UK COLLABORATIVE CENTRE FOR HOUSING EVIDENCE

Rent control

A review of the evidence base

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Executive Summary

Rent controls have a long history in the UK and continue to generate impassioned debate about their efficacy. Problems associated with rental unaffordability have encouraged renewed interest in rent regulation and there are policy design developments regarding rent control actively underway in Scotland.

This evidence review looked at academic and grey literature from the period 2000 to 2020. It is an attempt to understand the continuing academic interest in rent regulation and to distinguish the range of views about its impacts. The review incorporates a range of both economics analysis and wider social science evidence. This is a systematic evidence review of the literature and as such generates important findings that we believe add value in ways that other forms of analysis cannot. The international dimension is essential because there is no contemporary UK evidence on the impacts of rent control. Yet the literature demonstrates that we need to be cautious regarding the appropriateness of international comparisons (even within welfare regime clusters) and the relevance of contemporary evidence for the UK.

Key takeaways

The importance of recognizing different models and generations of rent control practice when appraising the evidence. This also includes acknowledging the interconnectedness of rent regulation with the wide range of actual and possible forms of non-price regulation.

The need for assumptions that are more strongly empirically grounded as the foundation for economic models.

Recognition of the importance of both local politics and ideological trends (and that these are not immutable).

The relative stalling or lack of recent theoretical development in the relevant economics literature.

There is a gap between practical evidence, data and monitoring of local housing markets and policy advice regarding the design and implementation of rent control (Wheatley, et al, 2019, is an honourable exception).

Specifically, this translates into the absence of grounded understanding of landlord supply structure, how segments of rental markets function and operate with different degrees of interdependence, and the extent to which local markets are volatile and subject to external shocks.

The report begins by examining recent **grey literature**. We draw the following points from this part of the review:

- While by no means exhaustive, our review demonstrates the range of perspectives that have currency. The contributions to the grey literature adopt different starting positions and articulate opposing perspectives, including a variable level of interest in international experience.
- Authors adopt different stances on the virtues of rent control, running from explicit rejection to cautious advocacy of appropriately designed and implemented interventions.
- It is not possible, however, to separate rent regulation from other components of the private rented sector regulatory architecture e.g. tenancy length and security. Enforcement shapes the impact of regulatory intervention but the need for, and challenges regarding, effective enforcement in the private rented sector is not always given prominence.

- A key feature of the debate is the weight given to context, history and institutions and the way in which they interact with any given mechanism for rent regulation. This can play out in different ways:
    - Where these variables are not seen as crucial, general conclusions about the impacts of rent control can be read off from theory and experience elsewhere and directly applied locally, typically in service of an argument against intervention.
    - Alternatively, these contextual variables can be seen as important and a reason for treating the apparent successes of rent control elsewhere as not indicative of likely success if applied locally.
    - It is possible to recognize contextual differences but argue, explicitly or implicitly, that they should not prevent policies that are effective in their 'origin' context from being successfully transferred and adapted for a 'recipient' context.

The report lays out, in chapter 3, the main **methodological considerations** of the evidence review. The main points are that:

- Informed by recognised country typologies, we decided to scope this review to selected countries belonging to three recognised welfare regimes, referred to as *liberal* (AUS, CAN, GBR, USA), *Nordic* (DNK, NDL, NOR, SWE) and *continental* (AUT, CHE, FRA, DEU).
- We retrieved 402 unique records by searching in two large databases (SCOPUS and Web of Science) for 'rent control', 'rent stabili(z)ation' and 'rent regulation' for literature published since 1990. After checking for country, methodological and thematic fit, we decided to further scope the review to research published since 2000. After including some additional studies, 82 publications were included for review.
- Among the 82 studies, we note a high dominance of quantitative analyses (68%) and an over-representation of the Liberal regime (n=67) versus the Nordic and the continental ones (41 and 33, respectively). Within each regime, their recognised 'prototype' is also over-represented (i.e. USA, SWE, DEU).

Chapter 4 is a review on the literature concerned with the **economic theory of rent control**. We draw the following points from our review of this theoretical literature:

- There is a rich theoretical literature on rent control stretching back fifty years. It continued to develop into our review period but, arguably, lost momentum after the mid-2000s.
- The literature offers a variety of models exploring the impacts of rent controls of different designs on a range of variables (e.g. property quality, new supply, prices in related markets) in housing markets with different assumed characteristics.
- The majority of models start from the assumption that housing markets can be characterised as perfectly competitive, while some rest on the assumption that landlords face imperfect or monopolistic competition or possess monopoly power.
- Once these assumptions about market structure are coupled with a specification for the rent regulation instrument, conclusions are derived. Substantially different conclusions can follow from different sets of assumptions.
- The literature demonstrates that rent control can have a negative, positive or neutral effect on one or more aspect of housing and related markets, depending on your modelling assumptions.

Chapter 5 reviews the international econometric evidence on rent control. A number of recurring or common themes can be extracted from the reviewed studies. We draw out the following observations on the basis of our review:

- North American econometric studies predominate, particularly for the areas of New York City, New Jersey, Massachusetts and Northern California. We also report on studies in Europe. Generally, the American studies come to different conclusions than those from Europe (though this is, at a more detailed level, a more nuanced and complex story). This serves to reinforce the importance of considering local markets trajectories, institutions and regulatory detail when we consider the effects of specific rent control measures.

- Attempting to build robust indices of rent regulation (perhaps also taking account of non-price regulation) is an interesting idea to debate and develop.

- There is tension between increasingly sophisticated econometric modelling that seeks to overcome the limitations of data, bias and testing of interventions, on the one hand, and the continued use of quite strong modelling assumptions (e.g. imputed rather than market rents; specific behavioural responses such as landlord substantive rationality; or indeed assumptions about the competitiveness of the market), on the other. Attempts to make these assumptions explicit and empirically grounded remain potentially valuable for developing future work.

- Econometric tests have been applied to an increasingly wide range of questions relevant to rent control in the last 20 years: there is now more focus on welfare effects, resource misallocation, impacts on decontrolled (or never controlled) adjacent markets and tenures, mobility and labour market effects and neighbourhood impacts such as segregation. These are important developments that need to be considered carefully in a second-best world analytically and in terms of the use of similar assumptions, contexts and institutions and their effects in more standard rent control models.

- A feature of the work in the last 20 years has been much closer concern with second-generation rent controls and rent stabilisation alongside changes in tenancy conditions. This has led econometric models to be more nuanced and context-specific and it has also made the case for future work to take more account of the non-price regulations that interact with price controls.

The empirical study of rent control in the UK is now extremely dated (it is a literature that largely tailed off in the 1980s) and the institutional structures of the UK housing market have subsequently changed substantially. The recent evidence base therefore inevitably comprises studies from cities in other countries. Furthermore, housing systems are becoming more diverse within the UK. These characteristics make the discussion of rent control particularly susceptible to analytical over-reach: there is a risk that results generated in quite different contexts are incautiously or uncritically applied to the UK.

Chapter six reviews the **wider social sciences** literature on rent control from three broad perspectives: welfare regime theory and international studies; the underlying importance of housing politics; and the contested nature of housing as home or commodity/asset:

- Regime theory - the idea that countries' housing and/or welfare institutional arrangements and distributional outcomes can be clustered in 'regimes', each containing similar enough countries that are also dissimilar enough from all other countries and regimes - is useful to understand the importance of the broader institutional context for the private rental sector in relation to the role and nature of a housing system. Regime theory has inspired a range of useful cross-country analyses focusing on the private rental system, including rent regulation.

- However, institutional arrangements, including those related to rent regulation, are neither deterministic nor unchangeable. The reviewed literature shows that some countries with lightly regulated private renting markets have recently moved towards more regulated regimes, which permit rent stabilisation (e.g. Ireland and Scotland) while other countries with already strongly regulated private rental systems have strengthen their provisions even

further (e.g. Germany). Recent change in the other direction has also occurred, particularly in the US when the move to deregulation seems to be the dominant trend. But, historically, all our sampled countries moved from first- to second-generation rent control or full deregulation.

- Finely-grained analyses coming from legal studies and human geography have clearly evidenced that changes towards (de)regulation have always been political. They explicitly, but sometimes implicitly, show that the political battle is fought at different levels (e.g. legislatures, political parties, vested interest groups, citizenry, culture) and through very different means (e.g. election campaigns, media, public consultations, governmental coalitions, public opinions). These studies argue that the issue of rent control should not be cast primarily as a matter of expert knowledge but as one of direct and reflective democracy.

- Finally, the reviewed literature demonstrates directly and sometimes indirectly that it is ideology - understood broadly as dominant beliefs endorsed by political parties, policymakers, economists or society - that casts a private tenancy as home (for a tenant) or asset (for a for-profit landlord). Some countries, particularly those in the Nordic countries and continental Europe (but also beyond our sample countries, e.g. Turkey) have balanced the terms of this apparent ideological tension. Their regulatory regimes go, however, beyond the issue of rent control, and its immediate corollary of tenure security and limited grounds for eviction. Clearly, the studies reviewed here invite broader reflection on what type of housing system is valued by a society.

The **final chapter** of the report summarises the main narrative running through chapters 1 to 6 before considering the analogy of recent evolution within the economics of the minimum wage and whether there would be similar mileage in revising the assumptions made about rental markets in similar fashion. This then leads to a set of policy conclusions that seek to generate practical lessons for Governments like the one in Scotland currently investigating new rent contol measures. These are lessons that can be derived from this evidence review and should feature in policy development thinking. The conclusions identify 10 measures but these can be reduced to four compound points:

- A **vision** of where policymakers wish to take the private rented sector based on an appreciation of how it works now, its multiple internal functions, and its important interactions with the wider housing system;

- Based on this vision, a **clear sense of the nature and design of rent regulation** proposed; how and in what circumstances it is triggered; and how it is later wound down (the sunset clause); as well as how it would complement existing and proposed non-price regulation;

- In order to achieve this clarity over policy objectives, design and operation, a **strong commitment to a comprehensive, operational data strategy** is required that will enable policymakers to undertake ongoing monitoring of the PRS within a clear market analysis strategy operating at the agreed market area level.

- Throughout these three stages there should be a **commitment to drawing on the evidence base** where it provides direction and also, where there is no conclusive evidence, a suitable degree of caution and reference to the data and evidence generated locally. At the same time, policy development and monitoring should be grounded throughout in deliberative and consultation mechanisms that give effective voice to tenants, as well as other stakeholders.

1. Introduction

Rent control reminds us of macroeconomics: if you are studying it, and you are not at least a little bit confused, you are probably not yet thinking clearly.

(Turner and Malpezzi, 2003, p.46)

Rent control in the private rented sector has a long history. It was one of the earliest active housing policy interventions. In the UK rent control was introduced nationally during the First World War as a temporary measure but it has subsequently never quite disappeared entirely from the housing system. Since its initial introduction rent control has repeatedly been the focus of intense political debate and significant reform; the private rented sector has been subjected to alternating bouts of regulation, deregulation and re-regulation. After 1990 we experienced a quarter of a century of relative stability in the policy regime: the deregulatory impulse dominated and market pricing prevailed. However, the terrain on which the political debate takes place has shifted again over the last five years or so.

It is now therefore timely to undertake this international evidence review of rent control. There is considerable policy interest in rent regulation because of ongoing concerns about affordability in rental markets both within and beyond the UK. In Scotland this has manifested itself in innovations in the substance of policy, initially, with the introduction of local rent pressure zones and, latterly, with a commitment by the current administration to introduce rent control by 2025. There has also been recent political debate concerning the possible introduction of new rent regulations in other parts of the UK.[1]

The question of the appropriate scope and nature of the regulation of the private rented sector was catapulted into the policy spotlight by the range of emergency measures that Governments rapidly enacted in 2020 in the face of the COVID-19 pandemic. The power of government to shape the operation of the market was vividly demonstrated. Different administrations have followed different trajectories out of the pandemic, with different aspirations regarding the level of policy intervention that will remain in place once the emergency measures are unwound. The pandemic has also impacted directly upon housing demand and supply. In Britain the arrival of the pandemic coincided with the advance of the Brexit process. Significant numbers of EU citizens decided to migrate from Britain to the rest of the EU. These developments mean that established understandings of the incidence of housing affordability problems cannot be taken for granted.

At the same time, there is continued academic interest in the effectiveness, or otherwise, of different forms of rent control. Distillations and distortions of these academic debates are transported by policy entrepreneurs into the policy process with the aim of influencing policy thinking. There isn't a single academic literature on rent control and the tenor of the debate can differ significantly between disciplines. The academic literature seems dominated numerically by economic analysis, but there are notable contributions from other disciplines. The state of the debate might be summarised by observing that economists consider rent control to be a demonstrably bad idea, but they have largely failed to convince anyone other than committed free-market politicians; hence the continuing popularity of rent control policy as the proposed solution to a range of affordability-related problems. In just about every respect this summary lacks nuance.

[1] The UK Is by no means alone in experiencing this resurgence of interest in rent control. There has been recent debate over the regulation of private rents in several countries. Some of the more vigorous debates have occurred in the US (see, for example, Chew and Treuhaft, 2019; Pastor et al, 2018; Terner Centre, 2018), where States including Oregon and California have recently legislated to regulate maximum rates for rent increases. Policy changes to re-regulate some aspects of private rents have occurred in several European countries, including Ireland and Germany. It can be municipal governments in cities facing the greatest affordability pressure, rather than national or Federal governments, which decide to act, as is the case in Berlin. Kettunen and Ruonavaara (2020) provide a valuable cross-national review of policy towards rent control (see also Lopez-Rodriguez and de los Llanos Matea, 2020, ch 2), while Kholodilin (2020) offers a broader longitudinal and cross-national perspective on private rental regulation.

The economic critique of rent control is not typically grounded in disagreement over the policy goals rent control seeks to address, but in an analysis that suggests rent control is a poor choice of instrument to achieve those goals. This is because, it is argued, the direct and indirect impacts of rent control on the housing system mean that it will not only fail to deliver those policy goals, but also has the potential to compound the problems. Critical responses to this type of argument can engage at the technical level or the level of principle. At the level of the technical economic analysis it can be argued that the economic critique relies upon models that do not capture important characteristics of the housing market; data and analytical techniques that do not allow the effect of rent control to be isolated effectively; or the scope for generalising from published results is more circumscribed than is assumed to be the case. Given that all economic models rest on assumptions about the housing market, this naturally invites us to consider whether alternative economic accounts (including assumptions) of the market and the influence of rent control rest on firmer foundations. At the level of principle, the argument can be either that the scope of the analysis is drawn inappropriately – typically too narrowly – and hence key benefits of the policy are missed or that the benefits of rent regulation are such as to be unsuitable for, or impossible to capture in, instrumental calculations of the costs and benefits of implementing the policy. At a more fundamental level, the argument can problematise the social function of property, highlighting that even when policy choices are framed in restricted economic terms they nonetheless rest on a series of political and ideological premises (for a recent discussion of this social function in the case of Portugal, see: Cordeiro Santos and Riberio (2021).

Finally, a counter-critique can be offered from the economic perspective. This operates at the level of policy design and focuses on questions of feasibility and resilience. That is, even if it is possible to argue that there are versions of rent control that do not impact negatively on the housing market or, indeed, contribute positively to housing market functioning, is it possible to design a feasible policy regime that can reliably deliver on this theoretical promise in practice across a range of different housing market contexts and conditions? If not then a second related question is whether the costs of a badly designed or poorly implemented rent control policy are less – or less problematically distributed - than the net costs imposed by the market processes the policy is seeking to reshape or by alternative measures that could be taken to address the policy objective? If the answer to this is no, or is not clear, then the arguments against rent control – and in favour of alternative policy mechanisms - take a different form but should be seen as remaining in force.

As this suggests, while *housing* economists might be less negative about rent controls than might initially be assumed, they continue to be sceptical that rent controls are the most effective way of pursuing affordability objectives. Even where rent controls are cautiously advocated they are typically viewed as desirable as part of a suite of policy measures aimed at stimulating alternative sources of housing supply, rather than being viewed as offering a remedy for affordability problems if deployed in isolation.

However, the question of rent control is not of course confined to the field of economic debates. As is discussed primarily in Section 6, rent control in practice remains one characterised by a political choice made through different democratic consultations and political processes, which may or may and to different extents be informed by the evidence arising from local, national and intrernational debates, including academic and policy entrepreneur evidence. We will explore these issues further in later chapters[2].

[2] We note that the current consultation over the Scottish Government's evolving proposals for a national effective system of rent control seeks to understand what it can learn from these different evidence domains: https://www.gov.scot/publications/new-deal-tenants-draft-strategy-consultation-paper/

1.1 Rent control: a contentious policy

The market for housing has a distinctive combination of characteristics. One of the key features of housing – which is increasingly being recognised in recent academic and policy debates, particularly in the light of the pandemic – is the importance of housing to the capabilities and functionings needed in order to realize a life well lived.[3] The importance of adequate housing not only as shelter but as home as well as a platform upon which to build a life means that the market does not behave in a way analogous to other markets. Unlike other goods or services, foregoing housing – even if only temporarily - because it is currently prohibitively expensive is rarely a choice that households make willingly. Lack of housing affordability can result in households trying to economise on housing consumption and/or the consumption of other goods and services. But there comes a point when doing so results in living in inadequate or unsuitable housing and/or non-housing expenditure falling below the level necessary to sustain a minimal acceptable standard of living.

The origins of high housing costs then become a focus of attention. While lack of housing affordability has a range of more or less visible or systemic causes, private landlords charging rents that account for large proportions of tenants' incomes become an obvious target. Such rents are a direct transfer of resources from one social group (tenants) to another (landlords). Where these transfers are seen as unfair or exploitative, allowing the (relatively) wealthy to accumulate further at the expense of the (relatively) poor, they become a source of political contestation. The origins of rent control in the UK and elsewhere lie in such contestation. Rent strikes instigated against landlords felt to be profiteering from wartime shortages during the First World War caused the Government to intervene to control rents – and mortgages - with the 1915 Rents and Mortgage Interest Restriction Act (Gray, 2018).

Conversely, rent controls can be portrayed as unacceptable interference in the rights of asset owners to realise a market return on their investment, raising difficult questions on how a socially fair return could be specified. Moreover, in the process the design of such controls may impede the effective functioning of the private rental market.

Rent control therefore brings competing and conflicting social interests into sharp focus. As a consequence, the impacts of rent controls have been a recurrent focus of academic attention. They are also frequently the solution to housing affordability issues reached for by those concerned with tenants' rights and well-being. Compared with other potential solutions to affordability issues rent control is attractive for at least three reasons. First, it is relatively "fast-acting" compared with policies such as building new affordable properties. Second, it is a high-profile policy that acts directly on the issue. That is the case even if we may think it is acting on a symptom rather than the cause of the problem. Most alternatives entail a more indirect or systemic approach. Third, it doesn't involve greater commitment of public resources, as least in the short term, instead it is about reducing the size of the transfer between social groups.

There are a range of supplementary questions about policy design that aren't extensively explored. For example, does the housing market behave differently in response to the implementation of 'temporary' or 'permanent' rent controls. If this were an issue then questions such as how best to sunset a temporary policy - or to have a clear triggger for turnign the policy on and off - become important. We know from the history of housing policy that initially temporary interventions have a tendency to stick around. But is that inevitably the case? Equally importantly, even if rent control is considered to be inadequate as a response to problems of housing affordability then might they play a useful supporting role within a broader and more comprehensive suite of measures? What would that look like?

[3] See, for example, Harris and McKee (2021) for a discussion of capabilities in the private rented sector context.

1.2 Objectives and research questions

In this context, this project sought to review the evidence on rent control in the recent social scientific literature. The project encompassed both the theoretical and empirical academic economics literature, but it also included a review of social sciences research conducted outside of economics that focused on the political economy, politics, and social movements associated with the live debate over rent control policy, and on evidence regarding the impacts of rent control. The research also provides an overview of the relevant UK grey literature. Hence, the scope of the project was drawn more broadly than has been the case in earlier reviews.

The project thus sought to provide a comprehensive overview of the current state of the relevant literature. The research questions were correspondingly broad:

(i) what are the key messages from the current literature?

(ii) where are the gaps and outstanding questions?

The focus of the study is on the recent literature which, as is discussed further in Chapter 3, we define as relevant studies published in English between 2000-2020.

A key question of interest is the extent to which findings for one country or time period can speak to another country and/or time period. This question can be linked to debates about policy movement and transfer (Soaita et al, 2021) or to questions about evidence-based policy, the contingencies that give rise to specific findings and the generalisability of those findings (Cartwright and Hardie, 2012).

1.3 The meanings of 'rent control'

The term 'rent control' can be used generically to cover a multitude of different policy mechanisms. However, this obscures some crucial differences. We can, more precisely, distinguish rent control from rent regulation or rent stabilisation because they signal interventions of different types and extent. Alternatively, we might differentiate "hard" and "soft" or "strong" and "weak" rent controls. Most commonly the economics literature talks about "generations" of rent control: the most widely used distinction is between "first generation" and "second generation" – as well as "third generation" - rent controls.

Each of these terms attempts to distinguish the approach to price regulation and, in particular, how far the regulated price is insulated from changes in costs, inflation or changing market conditions. The "hardest" of "first generation" rent controls refer to nominal rent freezes: Lind captures this approach as follows: "First generation rent control is a nominal rent freeze that leads to a fall in real rents and to a rent level that is significantly below the market rent level" (2001, p43).

This is broadly the form that rent controls took in the early years of the twentieth century. This type of intervention is perhaps what the term "rent control" conjures up in the public imagination. Many of the most forthright critiques by economists in the post-Second World War period were directed at this type of "first generation" rent control (eg. IEA, 1972). While some economists or politicians might simply generalise this critique to "second generation" rent regulation – on the assumption that all rent controls have similar effects - others would be much more cautious in taking this step.

In the last 50 years, few policymakers have advocated or adopted this "first generation" approach. "Second generation" rent control, by way of contrast, is a term used to cover a multitude of possible arrangements. But the key point is that such controls try to moderate the behavioural impacts of regulation by allowing rental adjustments to reflect, among other things, changing market conditions, cost inflation, or the costs of refurbishment. These approaches can be referred to as "rent regulation" rather than "rent control". Some approaches do no more than cap 'excess' rent increases to smooth rent inflation and prevent landlords from capitalising in the short term on sharp shifts in demand or supply[4]. In such cases the policy may be referred to as "rent stabilization" rather than "rent control". Rent controls can be applied to all tenants or only to rent changes during a tenancy, with rents being 'reset' at market levels between tenancies – in which case the system can be referred to as "third generation" rent control or so-called tenancy rent control. The broad point is that "second-generation rent controls are so different that they should be judged largely independently of the experience with first-generation controls" (Arnott, 1995, 118). Lind (2001) provides a helpful taxonomy of the different policy objectives that can drive rent control policy.

Sometimes authors discuss "second generation" rent controls as including further features such as enhanced security of tenure or other changes in tenancy protections or tenants' rights. While this is understandable because in practice such policies are often adopted as a package and, as a consequence, isolating the effect of price regulation empirically can be challenging, conceptually they are distinct (Lind, 2001).

In this report we use the term "rent regulation" as an umbrella term for policy that seeks to influence rent levels. We then refer to the three generations of rent control, where necessary, but also contrast 'rent control' (first generation) with 'rent stabilisation' (second and third generation).

Our focus in this report is upon rent control in the private rented sector. That is, as it affects rental housing provided by private individuals or organisations on a commercial, for-profit basis. In some countries, particularly those with so-called unitary rental markets, the distinction between private rental housing and social housing provided on a not-for-profit basis can be less clear cut or the boundaries more porous. The scope of any rent control regime in operation may be wider. This study does not include consideration of rent controls or regulations as they apply to social housing.

1.4 Report outline

This report is structured into six further chapters. Chapter two starts by providing some context for our discussion by reviewing key recent contributions to the UK grey literature. In chapter three we set out our review methodology, the process by which we established the evidence base with which we engage, and a profile of that evidence base (which includes that discussed in chapter two). Chapter four focuses on the theoretical economic arguments and that part of the literature that discusses rent control primarily through the exploration of theoretical models. The fifth chapter moves on to consider the findings from the empirical economics literature. Chapter six shifts focus to consider the arguments and evidence about rent control and its impacts that can be found in the broader social science literature. Finally, chapter seven provides a summary of our argument before going on to identify one further possible route for moving the discussion forward. It finishes by setting out a series of points that are relevant to policymakers approaching the development of rent control policy.

[4] There is a long history of supply shocks flowing directly or indirectly from public health emergencies or from war damage and bombing. Recently, COVID-19 lockdowns led to the temporary (and uncertain) closing of the entire short term lets market, with most of that sector shifting into the tradtional PRS.

2. Informing the contemporary UK debate

The increased policy salience of rent regulation within the UK and its devolved administrations has been accompanied by an increase in the volume of grey literature on the topic. Research and policy reports on rent regulation appear regularly. Most, though not all, of these reports have academics as authors, often those with a strong economic background of published research on the rental market. In this section we provide an overview of recent contributions and the current state of the debate. Most of the reports we consider are interested in international evidence. This may take the form of a review of existing research and commentary, or it might rather focus on the real-world application of rent regulations in different contexts internationally and historically. One or two reports cover both dimensions.

The reports we consider cover a period of seven years, starting with Ball's (2013) and Scanlon and Whitehead's (2014). We also include briefing papers by Wilson and colleagues published by the House of Commons research library on rent controls and the private rental market (eg Wilson and Barton, 2019). The third set of papers are more recent and reflect two reports for the Residential Landlords Association (RLA) by Whitehead and Williams (2018; 2019), drawing on international evidence as well as a Scottish study by Robertson and Young (2018) for Shelter Scotland which includes an international overview. We also include the rather different perspectives from a report about rent control by an in-house team at the RLA (Clay and Smith, 2019) and a report by Wheatley et al (2019) for the New Economics Foundation which does not question whether rent control is appropriate but rather focuses on how to design an effective rent control system for London. We finish the section by drawing some broader conclusions from our reading of this literature.

2.1 Arguments presented in the grey literature

In a report for the Residential Landlords' Association, Ball (2013) offers a critique of the case for long term rental contracts buttressed by inflation-only or index-linked rent increases. This is viewed as a form of rent control and is argued to be to the detriment of the expansion of rental market supply, to affect disadvantaged households the most through reducing property availability, and to increase risks for landlords. Moreover, Ball rejects claims about the benign effects of controls in continental Europe, where he argues investment is often weak and landlords are unable and unwilling to respond to rising demand because of rent caps. He also argues that rent controls are underpinned by large bureaucracies and that continental European countries often have deep subsidies and tax breaks well beyond those that operate in the UK.

Scanlon and Whitehead (2014), in contrast, address the case for precisely what Ball rejects – rent stabilisation policies and longer tenancies. They note that while schemes vary hugely across Europe, they are very different from first-generation rent controls and tend to provide both landlord and tenant with greater certainty. The authors argue that this is particularly useful for landlords: for example, institutional investors benefit from reduced tenant turnover and index-linked rent increases. However, they note that these benefits will not flow so easily to small scale landlords with mortgage commitments and greater focus on capital gains. This distinction between the different behaviours of corporate landlords and the small portfolio landlords reappears in the recent academic literature (e.g. Diamond, et al, 2019). Scanlon and Whitehead argue that the literature makes it clear that it is not just price regulation but a whole range of non-price regulatory factors that combine with price stabilisation to determine the effectiveness of the overall rental market system. But a stable and predictable environment is a necessary step towards effectiveness. Several other recent reports have sought to highlight the specific combination of characteristics of the regulatory regime implemented in the German rental market, including rent regulation, with a view to arguing that there are lessons to be drawn by the UK to improve the operation of its own private rented sector (Davies et al, 2017; Corcoran, 2020).

The legislative and political context around contemporary debates regarding rent controls is exemplified by a range of research library papers and briefings produced by Wilson (e.g. Wilson, 2017a and 2017b; Wilson and Barton, 2019). In 2018, Which? (2018) produced a report on the consumer's view about reform of the private rental market. They call for a wide-ranging set of reforms to non-price regulation of the sector – including landlord registration, regulation of letting agents, ending no-fault evictions, and improving dispute resolution and deposit schemes (see also Harris et al, 2020). But they are silent on rents and affordability and make no comment on interventions in rent-setting or rent increases. Shand-Smith (2020) also approaches the issue from the perspective of consumer rights and does no more than allude to the possibility of rent regulation. This can be read as indicating that, while there is a live UK debate about the need for greater regulation of the private rented sector, some members of the policy community are focusing on the non-rent aspects of regulation as areas considered either more important or more likely to make progress in the context of the current administration in Westminster.

In contrast, Clarke, et al (2015) focus directly on the potential impact of rent control. Responding to an observed lack of rental affordability in specific regional English housing markets, they carry out simulations of the effects of different rent controls systems. Clarke et al engage closely with the design of different approaches to rent regulation and argue that the impacts of different approaches are not a binary proposition - right or wrong. They model six variations on the theme of first-generation (n=3) and second-generation (n=3) controls. Their work looks at impacts on both tenants and housing supply, with the latter including consideration of behavioural impacts. They found that a baseline hard rent control would have a substantial negative impact on the sector but that other softer controls would not, to differing degrees. They acknowledge that their analysis was provisional and did not try to cost the delivery and enforcement of such policies. The authors do, however, report some landlords' stated views on their likely negative responses to even modest forms of rent regulation because they associate such moves with increased political risk and bureaucratic burdens. Such statements can be treated as indicative of likely behavioural responses, but can also involve an element of strategic signalling to try to pre-empt policy change.

Whitehead and Williams (2018) draw on international evidence and view the different models and choices of rent controls as a series of trade-offs for policy makers and market actors. There is a 'wide spectrum' of approaches operating in different market and institutional contexts. The UK sits at one end of the spectrum and the Netherlands at the other. Looking at the wider international picture they conclude that [overall] 'what had been a fairly clear trajectory towards liberalisation appears to have been reversed to limit rent increases as a result of political pressures in the face of market pressures' (p.5). They make a case for indefinite tenancies (as in Scotland) with a 'degree of' stabilisation' and for strengthened regulatory enforcement.

The rent pressure zone regime introduced in Scotland in 2017 (but never applied) is the focus of the assessment by Robertson and Young (2018). They also draw on European evidence on different forms of rent regulation. They conclude that where "harder" rent controls have been introduced in urban hot spots they have not always been applied by landlords or enforced by authorities. Where demand pressure is less intense rent regulation (usually stabilisation schemes) seems to work relatively effectively and they argue that this may be linked to concerns about the public cost of housing allowances. However, they argue that the main issue is having a system that generates sufficient aggregate housing supply across all forms of housing and, implicitly, choice to ensure market constraints – rather than regulatory constraints - continue to exert downward pressure on rising rents.

Whitehead and Williams (2019) deliver a second report on rent regulation for the RLA. It returns to themes set out in Ball (2013) and Scanlon and Whitehead (2014): long term tenancies and rent stabilisation. Drawing on evidence from a number of European countries (including Ireland and Scotland) and beyond (USA and New Zealand), they ask what a 'good' tenancy might look like from an English reform perspective. They reprise the conclusions from their 2018 paper but go on to argue that the private rented sector is in practice highly varied and that reforms have to bed-in, which will take time and resources. Both incentives and enforcement will be required to bring landlords along.

Clay and Smith (2019), also for the RLA, present a rather different picture. Their argument is in tune with the conventional North American economics perspective – rent controls are bad for markets and communities and for the welfare of landlords and tenants. The authors point to a range of problems including black market operations and ineffectiveness where, despite controls, rents continue to grow quicker than wages. Evidence is marshalled from North America (e.g. Jenkins, 2009) and from Europe, including some more recent evidence on Berlin's rent brake, as well as from Sweden. Some of the studies that Clay and Smith draw upon appear later in this review, but we do not necessarily interpret them in the same way, whether in terms of the nuance of the argument or the quality of the research.

Finally, Wheatley et al (2019) adopt a different starting point in their discussion of rent control for London, which is an explicit policy aspiration for the current Mayor. The question Wheatley et al address is not whether rent control is an appropriate policy response but how best to design a rent control system for London. The authors note some of the key risks and negative consequences that have been argued to flow from rent control policies but argue that these can be mitigated by careful design. They then draw on international experience of rent control systems to seek to identify the characteristics of a system that would work in the London context. The authors emphasize two key points. First, simply transposing policy from elsewhere is inappropriate because policy effectiveness is influenced by housing market context. Hence, system design needs to be tailored in the light of local characteristics. Second, a rent control policy should be viewed as part of the solution to housing market problems: it needs to be viewed in the light of a broader policy response comprising a portfolio of measures.

2.2 Implications

We can draw several points from this overview of the grey literature. First, while the review is by no means exhaustive, we think it is representative of the range of positions adopted by reports appearing over the last 5-10 years: the reviews adopt different starting positions and articulate different perspectives but there is interest in international experience and literature even if there is not in all cases similar interest in digging deeply into the quality of the individual studies cited.

Second, in practice it is difficult, if not impossible, to separate rent regulation from other key components of the wider regulatory ecosystem: in particular, on the one hand, moving to longer tenancies and, on the other, the need for effective enforcement of the suite of regulations. It is also clear that first generation rent controls are not the focus of the discussion. No strong arguments are being presented for the simple nominal rent caps of first generation rent control. So the focus here will be on rent stabilisation - second or third generation regulations. Behavioural responses and market structures, including questions of contestability, are an important factor in shaping the way in which these regulations work in practice. Indeed, the threat of future regulation may in itself be sufficient to affect the behaviour of market actors.

Third, we cannot underestimate the importance of context, history and institutions and the ways in which they interact with any given form of rent regulation. The effects of rent control upon the private rental market – and its consequences for the rest of the housing system – depend on the detailed design of the rent control mechanism, on the one hand, and the market and institutional context it interacts with, on the other. Any econometric study, for instance, should be sensitive to the way in which aspects of local markets impinge upon the operation of specific rent regulation mechanisms.

This has important implications for appraising the evidence base: in particular, it implies the need for serious reflection upon the transferability and generalisability of research findings. Empirical evidence pointing to the conclusion that rent control has a negative – or, for that matter, a neutral or a positive – effect upon a housing market needs to be engaged with critically. While the evidence may be clear for that particular regulatory mechanism implemented in that place at that time, to what extent can the conclusion be generalised to its effect in other housing market contexts at other times?

We might in addition start to draw some broader conclusions regarding the impact of rent control in different contexts by considering the weight of evidence. If the evidence suggests that rent controls of different designs implemented in different market conditions have similar impacts then we might be justified in drawing more robust general conclusions. Yet, even then we need to be sensitive to the possibility that the evidence base is subject to publication bias.[5] Similarly, we need to be sensitive to caveats and to understanding the divergent or exceptional case.

Finally, behind the conventional economics story of rent control is the conventional welfare economics of markets and market failure. We need to be clear about the extent to which real rental markets are competitive in the way assumed by the theory. But also, if they are not and there are market failures, how well does thinking in conventional welfare cost and benefit terms capture the problem, particularly if quantitative appraisal is emphasised?

Conventional welfare analysis argues that cash transfers are superior to in-kind subsidies or taxes on supply (i.e. rent controls). But what are the welfare considerations of real or credible (cash transfer) benefit systems that might be the means-tested alternative to rent controls? The other relevant welfare economics question is what impacts do possible rental market interventions have when we are dealing, in reality, with a second-best interdependent housing system where one shock or policy intervention has wider repercussions? When one starts to consider these broader and more subtle issues the challenges associated with carrying out comprehensive analysis that delivers strong conclusions regarding the relative merits of different forms of intervention, such as second or third generation rent controls, become increasingly apparent.

2.3 Summary

We draw the following points from this review of the grey literature:

- While our overview of the grey literature is by no means exhaustive it demonstrates the range of views and perspectives that have currency. The contributions to the grey literature adopt different starting positions and articulate opposing perspectives, including a variable level of interest in international experience.
- Authors adopt different stances on the virtues of rent control, running from explicit rejection to cautious advocacy of appropriately designed and implemented interventions.
- It is not possible, however, to separate rent regulation from other components of the private rented sector regulatory architecture e.g. tenancy length and security. Enforcement shapes the impact of regulatory intervention but the need for, and challenges regarding, effective enforcement in the private rented sector is not always given prominence.
- A key feature of the debate is the weight given to context, history and institutions and the way in which they interact with any given form of rent regulation. This can play out in different ways:
    - Where these variables are not seen as crucial, general conclusions about the impacts of rent control can be read off from theory and experience elsewhere and directly applied locally, typically in service of an argument against intervention.
    - Alternatively, these contextual variables can be seen as important and a reason for treating the apparent successes of rent control elsewhere as not indicative of likely success if applied locally.
    - It is possible to recognize contextual differences but argue, explicitly or implicitly, that they are not such as to prevent policies that are effective in their 'origin' context from being successfully transferred and adapted for a 'recipient' context.

[5] The issue of whether publication selection bias in the empirical literature tended to reinforce conclusions that align with accepted/standard theory and as a consequence underplay the need for, and value of, alternative approaches has been explored in the minimum wage literature (Doucouliagos and Stanley, 2009).

3. Method and research process

3.1 Scoping criteria

Building on our approach to systematic literature mapping (Soaita et al. 2019) tailored to our time and resource constraints, we decided to scope this review by focusing on:

- TIMELINE: literature published since 2000, a decision taken pragmatically in response to the large size of the literature;
- GEOGRAPHY: selected OECD countries that belong to the recognised welfare regimes referred to as *liberal* (AUS, CAN, GBR, USA), *Nordic* (DNK, NDL, NOR, SWE) and *continental* (AUT, CHE, FRA, DEU);
- DATA: analyses drawing on empirical data, quantitative or qualitative, both understood broadly (theoretical, econometric, descriptive models; historical analyses; and people-centred methods such as ethnographies, interviews or focus groups);
- DATABASES: literature published in English language, indexed in two major databases for the social sciences (SCOPUS and Web of Sciences), with searches performed in titles, abstracts and keywords for 'rent control' (RC), 'rent stabilis(z)ation' (RS) and 'rent regulation (RR). Clearly, these searching criteria determine which studies were found and which were missed.

3.2 Sourcing the literature

Searches were performed on 15 January 2020. To get a sense of the ways in which our criteria affect the size of the literature, we monitored the number of returned records through each string (RC, RS and RR), by publishing timelines (since 1990, 2000 and 2008), and countries (all countries versus our 12 selected countries). More detail is presented in Box A1 in the Annex. It suffices noting that RC is by far a more popular phrase than RS and RR; the number of records published since 1990 is more than double those published since 2008; and limiting the sample to our countries of interest, almost halves the number of records in Web of Science but has a much more limited impact in SCOPUS (in other words, the former has a more global representation whereas in the latter the literature outside our sampled countries is relatively small).

We retrieved the bibliographical data for records published since 1990 and focusing on our countries of interest. Table 3.1 shows successive strategies to reduce the sample to those references that best fit our criteria. Reasons for exclusions in steps 4 and 5 included country misfit, data misfit (e.g. book reviews and pre-1990 data), previously undiscovered duplicates, and thematic misfit (e.g. land, commercial property, mortgage finance, education, tourism). The last point is particularly interesting because it shows that the subject of rent control is most common in relation to residential than other type of property.

Table 3.1. Number of records and subsequent sample reduction

		Since 1990	Since 2000	Since 2008
Step 1	SCOPUS records	287	208	134
Step 2	Web of Science records	211	143	95
Step 3	Merging and removing duplicates *	402	281	186
Step 4	Maintained after screening of titles **	297	203	135
Step 5	Maintained after screening of abstracts **	185	116	79
Step 6	Highly scored/relevant references ***	113	73	46
Step 7	Additional references (n=12, mostly the reports discussed in chapter two)	n.a.	85	57
Step 8	Full text not accessible for review	n.a.	3	2
Step 9	Reviewed references	n.a.	82	55

*Notes: * By EndNote's function ** By the second author *** Independently by the three authors.*

After step 5, given our resource constraints, we felt we needed an additional method to reduce the size of the literature to be reviewed. Hence, based on information from abstracts, each author scored independently every record with 1 (exclude), 2 (maybe exclude) and 3 (include). By adding the scores, a record could get between 3 and 9 (as when marked 'exclude' or 'include' by all three authors). We decided to proceed by scoping our review to the 73 references published since 2000, which scored 8 and 9 (step 6; for more detail see Table A4 in the Annex). As common (Soaita et al. 2019), we further included 12 additional, relevant studies (mostly the 11 reports discussed in chapter two).[6] Finally, with three full-texts being inaccessible, we reviewed 82 references. As we draw from other studies to contextualise our arguments and as we will reference selectively, the 82 references are listed in Box A2 in the Annex.

3.3 The 82 reviewed publications

Figure 3.1 shows country representation and the publishing timeline of reviewed publications. Given that 18 references are cross-country analyses and that seven advanced theoretical-only models (see Box A2 in the Annex), the number in the left panel will not total 82. Clearly, the liberal-welfare group is over-represented (n=67) versus the Nordic and the continental ones (41 and 33, respectively); Austria and France are present only in comparative papers. Not surprisingly, the recognised 'prototypes' of the US, Sweden and Germany dominate their groups. Looking at the right panel, we see that the 12 recommended studies boosted the sample towards more recently-published research.

[6] There has been a recent increase in grey literature in the form of research and policy reports on rent regulation. While this has not been peer-reviewed, the included reports are authored by academics with a strong background of published research on the rental market. Most of the included reports review existing publications or describe the actual application of rent regulations in different contexts internationally and historically.

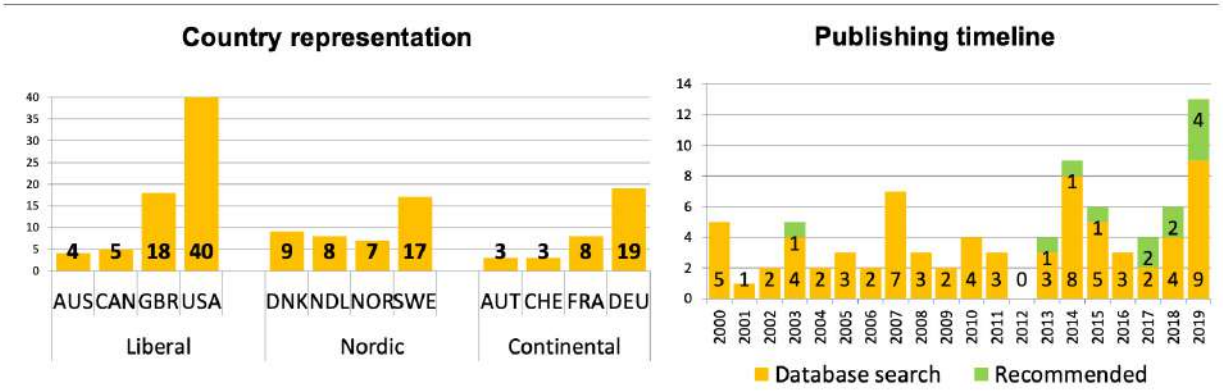


Figure 3.1 Country focus and publishing timeline

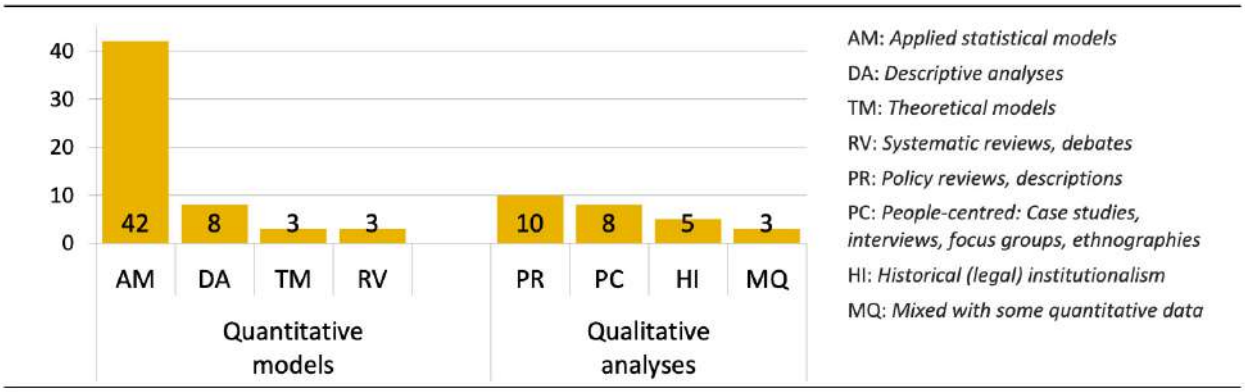


Figure 3.2 Methodologies

Figure 3.2. indicates that most publications used quantitative methodologies (68%), mostly applied econometric models. Qualitative studies are not only under-represented, but only 11 of the 26 studies used people-centred methods such as case studies, interviews, ethnographies, with only a few interviewing tenants or tenant representatives.

Throughout chapters four to seven whenever we refer to a publication included in the review the reference is marked with an asterisk. References without an asterisk are to publications that are not included in the review.

3.4 Summary

- Informed by recognised country typologies, we scoped this review to selected countries belonging to three recognised welfare regimes, referred to as *liberal* (AUS, CAN, GBR, USA), *Nordic* (DNK, NDL, NOR, SWE) and *continental* (AUT, CHE, FRA, DEU).

- We retrieved 402 unique records by searching in two large databases (SCOPUS and Web of Science) for 'rent control', 'rent stabili(z)ation' and 'rent regulation' for literature published since 1990. However, given the large size of the literature, we decided to scope the review to research published since 2000. After including some additional studies, 82 publications were included for review.

- Among the 82 studies, we note a high dominance of quantitative analyses (68%) and an over-representation of the Liberal regime (n=67) versus the Nordic and the continental ones (41 and 33, respectively). Within each regime, their recognised 'prototype' is also over-represented (i.e. USA, SWE, DEU).

4. The economic theory of rent control

In this chapter we review the theoretical arguments around the economics of rent control. We begin by recapping the conventional case against rent control. We then consider arguments that suggest the effects of rent control might be less severe, or other, than those suggested by this conventional case. The chapter focuses on theoretical contributions to the rent control debate that have been made over the last twenty years, drawn from the sample of publications profiled in chapter three. We examine the empirical component of the literature in chapter five.

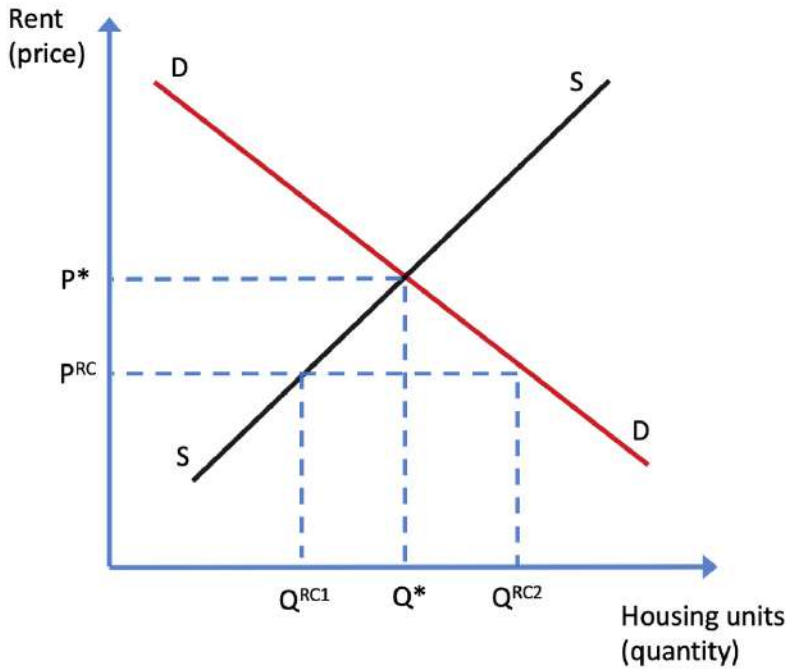
4.1 The conventional case *against* rent control

Almost every economist – even those with no particular interest in studying housing markets – is likely to encounter rent control early in their economics education. It is frequently used in microeconomics textbooks to illustrate the negative impacts of imposing a price ceiling upon a market.

Using a simple market diagram setting out intersecting supply and demand curves (Fig 4.1), and assuming that the market starts in equilibrium, a rent control price ceiling (p^{RC}) below the equilibrium price (p*) is imposed across the whole private rented stock with the aim of reducing prevailing rents and increasing affordability. This policy will, within this analytical framework, create excess demand (Q^{RC2}-Q^{RC1}) - more people wish to rent accommodation at the prevailing price than wish to offer property for rent at that price – and the amount of housing consumed will drop from Q* to QRC1, which is the quantity of housing landlords are willing to supply at p^{RC}. This excess demand might appear structural: demand will exceed supply in the long term because the price ceiling stops prices adjusting upward to return the market to equilibrium. In addition, the price ceiling artificially constrains the rate of return on capital that landlords can secure. This in turn will, it is argued, result in disinvestment - reductions in maintenance and refurbishment – such that deterioration in the housing stock will act as the mechanism for restoring acceptable rates of return. These principles can be derived from class exercises as well as from textbook arguments (Kruse et al., 2005*).

However, rather than a position of long-term excess demand, it could be argued that rent control may lead to discouraged demand: in the face of persistent shortage, households give up on being able to find accommodation in this housing market and the area experiences, for example, a reduced rate of household formation or increased outmigration. Alternatively, if that isn't a plausible response and households need to, or are determined to, live in a rent-controlled housing market then a range of practices to circumvent the regulations – such as landlords demanding substantial non-returnable deposits or 'key money' to recoup the 'lost' rent – can emerge. In the face of continuing high demand a shadow rented sector, operating entirely outside the rules, may become established. In addition, some people may find themselves shut out of the housing market entirely and homelessness increases as a result.

Figure 4.1: The simple textbook account of the impact of rent control on the private rented housing market



4.2 Further dimensions to the case against rent control

This simple theory has been elaborated in multiple directions and a broad range of further negative consequences have been argued to flow from using rent controls to regulate prices. Some arguments are taken to apply generally, whereas in other cases the conclusions flow from the theoretical analysis of rent controls of a particular design. Three ancillary assumptions are of particular relevance in shaping the theoretical analysis: whether controls are assumed to apply continually or whether landlords have discretion to (re)set rents between tenancies (that is, are we dealing with second- or third-generation controls); the extent of security of tenure; and whether rent control applies to the whole private rented sector or only to a part of it.

A key concern is that because rent control blunts price signals it means that resources are not being allocated to their most valued uses. In concrete terms, this means that there is a mismatch between households and properties. Not only is there no guarantee that the households accessing rent-controlled property are those that value it most highly, but also if households remain in rent-controlled property to take advantage of the lower rent then it can be expected that, as tastes or needs change, this mismatch increases (Glaeser and Luttmer, 2003*). There is, therefore, a misallocation of resources and the outcome does not maximise consumer welfare. As the severity of the rent controls increases so do the costs associated with mismatch (Arnott and Igarashi, 2000*).

One way of modelling the allocation of households to rent-controlled properties in the absence of a price mechanism is to treat it as essentially random. However, given that housing is what economists refer to as a "search good", and the effort to search for rent-controlled property can vary, this simplification may miss something important. Chang and Sanders (2010*) use a contest approach to argue that search effort, which is modelled endogenously, can reduce welfare losses through misallocation because those who value rent control most highly search most intensely. They argue that the search costs incurred can be greater than those associated with misallocation.

Slowing down residential mobility via reducing adjustment moves can be argued to decrease housing market efficiency. However, if rent control reduces mobility (Sims, 2007*; Glaeser, 2003*) then that has broader implications for economic efficiency (not much different from the effects of homeownership for that matter). For example, if households are reluctant to relinquish their rent-controlled accommodation to relocate for work reasons then rent control is reducing employment-related mobility, while correspondingly increasing labour market mismatch and, potentially, unemployment.

A further line of argument is that increased labour market mismatch created by rent control has environmental implications because it induces longer-distance commuting. In principle, additional commuting costs could neutralise the savings from controlled rents. But this argument is not well-developed in the theoretical literature[7].

Reduced mobility is typically interpreted as a negative consequence of rent control. Arguments that it should be viewed more positively have been advanced, albeit less frequently:

> *Mobility in an unregulated market may be excessive since neither the landlord (in the event of eviction) nor the tenant (in the event of moving) pays the full social cost of a separation; lower mobility in the controlled sector may therefore be welfare improving.* (Arnott 1995, 114)

This argument expresses, in rather more abstruse terms, a point that those who advocate rent control as a response to gentrification are often reaching for. Where a market generates rapid turnover – in the gentrification case, through rents being pushed up and changing the social profile of an area – it creates social costs beyond those borne directly by landlord and tenant. Increasing community stability, from this perspective, has a positive social value. Embedded in Arnott's argument is a key point. Conclusions regarding the inefficiency of rent control relative to market outcomes rest on crucial assumptions about the nature of the comparator: that is, that market outcomes are efficient.

Where price is not acting as the primary mechanism for allocating resources then an alternative allocation mechanism is required and will emerge. If rent control results in excess demand then landlords will be in a position to select tenants. This can open up the space for discrimination. Discrimination could in theory be across one or more of several possible dimensions. It might be about maintaining homogeneous communities – in terms of socio-economic group or ethnicity – in order to minimise frictions and potential management costs. It could be selecting for households less likely to need social security assistance to meet the rent – leading to the perverse outcome that better-off households find it easier to access rent-controlled housing. It could be that landlords are more interested in tenants who will not wish to stay for a long period (particularly if the system allows a rent reset between tenancies or there is inflation - Basu and Emerson (2000*) describe the distinction between short- and long-stayers as "the real dividing line in the rent control debate" (p.949) - or who are less likely to impose a high cost through wear and tear. It might be that these characteristics align so that certain groups – eg. low income families with young children – find it particularly difficult to secure accommodation. Glaeser (2003*) drew attention to the influence of rent control in increasing segregation as a result of these types of dynamics, noting that this was a relatively under-explored area.

[7] Similar points have been made about immobility and labour market inefficiencies in the owner-occupied sector, most noteably through the extensive international debate generated by the work of Oswald and Blanchflower e.g. Blanchflower, D and Oswald, A (2013) Does high home-ownership impair the labour market?. NBER WP190791, May. https://www.nber.org/papers/w19079

We noted above that the simple economics of rent control suggest that controlling rents below market levels will result in a reduction in landlord maintenance in order to realign the controlled rent and the rate of return from the property (Turner and Malpezzi, 2003*; Glaeser, 2003*). While this account of impacts on maintenance predominates – and has been extended to management as well as maintenance by Klingenberg and Brown (2008*) – it has long been recognised that the impact of rent control on maintenance expenditures is theoretically ambiguous (Olsen, 1988; Kutty, 1996). Rent regulation schemes that do not allow landlords to recoup the costs of investments in maintenance and renovation through rent increases are likely to trigger reductions in maintenance expenditures.[8] This is also relevant to incentives for retrofitting and increasing the energy efficiency of the housing stock. But it is possible to arrive at the theoretical conclusion that rent control will generate increased landlord maintenance. Key here are the precise characteristics of a particular rent control scheme: more specifically, the sorts of incentives it embeds and the compliance and enforcement culture within which it operates. Lind (2015*) has recently reviewed these issues in respect of the Swedish system to illustrate that, for particular regulatory designs, rent control, interacting with contract structure, can induce increased renovation activity. Indeed, where rent regulation embeds the (in)appropriate incentives, it can trigger gentrification. Arnott and Shevyakhova (2014*) focus on the specific issue of landlords' discretion to (re)set the rent between tenancies under a policy of tenancy rent control. They argue that this creates an incentive to invest in maintenance in order to secure a letting at the maximum possible rent but then, with rents controlled during the course of a tenancy, it offers limited incentive for regular maintenance until the property is vacant again.

While rent control might reduce the incentive for landlords to incur maintenance expenditure, it can increase the incentive for tenant self-maintenance, particularly where rent control is accompanied by strengthened security of tenure. Tenants expecting to live in a property for an extended period have an incentive to ensure that it remains watertight and habitable, even if their rental contracts formally place responsibility for maintenance with the landlord. While this effect might emerge relatively straightforwardly in theory, the question is how big it is in practice and whether it can genuinely compensate for reductions in landlord maintenance expenditure. There are grounds for being sceptical on that point.

Our discussion in this section has so far focused on the existing population of private landlords and the housing stock they provide. A complementary line of argument addresses the impact of rent control on the supply of rental housing. The standard economic argument is that because rent control suppresses the income from the housing asset it will lead existing landlords to sell their properties when vacant and exit the market - other assets will offer a better return on capital – thereby reducing the supply of rental housing.[9] At the same time, potential landlords will be discouraged from entering the market in the first place because the restrictions on income make it a relatively unattractive proposition relative to other asset classes. Mcfarlane (2003*) develops a theoretical argument that demonstrates that the standard conclusions depend on the design of regulatory policy. In theory, for example, rent stabilisation mechanisms that allow landlords to reset rents between tenancies needn't affect the timing or density of residential construction. Arnott (1995) argued that rent control could stimulate construction in uncontrolled subsectors of the market. Similarly, Hackner and Nyberg (2000*) present a theoretical model which differentiates housing quality and tenure: under particular assumptions regarding the scope of the regime and the nature of demand the model suggests that rent control can lead to an increase in the housing stock in aggregate.

[8] Unless they can be offset elsewhere, such as via tax allowances.

[9] This is a somewhat partial analysis. For this mechanism to lead to a reduction in aggregate supply the landlord would have to hold the property empty as a consequence of regulated rents being deemed unacceptably low. If the landlord exits the market then there are potentially a number of outcomes. The property could be sold into owner occupation (to which many tenants aspire), to a private landlord who believes they are able to make an acceptable return at prevailing rents, or a private landlord whose business model relies on moving the property into the informal sector. It could also be bought by a social landlord for intermediate rental or social housing.

A more subtle argument regarding (dis)incentives is that an active rent control policy in itself increases political risk: even where current policy exempts newly-constructed properties, for example, there is always the possibility that the scope of the policy will be extended, the exemption will be removed and more landlords will be subject to regulatory control. Thus, if the state does not possess effective precommitment devices, landlords' anticipation of future regulation could further discourage private investment in rental housing.[10]

If rent control opens the door to discrimination and reduces rental housing supply then it might be anticipated that it contributes to homelessness. Or, less starkly, it might mean that poorer households will find themselves housed in uncontrolled sectors where the rents are higher, and hence facing even more significant affordability problems. While this argument is superficially plausible, Jenkins (2009*) notes that the theoretical relationship between rent control and homelessness is ambiguous.

A key area of exploration has been the spillover effects of rent control. Attempts to regulate the rental sector do not exist in isolation – the elements of the housing system are interconnected in complex ways. Therefore we should anticipate that regulating rents will have effects that spillover to other parts of the system. That could be other parts of the rental sector, when rent regulations do not apply universally, or it could be to other tenures or related markets. Here again the literature suggests that some of the key theoretical relationships are ambiguous. It is possible to construct models that demonstrate that imposing rent control raises or lowers rents in the uncontrolled sector, depending on the assumptions underpinning the model. Similarly, rent control can in theory push up costs in the owner occupied sector. Alternatively, a positive correlation between the maximum regulated rent and the costs of owner occupation can plausibly be hypothesized on the basis of different assumptions about regulatory design and market context.

A key aim of imposing rent control is to increase housing affordability. A standard qualification to this argument would be that while it might increase affordability for those living in a rent-controlled dwelling, this is at the cost of higher rents/prices elsewhere in the housing market and potential access problems, if aggregate housing supply is reduced. If rent-controlled properties are not occupied by lower income households or the households with the most pressing affordability needs then the subsidy to consumers provided by the policy is rather indiscriminate.[11] In contrast, it is possible that, in theory, rather than improving affordability – at least for some - rent control pushes up rents and abolition of the regime could result in rents decreasing (Basu and Emerson, 2000*). A further argument is that rent control – or at least rent stabilisation policies that allow landlords to reset the rent – don't provide significant improvements in affordability for those in regulated properties, rather they simply reprofile and frontload rental payments: landlords know that they aren't going to be able to increase the rent during a tenancy so the incentive is to maximise the initial rent set (Arnott, 2003). The extent to which landlords will be able to adopt this strategy will depend in part on local market conditions. Where it can be operated it means that mobile households will be disadvantaged relative to households who stay in the same tenancy for longer periods.

Finally, arguments can be made about fiscal effects. If rent control reduces capital values then that will reduce the yield from local property taxes, which in turn will reduce the financial capacity of local authorities. To the extent that lower income households benefit disproportionately from urban public services, the overall effect of this will be regressive. This argument underlines the need to think holistically and systemically about policy change.

[10] A further dimension to political risk is generated by changes of government leading to significant reorientations in policy on rental regulation. The substantial swings between control and decontrol that accompanied changes of UK government in the post-World War Two period have been identified as a factor in the decline of the private rented sector.

[11] An economic subsidy exists where the prevailing price is being suppressed below the free market price.

4.3 The underlying model of the housing market

At the beginning of section 4.2 we noted that there are three ancilliary assumptions that shape the results of the theoretical analysis of rent control. The three assumptions related to the design of the rent control mechanism or the broader regulatory structure. Different assumptions about these variables mean that rent control policy embeds different incentives and, consequently, generates different outcomes.

The theoretical analysis of rent control differs across another important dimensions: the assumptions it makes about the nature of the (rental) housing market. Much of the analysis starts from the assumption that the rental market is perfectly competitive, with landlords lacking market power and being assumed to be price takers. The impacts of rent control are assessed relatively to this benchmark. In contrast, between the 1980s and the early 2000s several models of the rental market that start from a different premise were proposed. These models assume that landlords have a degree of market power and the rental market is best characterised as at best imperfectly or monopolistically competitive (eg Arnott and Igarashi, 2000*). The implications of assuming that landlords have a monopoly over rental supply have also been examined (Basu and Emerson, 2003*). The key point is that changing the assumptions about the nature of the housing market can fundamentally transform the evaluation of the impact of rent control.

In industrial economics it is a well-established theoretical result that, in an industry characterised by less than perfect competition, regulatory interventions have the potential to be welfare enhancing. That is, appropriately designed regulations can change incentives so that market outcomes more closely approximate the social optimum rather than the private optimum. Alternative analyses of rent control have developed an analogous line of thinking to argue that, under appropriate conditions, rent control can be welfare-enhancing rather than have an unambiguously negative effect on the market. It was this line of thinking that led Arnott, in his milestone paper, to ask whether it was "Time for revisionism on rent control?" (Arnott, 1995). This type of alternative analysis does not lead to an unqualified endorsement of rent controls. Rather, the theoretical analysis indicates that later generation rent controls have the potential to be welfare-enhancing, whereas first-generation hard rent controls would be expected to have the sort of negative impacts more conventional analysis identifies.

If rental markets are imperfectly competitive in the way that these alternative models assume, then we might ask how that situation arises. In industrial economics we might look at the cost conditions of an industry or network effects to understand why it might come to be dominated by a few large producers with market power. But the supply side of rental markets has typically been characterised by a lot of very small scale producers – landlords often owning only one or a few properties. It might be that when we examine very local markets it uncovers concentration of ownership to the extent that prices can be affected or that a market intermediary such as a letting agent accounts for a sufficiently large proportion of the stock in a locality that they can effectively manage the market, but that is not the norm. While there might well be economies of scale in housing management or advantages in access to capital markets, these have not typically been so compelling that small scale providers is outcompeted by larger organisations with more efficient business models.[12]

[12] Although we should note that this is a contingent conclusion. In the context of Build to Rent and growing interest in investing in rental housing from private equity and institutional investors capital market issues and local spatial monopolies are becoming an increasingly relevant concern (Nethercote, 2020). Moreover, evidence is emerging that the new corporate landlords pursue purposeful strategies to repurpose the stock for higher-income earners in Sweden, Germany or elsehwere (Baeten et al 2017; Gustafsson 2021; Huq and Harwood 2019).

An alternative route to understanding how landlords can have market power, even if operating at small scale, is to reflect on how housing markets align with the assumptions underpinning the perfect competition model. In particular, perfect competition assumes perfect information and product homogeneity. However, housing markets are characterised by consumers with heterogeneous tastes and preferences and a housing stock offering different combinations of characteristics in different, spatially-fixed locations. This means that search and matching form a significant component of market processes. It also means that consumers do not view available properties as perfect substitutes. Therefore tenants will value their current property differently, and potentially more highly, than alternatives. Tenants will have an incentive to avoid the costs of searching to find a new property and the psychic and transaction costs of relocating. This opens up the scope for landlords to charge rents above those that might prevail in a perfect market. Raess and von Ungern-Sternberg (2002*) present a model which focuses on these characteristics and develop the argument that a policy using regulation to index rents through third-generation rent control could be preferable to a market that relies on short-term contracts. In contrast, Basu and Emerson (2003*) use a model based upon the assumption of a monopolistic landlord and asymmetric information to explore the impact of third-generation rent control. Their model leads to the less than obvious argument that rather than increasing rents, even in the face of excess demand, monopoly landlords facing information asymmetries may prefer to maintain stable rent levels. The analogy can be drawn between so-called "efficiency rents" and the idea of efficiency wages that are intended to increase job retention.

Hence several theoretical models have been proposed that are rooted in alternatives to the assumption that rental markets are perfectly competitive. In their landmark view, Turner and Malpezzi (2003*) note that at the time they were writing such models had not been deployed extensively in empirical work. This situation has arguably not changed substantially during the subsequent period. There has been a significant volume of empirical work over the last two decades, but it is largely rooted in conventional assumptions of perfect competition.

This is not to say that continued theoretical exploration is entirely absent. In a recent paper, Schmitt and Westerhoff (2021) engage with rent control from a completely different perspective. Their interest is in curbing housing market volatility, their modelling approach is rooted in non-linear dynamics, and their conclusion, drawing on simulation results, is that a well-designed rent control policy can help to stabilise the housing market.

One of the key challenges in evaluating the impact of rent control – or indeed any other policy – is to encompass its impacts across several dimensions simultaneously. Many evaluations are partial because they seek to assess impacts on housing supply or maintenance or residential mobility, but don't provide a comprehensive analysis across several dimensions. Rent control will have a range of effects: some impacts will be positive – for some people – and some impacts will be negative and it is likely that different groups of people will be affected in entirely different ways. But what is the net effect? Favilukis et al (2019) seek to move towards answering this type of question by developing a general equilibrium model founded on heterogenous agents and incomplete markets to evaluate the impacts of affordable housing policies. They use this model to simulate the effects of rent control on a range of key variables and to look at the way in which other policies towards affordable housing interact with rent control to influence citizens' welfare.

4.4 Discussion: theorising rent control

Most economic models used to examine rent control start from the assumption that housing markets can be characterised as perfectly competitive, whereas a minority rest on the assumption that landlords engage in monopolistic competition or exercise monopoly power. Once these assumptions about market structure are coupled with the specification for the rent regulation instrument, conclusions can be derived. However, substantially different conclusions can follow from different sets of assumptions. The theoretical literature demonstrates that rent control can have a negative, positive or neutral effect on housing and related markets, depending on the assumptions that you feed into the model.

This characteristic of the literature led Lind (2007*) to cast a sceptical eye over the extent to which theoretical exploration in isolation can advance our knowledge of the impacts of rent control. He examines a sample of (then) recent theoretical papers using a Bayesian approach to evaluate their contribution to advancing our understanding. He concludes that this type of primarily theoretical discussion provides new information to change the probability of different hypotheses about the impact of rent control in only "very simple and rather uninteresting" ways. The development of the theoretical literature on rent control also invites broader reflection regarding the nature of the relationship between theoretical and empirical work in economics (Goldfarb and Ratner, 2009*).

In this respect, the theoretical literature on rent control could be characterised as an illustration of McCloskey's critique of debates in economic theory that are no more than a "search through the hyperspace of conceivable assumptions" (1991, p.10). There is a vast number of possible combinations of assumptions that can be used as the foundation for a model. Two sets of assumptions, even if they differ only slightly, can generate completely different conclusions. But without anchoring the discussion in more concrete consideration of which assumptions are most appropriate to the analysis this doesn't move the discussion very far forward.

In the rent control case, we have models based on perfect competition and models based on less than perfect competition and they can point to different conclusions about the impact of similar policies. The question that follows is: which is the better way to characterise private rental markets? This is not a question that has been directly examined in great detail. It can be approached as an empirical question, with the possibility that the answer is contingent. That is, private rental markets in different locations with different ownership structures and different demand characteristics, embedded in different housing systems and institutional frameworks, will perform in different ways and are therefore captured best using different modelling assumptions. The policy challenge then becomes model selection – applying the appropriate model for the situation at hand (as discussed more generally by Rodrik, 2015). It would also be possible to develop a priori arguments about the nature of private renting as a good which is seen as entailing particular market characteristics: for example, irreducible information asymmetries resulting in imperfect competition. While arguments of this nature are made in the economics literature they are not typically explored in greater detail. In contrast, versions of such arguments, typically in service of the case for regulatory intervention, are encountered regularly in the broader social science literature we review later.

4.5 Summary

We draw the following points from our review of the theoretical literature:

- There is a rich theoretical literature on rent control stretching back fifty years. It continued to develop into our review period but, arguably, rather lost momentum after the mid-2000s.
- The literature offers a variety of models exploring the impacts of rent controls of different designs on a range of variables (e.g. property quality, new supply, prices in related markets) in housing markets with different assumed characteristics.
- The majority of models start from the assumption that housing markets can be characterised as perfectly competitive, while some rest on the assumption of imperfect competition, monopolistic competition or monopoly power.
- Once these assumptions about market structure are coupled with a specification for the rent regulation instrument conclusions are derived. Substantially different conclusions can follow from different sets of assumptions.
- The literature demonstrates that rent control can have a negative, positive or neutral effect on one or more aspect of housing and related markets, depending on your modelling assumptions.
- The conclusion of Arnott's (1995) key contribution - that second generation rent control can be relatively benign - flows, in large part, from a respecification of housing market structure as less than perfectly competitive.
- It is rarely disputed that housing markets have distinctive characteristics. But the question of whether that means that assumptions about perfect competition are either inappropriate in principle or are heavily contingent is less frequently or fully examined.
- This indicates the need for empirical work that not only examines the impacts of rent control but also sheds more light on the plausibility of assumptions about market structure. This would assist in model selection. We turn to the empirical literature in chapter five.

5. Reviewing the econometric evidence

In this chapter we review 20 years of published, peer-reviewed, empirical, largely econometric studies of rent controls, with these studies ranging internationally. The evidence we look at is largely from North America and Europe though some (e.g. Sanchez and Andrews, 2011*) cover the OECD as a whole.

The chapter is organised as follows. We begin by looking at previous meta reviews of the literature (one from 2003 and one from 2009) and this is followed by two linked longer run studies. We then move on to key papers concerned with the economic welfare impacts of various forms of rent controls. There are also papers concerned with supply effects, imposition of controls, re-control and de-control, including vacancy de-control (i.e. second generation controls that allow vacant property or new tenancies to have a market rent established which is then limited in terms of future rent increases). A further section considers studies looking at the mobility and employment effects of rent controls before the chapter concludes by drawing out common themes and remaining questions. The chapter also notes in passing other studies applying rent control questions to wider topics such as mobile homes (Mason and Quigley, 2007*; Zheng and Deng, 2007*) or national tenure structure (Bourassa and Hoesli, 2010*).

5.1 Meta-reviews

A good place to start is with existing evidence reviews based on peer-reviewed journal articles. Jenkins (2009*) provides such a review from within a conventional mainstream economics perspective. Jenkins conducts a review of papers included in the American Economics Association electronic database up to 2008, featuring data on US cities and conducted by academics categorised as economists. Jenkins also selects papers referenced in this set of papers for review. While recognising the growing complexity of real regulatory schemes in places, as well as the impact of the more nuanced work led by Richard Arnott, Jenkins concludes that the preponderance of this literature finds that rent controls create inefficiencies and that these are not offset by any redistributive consequences. Nonetheless, in 2001 there were about 140 jurisdictions in the US with some form of control.

The first half of Jenkins' paper is concerned with theoretical implications of rent controls for supply, allocation, maintenance, homelessness, etc. The second half looks at the empirical evidence. She finds evidence of misallocation in terms of housing consumption compared to a market without price regulation (see also Glaeser and Luttmer, 2003*); excessive immobility of rent-controlled New York tenants; and excessive mobility among those seeking controlled tenancies (Gyourko and Linneman, 1989; Ault, et al, 1994; Nagy, 1995). Gyourko and Linneman (1989) also find that rent controls delay and disincentivise households from becoming home-owners.

Turning to maintenance under rent control, Jenkins reports studies that suggest first-generation rent controls *did not* reduce maintenance levels and hence quality (Moon and Stotsky, 1993) backing up the findings of Arnott (1995) for second-generation controls. However, in contrast, writers such as Navarro (1985) and Mengle (1985) find the predicted negative relationship for first-generation controls. Jenkins concludes that the overall picture is unclear and speculates that maintenance may be supported by the self-maintenance of tenants and the precise regulatory dimensions relating to maintenance rules of local controls (i.e. context matters).

Jenkins reviews housing availability and reports the small positive construction effects found under de-control by Sims (2007*) but also notes the strong incentives that de-control create for those landlords who can convert properties into condominiums and, more generally, to sell or sub-divide. She also reports evidence that while rent controls may appear to keep rents down, they may, to the contrary, lead to higher rents now because of tenants chasing future controlled rents (Nagy, 1997). There is also evidence that where the coverage of rent controls is not comprehensive they increase rents in the decontrolled sectors of the housing market (Early, 2000*; Sims, 2007*). However, Early and Phelps (1997) found that the effect of initially higher decontrolled rents diminishes over time. Moreover, Turner and Malpezzi (2003*) in their review point to older evidence regarding key money and other side payments that have been found in studies e.g. of New York: these informal practices mean that in reality the difference between total payments in the controlled and decontrolled subsectors is reduced. Finally, rent controls were found to be poorly targeted at those most in need – in part because they were often distributed by chance and then locked-in (Glaeser and Luttmer, 2003*). Turner and Malpezzi concluded from their earlier review of the cost-benefit analyses of rent control studies that the distributional outcomes were highly variable and much less obviously progressive than with more consciously targeted subsidies. This can be exacerbated by landlord discrimination (Gyourko and Linneman, 1989). Glaeser (2003*) found little evidence that segregation of neighbourhoods was any different between controlled and uncontrolled segments.

Jenkins' review is substantial but, despite her efforts, its reliance on American research evidence - and more specifically data from New York - means it is appropriate to view it as highly contextually and locality specific. Jenkins also refrains from passing comment on the technical quality of the empirical work in any of the papers reviewed.

Turner and Malpezzi (2003*) remains the best large-scale review of existing empirical literature. With a focus on the costs and benefits of controls and a measured evaluative empirical perspective, they review an extensive field of mainstream econometric studies. They make a number of general points: most of the empirical evidence is American though there are a few papers from Europe and one or two (usually with Malpezzi as a co-author) from developing countries[13]; welfare analysis increasingly used Hicksian rather than Marshallian techniques;[14] increasing use was made of methods of correcting for sample selection bias; and there was more focus on comparisons between controlled and uncontrolled markets. The authors found relatively few studies addressing supply impacts from controls, while studies of mobility effects were more common. They concluded that cost benefit analysis of transfer efficiency impacts[15] of controls varied considerably both by empirical methods but also, independently, by location. Turner and Malpezzi favour innovation in modelling, such as adopting models which capture market imperfections, but they stress that there had not been much empirical uptake of such innovations at the time they were writing. While they argue that they are interested in empirical models– 'the world as it is', not a theoretical 'world as it could be' (p.14) - their empirical findings and critical analysis are particularly helpful in shaping our review, thinking about how theory and evidence coincide and shedding light on the evidence published since their 2003 review.

[13] Note that this gap is still to some extent reflected in our literature reviwed despite efforts to purposefully include a broader set of countries.
[14] That is, more use is made of equivalent or compensating variation techniques rather than consumer or producer surplus.
[15] Transfer efficiency draws on Marshallian consumer and producer surplus (and deadweight loss) – where the benefits to tenants from rent controls are compared to the landlord costs, expressed as a ratio such that a value of less than one implies the tenant marginal benefits do not offset costs to landlords. Wider analysis would also take into account both second round effects such as on mobility and second best effects on uncontrolled properties, neighbourhood effects and other tenures. Following Glaeser, a number of studies have also looked more closely at the misallocation of resources in terms of rent controlled properties not being consumed by those who value them the most.

An elaboration of their key arguments can be set out:

- Studies of the disparate rent control regulations available around the world tell us regulation is neither good nor bad, rather 'what matters are the costs and benefits of specific regulations under specific market condition' (p.15).

- Rent controls vary hugely and do so in terms of their 'hardness' or 'softness' and their location along the 'generations' spectrum, but also the devil is in their specific details (and, of course, how efficiently and diligently they are enforced). We must be careful in drawing far-reaching conclusions from one case study, city, country or time period (see also Struyk and Turner, 2003*).

- Critically, Turner and Malpezzi ask whether the rental markets being empirically tested are competitive or where they lie on the market structure continuum between perfect competition and monopoly? They are bemused by how little research is done on the critical assumptions that underpin most market analysis of rent controls (market structure, price-taking, well-functioning symmetrical information, externalities, etc.). This is still something of a lacuna even though it is of fundamental importance to the models used. They point to one or two studies on the economic behaviour of larger landlords and the scope for different landlords (individuals v larger, better capitalised organisations) to respond differentially to rent controls. That very heterogeneity on the supply-side calls competitive norms into question, though it may raise questions about the utility of contestability as both a framework for analysis and a policy response (p.19).[16] They stress the 'disconnect' between (then) recent theory, on the one hand, and empirical strategies and assumptions, on the other. However, they conclude by arguing that there might still be more value in further studies using standard models in different market/institutional contexts than in applying new models and theories empirically (p.48).

- Static cost-benefit analysis of rent controls produces results that are 'all over the map' (p.29). Studies that estimate changes in consumer and producer surplus (or Hicksian measures of compensating or equivalent variation) found lower rents for controlled units but less housing consumption than would apply in the free market. The authors conclude that rent controls are rarely, from these analyses, anything other 'than a very inefficient redistributive mechanism' (p.35). The authors conclude that the ratio of tenant benefits to landlord costs, known as 'transfer efficiency', is generally less than 1.0 and often considerably less (p.47).

- Dynamic studies provided a mixed picture about maintenance and depreciation under rent control. Studies suggest that rent control does not seem to speed up or influence wider rates of property depreciation but studies in New York and in Boston did imply that the risk of being in a poorer quality property grew if it was rent controlled (p.39).

- In second-generation schemes, where rents are more or less indexed to inflation, the tenant benefits and landlord costs are both lower in an economic welfare sense and this can significantly increase transfer efficiency compared to first-generation schemes (although this aggregate result obscures bigger individual impacts which may not be so benign).

[16] William Baumol argued that regulatory conditions under certain market conditions could allow policymakers to incentivise businesses with market power to behave as if they were in a competitive setting.

5.2 Longer run studies

Gilderbloom and Ye (2007*) and Ambrosius, et al, (2015*) are linked papers looking at long term data from New Jersey (76 New Jersey cities studied over several decades). The earlier paper examined the long-term impacts of the introduction in the 1970s of several similar forms of limitations to annual rent increases. Essentially, within a set of New Jersey cities a contrast is drawn between those with or without rent control and, given a series of control variables, multiple regressions are run on selected outcome variables (e.g. median number of rooms, new construction 1990-2000, percentage of properties with a quality deficit e.g. inadequate plumbing). The authors argue that the evidence suggests that in New Jersey moderate rent control was symbolic rather than substantive: there was little evidence of strong impacts on the various outcome variables examined. The authors argue that this was in part because lobbying made the ordinances 'toothless'. Rent controls may have prevented excessive rent increases but not much more. There was limited evidence of opportunistic landlord behaviour attempting to maintain profit levels by reducing the size of units or growing through sub-division.

In 2015, Ambrosius et al., extended this data to 2010 and added new dependent variables (an index of policy diversity in the degree of rent control) and additional controls (changes in property values and foreclosures, reflecting the problems of the late 2000s). The authors found that different late generation rent control measures, once suitably controlled, did not exert significant influence on local housing markets. However, at least one study of mobility impacts (see below) does not suggest as benign a set of impacts in New Jersey (Krol and Svorny, 2005*).

5.3 Economic welfare effects

Measures of individual economic welfare change are the standard metrics used to assess impacts of interventions like rent controls. Traditionally, applied economists worked with consumer surplus, producer surplus, and deadweight loss in a Marshallian framework. More recently, however, one is more likely to see welfare change measured by Hicksian compensating and equivalent variation models. We again note Turner and Malpezzi's (2003*) finding that the variance of distributional outcomes for tenants is excessive compared to more targeted subsidies (e.g. demand-side personal subsidies). Moreover, the distributional transfer between tenant and landlord of rent control is a function of the respective incomes of each party; these distributions may overlap and it should not be assumed that income is always higher for landlords. Moreover, supply heterogeneity (large capitalised investors v 'mom and pop' landlords) will also produce different patterns of redistribution.

Glaeser and Luttmer (2003*) represents a major contribution to this literature. It changed the terms of the debate by emphasising that rent control misallocates housing in part because, whereas free markets allocate commodities to those who value them most highly, rent-controlled properties may be allocated by a form of lottery to a range of people. Those who secure rent-controlled accommodation could more accurately been seen as reflecting an average group valuation of a property rather than the highest willingness to pay. This is in addition to any lock-in effects caused by rent control incentivising non-mobility: the disconnect between a household's desired and actual housing consumption can grow as needs change over time. Through quite sophisticated analysis of New York's market (based on quite strong conventional assumptions), the authors find a statistically significant misallocation of housing across different housing consumption groups. They also suggest that the misallocation spills over into both the non-controlled rental market and the owner-occupied sectors. They conclude that for moderate rent control policies the welfare loss due to misallocation may be larger than that due to reduced supply. They estimate that as many as one in five New York apartments are in the 'wrong hands' (p.1044). This paper has contributed to a more intense focus on misallocation of resources, but it also underlines the need to think more systematically about the interdependence between rent controls, the uncontrolled sector and the home ownership market.

Further studies that contribute to this policy assessment work include papers by Sims (2011*), Skak and Blose (2013*) and Ost and Soderberg (2014*). Sims (2011*) exploited the rent decontrol that occurred in Cambridge, Massachusetts in 1994 to examine changes in segregation and socio-economic composition before and after the end of controls (using 1990 and 2000 census data). He found that rent controls increased the proportion of minorities in the sector but decreased the proportion of poor residents, and despite the greater presence of minority residents this was also associated with increased segregation. Sims argues that the counter-intuitive proposition of rent controlled properties being not disproportionately occupied by poorer income groups may in part be explained by the process of accessing rationed properties in the first place (where the affluent were simply better at the game). Sims concludes: 'I also find that rent control increases the isolation of minorities, which likely makes it a poor tool for the residential integration its proponents seek to attain. Thus, the end of rent control in Cambridge led to a city with fewer minority residents, but more residents classified as poor' (2011*, p.25).

Skak and Blose (2013*) consider a Danish city with second-generation rent control. Contrasting housing consumption (measured by living space) between controlled and uncontrolled submarkets, they use Hicksian measures of welfare change to find evidence of misallocation. This includes evidence of both over-consumption and under-consumption within the controlled market segment. Ost, et al. (2014*) look at the Stockholm's later generation rent control model and contrast it with the co-operative sector in order to test arguments about incomer and spatial segregation. They find that the controlled rental market in monocentric Stockholm is less segregated than its free market benchmark (co-op owners) but segregation with respect to education level, age, foreign background and number of children is present. The authors posit an urban economics explanation: the combination of monocentricity at metropolitan level with controlled flat rents across the city makes the demand for central urban living a key driver of these segregated outcomes.

5.4 Supply effects

A key issue for rent control studies has been to capture hypothesised supply effects: that is, how market supply responds to the imposition of rent controls and how this affects supply if there are adjacent non-controlled market segments. Papers from both the beginning of the review period (Early, 2000*) and the end of the review period (Asquith, 2019*; Diamond, et al, 2019*) addressed this question.

Early (2000*) is an important paper that, using New York data, clearly established that tenant benefits of rent control would be overstated if they did not take account of the price effects that the existence of rent control have on the free or uncontrolled market. The argument is that, in part because of supply effects but also increased commuting and relocation demand to where more property is available, rents are higher in the uncontrolled sector than they would be in the absence of controls; in addition, those in hard rent control market segments would be better off - in terms of cost of housing and choice of consumption bundles - in a system with no controls. Similarly, the evidence supported the notion that the cost of housing was much higher for tenants unable to access controlled tenancies. This paper extended the Hicksian welfare framework, like Glaeser and Luttmer (2003*), and the argument about price effects in the uncontrolled sector has become standard in subsequent analysis. We note again the possibility of unmeasured illegal key money or side payments that may reduce these differences in practice.

Asquith (2019*) examines landlord supply responses to increase in rental demand in San Francisco. The paper uses proxies to measure demand and willingness to supply property based on evictions. Landlords, subject to a vacancy de-control system, can charge higher rent between tenancies and rents are then constrained within tenancies by second-generation rent stabilisation. Thus, landlords may seek evictions in the face of rising demand to allow them to benefit from higher rents which establish the next (higher) baseline tenancy. The risk for landlords is that they will end up with the "wrong" sort of tenants who want to remain for long periods enjoying the benefit of rent control, which increases over time (adverse selection). Asquith finds that, on the contrary, there is no evidence that landlords use eviction to free up supply for these reasons in the face of rising demand. He does, however, find evidence that suggests landlords withdraw units from the sector in the face of rising demand.

Diamond, et al. (2019*) focus on the importance of the industrial economics question: do landlord supply responses depend on their scale? Are larger landlord operations better able to draw on their capital as opposed to small-scale individual landlords with only one or two properties? The authors are also looking at evidence from San Francisco. They sought evidence and then tried to explain that evidence concerning the strategies of different kinds of landlords facing new and unexpected rent controls in the 1990s. Using a treatment and control group method created by whether properties were affected by the new regulations, they found that predicted reductions in supply in the controlled sector were greater in multifamily properties run by larger corporate landlords compared to small scale landlords. Larger businesses with easier access to capital can be more flexible and responsive and better at avoiding the challenges created by rent control.

5.5 Imposition, de-control and re-control

A standard econometric strategy is to look for instances where there is change in the policy setting, such as the imposition or re-imposition of rent controls or the effects of de-control with, for example, control and treatment groups. These sorts of studies turn out to be the largest sub-group of papers examined here (Heskin, et al, 2000*; Smith, 2003*; Lind and Hellstrom, 2006*; Sims, 2007*; David, et al, 2014*; Fitzenberger and Fuchs, 2017*; Oust, 2018*; David, et al, 2019*; and Mense, et al, 2019*).

Heskin, et al. (2000*) use a spatial lag regression method that compares four cities in California, each with vacancy control provisions that keep base rents at pre-vacancy level, with six contiguous cities with different forms of vacancy and rent controls. They argue that the evidence neither outright supports nor rejects the case for rent control. Their main finding was that vacancy control has reduced the rate of increase in rents. Vacancy control seems to decrease renter turnover and increase length of residency. It also encouraged ethnic diversity and, more broadly, vacancy control conditions were found to be uncorrelated with changes in income, ethnic distribution, the elderly population, female-headed households, families in poverty, and the disabled. Finally, vacancy control appears to have contributed to a shift toward home ownership.

Smith (2003*) is a case study of the evolving Toronto second-generation system which has inter-tenancy decontrol and then later had control reinstated for new tenancies only having set an initial market rent. Toronto subsequently allowed rent increases but also increased tenure protection. Hence longer duration tenants benefit under this type of regulatory framework and the distorting effects of the vacancy decontrol regime dissipate over time. The author is relativly supportive of the scheme particularly compared to first-generation schemes.

Lind and Hellstrom (2006*) argue that one hypothesised reason not to deregulate controlled rents stems from fears that rising rents in more atttractive areas will increase segregation. Data from the 1990s allowed a quasi-experiment to test this proposition when Malmo increased rents incrementally in higher income areas (but less so in less affluent areas), while Stockholm increased rents across the board. These two markets were compared over a decade. The authors found however that segregation increased in both cities and they concluded that the hypothesis that gradually moving to market rents will independently increase economic segregation is not supported.

Sims (2007*) uses the unexpected end of rent controls in Massachusetts in 1994 to estimate effects associated with rent control. While the study only has data for a couple of years post-regime change, the author is nonetheless able to state that rent control had little effect on new construction but did reduce rents and encourage shifts by owners of the existing stock into home ownership. Property quality was found to deteriorate but only in minor cases of damage. Sims also found that in this case rent controls only had small spillover effects on the non-controlled rental stock. The author calculates welfare losses associated with rent control and 'these results confirm the simple intuition that economists derive from very basic microeconomic models; rent control artificially lowers price, decreases the quantity of rental housing supplied and decreases unit quality' (p.130).

David, et al., (2014*) use the same data and research opportunity as Sims (2007*) but their data extends to 2005. They find that decontrol led to substantial house price appreciation for both decontrolled and never-controlled units (through different channels), with most of the appreciation in overall values being due to value increases in the never-controlled segments. The authors argue that a quarter of the uplift could be explained by decontrol, in part due to sorting, neighbourhood effects, gentrification and in-migration of more affluent households. Price appreciation was largest in neighbourhoods with higher proportions of rent-controlled properties. A question not addressed here is what happened to displaced households. David, et al., (2019*) extend this neighbourhood analysis to argue that decontrol also reduced crime through these neighbourhood sorting effects.

Fitzenberger and Fuchs (2017*) consider re-regulation introduced in Germany in 2001. The study found reductions in rent post-control and a reduction in the discounts received by sitting tenants prior to the control introduction. Mense, et al. (2019*) look at the impacts of the second-generation model introduced in Germany in 2015. This involved a local rent cap for tight housing markets. Earlier work by the authors found a series of effects from the rent cap: increased demolitions to be replaced by new, often owner-occupied, units alongside higher uncontrolled rents. This new study, using a treatment-control comparison of land values in Bavaria, concludes that rent controls lead to bigger effects on land value than on rents.

Oust's (2018*) study of Oslo, again, examines second-generation decontrol (which occurred in 1982) using data for the period from 1970 to 2011. The author does not find that decontrol led to an increase in rents nor that rent control had had the desired distributional effects in the first place. While this study has very long run data it is constrained by relying on imputed rather than actual market rents,

5.6 Mobility

Several papers are concerned with the notion that rent controls alter mobility decisions - not different than the effects of home ownership - leading to longer tenancy durations (a form of the misallocation inefficiencies raised both by Turner and Malpezzi, 2003*, and Glaeser and Luttmer, 2003*). These are tested in different ways by Munch and Svarer (2002*), Svarer, et al, (2005*), Krol and Svorny (2005*), Simmons-Mosely and Malpezzi (2006*) and the OECD-wide study by Sanchez and Andrews (2011*). The latter write (p.188-89):

> *Many countries also have a range of controls and regulations in rental markets to address potential market failures, such as asymmetry of information between landlords and tenants. Rental regulations include rent controls, rules concerning the duration and termination of contracts and the reasons to evict a tenant. Although these regulations are typically a good policy option to address market failures and provide security of tenure, too strict regulations can decrease residential mobility if, for instance, regulated rents are much lower than market rents or tenants are overprotected.*

Munch and Svarer (2002*) employ a careful econometric approach (a proportional hazards model) to assess how rent control affects housing mobility in the Danish housing market. They find that tenancy mobility is substantially reduced by rent control. A typical household in the rental market will have a tenancy duration that is more than six years longer if the property is in the 10% most regulated units compared to the 10% least regulated units. Svarer, et al. (2005*) deploy a search model in order to distinguish between the reduction in housing mobility and therefore also mobility in the labour market. Second, in order to continue to benefit from rent control, they hypothesise that the jobless are more likely to accept job offers in the local labour market. Based on Danish data, the authors find that the probability of finding a local job increases with the degree of rent control affecting the inhabited property, whereas the probability of finding a job outside the local labour market decreases.

Krol and Svorny (2005*) find that rent controlled tenants sacrifice shorter commuting times for lower rents. Their New Jersey data contrasts three census points (1980, 1990 and 2000) and allows for analyse of rental markets at neighbourhood level. For 1980 and 1990, the authors conclude that a lack of household mobility is behind the longer commutes. For 2000, they conclude that the most restrictive vacancy control/decontrol ordinances have the strongest effect on commute times (in contrast to the more benign conclusions drawn by the Ambrosius et al study discussed above).

Turning back to New York City, Simmons-Mosely and Malpezzi (2006*) adopt a panel data methodology to estimate the costs and benefits for a given household of remaining in a regulated unit each period, before, in a second stage, they include the benefits (lowered rent) and costs (housing consumption distortions) as explanatory variables in models seeking to explain mobility decisions. Both confirm (albeit with modestly sized, though significant statistically, effects) that larger benefits in one period tend to be associated with a lower probability of moving in a later period. Similarly, larger costs (distortions in housing consumption) in one period are associated with a higher probability of subsequently moving. The benefit and cost effects are uneven: the pro-mobility effects are approximately twice those of the mobility-reducing benefits.

Finally, Sanchez and Andrews (2011*) bring together a large-scale OECD-wide national comparative study. This a 25-country cross-sectional study attempting to explain variations in household residential mobility. Their model attributes higher mobility variation to a number of key factors: namely, low transactions costs, greater household access to mortgage credit, higher price elasticity of supply, and rent deregulation/weaker tenant protection. The authors are sensitive to national institutional differences and in particular the bespoke and heterogeneous nature of rent regulations. To that end they construct an interesting index of rent regulation (see also the more qualitative Danish bank study by Whitehead et al 2012). The large-scale effort made by Sanchez and Andrews is worth further consideration in future work. Their 2011 research finds that rent regulation has a strong impact of reducing residential mobility.

5.7 Conclusion

A number of recurring or common themes can be extracted from the reviewed studies but they also leave us with a number of unanswered questions. We draw out the following observations on the basis of our review:

- North American econometric studies predominate, particularly for the areas of New York City, New Jersey, Massachusetts and Northern California. We do also report on studies in Europe. Generally, the American studies come to different conclusions than those from Europe (though this is, at a more detailed level, more nuanced and complex than a binary division would suggest). This serves to reinforce the importance of considering local markets trajectories, institutions and regulatory detail when we consider the effects of specific rent control measures.

- Attempting to build robust indices of rent regulation (perhaps also taking account of non-price regulation) is an interesting idea to debate and develop.

- There is an interesting tension between increasingly sophisticated econometric modelling that seeks to overcome the limitations of data, bias and testing of interventions, on the one hand, and the continued use of quite strong modelling assumptions (e.g. imputed rather than market rents; specific behavioural responses such as landlord substantive rationality; or indeed assumptions about the competitiveness of the market), on the other. Attempts to make these assumptions explicit and empirically grounded remain potentially valuable for developing future work.

- Econometric tests have been applied to an increasingly wide range of questions relevant to rent control in the last 20 years: there is now more focus on welfare effects, resource misallocation, impacts on decontrolled (or never controlled) adjacent markets and tenures, mobility and labour market effects and neighbourhood impacts such as segregation. These are important developments that need to be considered carefully in a second-best world analytically and in terms of the use of similar assumptions, contexts and institutions and their effects in more standard rent control models.

- A feature of the work in the last 20 years has been much closer concern with second-generation rent controls and rent stabilisation alongside changes in tenancy conditions. This has led econometric models to be more nuanced and context-specific and it has also made the case for future work to take more account of the non-price regulations that interact with price controls.

The empirical study of rent control in the UK is now extremely dated (it is a literature that largely tailed off in the 1980s) and the institutional structures of the UK housing market have subsequently changed substantially. The recent evidence base therefore inevitably comprises studies from cities in other countries. Yet, the current UK housing system differs from both the US system and most European systems in important and relevant ways. Furthermore, housing systems are becoming more diverse within the UK. These characteristics make the discussion of rent control particularly susceptible to analytical over-reach: there is a risk that results generated in quite different contexts are incautiously or uncritically applied to the UK.

6. Reviewing evidence from social policy studies

While theoretical and empirical economic models, as discussed in chapters four and five, more commonly try to measure the effects of rent control in terms of market distribution and efficiency, analyses coming from the field of political and social policy studies bring to the fore the role of institutions and politics.[17] We focus on these in turn in sections 6.1 and 6.2 while section 6.3 brings forward a focus on home, which is surprisingly lightly substantiated in the reviewed literature. The crucial point to take from all these studies is that the 'institution' of rent control cannot be isolated from broader welfare and housing arrangements, historically structured by the struggle for power and political representation, which have ultimately shaped the extent to which houses are understood as homes for occupiers (in our case, tenants) and assets for owners (in our case, landlords).

6.1 Cross-country analyses by institutional regimes

The idea that countries' housing or welfare institutional arrangements and distributional outcomes can be clustered in 'regimes' - each containing similar enough countries that are also dissimilar enough from all other countries and regimes - came to the fore in the 1980s. With reference to economically advanced countries, Esping-Anderson (1990) defined three regimes of welfare capitalism, which were grounded in historical struggle for political representation. The institution of either the state, the market or the family was seen as the principal welfare provider in the Nordic, Liberal and Continental regimes, respectively. About the same time, Kemeny (1981; 1995) developed his typology of renting and homeownership societies, each of which was grounded in a dominant ideology that governed institutions as well as people's beliefs. Drawing on these two seminal studies, housing scholars have engaged with, refined and applied regime theory to housing systems.

Regime theory was tested in a host of empirical studies in relation to many outcomes (e.g. inequalities, exclusions, gender in both labour and housing markets); expanded with new regime types[18]; and verified against historical change (Schwartz and Seabrooke 2009). It is fair to say that regime typologies have had relative empirical endurance, having inspired our choice of countries in this report as well as several cross-country comparisons in the reviewed literature. These studies have shown that the question of rent control cannot be separated from, but is also not deterministically related to, the countries' broader housing and welfare arrangements.

Martin et al. (2018*) advances an extensive analysis of the changing institutions of the private rental sector in 10 countries,[19] of which four are detailed case-studies (DEU, IRD, GBR, USA). Such a finely-grained comparative analysis will necessarily position each country as individually different notwithstanding their regime orientation (a broader brush analysis would instead shadow countries' differences to foreground similarities). They looked at changing institutional arrangements, policy governance and outcomes in the private rented sector (e.g. built form, quality and affordability) as embedded in the country's broader housing system, financial institutions and regulations (e.g. taxation, subsidies), and past and current housing policies. The authors' aim was to learn from international experience how the equity, efficiency and effectiveness of the private renting sector in Australia could be enhanced, particularly for improving outcomes for low-income tenants.

[17] Some economics literature includes analyses of the political economy of rent control but key contributions were published before our inclusion period: Fallis, 1988; Epple, 1998.
[18] E.g. the Mediterranean and eastern European housing regimes (see Minas et al. 2014; Soaita and Dewilde 2019; Stephens et al 2015).
[19] AUS, BEL, CAN, DEU, IRL, NZD, SWE, ESP, GBR, USA.

Of the 10 countries, Sweden and Germany stand apart through their strong rent regulation regimes for both new rents and rent increases; US through a particularly fragmented landscape; Australia, New Zealand and England through their lightly-regulated, market-based approach; and Ireland and Scotland by their moves towards increasing regulation (see Box A3 in the Annex). As Sweden and Germany are typically recognised as the prototypes of the Nordic and Continental welfare regimes while the other countries pertain to the Liberal regime (not without debate, though), it seems that regime categorisation still holds empirically and has relevance to regimes of rent control. However, the authors contend that change towards more extensive regulation of the private rental sector, including some measures of rent control, is not only warranted but possible:

> *The view of tenancy regulation as 'red tape' is out of step with the recent experience of most countries in this study. Smallholding individual landlords and LCLs[20] operate without undue difficulty in more strongly regulated PRSs than Australia's Martin et al.* (2018* p.5).

Martin et al. (2018*) observe that the first, and most obvious conclusion is that the long term trend towards deregulation has been reversed in many countries/cities, though their descriptive analysis has little to say about the politics of such policy reversals. The authors conclude that institutional arrangements in Australia are consistent with, and Australia could adopt, 'the use of prescribed grounds for termination', 'market-related rent regulations (e.g. limitation to guidelines or indices)' - known also as 'rent stabilisation' or 'second-generation' rent control - as well as the 'extension of registration requirements to mainstream PRS landlords' (all quotes at p.5). Whitehead and Williams (2018*; 2019*) arrived at similar conclusions for the case of England (UK) in their analysis, which was commission by the UK's Residential Landlords Association. Starting from an economic definition of a good tenancy,[21] they note a need for reform:

> *there is considerable agreement, including not just pressure groups and independent analysts but also the government and major stakeholders that there is a need for reform. In part this is the result of changes in the make-up of both landlords and tenants as the sector becomes more mainstream. But it is also because some aspects of the current system work poorly* (Whitehead and Williams 2019*, p.12)

Their discussion describes three interrelated aspects of tenancy regulation - length of tenancy, rent determination, and enforcement - across eight nations.[22] They cast Germany as a benchmark of strong regulation, with new measures taken in 2013 and 2015 to stabilise new rents and rent increases. More precicely, since 2015, new rents in tight housing markets must not surpass the local comparative rent (continually updated via municipal Mietspiegel registers) by more than 10%. This rule is imposed in "more than 300 cities and municipalities many of which have relatively little pressure" (Whitehead and Williams 2019*, p.15). Ireland and Scotland are viewed as movers from free, market-based to more regulated private renting sectors: while in both countries new rents are commonly market based, both have had the legal means to introduce rent stabilisation in pressured zones since 2016 and 2017 respectively - but only Ireland has introduced them in practice. Rent increases are also regulated in frequency (annually) and value (indexed). The authors claim that New Zealand aims to follow a similar path. France and Spain were characterised as examples of uncertainty: France has strengthened the regulatory landscape in 2015 and 2018, with cities being granted "the right to impose rent control, under certain conditions, as a means to protect tenants and create more affordable housing" (p.19), while Spain has a long history of changing regulation. Finally, the US was seen as an example of diversity, with states and cities ranging from purely market-based to strong regulated tenancies, a point substantiated by Hatch's (2017*) fine-grained spatial analysis (see also Box A4 in the Annex).

[20] LCLs stands for "large corporate landlords".
[21] "where a willing, well-informed buyer –the tenant - can purchase from a willing seller – the landlord - the mix of attributes they want and supply can adjust rapidly to changes in demand, so that prices reflect costs" (p.6).
[22] DEU, FRA, IRL, UK-Scotland, NZD, FRA, ESP, USA.

Noting the challenges of setting the practical policy detail[23] and an efficient enforcement system, Whitehead and Williams's (2018*; 2019*) recommendations for the UK mirror those of Martin et al. (2018*) for Australia. In particular, they recommend use of indefinite tenancies because they "provided both greater security and greater flexibility for both sides and removed many of the complexities around fixed term tenancies [. . .] – with no probationary period - and rent stabilisation within the tenancy based on the consumer price index" (Whitehead and Williams 2019*, p.26).[24]

Haffner et al. (2008*) argue that rent regulation is warranted to improve market efficiency (given that assumptions of perfect information and competition do not hold, particularly so in the private renting sector) as well as welfare economics understood as social equality between citizens. They map related policy changes in six countries during the two decades prior to the mid-2000s.[25] Even though the analytical timeframe may be considered out-of-date, since many countries have subsequently instituted changes, it is important to note they observed no connection between rent regulation and tenancy length. They positioned the countries' private renting systems along a continuum from a purely free-market governance, at one extreme, through market-based regulations (middle ground) to strong, cost-based regulations, at the other extreme.[26] They suggest that a stable or growing private rental sector size/share tends to be associated with less rent regulation, whereas a decreasing sector is associated with more rent regulation. This observation, however is explicitly rejected by Martin et al.'s (2018*) recent analysis. Haffner et al. (2008*, p.231) conclude that "rent regulation can be deployed to compensate for market imperfections" if "the benefits for the tenant are greater than the costs for the landlord". The later condition is debatable because rent control could be paid for by landlords as well as taxpayers (e.g. via subsidies to landlords; bricks-and-mortar subsidies to landlords in exchange of 20-years rent regulation as the case of Germany's historic approach). The authors do not explore in any detail the challenges involved in designing a rent control regime that delivers a net social benefit in practice and not just in theory. The authors also note that a compelling case for or against rent control had yet to be convincingly made.

We would highlight two more comparative studies for their original and in-depth analysis: Kemp and Kofner's (2010*) comparison of England and Germany and Norberg and Juul-Sandberg's (2018*) comparison of Sweden, Denmark and Finland. The former compares two very different countries belonging to the Liberal and Continental welfare regimes, respectively, while the latter compares three countries of the Nordic welfare regime.

Kemp and Kofner (2010*, p.379) ask the question "how is it that free market rents and weak security of tenure are perceived to be vital ingredients for a successful private rental sector (PRS) in England, when neither exists in Germany, which has a very large PRS?". Drawing on regime theory, the authors observe long-standing ideological differences between the two countries' housing and welfare regimes, which are themselves embedded in very different political-economic systems - one coordinated almost exclusively by free markets, the other by additional stakeholder negotiations (e.g. trade unions, business, governments, families). These differences have shaped very different roles for the private rental sector, with different types of landlord/tenant subsidies and taxes, different levels of landlord/tenant protections, and ultimately different landlord/tenant time horizons (short-term in England and long-term in Germany). The post-war historical timeline of this study demonstrates the importance of path-dependency while also

[23] See also Clarke et al. (2015*) who seek to identify the possible impact of six different rent control scenarios (three variations of the first-generation and three of the second-generation). They argue that the impacts of different approaches are not a binary right or wrong proposition.
[24] The regulation of new rents via existing local rents (e.g. in Germany) or rent pressure zones (e.g. in Ireland) has not entered the conclusions or recommendations of this report. To be fair, the report lacks any evidence to assess their viability.
[25] DEU, FRA, NDL, ESP, SWE, England-GBR
[26] The other four countries in between. Interestingly, the interpretation of the German regulations for new/entry rents differs between authors, some assessing it as particularly strong (including ourselves) and others as purely market-based (as per Haffner et al. in the referred article). The former consider that the Mietspiegel registers of local market rents and related provisions have a long-term dampening effect on market rents, the latter taking the Mietspiegel at face value.

suggesting that institutional change is possible in more than one way. In a later article, Kemp (2015) described in detail how (path-dependent) institutional change transformed the strong, first-generation rent-control regime in England into one of the most deregulated worldwide through processes of institutional *layering, displacement, conversion and drift*.[27] A similar analysis of the recent counter-direction towards increasing regulation in Scotland and Ireland would be of much value, a call to which Robertson and Young (2018*) subscribed.

Norberg and Juul-Sandberg's (2018*) historical analysis of rent control and tenancy laws in Sweden, Denmark and Finland is inspiring through its granular detail. There are some significant differences between these countries, e.g. in Sweden almost all rental apartments fall under the same cost-based regulation; Denmark regulates only the private rental market as all housing associations are non-profit; while Finland has a dual renting system similar to that in England, with private renting being unregulated and social renting regulated.

Norberg and Juul-Sandberg's (2018*) historical analysis shows that, from being three similar countries by WWI, the *political* choices for housing options and rent regulation have diverged significantly. Finland opted for massive subsidisation of homeownership and a large social sector while renters' continuing political power in Denmark and Sweden meant that deregulation has never been a political project. While both Denmark and Sweden have strong (cost-based) rent-regulation regimes, Denmark runs a very complex set of regulations making it hard for landlords and tenants alike to understand the regulated value of the rent. The implication of this confusion is that "rents in many situations are kept even lower than what [. . .] might be legally possible" or exceptionally, "the rent is unintentionally set too high" (Norberg and Juul-Sandberg 2018*, p.269). Conversely, Swedish 'reasonable rent' is easy to calculate as they reflect the 'collective bargaining' sector, whether the landlord or tenant are members or not.[28] This hints at what Whitehead and Williams (2018*, 2019*) called the challenge of setting the practical detail of policy.

Two conclusions drawn by Norberg and Juul-Sandberg (2018*) are particularly relevant to our study. First, by reviewing such different and quite complex rent-control provisions across the three countries, the authors call for a rent control regime that gives a tenant similar protection to a homeowner. As a homeowner buys at market price, so the tenant should pay an entry-rent freely set by the market. Just as a homeowner is protected from subsequent house price increases, so tenants' rent should be regulated in accordance with a fair index; finally, as homeowners enjoy various subsidies (e.g. imputed rent, mortgage rent interest deduction), these should be mirrored in the benefit to tenants (for an example of mirroring owners' subsidy of 'imputed rent', tenants' rents should be deducted from their taxable income: see Soaita and Searle, 2016). Second, this historically informed analysis shows that rent control policies must be related not only to the whole housing system, but to the political drive and public opinion which shape them - two factors for which economists "have failed to develop a more nuanced comprehension of the aim of rent control and the much-differentiated private rental system" (Norberg and Juul-Sandberg 2018*, p.280). This point is reinforced by Voldman's (2013*) analysis over the longest timespan in our sample - since 1900, covering the whole of Europe's history of rent control. He concludes that besides addressing the great housing crises produced by wars:

> *From yesterday to today, the regulation of rents, considered by some as a measure of social justice, by others as a limitation of individual freedoms and especially by economic circles as a counterproductive aberration, is far from being just a housing management technique. It is also a question of choice of society.* (Voldman 2013*, p.147)

We will next address the question of the politics of rent control, as presented in the literature reviewed.

[27] He explains (p.604): 'In brief, layering is the process whereby new institutions or rules are introduced on top of existing ones. Displacement occurs when new or previously subordinate institutions become increasingly important over time relative to the previously dominant institution. Conversion takes place when an existing institution, which had been established for one purpose, is given or acquires a new purpose. Finally, Drift occurs when an existing institution is not updated to take into account new conditions and consequently becomes increasingly less relevant over time'.

[28] Security of tenure also differ between countries: indefinite in Denmark (landlords can terminate a tenancy only for their personal use (but not for their children or other relatives); de facto indefinite in Sweden (only small landlords can terminate a tenancy for family reasons); complex in Finland (e.g. landlords can terminate a tenancy for family reasons- while tenants can fight in the court 'excessive rent' increase).

6.2 The politics of rent control

Aiming to identify the goals that society might value and "to determine whether a free market regime is the only equitable way of meeting such goals, or whether it is possible that properly crafted government regulations might provide a more desirable housing market" , McPherson (2004* p.1130) documents the political struggle for rent regulation (since 1920) between the *pro-business* New York State and the *tenant-protectionist* New York City legislatures. Box A5 in the Annex details how opposing ideological preferences, local activism, short-term political interests and circumstantial events resulted in key laws being adopted or allowed to expire. The excerpt below exemplifies the fierce political battle of 1997 (p. 1140-41):

> *The most recent major legislative battle over rent regulation laws occurred in 1997. With the laws supporting rent regulations due to expire on June 15, 1997, the first shot had been fired across the bow as early as December 1996 by State Senator Joseph Bruno, the Senate Majority Leader. In an address to a group of powerful property owners, Senator Bruno called for the complete abolition of rent regulation in New York State. Senator Bruno's statement "transformed an insider's game - fought with campaign contributions, backroom lobbying and arcane legislative manoeuvres - into a media spectacle, a holy war." This "holy war" was waged early and hard. By as early as April of 1997, the tenant lobby, under the State Democratic Party, had produced television commercials that accused Republicans Pataki and D'Amato "of being the real culprits behind the rent fight." In the end, the intense pressure that was sparked by Senator Bruno's comments resulted in [. . .] the Rent Regulation Reform Act of 1997.*

Chiefly, McPherson (2004*) calls for bringing democracy back in the relationship between market and society for answering thorny questions related to the goals that society wants to achieve (enhancing affordability, equity, efficiency or individual freedom); who should benefit from rent control and who should pay for it; and how to avoid "arbitrary distinctions between seemingly like-situated tenants, creating categories of haves and have-nots" (p.1127).

Concluding that "rent regulation laws are about more than just rents", as they "provide protections against unilateral evictions, and they purport to provide affordable housing and protect against displacement due to gentrification" (p.1164), McPherson proposes a rent-stabilisation model in which, briefly, entry-rents should be purely market-based, rent increases should be fairly indexed, and low-income tenants offered a means-tested rent abatement matched with an equal landlord tax cut. The author argues that "the beauty of this program" (p.1166), not principally different from housing benefits elsewhere, is that society and not landlords pay for the goals that society wishes to value. Clearly, to avoid low-income households subsidising those even poorer, the argument requires a progressive rather than the currently regressive US (housing) taxation regime (Piketty 2014).[29] Moreover, the fact that such a relatively weak tenant-protectionist proposal is cast as progressive turns the attention to the fact that historically dominant ideas in society influence our judgement of what is a 'weak' or 'strong' rent regulation regime. On the same line of thought, Martin et al (2018*) comment that the comparatively very strong regime in Germany is commonly perceived as 'weak' by German citizens given a stubbornly persistent social memory of the post-war 'first generation' rent control.

[29] In this context, we note that the (implicit) subsidies to US owner occupiers were considerably curtailed by the Tax Cut and Jobs Act 2017.

While McPherson (2004*) describes the legislative battle that significantly weakened the rent regulation regime in New York City via vacancy threshold, rent-value threshold, household-income threshold, and property-classification, other authors give a glimpse of how such regulations are mobilised in the struggle for the right to the city by private tenants fighting against the interests of global finance in New York City (Fields 2017*; Glass et al. 2014*; Teresa 2016*; Teresa 2019*; Wyly et al. 2010*) and elsewhere (Atkinson 2015; Huq and Harwood 2019; Soaita 2022; Stabrowski 2014; Tually et al. 2011):

> *The only tenants we have right now who are in danger are in rent-stabilized housing, and the landlords [have been] harassing them for a long time to try to get them out. They increase the rent to $2000 or beyond and de-regulate. We see a lot of times where they get someone out, renovate the apartment, and move someone in for $2,500"* (Wyly et al. 2010* p.2609).

While private tenants may organise to gain political representation or fight local decisions (Soaita 2022), their fight against global capital is unlikely to become a victory by David over Goliath if states do not intervene - and states can do so by many different means, e.g. rent control, social housing, welfare support or progressive taxation. Even when the state does embrace rent control measures, Gilderbloom and Ye (2007*) note that continued vigilence and pressure on the part of citizens is required to stop the policy over time becoming largely symbolic in practice. Indeed, a few studies in our sample have tried to evaluate the effectiveness of rent control versus other social policies.

From a policy analysis perspective, Voigt (2019*) asks which social policy decisions were made during the 2013-2017 left-right grand coalition in Germany and how they can be best explained. He focuses on four policies: minimum wage, rent control, care reform and pension reform, with the first two likely to directly affect fewer people compared to the latter two. Voigt analyses three explanatory levels of policymaking: the political elite (in terms of partisan ideological preferences; the strength of political opposition; and the diffusion of policy ideas across ideological borders); society (institutional characteristics, the power of vested interests, the electorate's opinion); and supra-national actors (i.e. EU). While increasing the minimum wage was a non-negotiable condition of the left-wing party, their other electoral agenda of strengthening the rent-control regime was open to political compromise. However, the opposing right-wing of the coalition was ultimately compelled to agree not least given great media attention to the topic, the large size of renting population, and Germany's good economic performance at the time (a stable economy and increasing tax revenues). The latter two reforms considered, elderly care and pensions, generated little political debate given the recognised 'silver power', but their terms and conditions gave in fact little additional benefits. The author concludes that, by negotiating across ideological borders, the "grand coalition turned away from liberalisation and deregulation tendencies of the last years and governmental responsibility gained in importance" while "state interventions were able to counteract some hitherto existing inequalities and undesirable developments" (Voigt, 2019*, p.426). As all these progressive measures "were clearly influenced by the Social Democrats" (p.439), Voigt's study and others in Canada, the UK and the US (Bryant 2004*; McPherson 2004*; Wilson 2017*; Wilson and Barton 2017*) demonstrate that political ideologies remain key to policymaking over and above knowledge claims from elsewhere. To give another example, by analysing "the full range of oral and written briefs presented at public consultations on the Tenant Protection Act held in Toronto in June and August, 1997", Bryant (2004*, p.642) demonstrates the strong ideological drive of government in decontrolling tenancies in Ontario, Canada through silencing public debates, ignoring non-supportive expert knowledge and evidence, and narrowing the base of consultation. Bryant (2004* p.647) concludes:

> *Political ideology plays a particular role in policy change. It shapes perspectives on social issues and policy responses developed to address these issues. Although knowledge came to the government from diverse sources inside and outside government, political ideology emerged in this case study as one of the most important dynamics influencing housing policy change in Ontario.*

Ideology, understood broadly as not only a political party policy stance but as dominant ideas in society that are mobilised to construct and interpret the social world (Clapham 2019; Kemeny 2002; Ronald 2008), has profound implications for how the role of, and access to housing, is understood.[30] We turn to this next.

6.3. A decent and affordable privately rented home?

Embedded within the theoretical economic models reviewed in chapter three and the empirical econometric studies reviewed in chapter four are a broad set of assumptions regarding the role of housing, and hence of 'desirable' housing markets and outcomes. Some more philosophical papers add to these insights. For instance, Block (2002*), endorsing a free-market ideology, sees housing as a free-market commodity and rent control as theft from landlords given to tenants. He compares a tenancy with a car, and quite literarily mocks the housing inequalities created by free markets:

> *For example, at present living standards, the poor, unless they wish to confine their total expenditures to automobiles, are pretty much frozen out of the Rolls Royce market. This, undoubtedly, forces them to "endure the frustration, disruption and other 'costs' " associated with having to drive Hondas and Fords.* (2002, p.77)

Block criticises the ideas of 'human flourishing' and housing-as-home endorsed by others (Radin 1986; Sen 2011):

> *Most of us, I think, feel that a tenant's interest in continuing to live in an apartment that she has made home for some time seems somehow a stronger aim than a commercial landlord's interest in maintaining the same scope of freedom of choice regarding lease terms and in maintaining a high profit margin* (Radin in Block, 2002*, p.82).

While beyond the remit of our review, the historic ideological debate regarding the nature of housing as market commodity or social good runs through housing studies, policymaking and academic economics.[31] Intermediate positions, such as Norberg and Juul-Sandberg's (2018*) tenant/homeowner equality discussed earlier or Whitehead and colleagues' (Scanlon and Whitehead 2014*; Whitehead and Williams 2018*; 2019*) idea of a 'good' tenant/landlord relationship, aim to give private tenants somewhat more power. However, they do not necessarily deal with the question of how low-income tenants could access a decent, secure and affordable home, and whether rent control - with its often intertwined stipulations regarding tenancy length, grounds for eviction, landlord registration and the problem of enforcement - is a necessary and sufficient policy toward this goal (Robertson and Young 2018*). This important policy question is taken up by Wetzstein (2021*) and Haffner and Boumeester (2014*).

Wetzstein (2021*) compares the views of elite stakeholders related to the potential of six different policies to address the affordability crises in the cities of Berlin, Vienna, Singapore, Sydney and Auckland. These are: affordable market supply; social/public housing supply; demand-side subsidies; rent control; construction subsidies; and public control of land markets. The study underscores "how affordability-related policy interventions are inherently intertwined with key dynamics in those contested relational arenas of supply-demand, state-market and local-global" (p.95) and concludes that despite large implementation and acceptability barriers, the three policies of supplying social/public housing, offering generous demand-side subsidies, and public control of land markets "are more likely to produce tangible affordability gains" (p.95).

[30] See also Gilderbloom with Ye (2007*) for a critique of this process in relation to rent control policy in the US: They argue that much of the "evidence" drawn into the rent control policy debate is generated by stakeholders with strong vested interests in a specific outcome, in this case the real estate industry.
[31] For instance between Michael Ball (2013*) and Christine Whitehead and colleagues (Scanlon and Whitehead 2014*; Whitehead and Williams 2018*; 2019*). As we noted in chapter two, Ball rejects any case for long-term renting contracts and regulated rent increases and denies any benign effects of rent control in continental Europe. Conversely, Whitehead et al. argue that such policies are useful for landlords as they benefit from reduced tenant turnover and index-linked rent increases. However, the authors note that these benefits will not flow so easily to small scale landlords, particularly those with (Buy-to-Let) mortgage commitments (see Soaita et al. 2016).

Mapping problems of housing affordability by households' income deciles in the regulated and liberalised public renting sector in the Netherlands, for those with and without housing allowances, Haffner and Boumeester (2014*) found that the "three types of subsidisation do not fully redress the problem of unaffordable rents" (p.129) even for some tenants having a minimum household income or above. Households' irregular income and/or overconsumption of housing were found to be key explanatory factors. The former hints to a need for policy to address the recent precariousness in the labour market and the latter to tenants' reluctance to move because their tenancies are indeed homes in the context of the regulated private rental systems of the Netherlands, as in Denmark, Sweden or Germany (Scanlon 2015). The opposite is true for the unregulated private rental markets in the liberal welfare regimes of the UK (McKee et al. 2019; Preece and Bimpson 2019; Soaita and McKee 2019) where high rents and insecurity of tenure create social suffering:

> *Our qualitative research highlights only too clearly the negative psychosocial impacts of residing in the PRS – living with insecure, precarious, expensive housing took significant tolls on people's well-being and mental health. By undermining their ability to 'settle' and make their house a home under their control, renting contributed to feelings of anxiety, negatively impacted on confidence and self-esteem, and exacerbated (for some) what was already a stressful living* (McKee et al. 2019 p.15)

Soaita et al.'s (2020) review of 69 qualitative studies shows that insecurity of tenure is endemic across the income spectrum in countries such as Australia, Canada, Ireland, the UK and the US while low-income tenants face critical problems of affordability, being increasingly pushed towards undesirable locations and poorly maintained, substandard or even unsafe and unconventional forms of housing, such as residential caravan parks, rooming houses or makeshift shelter. Clearly, rent affordability and predictability, and deterring evictions via excessive rent increases, are necessary but far from sufficient conditions for tenants being able to make their tenancy home. However, while considering several critical fields for policy intervention, such as increasing tenure security, improving the stock quality and addressing the unaffordability of rents, these 69 studies and others (Soaita et al. 2019; Which? 2018) shy away from the issue of rent control.

6.4 Summary

- Regime theory - the idea that countries' housing and/or welfare institutional arrangements and distributional outcomes can be clustered in 'regimes', each containing similar enough countries that are also dissimilar enough from all other countries and regimes - is useful to understand the importance of the broader institutional context for the private rental sector in relation to the role and nature of a housing system. Regime theory has inspired a range of useful cross-country analyses focusing on the private rental system, including rent regulation.

- However, institutional arrangements, including those related to rent regulation, are neither deterministic nor unchangeable. The reviewed literature shows that some countries with lightly-regulated private renting markets have recently moved towards more regulated regimes, which permit rent stabilisation (e.g. Ireland and Scotland) while other countries with already strongly regulated private rental systems have strengthen their provisions even further (e.g. Germany). Recent change in the other direction has also occurred, particularly in the US where the move to deregulation seems to be the dominant trend. But, historically, all our sampled countries moved from first- to second-generation rent control or full deregulation. Although regime theory is grounded in the idea of political struggle, the reviewed cross-country analyses remain relatively descriptive and the politics of policy change is not fully explored.

- Finely-grained analyses coming from legal studies and human geography have clearly evidenced that changes towards (de)regulation have always been political. They explicitly, but sometimes implicitly, show that the political battle is fought at different levels (e.g. legislatures, political parties, vested interest groups, citizenry, culture) and through very different means (e.g. election campaigns, media, public consultations, governmental coalitions, public opinions). These studies argue that the issue of rent control should not be cast primarily as a matter of expert knowledge but as one of direct and reflective democracy.

- Finally, the reviewed literature demonstrates directly and sometimes indirectly that it is ideology - understood broadly as dominant beliefs endorsed by political parties, policymakers, economists and society - that casts a private tenancy as home (for a tenant) or asset (for a for-profit landlord); a commodity no different from a car or a secure home no different than one owned. Some countries, particularly those in the Nordic and continental Europe (but also beyond our sample countries, e.g. Turkey) have balanced the terms of this apparent ideological contradiction. Their regulatory regimes go, however, beyond the issue of rent control, and its immediate corollary of tenure security and limited grounds for eviction. Clearly, the studies reviewed in this chapter invite broader reflection on what type of housing system is valued by a society. The question of how to ensure access to a decent, secure and affordable home regardless of tenure should be part of a national conversation that permits rather than represses political contestation and struggle.

7 Summary and conclusions

This concluding chapter has three objectives. It provides a summary of the discussion we presented in chapters one to six. It then considers a specific aspect of the rent control discussion that could open up a new avenue for moving the discussion forward. Finally, it draws out from the discussion some implications for policymakers.

7.1 Summary

Rent controls have a long history in the UK and continue to generate impassioned debate about their efficacy. Problems associated with rental affordability encourage interest in rent regulation and there are policy design developments regarding rent control actively underway in Scotland.

This evidence review looked at grey and academic literature from the period 2000 to 2020. It is an attempt to understand the continuing academic interest in rent regulation and to distinguish the range of views about the impacts. It incorporates a range of both economics analysis and wider social science evidence.

Before going onto the detail of the review's findings, it is helpful to remind readers that this is a systematic evidence review of the literature and as such generates important findings that we believe add value in ways that other forms of analysis cannot. The key added value that arises from detailed review can be summarised:

- The international dimension is essential because there is no contemporary UK evidence. Yet the literature demonstrates that we need to be cautious regarding the appropriateness of international comparisons (even within welfare regime clusters) and the relevance of international contemporary evidence for the UK.
- The role played by different generations of rent control practice and the interconnectedness of rent regulation with other non-price regulation, and the recognition that such research rarely extends beyond the admittedly important concern of combining controls with longer or greater tenure security.
- The need for more strongly empirically-grounded assumptions within economic models.
- Recognition of the importance of both local politics and ideological trends (and that these are not immutable).
- The relative stalling or lack of recent theoretical development in the economics literature on rent controls.
- There is a gap between practical evidence, data and monitoring of local housing markets and policy advice regarding the design and implementation of rent control (Wheatley, et al, 2019, is an honourable exception).
- Specifically, this translates into the absence of grounded understanding of landlord supply structure, how segments of rental markets function and operate with different degrees of interdependence, and the extent to which local markets are volatile and subject to external shocks.

Turning to the main sections of the report, an overview of recent UK grey literature in the second chapter of the evidence review indicates that, first of all, while by no means exhaustive, the grey literature adopts different starting positions and articulates opposing perspectives (including differing levels of interest in international experience). Second, it's not possible to effectively separate rent regulation from other components of the private rented sector regulatory ecosystem, such as tenancy length, and the need for effective regulatory enforcement. Third, we acknowledge the importance of context, history and institutions and the way in which they interact with any given form of rent regulation. Rent controls depend on the detailed design of the mechanism but also on the market and institutional context with which they interact, from the local housing market to national housing regimes. Finally, the conventional economics narrative regarding rent control is based on welfare economics and market failure. We need to be clear about how competitive the rental markets under scrutiny actually are in practice, but also how realistic and feasible is the counterfactual against which the regulations are being assessed.

The evidence review of academic studies is based on an examination of peer-reviewed literature published since 2000 drawn from OECD countries, published in English and identified through the Scopus and Web of Sciences databases. The process produced a final set of 82 papers (including the grey literature mentioned above).

The evidence review is organised into three substantive chapters (chapters 4 to 6). The first of these is concerned with the economic theory of rent control. The analysis begins with an overview of the simple demand and supply theory and further work concerned with wider negative impacts that rent controls might have on a well-functioning competitive rental market. It then discusses the distinction between first- and later generation rent controls and whether controls impact on the whole market or specific spatial or social subcomponents of it. The analysis notes that theoretical analyses of rent controls can indicate that resources have not been allocated to their most valued uses and that this misallocation of resources can lead to wider problems such as the insider-outsider problem (people in need are excluded), reduced mobility impacting on the labour market, and negative impacts on maintenance, investment and supply. Important work by Arnott (1995) suggests that later generation rent controls, when considered in a less competitive market framework, do not necessarily lead to the standard results. The analysis can be developed further, for instance by taking account of the inability of policymakers to eliminate future political risks of regulatory change, which can in itself inhibit investment decisions of landlords.

At the heart of the economic debates around rent controls is the underlying model of the housing market, how we think it works and therefore how the imposition of regulations impacts on the market and its outcomes. It is also about how, at different scales of analysis, such markets operate and would be affected by regulations, let alone other forms of intervention such as demand-side subsidies. Critical to these debates is whether rental markets can be genuinely considered to be competitive. In a nutshell, the more competitive the market appears to be in a conventional sense the more one might expect to have confidence that the initial economics arguments will hold and rent controls could be expected to have some direct negative impact on welfare and outcomes.

We were struck by the lack of recent progress in developing theories about rent controls and rental markets. In particular, we note that we are left in the unsatisfactory position where different modelling assumptions can generate all manner of outcomes and this does not, in the end, take us very far forward. This is why we need to look more closely at the econometric evidence in order to work with modelling assumptions based on appropriate and realistic stylised facts (and evidenced assumptions more generally). Econometric evidence is the subject of chaper 5 of the evidence review.

The review of the econometric papers begins by looking at two meta-reviews of the literature and then moves on to key papers which are concerned with the welfare impacts of various forms of rent controls in real markets. This is about supply effects and the imposition of controls, re-control and decontrol, but also looks at a number of mobility and employment effects and how different local markets and supply structures may impact on the outcomes of real rent controls.

The main conclusions are as follows: North American studies predominate and within this collection of studies the cities of New York and the States of New Jersey, Massachusetts and Northern California are overrepresented. These are the areas in which rent control has been imposed/removed or generates conditions where it is possible meaningfully to compare controlled and non-controlled sectors. This literature serves to reinforce the importance of considering local markets, institutions and regulatory detail. We need to recognise not only that the UK has not had any form of significant rent control intervention for more than 30 years, and that therefore there is no contemporary domestic analysis of its effects, but also that the UK housing market does not necessarily operate in the same way as those which have been studied. Consequently, reading across to the UK context needs to be approached with caution.

Generally speaking, while much new technology and new approaches to modelling have been used to address empirical problems - for instance, identifying treatment and control groups in order to dig deeper into rent control impacts, and also looking at spillover effects between controlled and non-controlled local markets - there is a sense that insufficient attention has been devoted to the effects of non-price regulations on those local markets (with notable exceptions, see below).

Indeed, there is a contrast between the use of increasingly sophisticated econometric models that overcome the limitations of data biases to test interventions, on the one hand, and the continued use of quite strong theoretical assumptions e.g. substantive rationality on the part of landlords, competitive market assumptions and the strong use of counterfactuals based on abstract and arguably unrealistic alternatives, on the other. A feature of the work in the last 20 years has been much closer concern with second- and third-generation rent controls (i.e. rent stabilisation), alongside changes in tenancy conditions. Econometric models have become more nuanced and context specific.

Chapter 6 reviews evidence from social policy and the wider social sciences. The central difference with these studies is that they do not typically seek to isolate the institution of rent control from broader welfare and housing arrangements. Indeed they can consider such an approach to be theoretically misguided. Rent control policy is structured by the struggle for power and political representation which is ultimately shaped by the extent to which houses are understood as homes (i.e. a platform for human flourishing) or investment assets. The chapter looks at a range of cross-country studies and then goes on to examine the politics of rent control.

The chapter draws four broad conclusions. First, welfare regime theory allows comparative institutional arrangements and the distribution of outcomes to be clustered and this is a useful way of understanding the broader institutional context of the private rented sector. Second, those institutional arrangements are, however, neither deterministic nor unchangeable. Some regimes have moved towards greater regulation over time while others have, for sustained periods of time, moved in the opposite direction. Third, finely grained analyses coming from legal studies and human geography have clearly evidenced that changes in regulation are inherently political. This political struggle takes place at different levels, through different stakeholders and interests, and through very different means. This also suggests that the issue of rent control should not be cast simply as a matter of expert knowledge but one that acknowledges the importance of direct deliberative and reflective democracy. Finally, the social sciences literature demonstrates directly and sometimes indirectly that it is ideology - understood broadly as dominant beliefs endorsed by a range of different parties within society - that casts private tenancy as a 'home' or as an 'asset' and policy flows from those decisions. This of course speaks to more fundamental questions about what the housing system is for and how it should be organised, regulated, financed and taxed, and what outcomes or goals society should seek to achieve through its preferred housing system (as well as by what means and their effectiveness).

Before we advance our policy recommendations, we would like to develop an analogy between the rent control debate and the parallel debate in another field of applied economics - the debate over the economics of the minimum wage.

7.2 The minimum wage analogy

Card and Krueger (1995), and the stream of work that has built on it, resulted in a major reorientation in thinking on the minimum wage. This innovative labour economics challenged well-established presumptions that the minimum wage inevitably had a disemployment effect. This isn't an open-ended argument in favour of a minimum wage. Instead, it is arguing that there is a range of values over which minimum wages can be raised, making a material difference to low-income workers, without it resulting in a reduction in the number of jobs available. At values above this range the conventional economic analysis of disemployment effects reasserts itself. Within the rent control debate this resonates with some of the analysis of second generation rent control under imperfect competition: over a certain range of values rent control can be welfare-enhancing, but stronger rent controls start to deliver the sorts of negative consequences conventional theory expects.

In the labour market literature the evolution of thinking on minimum wages has an empirical and a theoretical component. Exploration of empirical 'anomalies' – the seeming absence of identifiable disemployment effects – has been accompanied by a reformulation of the theoretical understanding of the labour market. It is also a site of ongoing academic controversy as these newer arguments are contested by those who believe that more conventional theoretical analysis and empirical conclusions have not been overturned.

The recent theoretical developments have taken place in different theoretical traditions within labour economics. One strand of work that we consider particularly relevant to the current discussion is that which draws on institutional economics. From an institutionalist perspective the arguments for the minimum wage are both rooted in a richer conception of the market and are more expansive (see Kaufman, 2010). (Re)framing the analysis of rent control within the richer ontology of institutional economics offers the prospect of drawing together arguments associated with the economic analysis of rent control and those more characteristic of the broader social scientific literature.

7.3 Implications for policymaking

In this final part of the evidence review we wish to generate some lessons and advice for different stakeholders, including governments, contemplating the design and delivery of some form of rent regulation for the sorts of reasons detailed throughout this evidence review. In other words, if the intention is to develop some form of rent intervention, what considerations should be taken on board in terms of the design of any such policy? Here, we particularly have Scotland in mind, where such a debate about future rent control is actively being pursued by Government.

Below we have identified 10 issues that we think should be considered. They are closely interlinked and grouped into four clusters, which can also be thought of as a theory of change that should be the basis for eventual programme evaluation:

- A vision of where policymakers wish to take the private rented sector based on an appreciation of how it works now, its multiple internal functions, and its important interactions with the wider housing system;
- Based on this vision, a clear sense of the nature and design of rent regulation proposed; how and in what circumstances it is triggered; and how it is later wound down (the sunset clause); as well as how it would complement existing and proposed non-price regulation;
- In order to achieve this clarity over policy objectives, design and operation, a strong commitment to a comprehensive, operational data strategy is required that will enable policymakers to undertake ongoing monitoring of the PRS within a clear market analysis strategy operating at the agreed market area level.

- Throughout these three stages there should be a commitment to drawing on the evidence base where it provides direction and also, where there is no conclusive evidence, a suitable degree of caution and reference to the data and evidence generated locally. At the same time, policy development and monitoring should be grounded throughout in deliberative and consultation mechanisms that give effective voice to tenants, as well as other stakeholders.

We say more about the individual elements of this progressive strategy below.

7.3.1 A Grounded Vision for the PRS

There needs to be a clear sense of policy **vision for a good private rented sector**. What is the long-term role or position that the sector plays in a well-functioning housing system? There are voices that argue that it should be shrunk and replaced; others pointing to a more comprehensive smart form of regulation; and, also, those who wish to reregulate. We contend that the evidence can support the regulatory route but in such a way that while tenants are protected landlords do have incentives to operate within the system. We are not convinced that the multiple roles played by the sector - especially its rapid responsive character and its role as a safety valve - can be played by other parts of the system, e.g. social housing, without a substantial change in the resourcing and scope of that sector, a degree of change which is just not credible. We live in a second-best system[32] and we would argue that it is better repaired than replaced. But in so doing policy could generate a more responsive and integrated set of housing opportunities than are currently available. Better designed and enforced regulatory interventions seek to steadily improve outcomes and good practice - such as better landlord-tenant relations - to build a vibrant, sustainable modern market sector that works for all parties.

Related to the above, there needs to be a clear sense of the **multiple functions** that such a private rented sector can or cannot and should or should not play in the wider housing system. This recognises the multiple elements of the rental market and its demand and supply configurations, which create a wide set of submarkets or segments. And while there might be some common elements to intervention across segments, intervention will also require tailoring and targeting. For instance, Buy to Let landlords are typically small scale and may or may not be 'economic' landlords but they will generally be quite different in objectives and motivations, addressing a different segment of market demand, to the Build to Rent sector. There is growing evidence that the Scottish PRT has created unintended consequences: it has reduced the supply of traditional private lets for the student housing segment and this in turn is creating inflationary pressures in urban rental markets. Social enterprise landlords targeting those in housing need are a third, quite different, landlord type. Similar distinctions can be made on the demand side. Is regulatory policy sufficiently attuned to their different requirements and behavioural responses and the potential impacts on and trades-off with the wider housing system? This diversity is a reason why a uniform rent cap across the whole sector and country will be blunt and likely problematic and should be avoided.

7.3.2 What kind of Rent Regulation?

A critical question is **what generation of rent control** is favoured and why? We note that in most countries the models in operation and under review are second- or third-generation models, although there are examples of what are effectively first-generation controls and a few iterations of such controls being attempted (e.g. the Berlin case). What we draw for the evidence review is that the potential damage of a 'hard' first-generation rent control depends on the shape of demand and supply curves (how big a quantitative effect follows from a given deviation between market and controlled rents) and linked to that the degree to which competitive market assumptions are borne out. While these are empirical propositions, in the absence of specific strong local evidence to the contrary, we concur with the overwhelming majority of studies that conclude that first generation rent regulations should be avoided. In considering the implementation of a new regime of price regulation, we are therefore in the territory of later generation rent regulation and how it interacts with other non-price regulations.

[32] In the welfare economics sense of the term.

it is also worth pointing out that the uneasy politics of housing problems, often exemplified by tenure insecurity and unaffordability, leads to constitutional problems between higher and lower tiers of government over who is responsible and who has discretion to intervene – typically, higher tiers wish to prevent lower tiers 'going it alone' (Fondation Abbé Pierre/Feantsa, 2021). This problem arose recently after Berlin attempted to add a rent freeze to the exisitng rent cap but this was then thrown out as *ultra vires* by the courts. This sort of problem has arisen in several European countries in recent times. Strong rent control measures may be advocated within the political process, but policymakers should assess their wider costs and undertake due diligence about implementation before heading down that track.

Economic analysis from housing researchers (e.g. Arnott, 1995; Turner and Malpezzi, 2003*; Whitehead and Williams, 2018*), especially when viewed through a lens of imperfect competition (subject to local market operation, institutions and context), can be synthesised to suggest that a combination of later generation rent stabilisation along with stronger tenancy conditions, can make a modest positive contribution (subject to policy design ie it does not encourage landlords to front end load rents at the commencement of a new tenancy). The literature indicates, further, that the details of policy design – such whether rent controls apply to the whole private rented sector or exempts new construction – can set up very different patterns of incentives to landlords and/or tenants. As Turner and Malpezzi (2003*) argue, any view on a specific rent control measure should be assessed in terms of its costs and benefits to society.

How might any rent regulation be triggered (and ended)? In other words, what does "unaffordable" mean in operational terms? This is partly about delivering a shared sense of what affordability and non-affordability means but it is also about translating that into a practical model that can be used to create thresholds. This is of course a current Housing to 2040 priority in Scotland – seeking to develop a shared understanding of rental affordability. While there is much that can be said about evidence on affordability and the various empirical approaches to arriving at a set of measures (Meen and Whitehead, 2020), we should recognise the normative, judgmental and convention-based nature of the concept. This is why consensus-based deliberative approaches, that include low-income tenants, and wider sector stakeholder analysis should be adopted. By coupling such approaches with the data and the local market analysis suggested here, one might be able to infer trigger thresholds for different markets.

Logically, we should also consider whether it is appropriate for such policies to have sunset clauses: trigger levels or thresholds where the policy no longer applies (e.g. when affordability thresholds no longer apply to hitherto pressured households). We recommend that these are simple, observable and based on good market evidence but would themselves depend on a shared operational understanding of affordability

How would rent or price regulation **map onto and complement existing and proposed nonprice regulation** operating in the private rented sector? Non-price regulation varies across jurisdictions, for instance: protect tenants by improving their rights and security (rebalance 'power'), set a floor to health and safety standards, improve the standards of landlord behaviour, improve the conduct of letting agents, provide systems of managing deposits, and provide efficient and effective means of dispute resolution. We noted above that in Scotland there is emerging evidence that the new indeterminant tenancy, combined with Covid-19 lockdowns, may have created shortages in the student rental market sub-sector, which is part of the explanation of rising private rents in Glasgow and Edinburgh. This is an example of why it is important to design and then monitor the interaction between new regulations and market outcomes – and this is equally true when combining these with new forms of rent regulation. Designing effective monitoring systems is a critical step for good PRS policy development.

7.3.3 An Empirical Data and Monitoring Operational Policy

There must be **data sufficiency**. By this we mean data that is high-quality and fit for purpose (in term of validity, robustness, frequency, coverage, timeliness, and accessibility - including for the public). Such data is required both to calibrate an intervention and to monitor and understand its effects. The data should be viewed as a public good and the opportunity cost of applying it should not be a barrier to policy (as was the case with rent pressure zones in Scotland where a policy was premised on a data infrastructure that was largely non-existent). Such rental market data has multiple public policy uses and one should consider the wider value such data could provide. In the context of current policy discussions in Scotland, reconsidering adding agreed rents to a reconstituted landlord register, as was discussed in the recent Fair Rents Bill in Holyrood would be one way forward.[33]

The variation in, and movement over time, at local market level implies that any system of rent regulation must have local components and therefore there must be a level of dedicated **market analysis of real rental markets** for effective policy implementation. Such analysis would also assist the development of both local housing strategies and systems/needs evidence base. Traditionally, the private rented sector is less frequently or thoroughly analysed, either as a whole or in its key sub-markets, than other parts of the housing market and is often treated as the residual part of an analysis. There is consequently a lack of joining up the interdependence of the PRS with the broader housing system. This is especially problematic given that the PRS is so important as a shock absorber and the place where the housing sector is most responsive (and indeed where pressures and problems first emerge). Combining a rich approach to accurate data with a clear grounded sense of how local rental markets work (or not) is not simply desirable; it is essential for operationalising more flexible and sensitive policies. We recognise that the investment in such system is not trivial but it is essential to providing a coherent common empirical grounding in measuring how housing markets, and interventions into them, operate and unfold over time. We would point to the scope provided by Local Housing Systems within local housing strategies as a clear way to progress this dimension of evidencing policy.

When the policy is established there needs to be **ongoing empirical monitoring** of how the local market is operating with the rent regulation in force. How will this monitoring be undertaken and how will policy effectiveness be assessed? Can the system be designed to be sufficiently responsive and reflexive so that policy effects can be identified, learnt from, and acted upon quickly. This should be a condition of turning the 'policy on' in the first place. The commitment to understanding local rental markets mentioned above should include this ongoing monitoring capacity. Again, there are wider public good benefits to doing so.

[33] We recognise there are legal issues to overcome in terms of ownership of the data but we would contend that the benefits and costs of such a change justify looking closely at changing this to more of a partnership between different tiers of government in the public interest. The current Scottish Fair Deal for Tenants consultation does imply a recognition and desire to develop a comprehensive data and monitoring strategy.

7.3.4 Informed by Evidence, Deliberative Voice and Consultation

Is policy design taking account of **key learning from the evidence base?** If not, why not? In particular, is the preferred approach sensitive to local context, how real markets work, and the significance of relevant institutions? Does it acknowledge and try to overcome evidenced weaknesses in the design or delivery of similar policies elsewhere or in the past? Does the approach take sufficient account of messages from the literature about what works and what has important costs? Is it thinking critically about the extent to which these empirical observations from other housing systems can be transferred and applied locally? We would point to a small number of key findings noted in this review:

- The characteristics of housing supply varies between localities (e.g small traders v larger capitalised entities, differences in motivation and time horizon for investment) and this is reflected in different responses to policy changes and shocks to the system including new rental regulations. Knowledge about the supply structure would therefore be particularly helpful for policymaking.

- A viable index of how competitive rental markets are would also be of considerable value to policy development because different levels of competitiveness can imply different responses to policy.

- The welfare analysis of rent controls suggests that we should consider the costs (e.g. key money and side payments) and benefits not just of the directly affected (sitting tenants) but also the indirectly affected who may face higher rents in adjacent areas, discrimination to enter the controlled markets, exclusion because of low mobility within controlled markets, as well as wider non housing costs such as labour market frictions and carbon costs of excess commuting. On the other hand, de-control may accelerate gentrification and displacement.

How does one use the evidence and the series of steps needed to deliver forms of rent regulation, to **support wider deliberative processes and consultation mechanisms** that enable citizens, voters and users (i.e. tenant voice) to properly consider the costs and benefits of different choices? The process should make room for the voices of the range of stakeholders - including landlords, public agencies, local government, tenant unions – integral to shaping the future of the PRS and include the most vulnerable tenants. Current Joseph Rowntree Foundation research on private renting in Scotland may shed light on some of these issues and good practice questions about developing policies that are both feasible and command support.

Finally, the development of a rent control policy should be viewed in the context of the broader portfolio of housing policies and strategies. To the extent that rent control may be argued to risk consequences deemed undesirable – for example, reductions in private rental supply – are those consequences being – or could they be - consciously offset by changes elsewhere in the policy portfolio? Given many private tenants' aspirations to other tenures, if the vision for the housing system seeks to reduce over time the sector's size, how is this being met practically by policy? Are resources in place for alternative provision to meet replacement demand and the requisite share of new household formation and net migration? The rental market is at the heart of the housing system as a shock absorber and also caters for an array of housing needs and wants that are not all necessarily transient or short term. Invest in data and monitoring and build a regulatory strategy based on a positive and systemic approach to housing which seeks to dampen unaffordability, volatility and shortage. We conclude that it makes more sense to develop such a theory of change, and a suite of policies to implement it, which seeks to repair the PRS, not an uncertain and risky project to replace it.

Annex

Box A1 Searching for relevant literature

Table A1: Exploring the number of records returned in SCOPUS by searching string, country groups and publication timelines

	Since 1990		Since 2000		Since 2008	
Searching strings	All countries	Sampled countries	All countries	Sampled countries	All countries	Sampled countries
RC	305	248	222	176	142	109
RS	9	9	8	8	6	6
RR	57	46	48	37	37	27
RC+RS+RS	**342**	**287**	**255**	**208**	**168**	**134**

Table A2: Exploring the number of records returned in Web of Science by searching string, country groups and publication timelines

	Since 1990		Since 2000		Since 2008	
Searching strings	All countries	Sampled countries	All countries	Sampled countries	All countries	Sampled countries
RC	273	190	183	125	119	82
RS	8	8	5	5	4	4
RR	43	22	39	19	26	11
RC+RS+RS	**314**	**211**	**220**	**143**	**146**	**95**

Table A3: Examples of a Boolean string (SCOPUS)

	Since 1990
All countries	TITLE-ABS-KEY (“rent control” OR “rent stabilisation” OR “rent stabilization” OR “rent regulation”) AND PUBYEAR > 1989 AND (LIMIT-TO (LANGUAGE, “English”))
Sampled countries	TITLE-ABS-KEY (“rent control” OR “rent stabilisation” OR “rent stabilization” OR “rent regulation”) AND PUBYEAR > 1989 AND (LIMIT-TO (LANGUAGE, “English”)) AND (LIMIT-TO (AFFILCOUNTRY, “United States”) OR LIMIT-TO (AFFILCOUNTRY, “United Kingdom”) OR LIMIT-TO (AFFILCOUNTRY, “Netherlands”) OR LIMIT-TO (AFFILCOUNTRY, “Germany”) OR LIMIT-TO (AFFILCOUNTRY, “Canada”) OR LIMIT-TO (AFFILCOUNTRY, “Australia”) OR LIMIT-TO (AFFILCOUNTRY, “Sweden”) OR LIMIT-TO (AFFILCOUNTRY, “France”) OR LIMIT-TO (AFFILCOUNTRY, “Norway”) OR LIMIT-TO (AFFILCOUNTRY, “Denmark”) OR LIMIT-TO (AFFILCOUNTRY, “Switzerland”) OR LIMIT-TO (AFFILCOUNTRY, “Austria”) OR LIMIT-TO (AFFILCOUNTRY, “Undefined”))

Table A4: The results of our scoring exercise

Scores	Decision	Since 1990	Since 2000	Since 2008
9	Include	90	57	34
8	Include	23	16	12
7	Re-inspect	24	11	7
6	Re-inspect	24	11	7
5	Exclude	10	8	6
4	Exclude	6	6	6
3	Exclude	8	7	7
Total		185	116	79

Box A2 The 82 publications

SOURCED WITH DATABASE SEARCHES (N=70)

(Ambrosius et al. 2015; Andersen et al. 2013; Andersson et al. 2007; Andersson and Svensson 2014; Arnott and Igarashi 2000; Arnott and Shevyakhova 2014; Asquit 2019; Basu and Emerson 2000; Basu and Emerson 2003; Bergh 2014; Block 2002; Bourassa and Hoesli 2010; Bryant 2004; Chang and Sanders 2010; Crook and Hughes 2001; David et al. 2014; David et al. 2019; Deschermeier et al. 2016; Diamond et al. 2019a; Diamond et al. 2019b; Early 2000; Fitzenberger and Fuchs 2017; Gilderbloom and Ye 2007; Glaeser and Luttmer 2003; Glass et al. 2014; Goldfarb and Ratner 2009; Hackner and Nyberg 2000; Haffner and Boumeester 2014; Haffner et al. 2008; Hatch 2017; Heskin et al. 2000; Jenkins 2009; Kadi and Ronald 2016; Kemp and Kofner 2010; Klingenberg and Brown 2008; Krol and Svorny 2005; Kruse et al. 2005; Lambie-Hanson 2008; Lind 2007; Lind 2015; Lind and Hellström 2006; Martin et al. 2018; Mason and Quigley 2007; McFarlane 2003; McPherson 2004; Mense et al. 2019; Micheli and Schmidt 2015; Munch and Svarer 2002; Norberg and Juul-Sandberg 2018; Ost et al. 2014; Oust 2018a; Oust 2018b; Sánchez and Andrews 2011; Scanlon 2015; Simmons-Mosley and Malpezzi 2006; Sims 2007; Sims 2011; Skak and Bloze 2013; Smith 2003; Svarer et al. 2005; Teresa 2016; Teresa 2019; Thomschke 2019; Voigt 2019; Voldman 2013; Wetzstein 2021; Wilhelmsson et al. 2011; Wyly et al. 2010; Ye 2007; Zheng et al. 2007)

ADDITIONAL PUBLICATIONS INCLUDED (N=12)

(Ball 2013; Clarke et al. 2015; Clay and Smith 2019; O'Toole et al. 2019; Preece and Bimpson 2019; Robertson and Young 2018; Scanlon and Whitehead 2014; Turner and Malpezzi 2003; Whitehead and Williams 2018; Whitehead and Williams 2019; Wilson 2017; Wilson and Barton 2017)

CROSS-COUNTRY ANALYSES (N=18 OF 82)

(Andersen et al. 2013; Andersson et al. 2007; Clay and Smith 2019; Haffner et al. 2008; Kemp and Kofner 2010; Lind 2007; Martin et al. 2018; Norberg and Juul-Sandberg 2018; Preece and Bimpson 2019; Robertson and Young 2018; Sánchez and Andrews 2011; Scanlon 2015; Scanlon and Whitehead 2014; Turner and Malpezzi 2003; Voldman 2013; Wetzstein 2021; Whitehead and Williams 2019; Wilson and Barton 2017)

NON-EMPIRICAL PAPERS (N=7 OF 82)

(Arnott and Igarashi 2000; Basu and Emerson 2003; Chang and Sanders 2010; Goldfarb and Ratner 2009; Kruse et al. 2005; Lind 2007; McFarlane 2003)

Box A3. Rent regulation in 10 countries (source Martin et al. 2018, p.50-51)

Table 8: Rent regulation: Australasia, Europe, North America (select countries)

Country	Rent increases	New tenancy rents
Australia	Varies by state; mostly provision for disputing 'excessive to market' increases*	No regulation
Belgium	Increases in line with CPI	No regulation
Canada	Varies by province; most restrict increases to annual 'guideline' rate	No regulation
Germany	Restrictions by reference to 'reference rents' and caps; additional increases for improvements	Restriction by reference to 'reference rents' in specified areas (but regulation is in doubt)
Ireland	Rents must not exceed market rent; high pressure zones	Rents must not exceed market rent
New Zealand	Restrictions against 'excessive to market' increases	No regulation
Sweden	Collectively bargained utility rents	Collectively bargained utility rents
Spain	Increases in line with CPI; additional increases for improvements	No regulation
United Kingdom	Provision for disputing excessive rent increases*; in Scotland, high pressure zones	No regulation
United States	Mostly no regulation; a few major cities have rent regulation (by annual guideline rates) and rent control	Mostly no regulation; a few major cities have rent regulation

*Notes: *A very few tenancies remain subject to rent regulations under historic legislation; CPI = Consumer Price Index.*

Sources: Survey responses; Bååth (2015); CMHC (2017); Cornelius and Rzeznik (2015); Haffner and Bounjouh (2015); James (2014); Jordan (2015a; 2015b); Orji and Sparkes (2015); Roig (2015).

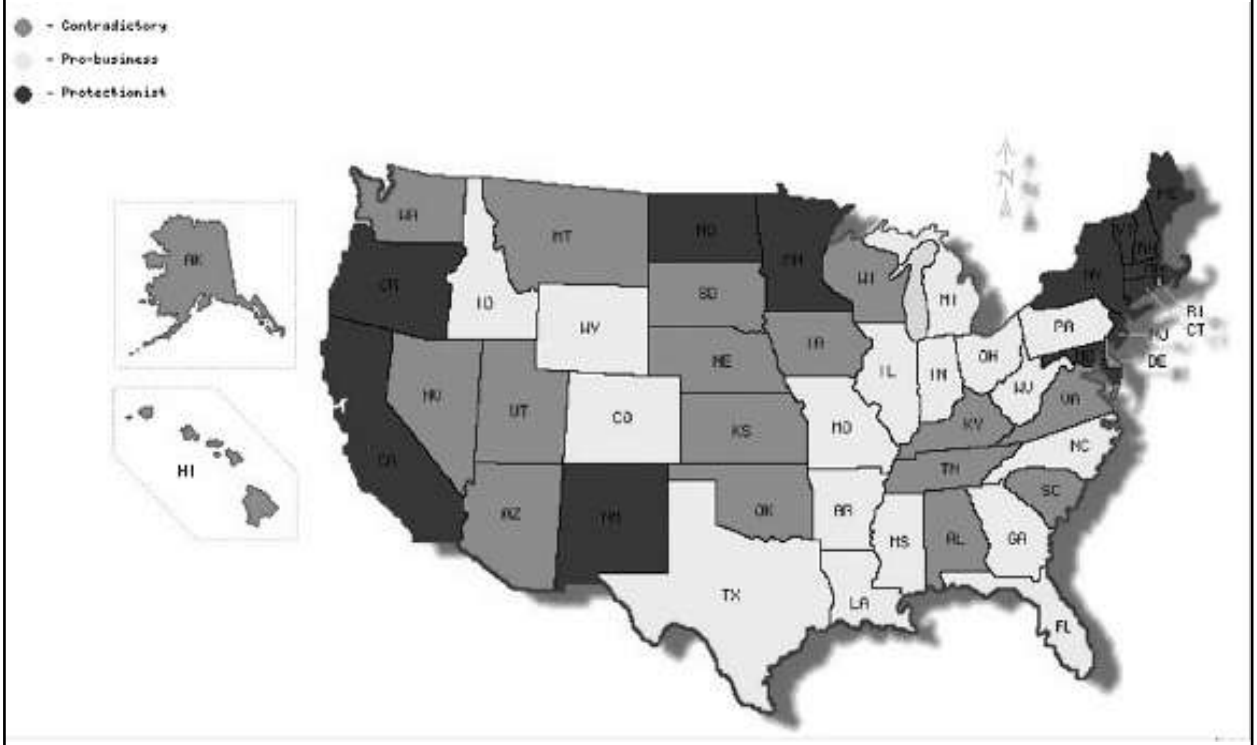
Rent increases:

- Germany: limited according to changes in a 'local reference rent', presented by each municipality in a database known as a Mietspiegel. The local reference is calculated by the municipality as the average rent paid under new and existing tenancies in comparable properties over the past four years. In 2013 and 2015 further limitations were introduced (a cap on increases of 20% over three years (or of 15% in specified tight housing markets).
- Sweden: set by collective bargaining between the Swedish Union of Tenants (roughly 500,000 members) and municipal housing companies and other landlords.
- Canada: most provinces regulate rent increases by government-issued guidelines expressed as a percentage (e.g. Ontario rents may increase 1.5% in 2017).
- Ireland and Scotland: some caps on rent increases in declared 'high pressure zones'
- Spain: has recently lightened its regulation of rents (but it still regulates more strongly than most countries)
- USA: high variation by states, districts and cities
- Rent increases following property improvements are accepted (sometimes regulated) in all countries.

New rents:

- Regulated in Germany, Ireland, Sweden and in a few US cities, each in different ways.

Box A4. Map of state landlord–tenant policy regimes (Hatch, 2017, p.110, Figure 5)



Notes (Hatch, 2017, p. 99-111):

- **Protectionist states** (n=13) tend to adopt policies benefiting renters. They are statistically correlated with prorenter landlord repair and charge; nondiscrimination because of marital status, sexual orientation, or source of income; quiet enjoyment; security deposit interest; and rent control policies.
- **Pro-business states** (n=17) adopt laws that give more rights to landlords at the expense of renter rights. These states tend to have fewer landlord–tenant laws overall, and when they do enact this type of law, the majority benefit landlords.
- **Contradictory states** (n=20) adopt some policies benefiting landlords and others aiding renters. These states are likely to have more and more comprehensive landlord–tenant legislation. They tend to legislate health and safety and rental unit possession in favor of renters while demonstrating no pattern in regulation of prices or prevention of discrimination.

Box A5. The thorny history of rent regulation in New York City, main legislation and its context (McPherson 2004)

The 1920s

- **1920**, the April Laws: 'fear of communism was a powerful influence on politics. During this time, legislation was enacted that allowed tenants "to legally challenge 'unjust, unreasonable and oppressive' rent hikes'
- **1920**, the September Emergency Rent Laws: just three days before mass evictions, the April Law was extended. This was allowed to expire in 1928-29, not least because the skyrocketing supply over the period resulted in the vacancy rate rising above the 5% threshold.

1942-61

- **1942**, the Emergency Price Control Act (EPCA): an attempt to prevent wartime profiteering in many important sectors, including "defense area housing". Initially rents were exempted but
- **1943**, November, New York City froze rents retroactively to their March 1943 levels
- **1946**, Congress amended the EPCA, with all controls to be terminated no later than June 1947, when Congress allowed the law to expire.
- **1947**, the Housing and Rent Act of 1947: Congress granted the states the power to administer these controls, and New York State passed the Emergency Housing Rent Law ("EHRL"), creating the State Housing Commission to temporarily administer rent control at the state level.
- **1949**: as the post-war shortages continued to lessen, Congress passed legislation allowing individual states to terminate federal rent control when they could prove either that a suitable state system was in place (deadline by 1953), or that a housing emergency no longer existed. While many states passed no new legislation, the New York State maintained its system, which was similar to the federal counterpart (applying to all buildings built before 1947).
- **1961**: New York City was the only location in the country continuing to maintain its own rent control regime, in force for more than a decade when nonetheless moderate but steady decontrols allowed for increases in rents while exempting additional classes of housing, e.g. vacant units in one and two-family houses (1953) and 'luxury units' (1958) were decontrolled.

1962-1970: Local Controls and Rent Stabilization

- **1962**, the State Legislature ended state rent control, while granting New York City the power to enact new local rent regulations. New York City promptly passed the Local Emergency Housing Rent Control Act.
- **1969**, New York City enacted the Rent Stabilization Law ("RSL"), which included buildings constructed after 1947. While requiring landlords to grant tenants renewal leases, it also provided for rent adjustment (usually an increase). The newly created Rent Guidelines Board had the power to set rent increases for any renewed lease based on 'Commensurate Rent Adjustment', which included operating costs, revenues and inflation.

1971-2000: further weakening of tenants' rights:

- **1971**, Vacancy Decontrol, passed by State Legislature phased out all rent regulations statewide and established vacancy decontrol of all units under rent control or stabilization.

- **1973**, Urstadt Law, forbids any municipality in the New York State from enacting rent regulations more stringent than those passed by the State.

- **1974**, the Emergency Tenant Protection Act: following vacancy decontrol, rents in New York City increased dramatically. With little hope of success, Rockefeller's Commission recommended the retroactive repeal of vacancy decontrol. However, tenants benefited from circumstantial events: Rockefeller's replacement, Governor Malcolm Wilson, a relatively unknown politician aiming to win voters' votes in upcoming elections, worked secretly with the New York State Tenant's Legislative Coalition in order to strengthen rent control. The final law was a compromise that allowed municipalities to declare a housing emergency where vacancy rates were less than 5%. Consequently, New York City passed legislation with units that had never been rent-regulated came under the Rent Stabilization system, and stabilized units that had deregulated under the 1971 law were re-regulated.

- **1983**, the Omnibus Housing Act removed local administration from all rent regulation to a single state agency.

- **1993**, the Rent Regulation Reform Act (aka luxury decontrol) allowed for units with a legal rent of more than $2,000 pm to be deregulated when becoming vacant upon landlord request; likewise, units with rents above $2,000 pm and occupied by households whose income exceeded $250,000 in each of the two immediately preceding years, could be decontrolled.

- **1997**, Rent Regulation Reform Act: in an address to a group of powerful property owners, Senator Bruno called for the complete abolition of rent regulation in New York State. Huge public demonstrations resulted in rent stabilization being not abolished but weakened (household's income threshold reduced to $175,000; limited tenancy succession rights to family members; sizable new "vacancy bonuses" and increases for low-rent apartments hugely shortened the time required to achieve the $2,000 vacancy-decontrol threshold).

- **2000**, amendments of the Rent Stabilization Code gave landlords new powers of eviction and increased methods of raising the rent on vacant units.

- **2003** Rent Law Extensions (valid 8 years): huge political battle between Republicans and Democrats but not public debate, with the Republican in power at the New York State Senate, however, there was no repeat of the fierce public debate that accompanied the 1997 Act. The expriation deadline came and passed, the old law being extended four times for just one day. In a surprise move on June 19th, the State Senate introduced a bill that one Democratic senator called "a *'declaration of nuclear war on rent-regulated tenants in New York'*. It provided landlords with increased power of deregulation and "sharply limit[ed] the ability of the New York City Council to alter rent regulation in the city: *"Assembly Democrats were left with a difficult choice. They could accept a bill that could deregulate thousands of apartments whose rents creep up beyond the $2,000 mark [. . .] Or they could allow the rent law, which technically expired at 12:01 a.m. [June 20th], to fade away entirely"*

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