Tax Motivated Takings

Abstract - Tax motivated takings are takings by a local government aimed purely at increasing its tax base. Such an action was justified by the Supreme Court’s ruling in Kelo v. New London, which allowed the use of eminent domain for a private redevelopment project on the grounds that the project promised spillover public benefits in the form of jobs and taxes. This paper argues that tax motivated takings can lead to inefficient transfers of land for the simple reason that assessed values understate owners’ true values. We, therefore, propose a reassessment scheme that may reduce the risk of this sort of inefficiency.

INTRODUCTION

The recent Supreme Court case of Kelo v. New London (125 S.Ct. 2655, 545 U.S. 469, 2005) approved the use of eminent domain by a municipality seeking to acquire land primarily aimed at economic redevelopment. The case tested the Constitutional requirement, stated in the Fifth Amendment, that eminent domain can only be used to obtain land for “public use.”¹ The requirement is clearly satisfied—and the use of eminent domain is uncontroversial—in cases where the land is intended for a highway or park, but the issue becomes more difficult when, as in Kelo, the land is given to a developer for use in a private project. Although the resulting benefits are, therefore, largely private, there may nevertheless be substantial spillover benefits to the community, “including—but by no means limited to—new jobs and increased taxes” (Kelo v. New London, p. 2665). The Court argued that existence of these benefits, as part of a comprehensive redevelopment project, satisfies the public use requirement.

Kelo is not the first case to reach this conclusion. In Berman v. Parker (348 U.S. 26, 1954), the Supreme Court had previously argued that eminent domain could be used for a redevelopment project aimed at eliminating urban blight in Washington, D.C. Similarly, in Poletown Neighborhood Council v. City of Detroit (304 N.W.2d 455, 410 Mich. 616, 1981), the Michigan Supreme Court allowed the city to use eminent domain to condemn an entire neighborhood in order to clear the way for a new General Motors assembly plant. Again, the Court cited the economic benefits from the increased jobs and tax revenue as its justification.

¹ The relevant clause reads, “nor shall private property be taken for public use, without just compensation.”
Still, courts have not universally accepted the principle that "public use" includes private uses with some spillover public benefits. For example, in 2004, just a year before *Kelo*, the Michigan Supreme Court reversed its earlier decision in *Poletown* when it disallowed the use of eminent domain for a private development project, despite the fact that the project created 30,000 new jobs and promised $350 million in tax revenues for the county. In reaching this conclusion, the Court emphasized the fundamental protection of private property afforded by the Constitution. Specifically, "if one’s ownership of private property is forever subject to the government’s determination that another private party would put one’s land to better use, then the ownership of real property is perpetually threatened by the expansion plans of any large discount retailer, ‘megastore,’ or the like" (*Wayne v. Hathcock*, p. 786). Thus, although the *Kelo* decision represents the law of the land, there is not universal agreement regarding the proper scope of public use. Indeed, since the *Kelo* ruling, no fewer than 42 states have passed legislation imposing some limits on the use of eminent domain for purely private development.

The purpose of this paper is not to engage in the broad debate about whether local governments ought to be allowed to exercise eminent domain in cases of private development, a topic that has been discussed in depth elsewhere. Rather, it is to examine the implications of allowing local governments, in the wake of *Kelo*, to use eminent domain specifically for the purpose of enhancing their tax revenues by forcing the transfer of land to higher valued uses. We will refer to such uses of eminent domain as "tax motivated takings." Although this type of action is apparently justified by *Kelo* as a legitimate public purpose, we will argue that, if the objective of local governments is to increase tax revenues (as suggested in the *Kelo* decision), then allowing the use of eminent domain in such cases can lead to inefficient transfers of land. The simple reason is that assessed values generally understate true values. For example, a piece of property assessed at $10,000 for tax purposes may be worth, say, $25,000 to the owner in the sense that she would not sell for less than that amount in a consensual transaction. Thus, if a would-be buyer offered $20,000, the owner would refuse to sell. In contrast, the local government, acting in the interest of the majority of voters, would like the sale to occur because it would then be able to extract more taxes from the property. The temptation to use eminent domain in this situation is apparent. Indeed, it is one of the objections raised by the dissenting justices in *Kelo*: “[W]ithout a bright line rule preventing the use of eminent domain for private projects[,] nothing would stop a city from transferring citizen A’s property to citizen B for the sole reason that citizen B will put the property to a more productive use and thus pay more taxes…” (*Kelo v. New London*, pp. 2666–7).

At its root, the inefficiency that results from the allowance of eminent domain stems from the combination of two factors: the local government’s desire to extract additional tax revenue, and its inability to observe the owner’s true valuation. This second factor effectively exempts $15,000 of the owner’s valuation (her so-called “subjective value”) from taxation (which is why she has no incentive to reveal her

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3 See the survey by the Castle Coalition (2007). The states that have passed no legislation are Arkansas, Hawaii, Mississippi, New Jersey, New York, Oklahoma, and Rhode Island. Among those states that have acted, the legislation varies considerably in terms of the stringency of the limits.

true value). Thus, the only way the government (responding to the first factor) can capture at least some of this value is through a sale of the land, whether consensual or forced.

The remainder of the paper describes this problem in more detail, focusing on the potential inefficiency arising from it. We develop a simple model to identify more explicitly the inefficiency that arises when tax–motivated local governments can use eminent domain in cases of private development. We then propose a reassessment scheme that could increase efficiency by discouraging local governments from resorting to eminent domain purely for tax reasons.

The paper is organized as follows. The second section discusses the concept of tax motivated takings and subjective value in more detail. The third section then presents a simple model of land transfers in the context of a project requiring a single parcel. The model is used to illustrate both the inefficiency that occurs when subjective value is not taxable, and the reassessment scheme we propose as a possible solution to this inefficiency. In the fourth section, the model is extended to the case of a project requiring purchase of multiple parcels. We show that the basic results from the single parcel case carry over to this case as well, provided landowners have identical subjective values. With identical landowners, our reassessment scheme both restores the efficiency of market transactions and eliminates the incentive for tax–motivated takings. However, in the more realistic case where subjective values differ (unobservably), the proposed scheme cannot fully restore the efficiency of market transactions, but it would still eliminate the local government’s incentive to inefficiently exercise its eminent domain power simply for purposes of raising tax revenue. Finally, the fifth section concludes.

**TAX MOTIVATED TAKINGS DEFINED**

As noted, tax motivated takings are defined to be takings aimed purely at increasing the local tax base, as opposed to assembling land for public use. Thus, instead of being used for a park or highway, the acquired land is given to a private developer for use in a commercial project whose value exceeds the aggregate assessed values of the taken parcels. The project, thus, promises greater tax revenues that can be used to increase the provision of public services like education or police protection. In this sense, the taking can be construed as indirectly satisfying the public use requirement of the Fifth Amendment, even though the acquired land is not itself being used for the public good. This is essentially the logic underlying *Kelo* and *Poletown*.

Still, the question arises as to why the current owners’ land has to be taken to achieve this purpose. In other words, if the land has higher value in development (which is the source of the increased tax revenue), then why can’t the developer simply acquire the land through the market, without the need for a forced sale? There are two possible reasons. The first is the usual holdout problem. That is, when multiple parcels need to be assembled, the individual owners have an incentive to hold out for prices in excess of their true valuation of the property in hopes

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5 If subjective value were uniformly distributed throughout the jurisdiction, its unobservability would have no effect on the amount or distribution of taxes. Still, there would be an incentive for the majority of landowners, acting through the local government, to attempt to extract more taxes from the minority by increasing their assessed values.

6 This logic reflects Epstein’s (1985) contention that taxes and takings are equivalent in the sense that both involve coercive acquisitions of resources for government use. Also see Fischel (1995a, p. 211) on this point.
of capturing a share of the surplus from the project (Miceli and Segerson, 2007; Strange, 1995). The fact that the project is private rather than public does not alter the nature of this threat: the holdout problem is a consequence of the need for assembly rather than the use to which the land will ultimately be put (Merrill, 1986). Eminent domain is a legitimate response to this form of market failure (a point to which we return in the fourth section below).

There is, however, a second reason why the market may fail to bring about the transfer of land to the developer, even in the absence of a holdout problem. This is due to the divergence of the current owners’ true valuation, or reservation price, from the assessed value, which is based on market value.7 Several authors have commented on the importance of this issue in the context of government takings, and in particular, on the inadequacy of market value as the measure of “just compensation.” For example, Merrill (1986, p. 83) notes that market value “awards the condemnee what he would obtain in an arm’s length transaction with a third party, but does not compensate him for the subjective ‘premium’ he might attach to his property above its opportunity cost. In some cases, such as those involving undeveloped land, there may be no subjective value. But in other cases, the premium may be quite large.”

Ellickson (1973) further notes that subjective value will be especially high for single family homes, and its amount will tend to grow with the owner’s length of tenure.8 In recognition of the importance of this component of value, Canada at one time used “value to the owner” as the measure of compensation for takings. Ultimately, however, measurement problems forced it to adopt the conventional market value standard (Knetsch and Borcherding, 1979).

The concept of subjective value is easily illustrated with a simple diagram that describes the allocation of land in a given jurisdiction. In Figure 1, the horizontal axis represents the total amount of land in the jurisdiction, the downward sloping curve (labeled $MB_R$) represents the marginal benefit of land for residential use, and the upward sloping curve (labeled $MB_C$) represents the marginal benefit of land for commercial use. The curves may, therefore, be thought of as demand curves for residential and commercial land, respectively. The intersection determines the equilibrium amount of land devoted to residential use, $Q^*$, the amount devoted to commercial use (the remaining amount), and the equilibrium price of land, $P^*$, which can be interpreted as its market value. Focusing on the residential sector, the vertical distance between the demand curve, $MB_R$, and $P^*$ for any given parcel represents the subjective value of that owner. In this sense, subjective value is

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7 One might argue that the assessed value of a property should reflect its highest use, including its possible use for commercial development. This point does not alter our argument, however, because the current owner would sell voluntarily to the highest user, regardless of his intended use, if and only if the offer exceeds her true reservation price. Thus, the fact that a property has not sold implies that the owner’s reservation price exceeds the value of the best alternative use, whatever that might be. Of course, the best alternative use is partially determined by existing zoning laws—for example, a parcel in a residential zone presumably could not be assessed at its highest value in commercial use—but the local government always has the option to rezone the property in order to increase its assessed value. Such a strategy, however, is analogous to a tax motivated taking in that it represents another tool at the disposal of the local government for revealing at least a portion of the current owner’s subjective value.

8 This notion reflects Holmes’s (1897, p. 477) famous dictum that “A thing which you have enjoyed and used as your own for a long time, whether property or an opinion, takes root in your being and cannot be torn away without your resenting the act and trying to defend yourself.” Also see Blume and Rubinfeld (1984, pp. 618–20) and Fischel (1995b).
analogous to consumer surplus. And while there is no empirical evidence on the magnitude of this surplus in land markets (given the unobservability of subjective value), there is abundant experimental evidence that it exists and can be substantial (Hovenkamp, 1991).

The problem subjective value creates for efficiency is that a proposed development project (i.e., a project seeking to convert one or more parcels from residential to commercial use) may have a value above the aggregate market value of the targeted properties, but there is no way to know whether it exceeds the sum of the true values (which is the proper comparison for determining efficient land use). One could argue that the owners’ refusal to sell is evidence that they value the land more than the developer according to the usual market test for efficiency, but as noted above, this could also represent a holdout problem. However, even in the absence of a holdout problem (i.e., even in the case of a single parcel), a government that represents the majority of landowners (as opposed to maximizing social welfare) would have an incentive to force the sale, irrespective of its efficiency, in order to increase the tax revenue obtainable from that property.

One might counter that, because the land itself is not needed for the public good, the desired increase in tax revenue could be obtained without a taking simply by reassessing the targeted properties, or by raising the tax rate. The first strategy, however, requires the government to be able to identify those properties that are “underassessed” in the sense described above, but the unobservability of subjective value makes this impossible (or arbitrary). Alternatively, the government could simply raise the property tax rate, thereby increasing everyone’s taxes, but this is inconsistent with a majoritarian model of local government whose goal is to promote the interests of the majority of landowners. Such a government is likely to find tax motivated takings an attractive option.

A SIMPLE MODEL

The preceding argument, and our proposed response to it, can be illustrated more formally as follows. Suppose a developer proposes a redevelopment

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**Figure 1.** The Allocation of Land in a Jurisdiction and the Definition of Subjective Value

![Figure 1](image-url)
project that requires acquisition of a single parcel of land currently in residential use. (We initially ignore the problem of assembly in order to focus on the role of subjective value. Below we examine the case of assembly.) Let $V$ be the gross–of–tax value of the project. Whether or not it is efficient for the property to be transferred to the developer for the project depends on whether $V$ exceeds the current owner’s true valuation, or reservation price, denoted $R$ (representing the relevant point on the $MB_R$ curve in Figure 1). More specifically, such a transfer is efficient if and only if $V \geq R$.

We first note that, as a result of under–assessment, the market will not guarantee efficient transfers through consensual sales. To see this, let $t$ be the property tax rate (which we assume is fixed),9 and let $X$ be the developer’s bid for the land. If the developer acquires the land at that price, we suppose that it will be reassessed at $X$ for tax purposes, which makes his net–of–tax value $V – tX$.10 This represents the maximum bid that the developer would offer; that is, $X \leq V – tX$, or $X \leq V/(1 + t)$.11 Now suppose that the targeted parcel is currently assessed at $A (= P^*$ in Figure 1), and assume that $X > A$, so the expected tax revenue from the proposed project, $tX$, exceeds that obtainable from the current owner, $tA$. Then the minimum amount the current owner will accept to sell is $R – tA$. Thus, a consensual sale will occur if and only if $V – tX \geq R – tA$, or if and only if

$$[1] \quad V \geq R + t(X – A).$$

Given our assumption that $X > A$, [1] implies that, in the absence of government intervention, the market will result in too few sales. In other words, there may be properties for which $V \geq R$ but the seller blocks the sale. Given that the property will be assessed at the purchase price if transferred to the developer, the inefficiency stems from the inability of the local government to include the subjective value of the land in the current owner’s assessment.12 Intuitively, the “underassessment” of the land provides an implicit subsidy to the owner that distorts her reservation price and causes her not to sell in some cases where it would be efficient to do so.13

The inefficiency of the market outcome provides a possible efficiency justifica-

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9 It is reasonable to treat the tax rate as fixed when only one parcel is taken since it is such a small fraction of the tax base. However, we will relax this assumption below when multiple parcels are taken.

10 Note that this assumes that the assessed value of the property is the purchase price (which represents the value of the property net of taxes), rather than the total value $V$. In this sense, even if the property is transferred, the land will continue to be under–assessed since $X < V$. If the local government could assess the land at $V$ rather than $X$, then the net–of–tax value (and, hence, the maximum offer of the developer) would instead be $X = V(1 – t)$.

11 If competition among developers drives their profits to zero, then, in equilibrium, $X = \frac{V}{1 + t}$.

12 More generally, the inefficiency of the market stems from the under–assessment that exists whether or not the sale occurs. To see this, note that if there is no under–assessment (i.e., if properties are always assessed at their true values to the owner), then the property would be assessed at $R$ if retained by the landowner and at $V$ if transferred to the developer. In this case, the developer’s maximum offer is $V(1 – t)$ (as noted in footnote 10 above), and the owner’s minimum acceptable price is $R(1 – t)$. Thus, a consensual sale will occur if and only if it is efficient.

13 The inability to tax subjective value is only one possible reason that too few sales may occur in land markets. Other sources of inefficiency can exist as well. For example, with asymmetric information and the potential for legal liability for prior environmental contamination, some sales that are efficient may not occur. Policies designed to encourage redevelopment of these properties (so–called “brownfields”) include various forms of liability relief and other economic incentives. See, for example, Segerson (1997) and Chang and Sigman (2007). Other policies commonly used by local governments to correct market failures in the land market include zoning (Fischel, 1985), and transferable development rights (TDRs). For general discussions of local government land use controls, see Ellickson (1973) and Eagle (2008).
tion for eminent domain, or forced sales, provided that the government limits its use of the power to those cases where $V \geq R$ but the owner refuses to sell. The problem with this policy, however, is twofold. First, the government cannot observe $R$ (which is the reason for the underassessment in the first place), so even an efficiency–motivated government would not be guaranteed to use eminent domain only when it is efficient. Second, as suggested by *Kelo* and related decisions, local governments may seek to use their eminent domain power specifically to enhance tax revenue (rather than to promote efficiency). More specifically, they may view the use of eminent domain as a means of extracting from a small minority of residents additional revenue that can be used to benefit the community at large.14

In the current example, the local government, if allowed to do so, would want to exercise its eminent domain power to force a sale whenever $X > A$, which, given the possibility that $R > V > X > A$, could result in some inefficient sales being forced to occur. In this way, the inability of the local government to tax subjective value, coupled with its possibly majoritarian objectives, sets up a potential conflict between the government and the developer on one hand, and the current owner on the other, possibly culminating in the government’s overuse of eminent domain.

Fortunately, condition [1] suggests a means of correcting this problem and ensuring that only efficient transactions will occur. Specifically, consider the following reassessment scheme that could be adopted by the local government: if a landowner turns down a legitimate offer to buy his or her property, the government reassesses the property at the amount of the offer.15 Thus, in the above example, if the owner turns down the developer’s offer of $X$, her property is reassessed at this amount. This reassessment scheme has two key attributes. First, it eliminates the need to use eminent domain to force efficient transactions when subjective value cannot be taxed.16 Specifically, when $A = X$, condition [1] implies that the landowner will accept the developer’s offer if and only if $V \geq R$, which is the condition for an efficient sale. The reason this reassessment scheme works is that it eliminates the implicit subsidy enjoyed by the current owner relative to would–be buyers of the property. Thus, the scheme ensures that the market outcome is efficient.

Second, and perhaps more importantly for our purposes, the reassessment scheme eliminates the incentive of the local government to use its eminent domain power simply to extract more tax revenue (tax motivated takings). The reason is that the tax revenue received by the local government under the scheme will be the same regardless of whether the property transfer occurs and, hence, the government cannot gain any tax advantage by exercising its eminent domain power.

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14 The literature on local public finance generally assumes that local governments act to maximize the welfare of the median voter (Fischel, 1995a, pp. 255–7). An objective of increasing tax revenue by extracting additional revenue from a minority of residents would be consistent with this assumption, provided the additional revenue is used to increase the provision of public goods that benefit the median voter. Fischel and Shapiro (1989), in the context of a takings model, refer to such a government as “majoritarian.”

15 The proposed rule is similar to the self–assessment mechanism proposed by Plassmann and Tideman (2008), which involves all landowners in a jurisdiction stating a price at which they would willingly sell their land if needed for public use. (Essentially, this involves revelation of the $MB_a$ curve in Figure 1.) To prevent strategic overestimation, owners would then be taxed on that announced value. The scheme achieves truthful revelation if the tax rate is set equal to the probability of a taking. The difference between this proposal and our reassessment scheme is that under our rule, the reassessment would only affect those parcels actually targeted for acquisition and would only occur after an actual offer has been made and turned down. Also, our scheme avoids the difficulty of having to ensure that the tax rate and probability of a taking are equal.

16 Of course, eminent domain might still be needed for other purposes, e.g., to solve the holdout problem.
Taken together, these results suggest that, in the context of the model analyzed here, the proposed reassessment scheme is a more efficient means of increasing local tax revenue than allowing local governments to do this through takings for private development, as in *Kelo* and other cases. We emphasize, however, that our results should not necessarily be interpreted as an endorsement of the restrictions on the use of eminent domain for private development that have been enacted by many states (Castle Coalition, 2007). Rather, our results suggest that coupling eminent domain power with the proposed reassessment scheme would eliminate the local government’s incentive to “abuse” eminent domain for purposes of extracting tax revenue, while still preserving its ability to exercise the power legitimately to solve holdout problems.

Although use of the proposed scheme would have the advantages noted above, several possible objections could be raised about its implementation. First, one could argue that it will potentially put a heavy tax burden on residents who are least able to afford it. Specifically, owners who have a high subjective value of their land and are also “cash poor” may have to sell their property in order to pay the higher taxes. This criticism, however, is not unique to our scheme, but applies to any reassessment. Moreover, owners who are forced to sell at the developer’s initial offer in order to afford the taxes are at least no worse off than under the status quo.

A second possible objection is that the scheme requires information about private offers, and offers for property are not generally matters of public record. However, prospective buyers seeking assistance from the government in assembling land would obviously be required to make their offers public. A related issue concerns the criteria for establishing the “legitimacy” of such an offer. As a general proposition, we would expect that any offer that might trigger a reassessment would require the same level of scrutiny as a proposed taking under the public use doctrine. Specifically, the offer would have to come from a reputable developer who demonstrates firm financial backing, and it would have to be made in conjunction with a comprehensive development plan that promises substantial benefits to the community.17

A third objection that might be raised concerns the possible impact of the proposed scheme on standard appraisal practices. For example, consider a situation in which a property that was previously reassessed under the scheme is used as a benchmark for revaluing a comparable property (i.e., a property that is alike in all physical respects). Since subjective values vary considerably across owners, this could result in systematic mis–assessments of properties. One way to deal with this problem is to develop a proxy for subjective value in determining comparability, for example, the owner’s length of tenure (as suggested above). Another is simply to exempt properties that have been reassessed under the proposed scheme from use as comparable properties. (This should not pose a problem since the number of such properties in a given jurisdiction will likely be quite small.)18

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17 In addition, the reassessment scheme would obviously have to satisfy any statutory or constitutional requirements that govern assessment practices in a given state or jurisdiction.

18 Two other objections noted by a referee are, first, that the proposed scheme could cause strategic bidding by development firms seeking to drive up the costs of their competitors. Although this should not result in inefficient land use since a firm would never rationally bid more than its true valuation (net of tax costs), it could distort the relative after–tax profits of firms. Second, because other tax instruments (sales, income) do not include consumer surplus, its inclusion in property taxes would possibly alter the optimal mix of tax bases, and could also lead to inequities in the distribution of taxes.
THE CASE OF LAND ASSEMBLY

The preceding discussion has focused on the threat of tax motivated takings involving the acquisition of a single parcel. Most likely, courts would not allow the use of eminent domain unless the project in question involved assembly of several contiguous parcels for a large scale project. As noted above, however, assembly raises the complicating possibility of a holdout problem, which many argue justifies the use of eminent domain, even for redevelopment (Merrill, 1986). The question we ask in this section, therefore, is whether the proposed reassessment scheme can also ensure efficient transfers when assembly is required, thereby helping to mitigate the holdout problem. To do this, we extend the model from the previous section to consider a project where multiple parcels must be purchased. We show that the basic results in the previous section continue to hold in this context, provided landowners are identical. With heterogeneity, the proposed reassessment scheme would not fully restore efficiency of market transactions, but it would nonetheless eliminate the incentive of local governments to exercise their eminent domain power simply to raise tax revenue.

Consider a proposed development project that requires the assembly of \( n \) parcels, each currently assessed at \( A \) but valued by their owners at \( R > A \). We initially consider the case of identical parcels, where \( A \) and \( R \) are the same for all owners. The aggregate value of the proposed project continues to be \( V \) and the developer’s offer per parcel is again \( X \), so the condition for the redevelopment to increase tax revenues, as above, is \( X > A \), whereas the condition for assembly to be efficient is now \( V \geq nR \). In this setting, we define a holdout as any seller who turns down an offer greater than her true reservation price. The problem, of course, is that, since \( R \) is unobservable, it is impossible to tell whether a seller who refuses an offer is holding out, or truly values the property more than the developer’s offer.

We begin by noting that in the case where multiple parcels are taken, it is not appropriate to treat the tax rate as invariant to changes in the tax base resulting from redevelopment. (We will, however, treat total spending as fixed at \( G \).) Thus, the balanced-budget tax rate before the development project is given by

\[
t_{0} = \frac{G}{NA},
\]

where \( N \) is the total number of initially identical parcels in the jurisdiction. This implies that, if the landowners retain their land (i.e., no land transfer occurs) and there is no reassessment, then each owner receives a net return given by \( R - t_{0}A = R - G/N \). Alternatively, if the \( n \) parcels are taken, the tax rate would become

\[
t = \frac{G}{nX + (N-n)A},
\]

where \( t < t_{0} \) given \( X > A \). The equilibrium values of \( t \) and \( X \) are simultaneously determined by the developer’s zero-profit condition,

\[
X = V/n - tX,
\]

and the post-sale tax rate given in [3]. Thus, in the absence of any reassessment,

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19 In a survey of contested public use cases from 1954–1985, Merrill (1986) in fact found that 60–69 percent involved assembly. Further, the courts legitimized the use of eminent domain in 90 percent of these cases.

20 For a counterargument, see Kelly (2006).

21 This too may be unrealistic since the new development may put greater demands on the public budget in the form of increased infrastructure, police protection, etc. We abstract from these issues, though our basic conclusions do not depend on this assumption.
an individual owner will sell if and only if \( V/n - tX \geq R - tA \). After substituting from [2] and [3], this condition becomes

\[
\left[5\right] \quad \frac{V}{n} \geq R + G \left[ \frac{X}{nX + (N - n)A} - \frac{1}{N} \right].
\]

The bracketed term on the right hand side of [5] is positive, given our assumption that \( X > A \). Thus, as in the case of a project involving a single parcel, some projects that are efficient would not go forward through consensual sales. Note, however, that this is not attributable to a true holdout problem where landowners reject offers in an attempt to capture additional surplus. (Condition [4] implies that landowners realize all of the surplus from the project if it goes forward.) Rather, it stems from the under-assessment of the property. Again this provides some justification for the use of eminent domain. However, as before, allowing local governments to use eminent domain could also lead to inefficient transfers since a tax-motivated government would have an incentive to invoke the power too often.

To see that our proposed scheme would eliminate this incentive and restore efficiency even when assembly is required, note that under the proposed reassessment, any owner who turns down the developer’s offer of \( X \) has her property reassessed at that amount. As a result, even if the project does not go forward, the new tax rate will be given by [3], which makes the net return from refusing the offer \( R - tX \). Thus, as above, the owner will accept any offer that satisfies \( X \geq R - tX \). Combining this with the developer’s maximum offer per parcel as defined by [4] shows that owners accept the developer’s offer if and only if \( V/n \geq R \), which is the condition for efficiency.

Note that this conclusion relies on a couple of assumptions. First, the reassessment threat must be seen as credible by sellers. Otherwise, a seller’s initial refusal cannot be interpreted as reliable evidence that the seller values the land more than the developer. (Of course, this same point applies to the model without assembly.)

The second and more important assumption is that all sellers are identical. To examine the implications of relaxing this assumption, suppose sellers differ in their \( R \)’s (though for simplicity, we continue to assume that they have the same \( A \)’s). In this case, the condition for the project to be efficient is

\[
\left[6\right] \quad \frac{V}{n} \geq \frac{1}{n} \sum_{i=1}^{n} R_i.
\]

That is, the per-parcel value of the project must exceed the average of the owners’ reservation prices. The developer’s maximum offer continues to be defined by [4], which must be the same for all sellers since they all appear identical.

Now consider seller \( j \). She will accept offer \( X \) if and only if \( X \geq R_j - tX \), or if and only if \( X \geq R_j / (1 + t) \). Combining this with [4] yields the condition for owner \( j \) to sell:

\[
\left[7\right] \quad \frac{V}{n} \geq R_j.
\]

Clearly, owners with reservation prices greater than the average value of the

22 This condition assumes that individual landowners act in ignorance of any offers to other landowners.
23 One might worry that the developer can make use of this threat to underbid on the project. Presumably, this problem can be minimized by allowing competitive bidding by developers so that \( X \) is determined by [4].
24 If sellers differed in their \( A \)’s, the offers might be made proportional to \( A \), but this would not alter the problem as long as the \( R \)’s are not perfectly correlated with the \( A \)’s.
25 This assumes that, if the project does not proceed because some landowners refuse to sell, all of the properties (including the properties of those who accepted the offer) will still be reassessed at \( X \).
proposed project will refuse to sell. Thus, since $V/n < R_j$ for any given $j$ is not inconsistent with [6], heterogeneity will potentially prevent efficient projects from going forward under the reassessment scheme (or at least it will prevent them from attaining the optimal scale).\textsuperscript{26} Intuitively, when owners differ in their reservation prices, reassessment based on the developer’s best offer will result in under-assessment of those owners who value their properties most highly, and, correspondingly, over-assessment of those owners who would have sold at the developer’s best offer.\textsuperscript{27}

It is again important to emphasize that the failure of the project to go forward in this case is not a holdout problem in the sense defined above since an owner who blocks the sale truly values the parcel more than the developer’s best offer. Still, given the unobservability of the $R_j$’s, it has the same effect of blocking some otherwise efficient projects.\textsuperscript{28} Thus, in contrast to the case of identical landowners, when landowners have differing subjective values, the proposed reassessment scheme does not ensure that market outcomes are efficient. In this sense, it does not provide a complete solution to the problem of land assembly with heterogeneous and unobservable property values. In some cases, the use of eminent domain would still be needed to allow efficient projects to proceed.\textsuperscript{29} Nonetheless, the reassessment scheme would still eliminate the local government’s incentive to invoke its eminent domain powers to allow inefficient projects simply for purposes of raising tax revenue.

CONCLUSION

The Supreme Court’s decision in *Kelo v. New London* to allow the use of eminent domain for private redevelopment projects that promise economic benefits to the community raises the possibility that local governments will use their condemnation power to raise tax revenue, not just to acquire land. They can do this by forcing the sale of land to users with higher assessed values. We have argued, however, that such tax motivated takings can result in inefficient transactions whenever the assessed value of properties understates the owners’ true values. Further, the unobservability of owners’ subjective values prevents the government from simply reassessing the properties at their true values, thus leading to the temptation to use eminent domain to extract that value.

Because of the potential inefficiency from tax motivated takings, we proposed a reassessment scheme that accomplishes the same goal for the government. Under the scheme, owners who turn down a legitimate offer have their property reassessed at the amount of that offer. When a project involves a single parcel, or assembly with landowners who have identical subjective values, this scheme simultaneously restores the efficiency of market transactions (absent the holdout problem) and eliminates the incentive of local governments to inefficiently exercise

\textsuperscript{26} As an example, suppose ten parcels, whose average value is $80,000, are needed to complete a project worth $1,000,000. Assembly is, therefore, efficient, but if one or more of the owners has a reservation price above $100,000, then the reassessment scheme will not induce them to sell.

\textsuperscript{27} This over-assessment could be avoided by modifying the proposed reassessment scheme so that only those landowners who refuse the developer’s offer will have their property reassessed. However, this would introduce the potential for strategic behavior on the part of landowners, since landowners who might otherwise have refused an offer could have an incentive to accept (in order to avoid reassessment) if they believe that there is some probability that others will refuse (thus preventing the project from going forward).

\textsuperscript{28} Shavell (2007) analyzes this justification for the use of eminent domain.

\textsuperscript{29} Of course, the lack of observability of subjective value means that even a welfare-maximizing local government could not perfectly identify efficient projects.
their eminent domain power solely to generate new tax revenue. In the more realistic case where land assembly is required but landowners’ subjective values differ, the reassessment scheme does not fully restore efficiency of the market, but it still eliminates the local government’s incentive to engage in tax-motivated takings.

We emphasize that this scheme is not intended to replace eminent domain when the targeted land would actually be used for a public project, or when a few owners are able to block completion of an otherwise efficient project by refusing to sell (either as true holdouts or in a legitimate effort to protect their subjective values). Rather, it is intended to reduce the incentive for local governments to “abuse” their eminent domain power. While some practical implementation issues would need to be addressed if the proposed scheme were adopted, it offers a means of retaining eminent domain power for legitimate uses (e.g., holdouts) while reducing or eliminating the incentive to “over-use” it.

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REFERENCES


