

Variation in Property Tax Abatement Programs Among States

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This research provides an exhaustive review of U.S. property tax abatement programs and identifies and compares critical structural differences of abatement programs across states. Program differences are much greater than the existing literature recognizes. As a result, perhaps the most comprehensive database on the diversity of property tax abatements is offered to practitioners who are considering the design of a new abatement program or the revision of an existing one, as well as to researchers interested in furthering research on the effectiveness of this policy tool. For each of the identified abatement program features, advantages and disadvantages are discussed in light of existing literature.

Keywords: *economic development; tax abatements; tax incentives; property tax; state and local finance*

Property tax abatements—full or partial relief from tax liability for certain parcels—constitute an integral component of many state and local economic development programs. Property tax abatements are limited to specific parcels and are awarded after a review process that often is both political and bureaucratic. They typically are targeted for improvements but not land, thereby enabling policy makers to use them to augment the attractiveness of particular locations for investment, rehabilitation, and other economic development.

However, there has been no attention given to the differing structures of abatement programs across the states. This article fills this void in the literature by providing an extensive and exhaustive review of property tax abatement programs currently offered in the United States. It identifies the states that have abatement programs and describes and compares the following critical structural differences in the various state programs: awarding procedure; existence of claw-back, sunset, or sunshine provisions; purpose of abatements; abated property classes; abated property uses; special eligibility requirements; specific abatement mechanisms and schedules; and cost distribution arrangements between state and local tax districts. As a result, perhaps the most comprehensive database on the diversity of property tax abatements is offered to practitioners who are considering the design of a new abatement program or the revision of an existing one, as well as to those interested in furthering research on the effectiveness of this policy tool. For each of the aforementioned abatement program features, advantages and disadvantages are discussed in light of existing literature on the topic.¹

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This research required an accurate, consistent, and complete inventory of abatements and their significant characteristics across all states. To create this inventory, a multistage review process was employed. The first stage was the review of statutes and tax services. This consisted of a detailed search of state statutes, tax codes, regulations, and informative briefs provided by Tax Analysts (www.taxanalysts.com) and the Commerce Clearing House, as well as directly by state government Web sites and officials. This was done for all 50 states. This review provided both a compilation of significant characteristics of tax abatement programs and a preliminary categorization of the abatement program in each state. The second stage consisted of establishing state contacts. The results of the initial categorization of each state's abatement program were sent to tax and economic development officers of each state for verification, correction, or expansion. The responses from these contacts were added to the data set. The final stage was verification. We called and e-mailed tax and development agency personnel to resolve any conflicts between information sources and to answer remaining questions about abatement program characteristics. State officials validated a summary for each state and the contents of the data set.

The article contains four sections: a background section that defines property tax abatements and provides a brief history of their use, a brief review of the abatement literature, a state-by-state comparison of abatement programs, and a summary and conclusion.

BACKGROUND

Definition of Abatement

Numerous programs either reduce the cost of or provide funds for economic development and redevelopment. Among these are tax increment financing and numerous property tax relief programs, one of which is property tax abatement.

This article focuses on stand-alone property tax abatement programs (SAPTAPs) only. SAPTAPs are defined as programs with four central elements: (a) They provide for a reduction in tax liability for select parcels; (b) they have a purpose beyond tax relief alone, such as redevelopment or economic development; (c) there is a time limit on how long the reduction remains in effect; and (d) they can be used by themselves and not in conjunction with other incentive programs.²

Brief History of Abatements

Property tax abatements may be as old as home rule and profit-maximizing firms. However, their emergence as programmatic policy tools for the enhancement of economic development in the United States is related to the growing role of states in the area of economic development policy. The origin of these programs is tied to the efforts of southern states to industrialize their predominantly agricultural economies through the recruitment of low-wage industries from the Midwest and Northeast.³ Their subsequent rapid expansion in the post-World War II period is due predominantly to the structural change in the U.S. economy and to the devolution of state prerogatives that occurred in the 1970s and 1980s. Both of these phenomena led states and localities into heated competition for revenue sources and economic base and forced them to become more proactive in promoting economic development (Wilson, 1993). The number of states offering property tax abatements has gone from 15 in 1964 (Alyea, 1969) to the 35 encountered by this study.

The focus of property tax abatement programs has evolved over the years. Initially, the emphasis was on narrow industrial recruitment objectives. Now programs emphasize broader economic development and redevelopment purposes, with special attention to expanding the tax base.⁴ In addition, the abated property uses have been expanded to include not only industrial and manufacturing property but also commercial and residential and property used for primary activities, such as mining, forestry, and agriculture, or used to perform services.

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REVIEW OF THE LITERATURE ON TAX ABATEMENTS

The literature on property tax abatements forms part of a broader literature on taxation and economic development. It is often difficult to distinguish where one ends and the other begins, and especially difficult to discern whether the findings with respect to one policy tool are equally applicable to another. One segment of the empirical literature focuses on the relationship between levels of taxation and economic development and has found evidence suggesting that tax levels may be related to outcome variables such as jobs and investment (Bartik, 1991; Wasylenko, 1997). However, words of caution have been expressed (Lynch, 1996; McGuire, 1992), and recent evidence has suggested that states may actually be converging and making their tax systems similar (Annala, 2003).⁵ Another segment of the empirical literature has focused on the effects of incentive packages and enterprise zones and has provided mixed results (Fisher & Peters, 1997).

One should always ask whether the findings of such literatures are applicable to property tax abatements. Caution is advised in this regard. For example, a reduction in the general level of taxation, say, the effective rate, is not the same as a property tax abatement. The latter may be likened to a reduction in the beneficiary's tax rate, but abatements often may also signify a parallel and general increase in the tax rate for the entire community. Therefore, the policy tools are not comparable, and the effects found with respect to one should not be predicted without further analysis to the other.

For this reason, the research reported in this section refers specifically to property tax abatements. This literature can be divided into three categories: the determinants of tax abatements, their effectiveness, and public policy issues surrounding them.

Determinants of Abatements

Scholars have been concerned with the reasons for establishing and propagating abatements, as well as community characteristics that are related to the offering of abatements in different forms. Wolkoff (1983), for example, found property tax abatements were attractive and popular alternatives for the following reasons: (a) They can be applied to all applicant firms; (b) the property tax is one of the few (though small) components of the firm's cost function that local governments can manipulate; (c) availability of abatements in one jurisdiction pressures other jurisdictions into adopting similar programs; and (d) the implementation of abatements, much like most tax expenditures, is quite easy, given that there is no visible diversion of funds from any other program or group currently being supported.

Wassmer (1992), in his analysis of Detroit metropolitan area data, suggested that local governments offered property tax abatements to compensate for the fact that a community's negative or profit-reducing characteristics had not been fully capitalized into lower land prices. Abatements, therefore, substitute for an efficiently operating market system for land. Anderson and Wassmer (1995) noted that localities tended to feel pressure to adopt an abatement program to avoid losing economic base to neighboring localities, yet higher median income and public service property tax prices reduced this pressure. However, they did find that localities felt the need to emulate abatement programs offered by competing localities.

Reese (1991) focused on what affected the amount of dollars abated in property tax programs. She found that population size was a determinant in the case of commercial abatements, whereas growing economies, as measured by total dollars of new development, competitive mayoral races, or the presence of an independent economic development department, affected the amount of abated dollars in the case of industrial property.

Byrnes, Marvel, and Sridhar (1999) examined the abatement offers cities made to firms under the Ohio Enterprise Zone program and found that more generous abatements were awarded to firms with better credit ratings and to firms that offered to create jobs, compared to firms that offered only to retain jobs.

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Effectiveness

A second thread in the literature is concerned with the effectiveness of abatement programs. Most often, "effectiveness" means whether abatements induce investment, jobs, firm location or relocation, or, in the last instance, achieve benefits that exceed costs.

The earliest attempt at verifying whether abatements induce investment was done by Ross (1953), who applied the survey approach to firms receiving abatements in Louisiana and concluded that abatements were ineffective, given that only 7% of investments would not have been made without the abatements. Similarly, Morse and Farmer (1986) used a survey approach on firms receiving abatements in Ohio and found that the percentage of investment influenced was 25%. However, Morse and Farmer concluded that abatements were effective (in the sense of breaking even) from the standpoint of local jurisdictions, given that abatement awards were reimbursed by the state. Had there been no state subsidy, abatements would have been considered ineffective. Royse (1994) also used a survey approach and found that actual jobs and investment created generally exceeded those promised by companies. Problems with a survey approach (biased answers, etc.) are well known and will not be elaborated here.

Other approaches have been used: Morgan and Hackbart (1974) concluded that if abatements accounted for 5% to 10% of the increase in property value, a positive net present value could be achieved. Coffin (1982) found evidence that abatements slowed the exodus or relocation of firms from the inner city. Wolkoff (1985) estimated that full abatement could decrease the price of capital by 4%, assuming a tax rate of \$80 per \$1,000 and an assessment ratio of 0.5. However, this percentage fell considerably short of the 75% reduction required to increase the probability of investment from .23 to .39. Wassmer (1991) found a significant and negative relationship between abatements and expenditures, which suggests that abatements may be ineffective at inducing investment. Severn (1992) demonstrates that abatements approximate permanent reductions of tax rates on buildings as the abatement period increases. Chang (2001) determined that the effect of abatements on job creation varied by the type of sector involved. Abatements given to the service sector were more effective at creating jobs than were those given to the industrial sector because of higher ratios of capital to labor in the latter. Finally, the most recent peer-reviewed study indicated that industrial abatements were effective only at increasing the tax base in the first years of the program; industrial abatements given at a later stage and commercial abatements were found to decrease the tax base of local jurisdictions (Wassmer & Anderson, 2001).

On a somewhat different note, Beck (1985, 1993) suggested that conceptually, abatements could be used to increase revenues, assuming that they were granted only to businesses that in the absence of abatements would not have made new investments.

In sum, the evidence on abatement effectiveness is mixed and leans toward the tentative conclusion that if abatements are effective, they are only partially, temporarily, or conditionally effective at best. This conclusion is what leads to the policy discussion on how best to limit property tax abatements.

Policy Issues

Several policy issues related to property tax abatements have also been discussed in the literature. The primary issue is how to constrain abatements if they are, in fact, of limited effectiveness. The options that have been discussed include allowing state and local governments to freely continue offering abatements, establishing a federal prohibition on abatements, enacting federal incentives that discourage abatements, reaching noncompete agreements between independent cities, putting forth more stringent contractual provisions, resorting to the courts to enforce abatement agreements, and limiting abatement to specific blighted areas (Bartik, 1991; Morse & Farmer, 1986; Nunn, 1994; Wassmer & Anderson, 2001). The proposition that appears to be gaining acceptance is that of limiting abatements to blighted areas (Bartik, 1991; Wassmer & Anderson 2001).

Another related issue is what Wolkoff (1983) calls the problem of invariant awards, or the lack of firm targeting. After reviewing the operation of abatement programs in New York City, Ohio,

and Michigan, Wolkoff concluded that “all awards were made for the same length of time and at the same abatement rate” (p. 81).⁶ He recommended establishing low-cost rules that might enhance the payoff of abatements (such as implementing an abatement budget), having local governments assume the full cost of the abatement, and creating other rules that would help distinguish between high-payoff abatements and projects that needed no encouragement.

Research on abatements and propositions on how to constrain or redesign abatement programs can be enhanced by knowledge of the diverse structural features of such programs across the American landscape. The following section identifies and discusses these structural features.

CROSS-STATE COMPARISON OF PROPERTY TAX ABATEMENT PROGRAMS

Table 1 contains information on the design features that have been adopted by each of the 35 states that offer SAPTAPs.⁷ Table 2 discusses the advantages and disadvantages of the different SAPTAP features. Together, these two tables provide a complete accounting and analysis of the SAPTAP design features currently employed in the United States.

It is clear from Table 1 that there is a large amount of variation across states. Some states operate a single program with a narrow objective, some operate one program with several objectives that have some degree of differentiation between them, whereas others operate two or more separate programs with noticeable variation in the awarding process, objectives, and benefits. To illustrate cross-state variation, Table 3 contrasts Florida’s Economic Development Ad Valorem Tax Exemption Program with Missouri’s Urban Redevelopment Corporation Program. Overall, out of the 35 states that have SAPTAPs, 15 have one program and the remaining 20 have two or more programs with considerable within-state variation.⁸

Purposes of Abatements and Special Conditions for Awards

The general purpose of the vast majority of SAPTAPs is the promotion of economic development or redevelopment, or both. Clearly, these objectives overlap, yet the former generally emphasizes economic growth whereas the latter generally focuses on the regeneration of an area that qualifies as a blighted zone. Of course, economic development and redevelopment are not the central purpose of all SAPTAPs. For example, the Illinois Leased Low-Rent Housing Abatement Program emphasizes redistribution. The reduction in the tax liability resulting from the abatement is reflected in lower levels of rent paid by tenants.

All states with SAPTAPs require the construction or expansion of improvements to land in order to receive tax benefits. Clearly, the goal of such a requirement is to increase the property tax base, but this principle is not absolute. For instance, South Carolina and Oklahoma deviate from this pattern by extending abatements to companies changing ownership in an arms-length transaction, which results in the retention of the company and its jobs without new construction taking place.

Some states have stricter standards and establish specific conditions to trigger benefits. These special conditions can take the form of capital investment or value-increase thresholds,⁹ job or payroll increase thresholds,¹⁰ or job retention conditions. Table 4 shows a clear preference of states for capital investment or value-increase thresholds. Capital investment or value-added threshold requirements are established either as absolute quantities or as a fraction of current property value and are quite diverse.¹¹ Job retention requirements tend to be more vague because the number of retained jobs varies from applicant to applicant.

Other special conditions include increases in state exports (Alaska and Florida), provision of a basic health benefit plan to full-time employees (Oklahoma), a minimum spread between the average tax rates of neighboring counties (Minnesota), and minimum average wage rates (\$12.10 per hour or better) in Indianapolis, Indiana (Chang, 2001).¹²

Again, these requirements are not applied across the board in each state. For example, Mississippi’s capital investment threshold requirement applies only to the payment-in-lieu-of-taxes

TABLE 1
Characteristics of Property Tax Abatements by State

[illegible]

TABLE 2
Advantages and Disadvantages of the Abatement Program Features

<i>Feature</i>	<i>Advantages and Disadvantages</i>
1. Special conditions	Special conditions (threshold investment or job increases) may enhance prospects of achieving positive net benefits, especially where local governments fail to distinguish among applicants. First, the greater the condition, the larger the eligible firm. Large firms should be targeted because they are more likely to have alternative location options (Ross, 1953; Wolkoff, 1981). Second, the greater the condition, the larger the benefits, making it more likely that benefits will exceed costs. However, special conditions discriminate against smaller and local firms and may be considered inequitable.
2. Discretionary vs. as-of-right	Discretionary, flexible award processes enhance prospects of improving effectiveness and achieving net positive benefits because they afford local governments the possibility of tailoring awards to individual applicants. However, uniform awards (even if discretion is given) are empirically the norm; they are easy and cheap to administer and justify, and they reduce uncertainty to investing firms (Wolkoff, 1983). States could require some minimum differentiation among applicants in the enabling legislation.
3. State vs. local award process	Ross (1953) suggested that the administration of the abatement program may be best put in state hands where there is concern about low assessment agreements between firms and local governments.
4. Award process by referendum	Nunn (1994) suggested that abatements undermined local democracy. A referendum would certainly democratize the award process. Most states settle for unbinding public hearings and ex post facto communication to citizens. A referendum clause would limit the use and duration of abatement programs, which, according to Wassmer and Anderson's (2001) most recent findings, may be the most effective way to offer abatements.
5. Specific target area	Designating specific target areas may be a crucial part of whether benefits of abatement programs exceed costs. It is recommended that blighted areas be targeted because a greater value will be placed on additional jobs created and because negative characteristics that discourage investment may be counteracted (Bartik, 1991, 1994; Wassmer & Anderson, 2001).
6. Land, improvements, and personal property	Considering evidence that abatements are at best partially and conditionally effective, abatements should be at least limited to property that increases the tax rolls of local jurisdictions. Therefore, land should be excluded and abatements offered only to improvements. Personal property abatements warrant special attention, given that personal property is movable and has a shorter life, compared to real property. In Indiana, despite a local award process, personal property abatements are ultimately handled by state authorities.
7. Commercial vs. manufacturing	Most recent evidence indicates that manufacturing abatements are effective during the first years of a program but that commercial abatements are not effective at all (Wassmer & Anderson, 2001).
8. Mode of abatement	If abatements are truly an exchange, and not just relief, it makes sense to define incentives as a function of what applicants offer in return, typically value added (tax base) or jobs. Therefore, options such as percentage of valued added, value freeze, rate reduction, and reclassification (if the latter two are applied to value added) have the advantage of limiting abatement awards and enhancing prospects of achieving net positive benefits, all things equal. All other options (save deferral) have the potential of offering incentives incommensurate to benefits received.
9. Duration	Duration and mode of abatement together define the bounds of the incentive offered to each applicant. The longer the duration, the more generous the award. Duration of personal property should depend on the useful life of the asset. Again, legislatures should be mindful of the tendency to award uniform abatements that afford maximum allowable benefits. Finding ways of promoting the tailoring of awards to project costs and benefits is suggested.
10. Sunset provision	Given the evidence cited in #7, a sunset provision may also be an excellent way to enhance the effectiveness of abatement programs. Sunset provisions also afford the opportunity to evaluate the program.
11. Claw-back provision	There is recurring evidence that businesses do not always follow through with the stipulations of abatement awards (number of jobs offered, etc.). Therefore, a claw-back provision and its strict enforcement is a must-have to enhance effectiveness prospects.

(continued)

TABLE 2 (continued)

Feature	Advantages and Disadvantages
12. Cost bearing	Four criteria or objectives that may imply or exclude each other have been used to distribute the cost of abatements: (a) to have awarding jurisdictions bear the costs, (b) to relieve jurisdictions that are more sensitive to the impacts of abatements, (c) to minimize the amount of the incentive, and (d) to maximize the amount of the incentive. Implementing (a) has the advantage of not affecting jurisdictions with no say in the process. Implementing (b) has the advantage of relieving jurisdictions that are heavily reliant on property tax revenues (typically school districts) from the fiscal stress (increase in both demand for services and deductions from the tax base), planning disruptions, and increased antitax sentiment that may be caused by abatements. However, achieving (a) or (b) also minimizes the size of the incentive and thereby achieves (c). The advantage of achieving (c) is that it may enhance the prospects of attaining positive net benefits. In contrast, establishing that all overlapping jurisdictions will bear the costs (implementation of d) will most likely not achieve (a) or (b) but will maximize the size of the incentive and decrease the prospects of achieving positive net benefits. A greater incentive may be more enticing to firms though harder on the finances of government and community.
13. State reimbursement	State reimbursement may contribute to (b) in #12. Also, the effect of this option is to decrease the percentage of investment that must be induced for a local jurisdiction to break even (Morse & Farmer, 1986). In any event, it translates into a state subsidy that may induce local jurisdictions to award abatements indiscriminately.

TABLE 3
Comparison of Florida and Missouri Abatement Programs

<i>Florida's Economic Development Ad Valorem Tax Exemption</i>	<i>Missouri's Urban Redevelopment Corporations Law</i>
Authority to award abatements is given by referendum for 10 years, renewable for another 10 years.	Authority to award abatements is given indefinitely by enabling legislation.
Award process is local discretionary.	Award process is local discretionary.
No target area requirement.	Target area must be blighted.
Development plan not required.	Development plan required.
Abatements open to eligible new business or expansion of existing business (industrial and commercial).	Abatements restricted to for-profit urban redevelopment corporations organized under a specific law.
Diverse job-creating requirements. Commercial firms must export 50% of goods.	No special conditions for abatement awards.
Real and personal property is abated.	Only real property is abated.
Abatement consists of up to 100% of assessed value of new improvements and new personal property for 10 years.	10-year tax holiday on improvements. For next 15 years, improvements assessed at 50% or less of value. Payments may be made in lieu of taxes.
Only the base of the awarding jurisdiction is affected.	The award affects the base of all overlapping jurisdictions (state included).

option, not to the other modes of abatement offered. Minnesota's similar requirement applies to only one of its six programs.

Process for Granting Abatements

Earlier research suggested that the process for granting property tax abatements involved one of two approaches; either local approval or statewide as-of-right (Wolkoff, 1985). However, the more detailed state-by-state analysis performed for this article has revealed a much more robust set of options for granting abatements. These options include local discretion, state discretion, joint local-state discretion, and as-of-right. In addition, some states require a public referendum for some part of the process. And, as noted before, there also is within-state variation.

A discretionary award means that local or state authorities, given certain criteria, have the flexibility to award or not to award an abatement on a case-by-case basis. An as-of-right award means that given certain requirements in state statute, if an applicant complies with these requirements, the abatement must be awarded to the applicant. The role of the authority in the latter is simply to verify that requirements are met.

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TABLE 4
Special Conditions: Proportion of Adopting States

<i>Condition Required</i>	<i>No. of States</i>	<i>% of 35 States</i>
Job retention	2	5.7
Threshold increase in jobs/payroll	8	22.9
Threshold increase in investment or value	18	51.4

TABLE 5
Type of Award Process: Proportion of Adopting States

<i>Type of Award Process</i>	<i>No. of States</i>	<i>% of 35 States</i>
Discretionary (local, state, or joint)	34	97.1
Local discretionary	23	65.7
State discretionary	6	17.1
Joint local/state discretionary	8	22.9
As-of-right	7	20.0
Public referendum	3	8.6

As Table 5 shows, by far the most popular method of granting abatements is the discretionary award process in its different forms, which dwarfs the use of the as-of-right method or the referendum. Again, within-state variation and other interesting variants also take place. Connecticut, Illinois, Missouri, New York, Oklahoma, and Oregon have an as-of-right process, in addition to a discretionary process. Missouri's Enterprise Zone program is a hybrid, with a minimum as-of-right component to the abatement and a discretionary component that may be added.¹³ Only Alabama, Alaska, and Florida require a public referendum for some part of the process.¹⁴

Scope of Abatements: Target Area, Property Class, Mode, Duration, and Amount

The scope of abatements also can vary widely among states. This variation can occur in the existence of a target area, the property class eligible for abatement, the mode or manner in which the abatement is granted, the duration of the abatement, and the amount or value of the abatement.

Target area and abated property classes. The importance of target areas has already been expressed in Table 2. However, only 15 of 35 states (42.9%) target specific areas. As stated in the introduction and in Table 2, abatement programs make the most economic sense when offered on improvements to land, not land itself. The data summarized in Table 6 confirm that most states do, in fact, abate improvements but also show that a hefty portion of states abate land as well. This should be cause for concern.

Twenty-four of 35 states abate personal property. Of the remaining 11 states, 4 abate real estate exclusively and 7 do not tax personal property, so abating personal property is not necessary.

Abatement programs commonly are associated with manufacturing or commercial activity. However, this analysis found that abatements also are awarded on residential property and primary activities, such as mining, forestry, and agriculture. Research to this day, however, has not considered abatement for residential property or primary activities. Table 7 illustrates the relative importance of each property use across states, showing that industrial and commercial abatements are by far the most popular. If research by Wassmer and Anderson (2001) is correct and can be generalized, the popularity of commercial abatements is also a cause of concern.

States and localities have been criticized for awarding abatements indiscriminately (Wolkoff, 1983). One aspect that influences generosity of awards is the method of defining beneficiaries. In defining economic activities that will benefit from the abatement, states show considerable variation. Most choose a broad approach by simply stating that the abatement applies to industrial, commercial, or residential property. North Dakota, for example, uses the term "revenue producing property" for one of its programs. The implication of using these generous terms is that the breadth of beneficiaries is equally broad.

TABLE 6
Abated Property Classes: Proportion of Adopting States

<i>Property Class</i>	<i>No. of States</i>	<i>% of 35 States</i>
Improvements	32	91.4
Land	16	45.7
Personal property	24	68.6

TABLE 7
Abated Property Uses: Proportion of Adopting States

<i>Use</i>	<i>No. of States</i>	<i>% of 35 States</i>
Commercial/tertiary	29	82.9
Industrial/manufacturing	33	94.3
Primary activities	9	25.7
Residential	20	57.1

Other states use lists of specific abated activities with different degrees of specificity; however, lists differ on whether they are illustrative or limitative. Montana, for example, uses an illustrative list of activities,¹⁵ whereas Alabama, Colorado, Kansas, Maryland, and Mississippi use a limitative list.¹⁶ Missouri's Enterprise Zone program has a mixed approach. The minimum as-of-right component of the abatement applies only if improved properties are "used for assembling, fabricating, processing, manufacturing, mining, warehousing or distributing properties," whereas the discretionary component does not specify use of property but requires a minimum number of jobs to be produced by the abatement.

Mode of abatement. Abatements are commonly understood as a deduction of new investment from the property tax base (Beck, 1985; Wolkoff, 1985). As Table 1 indicates, there are a variety of ways by which property taxes are abated. These include fraction of tax liability, reimbursement or incentive payment, fraction of value, fraction of value added, value freeze, rate reduction, reclassification, payments in lieu of taxes, and deferral of tax payment. Table 8 illustrates the relative importance of these modes for U.S. states. In view of what has been expressed in Table 2, a positive sign is that those modes tied to new investment are the most popular. However, many states make use of modes that are not tied to new investment and have the potential of becoming overly generous.

Fraction of liability is a credit against property taxes owed.¹⁷ Reimbursement or incentive payment is very similar to the previous category, except that the full property tax payment is made and then the government reimburses a fraction.¹⁸ Fraction of value is a temporary exemption or deduction from assessed value.¹⁹ Fraction of value added is a temporary exemption or deduction of the value added by the new investment or expansion to the original value of land and improvements. The difference between fraction of value and fraction of value added is that the former can potentially include a deduction of the assessed valuation on land and improvements existing before the new investment.²⁰

Value freeze generally means that property taxes continue to be levied on the amount of assessed value of land and improvements that existed before new investments were made. The main difference between this method and the two previous methods is that a value freeze does not operate as a deduction, but rather assessed value is set at a given level for a certain amount of time. However, value freeze can be materially very similar to the deduction of a fraction of value added. Roughly speaking, a value freeze (considering the value of property at the onset of new investments) is equivalent to a deduction of 100% of value added or a tax increment finance scheme in which the firm retains the tax increment for its own use.²¹

The only program using rate reduction is Michigan's Enterprise Zone. Though technically one method of calculating the tax is substituted for the generally applicable method, the scheme translates into a 50% reduction of the rate that is applied to the increase in value of the property for 5

TABLE 8
Mode of Abatement: Proportion of Adopting States

<i>Mode</i>	<i>No. of States</i>	<i>% of 35 States</i>
% of tax liability	8	22.9
% of value	12	34.3
% of value added only	15	42.9
Value freeze	6	17.1
Rate reduction	1	2.9
Reclassification	1	2.9
Payments in lieu of taxes	3	8.6
Deferral of tax payments	4	11.4
Reimbursement/incentive payment	4	11.4

years from the date of certification. Reclassification involves temporarily cataloguing property in a different use class to which either lower assessment ratios or lower rates are applied. Hawaii's Wasteland Development Property Program is an example of this mode of abatement.²² Property to be developed is reclassified as wasteland and assessed accordingly. Payments in lieu of taxes, also known as PILOTs, are negotiated amounts that are paid instead of taxes.²³ Last, deferral of payments has the main benefit of reducing the present value of tax payments for government and increasing liquidity for taxpayers.²⁴

These different modes of abatements are relevant for research purposes. Take, for example, Beck's (1985) theoretical model on abatements as a tool to increase revenues. One important assumption discussed in the article is the ability of jurisdictions to discriminate among applicants. However, another important assumption not discussed is the mode of abatement. In Beck's two-period model, investments are fully abated in the first period, which is equivalent to a 100% deduction of value added during the abatement period. It follows that a model of abatement different from this would influence the findings.

Duration of property tax abatement. Table 9 illustrates the proportion of states that have adopted the different maximum abatement duration periods. Clearly, a maximum abatement period of 10 years is the most popular, followed by 5 years. One outlier that is not contained in Tables 1 or 9 is Illinois's Leased Low-Rent Housing Abatement Program, where the reduction in the tax can go on as long as the lease lasts. For comments on the implications of different durations, please refer back to Table 2.

Amount. There is wide variation across states in the amount of abatement allowed, making it difficult to classify states according to this criterion. Generally, the absolute or relative amount of the abatement depends on many factors that must be considered at the same time, including:

- (a) Duration. The greater the duration, the greater the amount of the abatement. However, one must bear in mind that the actual duration depends, in many instances, on the discretion of the awarding authorities (assuming that this discretion will be exercised).
- (b) Abatement schedule. Some states offer a flat rate over the entire period, even as much as 100% of value or more. Other states offer a schedule in which the fraction of abated value is reduced every year.
- (c) Mode of abatement. Some modes have the potential to be more generous than others, therefore posing a greater threat to revenue flows. Clearly, fraction of liability, fraction of value, reimbursement, and payment in lieu of taxes are less constrained modes of abatement than fraction of value added, value freeze, deferral of payment (in a low-inflation world), and rate reduction (if the latter is limited to value added).
- (d) Property class or economic activity. Awards to industrial property, given the magnitude of industrial investment, generally result in greater revenue losses than abatements to commercial property and residential property.
- (e) The difference in current levels of mill rates across states. A state with low rates and a small abatement may, in fact, be placing a less onerous burden on a taxpayer than does a state with high rates and a large abatement.

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(e) The difference in current levels of mill rates across states . . .
(f) Differences in depreciation schedules for personal property.

TABLE 9
Maximum Duration: Proportion of Adopting States

<i>Maximum Duration</i>	<i>No. of States</i>	<i>% of 35 States</i>
25 years	2	5.7
20 years	3	8.6
17 years	1	2.9
15 years	4	11.4
12 years	3	8.6
10 years	21	60.0
7 years	1	2.9
5 years	12	34.3
3 years	1	2.9
2 years	2	5.7
1 year	2	5.7

- (f) Differences in depreciation schedules for personal property. These must also be considered to compare the generosity of one state versus another (in the case of personal property).

Abatement Oversight: Termination

Nunn (1994) and others have commented on the difficulties that state and local governments have had in ensuring that enterprises follow through with the bargained investments. However, as attention has focused on this issue, policies have been implemented that provide more leverage for the governments granting abatements. These policies include termination, claw-back, sunset, and sunshine provisions.

Terminations and claw-backs are the two more dramatic approaches used to punish enterprises that fail to live up to the promises made in order to receive an abatement. The first approach is to simply terminate the award, thus negating future benefits. The second approach goes one step further, terminating the abatement and requiring beneficiaries to return previously acquired tax benefits.

Some states formally establish a termination clause in their statutes, whereas others do not. This distinction is not reported in Table 1 because regardless of whether such a termination clause is established in statute, termination is inherent in the legal nature of the contract or award. In case of noncompliance, the state or locality will always have termination as its legal recourse. However, the threat of termination often is not enough to motivate beneficiaries because they stand to lose prospective benefits only if they are noncompliant. Retroactive effects, or claw-back provisions, are much more effective. These provisions punish the beneficiaries for not complying by ending their ability to receive benefits prospectively and by requiring repayment of all benefits retrospectively.²⁵ Our study has reported that 14 in 35 states have mandated or enacted claw-back provisions in one form or other (see Table 10).

Claw-backs are not necessarily established across the board in a particular state. For example, Minnesota has a claw-back provision for only one of its six programs, and Illinois and Indiana, despite the existence of a claw-back provision in statute, allow this provision to be waived in the specific contract. Also, the aforementioned 14 states may not be the only states that have established claw-back provisions. It is possible that any state that awards abatements on a discretionary basis may establish such clauses in the specific award or contract.

Sunset provisions are also an important aspect of property tax abatements. Most states have established their programs on a permanent basis. California, Florida, Indiana, Michigan, New Jersey, Oregon, Texas, and West Virginia, however, see abatements as a transitory policy and have established sunset provisions of some form or another. Last, Indiana has a formal sunshine provision that requires the county auditor to publicize approved deductions in newspapers of general interest and readership.²⁶

TABLE 10
Claw-Back and Sunset Provisions: Proportion of Adopting States

<i>Provision</i>	<i>No. of States</i>	<i>% of 35 States</i>
Claw-back	14	40.0
Sunset	9	25.7

TABLE 11
Cost-Bearing Arrangement: Proportion of Adopting States

<i>Arrangement</i>	<i>No. of States</i>	<i>% of 35 States</i>
All overlapping localities	16	45.7
State and all overlapping localities	7	20.0
Awarding locality	15	42.9
School tax exclusion	5	14.3
Counties only	1	2.9
State reimbursement (to localities)	6	17.1

Which Governmental Units Bear the Cost of Abatements?

Unless rates are raised, the revenue loss resulting from abatements must be borne by one or more governmental units, all else equal. This analysis found five different alternatives used by states to determine which entities would shoulder the revenue loss. This is referred to as cost bearing in Table 1. One approach is for all overlapping local taxing districts to bear the cost of the abatement, regardless of who awards the benefit. This means that regardless of which unit of government (state, county, municipality, etc.) formally awards the abatement, its action affects the revenues of all the local taxing units—the county, municipality, school district, township, and any other overlapping jurisdictions.²⁷ A second approach is for the awarding unit alone to suffer the revenue loss.²⁸ A third approach is for the state and all overlapping local jurisdictions to absorb the revenue loss, meaning statewide and local levies are affected.²⁹ A fourth approach is to specify which local units are affected. For example, South Carolina limits the state's as-of-right abatement to county revenues only, whereas Alabama, California, Kansas, Michigan, and Mississippi give special consideration to school levies and preclude them from being abated.³⁰ Finally, some states choose to reimburse local taxing districts in some form or another. This is the case in Colorado, Connecticut, Maine, Michigan, Oklahoma, and Vermont. Table 11 provides the proportion of states that have adopted diverse cost-bearing arrangements.

States adopt cost-bearing approaches in various ways. The following examples provide a flavor of the interesting variation among states. In Montana, revenue loss is borne by the awarding municipality and partially by the overlapping school districts. However, only the mills assessed for local high school and elementary school are affected; other school levies are not affected. Missouri has two SPTAPs: One affects all overlapping local taxing units and the other affects only the awarding jurisdiction and any other "consenting" taxing unit. Minnesota has five different SPTAPs, and these vary considerably in terms of how the revenue loss is borne (see Table 1). Finally, in Michigan revenue losses are borne essentially at the local level, but the state treasurer has the option to include statewide mills.

SUMMARY AND CONCLUSION

This article provides perhaps the most comprehensive database available on the diversity of property tax abatements across the U.S. landscape. The main design features of property tax abatement programs are reported, and advantages and disadvantages of each are discussed in light of

existing literature. This data set and analysis can be potentially helpful to practitioners who are considering the design of a new abatement program or the revision of an existing one.

The main conclusion that has been reached through this analysis is that abatement programs are overly generous. The review of the literature conveyed the sense that if effective, property tax abatement is only partially, temporarily, or conditionally effective, and that care should be taken to limit awards in such a way that positive net benefits can be achieved. However, our review of the different structural elements of abatement programs across states has found that a good portion of states lean toward those features that are most generous. For instance, 16 of 35 states abate land even if it results in a tax break on preexisting property. Twenty-four of 35 states abate personal property. Personal property abatements warrant special attention, given that personal property is movable and has a shorter life, compared to real property. Thus, the contribution of personal property to the tax base could be less stable. Twenty-nine of 35 states abate commercial property. Recent literature suggests that commercial abatement does not have an impact on the tax base. Only 14 of 35 states establish claw-back provisions, and in some this clause might not be enforced. Also, only 15 of 35 states target specific areas. Researchers, however, suggest that targeting blighted areas may be the only way to guarantee positive net benefits. Affecting the tax base of all overlapping local jurisdictions is the most popular cost-bearing feature among states and the most generous, as well. This inclination toward generosity may well make costs outweigh benefits in the final analysis for most local and state governments.

This data set and analysis should also be useful to researchers interested in furthering research on the effectiveness of this policy tool and in generalizing their findings. As discussed previously, a property tax abatement program can be more or less generous depending on the specific design features that are adopted. A program that is designed generously will surely have a greater impact on firm costs, on investment or location decisions, and on the calculus of costs and benefits. Thus, the data set and analysis presented here will provide researchers not only with a framework to compare abatement programs but also with valuable elements to choose programs with design features that maximize the possibility of affecting investment or location. By the same token, after a particular program has been analyzed, these same elements can be used to ascertain where a particular program stands in comparison with programs in other states and to make more reasoned statements about generalizing findings. Also, this study has uncovered areas such as residential or primary activity abatements and personal versus real property abatements that have not been considered by researchers thus far and represent potential avenues for future analysis.

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NOTES

1. Readers interested in detailed descriptions of particular abatement programs are referred to Mikesell, Zorn, Dalehite, and Park (2002). This report can be requested from the Lincoln Institute of Land Policy.

2. A number of property tax relief programs exist that do not qualify as stand-alone property tax abatement programs (SAPTAPs). The common thread among these programs is that property tax relief is only one component of a larger, more complex incentive program. A brief description of some of these programs will help refine the distinction between SAPTAPs and other incentive programs. Michigan's Renaissance Zone program is not considered a SAPTAP because it includes various incentives in addition to property tax abatements. Nebraska offers personal property relief as a component of a more complex bundle of benefits. Tennessee offers an indirect property tax relief program. Local governments or state agencies can finance the development of public (tax exempt) property through the issuance of bonds. The developed property is then leased to recruited businesses, which make lease or rent payments that cover the debt service and, sometimes, payments in lieu of property taxes. The leasehold interest is subject to property taxation, but it is valued in such a way that the business is awarded a de facto exemption, though technically there is no exemption provided. Arizona has a program called the Government Property Lease Excise Tax. It is for businesses that lease government-owned, property-tax-exempt parcels from the city. However, an excise tax is imposed, which varies by square footage, height of building, and building use. If the parcel is in a redevelopment area and the development projects result in an increase of property value of at least 100%, then it can be abated for the first 8 years (J. Chapman, Arizona State University, personal communication, September 5, 2002).

3. The Mississippi Balance Agriculture With Industry (BAWI) Act of 1936—often cited as the first state-led initiative to promote private industrial development (Anderson & Wassmer, 2000; Wilson, 1993)—offered a package of incentives that included property tax exemptions, exemptions for taxes on patents, and revenue bonds. The oldest SAPTAP encountered by our study is the Louisiana Industrial (10-year) Property Tax Exemption, established in 1936.

4. Increasingly specific areas, many of which must be blighted to qualify, are targeted for development. The emphasis on development and redevelopment, as opposed to recruitment, is also related to the adoption of so-called new wave economic development policies, the discussion of which are beyond the scope of this article. The interest placed on expanding the base will become evident later in this article by the popularity of such features as capital investment threshold requirements, or the percentage value-added-only mode of abatement.

5. This segment of the literature has gone through two phases, one where empirical evidence did not validate any firm-location-inducing effects of tax differentials. In this phase, it was argued that taxes were of secondary importance to firms making location decisions, given that they represented a small fraction of firm costs. In the second phase, use of more sophisticated econometric techniques made it possible for researchers to find significant impacts. The argument now is that however small a fraction business costs may represent, the difference may influence location decision of "footloose" firms, where all other factors are equal. Hence, intrametropolitan location decisions are expected to be influenced more than interstate location decisions.

6. We have also witnessed a similar phenomenon in Indiana. However, the research of Byrnes, Marvel, and Sridhar (1999) suggested that differential awards per firm were being approved in Ohio, which would contradict Wolkoff's (1983) findings in Ohio.

7. States that do not offer a SAPTAP are Arizona, Arkansas, Delaware, Georgia, Idaho, Massachusetts, Nebraska, New Hampshire, New Mexico, North Carolina, Tennessee, Utah, Virginia, Wisconsin, and Wyoming.

8. Under the auspices of this study, it was not feasible to contact substate units of government to gather abatement information. Abatements in some states are not regulated by statute, and they may be granted at either the state's or a locality's discretion on a case-by-case and locality-by-locality basis. Delaware, Georgia, and Virginia, for example, lack state statutes and regulations regarding property tax abatements, but state officials suggested contacting local government officials to gather information for that state. Therefore, although a visible property tax abatement program is not reported as existing in some states, abatements may be taking place on an ad hoc basis.

9. For an example of an investment requirement, see Section 68-2902(B)(2) of the Oklahoma Statutes.

10. For an example of payroll or jobs requirement, see Section 196.012(16)(a)(1) of the Florida Statutes.

11. Variants of investment requirements include the following: In Connecticut, for example, the relative amount and duration of the abatement depend on the magnitude of the increase in property value. Maryland requires that the area on which a new business is established, or on which it is expanded, be at least 5,000 square feet. In Nevada, the capital investment requirement is an increasing function of county or city population and type of business. Oregon determines that the amount of the exemption will be the quantity by which capital investments exceed a minimum investment requirement. Oregon and West Virginia require that preexisting industrial property (to which additions will be made) also satisfy certain thresholds.

12. Note that other states may impose similar requirements, but they are not contained specifically in their statutes or regulations or were not conveyed in written or verbal communication with state officials. These requirements are left to the individual agreements reached with the beneficiaries.

13. See Section 135.215(1) and (3) of the Missouri Revised Statutes.

14. For an example of public referendum in the property tax abatement process see Section 196.1995 (1), (3) and (7) of the Florida Statutes.

15. See Section 15-24-1401(2) of the Montana Code Annotated.

16. For an example of a limitative list, see Section 27-31-101 of the Mississippi Property Tax Statutes.

17. For an example of the fraction of liability (credit) method, see Section 40-57.1-03 of the North Dakota Century Code.

18. For an example of an incentive payment method, see Section 31-15-903(1)(b) of the Colorado Statutes.

19. For an example of fraction of value, see Article 11, Section 13(a) of the Kansas Constitution.

20. For an example of value-added method, see Section IC 6-1.1-12.1-4(a) of the Indiana Code.

21. For an example of a rather complicated and flexible version of the value-freeze method, see Section 10-6-55 of the South Dakota Codified Laws.

22. Hawaii's Wasteland Development Property Program, though it exists in state statute, appears to be in disuse according to information provided by diverse state tax officials. However, property tax abatements are offered and regulated at the local level.

23. For an example of a PILOT (payments in lieu of taxes), see Section 27-31-104 of the Mississippi Property Tax Statutes.

24. For an example of the deferral-of-payments method, see Section 29-45-050(m) of the Alaska Statutes.

25. For an example of a claw-back provision, see Section 312.205 of the Texas Property Redevelopment and Tax Abatement Act.

26. See Section 6-1.1-12.1 of the Indiana Code.

27. Fifteen states have established this system, where all overlapping jurisdictions bear the revenue loss: Alaska, Hawaii, Illinois, Indiana, Iowa, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nevada, New York, Oklahoma, South Dakota, and West Virginia.

28. Fifteen states have established this system, where only the awarding unit suffers the revenue loss: California, Colorado, Connecticut, Florida, Illinois, Kentucky, Maryland, Minnesota, Missouri, Montana, New Jersey, Pennsylvania, Rhode Island, Texas, and Washington.

29. Seven states use this third approach: Alabama, Kansas, Minnesota, Missouri, North Dakota, Oregon, and Vermont.

30. Whether it involves statewide school levies or some or all of the school district levies.

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