How Finland Approaches Land Value Taxation: an Experiment to Cost-Effectively Value Land in a System Where Land and Structures Are Valued Separately

Risto Peltola (Finland)

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SUMMARY

A proposal to a Cost Effective Way to Value Land for Property Taxation

Finland is among those few countries where higher rates are applied to land than for structures in property taxation. As the valuation methods are more than 20 years old, the methods are in urgent need of up-dating. A new system of valuation was ordered by the Ministry of Finance, and it has now been developed.

Based on the availability of data how valuable the location is, three approaches are introduced:

1) for most invaluable land zip-code means are recommended,

2) for more expensive land a spatial moving average of nearest comparable land sales is recommended, and

3) for most expensive land a spatial moving average of nearest comparable apartment sales is recommended as a second method, and as a method to draw zone borders.

In this paper those methods are explained and evaluated.

Land price data includes 254.000 million
Mean property values are calculated for each level. As to the property level, standardized housing prices are used as a proxy to land prices. The overview of the price landscape helps determine the most cost-effective way of valuation, and may in some cases be the valuation itself.

The impact of location on land prices is the purpose of the analysis, so all the other variables apart from spatial are control variables. As the location is the single most important argument factor, only a small number of control variables are needed. Time is controlled firstly by deflating all prices by house price index, and secondly by a trend correction term. Zoning of land and size of lot are also controlled.

A grid (250x250 m2) map of average values are made to help determine which method to use, and to give a first look at the price landscape. Only urban land is subject to property taxation in Finland, and the number of urban grids is ca. 200.000.

Zone price based on a spatial moving average of nearest comparable land sales is the most important and most effective method to value medium high price land. Preliminary results are presented and evaluated.

Conclusions are made in terms of accuracy of valuation, cost of valuation, scalability of methods, legal criteria, and possible discrepancies between methods, especially discrepancies between valuation based on direct land sales and indirect derivation from flat prices. This method is recommended for property taxation purposes in Finland.