

PUBLIC INTERVENTION IN THE RENTAL
HOUSING MARKET: A REVIEW
OF INTERNATIONAL EXPERIENCE

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Abstract

In recent years, residential rental prices have experienced remarkable growth in many of the major metropolitan areas of advanced economies. On occasions, these increases in rental prices have caused a significant increase in the cost of rental housing in the household consumption basket and difficulties in access to housing for certain groups. In this context, there has been a resurgence of the debate about the role of public policies in the rental housing market, designed to mitigate both the problems of access to housing and the potential negative effects of the growth of rental prices on workers' mobility or on the macro-financial stability of the economy. In this paper we review the main instruments of public intervention in the residential rental market, in the light of international experience among the main advanced economies. Broadly speaking, the different policies can be classified into three main groups: rent controls; public provision of rental housing; and a wide range of heterogeneous measures aimed at both incentivising the supply of private rental housing and containing the increase in household spending caused by rising rents. The experience accumulated over decades in the development of these policies and the increasing availability of quantitative evaluations of their impact illustrate some of the implementation challenges presented by support policies for residential rentals, as well as the wanted and unwanted consequences associated with this type of intervention.

Keywords: rental market, rent control, public provision of housing, incentives for housing rental.

JEL classification: R31, R21, R38, O18, H20, H42, K12, K23, K25, R52.

Resumen

En los últimos años, los precios del alquiler de viviendas residenciales han experimentado crecimientos notables en buena parte de las principales áreas metropolitanas de las economías avanzadas. Estos crecimientos de los precios del alquiler, en ciertas ocasiones, han generado un significativo incremento del gasto en alquiler de vivienda en la cesta del consumo de los hogares y dificultades de accesibilidad a la vivienda en determinados colectivos. En este contexto, ha resurgido el debate sobre el papel de las políticas públicas en el mercado del alquiler de vivienda para mitigar tanto los problemas de acceso a la vivienda como los potenciales efectos negativos del crecimiento de los precios del alquiler en la movilidad de los trabajadores o en la estabilidad macrofinanciera de la economía. En este documento se revisan los principales instrumentos de intervención pública en el mercado del alquiler de vivienda residencial a la luz de la experiencia internacional, relativa a las principales economías avanzadas. A grandes rasgos, las distintas políticas pueden clasificarse en tres grandes grupos: los controles de los precios del alquiler, la provisión pública de una oferta de vivienda de alquiler y un amplio conjunto de medidas de naturaleza heterogénea dirigidas tanto a incentivar la oferta privada de viviendas en arrendamiento como a contener el aumento del gasto de los hogares causado por el incremento de los precios del alquiler. La experiencia acumulada durante décadas en el desarrollo de estas políticas y la creciente disponibilidad de evaluaciones cuantitativas de su impacto permiten ilustrar algunos de los retos de implementación que presentan las políticas de apoyo al alquiler residencial, así como las consecuencias, tanto deseadas como no deseadas, asociadas a este tipo de intervenciones.

Palabras clave: mercado del alquiler residencial, controles de precios del alquiler, oferta pública de alquiler, incentivos al alquiler.

Códigos JEL: R31, R21, R38, O18, H20, H42, K12, K23, K25, R52.

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1 Introduction

In recent years, residential rental prices in many of the metropolitan areas of advanced economies have grown significantly (Whitehead and Williams (2018), *The Economist* (2019) and López-Rodríguez and Matea (2019)). This price increase is associated with a relative shortage of supply of rental housing, compared with a sharp increase in demand among certain groups, especially lower-income households and those in which the household heads are young adults. This demand growth has been located essentially in the geographical areas where economic activity tends to be concentrated, such as global cities and their central districts (European Commission (2019)). The main factors that may explain this increase in demand for rental housing include the lower dynamism of labour income (especially among young people and workers with a lower level of educational attainment), changes in the mortgage credit market in the wake of the recent international financial crisis and the greater concentration of economic activity and migration flows in the big (superstar) cities (Matlack and Vigdor (2008), Myers and Pitkin (2009), Acemoglu and Autor (2011), Gyourko et al. (2013), Acolin et al. (2016), Whitehead et al. (2016), Myers et al. (2016), Autor et al. (2014) and Hornbeck and Moretti (2019)). This increase in demand for rental housing has generally exceeded the increase in supply, which is quite rigid in the short term, giving rise to a relative scarcity of housing that appears to have prompted considerable rent increases.

As a result of this asymmetry between income and rental pricing dynamics in advanced economies, access to housing has become more difficult, especially for poorer households, and expenditure on rent has increased significantly in the household consumption basket (OECD (2016), Dong (2018), OECD (2019a) and (2019b)). This has given rise to a broad debate on the possibility of strengthening the role of public policies in the residential rental market, aiming to improve access to housing for the most vulnerable groups.¹

On occasions, the demand for greater intervention in the residential rental market has also been justified by reasons of macro-financial stability. Specifically, the shortage of supply of rental housing poses a challenge for the efficient functioning of the labour market, as it hinders the mobility of – especially younger – workers. Thus, a higher share of rental housing, compared with owner-occupied housing, among households in work would make it easier for the unemployed to move to areas where new jobs are being created or jobs are available (Nickell (1998), Munch et al. (2008) and Head and Lloyd-Ellis (2012)).

¹ The debate over housing market problems and residential rentals is particularly intense in the United States, where the situation has now become a housing affordability crisis, owing to the decline in home ownership over the past decade and the excessive burden of expenditure on rent among young adults and lower-income households (Harvard Joint Center of Housing Studies (2018), *The New York Times* (2018) and *Forbes* (2019)). In Europe, the main debates are on the need for more support policies for rental housing in Germany (Mense et al. (2017)), where price increases in the rental market affect 40% of the population (Eurostat (2019)), or in the United Kingdom where the shortage of new housing stock is deemed to be the main cause of the increase in property prices and affordability problems (UK Government (2017) and Wilson and Barton (2019a)). Over the past decade, the United Kingdom recorded the highest increases in Europe in the proportion of the population living in rented housing (8.7 percentage points (pp) since 2007, up to 35% in 2017). Although in the European economies overall (EU27) there is a high degree of heterogeneity across countries in the proportion of the population living in rented accommodation (López-Rodríguez and Matea (2019)), the proportion living in market-price rental housing is trending upward, rising significantly (by 7.5 pp) between 2007 and 2017 (Eurostat (2019)).

Macroeconomic stability may also be affected by the increase in expenditure on rent among certain households, especially if it is concentrated on those that have scant ability to save and greater propensity to consume. Rent increases reduce these households' demand for other goods in the consumption basket and may raise the proportion of households whose consumption is constrained by their current income level. This shift in the composition of household expenditure may in turn heighten the sensitivity of aggregate consumption and economic activity to possible brusque changes in the cyclical position of the economy (Paciorek and Sinai (2012)).

In addition, if investment in residential rentals were to become more attractive, in a setting marked by low returns on investment in financial assets, there could be consequences for the financial stability of the economy. This macro-financial risk arises owing to the possible connection between house prices and returns on investment in residential rentals (Sinai and Souleles (2005), Bracke (2015) and IMF (2018)). Indeed, if investment were to become more concentrated on real estate assets to be used, for example, for rental housing, growth in property prices and, potentially, in mortgage credit could accelerate.

This paper reviews the main instruments of public intervention in the residential rental market in the light of international experience. Broadly speaking, these policies can be classified into three groups: rent controls; public provision of rental housing at affordable prices; and a wide range of heterogeneous measures aimed at both incentivising the supply of private rental accommodation and containing the increase in expenditure on rent faced by certain groups. This review of international experience and discussion of the assessment of the impact of public policies aims not to be exhaustive, but to set out the main measures implemented in advanced economies (Andrews et al. (2011), Salvi del Pero et al. (2016) and OECD (2016) and (2019a)). The review seeks to illustrate the challenges posed by the introduction of support policies for residential rentals, the potential benefits and the possible unwanted consequences of the different forms of intervention. But it is important to recognise the constraints that directly transferring lessons from past experience in very different geographical markets to the present setting may entail. Although certain common conclusions may be drawn in very different settings, how effective residential rental market policies are depends on their interaction with the macroeconomic situation, the factors conditioning the local housing market and, in general, a wide range of other policies that also affect the functioning of the housing market – such as tax or labour market policies – and the income dynamics of households demanding rented accommodation.

The paper is organised as follows. Section 2 reviews the international experience of rent controls and the studies available on the possible effects of these policies. Section 3 examines the design and development of programmes for public provision of rental housing and summarises the main findings and challenges observed in their implementation on an international scale. Section 4 discusses the main measures intended to have an indirect impact on the rental market, specifically analysing: i) the legal framework governing rental contracts between landlords and tenants, ii) fiscal policy measures on the supply of and demand for rented housing, and iii) local regulations that affect the supply of residential housing. Section 5 sums up the main conclusions.

2 Residential rent controls

Policies that establish residential rent controls, in their various shapes and forms, offer the attraction of having an immediate mitigating impact on the adverse consequences that rising rents have for the well-being of renting households, without in principle entailing a high budgetary cost. The usual justification given for such controls, in settings marked by sharp upward moves in rental prices, is the need to ensure that households, especially lower-income households, have access to housing.

2.1 International evidence from a historical standpoint

Contemporary historical evidence shows that rent controls are introduced in exceptional periods, such as during the World Wars, or in the face of sudden increases in residential rental prices in big cities with strong population growth and short-term supply rigidities in the rental market (Arnott (1995), Malpezzi (2017), Wilson (2017) and Whitehead and Williams (2018)).

Rent controls were introduced in a wide range of European countries during the First World War. In the United States they appeared soon after the country entered the Second World War. In both cases, a large proportion of the workforce was relocated as a result of the war effort, putting pressure on residential rental prices in local markets where industrial activity was concentrated. In this setting, nominal rents were frozen, affecting the bulk of the housing stock, as a temporary measure to ensure affordability. When the Second World War ended, these controls continued in the United States as soldiers returned home to the big cities; they were withdrawn at the end of the 1940s, except in New York City. In Europe, where much of the housing stock was destroyed during the Second World War and had to be gradually rebuilt, residential rent controls with varying levels of cover of rental housing stock remained in place until the 1980s.² These controls mainly affected the older rental housing stock, with nominal rents that were generally set in accordance with different administrative criteria and could not be updated, permitting only periodic (not annual) increases to take into account rising maintenance costs (Arnott (1995), Kholodilin (2018) and Kholodilin et al. (2018)).³

This historical experience in advanced economies, focused on rent controls affecting a large part of the housing stock and imposed mainly by central governments, is known as the *first generation of rent controls* (Malpezzi (2017)).⁴ The fact that these controls continued

2 In Spain, the 1946 Urban Leases Law (LAU) froze rents and established unlimited duration for rental contracts. Previously, rents had been frozen in 1920, in a Royal Decree of 21 June 1920 (known as the Bugallal decree), with a notable impact in city centres (Artola (2012)).

3 Price-setting rules for residential rents were based on different country-specific administrative criteria. For example, some systems calculated a maximum monthly rent according to the estimated value of the property, others took into account benchmark pricing levels according to arbitrary housing types based on physical characteristics of the housing, and in some countries the market price was the starting point, but with no subsequent increases allowed (see, for example, Kholodilin (2018) for a more detailed discussion of types of rent controls).

4 Controls of this kind were also introduced in some big cities in developing economies, where economic activity and population growth are concentrated. See, for example, Turner and Malpezzi (2003) for a review that includes the main rent control experiences in developing countries.

to affect older housing stock meant that dual residential rent markets emerged, in which regulated residential rental prices fell in real terms, compared with the increase in prices in the non-regulated new residential rental market segment.

In the 1970s the *second generation of rent controls* appeared. These controls set limits on *growth* in rental prices, frequently linking them to a cost-of-living index such as, for example, a consumer price index. In consequence, real rental prices were frozen when inflation was spiralling, such as, for example, during the oil shocks of the 1970s. Rent controls of this kind were applied in a good many advanced economies, although with major design differences across countries, including a wide range of update clauses and market coverage levels. In particular, in some countries and cities rents could be updated when there was a change of tenant, while in other jurisdictions limits on rent increases were associated with the rented property rather than with the tenant. In some cases, rental contracts provided for compensation to landlords for rising maintenance costs, while others included guaranteed minimum rates of return.⁵ In addition, these regulations tended to apply to the pre-existing housing stock, but not to rentals in housing built after the regulations came into force. Over time, however, rent controls in some jurisdictions were gradually extended to include the part of the housing stock that was initially excluded. These price controls were first introduced in the main US cities, such as Boston, San Francisco, Los Angeles and Washington, D.C., in response to sharp increases in residential rental prices,⁶ although they spread, in various forms, to many European economies.

The widespread economic deregulation and liberalisation process in advanced economies in the 1980s led to the disappearance of many of the controls on rental prices and the simplification of some of the complex rent update mechanisms. Indeed, in a good many OECD economies, rental regulations either disappeared or were replaced by less far-reaching and administratively simpler measures, such as the *rent stabilisation policies* that limited the maximum increases permissible in residential rentals during the term of the contract (Salvi del Pero et al. (2016), Whitehead and Williams (2018), Wilson and Barton (2019b)). Yet rental price regulations in some residential rental market segments are still in place in economies such as the Netherlands, Denmark, Austria, Luxembourg, Sweden, Germany or the United States (see Table 1). These regulations generally affect older rental housing stock whose tenants have lived in the property for a long time.

In recent years, the strong growth in rental prices in a good many big cities around the world has, in some cases, prompted a resurgence in popular demand for residential rent controls (*The Economist* (2019), Gonçalves (2019) and Whitehead (2019)). Local authorities in some European and US cities, and regional or federal governments with powers over the housing market, have addressed this demand, introducing new regulations that limit

5 Moreover, rent controls of this kind were simultaneously associated with changes in the regulations governing rental contracts that affected their duration or the cases in which they could be terminated. In general, these second-generation rent controls were associated with greater protection for tenants, in the form of longer rental contracts and stricter eviction rules (see section 4.1 for a more detailed discussion of the effects of the design of residential rental contracts).

6 Rent controls of this kind were also introduced in the 1970s in Canada's federal provinces, and in big cities in the US states of California, Massachusetts, New Jersey, New York and Connecticut (Arnott (1995)).

Table 1

RESIDENTIAL RENT CONTROLS

	Control of initial rent levels			Control of rent increases
	Free	Regulated	Both free and regulated	
Australia (a)			x	
Austria (b)			x	x
Belgium	x			x
Canada (c)			x	x
Chile	x			
Czech Republic	x			x
Denmark (d)			x	x
Estonia (e)	x			x
Finland	x			
France (f)			x	x
Germany			x	x
Iceland	x			
Ireland (g)			x	x
Israel	x			
Japan			x	NA
Latvia	x			
Luxembourg (h)		x		
Mexico (i)	x			NA
Netherlands			x	x
New Zealand (j)	x			
Norway (k)	x			x
Poland (l)	x			x
Portugal	x			x
Slovakia	x			
Spain (m)	x			x
Sweden (n)		x		x
Switzerland (o)	x			x
United Kingdom (England)	x			
United States (p)			x	x

SOURCE: The table and notes are drawn from the indicators published in the “OECD Affordable Housing Database” (indicator PH6.1 Rental Regulation), obtained from the “Questionnaire on Affordable and Social Housing” (QuASH) (OECD (2019a)).

- a** Australia: Controls over initial rent levels apply to a small proportion of properties that are owned or operated by community housing providers and state governments. In addition, each state operates differently; some states have introduced tenancy laws to prevent landlords from accepting a higher price than advertised. Regarding controls of increases in rent levels, some states have set a minimum period (between six and 12 months) during which rental prices cannot change, and in some states changes in rental prices must be accompanied by a minimum notice period.
- b** Austria: Rent levels are regulated in the case of old housing stock (about 30% of the private rental market). An increase in rental levels after renovation in the case of existing leases is only possible with the agreement of tenants or following a court decision.
- c** Canada: Rent control legislation varies by province, and some provinces do not have rent controls. For instance, in some provinces (e.g. Alberta) there is no limit on how much rents may increase each year. In Saskatchewan, registered landlords with good standing can increase rent by any amount up to twice a year. In other provinces there are limits on how much rent can be increased for sitting tenants, but in some of these regions only some of the rental supply is rent controlled, and the proportion that is rent controlled is subject to frequent changes. In the province of Ontario, rent control was extended to all the private rental supply in 2017. Prior to that change, only housing built before 1991 was subject to rent control. However, in November 2018, new housing was exempted from rent control. In provinces with rent control, landlords are prohibited from increasing rent by more than a certain amount each year, unless the property is vacant.
- d** Denmark: There are different types of rent regulation, covering a very large share of rental housing. Only in new rental housing is rent unregulated since 1991.

Table 1

RESIDENTIAL RENT CONTROLS (cont'd)

- e Estonia: Rents may be freely negotiated. If rent increases are considered excessive they may be contested by tenants before the lease committee or through the courts.
 - f France: Regarding controls on initial rent levels, Article 140 of the 2018 ELAN Law authorised some urban agglomerations to pilot a rent control measure for five years, whereby initial rent levels are set within a benchmark range (with some exceptions). With respect to controls on increases in rent levels, in certain agglomerations experiencing a tight housing market, in the case of new leases or renewals of leases, the last rent paid by the tenant can only be increased based on a fixed rate benchmark index for rent (unless the landlord has made improvements in the dwelling, in which case the rent may be increased by up to 15% of the total cost of the improvements).
 - g Ireland: In 2016 the government introduced the Rent Predictability Measure and designated Rent Pressure Zones (RPZs). Rents in these zones can only rise by a maximum of 4% per annum for a period of three years. Rent reviews outside of RPZs are restricted so that a landlord can only review the rent once in any two-year period. However, similar to within RPZs, where works are carried out to effect a substantial change in the nature of the accommodation provided under tenancy, a landlord may subsequently set a new rent. The existing requirement that the initial rent set is not above the market rents for similar properties still applies both in designated RPZs and in non-designated areas. The Residential Tenancies (Amendment) (No. 2) Bill 2018 amended the rent increase restriction and associated exemptions (including in connection with new rental properties).
 - h Luxembourg: By law, the annual rent cannot exceed 5% of the capital invested in the rental dwelling (cf. Law of 21 September 2006 on rental contracts).
 - i Mexico: Control of both initial rent levels and subsequent rent increases varies across states.
 - j New Zealand: Section 25 of the Residential Tenancies Act allows tenants to apply to the Tenancy Tribunal for an order reducing rent if it substantially exceeds market rent.
 - k Norway: Rent levels can be freely negotiated, but the Tenancy Law establishes that rent cannot be unreasonable.
 - l Poland: There is no administrative control on setting rent levels, but tenants may challenge rents through the courts if the annual rent increase rate exceeds 3% of the replacement value (there are a few exceptions to justify such a price increase).
 - m Spain: Rents can be freely determined by landlord and tenant; however, for a period of five years (or seven years if the landlord is a legal entity), they cannot be increased annually by more than the change in the general price index.
 - n Sweden: Landlords and tenants are free to agree on any rent level, but both parties may go to the Rent Tribunal to have the fairness of the rent tested. Under the Swedish system, rents are set mainly through collective bargaining at the local level and in most instances the parties have developed systems to value the different qualities of dwellings. If the fairness of a rent for a particular dwelling is challenged, the Rent Tribunal analyses the rents for similar dwellings for which the rent has been set by collective bargaining. There are no formal controls on rent increases, but most rents and rent increases are the result of collective bargaining and rents may always be challenged through the Rent Tribunal.
 - o Switzerland: Rents can be freely negotiated, but once the contract is binding any changes in rent levels are subject to rent controls.
 - p United States: There are rent control and/or rent stabilisation regulations in a few major cities.
- NA = Not available.

the maximum permissible growth of residential rental prices, and in some cases even set maximum prices. In general, these regulations do not affect the rental housing market overall, but just certain market segments. In particular, regulations have been introduced that place caps on rental prices in areas where they are considered to be tight, in accordance with certain administrative criteria. At the same time, in some jurisdictions limits have been placed on rental prices or on their annual growth, by type of rental housing. Such measures have been adopted mainly in Germany, the United States and France.

Germany provides the most interesting recent experience of caps on rent increases in Europe, on account of the relative importance of its residential rental market – around 50% of households (Eurostat (2019)) – and also the broad range of regulatory experience it has accumulated in its endeavour to contain rents. The significant increase in residential rents in Germany since 2010 is largely owing to the higher degree of concentration of economic activity and migration flows in its biggest cities (Mense et al. (2017)).⁷ In this setting, in June 2015 a new policy instrument – the *Mietpreisbremse*, discussed in more detail below – was introduced at the federal level, explicitly designed to curb the growth in residential rental prices. The new legislation empowers federal governments (*Länder*) to allow their municipal

⁷ According to Mense et al. (2017), between 2010 and 2016 average rents in Germany rose by more than 25% in real cumulative terms, after a long period of stagnation in rental prices.

councils to set price controls in tight residential rental markets over a maximum period of five years.

The German regulations provide that local authorities may consider markets to be tight if they satisfy any one of the following criteria: i) average rents in the local market are growing faster than the national average; ii) the average rent-to-income ratio at the local level is significantly higher than the national average; iii) the rate of growth of the local population outpaces the capacity to build sufficient new housing to absorb the rising housing demand; or iv) the municipality has a low vacancy rate and high housing demand. Since this system was introduced in June 2015 it has been adopted by eleven *Länder*, affecting some 300 municipalities, with more than 20 million inhabitants, and 25% of the national housing stock (Mense et al. (2017)).

In order to curb rent increases, rents in new contracts are capped. The price cap applied depends on past growth in rents in the local market. Specifically, the maximum rental price set is the average rent for comparable rental housing in the municipality over the last four years plus 10%. These average annual rents are obtained using a *mirror* system – the *Mietspiegel* – which estimates average prices of housing with comparable characteristics in a specific local market.⁸ The main aim of this instrument, against a backdrop of rising rents, is to slow down the upward momentum of rental prices.

New rental contracts for housing in properties built since 1 October 2014 are excluded from this system. Also excluded are the first rental prices agreed after a rented property has been extensively renovated (understood to be when the cost of the renovation work is more than one-third of the cost of rebuilding the property).⁹ These exemptions are intended to ensure that residential investment in the construction and renovation of housing for rental is not discouraged.

However, in spite of this mechanism designed to limit growth in rental prices, access to rental housing is still problematic in some of Germany's most dynamic cities. These problems are particularly relevant in Berlin, which attracts a large portion of the migration flow and where housing production is unable to absorb the growth in demand (Mense et al. (2017), Observatori Metropolità de l'Habitatge de Barcelona, OHB (2019)). In this setting, the federal state of Berlin has approved new legislation which, as from 2020, sets a price cap on residential rentals and freezes rents for five years. This measure affects almost 1.5 million housing units. The new regulations – *Mietendeckel* – establish a benchmark price (in €/m²) that rental contracts for

8 The mirror system has been used in Germany since the 1970s as a customary benchmark for updating rental prices initially agreed between parties. It calculates benchmark rental prices for comparable housing in a specific municipality, drawing on information supplied by landlord and tenant associations on characteristics of rental housing (typology, size, quality, features, location, energy classification) and rental prices over the last four years. This indicator should be updated at least every two years and is available for almost 300 municipalities that account for a large share of Germany's main residential rental markets. If this comparison is not available, a local expert may be consulted or the rent agreed in three comparable housing units located in the same area may be used.

9 In addition, if the price set in a rental contract entered into before the regulations came into force is higher than the maximum price deriving from application of the Mietpreisbremse, landlords may maintain that price in successive rental contracts.

housing built before 2014 should not exceed. The rents may be updated as from 2022, in accordance with the consumer price index. Tenants will be able to seek a reduction in their rent if it is higher than the maximum benchmark price; rents that are more than 20% higher than the benchmark level will be considered abusive. The maximum benchmark price is only higher in certain cases of prime housing or housing located in certain areas of the city. The regulations also include clauses that allow rents to be updated if significant renovation work or maintenance is performed on properties, permitting a maximum of €1/m² to be added to the maximum benchmark price, subject to prior approval by the authorities. The new regulations aim to be more effective than their predecessors, as they include heavy economic sanctions on landlords who set abusive rents significantly above the maximum regulated price. This contrasts with the lower effective level of control of the regulations applicable in Germany overall, which are enforceable by civil law (Mense et al. (2017)) and are not subject to administrative enforcement and possible sanctions as the Berlin regulations are.

In the United States, new measures have been introduced to limit *growth* in residential rental prices, in some cities and in the states most affected by rising rents and with greater problems of access to housing. This is a broad range of measures, with numerous particularities associated with the local property markets, but the new rent controls generally set caps on growth in rental prices. These regulatory limits are generally above inflation, thus permitting real growth in rents, but below the rate of growth observed in the rental market when the regulations come into force. In addition, only apartments in multi-family housing of a certain age are generally affected, and the limits apply to existing rental contracts. In some cases, however, the price caps apply to most of the residential rental market, with exemptions for certain very specific types of housing, and the limits relate to the rented properties rather than their tenants.

Specifically, in the case of California, state legislation sets a cap on rent increases of 5% per annum plus inflation from 2020 and for a period of ten years. The legislation affects housing built more than 15 years ago but single-family homes owned by small landlords are exempt. If the rental housing is owned by corporations or institutional investors, rent controls are not dependent on the age or size of the property. In the state of Oregon, the regulations, which cap the annual growth rate of rental prices at the consumer price index plus 7%, apply to the whole of the rental housing market. These state regulations overlap with specific local regulations. For example, in the city of Los Angeles the regulations limit growth in rents to between 3% and 4% for housing units that are not single-family homes and were built before October 1978. In the city of San José, maximum annual growth in rents is set at 5%, while in Washington, D.C. it is limited to 10% per annum.

In the case of New York City, in 2019 as rent controls expired they were extended.¹⁰ These controls restrict rent levels in older housing.¹¹ In particular, they also limit maximum

10 New York City has maintained rent controls (on price levels and increases) since the 1940s, extending the level of cover and scope and adapting their specific scope. For details of the main regulations and changes over time, see Furman Center for Real Estate and Urban Policy (2011), Collins (2014) or New York City Rent Guidelines Board (2019).

11 Controls on rent levels are gradually being phased out, as they apply to housing in properties built before February 1947 and to housing that has been occupied by the same tenant since before 1 July 1971.

increases in rent renewals according to the duration of contracts and maximum increases in rents when there is a change of tenant and when the property is renovated. These regulations apply to all buildings with six or more housing units built between 1947 and 1973. The limits on rental price increases also apply when there is a change of tenant in housing that was subject to limits on price levels. It is estimated that these policies capping growth in rents affect more than one million housing units and around 50% of the city's residential rental market.¹² According to available estimates, in 2011 regulated rents amounted to 75% of the median free-market rent per month (50% in the Manhattan district) (Furman Center for Real Estate and Urban Policy (2011)).

In France, there has been a mechanism in place for automatic update of rents in existing rental contracts, and in renewals, since 1989. It is linked to a rental benchmark index – the *Indice de Référence des Loyers* (IRL) – which moves in line with the cost of living and has been linked since 2006 to the consumer price index excluding rentals and tobacco products (OHB (2019)). However, despite these limits on rent increases, the high rental prices in France's large urban concentrations gave rise to additional measures. In particular, in 2012 a set of municipalities (including the Paris agglomeration) activated a clause, included in the law that regulates the French rental market since 1989, which allowed rental prices for new tenants to be linked to the rent set in the previous contract, and rent increases in tight rental housing markets to be tied to the IRL. In 2014, the *Alur Law* (*Accès au Logement et à un Urbanisme Rénové*) introduced the possibility of capping rent levels, allowing ceilings to be placed on rents in cities where the rental housing market was under severe pressure. A price limit was set in relation to benchmark indices per m² by type of comparable housing and location; the limit was 20% over the median rent observed among the stock of comparable rental housing in a specific area. However, there were exceptions to these rules; for example, having a swimming pool, a concierge or a garden in some cases exempted housing from the regulations, thus making them less effective. The system was only applied in the cities of Lille and Paris, until November 2017 when the Paris Administrative Tribunal stayed the regulations, indicating that they could not be applied solely to the municipality of Paris but not to the agglomeration. In summer 2019 the *Elan Law* (*Évolution du Logement, de l'Aménagement et du Numérique*), approved in 2018 and validated by the French Constitutional Council, came into force. It again provides for capping of rent levels and will remain in force until 2023 when its effectiveness will be assessed. Cities that wish to apply the regulations will limit rent increases to 20% over an average benchmark price, to be determined according to the location or quality of the property, the number of rooms or the year of construction, among other variables. These rent controls affect new rental contracts, including previously rented housing and first-time rentals, and also future renovations. In terms of efficiency of implementation, the law introduces sanctions for landlords who do not comply with the regulations.

12 For instance, the New York City Rent Guidelines Board which sets the maximum allowable increase in rental prices has established for the period 1 October 2019 to 30 September 2020 a maximum increase of 1.5% (2.5%) for renewals for one year (two years). This compares with allowable increases of 4% (7.75%) for 2014, reflecting how the regulations have been tightened in recent years. In the case of a change of tenant, the regulations allowed a premium of 20% on the previous rent. In June 2019 new restrictions and conditions were introduced that limit the application of premiums for change of tenant or renovation of housing.

In Spain, the first-generation rent controls, introduced in 1946, were phased out as from 1985 following approval of Royal Decree Law 2/1985.¹³ Under these regulations, new rental contracts could freely establish prices and duration and mandatory extensions of contracts were eliminated. This measure created a dual system between new rents and pre-existing ones, which became known as “old rents” (*alquileres de renta antigua*) as they were set at prices significantly below market. In order to reduce market segmentation, the new 1994 Urban Leases Law (Law 29/1994) established mechanisms that would move these “old rents” closer to market rents, while the CPI was set as the benchmark index for maximum updates of rental housing prices during the first four years of rental contracts. In 2013, Law 4/2013 on measures to promote the residential rental market and make it more flexible dispensed with the maximum update clause linked to the CPI.¹⁴ The recent Royal Decree-Law 7/2019 returns to a rent stabilisation policy for existing rental contracts, establishing the CPI as the mandatory benchmark index for maximum annual rent updates.¹⁵

Among the European economies that apply controls on rent levels, the Netherlands and Sweden stand out.¹⁶ In the Netherlands, both private and social rental market prices are regulated by a points system that proxies the quality of the property. Specifically, points are assigned mainly according to the size and location of the rental housing, its physical characteristics and features and its surrounding environment (for example, close to transport or shops). The number of points assigned determines the maximum monthly rent. There is a points threshold which establishes the maximum rent permissible; prime rental properties are excluded.¹⁷ Once a rental housing contract has been signed, tenants have six months within which to file a complaint about the amount of rent they are paying to the Rent Tribunal (*Huurcommissie*). The Tribunal also settles disputes between landlords and tenants relating to maintenance of rental housing and the services charged to each party.

In Sweden regulated rental prices apply to the market as a whole, with free agreement between landlords and tenants subject to a collective bargaining process at the municipal level. Representatives of the Swedish tenant unions, the municipal housing associations and representatives of private landlords participate in this process. Each year,

13 Commonly known as the Boyer Decree, after the Minister for Economy of the time.

14 Law 4/2013 also provided that if no criterion for annual rent update was agreed between landlords and tenants, the CPI was to be used to automatically update the rent each year. Under the previous legislation (Ley 24/1994), in the absence of express agreement between the parties, rents were not updated throughout the life of the contract.

15 The maximum duration of rental contracts is set at five years when the property is owned by an individual and seven years when it is owned by a legal entity.

16 A more detailed discussion of the rent controls in place in various countries can be found in Whitehead et al. (2012), OECD (2016), Salvi del Pero et al. (2016) and Whitehead and Williams (2018).

17 The maximum rent in 2019 was €720 per month. Properties whose points carry them over the maximum rent threshold are exempt from regulation. It is estimated that more than 70% of private market rentals are still regulated based on this points system. In recent years rents have gradually been deregulated: for instance, by modifying the points threshold to narrow the scope of the regulations affecting prime property or higher income households. These changes have been made as a result of the problems detected relating to the emergence of black markets or inefficiencies in how rental prices are set.

a benchmark rental price is set for different housing types with equivalent *utility values*,¹⁸ together with the maximum rent increases permissible. Landlords and tenants may freely agree the initial rental price, but if tenants consider that the rent is too high compared with the benchmark price estimated in the collective bargaining process for properties with an equivalent utility value, they may raise the matter with the regional rent tribunal. This system is used to set rental prices in 90% of rental housing; the prices agreed for the rest of the rental housing stock are below the benchmark level agreed in the collective bargaining process.

2.2 Effects of controls on residential rental prices

The specialist literature contains arguments justifying the introduction of rent stabilisation policies on account of the possible gains in social well-being stemming from the guarantees that these policies provide to tenants. The gains would be particularly significant in cases where residential rental markets are not highly competitive and policies favour low-income tenants (Arnott (1995) and Favilukis et al. (2019)). At the same time, various authors emphasise that residential rent controls may create certain inefficiencies in the housing market, with potentially adverse effects for social well-being (Glaeser and Luttmer (2003), Glaeser and Gyourko (2008) and Bulow and Klemperer (2012)). This section analyses the theoretical channels that may affect social well-being and the evidence available on the effects of residential rent controls.

Insofar as the possible costs of rent controls are concerned, although these policies bring about an immediate improvement in the social well-being of the tenants affected, the change in incentives caused by the regulations trigger responses on both the supply and the demand side that may give rise to a loss of social well-being in the medium and long term. In particular, according to economic theory, if regulated residential rents are set at sub-market price, the supply of rented accommodation will shrink. This is because landlords would have a greater incentive to sell their properties, and because investment in the construction or renovation of properties for rental would fall. At the same time, the resultant decline in the net return on investment in rental housing would entail a drop in property maintenance and renovation expenses, and thus would lower the quality of the property over time. Moreover, there could be further efficiency losses if the regulations gave rise to a dual residential rental market where, for example, in different areas of the same city rent-controlled properties co-existed with free-market rentals.¹⁹ In particular,

18 Benchmark rental prices are established based on a set of variables that reflect the utility value assigned to properties by tenants (see, for example, Whitehead et al. (2012)). Specifically, the collective bargaining process sets prices, taking into account the geographical location and quality of the property, its position within the building and the quality and assessment of the surrounding area. Whether or not the property is a new-build may also be considered, so as to incorporate the construction cost or the land value as correctly as possible into the price.

19 For example, Chapelle et al. (2019) develop a model that examines the general equilibrium effects in a residential rental market with a dual price-setting system and geographical segmentation of rented housing. The model analyses the spatial misallocation of resources created by the regulations and the resultant increase in households' transport costs. It is calibrated for the city of Paris and shows that the regulations drive up rents in unregulated areas where economic activity and labour demand are concentrated. At the same time, in view of the existence of labour market friction, a good many workers live in peripheral areas with low, controlled rents but they bear higher transport costs, which may be mitigated by improvements in urban transport infrastructures.

in segmented rental markets, tenants may have an incentive to remain in properties with regulated rents that are below market price. This detracts from worker mobility and creates negative externalities, artificially concentrating the population in certain areas of the city and prompting a misallocation of the housing supply. Specifically, the possible loss of regulated housing were they to move would lead households that are growing (shrinking) in size to remain in small (large) housing units, thus creating inefficiencies in the allocation of the rental housing stock. Moreover, the decline in the return on investment in rentals and the segmentation of the population may reduce the aggregate value of real estate assets in a rent-controlled market. Lastly, a drop in the aggregate supply of residential rentals would tend to drive up rental prices in the non-regulated market segments. This effect could be particularly pronounced in cases where demand is growing and rental housing is in quite short supply.

Conversely, there are also theoretical arguments advocating that regulations that cap rent increases may be potentially beneficial for social well-being (Arnott (1995) and Favilukis et al. (2019)). These arguments are based on the non-competitive nature of the rental market in cases, for example, where landlords are able to set rental prices, where searching for rental housing is costly and where there are no guarantee mechanisms for tenants regarding future price moves. Specifically, social well-being gains will arise when regulations on rent increases provide a guarantee for tenants, compared with an asymmetrical contractual relationship in which moving is costly for the tenant and the landlord has market power. Likewise, an automatic rent update mechanism over a specific period reduces uncertainty for tenants insofar as employment and consumption decisions are concerned. In addition, regulations that limit rent increases are justified in the presence of positive externalities associated with the build-up of social (community) capital by households in their neighbourhoods.²⁰ For instance, the possibility of a sharp unexpected rise in rents would discourage households from investing in a community in case they then had to move, and if they were to move the social capital built up would be reduced.

In a recent paper, Favilukis et al. (2019) examine the gains in social well-being stemming from guarantee mechanisms, in the framework of a spatial model that quantitatively assesses the effects of policies that provide rental housing at sub-market price. They also identify the settings in which these policies bring about such gains. Specifically, despite possible rental market distortions, redistribution policies in the form of rent controls can generate gains in social well-being in the face of price increases when rent caps are concentrated on households at the lower end of the income distribution. In metropolitan areas where household income inequality and polarisation are high, rent controls are a guarantee mechanism in a setting where rents may increase at an uncertain pace over time.

20 The urban economic literature considers the build-up of social capital by households as a key factor in the development and well-being of a city. Social capital stems from family networks and personal relationships and from the proximity of housing to household members' employment or schools. Social capital reduces households' geographical mobility (Kan (2007)).

In this case, these gains could offset the social well-being losses stemming from spatial misallocation of housing among households or inefficient sectoral location of employment as a result of price controls.²¹

An empirical analysis of the impact of the regulations on *levels* of rental prices is in line with the theoretical forecasts on the negative effects of the regulations. The assessments available focus on the experience of a number of major US cities and coincide in showing the adverse effects of rent controls. For example, Diamond et al. (2019b) show how rent control policies in San Francisco reduced the supply of rental housing and altered its composition, contributing to an increase in rental prices and to gentrification and greater income inequality at the local level. Specifically, rent controls were effective in the short term in limiting house moves among lower-income households, especially among racial minorities, reducing mobility among residents in rent-controlled districts. However, in the medium to long term, the response by landlords prompted a fall in the supply of rental housing for low-income households. In particular, as a consequence of the regulations, growth was observed in the construction of dwellings for households with higher purchasing power, in housing renovations (to escape the scope of the regulations) and also in housing sales. Overall, the policy would appear to have created greater population segmentation and to have reduced the supply of rental housing, contributing to the increase in rental prices in the city.

Analysis of the effects of price controls in Cambridge (MA) and in the metropolitan area of Boston shows the efficiency losses created by the regulation of prices and the social well-being gains stemming from the subsequent disappearance of rent controls (Sims (2007) and Autor et al. (2014) and (2019)). This evidence shows how rent controls significantly drove down the value not only of the rental housing itself but also of the properties and facilities of the neighbourhoods where the rent-controlled housing was concentrated. Moreover, when the rent controls were lifted, residential investment in the deregulated areas increased, contributing to the decrease in their crime rates.

In Europe, the empirical analysis of the impact of rental price controls focuses on the recent introduction of the system to curb rental prices – *Mietpreisbremse* – in Germany. Mense et al. (2017) investigate the impact of the regulations, both on the price and the supply of rental housing, using the time and spatial variation stemming from the sequential adoption of the system by a set of German municipalities as from June 2015. In particular, the analysis uses the variation generated by the exemption from the regulations of housing built after October 2014. The findings show that this policy gave rise to a fall in rental prices in the regulated segment, while the controls led to a significant increase in residential rental prices in the non-regulated market segments. They also show that the increase in non-

21 The model, which is calibrated for the metropolitan area of New York, assesses the effects of a broad set of housing affordability policies on rental housing prices and volumes, spatial distribution of households and income inequalities within and across neighbourhoods. The housing affordability policies considered also include regulations affecting urban land use and the availability of new housing, demand subsidies and incentives for real estate developers.

regulated rents gave rise to an inefficient allocation of households, resulting in a loss of social well-being.²²

Mense et al. (2019) also present evidence of the impact of the rental housing regulations in Germany on the price of development land in the municipalities that adopted the *Mietpreisbremse* system. Housing built after October 2014 was exempt from the regulations, so as not to discourage investment in new rental housing. Using the time variation in the adoption of the regulations and the stock of new housing in the municipalities of the state of Bavaria, Mense et al. (2019) show how, in the municipalities that adopted the regulations, private sector investment in the construction of new housing exempt from the limitations increased. Specifically, it is estimated that the price of land rose by more than 16% in the short term, and that the rental price of the non-regulated new housing rose by around 2%-3%. These findings are consistent with greater expectations of future private sector profit in the non-regulated new rental housing segment.

Moreover, the practical difficulties detected in rent controls in the recent European experience (mainly in the urban concentrations of Paris and Berlin) show how these regulations face major challenges both of design and implementation. These challenges notably include: i) difficulties in objectively defining comparable housing to be used to build benchmark prices in a municipality or regulated area; ii) how to precisely define a tight residential rental market; iii) the inevitably arbitrary nature of thresholds set on rental prices and of the methodologies used to set limits on the levels and rates of growth of these prices; and iv) the administrative difficulty of monitoring how the regulations are applied to a large rental housing stock, and the cost of effective enforcement of the regulations and imposition of sanctions. In general, these difficulties have resulted in increased litigation between landlords and tenants and require efficient legal and/or arbitration systems to ensure the correct functioning of the market.²³

22 The empirical analysis also reveals an increase in demolitions of small old housing units. This could be the result of a supply-side response, intended to encourage the construction of new residential housing exempt from the regulations.

23 In the case of Germany, for example, the effective implementation of the regulations is considered to have been poor, as there are no controls or direct administrative sanctions in place, with tenants whose rents do not comply with the regulations having to go through the civil courts.

3 Direct supply-side policies: public provision of rental housing at regulated prices

In the case of residential rental housing, direct supply-side policies have often been justified by the greater efficiency that concentrating on the causes of sharp increases in rental prices entails. Specifically, in line with this argument, in a setting in which there is a relative shortage of available rental housing in local markets with rising demand, an increase in the public provision of rental housing that would contain the upward price momentum would be justified.

3.1 Public provision of rental housing in advanced economies

Public provision of rental housing may be made through a broad range of instruments and levels of public sector participation, according to criteria set by general government on the volume and characteristics of the new supply of rental housing and on how it is allocated to eligible households.²⁴ For example, these measures may entail the creation of public housing stock in which the volume and type of rental housing is determined on a periodic basis. This housing stock may be managed and maintained directly by the public sector, or this function may be assigned to the private sector in accordance with certain criteria set by general government. Alternatively, the public sector may introduce tax incentives and subsidies for the private sector to build and maintain a certain volume of rental housing over a certain period and to assign the housing to tenants according to certain rules. In particular, direct subsidies or tax credits may be given to real estate developers that allocate a proportion of their new or renovated housing for rental, according to certain allocation criteria.²⁵ In addition, the public sector may implement financial support policies that include granting low-cost loans or providing guarantees for developments that reduce the private investment risk in residential rentals. Lastly, the regulations may consider assigning public land to the private sector at low cost, with the condition that it be used for rental housing developments. Or they may require that the private sector assign urban land, or a proportion of housing units in private sector developments, to increase the regulated rental housing stock.²⁶

The criteria for allocation of rental housing are generally based on household income levels, granting priority to those groups at most risk of social exclusion and with most difficulties as regards access to housing. In particular, the international evidence shows that the eligibility criteria for public rental housing are generally based on household

24 The public nature of provision of a good stems from its allocation to consumers according not to market criteria but to criteria set by public regulations. The good supplied need not necessarily be publicly produced or financed, nor publicly owned (Atkinson and Stiglitz (2015)).

25 Direct public sector intervention is significant in eastern European countries, Japan and Norway. In the Netherlands, Denmark and France, social rental housing developers are generally non-profit institutions. In Austria and the United Kingdom, the non-profit sector develops a large portion of social rental housing in conjunction with local authority landlords. In the United States and Germany, public sector-regulated rental programmes and developments are carried out mainly by the private sector (OECD (2016)).

26 In some cities where housing is relatively scarce, regulations have been approved requiring that developers allocate a proportion of their dwellings to low-cost rentals (for example, in New York, Paris and London).

income thresholds and on not owning another available dwelling. Some public provision programmes apply broader eligibility criteria, so as to avoid creating pockets of social exclusion or marginalisation concentrated in geographical areas where public rental housing predominates (Collinson et al. (2016)). In addition, further criteria are often set to prioritise the group of eligible persons (OECD (2016) and (2019a)). For example: addressing households living in high-density buildings or low-quality housing; including allocations to certain racial or ethnic minority groups to enhance their integration in the community; or prioritising age groups – such as the young and the old – that are especially vulnerable to high rental prices on account of the effect of the income lifecycle (as in Japan). By contrast, in some countries the public rental housing stock is broader, benefitting a wide section of the population (for example, in the Netherlands, Denmark, Sweden and Austria).

The total cost of public rental housing is generally funded via a combination of budgetary resources and tenants' rent payments. The public funds take the form of direct or implicit expenditure through guarantees or lower tax revenue stemming from tax incentives or subsidies. Tenants' contributions are made through regulated rental prices that are usually significantly below market price. These regulated prices help fund the cost of maintaining and managing public rental programmes. As regulated rents are set below market price, these policies are generally classed as social rental programmes.

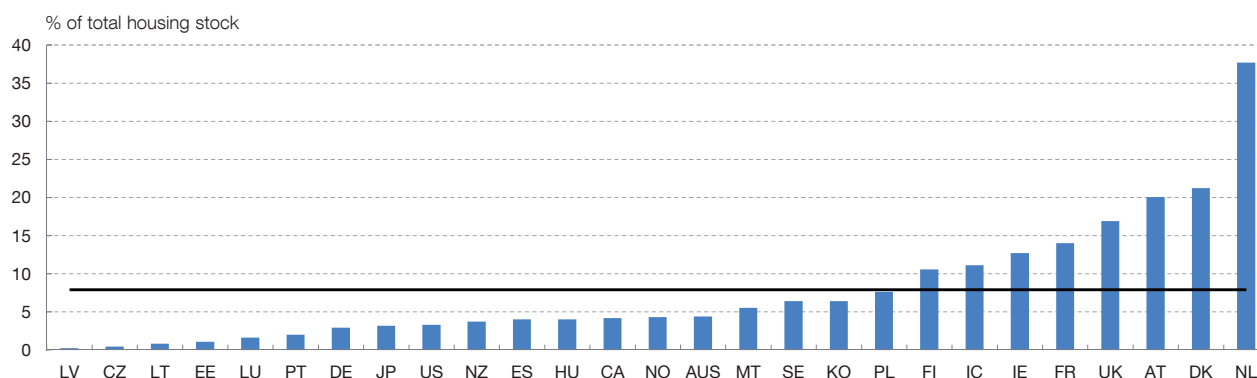
International experience of regulated rents shows how distributive and budgetary incentives coexist in how regulated prices are set. One alternative consists in setting prices according to the cost of purchase or renovation of the rental housing, aiming to cover the cost of maintaining and managing the housing stock (as, for example, in Austria, Denmark, Finland or France). Regulated prices by type of housing may also be adjusted according to the income level of the beneficiary households, aiming for a more progressive redistribution policy (as in the United States, Japan, Ireland or Luxembourg). Social rentals may also take into account the characteristics of the rental housing, such as size, features or location (as in the Netherlands or the United Kingdom). Lastly, rental prices may be capped, aiming to improve and/or facilitate access to housing, and at the same time to impact private-sector rental prices (as in the Netherlands or France). The information available on this impact shows that public sector-regulated rents average 80% of the market price in Austria and Finland, around 60% in France and the United Kingdom and 40% in Luxembourg (OECD (2016)).

The scale of these policies has been significant in many advanced economies (OECD (2019a)). In particular, in 2018, social rental housing accounted for 14% of the total housing stock in France, 16.9% in the United Kingdom, 20% in Austria, 21.2% in Denmark and 37.7% in the Netherlands.²⁷ At the same time, in the largest OECD economies such as

²⁷ In addition, public provision of rental housing is especially significant in some of the main European cities. In Vienna, for example, social rentals account for 60% of the rental market and for some 40% of the residential housing market (owner-occupied and rental housing). In Amsterdam and Rotterdam, public provision of rental housing accounts for more than 50% of the residential housing market (IMF (2014)).

Chart 1

SOCIAL RENTAL HOUSING IN OECD COUNTRIES (a) (b)



SOURCE: OECD, "Affordable housing database" (OECD (2019)).

a Data for 2018 or the last year with data available (for more details, see OECD (2019)). The horizontal line denotes the arithmetic mean of the countries with data available.

b Includes all non-market rental housing at below market price, especially public sector-regulated housing and dwellings transferred from the private sector. In the case of Spain in 2018, according to the Living Conditions Survey (INE, 2019), 2.7% of the population was living in rented accommodation at below market price and 6.4% in dwellings transferred from the private sector.

the United States, Japan and Germany, public provision of rental housing accounted for some 3% of total housing²⁸ (see Chart 1).

In Spain, scant resources have been allocated to the public provision of rental housing. Instead, budgetary efforts have been concentrated on public funding of owner-occupied housing, at below market price, through the government-sponsored housing programmes (VPO, by their Spanish name).²⁹ In recent years there has been a shift in this public housing policy stance, affording greater importance to social rentals.³⁰ For instance, subsidies available to developers of low-cost rental housing have been extended. These subsidies apply both to development and renovation of housing and are conditional on tenants' income and the rental prices charged being below a certain level. These thresholds are intended to ensure that lower income households have priority, and to reduce the high financial burden, relative to their income, that access to housing entails. In this shift towards granting more importance to the public provision of rental housing, the experience of the Basque Country stands out. Over the first decade of the new century, the Basque regional government built

²⁸ The estimates available for Spain suggest that social housing accounted for 4% of the total housing stock in 2018 (OECD 2019a)). This figure includes all non-market rental housing at below market price, especially public sector-regulated housing and dwellings transferred from the private sector. According to the Living Conditions Survey (LCS) of the Spanish National Statistics Institute (Instituto Nacional de Estadística (2019)), in 2018, 2.7% of the population was living in rented accommodation at below market price and 6.4% in dwellings transferred from the private sector.

²⁹ Over the period 1995-2012, these house-building programmes contributed more than 60,000 dwellings in annual average terms. According to the data on VPO developments, over the period 2005-2012 only approximately 20% of these were rental housing (López-Rodríguez and Matea (2019)).

³⁰ Housing policies are enshrined in the State Housing Plan, which sets out the framework for action, the main policy objectives, the eligibility requirements for public subsidies and a large portion of the budgetary funding. These policies are implemented mainly by regional and local authorities with powers over housing.

up a stock of public rental housing, comprising not only publicly-owned housing but also privately-owned rental housing managed and controlled by the public sector in exchange for certain considerations (fixed rents, contingency insurance). The regional government's housing stock, together with that of its main municipal authorities, currently consists of more than 18,000 dwellings and accounts for around 1.5% of the region's total housing stock. It also represents a very considerable proportion – estimated as around 40% – of the region's new housing supply in 2018 (Gobierno Vasco (2019)). Social rental prices are set below market price, with the commitment not to exceed 30% of household income, and social housing is assigned according to the residence or income level of the applicant household.³¹

3.2 Effects of public provision of rental housing

Policies for the public provision of residential rentals in advanced economies during the second half of the 20th century were effective in increasing the supply of rental housing at a reasonable cost for lower-income households (Salvi del Pero et al. (2016) and OECD (2016)). However, international experience also shows how complex these policies are, in terms of their specific design and implementation and the budgetary challenges they pose. These challenges and complexities explain the relative narrowing of the scope of these policies and the decline in the resources allocated in advanced economies over the last two decades (Whitehead et al. (2012) and OECD (2019a)).³²

Building up and maintaining a public rental housing stock is a costly policy, requiring the continued input of public funds or cuts in other expenditure items. This high cost is one of the main reasons for the decline observed in recent decades in some OECD countries where intensive use had been made of these policies, as for example in the United States or Germany. In the United States, the high cost of maintaining an ageing housing stock was deemed to be a key factor in the demolition of more than 300,000 social rental housing units over the last 20 years (Collinson et al. (2016)). In Germany the social rental housing stock has gradually been reduced, largely owing to privatisation of the existing public housing stock, and to the regulations that allow privately-owned social rentals to shift to market-price rentals after 20 years of regulated prices (Pestel Institut (2012) and OECD (2016) and (2019a)). In addition, low-quality social rental housing has been demolished and has not been replaced, owing to the low volume of new regulated rental housing projects developed by the Länder, which have held this power since 2006.

In addition, one of the main unwanted effects that limit the efficiency of the public provision of rental housing is the possible crowding-out effect. Growth in the supply of lower-

31 This housing policy continues to be reinforced, with sizeable developments in progress, broadening of eligibility requirements and budgetary funding that point to significant growth in social rentals in the Basque Country in coming years.

32 For example, evidence in the EU28 shows a decline in the share of public sector-funded low-cost rental housing, in parallel with the notable increase in the share of the population living in rental accommodation in the last decade (López-Rodríguez and Matea (2019)). In the European Union as a whole, the share of the population living in low-cost rental housing fell from 14.6% in 2007 to 10.7% in 2017. During that period, the share of the population living in market-price rental housing rose by 7.5 pp in the European Union and by 7.7 pp in the euro area. Among the large EU countries, the increases in the United Kingdom (8.7 pp), Italy (5.8 pp) and Spain (4.6 pp up to 2018) stand out.

cost rentals may discourage private sector property developers and owners from placing new housing on the rental market, thus limiting growth in the aggregate supply of residential rentals. Sinai and Waldfoegel (2005) present evidence of this for the United States, estimating that two-thirds of the private sector supply of residential rentals have been crowded out on average as a consequence of the public provision of social housing programmes. This effect was particularly significant in metropolitan areas where a decline in residential rental demand was detected.

Also, depending on how the specific policy is designed, public provision of rental housing may cause inter-generational inequality problems and may have dissuasive effects on beneficiaries. Specifically, assigning regulated rentals to households with initially low income levels would cause inter-generational equality problems if this was an indefinite arrangement and not conditional on how their income level evolved over time. Moreover, making rentals conditional on income levels not crossing certain thresholds could discourage beneficiaries from reporting increases in their income, owing to the opportunity cost that losing access to the housing would entail (Andrews et al. (2011)). Lastly, the economic literature has highlighted the efficiency costs associated with the public provision or direct subsidisation of consumption of certain assets for redistributive reasons. Specifically, the public provision of housing is an inefficient redistribution policy, compared with a policy of unconditional cash transfers (for example, subsidies or tax relief on income not linked to consumption) that would allow beneficiaries to adjust both their consumption basket (for example, between housing and all other goods) and their labour supply according to their individual preferences (Currie and Gahvari (2008)).

The challenges and problems stemming from policies for the direct public provision of residential rentals explain the gradual shift away from direct public sector intervention and towards a greater emphasis on policies that encourage private sector rental housing developments. Thus, the public sector would allocate funds to foment the private sector supply, making this assistance conditional on certain criteria being met as to allocation of the housing and rental price levels. One paradigmatic example of this type of measures is the Low Income Housing Tax Credit (LIHTC) programme in the United States. Since 1986 this programme has made tax credits available to real estate developers that build or renovate rental housing for low-income households.³³ Although the public sector does not set the exact volume or the rental prices, federal regulations establish the basic conditions that the projects must satisfy, intending to ensure access to housing for low-income tenants.³⁴

33 Specifically, the Internal Revenue Service (IRS) assigns tax credits to the housing agencies managed by the state governments, the amount of which is determined primarily by the state population. The state agencies assign these tax credits to rental housing projects proposed by private sector developers.

34 Rental housing building or renovation projects participating in the programme must satisfy at least one of the following criteria on occupation of the housing by low-income households: i) at least 20% of the tenants must have income of 50% or less of the area's median gross income; or ii) at least 40% of tenants must have income of 60% or less of the area's median gross income. These limits apply to a base household of four members and are increased (reduced) by 4% (5%) for each household member over (below) that number. If a low-income household's income increases and crosses the thresholds set, developers must assign the next market-price rental that becomes vacant to a low-income household. Rental prices, including utility costs, in rental housing for low-income households cannot exceed 30% of the gross income threshold for that housing. In other words, it cannot be more than 30% of 50% or 60% of the area's median gross income.

Once the tax credits have been assigned, the developers can sell them to investors, typically through a market created by intermediaries, in exchange for own capital funding for the real estate project, thus reducing their reliance on borrowed funds for the projects. Individual investors, corporations and financial institutions may use these tax credits to reduce their tax burden over a period of ten years. Housing built with the backing of this programme must be used as social rental housing for thirty years. These incentives for real estate developers are the largest source of funding for new affordable rental housing in the United States, accounting for almost one-third of all rents in newly-built multi-family residential housing (Desai et al. (2010)).³⁵

The available evidence on the effects of the LIHTC programme suggests that the policy has been quite effective from a welfare standpoint. Yet its estimated impact on the aggregate volume of supply of residential rentals is only small, given the existence of a significant crowding-out effect. In particular, the evidence suggests that almost all the housing built under the programme has been offset by a drop in newly-built non-subsidised rental housing which, had the LIHTC programme not existed, would have been supplied to the residential rental market (Eriksen and Rosenthal (2010)). Nevertheless, despite the lower than expected impact on the aggregate supply of rental housing, the LIHTC programme has had positive effects on welfare in the lower-income neighbourhoods where rental apartment blocks were built under the scheme (Diamond and McQuade (2019)). Specifically, in these neighbourhoods, the rental housing built under the LIHTC programme appears to have helped reduce the crime rate and attract residents with relatively higher incomes. As a result, low-income urban areas have been revitalised and property prices have risen, thus boosting social well-being in those areas. In turn, in higher-income neighbourhoods where this type of housing has been built, average house prices have fallen and this has attracted lower-income residents. Overall, the construction of rental apartment blocks under the LIHTC programme has helped mitigate the segregation of households by income level and race in US cities.

35 Since their introduction in 1986, these tax credits have given rise to more than 2.5 million housing units for low-income households, with an estimated annual fiscal cost of between \$6 and \$8 billion (Desai et al. (2010) and Collinson et al. (2016)). The LIHTC programme is the federal government's largest fiscal spending programme for the direct provision of rental housing.

4 Rental housing market: indirect policies

The implementation challenges and the limitations posed by direct intervention in rental housing supply and prices explain the legislative emphasis on indirect intervention observed in the rental market in advanced economies in recent decades (OECD (2016) and Salvi del Pero et al. (2016)). Such indirect intervention seeks to alter the incentives of the agents operating in the rental housing market. The aim is to increase private rental supply and to contain the growth of household spending on rental housing. In this area, key public policies have focused on: i) amending the design and effectiveness of the legal framework regulating rental housing contracts; ii) introducing tax relief and subsidies that seek both to boost private supply and support demand-side segments particularly affected by rises in housing rentals; and iii) amending local regulations governing the supply of residential housing.

4.1 Regulating residential rental contracts

The design of residential rental contracts between landlords and tenants, the legal framework regulating their renewal and conclusion and the effectiveness of their enforcement can all have a bearing on the volume of private supply of rental housing. Indeed, these aspects jointly determine the degree of legal security that landlords may enjoy. At the same time, the overall regulations governing the terms of housing rentals influence the parties' bargaining power in setting both the price and the conditions of rentals during the duration of the contract. Hence, the regulations defining the rights of the parties in a residential rental contract have a distributive dimension, bearing both on the landlord's expected profit and the tenant's expected burden during the duration of the rental contract.

The aim of policies geared to offering rental property owners greater legal security is to boost the supply of rental housing. These policies have focused on the introduction of insurance mechanisms that reduce the costs borne by landlords in the event of specific contingencies, mainly the non-payment of rent or damage to the property. The main insurance instrument has been the development of nimble and effective eviction mechanisms in the event of non-payment or damage to the rented property. Supplementing this, there have been regulations on the setting up and amount of bonds, deposits or guarantees that tenants must provide when signing the rental contract to cover potential non-payment or future damage to the property. At the same time, the regulations determining the minimum duration of contracts and the clauses that allow landlords to terminate rental contracts³⁶ are important for legal security and for rental supply incentives. These factors would be more important for rental supply incentives if there were rental price regulations in place during the period contracts are in force. Specifically, where rental controls are in place, contracts of a longer duration and with restrictions on termination clauses discourage

³⁶ Among the usual clauses included in the regulations that enable landlords to terminate rental housing contracts are the sale of the property owing to economic necessity, own or family use of the dwelling and non-payment of rentals. In some countries, the use of these clauses by landlords requires that economic compensation be paid to tenants who are forced to seek a new dwelling before the conclusion of the contract.

rental supply, by increasing the risk that property owners will maintain over time an asset offering a limited return. However, if there is a high degree of legal protection for landlords, demand – mainly from better-off households – may shift from renting to home ownership, thereby reducing the potential size of the rental market and skewing it towards higher-risk tenants.

The international evidence available shows that the effective degree of legal protection for landlords is related to the development and size of the residential rental market. In particular, a negative relationship can be seen between the lack of legal security for owners, associated with costly enforcement of rental contracts, and the development of the rental housing market (Casas-Arce and Saiz (2010)). Further, the economic literature has shown that the effectiveness of these regulations largely depends on the presence of flexible legal procedures that ensure regulatory enforcement and rapid economic compensation for landlords in the event of contingencies. In this respect, there is evidence of less legal security in the face of non-payment of rentals in legal systems with a higher degree of procedural formalities, and which are usually associated with lengthier procedures and less effective enforcement (Djankov et al. (2003)). Along these lines, within the European Union, Cuerpo et al. (2014) document the importance for the full development of a rental housing market of having an efficient and flexible legal system that ensures legal security. Lastly, in the case of Japan, Suzuki and Asami (2017) highlight the fact that long-term rental housing contracts, combined with the presence of clauses that restrict the possibility of eviction, generate inefficiencies in the functioning of the rental housing market. These inefficiencies are due to landlords' strategic behaviour to circumvent contractual regulations and take the form of a greater concentration of rental supply aimed at higher-purchasing-power segments, an increase in the proportion of empty dwellings owing to the lack of incentives to rent them out and unnecessary renovation of rental properties.

At the same time, with a certain level of legal security attained for landlords, the economic literature has justified the presence of mechanisms that also protect tenants, both for efficiency and distributive reasons (Arnott (1995), Whitehead et al. (2012) and Favilukis et al. (2019)). Tenant protection has been structured around setting minimum-duration contracts, combined with automatic rental-update mechanisms,³⁷ lengthier notice periods for contract conclusion by landlords, the tightening of some of the clauses allowing a contract in force to be terminated and even the introduction of compensation for tenants in the event of contract termination by landlords for justified reasons. This greater tenant protection might generate gains in social well-being, by providing tenants with greater economic decision-making certainty. Specifically, this protection acts as an insurance mechanism against potential abrupt rises in rentals, and lessens the probability and costs of tenants having to move unexpectedly. This justification might be particularly significant in contexts in which rental housing supply is inelastic and landlords have rental price-setting power. Complementing this, the gains in social well-being would be greater if the most protected groups were those

³⁷ Section 2 analyses in greater detail the relationship between rent controls and the design of rental housing contracts.

Table 2

FEATURES OF RENTAL HOUSING CONTRACTS

Country	Duration of contract		Deposit and guarantee (in months of rent)
	Freely agreed	Minimum duration	
Australia	x	NA	Varies by state/territory (e.g. maximum of 4 weeks' rent in Queensland, Victoria and Western and South Australia)
Austria	x	Minimum 3 years (if fixed term); average 3.5 years	Maximum 6 months (but usually 3 months)
Belgium	x	Either: i) 9 years, or ii) 3 years or less	Maximum 3 months
Canada	x	Generally month to month	1 month
Chile	x	Minimum 1 year	Maximum 3 months
Czech Republic	x	Minimum 1 year (if fixed term)	Maximum 6 months
Denmark		Mainly open-ended	Maximum 3 months
Estonia	x	No data; most are assumed to be short-term	Up to 3 months, generally 1-2 months
Finland	x	Minimum 12 months; average is 30 months	Generally 1 month
France		Minimum 3-6 years, according to whether landlord is an individual or a legal entity; average term 7.6 years	Maximum 1 month (unfurnished); 2 months (furnished)
Germany		Open-ended	Maximum 3 months
Iceland	x	NA	NA
Ireland (a)	x	Minimum 6 months; average 2.5 years (with some restrictions)	NA
Israel	x	NA	NA
Japan (b)	x	NA	NA
Latvia	x	NA	Negotiable, generally 2-3 months; some households exempt from paying deposits (e.g. low-income households)
Luxembourg	x	Not specified in most contracts; normally 1 year (if fixed term) and extended by tacit consent	Maximum 3 months
Mexico	x	NA	NA
Netherlands (c)		Open-ended (with restrictions, see note)	No legal limits; generally 3 times the monthly rent is considered reasonable
New Zealand	x	Two main types of rental contracts: i) periodic tenancy (flexible, either party can end the contract by giving notice); and ii) fixed-term tenancy (more secure; neither party can break the contract before the end date without involving the Tenancy Tribunal)	4 weeks' rent
Norway		Minimum 3 years	Maximum 6 months
Poland	x	NA	3-6 months, according to type of contract
Portugal		Minimum 1 year	NA
Slovakia	x	NA	NA
Slovenia	x	NA	NA
Spain (d)	x	NA	Minimum 1 month; maximum 3 months
Sweden (e)		Open-ended	Not generally used
Switzerland	x	Minimum 1 year	Maximum 3 months
United Kingdom (England)	x	Minimum 6 months; average is 10 months for fixed-term contracts	5 weeks' rent
United States	x	Minimum 1 month; typically 12 months	2 months

SOURCES: The table and notes are drawn from the indicators published in the "OECD Affordable Housing Database" (indicator PH6.1 Rental Regulation), obtained from the "Questionnaire on Affordable and Social Housing" (QuASH) (OECD (2019a)) and Banco de España.

FEATURES OF RENTAL HOUSING CONTRACTS (cont'd)

- a Ireland: Once a tenancy has lasted for six months, the tenant has the right to stay for a further 5.5 years (i.e. a total of six years). A landlord has limited rights to terminate a tenancy under section 34 of the Residential Tenancies Acts 2004-2016 during the period from month 7 of year 1 to the end of year 6, but can terminate a tenancy at the end of year 6 without reason. If a tenancy continues into year 7, the tenant accrues the right to stay for another six years. Security of tenure applies in blocks of six years, but there is nothing to prevent a longer-term tenancy being agreed between parties.
 - b Japan: Different arrangements apply: i) Shikibiki is a guarantee deposit and is usually not fully refunded; ii) Kenrikin/Reikin is a non-refundable payment by the tenant at the end of a contract.
 - c Netherlands: Rental contracts for a set duration over five years do not automatically expire after that period. Instead, they have to be terminated like a contract with undetermined duration.
 - d Spain: The term can be freely agreed, but in residential rentals tenants can freely extend their contracts during the first five years (or the first seven years if the landlord is a legal entity).
 - e Sweden: All rental contracts generally have no time limit, to ensure security of tenancy. A tenant can be evicted through legal action if rents are unpaid or there are disturbances.
- NA = Not available.

with the lowest incomes, with the insurance gains being concentrated in these groups (Favilukis et al. (2019)).

The evidence available for advanced economies shows the presence of ample heterogeneity in the design of the legal framework and in the specific clauses included in residential rental contracts (see Tables 1 and 2). Generally, in the OECD countries, regulations tend to set minimum terms or indefinite periods for the duration of rental housing contracts, longer periods of notice for rental contract termination by landlords than the terms set for tenants, and clauses limiting price increases during the rental period (OECD (2016)). However, there is wide diversity in the specific details regulated by these clauses. For example, minimum terms set range from one month in the United States to nine years in Belgium.³⁸ Moreover, there are open-ended tenancy contracts in a group of countries in which residential rentals have historically been significant, such as Germany, the Netherlands, Sweden and Denmark. In these countries, rental contracts are agreed for an indefinite period, but clauses tend to be set that regulate the conditions by which owners can terminate the contracts in view of specific contingencies (see footnote 36). In addition, in most of these countries new tenants are required to provide guarantees to landlords in the form of deposits or bonds. The amount of these monetary guarantees usually ranges from one to three months' rent,³⁹ with larger guarantees for owners in countries such as Austria and Poland where deposits of up to six months' rent can be set. Overall, this evidence illustrates the complex balance entailed in ensuring a sufficient degree of legal security for landlords, enabling a stable aggregate supply of rental housing to be maintained, while at the same time providing protection to tenants.

³⁸ Since 2019, Spain is among the OECD economies with the longest minimum contract duration: five years if the lessor is an individual and seven years in the case of legal entities. Spain also provides for a considerable, tacit contract extension, i.e. the term by which contract duration is lengthened if the parties do not communicate their wish to terminate the contract under the established terms (three years both for individuals and legal entities (Royal Decree-Law 7/2019)).

³⁹ In Spain, Royal Decree-Law 7/2019 establishes guarantees for a minimum of one month's rent and a maximum of three months' rent.

4.2 Fiscal policies

Governments have used a broad set of fiscal policy instruments to influence the residential rental market. The aims of these instruments have been to increase private rental housing supply, thereby contributing to containing price growth, and to provide support, via tax relief, for certain groups for which rental costs relative to their net income were considered an excessive burden. Fiscal instruments, therefore, have targeted both the supply of and the demand for rental housing.

The main tax measures aimed at rental housing supply are based on the introduction of tax incentives that reduce the effective taxation of returns obtained by landlords (either individuals or legal entities). In the case of landlords who are individuals, partial tax exemptions for income from rentals of primary dwellings have been introduced into personal income tax, in the tax base, as well as tax credits, with the aim of raising returns on residential rentals as opposed to other investment alternatives.⁴⁰

The tax relief measures geared to increasing the supply of rentals by legal entities have focused on fomenting the development and renovation of housing intended for residential rental, and on incentivising the acquisition and management of housing rentals by real estate investors.⁴¹ This tax relief has been implemented mainly through lower corporate income taxation, with the introduction of tax credits and low tax rates and direct aid in the form of subsidies. In the case of direct aid and tax incentives for development and renovation of rental housing, specific conditions that the private sector must meet are usually included. In particular, fiscal support is conditional, for example, on maintaining a specific supply of residential rentals at low prices over a period of time, or on assigning housing among tenants in accordance with certain administrative criteria.⁴²

On the demand side, policies have combined indirect aid, usually in the form of tax credits for tenants via lower personal income tax, and direct market rent subsidies. The subsidies have been designed in the form of set amounts or as a proportion of the market rent, paid in the form of direct transfers or through cheques or vouchers. The allocation of subsidies among the beneficiaries is usually conditional upon household income or the age of the tenants not exceeding certain thresholds, with the aim of supporting those groups who find access to housing most difficult (OECD (2016)).

40 Spain is a paradigmatic case of this type of intervention on the supply side owing to the existence, since 2003, of a generous partial tax exemption under personal income tax. This exemption was set in 2003 at 50% of property income from rentals of primary dwellings. Currently it stands at 60%. In the 2007-2014 period, this exemption stood at 100% if the rental was for young people whose income was below a certain benchmark level. There are no estimates on the effectiveness of this tax relief in increasing the supply of rental housing, nor on its effects on residential rental market prices.

41 In Spain, the main measure to promote an increase in the supply of rental housing by legal entities was the improvement in 2013 in the tax arrangements for listed real estate investment companies (SOCIMIs). In particular, non-distributed rental income was exempt from corporate income tax provided that the property was rented out for at least three years.

42 There is a more detailed discussion of this type of programme in Section 3, which examines the supply of rental housing according to criteria set by the public sector.

Since the 1970s, advanced economies have tended to concentrate the funds intended for fiscal policies supportive of rental housing on subsidies for specific demand segments (OECD (2016) and Salvi del Pero et al. (2016)). The greater emphasis on demand subsidies has been warranted both by the greater efficiency that leaving the choice of rental housing in the hands of households involves, and by the saving in terms of public funds compared with alternative policies such as the public provision of housing or subsidies to real estate developers (US General Accounting Office (2002) and Glaeser and Gyourko (2008)).⁴³ The amount earmarked for demand subsidies is particularly significant in economies such as the United Kingdom, France, Finland, Germany, the Netherlands, Sweden and the United States. In a lot of these programmes, support for demand not only includes subsidising a portion of the rent, but also financing other key expenses associated with the lease, such as utility costs or house insurance.

Notable in Europe is the case of the United Kingdom, where there is a generous means-tested programme – housing benefit – for rental housing. This scheme is largely geared to unemployed and low-income households and may cover up to 100% of the rental. This demand-support policy is the biggest such budgetary item among the OECD economies, accounting in the past two decades for annual public spending of over 1 pp of GDP. In the United States, the policy supporting low-income households based on subsidies for residential rentals has largely been implemented through cheques or vouchers. These can be used by beneficiaries to partly defray free-market rentals. Cheques are confined to households whose income level does not exceed certain thresholds, but their actual assignment is determined by the available funds contingency and a set of criteria for prioritising among eligible households (Salvi del Pero et al. (2016)). This type of measure increased in significance as from the 1980s, to the detriment of public social rental programmes, and has become one of the US Federal Government’s main redistributive programmes. Indeed, over the past decade its scope exceeded 2 million households (Olsen and Zabel (2015) and Collinson et al. (2016)).

In the case of Spain, fiscal policies supportive of the demand for rentals have been implemented through direct subsidies to tenants and income tax credits. Tax credits, both at national and regional level, have been regulated using eligibility criteria based on the level of taxable income and the taxpayer’s age.⁴⁴ Direct subsidies have mainly been through State Housing Plans, which are approved taking a three-year time horizon, and through specific policies pursued by regional and local governments as part of their housing remit. Generally, the subsidies seek to target the most underprivileged groups and those facing the greatest housing affordability difficulties. In particular, the criteria for setting and assigning these direct subsidies combine the following facets: low household income; labour market status of household members; maximum age of tenants; and maximum rental levels in connection

43 Under the public provision of rental housing, prices are usually set following administrative criteria and are below market. This type of measure is an implicit demand-side subsidy which is linked to specific publicly regulated supply; its nature and effects are discussed in greater detail in Section 3.

44 The primary dwelling tax credit at national level was eliminated in 2015, with its effects temporarily remaining in place for contracts in force prior to 1 January 2015.

with which assistance is granted. In aggregate terms, the amounts earmarked for rental housing subsidies in Spain to date are among the lowest in terms of GDP across the OECD countries which have this type of policy (OECD (2016)).⁴⁵

Economic theory predicts that a sizeable portion of the subsidies and tax credits intended for specific rental demand segments will pass through to prices and cause an increase in rentals when this demand faces relatively rigid supply, especially in the short run (Susin (2002) and Gibbons and Manning (2006)). The pass-through to prices would only be mitigated if demand subsidies were to prompt a supply response, either inducing the construction of new rental housing or increasing the upkeep or quality of rental housing. Conversely, much of the public or tax spending geared to improving access by specific groups to housing prompts an increase in rental prices that entails the transfer of funds to landlords. These potential inflationary processes in rental prices caused by subsidies would arise particularly in situations in which strong demand growth prompted upward price dynamics in the face of housing shortages.

The empirical evidence available is in line with the theoretical predictions: faced with a rigid rental housing supply in the short term,⁴⁶ subsidies pass through to rental housing prices. Price growth in the market segments targeted by the subsidies reduces, in aggregate terms, the effectiveness of tax incentives across the groups it is sought to assist and tends to generate unwanted effects in other rental housing market segments. For example, Susin (2002) documents the pass-through of demand subsidies in the form of cheques to residential rental prices in the main US metropolitan areas. In markets with low rental housing supply elasticity, cheques – faced with an increase in demand in the subsidised low-quality residential rental market – would appear to have prompted a bigger increase in rentals for lower-income households not subsidised by the programme. Specifically, according to the more robust estimate by Susin (2002), the cheque-based programme in the 90 biggest US metropolitan areas would have raised rentals, on average, by 16%. It is also estimated that the increase in rentals would have caused a transfer of funds to the owners of low-quality rented housing unaffected by the subsidies programme that was greater than the saving for subsidy recipients. The subsidies programme would, as a result, entail an aggregate net loss for lower-income households. The loss of well-being might even be greater if the administrative cost of the programme or the distortions created among taxpayers and the potential beneficiaries of the programme were considered.

In the case of the United Kingdom, Gibbons and Manning (2006) show the direct relationship between subsidies and rental prices in a context of high demand and rigid rental housing supply. In particular it is estimated that, in the mid-1990s, between 60% and two-thirds of the reduction in housing benefit subsidies for new applicants entailed a reduction in

45 This low relative weight of rental subsidies in Spain is attributable to the traditionally greater budgetary significance of the programmes providing access to home ownership at below-market prices (López-Rodríguez and Matea (2019)).

46 Sinai and Waldfogel (2005) show a modest response by private rental housing supply in the United States to programmes subsidising rental housing.

rental prices, thereby revealing that much of the subsidy was feeding through to landlords. Along these same lines, Laferrère and Blanc (2004) and Fack (2006) show how, in France, direct rental housing subsidies also had an upward effect on market prices and entailed, in the main, an increase in landlords' income.

Direct demand subsidies to defray rentals usually hinge on beneficiaries not exceeding specific income levels. This gives rise to the risk of tenants under-reporting their income in order to retain subsidies, and to the possibility of discouraging labour market participation by household members, since beneficiaries would face high implicit marginal rates were they to increase their labour income and lose their rental housing subsidy. The empirical evidence shows reductions in labour market participation associated both with the cheque programme for rental housing in the United States (Jacob and Ludwig (2012)) and the housing benefit programme in the United Kingdom (Bingley and Walker (2001)).

These limitations on the impact of fiscal policies on the demand for rentals account for the emergence of tax proposals aimed at influencing the supply of rentals. In particular, one alternative policy consisted of the introduction of tax penalties on owners of housing that is left empty or unoccupied. This strategy seeks to raise the cost of holding dwellings unoccupied and, thereby, encourage owners to rent them out. The justification behind this policy is its direct impact on rental housing supply incentives and the savings of public funds it entails compared with other conventional rental supply measures. Specifically, tax relief or supply subsidies, which seek to positively influence rental housing owners or developers, are measures with a budgetary cost that affect a supply segment, while in theory, penalising unoccupied housing may directly impact supply as a whole and generate public revenue from housing that remains empty once these penalties are introduced.

The main practical challenge involved in taxing empty housing lies in the legal definition of the taxable event. That calls for a precise definition of the requirements classifying a dwelling as empty, e.g. the time it has been unoccupied or, most particularly, how it differs from a second home.⁴⁷ Moreover, these tax policies face difficulties in respect of effective implementation and the administrative costs arising from the control and assessment over time of the administrative requirements that define an empty home for tax purposes.

Moreover, the effectiveness of higher taxation on unoccupied homes to increase the supply of rental housing faces economic challenges associated mainly with the wide range of reasons that lie behind empty homes. Specifically, unoccupied housing is a common occurrence in areas with depopulation problems and whose housing markets are not

47 Empty housing is a common phenomenon in advanced economies, with rates standing at around 10% of the residential housing stock. The presence of empty homes is higher in countries with a larger housing stock relative to population, such as the southern European economies, with empty home rates estimated to be around 14% in Greece and Spain in 2015, compared with rates close to 5% in Germany, Denmark and the Netherlands (OECD (2016)). However, there is no uniform definition or quantification of empty homes across the advanced economies, and no accurate individual identification, so these rates may include second homes.

tight. Higher taxation on unoccupied homes in areas without demand pressures would be tantamount to higher tax on real estate wealth, with scant potential impact on rental market conditions. Further, the existence of a specific amount of empty housing is an economic necessity for the efficient functioning of the housing market (Han and Strange (2015)). In particular, renting or buying a house entails time and transaction costs for the parties involved (e.g. costs arising from taxes and intermediation charges), which give rise to a frictional rate of empty homes during the search and negotiation period. Where there is a relative shortage of housing, a tax that penalised this type of property would pass through to the final rental price, and the burden would fall on the new tenant. Lastly, it should be borne in mind that this taxation would be ineffective in boosting rental housing supply if there were not beforehand a sufficient level of legal security or net minimum rental yield encouraging owners to rent out their property (Gabriel and Nothaft (2001)).

Tax penalisation of the ownership of homes that are not primary dwellings can also be seen in the personal income tax systems of a broad group of advanced economies. In particular, imputed income from unoccupied and unrented housing is usually higher than imputed income from primary dwellings (Andrews *et al.* (2011) and Salvi del Pero *et al.* (2016)). Moreover, the possibility of penalising unoccupied housing through an increase in local recurring property taxes has been introduced, for example, in the United Kingdom and in Spain.⁴⁸

One significant case of tax penalisation of empty homes is that of France. There, a tax on empty homes was introduced in 1999 in large cities with tight property markets.⁴⁹ The empirical evaluation of this measure, following Segú (2019), shows an average reduction of 13% in the proportion of empty homes in the major French cities, owing to the introduction of the tax. This reduction was greater (50%) in those cities whose initial empty-home rates were higher. At the same time, the impact appears to be greater in dwellings that have been unoccupied for longer. The results also suggest a shift from empty homes to primary residences owing to the introduction of the tax. In terms of house prices, a decline in prices at the municipal level has not been documented, possibly because the number of empty homes mobilised was relatively small in relation to the total stock.

Overall, the empirical evidence on the impact of these fiscal policies on rental housing supply is scant and highly dependent on the idiosyncratic characteristics of the local markets to which they are applied.

48 Since 2013, local authorities in the United Kingdom have had the power to raise taxes on the ownership of such housing by 50%. Spain introduced the legal possibility of a 50% property tax surcharge on unoccupied dwellings in 2004 (in a law regulating local tax authorities). However, in Spain this measure has not had practical effect to date owing to the difficulties of identifying unoccupied dwellings and distinguishing them from second homes. Royal Decree-Law 7/2019 introduces regulatory changes with the aim of making administrative identification of unoccupied housing and the attendant accreditation procedure at the municipal level by means of an internal regulation easier.

49 An alternative measure for mobilising the stock of empty homes in the market has involved reducing the supply of land for new construction, aiming to increase the incentives to sell or rent these properties. Evidence on the implementation of this policy at the local level in the United Kingdom appears to show that this reduction in land supply has not met its objective of mobilising empty homes in the market and that it has caused unwanted effects. In particular, the regulations are estimated to have prompted the inefficient locating of homes in unrestricted, more remote areas, in which housing supply might adjust better to household demand, and an increase in the proportion of empty homes in the areas affected by the regulations (Cheshire, Hilber and Koster (2018)).

4.3 Local regulations on land use and residential housing

The availability of development land and the specific local rules that regulate both the residential use of property and housing characteristics in a specific geographical area, principally a municipality with the ability to legislate on these matters, are key factors in explaining property price dynamics (Quigley and Raphael (2004), Glaeser and Gyourko (2008, 2018), Glaeser, Gyourko and Saiz (2008) and Gyourko and Molloy (2015)). Where there is a population or economic agglomeration in a specific geographical area, property prices rise when there is insufficient and rigid housing supply in the short term. These upward price dynamics affect both house purchase and residential rental prices (Sinai and Souleles (2005), Quigley and Raphael (2005) and Glaeser and Gyourko (2018)). In an economy in which housing demand is growing, the presence of regulatory or geographical restrictions limiting the growth of supply contributes to the growth of property prices and generates greater price volatility (Paciorek (2013)).

Economic research has shown that the availability of development land depends both on the geographical restrictions determining the physical conditions for house-building (Saiz (2010)) and on the political considerations that restrict land use and have a bearing on the availability of housing (Glaeser and Ward (2009) and Ortalo-Magne and Prat (2014)). At the same time, the regulations and limits on the maximum amount of building allowed, the possibility of assigning a residential use to property originally earmarked for other uses (e.g. commercial or industrial) and the regulations and requirements concerning the certificate of occupancy all have a bearing on the level and composition of residential housing supply (Quigley and Raphael (2004) and Gyourko and Molloy (2015)). Among the regulations restricting housing supply, those arising from local owner-occupant residents' pressure have been prominent. These residents demand greater quality in the public space (facilities and green zones), they usually prefer a lower population density and are opposed to the presence in their municipality of affordable housing for low-income households (Quigley and Raphael (2004), Glaeser et al. (2005), Glaeser and Ward (2009) and Solé-Ollé and Viladecans-Marsal (2012)).

Policy proposals in this area have focused on reducing the regulatory frictions that prevent the introduction of new housing in markets experiencing bouts of house shortages (Andrews et al. (2011) and Salvi del Pero et al. (2016)). Specifically, the introduction of a more flexible regulatory framework for housing supply would generate potential gains in social well-being if this flexibility were to focus on markets showing relatively greater house shortages (Glaeser et al. (2005), Ortalo-Magne and Prat (2014) and Turner et al. (2014)). Admittedly, making the regulations more flexible would have adverse effects on residents' well-being, in the form of negative externalities, but these effects would be offset in aggregate terms by the gains in well-being obtained by the new resident households, which would increase their housing consumption, and by the lower growth of rentals. These gains would be greater in those market segments with a relative shortage of housing and that spend more on housing relative to their net income.

The debate on the negative role of public regulation in the local government sphere on rental prices, via the increase in housing values caused by the shortage of supply, is particularly relevant in the United States (Glaeser and Gyourko (2018)). There, local regulations are considered to be a key factor for explaining property price and rental dynamics in metropolitan areas with greater demographic dynamism. In particular, the supply of housing in areas with strong demand growth would be restricted by “zoning” practices in urban areas in which: i) there is a maximum limit on the number of dwellings in new-build apartment blocks; ii) construction is confined to single-family homes; and iii) extensive areas of development land are protected for public use (parks and public facilities). In the advanced economies as a whole there is evidence that suggests an inflationary effect in property prices stemming from the regulations restricting land use in housing supply (Andrews et al. (2001) and Caldera and Johansson (2011)). However, in Europe greater analysis is required of the city or neighbourhood in order to be able to assess the impact and the current significance of these regulations on rental markets in the main European metropolitan areas.

4.4 Regulations on tourist rentals

In recent years there has been a boom in a new tourist or “holiday rental” market. The pursuit of this new activity has coincided with a rise in residential rental prices in the central districts of large cities that are highly attractive to tourists. This coincidence has contributed to the development of stricter regulations regarding the conditions under which this activity may be pursued. In particular, the regulations would seek to restrict the possible reduction of residential rental supply in specific areas of cities caused by a shift in housing use from residential use to tourism. Hence, the regulations seek to mitigate the possible pressures of tourism on residential rental prices. Additionally, the regulations also aim to reduce the adverse effects on residents’ quality of life that the development of tourism in residential dwellings might cause.

The tightening of regulations affecting holiday rentals can be seen acutely in recent years. Such tightening has mainly been by local authorities whose municipalities are considered to be especially affected by this phenomenon. The main regulations approved to restrict the supply of holiday rentals include: i) the need for a licence for pursuit of this activity in a residential dwelling, which must meet the requirements set by the municipality (e.g. in Paris, Berlin, San Francisco, Barcelona and Madrid); ii) the setting of a tax on the pursuit of this activity (e.g. in Amsterdam, Brussels, Paris, Rome, Florence, Lisbon, Prague and San Francisco); and iii) the setting of strict limitations on the maximum number of days a house can be used for holiday rentals (CNMC (2018) and OECD (2019a)).⁵⁰ In addition, some major cities have imposed regulations that limit the possibility of holiday rentals if the house in question is not the primary residence of the owner, or that restrict visits to short periods

50 This is the case, for example, of Amsterdam (60 days), London and Madrid (90 days) and Paris (120 days). In other cities, instead of time limits, restrictions have been set on income obtained from this activity, as in Reykjavik. If these limits are exceeded, owners must obtain a licence to pursue tourist activity and the house must meet a series of requirements.

if it is the primary residence (e.g. in New York, Berlin and San Francisco).⁵¹ Furthermore, the effectiveness of these regulations has been strengthened through the greater frequency of inspections, with heavy penalties for owners and platforms operating outside the regulations (e.g. in Barcelona, Berlin and Madrid). Overall, these restrictions might, in part, discourage the possible shift in housing from the residential rental market to the tourist market.

In Spain, regional governments have in recent years regulated this market by imposing requirements that tighten the conditions under which a residential dwelling can be legally used as tourist accommodation.⁵² These requirements have been strengthened by the regulations introduced in certain cities, such as Barcelona, Bilbao and San Sebastián, which have restricted the maximum number of tourist rental beds in specific areas of the cities. Zoning has also been applied in Bilbao and Madrid, to impose stricter requirements on housing located in specific areas. In Palma de Mallorca, holiday rentals in multi-family residential housing have been prohibited since July 2018.

There are relatively few academic papers available so as to offer an accurate estimate of the quantitative effect of holiday rentals on rental prices. But they suggest that the scale of this effect depends both on the density of holiday rentals in the city under study and on residential housing demand. For instance, Horn and Merante (2017) find a modest effect of holiday rentals on rental asking prices in Boston. In an analysis for the metropolitan area of Los Angeles, Koster, Van Ommeren and Volhausen (2018) show a bigger impact of holiday rentals, both on the reduction in the supply of rentals and on property prices, concentrated in areas with greater density of tourist rentals. In the case of the city of Barcelona, García-López et al. (2019) estimate that holiday rentals make a positive contribution to the growth of recorded average rentals, to second-hand house transaction prices and to asking house prices in districts with a high concentration of this type of activity.

In any event, more evidence is needed on the shift from residential housing to tourist activity and its impact on property prices. In particular, the analysis should be conducted in markets with a high degree of geographical disaggregation, e.g. by district or neighbourhood, in order to be able to estimate more accurately the scale of the causal effect on supply and rental price of this type of housing use.

51 In addition, central and regional governments can introduce further regulations on tourist rentals (OECD (2019a)). For instance, in the case of Spain, Royal Decree-Law 7/2019 introduces the possibility of residents of apartment blocks in which it is sought to locate the activity vetoing tourist rentals. In addition, central and regional government regulations can be implemented for tourist rentals to bring them into line with the regulations for traditional tourist activity (hotels, apartments and holiday cottages).

52 These regulations entail, for example, that the owners of properties potentially intended for holiday rental must register to pursue the activity, or that a minimum stay (La Rioja) or a maximum stay (Andalusia, Aragon, Balearic Islands, Castile-León, Catalonia, Galicia, La Rioja and Navarre) must be set.

5 Conclusions

Extensive debate has arisen in a good number of advanced economies on the possibility of strengthening the role of public policies in the residential rental market. The notable growth of rental housing prices in metropolitan areas where supply has outgrown demand, combined in some cases with the modest buoyancy of labour income for some population groups, has given rise to problems of housing affordability for certain segments of society. In particular, the largest increase in rental housing expenditure as a percentage of disposable income has been among low-income households and the young population. Moreover, this growth in rental housing expenditure also poses challenges: i) for the efficient functioning of the labour market, as it has a negative impact on labour mobility; ii) for macro-financial stability, as it affects a growing proportion of the working-age population and is centred on groups that have scant ability to save and greater sensitivity of consumption to changes in their current income; and iii) potentially for the functioning of the housing market in general, owing to the potential connection between house prices and the return on investment in residential rentals.

In light of the international experience, this paper reviews the main public policies in the rental housing market that could be implemented to address the challenges posed. For this purpose, the policies are grouped into three types of measures: rental price controls; public provision of affordable rental housing; and a set of measures designed to indirectly affect both the supply and price of rental housing.

First, rental housing price controls are attractive since they immediately and directly target the problems of affordability and financial burden that rentals entail for certain groups. However, the evidence points to the possible emergence of potentially significant adverse effects, especially when such measures are maintained over prolonged periods. Hence, the supply of rentals usually reacts to price controls by reducing the housing available on the market, lessening property maintenance expenses and amending the composition of the housing supplied in order to evade regulation. Further, this policy may lead to segmentation of the housing market, as the rent control measures are concentrated on specific groups or in specific areas of a city. Such duality in the rental market may prompt segmentation of the population on the basis of socioeconomic conditions, reduce the mobility of workers who do not wish to forgo a below-market rental and raise rental prices in unregulated market segments.

The problems associated with price controls explain the decline over time in the application of this policy, which was extensively used in advanced economies for much of the 20th century, until the late 1970s. However, in recent years some major European cities have attempted to apply rent controls once more in specific rental market segments. Recent evidence shows that these regulations have, in general, been effective in easing rental prices in the regulated segment in the short term, while at the same time they may prompt increases in rental prices in unregulated market segments. In the medium term, such measures highlight certain difficulties, relating both to actual implementation and to the

supply response in the rental market. These difficulties have been frequently signalled, in the specialist literature, as a limitation on this type of intervention when it comes to finding a lasting solution for the problems posed in the rental housing market.

Second, in a good number of countries governments have intervened, maintaining a significant public supply of residential rentals at affordable prices, aimed chiefly at groups facing difficulties in gaining access to housing. The advantage of this policy is that it focuses on the underlying cause of the increase in rental housing prices: the insufficient number of properties available for rent in the face of growing demand in certain local markets. But this policy faces major budgetary challenges and its implementation must be efficiently designed. For one thing, building up and maintaining an extensive stock of public rental housing is a costly measure for the public coffers. For another, the design of public rental housing programmes must avoid discouraging the geographical mobility of beneficiaries, it must curtail the risks of social segmentation, owing to the potential concentration of pockets of social exclusion, and it must minimise the crowding out of rental supply by private agents. While in a good number of advanced economies rental housing provided by the public sector retains a significant weight and complements private supply, over the past decade it has declined, owing to the shortage of budgetary funds in some economies and a shift in welfare policy priorities.

The challenges and limitations of direct intervention in prices or in the supply of rental housing account for the emergence, in recent decades, of different types of measures aimed at indirectly influencing the rental housing market. These focus mainly on: i) amending the legislation on rental housing contracts; ii) introducing fiscal policy instruments capable of influencing rental housing supply and demand; and iii) the regulations governing the supply of residential housing at the local level.

The policies offering greater legal security to owners of rental housing have been justified in contexts in which it is necessary to step up the incentives to rent, with the aim of increasing the supply of rental housing. International evidence shows that the degree of effective legal protection for landlords is related to the level of development and size of the residential rental market. At the same time, these incentives for landlords are usually balanced by protection for tenants in terms of the minimum duration of rental contracts, the updating of rents over that duration and the conditions regulating termination of contracts by landlords. Such tenant protection has been justified both for distributive reasons and for the potential social well-being gains derived from greater certainty for tenants in their economic decision-making. Specifically, tenant protection, particularly in lower-income groups, provides insurance against sharp rises in rents.

Fiscal policy has the capacity to affect market equilibrium, by altering the incentives for both the supply of and demand for residential rentals. On the supply side, tax credits that reduce effective taxation for landlords increase the net return on investment in rentals compared with alternative investments. On the demand side, direct subsidies or tax credits for tenants aim to reduce the burden on household income that rent entails.

Yet the risk of a subsidies policy in a rigid supply market is that those subsidies may be passed through to prices, producing a transfer of income (and public funds) to landlords, with a potentially minor impact on affordability for tenants. The evidence on the limited effectiveness of such subsidies explains why, in a good many advanced economies, tax relief measures have gradually shifted from rental demand to rental supply. In addition, there have been proposals in favour of tax penalisation of unoccupied homes, intended to foment the supply of residential rentals. However, the empirical evidence available on the effectiveness of the most common tax measures on the supply of residential rentals is still scant and inconclusive.

Local planning regulations that determine the capacity and conditions for the construction of new housing or the designation of property for residential use can affect the rental housing supply. A review of certain regulations that prevent, hinder or delay new housing construction or restrict the use of property for residential purposes could ease pressure on house prices in local markets that experience spells of relative housing shortages. In addition, some of the cities among the top tourist destinations worldwide have tightened up their regulations on tourist rentals (or are planning to do so), aiming to curb the decline in the supply of residential rentals in certain areas of the cities. In terms of social well-being, measures taken at the local level to boost the supply of rental housing should weigh the benefits for tenants of a larger residential housing supply compared with the cost of higher population density for residents of the regulated areas. At the same time, the regulations limiting tourist rentals should consider the potential contribution these measures make to stabilising the residential rental market. To date, evidence on the impact of local regulations of this kind on residential rental prices is still limited and more granular data – by neighbourhood or district – are needed to assess the possible impact of the different public policy alternatives in this respect.

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