

## **STUDY OF THE POTENTIAL FOR LAND VALUE TAXATION IN LIMITING URBAN SPRAWL**

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Abstract:

Urban development patterns play a critical role in defining the life of city residents. Inefficient land use patterns potentially play a role in contributing to greenhouse gas emissions, higher personal vehicle ownership, greater energy and resource consumption, environmental degradation and ineffective public transit initiatives. Despite this, all affluent countries have seen a trend towards urban sprawl in the years since the Second World War.

Property taxes, or taxes levied equally on the land and capital of a given structure, theoretically possess two countervailing effects on urban sprawl. On the one hand, they encourage less intense development than pure land taxes because they raise the cost of capital improvements, thereby encouraging smaller buildings to be built on each plot of land. On the other hand, property taxes encourage denser development by raising the cost of living per unit of space, thereby causing each building to be divided into smaller units (Brueckner & Kim 2003, 6-7). The impact of property taxes on sprawl would ultimately depend on which effect dominates.

As an alternative to these ambiguous effects, some have suggested land value taxation as a more effective means of curbing sprawl. In contrast to property taxation, land value taxation involves a shift in taxes away from elastically supplied capital improvements and towards inelastically supplied land services. Besides being more efficient than property taxation due to the fact that it creates no deadweight loss, land value taxation is seen to encourage more intense land use and thereby inhibit sprawl (Chapman et al. 2009; Skaburskis 1995).

Despite its theoretical advantages, there are only a small number of cases where land value taxation has been applied. Australia stands out in this regard, having levied state land taxes beginning in the 1880s (Forster 2000). While there is significant variation depending on state and local government, land value taxation is currently applied in all six states as well as the Capital Territory.

The potential of land value taxation as an alternative to property taxation will be evaluated in three parts. In the first part, the Australian experience with land value taxation and sprawl will be qualitatively compared with the Canadian experience. More specifically, this study will compare the cities of Toronto, Ontario with Sydney, New South Wales, with the aim of assessing how local tax policy in both cities influences urban sprawl. In contrast to Sydney, Toronto's local tax system is based largely on property taxes assessed by the province and collected by the city. This section will qualitatively evaluate urban development patterns in each city, focusing on the impacts of the two predominant taxation regimes. This section will also review the successes and failures of various city-level attempts to curb urban sprawl, as well as key policy constraints.

In the second part, the theoretical economic literature on property and land value taxation will be surveyed. The two tax regimes will be compared and contrasted in an

effort to illustrate the contexts within which each regime is most applicable, and the theoretical impacts of each taxation type.

In the third part, the effects of local tax regimes on urban sprawl will be analyzed using a regression analysis. Using both cross-sectional and panel data on government tax rates, population density, income, and unemployment (and possibly other variables) in Australian municipalities, this regression will evaluate the impact of land value taxation on population density and urban sprawl.

On the basis of the three parts, the potential for land value taxation in limiting urban sprawl will be evaluated, and potential lessons for Canada will be developed.

## References

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