



ISSN 2443-8022 (online)

Immovable Property Taxation for Sustainable & Inclusive Growth

Alexander Leodolter, Savina Princen
and Aleksander Rutkowski

DISCUSSION PAPER 156 | JANUARY 2022

EUROPEAN ECONOMY



Economic and
Financial Affairs

European Economy Discussion Papers are written by the staff of the European Commission's Directorate-General for Economic and Financial Affairs, or by experts working in association with them, to inform discussion on economic policy and to stimulate debate.

DISCLAIMER

The views expressed in this document are solely those of the author(s) and do not necessarily represent the official views of the European Commission.

Authorised for publication by Géraldine Mahieu, Director for Investment, Growth and Structural Reforms.

LEGAL NOTICE

Neither the European Commission nor any person acting on behalf of the European Commission is responsible for the use that might be made of the information contained in this publication.

This paper exists in English only and can be downloaded from https://ec.europa.eu/info/publications/economic-and-financial-affairs-publications_en.

Luxembourg: Publications Office of the European Union, 2022

PDF ISBN 978-92-76-44624-8 ISSN 2443-8022 doi:10.2765/431531 KC-BD-21-013-EN-N

© European Union, 2022

Non-commercial reproduction is authorised provided the source is acknowledged. For any use or reproduction of material that is not under the EU copyright, permission must be sought directly from the copyright holders.

CREDIT

Cover photography: © iStock.com/g-stockstudio

Immovable Property Taxation for Sustainable and Inclusive Growth

Alexander Leodolter, Savina Princen, Aleksander Rutkowski

Abstract

A well-designed recurrent tax on residential property (RRPT) can be an important element of the tax mix being able to foster growth, address policy issues related to inequality and contribute to the green transition. Nevertheless, tax revenues from recurrent property taxes are low in EU Member States. The paper first examines the design of efficient property taxation, which also includes removing the homeownership bias in taxation. Subsequently, it provides an overview of RRPT policies in EU Member States and discusses the political economy of property tax reforms. Finally, potential RRPT reforms to reduce inequality and support environmental goals are explored. An RRPT with a progressive rate schedule and a regularly updated tax base factoring in the energy performance of the building is able to support growth, reduce income inequality and contribute to a sustainable environment.

JEL classification: D1, D3, D31, H2, H21, H22, H22, H24..

Keywords: immovable property, housing, taxation, tax base, owner-occupied housing, homeownership bias, inequality, tax progressivity, land tax, energy efficiency.

Acknowledgements: We would like to sincerely thank Géraldine Mahieu, Joost Kuhlmann, Alexandr Hobza, Eric Ruscher, Erik Canton, Nicolas Philipponnet, Matteo Salto, Istvan Vanyolos, Samuel Whittaker, José Manuel Hernandez Luque as well as the members of the European Union's Economic Policy Committee for helpful comments and suggestions.

Contact: Alexander Leodolter, Directorate-General for Economic and Financial Affairs, alexander.leodolter@ec.europa.eu

CONTENTS

1.	Introduction	4
2.	Economic principles for taxing immovable property	5
3.	Taxation of immovable property in EU Member States.....	7
3.1.	Revenues from immovable property tax in EU Member States	7
3.2.	Tax treatment of immovable property in EU Member States.....	9
3.3.	Political economy issues	12
4.	Immovable property taxation and inequality	13
4.1.	The effect of property taxes on income inequality	13
4.2.	Recurrent property tax design issues related to reducing inequality	14
5.	Immovable property tax and environmental goals	16
5.1.	Tax base assessment and external effects	16
5.2.	Tax incentives for energy-efficient investment	17
6.	Conclusions	18
	REFERENCES	20
	ANNEX I – Distribution of real estate wealth	25
	ANNEX II - Recurrent immovable property tax (for individuals), 2019	26

LIST OF TABLES

Table 3.1	Recurrent taxation of residential immovable property in EU Member States, 2019	9
Table A2.1	Recurrent immovable property tax (for individuals), 2019	25

LIST OF GRAPHS

Graph 3.1	Revenues from property taxation as % of GDP (2019)	7
Graph 3.2	Tax revenues as % of GDP (2019)	7
Graph 3.3	Revenues from recurrent taxes on immovable property as % of GDP (2006-19) and of housing stock (2006-2018).....	8
Graph 3.4	Percentage of revenues from immovable property taxes levied at local government level (2019)	11
Graph 3.5	Contribution of taxes to the marginal cost of owner-occupied housing (left axis) and estimates of the user cost with and without the contribution of various tax elements (right axis), 2019.....	12
Graph 4.1	Marginal effective tax rates on owner-occupied housing at various wage levels of owner (2016)	14
Graph A1.1	Share (in %) of real assets in total assets for different net wealth quantiles	24
Graph A1.2	Conditional medians for real estate asset values for different net wealth quantiles	24

1. INTRODUCTION

A well-designed recurrent tax on residential immovable property (RRPT) can be an important element of the tax mix and address policy issues related to inequality. The Covid-19 pandemic has put economic activity under pressure, reducing output, investment and consumption. While short-run stimulus measures were taken to support the recovery, additional revenues will be needed in the long-run to compensate for the previous sharp decline in tax revenues and to reduce debt levels. Recurrent immovable property taxes are among the taxes least harmful to growth and can be designed in a way that reduces inequality of wealth and after-tax incomes.¹ This last point is of particular relevance at the current juncture, as households with lower incomes were hit particularly hard by the crisis, because of a higher risk of unemployment or reduced hours, lower savings to buffer unemployment, and more limited options to telework, even if these effects might not be immediately visible due to the effective working of crisis-related support schemes. Not least, property prices have experienced a substantial increase in the wake of the Covid crisis,² which is another reason to give special consideration to the taxation of immovable property.

Moreover, recurrent immovable property taxes can support the green transition and might be needed to address potential future changes of the economy, such as those related to technological developments. As set out by the European Green Deal,³ the roadmap for making the EU's economy sustainable by 2050, taxation can contribute to the transition towards an inclusive and climate-neutral economy. Recurrent taxes on immovable property are, if adequately designed, able to provide the right incentives to help address the global challenge of climate change. Besides, there is the possibility that the consequences of technological developments, globalisation and population ageing might require a stronger reliance on tax types other than labour taxation. Nevertheless, recurrent taxation of immovable property is rather low in many Member States.

This paper shows how a well-designed RRPT can simultaneously provide tax revenues, be growth-friendly, reduce inequality and contribute to a sustainable environment. The paper is based on an analytical note presented at the Economic Policy Committee⁴ and discusses immovable property tax issues related to growth, inequality and climate change objectives. It is organised as follows: Section 2 sets out the economic principles for housing taxation to serve their inequality-reducing and environmental objectives, while maintaining their budgetary purpose. Section 3 shows the features of RRPT in EU Member States. Section 4 shows that RRPTs making use of progressive tax rates can help reduce inequality while remaining growth-friendly. Section 5 explains how adapting the property tax base and implementing specific tax features can contribute to environmental objectives, while ensuring equity and efficiency. Section 6 concludes. Although the focus of the paper is primarily on recurrent taxation of residential property, it also briefly discusses the economic principles of property transaction taxes. The taxation of imputed rent from owner-occupied property and mortgage interest tax relief are also included in the discussion, as their impact is similar to that of a recurrent immovable property tax (reduction), even if in legal terms they are part of personal income taxation. The taxation of commercial buildings however differs from the taxation of residential property, as it is a form of taxation of intermediate inputs into production. For this reason it will not be discussed in the context of this paper.

¹ Whereas recurrent property tax is a tax on a type of wealth, it will usually be paid from the current income of the taxpayer and therefore directly affect the distribution of after-tax incomes. At the same time, recurrent property tax might also impact savings and the accumulation of wealth. It will therefore likely affect the inequality of both incomes and wealth.

² See for example European Commission (2021), "Alert Mechanism Report 2022", SWD (2021) 361 final.

³ European Commission communication (2019) "The European Green Deal", COM (2019) 640 final.

⁴ Tax Dialogue on housing tax reform to foster sustainable and inclusive growth at the 543rd meeting of the Economic Policy Committee on 18 March 2021

2. ECONOMIC PRINCIPLES FOR TAXING IMMOVABLE PROPERTY

Recurrent taxes on residential property (RRPTs) are widely considered to be one of the tax types least detrimental to growth (Arnold 2008, Arnold et al. 2010).⁵ Property taxes offer several advantages. First, property ownership is generally easy to establish and identify. Also, the fixed geographic location of immovable property makes the taxes difficult to evade. Furthermore, RRPTs offer a stable and predictable revenue source and usually have little impact on economic activity and on economic agents' decisions to supply labour or save and invest. To the extent that they do influence behaviour, they can - as an inevitable cost factor related to owning property - be an incentive for taxpayers to put their property to optimal use. Aligning the tax base with current market values ensures efficiency and is likely to be widely considered as fair.

RRPTs seem to be - at least partially - capitalised into net selling prices of property. If supply of immovable property is completely inelastic, then the only consequence of a newly introduced or increased recurrent property tax should be a corresponding reduction of the selling price of property. Consequently, present property owners will suffer windfall losses, but afterwards, property taxes should - as any tax on accumulated wealth - have no effect on behaviour any more. Empirical evidence on the degree of capitalisation of RRPTs into house prices suggests mostly partial capitalisation of a varying degree (Sirmans, Gatzlaff and Macpherson 2008). However, there are also studies providing evidence for full capitalisation (Borge and Rattso 2014) and without evidence for capitalisation (Elinder and Persson 2017).

Land constitutes a tax base that is particularly stable and land taxes have no undesirable effect on economic incentives. Since supply of land is fixed, taxing land is a form of taxing economic rents, which implies no behavioural effects on the side of the taxpayer including no reduction of investment. If land is sold, full capitalisation should occur and the net selling price should decrease, but there should be no impact beyond this. Indeed, changes to a tax on land value seem to be fully capitalised into house prices (Høj et al. 2018) and moving from a tax on overall property value to one on land value seems to increase economic activity, such as residential construction or building alteration (Murray and Hermans 2019 and Gemmell et al. 2019).

Owner-occupied property receives highly favourable tax treatment. Whereas income from renting out property as well as from other forms of capital is taxed in EU Member States, the imputed rents of owner-occupiers, i.e. their savings from not having to pay rent, are excluded from taxation.⁶ This is often justified with positive effects of homeownership: Homeowners may experience a higher increase of net wealth over time (Di et al. 2007, Turner and Luea 2009), enjoy better health (Munford et al. 2020), may be more engaged in the local community (McCabe 2013, DiPasquale and Glaeser 1999) and experience higher life satisfaction (Zumbro 2011). Moreover, the children of homeowners' might achieve higher educational attainment (Green et al. 2012, Chen 2013) and a high homeownership rate might also reduce crime (Disney et al. 2020). However, it might often prove difficult to isolate the role of homeownership, as effects might be influenced by unobserved individual characteristics that also

⁵ It should however be noted that some studies, like Baiardi et al. (2019) find no effect of different tax types on growth.

⁶ The only exception to this are the Netherlands, but the values for imputed rents are usually much lower than market rents.

affect the decision to own a home.⁷ Also, some studies show no significant positive effects of homeownership on these outcomes, have inconclusive results or even find a negative impact (see for example Engelhardt et al. 2010, Bourassa et al. 2016 or Kaas et al. 2019). Moreover, homeownership might make labour suppliers less mobile and decrease employment (Blanchflower and Oswald 2013, Laamanen 2017).⁸ In addition, homeowners might be more likely to oppose new residential developments in an area, thereby limiting housing supply (Levine Einstein et al 2018). In any case, a tax subsidy should not go to all households, as the more affluent ones are more likely to also choose homeownership without benefitting from it.

The favourable personal income tax treatment of owner-occupied property creates market distortions, which are only partially corrected through RRPT at its current levels. In order to avoid distortions, the return on investment of owner-occupied housing, i.e. imputed rents, should be taxed like other capital income.⁹ In this case, the costs which come with the investment into housing, such as mortgage interest, should be deductible from taxable income. In addition, gains from transactions of owner-occupied property should be taxed equally to other capital gains. In reality however, owner-occupied property receives a favourable income tax treatment relative to other types of investment, as taxation of imputed rents via the personal income tax system is practically inexistent and, on top of this, mortgage interest tax relief is granted in some Member States. Also, capital gains from sales of primary residences are usually not taxed.¹⁰ RRPT at its current low levels can only partially make up for this distortion and the result is a tax bias favouring owner-occupied housing, which has been estimated to lead to “excess” housing purchases of more than 30% of the financial assets held by homeowners (Fatica and Prammer 2018).¹¹ In the absence of imputed rents taxation, a well-designed lower RRPT combined with the removal of mortgage interest tax relief seems the most realistic way forward to reduce distortions.¹² Mortgage interest tax relief has also shown to have other disadvantages: It provides incentives for households to take on and maintain higher debts, can contribute to increased and more volatile house prices (Turk 2015, Andrews 2010) and may actually reduce homeownership by crowding-out financially constrained households (Andrews and Caldera Sánchez 2011, Hilber and Turner 2014).

Transaction taxes on immovable property give rise to potentially large economic distortions. Taxes on the transfer of immovable properties make investment into property less attractive, distort allocation of properties by putting an extra cost on property transactions and discourage labour mobility. Moreover, revenues tend to be procyclical and very volatile, as significant revenue increases in boom phases are followed by decreases in downturns. On the other hand, transaction taxes are

⁷ For a discussion of the literature on the effects of homeownership including methodological questions see Dietz and Haurin (2003) and Rohe and Lindblad (2013).

⁸ The reduction of employment may likely be due to a higher homeownership rate causing increased job competition because of homeowners’ higher job search activities and their lower reservation wages and reduced consumption on the side of homeowners which may decrease demand for workers. A higher unemployment rate specifically among homeowners would appear intuitive due to their lower mobility but could not be found.

⁹ It should be added that there are also differences in the taxation of other types of capital income in EU Member States. For an overview of the taxation of capital income in the EU see Princen et al. (2020).

¹⁰ Capital gains are however often only tax-exempt, if the residence has been kept for a certain minimum period before sale.

¹¹ See also the user cost of housing indicator discussed in Section 3.2 as well as Figari et al. (2019b).

¹² A tax on net imputed rents reflecting the rents’ true value and countervailing the tax reduction through mortgage tax relief might in fact be difficult to maintain when house prices increase over time. As RRPTs will realistically not reach the level of an efficient tax on imputed rents either, mortgage interest tax relief should not be granted, if the goal is a tax with little distortion (Johannesson-Linden and Gayer 2012).

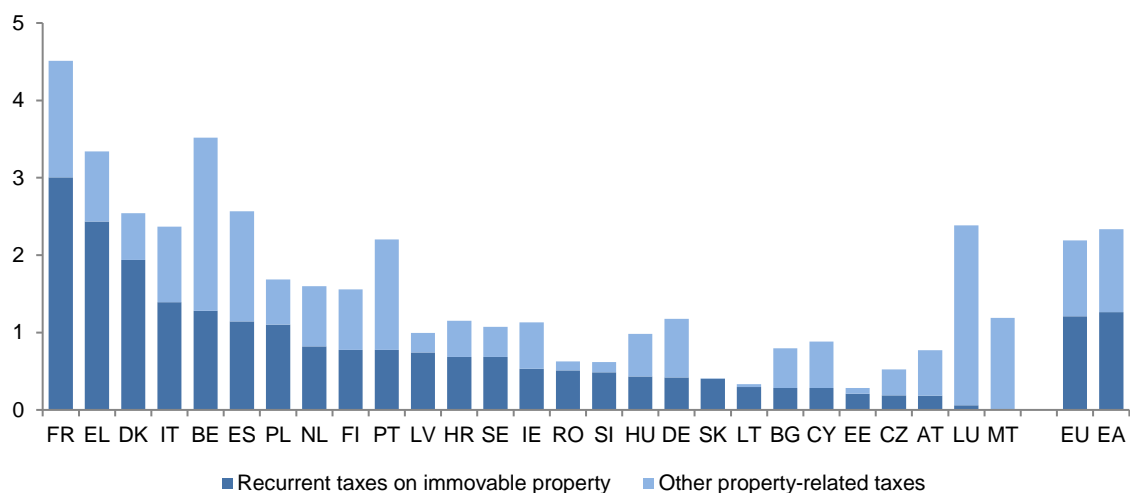
sometimes seen as reducing speculation and mitigating the risk of housing market bubbles. However, the effect remains empirically ambiguous and macro-prudential policies such as capital requirements or loan-to-value limits seem more suitable (Crowe et al. 2011). Transaction taxes might even be counterproductive, as a reduction in the number of transactions might make property prices more volatile.

3. TAXATION OF IMMOVABLE PROPERTY IN EU MEMBER STATES

3.1. REVENUES FROM IMMOVABLE PROPERTY TAX IN EU MEMBER STATES

Taxation of immovable property is rather low in many Member States. Graph 3.1 shows the tax revenues from property taxes in EU Member States. The contribution made by taxes on immovable property to Member States' budgets remains moderate. In 2019, revenue from these taxes was equivalent to 2.2% of GDP on average in the EU, which is relatively low compared to labour (20.7%) and consumption taxes (11.1%) and a little below environmental taxes (2.4%) (see Graph 3.2). A bit more than half of all property tax revenues came from recurrent property taxes (1.2% of GDP), but there are sizable differences across Member States. While France has recurrent property tax revenues of 3.0% of GDP, Malta does not levy recurrent property tax at all (Graph 3.1).

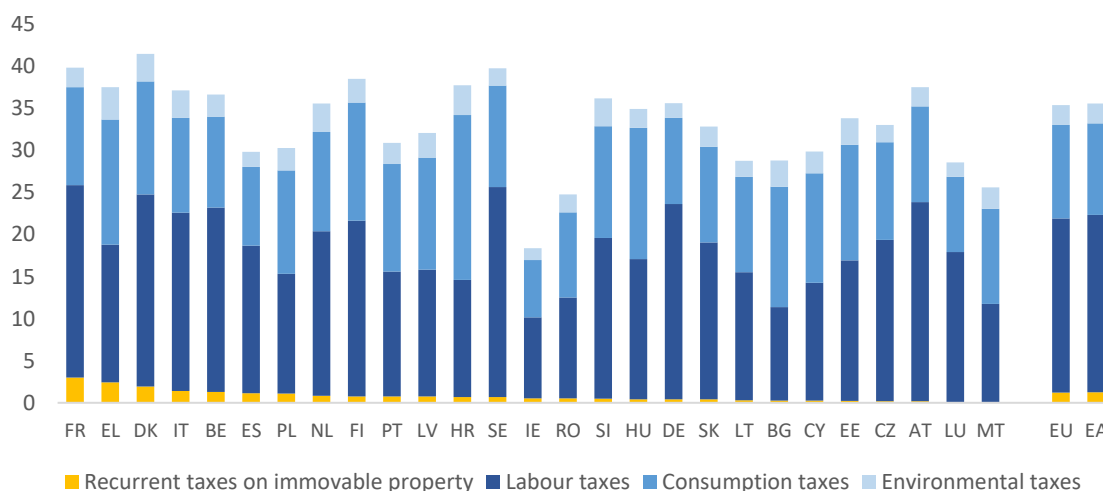
Graph 3.1. Revenues from property taxation as % of GDP (2019)



Note: 'Other property-related taxes' include taxes on net wealth, inheritance, gifts and other property items and on financial and capital transactions. Data does not include personal income tax on imputed rent.

Source: Commission services.

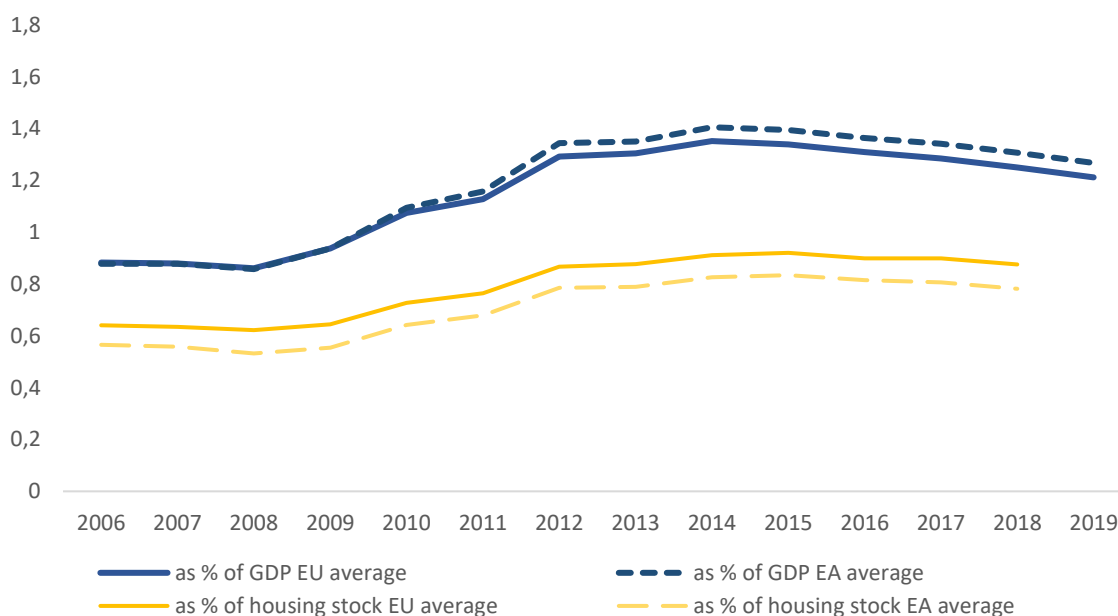
Graph 3.2. Tax revenues as % of GDP (2019)



Source: Commission services.

Revenues of recurrent taxes on immovable property are relatively stable over time. Graph 3.3 shows the evolution of revenues from recurrent immovable property taxes as a percentage of GDP in the EU and the euro area since 2005. While recurrent property tax revenues as % of GDP increased during the financial crisis, their share decreases again since 2015. The growth in tax revenues is more modest when compared to the increase of its base, the value of housing stock.

Graph 3.3. Revenues from recurrent taxes on immovable property as % of GDP (2006-19) and of housing stock (2006-2018)



Note: Housing stock is defined as net balance sheets for dwellings, i.e. for buildings that are used entirely or primarily as residences, including any associated structures. The value of dwellings is net of the value of land underlying dwellings. For more details on valuation see Eurostat (2013) "European System of Accounts – ESA 2010". For tax revenues as a % of housing stock, the year 2019 was excluded and Croatia was excluded from the calculation of the averages for 2017 onwards, both for reasons of data availability.

Source: Commission services.

3.2. TAX TREATMENT OF IMMOVABLE PROPERTY IN EU MEMBER STATES

Recurrent taxation of residential property differs significantly across EU Member States, with value-based taxes being the most common. Table 3.1 provides an overview of the laws in Member States regarding RRPT (see Annex 2 for more details). As can be seen, almost all Member States use recurrent immovable property taxation. The most common tax base is the value of the property, either defined as capital value or annual rental value.¹³ The value used as property tax base can in practice differ substantially from the actual market value. In some Member States the tax is based on the area of the property. As many Member States have several RRPTs, it is often the case that more than one tax base applies. The only Member State to tax imputed rents via the personal income tax system are the Netherlands.¹⁴

Table 3.1. **Recurrent taxation of residential immovable property in EU Member States, 2019**

	Recurrent property tax	Tax base	Differences in treatment of land and structures	Limitation for the setting of tax rates in national law	Progressivity with respect to value of property	Exemptions of / Reductions for owner-occupied property	Imputed rent taxed via personal income tax	Mortgage interest tax relief for owner-occupied property
BE	yes	annual rental value	tax base is lower for land	minimum rate per region	-	reduction*	yes, but main residence is exempt	yes
BG	yes	capital value	-	maximum and minimum rate	-	reduction	-	yes
CZ	yes	area	different calculation of rates	municipalities can multiply rates by "local coefficients"	-	-	-	yes
DK	yes	capital value	additional tax only on land	fixed rates /maximum and minimum rate	partly	-	-	yes
DE	yes	multiple of annual average rent	-	minimum rate	-	-	-	-
EE	yes	capital value	only land is taxed	maximum and minimum rate	-	-	-	yes
IE	yes	capital value	-	fixed rates	yes	-	-	-
EL	yes	area / capital value	higher rates for buildings (partly)	fixed rates / maximum and minimum rate	partly	-	-	-
ES	yes	capital value	-	minimum rate	-	-	-	-
FR	yes	capital value / annual rental value	additional tax only on dwellings	fixed rates /no limitation for local authorities	partly	reductions	-	-
HR	yes**	area	only certain dwellings are taxed	maximum and minimum amount per m ²	-	-	-	-
IT	yes	annual rental value	-	maximum and minimum rates	-	exemption (for certain property types reduction)	-	yes

¹³ For a discussion on the differences between capital value and annual rental value see UN-HABITAT 2013.

¹⁴ However, the value is usually much lower than the market rent. Belgium also taxes immovable property based on deemed rental values as part of personal income tax, but imputed rents from a taxpayer's main dwelling are exempt.

CY	-	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
LV	yes	capital value	-	fixed rates	yes	-	-	-
LT	yes	capital value	additional land tax	fixed rates / maximum and minimum rates	partly	-	-	-
LU	yes	capital value	-	no limitation for local authorities	-	-	-	yes
HU	yes	area or capital value***	higher maximum rate or maximum amount for buildings tax ***	maximum amounts per m ² or maximum rates ***	-	-	-	-
MT	-	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
NL****	yes	capital value	-	no limitation for local authorities	depends on municipality	-	yes	yes
AT	yes	capital value	additional tax only on land value	maximum rates / fixed rate	partly	-	-	-
PL	yes	area	higher rates for buildings than for land	maximum rates	-	-	-	-
PT	yes	capital value	-	fixed rate / maximum and minimum rates	partly	Possible reduction or exemption by municipalities (partly)	-	-
RO	yes	capital value / area	different rates and valuation systems for buildings and land	maximum and minimum rates / fixed rates	-	-	-	-
SI	yes	area / capital value	different rates and valuation systems for buildings and land	no limitation for local authorities / fixed rates	-	-	-	-
SK	yes	capital value / area	different rates and valuation systems for buildings and land	rate that can be changed by municipalities / fixed rate *****	-	-	-	-
FI	yes	capital value	-	maximum and minimum rates	-	-	-	yes
SE	yes	capital value	-	maximum amounts or rates / fixed rates	-	-	-	yes

Notes: Differences in treatment of land and structures refers to the taxation of developed land. "-" means not existent, "n.a." means not applicable, "partly" means that there are several recurrent property taxes in the Member State and that the feature of the respective column applies to at least one but not all of these taxes. "/" separates information on different property tax regulations within one Member State. * Only if the (deemed) annual rental value of the taxpayer's properties in the region (for Wallonia: in Belgium) does not exceed EUR 745. ** only applies to holiday homes. *** depending on whether the municipalities choose a value-based or an area-based tax. **** Landlord charge which only applies if more than ten dwellings are rented out for which rent is below a maximum threshold is not considered here. For further information see Annex 2. ***** Municipalities may add a surcharge with a maximum amount per floor for buildings but not apartments. For more detailed information see Annex 2.

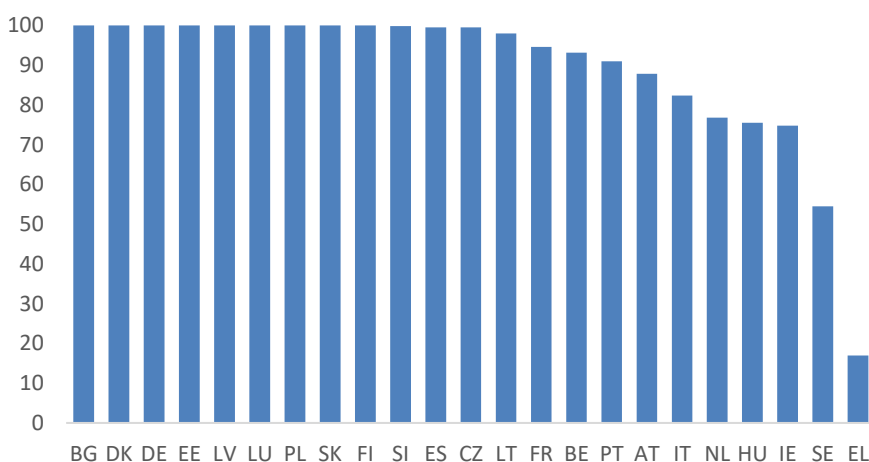
Source: IBFD

Almost all Member States tax residential land and buildings, but not always at the same rate or using the same tax base. Very often, there is an additional land tax in a Member State or the rates between the taxes on land and on buildings differ. Yet, while land taxes should be even more

favourable in terms of their neutrality concerning economic behaviour (see Chapter 1), it is not always land that is taxed higher.

Local governments often decide on rates and collect revenues. In most Member States the final rate of at least one recurrent property tax is determined by the responsible municipality, which levies the tax and often also receives the revenues. In these cases, the national tax law usually provides maximum and/or minimum tax rates. The local character of property taxes also shows in the fact that in almost all Member States with available data a majority of revenues are levied by local governments (Graph 3.4). The only Member State where federal or central governments levy a majority of revenues (83.7%) is Greece.

Graph 3.4. **Percentage of revenues from immovable property taxes levied at local government level (2019)**



Note: Data for Greece are for 2018. Data for Croatia, Cyprus, Malta and Romania are not available.

Source: Own calculations based on OECD

Progressivity with respect to the property value is not very common. Eight Member States have at least one of several recurrent property taxes showing features of progressivity with respect to the property value. Six of these countries (Denmark, Greece, France, Lithuania, Austria and Portugal) have more than one RRPT and progressivity only applies to one of the taxes, whereas two (Ireland and Latvia) have a progressive tax rate schedule for their only recurrent property tax.¹⁵ In Greece, France, Lithuania and Portugal, the tax rate system includes a basic tax-free allowance (“zero rate”).

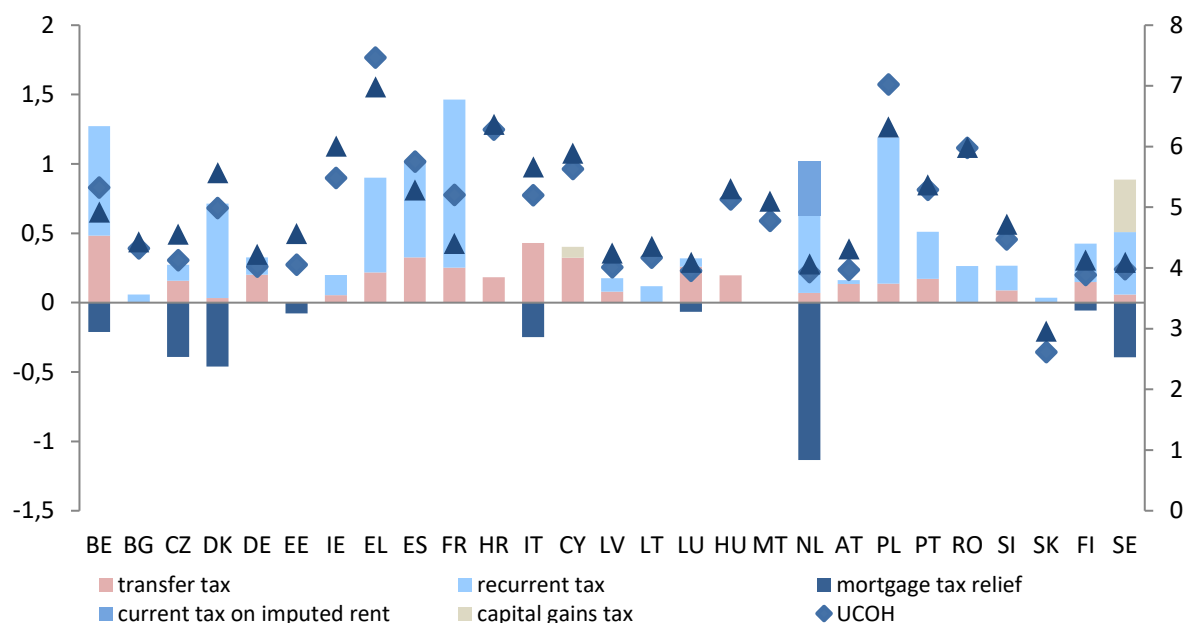
Some Member States grant favourable tax treatment for owner-occupied property in the form of mortgage interest tax relief and/or tax exemptions or reductions for owner-occupied property. In some Member States owner-occupiers can still, fully or partly, deduct mortgage interest payments from their income, even if some Member States have recently limited the generosity of the tax relief or are phasing it out. Besides, a few Member States grant property tax exemptions or reductions specifically for owner-occupied property.

The impact of the favourable tax treatment can be gauged by using an indicator of the marginal cost of owner-occupied housing. Graph 3.5 depicts the impact of various tax elements on the user

¹⁵ In Ireland the tax uses valuation bands and not tax brackets with a fixed amount of tax due per valuation band. Besides these Member States, Italy’s recurrent tax on immovable property might be seen as progressive in the case of owner-occupied property, which is only taxed when it falls under certain categories, which strongly correspond to higher-value properties.

cost of owner-occupied housing (UCOH), which measures the annual cost for a homeowner of owning their main residence per additional euro of house value. The estimated user cost of housing including taxes is below the one estimated in a tax-free scenario in most Member States.¹⁶ Mortgage tax relief can significantly reduce the user cost.

Graph 3.5. Contribution of taxes to the marginal cost of owner-occupied housing (left axis) and estimates of the user cost with and without the contribution of various tax elements (right axis), 2019



Notes: The bars (left-hand scale) depict the contribution of taxes to the user cost of housing, i.e. the annual cost of owning the main residence per additional euro of house value. The diamond and the triangle (right-hand scale) show the total user-cost of housing with taxes and without taxes respectively. The indicators are based on 2019 tax code rules and house price data. More details and the methodological background on the user cost of housing indicator are provided at <https://ec.europa.eu/jrc/en/thematic-research-fiscal-policy/housing-taxation>.

Source: Joint Research Centre-IPTS, European Commission.

3.3. POLITICAL ECONOMY ISSUES

Low revenue from immovable property taxes is often explained by low public acceptability of property taxes, but the evidence is not clear. It is often argued that public reservations towards property taxes are particularly strong, which would impact on the political willingness to rely on them. The available evidence seems however not to be unequivocal. While Hammar et al. (2008) find for Sweden that recurrent property tax is highly unpopular, a UK survey on perceived fairness of different taxes (YouGov, 2015) finds the council tax to be in the middle, seen as less fair than income tax but substantially fairer than, for example, inheritance tax. As property taxes are highly visible, taxpayers might overestimate their size compared to other, less visible taxes such as labour taxes withheld at source or consumption taxes paid in smaller amounts (see also Cabral and Hoxby 2012). Also, the fact that information on the incidence of the tax and its redistributive impact are often missing might add to reservations. Moreover, depending on the design of the tax, liquidity-constrained households might be concerned about their ability to pay it.

¹⁶ The opportunity cost of owner-occupied housing compared to a risk-free alternative investment with taxes on both housing and the interest income of the alternative investment is compared to the same cost without taxes on either housing or the alternative investment.

The immobile tax base of immovable property taxes leaves little room for taxpayers to change behaviour. Whereas income or consumption taxes allow for at least limited reactions to a tax increase, owners of immovable property are more restricted in their possible reaction, especially in the case of a land tax. Consequently, citizens might voice their discontent more clearly than in the case of the increase of another tax.

Valuation can make the tax base contentious. Regular revaluation at shorter intervals is preferable to irregular, less frequent value updates. Recurrent property tax is, contrary to income or consumption taxes, based on a value which needs to be assessed and the tax base may therefore be disputed. In addition, a revaluation will usually increase the tax base and increases will not be equal for all properties, thereby increasing the risk for contention. Regular revaluation at shorter intervals will not only keep the tax efficient, but might also be more acceptable than irregular and less frequent revaluations, as property owners will face smaller and more predictable increases. Also, the costs of ongoing revaluation are apparently preferable to the annualised costs of irregular revaluations (UN-HABITAT 2013). Denmark, for example, will perform biannual valuations combining statistical estimates based on property sales prices and individual housing characteristics with individual discretionary judgements as of 2024. In the Netherlands a yearly assessment by the municipalities based on property sales prices and house characteristics takes place.

Since property taxes are often levied at local level, reforming property taxation may affect the revenue distribution across government levels. While mortgage interest relief is often paid by central level governments, recurrent property taxes or transaction taxes are often levied by municipalities or regions (see Section 3.2). A reform of property taxes might therefore require measures to balance out revenues at different government levels in order to receive broad support. In addition, local governments might find it more difficult to increase taxes than central governments, as they are in closer contact with citizens.

4. IMMOVABLE PROPERTY TAXATION AND INEQUALITY

4.1. THE EFFECT OF PROPERTY TAXES ON INCOME INEQUALITY

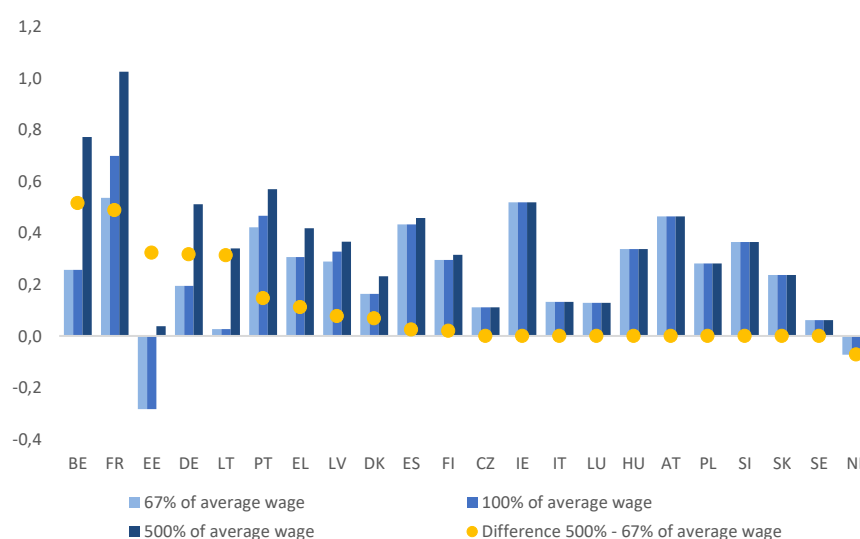
The effect of existing property taxes on income inequality does not seem to be very pronounced. The impact of immovable property taxes on inequality depends on different factors, such as the distribution of property, the design of the tax and its capitalisation into property prices. Studies on the overall effect of increasing recurrent property taxes on income inequality provide mixed results. While Alves and Alfonso (2019) find that an increase of immovable property tax revenues reduces income inequality in OECD countries and even more significantly so in the long run, Akgun et al. (2017) find no effect of higher recurrent property tax as a share of GDP on income distribution in the OECD. The low impact on income inequality is likely to be linked to the low level of property taxation and to tax design issues. The progressivity of taxation of household savings with respect to income can be assessed using marginal effective tax rates (METRs) for these different savings types at different income levels. Overall, the METRs on owner-occupied property¹⁷ do not seem to increase too strongly for higher income levels and in half of Member States METRs on owner-occupied housing do

¹⁷ METRs on owner-occupied property are marginal tax rates for taxpayers holding the average of housing and non-housing assets for each income level taking into account all property-related taxes including mortgage interest tax relief (OECD 2018).

not at all increase with income. Also, due to relatively generous mortgage interest tax relief, METRs can in some cases even be negative (Graph 4.1). As immovable property makes up a substantial amount of households' total wealth (more than 67% in the euro area ¹⁸), property taxation can also impact wealth inequality.

The overall home ownership tax bias in personal income taxation only weakly affects income inequality. While the favourable taxation of homeownership creates non-negligible efficiency losses, its effect on inequality is small. Fatica and Prammer (2018) find that the effects on the user cost of housing change only slightly for different income and quintiles in 14 euro area countries. Similarly, Figari et al. (2017) also find that abolishing the favourable tax treatment of homeownership would only lead to a small reduction of income inequality.

Graph 4.1. Marginal effective tax rates on owner-occupied housing at various wage levels of owner (2016)



Note: Includes recurrent taxes on immovable property, transaction taxes, possible taxes on income and capital gains taxes, when applicable. The property is debt-financed. No data were available for BG, HR, CY, MT and RO.

Source: OECD (2018)

4.2. RECURRENT PROPERTY TAX DESIGN ISSUES RELATED TO REDUCING INEQUALITY

Assessment methods may lead to preferential tax treatment of higher-income households. Several studies have found that owners of low-priced properties tend to suffer from “assessment regressivity”, i.e. that their properties have a higher assessed value relative to the sales price of the property than higher-priced properties, leading to lower effective tax rates for higher-income households.¹⁹ A regular update of a value-based tax base will ensure that owners are taxed according to the current monetary value of their property. If property values are not regularly updated, the tax base will not take into account the differences in value increases between regions or property types, resulting in an unequal tax treatment of properties of equal value.

¹⁸ European Central Bank Household Finance and Consumption Survey (HFCS) wave 2017.

¹⁹ This might be due to flawed valuation methods, but the reasons are not clear (see for example McMillen and Singh 2020).

Whereas the current taxation of immovable property in the euro area is not particularly conducive to reducing income inequality, changes in the design of RRPTs can help make it more redistributive. The progressivity of RRPT rates with respect to the property value could be increased in order to reduce income inequality, while – given the small behavioural effects related to RRPTs – helping achieve that the distortive effect of the tax system on the economy does not increase. In addition, a reduction of the RRPT which increases with the number of inhabitants of a house or apartment might be justified by the fact that housing is a basic consumption good. The reduction should be independent of the size or value of the property, only apply to the household’s main residence and always be granted to the occupant of the building.²⁰ It could be made income-dependent in order to be more targeted and help foster homeownership of poorer, financially constrained households.²¹ A reform that increases the progressivity of the RRPT rate schedule with respect to property and includes also tax reductions for low-income households was shown to have a favourable impact on lower-income households relative to those with higher incomes in simulations for Ireland (O’Connor et al. 2016).²² Of course, country-specificities in the distribution of immovable property, the overall tax structure of the country and the design of taxes on other capital income types will have to be considered, when reforms towards a more progressive rate system are planned.

Mortgage interest tax relief primarily benefits higher-income households and increases income inequality. Mortgage interest relief from personal income tax has been shown to benefit households with higher incomes more than those with lower incomes, as they receive a larger part of the overall tax relief and also experience a higher percentual increase of their disposable income due to the tax relief (Matsaganis et al. 2007, Fatica 2015, Leodolter and Rutkowski forthcoming). Similarly, mortgage tax relief causes a stronger reduction of the user-cost of housing of higher-income households (Fatica and Prammer 2018) and leads to an increase of income inequality (Figari et al. 2019a, Leodolter and Rutkowski forthcoming) in most Member States. Removing the relief of mortgage interest from personal income tax will therefore primarily affect higher-income households. Using the resulting additional tax revenues to decrease the tax burden of low earners will augment the redistributive effect while also making sure that the overall tax burden does not increase.

Taxation of immovable property could also function as a substitute for a general wealth tax. As immovable property constitutes a substantial amount of households’ total wealth (more than 67% in the euro area) and given the immobility and high visibility of the tax base as well as the distortive under-taxation of owner-occupied property (see Section 2), a (progressive) recurrent property tax could also function as a substitute for a wealth tax. Tax rates would however have to be noticeably progressive, in order to address the fact that the assets of the very wealthy households contain more property in absolute terms, but also a lower share of immovable property in relative terms than those of medium-wealth households (see Annex 1). Ideally, the progressivity of the rates would be based on the total value of all properties of the taxpayer.

A tax on land can be more favourable for households with lower incomes if adequately designed. Taxing land seems to be preferable not only from an efficiency standpoint (see Section 2), but also in order to capture the huge increases of land value over time.²³ Moreover, the value of land is strongly

²⁰ In Belgium for example, tenants are allowed to reduce their rent accordingly.

²¹ As discussed in Chapter 1, the evidence on the effects of homeownership for society is however not always clear.

²² The simulation included however a move from banded valuation to tax brackets.

²³ Increases of land prices might explain about 80 percent of the global property price boom since World War II in 14 advanced economies (Knoll, Schularick and Steger 2017).

influenced by its location and infrastructure, which are not the result of the activity of the landowner. However, the effects of a move from a recurrent property tax which treats land and buildings equally to one taxing only land values or taxing land higher strongly depend on the distribution of land and buildings ownership, on tax design issues, and possibly also on property valuation methods,²⁴ which is why country-specificities in the distribution of land and buildings and the tax system should be carefully taken into account when moving towards a stronger reliance on land taxation. Also, even if overall effects on income inequality look small, there can be a substantial shift of the burden between taxpayers (Barbosa and Skipka 2019).

Deferral of tax payment might be considered to address the issue of asset-rich but income-poor households. Sometimes, relatively large houses might be owned by people with low incomes, such as for example pensioners. An income-dependent property tax reduction and the use of tax deferral schemes until the point of sale might be needed.²⁵

5. IMMOVABLE PROPERTY TAX AND ENVIRONMENTAL GOALS

5.1. TAX BASE ASSESSMENT AND EXTERNAL EFFECTS

A value-based property tax base may discourage investments serving environmental objectives and lead to a trade-off between equity and environmental objectives. Buildings in the EU are responsible for 40% of EU energy consumption and 36% of EU greenhouse gas emissions.²⁶ Therefore, improving energy efficiency in buildings has a key role to play in achieving carbon-neutrality by 2050. While improving energy efficiency of buildings is important to meet climate and energy objectives, the tax base is likely to increase as a result of the improvement.²⁷ Value-based property taxation may therefore discourage the improvement of the building stock, if energy consumption taxes do not already factor in the full external environmental cost of energy consumption. Consequently, and as in reality energy taxes cover the external costs of energy consumption only partially, the energy performance of buildings could be included in an adjustment of the property tax base. Davis et al. (2017) show that using a tax base assessment based on the energy performance of a building and thereby redistributing the tax burden from more energy-efficient to less energy-efficient

²⁴ In their simulation for a US City England and Zhao (2005) find a revenue-neutral tax shift from a flat tax treating land and buildings equally towards either a pure land value-tax or a tax with a higher rate on buildings than on land to benefit homeowners with houses of higher values more. (House value is interpreted as a proxy for lifetime income.) A system with a higher rates on buildings and a universal tax credit would however benefit homeowners with houses of lower values more. In contrast, Bowman and Bell (2008) find households with lower value houses to be the main beneficiaries of a move towards a pure land value tax for another US city. They attribute the different results to differences in land-use intensity and possibly valuation techniques in the two cities.

²⁵ While tax reductions or deferrals are able to help asset-rich low income households, there is however the risk that owners remain in houses that are too large for them, depriving others, for example younger families with children, of the chance to buy them and also using high amounts of energy in order to be able to live in the house. Policymakers might therefore introduce conditions and/or limits for reductions and deferrals and might also make deferred taxes increase with an interest rate.

²⁶ European Commission News 17 February 2020, "In focus: Energy efficiency in buildings" (https://ec.europa.eu/info/news/focus-energy-efficiency-buildings-2020-feb-17_en)

²⁷ Fuerst et al. (2015) show that a higher energy efficiency rating significantly increases the transaction price of a property. They find a premium of 5% for dwellings rated A/B and of 1.8% for those rated C compared to those rated D.

buildings, would shift taxation from suburban to rural properties, while the taxation of urban properties would remain largely unchanged. Also, while taxes for apartments would decrease, the ones for terraced houses would increase. Distributional effects will have to be taken into account if the tax base is adjusted to buildings' energy performance, as households with higher incomes might more likely own energy-efficient buildings.

Moreover, the tax base might need to consider infrastructure costs and positive external effects of using land for non-residential purposes. Recurrent property taxes usually do not factor in the full cost of public infrastructure as well as the cost of environmental externalities. They can therefore be conducive to excessive land use and urban sprawl with detrimental effects on the environment, for example because of increased energy consumption due to higher transport needs (see Brandt 2014).²⁸ A general land value-based tax might be well-suited to address this problem, as it can support more economical land use. At the same time, lower rates for certain non-residential purposes can be used in order to take account of the positive external effects of, for example, open spaces, forests or farmland and to prevent their conversion towards more profitable use. However, the effect of immovable property taxes on land use is small (Meng and Zhang 2013) and has to be viewed in the context of planning instruments such as regulations and transport taxes. Yet, higher tax rates or bases than is currently the case might be able to increase the impact of property taxes on landowners' land use decisions.

5.2. OTHER PROPERTY-RELATED TAX POLICY MEASURES PROMOTING ENERGY-EFFICIENT INVESTMENT

Tax incentives for energy-efficient investments need to be well designed to have a positive impact. Also, they might disproportionately favour high-income earners. Cost is often the major hurdle to renovation, but evidence on the impact of income tax incentives for clean energy investments is mixed (Dubin and Henson 1988, Hassett and Metcalf 1995). As households might finance energy-efficient investments with the tax incentive but at the same time increase their energy use (Alberini et al. 2013), energy consumption taxes might be required as an additional measure. Not least, the question of which types of renovation should be supported might also be important, as minor renovations might create lock-in effects and thereby delay highly effective major renovations (Dubois and Allacker 2015). A trade-off between increased energy-efficiency and redistributive objectives might occur, as energy efficiency-related tax reductions have been found to predominantly benefit higher-income households. Reasons might be their availability to homeowners only, the non-refundable design of tax credits and restricted access to credits for lower-income households (Borenstein and Davis 2015).

Progressive property taxation could help accomplish environmental objectives while also reducing inequality. Besides reducing inequality, recurrent property taxes with progressive rates can also contribute to more energy-efficient construction of buildings and behaviour of owners by helping lower the demand for large immovable properties, which in turn reduces the consumption of energy and materials by wealthy households (see Clune et al. 2012 and Wilson and Boehland 2005). Also, they might be able to help create the tax revenue necessary to compensate for the income-regressive impact of many tax measures increasing energy efficiency and reducing emissions. In addition,

²⁸ In addition, "tax holidays", i.e. tax abatements granted to new buildings for a limited time, increase the incentive to invest into new buildings rather than existing ones and thereby lead to inefficient land use.

reducing the favourable taxation of owner-occupied vis-à-vis to rented housing as well as decreasing the distortive property transaction taxes might reduce environmental damage resulting from transport, as financial obstacles to move house to be closer to one's workplace would potentially be reduced.

6. CONCLUSIONS

The economic rationale for recurrent residential property taxation (RRPT) is strong, but the taxation of property is relatively low in many Member States. RRPTs are considered to be among the taxes least detrimental to growth. They can capture economic rents attached to land, constitute an immobile, stable tax base and are less distortive to economic growth than many other taxes. Despite these qualities, they are rather low compared to other taxes in many Member States. The assessment of the property tax base might be disputed and the taxes might face reservations, as they are highly visible and leave little room for taxpayers to react. Furthermore, as revenues often go to sub-central levels, reforms should be accompanied by measures to balance out revenues at different government levels. Finally, property taxes very often do not sufficiently take equity and environmental issues into account.

Better addressing efficiency and equity issues requires regularly updating the property tax base and phasing-out mortgage interest relief. A regular update of the property tax base is crucial to ensure that it reflects actual market values. Regular updates make the property tax efficient and fair in the sense that it is based on the current monetary equivalents of properties. A land-value based tax has the advantages of taxing economic rents and not discouraging building activity. Mortgage interest tax relief however contributes to the homeownership tax bias and was also found to more strongly favour higher-income households. The additional tax revenues from its removal could be used to decrease the tax burden of low-wage earners.

Also other design features, in particular a progressive tax rate schedule, can contribute to a reduction of inequality through immovable property tax. The use of a progressive RRPT schedule should be considered in order to reduce income and wealth inequality by way of the tax system while ensuring that it remains growth-friendly. A noticeably progressive property tax might also be able to address inequality concerns resulting from the fact that wealthier households invest less of their capital in relative terms into immovable property. In addition, the introduction of per capita property tax reductions would constitute a targeted support measure contributing to the progressivity of the property tax as well. In any case, deferred or reduced tax payments for asset-rich but income-poor households might be needed. The redistributive effects of moving towards a stronger use of land value taxation can strongly differ, depending on tax design and the distribution of land and buildings which may be highly country-specific. The separate assessment of land values would also be required.

Reforms of the immovable property tax base to achieve environmental goals should take into account the energy performance of the building. A well-designed tax on immovable property should not only foster efficiency and reduce inequality, but also take into account external effects and serve environmental goals. Reforming the tax base assessment by accounting for the energy performance of the building and by reducing the incentives for excessive land use can support environmental objectives. Progressive recurrent property taxes might be able to counteract the fact that environmentally-related tax expenditures have the tendency to benefit higher-income homeowners more than those with lower incomes.

A well-designed RRPT can help generate tax revenues, be growth-friendly and contribute to reducing inequality and protecting the environment. Reforming the property tax base by bringing property values in line with market values and by factoring in the energy performance of buildings helps reduce distortions, foster equity as well as promote energy efficiency. Applying a progressive RRPT rate schedule, possibly with income-dependent reductions, can contribute to reducing income and wealth inequality. In addition, it can help attain environmental objectives by lowering the demand for large immovable properties and providing the revenue for compensatory payments to vulnerable households in connection with environmental tax measures.

REFERENCES

- Akgun Oguzhan, Boris Cournède and Jean-Marc Fournier (2017), “The effects of the tax mix on inequality and growth”, Economics Department Working Paper No. 1447, OECD, Paris. <https://dx.doi.org/10.1787/c57eaa14-en>.
- Alberini, Anna, Will Gans and Charles Towe (2013), “Free Riding, Upsizing, and Energy Efficiency Incentives in Maryland Homes”, Fondazione Eni Enrico Mattei (FEEM) Nota di Lavoro 82. <https://www.jstor.org/stable/resrep00984>.
- Alves, José and António Alfonso (2019), “Tax structure for consumption and income inequality: an empirical assessment”, *SERIEs* 2019/10: 337–364. <https://doi.org/10.1007/s13209-019-00202-3>
- Andrews, Dan (2010), “Real House Prices in OECD Countries - The Role of Demand Shocks and Structural and Policy Factors”, Economics Department Working Paper No. 831, OECD, Paris. <https://dx.doi.org/10.1787/5km33bqzhhbzr-en>.
- Andrews, Dan and Aida Caldera-Sánchez (2011) “Drivers of Homeownership Rates in Selected OECD Countries”, Economics Department Working Paper No. 849, OECD, Paris, <https://dx.doi.org/10.1787/5kkg9mcwc7jf-en>.
- Arnold, Jens (2008), “Do Tax Structures Affect Aggregate Economic Growth? Empirical evidence from a panel of OECD countries” Economics Department Working Paper No. 643, OECD, Paris. <http://dx.doi.org/10.1787/236001777843>.
- Arnold Jens Matthias, Bert Brys, Christopher Heady, Asa Johansson, Cyrille Schwellnus and Laura Vartia (2010), “Tax Policy for Economic Recovery and Growth” *The Economic Journal* 121 (February).
- Baiardi Donatella, Paola Profeta, Riccardo Puglisi and Simona Scabrosetti (2019) “Tax policy and economic growth: does it really matter?” *International Tax and Public Finance* 26: 282–316. <https://doi.org/10.1007/s10797-018-9494-3>.
- Barbosa, Rafael and Simon Skipka (2019), “Tax Housing or Land? Distributional Effects of Property Taxation in Germany”, CESifo Working Paper No. 8039.
- Barrios, Salvador, Cécile Denis, Viginta Ivaškaitė-Tamošiūnė, Adriana Reut and Estefanía Vázquez Torres (2019), “Housing taxation: a new database for Europe”, JRC Working Paper on Taxation and Structural Reforms 08/2019, European Commission, Joint Research Centre, Seville.
- Blanchflower, David and Andrew Oswald (2013), “Does High Homeownership impair the Labour Market?”, NBER Working Paper 19079. <http://www.nber.org/papers/w19079>.
- Borenstein, Severin and Lucas W. Davis (2015), “The Distributional Effects of US Clean Energy Tax Credits”, in: Jeffrey R. Brown (Ed.), “Tax Policy and the Economy, Volume 30”, University of Chicago Press.
- Borge, Lars-Erik and Jørn Rattsø (2014), “Capitalization of Property Taxes in Norway”, *Public Finance Review* 42(5): 635-661.

- Bourassa, Steven C., Donald R. Haurin and Martin Hoesli (2015), "What Affects Children's Outcomes: House Characteristics or Homeownership?", Swiss Finance Institute Research Paper 15/42.
- Bowman, John H. and Michael E. Bell (2008) "Distributional Consequences of Converting the Property Tax to a Land Value Tax: Replication and Extension of England and Zhao", *National Tax Journal* 61(4, Part 1): 593-607.
- Brandt, N. (2014), "Greening the Property Tax", OECD Working Paper on Fiscal Federalism 17. <https://dx.doi.org/10.1787/5jz5pzw9mwzn-en>.
- Cabral, Marika and Caroline Hoxby (2012), "The Hated Property Tax: Salience, Tax Rates, and Tax Revolts", Working Paper 18514. <http://www.nber.org/papers/w18514>.
- Chen, Jie (2013) "Housing tenure, residential mobility and adolescents' education achievement: evidence from Sweden", *The Annals of Regional Science* 50(1): 275–294.
- Clune, Stephen, John Morrissey and Trivess Moore (2012), "Size matters: House size and thermal efficiency as policy strategies to reduce net emissions of new developments", *Energy Policy* 48: 657–667.
- Crowe, Christopher, Giovanni Dell'Ariccia, Deniz Igan, and Pau Rabanal (2011), "How to Deal with Real Estate Booms: Lessons from Country Experiences", IMF Working Paper 11/91.
- Davis P., M. McCord, W.J. McCluskey, E. Montgomery, M. Haran and J. McCord (2017) "Is Energy Performance too taxing: A CAMA approach to modelling residential energy in housing in Northern Ireland" *Journal of European Real Estate Research* 10/2: 142-148.
- Di, Zhu Xiao, Eric Belsky and Xiaodong Liu (2007), "Do homeowners achieve more household wealth in the long run?", *Journal of Housing Economics* 16: 274–290.
- Dietz, Robert D. and Donald R. Haurin (2003), "The social and private micro-level consequences of homeownership", *Journal of Urban Economics* 54: 401–450.
- DiPasquale, Denise and Edward L. Glaeser (1999), "Incentives and Social Capital: Are Homeowners Better Citizens?", *Journal of Urban Economics* 45, 354-384.
- Disney, Richard, John Gathergood, Stephen Machin and Matteo Sandi (2012), "Does Homeownership Reduce Crime? A Radical Housing Reform in Britain", Centre for Economic Performance Discussion Paper 1685.
- Dubin Jeffrey A. and Steven E. Henson (1988), "The distributional effects of the Federal Energy Tax Act", *Resources and Energy*, 10(3): 191-212.
- Dubois Maarten and Karen Allacker (2015), "Energy Savings from Housing: Ineffective Renovation Subsidies vs Efficient Demolition and Reconstruction Incentives", *Resources and Energy* 10(3): 191-212.
- Elinder, Mikael and Lovisa Persson (2017), "House price responses to a national property tax reform", *Journal of Economic Behavior & Organization* 144: 18–39.

Engelhardt, Gary V., Michael D. Eriksen, William G. Gale, Gregory B. Mills (2010), “What are the social benefits of homeownership? Experimental evidence for low-income households”, *Journal of Urban Economics* 67: 249–258.

England, Richard W. and Min Qiang Zhao (2005), “Assessing the Distributive Impact of a Revenue—Neutral Shift from a Uniform Property Tax to a Two-Rate Property Tax with a Uniform Credit”, *National Tax Journal* 58(2).

Eurostat (2013), “European System of Accounts – ESA 2010”, Publications Office of the European Union.

Fatica, Serena (2015), “Housing taxation: from micro design to macro impact”, in: *Quarterly Report on the Euro Area (QREA) 14(1)*, European Commission - Directorate-General for Economic and Financial Affairs, 27-33.

Fatica, Serena and Doris Prammer (2018), “Housing and the Tax System: How Large Are the Distortions in the Euro Area?”, *Fiscal Studies* 39(2): 299–342.

Figari, Francesco, Alari Paulus, Holly Sutherland, Panos Tsaklogiou, Gerlinde Verbist and Francesca Zantomio (2017), “Removing Homeownership Bias in Taxation: the Distributional Effects of Including Net Imputed Rent in Taxable Income“, *Fiscal Studies*, 38 (4), 525-557. <https://doi.org/10.1111/1475-5890.12105>.

Figari, Francesco, Katarina Hollan, Manos Matsaganis and Eszter Zolyomi (2019a), „Recent changes in housing policies and their distributional impact across Europe“, *Euromod Working Paper* 12/19.

Figari, Francesco, Gerlinde Verbist and Francesca Zantomio (2019b), “Homeownership Investment and Tax Neutrality: A joint assessment of income and property taxes in Europe”, *Ca' Foscari University of Venice Working Paper* 27/2019.

Fuerst, Franz, Patrick McAllister, Anupam Nanda, and Peter Wyatt (2015), “Does energy efficiency matter to home-buyers? An investigation of EPC ratings and transaction prices in England”, *Energy Economics* 48: 145-156.

Gemmell, Norman, Arthur Grimes and Mark Skidmore (2019) “Do Local Property Taxes Affect New Building Development? Results from a Quasi-Natural Experiment in New Zealand”, *Journal of Real Estate Finance and Economics* 58: 310–333. <https://doi.org/10.1007/s11146-017-9651-y>

Green, Richard K., Gary D. Painter and Michelle J. White (2012), “Measuring the Benefits of Homeowning: Effects on Children Redux”, *Research Institute for Housing America Research Paper* 12/01.

Hammar Henrik, Sverker C. Jagers and Katarina Nordblom (2008), "What explains attitudes towards tax levels? A multi-tax comparison", *Fiscal Studies* 29(4): 523-543.

Hassett, Kevin A. and Gilbert E. Metcalf (1995), “Energy tax credits and residential conservation investment: Evidence from panel data”, *Journal of Public Economics* 57: 201-217.

Hilber, Christian A. L. and Tracy M. Turner (2014), "The Mortgage Interest Deduction and its Impact on Homeownership Decisions", *The Review of Economics and Statistics* 96(4): 618-637.

- Høj, Anne Kristine, Mads Rahbek Jørgensen and Poul Schou (2018) “Land Tax Changes and Full Capitalisation”, *Fiscal Studies* 39 (2). <https://doi.org/10.1111/1475-5890.12163>.
- Johannesson-Linden, Åsa and Christian Gayer (2012), “Possible reforms of real estate taxation: Criteria for successful policies”, *European Economy Occasional Paper* 119.
- Kaas, Leo, Georgi Kocharkov and Edgar Preugschat (2019), “Does homeownership promote wealth accumulation?”, *Applied Economics Letters*, 26(14): 1186-1191. <https://doi.org/10.1080/13504851.2018.1542117>.
- Knoll, Katharina, Moritz Schularick and Thomas Steger (2017), “No Price Like Home: Global House Prices, 1870-2012”, *American Economic Review* 107(2): 331-353.
- Laamanen, Jani-Petri (2017), “Home-ownership and the Labour Market: Evidence from Rental Housing Market Deregulation”, *Labour Economics* 48: 157-167.
- Leodolter, Alexander and Aleksander Rutkowski (forthcoming), “The Fiscal and Distributional Effects of Removing Mortgage Interest Tax Relief in EU Member States”; *European Economy Economic Brief*.
- Levine Einstein, Katherine, Maxwell Palmer and David M Glick (2019), „Who Participates in Local Government? Evidence from Meeting Minutes“, *Perspectives on Politics* 17(1): 28-46.
- Marical, François (2009). “Les mécanismes de réduction des inégalités de revenus en 2008” in: *France, portrait social, Édition 2009*. INSEE. <https://www.insee.fr/fr/statistiques/1372408?sommaire=1372421>.
- Matsaganis, Manos and Maria Flevotomou (2007), “The Impact of Mortgage Interest Tax Relief in the Netherlands, Sweden, Finland, Italy and Greece”, *Euromod Working Paper* 2/07.
- McCabe, Brian J. (2013) “Are Homeowners Better Citizens? Homeownership and Community Participation in the United States”, *Social Forces* 91(3): 929–954.
- McMillen, Daniel and Ruchi Singh (2020), “Assessment Regressivity and Property Taxation”, *Journal of Real Estate Finance and Economics* 60:155–169. <https://doi.org/10.1007/s11146-019-09715-x>.
- Meng, Li and Daowei Zhang (2013), “Impacts of property tax on land use change decisions in Georgia”, *Urban Ecosystems* 16:3-12.
- Munford, Luke A., Eleonora Fichera, Matt Sutton (2020) “Is owning your home good for your health? Evidence from exogenous variations in subsidies in England”, *Economics and Human Biology* 39
- Murray, Cameron K. and Jesse Hermans (2019) “Land value is a progressive and efficient property tax base: Evidence from Victoria”, *OSF Preprints*. <https://doi.org/10.31219/osf.io/mxg3j>.
- OECD (2018) “Taxation of Household Savings”, *OECD Tax Policy Studies*, No. 25, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264289536-en>.
- O’Connor, Brendan, Terence Hynes, David Haugh and Patrick Lenain (2016), “Searching for the Inclusive Growth Tax Grail: The Distributional Impact of Growth Enhancing Tax Reform in Ireland“, *The Economic and Social Review* 47(1): 155-184.

Princen, Savina, Athena Kalyva, Alexander Leodolter, Cécile Denis, Adriana Reut, Andreas Thiemann and Viginta Ivaskaite-Tamosiune (2020), “Taxation of Household Capital in EU Member States: Impact on Economic Efficiency, Revenue & Redistribution”, European Economy Discussion Paper 130.

Rohe, William M. and Mark Lindblad (2013), “Re-examining the social benefits of homeownership after the housing crisis.” Paper originally presented at ‘Homeownership Built to Last: Lessons from the Housing Crisis on Sustaining Homeownership for Low-Income and Minority Families’ – A National Symposium held on April 1 and 2, 2013 at Harvard Business School in Boston, Massachusetts.

Sirmans, Stacy, Dean Gatzlaff and David Macpherson (2008), “The history of property tax capitalization in real estate”, *Journal of Real Estate Literature* 16(3): 327-344.

Turk, Rima A. (2015), “Housing Price and Household Debt Interactions in Sweden”, IMF Working Paper 15/276.

Turner, Tray M and Heather Luea (2009), “Homeownership, wealth accumulation and income status”, *Journal of Housing Economics* 18: 104–114.

UN-HABITAT (2013), “Property Tax Regimes in Europe”, The Global Urban Economic Dialogue Series, United Nations Human Settlements Programme.

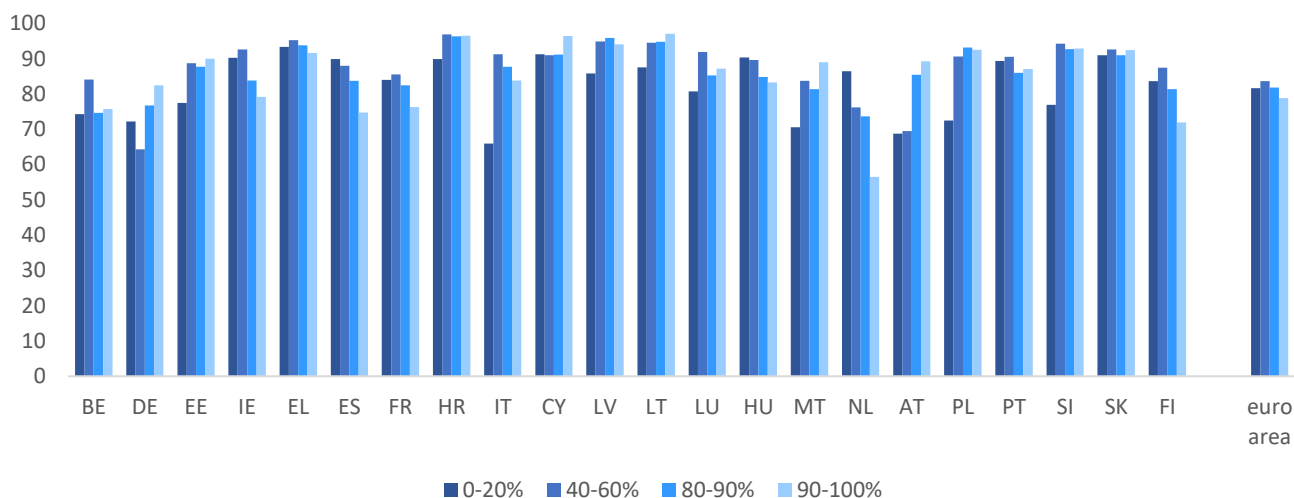
Wilson, Alex and Jessica Boehland (2005), “Small is Beautiful – U.S: House Size, Resource Use, and the Environment”, *Journal of Industrial Ecology* 9 (1-2): 277-287.

YouGov (2015), "Voters in all parties think inheritance tax unfair", <https://yougov.co.uk/topics/politics/articles-reports/2015/03/19/inheritance-tax-most-unfair>.

Zumbro, Timo (2011), “The Relationship Between Homeownership and Life Satisfaction in Germany”, *Housing Studies* 29(3): 319-338.

ANNEX I – DISTRIBUTION OF REAL ESTATE WEALTH

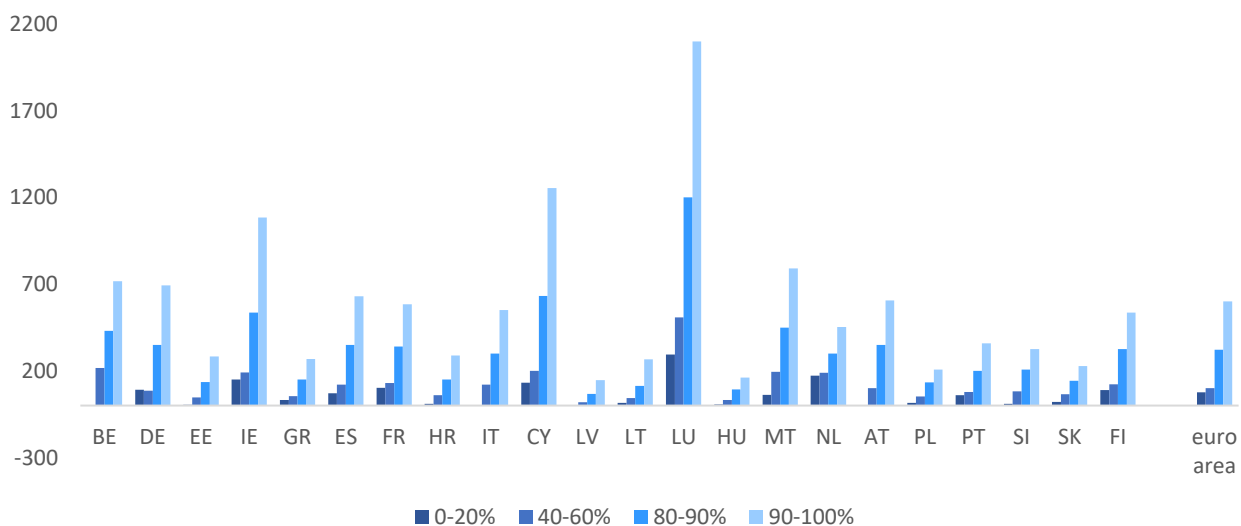
Graph A1.1 **Share (in %) of real assets in total assets for different net wealth quantiles**



Note: Reference period for data lies between September 2016 and January 2019 (see Household Finance and Consumption Network 2020 for more details).

Source: ECB Household Finance and Consumption Survey 2017 wave.

Graph A1.2 **Conditional medians for real estate asset values for different net wealth quantiles (in thousands of EUR)**



Note: Reference period for data lies between September 2016 and January 2019 (see Household Finance and Consumption Network 2020 for more details). Values for quintile of 0-20% of net wealth for Belgium, Italy, Latvia and Austria are missing because of too few observations.

Source: ECB Household Finance and Consumption Survey 2017 wave.

ANNEX II

Table A2.1 **Recurrent immovable property tax (for individuals), 2019**

	Tax	Tax base	Tax rate	Reductions	Differences for owner-occupied property	Mortgage interest tax relief	General wealth tax, applicable to immovable property
BE	Immovable withholding tax	"Cadastral income", i.e. the deemed rental value as determined by the tax administration. For buildings the tax base is 140% of cadastral income.	3.97% (Flanders), 1.25% (Wallonia and Brussels). Municipal and provincial surcharges increase the effective rate to between 25% and 60% or more of the cadastral income.	Reductions exist for: main residences/sole properties if the overall cadastral income value of the taxpayer is below EUR 745, for newly constructed buildings for 5 years, for dependent persons/ children living in the household, for investment into material and equipment in Flanders and Wallonia and for energy-saving buildings in Flanders.	No	No	No
BG	Real estate tax	Value of the property as estimated by the state body	Between 0.01% and 0.45% of the tax valuation of the immovable property. Higher tax rates for residential properties in resort areas: 0.5%-0.7% in sea or mountain areas, or other resorts of national importance; 0.45%-0.6% for other.	Exemption for up to 10 years for certificates of certain energy consumption classes.	If the property is the main residence of an individual, the tax is reduced by 50%.	Yes	No

CZ	Tax on land and buildings or structures	Area. Some land is exempt. For buildings and structures and individually registered flats the base is the floor area of the building. For flats it is multiplied by a coefficient of either 1.22 (for flats with a co-ownership of the relevant plot of land) or 1.2 (in all other cases). Some buildings and structures are exempt.	Tax on land: CZK 2 per m ² for building plots and CZK 0.2 per m ² in other cases. These rates are multiplied by coefficients ranging from 1.0 to 4.5, depending on the size of the municipality. Tax on buildings: for residential buildings CZK 2 per m ² ; for weekend and recreation buildings CZK 6 per m ² ; for industrial and energy structures CZK 10 per m ² ; for most structures used for business purposes CZK 10 per m ² . These rates are increased by CZK 0.75 per m ² of the area of the building for each floor. The size of the municipality in which the building is located determines the final amount.	-	No	Yes	No
DK	Municipal real estate tax	Value of land	Between 1.6% and 3.4%, varying depending on the location	Deductible from PIT if used for business purposes	No	Yes	No
	Municipal real estate tax on buildings used for certain businesses	Value of building	The rate of tax may not exceed 1%.	Basic allowance of DKK 50,000. Deductible from PIT if used for business purposes	No		

	National property tax for owner-occupied dwellings	Land and buildings. The lowest of the public assessment value of the current year, the public assessment value of 2001 plus 5% and the public assessment value of 2002 can be chosen.	1% until DKK 3.040.000 and 3% beyond.	Property let to a tenant is exempt. Tax relief for elderly owners, depending on their income. No deduction from PIT.	No		
DE	Immovable property tax	Immovable property whether held as private or business asset. Multiple of the average rent, which could be obtained for a comparable property. The fiscal value is usually lower than the actual value.	0.98% – 2.84% (0.35% multiplied by municipal coefficient from 280% to 810%). The average rate is around 1.9%.	Deductible from PIT if property is used for trade or business or if it is a source of income (rental income).	No	No	No
EE	Local real-estate tax	Taxable value of all land based on the authorities' valuation, unless it is exempted in the law.	The tax rate is established by the municipal council and may vary between 0.1% and 2.5% of the taxable value of the land.	The tax on land where economic activity is restricted by law is charged at the rate of 50%.	No	Yes	No
IE	Local property tax on residential property	Market value of property	0.18% until EUR 1 million, then 0.25%. For property values below EUR 1 million, there is a fixed amount of tax to be paid depending on the valuation band the property falls into. The amount translates to 0.18% of the property value at the mid-point of each valuation band. Local authorities can increase or decrease national rate by a factor of 15%.	-	No	No	No

	Local levy (termed "rates") on business premises	Notional value of business premises	Each authority sets its own percentage.	Rates are deductible as an expense in computing business profits	No		
EL	Real estate ownership tax (ENFIA), consisting of a principal tax and a supplementary tax	Principal tax: Area of land/building in m ²	Principal tax: Land: EUR 0.0037 – 11.25/m ² Buildings: EUR 2 - 13/m ² Rate is based on the surface, the usage, the age, the location of the real property and the nature of the property rights.	-	No	No	No
		Supplementary tax: Total value of the real estate property	Supplementary tax: The rates range from 0.1% to 1.0% with a tax-free value of EUR 300,000 The amount of the EN.F.I.A. is reduced by 30% for property with a total value (t.v.) ≤ EUR 60,000; 27% for t.v. ≤ EUR 70,000; 25% for t.v. ≤ EUR 80,000; 20% for t.v. ≤ EUR 1 million; and 10% for t.v. over EUR 1 million. The value of land located outside urban areas is not taken into account in determining the reduction.	-			

	Local real estate duty (TAP)	Objective property value according to area prices and an age coefficient, as assessed by the tax authorities.	The rate, set by the local councils, varies between 0.025% and 0.035% of the assessed value.	-	No		
ES	Immovable property	Cadastral value, adjusted every 8 years with reference to market value of land and buildings	General rates: 0.4% for urban and 0.3% for rural property. May be increased by municipal authorities.	The tax is a deductible expense for PIT purposes	No	No	Yes, yes
FR	Real estate wealth tax (IFI)	Market value of immovable property. Value of assets is determined at level of fiscal household. Debts relating to taxable assets can be deducted from the tax base.	Progressive, from 0.5% starting at EUR 800.000 until 1.5% from EUR 10 million onwards. Only applies if net value of assets exceeds EUR 1.3 million.	Exemptions for business assets. The tax itself can be deducted from its taxable base. The total sum of income tax and real estate wealth tax may not exceed 75% of taxpayer's income from previous year.	The taxpayer's main residence is taxed at 70% of its market value.		
	Property Tax	Notional rental value of undeveloped and developed immovable property obtained from local official land registry	Developed property: Coefficients applied to 50% of notional rental value. Undeveloped property: Coefficients applied to 80% of notional rental value	Partial or full exemption of 2 years for newly developed property	Tax burden on principal residence may not exceed 50% of total income.	No	No
	Dwelling tax	Deemed rental value of occupied dwellings determined by local land registry (<i>cadastre</i>). To be paid by occupier regardless if owner or tenant.	Coefficients determined by local authorities	Various allowances depending on family situation	Full tax rebate (100%) in 2020 (65% in 2019). Rebate fully applies to incomes below EUR 27.000 (single) and EUR 43.000 (couple).		

HR	Tax on country cottages	Area (m ²) of the usable floor space	The tax ranges from HRK 5 to HRK 15 per m ² of the living area per year, depending on the municipality or town.	-	No	No	No
IT	Municipal tax on immovable property (IMU)	Imputed income from immovable property (e.g. land, buildings and apartments), as entered into the cadastre plus a 5% addition, multiplied by a coefficient ranging from 55 to 160, depending on the cadastral classification of the property	General tax rate is 0.86%, but the municipality may increase or decrease the rate by a coefficient of up to 0.3%	The municipality may increase or decrease the rate. A deduction of EUR 200 is available.	The principal dwelling is normally not subject to IMU. For principal dwellings that are high-value properties, castles, villas or buildings of historic or artistic interest a reduced rate of 0.5% applies.	Yes	No
CY	-	#N/A	#N/A	#N/A	#N/A	No	No

LV	Local immovable property tax	Cadastral value of immovable property, such as land and buildings	<p>The basic rate of immovable property tax is 1.5% of the cadastral value of the land or building. The basic rates of tax on private residences are as follows:</p> <ul style="list-style-type: none"> - cadastral value up to 56,915 EUR: 0.2%, - cadastral value 56,915 – 106,715 EUR: 0.4%, - cadastral value over 106,715 EUR: 0.6%. <p>However, local authorities may set up the rate in the range of 0.2% and (in the case of property not maintained to a requisite standard) 3%.</p>	Local authorities are also entitled to grant tax reductions of 25%, 50%, 70% or 90% for certain categories of taxpayers.	No	No	No
LT	Immovable property tax	Average market value of the immovable property	<p>For residential and certain other types of property: for a value of EUR 220,000-300,000: 0.5%; EUR 300,000-500,000: 1%; over EUR 500,000: 2%.</p> <p>Properties used for business and certain other purposes: from 0.3 to 3%, in accordance to this each municipal council has the right to establish its own rate (rates) within the given range.</p>	The tax-exempt threshold for residential and certain other types of property is EUR 220,000. For persons who raise three or more children under 18 years old, a disabled child under 18 years old or a disabled child above the age of 18 years old who requires permanent nursing the tax-exempt threshold for residential and certain other types of property is EUR 286,000. The municipal councils have the right to reduce the tax or completely exempt from payment at the expenses of their budgets for properties used for business or certain other purposes.	No	No	No

	Land tax	Average market value of the land	The annual tax rate is set by the municipal councils and it can vary from 0.01 up to 4% of the market value.	-	No		
LU	Local real estate tax	Unitary value (depending on criteria such as size, age, location and economic use of the property) multiplied by assessment rate (based on the nature of the property asset and on its location, generally varying between 0.7 and 1%)	Communal rate set by the communal authority, varying depending on the place of establishment and the category of the building (commercial building, building plot, rental property, etc.).	Tax is deductible from tax base for agricultural profit or commercial benefit if property is business investment.	No	Yes	No
HU	Building tax	"Adjusted fair market value", which equals 50% of the fair market value as calculated under the inheritance tax and gift tax rules.	A maximum of HUF 1,898 per year per m ² or a maximum of 3.6% per year of the adjusted fair market value of the building.	-	No	No	No
	Land tax	"Adjusted fair market value", which equals 50% of the fair market value as calculated under the inheritance tax and gift tax rules. If buildings tax is paid, no land tax is levied on the land on which the building stands.	A maximum of HUF 345 per year per m ² or a maximum of 3% per year of the adjusted fair market value of the land.	-	No		
	Communal tax for individuals levied by municipalities	Building, land or rental right	Maximum: HUF 17,000 annually per building, land or rental right.	-	No		

MT	-	#N/A	#N/A	#N/A	#N/A	No	No
NL	Municipal real estate tax	Value established annually by the regional municipality.	Tax rates differ for each municipality. Different rates may apply between commercial and private real estate.	-	No	Yes	No
	Landlord charge	Value of rental dwellings in the regulated sector, if more than ten dwellings are rented out, for which the rent is less than the rent allowance threshold (EUR 720.42 per month in 2019). Value established annually by the regional municipality.	A rate of 0.561% applies for 2019.	Tax-free threshold depending on the total value of the properties	n.a.		
AT	Immovable property tax	Levied on the assessed standard value of the property, whether developed or not, which is calculated from the unitary value, usually substantially lower than the market value.	Basic federal rate: 0.2%. Reductions for residential properties and small properties. For a one-family house the federal rate is 0.05% up until EUR 3650 and 0.1% from EUR 3650 up until EUR 10950. For other residential properties it is 0.1% up until EUR 3650 and 0.15% between EUR 3650 and EUR 7300. The standard value times the federal rate is multiplied by a municipal coefficient ranging up to 500%. This leads to a maximum of 1% of the unitary value.	Tax is deductible if the property is used for business purposes.	No	No	No

PL	Local real estate tax	Land: area Buildings: floor area	For 2019, the maximum tax rates are: - PLN 0.93 per m ² for land used for business purposes; - PLN 0.49 per m ² for other land; - PLN 0.79 per m ² for dwellings; - PLN 23.47 per m ² for buildings used for business purposes; - PLN 7.90 per m ² for other buildings; and - 2% of the value of building constructions.	-	No	No	No
PT	Municipal real estate tax (IMI)	IMI: Urban property: cadastral value adjusted yearly by indexation coefficients, aiming to fix the taxable value at 80% to 90% of the market value of the property. Rural property: 20 times its yearly notional rent	Rural immovable property: 0.8%. Urban immovable property: 0.3%-0.45% (0.5% under certain conditions) depending on the municipality where the property is located. Additional surcharge for unoccupied property and under certain other conditions.	treated as income-related expenses and thus deductible for PIT.	IMI: The municipal authorities can give reductions or exemptions for taxpayer's permanent residence. Rented property can be reduced by 20%.	No	No
	Additional municipal property tax for not commercially used urban buildings	Sum of values on which IMI is due	For the part exceeding EUR 600.000: 0.7% and when the sum of all properties is higher than EUR 1.000.000: 1%	treated as income-related expenses and thus deductible for PIT	No		

RO	Local tax on owned buildings	Taxable value, generally determined by an authorised valuator for buildings	Buildings are taxed based on their use: 0.08%-0.2% (as decided by the local council) of the taxable value for residential buildings; 0.2%-1.3% for non-residential buildings if built, acquired or evaluated during the previous 5 years, otherwise 22%. Buildings that have not been properly maintained may be additionally taxed by local authorities.	-	No	No	No
	Land tax	Area (m ²)	Fixed amount per m ² , based on certain criteria (location, surface, category of use). Land that has not been properly maintained may be additionally taxed by local authorities.	Owners of degraded or contaminated plots, not included in the area for improvement, may be granted exemptions from land tax.	No		
SI	Charge for the Use of Building Land	For vacant building land: based on the area of the building land planned for building. For constructed building land: based on the useful area of the residential house or business premises thereon.	Set by local communities	Exemptions for temporary or new buildings and people with low incomes	No	No	No

	Property tax on buildings	Value of building ascertained according to special criteria issued by the government and local communities.	Tax rate depends of the type of property and its value. For buildings or parts of buildings: 0.10% for residential properties; 0.20%-1.50% for recreational properties; 0.15%-1.25% for commercial properties. The real estate tax includes the payment of the capital gains from the sale of properties.	Exemptions for buildings of less than 160 m ² and business premises	No		
SK	Tax on land	Tax base is generally the value of the land, which is determined by the law unless local municipalities determine it by general binding regulation.	0.25% of taxable base (land value). The tax authorities may increase or decrease the rate in accordance with local conditions.	-	No	No	No
	Tax on buildings	Built-up area in m ²	Land area (m ²) on which the building stands multiplied by EUR 0.033. The municipality may impose an additional surcharge of up to EUR 0.33 for each floor.	The municipality may grant an exemption or reduction, e.g. for buildings owned by elderly or disabled persons.	No		
	Tax on apartments and non-residential parts of residential buildings	Total floor area of an apartment in m ²	Floor area (m ²) multiplied by EUR 0.033 including non-residential areas of residential buildings.	-	No		

FI	Real estate tax	Value of the property	The general rate varies between 0.93% and 2%. The rate applicable to permanent dwellings ranges from 0.41% to 0.9%. Unused building sites are subject, under certain conditions, to rates between 2% and 6%. Actual rates are fixed by municipalities.	-	No	Yes	No
SE	Municipal immovable property tax	On residential property. Assessed value with a maximum of SEK 8,049 or 0.75% of the assessed value for single-family houses, and a maximum of SEK 1,377 or 0.3% of the assessed value for rental apartment buildings.	Maximum of SEK 8,049 (for 2019) or 0.75% of the assessed value for single-family houses, and SEK 1,377 (for 2019) or 0.3% of the assessed value for apartments owned by a residents' association	50% reduced fee for 10 years for buildings built between 2008 and 2011. Buildings constructed 2012 or later are exempt for 15 years.	No	Yes	No
	National real estate tax	Assessed value of immovable property that can be used for commercial and industrial purposes	0.5% for industrial property, 0.4% for rented premises with rooms, 1% for commercial premises, 0.4% or 1% for undeveloped land depending on the purpose of the land	The tax is deductible in computing taxable business income.	No		

Note: Differences in treatment of land and structures refer to the taxation of developed land.

Source: IBFD.

EUROPEAN ECONOMY DISCUSSION PAPERS

European Economy Discussion Papers can be accessed and downloaded free of charge from the following address:

[https://ec.europa.eu/info/publications/economic-and-financial-affairs-publications_en?field_eurovoc_taxonomy_target_id_selective=All&field_core_nal_countries_tid_selective=All&field_core_date_published_value\[value\]\[year\]=All&field_core_tags_tid_i18n=22617](https://ec.europa.eu/info/publications/economic-and-financial-affairs-publications_en?field_eurovoc_taxonomy_target_id_selective=All&field_core_nal_countries_tid_selective=All&field_core_date_published_value[value][year]=All&field_core_tags_tid_i18n=22617).

Titles published before July 2015 under the Economic Papers series can be accessed and downloaded free of charge from:

http://ec.europa.eu/economy_finance/publications/economic_paper/index_en.htm.

GETTING IN TOUCH WITH THE EU

In person

All over the European Union there are hundreds of Europe Direct Information Centres. You can find the address of the centre nearest you at: <http://europa.eu/contact>.

On the phone or by e-mail

Europe Direct is a service that answers your questions about the European Union. You can contact this service:

- by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),
- at the following standard number: +32 22999696 or
- by electronic mail via: <http://europa.eu/contact>.

FINDING INFORMATION ABOUT THE EU

Online

Information about the European Union in all the official languages of the EU is available on the Europa website at: <http://europa.eu>.

EU Publications

You can download or order free and priced EU publications from EU Bookshop at: <http://publications.europa.eu/bookshop>. Multiple copies of free publications may be obtained by contacting Europe Direct or your local information centre (see <http://europa.eu/contact>).

EU law and related documents

For access to legal information from the EU, including all EU law since 1951 in all the official language versions, go to EUR-Lex at: <http://eur-lex.europa.eu>.

Open data from the EU

The EU Open Data Portal (<http://data.europa.eu/euodp/en/data>) provides access to datasets from the EU. Data can be downloaded and reused for free, both for commercial and non-commercial purposes.

