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Intrajurisdictional capitalization and the incidence of the property tax☆

George R. Zodrow *

Economics Department and Baker Institute for Public Policy, Rice University, Houston TX, USA
International Research Fellow, Centre for Business Taxation, Oxford University, Oxford, UK

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ABSTRACT

Two views dominate the debate about property tax incidence — the "capital tax" or "new" view, under which the tax distorts capital allocation and is borne primarily by capital owners, and the "benefit tax" view, under which the tax is an efficient user charge. Evidence of both interjurisdictional and intrajurisdictional capitalization of property taxes and public services has been argued to provide compelling evidence for the benefit tax view. This paper focuses on the latter — the intra-jurisdictional capitalization effects that underlie what is arguably the most plausible derivation of the benefit tax view of the property tax. The analysis provides a model in which the capital reallocations that characterize the capital tax view induce intrajurisdictional capitalization effects that are generally similar — indeed, in the benchmark case, identical — to those that arise under the benefit tax view, suggesting that empirical evidence supporting such capitalization effects cannot distinguish between the two views. In addition, the analysis shows that these capitalization effects imply that even under the stringent assumptions of the benefit view, the property tax is not a benefit tax for a property-tax-financed increase in local public services; rather, it only becomes a benefit tax for future home purchasers — after the modeled intrajurisdictional capitalization effects occur.

1. Introduction

The debate surrounding the incidence of the property tax has raged for nearly 50 years, dating to the classic contributions of Netzer (1966), Mieszkowski (1972), and Oates (1969). Two opposing views — the "benefit tax" view and the "capital tax" or "new" view — dominate the debate. Under the benefit tax view, the property tax functions as an efficient user charge, an indirect payment for the benefits of local public services received by the residents of the taxing jurisdiction. In marked contrast, under the capital tax view, the property tax inefficiently distorts the allocation of capital, and its incidence is reflected primarily in a reduction in the national return to capital, coupled with increases in housing prices and reductions in the returns to labor and land in relatively high tax jurisdictions that are largely offset by decreases in housing prices and increases in the returns to labor and land in relatively low tax jurisdictions.[1]

Many observers have noted that a resolution of the debate is among the more pressing issues in state and local public finance (Youngman, 2002; Fisher, 2009), especially since property taxes account for roughly three-fourths of total local tax revenues and nearly half of local own-source revenues (Alm, Buschman, and Sjoquist, 2011). The differences in the economic effects of the property tax under the two views are striking, as are the policy implications of pervasive use of the tax by local governments.

Under the benefit view, the property tax — as a user charge that is paid in exchange for the benefits of local public service received — corresponds closely to the head tax originally envisaged in the celebrated Tiebout (1956) model, under which interjurisdictional competition and perfectly mobile consumers result in efficient provision of local public goods. The property tax is thus the rare example of a purely non-distortionary tax; in particular, it does not distort housing consumption, the allocation of housing capital (or other forms of capital), or the provision of local public services. Second, as a benefit tax, the property tax has no effects on the distribution of income. Instead, given the existing distribution of income, the incidence of the property tax simply corresponds to the benefits of local public services received. From a policy perspective, the property tax is the efficient user charge often recommended for local government by experts in local public finance (see Mills (2008) for a recent discussion). At the same time, however, its use is subject to the standard criticism of user charges and benefit taxes, and more generally the Tiebout model — although allocative efficiency is an important criterion in evaluating the performance of the local public sector, an efficient user charge system may be viewed as highly inequitable, as access to essential local public services such as primary and secondary

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* Economics Department and Baker Institute for Public Policy, Rice University, Houston TX, USA.
E-mail address: zodrow@rice.edu.

[1] This analysis focuses solely on the residential property tax; for recent discussions of non-residential property taxes, see Muthitacharoen and Zodrow (2006, 2012). In addition, a third "traditional" view, under which residential property taxes are shifted forward as higher housing prices, is a special case of the capital tax view (Zodrow, 2001a,b).

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education and police and fire protection will be largely determined by income. Indeed, numerous court cases have successfully challenged local use of the property tax on such equity grounds.

In marked contrast, under the capital tax view, the property tax is an inefficient tax instrument, as it reduces housing consumption and distorts resource allocation, driving capital out of high tax jurisdictions and into low tax jurisdictions. Moreover, the efficiency costs of the capital misallocations due to the property tax may be significant under the capital tax view. For example, the central estimates of Muthitacharoen and Zodrow (2010) — whose analysis focuses on inter-jurisdictional property tax differentials when the tax applies to both residential and non-residential property and thus does not include the intrajurisdictional misallocations analyzed in this paper — suggest average efficiency costs of roughly 6–16% of property tax revenues (0.24–0.65% of total consumption expenditures) and marginal efficiency costs of roughly twice that magnitude.[2] In addition, the use of the local property tax can lead to inefficient underprovision of local public services, as government officials, concerned about tax-induced outflows of mobile capital, reduce the level of public services provided (Zodrow and Mieszkowski, 1986a; Wilson, 1986, 1999). Wildasin (1989) suggests that such underprovision may also lead to significant inefficiencies. The distributional effects of the property tax are also markedly different under the capital tax view. The central tenet of this view (described in more detail below) is that the average burden of the tax is borne by all owners of capital, both housing and nonhousing, with additional effects across jurisdictions that tend to cancel in terms of their effects on the distribution of income. Given the concentration of capital income among higher income groups, this capital tax aspect of the property tax implies that it is progressive (at least with respect to annual income) and represents a relatively progressive element of the national tax structure. That is, in marked contrast to the benefit view, which implies the property tax is an efficient tax that has no effects on the distribution of income but may result in an inequitable distribution of public services, the capital tax view implies that the property tax is a relatively progressive tax that results in several potentially significant inefficiencies in the allocation of capital and the determination of local public service levels.

Despite the importance of a resolution of the debate on the economic effects and incidence of the property tax, the literature is far from arriving at a consensus on this issue. The depth of the lack of consensus is illustrated by two surveys of this literature. Fischel et al. (2011, p. 1) begin their recent review by observing that, "Our understanding of the incidence of local property taxes is in a sad state." They conclude (pp. 19–21) that the benefit view applies in urbanized areas, so that "the vast majority (70 to 80%) of the U.S. population would be candidates for the benefit view of property taxes" and that the "Tiebout model, and the associated benefit view, have long been taken by scholars in local public finance to provide a description of the working of the local public sector in metropolitan areas." In marked contrast, in a widely cited review of the urban public finance literature, Ross and Yinger (1999, p. 2043) argue that the property tax does in fact distort the allocation of capital and arrive at the unequivocal conclusion that "the evidence against the benefits view is overwhelming."[3]

A central issue in the debate, dating back to the work of Oates (1969), has been whether econometric evidence of fiscal capitalization — the capitalization of property taxes and local expenditure levels into land values — provides empirical support for the benefit view. Most of this discussion has focused on inter-jurisdictional capitalization. However, intra-jurisdictional capitalization is certainly highly relevant as well, especially since it is the key element in the most plausible theoretical exposition of the benefit view, originally developed by Hamilton (1976), under which perfect capitalization of intrajurisdictional fiscal differentials is required to convert the property tax into a benefit tax in communities with heterogeneous housing.[4] By comparison, the role of intrajurisdictional capitalization in the capital tax view of the property tax has not been fully developed (Mieszkowski and Zodrow, 1989; Zodrow, 2001a,b). Accordingly, this paper focuses solely on intrajurisdictional capitalization. It does so within the context of a highly simplified model that adopts most of the (admittedly rather stringent) assumptions of the models used to derive the benefit tax view, and is used to capture the essence of both the capital tax and benefit tax views. The main conclusion of the analysis is that the amounts of intrajurisdictional capitalization that would be expected to occur under the two views are remarkably similar, and indeed are identical in one fairly standard benchmark case. Thus, empirical evidence that is consistent with full capitalization of property taxes and local expenditure levels into land values is of little if any help in distinguishing between the two alternative views of the incidence of the property tax. In addition, the analysis shows that these capitalization effects imply that even under the stringent assumptions of the benefit view, the property tax is not a benefit tax when its rate increases to finance new public expenditures, as the associated tax-induced capitalization effects imply that the prices paid by different residents for the expanded public services (the combination of actual taxes paid and capitalization effects) differ significantly from the value of services received. Instead, the property tax only becomes a benefit tax for future home purchasers — after the modeled intrajurisdictional capitalization effects occur and are borne by homeowners at the time of the tax change.

The paper is organized as follows. The following section provides a brief overview of the property tax incidence debate. Section III reconstructs the benefit tax view within the context of a partial equilibrium version of the standard differential tax incidence model, including a derivation of the intrajurisdictional capitalization effects that would be expected under the benefit view. Section IV then alters the model to make it broadly consistent with those used to generate the capital tax view, and shows that, under the appropriate circumstances, intrajurisdictional capitalization effects are identical under the two views. More generally, in Section V, the results of a simple simulation suggest that the amount of intrajurisdictional capitalization that occurs under the two views is broadly similar, consistent with the central thesis of the paper that empirical evidence regarding such capitalization is of limited help in distinguishing between the two views. The final section concludes.

2. Overview of the property tax incidence debate

The voluminous literature on the incidence of the property tax can only be summarized briefly here; for additional details, see Ross and Yinger (1999), Nechyba (2001), Netzer (2001), Zodrow (2001a), Youngman (2002), Fisher (2009), and Fischel et al. (2011).

2.1. Theoretical results

The benefit tax view is closely linked to the classic Tiebout (1956) model in which interjurisdictional competition in local public service provision coupled with perfect household mobility results in an efficient local public goods equilibrium, as consumers reveal their public good preferences by "voting with their feet" and sorting themselves into jurisdictions that are completely homogeneous with respect to local public service demands. Although Tiebout assumed head tax finance (as do Oates and Schwab (1988) in a more recent reconstruction of the argument), other researchers have extended the model to include property tax finance.

[2] For purposes of a rough comparison, Cho and Francis (2011) estimate that eliminating the home mortgage interest deduction would result in an increase in aggregate welfare of 0.16%, while eliminating the deductibility of property taxes would result in an increase in aggregate welfare of 1.36%.

[3] One element of such evidence, discussed further below, is wide disparities in property taxes paid and local public services received. For example, Kurban et al. (2012) estimate that two-thirds of property tax payments used for education finance in Chicago suburbs reflect payments in excess of education benefits received.

[4] An alternative view, developed by Hamilton (1975) and discussed below, assumes homogeneous housing.