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Land is back - it should be taxed, it can be taxed

Etienne Wasmer, Guillaume Chapelle, Alain Trannoy, Odran Bonnet / 16 Mar 2021

Housing wealth is now between two and four times as large as GDP in many Western economies. This column reintroduces land and housing structures to the theory of optimal taxation, and finds that first-best taxation is achieved through a property tax on land and requires no tax on capital. Even absent land taxes, one can tax land indirectly and reach a Ramsey second best still with no tax on capital and positive housing rent taxes in the steady state.

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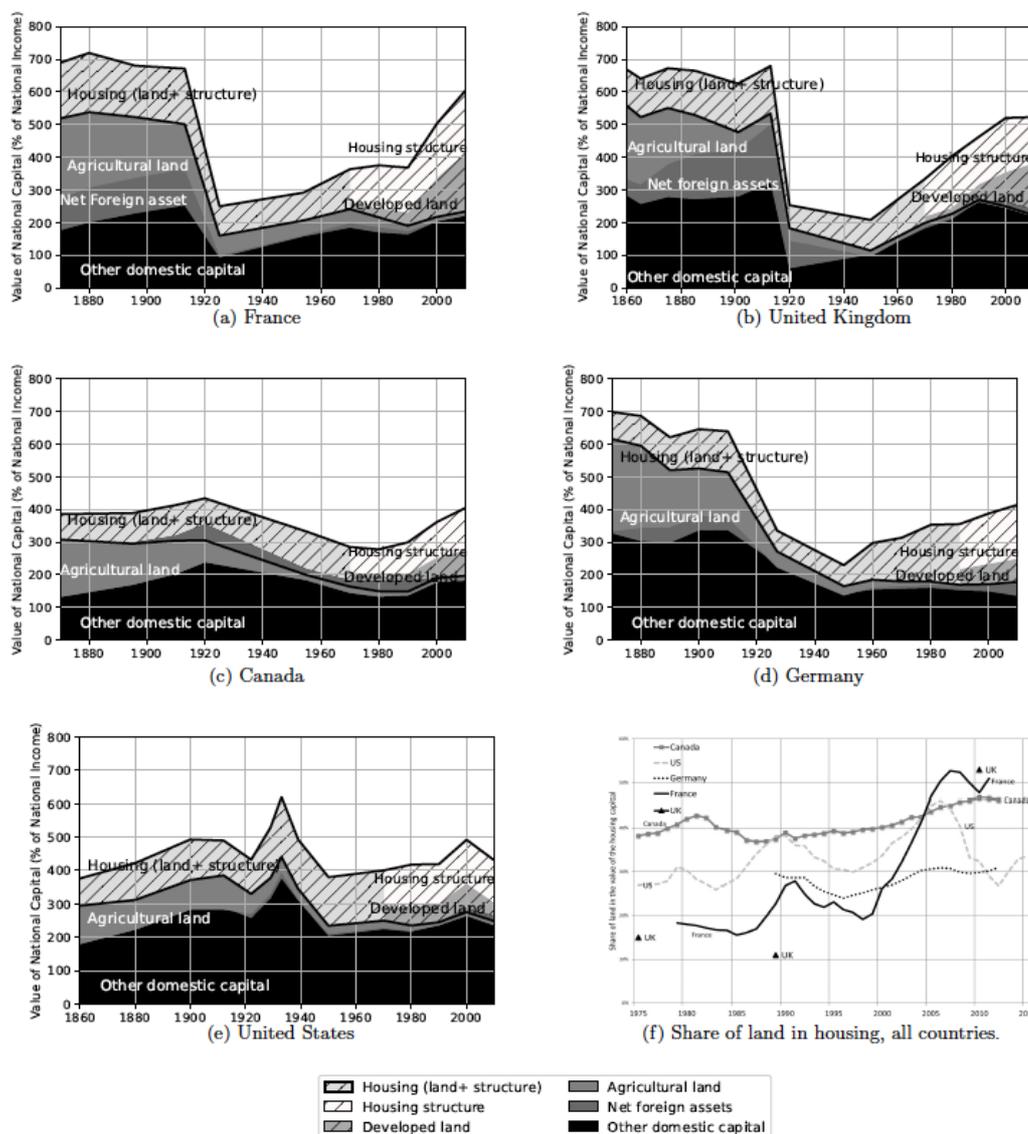
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1. The housing component of national private wealth is explained by the spectacular rise of wealth relative to national income in several countries.

2. Housing wealth as the sum of two elements – structures and developed land – is mostly driven by the rise in housing prices.

3. Rising land values can explain most of the trends in the UK and in France.2

Recent work by Baselgia and Martinez (2020) confirms these results for Switzerland, a very different country as it is decentralised and has faced much greater economic and political stability with no participation in the World Wars. Therefore, in many of the European countries, housing and land have been behind the rise in wealth-to-income ratio over the last decades. The supply of developed land is highly regulated in Europe through urban planning and environmental regulations, and the land component is de facto an inelastic tax base in cities and coastal regions.

These findings have a strong impact on the way wealth tax, and optimal tax more generally, should be designed. Further, since the optimal taxation literature is becoming increasingly quantitative, land and housing should be reinstated in it, especially when its conclusions apply to countries where housing wealth is between two to four times as large as GDP, as opposed to roughly the same size after WWII (Figure 1). We do precisely this in a recent paper (Bonnet et al. 2021), revisiting Judd's (1885) standard setup.

Figure 1 The role of land and housing in the secular variations in the wealth-to-income ratio

(a) France
(b) United Kingdom
(c) Canada
(d) Germany
(e) United States
(f) Share of land in housing, all countries.

Legend: Housing (land+ structure), Housing structure, Developed land, Agricultural land, Net foreign assets, Other domestic capital

Not only is housing wealth the largest tax base, but given the heterogeneity in sources of wealth (productive capital on the one hand, and housing on the other hand, with diverging trends and different supply elasticities), we show that a wealth tax must target each component differently. Our first set of results show that even a uniform land tax alone is theoretically enough to achieve the first best. We discuss in which cases and at which level land taxes can be achieved, and notably propose a formula for a property tax of land to reach the social planner's objective. When land can indeed be taxed at the first best level, taxing productive capital is not necessary, and nor is taxing
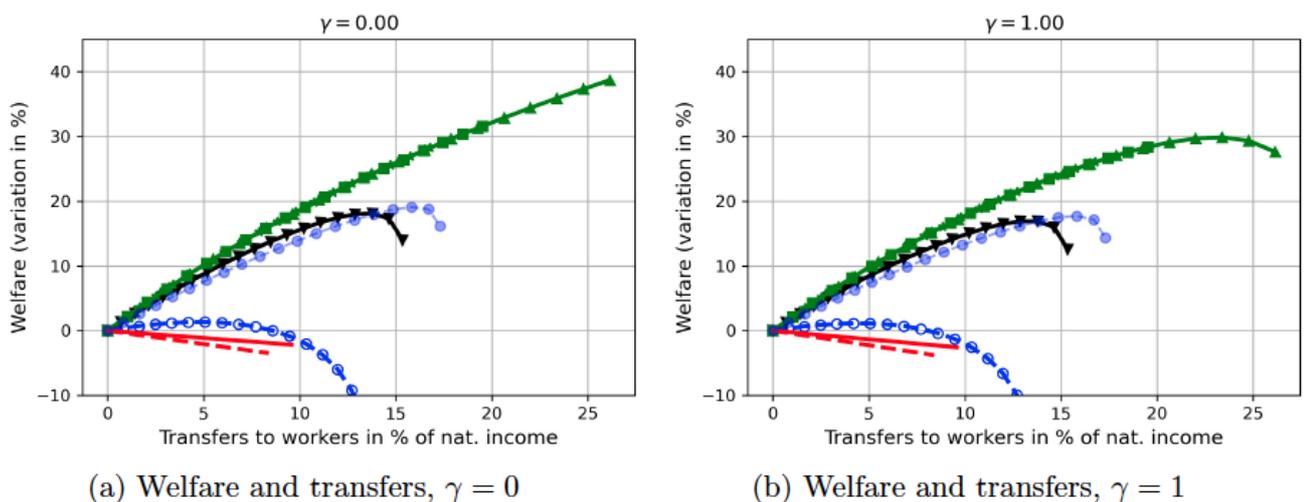
social planners might want to add housing rents to other sources of incomes and tax them too. More specifically, indirect land taxation via the taxation of housing rent is possible, but it cannot be implemented alone because it distorts the allocation of land across types of agents through a classical tax-wedge effect. Adding a tax on imputed rents – taxing homeowners and landlords – corrects for the land allocation distortion but still distorts choices; it affects investments in residential structures, which then becomes sub-optimal.

To reach the first best, a tax on rent therefore requires the addition of (1) a tax on land differentiated across the use of land (less on rental land and more on home-occupied land), and (2) a specific subsidy on investments on rented structures. This discussion illustrates the non-triviality of a tax scheme attempting to overcome the non-feasibility of an optimal uniform land tax, and our proposal provides a rare example of the usefulness of Lipsey and Lancaster's (1956) approach, combining three distortive instruments to mimic the impact of a non-distortive instrument.

Away from the first best, we explore the second-best Ramsey logic, where the social planner acts with no land tax but a rent tax and under a set of implementability constraints (Atkeson et al. 1999). The zero tax to capital applies in stable environments and under further restrictions extends to dynamics paths. The existence of a fixed factor – land – extends the range of parameters under which a steady state with no capital tax is socially desirable at the limit (Straub and Werning 2020). The possibility to tax housing rents actually reinforces the scope of Chamley's and Judd's original results.

This theory exercise has practical applications for policy. We propose explicit formulas for first-best land taxes, subsidies for housing structure investments, and a second-best optimal rent tax that follows an inverse elasticity rule à la Ramsey. In a simulation exercise (Figure 2) we show that the first best performs much better than second-best schemes. The first-best tax on land improves the first best welfare function by up to 30% in a utilitarist perspective and 40% in a Rawlsian perspective, compared to laissez-faire with no redistribution. It can be attained by a pure tax on land or by a complex set of taxes on rents and imputed rents combined with subsidies to structures. Taxing rents without subsidies to residential investments is not first best and 10% of the welfare gains are sacrificed. Taxing capital, in this setup, results in a very marginal improvement on welfare and can even reduce it, a conclusion that seems to hold as soon as housing is introduced. Borri and Reichlin (2020) obtain similar results using a different setup, and in particular, under different assumptions on land ownership.

Figure 2 Variation in the social welfare function with various tax schemes

(a) Welfare and transfers, $\gamma = 0$

(b) Welfare and transfers, $\gamma = 1$

Legend:
- (i) 1st best I: Land tax only
- (ii) 1st best II: Tax on rents with a diff. land tax and struc. subs.
- (iii) 1st best III: Tax on rents and imputed rents and struct. subs.
- (iv) Tax on rents compensated by a subs. on rental stuct.
- (v) Tax on rents only
- (vi) Tax on capital, rents and imputed rents
- (vii) Tax on capital only
- (viii) Tax on rents only (Fixed Structure)

Note: Rawlsian case γ = 0; utilitarist case γ = 1.

Conclusion

The quantitative and theoretical importance of a fixed factor – land – is reminiscent of the so-called Georgist view, subsequently endorsed by many prominent economists. Henry George (1879) argued within "the single tax movement" that a tax on land rent would allow to redistribute the return of the common heritage to benefit all individuals. In the past, many prominent economists shared the view that land should be taxed. Examples include William Vickrey, Jacques Thisse, Tibor Scitovsky, James Tobin, Richard Musgrave, Franco Modigliani, Zvi Griliches, William Baumol and Robert Solow among others, who wrote in a letter to Gorbachev in 1990 that "[i]t is important that the rent of

The take-away message is that a wealth tax uniformly taxing all three kinds of wealth – land, structures, and capital – at the same rate is not recommended, as it does not exploit the tax-elasticity heterogeneity of different types of wealth. Progressivity is welcome (Landais et al. 2020), but targeted taxes on the considerable housing wealth, while not trivial to implement, lead to very large welfare gains because housing land is almost a fixed factor, and this should be central to any analysis.

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Endnotes

1 Rents play a limited role of rents in these developments. In Bonnet et al. (2014), we provided a detailed discussion of the magnitude of discrepancy between housing prices and rents and how this changes the evaluation of wealth increases relative to national income.

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VOXEU COLUMN / 30 JUN 2014

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TAXATION

KEYWORDS

LAND TAX   OPTIMAL TAXATION   HOUSING WEALTH   PROPERTY TAX

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