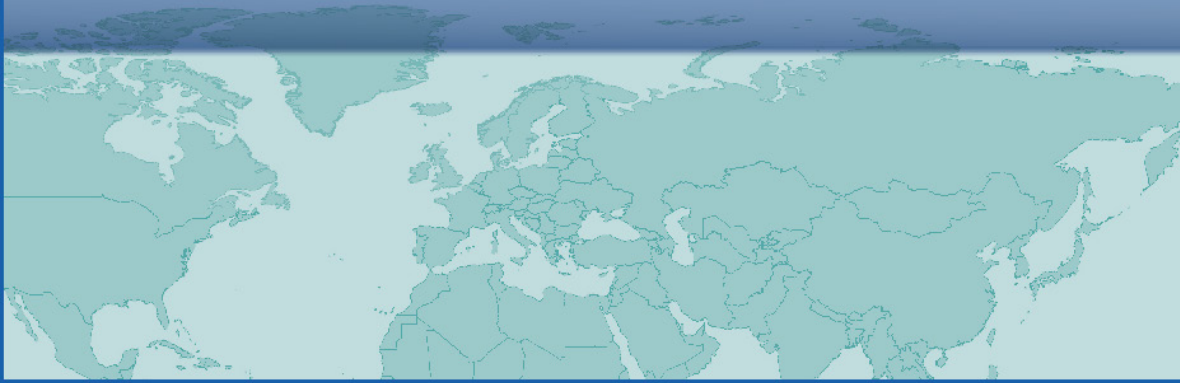


Proceedings of the 2011 Land Policy Conference



Balance Sheet and Cash Flow Effects

	Own	Rent	
	\$1,000,000	\$0	Building
	\$0	\$100,000	Cost
	\$120,000	\$0	Rent Saved
	\$0	\$100,000	Bond Income

Balance Sheet

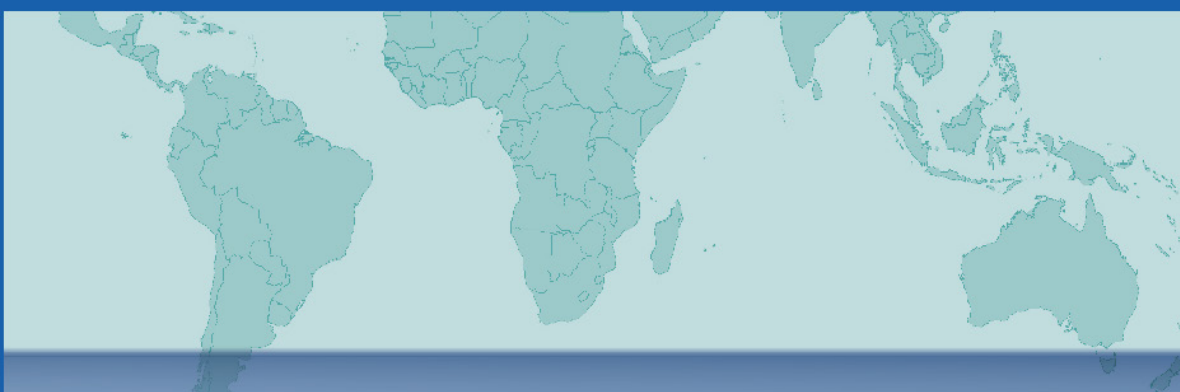
EWR	Newark Liberty Int
FLL	Fort Lauderdale
HNL	Honolulu Int
IAD	Washington
IAH	Houston
IND	Indianapolis
JAX	Jacksonville
JFK	New York
LAX	Los Angeles
LGA	New York

Flow Approach and Davis-Heathcote

Revenues 276,294

Grazing

# VALUE CAPTURE and LAND POLICIES



Edited by Gregory K. Ingram and Yu-Hung Hong

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# Value Capture and Land Policies

Edited by

*Gregory K. Ingram and Yu-Hung Hong*

**L** LINCOLN INSTITUTE  
OF LAND POLICY  
CAMBRIDGE, MASSACHUSETTS

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*Library of Congress Cataloging-in-Publication Data*

Value capture and land policies /  
edited by Gregory K. Ingram and Yu-Hung Hong.  
p. cm.

Includes bibliographical references and index.

ISBN 978-1-55844-227-6

1. Public lands—Valuation. 2. Real estate development—  
Finance. 3. Land use, Urban. 4. Public investments.

I. Ingram, Gregory K. II. Hong, Yu-Hung.

HD216.V33 2012


333.10973—dc23

2012008363

*Designed by Vern Associates*

Composed in Sabon by Achorn International in Bolton, Massachusetts.

Printed and bound by Puritan Press Inc., in Hollis, New Hampshire.

 The paper is Rolland Enviro100, an acid-free, 100 percent PCW recycled sheet.

MANUFACTURED IN THE UNITED STATES OF AMERICA

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# 14

## *Assessing the Nonprofit Property Tax Exemption: Should Nonprofit Entities Be Taxed for Using Local Public Goods?*

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Joseph J. Cordes

**E**xemption from property taxation was the main tax benefit conferred on nonprofit organizations for much of U.S. history, when local governments were the dominant providers of public goods and services, and when the local property tax was the principal source of revenue for these governments. Because this exemption increases the financial resources of nonprofit organizations that benefit from it, it is viewed, by both supporters and critics, as one of several tax subsidies to nonprofits.

The exemption from taxation of property owned by nonprofits has been the subject of some controversy. Local governments view this exemption as a drain on their tax base, a concern that predictably ebbs and flows with the fiscal circumstances. Some scholars who study the nonprofit sector regard the exemption as an inefficient subsidy because it favors nonprofits that own real estate and may encourage some nonprofits to invest more in real property than would otherwise be the case. On the other side, nonprofit organizations that own property are understandably nervous about proposals to curtail the exemption either explicitly by limiting its scope or implicitly through political pressure to have them make “voluntary” payments in lieu of taxes (PILOTs) to local governments.<sup>1</sup>

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1. To the extent that receiving zoning or other regulatory approval is made conditional on PILOTs, such payments become more and more taxlike in nature.

This chapter examines the benefits and costs of the current local tax treatment of real property that is owned by nonprofit organizations.<sup>2</sup> If one begins with the premise that local property taxes provide a means of charging users for services provided by local governments, what are the justifications for exempting nonprofit users of such services from taxation? How are the benefits of the exemption distributed among different types of nonprofit organizations, and how does the distribution of such benefits compare with the most plausible justifications for tax exemption? On the cost side, what are the consequences for local governments of exempting nonprofit property from taxation? How does the exemption affect production and location decisions of nonprofit organizations? To what extent do arrangements such as payments in lieu of taxes (PILOTs) or services in lieu of taxes (SILOTs) provide a workable alternative to exemption of nonprofit property, especially as compared with more direct limitation of the exemption?<sup>3</sup>

### *Rationales for Differential Treatment of Nonprofit Organizations*

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All 50 states plus the District of Columbia exempt certain types of property from taxation. As both Bowman (2002) and Brody (1998, 2010) note, there is considerable variation in state, and by implication local, tax treatment of property owned by nonprofits. (Local governments are legally entities of their states.) Table 14.1 provides a summary of the states' treatment of tax-exempt property based on Brody (2010). As a general rule, property owned by churches is almost universally exempt. Other types of nonprofit property, such as that owned by educational institutions, libraries, hospitals, and various membership organizations, are often, though not universally, fully exempt as well.

As Brody and Cordes (2006, 152) note, the general rationale "for tax policy toward the nonprofit sector . . . [is best] . . . characterized as involving some mix of (1) a desire to respect the 'sovereign' boundaries between the nonprofit and public sectors (Brody 1998); and (2) an explicit intent to subsidize nonprofit organizations." Sovereignty and base-defining rationales rest on a historic, if implied, respect by the public sector for the sovereignty of the nonprofit sector. Subsidy rationales view preferential tax treatment as providing financial support for the types of goods and services offered by nonprofit organizations.

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2. Portions of this chapter update and draw on research on this exemption; see Cordes, Ganz, and Pollak (2002) and Bowman, Cordes, and Metcalf (2009).

3. Unless otherwise noted, the analysis in this chapter, especially the empirical analysis, applies to property owned either by secular charities or by religious organizations that have IRS 501(c)(3) status. It does not apply to property owned by religious bodies (e.g., churches, temples, and mosques), which are not required to register with the IRS in order to receive tax-exempt status.



**Table 14.1****State Tax Treatment of Property Owned by Nonprofit Organizations**

	Tax Exemptions in Constitution?	Who May Decide Exemptions?	Requirements for Exemption	Use of PILOTs or SILOTs?
Alabama	Mandate for property tax exemption for "purely charitable" purposes; ad valorem tax exemption for "religious, educational or charitable purposes"		Property used exclusively for religious worship, schools, or purely charitable purposes, except property rented out (may be exempt); property used for hospitals (exemption up to \$75,000 for charitable hospitals as long as charity patients are 15% of business)	
Alaska	Mandate for property used exclusively for "non-profit . . . charitable . . . purposes"		Property used exclusively for nonprofit religious, charitable, cemetery, hospital, or educational purposes	
Arizona	Legislature may exempt	Legislature	Property of nonprofit charitable institutions "for the relief of the indigent or afflicted"; property exempt under IRS code 501(c)(3) (property of musical, dramatic, dance, and community arts groups; botanical gardens; museums; and zoos)	
Arkansas	Mandate for property tax exemption for property used exclusively for public charity		Buildings and land occupied by institutions of "purely public charity" used for nonprofit purposes	
California	Legislature may exempt religious, hospital, or charitable purposes that are strictly nonprofit	Legislature	Property used exclusively for religious, hospital, or charitable purposes that is organized or operated for those purposes; nonprofit	

**Table 14.1**  
(continued)

	Tax Exemptions in Constitution?	Who May Decide Exemptions?	Requirements for Exemption	Use of PILOTs or SILOTs?
Colorado	Property used exclusively for religious worship, schools, strictly charitable purposes, or nonprofit cemeteries are exempt unless amended by law	Legislature	See column 1; exemptions remain unamended	
Connecticut	None		Property used for scientific, educational, literary, historical, or charitable purposes	State makes PILOTs to municipalities (up to 77%) for private hospitals and colleges
Delaware	Legislature (in certain counties) may decide exemptions to promote "public welfare"	Legislature	Property belonging to church or religious society, college, or school used exclusively for those purposes; charitable corporations existing before 14 July 1988	
District of Columbia	None		District of Columbia Code 47-1002: exempts buildings owned and operated by institutions organized for public charity <i>principally</i> in DC.	
Florida	Property used for educational, literary, scientific, religious, or charitable purposes may be exempted by law	Legislature	To determine if the property is used for "predominantly" charitable, religious, scientific, or literary purposes (1) compare the use of the property for specified purposes with other uses; and (2) determine the extent to which the property is rented at or below cost to other exempt groups; may be considered an exempt purpose	

(continued)

**Table 14.1**  
*(continued)*

	Tax Exemptions in Constitution?	Who May Decide Exemptions?	Requirements for Exemption	Use of PILOTs or SILOTs?
Georgia	"Institutions of purely public charity"; may be repealed by two-thirds vote	Legislature (repeal only)	Institutions of purely public charity; colleges, schools, or hospitals open to the general public; not exempt if buildings leased	
Hawaii	None			
Idaho	Legislature may exempt	Legislature	Property belonging to fraternal, benevolent, or charitable corporation or society used exclusively for those purposes	
Illinois	Legislature may exempt public property; local government; school districts; agricultural and horticultural societies; school, religious, cemetery, and charitable purposes	Legislature	Property of "institutions of public charity" exempt when used purely for charitable purposes	
Indiana	Legislature may exempt property used for municipal educational, literary, scientific, religious, or charitable purposes	Legislature	Indiana Code §6-1.1-10-16 (a) (2009)	
Iowa	None		Grounds and buildings used/under construction by scientific, literary, charitable, benevolent, agricultural, and religious institutions; not more than 320 acres	
Kansas	Exemptions mandated	Legislature may broaden exemptions	Property used for state, county, municipal, literary, educational, scientific, religious, benevolent, and charitable purposes	

**Table 14.1**  
*(continued)*

	Tax Exemptions in Constitution?	Who May Decide Exemptions?	Requirements for Exemption	Use of PILOTs or SILOTs?
Kentucky	Exemptions mandated		Public property; property owned by nonprofit institutions of religion, purely public charity, or education	
Louisiana	Exemptions mandated		Property owned by nonprofit corporation or association for religious, burial, charitable, health, welfare, fraternal, or educational purposes; labor organizations; lodges or clubs organized for charitable or fraternal purposes	
Maine	Exemptions mandated		Property used by charitable or benevolent organizations	State makes 50% payments to municipalities for exemptions enacted after 1 April 1978
Maryland	None		Property necessary for a charitable or educational purpose to support the "general welfare" of the state; owned by a nonprofit hospital; or owned by a nonprofit charitable, fraternal, educational, or literary organization	
Massachusetts	Legislature may exempt	Legislature	Personal property of a charitable organization (a literary, benevolent, charitable, or scientific institution or temperance society); real estate owned by or held in trust for such an organization	

**Table 14.1**  
(continued)

	Tax Exemptions in Constitution?	Who May Decide Exemptions?	Requirements for Exemption	Use of PILOTs or SILOTs?
Michigan	Legislature may exempt property owned or occupied by nonprofit educational or religious organizations and used exclusively for those purposes	Legislature	Property owned or occupied by a nonprofit charitable institution and used specifically for the purposes for which the charity was established	
Minnesota	Exemptions mandated; may be changed by legislature	Legislature	Academies, colleges, universities, seminaries, churches, church property, houses of worship, and institutions of purely public charity; six-factor test to qualify as "purely public charity"	
Mississippi	Legislature may exempt	Legislature	Property belonging to and used exclusively by nonprofit religious society, ecclesiastical body, or congregation; charitable society; historical or patriotic association or society; nonprofit school fraternal or benevolent organization; or nonprofit hospital	
Missouri	Legislature may exempt	Legislature	Property used exclusively for religious worship, schools and colleges, or purely charitable purposes; excluding investment property	
Montana	Legislature may exempt institutions of purely public charity, hospitals, and nonprofit cemeteries; places of religious worship; and property used for exclusively educational purposes	Legislature	Montana Code Ann. §15-6-201 (2009)	

**Table 14.1**  
*(continued)*

	Tax Exemptions in Constitution?	Who May Decide Exemptions?	Requirements for Exemption	Use of PILOTs or SILOTs?
Nebraska	Legislature may exempt	Legislature	Property owned by educational, religious, charitable, or cemetery organizations, or organizations for the benefit of such organizations; must be nonprofit; cannot be used for liquor sales more than 20 hours/week; no discrimination based on race, color, or national origin	
Nevada	Legislature may exempt the property of corporations formed for municipal, educational, literary, scientific, or other charitable purposes	Legislature	Nevada Revised Statute § 361.140(2) (2009): "All buildings belonging to a corporation defined in Subsection 1" (nonprofit private schools; churches, chapels, and lodges; societies and similar charitable organizations)	
New Hampshire	None		Buildings, land, and property of charitable organizations and societies used specifically for their established purposes	
New Jersey	Exemptions mandated	Legislature may amend except for real and personal property used exclusively for religious, educational, charitable, or cemetery purposes; property owned by any corporation or organization used for those purposes	Real and personal property used exclusively for religious, educational, charitable, or cemetery purposes; property owned by any corporation or organization used for those purposes; buildings used for colleges, schools, academies, and seminaries; buildings used for historical societies, associations, or exhibitions; public libraries; buildings used for associations and hospital purposes	

*(continued)*

**Table 14.1**  
*(continued)*

	Tax Exemptions in Constitution?	Who May Decide Exemptions?	Requirements for Exemption	Use of PILOTs or SILOTs?
New Mexico	Exemptions mandated		Church property not used for commercial purposes; property used for educational or charitable purposes	
New York	Exemptions mandated	Legislature may amend except for real and personal property used exclusively for religious, educational, charitable, or cemetery purposes; property owned by any corporation or organization used for those purposes	Property owned by a corporation or association exclusively for religious, charitable, hospital, or educational purposes or for the moral or mental improvement of men, women, or children; allows municipalities the option of revoking some exemptions	
North Carolina	Legislature may exempt	Legislature	Charitable associations or institutions used for purely nonprofit educational, scientific, literary, or charitable purposes (defined as having human or philanthropic objectives)	
North Dakota	Exemptions mandated; legislature may exempt institutions for conservation or wildlife purposes	Legislature	Property used exclusively for school, religious, cemetery, charitable, or other public purposes	Boards of state-owned university and schools make annual payments to counties in lieu of ad valorem taxes
Ohio	Legislature may exempt	Legislature	Institutions used exclusively for charitable purposes	

**Table 14.1**  
(continued)

	Tax Exemptions in Constitution?	Who May Decide Exemptions?	Requirements for Exemption	Use of PILOTs or SILOTs?
Oklahoma	Exemptions mandated		Property used for free public libraries, free museums, or public cemeteries; property used exclusively for nonprofit schools and colleges; all property used exclusively for religious and charitable purposes	
Oregon	None		Property owned by nonprofit literary, benevolent, charitable, or scientific institutions	
Pennsylvania	Legislature may exempt	Legislature	Property used purely for public charities; only portion of property that is specifically used for charitable purposes is tax-exempt; five requirements	
Rhode Island	None		Buildings and personal property owned by a corporation used for a school, academy, or seminary; any incorporated public charitable institution used exclusively for those purposes and not for profit	By statute, state pays PILOTs to towns: 27% of what would have been paid by nonprofit schools and hospitals
South Carolina	Exemptions mandated; legislature may amend with two-thirds majority in both houses		Property of schools, colleges, and institutions of learning; nonprofit charitable institutions such as hospitals, those that care for the handicapped, the elderly, children, or the indigent; property of public libraries, churches, parsonages, burying grounds; property of charitable trusts and foundations	

(continued)



**Table 14.1**  
*(continued)*

	Tax Exemptions in Constitution?	Who May Decide Exemptions?	Requirements for Exemption	Use of PILOTs or SILOTs?
South Dakota	Exemptions mandated: "The legislature shall . . . exempt . . ."		Property owned by a public charity (defined as one that devotes resources to the relief of the poor, distressed, or underprivileged; receives majority of its funds from donations, public funds, membership fees, or program fees to cover expenses; lessens government burden; offers services to all, regardless of ability to pay; is recognized as exempt under section 501 (c) (3) of the IRS code; assets must be unavailable to private interest); property used for human health care	
Tennessee	Legislature may exempt	Legislature	Real and personal property used by religious, charitable, scientific, or nonprofit educational institutions exclusively for those purposes or leased to another exempt organization	
Texas	Legislature may exempt	Legislature	Charitable organizations organized exclusively for religious, charitable, scientific, literary, or educational purposes	
Utah	Exemptions mandated		Property owned by a nonprofit entity used exclusively for religious, charitable, or educational purposes	
Vermont	Exemptions mandated		Real and personal property used for public, pious, or charitable purposes; real property owned by churches or church societies used for parsonages; buildings used for library purposes; land used by colleges, academies, or public schools (excluding private buildings on such land)	

**Table 14.1**  
(continued)

	Tax Exemptions in Constitution?	Who May Decide Exemptions?	Requirements for Exemption	Use of PILOTs or SILOTs?
Virginia	Exemptions mandated; legislature may repeal or modify		Churches and parsonages, non-profit libraries, and educational institutions; property used for religious, charitable, patriotic, historical, benevolent, cultural, or public park or playground purposes	
Washington	Legislature may exempt	Legislature	Property used by nonprofit organizations conducted for nonsectarian purposes for character-building, benevolent, protective, or rehabilitative social services for people of all ages; nonprofit daycare centers, libraries, orphanages, homes, or hospitals; outpatient dialysis facilities	
West Virginia	Legislature may exempt	Legislature	Property used for charitable purposes; not leased out for profit	
Wisconsin	None		Property used exclusively by educational institutions (offering six months of courses); churches or religious, educational, or benevolent associations (including nursing homes and retirement homes, but not health maintenance organizations)	State compensates the taxing jurisdictions in which tax-exempt research property is located for property taxes those jurisdictions would otherwise have collected
Wyoming	Legislature may exempt	Legislature	Property of a museum or hospital district; property of charitable trusts; property used for schools, orphan asylums, or hospitals to the extent they are not used for private profit	

Source: Based on Brody (2010).

### SOVEREIGNTY AND BASE-DEFINING RATIONALES

Brody (1998) argues that the original impetus for exempting nonprofit organizations from income and other taxes appears to have been a mix of tax-base-defining objectives combined with a historical desire on the part of government to avoid intruding into a sphere of activities believed to properly belong to the church and its secular philanthropic successors. This is one reason why, for example, unlike the charitable income tax deduction, the exemption of nonprofit organizations from federal income taxation is not treated as a tax expenditure: “With respect to . . . charities, tax-exempt status is not treated as a tax expenditure because the nonbusiness activities of such organizations generally must predominate and their unrelated business activities are subject to tax. In general, the imputed income derived from nonbusiness activities conducted by individuals or collectively by certain nonprofit organizations is *outside the normal income tax base*” (JCT 2005, 7; emphasis added).

This base-defining argument has been extended by Peter Swords (1981, 2002) to the charitable property tax exemption.

What we include in the tax base is money and wealth to provide funds to support the government. On the other hand, we choose not to tax money and wealth that we have turned over to entities that will use it to benefit the public only and not us individually (except as we are members of the public). We do not mean to include such money or wealth in the tax base in the first place. Such entities are what we define as charities: public-serving nonprofits that are proscribed from advancing private interests improperly and are established for the sole purpose of benefiting the community as a whole. (Swords 2002, 378)

### SUBSIDY RATIONALE

Another economic argument in favor of institutional property tax exemption is that society wants to encourage the production of certain goods and services by subsidizing their producers.<sup>4</sup> The 1983 Supreme Court decision in *Regan v. Taxation with Representation* (461 U.S. 540) notes the equivalence between exemption and subsidy (Simon 1987). The International Association of Assessing Officials (IAAO 1997, 16) defines exemptions from property taxation as “subsidies to certain owners for certain uses of property, to encourage publicly desired objectives.”

The subsidy rationale is also mirrored in the scholarly literature, which identifies several ways in which nonprofit organizations are a potentially important and useful voluntary mechanism for addressing certain private market failures.

*Meeting Unsatisfied Demands for Public Goods*     Burton Weisbrod (1988) has argued that nonprofit organizations offer a mechanism whereby individuals

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4. This section draws heavily on Cordes (2011, 1014–1016).

are able to satisfy demands for public goods that are unmet by the public sector. James Ferris summarizes Weisbrod's basic argument:

The market fails and there is a need for collective action. . . . There are two options: public or nonprofit. In terms of service provision, government is appropriate when there is sufficient demand to generate the majority for action and the demands are homogeneous. However, when a majority cannot be sustained or there are heterogeneous preferences, the nonprofit option is likely to be preferred.

. . . As collective action becomes manifested in government action, nonprofit organizations are a vehicle for reacting to government choices. For example, nonprofits may provide an alternative to government action (e.g. private schools vs. public schools) or serve to augment government action (e.g. religious instruction to complement public schools). Nonprofit organizations make possible greater community satisfaction than would likely be attained if government were the only option. (1998, 140)

***Nonprofits as Alternative Providers of Public Goods and Services*** A rationale for providing public subsidies to nonprofit organizations that is quite close to the "nonprofits as providers of public goods" argument is the so-called quid pro quo case for public support of certain charities. The argument is straightforward. To the extent that nonprofits provide goods and services (mainly social services) that the government would otherwise be called on to provide, nonprofit organizations merit public support as a quid pro quo for providing such services.

***Trust Goods and Informational Market Failures*** Henry Hansmann (1980) has argued that nonprofit organizations have the potential to help overcome informational market failures that arise from information asymmetries between supplier and consumer in the case of goods with complex and hard-to-verify quality attributes. In Hansmann's framework, the key is the imposition by nonprofits of the nondistribution constraint, which, if credible, limits the incentive for a nonprofit organization to exploit potential informational asymmetries for its financial gain. Ferris (1998, 142) again provides a useful summary.

The contract failure theory of nonprofit organizations is based on the principal agent problems that exist for some goods and services in the marketplace. In effect, consumers are at an information disadvantage in their dealings with producers. The profit motive might encourage business to take advantage of the consumer. As a result there might be a need for government to regulate suppliers, or society may choose to rely on supply by nonprofit organizations. The promise of nonprofit organizations as a remedy for contract failure stems from the fact that such organizations, under tax law, are constrained from distributing their profits (residuals) either directly or implicitly through unreasonable compensation. As a consequence, nonprofit organizations are presumed to be more trustwor-

thy than for-profit organizations. They have less incentive to exploit their informational advantage over the consumer.

*Nonprofit Organizations as Providers of Club Goods* Nonprofit organizations also serve the important function of providing club goods. Like the consumption of nonexcludable public goods, the consumption of club goods is nonrival over some sharing unit, which implies that there are welfare gains to be had from collective financing of the provision of such goods. In contrast to nonexcludable “pure” public goods, which are often provided by government, it is possible to exclude noncontributors from consuming club goods. The ability to exclude noncontributors makes private financing of such goods more feasible, and the nonprofit organization is a convenient mechanism for providing this financing.

*Nonprofit Organizations and Advocacy* As Ferris (1998) and others note, nonprofit organizations exist not only to provide goods and services, but also to provide an organized means whereby individuals can advocate on behalf of particular public policies. Although such advocacy is viewed by some as a form of rent seeking, Dewatripont and Tirole (1999) show that having advocates who are capable of providing information to bear on both sides of policy issues can improve economic efficiency.

### *Rationale for the Nonprofit Property Tax Exemption* —————

The arguments summarized in the previous section provide a basis for viewing nonprofit organizations as distinctive economic entities that may merit special treatment in some form from the public sector. But the potential societal benefits provided by nonprofit organizations do not automatically provide a basis for the specific form of special treatment that is provided through the nonprofit property tax exemption.

The broadest case for property tax exemption follows from the sovereignty and base-defining rationales. As is clear from table 14.1, however, although the sovereignty and base-defining rationales certainly undergird the states’ universal exemption of property owned and used for worship by religious bodies, in the case of other nonprofit-owned property, many states also limit eligibility to property that is used for the “community benefit.”

Whatever the original impetus may have been for not including certain nonprofit-owned property on the tax rolls, a reasonable inference is that the exemption is provided in recognition of the presumed societal benefits provided by nonprofits. Empirically, the questions then become (1) what is the incidence of the nonprofit property tax exemption? (2) what types of nonprofit organizations benefit from the exemption? and (3) given the likely distribution of benefits, does the nonprofit property tax exemption provide societal or community benefits that are commensurate with its fiscal costs?

Ownership of real estate provides a simple measure of which types of nonprofits benefit from the property tax exemption.<sup>5</sup> Nonprofit organizations that are required to file the IRS Form 990 informational tax return must provide balance sheet information that includes the book values of land, buildings, and equipment held by the nonprofit. Information from the IRS 990s has been compiled in electronic form by the National Center for Charitable Statistics (NCCS).<sup>6</sup> In addition to balance sheet data from the IRS 990, the NCCS data files contain information on the types of nonprofit organizations filing this form, based on the National Taxonomy of Exempt Entities (NTEE) and, more recently, on the primary activities reported by nonprofits.<sup>7</sup>

A simple measure of whether a nonprofit organization would benefit from tax exemption is whether the organization reports a positive amount for the value of land, buildings, and equipment owned. Such a measure, however, might overstate the extent of property ownership, because a nonprofit that owns equipment but no real property would still report a positive value for this measure. An alternative indicator would be whether a nonprofit organization reports a value of land, buildings, and equipment owned that exceeds some minimum.

Table 14.2 shows tabulations of the percentages of different types of nonprofits that are estimated to own at least some real property. The data set used for this purpose is the 2008 NCCS Core Data file, which includes financial information for individual nonprofits, including estimates of the book value of land, buildings, and equipment based on IRS 990 data for the circa tax year 2008.<sup>8</sup> In general, the NTEE classifications are presented in decreasing order of amount of property owned. The second column shows the number of nonprofit organizations in each NTEE classification, and the remaining columns show the percentages of nonprofit organizations with estimated book values of land, buildings, and equipment greater than each of three threshold values (\$0, \$100,000, and \$500,000).

According to table 14.2, if the lowest threshold (\$0) is used, just under half of all nonprofits that file Form 990 returns would be classified as not owning any

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5. This section updates and draws on published research reported in Cordes, Ganz, and Pollak (2002).

6. For more information on these data and on the National Taxonomy of Exempt Entities, see <http://nccs.urban.org/>.

7. In many cases, there is a close relationship between an organization's primary activity and its NTEE code, but the relationship is not one-to-one. Asking a nonprofit to self-report its primary activity or mission can be problematic if the organization provides a range of services. For example, a youth organization may be primarily engaged in education when providing after-school tutoring, but primarily focused on youth development when running a summer camp.

8. NCCS defines the circa tax year to include returns with fiscal years that cause them to be filed in 2007 or 2008.

eligible property. Using the \$100,000 threshold, the fraction of nonprofits with taxable property drops to 3 out of 10. Using the \$500,000 threshold, the fraction drops to 1 out of 5. Not surprisingly, nonprofits that must use significant inputs of real property to fulfill their primary mission—such as housing/shelter, hospitals, and nonprofits involved in providing or supporting higher education—are much more likely to own real property, and hence to benefit from the property tax exemption, than are others.<sup>9</sup>

Table 14.3 presents information based not on an organization’s NTEE classification, but instead on the primary activity code used on its Form 990 return. The broad patterns found in table 14.2, where organizations are grouped by NTEE classification, are also found here.

Tables 14.4 and 14.5 show how property ownership varies with organization size and age. As might be expected, the property tax exemption is more likely to benefit larger and more established (older) organizations.

Table 14.6 presents predicted probabilities that an organization reported at least \$100,000 in land, buildings, and equipment. The probabilities are computed using the following simple logit regression:

$$(1) \quad P_i = \frac{1}{1 + e^{-Z}},$$

where  $P_i$  is the probability that an organization reported land, buildings, and equipment of \$100,000 or more, and  $Z$  is defined as either

$$(2) \quad Z_i = \alpha + \sum_{j=2}^6 \beta_j Size_{ij} + \sum_{k=2}^{19} \gamma_k Activity_{ik} + \varepsilon_i$$

or

$$(3) \quad Z_i = \alpha + \sum_{j=2}^6 \beta_j Size_{ij} + \sum_{k=2}^{19} \gamma_j Activity_{ik} + \sum_{m=2}^{19} \delta_m Age_{im} + \varepsilon_i,$$

where  $Size_{ij}$  = a set of indicator variables for organization size, based on total revenue;

$Activity_{ik}$  = a set of indicator variables for the organization’s primary activity; and

$Age_{im}$  = a set of indicator variables for the organization’s age.

Three patterns are evident in table 14.6. One is that the probability that an organization would benefit from the nonprofit property tax exemption varies by

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9. It may be unclear why less than 100 percent of nonprofits classified as housing/shelter, hospitals, and higher education are estimated to have more than \$100,000 in land, buildings, and equipment. One answer is that these categories include nonprofits that are classified as engaged in a particular activity (e.g., higher education), but that are not directly involved in the provision of the related service (e.g., a university foundation).

**Table 14.2**  
**Ownership of Potentially Tax-Exempt Property, by Major Nonprofit Group**

NTEE Major Group	Number of Nonprofits	Number of Nonprofits with Land, Buildings, and Equipment > 0	Percentage of Nonprofits with Land, Buildings, and Equipment > 0	Percentage of All Nonprofits	Percentage Distribution of Nonprofits with Land, Buildings, and Equipment > 0
Higher education	1,858	1,652	88.9	0.7	1.2
Hospitals	3,724	3,242	87.1	1.5	2.4
Housing/shelter	14,355	11,461	79.8	5.7	8.7
Mental health	7,416	5,172	69.7	2.9	3.9
Employment	3,474	2,365	68.1	1.4	1.8
Human services	33,675	22,651	67.3	13.3	17.1
Health	16,506	10,298	62.4	6.5	7.8
Public safety	4,180	2,598	62.2	1.6	2.0
Youth development	6,183	3,600	58.2	2.4	2.7
Civil rights advocacy	1,709	987	57.8	0.7	0.7
Crime	4,440	2,530	57.0	1.7	1.9
Environment	5,695	3,043	53.4	2.2	2.3
Animal related	4,334	2,288	52.8	1.7	1.7
Food agriculture	2,495	1,295	51.9	1.0	1.0
Disease specific	5,585	2,870	51.4	2.2	2.2
Arts	27,932	14,000	50.1	11.0	10.6
Disease research	1,683	841	50.0	0.7	0.6
Science and technology	1,625	793	48.8	0.6	0.6
Public societal benefit	2,410	1,174	48.7	0.9	0.9
Community improvement	11,444	5,500	48.1	4.5	4.2
Social sciences	647	307	47.4	0.3	0.2
Religion related	13,425	6,356	47.3	5.3	4.8
Foreign affairs	5,404	2,361	43.7	2.1	1.8
Unclassified	68	27	39.7	0.0	0.0
Education	42,905	15,019	35.0	16.9	11.3
Recreation/sports	17,656	6,092	34.5	7.0	4.6
Philanthropy	12,295	3,794	30.9	4.8	2.9
Mutual membership	651	173	26.6	0.3	0.1
Total	253,776	132,490	52.2	100.0	100.0



Number of Nonprofits with Land, Buildings, and Equipment > \$100K	Percentage of Nonprofits with Land, Buildings, and Equipment > \$100K	Percentage Distribution of Nonprofits with Land, Buildings, and Equipment > \$100K	Number of Nonprofits with Land, Buildings, and Equipment > \$500K	Percentage of Nonprofits with Land, Buildings, and Equipment > \$500K	Percentage Distribution of Nonprofits with Land, Buildings, and Equipment > \$500K
1,502	80.8	2.0	1,404	75.6	2.9
3,011	80.9	3.9	2,840	76.3	5.8
9,684	67.5	12.6	7,561	52.7	15.5
3,088	41.6	4.0	1,946	26.2	4.0
1,423	41.0	1.9	931	26.8	1.9
14,323	42.5	18.6	8,990	26.7	18.4
6,703	40.6	8.7	4,388	26.6	9.0
1,970	47.1	2.6	990	23.7	2.0
2,089	33.8	2.7	1,296	21.0	2.7
220	12.9	0.3	86	5.0	0.2
914	20.6	1.2	414	9.3	0.8
1,357	23.8	1.8	877	15.4	1.8
1,367	31.5	1.8	646	14.9	1.3
692	27.7	0.9	389	15.6	0.8
1,078	19.3	1.4	572	10.2	1.2
7,174	25.7	9.3	3,819	13.7	7.8
324	19.3	0.4	172	10.2	0.4
390	24.0	0.5	252	15.5	0.5
415	17.2	0.5	218	9.0	0.4
2,483	21.7	3.2	1,375	12.0	2.8
112	17.3	0.1	54	8.3	0.1
3,133	23.3	4.1	1,662	12.4	3.4
756	14.0	1.0	358	6.6	0.7
17	25.0	0.0	12	17.6	0.0
8,323	19.4	10.8	5,342	12.5	11.0
2,714	15.4	3.5	1,293	7.3	2.7
1,463	11.9	1.9	803	6.5	1.6
82	12.6	0.1	45	6.9	0.1
76,807	30.3	100.0	48,735	19.2	100.0

Source: Calculations are based on data from the 2008 Core Data file created by the National Center on Charitable Statistics.

**Table 14.3****Potential Ownership of Nontaxable Property, by Primary Nonprofit Activity**

Form 990 Primary Activity	Number of Nonprofits	Percentage Distribution by Activity	Percentage of Nonprofits with Land, Buildings, and Equipment > 0	Number of Nonprofits with Land, Buildings, and Equipment > 0	Percentage Distribution of Nonprofits with Land, Buildings, and Equipment > 0
Housing	7,680	4.0	84.6	6,497	6.1
Long-term care	1,749	0.9	84.0	1,470	1.4
Health clinic	1,832	1.0	82.4	1,510	1.4
Hospital	3,919	2.0	77.5	3,037	2.9
Private school	5,391	2.8	77.3	4,168	3.9
Litigation/legal	470	0.2	75.5	355	0.3
Higher education	3,411	1.8	72.3	2,467	2.3
Health	14,337	7.5	70.4	10,100	9.5
Civil rights	680	0.4	64.6	439	0.4
Inner city	7,199	3.8	63.6	4,581	4.3
Mutual membership	85	0.0	63.5	54	0.1
Social services	9,532	5.0	61.5	5,859	5.5
Religious	9,801	5.1	59.2	5,799	5.5
Conservation and environment	2,874	1.5	58.0	1,667	1.6
Advocacy	1,348	0.7	57.9	780	0.7
Youth development	13,679	7.1	56.6	7,737	7.3
Research	274	0.1	56.2	154	0.1
Cultural	15,869	8.3	54.7	8,675	8.2
Farming	193	0.1	53.9	104	0.1
Instruction	8,518	4.4	53.7	4,574	4.3
Other purposes	36,041	18.8	49.8	17,959	17.0
Legislative	84	0.0	47.6	40	0.0
Business/professional	1,603	0.8	43.5	697	0.7
Sport and social	5,724	3.0	41.9	2,396	2.3
Employee membership	376	0.2	41.5	156	0.1
Education	26,104	13.6	38.8	10,121	9.6
Community chest	13,051	6.8	33.5	4,375	4.1
Total	191,824	100.0	55.1	105,771	100.0

Percentage of Nonprofits with Land, Buildings, and Equipment > \$100K	Number of Nonprofits with Land, Buildings, and Equipment > \$100K	Percentage Distribution of Nonprofits with Land, Buildings, and Equipment > \$100K	Percentage of Nonprofits with Land, Buildings, and Equipment > \$500K	Number of Nonprofits with Land, Buildings, and Equipment > \$500K	Percentage Distribution of Nonprofits with Land, Buildings, and Equipment > \$500K
73.6	5,652	8.8	55.3	4,245	10.2
76.8	1,343	2.1	64.7	1,131	2.7
66.2	1,213	1.9	50.3	921	2.2
69.3	2,715	4.2	64.2	2,516	6.0
60.9	3,282	5.1	49.2	2,652	6.4
22.1	104	0.2	9.6	45	0.1
54.1	1,845	2.9	41.2	1,406	3.4
47.1	6,748	10.4	28.6	4,104	9.8
25.3	172	0.3	12.9	88	0.2
38.7	2,783	4.3	22.2	1,598	3.8
34.1	29	0.0	20.0	17	0.0
33.6	3,204	5.0	17.7	1,683	4.0
36.8	3,608	5.6	23.1	2,260	5.4
30.3	870	1.3	18.5	532	1.3
21.2	286	0.4	9.6	129	0.3
33.0	4,512	7.0	21.2	2,906	7.0
28.5	78	0.1	18.2	50	0.1
31.8	5,042	7.8	16.9	2,679	6.4
30.6	59	0.1	20.7	40	0.1
20.6	1,757	2.7	10.5	895	2.1
25.6	9,234	14.3	15.0	5,403	12.9
15.5	13	0.0	10.7	9	0.0
20.0	320	0.5	11.9	191	0.5
20.5	1,174	1.8	10.2	585	1.4
22.6	85	0.1	16.0	60	0.1
24.1	6,301	9.8	16.2	4,217	10.1
16.6	2,160	3.3	10.4	1,363	3.3
33.7	64,589	100.0	21.8	41,725	100.0

Source: Calculations are based on data from the 2008 Core Data file created by the National Center on Charitable Statistics.

**Table 14.4**  
Potential Ownership of Tax-Exempt Property, by Nonprofit Organization Size

Organization Size (\$)	Number of Nonprofits	Distribution by Size (%)	Percentage with Land, Buildings, and Equipment > 0	Number of Nonprofits with Land, Buildings, and Equipment > 0	Distribution by Size (%)	Percentage with Land, Buildings, and Equipment > \$100K	Number of Nonprofits with Land, Buildings, and Equipment > \$100K	Distribution by Size (%)	Percentage with Land, Buildings, and Equipment > \$500K	Number of Nonprofits with Land, Buildings, and Equipment > \$500K	Distribution by Size (%)
<25K	12,511	4.9	15.7	1,967	1.5	7.4	926	1.2	3.6	452	0.9
25K-<100K	70,181	27.7	25.7	18,002	13.6	10.1	7,074	9.2	2.8	1,997	4.1
100K-<500K	80,059	31.5	51.1	40,915	30.9	22.7	18,205	23.7	10.6	8,525	17.5
500K-<1M	27,691	10.9	70.0	19,387	14.6	36.9	10,225	13.3	21.6	5,979	12.3
1M-<10M	48,871	19.3	80.1	39,152	29.6	57.3	28,022	36.5	41.8	20,429	41.9
>10M	14,463	5.7	90.3	13,067	9.9	85.4	12,355	16.1	78.5	11,353	23.3
Total	253,776		52.2	132,490		30.3	76,807		19.2	48,735	

Source: Calculations are based on data from the 2008 Core Data file created by the National Center on Charitable Statistics.

**Table 14.5**  
Potential Ownership of Taxable Property, by Organization Age

Organization Age (years)	Number of Organizations	Percentage with Land, Buildings, and Equipment > \$0	Percentage with Land, Buildings, and Equipment > \$100K	Percentage with Land, Buildings, and Equipment > \$500K
<5	10,940	45.2	19.5	11.4
5–10	44,796	41.3	18.2	10.5
10–20	78,369	49.5	25.7	15.1
>20	119,671	58.7	38.8	25.9
Total	253,776	52.2	30.3	19.2

Source: Calculations are based on data from the 2008 Core Data file created by the National Center on Charitable Statistics.

**Table 14.6**  
Predicted Probability of Owning Real Property, by Organization Size, Activity, and Age

	Organization Size (\$)					
	>10M	1M–10M	500K–1M	100K–500K	25K–100K	<25K
<b>IRS Primary Activity</b>						
Housing	0.97	0.91	0.81	0.64	0.35	0.28
Private schools <sup>a</sup>	0.91	0.74	0.54	0.34	0.13	0.10
Hospitals	0.91	0.72	0.52	0.32	0.12	0.09
Higher education	0.89	0.69	0.49	0.29	0.11	0.09
Youth	0.86	0.62	0.42	0.23	0.08	0.06
Social services	0.84	0.58	0.37	0.20	0.07	0.05
Education misc.	0.81	0.52	0.32	0.17	0.06	0.04
<b>Organization Age (years)</b>						
<5	0.71	0.38	0.22	0.12	0.05	0.04
5–10	0.76	0.45	0.27	0.16	0.07	0.05
10–20	0.82	0.54	0.34	0.21	0.09	0.07
>20	0.86	0.62	0.42	0.27	0.13	0.10

<sup>a</sup>Includes some colleges and universities.

Source: Calculations are based on data from the 2008 Core Data file created by the National Center on Charitable Statistics.

the type of nonprofit goods or services it provides. The table also shows the strong effect of organization size on the likelihood of its owning potentially tax-exempt property, as well as a measurable, though weaker, effect of organization age.

### *How Much Is the Property Tax Exemption Worth?* \_\_\_\_\_

Tables 14.2 to 14.6 provide a rough indication of which types of nonprofit organizations are likely to benefit from the property tax exemption, but they do not provide information on the value of the tax exemption to individual nonprofits. Information from the NCCS data files can also be used to estimate approximate “orders of magnitude” of the value of the property tax exemption.

#### DISTRIBUTION AND VALUE OF THE PROPERTY TAX EXEMPTION AMONG NONPROFITS

The value of the property tax exemption to a nonprofit organization  $i$  located in community  $j$  is given by the equation

$$(4) \quad E_{ij} = \tau_{ij}V_{ij},$$

where  $E_{ij}$  = the value of the property tax exemption to the organization located in community  $j$ ;  
 $\tau_{ij}$  = the effective property tax rate in community  $j$ ; and  
 $V_{ij}$  = the value of property owned by the organization.

The effective tax rate,  $\tau_{ij}$ , is assumed to account for the fact that in many jurisdictions, only a fraction of market value is taxable.

If we knew the effective property tax rate  $\tau_{ij}$  and the property value, it would be easy to estimate the value of the property tax exemption for each nonprofit. The individual estimates could then be compared to other measures, such as an organization’s total revenue, in order to gauge the financial importance of the exemption. There is, however, a relative dearth of information on the value of the property tax exemption. The main reason is that there is very little information on the market value of property owned by nonprofit organizations. Local assessors have little incentive to devote scarce resources to assess nonprofit property, so it does not generally undergo the regular revaluation process required for taxable property.

Thanks to the NCCS data files, there is, however, information in easily accessible electronic form on the book values of land, buildings, and equipment reported on each IRS Form 990 return. These values can be used to estimate at least rough orders of magnitude of the exemption benefits received by different types of nonprofits. Information compiled by the Minnesota Taxpayers Association (MTA 2010) on the effective commercial property tax rates in some 50 cities was used to estimate the effective property tax rates that would be applied to property owned by nonprofits in those cities. This rate was then applied to the

reported book values of land, buildings, and equipment reported by nonprofit organizations on their Form 990 returns. Only nonprofits estimated to report at least \$100,000 of property value were selected for analysis.

Table 14.7 presents the estimated values of nonprofits' property tax exemptions based on the procedure outlined in the previous paragraph. Table 14.8 shows the values (tax savings) as a percentage of organization revenues. The average imputed value is on the order of \$280,000, although about half of nonprofits with taxable property have imputed values of property tax savings below \$21,000, and one-quarter have values below \$7,000. The overall average ratio of the imputed property tax exemption to total revenues is 5.7 percent. This average is brought up by the imputed value of the tax exemption among small nonprofits and among nonprofits in certain real-estate-intensive sectors, such as community improvement, housing/shelter, and the arts, where the ratio of imputed property tax savings to total revenues is relatively high. On balance, the imputations suggest that half of nonprofits benefiting from the property tax exemption receive savings of less than 1.3 percent.

Tables 14.9 and 14.10 present the same estimates as in tables 14.7 and 14.8, grouped by organization size. As table 14.9 shows, more than 90 percent of the imputed tax savings are garnered by organizations with revenues of at least \$1 million per year.

#### SOME MEASUREMENT ISSUES

The estimates presented in tables 14.7 to 14.10 have limitations. Most notably, the inclusion of equipment in the amount reported tends to bias the estimate of tax savings upward. At the same time, the fact that the amount reported is for book rather than market value imparts a downward bias.

Recent data compiled by the City of Boston (2009) can be used for comparison with the estimates of property tax savings based on Form 990 data. The comparisons for colleges and universities, hospitals, and cultural institutions are presented in table 14.11. In general, the downward bias in both estimated taxable value and estimated tax savings that results from using the Form 990 data, which is based on book value, more than offsets any upward bias from including equipment in the estimates. To provide a rough estimate of the magnitude of the bias, tables 14.12 and 14.13 present the estimates shown in tables 14.9 and 14.10 for the case in which the reported book value of taxable property reported on Form 990 is multiplied by a factor of 1.5. Essentially, this simple procedure inflates the averages shown in tables 14.9 and 14.10 by 1.5.

#### PAINTING A STATISTICAL PORTRAIT

The estimates of tax benefits presented here are best regarded as indicating the order of magnitude of the tax savings attributable to the property tax exemption, not as providing exact estimates of value. Nonetheless, these estimates offer a broadly representative picture of the exemption's relative economic importance to individual nonprofits.

**Table 14.7**  
**Estimated Values of Nonprofit Organizations' Property Tax Exemptions**

NTEE Major Group	Number of Nonprofits	Total Tax Exemption (\$)	Percentage of Total Tax Exemption	Mean (\$)
Hospitals	373	1,389,068,039	38.0	3,724,043
Higher education	301	862,492,323	23.6	2,865,423
Arts	1,320	289,482,996	7.9	219,305
Human services	2,129	228,135,976	6.2	107,156
Education	1,415	196,489,872	5.4	138,862
Health	1,011	176,251,876	4.8	174,334
Housing/shelter	2,055	156,407,489	4.3	76,111
Community improvement	536	47,343,015	1.3	88,327
Mental health	581	34,641,707	0.9	59,624
Animal related	151	30,385,806	0.8	201,231
Disease specific	280	29,668,828	0.8	105,960
Philanthropy	276	25,486,422	0.7	92,342
Religion related	453	21,319,602	0.6	47,063
Science and technology	73	21,244,372	0.6	291,019
Foreign affairs	253	21,019,673	0.6	83,082
Youth development	325	20,756,694	0.6	63,867
Disease research	119	20,327,009	0.6	170,815
Employment	252	18,591,313	0.5	73,775
Public societal benefit	108	18,437,792	0.5	170,720
Recreation/sports	301	14,946,399	0.4	49,656
Environment	197	14,159,241	0.4	71,874
Crime	221	6,769,133	0.2	30,630
Food agriculture	97	5,001,022	0.1	51,557
Social sciences	45	4,076,423	0.1	90,587
Civil rights advocacy	83	3,497,662	0.1	42,141
Mutual membership	18	931,498	0.0	51,750
Public safety	60	877,993	0.0	14,633
Total	13,035	3,657,831,473	100.0	280,616



Lower Quartile (\$)	Median (\$)	Upper Quartile (\$)	Total Organization Expenses (\$)	Percentage of Total Organization Expenses
333,868	1,371,685	3,759,016	3,620,300,700	1.3
52,027	430,402	1,820,427	2,533,784,288	0.9
6,273	19,195	94,518	9,683,447,400	3.6
6,603	21,890	77,958	13,642,938,576	5.1
5,774	20,214	96,119	11,101,467,400	4.1
7,556	25,694	94,986	22,747,500,000	8.4
11,898	26,963	69,624	35,551,500,000	13.2
4,847	13,148	42,536	5,302,639,960	2.0
5,445	16,018	50,370	5,771,394,874	2.1
6,436	18,434	95,920	1,525,100,000	0.6
4,641	11,062	42,379	3,640,000,000	1.4
6,401	18,379	59,135	18,574,800,000	6.9
5,309	13,313	37,839	67,044,000,000	24.9
5,549	25,539	118,698	30,149,000,000	11.2
4,121	11,611	38,153	512,264,533	0.2
8,441	26,321	72,378	2,772,543,150	1.0
4,235	14,705	90,629	4,533,900,000	1.7
5,912	18,324	65,966	2,230,994,556	0.8
3,309	6,742	35,999	3,877,200,000	1.4
4,803	12,377	38,197	6,531,700,000	2.4
5,460	14,941	58,273	129,570,702	0.0
3,697	7,570	26,123	8,817,900,000	3.3
6,241	21,346	57,059	560,181,790	0.2
3,568	17,796	75,636	124,608,375	0.0
4,799	8,094	22,551	8,034,400,000	3.0
5,714	9,399	111,460	428,400,000	0.2
3,062	8,856	20,549	13,135,500	0.0
6,668	21,276	81,914	269,463,541,006	100.0

Source: Calculations are based on data from the 2008 Core Data file created by the National Center on Charitable Statistics.

**Table 14.8**  
**Estimated Tax Savings as a Percentage of Organization Revenues**

NTEE Major Group	Number of Nonprofits	Mean (%)	Lower Quartile (%)	Median (%)	Upper Quartile (%)
Animal related	151	2.5	0.5	1.1	3.0
Arts	1,320	5.8	0.5	1.9	5.1
Civil rights advocacy	83	1.6	0.1	0.4	1.4
Community improvement	536	14.3	0.3	1.5	5.5
Crime	221	2.0	0.1	0.4	1.4
Disease research	119	2.5	0.1	0.3	1.2
Disease specific	280	3.7	0.2	0.6	1.6
Education	1,415	3.0	0.3	1.0	2.5
Employment	252	2.2	0.3	0.7	1.8
Environment	197	6.3	0.3	1.5	5.5
Food agriculture	97	3.2	0.2	0.4	1.3
Foreign affairs	253	2.0	0.0	0.2	1.0
Health	1,010	2.7	0.1	0.5	1.6
Higher education	301	4.0	0.9	1.6	2.8
Hospitals	373	3.1	0.4	0.7	1.1
Housing/shelter	2,055	12.1	2.3	5.0	12.4
Human services	2,129	3.7	0.4	1.1	2.8
Mental health	581	2.7	0.3	0.8	2.2
Mutual membership	18	3.1	0.2	1.0	5.2
Philanthropy	276	9.7	0.1	0.6	5.8
Public safety	60	6.4	1.1	2.7	7.9
Public societal benefit	108	1.8	0.1	0.4	1.3
Recreation/sports	301	5.1	0.7	1.6	5.2
Religion related	453	8.1	0.9	2.5	6.5
Science and technology	73	3.1	0.2	0.5	1.6
Social sciences	45	1.4	0.1	0.3	1.2
Youth development	325	3.1	0.6	1.5	3.2
Total	13,032	5.7	0.4	1.3	4.0

Source: Calculations are based on data from the 2008 Core Data file created by the National Center on Charitable Statistics.

**Table 14.9**  
Tax Savings, by Organization Size

Organization Size (\$)	Number of Nonprofits	Total Tax Savings (\$)	Percentage of Total Tax Exemption	Mean (\$)	Lower Quartile (\$)	Median (\$)	Upper Quartile (\$)	Total Organization Expenses (\$)	Percentage of Total Organization Expenses
<25K	27	439,291	0.0	16,270	3,864	8,839	17,686	2,448,340	0.0
25K-<100K	762	9,457,830	0.3	12,412	3,421	6,400	12,552	79,714,115	0.0
100K-<500K	2,268	69,666,791	1.9	30,717	4,933	11,388	27,544	765,068,522	0.2
500K-<1M	1,575	52,259,807	1.4	33,181	5,162	12,733	33,666	1,235,864,858	0.3
1M-10M	5,480	354,078,034	9.7	64,613	7,062	23,134	70,224	19,734,965,080	5.3
>10M	2,923	3,171,928,526	86.7	1,085,162	30,461	151,258	608,466	350,760,000,000	94.1
Total	13,035	3,657,830,280	100.0	280,616	6,668	21,276	81,914	372,578,060,915	100.0

Source: Calculations are based on data from the 2008 Core Data file created by the National Center on Charitable Statistics.

**Table 14.10**  
**Tax Savings as a Percentage of Organization Revenues, by Organization Size**

Organization Size (\$)	Number of Nonprofits	Mean (%)	Lower Quartile (%)	Median (%)	Upper Quartile (%)
<25K	26	251.5	27.8	75.7	166.8
25K–<100K	762	24.0	5.7	12.7	22.4
100K–<500K	2,268	11.8	2.0	4.6	11.4
500K–<1M	1,575	4.7	0.7	1.7	4.7
1M–10M	5,480	2.1	0.2	0.8	2.3
>10M	2,923	1.2	0.1	0.5	1.4
Total	13,034	5.7	0.4	1.3	4.0

Source: Calculations are based on data from the 2008 Core Data file created by the National Center on Charitable Statistics.

First, the results imply that a sizable share of nonprofit organizations do not own real property and hence do not benefit from the implicit subsidy provided by the exemption. Indeed, to the extent that competition in rental markets causes the property tax to be shifted to tenants, the results in table 14.2 imply that, contrary to popular wisdom, a sizable majority of nonprofit organizations pay property taxes through the rents paid to their landlords.

Second, the data show that a nonprofit organization is more apt to own taxable property if it is large and well established (older). Moreover, nonprofits whose activities make intensive use of real property in fulfilling their primary missions, such as those engaged in housing-related activities (e.g., housing/shelter), higher education, and health care, are more likely to own tax-exempt property, and hence to benefit from the exemption, than are other nonprofits. At the same time, although smaller organizations are less likely as a group to own taxable property, among those that do, the relative importance of the property tax exemption is greater.

Finally, although caution must be exercised in gauging when the exemption is financially important, the broad implication of the estimates presented in tables 14.8–14.10, 14.12, and 14.13 is that the value of the subsidy (i.e., the exemption) is modest for some nonprofits—perhaps equivalent to a few percentage points of revenue for many nonprofits that own taxable property. But the results also indicate that there is no truly “typical” nonprofit organization. While a requirement to pay property taxes in full would have a small to modest impact on many nonprofits, it would significantly affect the operation and financial condition of others.

**Table 14.11****Estimated Values of Land and Buildings, and Estimated Tax Savings from the IRS Form 990 and from the Boston PILOT Task Force**

Organization	Estimated Value of Real Property per Form 990 (\$)	Assessed Value of Real Property per Boston PILOT Task Force (\$)	Program Revenue per Form 990 (\$)	Estimated Tax Savings per Form 990 and MTA Commercial Property Tax Rate (\$)
<b>Colleges and Universities</b>				
Berklee College of Music	68,900,000	161,741,600	176,000,000	1,634,308
Boston University	1,570,000,000	2,115,919,700	1,670,000,000	37,240,400
Emerson College	267,000,000	177,826,400	140,000,000	6,333,240
Emmanuel College	98,800,000	165,162,000	78,900,000	2,343,536
Fisher College	10,600,000	16,719,000	15,400,000	251,432
Massachusetts College of Pharmacy	107,000,000	106,910,300	107,000,000	2,538,040
Northeastern University	697,000,000	1,351,225,100	810,000,000	16,532,840
Simmons College	172,000,000	152,572,500	140,000,000	4,079,840
Suffolk University	244,000,000	237,230,300	247,000,000	5,787,680
Wentworth Institute of Technology	125,000,000	207,977,400	108,000,000	2,988,720
Wheelock College	34,500,000	60,362,200	35,800,000	818,340
<b>Total</b>	<b>3,395,800,000</b>	<b>4,753,646,500</b>	<b>3,528,100,000</b>	<b>80,548,376</b>
<b>Hospitals</b>				
Beth Israel Deaconess	461,000,000	823,114,100	1,260,000,000	10,934,920
Boston Medical Center	414,000,000	300,928,700	1,100,000,000	9,820,080
Brigham and Women's	789,000,000	815,886,700	1,940,000,000	18,715,080
Children's Hospital	684,000,000	691,857,800	1,300,000,000	16,224,480
Dana-Farber	290,000,000	226,522,000	809,000,000	6,878,800
Faulkner	67,600,000	181,881,400	171,000,000	1,603,472
Massachusetts General	272,000,000	1,457,667,100	338,000,000	6,451,840
New England Baptist	54,700,000	144,781,500	173,000,000	1,297,484
Spaulding	31,500,000	86,751,700	101,000,000	747,180
<b>Total</b>	<b>6,459,600,000</b>	<b>9,483,037,500</b>	<b>10,720,100,000</b>	<b>72,673,336</b>
<b>Cultural Institutions</b>				
Boston Children's Museum	44,200,000	31,029,000	13,900,000	1,048,424
Boston Symphony	41,100,000	29,178,062	85,700,000	974,892
Museum of Fine Arts	158,000,000	282,450,999	254,000,000	3,747,760
Museum of Science	52,000,000	34,903,500	60,800,000	1,233,440
New England Aquarium	46,900,000	70,176,100	38,700,000	1,112,468
WGBH	197,000,000	81,705,000	279,000,000	4,672,840
<b>Total</b>	<b>539,200,000</b>	<b>529,442,661</b>	<b>732,100,000</b>	<b>12,789,824</b>

*(continued)*

**Table 14.11**  
(continued)

Organization	Estimated Property Tax per Boston PILOT Task Force (\$)	Estimated Tax Savings per Boston PILOT Property Values and MTA Tax Rate <sup>a</sup> (\$)	Ratio of Property Value: Boston PILOT to Form 990	Form 990 MTA Estimated Tax Savings as Percentage of Program Revenue	Estimated Tax Savings Boston PILOT Property Values MTA Tax Rate as Percentage of Revenue	Boston PILOT Tax Savings as Percentage of Revenue
<b>Colleges and Universities</b>						
Berklee College of Music	4,384,815	3,836,511	2.3	0.9	2.2	2.5
Boston University	57,362,583	50,189,615	1.3	2.2	3.0	3.4
Emerson College	4,820,874	4,218,042	0.7	4.5	3.0	3.4
Emmanuel College	4,477,542	3,917,643	1.7	3.0	5.0	5.7
Fisher College	453,252	396,575	1.6	1.6	2.6	2.9
Massachusetts College of Pharmacy	2,898,338	2,535,912	1.0	2.4	2.4	2.7
Northeastern University	36,631,712	32,051,059	1.9	2.0	4.0	4.5
Simmons College	4,136,240	3,619,020	0.9	2.9	2.6	3.0
Suffolk University	6,431,313	5,627,103	1.0	2.3	2.3	2.6
Wentworth Institute of Technology	5,638,267	4,933,224	1.7	2.8	4.6	5.2
Wheelock College	1,636,419	1,431,791	1.7	2.3	4.0	4.6
Total	128,871,355	112,756,495	1.4	2.3	3.2	3.7
<b>Hospitals</b>						
Beth Israel Deaconess	22,314,623	19,524,266	1.8	0.9	1.5	1.8
Boston Medical Center	8,158,177	7,138,029	0.7	0.9	0.6	0.7
Brigham and Women's Children's Hospital	22,118,688	19,352,833	1.0	1.0	1.0	1.1
Dana-Farber	18,756,265	16,410,867	1.0	1.2	1.3	1.4
Faulkner	6,141,011	5,373,102	0.8	0.9	0.7	0.8
Faulkner	4,930,805	4,314,227	2.7	0.9	2.5	2.9
Massachusetts General	39,517,355	34,575,864	5.4	1.9	10.2	11.7
New England Baptist	3,925,026	3,434,217	2.6	0.7	2.0	2.3
Spaulding	2,351,839	2,057,750	2.8	0.7	2.0	2.3
Total	128,213,789	112,181,155	1.5	0.7	1.0	1.2
<b>Cultural Institutions</b>						
Boston Children's Museum	497,540	736,008	0.7	7.5	5.3	3.6
Boston Symphony	440,087	692,104	0.7	1.1	0.8	0.5
Museum of Fine Arts	8,301,679	6,699,738	1.8	1.5	2.6	3.3
Museum of Science	617,805	827,911	0.7	2.0	1.4	1.0
New England Aquarium	1,712,100	1,664,577	1.5	2.9	4.3	4.4
WGBH	2,070,523	1,938,043	0.4	1.7	0.7	0.7
Total	13,639,734	12,558,380	1.0	1.7	1.7	1.9

<sup>a</sup>See MTA (2010).

Source: City of Boston (2009).

**Table 14.12**  
Tax Savings, by Organization Size, Adjusted

Organization Size (\$)	Number of Nonprofits	Mean (\$)	Lower Quartile (\$)	Median (\$)	Upper Quartile (\$)
<25K	27	24,405	5,796	13,259	26,529
25K–<100K	762	18,618	5,131	9,601	18,828
100K–<500K	2,268	46,076	7,400	17,081	41,316
500K–<1M	1,575	49,771	7,743	19,099	50,499
1M–10M	5,480	96,919	10,594	34,701	105,337
>10M	2,923	1,627,744	45,692	226,887	912,698
Total	13,035	420,924	10,001	31,914	122,871

Source: City of Boston (2009).

**Table 14.13**  
Tax Savings as a Percentage of Organization Revenues, by Organization Size, Adjusted

Organization Size (\$)	Number of Nonprofits	Mean (%)	Lower Quartile (%)	Median (%)	Upper Quartile (%)
<25K	26	377.3	41.7	113.5	250.3
25K–<100K	762	36.1	8.6	19.0	33.6
100K–<500K	2,268	17.7	3.0	6.9	17.1
500K–<1M	1,575	7.0	1.0	2.6	7.1
1M–10M	5,480	3.1	0.4	1.2	3.5
>10M	2,923	1.8	0.2	0.8	2.0
Total	13,034	8.5	0.6	1.9	6.1

Source: City of Boston (2009).

### *Property Tax Exemption and Behavior of Nonprofit Organizations*<sup>10</sup>

Does the property tax exemption affect nonprofit organizations' decisions to own rather than rent the space in which they are housed? Two perspectives can be used in addressing this question.<sup>11</sup>

10. This section draws on the model and analysis presented in Cordes, Ganz, and Pollak (2002, 99–107).

11. The analysis that follows is not intended to apply to houses of worship, where there may be many nonfinancial reasons for owning rather than renting.

### CASE 1: OWNING VERSUS RENTING WHEN THE NONPROFIT IS THE SOLE TENANT

Consider the case in which the space is to be used entirely to meet the nonprofit organization's primary mission. Suppose the rental market is competitive and for-profit landlords must pay both income and property taxes, but are allowed to deduct depreciation. Under these assumptions, it is easily shown that the landlord must earn a profit—after depreciation and taxes—that equals the after-tax rate of return that could be earned by purchasing an alternative investment (e.g., a bond) with the amount of money invested in the property:

$$(5) \quad (cq - q\delta) - t(cq - \alpha q\delta) - \tau q(1 - t) = qr(1 - t),$$

where  $c$  = the gross market rent charged per dollar invested;  
 $q$  = the value of the property;  
 $\delta$  = the annual rate of "true" or "economic" depreciation;  
 $t$  = the income tax rate;  
 $\alpha q\delta$  = the amount of economic depreciation<sup>12</sup> that can be claimed for tax purposes;  
 $\tau q$  = the amount of property tax;  
 $r$  = the before-tax return on the alternative investment; and  
 $r(1 - t)$  = the after-tax return.

This equation assumes that the property tax is deductible as a cost of doing business.

With some rearranging of terms, it can be shown that in a competitive market, the gross rent charged by a for-profit landlord is given by the equation

$$(6) \quad c = \frac{q[r(1 - t) + \delta(1 - t\alpha) + \tau(1 - t)]}{(1 - t)} \rightarrow \frac{c}{q} = r + \delta \frac{(1 - t\alpha)}{1 - t} + \tau,$$

where  $c/q$  = the rental or user cost per dollar.

A nonprofit organization that owns its building is its own landlord. The implicit rental cost of owning instead of renting equals the return the nonprofit could earn if it invested the money tied up in the building elsewhere, or, alternatively, the cost of the mortgage payments if the nonprofit had to borrow the funds ( $qr$ ), plus the cost of depreciation ( $q\delta$ ). The cost of owning,  $c^*$ , would thus be given by

$$(7) \quad c^* = qr + q\delta \rightarrow \frac{c^*}{q} = r + \delta.$$

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12. Economic depreciation is the rate at which a depreciable asset declines in market value. It is related to, but distinct from, the physical rate of wear and tear and/or obsolescence.



From the nonprofit's perspective, the issue of whether it would be better to own or rent would depend on whether the user cost of renting,  $c/q$ , was greater than that of owning,  $c^*/q$ . It would be financially advantageous to own rather than rent if  $c/q > c^*/q$ , or if

$$(8) \quad \frac{c}{q} - \frac{c^*}{q} > 0 \rightarrow \left[ r + \delta \frac{(1-t\alpha)}{(1-t)} + \tau \right] - [r + \delta] > 0.$$

Collecting and rearranging terms yields

$$(9) \quad \frac{c}{q} - \frac{c^*}{q} > 0 \rightarrow \tau - \frac{\delta t(\alpha-1)}{(1-t)} > 0.$$

Equation (9) shows how the property tax exemption affects the decision to own or rent. The term  $\tau$  represents the property tax savings (per dollar invested) that the nonprofit organization receives as an owner. (Since the nonprofit is its own landlord, it does not need to "pass the property tax forward" as a for-profit landlord would.) The term

$$\frac{\delta t(\alpha-1)}{(1-t)}$$

shows how tax deductions for depreciation affect the decision to own or rent.

To understand the interaction between the tax treatment of depreciation and the property tax exemption, it is useful to first consider the case in which  $\alpha = 1$ , which would be true if the value of depreciation deductions allowed for tax purposes exactly equaled economic depreciation. As may be seen from equation (9), when  $\alpha = 1$ , the depreciation term drops out of the calculation, and the nonprofit would clearly benefit from owning rather than renting, with the amount of the benefit dependent on the property tax rate. In this simple case, for example, a nonprofit located in a jurisdiction with high property tax rates would have a stronger incentive to own than a nonprofit located in a jurisdiction with low rates.

The own versus rent calculation changes, however, if the tax system allows property to be depreciated at a faster or slower rate than economic depreciation. Consider, for example, the case in which  $\alpha > 1$ , where tax depreciation deductions are more accelerated (generous) than economic depreciation. In that case, it would be theoretically ambiguous whether a nonprofit should own or rent. The result may seem counterintuitive at first, but the explanation is straightforward. In such cases, tax deductions for depreciation actually provide a tax subsidy to capital. Thus, when  $\alpha > 1$ , the nonprofit organization in effect gives up the subsidy to capital that the for-profit landlord receives and would be forced, by market competition, to pass on to the tenant. Whether it is financially advantageous to own rather than rent depends on whether the economic gain

from the property tax savings,  $\tau$ , exceeds the economic loss from the forgone capital subsidy,

$$\frac{\delta t(\alpha - 1)}{(1 - t)}.$$

If the tax system allows less than economic depreciation, so that  $\alpha < 1$ , the incentive to own rather than rent exists whether or not property is exempt from property taxation. When businesses are allowed to claim less than economic depreciation on their assets, the tax system effectively imposes an added tax penalty (instead of a subsidy) on the return to capital, which has to be recovered in the rent. Ownership allows the nonprofit to save this tax penalty along with the property tax.

One implication of this model is that, other things being equal, nonprofit organizations should have a stronger incentive to rent rather than own when the property tax rate is low and the depreciation system is relatively generous. The latter condition pertained in the early 1980s, under the Economic Recovery Tax Act of 1981. These incentives were reversed with the passage of the Tax Reform Act of 1986. Basically, this act scrapped the accelerated-depreciation schedules for buildings and required that deductions be spread over a fairly long useful life. Many economists believe that the depreciation schedules enacted under the 1986 act, and subsequently incorporated in the Modified Accelerated Cost Recovery System, effectively allow close to economic depreciation, so that we might expect the property tax exemption to provide an unambiguous incentive to own rather than rent, which would increase as the property tax rate rose.

#### **CASE 2: OWNING VERSUS RENTING WHEN THE NONPROFIT IS NOT THE SOLE TENANT**

In many cases, the space needs of the nonprofit are such that its choice may be between renting part of the building and owning the entire building. Modeling the own versus rent decision in such situations is more complex, and much depends on how the property tax exemption is applied. For example, suppose that the state grants property tax exemption for a dual-use building (i.e., part is used by the nonprofit, and part is used by other organizations). In that case, if the nonprofit owns the building, it saves the property tax and also acquires a tax-favored source of income. The incentive to own would seem strong. At the other extreme, the state might deny exemption for a dual-use building. In that case, the nonprofit would save no property tax by owning rather than renting.

#### **IMPLICATION OF PROPERTY TAX-SHIFTING ASSUMPTIONS**

The preceding analysis implicitly assumes that the burden of the property tax is ultimately borne by tenants in the form of higher rents. A more complex view holds that the economic burden of the tax is borne in part by the owners of

capital and in part by renters in the form of higher prices for rental housing. To the extent that landlords bear some of the property tax as capital owners, less than 100 percent of local property tax burdens would be shifted to tenants. This capital tax effect would work to attenuate the pure economic incentive to own that is reflected in equation (9).<sup>13</sup>

#### PROPERTY TAX EXEMPTION AND LOCATION DECISIONS

How does the exemption affect where nonprofits choose to locate? It might be tempting to conclude that if the property tax burden tends to be greater in central cities than in suburban areas, the property tax exemption may keep some nonprofits from favoring lower-tax suburbs over higher-tax central cities. If correct, this conjecture would imply that policies that weaken or remove the exemption could affect the location decisions of nonprofits in ways that might disadvantage central cities.

As noted earlier, however, the evidence indicates that the majority of nonprofits do not own taxable real property. If competition for rental real estate will cause some or all of the local property tax to be shifted to renters, nonprofits that rent will implicitly bear some of the relatively higher burden of urban property taxes through higher monthly rents. Hence, nonprofits face similar financial incentives or disincentives to choose an urban location as for-profit businesses do. Thus, the extent to which the property tax exemption contributes to “locational neutrality” seems to be greater for nonprofits that are property owners. Moreover, from equation (9) it can be seen that the exemption of nonprofit property is more likely to provide a financial incentive to own rather than rent in jurisdictions with higher property tax rates.

#### PROPERTY TAX EXEMPTION AND COMMERCIALITY

Does the property tax exemption encourage nonprofits to undertake commercial ventures and give them an unfair competitive edge in markets in which nonprofits compete with for-profit businesses? As noted by several authors (Cordes and Weisbrod 1998; Rose-Ackerman 1982; Sansing 1998; Schiff and Weisbrod 1991), the property tax exemption (along with the income tax exemption) can create a financial incentive for nonprofits to undertake certain types of commercial activities that they might otherwise be inclined to avoid.

Hansmann (1987) and Gulley and Santerre (1993) used interstate variations in property and corporate tax rates to examine whether the market share of nonprofits in selected industries was higher in states with relatively high tax rates. They found that the size of the nonprofit sector in these industries increased with the tax rate. Cordes and Weisbrod (1998) found that the share of income that

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13. See Zodrow (2007) for a useful survey of the conceptual issues involved in determining the economic incidence of the property tax.

individual nonprofits derived from commercial activities increased with state income and property tax rates. These results provide some empirical evidence that property tax exemption can encourage nonprofits to become more commercial than would otherwise be the case.

### *The Fiscal Costs of the Property Tax Exemption to Local Governments*

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Thus far this chapter has focused on the benefits of the property tax exemption within the nonprofit sector. The other side of the story is the fiscal impact of the exemption on the property tax base. Conceptually, this impact depends on several factors. The basic points can be illustrated with a simple revenue model. The amount of revenue raised in a jurisdiction that hypothetically taxes all property whether exempt or nonexempt at the same tax rate is given by the equation

$$(10) \quad R_j = \tau_j \times A_j^{NE} \times V_j^{NE} + \tau_j \times A_j^E \times V_j^E = \tau_j \times (A_j^{NE} \times V_j^{NE} + A_j^E \times V_j^E),$$

where:

$R_j$  = tax revenue;

$\tau_j$  = tax rate applied to assessed value of property;

$A_j^{NE}$  = the ratio of assessed (taxable) value to property value of nonexempt property;

$V_j^{NE}$  = value of nonexempt property;

$A_j^E$  = the ratio of assessed (taxable) value to property value of exempt property; and

$V_j^E$  = the value of exempt property.

In cases where the exempt property is not taxed, the revenue yield from the property tax would be

$$(11) \quad \tilde{R}_j = \tau_j \times A_j^{NE} \times V_j^{NE}.$$

The practical fiscal impact of the exemption can be expressed in one of two ways. If the property tax rate is held constant, the proportionate reduction in property tax revenue due to exemption would be

$$(12) \quad \frac{\tilde{R}_j - R_j}{R_j} = \frac{\tau_j \times A_j^E \times V_j^E}{\tau_j \times (A_j^{NE} \times V_j^{NE} + A_j^E \times V_j^E)} = \frac{A_j^E \times V_j^E}{(A_j^{NE} \times V_j^{NE} + A_j^E \times V_j^E)}.$$

As is easily seen, the percentage reduction in property tax revenue depends on the ratio of the assessed value of exempt property to the assessed value of all property, exempt and nonexempt.

Alternatively, if a jurisdiction adjusts the statutory tax rate to meet a specific property tax revenue target  $\bar{R}$ , and if no exemptions are allowed, the statutory tax is given by the equation<sup>14</sup>

$$(13) \quad \bar{R} = \tau_j \times (A_j^{NE} \times V_j^{NE} + A_j^E \times V_j^E),$$

in which case

$$(14) \quad \tau_j = \frac{\bar{R}}{(A_j^{NE} \times V_j^{NE} + A_j^E \times V_j^E)}.$$

In contrast, if nonprofits are exempt from the property tax, the required statutory tax rate is given by the equation

$$(15) \quad \tilde{\tau}_j = \frac{\bar{R}}{(A_j^{NE} \times V_j^{NE})}.$$

The ratio of the tax rate with the exemption to the tax rate without the exemption would thus be

$$(16) \quad \frac{\tilde{\tau}_j}{\tau_j} = \frac{(A_j^{NE} \times V_j^{NE} + A_j^E \times V_j^E)}{(A_j^{NE} \times V_j^{NE})}.$$

Equations (12) and (16) show that the fiscal impact of exempting nonprofit property on the local property tax base depends on the relative share of property owned by nonprofits in the local property tax base. The overall impact of the nonprofit exemption on the local fiscal system depends in turn on the relative importance of the local property tax in local revenues. If exempting nonprofit property simply leads to lower revenues (with statutory rates assumed to remain unchanged), the net fiscal impact would depend on the relative importance of the property tax as a source of revenue. To the extent, however, that localities are able to adjust statutory property tax rates to offset the effects of exemption, the main fiscal impact would be experienced by the owners of nonexempt property, who would face higher property tax rates and bills to compensate for the exemption. As noted earlier, to the extent that these higher property taxes are shifted from landlords to tenants, part of the burden of paying for the exemption enjoyed by some nonprofits would be borne in the form of higher rent payments by other nonprofits.

Truly comprehensive data on this topic are limited. Some jurisdictions, such as New York City, Boston, and the State of Maryland, provide enough information

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14. I am indebted to Woods Bowman, who reminded me of this distinctive feature of local property taxes. See the discussion in Bowman, Cordes, and Metcalf (2009).

**Table 14.14**  
Fiscal Impact of the Nonprofit Property Tax Exemption

	Total Nonprofit Property Value (\$)	Nonprofit Property Value as a Percentage of All Real Estate	Total of Taxes Not Paid Due to Nonprofit Exemption (\$)	City Budget (\$)	Unpaid Taxes as Percentage of City Budget	Property Tax Rate Inflation Factor <sup>e</sup>
City of Boston						
Boston PILOT Task Force (2010) <sup>b</sup>	12,700,000,000	14.6	345,000,000	2,394,000,000	14.4	1.17
Boston (CP) <sup>c</sup>	7,901,972,076	8.4	247,108,012	2,125,000,000	11.6	1.09
Massachusetts (State 2003) <sup>d</sup>	4,816,894,343	6.5	159,728,216	1,807,000,000	8.8	1.07
Washington, DC						
Washington, DC (CP) <sup>c</sup>	6,076,221,240	3.2	112,410,093	7,186,000,000	1.6	1.03
New York City						
New York City (2010) <sup>e</sup>	11,731,000,000	8.0	879,825,000	39,901,000,000	2.2	1.09
New York City (CP) <sup>c</sup>	11,892,184,953	6.8	605,038,694	36,885,000,000	1.6	1.07
Maryland <sup>b</sup>						
Baltimore City (CP) <sup>c</sup>	2,090,398,651	7.2	60,203,481	1,200,000,000	5.0	1.08
Baltimore City (2008) <sup>f</sup>	1,731,515,101	5.3	50,213,938	2,177,660,000	2.3	1.06
Prince George's County (2008) <sup>f</sup>	1,024,761,363	1.1	9,837,709	2,642,654,400	0.0	1.01
Baltimore County (2008) <sup>f</sup>	641,804,242	0.7	18,612,323	1,499,399,000	1.2	1.01
Montgomery County (2008) <sup>f</sup>	742,349,555	0.4	4,906,931	4,162,500,000	0.0	1.00
Philadelphia (CP) <sup>c</sup>	5,247,323,300	10.8	89,151,334	3,470,000,000	2.6	1.12
Denver (CP) <sup>c</sup>	695,571,090	6.5	46,048,197	775,000,000	5.9	1.07
Columbus, OH (CP) <sup>c</sup>	2,056,834,494	5.6	22,604,611	599,000,000	3.8	1.06
Portland, OR (CP) <sup>c</sup>	3,752,105,680	4.8	8,739,780	2,930,000,000	0.3	1.05
Fort Worth, TX (CP) <sup>c</sup>	1,606,590,290	4.2	13,897,006	838,599,259	1.7	1.04

Charlotte, NC (CP) <sup>c</sup>	2,411,534,900	4.1	30,807,358	1,420,000,000	2.2	1.04
San Francisco (CP) <sup>c</sup>	4,167,453,072	3.9	41,674,531	5,343,296,087	0.8	1.04
Wisconsin <sup>g</sup>	11,845,000,000	3.8	—	—	—	1.04
Seattle (CP) <sup>c</sup>	4,211,904,464	3.8	40,557,018	2,889,348,000	1.4	1.04
Jacksonville, FL (CP) <sup>c</sup>	1,779,535,358	3.8	33,055,759	1,280,000,000	2.6	1.04
Houston, TX (CP) <sup>c</sup>	5,399,278,593	3.1	34,960,329	1,693,568,000	2.1	1.03
San José, CA (CP) <sup>c</sup>	2,765,969,040	3.1	7,136,200	2,590,504,780	0.3	1.03
Los Angeles (CP) <sup>c</sup>	8,053,705,570	2.9	80,537,056	6,672,047,645	1.2	1.03
Dallas (CP) <sup>c</sup>	2,607,875,390	2.9	19,342,612	2,300,000,000	0.8	1.03
San Diego (CP) <sup>c</sup>	4,275,618,925	2.8	42,756,189	864,919,912	4.9	1.03
Nashville (CP) <sup>c</sup>	1,074,212,500	2.7	20,152,227	1,506,054,500	1.3	1.03
Phoenix (CP) <sup>c</sup>	370,200,670	2.7	3,177,803	1,093,012,000	0.3	1.03
Tucson, AZ (CP) <sup>c</sup>	886,279,950	2.4	10,901,243	1,008,000,000	1.1	1.02
Memphis (CP) <sup>c</sup>	665,857,400	1.9	10,760,256	261,983,000	4.1	1.02
El Paso, TX (CP) <sup>c</sup>	327,390,186	1.9	2,280,852	582,425,368	0.4	1.02

<sup>a</sup> Author's calculations.

<sup>b</sup> City of Boston (2010).

<sup>c</sup> Lipman (2006).

<sup>d</sup> Massachusetts Department of Revenue (2003).

<sup>e</sup> New York City Department of Finance (2011).

<sup>f</sup> State of Maryland (2008).

<sup>g</sup> Wisconsin Department of Revenue (2011).

about the exemption to allow estimates to be made. These estimates, along with estimates published in an article by Lipman (2006) in the *Chronicle of Philanthropy*, are presented in table 14.14.

Consistent with the simple theoretical model presented in equations (10)–(16), table 14.14 suggests that the fiscal effects on the jurisdiction can range from minimal to significant. To provide some perspective, Chernick, Langley, and Reschovsky (2011) present estimates that a 10 percent decline in housing prices results in a lagged decline in property tax revenues of just under 4 percent.

Recognizing the limitations of a relatively small number of cases, the estimates in table 14.14 suggest that the impact of the exemption may be more significant in older eastern cities (Boston, New York, Philadelphia, and Baltimore) than in cities in the West and South, and less significant in suburbs (Baltimore County, Montgomery County, and Prince George's County, Maryland) than in central cities (Baltimore).

### *Evaluating the Property Tax Exemption and Alternatives* —————

Are the benefits of exempting nonprofits from the property tax commensurate with the fiscal costs to the community? Are there any ways of reducing the fiscal impact on communities while minimizing the financial effects of limiting the exemption on certain types of nonprofit organizations?

#### ATTRIBUTES OF THE NONPROFIT PROPERTY TAX EXEMPTION

The numbers presented in this chapter show that the financial benefits provided by the property tax exemption fall unevenly on the nonprofit sector. The evidence is strong that a majority of nonprofits own little or no real property, and hence do not benefit from the exemption. Indeed, to the extent that localities adjust to the exemption by raising their property tax rates, and if landlords are able to shift property taxes to tenants in the form of higher rents, non-property-owning nonprofits actually help pay for the exemption received by their property-owning counterparts. For the minority of nonprofits that own property, the financial benefits of the exemption appear to be roughly equivalent to an increase in revenue of several percentage points, although in individual cases the financial impact can be greater.

The analysis also shows that the exemption has mixed effects on how certain nonprofits operate. Given the current tax rules for tax depreciation, the nonprofit exemption is likely to provide a financial incentive for nonprofits to own rather than rent property, although the strength of this incentive depends in part on how much of the local property tax is shifted to tenants. For nonprofits that own property, the property tax exemption has the desirable effect of muting the financial effects of location decisions, although this result does not hold for the many nonprofits that rent rather than own. Lastly, the exemption creates a financial incentive for some nonprofit organizations to engage in commercial ventures



they might otherwise avoid; there is empirical evidence that nonprofits respond to this incentive.

Thus, although there is no doubt that the property tax exemption provides a financial benefit to many nonprofits, which in turn provide community benefits, one can reasonably ask whether a different type of subsidy would be more effective.

#### **POLICY ALTERNATIVE 1: RETAIN BUT LIMIT THE EXEMPTION**

One option would be to retain the current exemption, but, where it is legally permitted, add more explicit eligibility criteria to maximize the extent to which the financial benefits of the exemption support the community benefits. Such an approach was used by Fairfax County, Virginia, which imposed a moratorium on requests for property tax exemption and required nonprofits to provide more explicit justification that they were providing community benefits. Similarly, several states have attempted to limit or deny the exemption to nonprofit hospitals that, according to the states, provide insufficient community benefits.

The advantage of this incremental approach is that it maintains the essential features of the current system, while modifying the exemption to increase its fiscal benefits to the community.<sup>15</sup> An ongoing challenge in implementing this approach is the definition of what constitutes a community benefit.<sup>16</sup>

#### **POLICY ALTERNATIVE 2: FORMAL PROGRAMS FOR VOLUNTARY PAYMENTS IN LIEU OF TAXES (PILOTS)**

The most common response to date among cities that feel burdened by the exemption has been to implement programs in which nonprofits have agreed to make payments in lieu of taxes (PILOTS). Such payments have traditionally been negotiated with the jurisdiction and, in principle, are voluntary, although some observers have noted that it may be in the interest of the nonprofit organization to make such payments in exchange for retaining the goodwill of the jurisdiction in matters such as zoning.

Kenyon and Langley (2010) have conducted a comprehensive analysis of both the scope of PILOT programs in the United States and the pluses and

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15. Other incremental approaches, discussed in Kenyon and Langley (2010, 41), would include a broader use of service charges and impact fees levied on all property owners, including nonprofits. Such fees have increasingly been used by jurisdictions in California whose property tax base is limited by Proposition 13.

16. My colleague Elizabeth Rigby notes that in the case of hospitals, if the standard has been the provision of “uninsured care,” that standard would need to be modified if and when the Patient Protection and Affordable Care Act of 2010 is fully implemented. See also Brody (2010) and Jaynes (2007) for discussions of the issue of community benefits.

minuses of traditional PILOT programs compared to more explicit taxes. These pluses and minuses are summarized in the first two columns of table 14.15.

After extensive study, the City of Boston formalized its PILOT program in April 2011.<sup>17</sup> The program includes the following elements:

- The program will apply only to large nonprofits with taxable property worth \$15 million or more.
- Based on the share of city services (such as police and fire departments) in the Boston city budget, each nonprofit with assets of \$15 million or more will be asked to voluntarily contribute 25 percent of the amount it would otherwise owe in taxes.
- Each nonprofit will be eligible for a credit of up to 50 percent of the voluntary payment based on services provided by the nonprofit to the city of Boston.
- Each nonprofit will be asked to agree to make contributions for a certain number of years.

This program represents an interesting institutional hybrid. On one hand, the PILOTs will be voluntary, in the sense that a nonprofit will not be legally obligated to remit the amount proposed. On the other hand, unlike other PILOT programs, which have been based on individual negotiations between nonprofits and the jurisdiction, the PILOTs in Boston will be structured very much like formal taxes: those asked to pay will be sent a PILOT “bill,” and the amounts of the PILOTs will be determined based on an explicit formula. As a result, as noted in the third column of table 14.15, the Boston program addresses many of the weaknesses of traditional PILOT programs, aside from the possible issue of the amount of revenue that is actually raised. It has the additional advantage of providing an incentive for cities that are considering implementing PILOTs to assess property owned by nonprofit organizations. Predictably, the Boston program has met with mixed reactions. Although several nonprofits have been quoted as saying they are prepared to pay the PILOTs, others have been more circumspect in their response (*Boston Globe* 2011). A sharp negative reaction to the proposal came from the National Council of Nonprofits, which referred to the program as “the camel’s nose under the tent” (Delaney 2011).

### **POLICY ALTERNATIVE 3: MORE EXPLICIT SUBSIDIES**

As a number of critics of the property tax exemption have noted, if the exemption is justified as a subsidy for the nonprofit sector, it is hard to argue, in principle, that such a subsidy should be based on specific inputs used by a nonprofit entity. If the intent of the subsidy is to offset some of the costs of producing non-

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17. For a discussion of the deliberations of the Boston PILOT Task Force, see City of Boston (2010). For an assessment of the task force’s approach, see Lustig (2010).

**Table 14.15**  
**Comparative Features of Taxes versus PILOTs**

Desirable Features of a Tax System	Common Pitfalls of PILOTs	Boston City PILOT Proposal
<b>Horizontal equity.</b> Taxpayers in similar situations pay similar taxes. For example, two homeowners with similar property values pay similar property taxes.	Because PILOTs are voluntary, two tax-exempt nonprofits with similar property values often make very different PILOTs.	Formal criteria and protocols will reduce the chances of horizontal inequity.
<b>Vertical equity.</b> Taxpayers with a greater ability to pay often face higher tax bills.	Large nonprofits with highly valued real property may pay less in PILOTs than smaller nonprofits with lower property values.	Formal criteria will reduce the chances of vertical inequity.
<b>Low administrative costs.</b> The costs of government administration plus compliance costs for the private sector are low relative to the amount of revenue raised.	The costs of government administration of PILOTs (including costs for assessing tax-exempt property), the expenditures nonprofits make to avoid or reduce PILOTs, and the potential costs of litigation can be high.	Making PILOTs “taxlike” and regular will lower administrative costs.
<b>Revenue sufficiency.</b> The tax system raises enough revenue to pay for the desired level of public services.	PILOTs normally raise little revenue relative to what nonprofits would pay if not tax-exempt, but they can still provide crucial revenue for some municipalities.	The proposed PILOTs will increase over time.
<b>Transparency.</b> The tax system is simple and easy to understand.	PILOTs are often negotiated secretly, and the payments are often determined in an ad hoc way with no underlying basis.	Formal criteria and protocols will increase transparency.
<b>Predictability.</b> Tax rates are fairly stable from year to year, so taxpayers can plan for future liabilities and government can rely on a stable revenue stream.	PILOTs are often short-term agreements, which leave municipalities uncertain that they will continue to raise sufficient revenue and nonprofits concerned that they will be asked for higher and higher payments in the future.	The proposed PILOTs will be negotiated for several years.

Sources: Columns 1 and 2 are based on Kenyon and Langley (2010, table 7). Column 3 is based on Foundation Center (2011).

profit goods and services, a more logical option would be to replace the exemption with a direct-cost subsidy available either to all nonprofits or to nonprofits deemed to provide goods and services with community benefits.

One could imagine a “revenue neutral” policy change in which (1) property owned by nonprofits was assessed and taxed like all other property; and (2) the proceeds from taxing nonprofit-owned property would be rebated back to the nonprofit sector in the form of an ad valorem subsidy applied to program service expenses.<sup>18</sup> The subsidy would take the form of credits against property taxes owed by property-owning nonprofits and grants to non-property-owning nonprofits. Such a policy would “redistribute” the aggregate fiscal subsidy from the existing exemption away from nonprofits that currently benefit to (1) non-property-owning nonprofits generally; or (2) non-property-owning nonprofits deemed to provide community benefits.

The financial impact of such a policy change on nonprofits whose property is currently tax-exempt should not be discounted. Although many of them could presumably absorb the financial impact of such a cutback with modest changes in their operations, the effect of repealing or reducing the property tax exemption would fall unevenly on the nonprofits in each community.

## Conclusions

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The question of whether local governments should grant exemptions for real property owned by nonprofit organizations is not a new one, and, as is the case with other issues surrounding local property taxes, its political salience rises and falls with the fortunes of local government finances. The impact of the recent recession on local revenues has led to heightened interest in whether the benefits of exempting nonprofit property are worth the fiscal costs.

This chapter has shown that the effect of the exemption on the nonprofit sector is quite uneven. Although there is no doubt that many recipients of the exemption provide community benefits (at least if the term is broadly defined), it is less clear whether these benefits uniformly help to reduce the fiscal responsibilities of cities. From a public finance perspective, if the rationale for the exemption is that it helps to subsidize the provision of goods and services with community benefits, a more direct mechanism for providing support would be a direct-cost subsidy available to all nonprofits, not just property-owning ones.

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18. A simple and very rough calculation suggests that if applied to all nonprofits, the ad valorem subsidy might be on the order of 1 percent of program expenses, which would translate into an average amount of roughly \$80,000 per nonprofit (for the nonprofits examined in this chapter). This amount would be larger or smaller depending on each nonprofit's expenses and on whether the cost subsidy was limited to nonprofits engaged in certain types of activities.

A 2011 modification and formalization of the City of Boston's PILOT program represents a potentially important development in the ongoing relationship between nonprofits and their jurisdictions. On one hand, the Boston program remains voluntary, thus preserving the essential features of the nonprofit property tax exemption. On the other hand, by creating a formal structure under which requested PILOTs are to be determined and agreed on, the Boston plan addresses at least some criticisms that have been levied against such arrangements in other cities.

In the final analysis, we should not lose sight of the fact that nonprofits contribute in significant ways to American communities. Although the alignment of benefits and fiscal costs under the current nonprofit property tax exemption is far from perfect, in pursuing alternative fiscal arrangements, we would do well to heed the advice of Daphne Kenyon that cities should work with nonprofits, recognizing the economic and community benefits that many nonprofits provide.

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#### REFERENCES

- Boston Globe*. 2011. City sends "tax" bills to major nonprofits: Aims to triple voluntary payments within 5 years (25 April). [http://www.boston.com/news/local/massachusetts/articles/2011/04/24/boston\\_sends\\_tax\\_bills\\_to\\_major\\_nonprofits/?page=1](http://www.boston.com/news/local/massachusetts/articles/2011/04/24/boston_sends_tax_bills_to_major_nonprofits/?page=1).
- Bowman, W. 2002. Impact fees: An alternative to PILOTs. In *Property-tax exemption for charities: Mapping the battlefield*, ed. E. Brody, 301–319. Washington, DC: Urban Institute Press.
- Bowman, W., J. Cordes, and L. Metcalf. 2009. Property used for social purposes. In *Erosion of the property tax base*, ed. N. Y. Augustine, M. E. Bell, D. Brunori, and J. M. Youngman. Cambridge, MA: Lincoln Institute of Land Policy.
- Brody, E. 1998. Of sovereignty and subsidy: Conceptualizing the charity tax exemption. *Journal of Corporation Law* 23(4):585–629.
- . 2010. All charities are property tax exempt, but some charities are more exempt than others. *New England Law Review* 44(26 August):621–732.
- Brody, E., and J. Cordes, 2006. Tax treatment of nonprofit organizations: A two-edged sword. In *Nonprofits and government: Collaboration and conflict*, ed. E. T. Boris and C. E. Steuerle, 2nd ed. Washington, DC: Urban Institute Press.
- Chernick, H., A. Langley, and A. Reschovsky. 2011. The impact of the great recession on the financing of America's largest cities. Paper presented at the Lincoln Institute of Land Policy workshop Fallout from the Economic Crisis: How Are School Districts and Municipal Governments Coping? Cambridge, MA (22 April). <http://www.lafollette.wisc.edu/publications/workingpapers/reschovsky2011-008.pdf>.
- City of Boston. 2009. *Exempt property analysis: Educational and medical institutions*. Assessing Department. [http://www.cityofboston.gov/Images\\_Documents/ExemptRPT\\_09\\_WEB\\_tcm1-3932%5B1%5D\\_tcm3-8885.pdf](http://www.cityofboston.gov/Images_Documents/ExemptRPT_09_WEB_tcm1-3932%5B1%5D_tcm3-8885.pdf).
- . 2010. Mayor's PILOT Task Force. *Final Report and Recommendations* (December). [http://www.cityofboston.gov/Images\\_Documents/PILOT\\_%20Task%20Force%20Final%20Report\\_WEB%20\\_tcm3-21904.pdf](http://www.cityofboston.gov/Images_Documents/PILOT_%20Task%20Force%20Final%20Report_WEB%20_tcm3-21904.pdf).

- City of New York. 2011. NYC Finance. <http://www.nyc.gov/html/dof/html/property/property.shtml>.
- Cordes, J. J. 2011. Re-thinking the deduction for charitable contributions: Evaluating the effects of deficit-reduction proposals. *National Tax Journal* 64(4):1001–1024.
- Cordes, J. J., M. Ganz, and T. Pollak. 2002. What is the property-tax exemption worth? In *Property-tax exemption for charities: Mapping the battlefield*, ed. E. Brody, 81–112. Washington, DC: Urban Institute Press.
- Cordes, J. J., and B. A. Weisbrod. 1998. Differential taxation of nonprofits and the commercialization of nonprofit revenues. *Journal of Policy Analysis and Management* 17(2):195–214.
- Delaney, T. 2011. Boston's coercive PILOTs experiment should crash. *Huffington Post* (27 April). [http://www.huffingtonpost.com/tim-delaney/bostons-coercive-pilots-e\\_b\\_854531.html](http://www.huffingtonpost.com/tim-delaney/bostons-coercive-pilots-e_b_854531.html).
- Dewatripont, M., and J. Tirole. 1999. Advocates. *Journal of Political Economy* 107(1):1–39.
- Ferris, J. 1998. The role of the nonprofit sector in a self-governing society: The view from the United States. *Voluntas* 9(2):137–151.
- Foundation Center. 2011. Boston requests PILOT payments from area's largest nonprofits (26 April). <http://foundationcenter.org/pnd/news/story.jhtml?id=337400015>.
- Gulley, D. O., and R. E. Santerre. 1993. The effect of tax exemption on the market share of nonprofit hospitals. *National Tax Journal* 46(4):477–486.
- Hansmann, H. 1987. The effect of tax exemption and other factors on the market share of nonprofit versus for-profit firms. *National Tax Journal* 40(1):71–82.
- . 1980. The role of nonprofit enterprise. *Yale Law Journal* 89(5): 835–901.
- IAAO (International Association of Assessing Officials). 1997. *Standard on property tax policy*. Chicago.
- Jaynes, A. 2007. What is benevolence? Clarifying Wisconsin's real property tax exemption for benevolent organizations and the argument for the "retirement" of the exemption for high end senior-housing complexes. *Wisconsin Law Review* 2006(5):1434–1464.
- JCT (Joint Committee on Taxation, U.S. Congress). 2005. *Estimates of federal tax expenditures for fiscal years 2005–2009*. Washington, DC: Government Printing Office. <http://www.house.gov/jct/s-1-05.pdf>.
- Kenyon, D., and A. Langley. 2010. *Payments in lieu of taxes: Balancing municipal and nonprofit interests*. Policy Focus Report. Cambridge, MA: Lincoln Institute of Land Policy.
- Lipman, H. 2006. Cities take many approaches to valuing tax-exempt property. *Chronicle of Philanthropy* 19(4):13.
- Lustig, E. 2010. The Boston city task force: An emerging best practice? *New England Law Review* 44(60):601–619.
- Massachusetts Department of Revenue. 2003. A study of charitable and educational property tax exemptions: FY 2003 impact of MGL-592c/3. Division of Local Services. December.
- MTA (Minnesota Taxpayers Association). 2010. *How does Minnesota compare? Fiscal year 2008 comparisons: State by state rankings of revenues and spending; Includes*

- fiscal year 2009 rankings for state taxes only*. St. Paul (July). <http://www.mntax.org/cpfr/documents/HDMCFY08FINAL.pdf>.
- New York City Department of Finance. 2010. Property tax reduction programs. [http://www.nyc.gov/html/dof/html/property/property-tax-reduc\\_taxreductions.shtml](http://www.nyc.gov/html/dof/html/property/property-tax-reduc_taxreductions.shtml).
- Rose-Ackerman, S. 1982. Unfair competition and corporate income taxation. *Stanford Law Review* 34(5):1017–1136.
- Sansing, R. 1998. The unrelated business income tax: Cost allocation and productive efficiency. *National Tax Journal* 51(2):291–302.
- Schiff, J., and B. A. Weisbrod. 1991. Competition between for-profit and nonprofit organizations in commercial markets. *Annals of Public and Cooperative Economics* 62(4):619–639.
- Simon, J. G. 1987. The tax treatment of nonprofit organizations: A review of federal and state policies. In *The nonprofit sector*, ed. W. W. Powell. New Haven, CT: Yale University Press.
- State of Maryland. 2008. Maryland Department of Assessment and Taxation. <http://www.dat.state.md.us/>.
- Swords, P. 1981. *Public benefit real property tax exemptions in New York State*. New York: Association of the Bar of the City of New York.
- . 2002. The charitable real property-tax exemption as a tax base-defining provision. In *Property-tax exemption for charities: Mapping the battlefield*, ed. E. Brody, 377–379. Washington, DC: Urban Institute Press.
- Weisbrod, B. 1988. *The nonprofit economy*. Cambridge, MA: Harvard University Press.
- Wisconsin Department of Revenue. 2011. *Summary of tax exemption devices*. Madison: State of Wisconsin. <http://www.revenue.wi.gov/ra/11sumrpt.pdf>.
- Zodrow, G. 2007. The property tax as a capital tax: A room with three views. Paper updated for the James A. Baker III Institute for Public Policy, Rice University, Houston, TX (January). [http://www.bakerinstitute.org/publications/2007\\_propertytax\\_zodrow.pdf](http://www.bakerinstitute.org/publications/2007_propertytax_zodrow.pdf).