



Homeownership Taxation After the Great Recession Onset in Europe: Do Property Taxes Compensate for Income Tax Exemptions?

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Abstract

Western countries' income tax system exempts imputed rent, i.e. the return from investing in owner-occupied housing, thus entailing a lack of neutrality with respect to other forms of capital investment. Despite a long-standing endorsement of removing this *homeownership bias*, lack of updated comparative evidence on its size, in relation to existing property taxes on owner-occupied housing, and their joint distributional effect, is hampering the current policy debate. This paper first offers up-to-date aggregate and distributional measures of the homeownership bias arising from the income tax rules prevalent in eight European countries, observed after the onset of the recent crisis. Second, it provides novel evidence on the extent to which lack of neutrality is mitigated by recurrent property taxation of owner-occupied housing assessing the joint distributive effects of income and property taxes. The analysis is based on data drawn from Survey of Income and Living Conditions and UK Family Resources Survey and makes use of the multi-country tax benefit model EUROMOD. Results show that a sizeable bias in favour of homeowners is indeed embedded in current income tax systems, and that property taxation represents only a partial correction to this bias. Moreover, this bias is not the same across the income distribution. Such evidence appears valuable in informing the policy debate on the search for new sources of tax revenues, and in particular for those less detrimental to growth and equity.

Keywords

Housing taxation; imputed rent; property tax; homeownership bias; neutrality; income distribution; microsimulation

JEL-codes

D31, H23, I31, I32

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1. Introduction

The Great Recession has clearly revived policy interest towards housing taxation. Taxation of owner-occupied housing in particular has been one of the subjects which held the spotlight in the past few years' public discourse over government intervention. Several publications have been released on the matter, and recommendations issued, by international bodies such as the European Commission, the IMF and the OECD (e.g. IMF, 2009; Andrews et al., 2011; Norregaard, 2013; Slack and Bird, 2014; European Commission, 2012). Indeed, after the crisis onset, governments have not only been facing the need to consolidate their public finances, but also to adopt forms of taxation least detrimental to growth (Arnold et al., 2011). Housing taxation has thus entered the scene, because regarded as a growth-enhancing avenue for raising tax revenues.

The topic of owner-occupied housing taxation has a long tradition in the economic literature. Homeownership represents a capital investment yielding a return in the form of non-cash income, i.e. the avoided cost of paying for the residential services enjoyed, which is referred to as figurative or imputed rent (IR) (Frick et al., 2010). Neutrality, i.e. the benchmark criterion for efficiency in taxation (Mirrlees et al., 2011), requires IR to be taxed as other returns from capital investment, in order to avoid distortions leading to inefficient investment decisions. However, tax policies applying in most western countries, including the US and many in Europe, do not follow such economic principles. On the contrary, tax rules provide for a favourable tax treatment of owner-occupied housing, most notably in the context of personal income taxation: IR (or an equivalent tax base) and housing related capital gains are tax exempt, and often also tax reliefs on mortgages incurred to purchase housing apply.

Past prominent contributions (Goode, 1960, Aaron, 1970, Rosen, 1979, Poterba, 1992), and a considerable body of following research have illustrated the multiple drawbacks of similar practices, on both efficiency and distributional grounds (e.g. Rosen, 1984, Skinner, 1996; Kneller *et al.*, 1999; Arnold et al., 2011). On efficiency grounds, lack of neutrality in taxation of different types of investment (e.g. owner-occupied housing versus others) leads to overinvestment in housing along the extensive and intensive margins (Hanson, 2012) and to the crowding-out of more productive alternative investments that are more heavily taxed

(Turnovsky and Okuyama, 1994; Leung, 2004). Second, the favourable tax treatment of owner-occupied housing might increase house prices (Berger et al., 2000; Damen et al., 2016) without necessarily expanding housing opportunities, but rather fostering inflation and volatility (Catte et al., 2004). A link has also been established between the favourable income tax treatment of owner-occupied housing, households' indebtedness (Fjaerli, 2004) and the housing bubble that triggered the crisis in the US (Manestra et al., 2011). A related stream of research has covered the distributional effect of existing tax provisions in the light of horizontal and vertical equity principles framed in relation to Comprehensive Income Taxation according to which the tax base should reflect both monetary and non-monetary potential consumption opportunities (Haig, 1921; Simons, 1938). These works generally found that existing housing-related income tax provisions, and mortgage interest reliefs in particular, bear regressive distributional effects (e.g. Anderson and Roy, 2001; Matsaganis, and Flevotomou, 2007; Poterba and Sinai, 2008; Figari et al., 2016).

On normative grounds the motivation behind existing tax practices broadly relates to the idea that homeownership generates positive externalities, in terms of social capital, citizenship (Di Pasquale and Kahn, 1999, Di Pasquale and Gleaser, 1999) and lower crime (Gleaser et al., 1996), house (Galster, 1983) and neighbourhood maintenance (Dietz and Haurin, 2003), children's educational outcome (Bramley and Karley, 2007; Haurin et al., 2002), assets accumulation in long run (Di et al., 2007). However, the scientific debate has not reached consensus on the point, as several authors trace the link to a selection mechanism, pointing rather at homeownership hampering mobility and therefore employment (Bover *et al.*, 1989; Cameron and Muellbauer, 1998; Boeri and Terrell, 2002). On a positive ground, owner-occupied housing taxation is highly unpopular, for a variety of reasons (EC, 2012). These include the salience of particular forms of housing taxation (e.g. recurrent property taxation), but also the non-cash nature of imputed rents, and a popular notion that housing constitutes a primary need. The last argument, however, would equally recommend the income tax exemption of rent paid by renters, a practice which does not apply, or does to a very limited extent, in the same countries that exempt imputed rent. Bluntly, existing tax measures often seem driven by political attempts to maximise consensus, as showcased by the succession of owner-occupied housing tax reforms passed in Italy over the past decade, with the property tax on the main residence being repeatedly announced to be, and then actually being abolished, re-introduced, reformed, at a pace replicating that of the political cycle (Figari and Fiorio, 2015).

One of the arguments brought to bear in defence of IR exemption is that owner-occupied housing investment, while treated favourably under income tax, is then subject to recurrent property taxation. Property taxation on the main residence could possibly compensate homeowners' income tax savings, and the lack of neutrality in income taxation of different investments, an argument reinforced by the widespread absence of financial wealth taxation. From a theoretical perspective, it is still debatable whether the rationale behind property taxation should that of substituting income taxation of IR, or that behind any form of wealth taxation. In this second case, housing property taxation should complement income taxation of IR. But in both cases, assessing (lack of) neutrality in taxation of different types of

investments, i.e. whether an homeownership bias exists, requires taking a systemic view of the tax system (Mirrlees et al., 2011) accounting for both types of recurrent direct taxes.

While the Great Recession appears to have strengthened interest in the matter, also in the light of the profound changes ongoing in the housing market, no evidence exists - to our knowledge - on the size and the distribution of the taxation bias related to owner occupied houses and on the extent to which property taxes might 'compensate' income tax exemptions enjoyed by owner-occupiers. The answer to this empirical question is highly relevant for informing the current debate on housing taxation reform prospects. On efficiency grounds, in order to assess how far current provisions stand from neutrality, and therefore the scope for potentially growth-enhancing reforms; but also on distributional grounds, given the particular concern for safeguarding asset-rich but income-poor households that the prospect of expanding owner-occupied housing taxation raises.

In what follows, we respond to such research needs offering new and up-to-date evidence on the existence of an owner-occupied housing bias, or tax-induced distortion, accounting for both income and property taxation. We cover eight European countries, Austria, Belgium, Finland, France, Germany, Italy, Spain and the United Kingdom, somewhat representative of institutional heterogeneity within Europe. Section 2 describes the housing tax provisions prevailing in each country. The analysis is based on data drawn from the Statistics of Income and Living Conditions and the UK Family Resources Survey and builds on up-to-date estimates of imputed rent, whose exemption from personal income taxation represents the major contributor to the homeownership bias. Data and IR estimation are described in Section 3.

The contribution we provide is twofold. First, using the multi-country tax benefit model EUROMOD, we offer up-to-date measurement of the homeownership bias inherent in income taxation, quantifying both its aggregate size, and the related distributional pattern, as of after the Great Recession onset. We do so considering both lack of neutrality with respect to other investment in immovable property, and with respect to financial investment. Second, we assess the role of property taxation on the main residence in mitigating the homeownership bias stemming from income tax provisions. The scope of this depends not only on the level of property taxation, and therefore the extent to which property tax revenues substitute for the fiscal cost of owner-occupiers' income tax exemptions. It also crucially depends on the population distribution of income tax housing-related allowance on the one hand, and property tax liability on the other. Property taxes on the main residence are in fact typically levied as a proportional tax on the gross house asset value, irrespective of taxpayers' income. This raises a distributional question, even under the hypothesis of aggregate compensation between property tax revenues and the fiscal cost of owner-occupiers' income tax exemption. The methodology and set-up of the analysis are illustrated in Section 4.

Results, reported in Section 5, show that, as far as direct taxation is concerned, a sizeable distortion in favour of homeownership investors is embedded in current direct tax systems, and that existing property taxation on the main residence generally represents only a partial compensation to this bias.

2. Recurrent taxation of owner-occupied housing in practice

The choice of the European countries we cover is aimed at representing heterogeneous institutional settings (Anglo-Saxon, Central European, Mediterranean, Nordic), both with respect to housing markets and population distribution of homeownership, and in terms of tax systems. In what follows, we describe the tax treatment of the main residence and focus on housing-related income tax provisions on the one hand (IR exemption and mortgage interest reliefs under personal income tax (PIT)), and recurrent residential housing taxation provisions on the other hand. Table 1 offers a summary of the main housing-related tax policies prevailing in each country, as of 2012¹.

Strikingly, in no country is IR subject to income tax. Tax rules de facto exempt returns from owner occupied housing investment. On the contrary, returns from investment in other immovable property and financial ones are both subject to income taxation, either under PIT or, in some countries, under separate taxation (which typically applies to returns from financial investment). Hence, an income tax-induced distortion in investment decisions is present in all countries, potentially leading to overinvestment in housing.

As to PIT mortgage interest (MI) tax reliefs, there has been a tendency to reduce them in recent years. MI tax reliefs have been entirely abolished in Spain (2012) and France (2010), reduced in Finland (since 2012, while previously the country provided one of the most generous) and reformed in Belgium (since 2005). Italy appears the only country, among those providing for a sizeable MI relief (in Italy the maximum amount returned to the taxpayer per year corresponds to about one third of median monthly earnings), which made no plan of reducing it, despite its undisputed regressive nature.

A political argument against IR income taxation builds on the presence of an additional tax burden on homeowners stemming from recurrent property taxation of the main residence. Indeed in all the countries we consider, except the UK, real estate taxation, i.e. a recurrent property tax, applies to owner-occupied housing. In the UK instead, a recurrent housing tax is levied from occupiers (either homeowners or renters) in the form of a residential service tax, the Council Tax².

¹ We do not discuss here related transfer taxes and taxes on capital gains. As these are not recurrent but event-based taxes, they fall outside the scope of this paper.

² In what follows, our focus will be on considering, as potential compensation to the homeownership bias, property taxation on the main residence, rather than residence-based taxation, which applies to owner and tenant occupiers. Table A1 in Appendix provides a summary of the principles inspiring the two forms of recurrent housing taxation: residence taxation does not (and is not meant to) correct for the homeownership bias, neither in terms of equity (equal treatment of same-comprehensive-income owners and tenants) nor in terms of efficiency (neutrality w.r.t other capital income tax treatment) as it is rather inspired by the benefit principle according to which the amount paid in taxation should reflect the benefit received from public provisions of local goods.

Table 1: Owner-occupied housing direct taxation, 2012

	Personal Income Tax		Property taxation		
	IR exempt	MI tax relief	Type	Revenues (as % of GDP)	Latest values assessment
Austria	YES	YES, Limited amount allowed for low incomes	Real Estate Tax: federal and municipal rate on standard value of property	0.2	1973
Belgium	YES	YES	Real Estate Tax: regional and municipal rate on Cadastral Income	1.22	1975
Finland	YES	YES, among most generous in EU, although being limited	Real Estate Tax: municipal tax on taxable value of the property	0.64	2011
France	YES	NO – abolished in 2010 (tax credit maintained for second properties)	Real Estate Tax: municipal rate on Cadastral Income	1.33	1978
Germany	YES	NO	Real estate tax: federal and municipal rate on standard value of property	0.45	1964
Italy	YES	YES	Real Estate Tax: municipal tax on Cadastral Income	1.51	1988
Spain	YES	Mortgage tax credit removed since 2012 (still compensation for house acquired before 2006).	Real Estate Tax: municipal rate on Cadastral Value. Net Wealth Tax	1.09	1994
United Kingdom	YES	NO (after lengthy phasing-out), maintained on other taxed properties.	NO	-	1991 (2005 in Wales)

Source: Taxes in Europe database except in the case of Italy (official national tax revenues data).

These recurrent housing taxes generally play a role in local taxation, although tax bases are defined at the central level, and local governments retain only some discretion in setting tax rates (often within centrally established lower and upper boundaries) and obtaining (at least some portion of) tax revenues. The assessment of housing values appears quite out of date in all countries, with some exceptions, most notably Finland. Reflecting a feature of other Nordic Countries, Finland provides for regular re-assessments of housing values.

In a few countries, ‘safeguard mechanisms’ are in place, to protect individuals who might be assets-rich but income-poor (Shan, 2010). These are the countries where a Wealth Tax (with partial exemptions for the main residence) is also in place: France, where since 2012 the total tax burden cannot exceed the 50% of taxable income, and Spain, where the sum of the Personal Income Tax and the Wealth Tax cannot exceed 60% of taxable income. Such mechanisms represent a promising avenue for enlarging the role of housing taxation while safeguarding the most vulnerable in societies.

Property taxation varies a lot with respect to the amount of revenues raised. However, to assess the weight of owner-occupied housing taxation in each country, it is important to consider the integration of different housing tax measures, and that with other components of the tax benefit system. For example, Austria and Germany display very light housing taxation, but no (or very limited, in the case of Austria) mortgage interest relief is granted to

homeowners. The UK has removed homeowners' mortgage interest reliefs, but a relevant homeownership bias still stems from the combined effect of IR exemption and the lack of a property tax. Countries where housing taxation is heavier (UK, France), are also those who appear more developed in the use of tax exemptions and reductions (France) and benefits (the Council Tax Benefit in the UK) to lift the tax burden for the income poorest households.

3. Data and imputed rent estimation

Data are drawn from the European Statistics of Income and Living Conditions (EU-SILC) for all countries except United Kingdom, for which we use Family Resources Survey (FRS). These correspond to the surveys used as input databases for the multi-country microsimulation model EUROMOD, which we use for our empirical analysis. The EU-SILC provides cross-sectional and cross-country comparable yearly data drawn from nationally representative samples, covering different topic domains, including housing tenure, house characteristics and quality indicators, besides information on the household financial circumstances. The FRS, the UK household budget survey, offers a considerably larger sample size than the British component of EU-SILC, as well as much more detailed information on household' incomes, valuable for tax modelling. The data used here refer to 2010 (income reference period 2009).

These EUROMOD input datasets provide information on homeownership rates, as shown in Table 2. Homeownership is most prevalent in Belgium, Italy, Finland and Spain, with rates above 70%, and relatively lower in Austria and Germany (less than 60%).

Table 2: Homeownership rates in 8 EU countries, 2010.

	Owned on mortgage	Owned outright	Rented	Reduced, social or free rented
AT	25.4	32.1	17.2	25.3
BE	41.6	30.2	19.5	8.7
FI	42.0	32.3	10.1	15.6
ES	33.2	46.7	11.9	8.3
FR	28.9	33.3	20.1	17.7
DE	27.8	25.5	39.6	7.1
IT	15.4	56.5	14.0	14.1
UK	41.3	27.7	12.5	18.5

Source: Own calculations on the basis of EU-SILC/FRS.

Although the EU-SILC provides estimates of IR for all the countries involved since 2007, these are known to suffer from comparability issues (Juntto and Reijo, 2010; Törmälehto and Sauli, 2013) because derived under country-specific methodological choices. For this reason, we estimate IR measures adopting a cross-country comparable approach. This is required for

measuring the tax saving for homeowners stemming from the IR exemption under income taxation.

Among the approaches previously proposed³ to compute IR from micro data, we opt for the opportunity cost approach, also known as the rental equivalence method. We apply a hedonic regression estimation of the logarithm of rent actually paid by tenants in the private housing market (i.e. excluding social housing and any reduced rent payments). In the case of UK, the estimation sample has been restricted to private tenants holding assured short-hold letting agreements (about 55% of private tenants), deemed most representative of the private rental market prices we want to capture. Covariates cover those traditionally used in the IR estimation literature: type and size of the dwelling, quality of the dwelling and the neighbourhood, occupancy in years, geographical location, household income. As selection bias may arise from substantial differences in terms of housing quality and other dwelling characteristics between private market tenants and homeowners, a Heckman selection correction is used. To model selection in homeownership, we exploit indicators of spatial segregation, or other factors that may cause a difference in e.g. quality of the house. Our estimation indeed points towards selection bias arising in all countries except Belgium and Spain. Obtained coefficients are applied to the owner-occupiers sample in order to estimate their IR. In order to maintain the proper variance in the resulting estimates of IR, we add an error term to the predicted value of IR (Frick et al., 2010). This is achieved by adding an error component, randomly chosen from a distribution characterised by zero mean, and variance set based on the difference, measured on the estimation sample of private market tenants, between the standard deviation of the actual rent variable and the standard deviation of the predicted IR variable.

A net version of IR estimates is obtained deducting interest payments for those owners who are repaying a mortgage. For some households this results in negative imputed rents, which were recoded to zero⁴. The overall IR estimation procedure has been validated exploiting observability of tenants' actual rent, whose distribution was compared with that of the in-sample predicted IR, with reassuring results (see Figari et al., 2015 for related evidence).

4. Methodology

The methodology used to quantify the income tax homeownership bias and the extent it is mitigated by property taxation is based on the simulation of counterfactual scenarios. In more detail, we adopt a fiscal microsimulation approach, which allows estimating household incomes under different taxation scenarios, holding everything else constant.(Figari, Paulus and Sutherland, 2015).

³ The opportunity cost approach, the capital market approach, and the self-assessment approach; for a discussion of these, see Frick et al. (2010).

⁴ Negative values may arise because of overlapping distribution of homeowners and private renters, e.g. because the geographical categorization used in the regression is too rough.

The measurement of homeowners’ income tax saving is obtained by comparing the income distribution arising under existing tax provisions (in what will be referred to as the baseline scenario) with that arising under a benchmark investment neutral, non-biased, tax system. We consider two options of benchmark non-biased system. The first achieves neutrality in taxation of returns from owner-occupied housing with respect to other investment in housing or immovable property. In other words, this scenario would regard the owner-occupier, who in fact obtains a return (i.e. the avoided cost of paying for housing services) in the form of IR, as a landlord obtaining a return in the form of rent received from (self as) a tenant. As neutrality requires applying the same taxation to both returns, in this benchmark scenario we tax homeowners’ IR under the provisions applying to rent received from secondary properties, which, in the European countries we consider, generally happens under progressive PIT. The extension of tax rules currently applying to secondary housing properties to owner occupied housing entails not only the inclusion of gross IR in the income tax base. It also covers mortgage interest reliefs allowed for second properties in particular countries, namely Austria, Finland, France, Germany and the UK.

Investing in immovable property other than owner-occupied housing, represents only one alternative form of low-risk investment. Another one is low-risk financial investment⁵. Because in many countries returns from financial investment are subject to proportional taxation at source, we also consider a second benchmark system. This achieves neutrality in the taxation of returns from owner-occupied housing investment with respect to low-risk financial investment. In this second case, neutrality in taxation of both returns requires taxing IR under the provisions applying to returns from financial investment. Table X below summarises the tax treatment of returns from immovable property (other than owner-occupied housing) and from financial investment prevailing in the eight countries.

Table 3: Overview of taxation of income from properties and financial investments

	Tax on income from properties	Tax on low-risk financial investment
Austria	PIT	20%
Belgium	Both in PIT and separate tax	15%
Italy	Optional PIT or separate tax (21%)	12.5%
Finland	Capital income tax	39% & 32%
France	PIT with 30% deduction	PIT with deduction
Germany	PIT	25%
Spain	PIT	21% & 25%
UK	PIT, Rent on rooms in own residence untaxed if below £4250 per year	10%

⁵ We do not cover business investment as typically entailing a higher risk than investment in immovable properties.

Both benchmark scenarios are explicitly not designed to achieve revenue-neutrality, but rather lack of tax-induced distortions to investment decision. In other words, the underlying idea is that the level of taxation is left as a political choice to policy makers, or citizens' representatives in democratic societies (Mirrlees, 2011). Also, availability of additional tax revenues might be valuable in times of fiscal consolidation needs, and anyway enlarge the scope for growth enhancing tax-shifting measures.

The second step of analysis requires comparing the estimated income tax saving for homeowners' with the property tax liability arising from existing legislation applying to main residence.

Baseline and counterfactual benchmark scenarios are implemented using EUROMOD, the multi-country European wide tax-benefit microsimulation model. EUROMOD is a static model that provides measures of direct taxes, social insurance contributions, cash benefits as well as market incomes in a comparable way across countries. EUROMOD simulates cash benefit entitlements and direct tax and social insurance contribution liabilities on the basis of the tax-benefit rules in place and information available in the underlying datasets. Instruments which are not simulated (mainly contributory pensions), as well as market income are taken directly from the data (Sutherland and Figari, 2013). As such, EUROMOD allows to gauge the first order effects of tax-benefit policies in terms of government budgets, income distribution and work incentives in the short run.

Table 4: Overview of policies coverage in EUROMOD

	MITR		IR tax		Property tax		Rent tax relief		Taxation of income from other properties	
	Tax code	EM	Tax code	EM	Tax code	EM	Tax code	EM	Tax code	EM
Austria	Limited	No	No	-	Yes	No	No	-	Yes	S
Belgium	Yes	S	No	-	Yes	S	No	-	Yes	S
Finland	Yes	S	No	-	Yes	I	No	-	Yes	S
France	No	-	No	-	Yes	I	No	-	Yes	S
Germany	No	-	No	-	Yes	I	No	-	Yes	S
Italy	Yes	S	No	-	Yes	S	Yes	S	Yes	S
Spain	Yes	S	No	-	Yes	I	Yes	S	Yes	S
UK	No	-	No	-	No	-	No	-	No	-

Note: S = simulated in EUROMOD; I = included (i.e. information from input data).

The baseline tax-benefit systems simulated refer to tax policy rules applying in 2012 (for an overview of policies' coverage in EUROMOD see Table 4). Appropriate price and income indices are used to update monetary variables from the income reference period (i.e. 2009) to policy system year (i.e. 2012). The simulations of these policy systems have been cross-

checked with administrative statistics and tested through a number of other applications (e.g. Bargain, 2007; Dolls et al., 2012; Bargain et al., 2014)⁶.

5. Budgetary and redistributive effects of homeownership tax bias

The benchmarks explained in the previous section allow us to quantify the homeownership bias and to assess the extent to which property taxes compensate for the favourable treatment of homeowners in the personal income tax system.

In detail, these are the two scenarios applied in our empirical exercise:

1. IR taxed as part of PIT as income from secondary property; hence, MITR is only applied when present for secondary properties;
2. IR taxed as financial investment income as in place in the country; hence, no MITR applied.

In both cases gross imputed rent⁷ is allocated to homeowners, and equally shared between those persons responsible in the household for accommodation.

5.1 Budgetary impact

The lack of neutrality embedded in the tax systems in place in the countries considered in this analysis implies a relevant loss of tax revenue that we quantify considering the two different benchmarks. In the first scenario, the PIT budget would receive an extra revenue (as % of baseline tax revenue) ranging from 5.8% in France to around 25% in Belgium, Finland and Spain (see Table 5). According to the benchmark of the second scenario, changes in tax revenue are in general somewhat smaller, but still sizeable, ranging from 5.1% in France to around 20% in Finland and Spain. This depends on the progressivity of the overall tax system and the taxation of financial incomes.

⁶ Transfer taxes and Taxes on capital gains are out of the scope of EUROMOD simulations, as the underlying data include neither data on transfers of property nor on realised capital gains.

⁷ We have used the gross imputed rent concept after correction with the error term, as explained in the previous section.

Table 5: Budgetary impact of different scenarios and compensation role of property tax (% of tax revenue)

	Property Tax as % of tax revenue	Scen. 1: IR taxed as part of PIT		Scen 2: IR taxed as financial income	
		Change in tax revenue (a)	Property Tax as % of (a)	Change in tax revenue (b)	Property tax as % of (b)
AT	-	11.38	0%	6.78	0%
BE	3.06	24.31	12.6%	6.65	46.0%
FI	1.37	26.62	5.1%	20.39	6.7%
ES	15.27	25.96	58.8%	22.24	68.7%
FR	7.06	5.83	121.1%	5.13	137.6%
DE	2.59	8.25	31.4%	9.96	26.0%
IT	2.29	15.03	15.2%	5.46	41.9%
UK	-	17.85	0%	17.09	0%

Source: Own calculations on the basis of EU-SILC/FRS.

The existing property tax revenue ranges from 1.4% in Finland to 15% in Spain. With the exception of France, at aggregate level, the budgetary role plaid by the existing property tax is not sufficient to compensate for the revenue gain that homeowners get due to the non-neutral existing systems.

5.2 Distributive outcomes

The lack of neutrality of the tax systems and the partial compensation provided by the property tax is distributed unevenly over income groups. For the decile distribution, individuals are ranked on the basis of an extended disposable income concept, notably cash income plus net imputed rent⁸, following the consensus in the literature about the superiority of an extended income concept that also incorporates non-cash income components with respect to a cash income only concept (Frick et al. 2010).

The blue bars in Figure 1 show the change in tax liability when imputed rent is included in the personal income tax system as a share of baseline extended original income (i.e. original income plus replacement incomes plus net imputed rent before taxes and social benefits). For Austria for instance, households in the first income decile group would pay an additional 0.3% of their gross extended income in taxes, while those in the top deciles would pay 1.5% extra, less than the extra tax liability faced by households in the previous three decile groups which is around 2%. In Belgium, Finland, France, Germany, Italy and Spain, we find a similar U-inverted pattern of the tax liability, though the magnitude of the effect is quite different. Only in the United Kingdom we find the highest share for the top decile. In general, the change in tax liability is heavier for the richer households, and can thus be considered to be progressive.

⁸ Net imputed rent after application of the error term correction is used.

This contrasts starkly with the distributional pattern of the property tax in place (red bar): in Belgium, Finland and Germany, the share taken in tax is roughly the same over income deciles (pointing towards proportionality), while in France, Italy and especially Spain the share by the lowest quintile is noticeably higher than in other parts of the income distribution.

Given the absence or the very low level of compensation through the property tax in Austria, Finland and the United Kingdom, the net bias in favour of homeowners (green bar) follows the same pattern in these countries as the change in tax due to the inclusion of imputed rent in the PIT. In Belgium and Italy there is no or a rather small bias in the first decile, but in the rest of the income distribution the pattern is also similar to that of the tax on imputed rent. In France, Germany and Spain the net bias is negative up to the eighth, second and fourth decile group respectively. Hence, the poorest tax payers would pay less taxes with a neutral tax system (i.e. taxing IR as part of PIT - property tax). In the other countries the net effect is always positive but progressive: poorest households would pay more taxes with a neutral system but less than richest.

In Figure 2 we show the same information but for the second scenario, i.e. imputed rent is taxed as financial income. For all countries we find that taxing imputed rent according to this system shifts the tax burden more towards the bottom of the income distribution. Hence, the tax on imputed rent is less progressive/more regressive in all countries in scenario 2 as compared to scenario 1. The compensating effect at the bottom of the income distribution is also quite different for several countries. In Belgium in Germany it is quite large for the first two deciles. Also in Italy it is larger than in the first scenario, almost equally high throughout the income distribution. Only in France and Spain the net bias is negative for parts of the income distribution (in France up to the eighth decile and in Spain only in the first decile). These groups would pay less taxes with a neutral tax system (i.e. taxing IR as other financial incomes - property tax). In the other countries the net effect is always positive but progressive (inverted U shape): poorest households would pay more taxes with a neutral system but less than richest.

Figure 1: Changes in tax revenue when IR is taxed as part of PIT and property taxes, as % of original&replacement extended income

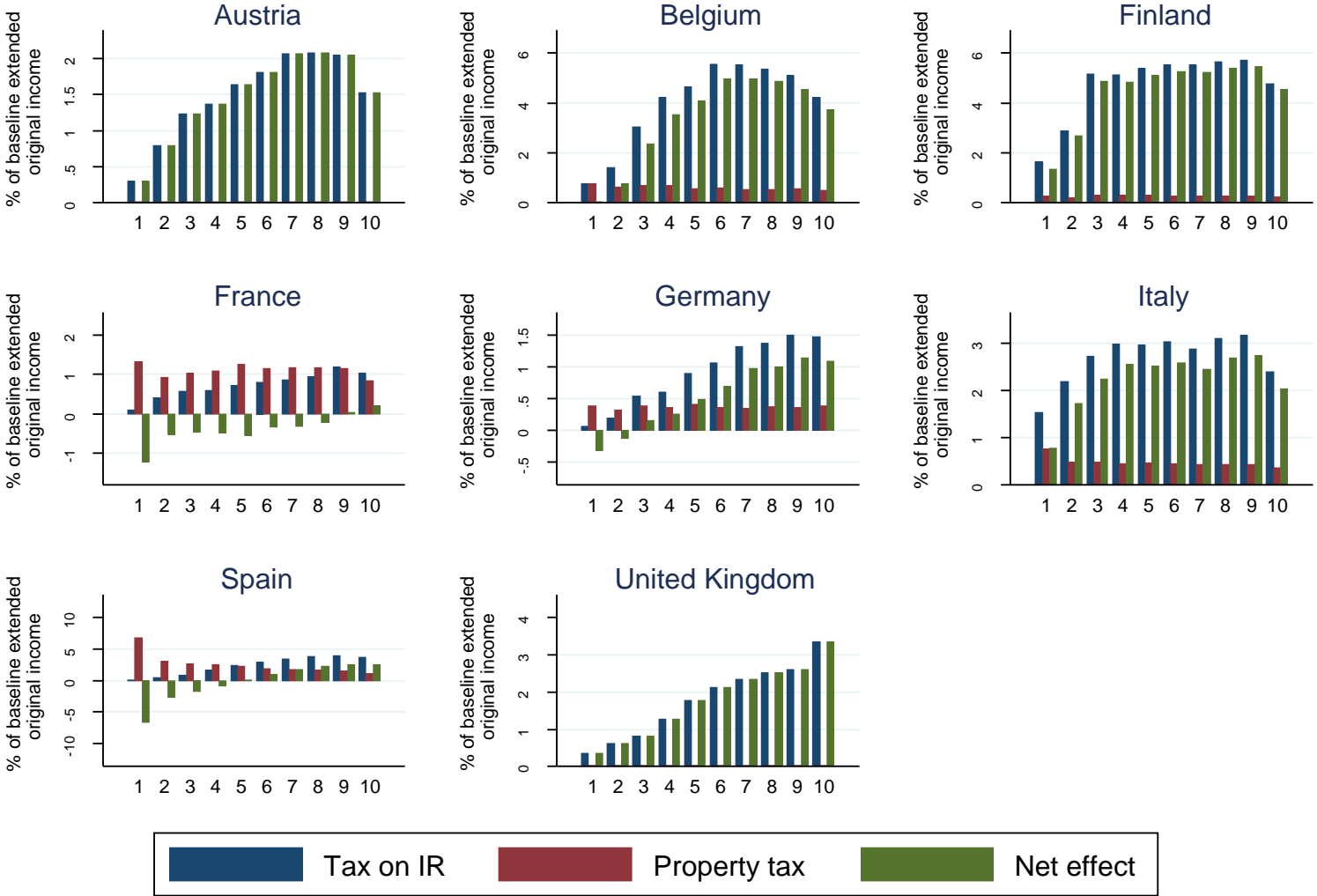
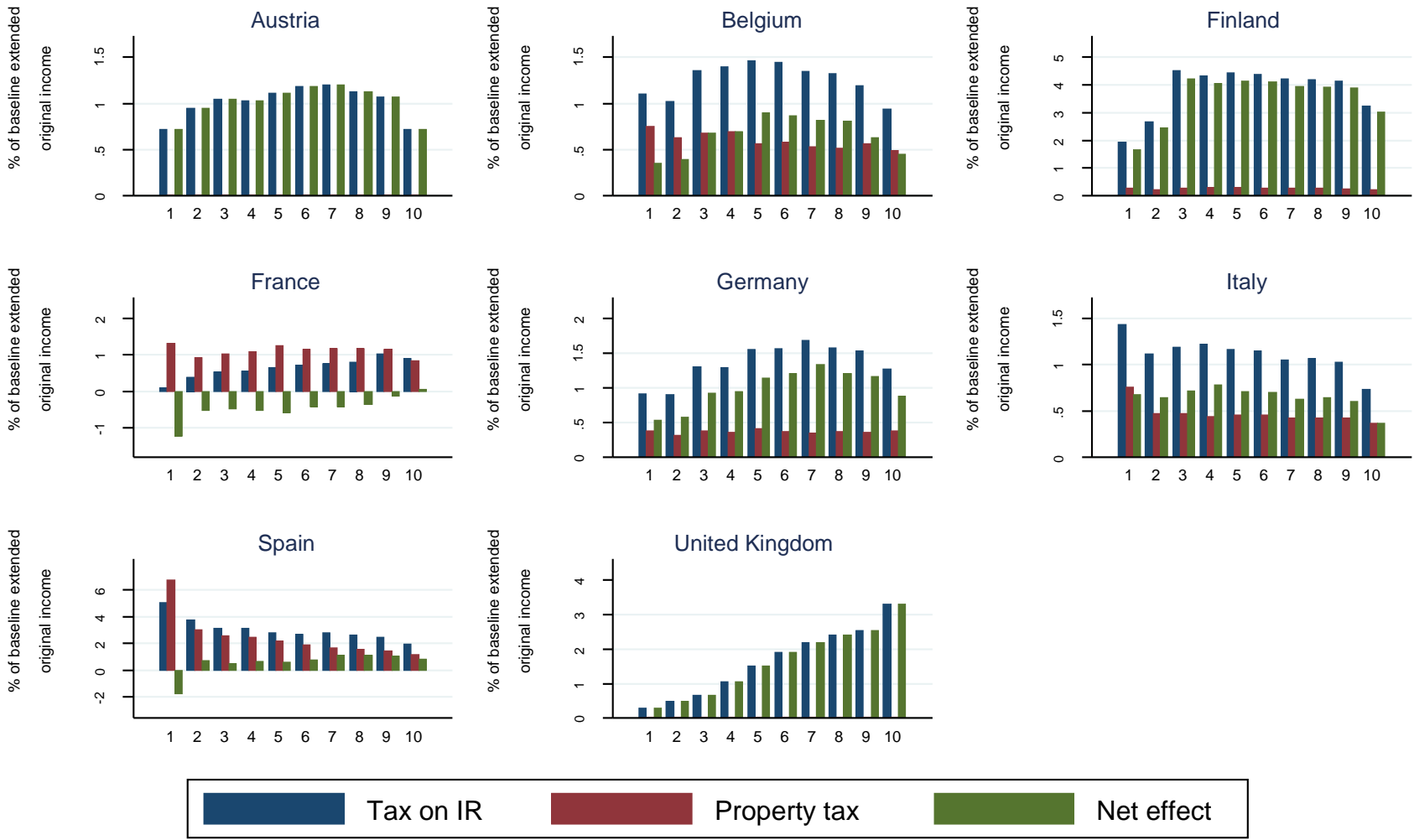


Figure 2: Changes in tax revenue when IR is taxed as financial incomes and property taxes, as % of original&replacement extended income



Conclusions

In Europe, the Great Recession has made it imperative to identify forms of taxation least detrimental to growth, and shift the tax burden towards those, thus reviving interest towards owner-occupied housing taxation. For decades, in sharp contrast with economic principles, western countries' income tax systems have exempted IR, i.e. the return from investing in owner-occupied housing, from income taxation, thus entailing a lack of neutrality with respect to other forms of investment. On the other hand though, IR income tax exemption is generally accompanied by recurrent property taxation of owner occupied housing, a practice which could be regarded as a correction to the homeownership bias. Under this 'substitution view', between income and property taxation of owner occupied housing investment, the choice of property over income taxation indeed has advantages, for example, given the income tax evasion prevalence in some countries. But it also poses potential distributional drawbacks, as real estate taxes are typically of proportional, rather than progressive, nature.

Despite a long-standing endorsement of removing this homeownership bias, lack of updated comparative evidence on its size, also in relation to existing property taxes on housing, and on their joint distributional effect, is currently hampering the tax policy debate.

This paper has offered up-to-date aggregate and distributional measures of the homeownership bias arising from income taxation in eight European countries, observed after the onset of the recent crisis, accounting for the extent to which the bias might be mitigated by recurrent property taxation.

The analysis is based on data drawn from Statistics of Income and Living Conditions and UK Family Resources Survey and makes use of the multi-country tax benefit model EUROMOD. Results show that a sizeable bias in favour of homeowners is indeed embedded in current income tax systems, and that property taxation represents only a partial correction to this bias. Moreover, this bias is not the same across the income distribution. Such evidence appears valuable in informing the policy debate on the search for new sources of tax revenues, and in particular for those less detrimental to growth and equity.

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Appendix

Table A1: Comparison of property and residence service taxation

	PROPERTY TAX	RESIDENCE SERVICE TAX
Taxpayers:	Owners only	Owner occupiers and tenant occupiers
Principle:	Ability to contribute principle (equity in contribution, w.r.t to others)	Benefit principle (equity in exchange)
Neutrality:	Could contribute to achieving neutrality w.r.t taxation of other forms of investment, correcting the homeownership bias	No concern for neutrality w.r.t taxation of other forms of investment, no connection to the homeownership bias
Tax rate design:	Could be proportional or progressive (according to how other investment income is taxed)	Progressive only if higher income individuals are regarded as benefitting more from the local services provided