Articles

Public Works
Management & Policy
Volume 14 Number 1
July 2009 4-36

10.1177/1087724X09333940
http://pwmp.sagepub.com

The Problem With Being Special

Democratic Values and Special Assessments

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In the face of voter-imposed tax limitations, local governments have adopted ever-more complex financial mechanisms to balance their budgets. Increasingly, municipalities in California have made use of special assessments to finance local infrastructure improvements and other vital government services. These assessments bill property owners for public goods and services in proportion to the "special benefits" that they receive. Because benefit assessments are constitutionally distinct from taxes, the growth in assessment financing has come partly as a direct response to increased constraints on the ability of local governments to raise general taxes. Our contention is that this growth should prove cause for concern due to the unusual combination of social choice pathologies to which special assessments fall vulnerable. Field interviews with public officials and the consultants they call on to help create these assessments suggest that special assessments can indeed pose special democratic problems.

Keywords: *special benefit assessments; municipal finance; Proposition 13; agenda control; gerrymandering*

Democracy, in its many variants, is defined as a nexus between the preferences of voters and the actions of government. The extent to which voter input drives government output, however, depends on a variety of important features of democratic institutions. Among the mechanics that can weaken the connection between citizens and their government, scholars have identified the absence of competitively drawn district boundaries, the presence of incumbency advantage, social choice problems that plague preference aggregation, and the necessities of delegation and

Authors' Note: We would like to thank the John Randolph Haynes Foundation and the Keston Institute for Infrastructure for supporting this project. We also thank Amy Bridges, Peter Detwiler, Elizabeth Garrett, Ellen Moule, Dan Rodriguez, and Jaime Settle for their helpful comments. Finally, Peter Detwiler, Dean Miscynski, and Marianne O'Malley provided invaluable background information for this paper. Please address correspondence to Vladimir Kogan, Department of Political Science, University of California, San Diego, Social Sciences Building 301, 9500 Gilman Drive, #0521, La Jolla, CA 92093-0521; e-mail: vkogan@ucsd.edu.

agenda control. These issues afflict all forms of democratic politics—whether representative or direct, local or national—though different institutions often vary in their vulnerability to particular kinds of problems.

The focus of this article is the *special assessment*, a little-studied method of local government financing that assesses residents in proportion to the "special benefits" they receive from various public goods and services. Our contention is that such assessments represent a unique institution both in the degree to which they fall vulnerable to agency loss—the divergence between voter preferences and public policies—and in the combination of potential social choice and agenda control pathologies that can plague them. Special assessments, in other words, pose a special democratic problem.

Special assessments have long been used by municipalities to pay for local infrastructure like streets and roads, water works, sewer systems, schools, parks, open-space preservation, and street lighting in cities across the country (Einhorn, 1991). At the same time, they have largely escaped the attention of scholars because such assessments have been thought to represent only a small fraction of government revenue. Recent work, however, has indicated that special assessment financing has become "an increasingly frequent mechanism for the provision of local public goods" (Brooks, 2007). In addition, the use of assessments has expanded in recent years from simply funding the construction of public improvements to also paying for their maintenance and a growing range of vital public services such as public safety and fire protection.

Unlike more traditional taxation methods, assessments allow local governments to charge residents directly for the public goods and services and to vary the amount charged from person to person. Most generally, special assessments form when a group of property owners votes or petitions to levy a special charge on their property to pay for particular services or the construction and maintenance of specific public improvements.[1] Though often indistinguishable from traditional property taxes in the way they are collected and paid, special assessments are legally and constitutionally distinct from property taxes and their enactments follow different sets of legal procedures.

Jacobson and Tarr (1996) have argued that the evolving mix of tools used to finance public goods has reflected the "values of politically important actors and the workings of governmental, political, and legal institutions." We show below that political institutions and events, particularly the increasing use of direct democracy, have indeed shaped the recent growth of special-assessment financing in California. Other researchers studying the state's Proposition 13, a voter-approved limitation on ad valorem property taxes, have argued that special assessment financing has grown more prominent in the era of tax-and-expenditure limits enacted through direct democracy (Chapman, 1998; Foldvary, 2006; Shires, 1999), often as a way to subvert these limits. However, to the extent that these authors attempted to quantify the impact of special assessments, their analyses have greatly underestimated the role played by this unique source of governing funding. The measurement error has been due both to official government statistics, which undercount special assessments, and strategic actions by lawmakers, who sometimes choose to call assessments by other names for political reasons. In what follows, we use both case studies and previously unused California-wide data to suggest that the magnitude of local government revenue raised through special assessments is much greater than scholars have previously thought.

The growing reliance on special assessments by local governments raises important questions about the degree to which these assessments are capable of representing the underlying preferences of voters for both the types and amounts of public goods provided to them. We consider special assessment financing in the context of two prominent models of local government: in the first, citizens control government agents by voting at the polls (the "voice" model); in the second, they vote with their feet (the "exit" model). Under both scenarios, however, we argue that the shift from general taxation to special assessments can weaken the connection between voter preferences and public policies. Because, as we discuss below, special assessments do not hew to the principle of "one person, one vote" and can suffer from several unusual types of gerrymandering, they fall particularly vulnerable to the problems of "take-it-or-leave-it" bargaining identified by Romer and Rosenthal (1979). This problem results from the power afforded to the agenda setter when voters must choose between the status quo and a proposed assessment, with no power to amend the proposal. Though it also plagues direct democracy at the state and local level, we believe the Romer–Rosenthal problem may be more severe for special assessments because of institutional rules that allow the parties proposing a special assessment to shape the boundaries of assessment districts, the timing of elections, and the weight afforded to each vote.

As an alternative to the idea that voters shape public policies through their participation in elections, Tiebout (1956) has proposed that voters use the threat of exit to align public policies with their preferences: When the provision of local services does not match the expectations of residents, these residents can move to areas where their needs are better served, resulting in efficiency-improving sorting. Peterson (1981) has argued that the threat of such exit serves as an important constraint on the discretion of local governments. However, special assessments violate two important assumptions of the Tiebout–Peterson model—that service levels are perfectly correlated with existing political boundaries and that a single government entity serves as a monopoly provider of public goods for a particular parcel of property. Neither assumption is true for the assessments considered in this article. In a world with special assessments, the threat of exit instead leads to what Berry (2008a, 2008b) has called the "tragedy of the fiscal commons," in which the levels and types of services provided by government may not match those preferred by local residents. Uniquely, special assessments combine the potential overgrazing of the fiscal commons with sequential elimination agendas (Kousser & McCubbins, 2005; Ordeshook & Schwartz, 1987), which arise when alternative policy (or spending) proposals are considered one at a time in a sequence. Such a process does not allow voters to make direct comparisons between competing alternatives, or to make tradeoffs among them. Together, these problems can create a “race to the polls” by local agencies, each seeking to ensure support for their projects to the exclusion of others (Garrett & McCubbins, 2008), resulting in a potentially inefficient allocation of local government resources.

In addition, we consider how special assessments encourage the hyperfragmentation of local government into ever-smaller units (Einhorn, 1991), resulting in jigsaw puzzle of “layered democracy.” Instead of bringing citizens closer to their government, however, we argue that this fragmented system reduces the ability of citizens to cast informed votes and to adequately monitor their elected agents, a problem exacerbated by laws requiring some assessments to be turned over to opaque local nonprofits and “property owners associations,” which profit from the arrangement. These problems suggest that special-assessment financing may be a flawed method for aggregating the preferences of citizens into local government policy.

The remainder of this article will consider all of these points in turn. In the first section, we provide a brief overview of special assessments and their history. In particular, we examine the idiosyncratic aspects of special assessments that separate them from other, better-studied, forms of government finance, and, in many ways, clash with modern conceptions of democracy that envision each voter having a single vote, cast anonymously in the privacy of the voting booth. The next section considers the rise of special assessments in the post–Proposition 13 era, presenting evidence on the growing use of this tool to finance infrastructure construction and maintenance in California and several case studies from San Diego and Los Angeles counties that help quantify the rising importance of special assessments for local governments. In the subsequent section, we apply the models of social choice and the theory of industrial organization to argue that special assessments may reduce efficiency of local government and are a more problematic method of financing than general taxation. The penultimate section provides additional support for these models gleaned from field interviews with California practitioners and government leaders, who appear to confirm the problems identified by the theories. The final section concludes with important questions that remain unanswered and paths for future research.

“One Dollar, One Vote Democracy”

The tradition of assessing special charges for certain public benefits dates back to at least the year 1250, when a local ordinance in England first required residents to pay for repairs made to sea walls adjacent to their properties. The assessment was based on the proportion of each resident’s property deemed to benefit (Miscynski, 1978). In the United States, the first known use of special assessment financing occurred in 1691, a century before the ratification of the federal constitution, when

New York City used assessments to finance the construction of street and water drainage systems (Governor's Office of Planning and Research, 1997; Miscynski, 1978). By 1913, Miscynski estimates that major American cities obtained an average of 12% of their revenue from special assessments, with the four largest raising more than 20% of their funds in this way (Rosewater, 1968). Though assessments became less popular in the wake of the Great Depression, special-assessment financing, especially of infrastructure, was again on the rise in the second half of the 20th century (Miscynski, 1978).

In some ways, special assessments share important characteristics with general taxes (from property, income, sales, and so on) and user fees, two other important sources of local government revenue. Indeed one scholar has even called special assessments a "halfway house between the property tax and the user charge" (Land, 1967). Like taxes, special assessments are compulsory—that is, members of the particular population defined by a special assessment district are required to pay the levy, regardless of whether they desire or use the public services that the assessment funds. As with user fees, the assessment amount charged to each person or entity must be directly related to the level of service they are provided—in the case of special assessments, to the amount of benefits the user is deemed to receive.[2] Though we focus mainly on special assessments in California, the laws and regulations appear to be very similar in other states (Citizens Research Council of Michigan, 1997; Einhorn, 1991; for an overview of Business Improvement Districts, see Briffault, 1999), suggesting that the conclusions drawn in this article apply to special assessments more generally.

In California, various statutes and local ordinances authorize local governments to levy assessments, and each assessment may vary in small ways from the general type described here, though the passage of Proposition 218 in 1996 has imposed a standard assessment-adoption process on all special charges applied to real property. The creation of a new special assessment may begin when local property owners submit a petition calling for the formation of a district to pay for the provision of special benefits.[3] For certain assessments, the process may also be initiated by a local government, but in each case, the sitting board of the city, county, or special-purpose government must generally vote to proceed with the formation process. If the board gives its approval, a "benefit engineer" is retained to estimate the costs of the public improvements and services proposed and for how long these costs are to be paid; to describe the general and special benefit that would be provided; to diagram the boundaries of the proposed district that would be served; and to apportion the costs of these improvements and services among the properties in the district in proportion to the benefits that they are estimated to receive. A public hearing is held once the engineer's report has been completed. The engineer's allocation of benefits is later used to calculate the portion of the assessment, if approved, that a property owner would pay. For example, if a single property is estimated to receive 50% of the benefits from a project, the owner of that property would be required to contribute half of the total revenue raised through the assessment. As we explain below, these weights are subjective in nature. Following the hearing, the local government must mail ballots to the affected property owners, who are given the final say about whether the special assessment district will be formed. The creation of an assessment district requires the support from a majority of property owners who return their ballots taking into account the amount that each would pay. Practically speaking, this means that the ballots are weighed by the proportion of the assessment a property owner would pay. Some assessments formed prior to the passage of Proposition 218, as well as assessments in other states, allow governments to initiate assessments without a vote, requiring only that a majority of the property owners do not formally protest the action. The state laws and local ordinances also may, but are not required to, specify a sunset period, after which an assessment must be renewed.

As this process illustrates, the first thing to note about special assessment districts is that they are a peculiar mixture of direct democracy, and administrative and legislative action. Similar to qualifying initiatives for the ballot, the creation of an assessment district is often the result of public petition, although sometimes the process more resembles a referendum.[4] The specification of what improvements and services the assessment district is to fund, how much money it will collect, the identification of properties to be included in the district, the timing of the election, who gets to vote and how their votes are to be counted, and when the district sunsets are all determined by a hired consultant whose work is subject to public notice, hearing, and comment, much like an administrative agency. The special assessment is then put to a vote, again much like a ballot initiative. The assessment once levied then becomes part of a legislative process, wherein decisions about meetings, spending, revenue, merger, fees, and so on are decided by either the elected body that approved the special assessment, by a private property owners association deputed to spend its proceeds on behalf of the public, or the district's management company.

This process for forming special assessment districts helps highlight the unusual features of this fundraising mechanism. As noted above, ballots for the creation of special assessment districts are weighted according to the amount of the proposed assessment each property owner is expected to pay. In effect, these rules replace the one-person, one-vote principle at the heart of the American political system with "one dollar, one vote democracy" (Garreau, 1991). Because each property owner's vote is afforded a different weight, ballots for special assessments can be neither anonymous nor confidential. (In a recent assessment election held by a rural fire protection district in San Diego County, property owners complained of fear that "firefighters wouldn't respond to an emergency at their houses if they voted against" the charge [Krueger, 2008].) Finally, for special assessments on real property, voting is limited only to property owners, even for diffuse, nonexcludable and nonrivalrous public goods such as streets, lighting, and public safety, imposing a de jure property-holding requirement for participation. As Briffault (1999) noted of one type of special assessment district, called the Business Improvement District, these entities push up "against the rules governing local voting rights and local government finances, and [challenge] norms concerning the democratic control of urban government and the equal treatment of urban residents." Though voting rules used for special assessments have faced legal challenges, particularly for their violation of the one person, one vote principle, the Supreme Court has consistently upheld them, arguing that assessment districts' "limited role"—the absence of authority to make laws and regulate private behavior—and "disproportionate effect" on certain groups exempted special assessments from the requirements of traditional voting (Briffault, 1993; Gaines, 1972).

Because special assessments need not conform to existing political boundaries and may overlap with one another, a property owner could find herself within more than a dozen assessment districts, voting on their creation, following their budgets and disbursements, voting for the elected officials who may oversee their function, and receiving services from each. The potential problems with such a system was noted by scholars studying the use of special assessments in the 19th century, who remarked, "Because the costs of improvements financed by special assessments were both deferred and spread across the public at large, no group of citizens had incentives to police them. Premature and unnecessary improvements became the norm" (Diamond, 1983).

California Government and the Response to Proposition 13

In June of 1978, 64.8% of California voters approved changes to the State Constitution known as Proposition 13, imposing numerous limits on the "taxing power of the sovereign" (*County of Fresno v. Malmstrom*, 1979). In the lead up to the vote, the state's real estate boom pushed property values ever-higher—and brought property taxes up with it, laying the stage for the "taxpayers' revolt." Proposition 13 capped ad valorem property taxes at 1% of a property's value as assessed in 1975 and limited increases in the valuation to 2% a year, unless the property changed hands or underwent new construction. Before other "special taxes"—a vague category that remained undefined—could be levied, the initiative required a two-thirds vote of the "qualified electors."

As can be expected, these important changes to the legal and political institutions in California reverberated through the state's governments. When the initiative took effect on July 1, 1978, many local governments turned to special benefit assessments to pay for services previously funded by property taxes.[5] In Los Angeles County, the Board of Supervisors imposed $11 million in assessments to pay for the county waterworks and sewer maintenance, $6.7 million for street lighting, landscaping and recreation, and moved ahead with a $20 million assessment to pay for flood protection (Keppel, 1979a, 1979b; Merina, 1980; Shuit, 1979). Officials in San Clemente, a small city in southern Orange County, faced public protest in response to a proposed special assessment to fund the San Clemente Municipal Lighting District, which previously received a portion of the property tax revenue (O'Dell, 1981).

However, the legal status of special assessments remained much in dispute. In 1979, worried local officials asked Attorney General George Deukmejian to issue at least three opinions on how Proposition 13 applied to special assessments, and where the lines between property taxes, special taxes, and special assessments were drawn. In response, Deukmejian's office offered advice on how the ballot measure affected in-lieu fees for building permits, charges to pay off the debt of fire-protection districts, fees of recreation and park districts, and "service area charges" imposed by counties on unincorporated areas (62 Ops. Call. Attorney General, 1980). Acknowledging "some confusion in the use of terms," the attorney general concluded that officials needed to "examine a particular exaction in a specific context" and argued that charges used to pay for benefits to an assessee's property, instead of improvements and services benefiting the general public as a whole, were special assessments and thus exempt from Proposition 13's limits and procedural requirements, even if the statutory language described these charges as taxes. In Fresno County, the tax collector refused to implement a new special assessment created by the Board of Supervisors to pay for certain road improvements, arguing that it had not been approved by two-thirds of voters as required by Proposition 13. The California Court of Appeal sided with the supervisors, arguing that "[a] special assessment is charged to real property to pay for benefits that property has received from a local improvement and, strictly speaking, is not a tax at all" (*County of Fresno v. Malmstrom*, 1979).[6]

By the early 1980s, California had developed a new taxonomy for local revenue. "Property taxes" referred to involuntary charges based on the value of the land and improvements used to pay for a variety of public purposes. They were capped at 1% of the total assessed value of the property. "Special taxes" referred to involuntary charges collected and earmarked for a special purpose. Though they could be levied on property, special taxes could not be calculated based on the *value* of the property; however, parcel taxes calculated based on the total acreage, zoning designations or any other "reasonable" method were allowed. "Fees" referred to voluntary charges paid to recoup the cost of providing specific services. In comparison, "special benefit assessments" referred to an involuntary charge paid by property owners for improvements and services providing "a special benefit" to their property.[7]

The use of special assessments as a substitute for revenue lost due to Proposition 13 quickly became apparent to observers in and outside of government. Testifying at a 1986 hearing, State Senator Marian Bergeson noted that "benefit assessments have become a growth industry in California" and the California Taxpayers Association described them "a born again revenue raiser" (Senate Committee on Local Government, 1986).

"The Genius of Mello-Roos"

Despite the court decision in *County of Fresno v. Malmstrom*, the legal boundaries for the uses of special assessments remained in flux. In 1980, for example, the

San Diego City Council adopted a new policy requiring that all public improvements related to new developments be paid for by special assessments. However, the policy hit a road block when the city auditor refused to release funds needed to administer the program, arguing that the new levies represented special taxes and thus violated Proposition 13. A San Diego Superior Court judge ruled against the city and ordered it to stop imposing charges on or collecting fees from developers (Frammolino, 1983). The state legislature continued passing new laws authorizing new special assessments, though the most ambitious efforts ran into opposition from Republican lawmakers, who viewed the lax voting requirements of special assessment formation as an end-run around the two-thirds special tax requirements enshrined in Proposition 13 (M. Roos, Telephone interview, June 24, 2008).

Three years later, lawmakers reached bipartisan consensus on a compromise: The Mello-Roos Community Facilities District Act of 1982. The law provided for the formation of new "community facilities districts" (CFDs) with a mandate much broader than previously authorized for special assessments. The current version of the law allows CFDs to pay for police and fire protection, recreation programs, library services, school construction and maintenance, operation of museums and "cultural facilities," parks, and roads. The Mello-Roos Act also provided that the formula for calculating each parcel's assessment could, but did not have to, take account of the benefits received; the law's only restrictions stated that the formula could not be based on the value of the property and had to be "reasonable." Though very similar to special assessments, and collected in the same way, the law specifically stated that CFDs were "special taxes" and required a two-thirds vote, a designation one of the act's lead authors, Democratic Assemblyman Mike Roos, said was made strategically:

> The Republicans insisted that there be a two-thirds vote to honor and stay in keeping of the broad mandate of [Proposition 13 author Howard] Jarvis. And that was the genius of Mello-Roos. *Once you strip that away, it's nothing more than a benefit assessment district* [italics added] . . . I think initially, the list was fairly modest of what those districts could be formed to fund. And it kept expanding rapidly over the next three or four or five years (M. Roos, Telephone interview, June 24, 2008).

The two-thirds vote, according to Roos, "would provide a fig leaf to then take the matter to the local agency, who would then adopt the district—the community facilities district—and then enable the issuance of bonds or debt to pay for those benefits."

Yet the voting procedures specified by the act were unique. For districts with more than 12 registered voters, the assessments needed two-thirds approval from the general electorate. But for districts with fewer than 12 voters—essentially, new developments owned by the same developer—the law provided for a "landowner election," allowing only the property owner(s) to participate and awarding each of them one vote for every acre of property. The provision for a "landowner election," according to Roos, was also strategic:

> The idea was that we were trying to jury-rig the outcome, meaning that Prop. 13 had arbitrarily, or unilaterally, taken the ability to finance infrastructure off the table. We were clearly making a statement that we wanted infrastructure, and we didn't want this impeded by two or three people who were basically renting the land but were able to vote (M. Roos, Telephone interview, June 24, 2008).

Though not all observers agree with Roos that Mello-Roos districts are just special assessments in disguise, the two financing mechanisms share many several important features that separate them from more traditional taxing methods, including the reliance on weighted voting limited to property owners. In the nearly three decades since the passage of Proposition 13, Mello-Roos districts have become a key tool for financing local improvements and services. "Anecdotally, there are stories of homeowners making Mello-Roos payments that are larger than their property tax payments" (Chapman, 1998). Lawmakers have also been cognizant of the unusual election procedure for districts with fewer than 12 voters, using the process to their advantage. According to Bort (2006), "District boundaries can be, and often are, intentionally drawn to accomplish the goal of creating a 'landowner vote' district". He notes that "some local residents have complained of being 'disenfranchised' by being intentionally excluded from CFDs that were gerrymandered (which should not necessarily be considered a bad word in this context) for landowner elections" (Bort, 2006, p. 6, parenthetic note in original).

Financing Streets and Roads

We are certainly not the first authors to notice that special assessment financing has grown in the post–Proposition 13 era (see Chapman, 1998; Foldvary, 2006; Shires, 1999). Shires, for example, noted that special assessments rose to roughly 0.3% of California's total government revenue by the early 1990s, from 0.1% before Proposition 13. However, we believe these authors' measures vastly underestimate the role of assessment districts in local finance. First, Shires' numbers attempt to aggregate revenue from all levels of California government. Though special assessments may indeed represent a small portion of state's overall revenue sources—which includes the state income tax—we believe most of the growth in special assessment financing has taken place at the local level. Second, the statewide data from the State Controller's Office, which informs much of the scholarly research on California finance, is seriously flawed. Shires and Habers (1997) note that the state data on special assessments is "spotty at best and does not appear to capture the full range of activity that occurs." In addition, these scholars note that governments appear to report only about 20% of their Mello-Roos CFDs to the state controller (Shires & Habers, 1997).[8] Though Shires and Habers supplement the controller's data with numbers from the California Debt Advisory Commission, this measure would still undercount CFDs that provide ongoing revenue not linked to bond repayment. Third, we believe the measurement error is further exacerbated by the strategic decisions of lawmakers to classify certain special assessments by other names. Most state agencies, for example, treat Mello-Roos assessments as taxes, even though the law's author suggests that these entities are close cousins of the special assessment.

The final, and perhaps the biggest challenge, to performing time-series analysis on special assessment revenue is the simple fact that Proposition 13 has changed the way revenue data is collected. Prior to 1978, the difference between special assessments and property taxes was largely one of semantics. Practically speaking, both types of revenue were functionally equivalent and, as our historical account illustrates, many public officials did not pay much attention to the difference. After 1978, however, the distinction took on important constitutional significance; some charges previously called "taxes" were now identified as "assessments." Because this change in measurement corresponded to the imposition of Proposition 13, our "treatment" of interest, any attribution of causality to the ballot measure faces a significant instrumentation threat to internal validity (Trochim, 2001).

Our effort to overcome this threat makes use of an original dataset on municipal revenue collected by California cities for the purpose of improving and maintaining streets and roads. Because this data captures only one component of local government revenue and is limited only to cities, one must of course be cautious about extrapolating trends reported here to other categories of public goods and services. Our data are taken from the *Streets and Roads Annual Report*, published annually since 1948 by the California State Controller. Unlike the controller's general reports on city revenue, used by scholars such as Shires (1999), the streets and roads data are collected through a questionnaire that specifically lists the kinds of special assessments to be included under the category of "special assessments." For example, cities are asked to include assessments authorized by the Improvement Act of 1913, the Street Lighting Act of 1931, and the Landscape and Lighting Assessment Act of 1972. Because assessments collected for street improvements and lighting represent some of the earliest use of special assessment financing that long predate Proposition 13 and its aftermath, and because the types of assessments authorized for this purpose were not changed dramatically by the initiative's passage (Hotelwala & Mannat, 2004), they represent an ideal way to track the role of this financing mechanism over time, including the period prior to 1978. It is important to note that data reported here do not include revenue collected through Mello-Roos CFDs, so the figures represent a lower bound of special assessment revenue collected for street purposes after the early 1980s.

Even excluding CFDs, Figure 1 illustrates the sharp increase in the amount of revenue California cities have raised from special assessments for street and road construction and maintenance. In 1950, the cities collected roughly \$3.5 million in 2000 dollars; by 2006, the figure stood at more than \$232 million, representing a more than 6,000% increase in real terms.[9] Another way to measure the importance of

Figure 1
California Cities: Total Roads Assessment Revenues

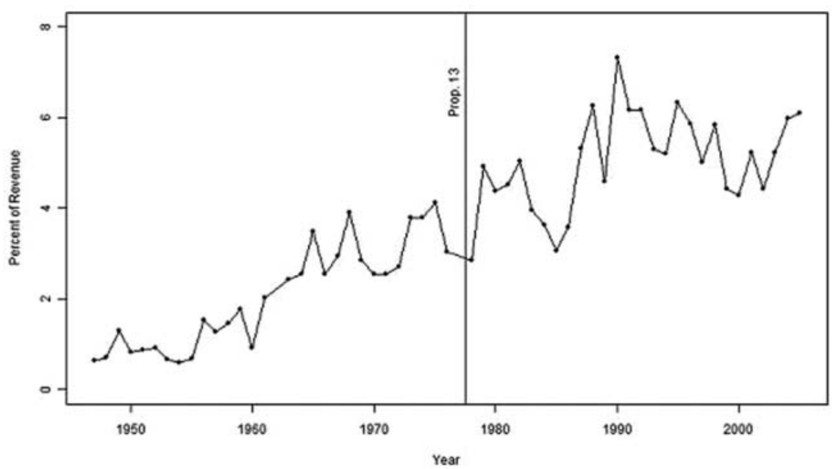
special assessments is to look at the proportion of funds for particular services raised through them. Figure 2 presents the percentage of California cities' total streets and roads revenues raised through special assessments. In 1950, special assessment revenue represented roughly 0.8% of the total. Assessments rose to a high of 7.3% in the early 1990s, before falling back to about 6% by 2006. The rest of the money came from local, state, and federal sources such as gas taxes, vehicle license fees, and sales taxes.

The streets and roads data highlights two important points. First, if the pattern found in Figure 2 is replicated for other types of public services, the role of special assessments in financing local government is several orders of magnitudes greater than in earlier estimates. Second, though the growth of special assessment financing accelerated after the passage of Proposition 13, the data suggest that this expansion began even before the taxpayers' revolt.

Data From Two Counties

In this section, we report additional findings based on data collected from Los Angeles and San Diego counties, among the few in the state that publicly report special assessment collections for all government entities in those counties. The data are taken from annual reports published by the counties' respective auditor controllers. These numbers complement the streets and roads figures because they include

Figure 2
California Cities: Assessments as Percentage of Roads Revenues



assessments collected for all purposes by the two counties and the cities, school districts, and special-purpose districts located within them. The assessment totals include traditional special assessments, Mello-Roos CFDs, and other non–ad valorem direct assessments like utility "standby charges" that are in many ways functionally equivalent. Unfortunately, due to changes in how the counties report these figures, assessment levels prior to the early 1980s are not available.

As Figure 3 makes clear, the amount of money San Diego County governments raised through special assessments has grown significantly between 1983 and 2006. In 1983, county governments raised just more than $38 million (in deflated dollars) through direct assessments, representing 3.8% of the total revenue from property-based levies; by 2006, this figure had grown to $290 million, representing 8.3% of the total.[10] And, as seen in Figure 4, assessments have remained largely unchanged as a percentage of total property-based levies since the late 1990s even as housing prices rapidly increased. This is remarkable because the amount collected through the assessments, unlike property tax collection, cannot legally be tied to the value of the property; to keep pace, assessment collections had to rise during this period to match the rapidly growing property tax receipts.

In Figure 5, we plot the number of parcels subject to special assessments over time.[11] As the data make clear, the growth in county special assessment revenue has been the result of increases in the number of special assessment districts or district magnitude, not simply in the size of the assessments levied.[12] The increase is also not just the result of population growth, as we see a more than 10-fold increase in

Figure 3
County of San Diego: Property-Based Revenue

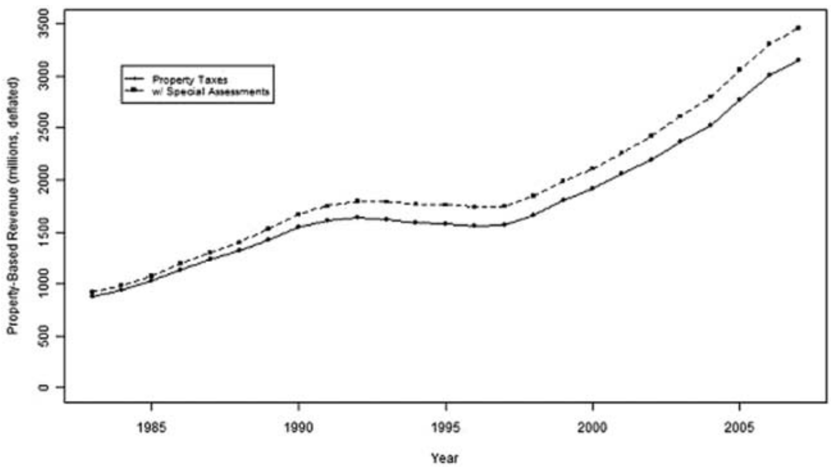
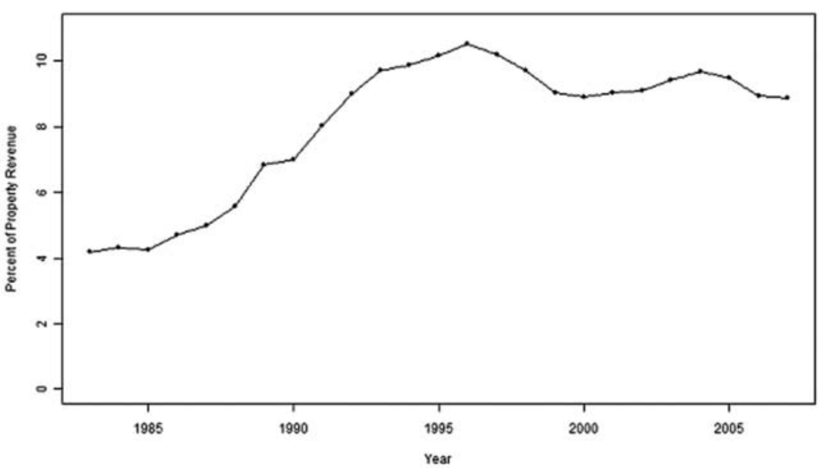
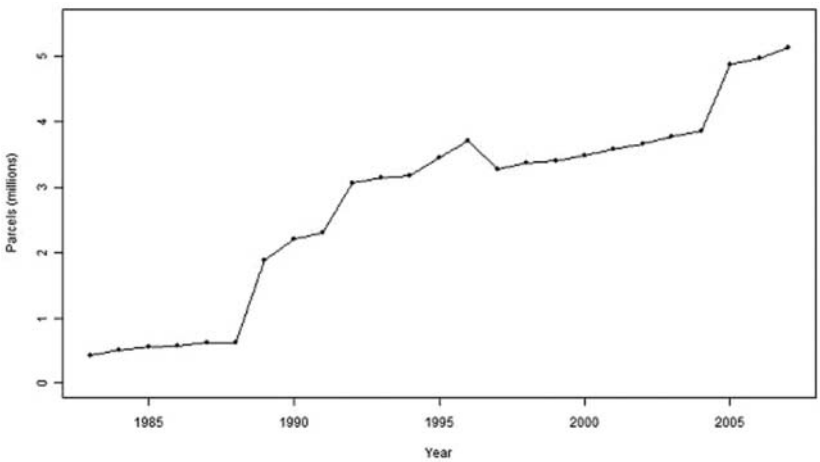


Figure 4
County of San Diego: Assessments as Percentage of Property-Based Revenues



the number of parcels in special assessment districts, whereas the population has grown only 38% from 2.1 million in 1985 to 2.9 million in 2005 (data from the U.S. Census Bureau).

Figure 5
County of San Diego: Property Parcels in Assessment Districts

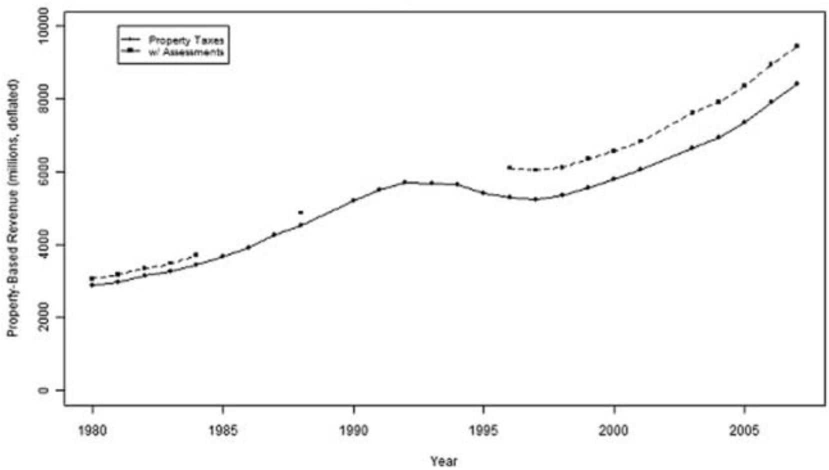


In Los Angeles County, assessment revenue has become an even more important component of local government finance.[13] Between 1980 and 2007, direct assessments increased nearly sixfold in deflated dollars, from $175 million to more than $1 billion. As can be seen from Figure 6, the assessments have grown much faster than property tax revenue, increasing from 6% of property-based levies in 1980 to a high of 15.3% in 1996. When property tax receipts ballooned during the California housing bubble, assessments continued growing as well, making up 12% of property based levies in 2007. Because of data unavailability, Figure 6 does not include assessment amounts for most years between 1985 and 1995.

Epilogue

That local governments quickly turned to special assessments—among other revenue enhancing efforts such as public–private partnerships and tax increment financing—to make up for lost property tax revenue did not escape the attention of the authors of Proposition 13.[14] Shortly after the passage of the Mello-Roos Community Facilities Act, the supporters of Proposition 13 qualified a new measure, which appeared on the ballot in the fall of 1984. Proposition 36, if approved by voters, promised to eliminate benefit assessments used to pay for services or for the maintenance of existing infrastructure, and to extend the Proposition 13 1% property tax cap to “any other tax on or based upon the ownership of real property” (California Secretary of State, 1984).

Figure 6
County of Los Angeles: Property-Based Revenue



"Proposition 13 is in serious trouble . . . The courts have allowed local governments to call certain taxes 'fees' or 'assessments' so they can be raised without voter approval," the authors of the measure wrote in their ballot argument. They implored voters to "SAVE PROPOSITION 13" (California Secretary of State, 1984). On November 6, 1984, voters rejected the measure. In 1996, taxpayer groups placed another attempt to limit special assessments on the ballot, this time successfully. Proposition 218, approved by voters, attempted to define the types of "special benefits" that qualified for funding by special assessment, and required majority support from property owners in a weighed election before an assessment could be levied. Though observers point out that the measure's insistence on a full election instead of a protest procedure made it more difficult for localities to impose new assessments, the full legal effects of Proposition 218 remained unclear in the first decade after its passage, as courts continued to give maximum deference and the presumption of validity to local governments' determinations of special benefits. However, in July 2008, the California Supreme Court for the first time used the initiative's special-benefit provisions to strike down a special assessment (*Silicon Valley Taxpayers Association v. Santa Clara Open Space Authority*, 2008).

Problem of Being Special

Despite their long history and their growing use, special assessments have attracted little attention from the academic community. Much of the extant literature has dealt with the debate about the classification of special assessments in a broader taxonomy of local government entities and the potential collective-action problems standing in the way of their formation. For example, Baer and Feiock (2005) describe certain special assessments as “private governments” akin to homeowners associations, facing the problems of coordination, division, and defection. They continue by outlining how, and under what conditions, these problems can get solved. Briffault (1999), on the other hand, focuses on the public nature of Business Improvement Districts, one type of special assessments, concluding that they “are publicly created, they wield public powers, they provide public services, and they are subject to public control.”

We depart from much of the previous literature by considering the consequences of financing public services and improvements through special assessment districts and by analyzing how the unique structure, rules, and processes of these districts can result in policies that do not represent the preferences of residents and property owners. While some scholars have suggested that the “unbundling” of *representative* democracy among specialized governments could reduce agency loss (Berry & Gersen, 2007, 2008), we argue that the unbundling of *direct* democracy through special assessments could increase the slack between citizen preferences and government policy. In what follows, we offer a largely theoretical account of three common problems from the social choice literature we believe may be particularly acute for special assessment districts.

Layered Democracy, Representation, and Agency Problems

In representative democracy, citizens rarely get to play an active role in the implementation of policy. Instead, they usually delegate the authority to take action to elected or appointed agents in government (Grossman & Hart, 1983; Holmström, 1979; Mirrlees, 1976; for a survey see Kiewiet & McCubbins, 1991; Tirole, 1988). From the perspective of the citizen—the principal—entering into an agreement with an agent—a governmental entity—this delegation can be beneficial, allowing the efficient division of labor and specialization, particularly if authority is delegated to individuals with special talent, training, or interest in the tasks at hand. However, delegation can also prove costly, particularly when the agents act opportunistically, maximizing their own gains at the expense of their principal’s interests. Such opportunism is most likely to emerge when agents possess hidden information (i.e., knowledge about a choice that is unavailable to the principal or that is available but too costly for the principal to obtain), which is often referred to as adverse selection, or when the agent can take hidden action (i.e., the principal cannot observe the agent’s actions), which is known as moral hazard.

The potential for agency loss becomes particularly acute when a single principal must delegate to multiple agents, as is common under the fragmented local system of American federalism. As an example, Figure 7 presents a sample property tax bill

Figure 7
Sample Property Tax Bill for a Property Located in the Golden Hill Neighborhood of San Diego

PARCEL NO	TAX RATE AREA	CORTAC NO	FIRST INSTALLMENT +	SECOND INSTALLMENT =	TOTAL DUE
	08001		178.5	206.35	384.85

YOUR TAX DISTRIBUTION

AGENCY	BASE	RATE	TAX AMOUN
1% TAX ON NET VALUE	NET	1.00000	227.2
VOTER APPROVED BONDS			
SAN DIEGO UNIFIED LEASE/PURCHASE	NET	0.00000	0.00
UNIFIED BOND SAN DIEGO 1999A	NET	0.00748	1.70
UNIFIED BOND SAN DIEGO 2000B	NET	0.00567	1.28
UNIFIED BOND SAN DIEGO 2001C	NET	0.00648	1.47
UNIFIED BOND SAN DIEGO 2002D	NET	0.00868	1.97
UNIFIED BOND SAN DIEGO 2003E	NET	0.01429	3.24
UNIFIED BOND SAN DIEGO SERIES 1998F REFUNDING	NET	0.00261	0.59
UNIFIED BOND SAN DIEGO SERIES 1998G REFUNDING	NET	0.00260	0.59
UNIFIED BOND SAN DIEGO 2006 SERIES F-1 REFUNDING	NET	0.00670	1.52
UNIFIED BOND SAN DIEGO 2006 SERIES G-1 REFUNDING	NET	0.00556	1.26
SAN DIEGO COMMUNITY COLLEGE BOND, 2003A	NET	0.00000	0.00
SAN DIEGO COMMUNITY COLLEGE BOND, 2003B	NET	0.00874	1.98
SAN DIEGO COMMUNITY COLL BOND-PROP N SERIES 2006A	NET	0.01866	4.24
SAN DIEGO CITY OPEN SPACE FACILITY DIST NO. 1 D/S	NET	0.00000	0.00
SAN DIEGO CITY ZOOLOGICAL EXHIBITS - DEBT SERVICE	NET	0.00500	1.13
SAN DIEGO CITY PUBLIC SAFETY COMM SYS - DEBT SERV	NET	0.00119	0.27
MWD D/S REMAINDER OF SDCWA 15019999	NET	0.00450	1.02
TOTAL ON NET VALUE		1.09816	249.54

FIXED CHARGE ASSMTS:	PHONE	
VECTOR DISEASE CTRL	800-273-5167	5.92
CWA WTR AVAILABILITY	858-522-6900	10.00
MOSQUITO SURVEILLANC	800-273-5167	3.00
GRTR GLDN HILL MAINT	619-236-6495	77.00
MWD WTR STANDBY CHRG	800-755-6864	11.50

DELINQUENCY CHARGES:	
DELINQUENCY CHARGE (Second Installment)	17.85
DELINQUENCY CHARGE (Handling Charges)	10.00
TOTAL AMOUNT	384.85

for a property located in the Golden Hill neighborhood of San Diego. In addition to the various governments listed in Figure 7 and other local governments that receive a share of the one percent property tax base, the sample property tax bill includes five special assessments. In fact, one assessment, for the Greater Golden Hill Maintenance Assessment District, is the second biggest charge on the bill. The assessment district is operated by the Greater Golden Hill Community Development Corporation, a nonprofit that manages graffiti removal, landscaping, trash removal, hazardous waste removal, canyon cleanup, tree trimming, sidewalk repair, cleaning and weeding, promotions, and community events, "and much more" within the boundaries of the district (Greater Golden Hill Community Development Corporation

Clean, Green, and Safe Maintenance Assessment District, 2008).[15] The maintenance assessment district (also known as a MAD) is overseen by a nine-member board of directors that meets every third Monday of the month at the Balboa Golf Course Club house, a project manager, and a citizens' advisory committee that monitors the district's adherence to the terms of the assessment. None of this information, however, is listed on the property tax bill or the city's Web site. Indeed, a property owner calling the number of the assessment district listed on the property tax bill hears a recorded message referring him or her to SCI Consulting, a Fairfield, California-based company that helps create and manage special assessment districts. SCI Consulting also answers the toll-free numbers listed for the vector disease control special assessment and the mosquito surveillance special assessment, though these assessments actually go to fund a department at the County of San Diego.

As it quickly becomes clear, a single citizen must delegate to a plethora of agents, often in a nested relationship, and assure that each agent remains faithful to his or her interests. In the case of the special assessment districts, however, the challenge for the average citizen is even greater: First, the citizen needs to decide whether or not to agree to the assessment; and second, she must keep her agent from shirking, that is, if she can identify who is the correct agent. Indeed, though special assessments are legally financing devices for established municipal governments, state law in California sometimes requires—and local governments often choose—for certain assessments to be turned over for management to nonprofit "property owners associations" such as the Greater Golden Hill Community Development Corporation (Kogan & McCubbins, 2008). Until 2003, these quasi-governments were actually exempt from the state's public-records and public-meetings laws, and their requirements under the state's other government-in-the-sunshine provisions, such as the Political Reform Act of 1974, remain ill-defined.

Kiewiet and McCubbins (1991) summarize the literature on agency and describe four means by which principals can reduce agency losses: (a) contract design, (b) screening and selection mechanisms, (c) monitoring and reporting requirements, and (d) institutional checks. Each of these is costly to implement and it is not clear that any one of these measures singly or in combination can be cost-effective measures at reducing agency losses when there is multiple or nested agency. However, Berry and Gersen (2007, 2008) also conclude that dispersing government authority among specialized units, headed by different legislators and executives, could mitigate some of the pathologies of fragmentation by enhancing the democratic linkages between citizens and their agents. Put simply, their argument is that limiting an agent's responsibility to a single area of policy precludes him or her from trying to retain his or her office despite poor performance in one category of policy making by doing exactly what citizens want in another. Instead of weighing the performance of an incumbent Chief Executive along multiple policy criteria, a voter can choose to keep a well-performing incumbent Agriculture Executive while showing a poor-performing Education Executive the door.

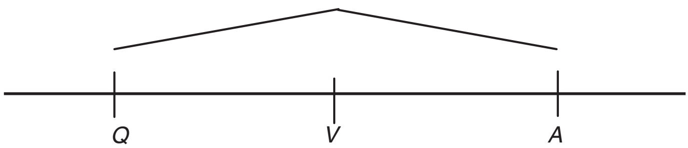
Special assessments combine all of the costs of fragmentation due to agency loss without providing the offsetting benefits described by Berry and Gersen. Unlike the authors' "unbundled executive," special assessments do not enjoy a monopoly over the provision of specific public services; indeed, like the Greater Golden Hill MAD, an assessment district may often provide multiple public goods, each of which supplements services funded through general taxation. And unlike traditional elections for legislators or executives, where voters must discern among competing candidates, special assessments require voters to weigh in on various taxing and spending proposals directly, and understand how a vote on a single assessment proposal contributes to the final basket of goods and services provided to them by their local government. In representative elections, voters must find enough information and remain attentive enough to correctly anticipate the "main effect" of their vote; in special assessment elections, voters must also take into account the "interaction effects," a much more difficult and taxing task.

Agenda Control and Gerrymandering

Because not all special assessments are administered by separate government entities and elected agents, it can be argued that some of the delegation problems described above can be cured by simply requiring local governments to oversee assessments directly. However, this solution would not address a different set of agenda control issues that arise from the way new assessments are created, a process that has many parallels with forms of direct democracy, including initiatives and referenda. The formation of special assessment districts is generally characterized by a single agenda setter—the person or group of people who determine the wording and terms of the special assessment language presented to voters for approval or rejection. In practice, the agenda setter may be an entrepreneurial consultant, who is keen on securing the management duties of the district once it is created, in exchange for a set percentage of its total revenue. Such consultants are often hired even when local government bodies continue to oversee the assessment funds themselves, without separate boards. Alternatively, it is not uncommon for assessments to be drafted by a leading group of business owners interested in additional public services not available from the local municipal government.

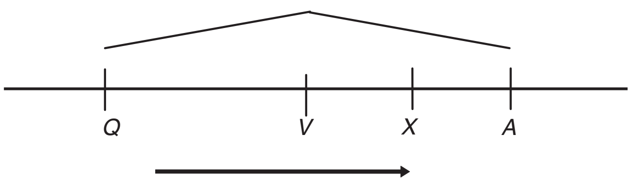
Once the language of the special assessment has been finalized, voters must make an up or down vote on the proposal, without the ability to offer amendments. The structure of special assessments, then, very much resembles Romer and Rosenthal's (1979) take-it-or-leave-it offers. In their analysis, the authors suggest that such monopoly agenda control confers great power to an agenda setter to move public policy outcomes in his or her preferred direction and away from the preferences of the pivotal voter. Figure 8 illustrates this point by modeling a hypothetical special assessment proposal. Point V indicates the ideal point of the pivotal voter in a proposed special assessment district—that is, the voter who would provide the winning

Figure 8
Spacial Model of Assessment Proposal



Note: Q = status quo; V = pivotal voter's preference; A = agenda setter's ideal point.

Figure 9
Hypothetical Special Assessment



Note: Q = status quo; V = pivotal voter's preference; A = agenda setter's ideal point.

vote for passage. *Q* indicates the status quo or the reversion point if the efforts to create the special assessment fail. The ideal point of the agenda setter is indicated by *A*. The left side of the figure may represent fewer public services and lower assessments, whereas the right side may represent more public services and higher assessments. The pivotal voter, *V*, will support a policy change that is as close, or closer, to her ideal point as the status quo. As Figure 8 indicates, the voter will support any policy that is at least as close to her ideal point as *Q*, regardless of whether the new policy is to her left or right. The key insight of the Romer–Rosenthal model is that the pivotal voter will support a policy change close to the agenda setter's ideal point and far away from her owns as long as the voter prefers it to the status quo. In Figure 9, this can be seen as the change from *Q* to *X*. Put another way, the ability to make take-it-or-leave-it offers empowers the agenda setter relative to the pivotal voter.

The problem of monopoly agenda control is not unique to special assessments districts. However, there are several reasons to fear that it is potentially more severe for special assessments than for other methods of aggregating individual preferences into public policies, including the direct initiative (Garrett & McCubbins, 2008).

First, special assessment districts need not follow pre-existing political boundaries and are usually defined by the text of the assessment itself, giving strategic political actors the ability to "gerrymander" a constituency favorable to their proposals. For example, this may mean excluding the elderly as they frequently oppose tax increases. The problem is further exacerbated by another type of gerrymandering, the weighed voting requirement, which mandates that municipalities weigh each vote according to the proportion of the assessment a given property owner would pay, which in turn depends on the amount of special benefits they are expected to receive. The law does not specify a uniform method for apportioning costs or estimating benefits, and courts have traditionally afforded local government maximum deference in these matters (*Knox et al. v. City of Orland et al.*, 1992), opening the door for more strategic tweaking to increase the probability of passage.[16] In a recent special assessment election in San Francisco, for example, a proposed assessment was approved with an 83% affirmative vote, even though more than half of the property owners voted against the creation of the district; the local Marriott hotel, a key supporter, received a vote weight equivalent to the vote of more than 600 average property owners (Kirk, 2008). According to Miscynski (1978),

> Perhaps the most serious practical difficulty in applying [special assessments] properly is that no one knows how to measure benefits accurately . . . This problem is especially acute for special assessments, as opposed to other benefit recapture schemes, because of the tradition that the amount of assessment against each parcel be determined *before* the project is constructed. (p. 329)

Finally, special assessment elections, at least in California, are rarely coordinated with other local, state, or federal votes, and are usually held with mail-in ballots, creating the potential for yet a third form of gerrymandering—timing. The lack of other salient political races, and the mail-in system, help explain the extremely low turnout that characterizes these elections, and creates opportunities for those with unique special interest in the outcome and atypical preferences to dominate the results. Together, these three types of gerrymandering suggest that special assessments are vulnerable to particularly acute Romer–Rosenthal problems, because agenda setters control not only the content of the proposed assessment but also the identity of the pivotal voter.

Thus, though it is possible for special assessments to move government policy closer to the preferences of individual voters, the structure of these financing mechanisms and the procedures governing their adoption, especially the multiple dimensions of gerrymandering, open the door for self-interested actors to co-opt the process and maximize their own private benefit with little or no improvement on the status quo.[17]

Voting With Your Feet and Racing to the Ballot

The world envisioned in our discussion of delegation and agenda control is one in which citizens control government directly through their "voice"— that is, by participating in elections and strategically casting their votes for either candidates or policies. Though this is largely the world analyzed by political scientists, an alternative one has been proposed by Tiebout (1964), an economist studying the allocation of resources by local governments. Rather than controlling local government through their voice, Tiebout suggested that residents do so through "exit"—by moving to areas where the basket of government goods and the level of taxation most matches their preferences. Instead of voting with their ballots, people voted with their feet. Peterson (1981) has extended the logic of the Tiebout model by suggesting that people did not have to leave their location to influence the direction of local policy. Rather, Peterson reasoned that the threat of exit would induce local governments to pursue only those spending policies favored by voters, creating effective "limits" on the discretion available to local politicians. In other words, "Competition among jurisdictions [would force] governments to represent citizen interests and preserve markets" (Qian & Weingast, 1997). Tiebout sorting, however, can exist only in a two-dimensional universe where each voter pays taxes to and receives public goods from only one political jurisdiction and in which all voters living in the same jurisdiction pay the same taxes and receive the same goods. In such a universe, special assessments would not exist, since they have little relationship to existing political boundaries.

Because multiple jurisdictions can indeed assess the same property, they must overcome barriers to collective action that Berry calls the "fiscal common-pool problem." Just as herdsmen in Hardin's (1968) famous tragedy of the commons will overgraze a shared pasture, Berry argues that overlapping jurisdictions will overtax. For special assessments, the "tragedy of the fiscal commons" is combined with "sequential elimination agendas" (Ordeshook & Schwartz, 1987). These occur when votes are held one after another, defeated options are removed from consideration, and the winning issue moves onto the next round of voting. The problem with sequential elimination agendas, as this situation suggests, is that they do not allow voters to directly compare all of the alternatives and, therefore, do not allow them to make tradeoffs among their options. Ordeshook and Schwartz demonstrate how sequential elimination agendas can lead to suboptimal outcomes. Understanding that there exists a "fiscal carrying capacity" beyond which voters simply stop approving assessments or vote with their feet, competing public agencies and competing public services face incentives to engage in a race to ballot to receive approval, before this carrying capacity is reached (Garrett & McCubbins, 2008). Under such circumstances, sequential elimination agendas suggest that the particular mix of public goods approved for funding may be the result of the order in which the proposals were considered, not the underlying preferences of the voters.

A Ground-Level View of Special Assessments

Thus far, we have dealt primarily with theoretical critiques of special assessment districts, suggesting that these institutions suffer from a unique combination of social choice pathologies that makes them a problematic way to aggregate voter preferences. Here, we present observations from field-level interviews with practitioners and government leaders to suggest that these conditions are not merely the result of academic imagination but are also observed in practice.[18] Of course, the reader should be cautioned that the anecdotes described below are by no means a random sample of special assessment operations but ones selected to demonstrate the peculiar problems of special assessments we have identified in this article, problems that have so far escaped scholarly attention.

District Formation

As we noted earlier, the ability to shape the boundaries of proposed assessment districts, the weight afforded to each property owner, and the timing of elections provide advantages for those proposing the assessments. The gerrymandering, local practitioners say, is done routinely, with residents not interested in approving higher fees being excluded from the district. "They had to be strategic about who was included and who wasn't," an executive director of a San Diego Business Improvement District told us about the formation of his district. "It's almost like redesigning congressional districts every 10 years. Some people run the line down the middle of the street." An assessment engineer at a leading firm that works on special-assessment formation and who is often tasked with determining the amount of benefit each property owner would receive from the district said early polling gives organizers powerful data on the likely outcome of a vote; districts that are not expected to pass simply never move forward beyond the early planning stage.

As explained above, California law provides that votes be weighed according to the amount of the assessment each property owner would pay, which in turn is based on the amount of benefit each property owner would receive. Echoing Miscynski's observation, the assessment engineer explained that determining when a property is expected to receive a "special benefit" is itself a subjective task. "No. 1, it's not an exact science. It's a little bit of an art, I guess, in a sense that you're looking at the improvements and services and trying to quantify those benefits" and who receives them, he said. Traditionally, local governments have used general "rules of thumb" (Miscynski, 1978) to apportion benefits and thus voting rights, relying on measures such as the amount of the property fronting the street, total acreage, and the zoning of the land.[19] These rules of thumb generally assume that larger parcels and businesses receive greater special benefits, giving them a larger voice in the vote. One scholar has noted,

> The doctrine that “special assessments must always be proportioned to benefits” is merely an example of those legal fictions so dear to the minds of American judges and lawyers, since “acreage, frontage, value, and superficial area” may any of them be taken as the measure of presumptive benefit (a benefit which, it should be added, may never be realized), and therefore the limitation of proportionality is effectively evaded (quoted in Diamond, 1983, parenthetic note in original).

A San Diego County official, who oversees a department that relies heavily on special assessments for its funding, said the apportioning of benefits has often been a contentious task, pitting one property owner in the proposed special assessment district against another. These bitter battles, she said, drove the county’s decision to retain outside assessment engineers to do the work and give the apportionment a sheen of objectivity.

For an example of how special assessments can be “gerrymandered” to get around opposition to more traditional development processes, consider the case of Venice, a western district in the city of Los Angeles. In 1905, a large system of canals was built in the area, reminiscent of the vast waterways from the district’s Italian namesake. But by the mid-1960s, most property owners had fled the area and it became a “blighted” home to low-income renters. By 1965, the largely absentee landlords formed the Venice Canals Improvement Association, lobbying to establish a special assessment to better the canals and serve as a catalyst for a revitalization of the whole area (Gaines, 1972). Though the measure was strongly opposed by the area’s residents, who warned that the project would force numerous low-income families out of Venice, participation in the proceedings to establish the assessment district for the project was limited by state law to property owners (“Council Vote Against Tenants,” 1969).[20] In 1971, the Los Angeles City Council finalized the $21.3 million assessment, creating the largest special assessment in California history up until that point (Baker, 1971).

Managing the District

Under California law, municipalities must outsource the allocation of some special assessment funds to local nonprofit corporations, which sign agreements with the municipalities to provide the services paid for by the assessments. Sometimes local officials also outsource assessment work voluntarily, in an effort to convince property owners that their money will be kept close to home and directed toward projects they want. In practice, assessment district officials say, the decisions about how to allocate funds under such circumstances are made by corporate staff, subject to the specific terms of the ballot language approved by property owners. This does not necessarily lead to efficient outcomes, or to those preferred by the voters. One executive director in charge of a special assessment district, for example, said the organization had saved up thousands of dollars to provide landscaping and maintenance work for a street median constructed by San Diego's city redevelopment agency. But the construction of the median ran behind schedule, meaning that the money allocated for the landscaping could not be spent before the end of the fiscal year. Under the terms of the special assessment, however, if the money remained in the special assessment's account at year's end, the district could not collect new fees the following year. To avoid missing out on the new funds, which were needed to pay the cost of administering the district, the executive director said she used the remaining budget to replace half of the public trash cans within the district's boundaries.

Initially, California law provided that the nonprofit corporations be governed by boards consisting of the affected property owners, and that a third body, an advisory board, provide recommendations to the municipal governing body about the functioning of the special assessment district. In 2001, however, the requirement for advisory boards was eliminated, because they "seldom met, did not submit their annual reports to city council and often consisted of the same members" as the nonprofit boards (Chacon, 2001). In the case of the Greater Golden Hill MAD considered earlier, the annual assessment was reaffirmed by the San Diego City Council in 2008 despite opposition from MAD's advisory committee (Hargrove, 2008a, 2008b).

Special assessment district leaders also say that meetings by the district boards are rarely well-attended, and, as with most other local bodies, few board members face challengers when they stand for reelection. When asked how many people, on average, attend meetings of the board for one special assessment district in southern San Diego, a board member said, "The board members. Sometimes all of them—but that's very unusual." An executive director of both a property-based special assessment district and a Business Improvement District in eastern San Diego recalled the challenges she faced when trying to recruit a new member to the board governing both districts. "We were looking specifically for an attorney along the boulevard and we couldn't find one who wanted to be on the board," she said.

> So we ended up getting the owner of a new coffee shop up here—new blood on the board. And that's really what our board needs, a lot of the members have just been there for a long time and we need fresh ideas.

A consultant, whose company has helped dozens of California cities create special assessment districts and who manages one himself, expressed concern about the quality of management provided by the nonprofit corporations. "That's a huge problem. These districts are being formed, and, in my opinion, most executive directors don't know what the hell they're doing because this is such a new field," he said. "What they really become is an opportunity to pay someone maybe $150,000, maybe $200,000, maybe $250,000 to act as an 'executive director' and manage the district." Together, these anecdotes demonstrate how unusual institutional features of special assessments can indeed make them vulnerable to democratic problems identified by the theoretical discussion above.

Conclusion

The financing of public infrastructure and improvements through special assessments is, to be sure, a practice deeply rooted in American history. As Einhorn's insightful account of early Chicago makes clear, special assessments have played a crucial role in the construction of America's major cities. Yet the rebirth of special-assessment financing in California in recent decades is in many ways markedly different from Chicago's experience. In the 19th century, special assessments emerged from a distinct political philosophy, one that rejected the idea that local governments could play an effective role in the redistribution of resources. "American city government in the nineteenth century," Einhorn (1991) wrote, "worked on the principle that the distribution of services was equitable when each city dweller got what he paid for, no more and no less."[21] Today, California's growth of special assessments has been driven instead by political expediency in the face of direct democracy. Even as California voters continue to limit the ability of their governments to raise revenue, polls show that the majority of voters continue to expect an active—and redistributive—state. And though the institutional structures of modern assessments do appear to prevent downward redistribution, they leave the system vulnerable to strategic manipulation by large property owners and businesses, who can more easily overcome the problems of collective action, in effect transforming assessments into a potential tool for upward redistribution. There is another difference, too: The special assessments of the 1800s provided funding primarily for the construction of public works. Today, local governments are increasingly using special assessments to pay for the maintenance of these improvements, and for traditional public services. In addition to making "special benefits" far more difficult to quantify, the mission creep of assessment financing is also stretching the legal rationale—special assessments' limited role and disproportionate effect—that has exempted them from universal and equal suffrage. This rationale begins to break down when assessments are used to finance vital and diffuse government services, such as public safety, fire protection, and schools.

Based on special assessments' vulnerability to various social choice problems, we believe they may be a problematic way to replace general taxation in the face of voter retrenchment. Our exploratory discussion, however, raises as many questions as it answers. Future research would be well served by comparing areas where specific public goods are funded through general taxation to other communities where the same goods are financed through assessments, a step that will help quantify the extent of agency loss posited in this paper. In addition, though we have noted that assessment financing has grown steadily in California in recent decades, our data collection efforts also indicate that this growth has been brisker in some parts of than others. The differences in patterns of adoption pose as yet unexplored puzzles, with important distributional consequences. As our knowledge of assessments catches up with their growing prominence in local finance, these and related puzzles will beg the attention of scholars.

Notes

1. Special assessments may also be assessed on things other than real property. One of the most closely studied forms of special assessment district, the Business Improvement District, is funded through a levy on business licenses approved by the affected business owners. See Brooks (2006) for a survey of the literature on Business Improvement Districts.

2. The total amount collected in user fees also cannot exceed the cost of the service for which they are charged. Misczynski (1978) suggests this is also a common feature of special assessments. However, as we note later and as previous scholars have pointed out, the cost of public goods and services provided through special assessments is, by assumption, also used to determine the amount of "special benefits" that these goods and services provide. The legal history of special assessments depicts a progression from the initial requirement that assessments be based *exactly* on the expected benefit for a property to a more relaxed standard once the idea that benefits could be estimated with precision was rejected, requiring only that the assessment be *directly related*, or proportional, to the benefit (Diamond, 1983).

3. In recent decades, business owners have also formed special assessment districts funded through surcharges on their business fees, and hoteliers in San Diego formed a Tourism Marketing District funded by a surcharge on hotel occupants (Lewis, 2007).

4. Though local government leaders describe special assessments as grassroots projects, many are begun by a small group of interested community leaders with the help of professional consultants. In addition, local governments may provide seed funding to pay for the initial costs of special assessment formation, to be repaid from the first year's assessment funds (City of San Diego Annual Fiscal Year 2004 Budget). For an example of a community survey to gauge interest in an assessment administered by a leading special assessment consulting firm, see http://newcityamerica.com/downloads/LakeMerritt_UptownDistrict.pdf. Although there has been a vigorous literature on statewide initiatives in the United States and Switzerland (e.g. see Bails, 1990; Bali, 2003; Bowler, Donovan, & Tolbert, 1998; Bridges & Kousser, 2008; Cain & Noll, 1995; Garrett, 1997, 1999, 2005; Garrett & McCubbins, 2007, 2008; Gerber, 1996, 1998, 1999; Gerber & Lupia, 1995; Gerber, Lupia, & McCubbins, 2004; King-Meadows & Lowery, 1996; Kousser & McCubbins, 2005; Kousser, McCubbins, & Moule, 2008; Lupia & Matsusaka, 2004; Matsusaka, 1995, 2000, 2004; Matsusaka & McCarty, 2001; McCubbins, 1995; Smith, 1998), there has been relatively little on local initiatives (for an exception, see Hajnal & Lewis, 2002).

5. This would not be the first time special assessments were considered for use to get around legal limits on revenue and financing. Misczynski describes how New York public works entrepreneurs, determined to build a subway expansion in 1909 even though the city had reached its legal debt ceiling, turned to special assessment bonds, which were not subject to the limit. The idea was dropped due to opposition from real estate and business interests (Misczynski, 1978, p. 316).

6. Noting the importance of statutes authorizing special assessments, the court wrote,

> For over 60 years these laws have provided the most widely used procedure in California for the construction of a variety of public improvements including streets, sewers, sidewalks, water systems, lighting and public utility lines; property owners benefited by the improvements pay for these improvements either in cash or, at their option, by installments over a period of time. (*County of Fresno v. Malmstrom*, 1979)

In a subsequent ruling, the court added "a word of caution to taxing entities which might be tempted to use the special assessment exclusion as a means to circumvent the tax limitation," noting that its ruling applied only to "true special assessments designed to directly benefit the real property assessed and make it more valuable" (*Solvang Municipal Improvement District v. Board of Supervisors*, 1980).

7. Summarizing the practical impact of these definitions, a manager of a vector control district told a state Senate committee: "Call it an assessment, call it a service charge, call it a fee, call it a tax—the terms are all the same to the public. People don't care what you call it. All they care about is having a program that works" (Senate Committee on Local Government, 1986).

8. Shires and Habers do not include Mello-Roos districts in their measure of special assessment financing. See our third critique above.

9. Nominal dollar figures were adjusted using the Implicit Price Deflator from the Bureau of Economic Analysis.

10. According to the state controller's data, property taxes represent roughly 20% of local revenues.

11. This is calculated by multiplying each special assessment by the number of property parcels in it. Parcels that are in multiple assessments are thus counted multiple times by this measure. However, calculating the number of special assessment parcels in this way allows us to separate growth due to larger assessments from growth due to larger and more numerous districts.

12. Unfortunately, we do not have the data on the number of special assessment districts during the entire time period to definitively say whether the increase is due to the growth in the number of districts or in their size. However, we do know that the number of special assessment districts increased from 62 in 1981 to more than 700 by 2006.

13. Because Los Angeles County did not report total property tax receipts, the amount is estimated by taking 1 percent of the total assessed valuation in the county.

14. By comparison, in Massachusetts, the only other state for which we have reliable longitudinal local government revenue data, special assessments fell in nominal dollars from $7.1 million in 1985 to $6.2 million in 1999, according to the definition of special assessment used by that state's Department of Revenue.

15. It should be noted that the city of San Diego provides many of the same services itself. The district supplements those services, providing for levels of public goods above those funded with general taxation.

16. Though the California Supreme Court's recent ruling in *Silicon Valley Taxpayers Association v. Santa Clara Open Space Authority* did increase the burden of proof for local benefit determinations, it did not prescribe an exact method by which these determinations should be made.

17. The fact that special assessments must be approved by legislative bodies need not necessarily fix these pathologies. Because city councils and county supervisors must vote on assessment petitions submitted to them, special assessments increase the total number of agenda setters, thus exacerbating the problem of monopoly agenda control.

18. Most of the subjects who agreed to speak with us for this report did so anonymously. Their interviews were conducted in confidentiality, and the names of interviewees are withheld by mutual agreement. When citing them, we provide a description of their position and their role in the management or oversight of special assessments. For subjects who agreed to speak on the record, we use the standard citation format.

19. These changes were driven largely by the property owners themselves, who hoped that clear-cut rules for apportioning benefits would reduce the discretion of government officials, and thus opportunities for rent seeking (Diamond, 1983).

20. At the time, state law did not require a vote to establish an assessment, but did provide for "majority protest" by affected property owners to oppose the district formation. Though the project was opposed by many residents, only a few property owners chose to protest—most of them on the periphery of the district, arguing that they would be charged too much for the improvements.

21. A 1973 map of the Chicago sewers and street system illuminates an important democratic implication of funding improvements through assessments: Whereas neighborhoods with poorer residents were more likely to have sewers (funded through general taxation) than pavements (funded through assessments), wealthy areas had both (Einhorn, 1991).

References

62 Ops. Call. Attorney General. (1980). *Opinions of the Attorney General of California*, Sacramento, CA.

Baer, S. E., & Feiock, R. C. (2005). Private governments in urban areas: Political contracting and collective action. *American Review of Public Administration, 35,* 42-56.

Bails, D. (1990). The effectiveness of tax-expenditure limitations: A re-evaluation. *American Journal of Economics and Sociology, 49*, 223-238.

Baker, E. (1971, June 23). Legal barriers cleared for Venice Canal Plan. *Los Angeles Times.* p. 3.

Bali, V. A. (2003). Implementing popular initiatives: What matters for compliance? *Journal of Politics, 65*, 1130-1146.

Berry, C. R. (2008a). *Imperfect union: Representation and taxation in multi-level governments*. Unpublished manuscript, University of Chicago.

Berry, C. R. (2008b). *Piling on: The fiscal effects of jurisdictional overlap.* Unpublished manuscript, Harvard University, Cambridge, MA. Retrieved May 14, 2009, from http://politics.as.nyu.edu/docs/IO/4754/berry.pdf.

Berry, C. R., & Gersen, J. E. (2007). Representation without taxation: The fiscal consequences of electoral institutions. *Harris School Working Paper Series 07.13*. Retrieved February 12, 2009, from http://harrisschool.uchicago.edu/About/publications/working-papers/pdf/wp_07_13.pdf

Berry, C. R., & Gersen, J. E. (2008). The unbundled executive. *Harris School Working Paper Series 08.05.* Retrieved February 13, 2009, from http://harrisschool.uchicago.edu/About/publications/working-papers/pdf/wp_08_05.pdf

Bort, D. C. (2006). *An introduction to California Mello-Roos community facilities districts.* San Francisco: Orrick, Herrington & Sutcliffe LLP.

Bowler, S., Donovan, T., & Tolbert, C. J. (Eds.). (1998). *Citizens as legislators: Direct democracy in the United States*. Columbus: Ohio State University Press.

Bridges, A., & Kousser, T. (2008). *When do politicians give power to the people? Adoption of the citizen initiative in American States*. Unpublished manuscript.

Briffault, R. (1993). Who rules at home? One person/one vote and local governments. *The University of Chicago Law Review, 60*, 339-424.

Briffault, R. (1999). A government for our time? Business improvement districts and urban governance. *Columbia Law Review, 99*, 365-477.

Brooks, L. (2006). Does spatial variation in heterogeneity matter? Assessing the adoption patterns of business improvement districts. *Review of Policy Research, 23*, 1219-1234.

Brooks, L. (2007). Unveiling hidden districts: Assessing the adoption patterns of business improvement districts in California. *National Tax Journal, LX*, 5-24.

Cain, B., & Noll, R. G. (Eds.). (1995). *Constitutional reform in California: Making state government more effective and responsive.* Berkeley: IGS Press, University of California.

California Secretary of State. (1984). *California ballot pamphlet: 1984 general election*. Sacramento, CA.

California State Controller's Office. (Selected years). *Streets and roads annual report.* Sacramento, CA: Author.

Chacon, F. (2001). *AB 1021 assembly bill: Bill analysis*. Sacramento, CA: Assembly Committee on Local Government. Retrieved June 27, 2008, from http://info.sen.ca.gov/pub/01-02/bill/asm/ab_1001-1050/ab_1021_cfa_20010508_141643_asm_comm.html

Chapman, J. I. (1998). *Proposition 13: Some unintended consequences*. San Francisco: Public Policy Institute of California.

Citizens Research Council of Michigan. (1997). *Ad valorem special assessments in Michigan* (Report No. 319). Farmington Hills, MI: Author.

City of San Diego Annual Fiscal Year 2004 Budget. (2004). *Maintenance assessment districts*. San Diego, CA.

Council vote against tenants interpreted as vote for canals. (1969, April 3). *Los Angeles Times*.

County of Fresno v. Malmstrom. (1979). 94 Cal App. 3d 974.

Diamond, S. (1983). The death and transfiguration of benefit taxation: Special assessments in nineteenth-century America. *Journal of Legal Studies, 12*, 201-240.

Einhorn, R. (1991). *Property rules: Political economy in Chicago, 1833-1872*. Chicago: University of Chicago Press.

Foldvary, F. E. (2006). *Circumventing California's Proposition 13 for the public collection of rent.* Retrieved February 13, 2009, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id= 1103582

Frammolino, R. (1983, December 15). San Diego halts new construction in battle over fees. *Los Angeles Times.* p. OC3.

Gaines, S. A. (1972). The right of non-property owners to participate in a special assessment majority protest. *UCLA Law Review, 20*, 201-249.

Garreau, J. (1991). *Edge city: Life on the new frontier*. New York: Doubleday.

Garrett, E. (1997). Perspective on direct democracy: Who directs direct democracy? *University of Chicago Law School Roundtable, 4*, 17.

Garrett, E. (1999). Money, agenda setting, and direct democracy. *Texas Law Review, 77*, 1845, 1849-1854.

Garrett, E. (2005). Hybrid democracy. *George Washington Law Review, 73*, 1096.

Garrett, E., & McCubbins, M. D. (2007). The dual path initiative framework. *Southern California Law Review, 80,* 299.

Garrett, E., & McCubbins, M. D. (2008). *When voters make laws: How direct democracy is shaping American cities.* Retrieved February 17, 2009, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1060861.

Gerber, E. R. (1996). Legislative response to the threat of popular initiatives. *American Journal of Political Science, 40*, 99-128.

Gerber, E. R. (1998). Pressuring legislatures through the use of the initiatives: Two forms of indirect influence. In S. Bowler, T. Donovan, & C. J. Tolbert (Eds.), *Citizens as legislators: Direct democracy in the United States* (pp. 191-208). Columbus: Ohio State University Press.

Gerber, E. R. (1999). *The populist paradox: Interest group influence and the promise of direct legislation*. Princeton, NJ: Princeton University Press.

Gerber, E. R., & Lupia, A. (1995). Campaign competition and policy responsiveness in direct legislation elections. *Political Behavior, 17*, 287-306.

Gerber, E., Lupia, A., & McCubbins, M. D. (2004). When does government limit the impact of voter initiatives? The politics of implementation and enforcement. *Journal of Politics, 66*, 43-68.

Governor's Office of Planning and Research. (1997). *A planner's guide to financing public improvements.* Sacramento, CA: Author.

Greater Golden Hill Community Development Corporation. (2008). *Clean, green, and safe maintenance assessment district*. San Diego, CA: Author. Retrieved June 26, 2008, from http://goldenhillcdc.org/CGSMAD.htm?3.

Grossman, S. J., & Hart, O. D. (1983). An analysis of the principal-agent problem. *Econometrica, 51*, 7-45.

Hajnal, Z., & Lewis, P. (2002). *Why direct democracy? The incidence of local voter initiatives in California.* Paper presented at the annual meeting of the American Political Science Association, Boston.

Hardin, G. (1968). The tragedy of the commons. *Science, 162*, 1243-1248.

Hargrove, D. (2008a, May 21). MAD gets irate. *San Diego Reader*. Accessed online May 5, 2009: http://www.sandiegoreader.com/news/2008/may/21/mad-gets-irate/

Hargrove, D. (2008b, May 21). MAD: Advisory or oversight committee? *San Diego Reader.* Accessed online May 25, 2009: http://www.sandiegoreader.com/news/2008/jun/17/mad-advisory-or-oversight-committee/

Holmström, B. (1979). Moral hazard and observability. *Bell Journal of Economics, 4*, 74-91.

Hotelwala, M., & Mannat, A. (2004). *Assessing the benefits of benefit assessments*. Senate Local Government Committee Report 801-S, Sacramento, CA.

Jacobson, C. D., & Tarr, J. A. (1996). No single path: Ownership and financing of infrastructure in the 19th and 20th centuries. In A. Mody (Ed.), *Infrastructure delivery: Private initiative and the public good* (pp. 1-36). Washington, DC: World Bank.

Keppel, B. (1979a, July 25). L.A. supervisors OK $12 annual street light fee. *Los Angeles Times*. p. OC_A12.

Keppel, B. (1979b, July 25). Supervisors approve $12 annual street lighting fee. *Los Angeles Times.* p. E1.

Kiewiet, D. R., & McCubbins, M. D. (1991). *The logic of delegation*. Chicago: University of Chicago Press.

King-Meadows, T., & Lowery, D. (1996). The impact of the tax revolt era state fiscal caps. *Public Budgeting and Finance, 16,* 102-112.

Kirk, D. (2008). How voting works. *Yerba Buena CBD [YBCBD] community blog.* Retrieved September 30, 2008, from http://www.ybcbd.blogspot.com/.

Knox et al. v. City of Orland et al. 4 Cal.4th 132 (1992).

Kogan, V., & McCubbins, M. D. (2008). *The problem of being special: Special assessment districts and the financing of infrastructure in California* (Working Paper). Los Angeles: University of Southern California (USC)–Caltech Center for the Study of Law and Politics. Retrieved May 14, 2009, from http://law.usc.edu/academics/assets/docs/specialdistricts_updated.pdf.

Kousser, T., & McCubbins, M. D. (2005). Social choice, crypto-initiatives and policymaking by direct democracy. *Southern California Law Review, 78*, 949-984.

Kousser, T., McCubbins, M. D., & Moule, E. (2008). For whom the TEL Tolls: Can state tax and expenditure limits effectively reduce spending? *State Politics and Policy Quarterly, 8*, 331-361.

Krueger, A. (2008, July 26). Fire district tax loses by 1 vote. *San Diego Union-Tribune*. Retrieved February 17, 2009, from http://www.signonsandiego.com/uniontrib/20080726/news_1ez26rural.html.

Land, A. E. (1967). Toward optimal land use: Property tax policy and land use planning. *California Law Review, 55*(3), 856-897.

Lewis, S. (2007, December 6). The hotelier's new kitty. *Voiceofsandiego.org*. Retrieved June 27, 2008, from http://www.voiceofsandiego.org/articles/2008/06/27/columnists/scott_lewis/27lewis120607.txt.

Los Angeles County Auditor and Controller. (Selected years). *The L.A. county taxpayers' guide.* Los Angeles: Author.

Lupia, A., & Matsusaka, J. G. (2004). Direct democracy: New approaches to old questions. *Annual Review of Political Science, 7*, 463-482.

Massachusetts Department of Revenue. (Selected years). *Schedule A: Part 1 general fund revenues and other financing sources.* Boston: Author.

Matsusaka, J. (1995). Fiscal effects of the voter initiative: Evidence from the last 30 years. *Journal of Political Economy, 103,* 587-623.

Matsusaka, J. (2000). Fiscal effects of the voter initiative in the first half of the twentieth century. *Journal of Law and Economics, 43*, 619-650.

Matsusaka, J. (2004). *For the many or the few*. Chicago: University of Chicago Press.

Matsusaka, J., & McCarty, N. M. (2001). Political resource allocation: Benefits and costs of voter initiatives. *Journal of Law, Economics, and Organization, 17*, 413-448.

McCubbins, M. D. (1995). Putting the state back into state government: The constitution and the budget. In B. Cain & R. Noll (Eds.), *Constitutional reform in California: Making state government more effective and responsive* (pp. 353-375).Berkeley: University of California Institute of Governmental Studies Press.

Merina, V. (1980, June 21). Board juggles funds for record budget. *Los Angeles Times.* p. C1.

Miscynski, D. J. (1978). Special assessments. In D. G. Hagman & D. J. Miscynski (Eds.), *Windfalls for wipeouts: Land value capture and compensation*. Chicago: American Society of Planning Officials.

Mirrlees, J. (1976). The optimal structure of incentives and authority within an organization. *Bell Journal of Economics, 7*, 105-131.

O'Dell, J. (1981, May 20). Lighting fee changes pondered in San Clemente. *Los Angeles Times*. p. OC_A6.

Ordeshook, P. C., & Schwartz, T. (1987). Agenda and the control of political outcomes. *American Political Science Review, 81*, 179-199.

Peterson, P. (1981). *City limits*. Chicago: University of Chicago Press.

Qian, Y., & Weingast, B. R. (1997). Federalism as a commitment to preserving market incentives. *Journal of Economic Perspectives, 11*(4), 83-92.

Romer, T., & Rosenthal, H. (1979). Bureaucrats versus voters: On the political economy of resource allocation by direct democracy. *Quarterly Journal of Economics, 93*, 563-588.

Rosewater, V. (1968). *Special assessments: A study in municipal finance*. New York: AMS Press. (Original work published 1893)

San Diego County Auditor and Controller. (Selected years). *Property valuations, tax rates, useful information for taxpayers.* San Diego, CA: Author.

Senate Committee on Local Government. (1986, October 22). *Interim hearing on the use of benefit assessments since Proposition 13.* Los Angeles Convention Center.

Shires, M. A. (1999). *Patterns in California government revenues since Proposition 13*. San Francisco: Public Policy Institute of California.

Shires, M. A., & Habers, M. G. (1997). *A review of local government revenue data in California.* San Francisco: Public Policy Institute of California.

Shuit, D. (1979, October 21). Flood "Tax" leads local issues. *Los Angeles Times*. p. B1.

Silicon Valley Taxpayers Association v. Santa Clara County Open Space Authority. Cal. LEXIS 9306 (2008).

Smith, D. A. (1998). *Tax crusaders and the politics of direct democracy*. New York: Routledge.

Solvang Municipal Improvement District v. Board of Supervisors. 112 Cal. App. 3d 545 (1980).

Tiebout, C. (1956). A pure theory of local expenditures. *Journal of Political Economy, 64*, 416-424.

Tirole, J. (1988). *The theory of industrial organization.* Cambridge: MIT Press.

Trochim, W. (2001). *The research methods knowledge base.* Cincinnati, OH: Atomic Dog.

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