III. Taxation of residential property in the euro area with a view to growth, equality and environmental sustainability

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This section discusses economic effects of property taxation, which is a national competence. It first provides an overview of recurrent residential property tax policies in euro area Member States. It then examines the design of efficient property taxation, which also includes removing the homeownership bias in taxation, and discusses the political economy of property tax reforms. Finally, the effects of recurrent residential property taxes on inequality and on environmental goals are explored. Overall, the economic literature reviewed in this section suggests that that well-designed recurrent taxes on residential property can be an important element of the tax mix and can help to foster growth while also addressing issues related to inequality and the green transition. A recurrent tax on residential property can thus be an important element of the tax mix if the tax is well-designed. Nevertheless, tax revenues from recurrent property taxes remain low in euro area Member States. Political economy considerations need to be addressed in the tax design. Also, it should be kept in mind that property taxation is a national competence. A consensus for a forward looking mix of tax, housing and other social and environmental policies could make it possible to reap the economic, social and environmental benefits of a sustainable and socially inclusive recurrent property tax.

III.1. Introduction

A well-designed recurrent tax on residential immovable property can be an important element of a growth-friendly tax mix and help address policy issues related to inequality environmental objectives. The COVID-19 pandemic has put economic activity under reducing output, investment pressure, consumption. While stimulus measures were taken to cushion the economic shock, additional revenue measures may be needed in the medium -run as part of the policy response necessary to ensure sustainable debt levels. Recurrent immovable property taxes are among the taxes that are least distortive and least harmful to growth. In addition, if well-designed they can help reduce inequality of wealth and after-tax incomes and help provide the right incentives to address the global challenge of climate change (83). They may also be considered amongst the revenue sources least affected by increasing globalisation and tax base mobility. However, design of recurrent property taxes needs to carefully reflect possible drawbacks that underlie their widespread unpopularity.

This chapter is organised as follows: The following section sets out the economic principles for efficient, growth-friendly property taxation. Section 3 provides an overview of residential property taxation in the euro area and Section 4 briefly discusses the political economy of residential property taxes. Section 5 discusses the effect of property taxation on income inequality and Section 6 its effects on environmental goals. Section 7 concludes (84).

III.2. Taxation of immovable property in the euro area

Taxation of immovable property is rather low in many Member States. Immovable property taxation is a competence of the EU Member States. Graph III.1 shows the tax revenues from property taxes in euro area 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 2.3% of GDP on average in the euro area, compared to labour (21.1%) and consumption taxes (10.9%) (85). They are similar in size to environmental taxes (2.3%) (see Graph III.2). More than half of all property tax revenues came from recurrent property taxes (1.3% of GDP), but there were sizable differences

⁽⁸³⁾ Taxation can help make the transition to an inclusive and climate-neutral economy, as set out by the European Green Deal, the roadmap for making the EU's economy sustainable by 2050 (European Commission communication (2019) "The European Green Deal", COM (2019) 640 final). Property taxation in particular might be able to help support environmental goals by accounting for environmental effects in the calculation of the property tax base (see Section 5).

⁽⁸⁴⁾ The taxation of commercial buildings differs from the taxation of residential property, as it is a form of taxation of intermediate inputs into production, and will therefore not be discussed in the context of this chapter.

⁽⁸⁵⁾ Differences in the tax base however also have to be accounted for.

across Member States. While France had recurrent property tax revenues of 3.0% of GDP, Malta did not levy recurrent property tax at all (Graph III.1). While recurrent property tax revenues as % of GDP increased during the financial crisis, probably largely because of tax reforms in the wake of the crisis, their share in GDP has again been decreasing since 2015 (86).

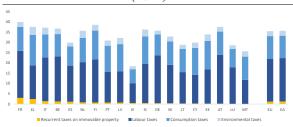
Graph III.1: Revenues from property taxation as % of GDP (2019)



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

Source: European Commission.

Graph III.2: Tax revenues as % of GDP (2019)



Source: European Commission.

Recurrent taxation of residential property differs significantly across euro area Member States, with value-based taxes being the most common. Table III.1 provides an overview of the laws in euro area countries regarding recurrent taxation of residential immovable property (see Leodolter et al 2022 (87) for more details). Almost all euro area countries use a recurrent tax on residential property. The most common tax base is the value of the property, either defined as capital value or annual rental There are differences in the recurrent taxation of residential property in euro area countries when it comes to the tax base, the tax treatment of land and buildings progressivity in relation to property values. Table III.1 shows differences in the tax design of residential recurrent property taxes in euro area countries. The most common tax base is the value of the property, either defined as capital value or annual rental value. In some countries there are differences between the taxation of land and the taxation of buildings in the form of an additional land tax or of differences in the tax rate or base. Also, as property taxes in the euro area are to a very large extent levied by local governments (90), many countries have at least one property tax where the final rate is within limits determined by the responsible municipality. Progressivity of residential recurrent property taxes in relation to the property value is rather the exception in the euro area and, if existent, mostly applies only to one of several taxes. Mortgage interest tax relief is still provided in some euro area Member States, even if some countries have recently limited the generosity of the tax relief or are phasing it out.

value (88), although sometimes also the property area serves as the tax base. The value used as the property tax base can in practice differ substantially from the actual market value. While some countries have several residential property taxes, the only euro area country to tax imputed rents via the personal income tax system is the Netherlands. Also, capital gains from sales of primary residences are usually not taxed (89).

⁽⁸⁶⁾ One reason for the increase and decrease is certainly to be found in the increase of housing stock values over time, which has been ben more even than the one of GDP.

⁽⁸⁷⁾ Leodolter, A., Princen, S. and A. Rutkowski (2022), Immovable Property for Sustainable and Inclusive Growth', European Economy Discussion Paper 156.

⁽⁸⁸⁾ For a discussion on the differences between capital value and annual rental value see UN-HABITAT (2013), 'Property Tax Regimes in Europe', The Global Urban Economic Dialogue Series, United Nations Human Settlements Programme.

⁽⁸⁹⁾ Capital gains are however often only tax-exempt if the residence has been kept for a certain minimum period before sale.

⁽⁹⁰⁾ See Leodolter et al (2022), op.cit.

Table III.1: Recurrent taxation of residential immovable property in the euro area (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
			tax base is lower for				yes, but main residence is	
BE	yes	annual rental value	land	minimum rate per region	-	reduction *	exempt	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	-	-
						exemption (for certain property types		
IT	yes	annual rental value		maximum and minimum rates	-	reduction)	-	yes
CY	-	n.a.	n.a.	n.a.	n.a.	n.a.	-	-
LV	yes	capital value	-	fixed rates / maximum and	yes	-	-	-
LT	yes	capital value	additional land tax	minimum rates	partly	-	-	-
LU	ves	capital value		no limitation for local authorities	-		-	yes
МТ	-	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	-	-	-
				fixed rate / maximum and		Possible reduction or exemption by municipalities		
PT	ves	capital value		minimum rates	partly	(partly)		
	yes	cupital value	different rates and valuation systems for	no limitation for local authorities /	purcy	(partiy)		
SI	yes	area / capital value	buildings and land different rates and	fixed rates		-	-	
			valuation systems for	rate that can be changed by				
SK	yes	capital value / area	buildings and land	municipalities / fixed rate ***	•	-	-	-
FI	yes	capital value	-	maximum and minimum rates		-	-	yes

^{(1) :} 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. Imputed rent taxation as part of personal income taxation is not included in the table. * Only if the (deemed) annual rental value of the taxpayer's properties in the region (for Wallonia: in Belgium) does not exceed EUR 745. ** 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. *** Municipalities may add a surcharge with a maximum amount per floor for buildings but not apartments.

Source: IBFD

III.3. Economic principles for taxing immovable property

Recurrent taxes on residential immovable property are widely considered to be one of the tax types least detrimental to growth. Property taxes offer several advantages in view of growth-friendly taxation: 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, recurrent taxes on residential immovable property 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 be an incentive for

taxpayers to put their property to optimal use. This applies in particular to land value-based taxes, as taxes on the building value can also discourage construction and renovation activity. Studies on the overall impact of recurrent property taxes on economic growth identify them as a highly growth-friendly tax type (Arnold 2008, Arnold et al. 2010) (91). However, valuation of property may be

⁽⁹¹⁾ Arnold, J. (2008), 'Do Tax Structures Affect Aggregate Economic Growth? Empirical evidence from a panel of OECD countries' Economics Department Working Paper No. 643, OECD, Paris. Arnold, J., Brys, B., Heady, C., Johansson, A., Schwellnus, C. and L. Vartia (2010), 'Tax Policy for Economic Recovery and Growth' The Economic Journal 121 (February). It should however be noted that some studies, like Baiardi D., Profeta P., Puglisi, R. and S. Scabrosetti (2019) 'Tax policy and economic growth: does it really matter?' International Tax and Public Finance 26: 282–316 find no effect of different tax types on growth.

challenging and require extensive administrative capacity. Also, homeowners with low incomes, such as for example pensioners, might have difficulties to pay the tax (see Section 5).

Recurrent taxes on immovable property seem to be - at least partially - capitalised into the net selling prices of property. If the supply of immovable property is completely inelastic, then the only consequence of a newly introduced or increased recurrent immovable property tax should be a reduction of the selling price of property, i.e. windfall losses by present property owners. . Empirical evidence on the degree of capitalisation of immovable property taxes into house prices suggests mostly partial capitalisation of a varying (Sirmans, Gatzlaff and Macpherson 2008) (92). However, there are also studies providing evidence for full capitalisation or showing no evidence for capitalisation at all. A pure land tax provides the most favourable economic incentives, as it should be fully capitalised in case of sale and the net selling price should decrease by the amount of the tax. As the supply of land is fixed, taxing land is a form of taxing economic rents, which implies behavioural effects on the side of the taxpayer including no reduction of investment (93).

Owner-occupied property generally receives highly favourable tax treatment in the euro area. Whereas income from renting out property as well as from other forms of capital is taxed in euro area Member States, the imputed rents of owner-occupiers, i.e. their savings from not having to pay rent, are not taxed (94). This is often justified by the positive effects of homeownership:

homeowners may experience a higher increase of net wealth over time, enjoy better health, may be more engaged in the local community and experience higher life satisfaction. Moreover, the children of homeowners' might achieve higher educational attainment and a high homeownership rate might also reduce crime. However, it is often difficult to isolate the role of homeownership, as its effects might be influenced by unobserved individual characteristics that also affect the decision to own a home (95). Also, some studies significant positive homeownership, have inconclusive results or even find a negative impact. Moreover, homeownership might make labour suppliers less mobile and decrease employment (Blanchflower and Oswald 2013 (%), Laamanen 2017 (%) (%). In addition, homeowners might be more likely to oppose new residential developments in an area, thereby limiting housing supply.

The favourable tax treatment of owneroccupied property creates market distortions, which are only partially corrected through recurrent property taxation at its current levels. If the aim is to tax owner-occupied housing neutrally relative to other forms of investment, then its return on investment, i.e. imputed rents, should be taxed like other capital income (99). In

⁽⁹²⁾ Sirmans, S., Gatzlaff, D. and D. Macpherson (2008), 'The history of property tax capitalisation in real estate', Journal of Real Estate Literature 16(3): 327-344.

⁽⁹³⁾ Høj, A., Jørgensen, M. and P. Schou (2018) 'Land Tax Changes and Full Capitalisation', Fiscal Studies 39 (2)) find full capitalisation of land value taxes into house prices in Denmark. In line with this, 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 (see Murray, C. and J. Hermans (2019) 'Land value is a progressive and efficient property tax base: from Victoria', OSF Preprints. https://doi.org/10.31219/osf.io/mxg3j. and Gemmell, N., A. Grimes and M. 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...

The only exception to this is the Netherlands, but the values for imputed rents are usually much lower than market rents. However, property is also taxed through local recurrent property taxation in addition to the tax on imputed rents in the Netherlands.

⁽⁹⁵⁾ For a discussion of the literature on the effects of homeownership including methodological questions see Dietz, R. and D. Haurin (2003), 'The social and private micro-level consequences of homeownership', Journal of Urban Economics 54: 401-450 and Rohe, W. and M. 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.

^(%) Blanchflower, D. and A. Oswald (2013), Does High Homeownership impair the Labour Market?', NBER Working Paper 19079.

⁽⁹⁷⁾ Laamanen, J.-P. (2017), 'Home-ownership and the Labour Market: Evidence from Rental Housing Market Deregulation', Labour Economics 48: 157-167

⁽⁹⁸⁾ The reduction of employment may be due to a higher homeownership rate causing increased job competition because of homeowners' higher job search activities and their lower reservation wages in a situation of less than perfectly elastic labour demand or also causing reduced consumption by homeowners. A higher unemployment rate specifically among homeowners would appear intuitive due to their lower mobility, but could not be found.

⁽⁹⁹⁾ It should be added that there are also differences in the taxation of other types of capital income in euro area Member States. For an overview of the taxation of capital income in the EU see Princen, S., Kalyva, A., Leodolter, A., Denis, C., Reut, A., Thiemann, A. and V. Ivaskaite-Tamosiune (2020), 'Taxation of Household Capital in EU Member States: Impact on Economic Efficiency, Revenue & Redistribution', European Economy Discussion

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 owneroccupied property should be taxed equally to other capital gains. In reality, owner-occupied property receives a favourable income tax treatment relative to other investments: As mentioned in Section 2, 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 euro area Member States, while also capital gains from the sale of the main residence are often taxfree. Recurrent property tax 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) (100). In the absence of imputed rents taxation, a well-designed lower recurrent property tax combined with the removal of mortgage interest tax relief seems the most realistic way forward if the goal is to reduce distortions (101). Mortgage interest tax relief has also shown to have other disadvantages: It acts as an incentive for households to take on and maintain higher debts, can contribute to increased and more volatile house prices (Turk 2015 (102), Andrews 2010 (103)) and may actually reduce homeownership by increasing mortgage sizes and thereby making it more difficult for financially constrained households to obtain a mortgage and by increasing housing transaction costs and thereby increasing the opportunity cost of owning a house

(Hilber and Turner 2014 (104), Bourassa and Yin 2008 (105)).

Asset-rich but income-poor households might require special provisions. As the tax base of property taxes are illiquid assets, some taxpayers with low incomes and large properties might have difficulties to pay them. For these situations, the use of tax reductions and deferral schemes might be called for (see also III.5).

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 and distort the allocation of properties by putting an extra cost on property transfers. Also, they 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 sometimes seen as reducing speculation and mitigating the risk of housing market bubbles. However, the effect remains empirically ambiguous and macroprudential policies such as capital requirements or loan-to-value limits seem more suitable (Crowe et al. 2011) (106). Transaction taxes might even be counterproductive, as a reduction in the number of transactions might make property prices more volatile.

III.4. 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 and would dampen the political willingness to rely on them. The available evidence is, however, not unequivocal. While Hammar et al. (2008) (107) find for Sweden that the recurrent property tax is highly unpopular, a UK survey on the perceived fairness

⁽¹⁰⁰⁾ 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. See also Figari, F., Verbist. G. and F. Zantomio (2019), 'Homeownership Investment and Tax Neutrality: A joint assessment of income and property taxes in Europe', Ca' Foscari University of Venice Working Paper 27/2019 as well as the user cost of housing indicator in Leodolter et al (2022), ob.cit.

⁽¹⁰¹⁾ A tax on net imputed rents reflecting the rents' true value might be difficult to maintain when house prices increase over time. As recurrent property taxes 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 (see Johannesson-Linden, A and C Gayer (2012), 'Possible reforms of real estate taxation: Criteria for successful policies', European Economy Occasional Paper 119).

⁽¹⁰²⁾ Turk, R. (2015), 'Housing Price and Household Debt Interactions in Sweden', *IMF Working Paper* 15/276.

⁽¹⁰³⁾ Andrews, D. (2010), 'Real House Prices in OECD Countries -The Role of Demand Shocks and Structural and Policy Factors', Economics Department Working Paper 831, OECD, Paris.

⁽¹⁰⁴⁾ Hilber, C. and T. Turner (2014), 'The Mortgage Interest Deduction and its Impact on Homeownership Decisions', The Review of Economics and Statistics 96(4): 618-637.

⁽¹⁰⁵⁾ Bourassa, S. and M Yin, (2008) 'Tax Deductions, Tax Credits and the Homeownership Rate of Young Urban Adults in the United States', Urban Studies 45(5&6): 1141–1161.

⁽¹⁰⁶⁾ Crowe, C., Dell'Ariccia, G., Igan, D. and P. Rabanal (2011), 'How to Deal with Real Estate Booms: Lessons from Country Experiences', *IMF Working Paper* 11/91.

⁽¹⁰⁷⁾ Hammar, H., Jagers, S. and K. Nordblom (2008), 'What explains attitudes towards tax levels? A multi-tax comparison', Fiscal Studies 29(4): 523-543.

of different taxes (YouGov, 2015 (108)) finds the recurrent property tax to be in the middle, it is seen as less fair than income tax but substantially fairer than, for example, inheritance tax. As property are highly visible, taxpayers might overestimate their size compared to other, less visible taxes, for example labour taxes withheld at source or consumption taxes paid in smaller amounts (see also Cabral and Hoxby 2012 (109)). Also, the fact that information on the incidence of the tax and its redistributive impact is often missing might add to public reservations. Moreover, depending on the design of the tax, liquidityconstrained households might be concerned about their ability to pay it.

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, affected citizens might voice their discontent more clearly than in the case of the increase of another tax, where they can react to a tax change by adapting their labour supply or consumption behaviour.

Ongoing revaluation often proves contentious.

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 revaluations at intervals will not only keep the tax efficient, but might also be more acceptable than irregular and less frequent valuation, given that 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 (110)). Denmark, for example, will begin performing biannual valuations combining statistical estimates based on property sales prices and individual housing characteristics with individual discretionary judgements starting in 2024. In the Netherlands the

municipalities do a yearly assessment based on property sales prices and house characteristics.

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. 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 the public.

III.5. Immovable property taxation and inequality

The effect of existing property taxes on income inequality does not seem to be very **pronounced**. The impact of immovable property taxes on income and wealth 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) (111) find that an increase of immovable property tax revenues reduces income inequality in OECD countries, even more significantly so in the long run, Akgun et al. (2017) (112) 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 in the euro area but also to tax design issues. In order to assess the progressivity of taxation of household savings with respect to income, the OECD has calculated marginal effective tax rates (METRs) for these different savings types at different income levels. The METRs on owner-occupied property are overall marginal tax rates for the average of asset holdings for each income level and they take into account all property-related taxes (113). As can be

⁽¹⁰⁸⁾ YouGov (2015), 'Voters in all parties think inheritance tax unfair', https://yougov.co.uk/topics/politics/articlesreports/2015/03/19/inheritance-tax-most-unfair.

⁽¹⁰⁹⁾ Cabral, M. and C. Hoxby (2012), 'The Hated Property Tax: Salience, Tax Rates, and Tax Revolts', Working Paper 18514.

⁽¹¹⁰⁾ UN-HABITAT (2013), op.cit.

⁽¹¹¹⁾ Alves, J. and A. 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

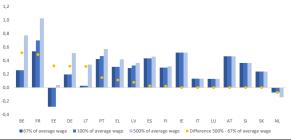
⁽¹¹²⁾ Akgun O., Cournède B. and J.-M. Fournier (2017), 'The effects of the tax mix on inequality and growth', Economics Department Working Paper No. 1447, OECD, Paris.

⁽¹¹³⁾ These taxes are recurrent taxes on immovable property, transaction taxes, possible taxes on income, mortgage interest tax

seen in Graph III.3, they do not seem to increase too strongly for higher income levels and in some Member States METRs on owner-occupied housing do not at all increase with income. Also, due to relatively generous mortgage interest tax relief, METRs can in some cases even be negative. As immovable property makes up a substantial amount of households' total wealth (more than 67% in the euro area (114)), 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) (115) find that the effects on the user cost of housing change only slightly for different income quintiles in 14 euro area countries. Similarly, Figari et al. (2017) (116) also find that abolishing the favourable tax treatment of homeownership would only lead to a small reduction of disposable income inequality.

Graph III.3: Marginal effective tax rates on owner-occupied housing at various wage levels of owner (2016)



(1) No data were available for Cyprus and Malta.

relief and capital gains taxes, when applicable. The investment is debt-financed. The taxpayer at 67% of the average wage has an annual combined (labour plus capital) income equal to 67% of the average wage, with no or minimal net wealth. The taxpayer at 100% of the average wage has a combined income equal to 100% of the average wage, with net wealth equal to six times the average wage, of which three-quarters is held in residential property. The taxpayer at 500% of the average wage has an annual combined income equal to 500% of the average wage, with net wealth equal to twenty times the average wage, of which half is held in residential property. For more information on the calculation see OECD (2018) 'Taxation of Household Savings', OECD Tax Policy Studies, No. 25, OECD Publishing, Paris.

- (114) See European Central Bank Household Finance and Consumption Survey (HFCS) wave 2017.
- (115) Fatica, S. and D. Prammer (2018), op.cit.
- (116) Figari, F., Paulus, A., Sutherland, H., Tsaklogiou, P., Verbist, G. and F. Zantomio (2017), 'Removing Homeownership Bias in Taxation: the Distributional Effects of Including Net Imputed Rent in Taxable Income', Fiscal Studies 38 (4), 525-557.

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

Assessment methods may lead to preferential

households (117). 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.

Whereas the current taxation of immovable property in the euro area is not particularly conducive to reducing income inequality, some authors have stressed that the tax could be made more redistributive via design changes. A way to reduce inequality could be to increase the progressivity of recurrent residential property tax rates in relation to the property value. Due to the fact that behavioural effects related to recurrent property taxes are typically small, this measure would also not increase the distortive effect of the tax system on the economy. In addition, accompanying this with a reduction of the recurrent property tax based on the number of inhabitants, might be justified from the point of view that housing is a basic consumption good (118). Alternatively, the reduction could be made income-dependent to be more targeted and help foster homeownership of poorer, financially constrained households (119). A reform that increases the progressivity of the tax rate schedule in relation to property and also includes 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) (120).

⁽¹¹⁷⁾ This might be due to flawed valuation methods, but the reasons are not clear (see for example McMillen, D. and R. Singh (2020), 'Assessment Regressivity and Property Taxation', *Journal of Real Estate Finance and Economics* 60:155–169.

⁽¹¹⁸⁾ 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. In Belgium for example, tenants are allowed to reduce their rent accordingly.

⁽¹¹⁹⁾ However, as discussed above, the evidence on the effects of homeownership for society is not always clear.

⁽¹²⁰⁾ O'Connor, B., Hynes, T., Haugh, D. and P. 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. However, the simulation included a move from a very mildly progressive banded valuation system to a more progressive one with one rate per dwelling, where higher rates apply to more valuable dwellings. ()

Finally, reducing inequality via recurrent residential property taxation needs taking into consideration the overall tax structure of the country and in particular the design of taxes on other capital income types.

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. 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) (121), Fatica 2015 (122), Leodolter and Rutkowski (forthcoming) (123)) and their user-cost of housing sees a stronger reduction (Fatica and Prammer (2018) (124)). Also, mortgage tax relief leads to income inequality (Leodolter Rutkowski (forthcoming) (125)) in most Member States.

A particular aspect of inequality that is relevant in the case of property taxation concerns asset-rich but income-poor households. Sometimes, people with low incomes, such as for example pensioners, might own relatively large houses and might not be able to pay the property tax. In this case, the use of tax deferral schemes until the point of sale might be coupled with the income-dependent property tax reduction to avoid increasing inequality in order to support income-poor households (126).

Matsaganis, M. and M. Flevotomou (2007), "The Impact of Mortgage Interest Tax Relief in the Netherlands, Sweden, Finland, Italy and Greece", Euromod Working Paper 2/07.

(125) Leodolter, A. and A. Rutkowski (forthcoming), op.cit.

III.6. Immovable property tax and environmental goals

A value-based property tax base could discourage investments serving environmental objectives. Buildings in the EU are responsible for 40% of EU energy consumption and 36% of EU greenhouse gas emissions (127). Therefore, improving energy efficiency in buildings has a key role to play in achieving carbon-neutrality by 2050. While improving the 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 (128). Α value-based recurrent property tax could therefore discourage efforts to improve the building stock, if energy consumption taxes do not already factor in the full external environmental cost of energy consumption. Consequently, and as energy taxes cover the external costs of energy consumption only partially in reality, the energy performance of buildings could be included in an adjustment of the property tax base. Davis et al. (2017) (129) show that using a base assessment based on the energy performance of a building and redistributing the tax burden from more energyefficient to less energy-efficient 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 the 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

Matsaganis, M. and M. Flevotomou (2007), "The Impact of Mortgage Interest Tax Relief in the Netherlands, Sweden, Finland, Italy and Greece", Euromod Working Paper 2/07.

⁽¹²²⁾ Fatica, S. (2015), "Housing taxation: from micro design to macro impact", Quarterly Report on the Euro Area (QREA) 14(1), 27-33.

⁽¹²³⁾ Leodolter, A. and A. Rutkowski (forthcoming), "The Fiscal and Distributional Effects of Removing Mortgage Interest Tax Relief in EU Member States"; European Economy Economic Brief.

⁽¹²⁴⁾ Fatica, S. and D. Prammer (2018), op.cit.

⁽¹²⁶⁾ While tax reductions or deferrals are able to help asset-rich low income households, there is however the downside that, if owners remain in houses that are too large for them, they might deprive others, for example younger families with children, of the chance to buy them, and also use high amounts of energy in order to be able to live in the house. On the other hand, having to move out of a neighbourhood and to cut social ties can also bear a substantial - also non-monetary - cost, especially for older homeowners.

⁽¹²⁷⁾ European Commission News 17 February 2020, In focus: Energy efficiency in buildings' (https://ec.europa.eu/info/news/focusenergy-efficiency-buildings-2020-feb-17_en)

⁽¹²⁸⁾ Fuerst, F., McAllister, P. Nanda, A. and P. Wyaff (2015), 'Does energy efficiency matter to home-buyers? An investigation of EPC ratings and transaction prices in England', Energy Economics 48: 145-156 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.

⁽¹²⁹⁾ 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.

well as the cost of environmental externalities. They can therefore be conducive to excessive use of land and urban sprawl, with detrimental effects on the environment, for example because of increased energy consumption due to higher transport needs (130) (131). A general land valuebased tax might be well-suited to address this problem, as it can support more economical use of land. At the same time, lower rates for certain nonresidential purposes can be used to take account of the positive external effects of, for example, open spaces, forests or farmland and to prevent their conversion for profit-making purposes. However, the effect of immovable property taxes on land use is small (Meng and Zhang 2013) (132) 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 landowner's land use decisions. Progressive tax rates on residential property can also contribute to a more energy-efficient construction of houses and behaviour of homeowners by helping lower the demand for large immovable properties, which in turn reduces the consumption of energy and materials by wealthy households (133). In addition, reducing the favourable taxation of owneroccupied vis-à-vis rented housing as well as decreasing the distortive property transaction taxes could reduce the environmental damage resulting from transport, as there would potentially be fewer financial obstacles to move house to be closer to one's workplace.

III.7. Conclusions

The economic rationale for recurrent residential property taxation is strong, but the taxation of property is relatively low in many euro area Member States. Recurrent taxes on residential property 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. This can partly be explained by political economy considerations: 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. The appropriate design of the tax such as a lighter tax burden on lower value properties or on those with lower incomes, who in addition might face liquidity issues, and the payment of smaller amounts at a higher frequency instead of an annual tax payment might help address these reservations. Furthermore, revenues often go to sub-central government 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.

Regular updates of the property tax base can help to keep recurrent housing property taxation non-distortive and fair. Phasing-out mortgage interest relief can both increase the efficiency of the tax and reduce income inequality. A regular update of the property tax base ensures that the latter reflects actual market values. Regular updates make the property tax efficient and fair in the sense that properties of equal value are not treated differently because of past differences in value. A land-value based tax has the advantages of taxing economic rents and not discouraging building activity. Tax relief for mortgage interest, however, contributes to the homeownership tax bias and favours higherincome households.

Inequality can be reduced also via other design features, like a progressive tax rate schedule.

The use of a progressive recurrent property tax schedule would at the same time reduce income and wealth inequality while ensuring that the tax system remains growth-friendly. Similarly, the introduction of per capita or income-based property tax reductions might also be able to help reduce inequality. Also, deferred or reduced tax payments might be needed to support asset-rich but income-poor households. More in general, improving the fairness of property taxes should be considered in the broader context of the distributional effects of the taxation of wealth and income in the country's tax system.

⁽¹³⁰⁾ See Brandt, N. (2014), 'Greening the Property Tax', OECD Working Paper on Fiscal Federalism 17.

⁽¹³¹⁾ 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.

⁽¹³²⁾ Meng, L. and D. Zhang (2013), 'Impacts of property tax on land use change decisions in Georgia', *Urban Ecosystems* 16:3-12.

⁽¹³³⁾ See Clune, S., Morrissey, J. and T. Moore (2012), 'Size matters: House size and thermal efficiency as policy strategies to reduce net emissions of new developments', Energy Policy 48: 657–667 and Wilson, A. and J. Boehland (2005), 'Small is Beautiful – U.S: House Size, Resource Use, and the Environment', Journal of Industrial Ecology 9 (1-2): 277-287.

Making the immovable property tax base more apt at achieving environmental goals requires taking into account the energy performance of the building. Reforming the tax base assessment by accounting for the building's energy performance and reducing the incentives for excessive land use can support environmental objectives. In order to combine environmental and social objectives, aprogressive recurrent property taxes might be able to counteract the fact that environmentally-related tax expenditures tend to benefit higher-income homeowners more than those with lower incomes.