

# Land value taxation

Reconciling economic, social  
and ecological interests

## **Imprint**

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### **Please cite as**

Löhr D. and Richters O. (2020): Land value taxation. Reconciling economic, social and ecological interests. Transformation Policy Brief #3. ZOE-Institute for future-fit economies.

### **Transparency**

The financial support of KR Foundation and Partners for a New Economy is greatly appreciated.

ISSN: [2627-9436](#)

### **Layout and design concept**

Drees + Riggers

### **Cover photo**

Timo Wielink / unsplash.com

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# **Land value taxation**

## **Reconciling economic, social and ecological interests**

### **Executive summary**

With regard to land, the current economic order shows significant undesirable developments in ecological, economic and social terms. Rising land prices prevent affordable housing and create social tensions. On the other hand, the mitigation of this social problem by further soil sealing endangers among others biodiversity and soil fertility. Although a land value tax (LVT) cannot be considered primarily as a steering tax, it may help to reconcile various sustainability goals; research shows the potential to ease housing markets, reduce land prices and create more compact settlement patterns. It also supports spatial and urban planning. Given the existence of a land valuation register, a LVT is easily to implement and administer – although its effects are not necessarily easily understood.

## **Highlights**

- Although a LVT is basically not a steering tax, it helps to reconcile conflicting sustainability goals related to land use.
- It supports a more efficient land use, compact settlement patterns, and compliance to land use planning.
- It increases the supply and reduces the prices for housing and contributes to more equality in society.
- LVT is an efficient tax, which is easily implemented and administered.
- However understanding the effects of LVT is tricky.

## **Introduction**

Land literally provides the basis for all economic activity; the land market is a fundamental upstream market. However, the land market is also unique: given that land areas are neither accumulated nor reduced, market forces operate differently than in other markets. The land market has effects on ecological, economic and social objectives. From an ecological perspective, a substantial reduction of land sealing, fragmentation of landscape and land consumption is necessary to preserve biodiversity and soil fertility. However, this creates more tension, especially on the housing markets. Land is the bottleneck for a higher supply of affordable housing. More and more fertile land is being converted into settlement areas and is available neither for nature nor agriculture. Different social and ecological objectives are played off against each other.

Moreover, the value of the land contains a high degree of financial potential, which conventional taxation fails to sufficiently take advantage of, given its focus on labour, capital and consumption. If governments finance the Corona crisis recovery in this manner, it will hamper the social and economic recovery process.

The value of land plays also a vital role in explaining rising inequality. The value of a plot of land is determined primarily by its location, which attracts private and public investment to the surrounding area. Owners can privatise this value as ‘land rent’ without making any contributions of their own – this endangers economic justice.

The proposal of a LVT, going as far back to Adam Smith and popularized by Henry George (2009), attempts to reconcile economic, social and ecological interests by increasing economic efficiency, improving social justice and reducing incentives for urban sprawl.

## **Research overview**

In economics, ‘land’ includes space as well as natural resources. Land use and settlement patterns have consequences for the loss of biodiversity, caused by dissection of the landscape, urban sprawl, and the resulting loss of agricultural, forest and natural land. Soil is a major natural resource, providing essential ecosystem services such as fuel, food and drink, but also water purification, flood mitigation and climate regulation. Dispersed land use patterns increase energy use or transport needs (e. g. commuting), with a negative environmental impact. Moreover, the quality of the physical soil is affected with consequences for essential ecosystem services such as fuel, food and drink, but also water purification, flood mitigation and climate regulation. Every year, around 1.000 km<sup>2</sup> of land are sealed for housing, industry, transport or recreational purposes in the European Union. Politicians tend to force further sprawl as an answer to the tensions in the housing markets. The reduction of land sealing is of political concern to preserve biodiversity and soil fertility. The 7<sup>th</sup> Environment Action Programme (EAP, § 23) states the objective of making progress towards ‘no net land take’ by 2050 (European Union 2013; Science for Environment Policy Future brief 2016).

## Problem 1: Private ownership of land causes inefficiencies

The interest of the community in efficient use of the scarce resource of land and the interest of the individual land owners may irreconcilably conflict with each other. While the loss of fertile land is considerable, large parts of settlement areas could be better used. Once construction permits are approved, the owner can cultivate the land if this is advantageous for them. Also if they decided to keep the land undeveloped, the municipality has to provide the necessary infrastructure.

## Problem 2: Land values and its contribution to raising inequality

Private ownership of land is a prime example of external effects that contribute substantially to rising inequality. The value of a plot of land is determined primarily by its location, which attracts private and public investment to the surrounding area. Community services create the value, but these gains are privatized by the land owners.

In his book *Capital in the Twenty-First Century*, Thomas Piketty (2014) argues that it is mainly the capital accumulation which leads to a concentration of wealth, causing social and economic instability. Among others, Rognlie (2014) criticized that Piketty failed to distinguish between man-made capital and land. The latter accounts for a large share of 'total capital value', but its properties differ from man-made capital as it does not depreciate and is in fixed supply. Rognlie (2014:3) finds that housing 'accounts for nearly 100 % of the long-term increase in the capital/income ratio', mainly through rising land prices.

The principle of fiscal equivalence requires that beneficiaries of increased land values should also bear the fixed costs of public services as taxpayers. This corresponds to the meritocratic principle as an important social norm in market economies. Currently, public services increase land values that are mostly privatized by the land owners, but the costs are covered by taxing wages, investment or consumption.

## Method and costs of land value taxation

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If instead the building is included in the tax base, as in most OECD countries (Blöchliger 2015), the owner can save taxes by reducing investments. This increases scarcity and leads to higher property prices and rents, as the property tax will be shifted onto tenants.



**Figure 1:** German land value map („Bodenrichtwertkarte“).  
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## Benefits for public finances

According to the 'golden rule of local public finance' (Arnett and Stiglitz 1979), the increases in land value are sufficient to finance the fixed costs of public expenditures. This would restore fiscal equivalence and create fiscal space for local authorities to improve public goods, such as infrastructure or public transport. Land value taxation imposes costs on landowners, while the benefit is spread over today's population and future generations (The Economist 2014; Harrison 2016).

## Benefits for macroeconomic efficiency

Different to taxes on wages, investment or consumption, a LVT has less non-intended side effects such as the reduction of the supply of labour or capital. For land, there can be no supply response, and in theory a LVT neither distorts the economy nor causes economic inefficiencies (Mattauch et al. 2018). The land value results primarily from the future land yields. A LVT diverts a part of the landed income to the public sector, reducing the willingness to pay of private investors. Land prices fall until they offset the discounted tax costs. Land is thus partly decapitalised by the LVT.

Land value taxes are very popular among economists (The Economist 2014), and LVT received praise by very different theorists: Milton Friedman called it ‘the least bad tax’, and Paul Samuelson argued that land rents ‘can be taxed heavily without distorting production incentives or efficiency’. A land value tax is difficult to pass on to tenants, because the supply and demand of rented land is unchanged by the tax. Joseph Stiglitz (2016) argued that LVT would reduce inequality and enhance economic growth by encouraging investment into real capital.

## Benefits for spatial planning

The LVT creates pressure to use the scarce resource land more efficiently – currently, land is often underused or not used at all. A land value tax gives pressure to use the land optimally in accordance with planning specifications. This increases incentives to improve land use, for example by investing in building, which facilitates the provision of affordable housing without requiring new land. In apartment building, the LVT is shared among a number of apartments, reducing the tax burden on the individual apartment. This creates an incentive for compact types of housing and compact settlement patterns. Hence, it helps prioritize internal development in cities over external development. Combined with appropriate land use planning, this can incentivize the conversion of developed land instead of greenfield development and urban sprawl.

Moreover, LVT mobilizes the land market: Those who cannot use the land efficiently experience pressure to sell the land. This enhances the possibilities of municipalities for corrective interventions in case of undesirable developments on the local land market (Milana et al. 2016). However, it would be wrong to regard the LVT as a panacea or a steering tax. While it decapitalises the land and lowers the land price level, it is neutral with regard to the structure of land prices. Accordingly, the LVT is no guarantee against undesirable social developments such as excessive gentrification or segregation. This must be controlled by planning. However, LVT can improve the effectiveness of planning and encourages investors to make use of the approved planning to refinance the tax

## Costs of land value taxation

A LVT is easy to implement and administer. The only precondition is a working land cadastre and land valuation system such as a land value register.

## International examples for land value taxation

Land taxes have been implemented in several countries, including in the EU. International examples of land value taxes include the former German colony Qingdao in China, taxing both land values and land value increments. In Taiwan, land value taxation was introduced in the 1940ies, and small remnants are still present. Estonia introduced land value taxes after the fall of the Soviet Union. The conservative think tank Tax Foundation praises this as ‘most competitive tax system’ in the OECD and praises the strength that property taxes are only applied to the value of land (Bunn and Asen 2019). Denmark combines two property taxes, one of them designed as a LVT. Between 1910 and 1952, Australia introduced a national property tax to finance pensions and shifted the taxation to the states and territories. These property taxes contribute substantially to municipal finances.

Although the state of Singapore uses a different concept to finance public expenditure, it is in line with the idea of the ‘golden rule of public finance’: More than 80% of the land is in public ownership, and the government receives income from long-term leasehold and public housing flats. Land revenue is a major source of income to finance their public infrastructure and social services.

## **Conclusion**

A land value tax can support ecological, economic and social objectives while avoiding conflicting goals. The LVT is primarily a fiscal tax; the financial potential is considerable, and it could turn out to be an ideal means of dealing with the financial burden created by Covid. However, it is much more than just an instrument for generating revenue because of multiple ‘collateral benefits’ in terms of justice and sustainability: It reduces urban sprawl and increases the supply of affordable room for living. It is an essential part of a sustainable finance system, which puts the primary burden on the use of land and nature, not on labour, investment and consumption.

## **Policy recommendations**

- The EU should recommend to member states to reduce tax burden on labour and capital; instead increase taxation of land values in line with the suggestions by the OECD.
- The EU should call on member states to replace real estate taxes by land value taxes to increase incentives to improve homes and develop land.
- The EU should encourage to up-date property values regularly, because the total tax take declined over the past decades, despite sharp rises in property values (Blöchliger 2015).

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