



ISSN 2443-8030 (online)

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ECONOMIC BRIEF 072 | OCTOBER 2022

EUROPEAN ECONOMY

*Economic and
Financial Affairs*



European Economy Economic Briefs are written by the staff of the European Commission's Directorate-General for Economic and Financial Affairs to inform discussion on economic policy and to stimulate debate.

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Luxembourg: Publications Office of the European Union, 2022

PDF ISBN 978-92-76-29627-0 ISSN 2443-8030 doi:10.2765/37304 KC-BE-21-009-EN-N

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The Fiscal and Distributional Effects of Removing Mortgage Interest Tax Relief in EU Member States

By Alexander Leodolter and Aleksander Rutkowski

Abstract

Mortgage interest tax relief contributes to the favourable tax treatment of owner-occupied housing compared to other investments. It thereby creates market distortions and may at the same time often not give rise to its intended effect, namely to increase homeownership. EU country-specific recommendations have asked for a reduction of the relief in Member States, also in view of risks to macroeconomic stability. The paper analyses the effects of removing mortgage interest tax relief on public revenue and expenditure, household disposable income and income inequality in 14 EU Member States with the microsimulation model EUROMOD. It finds that the tax relief largely benefits households at medium to high income levels. Consequently, its removal could help decrease income inequality in almost all Member States.

Acknowledgements: We would like to sincerely thank Erik Canton, Alexandr Hobza, Aron Kiss, Joost Kuhlmann, Géraldine Mahieu, Frank Neher, Irene Pappone, Nicolas Philipponnet, Savina Princen, Johannes Schuffels and Lukas Vogel for their valuable comments and suggestions.

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The favourable tax treatment of owner-occupied housing

In EU Member States owner-occupied housing is given preferential treatment in taxation, although there are different opinions on the social benefits of homeownership. Imputed rents of owner-occupiers, i.e. their savings from not having to pay rent, are tax-free and therefore favourably treated compared to income from renting out property and other forms of capital, which is taxed in EU Member States.¹ This treatment is often motivated with reference to the positive side effects of homeownership, such as increased incentives for saving and accumulating wealth, higher wellbeing and better educational outcomes of children, increased engagement in the local community, a lower probability to fall victim to a crime, and improved health. However, due to unobserved individual characteristics it might often be difficult to isolate the impact of homeownership.² In addition, there are also studies which show either no significant positive effect of homeownership, inconclusive results, or even a negative impact (see for instance Engelhardt et al. 2010, Bourassa et al. 2015, or Kaas et al. 2019). What is more, a high homeownership rate might increase aggregate unemployment (Blanchflower and Oswald 2013, Laamnanen 2017)³, and homeowners might be more likely to take issue with new residential developments in an area than renters (Levine Einstein et al 2018).⁴

The favourable personal income tax treatment of owner-occupied property creates market distortions, which are only partially corrected through recurrent property taxes. In order to avoid distortions, the first-best solution would be to tax imputed rents equally to other capital income.⁵ In the case that imputed rents are taxed adequately, mortgage interest as well as other costs that come with investing into homeownership should be deductible from taxable income. Also, capital gains from transfers of owner-occupied property should be taxed equally to capital gains from other transactions. Yet in practice, almost no Member State includes imputed rents into taxable personal income, while mortgage interest tax relief is granted in several Member States.⁶ Also, capital gains from the transfer

of ownership of primary residences are usually not taxed.⁷ Finally, recurrent property tax can only partially compensate the distortion resulting from the non-taxation of imputed rents and the tax relief on mortgage interest at its current low levels.⁸ The result of this is a tax bias, which favours homeownership compared to financial investments, and which may make households invest capital, which would have gone into financial assets otherwise, into their owner-occupied property.⁹ The tax bias has been estimated to cause “excess” housing investment equivalent to 8% of the value of owner-occupied housing, or 30% of the financial assets held by homeowners (Fatica and Prammer 2018). However, because it might be difficult over time to maintain a tax level on imputed rents that balances the tax relief (see Johannesson-Linden and Gayer 2012) and as mortgage interest tax relief has been found to have – as will be discussed further below - several disadvantages, a well-designed lower recurrent property tax, combined with the full removal of mortgage interest tax relief, appears as an attractive second-best solution from an efficiency point of view.

The effects of mortgage interest tax relief

If property supply is inelastic, mortgage interest tax relief may increase property prices and even decrease the homeownership rate. Adding to the under-taxation of owner-occupied property and, thereby, to economic distortions is not the only potential disadvantage of the mortgage relief. If property supply is inelastic¹⁰ as a result of geographical constraints as well as of supply regulations, mortgage interest tax relief can be expected to be capitalised into house prices. It will in this case not benefit the new owner-occupier, but will generate a windfall gain for the sellers of property. Empirical evidence shows at least partial capitalisation of mortgage interest tax relief into house prices.¹¹ The house price increase resulting from capitalisation may also reduce homeownership among those on the margin to buy or rent, if these households face credit constraints. In addition, higher prices may lead to risk-averse households choosing not to buy and to increasing transaction costs related to a house

purchase.¹² Also, mortgage interest tax relief may lead to increased household debt (see Gruber et al. 2021) and thereby increase macroeconomic vulnerability. It may also increase volatility of house prices (Andrews 2010, Catte et al. 2004) and exacerbate business cycles, as it may be procyclical in nature (Splinter 2019).

Discontinuing mortgage interest tax relief would be able to contribute to strengthening the fiscal positions of Member States, while also helping to reduce inequality. A removal of the relief would lead to an increase of tax revenues, which could contribute to addressing the issue of increased debt levels. As will be visible in the simulations, the reduction of tax revenue caused by mortgage interest tax relief is sizable in some Member States, and its removal can therefore help improve their fiscal position.

Abolishing the tax relief would also contribute to the reduction of income inequality, as will be shown in the simulation. This last point is of particular relevance in the current post-COVID situation, to the extent that households with lower incomes were hit particularly hard by the economic crisis, for reasons such as a higher unemployment risk, lower savings to compensate for unemployment, and reduced options for telework. In this context, a removal of the tax relief has the advantage of falling onto the most vulnerable households to only a small extent. Still, as it would also affect mortgage holders with low incomes, compensatory measures for low-income households may be recommended.¹³

EU country-specific recommendations have called for the reduction of mortgage interest tax relief. In the context of the European Semester the Council of the EU issued Country-Specific Recommendations (CSRs) related to mortgage interest tax relief for the Netherlands and for Sweden in 2019 and 2022.¹⁴

Data and methodology

The simulation with EUROMOD¹⁵ covers the effect on public revenues and expenditures, disposable income and income inequality for 14 EU Member States. The microsimulation model EUROMOD is used to simulate the impact

of a hypothetical immediate full discontinuation of mortgage interest tax relief on public revenues and expenditure, on household disposable income, and on income inequality in EU Member States in the year 2018.¹⁶ Suspending mortgage interest tax relief is – as mentioned above – a realistic way to increase the taxation of immovable property, which is, as mentioned above, usually undertaxed compared to other capital income. Simulations were performed for all Member States which either had tax relief in place in 2018 for all mortgages, or where the relief was not granted for new mortgages, but still in place for mortgages taken up before the change in law, with two exceptions.¹⁷ The analysis is static, i.e. it does not include behavioural responses caused by the elimination of mortgage interest tax relief. An immediate full discontinuation of the relief is simulated in order to catch the full effect of the policy change. In practise, a gradual removal may be preferable, especially if the relief is sizable. A gradual approach will help ease the transition for homeowners repaying their loans and at the same time will mitigate house price reductions, which removing mortgage interest tax relief might possibly lead to via the capitalisation of tax changes into house prices.

The Member States, which still had mortgage interest relief in 2018 for all mortgages and for which simulations were performed, were Belgium, Czechia, Estonia, Italy, Luxembourg, the Netherlands, Finland and Sweden.¹⁸ The Member States, where mortgage interest relief was removed before 2018, but was still in place for mortgages taken up before the change in law were Ireland, Spain, France, Lithuania and Portugal. In Spain and Ireland, mortgage interest tax relief only applies to mortgages taken out before 2013, in Portugal to those taken out before 2012, in France to those taken out before 2011, and in Lithuania to those taken out before 2009. For France, simulations refer to the year 2016, and for Greece to 2010.

EUROMOD encodes the tax-benefit systems of all EU Member States in a harmonised way and employs data from the European Survey on Income and Living Conditions (EU-SILC). The baseline scenario of the study uses the tax-benefit calculation rules in place in 2018 for all Member

States except for France, where rules for 2016, and Greece, where rules for 2010 were used.¹⁹ The reform scenario uses the same rules, except that mortgage interest tax relief has been removed.

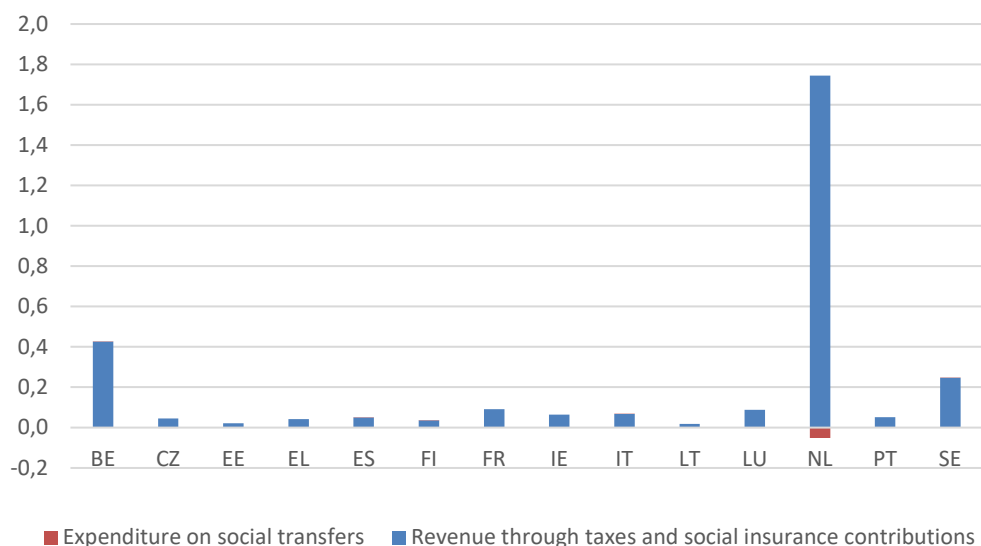
Abolishing Mortgage Interest Tax Relief: simulation results

The impact of mortgage interest tax relief on government revenues is sizable in some Member States. As can be seen in Graph 1, the simulated impact on government revenues is exceptionally large for the Netherlands (+1.8% of GDP), followed by Belgium (+0.4% of GDP) and Sweden (+0.25% of GDP). For all other countries, the impact on government revenues is below 0.1% of GDP, with the largest impact estimated for France and Luxembourg (+0.09%) and the lowest in Estonia and Lithuania (+0.02%).

There are differences between Member States regarding the distribution of households holding mortgages and of the annual mortgage interest repayments at different income levels. Differences in the design of mortgage interest tax

relief, such as the maximum amount for income qualifying for the relief or the rate at which the relief is deductible against income, will affect the impact of the relief. Also, some Member States do not grant a tax allowance that reduces taxable income, but a tax credit which directly reduces the tax to be paid. Consequently, will higher-income households will benefit more from an allowance than those with lower incomes due to their higher marginal tax rate, this will not be the case for tax credits. Another driving factor for the large cross-country differences regarding the distributional impact of mortgage interest tax relief should be the distribution of mortgage interest repayments across the population. As can be seen in Table 1, a much higher share of high-income households than of those with low incomes has a mortgage in all 14 Member States observed. Yet, it is not always households in the top decile of the income distribution that hold the highest share of mortgages. Overall, the differences between deciles are particularly pronounced in Member States where the overall share of households holding a mortgage is low, while countries with a higher overall ratio of mortgage-holding households have almost always smaller differences. Similarly, the differences in

Graph 1. **Effect of removing mortgage interest tax relief on government revenue and expenditures as % of GDP**



Note: Results are for 2018 except for France (2016) and Greece (2010).

Source: own calculations with EUROMOD.

Table 1. Share of mortgage holders among households per income decile

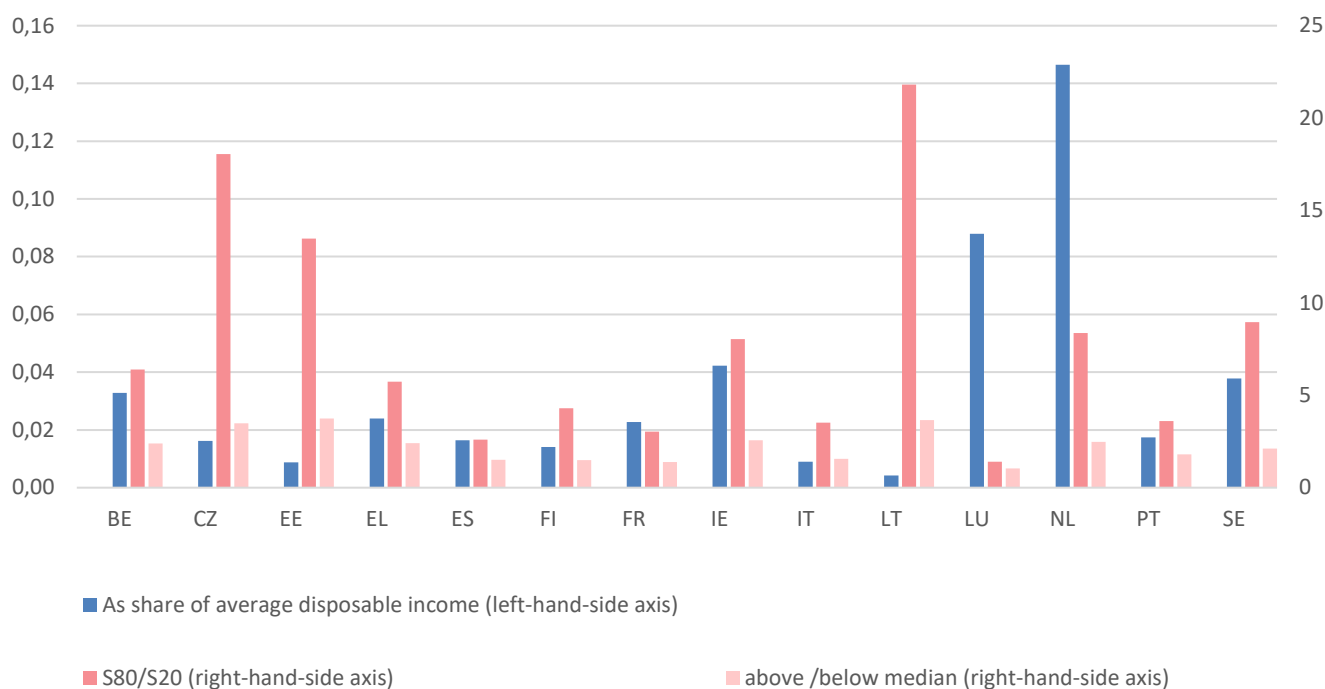
	BE	CZ	EE	EL	ES	FI	FR	IE	IT	LT	LU	NL	PT	SE
1	0.10	0.04	0.04	0.06	0.15	0.14	0.09	0.10	0.04	0.01	0.23	0.22	0.13	0.16
2	0.12	0.03	0.02	0.05	0.16	0.18	0.14	0.06	0.05	0.02	0.37	0.29	0.14	0.23
3	0.13	0.07	0.04	0.06	0.15	0.29	0.20	0.11	0.07	0.01	0.42	0.33	0.15	0.37
4	0.20	0.06	0.04	0.06	0.20	0.35	0.23	0.15	0.07	0.03	0.43	0.44	0.20	0.49
5	0.30	0.09	0.09	0.09	0.23	0.43	0.26	0.20	0.09	0.04	0.39	0.59	0.26	0.58
6	0.38	0.14	0.15	0.11	0.27	0.47	0.28	0.28	0.10	0.07	0.44	0.64	0.31	0.66
7	0.45	0.19	0.16	0.14	0.28	0.51	0.32	0.32	0.12	0.06	0.35	0.72	0.34	0.69
8	0.54	0.23	0.21	0.18	0.32	0.50	0.32	0.37	0.13	0.10	0.41	0.77	0.39	0.69
9	0.55	0.24	0.23	0.19	0.32	0.52	0.30	0.39	0.14	0.12	0.42	0.79	0.43	0.72
10	0.54	0.26	0.35	0.22	0.30	0.53	0.23	0.42	0.11	0.17	0.36	0.80	0.37	0.74
All	0.33	0.14	0.13	0.12	0.24	0.39	0.24	0.24	0.09	0.06	0.38	0.56	0.27	0.53
S80/S20	5.16	7.18	10.36	3.86	2.05	3.27	2.37	4.99	2.87	9.67	1.31	3.15	2.93	3.71
above /below median	2.92	3.63	4.90	2.68	1.70	1.81	1.60	2.83	1.89	4.48	1.08	2.00	2.08	1.92

Note: includes mortgages on the main residence of the household. Calculations are for 2018 except for France (2016) and Greece (2010).

Source: own calculations based on EU SILC.

average annual gross mortgage interest repayments between higher-income and lower-income households vary between Member States (Graph 2).²⁰ Again, Member States with a larger average annual gross mortgage interest payment (meas-

ured as percentage of GDP) usually show rather large inequalities across income deciles regarding the average mortgage interest payment. However, the Member States with a smaller-sized average mortgage interest payment include both countries with larger and smaller inequality across deciles.

Graph 2. Average annual gross interest repayments on mortgage as share of disposable income

Note: includes mortgages on the main residence of the household. Gross interest repaid refers to the total amount before deductions of tax credits or allowances. Calculations are for 2018 except for France (2016) and Greece (2010).

Source: own calculations based on EU SILC.

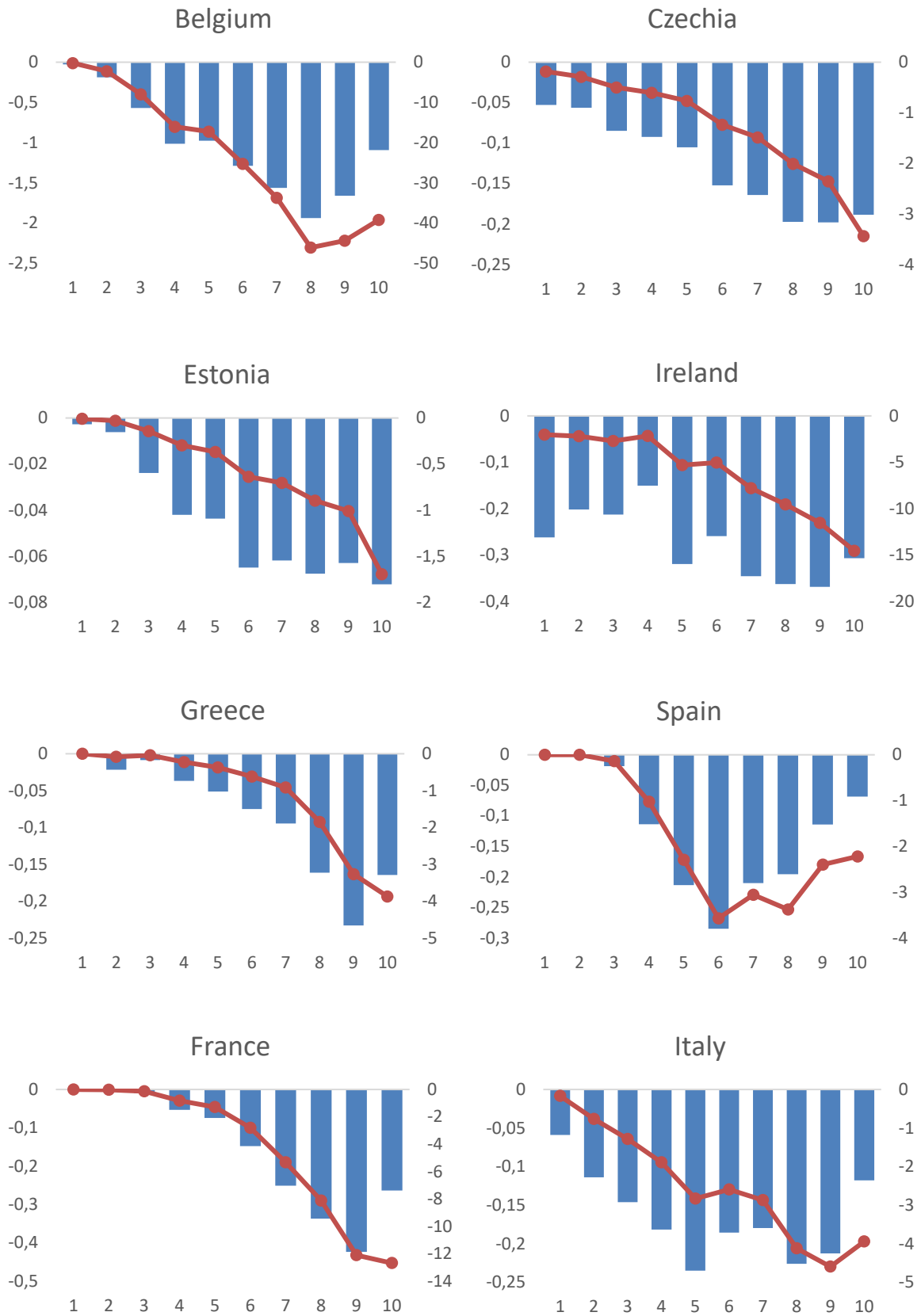
Households in higher income deciles benefit from mortgage interest tax relief, but the impact differs significantly across Member States. An uncompensated discontinuation of mortgage interest tax relief implies a reduction of disposable household income. As can be seen in Graph 3, it is in particular households in higher income deciles who face the largest income reduction following such an uncompensated discontinuation, both in absolute (in EUR) and relative terms (as a percentage of pre-reform disposable income).²¹ Yet, while the decrease in absolute terms is highest for the 10th (i.e. highest) income decile in a majority of countries, the decrease as a percentage of disposable income is highest for the 10th decile only in Estonia. It is highest for the 9th decile for Czechia, Greece, France, Ireland, Lithuania and the Netherlands, and highest for the 8th decile in Belgium, Luxembourg and Sweden. Italy is the only Member State where an income decile in the bottom half, namely the 5th decile, is facing the highest income reduction.

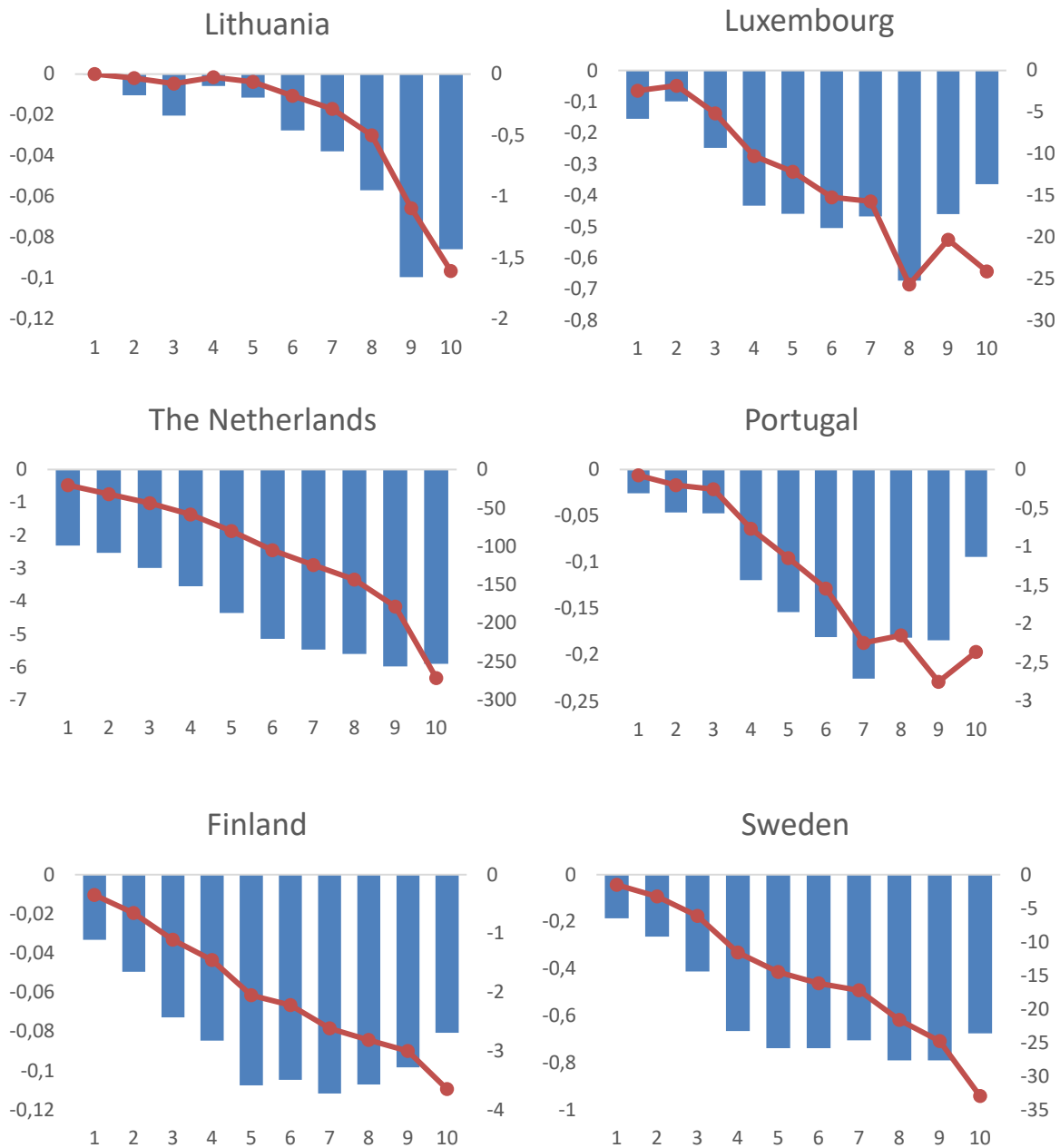
Overall, simulations show that abolishing mortgage interest relief reduces income inequality. A removal of mortgage interest tax relief leads to a reduction in income inequality: In 12 out of the 14 Member States the Gini coefficient decreases and in 13 out of 14 the S80/S20 ratio decreases as a result of the reform (see Table 2).²² As can be seen in Graph 4, a larger decrease in average disposable income is often accompanied by a larger reduction of income inequality. In the Netherlands, abolishing the tax relief would lead to the largest reduction of average disposable income, namely a decrease by 4.9%, with reductions in the upper deciles reaching up to almost 6% percent of disposable income. The Netherlands would also see the largest decrease of inequality as measured by the change in the Gini coefficient and the S80/S20 ratio due to the discontinuation of the relief, with one reason of the effect certainly being the generous mortgage tax relief system. Moreover, the Netherlands have the highest average annual mortgage interest repayments as share of disposable income and mortgage interest payments are also relatively unequally dis-

tributed as indicated in Graph 2. Also Belgium, which has a relatively high mortgage incidence and a rather unequal distribution of mortgage interest payments, would see a large reduction in average disposable income, accompanied by a comparatively strong reduction of inequality. Another country which would experience a reduction of inequality and at the same time a noticeable reduction of average disposable income, albeit to a lesser extent than the Netherlands and Belgium, is Sweden, where average mortgage interest repayments are again relatively high and relatively unevenly distributed.

Some Member States see neither a sizable effect on income nor on inequality. Some Member States do not show a larger reduction of either disposable income or income inequality. Of these countries, Estonia, Italy and Finland offer tax relief for all mortgages, while Spain, Lithuania and Portugal have abolished tax relief for interest from new mortgages in 2013, or even earlier. Not surprisingly, average mortgage interest repayments in all six of these countries are comparatively low. In Spain, where the income deciles in the middle clearly gain most from mortgage relief, mortgage interest repayments are in addition more equally spread than in most other Member States. In Portugal, Italy and Finland interest repayments are also relatively equally distributed, and their average size as share of disposable income is also rather small. Spain and particularly Italy see, however, a more sizable reduction of the S80/S20 ratio than of the Gini coefficient. In Estonia and Lithuania, where the effect on disposable income and inequality is also relatively small, mortgage interest repayments are very unequally distributed, but their average size as a share of income is among the lowest. Of these Member States, Spain, Italy and Portugal have a tax credit and not a tax allowance for mortgage interest. In France, abolishing mortgage interest relief would not lead to a very large reduction of mean disposable income, but the redistributive effect as measured by the change in the Gini coefficient would be relatively high, even though mortgage interest payments are not too unequally distributed and the relief has the form of a tax

Graph 3. Change in monthly equivalised disposable income per decile from removing mortgage interest tax relief (in % and in EUR)





Note: Blue bars and axis on the left-hand-side refer to change of equivalised disposable income in % of the value before the hypothetical reform. Red dots and axis on the right-hand-side refer to change of equivalised disposable income in EUR. Equivalised income is a measure of household income that takes account of the differences in a household's size and composition. Disposable income is equivalised according to the modified OECD equivalence scale: A weight of 1.0 is assigned to the first adult, of 0.5 to each subsequent person aged 14 or over and of 0.3 to each child aged below 14. Results are for 2018 except for France (2016) and Greece (2010).

Source: own calculations with EUROMOD.

credit. Also in Czechia with its low, but unequally distributed mortgage repayments, the effect on disposable income is small, but the impact on inequality is a bit more pronounced. For Greece, where both the size of mortgage interest repay-

ments and their distribution are average compared to other countries, a similar effect can be found, even if the relief has been granted as a tax credit. Ireland has rather high and unequally distributed mortgage repayments, but the relief only applies to

Table 2. **Inequality of disposable income**

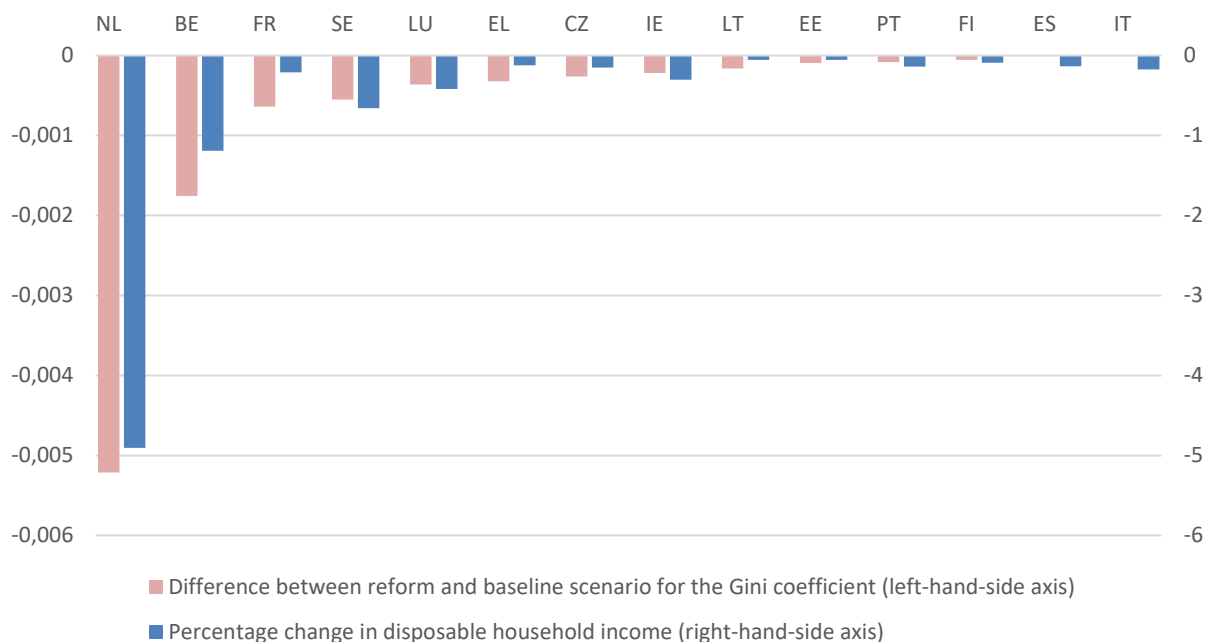
	Gini coefficient			S80/S20		
	Baseline	Reform	Difference	Baseline	Reform	Difference
BE	0.2223	0.2205	-0.0018	3.1744	3.1393	-0.0351
CZ	0.2506	0.2504	-0.0003	3.5060	3.4895	-0.0166
EE	0.3068	0.3067	-0.0001	4.9274	4.9243	-0.0031
EL	0.3490	0.3487	-0.0003	6.6084	6.5981	-0.0103
ES	0.3383	0.3383	0.0000	6.3516	6.3464	-0.0052
FI	0.2353	0.2353	-0.0001	3.2021	3.2039	0.0018
FR	0.2769	0.2762	-0.0006	3.9765	3.9634	-0.0132
IE	0.2905	0.2903	-0.0002	4.2330	4.2284	-0.0046
IT	0.3152	0.3152	0.0000	5.7166	5.7072	-0.0094
LT	0.3456	0.3455	-0.0002	6.0247	6.0096	-0.0152
LU	0.2432	0.2428	-0.0004	3.2305	3.1872	-0.0433
NL	0.2519	0.2466	-0.0052	3.5347	3.4362	-0.0985
PT	0.3333	0.3333	-0.0001	5.4463	5.4421	-0.0042
SE	0.2653	0.2648	-0.0006	3.9127	3.8947	-0.0179

Note: Data are for 2018 except for France (2016) and Greece (2010).

Source: own calculations with EUROMOD.

mortgages before 2013 and changes in both disposable income and inequality are relatively modest. Also, the Irish relief has the form of a tax credit. In Luxembourg the relatively large

effect on the S80/S20 ratio might be related to the large size of mortgage interest repayments as a share of income, even though they are not unequally distributed.

Graph 4. **Change of the Gini coefficient and of mean equivalised disposable household income**

Note: Data are for 2018 except for France (2016) and Greece (2010).

Source: own calculations with EUROMOD.

Conclusion

Mortgage interest tax relief contributes to the homeownership tax bias. Mortgage interest tax relief decreases revenues from personal income taxation and leads to market distortions by providing a tax bias favouring investment into owner-occupied housing. Alternatively, it will increase house prices if property supply is inelastic, thereby discouraging its intended effect, namely to promote homeownership. Also, it might make house prices more volatile, amplify cyclical fluctuations and increase household debt. Not least, mortgage relief reduces tax revenues, which is why its discontinuation can support the strengthening of Member States' fiscal positions.

Due to the regressive nature of mortgage tax relief, removing it reduces income inequality, especially in Member States where the tax relief is an important policy intervention. The simulations show that households in higher income deciles experience the largest benefit from mortgage interest tax relief, both in absolute terms and as a share of disposable income.²³ Yet, there are noticeable differences across Member States, with the Netherlands and Belgium seeing non-negligible reductions of inequality from a removal of the tax relief. Overall, removing the tax relief leads to a reduction of the Gini coefficient and the S80/S20 coefficient in 12 of 14 and 13 of 14 Member States respectively.

The simulation does not include possible effects resulting from capitalisation of the tax relief into house prices. It should be taken into consideration that the analysis with EUROMOD is static and includes no behavioural responses by economic agents. Therefore, it does not address the issue of capitalisation of mortgage interest tax relief into house prices. However, non-negligible capitalisation is likely to be the case, as housing supply may often be relatively inelastic due to housing market regulation.

Increasing interest rates may make the effects of mortgage interest tax relief even more sizable. Compensatory measures for a removal of the relief for low-income households may be recommended. An economic environment where interest rates increase may make the negative impact of the relief even more pronounced, not only on income inequality, but also for example on house prices. At any rate, even though the tax relief has a clear income-regressive overall effect, also mortgage holders with low incomes will benefit from it. Therefore and in order to increase the acceptability of reducing or discontinuing mortgage interest tax relief, compensatory measures for lower-income households may be recommended.

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AnnexTable A.1 **Effect of removing mortgage interest tax relief on government revenue and expenditures**

	Revenue through taxes and social insurance contributions			Expenditure on social transfers			Overall difference as % of GDP
	Baseline	Reform	Difference	Baseline	Reform	Difference	
BE	111229.1	113187.0	1957.9	71508.0	71508.1	0.1	0.43
CZ	37216.7	37311.7	95.0	19395.4	19390.0	-5.4	0.05
EE	5283.8	5289.5	5.7	2828.9	2828.9	0.0	0.02
EL	22836.4	22929.0	92.6	29993.8	29993.8	0.0	0.04
ES	202013.1	202616.7	603.6	163393.6	163393.7	0.0	0.05
FI	55534.4	55617.5	83.1	41976.6	41977.1	0.5	0.04
FR	638104.6	640141.8	2037.2	408958.5	408958.5	0.0	0.09
IE	28434.9	28644.5	209.6	21095.0	21095.0	0.0	0.06
IT	424198.8	425388.6	1189.8	314075.0	314075.9	0.8	0.07
LT	8014.4	8023.0	8.6	4581.5	4581.5	0.0	0.02
LU	5484.5	5537.6	53.1	5567.4	5566.8	-0.7	0.09
NL	175931.5	189428.3	13496.8	75874.3	75479.3	-395.0	1.79
PT	36209.4	36316.8	107.4	30652.6	30652.6	0.0	0.05
SE	121310.0	122473.2	1163.3	69491.8	69496.1	4.3	0.25

Note: in mn of EUR, results are for 2018 except for France (2016) and Greece (2010).

Source: own calculations with EUROMOD.

Table A.2: **Average annual gross interest repayments on mortgage per income decile in EUR**

	BE	CZ	EE	EL	ES	FI	FR	IE	IT	LT	LU	NL	PT	SE
1	186.1	24.0	27.6	144.3	145.2	112.4	242.5	306.8	71.1	3.6	3408.9	795.4	88.5	240.4
2	254.27	14.827	8.218	81.49	174	191.52	261.27	291.23	84.355	5.451	2781.7	1178.6	88.231	233.52
3	272.4	46.7	14.0	144.8	156.8	321.5	419.9	469.4	116.0	7.2	3189.6	1471.2	79.4	487.4
4	357.64	50.409	18.403	159.77	192.49	336.1	552.02	513.57	146.06	9.6204	3193.8	2171.6	127.58	757.32
5	670.7	91.9	52.4	179.9	257.9	450.0	576.2	831.3	175.3	21.8	3408.6	2982.6	152.7	1003.5
6	875.06	140	93.584	285.36	334.99	457.37	658.32	1152.3	197.64	30.561	3689.3	3957.2	201.1	1276.8
7	1146.5	182.4	96.0	347.7	351.6	491.1	772.0	1476.8	234.1	18.5	3896.5	4796.7	228.7	1432.5
8	1408.6	258.71	130.57	474.68	389.84	535.82	819.29	1715.6	260.15	39.449	4139.1	5760.6	264.05	1498.1
9	1417.3	288.8	149.5	585.9	412.4	551.7	774.2	2018.2	270.7	84.6	4479.6	6656.0	328.9	1773.7
10	1396.2	411.19	333.16	710.46	415.29	755.96	756.48	2788.5	275.04	111.84	4226	9853.4	307.65	2473.8
All	798.3	150.9	92.3	311.4	283.0	420.3	583.1	1155.9	183.0	33.2	3655.0	3962.0	186.7	1117.2
All as share of average disposable income	0.03	0.02	0.01	0.02	0.02	0.01	0.02	0.04	0.01	0.00	0.09	0.15	0.02	0.04
S80/S20	6.39	18.04	13.47	5.74	2.59	4.30	3.04	8.04	3.51	21.81	1.41	8.36	3.60	8.96
above /below median	2.39	3.48	3.75	2.41	1.51	1.49	1.39	2.57	1.57	3.65	1.04	2.47	1.80	2.11

Note: includes mortgages on the main residence of the household. Gross interest repaid refers to the total amount before deductions of tax credits or allowances. Calculations are for 2018 except for France (2016) and Greece (2010).

Source: own calculations based on EU SILC.

¹ The only EU Member State which taxes imputed rents are the Netherlands, but even there the value of the tax base is usually much lower than the actual market rent would be.

² For a discussion of the literature on the effects of homeownership, including methodological questions, see Dietz and Haurin (2003) and Rohe and Lindblad (2013).

³ This might for example be due to reduced consumption by homeowners with mortgages, which in turn might reduce overall employment in areas with a high homeownership rate. Also, lower rates of business formation have been found in areas with high homeownership rates. Lower labour mobility and higher commuting times of homeowners may also play a role.

⁴ See also Leodolter et al. (2022).

⁵ Also other types of capital income are not necessarily taxed equally in EU Member States. For an overview of the taxation of capital income in EU Member States see Princen et al. (2020).

⁶ In practise, tax relief takes the form of mortgage interest being subtracted from a homeowner's taxable income.

⁷ This tax exemption may however only apply if the property has been held for a certain minimum amount of time.

⁸ For a more detailed discussion of residential property taxation, including information on the design of recurrent residential property tax, and the favourable taxation of owner-occupied housing in EU Member States, see Leodolter et al (2022). For the homeownership tax bias, see also Fatica and Prammer (2018), and Figari et al. (2019a).

⁹ The place for distortions to occur is the intensive margin, i.e. the decision of homeowners on whether to spend more on owner-occupied housing. The extensive margin, i.e. the own versus rent decision, will not lead to over-investment into property given that housing is required by every person.

¹⁰ See Andrews, Caldera Sánchez and Johansson (2011) for the elasticity of property supply in Europe.

¹¹ See Davis (2019), Turk (2015) and Andrews (2010). However, Boelhouwer et al. (2004) find no effect for a majority of countries.

¹² Bourassa and Yin (2008) find such an effect for young households between 25 and 34 years of age in different US areas, and Andrews and Caldera Sánchez (2011) for households in the second income quartile in selected OECD countries. Hilber and Turner (2014) find mortgage interest tax relief to decrease homeownership among higher-income households in the US, when housing supply is inelastic. At the same time, they find an increase, when supply is elastic. They speculate that lower-income households see no effect, as they are less likely to be able to deduct mortgage from their gross income for tax purposes.

In order to increase affordable housing, supply-side policies such as public investment into residential buildings or into transport infrastructure or ensuring well-functioning rental markets are recommended (see Frayne et al., 2022).

¹³ Compensatory measures may be targeted to help ease the credit constraints of those at the margin to own or rent. In France for example subsidised loan schemes targeted at among others first-time buyers and low-income earners were introduced at the time when the tax relief was removed for new mortgages.

¹⁴ For the Netherlands it was recommended in both 2019 and 2022 that the debt bias for households and distortions in the housing market were reduced. The explanations accompanying the CSRs mentioned that the generous mortgage tax relief was one of the factors explaining the high household debt. For Sweden it was in both years recommended that the relief should be gradually reduced, or that recurrent property taxes should alternatively be increased. The need to reform tax incentives encouraging debt-financed homeownership was also mentioned in the explanations accompanying the CSRs for Sweden in 2020. For Denmark a CSR recommended the implementation of the country's new property tax system as a means to make taxes better reflect market prices of properties and increase the fairness of property taxation in 2022. A number of other Member States have received CSRs between 2019 and 2022 that recommend shifting taxes away from labour, sometimes explicitly mentioning a shift to property taxation.

¹⁵ EUROMOD is a tax-benefit microsimulation model for the EU that enables calculating the effects of changes in taxes and benefits on household incomes of each Member State in a comparable manner. Cross-country comparability is ensured by coding the policy systems of each country according to a common framework based on a standard set of [modelling conventions](#). For more details see <https://euromod-web.jrc.ec.europa.eu/>.

¹⁶ The simulations were first presented in an analytical note at the 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.

¹⁷ Bulgaria was not included in the simulations, as mortgage interest tax relief is only offered to young married families below age 35. In Austria tax relief on interest was only granted for mortgages taken out before 2016 and was phased out until 2020. It was not included in the simulations, as due to its design very few households benefitted from it. Mortgage interest tax relief for Denmark could not be simulated due to restrictions of the model/data.

¹⁸ In Belgium, all regions which still applied mortgage interest tax relief decided to phase it out for new mortgages as of 2020.

¹⁹ 2016 was chosen for France, as more recent versions of EUROMOD did not allow for simulation of mortgage interest tax relief. Greece fully repealed mortgage tax relief in 2013, but was still included in the simulations, as the 2010 EUROMOD version was used, which was the latest version to allow simulating changes in mortgage interest tax relief.

²⁰ See also Table A.2 for the average annual gross interest repayment.

²¹ This is in line with other studies looking at the impact of mortgage tax relief as a percentage of pre-reform disposable income, such as Matsaganis et al. (2007), Matsaganis (2011) and Barrios et al. (2019).

²² Again, this result is in line with other studies investigating the distributional consequences on mortgage relief, such as Matsaganis (2011), Barrios et al. (2019) or Figari et al. (2019b).

²³ As the simulations address the removal of the relief, the baseline income is one with the relief included.

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