion. Landowners often have an expectation that their land values will increase from rural to urban levels as the demand for urban land expands outwards. Given this expectation, the selective adoption of urban consolidation controls and the disputes surrounding them may be likely in contexts where gradual urban expansion has been the status quo (Voith and Crawford 2004). Based on the theoretical analysis in Chapter 3 (see Table 3.2), there is an expectation that landowners will try to avoid growth controls limiting the future development value of their land. It is also expected that they will seek to minimise the taxation of betterment.

The fact that some landowners also seek to preserve restrictions on urban growth somewhat complicates this framework. Landowners in low-density ‘lifestyle’ communities close to urban areas appear to benefit from the scarcity and landscape values preserved by planning controls such as green belts (Cavailhès, Brossard et al. 2009). Studies have documented a strong influence on containment policies, in the UK and the USA, from more affluent rural home owners and their pressure groups seeking to prevent urban development (Hall 1974; Green 1999; Duncan and Duncan 2001; Woods 2005; Glaeser and Ward 2009). Endogenous theories of housing markets and planning therefore suggests two, sometimes oppositional, types of interest that rural landowners may have in urban consolidation policies.

Chapter 6 to 8 will look empirically at the relationships between the Urban Growth Boundary (UGB) in Melbourne, and the landowners directly affected by changes to UGB policy. These chapters look at the activities of landowners in response to proposed changes to UGB policies. The focus is on a proposed betterment tax – the Growth Areas Infrastructure Contribution (GAIC) – and a proposed expansion to the UGB. In 2010 the UGB was expanded substantially, particularly to the north and west of Melbourne. The GAIC is a $95,000 per hectare charge (betterment tax) on land incorporated into the expanded UGB. As the changes required legislative approval, they were preceded by a process of public inquiry and political debate.

This first chapter analyses public submissions made in response to the changes to Melbourne’s growth boundary proposed in 2009. Many submissions were from landowners who were to have had their land included in the expanded UGB and were,
as a result, facing payment of the betterment tax. This chapter documents the claims made by landowners about the effects of the UGB and their claims about betterment and the effects of the GAIC, as well as the calls made for policy modifications. In the next two chapters, the claims of landowners will be compared to estimates of betterment values associated with UGB policy changes.

This chapter addresses the following research questions:

- What is the history of, and rationale for, the proposed GAIC betterment tax?

- In their public submissions, what claims do landowners make about betterment and taxation rates resulting from expansions to the UGB? What pressures do they place on planning policy?

6.1 Background

6.1.1 Taxation of betterment

Agricultural land values near urban areas typically increase over time as the result of increases in demand for developable land. Differences in value between agricultural and housing land are sharpened by planning policies such as zoning and UGBs. The difference in value that results from planning permission for more intensive uses is known variously as betterment, development gain, windfall, or planning gain (Evans 2004 pp89-110). Betterment thus refers to the increase from rural to urban land values, resulting from either increased demand for developable land or from favourable planning changes.

In view of substantial betterment values, governments have sometimes come to view betterment as a potential revenue source. The political case is that the owner has made an unearned gain, and one that occurs largely due to government action. As a result, the view may be taken that the owner is not justified in having full receipt of the full betterment value. Betterment taxes may also be referred to as ‘impact fees’ or ‘developer charges’. The emergence of betterment taxes has been linked to the increasing difficulty, in the post-war period, of financing urban services. Governments and communities have increasingly looked for ways to transfer the costs of infrastructure away from general revenue sources and onto housing developers (Been 2005). Urban consolidation policies frequently integrate betterment taxes, sometimes in the form of inclusionary zoning or other hypothecated taxes.
The conceptual basis of betterment and betterment taxes is illustrated at Figure 6.1, below. The sloping line ‘a’ represents the demand for urban land. The flat line ‘b’ represents the demand for rural land, which is constant. In the absence of urban containment policies, land prices on the urban fringe increase as demand for developable land increases. The point ‘c’ is where the price that would be paid for urban land equals that for rural land. In the absence of growth controls, this would be the extent of urban land. The effect of a growth boundary is shown at the points ‘d’ and ‘e’. These indicate the higher price paid for urban land at the boundary, and the lower price paid for rural land, respectively. The UGB limits land outside the boundary to its rural value. If the UGB is binding – that is, if the UGB is applied before ‘c’ – then the increment ‘f’ between ‘d’ and ‘e’ is substantial. The difference between these values (‘f’) is the betterment value. The stronger the demand and the more binding is the boundary, the more substantial is the extra increment ‘f’. An urban containment policy, such as a growth boundary, puts an additional premium on the fringe land with planning permission. Should the policy be changed, the premium is unlocked for the affected land parcels.

**Figure 6.1: UGB, land price and betterment concepts**

Containment policies may influence land and housing markets – because of either demand or supply factors – and also the behaviour of property owners. Betterment values are associated with property speculation, where land is purchased in anticipation of future changes in demand or changes in policy (Cotteleur, Gardebroek
Nelson and Pendall et al. (2002) argue that containment policies introduce speculative behaviour and costs because of “dual predictability”: the fact that while there is more certainty on which land can and cannot be developed, there is also the knowledge that land within the growth boundary is exhaustible. Growth boundaries create policy ‘losers’ in the sense that landowners outside the boundary lose their potential betterment. Containment policies also create ‘winners’, by amplifying the financial gains from a favourable result in the planning system. By demarcating urban and non-urban land values, urban consolidation policies give incentives to landowners outside the boundary to try to alter the policy in their favour.

As reviewed in Chapter 3 (refer to Table 3.2), both landowners and developers have a logical interest in maximising betterment. The taxation of betterment is also potentially disadvantageous for landowners, developers and prospective homebuyers. The cost of a betterment tax is, however, relative to the potential benefits of planning permission and the likelihood of passing the costs on to others. In general, landowners have a stronger interest in avoiding betterment taxes than do housing developers, for whom compliance costs can be passed forward directly to housing consumers or passed back to landowners in the form of lower prices. The impacts of betterment taxes – who they are, in reality, absorbed by – have been debated (Oxley 2004). Research on the effect of impact fees on undeveloped land suggests that while the price paid to landowners decreases slightly with increases in fees, homeowners ultimately bear the majority of the costs (Evans-Cowley, Forgey et al. 2005). This view is generally shared by housing developers (Housing Industry Association 2008; Urban Development Institute of Australia 2009). Interpretation of public claims about the incidence of betterment taxes should, however, bear in mind the strategic interests of groups in exaggerating public claims. Part of the costs of the tax may actually be passed backwards to landowners or may be borne by the developers themselves.

The taxation treatment of betterment varies. Unlike in other locations, such as the UK and NSW (Gurran, Ruming et al. 2009), development gains on property in Victoria have historically not been directly taxed, and are non-transferable. Some de facto taxes on development gains do exist. Capital Gains Tax (CGT) is payable on gains in property value between purchase and sale under certain conditions. The CGT is not payable on a principal place of residence on land up to 2 hectares. Local property rates are based on land value, with the assessed value taking into account the zoning and development potential of land. Higher local tax rates are payable on undeveloped land with urban zoning or approval for subdivision. Land tax operates on a similar principal. Principal places of residence and land used for primary production are exempt from land tax. Development levies or contributions are, in effect, another form of betterment.
tax, payable in the planning approvals stage. Development levies make planning permission conditional on the provision of community infrastructure. In Victoria, these arrangements have been negotiated through Section 173 agreements. These have not been as widely used, and in particular have not been used for affordable housing (inclusionary zoning), as similar levies in many other locations (Zorn, Hansen et al. 1986; Gallent, Mace et al. 2002; Norris and Shiels 2007; Whitehead 2007; Wheaton 2008).

Until the GAIC proposal, betterment taxes had not been proposed in Melbourne for several decades. The 1971 metropolitan plan for Melbourne, which formalised the growth corridor model, included a section discussing different options to tax betterment, focusing on the urban fringe and on land benefiting from rezoning from rural to urban use. The document considered the case both for the taxation of betterment and for compensation for planning decisions limiting the use and development of land. Ultimately, a betterment tax was not favoured and the principle of no compensation for land use zoning was maintained (Melbourne and Metropolitan Board of Works 1971).

In rejecting the proposed betterment tax, the Melbourne and Metropolitan Board of Works (MMBW) argued that speculative land values made it impractical to separate and identify the value of betterment (Melbourne and Metropolitan Board of Works 1971 pp93-100). The report also noted concern that costs would be passed on to the final housing purchaser, stating: “the levy is not affecting the person at whom it is aimed i.e. the original owner of broad acres who achieved his urban value through no effort of his own” (Melbourne and Metropolitan Board of Works 1971 pp93-100). The MMBW ultimately rejected proposals for a direct betterment tax. Nonetheless, Wale (2003) argues that in applying stricter urban and non-urban zones the 1971 plan tried, for the first time in Victoria, to change landowner expectations and reduce land speculation in rural areas.

6.1.2 Proposed UGB expansion and the GAIC

In December 2008 the state government released an ‘update’ to the Melbourne 2030 strategy, titled Melbourne 2030: a planning update – Melbourne @ 5 Million (Department of Planning and Community Development 2008). A key component of the update was a proposed expansion of the UGB, with the document identifying ‘investigation areas’ of around 50,000 hectares to be considered for inclusion in the new UGB. As with the 2005 expansions, the changes to the UGB were based on population projections and a stated “need to maintain an adequate and competitive
land supply to meet future housing needs” (Department of Planning and Community Development 2008). The expansions were described by the planning minister as being needed “to ensure we have access to the necessary land to accommodate projected population growth and maintain housing affordability” (State Government of Victoria 2010). Chapter 4 discussed how negative views of the impact of planning on housing affordability were very prominent in the public and policy discourse, particularly during 2007 and 2008. These debates help explain the political pressure at that time to expand Melbourne’s UGB.

The *Melbourne @ 5 Million* update also proposed the introduction of a form of betterment tax, the Growth Areas Infrastructure Contribution (GAIC). The GAIC was intended as a tax on the increase in value resulting from UGB planning changes, and as a means of financing the infrastructure costs of new development. The government claimed that the per-hectare flat tax would represent only a small part of the betterment values to be made by landowners and developers as a result of urban expansion:

> It reflects a small portion of the significant increase in land values that occurs when changes to a planning scheme make land available for urban development. It will be used to offset the very substantial cost of providing infrastructure and services in growing areas (Department of Planning and Community Development 2008).

The GAIC proposal was for a flat-rate charge payable on the sale, subdivision (division of land into smaller pieces) or development (building on) of developable land that is newly incorporated within Melbourne’s UGB. The stated intention of the GAIC was to fund the costs of new infrastructure on the fringe. Implicitly, the GAIC is a betterment tax that seeks to harness increases in value as a result of UGB policy changes. The tax is hypothecated in that set proportions are to be used for transport and community infrastructure. In the GAIC’s initial format, payment of the once-off tax was to be made either at the sale or the subdivision of land, whichever occurred first. The tax applied to all land over a certain size (0.41 hectares, or 1 acre) that was brought inside the UGB. This meant that the tax could potentially apply either to the vendors of land parcels or to housing developers that already owned development land. This differentiated the GAIC from other taxes and levies payable only at the point of development, notably those in New South Wales. In its initial format, the GAIC applied to land incorporated into the UGB in the 2005–06 expansions, in the proposed 2010 expansions, and to land brought into the UGB in any future expansions. The proposed flat rate was $95,000 per hectare for land brought into the UGB during or after 2009, and $80,000 per hectare for land incorporated inside the UGB in 2005–06.
The GAIC bill was accompanied by a planning scheme amendment to expand the UGB and rezone new land incorporated within it. Throughout 2009 and early 2010 the provisions for the UGB expansion and associated GAIC were debated, with opposition from landowner interest groups, notably Taxed Out!. The effect of the GAIC on the equity position of property owners, and particularly on residential property owners, was a contentious political point. The Taxed Out! group argued that the tax should only be applied at the subdivision or development of land, and not at the point of sale, so as to not impact on the equity position of landowners. The GAIC bill was initially blocked by Opposition political parties during the parliamentary ratification stage. The UGB expansion itself was supported, but not the GAIC tax. Despite this, the GAIC legislation was not submitted separately from the infrastructure charge. The then government was reluctant to separate the UGB changes from the betterment tax, arguing that “to open up land without the critical infrastructure would be irresponsible” (Millar and Dowling 2010). This led to a set of modifications to the GAIC bill.

The GAIC was redrafted twice and was approved in its modified form in mid-2010. Key changes made to the GAIC bill to obtain parliamentary ratification included exemptions on the sale of smaller properties (between 0.41 and 5 hectares) and the transfer of formal liability in most situations to either land purchasers or to housing developers (not the vendors of land). Under the revised tax, the purchaser pays 30 per cent of the GAIC at the time of purchase, and the remainder at the time of development. Previously, the tax was to have been paid by the vendor at the time of sale. The new system is described as a ‘purchaser pays’ model. Politically, the effect of the GAIC on the equity position of property owners – particularly ‘lifestyle’ property owners – was crucial to the opposition to the tax and the changes made to it (Dowling 2009; Taxed Out 2009; Hunt 2010). Reflecting this, with regards the revised bill, the planning minister claimed that:

Any GAIC liability is not triggered on the sale of land, which protects the interests of hobby farmers and people owning lifestyle properties. [The amendments] ensure the contribution is targeted at developers or people acquiring land for development or subdivision. (Tait 2010)

The changes to the GAIC will be modelled in detail in the following chapters. It is notable that opposition to the bill was driven by landowners rather than housing developers. Australian housing developers have expressed cautious acceptance of development taxes where these are transparent and can be sold on to housing consumers (Gurran, Ruming et al. 2009). However, developers generally do not support development levies on account of the housing affordability implications, arguing that betterment taxes and development levies are ultimately paid by
homebuyers or land vendors, and that this has “a compounding negative impact on housing affordability” (Urban Development Institute of Australia 2009 pp15-16). However the question of whether betterment taxes are absorbed by the seller or passed on to the developer - and, ultimately, the housing consumer - is a subject of ongoing debate (Oxley 2004). Different groups may exaggerate claims of the incidence of taxes, in order to strategically advance their policy interests.

6.1.3 Claimed betterment values in Melbourne

Although development gains have not been directly taxed in Victoria, historically there has been a view that ‘windfall’ or ‘unearned’ gains in property value are accrued on the city’s urban fringe. Planners have put forward critical views of the role of speculative land purchasers. The 1971 and 1992 metropolitan strategies attributed increased land prices to speculators “bidding up the price of raw land on the urban fringe” (Victoria 1992 p34). Sandercock (1975) argued that regulation on the urban fringe in the post-war era functioned as a kind of marketing tool or speculator’s guide.

The housing and development industry has argued that the introduction of Melbourne’s UGB in 2002 contributed to price increases for broad hectare land inside the UGB by causing developers to compete for remaining land parcels. Early in 2003, the Urban Development Institute, the Housing Industry Association and other development lobby groups and commentators claimed that the introduction of the Melbourne UGB in 2002 led to a 30 per cent increase in the price of land on the urban fringe (Millar 2008).

The Growth Areas Authority (GAA) apparently based its formulation of the per hectare GAIC charge on independent research, included in an unpublished report by consultants CKC. The GAA quoted the report as finding that underlying rural land values around Melbourne typically fell between $15,000 and $35,000 per hectare, but that rural land brought into the UGB and rezoned for development increased to an average of $365,000 per hectare, with an estimated range of $225,000 to $450,000 per hectare (Growth Areas Authority 2009). From these figures it can be understood that the betterment values in the vicinity of $190,000 to $435,000 per hectare were expected.

Similar figures are cited in submissions to the 2008 Senate committee on housing affordability, which estimated that in Australian cities windfall gains from rural to urban rezoning “could be in the order of $300,000 to $400,000 per hectare” (Senate Select
Committee on Housing Affordability in Australia 2008 p116). One local government submission to the committee claimed that:

Land speculation on the urban fringe is rife, with many entities engaging in land acquisition solely for the purpose of capturing betterment rather than engaging in bona fide development (Senate Select Committee on Housing Affordability in Australia 2008 p116).

A recent study of the effects of planning policies on housing supply characteristics in Melbourne found, in interviews with planners and with housing developers, a widespread agreement that the price of land inside the UGB had risen considerably since the boundary’s introduction (Goodman, Buxton et al. 2010). The sale of a rezoned parcel of land in Point Cook for the unusually high figure of $1.3 million per hectare was cited. In interviews, planners typically attributed price increases to the market control of a limited number of housing developers. Developers pointed to the impact of the UGB on developer competition for land. Some also identified the raised expectations of landowners inside the UGB, for instance:

People that are inside the UGB, the farmers and the owners, believe their land is liquid gold … gone are the days where the farmer needed protection from the developer. It’s flipped the other way. The developer needs protection from the farmer these days, but that boundary imposed that expectation (Goodman, Buxton et al. 2010 p67: interview with developer 3).

To put the betterment values and GAIC charge more into context, typical densities for new housing developments on Melbourne’s fringe range between 12 and 15 dwellings per hectare. The Melbourne 2030 policy seeks to encourage densities of 15 dwellings per hectare. In these terms, the GAIC charge of $95,000 per hectare is equivalent to roughly $6000 per dwelling. Given an average dwelling price for houses in designated growth areas of $344,455 in 2009, the total final sale value of new suburban housing developments might be around $5.2 million per hectare.

6.2 Approach to the UGB and the GAIC

6.2.1 Stages of the UGB analysis

The analysis of the three UGB- and GAIC-related chapters is in stages, as follows:

1. Analysis of landowner submissions: claims and objections
2. Land sales model: identification of betterment coefficients
3. Imputed measures of betterment values
4. Imputed measures of the financial impact of GAIC on landowners
5. Review of implications of the policy changes

A summary of the stages of the methodology is shown at Table 6.1, below. In this chapter, samples of public submissions made to the review are coded and analysed. In the following chapters, the claims made by landowners will be compared to estimates of betterment values. Using land valuation and transaction data, hedonic regression techniques are used to identify differences in standardised land prices between parcels inside and outside of the boundary, and before and after its introduction. The model produces land value coefficients that are then used to estimate the betterment value to landowners with land incorporated inside the UGB. After controlling for land parcel characteristics, the coefficients relating to the UGB policy variables will be interpreted. The distribution of the effective tax rates of the GAIC are then estimated, based on some key assumptions.

The tax is modelled both in its original proposed form and in the modified form of the charge required to pass the legislation. This analysis applies some assumptions on who will bear the cost of the tax in its different forms, which are based in part on the claims made by landowners in arguing for the ‘purchaser pays’ model. The tax rates (the proposed betterment tax relative to the estimated betterment value) are compared to the claims made by landowners and their suggested policy changes. Ultimately, the implications of landowner interests for the implementation of the city’s urban consolidation and housing affordability policies are considered.

### 6.2.2 Method for analysis of submissions

The method for this chapter comprises a content analysis of public submissions relating to the proposed UGB expansion and introduction of the GAIC. The analysis looks at the submissions of individuals and organisations in response to the proposed policy changes. The statements of support or objection, and the reasoning given, are considered.

In late 2009 submissions were received in support of or objection to the UGB expansion and the GAIC tax. A sample of submissions by affected landowners regarding property located inside or outside of the proposed UGB expansion has been identified for analysis. The submissions are coded and assessed in terms of their
opinions about the UGB expansion and the GAIC tax. Comments about perceived impacts on property prices and tax rates are particularly noted.

Table 6.1: Summary of UGB methodology

<table>
<thead>
<tr>
<th>Question</th>
<th>Method</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>In their public submissions, what claims do landowners make about betterment and taxation rates resulting from expansions to the Urban Growth Boundary (UGB)?</td>
<td>Code and analyse samples of public submissions made to the Melbourne @ 5 Million review: location of and interest in UGB of submitters; objections to or support of UGB expansion; objections to GAIC: reasons for objections; references to property values and betterment; taxes, development plans, and suggested changes to GAIC.</td>
<td>Analysis of common patterns in landowner perceptions of UGB and GAIC: debate over perceived impact on property values and equity, betterment, tax rates.</td>
</tr>
<tr>
<td>What pressures are placed on planning policy?</td>
<td>Code and analyse samples of public submissions made to the Melbourne @ 5 Million review: location of and interest in UGB of submitters; objections to or support of UGB expansion; objections to GAIC: reasons for objections; references to property values and betterment; taxes, development plans, and suggested changes to GAIC.</td>
<td>Analysis of common patterns in landowner perceptions of UGB and GAIC: debate over perceived impact on property values and equity, betterment, tax rates.</td>
</tr>
<tr>
<td>Controlling for other differences in land characteristics, has the introduction of the UGB had a measurable influence on land prices for large land parcels on Melbourne’s urban fringe?</td>
<td>Hedonic model of land sales: vacant land and farmland (undeveloped land) sold &gt;= 1 acre, &gt; 15 km from Melbourne CBD, 1996–2008. Model includes land size, price, date, distance measures, and other characteristics. Dummy (binary) variables for policy effects: UGB time and location, and for zoning.</td>
<td>Model estimating the determinants of per hectare land prices on Melbourne’s urban fringe.</td>
</tr>
<tr>
<td>What are the imputed betterment values to large landowners on Melbourne’s urban fringe under different UGB policies?</td>
<td>The UGB and zoning betterment coefficients are applied to sales information on rural land that has been brought inside the UGB, as of 2010. The rural land prices are brought to 2008 levels, then inflated using the UGB and zoning coefficients.</td>
<td>Estimated betterment values: Estimated rural sale price based on 2008 land prices. Estimated ‘uplifted’ (urban) price with UGB and zoning coefficients. Estimated betterment values for rural land that has now been integrated inside the UGB and is subject to the GAIC.</td>
</tr>
<tr>
<td>What are the imputed tax effects, given key assumptions, for large landowners on Melbourne’s urban fringe under different UGB policies?</td>
<td>Calculate original GAIC tax ($95,000 per hectare) as a proportion of the imputed betterment values for rural land that has now been integrated inside the UGB. Calculate modified GAIC tax liability (exemptions based on land size, deferral of 70% of payment at sale), using assumptions on tax incidence.</td>
<td>Estimated tax rates on betterment values: GAIC per hectare as a proportion of development value per hectare. Modified GAIC charge as a proportion of development value per hectare.</td>
</tr>
<tr>
<td>To what extent are the changes made to the GAIC charge consistent with the content of public submissions by landowners, and with an endogenous perspective on planning?</td>
<td>Review key changes to the GAIC tax (particularly the move to a ‘purchaser pays’ model). Compare to analysis of public submissions and to analysis of betterment values and the assumed impacts of GAIC.</td>
<td>Analysis of links between Effective Tax Rates (ETRs) of the original GAIC, the submissions of landowners, and the modifications made to the GAIC tax. Do the changes made to the GAIC have the perceived effect of protecting the property values of existing landowners?</td>
</tr>
</tbody>
</table>
The 2009 public inquiry covered submissions on the UGB expansion, the GAIC tax and two associated initiatives: the construction of a new freeway, and the designation of grasslands protection areas within the new UGB. These policy changes were all proposed under the banner of the Delivering Melbourne’s Newest Sustainable Communities project (State Government of Victoria 2010). The public submissions – received from individuals, organisations and local councils – could be made in support of or objection to any of the elements of the Delivering Melbourne’s Newest Sustainable Communities plan.

The public submissions comprised those by individuals and organisations, of which there were:

- 1411 individual submissions lodged (these are in confidential format with names and property details removed); and
- 503 organisational submissions (including some organisations, e.g. planning consultants, submitting on behalf of landowners). These are not confidentialised.

Given that there were nearly 2000 submissions, I have sought to sample only a broadly representative section of these. The first 20 per cent of submissions received from individuals and organisations were selected for review. The order of submissions is by code number, with these numbers randomly ascribed by the government officers processing the submissions. This provides an effectively random sample of submissions. The content analysis looks at 281 individual submissions and 101 submissions by organisations, making a total of 382 submissions reviewed and coded.

The submissions have been reviewed and coded by the different content factors relating to theories of endogenous model of housing markets and planning:

- Whether ownership of an affected property is mentioned;
- Whether the affected property is inside or outside of the proposed UGB;
- The preferred policy outcome stated by the submission (e.g. to be included or excluded from the UGB, to not pay the GAIC);
- Comments about property values and the assumed impact of the policy changes on these;
- Comments about the taxation impact of the GAIC;
- Comments regarding fairness: who should pay for the GAIC and for infrastructure;
Common patterns in the debate are then analysed, assessing who objects to or supports the UGB and GAIC policies and why. The focus is on the perceptions that landowners hold of the policy changes and the potential impacts on their land, particularly on their property values.

6.3 Analysis of public submissions

6.3.1 Submission types

Of the sample of 382 public submissions to the UGB inquiry, 73 were removed after the initial coding because they contained content exclusively relating to the freeway or rail link proposals. A further 45 were removed because they were confidential, duplicates of other submissions, attachments to other submissions, or because they had essentially no information or content. After these removals, 264 submissions were assessed, comprising 218 submissions by individuals and 46 by organisations.

Consistent with the endogenous perspective, the majority – 186, or 70 per cent – of the 264 sampled submissions were from owners of land on the urban fringe, affected by the proposals. Submissions by landowners included individual owners (171), and collectives of landowners (15 submissions). Of those that clearly stated the use of their land, 26 were commercial farmers and 28 were ‘lifestyle’ rural residents (some with hobby farming components). Forty-nine (49) of the landowners stated that they had development plans for their sites.

The submissions varied widely in length, style and content. Some were handwritten and addressed only one policy issue (for example, the GAIC), whereas others were eight or more pages in length and addressed each of the proposals systematically.

6.3.2 The UGB expansion – ‘in principle’

The public submissions included two basic types of commentary – mainly objections regarding the proposed expansion of the UGB. Some submissions stated support of or objection to the UGB expansion ‘in principal’ – for example, criticising the effects of urban sprawl (36 submissions) as an issue of wider policy concern. The second type comprised comments on the effect of the UGB expansion on the submitters’ own
properties – for example, arguing that a property should or should not be included within the expansion.

Table 6.2: ‘In principle’ objections to the UGB expansion, by type of submitter

<table>
<thead>
<tr>
<th>Type of Submitter</th>
<th>Impacted landowners</th>
<th>Non-impacted individuals</th>
<th>Groups</th>
<th>Not known</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objected to UGB expansion in principle</td>
<td>26</td>
<td>38</td>
<td>11</td>
<td>8</td>
<td>83</td>
</tr>
<tr>
<td>Supported UGB expansion in principle</td>
<td>24</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>28</td>
</tr>
<tr>
<td>No specific comment</td>
<td>136</td>
<td>3</td>
<td>2</td>
<td>12</td>
<td>153</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>186</strong></td>
<td><strong>43</strong></td>
<td><strong>13</strong></td>
<td><strong>22</strong></td>
<td><strong>264</strong></td>
</tr>
</tbody>
</table>

Source: Author’s analysis of sampled public submissions. See text.

‘In principal’ statements regarding the UGB expansion were included in 111 (42 per cent) of the submissions. Of these, the majority (83, or 75 per cent) objected to the UGB expansion. These ‘in principle’ submissions are summarised by the type of submitter (impacted landowners and non-impacted individuals) at Table 6.2. Common objections to UGB expansion included:

- environmental concerns (40 submissions);
- concerns about urban sprawl (36 submissions);
- the need to implement urban consolidation policies, particularly infill housing (34 submissions);
- the value of preserving rural amenity (13 submissions) or rural lifestyles (15 submissions); and
- the need for better planning and design of urban development (13 submissions).

The objections to the UGB expansion included a large proportion (38, or 46 per cent) from individual submitters who did not own land on the fringe. This group is not directly affected by the UGB or the GAIC. These submitters instead indicated that they lived in the inner city and had a general interest in the environmental implications of the UGB expansion. There were also similar submissions (11) from environmental groups. Such objections tended to call for greater protection of native grasslands (19); to be critical of low-density housing and of urban sprawl (30); and to urge the government to implement urban consolidation policies (31). For example:

I am gravely concerned about the environmental impacts of further expanding Melbourne’s boundary. I believe the environment, social and economic impacts are completely unacceptable. I’m strongly in favour of the alternative strategy of urban infill. (Sub 2298)
Such submissions are clearly based on a positive view of urban consolidation policies. Their content is also generally in line with a welfare economics view of planning regulation, given that the submissions highlight the potential costs or failures of relaxing the urban consolidation policy, and call for greater intervention in housing markets. They argue that stronger policy interventions will improve environmental outcomes (in effect, negative externalities), better protect valuable resources (public goods) and provide better-planned housing (address market failures). It might be speculated that the submissions expressing altruistic interests in environmental outcomes represented those either not directly impacted by growth boundaries or those who may benefit from them.

Many ‘in principle’ objections to the proposed UGB, both from landowners and non-landowners, mentioned environmental concerns, however, the two types of submitters tended to differ in the type and scale of environmental issues to which they referred. Submissions from non-landowners were much more likely than those of landowners to mention urban consolidation policies in general, the Merri Creek, and the western grasslands. For example:

Victoria’s western Grasslands are the most endangered ecosystem in Australia, and while it is fantastic that so much of this area is to be protected with reserves, it is criminal to destroy the rest for unsustainable housing design (Sub 0562).

By contrast, landowners who objected to the UGB expansion were more likely to refer to local environmental amenity and its value to existing residents – the rural feel, quality of the landscape, birdlife or lack of noise (13 submissions); or to the local rural lifestyle they enjoy in preference to urban living (15 submissions). For example:

We made this purchase with a few things in mind, including, lifestyle, amenity, and importantly the wildlife, particularly the local bird life. (Sub 1657)

Landowners also often referred to their own conservation work, particularly tree planting. Submissions from hobby farmers and rural residential retirees more often (11) mentioned these than did submissions from broad hectare farmers. Submissions from rural residential owners sometimes put forth a view of existing farmers and residents on the urban fringe as custodians of the environment, which they placed in contrast to the negative effects of new suburban development. For example, with reference to the GAIC tax:
This tax needs to be placed on developers that do not care about the future and also have the money to destroy country life, not on landowners who came out here for peace and quiet and to enjoy rural life (Sub 2047).

Landowners who objected to the expansion of the UGB also discussed their rural lifestyle in terms of its social advantages, in comparison to their perceptions of urban and suburban living. These submissions typically came from hobby farmers or retirees; very few submissions from broad hectare farmers mentioned these issues. Fears of changes to the local population were expressed. Submissions from semirural towns to the north of Melbourne, in particular, expressed a fear of new residents. For example:

Many residents reside here as it allows us the freedom that only the small township culture brings. We do not need to worry about fencing to keep our animals in and unwanted persons out. (Sub 2064)

And similarly:

Our family came out here to move away from the noise and bad behaviour of other people around us. Is Beveridge going to turn into another Melbourne, bashings and stabbings everywhere you go? (Sub 2046)

A number of submissions (15, of which 12 were from landowners) also criticised Melbourne’s overall population growth levels, and called for limits on immigration. These submissions included unfavourable parallels made between the UGB expansion and the world’s more densely populated cities, for example:

There is no need for more housing – stop letting people in. We have enough housing and factories, people are born every day but people also die. We do not want to look like other countries that have nothing but houses, factories, smog and pollution (Sub 2042).

These submissions made critical links between population growth and environmental concerns, ultimately indicating a preference to stop urban growth in semirural towns, for instance:

Some places, such as Sunbury’s current population, should just be left ALONE as it currently is. Flora and fauna seem to have no place, nor any say, in its own right. Leave Sunbury alone as it currently is, as a green wedge, and begin to accept the fact that this state can only accommodate so many people before massive problems begin to emerge socially, structurally and environmentally (Sub 1517).
The above patterns of submissions by landowners are comparable to studies of rural politics and of the ‘insider–outsider’ effect in counterurbanisation in the USA and the UK. Their content is comparable to the literature on the role of rural landowners in supporting green belts in the UK. Implicitly, the arguments place the property rights of existing residents above those of the potential residents of urban developments on the urban fringe. Also implicit is deference to existing lifestyles and existing patterns of land use – the status quo of insiders. In both the submissions and in the literature, owner-occupiers seem to be more commonly associated with these arguments.

A smaller number of submissions (28) stated ‘in principal’ support for the UGB expansion. All but two of these were from landowners on the urban fringe, including collectives of landowners happy to be included within the new UGB. Farmers were more represented in supporting the UGB expansion. Several farmers in the west of Melbourne commented on the poor quality of their area for farming and suggested that urban development was a more appropriate use. Although submissions from developers and landowners with plans to develop their land were received (see below), these mostly commented only on the suitability of a particular parcel or area for development, and not on the ‘in principle’ merits of the UGB expansion. Only a small number of submissions mentioned land supply and housing affordability, and felt that the expansion would address these issues, for example:

The existing Urban Growth Boundary (UGB) is placing unnecessary restrictions on the availability of land suitable for residential development and must be expanded (Sub 10485).

Similarly, in one of the very few submissions to state support for the GAIC tax:

I support the Victorian Government in its plans to ensure land availability for the future. Victoria cannot prosper if it doesn’t cater for future growth. It will also help to ensure land availability is maintained at an affordable level for our young people. I am happy that my land falls within the proposed area, and feel the infrastructure tax is justified (Sub 0412).

6.3.3 Impact of the UGB expansion on specific properties

A large number (107) of submissions in the sample were received from landowners commenting on the impact of the UGB expansion on their own land. These included those that:
were inside the new UGB and happy to have been included (33);
- were outside the new UGB and would prefer to have been included (52); and
- were inside the new UGB and would prefer to have been excluded (11).

These submissions are summarised at Table 6.3, showing the status of land as either inside or outside of the proposed UGB expansion, by the preferred policy outcome (e.g., inclusion in the UGB). Of landowners included in the expanded UGB, 33 were happy with the proposed policy change to their land and 11 were unhappy, the latter stating that they would prefer to retain rural or green wedge status for their land. Of these 11 submissions, eight were from rural residential ‘lifestyle’ property owners, and three were from affected businesses, including a winery. Of the 33 submissions from landowners happy to have been included in the UGB, the majority (16) did not indicate the use of their land. Those that did were broad hectare farmers (e.g., sheep grazing) or vacant landowners.

Table 6.3: Landowner submissions: status of land inside/outside new UGB, by preferred policy outcome

<table>
<thead>
<tr>
<th>Preferred Policy Outcome</th>
<th>Status of land</th>
<th>Inclusion in UGB</th>
<th>Non-Inclusion in UGB</th>
<th>Other</th>
<th>No specific comment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Included in new UGB</td>
<td>33</td>
<td>11</td>
<td>5</td>
<td>15</td>
<td>64</td>
<td>64</td>
</tr>
<tr>
<td>Not included in new UGB</td>
<td>52</td>
<td>4</td>
<td>2</td>
<td>64</td>
<td>122</td>
<td>122</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>15</td>
<td>7</td>
<td>79</td>
<td>186</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s analysis of sampled public submissions. See text.

Many (49) landowners indicated in their submissions that they had plans to develop their sites. These included those with prepared plans for development, those who had formed owner collectives to consolidate land for developers, those who had had interest from developers, and those who saw their land as suitable and likely for future urban development. Those submissions with development plans for land included within the UGB expansion usually applauded the policy change for their land, for instance:

Many resident landholders in the area agree with the Council recommendation for the land to be considered for residential use and some have already investigated and obtained designs for land subdivisions (Sub 2060).

Submissions from landowners with development plans for land not included in the expansion argued that their properties had good potential for housing demand, or were strategically appropriate for housing development. The submissions made cases for why their land should be included in the expanded UGB. For example:
If urban development is to proceed, I would imagine that this would be amongst the most highly sought after due to the views, being adjacent to the reserve and being in such close proximity to the Freeway access. Therefore to inaccurately zone it places unjustified constraints on the property would be to deny access to this and its associated value (Sub 1470).

We have always believed that our property would one day make an ideal place for a housing community. Therefore, we are very concerned about the new proposed changes to the urban growth boundaries as we are not included. We think that we should be included in the new proposed urban area. (Sub 3294)

A group of 21 submissions in the sample were from landowners in Melbourne’s west whose properties had been designated as protected grasslands areas. The content of these submissions is in contrast to the submissions by non-landowners who supported the grasslands protection policies. The landowners affected by the grasslands restrictions argued strongly that the grasslands regulations were unfair and unnecessary. Some of the affected landowners wished to continue existing farming practices and many submissions, including a petition from Mt Cottrell landowners, expressed a wish to have the proposed grasslands protections removed to allow for future residential development. These submissions criticised the claimed ecological value of the designated grasslands, describing the policies as merely “conning landowners from their rights to their land and livelihood by claiming to protect something that they have no evidence of” (Sub 1644).

The above categories of submissions can be classified as ‘rent seeking’ type objections to planning regulations. Landowners are seeking to minimise the restrictions placed on the use and development of their land, and to unlock urban land values. By contrast, some (15) landowners, mostly hobby farmers on acreages, argued that restrictions on development were advantageous to them and sought to have them retained or strengthened. Most (11) of these were from landowners inside the new UGB, but the remainder were from landowners outside the expansion who wished to make sure their land stayed outside the UGB. Similar arguments against the expansion of the UGB were made in submissions by resident action groups for semirural townships. These submissions are more consistent with an endogenous ‘homevoter’ explanation for planning controls, for example:

Despite the government view of its increase in monetary value, land will become significantly decreased in ‘value’ for our purposes if the area becomes higher density (Sub 1328).
The properties in the estate are 5 to 10 acres and were bought with a caveat that does not allow further subdivision. A lot of landowners in the estate bought the land for this reason. They were under the impression that their property was safe, as it is in part of the green wedge (Sub 0812).

### 6.3.4 Objections to the GAIC

The sample of submissions illustrates the unpopularity of the proposed GAIC tax with most landowners. Within the sample there were 83 submissions objecting to the GAIC, of which essentially all were from impacted landowners: 76 from landowners and four from resident groups representing landowners. Only three submissions stated some kind of support for the GAIC. At the same time, the GAIC is almost never (only in four submissions) mentioned as an issue by housing developers, or by landowners who mentioned development plans for their sites.

<table>
<thead>
<tr>
<th>Type of Submitter</th>
<th>Impacted landowners</th>
<th>Non-impacted individuals</th>
<th>Groups</th>
<th>Not known</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objects to GAIC</td>
<td>76</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>83</td>
</tr>
<tr>
<td>Supports GAIC</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>No specific comment</td>
<td>106</td>
<td>42</td>
<td>9</td>
<td>20</td>
<td>177</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>186</strong></td>
<td><strong>43</strong></td>
<td><strong>13</strong></td>
<td><strong>22</strong></td>
<td><strong>264</strong></td>
</tr>
</tbody>
</table>

Source: Author’s analysis of sampled public submissions. See text.

Landowners who objected to the GAIC (76 submissions) tended to refer to the charge as a tax on their existing land values. These landowners thus interpreted the GAIC not as a tax on windfall increases in value from the UGB, but as a sizeable tax on existing land values. Around a third (23) of the objections to the GAIC specifically mentioned its impact on their existing land values and home equity position. For example:

> I am against being taxed in the form of a GAIC as if I sell my property, I will be financially disadvantaged. To put it another way, I would be financially better off if the expansion of the UGB did not proceed due to the imposition of the GAIC (Sub 2138).

Most submissions expressed their objections to the GAIC in more emotional terms than the above. Landowners often referred to the amount of time and work they’d spent on their property and a deep aversion to having the ensuing increases in value subject to taxation, for instance:
I’m not happy with the $95,000 tax. I’ve worked 30 years of my life to provide my family with a piece of land to call home, why should it be a gift to the whole of society? (Sub 1806)

Again, around a third (23) of the landowner objections to the GAIC specifically referred to the tax as unfair, undemocratic or immoral. For example:

Your tax is a capital gains tax on residential properties – whatever you call it you are thieves, I don’t know how you sleep! (Sub 1322)

In a similar way, a significant portion (40 per cent) of the objections to the GAIC argued that the tax would be fairer if charged to housing developers only, and passed on to purchasers of new housing. The content of these submissions is discussed in more detail below, along with other suggested changes to the GAIC made in the submissions.

6.3.5 Claimed impacts of the GAIC

Many landowners (41 per cent of the objectors to the GAIC) did not believe that an increase in land values would result from their land being included in the UGB. Three key reasons for doubting the windfall premise of the GAIC are apparent in the submissions. Some landowners simply ignored the betterment premise of the GAIC and focused on the substantial potential impact of the tax relative to existing land values. For example:

We strongly object to the taxes imposed on the sale of land as required by the Urban Growth Boundary. We approximate that after a lifetime of sacrificing that selling our home and land we will end up with not sufficient funds to buy a home and fund our retirement. Costs for most homes in the area are not that high which means there will be little left over (Sub 0613).

We are a simple working class family that have a home on 10 Acres in Mt Cottrell. We are neither a developer nor investors seeking to subdivide our land – this land is our home. We are dumbfounded that a government we voted to represent us cannot understand that this tax is imposed on family homes. As an example, the value of our land is $950,000 – if that – and based on your crazy law I lose $450,000 in contribution tax. This is crazy and I would like to see how you would feel if this was imposed on your family home. After working for 20 years to pay off our home we now lose more than half to the government (Sub 0569).
As the above submission indicates, the owner is calculating the approximate GAIC (based on land size) as a proportion of the existing value of his or her property. In this context, the GAIC would be worth nearly half of the existing value. The submission does not refer to the GAIC as being a proportion of increased value from the future UGB change. This omission could be for a number of reasons, which will be discussed in the following section.

Secondly, some landowners did not believe the claims that the UGB expansion would result in the land value increases premised by the GAIC. For example:

The government cannot guarantee that our land values will increase because the land has been rezoned to urban. There may be some increase in value but nowhere near the amount of the imposed tax. (Sub 2255)

We have been told that the value of our property will increase significantly. Will it increase beyond the GAIC of $95,000 per hectare? Who will guarantee this increase? (Sub 1013)

The submissions questioning the claimed uplift in land values ranged from concerned landowners looking to be reassured of value increases (as in the above), through to submissions critiquing the general premise of betterment values and the GAIC. An example of the latter follows:

Only demand for the land can improve its value by 10 fold. If wealth could be created this way, we could rezone all of Australia and be the richest nation on earth. Both ideas are totally illogical. If you really believe that all the land in the UGB will go to $400,000 a hectare, you can buy my land for $12,000,000 today – I gave you a slight discount! (Sub 2050)

Thirdly, some landowners did not think their own property would increase in value, at least for some years. These submissions agreed that some land values may increase as claimed, but disputed the effect on certain locations, for example:

On 72 hectares at $95,000 per hectare, the total GAIC payable is $6.84M. What would our land be worth if it was developed? Figures published were between $225,000 and $450,000 per hectare – which I find unbelievable for land in this area. (Sub 2673)

The tax is very unfair as it is a flat rate $95,000 across three very different areas and does not take into account the value of the land. This is very unfair as the land in more attractive areas will sell at a much higher price than land in the less sought after areas. (Sub 1496)
The landowners most critical of the GAIC tended to consider it a tax directly on their existing land value, rather than on betterment. These submissions expressed the view that the increase in value presumed by the UGB had been invented as an excuse for arbitrary taxation. One submission described the system as “increased rates factored on speculated increases in property value” (Sub 0409), and another made the accusation that “you are falsely inflating property values, that is your reasoning on tax – but who would even pay for any of it except developers?” (Sub 1322). Some submissions went further and predicted that the GAIC would deflate property values:

This proposed legislation to rezone and consequently charge $95,000 per hectare to transfer this land in the future seems unbelievable. Land values will surely plummet, making it impossible to sell in the future (Sub 1657).

Some of the landowner submissions included their own estimates of the Effective Tax Rates (ETRs) of the GAIC on their property values. Landowners tended to express the tax as a percentage of total existing land values, thus obscuring the intended purpose of the tax. Nonetheless the range of perceived ETRs was from 20 per cent (e.g., Sub 1328) to 50 per cent (e.g., Sub 0653 and Sub 1330), and to two-thirds (66 per cent) of land values (e.g., Sub 1318). Submissions 2050 and 1649 refer to the GAA estimates of betterment values ($225,000 to $450,000 per hectare) with great scepticism.

In addition, some submissions objected to the idea of any taxation on land, regardless of windfall gains. These submissions tended to refer to the role of land in funding retirement plans or as an inheritance for children, and usually referred to the impact of the GAIC on landowners as being immoral or inconceivable. Owner-occupiers often disputed the view of ‘uneared’ value by drawing attention to their status as owner-occupiers and to their personal involvements with their properties, for instance:

We acquired our property through honest, hard work, only to have a large portion virtually stolen from us if we sell. One may argue that property values will increase, true, but also not guaranteed. Plus, it should not matter how little or how much a property is sold for, the point is, that this is outright robbery and it is unfair to tax a portion of the population to the extreme! Why should we be discriminated against and be forced to pay just because we happen to live within the Urban Growth Boundary? (Sub 0860)

We are counting on the sale of my property to keep us financially comfortable in our retirement and not be a burden on the public purse. This is now in doubt. I have worked hard for 35 years on the land and whatever I have earned is my three children’s inheritance, not the governments (Sub 2039).
Such landowner submissions are consistent with the ‘homevoter’ hypothesis. Their implicit reasoning is that whereas increases in property values are considered ‘as of right’; decreases in property values or taxes on property value increases are considered unconscionable. These claims of a moral deficiency to the GAIC charge tap into a powerful political aversion to taxing owner occupation, for example:

Many property owners will have made long term financial plans based on expected outcomes and these plans are now destroyed by this surprise tax. People in the past have not had to pay such taxes, and they should not now be liable (Sub 1041).

These properties are owned by ordinary Australian families, not developers, people who in some instances have owned their property in excess of 20 years. (Sub 1328)

We believe that a levy put on land that is sold simply for the purpose of a family wishing to move out to quieter terrain is totally unethical and unfair. Why should a simple blue collar family have to pay such a hefty levy when they are simply looking for a quieter and healthier lifestyle? (Sub 2064)

Totally unfair, we are not property developers. This is our home, this $95,000 GAIC is so so unfair! (Sub 1942)

This type of submission often tied in with fears of being displaced, or of losing substantial portions of home equity. Themes of ‘fleeing’ the city for semirural areas are particularly apparent in the submissions by rural residential landowners:

The Infrastructure Levy Contribution Tax is unjust and unfair! Unfair to the people that have worked hard to buy their large backyard; to give their children and themselves some breathing space and land they can enjoy without impinging on other people’s space. (Sub 1662)

Finally, some of the submissions (12, or 14 per cent) objecting to the GAIC felt that the tax would put them in a ‘land locked’ position, wherein the tax would deter rural buyers and make the property only saleable to housing developers. A notable feature of these submissions is the clear perception of housing developers in Melbourne as being relatively few in number and having a strong control over the land market. The sample of landowner submissions does not indicate that the potential sellers of land expected competitive bidding for their land. For example:

This will force us off our land with cap in hand just taking whatever the developer wants to give us (Sub 1659).
6.3.6 Development plans and the GAIC

A significant pattern in the sample of landowner submissions is that, of the 49 submitters with development plans for their land, only four (8 per cent) objected to the GAIC tax. By contrast, 72 (53 per cent) of the 137 landowners who did not mention development plans for their land specifically objected to the GAIC. This is summarised at Table 6.5.

Table 6.5: Affected landowners: objections to the GAIC by development plans for site

<table>
<thead>
<tr>
<th>Stated development plans for site</th>
<th>No stated development plans for site</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objects to GAIC</td>
<td>4</td>
<td>72</td>
</tr>
<tr>
<td>Supports GAIC</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>No specific comment on GAIC</td>
<td>42</td>
<td>64</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>49</strong></td>
<td><strong>137</strong></td>
</tr>
</tbody>
</table>

Source: Author's analysis of sampled public submissions. See text.

One explanation is that landowners with an active knowledge of development values for their sites do not object to the GAIC, as it is viewed in the context of potential gains in value from the UGB expansion. The landowners with development plans may have a more realistic understanding of the implications of the policy changes.

These landowners may also be more aware of development values because their properties are those that are in higher demand. Several (13) of the submissions from landowners with development plans were made via professional representatives including lawyers and planning consultants, suggesting a degree of premium-seeking investment. A number were also received from collectives of landowners, in areas where there had been obvious interest from housing developers. These submissions stated support for inclusion in the UGB and reiterated plans for urban development. They did not mention the GAIC as an issue. For example:

I am writing this submission on behalf of all the owners at the above address to express our excitement on being included in the urban growth boundary investigation area, with the hope that this boundary will be implemented in its entirety in the coming months …

On behalf of the owners of East Mt Cottrell we look forward to working with you in future (Sub 0712).

I am the spokesperson representing the view of the land owners of this street who are united and in support of development and have received several speculative offers from developers over the past four years (Sub 1007).
The other side of this pattern is that landowners without development plans for their land objected strongly to the GAIC. Such objections relate in large part to the perception that those intending to keep or sell their land in its existing rural use would be penalised. In this situation, the price paid for the land would normally be lower than the price paid by developers, but under the original GAIC the tax charged would be the same. This point was crucial to the landowner objections and to the GAIC modifications.

6.3.7 ‘Purchaser pays’ and other suggested changes

Many submissions in the sample objected to the proposed GAIC, and also frequently include suggested changes to the tax. A very common suggestion in the sample (32 submissions, or 42 per cent of landowners objecting to the GAIC) was that any proposed tax should be paid not by landowners but by housing developers. Homeowners objected to the GAIC on the grounds that they would be required to pay on sale, regardless of whether the buyer would actually develop the land. Developers were frequently referred to as being better placed to absorb the costs of the GAIC – specifically, by passing them on to the end purchasers of housing. The perception of submitters was that if only housing developers were formally liable for the tax, then the tax would ultimately be passed forward and borne by the home purchasers. This ‘user pays’ or ‘purchaser pays’ system, wherein housing purchasers pay the GAIC, was referred to in these submissions as being a fairer system. For example:

If there has to be a GAIC it should be paid by the owner of the property at the time of development submissions or approvals. Surely this is a fairer system than a homeowner selling to another homeowner who has no intention of developing the property in the near future (Sub 1014).

Current land holders should not pay for future development, it should be the developers to pay, then passed on to future owners (Sub 1321).

As the GAIC is hypothecated, many submissions by landowners also referred to their paying for the infrastructure of new housing developments. This premise was highly unpopular with the existing landowners. For example:

The imposition of a new tax on what is often a person’s own home is unjust and unfairly falls on the wrong party. Traditionally when new developments occur then it is the developers who pay and the end costs are incorporated into the final costs when the
land is ultimately sold, so the purchaser is basically paying for their own development and infrastructure. I can’t see why this does not continue? (Sub 1820)

Landowner submissions also called for the GAIC to be charged on a percentage rather than flat rate, arguing that the flat rate would disadvantage lower-value properties. Other recurrent suggestions for the GAIC were that it be exempt for family transfers and inheritances, and that local council rates should not increase unduly because of the policy change.

6.3.8 Lifestyle and farming properties: differences

The original GAIC was to apply to any property over 0.41 hectares, including not only vacant land and farmland but also properties with houses. A notable pattern in the submissions is that the owners of hobby farm, rural residential and other ‘lifestyle’ properties were more likely to object both to the UGB expansion and to the GAIC tax. This is consistent with the policy position of the Taxed Out! group, which expressed concern about the equity impact on ‘lifestyle’ properties with capital improvements. The group listed three major concerns with the proposed GAIC, the first of these being the “failure to acknowledge the market value of lifestyle property” (Taxed Out 2009). Such smaller farms, including acreages, are purchased as home sites rather than as commercial farming land.

For properties with significant capital improvements, the total betterment value after the GAIC tax would have needed to be enough to offset the cost of the dwelling. Dwelling values would usually not be valued into properties purchased for redevelopment. This concern is evident in the public submissions, for example:

A lot of money has been spent on this house, concrete tank, and septic system. I have no more money. The title says rural green wedge. I do not want this to change. Can you refund my $1.25 million please? (Sub 1316)

Landowner submissions called for transactions in residential properties to be exempt from the GAIC. The concept was that if the land were kept in its existing rural residential use, no GAIC would be paid. The landowners preferred that GAIC be paid only by those developing the land for urban use. For example:

Why can’t the infrastructure tax be exempt on the sale of a residential property if the purchaser intends to continue using the property as a residential property with no intentions of subdividing or developing the property? (Sub 2255)
The proposal does not discriminate between those who purchased land for ultimate development and those who chose it for their lifestyle. Landowners who chose land currently outside the UGB for life-style purposes are unfairly targeted for their past choice (Sub 2052).

This issue with the proposed GAIC puts into contrast landowners’ two potential interests in urban containment policies. Some rural landowners undertake rent-seeking activity in order to remove restrictions on development and unlock urban land values. The available evidence is that this seems to be a pattern more associated with commercial farmers and with absentee landowners (property speculators). On the other hand, some rural landowners operate in line with the ‘homevoter’ hypothesis, and seek to retain regulations that protect the landscape values of their property and the equity in their dwellings. Although these two interests are sometimes in opposition, in other ways they both reflect the interests of landowners in the sale value of their land. If the existing rural residential value of a parcel is thought to be higher than the urban value after the GAIC is deducted, then landowners will presumably prefer to be able to sell their land to rural purchasers, without payment of the GAIC. Landowners may have different price premiums that they require in order to sell, based on their personal situations and their level of attachment to the land (Evans 2004 p92).

In 2003, before the GAIC charge was proposed, the state government prepared a summary of submissions received to the *Melbourne 2030* review. At that time, the state government noted that farmers on the urban fringe expressed “strong opposition” to the loss of future development rights associated with the UGB. Many submissions at that time argued that “retiring farmers have no other form of retirement income other than by subdivision”. Some of this income, it was noted, came from subdividing broad hectare farms into smaller farm lots for rural residential and lifestyle farming properties (Department of Sustainability and Environment 2003 page ix).

### 6.4 Key findings

This chapter examined a sample of public submissions in response to proposed changes to Melbourne’s UGB and the treatment of betterment on the urban fringe. Many of these submissions were from affected landowners. Some patterns in the submissions have been shown to be consistent with the expectations of an endogenous perspective on planning and housing markets. A large number of objections to the GAIC were received, nearly all of them from affected landowners. A third of landowners mentioned property values in their objections, and another third referred to the impact of the GAIC on their potential gains in property values as unfair,
undemocratic or immoral. A large portion (42 per cent) of landowners objecting to the GAIC also argued that it would be fairer if such a tax were charged to housing developers (as opposed to vendors of land) and passed on to the purchasers of new housing in a user-pays system. Some submissions objected to the idea of any taxation on land.

Around 40 per cent of the landowners objecting to the GAIC claimed that they did not believe any increase in land values would result from their land being included in the UGB. Landowners critical of the GAIC tended to consider it a tax directly on their existing land value, rather than on any windfall gain. Effective tax rates of 20 per cent to 60 per cent of existing rural land values were predicted. By contrast, of the 49 submitters with development plans for their sites, only four objected to the GAIC tax. Few developers were critical of the GAIC tax. It is likely that landowners with an active knowledge of development values for their sites would not object to the GAIC as it is viewed in the context of potential gains in value from the UGB expansion. There is a perception, evident in the submissions and in other documentation, that developers are able to pass forward the costs of the GAIC to home purchasers. Landowners with development plans were often organised, with professional representation. To some landowners, the value of rezoning may be substantial enough to absorb both the GAIC charges and the costs of professional representation.

The analysis of submissions also indicated that there were two broad types of landowners, with differing types of concerns about the GAIC. The distinction between ‘homevoter’ rural landowners and other farmers is consistent with the evidence from earlier inquiries into Melbourne’s growth boundary, and from the political debates around the GAIC proposal. Some landowners, often commercial farmers, undertook rent-seeking activity in order to remove restrictions on the future development of their land. Although always unpopular, the GAIC was clearly more unpopular with a second type of landowner.

This second type of landowner, primarily lifestyle farmers on smaller parcels, sought to protect the (often substantial) equity in their dwellings, and objected very strongly to the proposed GAIC. Many of their objections related to a preference to continue rural use of the land, and to be not be unfairly penalised if selling to another rural user. Such landowners expressed an altruistic interest in retaining rural use of their land. Others feared their land would not attract interest from property developers. Viewed endogenously, if the existing rural residential value of a parcel is thought to be higher than the urban value after the GAIC is deducted, then landowners are likely to prefer to be able to sell their land to rural purchasers, without payment of the GAIC.
Chapter 7

Betterment: Modelling Urban Fringe Land Prices and the Urban Growth Boundary

People that are inside the UGB, the farmers and the owners, believe their land is liquid gold … the developer needs protection from the farmer these days, but that boundary imposed that expectation

*Interview with a Melbourne housing developer*

*(Goodman, Buxton et al. 2010 p67)*

This chapter is the second of three that investigate relationships between the Urban Growth Boundary (UGB) in Melbourne, and the landowners affected by changes to UGB policy. The preceding chapter reviewed the claims made by landowners in response to the expansion of the UGB and the GAIC, an accompanying per-hectare charge on land brought inside the UGB. The state government claimed that the $95,000 per hectare charge would only represent a portion of the increases in land value – betterment – resulting from the UGB expansion.

One finding from the analysis of landowner submissions was that around 40 per cent of landowners stated that they did not believe any increase in land values would result from their land being included in the UGB. These landowners claimed that that the GAIC would eat into the existing value of their land, accounting for up to 40 to 60 per cent of its underlying rural value. On this basis, around a third of the objections to the GAIC specifically referred to the tax as unfair, undemocratic or immoral. Either landowners did not believe that their land values would increase in value from the UGB expansion, or they felt that their land would be worth more in its existing use than for urban development (after the payment of the GAIC). The impacts on ‘lifestyle’ farmers with higher-value dwellings were highlighted, with smaller landowners more critical of
the proposed tax. The submissions placed strong pressure on policymakers to either remove the tax, or to change the manner of its imposition so that it would be paid only by housing developers and the end purchasers of housing.

In this and the next chapter, these claims are explored using quantitative methods. A database of property sales and valuations (see Appendix 1 for details) is used to estimate the betterment to large landowners on the urban fringe as a result of the recent changes to UGB policy. In this chapter, a hedonic regression model drawing on a database of property sales and valuations is used to estimate the drivers of land prices on Melbourne’s urban fringe. The model produces parameter estimates of betterment values – the additional value associated with land inside the UGB zoned for residential development, as compared to land outside the UGB zoned for rural use.

The model is based on land valuation and sales data at the individual parcel level. Sales data on undeveloped land parcels is used in combination with known parcel characteristics to estimate the effects of UGB policy changes when controlling for other differences between land parcels. After controlling for a range of parcel characteristics, the coefficients relating to the UGB policy variables will be interpreted to identify whether and to what extent the introduction of the UGB has had an effect on land prices. In the next chapter, the coefficients for the policy variables will be applied to the characteristics of those rural properties recently brought into the UGB, in order to estimate betterment values. The scale of betterment and the distribution of the effective tax rates of the GAIC will be estimated, and compared to the claims made by landowners and policymakers.

This chapter addresses the following research question:

- Controlling for other differences in land characteristics, has the introduction of the UGB, and changes to it, resulted in a measurable betterment value for land prices on Melbourne’s urban fringe?

### 7.1 Land price model

#### 7.1.1 Data sources

The UGB methodology draws on the property transactions and valuations database (the property database; see Appendix 1 for details). The property database combines detailed property characteristics information with sales data, both at the unit-record
level. Also integrated is spatial information derived for each parcel, including the distance to selected amenities and the applicability of different planning controls. The main data sources are as follows:

- property valuations as at 2008;
- property sales from 1990 onwards;
- planning information (zoning and overlays data as at 2010);
- UGB files (the different formats of the UGB between 2002 and 2010).

7.1.2 Approach

This chapter is based on a hedonic regression analysis of undeveloped land parcels inside and outside of the UGB. Detailed property valuation and sale data from the property database are used to estimate a set of underlying drivers of land prices on Melbourne’s urban fringe. The model seeks to estimate the possible effects of UGB policy and UGB policy changes, when holding other land characteristics constant. The model estimates to what extent land sales inside the UGB and zoned for residential development are measurably different in price from similar parcels sold outside the boundary, or that were sold before the introduction of the UGB. The GAIC tax is premised on this assumed betterment value.

The dependent variable used is the sale price per hectare of vacant land and farmland, inflated to constant 2008 values using CPI. Land sales over the period 1996–2008 are included, comprising sales of properties more than 15 kilometres from the Melbourne CBD, in the relevant land use classifications, and of 0.41 hectares (1 acre) in size or larger. The model is based on sales of large undeveloped land plots around Melbourne’s urban fringe. With the recent (2010) expansion of the UGB, most properties over 0.41 hectares in size that were brought inside the expanded UGB were to have been subject to the per-hectare GAIC. The parcels in the model are therefore those apparently considered large enough for subdivision and future residential development.

Measures of the effect of selected indicators of location, distance, land price changes over time, risk, amenity, land size and any improvements on the land parcels are included in the model. The variables used in the model, their type and the reason for their inclusions are described below. The main outputs are the estimated betterment coefficients for land inside the UGB after its introduction and zoned for residential development. These are used in the next chapter, in which betterment values and tax rates will be estimated for the parcels subject to the GAIC.
7.1.3 Sampling

The land sales model is based on identifying large land holdings in Melbourne in the vicinity of the UGB (see Figure 7.1). Properties are selected where the land size is equal to or greater than the size subject to the GAIC tax. This means land plots of 0.41 hectares (1 acre; 4046 square metres) and larger. This characteristic of the sample is based on the research’s focus on land that can be subdivided and sold for future residential development. The assumption is that land of this type and size accrues betterment from rezoning, implied by the size threshold given in the GAIC bill. The land size of the property is as specified in the 2008 valuation dataset.

Figure 7.1: Study area, based on changes to the UGB (map)

The land sales model is also limited to certain types of properties, where all required information is known, as follows:

- Sales records joined to a valuation record (so that property characteristics are known – 85 per cent of land sales, see Appendix 1);
- Only geocoded records (those pinpointed to a location, so that location in relation the UGB is known – 89.2 per cent of land sales, see Appendix 1);
- Only undeveloped land (farmland and vacant land);
- Only properties known to be 0.41 hectares or larger;
- Only properties in Melbourne municipalities; and
- Only properties more than 15 kilometres from the Melbourne CBD, to reduce the influence of high-value urban land.

7.1.4 Model variables

**Dependent variable**

The dependent variable is the sale price per hectare size of land parcels, in real ($2008) values using CPI inflator, in log form. This variable is produced using the sale price, in combination with the property size information.

**Key variables**

Property sales are coded by whether they are located inside or outside of the 2002 UGB, and whether this occurred before or after the introduction of the UGB in October 2002. These characteristics are used to create dummy variables for the effects of the UGB. The more important of these is the category of land sold inside the UGB after its introduction. The omitted category is land sold outside the UGB before its introduction. The zoning of properties is also included as a key variable. Zoning specifies the use to which land may be put. The omitted category is land zoned for rural use. Properties are coded by whether they are zoned for different types of urban development, but focusing on residential development. The key variables are described at Table 7.1, below.
Table 7.1: Land sales model – key variables

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outside and before 2002 UGB</td>
<td>Key – omitted</td>
<td>Land outside the UGB before its introduction</td>
<td>Omitted category</td>
</tr>
<tr>
<td>Inside and before 2002 UGB</td>
<td>Key</td>
<td>To what extent was land inside the UGB already different in price to land outside it, prior to the policy’s introduction?</td>
<td>Dummy</td>
</tr>
<tr>
<td>Outside and after 2002 UGB</td>
<td>Key</td>
<td>To what extent did land outside the UGB change in price after the introduction of the policy?</td>
<td>Dummy</td>
</tr>
<tr>
<td>Inside and after 2002 UGB</td>
<td>Key</td>
<td>To what extent did land inside the UGB change in price after the introduction of the policy?</td>
<td>Dummy</td>
</tr>
<tr>
<td>Rural zoning</td>
<td>Key – omitted</td>
<td>Land zoned rural (green wedge, farming, others)</td>
<td>Omitted category</td>
</tr>
<tr>
<td>Residential zoning</td>
<td>Key</td>
<td>Is there an additional price premium for land that is zoned for residential development? (Betterment measure)</td>
<td>Dummy</td>
</tr>
<tr>
<td>Business zoning</td>
<td>Key</td>
<td>Is there an additional price premium for land that is zoned for retail or commercial development?</td>
<td>Dummy</td>
</tr>
<tr>
<td>Industrial zoning</td>
<td>Key</td>
<td>Is there an additional price premium for land that is zoned for industrial development?</td>
<td>Dummy</td>
</tr>
</tbody>
</table>

**Control variables**

The control variables in the land sales model comprise various known characteristics of each land parcel, taken from the valuations dataset. The control variables comprise measures of time, distance, location and property characteristics, as summarised below at Table 7.2. As the source data is used for property valuations (although the actual valuation figure has been removed for confidentiality purposes), a number of variables relevant to property value are known. These include the property size and land use classification.

Only sales records successfully linked to a valuation record are used in the model. As specified in the Appendix to this thesis, around 85 per cent of land sales were matched to a valuation record. The locations of the parcels in the sample have been geocoded to specific locations. As a result, the proximity of the parcels to urban amenities has been derived and attached to the records. The applicability of different planning controls (overlays) is also known as a result of the geocoded parcel locations. Planning overlays are additional controls on land use and development, which indicate the existing characteristics of the land, for example, environmentally significant landscapes. They also indicate restrictions on the use of land, for example, requiring a permit to remove vegetation.
### Table 7.2: Land sales model – control variables

<table>
<thead>
<tr>
<th>Type/Name</th>
<th>Role</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sale year 1996</td>
<td>Control – omitted</td>
<td>Sale year 1996</td>
<td>Omitted category</td>
</tr>
<tr>
<td>Sale year (calendar year)</td>
<td>Control</td>
<td>Dummy variables for calendar years 1997 – 2008. To what extent have land prices on the urban fringe generally changed over time?</td>
<td>Dummy</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West segment</td>
<td>Control – omitted</td>
<td>Properties sold in the west of the urban fringe</td>
<td>Omitted category</td>
</tr>
<tr>
<td>East segment</td>
<td>Control</td>
<td>Are properties in different ‘corridors’ of Melbourne priced differently?</td>
<td>Dummy</td>
</tr>
<tr>
<td>North-east segment</td>
<td>Control</td>
<td>Are properties in different ‘corridors’ of Melbourne priced differently?</td>
<td>Dummy</td>
</tr>
<tr>
<td>North-west segment</td>
<td>Control</td>
<td>Are properties in different ‘corridors’ of Melbourne priced differently?</td>
<td>Dummy</td>
</tr>
<tr>
<td>South-east segment</td>
<td>Control</td>
<td>Are properties in different ‘corridors’ of Melbourne priced differently?</td>
<td>Dummy</td>
</tr>
<tr>
<td>South-west segment</td>
<td>Control</td>
<td>Are properties in different ‘corridors’ of Melbourne priced differently?</td>
<td>Dummy</td>
</tr>
<tr>
<td><strong>Land characteristics</strong> (2008–09)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental significance overlay</td>
<td>Control</td>
<td>Is there a price premium associated with land of higher amenity, or is there a price reduction from the additional restrictions this control puts on land use?</td>
<td>Dummy</td>
</tr>
<tr>
<td>Land subject to inundation</td>
<td>Control</td>
<td>Is there a price reduction on land that is prone to flooding, and/or from the additional restrictions this control puts on land use?</td>
<td>Dummy</td>
</tr>
<tr>
<td>Heritage overlay</td>
<td>Control</td>
<td>Is there a price value associated with land with buildings of heritage value, or is there a price reduction from the additional restrictions this control puts on land use?</td>
<td>Dummy</td>
</tr>
<tr>
<td>Wildfire management overlay</td>
<td>Control</td>
<td>Is there a price reduction on land that is prone to bushfires, and/or from the additional restrictions this control puts on land use?</td>
<td>Dummy</td>
</tr>
<tr>
<td>Significant buildings at point of sale</td>
<td>Control</td>
<td>The sample includes vacant land and farmland, some of which may have buildings of value which influence sale price. To what extent does having buildings (worth over $20,000) on the land add to sale price?</td>
<td>Dummy</td>
</tr>
<tr>
<td>Size (hectares)</td>
<td>Control</td>
<td>Is the standardised measure land price (price per hectare) different for differently sized properties? The literature suggests that larger land parcels are typically lower in standardised price.</td>
<td>Continuous (log)</td>
</tr>
</tbody>
</table>

*continued*
Table 7.2: Land sales model – control variables (continued)

<table>
<thead>
<tr>
<th>Type/Name</th>
<th>Role</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proximity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance to CBD (km)</td>
<td>Control</td>
<td>Does price decrease with increasing distance from</td>
<td>Continuous (log)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the Melbourne CBD?</td>
<td></td>
</tr>
<tr>
<td>Distance to train station (km)</td>
<td>Control</td>
<td>Does price increase with accessibility to transport?</td>
<td>Continuous (log)</td>
</tr>
<tr>
<td>Distance to primary school (km)</td>
<td>Control</td>
<td>Does price increase with accessibility to schools?</td>
<td>Continuous (log)</td>
</tr>
<tr>
<td>Distance to activity centre (km)</td>
<td>Control</td>
<td>Does price increase with accessibility to shops and other services?</td>
<td>Continuous (log)</td>
</tr>
</tbody>
</table>

7.1.5 Limitations

There are caveats on the data and the model. Firstly, there are two sources of sales data. These in combination give partial coverage of the period 1996–2008. The transaction records cover 1996 to mid-2004. Unfortunately, land transaction data was not made available beyond this point until too late in the research. The property valuation records contain a “most recent sale date” and “most recent sale price” for the property, where these are known. As the valuation dataset is as at mid-2008, sales up to mid-2008 are therefore known from this source. The two sources of sales information for the sample properties are combined to give a list of the known sales dates and prices for properties over the period 1996–2008. Duplicate sale records from the transactions and valuations data have been removed. The sales between 2004 and 2008 will only include the most recent sale of the property, excluding repeat sales within this period. The sale records between 1990 and 2004 include repeat sales of the same property. The land sale data is therefore treated only as a sample of property sales in the study area. The sample should include all transactions up to 2004. For 2004 to 2008, the most recent transaction is captured in the sample.

The second caveat on the model pertains to the changes to Melbourne’s UGB. Melbourne’s UGB has moved outwards twice – once in the transition from the interim UGB to the legislated UGB in 2003, and again in 2005. Land sales situated ‘between’ these different versions of the UGB (between 2002 and 2003, and between 2003 and 2005) have been identified. Sales in these locations have also been coded by whether they occurred in the time between the UGB changes. These groups were to have been included separately in the model, seeking to identify any progressive impacts on land prices as the boundary moved outwards. Unfortunately, the numbers involved in each group were ultimately too small for use in the model, given the relatively small areas involved in the 2003 and 2005 expansions, the large size of the affected properties and
the limited time periods between each expansion. The disadvantage of excluding the
detailed UGB time and location measures in the model is that specific effects of
expanding the UGB are not picked up. In terms of the betterment coefficients derived
from the model, which assumes a static UGB, these coefficients for the impact of the
UGB may be underestimated in that land sales that occurred inside the later UGBs will
still be in the category of land sales outside the UGB. A potential future approach would
be to code those sales inside and after the subsequent expansions of the UGB as
being ‘inside and after’ the UGB.

A comparable issue is that the zoning and overlay controls are as at the end of the
study period. This means there is the risk of changes in planning controls between the
date of the transaction, and 2008. The limited availability of historical zoning data
forces this assumption to be made. The potential impact on the model is mixed. Most (if
not all) land parcels on the urban fringe that have changed in zoning over the study
period will have been rezoned from rural to other uses. Few if any are ‘down’ zoned
from urban to rural use. This means land parcels sold with rural zoning, and
subsequently rezoned to urban, will be treated in the model as sales urban zoned land.
This is likely to mean the coefficient for urban zoning is underestimated. However, the
price that developers pay for such parcels will also likely reflect an expectation that
land will be rezoned. Further, the sale values of land that remains in rural zoning at the
end of the study period are more likely to capture the true value of underlying rural land
in agricultural use.

7.1.6 Sample sizes

The model is based on identifying known sales records for large land parcels, between
1996 and 2008. As shown in Table 7.3, a total of 8074 sale records are included in the
model. In terms of the Urban Growth Boundary variables (which group the sales into
those before and after, and inside and outside, the UGB), the largest group is the
omitted category of land sales outside of the UGB and before its introduction, in which
there are 3404 records. The ‘betterment category’, of sales inside the UGB and after its
introduction, has 1122 records.

The sample has on average 621 sale records per sale year (Table 7.4). Around half of
the years have between 500 and 600 sale records. The years 2001, 2002 and 2003 all
have larger numbers of sales, with around 900 in each. The records are spread evenly
across the study period and there are 506 records in the omitted year, 1996. The
exception is the final year of data, 2008, which only has 40 records. As shown in Table
7.5, over half (56 per cent) of the properties are between 0.41 and 5 hectares in size. The spatial distribution of the sales is mapped at Figure 7.2.

### Table 7.3: Sample numbers by UGB group (land sales model)

<table>
<thead>
<tr>
<th>UGB Group</th>
<th>N.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outside and before UGB</td>
<td>3404</td>
</tr>
<tr>
<td>Inside and before UGB</td>
<td>1075</td>
</tr>
<tr>
<td>Outside and after UGB</td>
<td>2473</td>
</tr>
<tr>
<td>Inside and after UGB</td>
<td>1122</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8074</strong></td>
</tr>
</tbody>
</table>

Source: Author’s calculations, based on property sales and valuations database, Melbourne urban fringe study area (see text and Appendix 1).

### Table 7.4: Land sales model – sample numbers by sale year

<table>
<thead>
<tr>
<th>Sale Year</th>
<th>N.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>506</td>
</tr>
<tr>
<td>1997</td>
<td>537</td>
</tr>
<tr>
<td>1998</td>
<td>551</td>
</tr>
<tr>
<td>1999</td>
<td>697</td>
</tr>
<tr>
<td>2000</td>
<td>596</td>
</tr>
<tr>
<td>2001</td>
<td>897</td>
</tr>
<tr>
<td>2002</td>
<td>866</td>
</tr>
<tr>
<td>2003</td>
<td>995</td>
</tr>
<tr>
<td>2004</td>
<td>646</td>
</tr>
<tr>
<td>2005</td>
<td>516</td>
</tr>
<tr>
<td>2006</td>
<td>627</td>
</tr>
<tr>
<td>2007</td>
<td>600</td>
</tr>
<tr>
<td>2008</td>
<td>40</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8074</strong></td>
</tr>
</tbody>
</table>

Source: Author’s calculations, based on property sales and valuations database, Melbourne urban fringe study area (see text and Appendix 1).

### Table 7.5: Land sales model – sample numbers by property size group

<table>
<thead>
<tr>
<th>Size group</th>
<th>N.</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.41–5 hectares</td>
<td>4545</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>5–10 hectares</td>
<td>1192</td>
<td>15</td>
<td>71</td>
</tr>
<tr>
<td>10+ hectares</td>
<td>2337</td>
<td>29</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8074</strong></td>
<td>100</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Author’s calculations, based on property sales and valuations database, Melbourne urban fringe study area (see text and Appendix 1).
7.2 Descriptive results

7.2.1 Land price trends

As shown at Table 7.6, the average land sale price, at constant 2008 prices, for land parcels across the study period was $834,393. The median figure was around half of the average sale price, at $393,136. Note that all comments on sale price refer to constant 2008 prices, unless stated otherwise.

The dependent variable in the model is the median price per hectare of property size – this is thus a standardised measure of land price, controlling for size differences. The mean price per hectare across the study period was $318,799 and the median around a third of this at $97,426. The significant difference in mean and median suggest outliers in the land sales data. The median price per hectare trended upwards in most years, but particularly so from 2001 onwards. The median price per hectare in 1996 was $45,839, which increased by 51 per cent to $69,153 in the five years to 2001.
Between 2001 and 2006 steeper increases were seen in land prices, with the measure increasing nearly four times to reach a median of $270,524 per hectare in 2006. The graph at Figure 7.3 illustrates this uplift. Both land prices and land prices per hectare were relatively stable between 1996 and 1999. Prices then increased strongly between 2001 and 2006. These trends mirror the rapid increases in median house prices across Melbourne at that time, as discussed in preceding chapters. Several factors created conditions of strong underlying demand for housing, including rising incomes, low interest rates and high levels of migration to the city.

The years 2007 and 2008 do not fit the trend as clearly, in that median 2007 prices drop from 2006 levels (but are still 54 per cent higher than in 2005), but prices in 2008 increased sharply again to $363,295 per hectare. The mean price increased over 2006–07 and decreased over 2007–08, with this difference suggesting the role of outliers. The year 2008 has relatively few sale observations.

Table 7.6: Mean and median land sale prices, and prices per hectare (real, $2008), Melbourne urban fringe study area, by sale year

<table>
<thead>
<tr>
<th>Sale year</th>
<th>Mean sale price ($)</th>
<th>Median sale price ($)</th>
<th>Mean price per hectare ($)</th>
<th>Median price per hectare ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>358,327</td>
<td>272,620</td>
<td>113,684</td>
<td>45,839</td>
</tr>
<tr>
<td>1997</td>
<td>393,696</td>
<td>271,241</td>
<td>135,585</td>
<td>52,868</td>
</tr>
<tr>
<td>1998</td>
<td>394,227</td>
<td>282,087</td>
<td>125,116</td>
<td>54,889</td>
</tr>
<tr>
<td>1999</td>
<td>384,209</td>
<td>266,564</td>
<td>137,150</td>
<td>60,229</td>
</tr>
<tr>
<td>2000</td>
<td>465,077</td>
<td>306,536</td>
<td>179,845</td>
<td>79,632</td>
</tr>
<tr>
<td>2001</td>
<td>509,071</td>
<td>342,209</td>
<td>170,797</td>
<td>69,153</td>
</tr>
<tr>
<td>2002</td>
<td>626,432</td>
<td>381,935</td>
<td>225,397</td>
<td>109,273</td>
</tr>
<tr>
<td>2003</td>
<td>908,059</td>
<td>427,674</td>
<td>307,397</td>
<td>128,737</td>
</tr>
<tr>
<td>2004</td>
<td>1,185,300</td>
<td>577,724</td>
<td>383,601</td>
<td>142,346</td>
</tr>
<tr>
<td>2005</td>
<td>1,277,708</td>
<td>662,654</td>
<td>554,982</td>
<td>148,845</td>
</tr>
<tr>
<td>2006</td>
<td>1,854,846</td>
<td>728,370</td>
<td>723,114</td>
<td>270,524</td>
</tr>
<tr>
<td>2007</td>
<td>1,467,781</td>
<td>668,782</td>
<td>837,164</td>
<td>229,785</td>
</tr>
<tr>
<td>2008</td>
<td>5,266,555</td>
<td>1,054,342</td>
<td>695,075</td>
<td>363,295</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>834,393</strong></td>
<td><strong>393,136</strong></td>
<td><strong>318,799</strong></td>
<td><strong>97,426</strong></td>
</tr>
</tbody>
</table>

Source: Author’s calculations, based on property sales and valuations database (see text and Appendix 1).
7.2.2 Distance to amenities

Descriptive statistics used in the model, for measures of the distance of the land parcels to selected urban amenities, are shown at Table 7.7. The mean distance to the Melbourne CBD of properties was 42.33 kilometres, similar to the median of 40.44 kilometres. Most properties ranged between 25 and 55 kilometres from the CBD. Reflecting their urban fringe locations and predominantly rural uses, most properties were a considerable distance from urban amenities.

Both the average and median distances of parcels in the sample from activity centres were around 20 kilometres, with most sales between 10 kilometres and 30 kilometres from a major activity centre. Distances were also high to metropolitan train stations, with an average distance of 11.86 kilometres and a median of 9.73 kilometres. The average distance to primary schools was less, at 3.32 kilometres on average. The location of the sample properties in relation to selected amenities is illustrated in the map at Figure 7.4. The fact that most land parcels in the model were located some distance from train stations and activity centres has implications for the model, as will be discussed.
Table 7.7: Descriptive statistics for continuous variables in land sales model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance to CBD (km)</td>
<td>42.33</td>
<td>40.44</td>
<td>14.62</td>
</tr>
<tr>
<td>Distance to train station (km)</td>
<td>11.86</td>
<td>9.73</td>
<td>9.11</td>
</tr>
<tr>
<td>Distance to activity centre</td>
<td>20.34</td>
<td>19.38</td>
<td>11.42</td>
</tr>
<tr>
<td>Distance to primary school(km)</td>
<td>3.32</td>
<td>2.18</td>
<td>3.38</td>
</tr>
</tbody>
</table>

Source: Author’s calculations, based on property sales and valuations database, Melbourne urban fringe study area (see text and Appendix 1).

Figure 7.4: Location of amenities (activity centres, train stations, primary schools) in relation to land sales, Melbourne urban fringe study area

7.2.3 Amenity and risk

Table 7.8 shows the number of observations and the median price per hectare for measures of location and land characteristics used in the model. Of the 8074 records, 1749 were subject to an Environmental Significance Overlay; 1304 had a Wildfire Management Overlay (fire risk); and 461 had a Land Subject to Inundation (flooding) Overlay. Sales of land with flooding risk had a noticeably lower median price, at $21,272 per hectare. Relatively few (60) sales were of parcels subject to a Heritage Overlay, reflecting the undeveloped status of most of the parcels. These are less likely to have significant historical buildings or features than would properties in urban areas.
Table 7.8: Location and land characteristics: sample sizes and median sale prices per hectare, Melbourne urban fringe study area

<table>
<thead>
<tr>
<th>Location</th>
<th>Count (where = 1)</th>
<th>Median price per hectare ($2008)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Significance Overlay</td>
<td>1749</td>
<td>57,889</td>
</tr>
<tr>
<td>Land Subject to Inundation</td>
<td>461</td>
<td>21,272</td>
</tr>
<tr>
<td>Heritage Overlay</td>
<td>60</td>
<td>68,130</td>
</tr>
<tr>
<td>Wildfire Management Overlay</td>
<td>1304</td>
<td>68,708</td>
</tr>
<tr>
<td>Significant buildings at point of sale</td>
<td>2260</td>
<td>99,342</td>
</tr>
</tbody>
</table>

Source: Author’s calculations, based on property sales and valuations database (see text and Appendix 1).

7.2.4 Land size and location

As shown at Table 7.9, the average land size of the sample was 13.13 hectares – higher than the median size of 4.05 hectares. Land size varied widely, with many farming properties of 40 hectares or larger, including some up to 500 hectares in size. Land size was also strongly associated with prices per hectare, with smaller parcels tending to be more expensive on a per-hectare basis. As illustrated in Table 7.10, the median sale price for smaller parcels of 0.41 to 5 hectares was $218,394 per hectare, compared to $53,304 for those of 5 to 10 hectares and only $22,103 for those of 10 hectares or more. Average prices were higher, for example the average per-hectare price of $48,604 for parcels of 10 or more hectares. A large proportion of land sales – over half of the sample – were in the smaller size category for rural properties. There were 1192 sales of parcels sized 5 to 10 hectares, and 2337 sized 10 hectares or larger.

The largest number of observations were in the eastern and south-eastern segments of the urban fringe, with 2657 and 2739 sales, respectively (see Table 7.11). These areas also had high numbers of smaller-sized properties (less than 5 hectares). There were 1807 sales of smaller-sized parcels in the eastern segment and 1256 in the south-east. The smaller numbers of sale observations were in the south-west (431), west (537), and north-west sectors (579).

Somewhat surprisingly, the highest median price per hectare was in the north-west segment, at $181,497, followed by the east with $109,801. Prices were lowest in the south-west, at $62,704 per hectare. Both anecdotaly and based on the submissions, land to the east and south-east of Melbourne is thought to be higher priced. This is not apparent in the descriptive statistics, however, there may be compositional differences between the locations, in particular differences in the time of sale.
Table 7.9: Parcel size and improvements: descriptive characteristics, Melbourne urban fringe study area

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land size in hectares</td>
<td>4.05</td>
<td>13.13</td>
</tr>
<tr>
<td>Value of improvements at sale</td>
<td>-</td>
<td>58,516</td>
</tr>
</tbody>
</table>

Source: Author’s calculations, based on property sales and valuations database (see text and Appendix 1).

Table 7.10: Parcel size by category: descriptive characteristics, Melbourne urban fringe study area

<table>
<thead>
<tr>
<th>Category</th>
<th>Count (where = 1)</th>
<th>Mean price per hectare ($2008)</th>
<th>Median price per hectare ($2008)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.41-5 hectares</td>
<td>4545</td>
<td>512,301</td>
<td>218,394</td>
</tr>
<tr>
<td>5-10 hectares</td>
<td>1192</td>
<td>110,726</td>
<td>53,304</td>
</tr>
<tr>
<td>10+ hectares</td>
<td>2337</td>
<td>48,604</td>
<td>22,103</td>
</tr>
</tbody>
</table>

Source: Author’s calculations, based on property sales and valuations database (see text and Appendix 1).

Table 7.11: Parcel location by sector: descriptive characteristics, Melbourne urban fringe study area

<table>
<thead>
<tr>
<th>Sector</th>
<th>Count (where = 1)</th>
<th>Mean price per hectare ($2008)</th>
<th>Median price per hectare ($2008)</th>
</tr>
</thead>
<tbody>
<tr>
<td>East</td>
<td>2657</td>
<td>224,345</td>
<td>109,801</td>
</tr>
<tr>
<td>North-east</td>
<td>1131</td>
<td>271,820</td>
<td>84,152</td>
</tr>
<tr>
<td>North-west</td>
<td>579</td>
<td>710,627</td>
<td>181,984</td>
</tr>
<tr>
<td>South-east</td>
<td>2739</td>
<td>296,175</td>
<td>75,497</td>
</tr>
<tr>
<td>South-west</td>
<td>431</td>
<td>307,873</td>
<td>62,704</td>
</tr>
<tr>
<td>West</td>
<td>537</td>
<td>586,780</td>
<td>129,079</td>
</tr>
</tbody>
</table>

Source: Author’s calculations, based on property sales and valuations database (see text and Appendix 1).

7.2.5 Key policy variables: UGB and zoning

Table 7.12 shows the number of observations and the median price per hectare of parcels in the sample, by measures of UGB policy and zoning. There are 1075 sales in the model of land inside and before the UGB, with a median price per hectare of $177,138. By contrast, sales of land outside and before the UGB have a much lower median price of $52,880, based on 3404 records. There are 2473 observations of land sales outside and after the UGB, with a median price per hectare of $105,733. The group of land sales inside the UGB after its introduction has 1122 records and a dramatically higher median price per hectare of $779,485, or around seven times as high as land outside the boundary after its introduction.

Table 7.13 and Figure 7.5 illustrate the trends over time between the different UGB variables. The median price of sales outside and before the UGB began at $38,558 per hectare in 1996, much lower than the median price for properties located inside the boundary (before its introduction), at $146,482 per hectare. Between 1996 and 2001, land outside the boundary increased by 67 per cent to reach $64,219 per hectare in
2001. Land inside the boundary peaked in 2000 at $191,526 but in 2001 was only 4.8 per cent higher, in real terms, than in 1996. After the introduction of the UGB, land prices outside the boundary continued to increase steadily, to $187,462 in 2008, an increase of 129 per cent since 2002. The trend in land sales outside the UGB, both before and after the policy introduction, is of steady increases in value.

The pattern for sales inside the boundary is much sharper. Prices inside the boundary were consistently higher than those outside, but were relatively flat between 1996 and 2001 except for a jump in 2000. From 2002 onwards, the price of land inside the boundary increased very rapidly. Prices inside the boundary in 2002 were higher (at $383,989) than those outside before the policy introduction in October, as well as after ($315,038). These prices are roughly double those for the same location in the preceding year. By 2005 median prices per hectare inside the UGB increased to over $1 million in real terms ($1,017,131). The gap between land inside and outside the boundary is thus seen to increase very rapidly from 2002 onwards, supporting claims of dramatic betterment values associated with the UGB. This pattern is very clear in the descriptive data, but may reflect compositional differences. The hedonic regression model seeks to identify any UGB effects when controlling for differences between land parcels. As discussed in preceding chapters, the results do not indicate whether the price difference is due to supply (scarcity) or demand factors.

The majority (6291 or 78 per cent) of parcels in the sample were zoned for rural uses, as illustrated at Table 7.12. The median price of rural-zoned land was $81,275 per hectare. By contrast, land zoned for residential development had a higher median price per hectare of $266,424 (around three times as high), based on 1027 observations. The median price per hectare of industrial-zoned land was very high, at over $1 million in 2008 ($1,017,131). Sale numbers of business- and industrial-zoned land were lower, with 439 and 317 parcels, respectively.
Table 7.12: Key dummy variables in model: sample sizes and median sale prices per hectare, Melbourne urban fringe study area

<table>
<thead>
<tr>
<th>Key dummy variables</th>
<th>Count (where = 1)</th>
<th>Median price per hectare ($2008)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outside and before 2002 UGB</td>
<td>3404</td>
<td>52,880</td>
</tr>
<tr>
<td>Inside and before 2002 UGB</td>
<td>1075</td>
<td>177,138</td>
</tr>
<tr>
<td>Outside and after 2002 UGB</td>
<td>2473</td>
<td>105,733</td>
</tr>
<tr>
<td>Inside and after 2002 UGB</td>
<td>1122</td>
<td>779,485</td>
</tr>
<tr>
<td>Rural zoning</td>
<td>6291</td>
<td>81,275</td>
</tr>
<tr>
<td>Residential zoning</td>
<td>1027</td>
<td>266,424</td>
</tr>
<tr>
<td>Business zoning</td>
<td>317</td>
<td>57,981</td>
</tr>
<tr>
<td>Industrial zoning</td>
<td>439</td>
<td>1,017,131</td>
</tr>
</tbody>
</table>

Source: Author’s calculations, based on property sales and valuations database (see text and Appendix 1).

Table 7.13: Median sale price per hectare ($2008) by UGB status and sale year, Melbourne urban fringe study area

<table>
<thead>
<tr>
<th>Sale year</th>
<th>Outside and before UGB</th>
<th>Outside and after UGB</th>
<th>Inside and before UGB</th>
<th>Inside and after UGB</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>38,558</td>
<td>146,482</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>45,686</td>
<td>129,506</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>44,155</td>
<td>126,532</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>44,302</td>
<td>115,701</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>62,263</td>
<td>191,526</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>64,219</td>
<td>153,474</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>80,669</td>
<td>81,843</td>
<td>383,989</td>
<td>315,038</td>
</tr>
<tr>
<td>2003</td>
<td>98,378</td>
<td>308,843</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>99,043</td>
<td>609,807</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>96,262</td>
<td>1,017,131</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>119,231</td>
<td>1,264,733</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>119,875</td>
<td>1,195,532</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>187,462</td>
<td>1,235,489</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s calculations, based on property sales and valuations database (see text and Appendix 1).
7.2.6 Implications of the descriptive data

Most properties in the sample were some distance from the Melbourne CBD, generally between 25 and 55 kilometres. Because of this, distances to the nearest major activity centre and the nearest train station were quite high, with most properties more than 10 kilometres away from these amenities. This reflects the predominantly rural and semirural nature of the properties. Properties were predominantly around 4 hectares in size, with over half being less than 5 hectares. Smaller properties tended to be much higher in price per hectare. Sizes ranged widely, between 0.41 hectares (1 acre; the minimum size for GAIC liability) and 500 hectares. Residential- and industrial-zoned land parcels were higher in price than rural-zoned land, with a median price per hectare of $266,424 for residential-zoned land.

The descriptive data indicates a strong uplift in per-hectare land prices, particularly between 2001 and 2006. This is consistent with the strong demand factors and movement in house prices, as reviewed in previous chapters. Land prices per hectare for land outside the UGB increased steadily, in real terms, over the study period, from $38,558 in 1996 to $187,462 in 2008. Median prices for land outside the UGB have
been consistently lower than for those inside. The gap between land outside and inside the boundary increased sharply from 2002 onwards. Land inside the UGB increased very sharply in price after the UGB’s introduction in 2002, particularly between 2003 and 2006. Land inside the boundary had a median price of over $1 million per hectare from 2005 onwards. This gap in value is consistent with claims of strong betterment values associated with the growth boundary. The patterns suggest a strong policy effect from the UGB, although not concluding whether these effects are from supply or demand factors. Being descriptive only, they may also reflect compositional differences. These issues are taken into account by the model analysis below.
7.3  Land price model results

7.3.1 Summary of results

Table 7.14: UGB land sales model – summary of results

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R square</th>
<th>Adjusted R square</th>
<th>Standard error of the estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>UGB effects: inside and before, outside and after, inside and after.</td>
<td>.883</td>
<td>.779</td>
<td>.778</td>
<td>.72584</td>
</tr>
<tr>
<td>Urban zoning, planning controls indicating risk and amenity; land</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>size, distance to amenities, year of sale, location (radial sector).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7.15: UGB land sales model results – coefficients

<table>
<thead>
<tr>
<th>Coeff.</th>
<th>Std. Error</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>16.541</td>
<td>.173</td>
</tr>
<tr>
<td>Inside and before 2002 UGB</td>
<td>-.180</td>
<td>.036</td>
</tr>
<tr>
<td>Outside and after 2002 UGB</td>
<td>.011</td>
<td>.063</td>
</tr>
<tr>
<td>Inside and after 2002 UGB</td>
<td>.396</td>
<td>.071</td>
</tr>
<tr>
<td>Residential zoning</td>
<td>.342</td>
<td>.032</td>
</tr>
<tr>
<td>Business zoning</td>
<td>.200</td>
<td>.061</td>
</tr>
<tr>
<td>Industrial zoning</td>
<td>.515</td>
<td>.046</td>
</tr>
<tr>
<td>Environmental Significance Overlay</td>
<td>.067</td>
<td>.024</td>
</tr>
<tr>
<td>Land Subject to Inundation</td>
<td>-.339</td>
<td>.041</td>
</tr>
<tr>
<td>Heritage Overlay</td>
<td>.266</td>
<td>.094</td>
</tr>
<tr>
<td>Wildfire Management Overlay</td>
<td>-.329</td>
<td>.024</td>
</tr>
<tr>
<td>Significant buildings at point of sale</td>
<td>.433</td>
<td>.022</td>
</tr>
<tr>
<td>Land size in hectares</td>
<td>-.704</td>
<td>.007</td>
</tr>
<tr>
<td>Distance to CBD (km)</td>
<td>-1.649</td>
<td>.061</td>
</tr>
<tr>
<td>Distance to train station (km)</td>
<td>.149</td>
<td>.016</td>
</tr>
<tr>
<td>Distance to primary school (km)</td>
<td>-.011</td>
<td>.012</td>
</tr>
<tr>
<td>Distance to activity centre</td>
<td>.157</td>
<td>.024</td>
</tr>
<tr>
<td>Year 1997</td>
<td>-.046</td>
<td>.045</td>
</tr>
<tr>
<td>Year 1998</td>
<td>.059</td>
<td>.045</td>
</tr>
<tr>
<td>Year 1999</td>
<td>.072</td>
<td>.043</td>
</tr>
<tr>
<td>Year 2000</td>
<td>.249</td>
<td>.044</td>
</tr>
<tr>
<td>Year 2001</td>
<td>.306</td>
<td>.041</td>
</tr>
<tr>
<td>Year 2002</td>
<td>.493</td>
<td>.043</td>
</tr>
<tr>
<td>Year 2003</td>
<td>.448</td>
<td>.074</td>
</tr>
<tr>
<td>Year 2004</td>
<td>.735</td>
<td>.076</td>
</tr>
<tr>
<td>Year 2005</td>
<td>.871</td>
<td>.077</td>
</tr>
<tr>
<td>Year 2006</td>
<td>.971</td>
<td>.076</td>
</tr>
<tr>
<td>Year 2007</td>
<td>.999</td>
<td>.076</td>
</tr>
<tr>
<td>Year 2008</td>
<td>1.520</td>
<td>.135</td>
</tr>
<tr>
<td>East segment</td>
<td>.682</td>
<td>.043</td>
</tr>
<tr>
<td>North-east segment</td>
<td>.249</td>
<td>.043</td>
</tr>
<tr>
<td>North-west segment</td>
<td>.066</td>
<td>.046</td>
</tr>
<tr>
<td>South-east segment</td>
<td>1.226</td>
<td>.049</td>
</tr>
<tr>
<td>South-west segment</td>
<td>.049</td>
<td>.049</td>
</tr>
</tbody>
</table>

Note: The use of bold text indicates statistically significant coefficients

Source: Author’s calculations, based on land sales model (see text).
The land price model results are summarised at Table 7.14 and Table 7.15, above. The model returns a very high R-square value, with an adjusted R square of .778. Thus the model explains slightly less than 80 per cent of the variation in land prices per hectare on Melbourne’s urban fringe. The high R square suggests that the use of land data, as opposed to house sales, for example, removes much of the unexplained variation in property sales data.

### 7.3.2 Key variables – UGB and zoning

The key variables from the land price model are the coefficients relating to the introduction of Melbourne’s Urban Growth Boundary, and to urban land use zoning. The control variables in the model – used to indicate location, accessibility, land size, amenity, risk, and land improvements – are held constant when interpreting the effects of the key policy variables.

For the key variables measuring policy effects, the omitted category of land transactions is land sold outside of the UGB, and before its introduction. In comparison to this category, land sold before the introduction of the UGB but inside the boundary was, holding other factors constant, 18 per cent lower in price. This negative effect is significant in the model. The implication is that between 1996 and 2002, before the implementation of the UGB, there was not a distinct value of land associated with the land that would later be designated as inside the UGB. Land on the urban fringe inside what was later to become the UGB was in fact slightly lower in price per hectare than land that was later outside the UGB, when controlling for other effects on land price. The differential between inside and outside the UGB prior to its introduction is established with this measure.

The dummy variable for land sold after the UGB and outside the UGB is now considered. This is in comparison to land in the same location prior to the introduction of the UGB, holding other factors (notably, calendar year effects) constant. This measure, which is only very weakly positive, is not significant in the model. The implication is that the UGB has not had a significant influence on land prices outside the boundary. This effect is consistent with the expectations of both critical Coasian theory and of planning theories of urban containment. One of the purposes of a UGB is to demarcate urban and non-urban land values and to retain rural land, with the result that land outside the boundary should be relatively flat in price. Critical Coasian theory would view this effect more critically, as an indicator of distorted supply. Both theories
would expect land prices outside the boundary to stay comparatively flat. This effect is evident in the model.

Considered next is one of the key betterment variables in the model, the dummy for land sold inside the UGB after the boundary’s introduction in October 2002. The model initially tested a range of dummy variables to capture the progressive expansion of the UGB. Land parcels situated between, for example, the 2002 and 2005 UGBs, and sold after the UGB was introduced, were given a separate dummy category to test for any price effects. The number of unimproved land parcels falling into these smaller categories proved to be extremely small; for example, only 31 properties in the sample were brought inside the 2005 expansion. After some exploration, these variables were removed from the land price model due to difficulty with significance levels. A result of excluding them is that land classed as outside the UGB and after its introduction will include land parcels that were actually inside a later version of the UGB at the time of sale. These records may influence results, however the numbers are small. Their influence could potentially mean the influence of inclusion in the UGB is underestimated.

The land sales model finds that the coefficient for land sold inside the UGB after the boundary’s introduction (holding other factors constant) is a land price per hectare 39.6 per cent higher than land sold outside the boundary before its introduction. This is particularly important given that the price of land outside the UGB is not significantly different after the UGB as compared to before. In addition, before the UGB’s introduction land inside the later boundary tended to be lower in price than land outside it. The model shows a significant and positive difference in land prices associated with land being included in the UGB. Controlling for other land characteristics (such as size, time, location and distance, as discussed below), land inside the UGB after its introduction is significantly higher in price than land outside. It is also significantly higher than land in the same location (inside what would later be the UGB) before the policy was introduced.

The sample for this analysis is large vacant land or farmland parcels located on the urban fringe. The model indicates that, consistent with the theoretical framework, these parcels experience uplifts in value when policy changes unlock their value for urban development. Landowners inside the UGB received substantial betterment values after its introduction, even holding other land characteristics constant. It is important to note that the UGB coefficient for this sample does not comment on the overall influence on house prices in the city. In identifying a 39.6 per cent value difference for inclusion in the UGB, the reason for this effect – whether supply or demand related, or because of
policy distortions or from the amenity package of urban consolidation policies – is not identified. The model also does not comment directly on who ultimately absorbs these higher prices, or on the influences on housing affordability outcomes.

Land use zoning dummies are also included as key variables in the model. The omitted category is zones not permitting urban development, including farming and green wedge zones. In comparison to these omitted categories are land parcels zoned for industrial, business (including commercial and retail) and residential development. This thesis is focused on housing markets, specifically the value of land included in the UGB and zoned for residential development. The ‘betterment’ coefficient associated with residential zoning is 34.2 per cent above rural zoning – higher than for business zoning (20 per cent) and lower than for industrial (51.5 per cent).

By combining the UGB and residential zoning variables, the land sales model identifies a combined betterment effect. Holding other measures in the model constant (including time, location, size and accessibility), the two measures of betterment are associated with a 73.8 per cent increase in land values.

7.3.3 Year effects

Looking at the control variables in the model, the first noticeable trend is that there are strong year effects picked up in the results. The calendar years 2000 through to 2008 are all significantly and positively associated with an increase in land price per hectare, as compared the base year of 1996. In particular, the years 2004 through to 2008 are strongly positive, indicating a notable uplift in land values. This is consistent with the descriptive trends in land prices as discussed above. Land sales in 2006 are, controlling for other factors, almost double (97.1 per cent higher) than those in 1996. Land sales in 2008 are 1.52 times as high as in 1996.

Strong increases in land prices on Melbourne’s urban fringe are thus evident over time. This suggests background influences on prices, particularly demand-side factors over the study period, as indicated by the earlier analysis of the ‘anatomy’ of the housing affordability crisis. There were rapid increases in median house prices across Melbourne at that time. Several factors created conditions of strong underlying demand for housing, with rising incomes, low interest rates and high levels of migration to the city.
7.3.4 Land size and improvements

In the model the overall size of the land parcel also shows a strong negative influence on the dependent variable. The dependent variable is itself standardised for size – sale price per hectare – but this measure decreases with increases in land size, meaning that controlling for other differences larger parcels are lower in price per hectare than are smaller parcels. Recall that only land large enough for development (as defined by the size subject to the GAIC, 0.41 hectares or larger) is included in the model. The descriptive results showed that smaller parcels (less than 5 hectares) tended to be higher in per-hectare price than larger parcels (of more than 10 hectares).

In the model, an increase of land size in hectares by 1 per cent is associated with a decrease in the price per hectare of 0.7 per cent, meaning that standardised land price is moderately negatively elastic in response to land size. This finding is consistent with economic theories of land price. Knaap (1998) notes that there is a “nearly universal finding” that standardised land values (land values per acre, for example) will fall with lot size. Thus, larger lots are less expensive per unit of land than are smaller lots. The potential reasons are debated, but include transaction costs, economies of scale and diminished utility. The analysis submissions also suggested that smaller parcels of farmland are likely to be ‘lifestyle’ parcels, which tend to be higher in price.

The sample comprises vacant land but also farmland parcels, many of which may have buildings of value that add to agricultural sale prices. A dummy for any improvements (buildings) being present on the land at the point of sale and worth over $20,000 is included in the model. This has a positive influence on sale prices. This variable is somewhat problematic in that the buildings are more likely to be of value if sold for agricultural or residential use, rather than for redevelopment. The improvements may be of little or negative value if the parcel is sold for redevelopment.

7.3.5 Location

The model also picks up very strong location effects. In particular, the distance of the land parcel from the Melbourne CBD has a very strong negative effect on the dependent measure. Land prices are highly elastic with respect to distance from the CBD. For each 1 per cent increase in distance from the CBD there is an associated 1.65 per cent decrease in land prices. This distance-decay trend is consistent with anecdotal knowledge of the significance of the CBD to property prices in Melbourne.
The location of land sales in radial sectors is also significant. In comparison to the west of Melbourne as a base, land sales in the east and south-east of the city are significantly higher in value. Land sales in the south-east corridor are, controlling for other differences, 123 per cent higher than in the west. Those in the east are 68.2 per cent higher. Sales in the north-east are also higher value than in the west but to a lesser degree, being 24.9 per cent higher than the west. The north-west and south-west sectors are not significantly different in price from the west.

The strong price differentials between corridors, particularly between the south-east and the west of Melbourne, are consistent with studies that have shown a longstanding preference for land in the south-east, for both housing and agriculture. The model results are more consistent with the landowner submissions. In the descriptive results, these trends were different. The difference between the descriptive and model results suggests that other compositional differences influence land prices by location.

The variables in the model to measure accessibility to amenities account for some of the price variation, although in unexpected ways. The model includes measures of accessibility: the distance to the nearest train station, primary school, major activity centre (meaning shops and services) and the Melbourne CBD. Whereas the CBD variable is strong and negative, with the implication that price decreases with distance from the city, the other distance measures do not have a strong impact in the model. The distance of the land parcel to the nearest school has a weak and not significant negative effect. Distances to the nearest train station and activity centre are, somewhat surprisingly, associated with an increase in value.

These effects are not strong but they are significant. An increase in distance to the nearest train station of 1 per cent is associated with a 0.15 per cent increase in land price per hectare. It might normally be expected that proximity to amenities and services would increase land values. This assumption may, however, be based on a misunderstanding of the market for land on the urban fringe. Amenities and services may have a more positive influence on price in established urban areas, whereas on the rural fringe other aspects of location are more desirable. In addition, the fact that there are very few of these amenities located on the urban fringe may distort their influence. This factor was illustrated in the map at Figure 7.4. On average, properties in the sample are 11.85 kilometres from the nearest train station.
7.3.6 Amenity and risk

Planning overlays are included in the model for two reasons. One is to indicate additional controls on land that may add or detract from land value. Secondly, these overlays are used to indicate underlying conditions of the land that may impact on value. The Land Subject to Inundation Overlay (LSIO) firstly indicates that the land is subject to flooding, which will potentially influence value. Secondly, it denotes that the land is subject to additional planning controls on development, a factor which may also influence value. Likewise, the Wildfire Management Overlay (WMO) indicates that the land is subject to the risk of bushfire, which may be a negative influence on value. The presence of a WMO also restricts development, as do the other included overlays in the model, being the Environment Significance Overlay (ESO) and the Heritage Overlay. These types of overlay tend to indicate that the land is of higher amenity value, however, they also put some limitations on use and development and so might have an opposite effect on land value depending on demand.

In the model, the ESO and the Heritage Overlay are associated with positive and significant influences on land values. The ESO is associated with a 6.7 per cent increase in land values when controlling for other land characteristics, and the Heritage Overlay is associated with a stronger effect of 26.6 per cent higher values. The number of properties with the Heritage Overlay is quite low. The two overlays that indicate environmental risk – the LSIO and the WMO – also behave as might be expected, with significant and negative influences on land prices. Land with a flood risk is associated with a 33.9 per cent reduction in land price, and land with bushfire risk is associated with a 32.9 per cent reduction in price.

7.4 Key findings

This chapter used a hedonic regression model, based on a detailed sample of property-level transactions in land parcels, to estimate the drivers of prices for large land parcels on Melbourne’s urban fringe. The land price model explained a high degree (around 80 per cent) of the variation in per-hectare prices. Significant influences on land price were identified, including decreasing values with increasing distance from the CBD, the influence of risk, higher prices for smaller parcels, and increasing land values over the study period. Differences in standardised land prices were identified between parcels inside and outside of the boundary, and before and after its introduction.
Controlling for other property characteristics, the model demonstrates a betterment value of 39.6 per cent for land included in the UGB since its introduction. The model thus estimates the planning gain or ‘betterment’ coefficients associated with Melbourne’s UGB when holding other differences in land characteristics constant. Land zoned for residential development is estimated to be a further 34.2 per cent higher in price. These policy variables are shown to have positive and significant effects on land prices when holding other land characteristics constant. The combined betterment coefficient for residually zoned land inside the UGB is estimated to be 73.8 per cent above the price of rural land outside the UGB.
Chapter 8

Betterment: Estimates of Planning Gain and Taxation on the Urban Fringe

Current land holders should not pay for future development, it should be the developers to pay, then passed on to future owners

(Submission 1321 to the Melbourne @ 5 Million inquiry).

This chapter is the final of three that investigate relationships between the UGB in Melbourne and the landowners directly affected by changes to UGB policies. The preceding chapter used a hedonic regression model, based on a detailed sample of property-level transactions and property valuations, to estimate the drivers of sale prices for large land parcels on Melbourne’s urban fringe. Controlling for other property characteristics, the model estimated a betterment value of 73.8 per cent above rural values for land incorporated inside the UGB and rezoned for residential development.

In this chapter, these betterment coefficients are applied to the characteristics of the rural land parcels recently incorporated into the UGB. These are the parcels that will now be subject to the GAIC. The GAIC was premised on the government claim that land inside the UGB commanded significant betterment values, of which it was claimed that the $95,000 per hectare GAIC would represent only a portion. The analysis of landowner submissions in Chapter 6 showed that many landowners disputed both the idea and the alleged scale of this betterment. Some landowners claimed that the original GAIC would have a punitive effect by eating into their existing rural land values. It was because of such concerns that modifications were made, in order for the GAIC and associated UGB expansion to attain parliamentary approval. The main changes to the GAIC consisted of an exemption on land parcels between 0.41 hectares (1 acre) and 5 hectares, an exemption on many rural residential properties, and changes to the
timing of the payment. The latter changes have impacted how much of the GAIC is to be paid, when and by whom.

This chapter first estimates the value of betterment for the parcels liable for the GAIC. It then estimates the impact of the GAIC on these parcels in the form of effective tax rates (ETRs) for these properties. To do so, the per-hectare GAIC charge is expressed as a proportion of betterment values. The effects on landowners of the original and (more complex) modified GAIC are considered. The goal of this comparison is to review the implications of policy changes made to the GAIC tax in the context of the claims made by both policymakers and affected landowners. In particular, the move to the ‘user pays’ or ‘purchaser pays’ model is examined, in the context of claims made about who will – and who should – ultimately bear the cost of the GAIC.

For the purposes of arriving at estimates of GAIC tax burdens, I have applied certain assumptions about who will ultimately bear the costs of the tax, which are based, in part, on the public claims of landowners and developers rather than an economic analysis of incidence. Landowners argued that the tax would be fairer if paid by developers, as future homeowners could then absorb the cost. This was seen as the more appropriate taxation arrangement. Housing developers also claimed to expect charges on development to be passed on to homebuyers but were critical of this effect, because of the potential impacts on housing affordability. Groups with strategic interests in policy may have a propensity to exaggerate public claims of the incidence of tax. Part of the costs of the tax can be passed backwards to landowners or may be borne by developers. I have applied assumptions based in part on the widespread claims in the debate.

This chapter addresses the following research questions:

- What are the estimates of betterment to landowners with land recently incorporated inside Melbourne’s UGB? How do these compare to the claims made by landowners and policymakers?

- What would have been the effective tax rates, on this betterment, to large landowners on Melbourne’s urban fringe under the original and modified GAIC policies? How do these compare to the claims made in debates surrounding the proposed betterment tax?

- Do the perceived interests of landowners appear to have been improved by the modifications made to Melbourne’s urban consolidation policies and the
proposed betterment tax? Which landowners seem to have benefited most from the changes?

8.1 Approach: betterment values

The results of the land sales model are used to estimate betterment values. To do so, the model coefficients for the UGB and for residential zoning are applied to sales information on rural land outside the UGB, including land that has now (2010) been incorporated inside the UGB. These are the parcels that will be subject to the GAIC.

This analysis is based on sale records for rural land parcels outside the UGB, before the 2010 changes to the boundary. The sale records include the observed real sale price per hectare, the predicted price per hectare produced by the model for that parcel (based on parcel characteristics), and the model residual (the difference between observed and real prices). These records are used in combination with the results of the land price model to impute a series of variables.

The first step is to use the regression residuals to control for potential observation errors. From the sample of rural land sales outside the UGB, the top and bottom 1 per cent of residuals (differences between the observed and predicted land prices per hectare) are removed. This excludes a small number of records for which the sale price is unusually high or unusually low, when taking that property’s characteristics into account. In some cases, these records appear to have problems with missing or additional digits in the recorded sale price – for example, a large farm selling for $10,000. An alternative approach might have been to remove the top and bottom 1 per cent of sale prices. Given the sample design, however, many of the highest-priced records – with sales of several million dollars – are for large farms in high-demand areas, and are legitimate prices. Likewise, many land sales in more isolated, lower-demand areas have legitimately sold for under $10,000, particularly in the earlier years of the sample.

After removing the top and bottom 1 per cent of model residuals, the sample consists of 5160 rural-zoned sales outside the UGB. Of these, 359 are parcels that have now, as at 2010, been brought inside the UGB.

The second step is to inflate the land price per hectare up to 2008 levels by calculating a new coefficient for each year of sale, based on the land price model. For example, sale records from 2001 are brought to 2008 levels by dividing the 2008 year effect
coefficient in relation to the base year of 1996 \( (1 + 1.52 = a \text{ multiple of } 2.52) \); by the same figure for 2001 \( (1 + 0.31 = 1.31) \). Land sales in 2008 are \( 2.52 / 1.31 = 1.92 \) or 92 per cent higher than those in 2001. This gives an estimated current rural sale value for the parcel, based on land price trends. Sale records from 2001 are inflated by 92 per cent. Therefore the predicted rural value (2008) is the observed sale price for the parcel, multiplied by the applicable year inflator.

This 2008 rural value is then uplifted to estimate a residential development value for the parcel, using the UGB and zoning coefficients produced by the model. These are log value coefficients, so the rural price per hectare is increased by the combined percentage increases of the two betterment coefficients. This gives an estimated urban residential development value per hectare for the property – its value were the parcel brought inside the UGB and zoned for residential development. The urban residential development for the parcel is the 2008 rural value multiplied by the UGB and residential zoning coefficients. This is how much the model predicts the same parcel of land would sell for when rezoned inside the UGB.

Finally, the betterment value per hectare for each parcel is calculated. This is the difference between the urban residential development value and the estimated rural value. This value is used to assess the potential impacts of the GAIC charge.

### 8.2 Results: estimated betterment values

#### 8.2.1 All rural parcels outside the UGB

For all 5160 rural properties outside the UGB, sale prices have first been inflated to attain an estimated rural value per hectare as at the last year covered by the model, 2008. As summarised in Table 8.1, the average estimated rural sale value for the land parcels is $214,742 per hectare and the median is $127,477 per hectare. The lowest quartile (25th percentile and below) of parcels are worth $52,547 per hectare or less. The top quartile (75th percentile and above) have estimated rural values of $273,717 per hectare or more.

To attain an estimated urban residential development value (the land value including betterment from rezoning), the rural values are inflated using the percentage betterment values from the UGB and residential zoning coefficients. Table 8.1 shows that the average per hectare urban residential development value for the parcels is $402,305 and the median is $238,819. The lowest quartile of values has an imputed
The estimated betterment value is the estimated urban residential development value minus the estimated rural values. These values are also summarised in Table 8.1. The average estimated betterment value of inclusion in the UGB is $187,563 per hectare, with a median of $111,342 per hectare. The value of betterment for the parcels ranged from $45,896 for the bottom 25 per cent of properties, to around a quarter of a million dollars per hectare ($239,073 and above) for the top 25 per cent of properties.

The range of estimated betterment values varies by location, as shown in Table 8.2. The median estimated betterment values of properties in the eastern and north-western segments were highest, at $158,154 and $103,545 respectively. Given that, controlling for other characteristics, prices in the south-east sector were higher, this difference suggests that there are compositional differences between different locations. The east and north-west have high numbers of smaller, higher-priced ‘lifestyle’ farm parcels. Betterment values in the south-west and west were noticeably lower than in other areas. The total value of betterment (the per-hectare value multiplied by the size of the parcel) was highest in the south-east, with a median of $840,146.

Estimated per-hectare betterment values also vary widely by the size of the parcel. This is consistent with the model results, which showed a negative relationship between parcel size and the per-hectare sale price. As shown in Table 8.3, smaller properties below 5 hectares had a median betterment value of $238,347 per hectare. At the other end of the scale, the median betterment value for properties of 10 hectares or larger was only $35,410. The total estimated betterment values for properties were conversely lower for the smaller-sized properties, with a median betterment of $546,533. The median total betterment value for larger properties of 10 hectares or more was nearly $1 million ($941,489).

The estimated betterment values are driven in part by the betterment equation, which is based on a percentage uplift of the observed rural sale values. Alternative methodologies could be used. These include using regional models (interacting the UGB change with particular spatial segments) or dollar-value coefficients. The results from the selected approach suggest that potential betterment values for over half of the rural land parcels outside the UGB are substantial, at over $111,342 per hectare and $670,048 for the total parcel sale. For the top quartile of the land parcels, windfall gains in value of over $239,073 per hectare above the rural value of the land are estimated.
This latter large scale of betterment accords with the premise of the GAIC. On the other hand, the potential per-hectare betterment value of inclusion in the UGB is quite small for a portion of the properties in the sample, particularly larger parcels in the west. This is more consistent with the claims made by affected landowners of punitive taxation from the GAIC. As was suggested in the submissions, much of the punitive effect seems to stem from the fact that the GAIC is a flat per-hectare charge, regardless of land value.

Table 8.1: Imputed rural values, residential development value, and betterment per hectare (all rural properties outside 2005 UGB), Melbourne urban fringe study area

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean ($)</th>
<th>25th percentile ($)</th>
<th>Median (50th percentile) ($)</th>
<th>75th percentile ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural value per hectare</td>
<td>214,742</td>
<td>52,547</td>
<td>127,477</td>
<td>273,717</td>
</tr>
<tr>
<td>Uplifted value per hectare</td>
<td>402,305</td>
<td>98,444</td>
<td>238,819</td>
<td>512,791</td>
</tr>
<tr>
<td>Betterment per hectare</td>
<td>187,563</td>
<td>45,896</td>
<td>111,342</td>
<td>239,073</td>
</tr>
</tbody>
</table>

Source: Author’s calculations, based on land sales model (see text).

Table 8.2: Imputed betterment per hectare, by location (radial sector) (all rural properties outside 2005 UGB), Melbourne urban fringe study area

<table>
<thead>
<tr>
<th>Radial sector – rural properties outside the UGB</th>
<th>Median betterment per hectare ($)</th>
<th>Median total betterment value ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>East</td>
<td>158,154</td>
<td>664,324</td>
</tr>
<tr>
<td>North-east</td>
<td>97,105</td>
<td>627,085</td>
</tr>
<tr>
<td>North-west</td>
<td>103,545</td>
<td>415,925</td>
</tr>
<tr>
<td>South-east</td>
<td>68,225</td>
<td>840,146</td>
</tr>
<tr>
<td>South-west</td>
<td>43,691</td>
<td>727,260</td>
</tr>
<tr>
<td>West</td>
<td>32,782</td>
<td>534,289</td>
</tr>
<tr>
<td>Total</td>
<td>111,342</td>
<td>670,048</td>
</tr>
</tbody>
</table>

Source: Author’s calculations, based on land sales model (see text).

Table 8.3: Imputed betterment per hectare, and total betterment value, by size (all rural properties outside 2005 UGB), Melbourne urban fringe study area

<table>
<thead>
<tr>
<th>Size group</th>
<th>Median betterment per hectare ($)</th>
<th>Median total betterment value ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.41–5 hectares</td>
<td>238,347</td>
<td>546,533</td>
</tr>
<tr>
<td>5–10 hectares</td>
<td>96,323</td>
<td>702,217</td>
</tr>
<tr>
<td>10+ hectares</td>
<td>35,410</td>
<td>941,489</td>
</tr>
<tr>
<td>Total</td>
<td>111,342</td>
<td>670,048</td>
</tr>
</tbody>
</table>

Source: Author’s calculations, based on land sales model (see text).

8.2.2 Rural land included in the UGB expansion

Of the 5160 rural land parcels for which betterment values have been imputed, 359 have now (as at 2010) been included within the UGB expansion. These are the parcels for which betterment values should actually be realised (according to the model assumptions), and which will be liable for the GAIC charge. The ranges of estimated rural, urban and betterment values for the land incorporated into the 2010 UGB are
shown at Table 8.4 and are illustrated at Figure 8.1. The median rural value per hectare is $144,488, with an estimated urban value of $270,688 per hectare. The parcels now have marginally higher estimated betterment values than the overall sample, with a median of $126,200 (as compared with $111,342). The top quartile of parcels have estimated betterment values per hectare of $257,426 or higher.

As the UGB was not expanded in the east, the UGB expansion does not cover any land in the eastern sector of Melbourne’s urban fringe. This means that parcels in the eastern segment are not included in Table 8.5, which summarises estimated betterment values by location. Of these properties, those in the north-west have the highest imputed betterment values on a per-hectare basis, with a median betterment of $237,893 per hectare. This figure appears to be a function of the land characteristics in the north-west, with higher landscape values, closer proximity to Melbourne and a greater number of smaller ‘lifestyle’ farms. The higher total betterment values (multiplying the per-hectare value by the size of the parcel) are largest in the south-east, at $898,615.

The results suggest that half the parcels brought inside the UGB have estimated betterment values of $126,200 per hectare or more. This is comfortably above the GAIC per hectare rate of $95,000. What is also apparent is that for lower-value properties, particularly larger properties and those in the south-west, the GAIC charge would be higher than the estimated betterment values from being incorporated into the new UGB. Multiplying the per-hectare betterment by the hectare size of the properties shows that the median total betterment value for properties is just over half a million dollars ($532,757). The model estimates that the top quartile of properties included in the new UGB will make just below one million dollars ($954,342) in windfall gains.

By size, the median estimated betterment value per hectare is much higher for the smaller properties, as shown at Table 8.6. The median betterment per hectare for properties of 5 hectares or smaller is $235,296, compared to only $34,637 for properties of 10 hectares or larger. The total estimated betterment value is conversely far higher for the larger properties incorporated into the new UGB, with a median total betterment value of over $1 million for properties of 10 hectares or more ($1,021,751).
Table 8.4: Imputed rural values, residential development value, and betterment per hectare for properties now included in the 2010 UGB expansion, Melbourne urban fringe study area

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean ($)</th>
<th>25th percentile ($)</th>
<th>Median (50th percentile) ($)</th>
<th>75th percentile ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural value per hectare</td>
<td>206,272</td>
<td>49,034</td>
<td>144,488</td>
<td>294,729</td>
</tr>
<tr>
<td>Uplifted value per hectare</td>
<td>386,436</td>
<td>91,863</td>
<td>270,688</td>
<td>552,155</td>
</tr>
<tr>
<td>Betterment per hectare</td>
<td>180,164</td>
<td>42,828</td>
<td>126,200</td>
<td>257,426</td>
</tr>
</tbody>
</table>

Source: Author’s calculations, based on land sales model (see text).

Figure 8.1: Imputed rural values, residential development value, and betterment per hectare for properties now included in the 2010 UGB expansion, Melbourne urban fringe study area

Table 8.5: Imputed betterment: properties now included in the 2010 UGB expansion, Melbourne urban fringe study area, by location

<table>
<thead>
<tr>
<th>Radial sector – properties now included in the expansion</th>
<th>Median betterment per hectare ($)</th>
<th>Median total betterment value ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North-east</td>
<td>111,085</td>
<td>752,996</td>
</tr>
<tr>
<td>North-west</td>
<td>237,893</td>
<td>381,168</td>
</tr>
<tr>
<td>South-east</td>
<td>78,130</td>
<td>898,615</td>
</tr>
<tr>
<td>South-west</td>
<td>44,040</td>
<td>807,280</td>
</tr>
<tr>
<td>West</td>
<td>65,571</td>
<td>444,214</td>
</tr>
<tr>
<td>Total</td>
<td>126,200</td>
<td>532,757</td>
</tr>
</tbody>
</table>

Source: Author’s calculations, based on land sales model (see text).
Table 8.6: Imputed betterment per hectare, and total betterment, properties now included in 2010 UGB expansion, Melbourne urban fringe study area, by size group

<table>
<thead>
<tr>
<th>Size group</th>
<th>Median betterment per hectare ($)</th>
<th>Median total betterment value ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.41–5 hectares</td>
<td>235,296</td>
<td>389,883</td>
</tr>
<tr>
<td>5–10 hectares</td>
<td>83,368</td>
<td>644,549</td>
</tr>
<tr>
<td>10+ hectares</td>
<td>34,637</td>
<td>1,021,751</td>
</tr>
<tr>
<td>Total</td>
<td>126,200</td>
<td>532,757</td>
</tr>
</tbody>
</table>

Source: Author’s calculations, based on land sales model (see text).

8.2.3 Implications of betterment estimates

In this section of the analysis, the land sales model has been used to estimate the increases in value for rural land parcels that would result from being incorporated inside the UGB. Half of the rural landowners whose land parcels have been incorporated inside the 2010 UGB expansion stand to make betterment gains of $126,200 or more per hectare. This is comfortably above the $95,000 GAIC charge. A quarter of landowners stand to have their land values increase by $257,426 or more per hectare, which is considerably above the GAIC charge. The median total estimated betterment for properties rezoned inside the UGB is $532,757. This means that for half of the landowners, their land would increase by over half a million dollars above their existing rural values.

Thus, for many landowners, the policy change of expanding the UGB will have represented a potentially substantial financial gain. The GAA suggested that betterment values for rezoned land on Melbourne’s fringe would range from $190,000 to $435,000 per hectare, and that the $95,000 charge would represent only a portion of this increase from rural values. The median estimated figure is lower than this range, but the results for the upper quartile are within this range. It is notable that the smaller farms and parcels have much higher estimated betterment values per hectare, with a median value of $235,296. This difference seems to account for the higher estimated betterment values in the north-west and the north-east, around the Sunbury and Whittlesea green wedges.

Many landowners claimed that the GAIC charge would be larger than any increase in the value of their land resulting from the expanded UGB. Based on the modelled results, this assertion appears to be true of lower-value properties, particularly larger land parcels and those in the west and south-west. For these parcels, the model estimates of betterment values per hectare are relatively modest. Properties in the south-west have median estimated betterment values per hectare of only $44,040 or
less per hectare. Larger properties also tend to have lower per-hectare betterment values, although logically they also have much higher total betterment values, with median betterments of over $1 million per property. This range in values based on location and size supports the concerns of landowners about the flat per-hectare basis of the GAIC.

Overall, the potential increase in land value to result from inclusion in the UGB is large for the majority of properties, in keeping with the premise of the GAIC. At the same time, the results show that there is a significant portion of properties that stand to gain relatively little from the UGB policy changes, consistent with the claims of some landowners. The variance of betterment values by size and location is a key reason for this and for the potentially punitive effects of the flat-rate GAIC (as discussed below). Conversely, the flat-rate GAIC appears to be a very small portion of the higher end of betterment values. As a result of concerns about the impact of the GAIC, the proposed charge was modified. The next section will estimate the different impacts on landowners of the two versions of the GAIC.

8.3 **Approach: effective tax rates of the GAIC on betterment**

Although the UGB represents a potential financial gain to landowners whose properties are incorporated inside the UGB, the accompanying GAIC charge takes a portion of this gain. The GAIC charge was originally to have been applied uniformly to all those properties that were recently incorporated inside the UGB. The original GAIC was based on a flat rate of $95,000 per hectare, to be payable by the vendor at sale, or by the land developer at the point of subdivision (whichever came first). Certain changes were subsequently made to the GAIC in order to pass the legislation.

The ranges of betterment values, as reviewed in the preceding section, become more important when considering the GAIC, which is charged on a flat per-hectare basis. The real windfall gain to landowners is the betterment per hectare, less the GAIC charge per hectare. The Victorian government claimed that the GAIC would represent only a portion of substantial betterment values. Many landowners claimed that the GAIC would damage their existing property values.

To explore these claims, effective tax rates (ETRs) are estimated for the GAIC. This is done by calculating the GAIC charge as a proportion of the estimated betterment value per hectare. The tax rate represents the percentage of planning gain that the government would have claimed. Where the GAIC exceeds the betterment value, the effect would have been punitive and landowners would have limited incentive to sell to
developers. This effect is illustrated at Figure 8.2. The urban value of the land after its inclusion in the UGB is the line at ‘a’. The urban value net of the flat GAIC charge is the line below this, at ‘c’. For the highest range of betterment values, the GAIC accounts for a small portion of the betterment value, leaving substantial windfall gains leftover (shown at ‘d’). This is true for the top 25 per cent of estimated per-hectare betterment values ($257,426 and higher). For landowners at the other end of the scale, the GAIC is larger than the betterment value and there are losses equal to ‘e’. These losses are equal to the distance between the ‘c’ line and rural value line ‘b’, where ‘c’ is below ‘b’. In this case, the effect is punitive and the landowner would have no incentive to sell to a developer. They would, in that case, be better placed selling their land at its existing use value. In practice, however, Landowners may have different price premiums that they require in order to sell, based on their personal situations (Evans 2004 p92).

**Figure 8.2: Impact of the GAIC on betterment values from inclusion in UGB**

The ETR effects of the original GAIC tax are estimated first. In this case, the effects of the charge are reasonably straightforward. The effects of key modifications made to the GAIC are then considered, applying some assumptions based on the landowner submissions and perceptions. The changes made to the GAIC and their intended impact on landowners are then compared to the content of the submissions as evaluated previously.
8.2.1 GAIC tax schedules

There are three points at which the one-off GAIC may be charged. The basic rate is $95,000 per hectare. The GAIC is ‘triggered’ by whichever event comes first: the sale of land, the subdivision of land (division into smaller parcels), or the development of land (referring to the issuing of building permits). There are two GAIC scenarios – original and modified. Key differences between the two versions of the GAIC are shown at Table 8.7. The differences mainly concern reduced or deferred GAIC liabilities for the sale of land parcels.

Table 8.7: The GAIC – differences in liability between original and modified versions

<table>
<thead>
<tr>
<th>Land size</th>
<th>Original GAIC</th>
<th>Modified GAIC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sale of land</td>
<td>Subdivision/</td>
</tr>
<tr>
<td></td>
<td></td>
<td>development</td>
</tr>
<tr>
<td>0.41–5 hectares</td>
<td>$95,000/ha paid by vendor at sale</td>
<td>$95,000/ha paid by landowner/ developer</td>
</tr>
<tr>
<td>5–10 hectares</td>
<td>$95,000/ha paid by vendor at sale</td>
<td>$95,000/ha paid by landowner or developer</td>
</tr>
<tr>
<td>10+ hectares</td>
<td>$95,000/ha paid by vendor at sale</td>
<td>$95,000/ha paid by landowner/ developer</td>
</tr>
</tbody>
</table>

**Original GAIC**

The first scenario uses the original GAIC criteria. As originally proposed, the GAIC was to be charged at $95,000 per hectare for all properties of 0.41 hectares or larger that were brought inside the UGB. This would have applied uniformly to all land parcels and for all trigger points (sale, subdivision or development).

In this case, the effective ETR of the charge is assumed to be $95,000 as a proportion of the betterment value per hectare. That is, the landowner loses $95,000 per hectare in sale value. In this case I am assuming that the landowner would have both formally paid the charge, and ultimately borne its cost.

**Modified GAIC**

The second scenario uses the modified GAIC criteria. The modified GAIC applies differently to properties in three size categories: 0.41 up to 5 hectares, 5 hectares up to 10 hectares, and 10 hectares or larger. The changes concern the circumstances under
which the GAIC is payable at the point of sale. They also impact the timing of the GAIC payment and who formally pays for it. These key changes (also summarised in Table 8.7) are set out below.

- **Properties of less than 5 hectares**
  The revised GAIC is not levied on the sale of land parcels between 0.41 hectares and 5 hectares. The tax only applies to properties of this size group at the point where the land is subdivided (divided into smaller pieces) or developed.

- **Properties of 5–10 hectares**
  Properties in the next size bracket, of between 5 hectares and 10 hectares, are also exempt from the tax on sale where there is a habitable dwelling on the property. If there is no habitable dwelling, 30 per cent of the GAIC liability is paid by the purchaser and 70 per cent is paid on development. The GAIC also applies if the land is subdivided or developed.

- **Properties of 10+ hectares**
  The full GAIC liability applies at the point of sale, subdivision or development of land of 10 hectares or more.

- **Development of land parcels (all sizes)**
  The original GAIC was triggered by the sale of land, subdivision of land or issuance of building permits. The modified GAIC has different triggers for the point of sale, but is the same as the original GAIC for subdivision or development of land if this occurs before sale.

- **Formal liability for the GAIC**
  Under the modified GAIC, landowners only pay the GAIC if they also subdivide or develop the land (i.e. if they are housing developers). Under the modified ‘purchaser pays’ model, the tax is to be paid by the purchaser (not the vendor), and the purchaser can elect to defer up to 70 per cent of the GAIC over the course of the development.

**Assumptions**
I model two of the main changes made to the GAIC, using certain assumptions. The first is the exemption from GAIC for sales of properties of 5 hectares or less. The changes to the GAIC mean many landowners (of the smaller parcels; the majority of landowners in the sample) will not be liable for the GAIC when they sell their land. They will only be liable if they develop the land.
The second change modelled is that, for properties of 5 hectares or more, 30 per cent of the $95,000 per hectare GAIC liability ($28,500 per hectare) is to be paid by the purchaser of land at the point of sale. The remaining 70 per cent is payable in stages when the land is developed. For the purposes of arriving at measures of tax burdens under the modified GAIC, I have assumed that purchasers will discount the 30 per cent GAIC charge into the amounts that they are willing to pay for land, thus shifting the charge back to the landowner. The remaining 70 per cent is assumed to be passed on to the sale price of housing, and to be borne by homebuyers.

The actual incidence of the GAIC charge may mean that the landowners will bear the cost of the charge regardless of when it is formally levied and who actually pays. Part of the costs of the tax can be passed backwards to landowners or may be borne by the developers themselves. Developers may exaggerate claims of the costs to homebuyers, in order to ‘game’ the argument in their favour. However, returning to the discussion in Chapter 6, the widespread view is that charges at the point of development will be ultimately passed on to homebuyers. Landowners say that the costs are borne by them if the charge is at the point at sale, and that this is not fair on them. They argue that the costs will be borne by home purchasers if charged at development (on housing developers), and that this ‘purchaser pays’ arrangement is fairer. Housing developers say that the costs of betterment charges are borne by home purchasers, and that this is not fair on homebuyers.

I have also assumed that the exemptions on smaller land parcels will mean that landowners will not sell to developers or develop their own land, unless the value of betterment is greater than the GAIC charges. Under the revised schedule, smaller landowners effectively retain the option to sell their land for its rural value. They may do so because their land is, in effect (after the GAIC), worth more in rural or rural residential use. They may also wish not to sell to a housing developer on principle. Landowners may have different price premiums that they require in order to sell, based on their personal situations (Evans 2004 p92). Thus I assume that most landowners in the smaller size categories are unlikely to be in the position shown at point ‘e’ in Figure 8.2. With the deferral of 70 per cent of the payment, I expect that the effect on many parcels in the larger scale of betterment (shown at ‘d’ in the diagram) will be that the assumed amount of betterment left over will increase.
8.4 Results: effective tax rates of the GAIC on betterment

8.4.1 The original GAIC

The first tax scenario considered is the original proposed GAIC. The effective tax rate (ETR) for this version of the GAIC is assumed to be $95,000, divided into the estimated betterment value per hectare. That is, the landowner loses $95,000 per hectare for every per-hectare increase in sale price resulting from the rezoning.

For properties included in the 2010 expansion, the estimated betterment per hectare remaining after the application of the original GAIC charge would have been, on average, $85,164. The median value left over per hectare would have been $31,200. For the top quartile of the distribution, landowners would still have had $162,426 or more per hectare in betterment value left after the payment of the $95,000 per hectare GAIC charge.

For the bottom quartile of properties, however, the estimated amount of betterment left over after the payment of the GAIC is negative (-$52,172 per hectare or less). For at least 25 per cent of properties, the original GAIC would potentially have reduced their existing rural property values. Although landowners may have different price premiums that they require in order to sell; these landowners would have limited incentive to sell their land for urban use, and would logically have been concerned that the original GAIC would still have been levied had they sold their land for its existing use value.

Table 8.8 illustrates the impact of the original GAIC charge in percentage terms. The median ETR of the original GAIC as a percentage of betterment values per hectare is 75.3 per cent. It can be argued that this is a very high tax rate. It is, however, in the context of unearned or ‘windfall’ values – in excess of normal rural values. In some contexts (as in the UK in the immediate post-war period) these gains from policy changes have been subject to 100 per cent betterment taxes. For the top 25 per cent of properties, the taxation rate of the original GAIC charge would have been 36.9 per cent or less of the betterment value, representing a relatively low rate of taxation on betterment.

A key pattern in the results is the range of distribution of the effects of the GAIC charge. For some parcels the charge would be more than double the amount of estimated betterment per hectare, and thus would have been effectively a punitive tax on existing rural property values. At the other end of the scale, the model estimates that many properties would still have made large profits from the UGB expansion, of
$162,426 or more per hectare, even after the payment of the GAIC. The range of values again highlights issues with the per-hectare basis of the GAIC.

The distribution of the estimated ETR of the original GAIC is shown in bands at Table 8.9. This table shows that the ETR of 42.6 per cent of the impacted parcels was estimated to have been over 100 per cent, meaning that the original GAIC would have been larger than the estimated betterment. For a large number (94, or 35.1 per cent) of the affected parcels, the ETR of the original GAIC would have been comparatively low, at 50 per cent or less of the betterment value. For 8.9 per cent of the parcels, the estimated taxation effect of the GAIC would have been less than 25 per cent ETR. By property size, properties in the smallest group (0.41 to 5 hectares) had the lowest median ETR, at 40.4 per cent.

When taking into account the varying size of properties, landowners in the top quartile of after-GAIC betterment values would have made a total windfall of $272,827 or more.

Table 8.8: Original GAIC charge as % (ETR) of estimated betterment value, Melbourne urban fringe study area, by location

<table>
<thead>
<tr>
<th>GAIC ETR per hectare (%)</th>
<th>Mean % ETR</th>
<th>Median % ETR</th>
</tr>
</thead>
<tbody>
<tr>
<td>North-east</td>
<td>177.9</td>
<td>85.5</td>
</tr>
<tr>
<td>North-west</td>
<td>171.2</td>
<td>39.9</td>
</tr>
<tr>
<td>South-east</td>
<td>182.5</td>
<td>121.6</td>
</tr>
<tr>
<td>South-west</td>
<td>359.3</td>
<td>215.7</td>
</tr>
<tr>
<td>West</td>
<td>221.9</td>
<td>144.9</td>
</tr>
<tr>
<td>Total</td>
<td>201.0</td>
<td>75.3</td>
</tr>
</tbody>
</table>

Source: Author’s calculations, based on land sales model (see text).

Table 8.9: Original GAIC charge as % (ETR) of estimated betterment value: distribution by ETR band, Melbourne urban fringe study area

<table>
<thead>
<tr>
<th>Range of ETR</th>
<th>N.</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 25% ETR</td>
<td>32</td>
<td>8.9</td>
<td>8.9</td>
</tr>
<tr>
<td>25–50% ETR</td>
<td>94</td>
<td>26.2</td>
<td>35.1</td>
</tr>
<tr>
<td>50–75% ETR</td>
<td>52</td>
<td>14.5</td>
<td>49.6</td>
</tr>
<tr>
<td>75–100% ETR</td>
<td>28</td>
<td>7.8</td>
<td>57.4</td>
</tr>
<tr>
<td>&gt;100% ETR</td>
<td>153</td>
<td>42.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>359</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Author’s calculations, based on land sales model (see text).

8.4.2 Effective tax rates – the modified GAIC

Applying the assumptions stated earlier, the modified GAIC means that landowners in effect will pay 30 per cent ($28,500 per hectare) of the GAIC at the time of sale. The remainder ($66,500 per hectare) is assumed to be passed on to homebuyers by
developers. The GAIC is calculated at $28,500 as a proportion of the per-hectare betterment value. In the case of smaller properties (0.41 to 5 hectares), the GAIC is not paid at sale, only on development. In this case it is assumed that the landowner will not bear any GAIC charge at sale. The full GAIC will be charged at the point of development, with 100 per cent of this then assumed to be passed on to homebuyers.

Under these assumptions for the modified GAIC charge, the median betterment value per hectare remaining after the GAIC liability is $369,096 – around 3.3 times as high as under the original GAIC. The median ETR of the modified GAIC is 0 per cent. The chief reason for this is that around half of the affected land parcels were of 5 hectares or less, and so are no longer liable for the GAIC at the point of sale.

Nearly 60 per cent (58.2 per cent) of the properties under the modified tax have an assumed ETR on betterment values of 25 per cent or lower, and 67.1 per cent have an ETR of 50 per cent or lower (Figure 8.3). This is in contrast to the distribution of tax rates under the original GAIC. Under the modified GAIC, a portion (17 per cent) of properties still have estimated ETRs of over 100 per cent of the betterment value. A small proportion (5 per cent) of parcels will also have relatively high ETRs, of between 75 per cent and 100 per cent.

Under the assumptions applied, the results suggest that the changes to the GAIC are favourable to the majority of landowners with land incorporated inside the UGB, and particularly to landowners who sell (rather than develop) their land. The expectation (based on the claims made by landowners and developers) is that the majority of GAIC liability will be passed on to homebuyers – 100 per cent where the charge is levied at the point of subdivision or development, and 70 per cent where it is levied at sale. The results of the GAIC change are likely to be particularly favourable to owners of smaller land parcels. These landowners have the higher per-hectare values, and under the changes to the GAIC are effectively able to sell their land for its existing use without paying the GAIC, should this be more profitable or preferable.

By contrast, the modified GAIC is unfavourable to large landowners (parcels of 10 hectares or more) and landowners in some areas, such as the south-west. Based on the assumptions applied, the ETRs of the modified charge will, for these groups, still be over 60 per cent of the estimated betterment value.
Table 8.10: GAIC as median % (ETR) of estimated betterment value, Melbourne urban fringe study area by location: original and modified

<table>
<thead>
<tr>
<th>Location</th>
<th>Median Original GAIC % ETR</th>
<th>Median Modified GAIC % ETR</th>
</tr>
</thead>
<tbody>
<tr>
<td>North-east</td>
<td>85.5</td>
<td>20.9</td>
</tr>
<tr>
<td>North-west</td>
<td>39.9</td>
<td>0.0</td>
</tr>
<tr>
<td>South-east</td>
<td>121.6</td>
<td>36.5</td>
</tr>
<tr>
<td>South-west</td>
<td>215.7</td>
<td>64.7</td>
</tr>
<tr>
<td>West</td>
<td>144.9</td>
<td>38.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75.3</strong></td>
<td><strong>0.0</strong></td>
</tr>
</tbody>
</table>

Source: Author’s calculations, based on land sales model (see text).

Table 8.11: GAIC as median % (ETR) of estimated betterment value, Melbourne urban fringe study area: distribution by ETR band, original and modified

<table>
<thead>
<tr>
<th>Range of ETR</th>
<th>Original GAIC % ETR</th>
<th>Modified GAIC % ETR</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 25% ETR</td>
<td>8.9</td>
<td>58.2</td>
</tr>
<tr>
<td>25–50% ETR</td>
<td>26.2</td>
<td>8.9</td>
</tr>
<tr>
<td>50–75% ETR</td>
<td>14.5</td>
<td>10.9</td>
</tr>
<tr>
<td>75–100% ETR</td>
<td>7.8</td>
<td>5.0</td>
</tr>
<tr>
<td>&gt;100% ETR</td>
<td>42.6</td>
<td>17.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Author’s calculations, based on land sales model (see text).

Figure 8.3: GAIC charge as % (ETR) of estimated betterment value, Melbourne urban fringe study area: distribution by ETR band, original and modified GAIC

[Bar chart showing effective tax rates (ETRs) of growth areas infrastructure contribution (GAIC), with data for original and modified rates across different ETR bands.]

Source: Author’s calculations, based on land sales model (see text).
8.5 Key findings

This chapter estimated betterment values for land parcels incorporated into the expansion of the UGB, and the potential impacts on this betterment of the original and modified GAIC – a charge intended to capture some of the windfall value arising from changes to the UGB.

The effective tax rate analysis suggests that for the majority properties incorporated into the UGB, the amount of betterment value per hectare after payment of the original GAIC would still have been positive. For the most strongly affected group of parcels, however, the remaining betterment value after the tax would have been negative, meaning that for some properties the GAIC would have potentially reduced existing rural property values.

The median estimated ETR of the GAIC in its original form was 75.3 per cent of the betterment value per hectare. The level of variation was very wide. For the 25 per cent of properties with the higher estimated betterment values, the tax impact would have been quite low, at 36.9 per cent or less. The degree of variation in the results (by size and location) highlights issues with the flat basis of the GAIC charge. It is possible that an alternative percentage-based charge would have resulted in better targeting of the largest windfall gains, and in less punitive effects on other landowners. This point was emphasised in the landowner submissions.

The original GAIC was modified in several ways as a result of a public inquiry and the parliamentary ratification process. The modified GAIC is described as a ‘purchaser pays’ model. Both the critics and supporters of this alternative model argued that the bulk of costs would then be borne by future housing consumers. I have applied this assumption, although in reality, part of the costs of the tax can be passed backwards to landowners or may be borne by the developers.

Under the modified GAIC, most properties would not be liable for the charge at the point of sale, and 67 per cent would have ETRs of 50 per cent or less of the potential betterment values. Given that over half of the affected land parcels were of 0.41 to 5 hectares in size, over half of the rural landowners with land brought inside the UGB will not pay any GAIC at the point of sale. The median ETR of the modified GAIC, applying the aforementioned assumptions, is thus 0 per cent, and 58 per cent of properties have estimated ETRs of 25 per cent or less (on point of sale).

The tax estimates of the two versions of the GAIC suggest that the changes to the GAIC are – in theory – highly favourable to the majority of landowners with land
rezoned to fall within the UGB. Even if the assumption that the 70 per cent deferred payment will be borne by developers (and then homebuyers) is untrue, the exemptions based on size and habitable dwellings mean that smaller landowners will usually be better off. This is especially true as they also retain the ability to sell their properties for their existing use value.

It is noticeable that the GAIC changes appear to be the most favourable to owners of smaller farm parcels: ‘hobby’ and ‘lifestyle’ farmers. This group stands to gain the most from UGB changes, and were the most critical of the GAIC in the public inquiry. This is consistent with the planning minister’s comments on the changes to the GAIC, stating that the changes were to protect “the interests of hobby farmers and people owning lifestyle properties” (Tait 2010). Vocal opposition to the GAIC came from smaller rural landowners, particularly those with capital investments in their properties. In the submissions and the political campaign around the GAIC, the impact of the GAIC on such owners was highlighted and criticised. Issues of inheritance and the high capital values of such properties were often mentioned in the submissions, with the landowners frequently stating a wish to pass the high (and increasing) values of their land on to their children without being affected by taxation.

By contrast, housing developers and large farmers were less likely to complain about the proposed GAIC, even though its effects on the latter were potentially worse. This seems curious. It may be that because larger landowners stand to make more profit on a gross level from the UGB changes – although their per-hectare ETRs are much higher – they have less opposition to the tax. Selling large farms (of 40 hectares or larger) for development will net substantial betterment values – often in the millions – even if tax rates are very high on a per-hectare basis.

Background documents indicate that many commercial farmers make long-term plans around selling to developers, and for this reason such landholders were strongly opposed to the original introduction of the UGB. The submissions also indicate that housing developers are thought more likely to approach large landowners: for reasons of easier land assembly, for example. Large landowners may thus find it easier to sell their land for development.

The other factor at work in untangling the UGB and GAIC policy changes is that commercial farmers have no interest in retaining the UGB (unless their properties are already within it). Lifestyle farmers and rural residential residents, by contrast, have two interests, working sometimes in opposition. On the one hand is the desire to benefit financially from policy changes. On the other is the desire to retain the landscape values that make their parcels valuable as lifestyle properties. The fact that the
changes made to the policy are so closely aligned to the suggestions made by landowners is evidence in support of the ‘homevoter’ theory.

Given the assumptions applied, the analysis is only a guide to the process of changing the UGB and of negotiating the proposed tax on betterment. A basic summary, however, is that whereas the original GAIC was designed to function as a (high) tax on betterment resulting from the policy change, the modified GAIC is – at least in its intention – a ‘purchaser pays’ system wherein the tax is to be paid by housing developers and will ultimately be passed on to homebuyers. The modified GAIC has potential implications for housing affordability policies. The charge is now intended to be loaded into the cost of new housing – a fact lauded by many landowners as fairer, or at least more conventional. ‘Hobby’ farmers with more valuable properties have been intentionally protected by the changes to the charge.

All of this sits within a larger context. Firstly, it must be remembered that Melbourne’s UGB was expanded quite substantially alongside the GAIC changes. Secondly, referring back to Table 3.2 in the earlier part of the thesis, different aspects of urban consolidation policy were identified as having different implications for ‘insider’ groups. Those most likely to be opposed to betterment taxes are landowners. Conversely, those most likely to be opposed to urban growth boundaries are housing developers. Viewed in this way, the series of changes to the UGB and the GAIC may be understood as having been melded from a range of policy pressures from property owner ‘insiders’.
“The trouble is the manner of enforcement,” insisted Howard Littlefield. “Congress didn’t understand the right system. Now, if I’d been running the thing, I’d have arranged it so that the drinker himself was licensed, and then we could have taken care of the shiftless workman – kept him from drinking – and yet not’ve interfered with the rights – with the personal liberty – of fellows like ourselves.”
They bobbed their heads, looked admiringly at one another, and stated, “That’s so, that would be the stunt.”

*Sinclair Lewis*, Babbitt (1923)

As Howard Littlefield (PhD) and his suburban neighbours quaffed cocktails in prohibition-era America, they weighed up the merits and perils of regulation – or “invading the rights of personal liberty”. On the plus side, they decided, prohibition kept other people from drinking to excess. On the down side, the frustratingly democratic nature of prohibition laws meant that they themselves were also prevented from drinking.

They hit upon the idea of reshuffling the regulations in some way, to stop other people drinking and yet allow them – the right people, with the right taste in drinks – to continue having cocktail parties unabated. In my more cynical moments during this research, I found myself recognising essentially the same ‘stunt’ again and again, doggedly reappearing and dressed in the language of the time and place. That is, the desire to control how the world around you appears, and yet retain the right to freely control your own patch. As I finish writing this thesis, issues around planning, housing and property owners continue to pepper the media. Recently the owners of an exclusive 23-storey apartment building successfully campaigned to introduce height controls to prevent construction of a 29-storey building that would block their views.
The owners of the existing tower included Liberal party secretaries and well-known property developers (Dobbin 2011). On the expanded urban fringe there are reports of “new millionaires walking around” (Green 2011) – the owners and developers of land rezoned for housing. Plans for a new rail link to service these communities are in danger of stalling. Battles over high-density housing continue in Toorak (Dowling 2010), Williamstown (Keys 2011) and elsewhere throughout Melbourne. Meanwhile, federal funding for the National Rental Affordability Scheme has been dramatically cut back (Hall 2011).

It is the ongoing complexity of the policy issues and debates around planning and housing markets, and the very high stakes involved, that keep many people preoccupied with them. This has been true from Howard Littlefield (PhD), with his “rows of figures all in rows and precedents from Poland and New Zealand”, back in 1923 – through to the work going into this PhD thesis. To reiterate, this research has used a mixed-methods approach to address the following question:

Are the housing market interests of property owners, as ‘insiders’, reflected in activities that influence urban consolidation policies in Melbourne?

In my review of the existing theory and evidence, I have argued that the endogenous or ‘insider–outsider’ effect on planning from property owners presents implications for the planning system, and ultimately for housing affordability policies. The research has supported the notion that the activities of groups with an existing interest in the housing market do follow certain predictable patterns, and have played an important role in the contestation and negotiation of urban consolidation policies in Melbourne.

I have suggested that although urban consolidation may in theory either improve or undermine housing affordability, in practice property interest groups are likely to contest and shape the ways in which consolidation policies are implemented. I submitted that this interactive process of conflict (Hall 1973) itself has implications for housing affordability and planning. This theoretical framework was applied to the subsequent empirical investigations.

The review of historical policy documents found that, like much early planning regulation, planning in Melbourne initially pursued concurrent goals of both social reform and the protection of property values. Urban consolidation and the curtailment of outward growth have been strategic policy objectives since the early 1980s. But although earlier plans for Melbourne had articulated concerns about urban sprawl, they also expressed reluctance to use regulatory mechanisms to directly curb urban
expansion. The 2002 growth boundary introduced in the *Melbourne 2030* strategy was one of the few prescriptive measures to be introduced.

The UGB has, however, been moved outwards several times since its introduction. As documented in the content analysis, these changes to the boundary occurred amid housing affordability concerns and prominent lobbying by landowners and developers. The housing and development industries have been integral to criticisms of the UGB, and to the public documentation of links between affordability and planning. The content analysis found that public interest in housing affordability and planning follows systematic patterns, appearing to instigate planning policy changes. These patterns are consistent with the interests of the housing and development industries in reducing supply restrictions in ‘boom’ periods, and in promoting demand (via government interventions) during slumps. The nature of the more recent housing affordability crisis – with strong underlying demand pushing up against supply restrictions – provides one means of understanding the recent polemic against urban consolidation, and the associated policy changes.

The content analysis also showed that in Australia, the notion that urban consolidation could improve housing affordability has more or less disappeared. Housing affordability was a key factor in the introduction of otherwise unpopular planning reforms through the 1970s and 1980s, which relaxed the use of minimum lot size and ‘flat’ codes. This process of densification and policy reform to promote urban consolidation was backed – sometimes actually designed – by the housing and development industries through the 1970s to 1990s. More recently, planners have been concerned with defending urban consolidation against claims that controls on outward growth have driven up housing prices.

Meanwhile, the process of densification has been met with resistance from existing homeowners, particularly in the city’s more affluent suburbs. These areas were previously protected from higher-density housing through the use of local controls. In a context where planning policies are not strictly local in content but interested parties may oppose individual development proposals, planning objections and appeals provide an important recourse for existing property owners to engage with the planning system. To explore this relationship I examined data on planning permit applications and rates of objections and planning disputes, using descriptive and regression methods.

I found that even after controlling for a range of other factors, rates of planning objection and dispute are highly related to housing prices. Planning applications
statistically attract more objections in areas of higher-value housing, even after controlling for such factors as where development is more prevalent. The findings support the hypothesis that groups with a greater existing stake in the housing market and a greater capacity to negotiate the system appear to be able to influence planning outcomes via objection and dispute.

This property owner backlash against urban consolidation policies is consistent with the idea of ‘homevoters’ and the insider–outsider problem. It presents implications for policies that direct new housing supply to established high-demand areas, particularly given the ever-increasing costs of housing in Melbourne’s inner and middle suburbs. The idea that housing supply can be increased by urban infill and increasing density needs to take these findings into account. They suggest that it will be more difficult where affordable housing is required most. This also aligns with recent high-profile reports in Australia suggesting that increased developer risks, and greater construction costs, function as significant barriers to housing construction in existing urban areas (Productivity Commission 2010 p106; Kelly 2011 pp30-35).

There are winners and losers from different aspects of urban consolidation policies. Those most likely to oppose infill housing are existing homeowners. Those most likely to oppose betterment taxes are fringe landowners. Those most likely to oppose urban growth boundaries are housing developers. Viewed in this way, the series of changes to the UGB and the GAIC may be understood as having been melded from a range of policy pressures from property owner interests.

The UGB analysis utilised a land price model, based on a detailed sample of property-level transactions in land parcels. The analysis used a hedonic regression model to estimate the drivers of sale prices for large land parcels on Melbourne’s urban fringe. Controlling for other property characteristics, the model estimated a betterment value of 73.8 per cent above rural values for land incorporated inside the UGB and rezoned for residential development. That is, the price of rezoned land inside the UGB is 73.8 per cent higher than rural zoned land parcels with similar characteristics outside the UGB.

This estimated betterment value was then used to estimate price premiums for landowners resulting from having their land rezoned for urban development. The median total betterment value for landowners was estimated to be $532,757. The extent of these planning gains is likely to have been a factor in pressure for the UGB to be expanded: the expansion of the UGB closely follows campaigns by housing and development industry groups. Key changes made to the GAIC tax toward a ‘purchaser pays’ system closely reflect the claims made by landowners in their political
submissions. Under the revised version of the charge, which was modified to attain legislative approval, the bulk of the costs of financing new development are intended to be borne by new homebuyers rather than landowners.

The net effect is that urban consolidation policies seem to create substantial price premiums in the land and housing market, which are then redistributed in response to the premium-seeking investment of insiders. These premiums have been shaped over time by conflict and policy renegotiation, with the wins and losses redistributed based on the premium-seeking activities of existing property owner insiders. The costs of this process are, it seems, likely to be passed on to housing market outsiders. The situation in Melbourne, in terms of key urban consolidation and housing affordability concepts, is set out below at Table 9.1, within the context of the research findings.

Table 9.1: Urban consolidation in Melbourne: summary in view of research

<table>
<thead>
<tr>
<th>Policy aspect</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy focus on housing affordability and planning</td>
<td>Shifted from urban consolidation as solution to urban consolidation as problem. Constant push to release more fringe land for housing affordability reasons.</td>
</tr>
<tr>
<td>Housing affordability outcomes</td>
<td>Housing costs continue to rise to unprecedented levels, well ahead of income increases.</td>
</tr>
<tr>
<td>Urban growth boundary</td>
<td>Expanded continuously, under pressure from housing developers and affordability concerns.</td>
</tr>
<tr>
<td>Higher-density development in existing areas</td>
<td>Backlash from residents, particularly in high-value areas, in the form of objections, disputes and political outcomes. Higher-density housing continues to be built, but not to levels anticipated by the Melbourne 2030 strategy.</td>
</tr>
<tr>
<td>Inclusionary zoning</td>
<td>No policy commitment to inclusionary zoning.</td>
</tr>
<tr>
<td>Betterment taxes</td>
<td>Substantially revised, favouring landowners with the intention of passing tax on to homebuyers.</td>
</tr>
</tbody>
</table>

There are limitations to the findings, which suggest areas for future research. The empirical investigations found supporting but not overwhelming evidence of the effects of housing market insider groups on the planning system. There are certainly a range of other interests and influences that are likely to shape planning outcomes. In some parts of the analysis, such as the investigation of the interests of rural landowners on the urban fringe, there are multiple influences at work. These raise questions warranting further investigation.

The modelling of betterment to landowners in chapters 7 and 8 would benefit from more detailed analyses to explore the variable effects of location, size, amenity and other submarket differences on the scale of betterment from planning changes. For example, developing regional models identifying policy effects in specific areas of Melbourne would be an important expansion of the land sales model. An analysis of
the variable effects of the growth boundary over time would also be a valuable area for further research.

The analysis of planning dispute incidence in Chapter 5 would benefit from more disaggregated data, and from a more detailed analysis of the nature of disputes and their outcomes. The level of objection and dispute in the planning system affects the time taken, but not necessarily the outcome. These links are important to understanding the role of third-party rights of appeal and any implications for housing supply (Clinch 2006; Willey 2006). Further, a more responsive measure might be the number of objections received rather than the number of applications objected to. Should this data become available, this could provide greater insight into variations in planning objection and dispute in Melbourne.

On a more general level, I have applied a narrow economic approach to the key concepts in this thesis. These issues may be understood in other more qualitative terms. In particular, the analytical framework of Bourdieu (1984) warrants further exploration with regards to issues around planning disputes (Huxley 2002). This framework considers the close link of ideas of aesthetic taste or ‘distinction’ to those in positions of power, and to different forms of capital – not just economic but cultural, social and symbolic.

The findings raise issues with policy implications. One such area concerns different models of public participation in planning, including third-party appeal rights. Appeal rights in planning are premised on ideals of social inclusion. The findings suggest that these channels are, however, likely to be disproportionately used by better-resourced people, potentially to secure their housing market position against outsiders. While this finding does not necessarily warrant changes to participation processes, it is important for planners to take into account that there may be exclusionary outcomes from policies intended to be inclusionary.

A further implication of the research relates to efficiency. The processes of contesting and negotiating a flexible planning system are, in effect, premium-seeking investments by property owners seeking to influence the planning system in their favour. This adds time and uncertainty to housing supply and to planning. Certain groups have a greater interest in, and capacity to negotiate with, the planning system. These are, however, interactions that are not widely understood by policymakers. Simplified debates around housing affordability and planning instead tend to assume only a ‘good’ or ‘bad’ view of planning or urban consolidation.

Likewise, the assumption of a dichotomy between regulation and housing markets is powerful and broad reaching. In Melbourne’s housing market, prices have continued to
rise to awe-inspiring levels not just since 1996, but through 2007 and on into 2011 – against the backdrop of the spectacular downfalls of many other countries’ housing markets. It seems telling that, with regards to the collapse of the US subprime mortgage market, the political right suggested that the problem was over-regulation and ensuing market distortion (Henderson 2008), and the left suggested that the problem was capitalism gone mad, unleashed to enact its natural failures (Rundle 2008). These are the same fundamental differences in perspective that have influenced the housing and planning issues explored in this thesis.

The answers to issues around the relationships between housing and planning – and between housing affordability and urban consolidation – are not as simple as left and right. In fact, one of the things that drew me to this topic was the way in which the intersection of planning and housing markets seems to test the staunchest of political convictions. The evidence is that even the most freewheeling neoliberals stop short of deregulating planning controls in their own neighbourhoods. Equally, the language of green politics and citizen participation is often used to fight projects at a local level that would otherwise sit perfectly with those same values on a general level, such as wind farms, social housing or community care facilities.

At the local levels at which planning and housing inevitably operate, the politics of regulation and deregulation seem to be constantly frustrated and renegotiated. This fact has seen the downfall of flagship free market proponents from Margaret Thatcher through to Melbourne’s Jeff Kennett, with their wealthy constituents apparently furious at having been taken at their word too close to home. Often, it seems, the battles boil down to the inevitable involvement of property developers – and their unfashionable motivation of being ‘in it for the money’.

The fact that many property owners large and small are still quite drawn to the idea of having their cake and eating it too is, it seems, part of why planning and planning disputes have not become less prominent. This is despite the best efforts of reformers holding a range of political motivations. Perhaps a detailed analysis is not really needed to see ulterior motives in the cap-in-hand campaigns of housing developers or the straight-faced pleas of millionaires against the social impacts of offensively new apartment buildings. But what I have often found strange during this research is that while so much of planning activity is based around various interests in property markets, this is so rarely mentioned. Planning debates tend to take place in code – drawing on happenstance and heresthetics to strategically align a host of unmentioned goals with mentioned ones. Yet it is not obvious why the unmentioned goals cannot be articulated.
I contend that given the types of relationships demonstrated by this research, there is a strong case for the idea that planning policies (and reforms to the planning system) should actively anticipate their impacts on property rights. There is an argument for greater transparency in dealing with the role of planning in housing markets. Jacobs and Paulsen (2009) argue as follows:

Planners must understand and explain how planning proposals benefit and harm property owners … if such questions are not asked and answered, planners themselves remain unaware of real consequences of what they propose, and their proposals may seed social conflict rather than consensus (Jacobs and Paulsen 2009 p141).

Similarly, Tiesdell and Allmendinger (2005) call for more market-aware planning processes, with a focus on the interrelationships between various actors and how these translate to market outcomes (Tiesdell and Allmendinger 2005 pp56-57). I agree with their assertion that there is limited decision-making value in the alleged dichotomy between planning and markets.

The policy debate in Australia has tended to ignore studies of the impacts on housing supply of flexible or unpredictable planning systems (Ball, Allmendinger et al. 2008; Glaeser and Ward 2009). Glaeser and Ward, in their study of Boston area planning regulations, argued that “land use regulations are often astonishingly vague, which increases the likelihood that there will be disputes about implementation” (Glaeser and Ward 2009 p266). The same could be said of planning policies in Melbourne. The findings from this research have a bearing on contemporary reforms to planning that seek to ‘streamline’ or create ‘flexibility’ but underestimate the interactive role of interest groups in planning processes. The costs of this underestimation may be passed on, for example, in the form of development industry structures that require extensive time and resources for rent-seeking expenditure to gain planning permission. Anticipating the housing market winners and losers of different decisions – even if these issues are not reconcilable – may improve the transparency of the planning system and reduce the extent of this expenditure.

Insofar as affordable housing policies are concerned, the review of the literature and of the historical planning material has underscored the potential for planning to be used for affordable housing. It has highlighted that inclusionary zoning policies are, conceptually, intrinsic parts of urban consolidation policies. These policies have, however, only really occurred at experimental scales in Australian cities and never in Melbourne. If there are (as the evidence suggests) price premiums associated with urban consolidation, it would make sense to specifically offset these effects with
upzoning and affordable housing strategies. Melbourne relies on a planned redistribution of housing supply to existing areas – however, audits of the *Melbourne 2030* strategy show this redirection of housing growth is not being achieved (Melbourne 2030 Audit Expert Group 2008). This research has thrown light on some of the possible influences on this situation.

Given the findings, if urban consolidation policies remain a strategic planning priority, the greater use of positive or enabling planning mechanisms may be a more effective means of implementing them. Certainly in comparison to the situation in many other countries or even other states, planners in Victoria have far fewer enabling powers. There are also comparatively few prescriptive measures to directly require certain outcomes. Planning goals are dependent on steering market actors, generally in flexible ways. In the 1970s, Leonie Sandercock described planning in Melbourne as “bureaucracy tempered by anarchy” (Sandercock 1975 p55). There may still be something in this.

Recently Beer, Kearins et al. argued that planners in Australia are constrained by Australia’s high rate of homeownership and its dependence on homeownership-driven cycles (Beer, Kearins et al. 2007). At the least – and at the risk of endorsing the wholesale abandonment of any notion of urban containment policies in Melbourne – the findings suggest that there is a case for more clarity and commitment regarding planning policy. The recent Productivity Commission Inquiry into Planning and Zoning pointed to an “objectives overload” in Australian planning systems; arguing that there “is a significant risk that the systems’ capacity to deliver on their objectives will deteriorate” (Productivity Commission 2010 pxxii). I think this quotation, from one of the submissions to the growth boundary expansion, sums it up:

> Call me Captain Obvious, but this land release directly contradicts the first Key Principle in *Melbourne 2030* – a more compact city. A ‘growth boundary’ is useless if you just keep shifting it outwards. It’s not really a boundary at all then, is it? (Submission 1563 to the *Melbourne @ 5 Million inquiry*)

The findings, particularly in the UGB chapters, also point to the potential for alternative taxation and compensation arrangements. These include transferable development rights and other models of formalised planning compensation. Development rights purchase programs and transferable development rights programs allow the voluntary sale of land values above agricultural land values (i.e. the sale of betterment values), usually by public agencies. These are often used to preserve agricultural land around urban areas, as in some US states including California (Smith and Giraud 2006).
Transfer programs remove much of the incentive on the part of landowners to influence planning policies in their favour to capture development values.

In the case of transferable development rights, housing developers also have less incentive to influence policy. This is because planning decisions relocate – to specific sites – rather than restrict housing supply. There is a high cost involved in such purchases, especially in high-demand areas. This is, however, a relatively transparent cost. Such costs need to be weighed against the evidence, as presented in this thesis, of the efficiency costs of flexible planning systems that do not anticipate the interests and effects of property market interest groups.

This research has suggested that the balance in planning between housing market insiders and outsiders currently tends to be skewed in favour of current owners, although there are many ways in which this can eventuate. The research has focused on planning processes. It has not commented on planning outcomes. Indeed, by certain measures planning and housing market outcomes may have been improved as a result of the influence of housing market groups. However, the impacts of property owners on planning processes may be to the detriment of those excluded from property ownership, a growing group in Melbourne’s current environment of extremely high housing prices. They are also potentially to the detriment of the planning system and its ability to achieve well-motivated goals in an efficient and effective manner. Increasing the acknowledgement, transparency and understanding of the influence of housing market interests on planning may go some way to mitigating these effects.

If groups have vested interests that motivate resistance to urban consolidation and affordable housing initiatives, planners and policymakers need to find policy instruments that help to align the incentives of these groups with the goals of planning and housing policy. This is a key challenge posed by the findings of this thesis.
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Appendix 1

Property sales and valuations database

Parts of the thesis make use of a detailed property database. This appendix describes the methodology for compiling and developing a spatial dataset of property sales and characteristics – referred to as the Property Transactions and Valuations Database, or just as the property database. This database is used as the basis for parts of the empirical research, particularly the Urban Growth Boundary related chapters 7 and 8. The database is also used for the ‘anatomy of housing crises’ section of Chapter 4, and the analysis of planning disputes in Chapter 5.

This appendix summarises the goals of the property database and discusses its useful attributes for addressing the research questions. It describes the different sources of data and the characteristics of each source; the design and development of joins and of database structures; and the strengths and weaknesses of the database for the research.

Data Sources

Overview

The property dataset is a spatial dataset compiled from administrative records at the unit-record (individual property) level. The dataset covers Melbourne municipalities across the period 1990–2008. The data is integrated into a Geographical Information System (GIS) environment. The two main input data sources are property transactions (sales) data, and property characteristics data obtained from property valuations.
The merged database uses property identifier fields to link sales information to valuation information. This is then linked to unit-record spatial information. In a spatial setting the property records may be located in relation to urban amenities, and to applicable planning regulations. In the Urban Growth Boundary (UGB) chapters, the applicable planning regulations at the urban fringe are overlaid onto the merged database. Spatial data at an aggregate level (municipality level or census boundary level) can also be linked to the merged dataset. This then provides a set of information that is suited to dynamic spatial analysis of the Melbourne housing market.

**Property valuations data**

The first raw data source is the property valuations data. Property valuations are collected by individual municipalities for the purposes of levying property rates (taxes). The valuation records for each rateable property comprise descriptions of the use of the land and the improvements made to it (with the term ‘improvements’ generally referring to buildings). These characteristics are used by local governments in combination with local sale price information to derive a property valuation on which taxes are paid. Valuations are audited at the state level by the Victoria Valuer-General to ensure consistent property valuations.

The 2008 valuations dataset was obtained in raw form from the Office of the Victorian Valuer-General, as a confidentialised extract from the Statewide Valuations Dataset. Although aggregate forms of the data are published by the Valuer-General, the disaggregated data is not publicly available. The unit-record form of the data was obtained for research purposes. Being partially confidentialised, some of the fields (owner details and actual valuation figures) were removed prior to the data being provided. The dataset is a point–in-time record of all rateable properties as at 2008: each property should appear, but can appear only once.

As valuation information is collected by individual municipalities, a standard format of data collection is followed but there are issues with consistency in how information is recorded. For example, the quality of address information varies by municipality. This is a weakness of the dataset. The key strengths of the data are its size and coverage – around 2 million records – and its general reliability, given that it is used for taxation purposes.

The valuations data includes property characteristics. These include:
Land Use Classification (residential, commercial, industrial, agricultural)
- Land Use Classification Code (a more detailed description of the use of the property, following a standard coding framework for valuers)
- land size
- dwelling size
- number of bedrooms
- year of construction
- construction material.

The valuations data therefore allows for the control of property characteristics in price analyses.

**Property sales**

The second raw data source is the property sales data. The property sales – or transactions – data consists of one file for each year and property type (house, land, units/apartments). Property sales data is also collected by the Victoria Valuer-General, on the point of property sale. It is collected for taxation purposes, in this case for the levying of stamp duties.

The version of the data supplied for the research comprises three types: houses, units and apartments, and vacant land. Being records of sale, a property may appear more than once if it is sold multiple times. It may also not appear at all, if it has not been sold during the period. The unit-record level data was obtained by agreement from the Victorian Valuer-General, with some confidential fields (names) removed. Aggregate versions of the data are published by the Valuer-General but disaggregated records are not publicly available.

The years 1990 to 2004 were initially supplied and it is this data that is used in the UGB chapters.

Later (toward the end of the thesis), sales data covering the period to 2008 was obtained. This data is used in the descriptive analyses in Chapter 4.

The data includes property sale information:

- sale price
- date of sale
- sale type (house, unit/apartment, vacant land).

The strength of this data is its coverage: it consists of a comprehensive record of residential property sales in Victoria. The data thus allows the analysis of sale trends over time. As with the valuation data, this raw administrative data is not necessarily consistently formatted. This data is centrally collected, however, so the level of variation is relatively low.

**VicMap spatial reference datasets**

VicMap is a comprehensive reference database of spatial information – including, for example, local government area boundaries. The VicMap datasets are the authoritative reference database for spatial information in the state of Victoria. For the purposes of this research, VicMap is used as a reference file to link, where possible, the unit record property data to a geographic point and property dimensions. This linking process is referred to as ‘geocoding’.

The elements of VicMap particularly important to the database are the address files (which comprise one geographic point for each registered street address) and the property and parcel reference files (which comprise polygons – representing the dimensions – of land titles). The methodology also makes use of the VicMap Planning files, reference files of planning instruments with a spatial element (zones, overlays and the Urban Growth Boundary).

The strength of VicMap is that it provides a reliable, systematic means of giving spatial information to the property data. It is nonetheless a complex database in itself, as the relationships between different objects (addresses, parcels, properties) can be of many forms. The most likely and common relationship is that there is one address for one parcel (title) sold as one property. However, there may be multiple parcels in a property, or multiple properties linked to one address, and so on. Another challenge is that, like the valuation data, VicMap represents all available information at a point in time. The VicMap version used is as at mid-2009. The sale data therefore differs from the valuation and VicMap data in that it tracks changes over time.
Key characteristics of input datasets

There are some clear strengths to the input datasets. Both the valuations and sale information are collected for the purposes of revenue collection and as a result offer a high level of coverage and reliability. Those collecting the information have an interest in accuracy and completeness of coverage, since it is used to collect stamp duties, land taxes and local government rates. It can be expected that essentially all residential property transactions over the period 1990–2004 will be captured in the sales dataset. It can also be expected that essentially all properties as at 2008 will be captured in the valuations dataset. Both of these sources of data are thus considered to offer population coverage rather than a sample. This is advantageous as most databases are samples, not populations, and questions inevitably arise as to how well the sample represents the population.

Although the database does not in principle have to contend with sample selection problems, the challenges with cleaning and matching the datasets raise issues that need to be considered. The availability of unit-record sale data is not as strong as the valuation data, in that recent years were not able to be included in time for the UGB analysis. Also, not all sales records can be joined to a matching valuation record or to a geocoded location, so potential sample selection issues do arise. Matching issues arise in three main forms. One is the differences between datasets and differences in the degree of specificity to which some fields are populated. The sales dataset contains very reliable lot and plan (title) information. The valuation dataset does not contain reliable lot and plan information, and instead contains much more reliable street address information. Another problem is simple data-entry error, which, given the size of the datasets, has by necessity not been specifically addressed. It is assumed that only a small percentage of records will be affected by, for example, missing or additional zeros in sale values. It is also assumed that these records will be randomly distributed.

Finally, temporal changes result in challenges with the use of the input data – sales data from past years may refer to changed properties. They may therefore not match to current valuation or geocoded information.

Database Design and Development

Design
Where possible the sales and valuations information has been geocoded, meaning that is has been linked to geographic coordinates. This is done using VicMap spatial reference files. Geocoding allows analysis within a Geographical Information System (GIS) environment, and the derivation of spatial variables. Several cleaning and recoding exercises were undertaken in order to link and geocoded the input data sources. There are also three join models. Combining the datasets presented data processing challenges. The source datasets are very large and contain variations in data formats, including incomplete property identification data. Not all records could be successfully cleaned and joined.

The property sales and valuation dataset is designed to join together the three input datasets: sales, valuations and spatial information. Combining property characteristics with property sale information enables housing market analysis over both time and space, while controlling for property variations such as size and form. Using unit-record level data with attached geographic coordinates allows the flexible analysis of spatial variation.

The basic database design is illustrated in Figure A.1, below. The illustration shows the two administrative property datasets (property valuations and property sales) on the left, which are linked together. On the right are spatial reference datasets (the property and address files from VicMap). The property datasets are each linked in to the spatial data (geocoded). This allows the derivation of additional spatial variables, and also the overlay of spatial planning regulations in a GIS setting. In addition, the spatial datasets are used as a template to standardise the joining fields into exactly matching property identifiers, where possible. This means that the sales and valuations datasets are also joined via the spatial reference files.

To develop a database combining these different sources, the first step was to clean up and concatenate common property identifier fields in the sales and valuation datasets. These fields are the street address and the title (lot and plan) data. The goal was to clean and reformat each source to be exactly consistent with the formats of the VicMap reference files. This joining process proved challenging as the two sources had different strengths. As a result, a hierarchy of joins was devised through which each sale record could be linked to one (or many) matching valuation records. Following the joining of the datasets, the result was that each sale record was linked to one, multiple or no valuation records. The next step was to use the geographic location (coordinates) of records by linking the common fields in with the VicMap reference files. By using the data in a GIS environment, new variables were then integrated.
Development process

The database construction process therefore consisted of three basic tasks:

- cleaning (reformatting of property identifier fields)
- joining and geocoding (joining of sales to valuations, and geocoding to an address point and property polygon, based on the cleaned fields)
- adding spatially derived measures (e.g. computing distance from a property to different amenities such as railway stations).

This sequence is illustrated in Figure A.2, below. Each step informs the subsequent step. The addition of spatially derived measures requires that each record be geocoded. This in turn requires that records be joined to the VicMap reference file using the cleaned join fields, and that the sale and valuation information be joined together (again using the cleaned fields). Following the database development process, the database was integrated with other information to undertake the empirical research. The main examples are the UGB files, zoning and overlays, and measures of distance.
Cleaning methods

Two unique property identifiers exist in both of the property datasets (sales and valuations). These are the street address fields, and the lot/plan numbers. Each of these pieces of information has the advantage of referring to a specific property, which means that they can act as a link, at the unit-record level, between different property datasets.

This being said, data in the two input datasets (sales, valuations) required substantial reformatting to create identical matching fields to match the two with each other, and with the VicMap geospatial datasets. The aim of data cleaning was to format joining fields as uniformly as is reasonably possible with minimal or no manual intervention. The benchmark for uniform formatting was the VicMap dataset. Although a reasonably high success rate has been achieved, not all records have been successfully cleaned and joined.

The cleaning process consisted of:

- removing abbreviations;
- removing spaces and padding;
- reordering and combining (concatenating) fields to create new fields with the exact required order of fields (as in the reference datasets).

In the simplest case, street type data presented as abbreviations (e.g. st, rd, crt, la) needed to be converted to the appropriate VicMap standard street type (e.g. street, road, court, lane). Cleaning of data was less straightforward in more complex cases,
with non-standard, ambiguous or superfluous data to be identified and cleaned or removed.

The need for data cleaning arose in part from differences in the level and style of data entry in each of the datasets. The sales data had superior and consistent property title information but poor address formatting. The valuations data had consistent address information, but many municipalities either did not enter lot and plan fields at all or did so inconsistently. Tables A.1 and A.2, below, provide some examples to demonstrate the procedure for cleaning the data.

Table A.1: Example of reformatting property lot/plan information

<table>
<thead>
<tr>
<th>Source data</th>
<th>Issue</th>
<th>Refined output</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS 93284 PT LOT 5 PS CA 3 S 10</td>
<td>Reverse order</td>
<td>5:PS93284</td>
</tr>
<tr>
<td>LOT:563 LP:85418</td>
<td>Variable separator</td>
<td>563:LP85418</td>
</tr>
<tr>
<td>L2 PS: 605033N</td>
<td>Variable separator</td>
<td>2:PS605033</td>
</tr>
</tbody>
</table>

Table A.2: Example of reformatting property address information

<table>
<thead>
<tr>
<th>Source data field 1</th>
<th>Source data field 2</th>
<th>Refined Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Jackson St</td>
<td>10 Jackson Street</td>
</tr>
<tr>
<td>25</td>
<td>Gold Ave</td>
<td>25 Gold Avenue</td>
</tr>
<tr>
<td>9</td>
<td>Crimean Ct</td>
<td>9 Crimean Court</td>
</tr>
</tbody>
</table>

To provide the best combination of data strengths, missing data fields were derived from the VicMap datasets. In this way, a combination of all available fields was used in order to triangulate the joining process. The advantage of using multiple fields is that a higher degree of joining is enabled, and also that cross-referencing (for example, determining whether the address and property results are consistent) allows for error control. Multiple joins provide a cross-checking mechanism to identify potential errors in the data joins.

Because of the different strengths of the two datasets and problems with missing or inadequate fields, a hierarchy of joins was devised through which each sale record could be linked to one (or many) matching valuation records. The dataset joins are shown in Figure A.3, below. The highest-ranked join type was where lot/plan information in the property sales data was reformatted to match to the VicMap property file, which linked to an equivalent VicMap address record, which then matched to reformatted address fields in the property valuations file. Where inadequate or incomplete input data meant the preferred join type did not result in a matching valuation record, other join types were used.
Key variables and imputed variables

Variables in the database of particular importance to the research are set out below. Many variables are sourced directly from the input datasets (including sale price and land size). Others are spatial variables derived from the geocoded data.

Table A.3: Key variables in property sales and valuations database

<table>
<thead>
<tr>
<th>Variable</th>
<th>Source</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale price</td>
<td>Sales dataset</td>
<td>-</td>
</tr>
<tr>
<td>Sale date</td>
<td>Sales dataset</td>
<td>-</td>
</tr>
<tr>
<td>Land size (sale)</td>
<td>Sales dataset</td>
<td>Not always populated. Refers to the size of land (sq m) at point of sale.</td>
</tr>
<tr>
<td>Land size (valuation)</td>
<td>Valuations dataset</td>
<td>Consistently populated. Refers to the size of land (sq m) at time of valuation.</td>
</tr>
<tr>
<td>Building floor area</td>
<td>Valuations dataset</td>
<td>Consistently populated. Refers to the total size of buildings (sq m) at time of valuation.</td>
</tr>
<tr>
<td>Number of bedrooms</td>
<td>Valuations dataset</td>
<td>Consistently populated for residential dwellings.</td>
</tr>
<tr>
<td>Construction year</td>
<td>Recoded from Valuations data</td>
<td>Consistently recorded for most municipalities from late 1980s onwards.</td>
</tr>
<tr>
<td>Construction material</td>
<td>Recoded from Valuations data</td>
<td>Use is inconsistent across municipalities. Recoded into most basic categories, e.g. brick.</td>
</tr>
<tr>
<td>Land Use Classification Category</td>
<td>Valuations dataset</td>
<td>Valuers' code used to class the use of the land into residential, industrial, commercial or agricultural categories.</td>
</tr>
<tr>
<td>Land Use Classification Code</td>
<td>Valuations dataset</td>
<td>Valuers' code used to class the use of the land into one of several hundred categories. Use is not consistent across municipalities. Used to select vacant and farming land for the sample.</td>
</tr>
<tr>
<td>X and Y coordinates</td>
<td>VicMap</td>
<td>Refers to the address centroid.</td>
</tr>
<tr>
<td>Distance from CBD</td>
<td>Imputed</td>
<td>Shortest distance (not network distance) between address centroid and Melbourne Central Business</td>
</tr>
<tr>
<td></td>
<td>District centroid.</td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Distance from Activity Centres</td>
<td>Imputed</td>
<td>Shortest distance (not network distance) between address centroid and the nearest designated Principal or Major Activity Centre.</td>
</tr>
<tr>
<td>Distance from railway station</td>
<td>Imputed</td>
<td>Shortest distance (not network distance) between address centroid and the nearest metropolitan train station (as at 2009).</td>
</tr>
<tr>
<td>Zoning</td>
<td>Imputed using VicMap</td>
<td>The designated zone of the property under the planning scheme. For example, Residential 1 Zone (as at 2009).</td>
</tr>
<tr>
<td>Overlays</td>
<td>Imputed using VicMap</td>
<td>Whether or not the property falls under an overlay under the planning scheme, e.g. Heritage Overlay (as at 2009).</td>
</tr>
</tbody>
</table>

**Database Characteristics**

**Key characteristics of the database – strengths**

The first key strength of the database is its ability to integrate disparate datasets at a disaggregate (unit-record) level. The design uses property identifier fields to merge sales information with valuation information that records details of property characteristics. This is then linked to unit-record spatial information.

The spatially integrated aspect of the database is a second strength. With the links to the spatial reference dataset, also at a unit-record level, it is possible to undertake spatial analyses of the merged property datasets using flexible spatial boundaries. This can be applied to a variety of research questions using different spatial queries, and is then used in identifying parcels by their location inside or outside of the different versions of the UGB, and their distance to different amenities. Thirdly, the database design allows simultaneous analysis of the spatial and time dynamics of land and property markets, which is rare.

The database design itself is therefore a useful resource that is an output from the thesis, with wider future applications. Its characteristics are suited to the analysis of housing, land use, urban form, location and regulation.

**Key characteristics of the database – limitations**

Although the coverage of the data is an advantage, not all records could be successfully cleaned and joined, either to a matching valuation record or to the VicMap spatial files. This is a weakness of the database. It means that ultimately the database is a very large sample, capturing around 85 per cent of all records in the study period.
The limited availability of sales data (running only to 2004) is another limitation. More recent sales data was eventually obtained from the Valuer-General but only with sufficient time to update the descriptive (unjoined) data, used in Chapter 4. This new data was not used in the joined dataset used in chapters 7 and 8.

Combining the data sources presented challenges in resource terms. The input datasets are large and contain great variation in field formats. With the sales records in particular, there were also problems with controlling for change over time in street addresses and property information. Given that each source dataset comprised millions of records, all processing was automated and in some cases processing times were quite slow. Thus, although efforts were made to maximise the successful merging of the datasets (see the cleaning methods section, above), some problematic records were ignored due to resource constraints.

A final weakness of the dataset is that similar datasets, in both single and merged forms, may already be held by government. The level of accuracy in data joins is likely to be higher in such settings, given greater resources and also higher accuracy demands on datasets used for customer service purposes. Because of this, the most emphasised aspects of the database are the spatial variables and spatial analytical potential, and the potential to link the database with policy measures.

### Sample sizes

The input sales data contained 1,382,716 sale records covering the years 1990–2004. Records are for sales within Local Government Areas (municipalities) in the Melbourne Statistical Division. Only the first part of the year 2004 is covered.

Of these sales records, 1,175,234 or 85 per cent were matched to a valuation record. Of these, just over 77 per cent were geocoded to a location in the VicMap reference files. The rate of matching sales to valuations was highest for house sales (88 per cent), then vacant land sales (85 per cent), and lowest for sales of units and apartments (77 per cent).

The rate of matching of sales to valuations increases with the year of sale. For sales in 1990, 82.3 per cent have a matching valuation record, rising to a high of 92 per cent for sales in 2004. Geocoding rates also increase with the year of sale, from 73.9 per cent in 1990 to 89.1 per cent in 2004. These figures are set out below in tables A.4 (by sale type) and A.5 (by sale year).
Later years of sale data were obtained at the end of the project, without sufficient time to integrate these into the merged database and UGB analysis. These sales are used in the descriptive analyses in Chapter 4. The additional sale numbers for the years 2004–2008 are shown at Table A.6.

Table A.4: Sample numbers – sales to valuation matches, by sale type

<table>
<thead>
<tr>
<th>Sale type</th>
<th>Number of sale records</th>
<th>With matching valuation records</th>
<th>% matched</th>
<th>Number of valuation records</th>
<th>% geocoded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>253,772</td>
<td>216,130</td>
<td>85</td>
<td>240,996</td>
<td>89.2</td>
</tr>
<tr>
<td>House</td>
<td>800,029</td>
<td>706,357</td>
<td>88</td>
<td>741,378</td>
<td>75.2</td>
</tr>
<tr>
<td>Unit/apartment</td>
<td>328,915</td>
<td>252,747</td>
<td>77</td>
<td>331,093</td>
<td>73.1</td>
</tr>
<tr>
<td>Total</td>
<td>1,382,716</td>
<td>1,175,234</td>
<td>85</td>
<td>1,313,467</td>
<td>77.2</td>
</tr>
</tbody>
</table>

Source: Author's calculations, based on land sales model (see text).

Table A.5: Sample numbers – sales to valuation matches, by sale year

<table>
<thead>
<tr>
<th>Sale year</th>
<th>Number of sale records</th>
<th>With matching valuation records</th>
<th>% matched</th>
<th>Number of valuation records</th>
<th>% geocoded</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>65,404</td>
<td>53,803</td>
<td>82.3</td>
<td>58,877</td>
<td>73.9</td>
</tr>
<tr>
<td>1991</td>
<td>66,211</td>
<td>55,843</td>
<td>84.3</td>
<td>60,557</td>
<td>76.8</td>
</tr>
<tr>
<td>1992</td>
<td>74,773</td>
<td>62,630</td>
<td>83.8</td>
<td>69,060</td>
<td>76.5</td>
</tr>
<tr>
<td>1993</td>
<td>78,591</td>
<td>66,394</td>
<td>84.5</td>
<td>73,307</td>
<td>76.6</td>
</tr>
<tr>
<td>1994</td>
<td>83,915</td>
<td>71,121</td>
<td>84.8</td>
<td>77,948</td>
<td>76.6</td>
</tr>
<tr>
<td>1995</td>
<td>75,459</td>
<td>57,793</td>
<td>76.6</td>
<td>61,776</td>
<td>-</td>
</tr>
<tr>
<td>1996</td>
<td>84,942</td>
<td>70,943</td>
<td>83.5</td>
<td>77,789</td>
<td>73.2</td>
</tr>
<tr>
<td>1997</td>
<td>104,477</td>
<td>88,979</td>
<td>85.2</td>
<td>97,171</td>
<td>75.3</td>
</tr>
<tr>
<td>1998</td>
<td>102,668</td>
<td>87,752</td>
<td>85.5</td>
<td>96,179</td>
<td>75.9</td>
</tr>
<tr>
<td>1999</td>
<td>113,053</td>
<td>92,041</td>
<td>81.4</td>
<td>103,474</td>
<td>69.1</td>
</tr>
<tr>
<td>2000</td>
<td>107,887</td>
<td>89,648</td>
<td>83.1</td>
<td>99,222</td>
<td>68.0</td>
</tr>
<tr>
<td>2001</td>
<td>132,491</td>
<td>114,294</td>
<td>86.3</td>
<td>130,824</td>
<td>72.0</td>
</tr>
<tr>
<td>2002</td>
<td>119,176</td>
<td>105,252</td>
<td>88.3</td>
<td>122,757</td>
<td>78.8</td>
</tr>
<tr>
<td>2003</td>
<td>114,717</td>
<td>104,495</td>
<td>91.1</td>
<td>122,149</td>
<td>87.0</td>
</tr>
<tr>
<td>2004</td>
<td>58,952</td>
<td>54,253</td>
<td>92.0</td>
<td>62,377</td>
<td>89.1</td>
</tr>
<tr>
<td>Total</td>
<td>1,382,716</td>
<td>1,175,234</td>
<td>85.0</td>
<td>1,313,467</td>
<td>77.2</td>
</tr>
</tbody>
</table>

Source: Author's calculations, based on land sales model (see text).

Table A.6: Additional sample numbers – later sales (not matched to valuations) by year

<table>
<thead>
<tr>
<th>Sale Year</th>
<th>Number of sale records</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>34,748</td>
</tr>
<tr>
<td>2005</td>
<td>98,673</td>
</tr>
<tr>
<td>2006</td>
<td>93,245</td>
</tr>
<tr>
<td>2007</td>
<td>111,599</td>
</tr>
<tr>
<td>2008</td>
<td>103,258</td>
</tr>
<tr>
<td>Total</td>
<td>441,523</td>
</tr>
</tbody>
</table>

Source: Author's calculations, based on land sales model (see text).