


2-23-2017

# Incomplete Takings

Abraham Bell  
*University of San Diego*

Gideon Parchomovsky  
*University of Pennsylvania Law School*

Follow this and additional works at: [http://scholarship.law.upenn.edu/faculty\\_scholarship](http://scholarship.law.upenn.edu/faculty_scholarship)

 Part of the [Constitutional Law Commons](#), [Land Use Law Commons](#), [Law and Economics Commons](#), [Law and Society Commons](#), [Legal Remedies Commons](#), [Policy Design, Analysis, and Evaluation Commons](#), [Property Law and Real Estate Commons](#), [Public Economics Commons](#), [Public Policy Commons](#), [Real Estate Commons](#), [State and Local Government Law Commons](#), and the [Urban Studies Commons](#)

---

## Recommended Citation

Bell, Abraham and Parchomovsky, Gideon, "Incomplete Takings" (2017). *Faculty Scholarship*. 1736.  
[http://scholarship.law.upenn.edu/faculty\\_scholarship/1736](http://scholarship.law.upenn.edu/faculty_scholarship/1736)

This Article is brought to you for free and open access by Penn Law: Legal Scholarship Repository. It has been accepted for inclusion in Faculty Scholarship by an authorized administrator of Penn Law: Legal Scholarship Repository. For more information, please contact [PennlawIR@law.upenn.edu](mailto:PennlawIR@law.upenn.edu).

# INCOMPLETE TAKINGS

*Abraham Bell<sup>α</sup> and Gideon Parchomovsky<sup>β</sup>*

<b>ABSTRACT</b> .....	<b>3</b>
<b>INTRODUCTION</b> .....	<b>4</b>
<b>I. THE LANDSCAPE OF PARTIAL TAKINGS</b> .....	<b>7</b>
A. PARTIAL AND OTHER TAKINGS .....	7
B. SPECIAL DOCTRINES OF PARTIAL TAKINGS .....	13
1. <i>Offsets</i> .....	13
2. <i>Severance</i> .....	19
C. THE PROBLEM WITH PARTIAL TAKINGS .....	20
1. <i>The Artificial Incentive for Partial Takings</i> .....	21
2. <i>Compensation Problems</i> .....	22
3. <i>Problematic Asset Configurations</i> .....	23

---

<sup>α</sup> Professor, Bar Ilan University Faculty of Law and University of San Diego School of Law.

<sup>β</sup> Robert G. Fuller Jr. Professor of Law at the University of Pennsylvania School of Law and Professor at the Bar-Ilan University Faculty of Law. This Article greatly benefited from comments and criticisms by participants in the faculty workshop of the College of Law and Business (Ramat Gan) and sessions of the 2016 Private Law Consortium Seminar at the University of Oslo, the 2016 annual conference of the American Law and Economics Association at Harvard University, and the 2016 Property Works in Progress Conference at Boston University; from comments and criticisms from Michael Abramowicz, Tally Amir, Shyamkrishna Balganes, Uri Benoliel, Bill Bratton, Yun-Chien Chang, Lee Anne Fennell, Sylvia Ferreri, Evan Fox-Decent, Jonah Gelbach, John Goldberg, Andrew Gould, Michele Graziadei, Dave Hoffman, Daniel Kelly, Jon Klick, Michael Knoll, Shelly Kreiczler Levy, Adi Libson, Thomas Miceli, Jonathan Nash, Wendell Pritchett, Erik Røsæg, Endre Stavang, Chris Sanchirico, Reed Shuldiner, Ram Singh, Lionel Smith, Stephen Smith, Dov Solomon, Geir Stenseth, Gila Stopler, Andrew Verstein and Katrina Wyman and participants at the Annual Conference of the American Law and Economics Association at the Harvard Law School, the University of Pennsylvania Faculty Retreat and the annual gathering of the Private Law Consortium at McGill University. For excellent research assistance we thank Ben Meltzer, Ananth Padmanabhan and Amal Sethi

*Incomplete Takings*

4. *Strategic Misbehavior*..... 25

**II. ADDING OPTIONS TO PARTIAL TAKINGS .....26**

A. THE USE OF OPTIONS IN PROPERTY LAW ..... 27

B. AN OPTION-BASED MECHANISM FOR ADDRESSING PARTIAL TAKINGS ..... 31

C. THE ADVANTAGES OF THE PROPOSED MODEL ..... 32

**III. EXTENSIONS .....36**

A. DE MINIMIS TAKINGS ..... 37

B. SELF-ASSESSMENT ..... 38

C. PARTIAL CHATTEL TAKINGS ..... 40

**CONCLUSION.....47**

*Incomplete Takings*

## ABSTRACT

*Incomplete takings are vital and extremely common. Yet, they present unique challenges that cannot be resolved by standard rules of eminent domain. In particular, incomplete, or partial, takings may result in the creation of suboptimal parcels, and even unusable and unmarketable ones. Additionally, partial takings create nettlesome assessment problems that do not arise when parcels are taken as a whole. Finally, incomplete takings engender opportunities for inefficient strategic behavior on the part of the government after the partial taking has been carried out. Current partial takings jurisprudence fails to resolve these problems, and, in some instances even exacerbates them.*

*In this Article, we offer an innovative mechanism that remediates the shortcomings of extant partial takings doctrines. Specifically, we propose that whenever the government engages in a partial taking, the affected property owner should be given the power to force the government to purchase the remainder (or, untaken part) of the lot at fair market value. Exercise of this power by the private owner would lead to the reunification of the land in its pre-taking form, while transferring title to the entire parcel to a new single owner, namely the government.*

*Implementation of our proposal would yield several important benefits: First, it would allow for the preservation of the current configuration of parcels, enabling them to remain highly usable and marketable. Second, it would lower the cost of determining compensation for private property owners and thereby of the adjudication process as a whole, in those cases in which private owners choose to exercise their entitlement to sell the remainder to the government. Third, it would significantly reduce the ability of the government to behave strategically and externalize costs on private property owners. Fourth, it would create opportunities for more efficient planning and land use by the government as the government would be free to re-parcel, develop and re-sell the parcels sold to it.*

*Incomplete Takings*

## INTRODUCTION

Incomplete, or partial takings allow the government to expropriate those particular parts of an asset that it needs, leaving the owner to retain the remainder.<sup>1</sup> The evidence shows that partial takings are ubiquitous. At least in some jurisdictions, partial takings are more common than total takings.<sup>2</sup> In fact, in some cases, the law of the jurisdiction pushes authorities to engage in partial takings rather than complete takings.<sup>3</sup> Partial takings are routinely used when the government wishes to construct a new highway, pave a railroad track, or build infrastructure over multiple lots.<sup>4</sup> They are also common in cases in which the government needs to erect protective barriers against flooding on beachfront properties and riparian lots.<sup>5</sup>

At first blush, one might assume that partial takings are more efficient and fairer than total takings, as they take no more property than necessary. This first impression is incorrect, however. Partial takings impose two substantial costs. The first cost is administrative. Because in many cases, there is no market for the particular slice of the asset seized by the government, determining the value of the partial taking (and, therefore, the compensation to be paid) is quite difficult and expensive.<sup>6</sup> The second cost relates to the value of the parcel itself. While the partial taking is motivated by a government need for the particular slice being seized by the government, there may be little private use for what remains of the parcel. A partial taking may render the remainder practically or legally unfit for ordinary use. The remaining land may fail to comply with size or setback restrictions, or otherwise be no longer fit for use. Likewise, the remainder may simply depreciate in value in light of changes affected by the government project. Consequently, the partial taking might prove to be less efficient than

---

<sup>1</sup> See 4A NICHOLS ON EMINENT DOMAIN Ch. 14 (Matthew Bender, 3rd ed.).

<sup>2</sup> Ronit Levine-Schnur and Gideon Parchomovsky, *Is the Government Fiscally Blind? An Empirical Examination of the Effect of the Compensation Requirement on Eminent Domain Exercises*, 45 J. LEG. STUD. (forthcoming, 2016).

<sup>3</sup> *Pressault v. U.S.*, 100 F. 3d 1525 (1996).

<sup>4</sup> See Xiaoxia Xiong and Kara M. Kockelman, *The Cost of Right-of-Way Acquisition: Recognizing the Impact of Condemnation via a Switching Regression Model*, 20 (4) J. INFRASTRUCTURE SYSTEMS 04014021 (2014), citing C. H., Caldas and C. R., Bhat, and Kara M. Kockelman, et al. Technical Memorandum: TxDOT Research Project 0-6630: Condemnation in Transportation Projects: Causes and Solutions (The University of Texas at Austin 2011) (showing that in excess of 90% of Texas Department of Transportation takings were partial takings).

<sup>5</sup> See *infra*, Part I.A.

<sup>6</sup> See *infra* Part I.

*Incomplete Takings*

keeping the asset together, even if the government were to underutilize some parts of the total asset.<sup>7</sup>

In this Article, we propose a new approach to partial takings that addresses both aforementioned costs at once. We suggest that whenever the government elects to engage in a partial taking, the private property owner should be given a put option that will entitle her to sell the remainder of the lot to the government. The exercise price of the put option should be a percentage of the fair market value of the asset as a whole, where both the percentage and the market value of the whole are determined at the time of the partial taking. As a consequence of the exercise of the option, the title to the parcel would be unified in the hands of the government. And, as the new owner of the title to the entire parcel, the government would have full discretion as to how to use or dispose of the parcel in the future.

It should be noted that under present law, the power of eminent domain grants the government what is functionally a call option over all private property.<sup>8</sup> The government's call option is exercisable at fair market value and is subject to the public use requirement in the Constitution. Extant law recognizes no such option to buy or sell land in private parties. The introduction of our mechanism would give private property owners a limited put option, exercisable at fair market value in a small set of cases: those in which the government decided to use its call option to take only *part* of the land of an individual owner.

As an illustration of how our proposed system would work, consider the following example. Assume that the government wants to expand the street adjacent to Abby's land. The government does not need all of Abby's land to widen the street; it therefore takes 68% of Abby's parcel by eminent domain. Assume, further, that the fair market value of Abby's parcel is \$100,000 and that, *prima facie*, all parts of the land are of equal value. Under current law, the baseline for compensating Abby will be the amount of \$68,000 for the part taken.<sup>9</sup> In addition, Abby can demand additional compensation for the "severance harm" she suffered and for the diminution in value of the remainder.<sup>10</sup> The government may seek to offset compensation with the value of certain benefits bestowed upon Abby's remaining property.<sup>11</sup> Notice, however, that the

---

<sup>7</sup> See *infra* Part I.C.

<sup>8</sup> See *infra* II.A.

<sup>9</sup> In our example, we presumed that the taken land was not only 68% of the whole in size, it was also 68% of the whole in value. This presumption is unlikely to bear true in reality.

<sup>10</sup> See *infra* Part I.B.

<sup>11</sup> See *infra* I.B.2.

*Incomplete Takings*

severance and diminution harms are very difficult to substantiate and proving them imposes considerable costs on Abby—both in money and time. Under our proposal, Abby would have the option of sidestepping the procedure of proving severance and diminution harms by simply forcing the government to take her lot in her entirety and pay her the market value of her entire lot, i.e., \$100,000.<sup>12</sup>

It bears emphasis that we do not propose forcing the government to retain title to the remainder it would receive via exercise of put or call options. On the contrary, the government would acquire the prerogatives of the owner and thus retain complete liberty in deciding what to do with the land it receives. The government could either retain the entire parcel, if it preferred, or it could re-parcel the land in any way it wanted and sell parts on the open market.

Our proposal presents four advantages over the current legal regime. First, it prevents the creation of parcels that are sub-optimally configured for use. Under our proposed regime, were a partial taking to threaten to leave the remainder unfit for use, the owner (or the government) would exercise her put (or its call) option to stop this result from occurring. Second, and relatedly, our proposal creates a readily available mechanism for reuniting the title to the lot as a whole in the hands of a single owner, thereby preempting the creation of negative externalities that tend to arise in cases of split ownership. Concretely, our mechanism ensures that over time the government does not increase or change the nature of

---

<sup>12</sup> An integral component of our proposal is the determination of the ratio of value of the part of the land taken to the value of the land as a whole. Knowing the value ratio is essential to setting the strike price of the call and put options (i.e., the amount that the government would have to pay Abby in the event the option were exercised). Indeed, in many senses, the value ratio *is* the strike price. In our example, if the ratio were 68%, the strike price would be 32% of the value of the lot as a whole—\$32,000. If the option were exercised at a later time, the strike price would have to be adjusted by the relevant measure of inflation, which would be the price index for realty.

We suggest two alternative ways of establishing the strike price. The easiest way would be to carry forward current doctrines for establishing the value of partial assets. Courts would use these doctrines to determine the value of the partial asset, and this would yield the ratio, when compared with the value of the asset as a whole. An alternative means for establishing the ratio would be to allow either the government or the aggrieved owner to set the ratio, or even to set the ratio arbitrarily at the percentage in size, rather than value. Size is easier to measure, and, of course, self-assessment may lead to the revelation of private information. This alternative would obviously create some interesting strategic pressures to overstate or understate value (in the case of self-assessment), or otherwise to take advantage of the gap between size and actual value. However, the misincentives created by the gap between stated and actual value ratios would be corrected by the availability of the put and call options. *See infra* Parts II.A and III.B.

### *Incomplete Takings*

its use of the parts taken in a way that harms the remainder. Third, our mechanism creates an incentive for the government to engage in more efficient planning and land development policies. In many eminent domain projects, the government takes title to multiple parcels and can, therefore, unlock synergies across parcels that owners of individual lots cannot possibly unlock or even envision. Fourth, and finally, at least in some variants, our proposal creates significant cost-savings, relative to the existing rule, by obviating the need to appraise the value of the part that remains in the hands of the private owner after the taking. Indeed, our proposal can sometimes suffice with appraising the value of the parcel as a whole, which should be a much easier task.

Structurally, the Article unfolds in four parts. In Part I, we position the phenomenon of partial takings within the larger framework of eminent domain and discuss the rationales that have been proffered to support the practice. Additionally, we enumerate the drawbacks that attend partial takings and the costs they impose on society. In Part II, we present our reform proposal. Drawing on the rich literature on the use of options within law, we detail the option mechanism with which we seek to replace the current legal regime. In Part III, we contemplate and evaluate several extensions of our model. Specifically, we introduce a *de minimis* limitation into our basic model, offer an alternative self-assessment valuation mechanism for determining the price of the options, and extend our model to partial chattel takings. Finally, in part IV, we assess the applicability of our model to partial regulatory takings. . A short conclusion ensues.

## I. THE LANDSCAPE OF PARTIAL TAKINGS

### *A. Partial and Other Takings*

The government typically takes property by eminent domain when it needs the property for a purpose other than that to which it is currently put to use. It will not generally take farmland to establish a government farm; but rather to build a road. The physical configuration that fits the old use of the property often does not match the new use of the property. A narrow strip of land suffices for a highway; the entire farm is rarely needed.<sup>13</sup>

---

<sup>13</sup> See THOMAS J. MICELI AND KATHLEEN SEGERSON, THE ECONOMICS OF EMINENT DOMAIN-PRIVATE PROPERTY, PUBLIC USE, AND JUST DOMAIN, 5-7 (NOW PUBLISHERS, 2007) (providing an overview of case law relating to eminent domain); ELLEN FRANKEL PAUL, PROPERTY RIGHTS AND EMINENT DOMAIN, 7-14



*Incomplete Takings*

For this reason, partial takings are ubiquitous. It is reasonable to estimate that there are at least as many partial takings as total takings.<sup>14</sup> We suspect that most government projects do not require seizures of lots in their entirety and the government has no need to take an entire parcel of land when a part will do. Construction or expansion of roads, trails, railroad tracks or other forms of infrastructure almost always rely on partial takings. As an illustration consider the case of *Loretto v. Teleprompter Manhattan CATV Corp.*,<sup>15</sup> in which the Supreme Court ruled that the placement of cable on private buildings in New York City, together with a small box on the roof amounted to a partial taking that required the payment of compensation to the building owners.

Partial takings are common in yet another category of cases: beach replenishment. Consider the aftermath of Hurricane Sandy. The storm had destroyed coastal dunes, laying bare the littoral ocean-front properties.<sup>16</sup> To protect these properties, as well as the safety of the public at large and the coastal systems, the state governments of New Jersey<sup>17</sup> and New York<sup>18</sup> committed to reconstituting the coastal dunes, partly on public property but mostly on private land. The measures involved multiple partial takings that attracted the wrath of certain private property owners and triggered litigation.<sup>19</sup>

---

(Transaction Publishers, 2009) (describing the concept of eminent domain); 2A NICHOLS ON EMINENT DOMAIN Ch. 3 (Matthew Bender, 3rd ed.).

<sup>14</sup> Levine-Schnur & Parchomovsky, *supra* note 2.

<sup>15</sup> 458 U.S. 419, 425-441 (1982).

<sup>16</sup> St. Petersburg Coastal and Marine Science Center, *Hurricane Sandy Response - Storm Impacts and Vulnerability of Coastal Beaches*, USGS at <http://coastal.er.usgs.gov/sandy-storm-impact-vulnerability/research/coastal-impacts.html> (describing the damage from hurricane sandy); Jenny Anderson, Rebuilding the Coastline, but at What Cost?, N.Y. TIMES, May 18, 2013, <http://www.nytimes.com/2013/05/19/nyregion/rebuilding-the-coastline-but-at-what-cost.html>.

<sup>17</sup> Elise Young, *New Jersey Shore Towns Challenge Sand Dunes Plan as Storms Gather*, INSURANCE J., May 5, 2016 at <http://www.insurancejournal.com/news/east/2016/05/05/407618.htm>; Leslie Garisto Pfaff, Sea Change: Post-Sandy Rebuilding, New Jersey Monthly, Dec. 11, 2012, <http://njmonthly.com/articles/jersey-shore/sea-change-post-sandy-rebuilding>.

<sup>18</sup> Lisa W. Foderaro, *Fire Island Residents to Lose Their Homes To Make Way For Dunes*, THE NEW YORK TIMES, Jul. 17, 2015 at <http://www.nytimes.com/2015/07/19/nyregion/some-houses-on-fire-island-to-be-torn-down-to-make-way-for-new-dune.html>; De Blasio Administration Releases Progress Report on Sandy Recovery and Resiliency, NYC, Oct. 22, 2015, <http://www1.nyc.gov/office-of-the-mayor/news/749-15/de-blasio-administration-releases-progress-report-sandy-recovery-resiliency>.

<sup>19</sup> Wayne Perry, Beachfront owners challenge sand dunes plan, COURIER POST, Jan. 21, 2016 at <http://www.courierpostonline.com/story/news/local/south-jersey/2016/01/21/beach-property-lawsuit/79116298>; see also Louis M. Russo,

*Incomplete Takings*

Another category of cases that has occasioned partial takings consists of the expansion of riverbeds or navigational routes.<sup>20</sup> Such changes in the layout of rivers invariably involve reconfiguration of the boundaries of riparian lots. While such adjustments typically involve multiple lots, it is possible that, in some cases, only one lot will be affected.

In all these cases, the government needs only a portion of existing parcels of land for its project. A partial taking, therefore, gives the government what it needs for its project while saving valuable resources. This is because the law of eminent domain only requires the government to pay for what it takes.<sup>21</sup> Hence, the government will often suffice with a partial taking for financial reasons. In some cases, state law even requires the state to suffice with a partial taking, when that is all that is necessary to achieve the state's aim.<sup>22</sup>

It is worth noting another important aspect of partial takings: partial takings cases paradigmatically implicate the core justifications for existence of a power of eminent domain. Accepted lore justifies the power of eminent domain on the grounds that it is necessary to overcome the twin problems of high transaction costs and holdouts that would otherwise undermine the government ability to carry out valuable social projects.<sup>23</sup> The takings literature suggests that high transaction costs are positively correlated with the number of lots affected.<sup>24</sup> Specifically, the more private lots a project involves, the more rights the government will need to clear and the higher the cost of the project will rise. The holdout problem,

---

*From Railroads to Sand Dunes: An Examination of the Offsetting Doctrine in Partial Takings*, 83 FORDHAM L. REV. 1539 (2014); Matthew Hromadka, *The Price of Protection: Compensation for Partial Takings along the Coast*, 30 Touro L. REV. 861 (2014).

<sup>20</sup> See, for example, Hromadka, *supra* note 19, at 874-76 (discussing *United States v. Fort Smith River Development Corp.*, 349 F.2d 522 (8th Cir. 1965)); Richard Harnsberger, *Eminent Domain and Water Law*, 48 NEBRASKA L. REV. 326 (1969).

<sup>21</sup> See Abraham Bell and Gideon Parchomovsky, *Takings Reassessed*, 87 VA. L. REV. 277 (2001).

<sup>22</sup> A statute of this kind was the source of the decision to take only an easement for a railroad track, which led to the litigation of *Pressault*, 100 F. 3d 1525.

<sup>23</sup> See Jonathan Klick and Gideon Parchomovsky, *The Value of the Right to Exclude: An Empirical Assessment*, 165 PENN. L. REV. \_\_\_\_ (forthcoming, 2016).

<sup>24</sup> See THOMAS J. MICELI, *THE ECONOMIC APPROACH TO LAW*, 219 (Stanford University Press, 2004); Thomas J. Miceli and Kathleen Segerson, *Land Assembly and the Holdout Problem Under Sequential Bargaining*, 14 AM. L. & ECON. REV. 372 (2012); Lloyd Cohen, *Holdouts and Free Riders*, 20 J. LEG. STUD. 351 (1991); Daniel B. Kelly, *Acquiring Land Through Eminent Domain: Justifications, Limitations, and Alternatives* in KENNETH AYOTTE & HENRY E. SMITH, EDS, *RESEARCH HANDBOOK ON THE ECONOMIC ANALYSIS OF PROPERTY LAW* (Edward Elgar, 2011).

*Incomplete Takings*

by contrast arises whenever the government must gain access to a *particular* lot.<sup>25</sup> In such cases, in a world without eminent domain, the relevant private owner could try to extract the entire surplus arising from the project before consenting to the transaction.<sup>26</sup> The holdout problem arises when the government has no reasonable substitutes to a particular parcel and must appropriate that parcel alone.<sup>27</sup>

The twin problems of high transaction costs and holdouts are endemic to projects that rely on partial takings. Almost inevitably, partial takings rely on particular parcels, making the partial taking highly vulnerable to holdouts. At the same time, while partial takings may not involve a large number of parcels, the transaction costs associated with a partial taking can be quite high. This is due to the particular problems raised by partial takings—particularly in establishing the value of the partial lots taken—that we explore in depth later in this Part.<sup>28</sup> In order to take property by eminent domain, the state must pay “just compensation” to the owner whose property is taken.<sup>29</sup> Figuring out the amount that constitutes “just compensation” is a perennial difficulty.<sup>30</sup> Calculating compensation for partial takings is far more difficult,<sup>31</sup> and concomitantly, more expensive.

The choice of whether to pursue a partial taking is thus a difficult one for the state. Partial takings may reduce the amount of direct compensation paid by the government for property, but at the same time, they create additional costs that must be borne, in part,

---

<sup>25</sup> The need for a particular lot and the need for many lots are not mutually exclusive. For instance, the collection of many lots to build a road may make particular lots necessary in order to complete the road.

<sup>26</sup> See, e.g., Thomas J. Miceli, *Holdups and Holdouts: What do They Have in Common?*, 117 *ECON. LETTERS* 330 (2011); Guido Calabresi & Douglas A. Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 *HARV. L. REV.* 1089, 1106-07 (1972).

<sup>27</sup> Of course, the parcel may be needed in conjunction with other parcels to enable the government use.

<sup>28</sup> See *infra* Part I.C.

<sup>29</sup> The just compensation requirement appears not only in the United States Constitution, U.S. CONST. AMEND V (“... nor shall private property be taken for public use, without just compensation.”), but also in state constitutions, 1-1 NICHOLS ON EMINENT DOMAIN § 1.3 (2015). Indeed, the compensation requirement is understood around the world to be a necessary companion to the power of eminent domain. S. KEITH, P. MCAUSLAN, R. KNIGHT, J. LINDSAY, P. MUNRO-FAURE AND D. PALMER, *COMPULSORY ACQUISITION OF LAND AND COMPENSATION*, 11-15 (FAO Land Tenure Series, 2008). Also see CHAPTER 1C EMINENT DOMAIN LAW IN ASIA, 1A-1C NICHOLS ON EMINENT DOMAIN § 1C.02.

<sup>30</sup> 9 NICHOLS ON EMINENT DOMAIN § G31.04; Katrina Miriam Wyman, *The Measure of Just Compensation*, 41 *U.C. DAVIS L. REV.* 239 (2007). See also sources collected in note 36, *infra*.

<sup>31</sup> 3-8A NICHOLS ON EMINENT DOMAIN § 8A.02 (2015).

*Incomplete Takings*

by the state.

A further complication is added by the fact that the state's decision to pursue a partial taking does not take full account of the social costs engendered by such takings.

Full and accurate compensation for takings is indispensable to the proper functioning of the government's power of eminent domain.<sup>32</sup> Accurate compensation is necessary for three distinct reasons. First, accurate compensation ensures fairness for aggrieved owners by ensuring that individual property owners are not forced to bear costs that ought rightly to be borne by society as a whole.<sup>33</sup> Second, accurate compensation ensures that government decisionmakers do not suffer from "fiscal illusion"—the illusion that social costs only matter when they find expression in government budgets.<sup>34</sup> Third, and finally, accurate compensation reduces the possibility (and therefore the incentives) for government actors to utilize their taking power for corrupt purposes.<sup>35</sup> When compensation does not accurately measure the costs imposed by takings, the takings power can be misused or abused. This is no less true when the taking is a partial one.

Unaccounted-for costs and benefits are endemic to all takings, and, in particular to partial takings. Many scholars have argued that standard compensation formulas for all exercises of eminent domain fail to take account of some kinds of subjective value

---

<sup>32</sup> See Abraham Bell & Gideon Parchomovsky, *The Uselessness of Public Use*, 106 COLUM. L. REV. 1412 (2006).

<sup>33</sup> *Armstrong v. U.S.*, 364 U.S. 40 (1960).

<sup>34</sup> There is an ongoing debate about the degree to which fiscal illusion actually occurs in the real world. In support of the fiscal illusion theory, see, for example, RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 56, 73-74 (2008); Lawrence Blume and Daniel L. Rubinfeld, *Compensation for Takings: An Economic Analysis*, 72 CAL. L. REV. 569-628 (1984); Louis Kaplow, *An Economic Analysis of Legal Transitions*, 99 HARV. L. REV. 509-617 (1986); DAVID A. DANA & THOMAS W. MERRILL, *PROPERTY TAKINGS* 41-46 (2002); Thomas J. Miceli, *ECONOMICS OF THE LAW: TORTS*, 141 (2004) (all claiming fiscal illusion impacts decision making). But see Yun-Chien Chang, *Empire Building and Fiscal Illusion? An Empirical Study of Government Official Behaviors in Takings* 6 J. EMPIRICAL LEG. STUD. 541-584 (2009) (finding that political interests are of more importance to government officials); Klick and Parchomovsky, *supra* note 23 (finding that government officials are more affected by considerations of fairness and real world necessities); Daryl J. Levinson, *Making Government Pay: Markets, Politics, and the Allocation of Constitutional Costs*, 67 U. CHI. L. REV. 345, 377 (2000) (similar finding as Chang); STEVEN SHAVELL, *FOUNDATIONS OF ECONOMIC ANALYSIS OF LAW* 130, (Cambridge, Mass.: Harvard University Press, 2004) (questioning the fiscal illusion theory as a justification for the compensation requirement); Bethany R. Berger, *The Illusion Of Fiscal Illusion In Regulatory Takings*, 66 AM. U. L. REV. 1 (2016).

<sup>35</sup> Abraham Bell and Gideon Parchomovsky, *The Hidden Function of Takings Compensation*, 96 VIRGINIA LAW REVIEW 1673, 1692-1704 (2010).

*Incomplete Takings*

enjoyed by owners.<sup>36</sup> Additionally, government benefits that accompany takings are generally not given expression in compensation formulas.<sup>37</sup> Finally, not all “takings” of property are compensable. A complicated set of judicially-crafted formulas distinguish between, on the one hand, ordinary government actions that take valuable property rights and attributes without the need for compensation, and, on the other hand, those that go “too far” and become “regulatory takings” for which compensation must be paid.<sup>38</sup> “Partial regulatory takings,” in particular, do not trigger a compensation requirement, unless, like other regulatory actions, they go “too far.”<sup>39</sup>

These valuation problems associated with ordinary takings are even more severe in the case of partial takings. Partial takings involve the seizure of partial assets. This means that the seized property may have no market in which value can be measured. In addition, the seizure of one partial asset leaves behind a different partial asset. The effect of the seizure on the partial asset left behind must also find expression in valuation formulae.

In sum, partial takings are both extremely popular and extremely problematic. Partial takings are supported by the justifications supporting ordinary takings and troubled by the

---

<sup>36</sup> E.g., Abraham Bell & Gideon Parchomovsky, *Taking Compensation Private*, 59 STAN. L. REV. 871 (2007); James E. Krier & Christopher Serkin, *Public Ruses*, 2004 MICH. ST. L. REV. 859, 866 (2004); James Geoffrey Durham, *Efficient Just Compensation as a Limit on Eminent Domain*, 69 MINN. L. REV. 1277, 1292 (1985); Thomas W. Merrill, *The Economics of Public Use*, 72 CORNELL L. REV. 61 (1986); John Fee, *Eminent Domain and the Sanctity of Home*, 81 NOTRE DAME L. REV. 783 (2006); James J. Kelly, Jr., “We Shall Not Be Moved”: Urban Communities, Eminent Domain and the Socioeconomics of Just Compensation, 80 ST. JOHN’S L. REV. 923 (2006). *See also* Laura H. Burney, *Just Compensation and the Condemnation of Future Interests: Empirical Evidence of the Failure of Fair Market Value*, 1989 B.Y.U. L. REV. 789 (1989).

<sup>37</sup> *Infra* Part I.B.1.

<sup>38</sup> There is a vast literature on regulatory takings, including Frank I. Michelman, *Property, Utility, and Fairness: Comments on the Ethical Foundations of “Just Compensation” Law*, 80 HARV. L. REV. 1165 (1967); Joseph L. Sax, *Takings, Private Property and Public Rights*, 81 YALE L.J. 149 (1971); RICHARD A. EPSTEIN, *TAKINGS: PRIVATE PROPERTY AND THE POWER OF EMINENT DOMAIN* (1985); WILLIAM A. FISCHER, *REGULATORY TAKINGS: LAW, ECONOMICS, AND POLITICS* (1995); Thomas J. Miceli & Kathleen Segerson, *Regulatory Takings: When Should Compensation be Paid?*, 23 J. LEG. STUD. 749 (1994); Lawrence E. Blume, Daniel L. Rubinfeld & Perry Shapiro, *The Taking of Land: When Should Compensation Be Paid?*, 99 Q. J. ECON. 71 (1984); STEVEN J. EAGLE, *REGULATORY TAKINGS* (25th ed., 2012).

<sup>39</sup> John D. Echeverria, *Partial Regulatory Takings Live, But ...*, in *TAKING SIDES ON TAKINGS ISSUES: THE IMPACT OF TAHOE-SIERRA 67*, Thomas E. Roberts, ed. (2002); Richard A. Epstein, *Lucas v. South Carolina Coastal Council: A Tangled Web of Expectations*, 45 STAN. L. REV. 1369, 1377-78 (1993) (stating that partial takings, while virtually total in form, will remain uncompensated under the Court’s current approach).

### *Incomplete Takings*

difficulties attending them. Yet, partial takings also have unique aspects that make them both particularly useful and unusually problematic. Ideally, the legal treatment of partial takings would ameliorate these problems. Unfortunately, the law's treatment of partial takings seems more likely to exacerbate them. It is to this troubling feature of the law of partial takings that we now turn.

#### *B. Special Doctrines of Partial Takings*

In this Section, we explore the judicial treatment of partial takings. Many special doctrines have been fashioned to deal with compensation for partially taken parcels of land. The doctrines, as we will see, deal with only some of the challenges posed by partial takings. In some ways, the doctrines may be said to worsen the already extant challenges.

As a preliminary matter, it is important to understand the conundrums posed by compensating for partial takings. In general, takings compensation aims to give the owner of the taken property money in the value of the taken property. *Prima facie*, if the state takes one-third of Blackacre, it should give the owner one-third of the value of Blackacre. But in reality, matters are not so simple. Blackacre may not be of consistent quality; part may be rocky, and the rest flat. Moreover, taking one-third of Blackacre affects the value of the remaining two-thirds. It may no longer be possible to use Blackacre in the same way as before—the lot, for instance, may no longer be large enough to grow certain crops. And new uses of Blackacre may now be possible—for example, the new road created in part from the taken property may enable a new factory to get products to the market cost-efficiently. The relationship between the partial taking and the value of what remains of Blackacre is a complex one. This relationship is the source of a variety of special doctrines for adjusting compensation awards in cases of partial takings.<sup>40</sup>

##### *1. Offsets*

One of the most litigated questions of partial takings compensation is the “offset.” In most cases, compensation for partial takings is reduced by an “offset.”<sup>41</sup>

To understand offsets, we must recall that all takings—not just partial takings—produce multiple effects, some positive, some

---

<sup>40</sup> See generally, 4A-14 NICHOLS ON EMINENT DOMAIN § 14.03 (2015).

<sup>41</sup> 3-8A NICHOLS ON EMINENT DOMAIN § 8A.02 (2015); 4A-14 NICHOLS ON EMINENT DOMAIN § 14.03 (2015).

*Incomplete Takings*

negative.<sup>42</sup> For instance, when the state uses the power of eminent domain to take land to build a road, the land owners lose the assets taken by the state, but the remaining owners gain the value of easier access to their land. Indeed, given the constitutional requirement that takings be justified by a “public use,”<sup>43</sup> it is near-impossible to think of a taking without an accompanying benefit to at least one person.<sup>44</sup> In most cases, the costs and benefits are treated by the law entirely separately. The losses suffered by the owners as a result of the government’s takings are compensated. The benefits enjoyed by owners as a result of the government’s givings are overlooked.<sup>45</sup>

In the case of partial takings, however, matters are different. Under both state and federal law of takings compensation, when deciding on the compensation to award owners suffering a partial taking, courts take into account both costs and benefits.<sup>46</sup> In the language of the law, compensation for the taking is “offset” by the value of the benefit realized by the owner. The U.S. Supreme Court has ruled that such offsets are constitutional and do not run afoul of the constitutional requirement of “just compensation” for takings.<sup>47</sup>

While it has a great deal of intuitive appeal, a doctrine of offsetting compensation by the value of benefits actually creates three different sets of difficulties. First, the doctrine is difficult to apply. It is difficult enough to measure land value;<sup>48</sup> it is much tougher when the effects of government projects must be disentangled from all the other factors affecting land value. All states eliminate from the offset valuation effects that are not attributable to government action, and the version of the doctrine used by most jurisdictions involves an even more difficult exercise of line-drawing between government-created effects that are legally important and those that are not. Second, the doctrine does not apply solely to partial takings, but also applies to cases where a landowner owns multiple parcels. This means that application of the doctrine depends on the identity of the landowner, rather than simply the

---

<sup>42</sup> Abraham Bell and Gideon Parchomovsky, *Takings Reassessed*, 87 VA. L. REV. 277 (2001).

<sup>43</sup> U.S. CONST. Amend. V.

<sup>44</sup> See Abraham Bell and Gideon Parchomovsky, *Givings*, 111 YALE L.J. 547 (2001).

<sup>45</sup> *Id.*

<sup>46</sup> 3-8A NICHOLS ON EMINENT DOMAIN § 8A.02 (2015); 4A-14 NICHOLS ON EMINENT DOMAIN § 14.03 (2015).

<sup>47</sup> *Bauman v. Ross*, 167 U.S. 548 (1897). In some states, the benefits may only offset severance damages, but not the compensation for the property taken. See, e.g., *City of Richardson v. Smith*, 494 S.W.2d 933 (Tex. Ct. App.—Dallas 1973); *State v. Meyer*, 403 S.W.2d 366 (Tex. 1966); *Done Holding Co. v. State*, 144 A.D.2d 528, 534 N.Y.S.2d 406 (2d Dep’t 1988).

<sup>48</sup> See, *infra*, note 61.

*Incomplete Takings*

nature of the asset.<sup>49</sup> Third, and finally, by offsetting benefits only for partial taking compensation but not for other takings or government actions, the doctrine actually creates a perverse incentive. It encourages the state to prefer partial takings, in order to reduce the amount of compensation to be paid.

Let us examine each of these in turn.

The doctrine of offsets is not as simple as it sounds.<sup>50</sup> At least in some states, the compensation award is not adjusted for *all* benefits realized by the owner. Courts draw a distinction between “special benefits”—benefits that are “direct and peculiar to the particular property”<sup>51</sup>—and “general benefits”—benefits accruing to the many properties in the area.<sup>52</sup> In most states and at the federal level, courts reduce the compensation award (or offset it, in the preferred terminology) by the value of special benefits realized by the owner of the taken property.<sup>53</sup> The offset doctrine thus benefits the government in partial takings cases, by allowing it to pay less compensation than it would have to pay in ordinary takings. However, the state reduces costs only to the extent of special, but not general benefits created by the government project.

While it is easy to grasp the conceptual difference between special and general benefits, it is much harder to identify them in practice. Consider, for instance, the case of *Defnet Land & Invest. Co. v. State ex rel. Herman*.<sup>54</sup> The state of Arizona had decided to widen a highway, and it therefore seized by eminent domain roughly 13 acres of land from a tract of 120.75 acres owned by the aggrieved landowner. The state agreed to pay compensation for the taken land, as well as severance damages, but it sought to offset the reward by the value of “special benefits” enjoyed by the land due to the highway expansion. Specifically, the state argued that the remaining land was more valuable because the highway expansion

---

<sup>49</sup> For those who support incorporating broader concerns of distributive justice into eminent domain compensation awards, e.g., Hanoch Dagan, *Takings and Distributive Justice*, 85 VA. L. REV. 741 (1999), this can be seen as a feature, rather than a bug. However, it remains difficult to explain why the distributive justice concerns should only enter into the picture in the case of partial takings. Cf. Glynn Lunney, *Takings, Efficiency, and Distributive Justice: A Response to Professor Dagan*, 99 MICH. L. REV. 157 (2000).

<sup>50</sup> For a summary of the different state and federal approaches to offsets, see 3-8A NICHOLS ON EMINENT DOMAIN § 8A.03 (2015).

<sup>51</sup> *United States v. Trout*, 386 F.2d 216, 221–22 (5th Cir. 1967) (quoting *United States v. 2477.79 Acres of Land, More or Less, Situate in Bell Cnty.*, 259 F.2d 23, 28 (5th Cir. 1958)).

<sup>52</sup> *Richardson v. Big Indian Creek Watershed Conservancy Dist. of Gage & Jefferson Cntys.*, 151 N.W.2d 283, 286 (Neb. 1967) (general benefits are those which arise “from the fulfillment of the public object which justified the taking”).

<sup>53</sup> NICHOLS, *supra* note 50.

<sup>54</sup> 14 Ariz. App. 96, 480 P.2d 1013 (1971).



*Incomplete Takings*

brought an interchange in close proximity to the affected land. The landowner challenged this argument on the grounds that proximity to highway interchanges should never be considered a “special” benefit. The landowner also noted the oddities of the particular case—that before receiving the “benefit” of the widened interstate highway, the land enjoyed direct access to a much longer stretch of the unimproved highway, while the new interchange itself was not located on the taken land, but, rather, nearby on other taken land. The court rejected the landowner’s argument, ruling that proximity to highway interchanges might or might not constitute special benefits, depending on the circumstances, including such matters as the amount of traffic on the highway and the amount of distance from the interchanges. The rule, in other words, is that benefits must be examined *ad hoc*, and there are no firm guidelines for distinguishing the general from the special benefits.

With the distinction between special and general benefits boiling down to a fact-intensive but legally vague judicial determination, it is unsurprising that disagreements between state and landowner are frequent, and litigation common. The need to distinguish between the effects of specific and general benefits also complicates the appraisal process, since appraisers must not only discern the degree to which a property’s price has been affected by a taking, but also the degree to which other property’s prices have been affected by the same taking.

A small number of jurisdictions have set aside the distinction between special and general benefits. For instance, in a controversial recent decision,<sup>55</sup> *Borough of Harvey Cedars v. Karan*,<sup>56</sup> New Jersey’s Supreme Court eliminated the long-standing distinction between general and special benefits in New Jersey law and expanded the offset doctrine to cover all benefits engendered by the takings project of any kind. The case had involved restoration of sand dunes. The Karans owned a single-family beachfront home in Harvey Cedars, New Jersey. As part of its efforts to protect the beaches from erosion by rebuilding sand dunes, the Borough of Harvey Cedars took a perpetual easement over roughly one-quarter of the Karans’ property.<sup>57</sup> The state sought to pay compensation only for the actual reduction in value to the Karans’ property; this meant that the compensation award would be offset by the value of *all* benefits that accrued to the Karans’ property, instead of just the

---

<sup>55</sup> Bill Ward, NJ Supreme Court overturns Karan, changes rules on partial takings, New Jersey Eminent Domain Blog (July 8, 2013), <http://www.njeminentdomain.com/state-of-new-jersey-nj-supreme-court-overturns-karan-changes-rules-on-partial-takings.html> (describing the decision as opening “a virtual Pandora’s box of issues for trial judges”).

<sup>56</sup> 70 A.3d 524 (N.J. 2013).

<sup>57</sup> *Id.*

*Incomplete Takings*

“special benefits.” The Supreme Court reversed the lower court’s decision in favor of the Karans and sided with the state, ordering the lower measure of compensation.<sup>58</sup> It remains to be seen whether New Jersey’s approach will be adopted elsewhere in the United States.

The New Jersey approach can potentially make application of the offset rule much easier. One measures the value of a partially taken property before the taking and after it.<sup>59</sup> The difference is the amount that has to be paid in compensation. If the remainder of the land has actually increased in value after the taking, no compensation need be paid at all.<sup>60</sup> Of course, even this measurement may pose logistic problems. It’s doubtful the affected realty was actually sold immediately before and after the taking, and markets for real estates never involve perfect substitutes, so measuring price is a complex process.<sup>61</sup> In addition, one has to take account of other factors that affected the price of the property, as reflected in broader price movements in the real estate market. Aside from the effects of the taking, there might be other factors that affect the price of the asset.

Problems in measuring offsets are compounded by the peculiar definition of “partial takings” for purposes of the offset doctrine. In most jurisdictions, a taking is considered “partial” for purposes of the offset doctrine so long as a portion of the owner’s land holdings are taken, even if all the taken land consists of whole parcels.<sup>62</sup> Consider, for instance, a state decision to take a single parcel of

---

<sup>58</sup> *Id.*

<sup>59</sup> To be sure, this is not as easy as it sounds. The land market is not like the stock market. Thousands or even millions of identical stocks are bought and sold nearly continuously, such that it is possible to measure the price of a share at any given time with a high degree of precision. Land markets are much thinner—many fewer buyers and sellers—and the products being sold are never perfect substitutes.

<sup>60</sup> *But see*, Note, *The Compensation Conundrum in Partial Takings Cases and the Consequences of Borough of Harvey Cedars*, 2015 CARDOZO L. REV. DE NOVO 31, <http://www.cardozolawreview.com/content/denovo/HARRISON.36.denovo.pdf>, (arguing that the New Jersey ruling is equally compatible with different valuation approaches).

<sup>61</sup> P. Chinloy, REAL ESTATE: INVESTMENT AND FINANCIAL STRATEGY, 25-50 (SPRINGER, 2012) at <http://tinyurl.com/glc3c4>; WILLIAM J. MCCLUSKEY, GARY C. CORNIA, LAWRENCE C. WALTERS, A PRIMER ON PROPERTY TAX (JOHN WILEY AND SONS 2012) at <http://tinyurl.com/z5oatb2>.

<sup>62</sup> A similar rule is applied to partial regulatory takings. A regulation that deprives some parcels of all their value, but leaves value in other parcels of the same owner cannot be considered as a regulation that completely eliminates the value of a parcel, automatically triggering a finding of a regulatory taking, but, rather, must be considered as regulations that deprive all the parcels together of some of their value, thus requiring an indeterminate fact-intensive determination of whether the regulation went “too far” and became a regulatory taking. *Palazzolo v. Rhode Island*, 533 U.S. 606 (2001). *See also* discussion in Part III.C, *infra*.

*Incomplete Takings*

land—Blackacre—in its entirety to create a park. The park is sufficiently valuable that the four abutting parcels of land—Whiteacre, Greyacre, Blueacre and Greenacre—will all double in value. For simplicity’s sake, let us assume that all five parcels are of equal value, and all are worth \$100,000. If each of the five parcels were owned by different people, the state would have to pay \$100,000 in compensation to the owner of Blackacre to seize the land for the park. However, if the owner of Blackacre also owned another parcel, say Greyacre, the offset doctrine would view Blackacre-Greyacre as a single parcel that had been partially taken. Thus, under the offset doctrine, there would be no compensation: the \$100,000 loss of Blackacre would be offset by the \$100,000 gain in value of Greyacre.

As our hypothetical taking of Blackacre illustrates, the offset doctrine leads to two disturbing anomalies. First, the amount of compensation that must be paid for takings depends on the identity of the aggrieved party, rather than on the property being taken. The same taking by the same government of land that is the same in all particulars but the identity of its owner will in some cases require a large compensation payment, and in others a small payment, or none at all. Second, the ability of the government to recapture the value of its givings depends on it taking property. If the government creates the park on land it already owns, it cannot utilize the offset doctrine, but if it seizes the land to create the park, the offset doctrine may be used to subsidize the seizure. This means that the government best preserves its reservoir of land holdings by pairing its takings of land with projects that create positive externalities for landholders. For government planners with an eye on the budget, a project with such positive externalities is an excellent opportunity to take land on the cheap, as long as the government remembers to take the land from holders of multiple parcels.

This leads us to the third and most serious problem with offsets: no matter how perfectly the offsets are measured, they distort the incentives of state officials deciding about takings. Indeed, in some sense, the more accurately the offset doctrine measures the effects of the taking, the worse the distortion of incentives.

Ordinarily, when the government takes property by eminent domain, it owes compensation for the full value of the property taken, irrespective of any benefits created.<sup>63</sup> But if the offset rule applies, the amount of compensation that must be paid drops drastically. Suddenly, the government may force the private citizen to pay a charge for the “giving”—the benefit it bestows upon

---

<sup>63</sup> 3-8A NICHOLS ON EMINENT DOMAIN § 8A.02 (2015); Noel F. Delporte, *Benefit as Legal Compensation for the Taking of Property Under Eminent Domain*, 16 ST. LOUIS L. REV. 313,317-322 (1931).

### *Incomplete Takings*

citizen.<sup>64</sup> This means that the government will pay less compensation, and perhaps avoid having to pay at all. When the offset rule applies, takings are dramatically cheaper for the government. All things being equal, the government should always prefer takings where the offset rule applies to those where it does not.

The offset rule may lead the government to configure projects in such a way as to take advantage of the ability to reduce compensation by offsetting gains. This creates an incentive for the government to prefer, all things being equal, to seize parts of two parcels rather than one complete parcel. Likewise, the government prefers to take parcels from owners of multiple parcels, rather than take all the land holdings of a single owner.

#### *2. Severance*

A second unique doctrine associated with partial takings is the severance damage rule.<sup>65</sup> Under this rule, when an asset is partially taken, the compensation is calculated in two steps: First, one calculates the value of the partial asset taken. Second, one measures the change in value of the partial asset that remains with the owner—the “severance damage.” One then combines the two values to get the total amount of compensation.<sup>66</sup>

The severance rule is not generally intended to be applied together with an offset rule. Rather, it is used as a different approach to calculating damages. To understand this, consider the ordinary use of the offset rule. The offset rule is used when the primary measure of damages is the difference between the value of the whole asset before the taken and the partially remaining property after the taking.<sup>67</sup> In such cases, the offset rule clarifies that that difference in value is not the final word on compensation due; rather, the loss in value occasioned by the taking must be “offset” by certain benefits. By contrast, the severance rule is used the primary measure of damages is the value of the portion of the asset that is taken. In such cases, the severance rule assures that proper account is taken of the impact of the taking on the remaining property. As the Fourth Circuit Court of Appeals noted, the different approaches ultimately seek to measure the same loss, but do so in different ways, such that setting compensation at the difference between property value before and after taking, and then

---

<sup>64</sup> See Bell & Parchomovsky, *supra* note 44; WILLIAM A. FISCHER, REGULATORY TAKINGS 80-84 (1995).

<sup>65</sup> 26 AM. JUR. 2d EMINENT DOMAIN § 229.

<sup>66</sup> 3-8A NICHOLS ON EMINENT DOMAIN § 8A.02 (2015).

<sup>67</sup> *Infra* Part I.B.1. See also Lewis Orgel, VALUATION UNDER THE LAW OF EMINENT DOMAIN § 48-51 (2d ed. 1953).

### *Incomplete Takings*

adding extra compensation for “severance” can result in the payment of double compensation.<sup>68</sup> Said the court,

[A]s the government argues, if th[e] [“before and after method of valuation”] is properly employed when there is a partial taking, severance damages should not be allowed. This is so because if the fair market value of the property after the taking is subtracted from its fair market value before the taking, presumably the fair market value after the taking would reflect any diminution in value by reason of the taking so that a separate allowance for severance damages is unnecessary in order for the landowner to recover just compensation.<sup>69</sup>

Theoretically, the severance rule should allow courts to avoid the pitfalls of the offset rule, and calculate damages more precisely. Unfortunately, reality is more complicated. Severance damages are almost impossible to calculate. Measuring severance damages requires courts to undertake the same task that frustrates them in measuring offsets: they must figure out to what degree changes in asset value are attributable to “severance” as opposed to other phenomena,<sup>70</sup> such as changes in the market, or the general effects of a government action. Because the markets for partial assets are often thin, or even non-existent, there is little empirical basis on which courts can make such determinations. Instead courts must try to infer the relative financial impact of several causes by various indirect measurements.

Additionally, even if courts feel confident enough to make a decision about the economic impact of a severance, they must have a firm grasp of the other pieces of the compensation puzzle. They must be able to measure the value of the taken asset in such a way as to ensure full compensation, but not double compensation.

It is little wonder, therefore, that courts often choose a different approach.

#### *C. The Problem with Partial Takings*

While partial takings are both ubiquitous and necessary, they also raise unique economic problems. Specifically, partial takings lead to three characteristic difficulties. First, the division of a parcel between state and owner creates a situation that may be prone to strategic misbehavior, such as extortion by the state. Second, in dividing parcels between the state and the prior owner, partial takings may create new assets (post-taking parcels) that are suboptimally configured. For instance, while a partial taking may

<sup>68</sup> *United States v. 2.33 Acres of Land*, 704 F.2d 728, 732 (4th Cir. N.C. 1983).

<sup>69</sup> *Id.*

<sup>70</sup> NICHOLS, *supra* note 50.

### *Incomplete Takings*

enable a road, the partial taking may come at the price of making an entire farm unusable. Third, because partial takings involve dividing up existing parcels of land, they create new assets that may have no clear market. This complicates efforts to value the asset taken. Obviously, all three of these difficulties are related to one another.

The special doctrines discussed above do not fully address these three problems, and in some ways, they even exacerbate them. Indeed, the offset doctrine in particular creates a fourth problem with partial takings: special doctrines incentivize the state to prefer partial takings over complete takings. Indeed, the state may choose inefficient partial takings over efficient complete takings or non-action.

In this Section we address each of these problems, in reverse order. We begin with the artificial and undesirable incentive to engage in partial takings created by the special doctrines.

#### *1. The Artificial Incentive for Partial Takings*

The first problem that arises in the context of partial takings is directly related to the offset rule. As we explained, the offset rule allows the government to adjust downwards compensation awards by taking account of the positive effects of exercises of eminent domain.<sup>71</sup> The offset rule, however, applies only to partial takings or takings of a portion of an owner's larger set of holdings. When land holdings are taken in their entirety, no offset is possible. This, of course, creates an incentive for the government to engage in partial takings whenever possible.<sup>72</sup>

As an illustration, consider the following example. Imagine that the construction of a new highway exit increases the value of ten identical contiguous commercial lots by 200% each on account of the increase in the volume of traffic. Assume that the government can construct the new exit either by taking four of the said lots in their entirety or by taking 40% of each of the ten lots. Assume, further, that the first option—taking four lots in their entirety—is more desirable from a planning standpoint; seizing the lots in the entirety would allow for a more compact exit, with lower maintenance costs, and superior safety. In the absence of the offset rule, the government would clearly prefer to take the four entire lots. This option would lead to better results at the same cost (or perhaps even a lower cost, since the government would only bear the administrative cost of four takings, rather than ten). Yet, under the current compensation rules, the government has a strong financial incentive to choose the second, inferior option. While the inferior

---

<sup>71</sup> *Supra* Part I.B.

<sup>72</sup> *See supra* Part I.B.

### *Incomplete Takings*

option would require the government to bear the cost of prosecuting ten eminent domain proceedings, in each case, thanks to the offset rule, the government would avoid paying any compensation. The offset rule, in other words, would render the acquisition of private property by eminent domain essentially free, so long as the government remembered to use partial takings.

In the extreme case, partial takings allow the state to take fee simple ownership in land without paying compensation, and without falling afoul of the constitutional requirement to pay “just compensation” for takings. But even in the less extreme cases where the state does have to pay compensation for a partial taking, the offset rule makes it likely that the state will pay less than it would for similar assets taken by whole parcel takings.

Naturally, the ability to seize ownership for no compensation or for very little compensation distorts the government’s decisions on takings. Simply put, when given the opportunity to take a lot and pay a little, there are few who will resist to the opportunity to take.<sup>73</sup>

#### *2. Compensation Problems*

Of course, the purpose of the offset rule is not to distort government incentives. Rather, the offset rule (like the severance rule) is intended to deal with the immensely difficult prospect of calculating compensation properly for partial takings.<sup>74</sup>

As we noted, compensation for eminent domain is already a difficult task even when the taking is of a complete parcel. Compensation, as calculated by standard doctrines, already ignores a number of important harms and benefits.<sup>75</sup> The offset doctrine partially alleviates the failure to take account of givings in ordinary exercises of eminent domain, but it does so at the cost of distorting government incentives. Additionally, as we have noted, where the offset doctrine discounts general benefits, it forces courts to engage in a fact-intensive inquiry into the character of different benefits

---

<sup>73</sup> One does not need to hold to extreme versions of fiscal illusion to recognize that budgetary impacts potentially impact in some fashion on government decisionmaking. *See supra* note 34.

<sup>74</sup> *Village of South Orange v. Alden Corp.*, 365 A.2d 469, 472 (N.J. 1976).

<sup>75</sup> *See Coniston Corp. v. Village of Hoffman Estates*, 844 F.2d 461, 464 (7th Cir. 1988) (“Compensation in the constitutional sense is . . . not full compensation, for market value is not the value that every owner of property attaches to his property but merely the value that the marginal owner attaches to *his* property. Many owners are “intramarginal,” meaning that because of relocation costs, sentimental attachments, or the special suitability of the property for their particular (perhaps idiosyncratic) needs, they value their property at more than its market value . . .”). *See also* Durham, *supra* note 36; Bell & Parchomovsky, *supra* note 36; Krier & Serkin, *supra* note 36; Merrill, *supra* note 36; Lee Anne Fennell, *Taking Eminent Domain Apart*, 2004 MICH. ST. L. REV. 957, 958-59 (2004).

### *Incomplete Takings*

enjoyed by remainder properties.

Partial takings do not alleviate the ordinary difficulties in calculating compensation; they exacerbate them. This is because partial takings necessarily divide assets into new configurations. The old configurations may have had thick or thin markets, but the new configuration will almost certainly have a thin market or none at all. Consider, for example, the taking of a diagonal strip of land for a road, in such a manner as to create two remainder parcels that are roughly triangular. Though the new triangular parcels might have been created previously, they were not, probably because there was little demand for them. While the demand for such parcels might emerge at some time in the future, now that they have been created, there is little likelihood that such demand will emerge precisely at the time they are created by the partial taking.<sup>76</sup>

To arrive at the correct compensation amount, judges must be able to estimate the value of the giving received by the affected property owners, the potential effects of future use by the government and the suitability of the remainder for standard uses. In addition, the judge ought to be able to determine the harm caused by the severance in those cases in which such harm exists. This is a formidable task.

As one would expect, there could be significant disagreement between the government and the private property owners concerning the appropriate compensation amount. Naturally, each party would attempt to bolster its claims by hiring the services of land appraisers and the court would often be presented with divergent opinions as to what it should do. At the end of the day, though, notwithstanding the court's best efforts and the amounts expended by the parties, it is unrealistic to expect the court to arrive at an accurate number. As a result, the amount awarded may be excessive or under-compensatory and the costs incurred by the parties simply in order to figure out how to allocate the value and loss of the taking largely represent a pure loss from a social perspective.

### *3. Problematic Asset Configurations*

Even if the government could figure out how to calculate compensation easily, partial takings would still be problematic. Partial takings, by their nature, reconfigure assets. Part of an asset

---

<sup>76</sup> Studies show that parcels with regular boundaries are more valuable than those with irregular boundaries. *See, e.g.*, Gary D. Libecap and Dean Leuck, *The Demarcation of Land and the Role of Coordinating Property Institutions*, 119 J. POL. ECON. 426 (2011); Gary D. Libecap and Dean Leuck, *Land Demarcation Systems*, in KENNETH AYOTTE AND HENRY E. SMITH, EDs., *RESEARCH HANDBOOK ON THE ECONOMICS OF PROPERTY LAW* 257 (2011).



*Incomplete Takings*

is taken by the government and part is left behind, creating two new smaller assets in place of the one larger one. But these new assets may not be properly configured for optimal use. Naturally, the asset held by the government is in a configuration that the government deems suitable for its use. But the part left in the hands of the private owners in the aftermath of partial takings is often unsuitable for its pre-taking use. At times, the remaining part is unfit for any economically viable use.

This is especially true when the government takes a large percentage of the original parcel. For instance, takings of over 50% of the original parcel may result in the creation of remainders of very little use for their owners. Naturally, the specific effect will also depend on the initial size of the parcel that was subject to a partial taking. Very large parcels may “survive” substantial partial takings without losing the lion’s share of their value, whereas small parcels may see their value eviscerated even by relatively small partial takings.

Another factor that affects the suitability of the remainder for future use is the pertinent land use law. Specifically, minimum lot size and setback requirements can render the remaining parts unsuitable for residential and commercial uses, dooming them to lay fallow if the owners cannot secure a change in the zoning rules or an exemption.

Small size is not the only problem resulting from partial takings. Partial takings may also create irregular-sized lots. The taking of a corner of a lot for a park may create an “L” shaped remainder lot, for example. In other cases, partial takings may leave only a narrow sliver of the original lot, leading to the formation of “bowling alley” parcels. Needless to say, such unorthodox configurations make the remaining parts nearly impossible for conventional uses.

In a smoothly functioning market among willing buyers and sellers, these kinds of asset configurations would not need to concern us. Owners would only voluntarily subject their assets to such troublesome reconfigurations if the newly enabled use were valuable enough to compensate for the loss engendered by stunting the ability of the remaining parcel to produce value. But exercises of eminent domain are not market transactions; indeed, it is highly unlikely that the power of eminent domain would be used if there were a smoothly functioning market in which the government could buy the lots it needed.<sup>77</sup> There is no guarantee that the partial taking is valuable enough to justify stunting the remaining parcel. Indeed,

---

<sup>77</sup> Even with the shortcomings in compensation for takings, the process of taking property by eminent domain is costly, and likely more costly than negotiations in a smoothly functioning market.

### *Incomplete Takings*

there is no guarantee that the stunting was necessary to achieve the purpose of the taking; perhaps the new use of the taken property could be best achieved by using whole parcels, rather than partially taken parcels.

#### *4. Strategic Misbehavior*

A final problem emanating from partial takings is that they may induce strategic misbehavior on the part of the government. The potential for strategic misbehavior is in large part the result of the problems we have described above.

Consider again the differences between the compensation doctrine applicable to partial and complete takings. The government can greatly reduce the amount of compensation it will pay by carrying out a partial rather than complete taking. But the government need not actually carry out the partial taking. The threat of a partial taking can be employed in order to convince owners to take less compensation.<sup>78</sup>

The possibility of strategic misbehavior does not end at the moment of the partial taking. Oftentimes, the nature of the asset divided by the partial taking is such that the newly divided assets continue to be strongly linked. If Blackacre, a farm, is partially taken by the government, what remains of Blackacre will be highly influenced by a government decision to use its part as waste facility, rather than a park. More generally, once it has taken the asset part it needed and has paid compensation for it, the government can threaten to use the taken part in ways that impose negative externalities on the owner of the remainder. Once, again, the threat can be employed to extract payment from owners (or, more likely, to silence objections by the owners to other government actions).<sup>79</sup>

Consider the construction of a new highway. To enable the project, the government must take several lots, in whole or in part. Thereafter, in the event of partial takings, multiple remainders of various sizes will remain in the hands of the original owners. Having paid compensation to the owners, the government has discharged its legal duty. But, of course, the payment of compensation does not terminate the relationship between the government and the taken owners. Subsequent to the takings, the

---

<sup>78</sup> See Gideon Kanner, *Condemnation Blight: Just How Just is Just Compensation?*, 48 NOTRE DAME LAWYER 765 (1973).

<sup>79</sup> A related phenomenon is the strategic announcement of takings in order to take advantage of “condemnation blight” and lower compensation amounts. See 8A-G18 NICHOLS ON EMINENT DOMAIN § G18 (2015); Kanner, *supra* note 78. Cf. T. Nicolaus Tideman and Florenz Plassmann, *Fair and Efficient Compensation for Taking Property Under Uncertainty*, 7 J. PUB. ECON. THEORY 471 (2005).

*Incomplete Takings*

government must decide what resources to expend on the maintenance of the new highway. For example, the government whether to erect acoustic barriers between the highway and the lots, how much to spend on upkeep and maintenance, and how to develop the landscape. These and other decisions will have a direct bearing on the value of the remainders.<sup>80</sup>

To be sure, similar strategic problems may arise in any case of eminent domain. The government may threaten eminent domain in order to extract favors. Or, once it has taken the property, the state may threaten to use it in ways that are disadvantageous to owners of adjacent lots. However, the strategic problem is particularly acute in the case of partial takings. Partial takings, and the attendant compensation doctrines, give the government a number of tools for extortion. In some cases, these tools may end up being used.

## II. ADDING OPTIONS TO PARTIAL TAKINGS

In this Part, we suggest a new approach to partial takings. We propose the creation of a new legal entitlement that would vest in private property owners whenever the government elects to engage in a partial taking; a put option. The creation of a put option would bestow upon the private property owner the power to sell the remainder of her partially taken asset to the government at a percentage of fair market value of the asset as a whole, at the time of the partial taking.

Formalization of this new entitlement would create a property arrangement in which the parcel is divided (as the government desires in effecting a partial taking) but either party can exercise the legal power to effect a unification of the title in the hands of the government. As Ian Ayres pointed out: the government already holds a call option on all private property by dint of its power of eminent domain. The power of eminent domain entitles the government to seize title to any property, or part thereof, provided that it acts in the furtherance of a public use and is willing to pay the private owner just compensation, measured by fair market value. Our proposal is intended to pair the government's broad call option with a much more limited put option that would be conferred to private property owners in cases of partial takings.

As is true of all options, private property owners would be under no obligation to exercise their new legal entitlement. They would be free to do so at their choice, if they estimate that the planned partial taking of their parcel would leave them worse off even after the payment of compensation. Importantly, the

---

<sup>80</sup> Kanner, *supra* note 78.

### *Incomplete Takings*

introduction of a put option would result in a property arrangement that has the potential significantly to ameliorate all the problems associated with partial takings. The put option would encourage the reunification of assets where partial takings result in inefficient configurations. As well, it would create strategic pressures on the owner to reach a more realistic assessment of the value of the taking, while reducing the ability of the government to engage in strategic misbehavior. If coupled with the elimination or reform of the offset doctrine, the property arrangement would neutralize all the difficulties mentioned in the previous Part.

In order to explain our proposal, we begin with a brief review of the intersection of the rich literature on options with the phenomenon of takings. We then present the particulars of our proposed approach to partial takings.

#### *A. The Use of Options in Property Law*

The options with which we are concerned come in two varieties. The first, a call option, allows the option holder to purchase an asset, entitlement, or future commodity, from a certain counter-party at a pre-agreed price or at a price to be determined in the future.<sup>81</sup> The second type, a put option, can be thought of as the mirror image of a call option: it empowers the option holder to sell a good, entitlement or future commodity to a certain counter-party at a preset price or a price to be decided in the future.<sup>82</sup> Options are often used to incentivize or suppress certain behaviors,<sup>83</sup> align the interests of the parties<sup>84</sup> or to force parties to provide information.<sup>85</sup>

---

<sup>81</sup> Ian Ayres, *Protecting Property with Puts*, 32 VAL. U. L. REV. 793, 796 (1998).

<sup>82</sup> *Id.*

<sup>83</sup> IAN AYRES, *OPTIONAL LAW* (2005). *See also, e.g.*, Gideon Parchomovsky & Endre Stavang, *The Green Option*, 99 MINN. L. REV. 967 (2015) (explaining how call options can be used to incentivize large businesses to act in a more environmentally responsible way); Madeline Morris, *The Structure of Entitlements*, 78 CORNELL L. REV. 822, 824 (1993).

<sup>84</sup> *See e.g.*, Michael Jensen, M. and William Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 J. FIN. ECON. 3: 305 (1976) (arguing that option contracts can be used to align the managerial and shareholders' incentives and maximize firm value); Demsetz, H. and K. Lehn 1985. *The Structure of Corporate Ownership: Causes and Consequences*. *Journal of Political Economy*, 1155-1177; Core, J. and W. Guay. 1999. *The Use of Equity Grants to Manage Optimal Equity Incentive Levels*. *Journal of Accounting and Economics* 28: 151-184.

<sup>85</sup> *See e.g. Lee Anne Fennel, Revealing Options*, Lee Anne Fennel, 118 HARV. L. REV. 1399, 1404 (2005) (discussing how options may be employed to reveal private information); Saul Levmore, *Self-Assessed Valuation Systems for Tort and Other Law*, 68 VA. L. REV. 771 (1982) (explaining how the grant of call options to third parties may induce truthful reporting of property values for property tax purposes).

*Incomplete Takings*

Options may also be used to effect a better ownership structure or configuration of assets.<sup>86</sup> It is this use of options that is especially pertinent for our purposes.

In recent years, scholars have used option theory to devise innovative solutions to various property problems. This line of analysis begins with Guido Calabresi's and Douglas Melamed's seminal insight that all legal entitlements may be divided into three prototypes.<sup>87</sup> The first prototype, property rule protection, vests in the entitlement holder the power to set the price for takings or uses of her entitlement, and any attempts to take the entitlement non-consensually will be met with an injunction.<sup>88</sup> The second prototype, liability rule protection, bestows the price-setting power not on the entitlement holder, but rather on some third party, such as a legislator, court, administrative agency, which means that transgressions will be met with a damage award that may fall way short of the asking price of the entitlement holder.<sup>89</sup> Finally, the third prototype, inalienability rules puts the entitlement outside the sphere of market transactions and forbids the entitlement holder to sell her entitlement to others even for a price of her choosing.<sup>90</sup>

Drawing on the Calabresi-Melamedean framework, property theorists have analogized liability rule protection to call options.<sup>91</sup> As an illustration, consider a classic pollution dispute. Assume a factory that emits smoke, depositing soot on a residential lot. Assume further that the law wishes to protect the entitlement of the resident to fresh air, free of pollutants. In this case, the law can either grant the resident property rule protection or liability rule protection. Under a property rule, the residential property owner will have an absolute right to block the emissions, and win an injunction in court against the factory continuing to emit smoke. A liability rule, on the other hand, will allow the court to set the price of the pollution; the resident will win money damages to compensate her for the harm she suffers, but the factory will continue to emit smoke and soot.

---

<sup>86</sup> See e.g., *The Symphony Space Inc. v. Pergola Properties Inc.* 88 N.Y.2d 466, 669 N.E.2d 799, 646 N.Y.S.2d 641 (1996) (explaining that “options “appendant” or “appurtenant” to leases—encourage the possessory holder to invest in maintaining and developing the property by guaranteeing the option holder the ultimate benefit of any such investment.”).

<sup>87</sup> Calabresi & Melamed, *supra* note 26.

<sup>88</sup> *Id.* at 1092.

<sup>89</sup> *Id.*

<sup>90</sup> *Id.* at 1092-93.

<sup>91</sup> See e.g., Ian Ayres & J.M. Balkin, *Legal Entitlements as Auctions: Property Rules, Liability Rules, and Beyond*, 106 *YALE L.J.* 703, 729-33 (1996); Ian Ayres & Eric Talley, *Solomonic Bargaining: Dividing a Legal Entitlement to Facilitate Coasean Trade*, 104 *YALE L.J.* 1027 (1995).

*Incomplete Takings*

Carol Rose colorfully explained the policy choice in the following way:

[Under a property rule regime], the entitlement holder has the whole meatball, so to speak, and the other party has nothing---one has property, the other has zip. Under either of the two liability rules, on the other hand, the meatball gets split: The factory has an option to pollute (or once exercised, an easement), while the homeowner has a property right subject to an option (or easement).<sup>92</sup>

The value of employing options in property law has not escaped other property theorists. Even Richard Epstein, generally a champion of strong property rule protection for property interests,<sup>93</sup> has acknowledged the value of employing call options with respect to property in some cases. Specifically, Epstein has written of the utility of liability rules as a means of overcoming holdout problems and cases of bilateral monopoly that thwart voluntary exchange, noting that, “[l]iability rules, when used, always take the direction of a ‘call’ [option].”<sup>94</sup>

Ian Ayres took the next logical step by suggesting the potential utility of put options as well.

Ayres illustrated his analysis within the common framework of a pollution lawsuit. To begin with, Ayres explained the creation of options as a two-step process.<sup>95</sup> In step one, a party ceases or compromises the property interest of another, as in the case of the factory that emits pollutants onto a neighboring lot. Once the initial partial taking occurs, an option is created if a court decides to grant the affected property owner liability rule protection. By setting a damage amount to be paid by the taker, the court effectively gives the taker a choice between exercising the option at the price set by the court and thereby appropriating the underlying entitlement, or refraining from exercising the option at said price by stopping and restoring the status quo ante.

Extending the analysis to puts, Ayres noted that after the initial transgression occurs, courts have another option at their disposal: they can empower the harmed property owner to sell her interest to the transgressor at the price set by the court.<sup>96</sup> Ayres explained that the use of put options has different distributional and informational effects than the use of calls. Puts place the decision-making power

---

<sup>92</sup> Carol M. Rose, *The Shadow of the Cathedral*, 106 *YALE L.J.* 2175, 2178-79 (1997).

<sup>93</sup> Richard Epstein, *A Clear View of the Cathedral: The Dominance of Property Rules*, 106 *YALE L.J.* 2091, 2093-4 (1997).

<sup>94</sup> *Id.*

<sup>95</sup> Ayres, *supra* note 81 at 800.

<sup>96</sup> *Id.* at 800.

*Incomplete Takings*

in the hands of the harmed party, as opposed to the aggressor, allowing her to perform the relevant cost-benefit analysis and to exercise the option only when doing so inures to her benefit.<sup>97</sup>

As an example of the use of options in current property doctrine, Ayres turned to the doctrine of encroachment. An encroachment occurs when a land owner erects a structure that projects into or fully stands on her neighbor's property.<sup>98</sup> Traditionally, the common law dealt with encroachment by granting property rule protection to the encroached-upon party and issuing an injunction against the encroacher even when the encroachment happened in good faith.<sup>99</sup> The case of *Pile v. Pedrick* provides a powerful, albeit extreme illustration.<sup>100</sup> There, the foundations of the defendant's factory wall projected by 1.375 inches onto the plaintiff's property. The encroachment resulted from a surveyor's error of which the defendant was not aware. Despite the fact that the encroachment was both *de minimus* and in good faith, the court ordered the defendant to remove the offending portion of the wall. As the plaintiff was not willing to sell the tiny bit of land to the defendant, nor to permit the defendant entry to chip away the small portion of the offending foundations, the defendant had no choice but to remove the wall in its entirety.<sup>101</sup>

Over time, the law has shifted away from the dogmatic approach of the common law. A growing number of states have modified the traditional approach statutorily by empowering courts to use liability rule protection in cases of good faith encroachments, where the encroacher did not know and was not supposed to know that she encroached on her neighbor's land and where the value of the encroaching structure far exceeds the value of the underlying land.<sup>102</sup> In such cases, certain states vest power in the courts to give

---

<sup>97</sup> *Id.* at 804-813 (discussing the distributional, informational and bid-ask spread of puts).

<sup>98</sup> See e.g., Joseph William Singer, Introduction To Property, 40 (2d Ed. 2005) (discussing encroachments).

<sup>99</sup> See e.g., Deepa Varadarajan, Improvement Doctrines, 21 Geo. Mason L. Rev. 657, 669 (2014) ("Under the conventional common law view, the mistaken improver of land was not entitled to any compensation from the landowner for the improvement."); James L. Kainen, *The Historical Framework for Reviving Constitutional Protection for Property and Contract Rights*, 79 CORNELL L. REV. 87, 134 (1993) (noting that under the traditional view of the common law, that of "the early nineteenth century," when an owner vindicated his title to the land by ejecting the improver from possession, his title was held to encompass title to the improvements[.]").

<sup>100</sup> 31 A. 646 (Pa. 1895).

<sup>101</sup> *Id.*

<sup>102</sup> See e.g., Kelvin H. Dickinson, *Mistaken Improvers of Real Estate*, 64 N.C. L. REV. 37, 42 n. 28 (1985) (reporting that at least 42 states have adopted versions of such acts).

### *Incomplete Takings*

the encroacher an option to buy the affected land strip from the victim at a price set by the court – a call option solution. Other states have gone even further by recognizing an option in good faith encroachers to force a sale of the structure upon the encroached upon neighbor – a put option solution.<sup>103</sup>

The modern approach to encroachments provides a natural launching pad for our proposed reform of the doctrine of partial takings. After all, encroachments that are authorized without the consent of the owner are nothing more (or less) than partial private takings.<sup>104</sup>

We propose an expansion of the number of options already created in the context of partial takings. In addition to the options already inherent in the nature of the taking, we suggest adding a new put option, as we will describe in greater detail in the next section. As with other options, the option we propose provides a simple but elegant way to ameliorate the harsh results of property rules, without excessively disturbing the overall structure of entitlements.

#### *B. An Option-Based Mechanism for Addressing Partial Takings*

In this section, we propose an options mechanism that should accompany all partial takings. The aim of the mechanism is simultaneously to alleviate the central weakness of partial takings—the danger that partial takings might result in suboptimal partitions of parcels or titles that adversely affect land value—and to ameliorate or avoid the appraisal problems that plague partial takings. The options mechanism we propose addresses the former issue by giving both the private owner the ability to reunify an affected parcel, at a price that is partially predetermined. By linking the price of unification to compensation for the partial taking, our mechanism also incentivizes parties to provide information that eases the task of determining the correct compensation for the initial partial taking.

In our proposal, every partial taking would be accompanied by the creation of a put option that complements the call option the government already has. The put option of private property owners would arise immediately upon the announcement of a partial taking and would have to be exercised within a short time—we propose three months. The price of exercising the option—the “strike price”—would be set by two factors: the market values set at the time of the partial takings, and a ratio specified by the court at the time of the partial taking. The ratio, in turn, would be set by the court on the basis of the market prices of the asset as a whole, and

<sup>103</sup> *E.g.*, CAL. CIV. PROC. CODE § 871.1–.7 (West 2009).

<sup>104</sup> Abraham Bell, *Private Takings*, 76 U. CHI. L. REV. 517 (2009).



*Incomplete Takings*

the portion taken.

To illustrate how our proposal would work, consider the following example. Assume that the government announces a plan to take a portion of Beth's parcel in order to add another lane to an interstate highway. Ordinarily, the court would examine the value of Beth's parcel and the portion taken thereof, announce a compensation award for the partial taking, and the government would then receive title for the portion. Under our proposal, the court's order would be slightly more detailed. The court would not only announce the value of the portion taken, it would also announce the value of Beth's parcel as a whole. For purposes of illustration, let us imagine that Beth's parcel is appraised at \$500,000, and the portion taken \$100,000. This would mean that the court found that the portion taken was worth 20% of the whole parcel. As in an ordinary taking, the government would pay \$100,000 and receive title to the portion of Beth's parcel it desires.

At this point, a put option would be granted to Beth to force a sale of the remainder of her lot to the government. The option would allow Beth a three-month period during which to force the government to buy the remainder of her parcel at a price equal to 80% of the value of the parcel as a whole, or \$400,000. It is important to note that the formalization of a put option in Beth creates symmetry between private property owners and the government. Indeed, as Ian Ayres explained, the government, on account of its eminent domain power, already has a call option over all private property, with the exercise price being fair market value.<sup>105</sup> In principle, therefore, had the government wanted it could have seized the entirety of Beth's parcel, and paid her \$500,000, invoking the same public use purpose that enabled the partial taking.<sup>106</sup>

The central feature of our proposal is thus to give both sides the ability to force the unity of asset. The symmetric ability to force unity of the asset not only encourages maintaining asset unity when it is more valuable. It also eliminates the strategic incentive to seize partial assets when it is possible to offload uncompensated costs on the remaining parcel. In essence, the options force the government to evaluate the costs of a partial taking that would otherwise fall on the owner.

*C. The Advantages of the Proposed Model*

Our proposal offers four advantages over the current legal

---

<sup>105</sup> AYRES, *supra* note 83 at 4.

<sup>106</sup> While the government would have to show a "public use" for the remainder, under current law, the government can point to almost anything as a public use justifying the taking.

*Incomplete Takings*

regime. First, our proposal creates a readily available mechanism for reuniting the title to the lot as a whole in the hands of a single owner, thereby preempting the creation of negative externalities that tend to arise in cases of split ownership. Second, and relatedly, it prevents the creation of parcels that are suboptimally configured for use. Third, our mechanism creates an incentive for the government to engage in more efficient planning and land development policies. Fourth, our proposal may save costs, relative to the existing rule, by simplifying the appraisal of the value of the part that remains in the hands of the private owner after the taking.

Let us examine each of these advantages in turn.

The proposal's ability to unify parcels is straightforward. Indeed, this is its central feature. Under our proposed regime, both government and owner have the ability to force reunification of a parcel split by a partial taking. This means that where one or the other of the parties believes the division to be suboptimal, either can force the unification. At the same time, the mechanism does not require the pre-taking parcel configuration to remain forever. If the parties are satisfied by the decision, they can allow the options to lapse, and the parcels will have successfully been reconfigured. Thus, the proposal encourages unity only where one or the other party foresees a benefit from unity. It is only where a government taking threatens to leave the remainder unfit for use, or suboptimally configured for use, that the owner will exercise her put option to stop this result from occurring. While the owner would be unable to block the taking—that is the nature of eminent domain—the owner would be able to decide whether she is better off with the remaining partial parcel or the compensation. The government, of course, would not be saddled permanently with the remainder asset either. If the government could find a buyer for the remainder of the parcel, it could transfer the remainder to someone able to make productive use of it.

The ability to force unity of the parcel, together with the option to leave the partial taking in place, is what points to our proposal's second advantage. The reason an owner would choose to exercise the put option and force a taking of the remainder is either some flaw in the compensation scheme that ensures over-compensation for the remainder, or a flaw in the configuration of the remainder making it difficult to use or sell. While flaws in the compensation scheme are certainly possible (as we shall discuss momentarily), it is reasonable to conjecture that the bulk of cases exercising the put option will involve a flawed configuration of the remainder. Flaws in the compensation scheme can be rectified with cash payments, without passing title; transferring title can be costly and traumatic. The owner's put option will likely be exercised only where the remainder cannot be put to more productive use.

*Incomplete Takings*

The third advantage of our proposal is to be found in its effect on government decisions. Strictly speaking, our proposal is not necessary for the government to have a call option on the remainder. Thanks to the government's power of eminent domain, in all cases of partial takings, the government could have taken the remainder if it so desired, and it can always pick up the remainder later. Accordingly, the decision to take only a part implies that from the government perspective, a partial taking (coupled by partial compensation) is preferable to a complete taking (accompanied by full compensation). As we explained, the government cost-benefit calculus is not necessarily aligned with the preference of the property owner and does not necessarily reflect the broad societal interest.<sup>107</sup> Yet, under current law, the government has the power to force its preference on the owner of the partially taken property and she has no real say in the matter.

The creation of a put option in the property owner, per our proposal, will change the balance of power between the government and private property owners. It would allow property owners, who wish to do so, to force a sale of the remainder of the lot to the government in cases of partial takings. The formalization of a put option that would complement the government's already existing call option will necessarily change the calculus performed by the government, when it considers whether to carry out a partial taking or a full taking. On the most basic level, it will force the government to take account of the cost that its choice will impose on property owners. Knowing that private property owners, whose land was partially taken, will be able to sell the remainder to the government will induce the government to engage in more socially partial optimal takings and in appropriate cases take the whole lot ab initio.

Relatedly, our proposal neutralizes some of the problematic incentives created by current partial takings doctrine. As we noted, the offset doctrine creates a peculiar incentive for the government to seek partial takings in place of total takings.<sup>108</sup> It is only when the taking is considered "partial" that the government has the ability to reduce compensation awards by taking into account the positive effects of government projects on property values. Under our proposal, this perverse incentive is greatly diminished.<sup>109</sup> All partial

---

<sup>107</sup> *Supra* Part I.C.4.

<sup>108</sup> Abraham Bell & Gideon Parchomovsky, *The Uselessness of Public Use*, 106 COLUM. L. REV. 1412, 1440-1442 (2006).

<sup>109</sup> As we have argued elsewhere, the government is best incentivized when the value of benefits is taken into account. Indeed, we proposed a general rule of assessing a charge for all government givings. Abraham Bell and Gideon Parchomovsky, *supra* note 44. However, as we noted there, it is a mistake to require givings charges only in the context of offsets to takings. By restricting givings charges to offsets for takings, the law perversely encourages the government to take property unnecessarily. *Id.*

*Incomplete Takings*

takings compensation awards are granted against the background of an assessment of the value of the parcel as a whole. While courts may still use the offset and severance doctrines to establish the value of the partial taking, such evaluations ultimately must be anchored by the value of a complete taking; if there is a significant enough divergence, one or the other of the parties will almost certainly exercise the put or call option to translate the partial taking into a complete one.

The fourth and final advantage of our proposal can be found in the savings it produces in administrative and assessment costs. While our proposal leaves courts in the unenviable position of measuring the value of partially taken property, it holds out the possibility of cheaper and more accurate assessments of value.

To begin with, the options significantly reduce the incentives for the parties to misstate the value of a partial taking. *Prima facie*, one may argue that our proposal invites the government to secure artificially low appraisals of the value of properties it plans to take. A second look shows this is not the case. It is under current doctrine that the government has an incentive to “depress” the value of taken properties, irrespective of whether it takes in whole or in part. Budgetary constraints invariably induce the government to try to lower the compensation amount it must pay to aggrieved property owners. Our proposal, however, greatly reduces the advantage of artificially low assessments of the value of that part of the property that is taken in partial takings. If the assessment of the portion taken is too low, while the assessment of the property as a whole is roughly accurate, this will all but ensure that the property owner exercises the put option. As for the danger of artificially low appraisals of the entire parcel, there is an easy and well-established fix. As is the case under current takings law, property owners have the right to challenge the government assessment and produce an appraisal of their own.<sup>110</sup> Should the parties fail to reach an amicable resolution, a court will have to step in and determine the fair market value. In such cases, it will be only upon the issuance of a judicial determination that the property owner will get to exercise her put option. While there is no guarantee that appraisals of the value of the parcel as a whole will be accurate, as we have noted, there is reason to believe that such appraisals will be better than those of segments of the parcel as a whole with no clear market.

One might voice a concern over the fact that our proposal increases the cost of planning for the government. Under our proposal, whenever it engages in a partial taking, the government will have to bear in mind that the private owner might choose to exercise her put option, forcing the government to pay the full

---

<sup>110</sup> Bell & Parchomovsky, 96 VA. L. REV. at 1675 *supra* note 35.

*Incomplete Takings*

market value of the property, even though it only needs part of it. Although this argument is correct, it misses the mark. For while it is true that the total amount paid by the government will increase, so will the amount of land the government will have at its disposal. Importantly, the government will be able to use the land to its own ends or resell any parts in which it has no interest to third parties. In other words, the government will be able to use and dispose of the taken property as any private owner would. The only marginal cost our scheme imposes on the government consists of the transaction costs that the government will incur should it choose to transfer its title. It is critical to understand that under current law that same cost must be borne by the private property owner, who wishes to sell her remainder.

On a similar note, one might claim that the ultimate result of the exercise of put options by the owner will lead to excessive holdings of property by the state. Indeed, almost by definition, the put will force the state to take ownership of properties it did not express any interest in acquiring. Nonetheless, there is little reason to fear that this will ultimately lead to excessive land holdings by the state. The state already has impressive powers to acquire property, including the right to purchase property and to take it by eminent domain. The state's land holdings are vast—the federal government owns a quarter of all lands in the United States (considerably more in several states), and state and local governments also own vast amounts of land. At the same time, the state has the ability to sell property it does not desire, and it seems odd to fear that the state will end up holding too many lands because it has been forced to purchase lands it wants not to hold.

One might also voice a concern over the potential manipulation of the put option by the owner. Owners will exercise the put option, *inter alia*, when there are few good market options for disposing of the remainder. One might object that this opens the process up to manipulation; owners will seek a government taking when compensation exceeds market price, or when in need of liquidity. The put option can force the taking of the remainder of the property without the need to engage in lobbying (or more corrupt practices). Here again, while the argument is correct, it is more aptly aimed at the practice of eminent domain. Where compensation practices are flawed, all government takings are vulnerable to corruption.<sup>111</sup> The put and call options do not increase this vulnerability.

### III. EXTENSIONS

In this Part, we explore several extensions to our basic

---

<sup>111</sup> *Id.*

### *Incomplete Takings*

proposal. First, we consider the possibility of introducing a *de minimis* exception into our model, which would exempt very small takings from triggering the put option mechanism. Second, we evaluate an alternative means of implementing our proposal, in which the option prices would be determined by self-assessment, rather than by the courts. Third, we explain how our model can be extended to partial chattel takings

#### A. De Minimis Takings

The rigidity of the Supreme Court's takings jurisprudence requires a small addendum to our basic model. The Supreme Court has steadfastly held to the view that any permanent physical occupation, slight though it may be, constitutes a taking for constitutional purposes (and thus, a taking for which just compensation must be paid). Recall the case of *Loretto*, which involved a municipal ordinance requiring the placement of hardware and cables for cable television service on private residential property. In that case, the physical objects occupied only a few square inches of the building's exterior.<sup>112</sup> Nonetheless, the Court clung to the rule that a physical taking, of any size, demanded the payment of just compensation;<sup>113</sup> in that particular case, the compensation ultimately awarded to the property owners was a single dollar.<sup>114</sup>

Yet, the rule that any permanent physical occupation constitutes a compensable taking poses a challenge to our proposal. In its basic form, our model would empower owners who suffered minor permanent intrusions to force a sale of their entire interest to the government. Such a result is undesirable from a social standpoint. Most minor intrusions and occupations do not affect the characteristic or marketability of the underlying asset. Nor do they create a risk of strategic abuse on the part of the government. Hence, trifling incursions do not normally necessitate a transfer of ownership to the government.

To reflect this fact, we propose that *de minimis* takings be exempted from our model. To operationalize this exemption, we would grant the government, in appropriate cases, the power to seek a declaratory judgment in court that its actions would result in a *de minimis* taking—an occupation that causes only a token harm to the owner. The owner, for her part, would receive an opportunity to convince the court that the occupation would occasion upon her more than a *de minimis* harm. Should the court grant the government its request and classify the taking as *de minimis*, no put

---

<sup>112</sup> *Loretto v. Teleprompter Manhattan CATV Corp.* 458 U.S. at 426-435.

<sup>113</sup> *Id.*

<sup>114</sup> *Id.*

### *Incomplete Takings*

option would be given to the owner and, a fortiori, she would not be able to exercise it. If on the other hand, if the court were to reject the government's claim that the occupation at hand is merely *de minimis*, the owner would receive a put option and would be entitled to exercise it at her will within the three-month window.

Whether a particular occupation counts as a *de minimis* taking or not would depend on the value of the property taken, and the taking's effect on the use and marketability of the property. By our lights, a case like Loretto would clearly come within the *de minimis* exception and would not create a put option in the property owner. Other physical occupations whose impact exceeded that of Loretto would be judged based on their circumstances. It can be added that the partial takings examples we discussed *infra* in Part I,<sup>115</sup> which involved the partial takings of land for the expansion of roads, navigation routes, and sand dunes, would almost certainly fall outside the scope of *de minimis* takings.

#### *B. Self-Assessment*

Our model was based on utilizing existing legal doctrines for appraising the value of property affected by partial takings. A more ambitious version of our model would offer a self-assessment mechanism that would enable condemnees to state the value of the taken part as a percentage of the overall value.<sup>116</sup> In this variant, once the government declared its intent to engage in a partial taking of a certain percentage (size-wise) of a private parcel, the owner would receive an opportunity to self-assess the value of the targeted portion (percentage-wise) relative to the whole.

To illustrate how the proposed mechanism would work, assume that a municipality publicizes its intent to take 40% of Anne's parcel to expand a local road. To this end, the government secures an appraisal of Anne's entire parcel, which states that the value of the lot as a whole is \$200,000. At this point, Anne should receive an opportunity to report her own assessment of the ratio of the value between the 40% portion designated to be taken and the property as a whole. For example, Anne might estimate that the value of the part designated for taking is not 40% of the whole, but actually 65%. Once Anne submits her self-assessment, the government can choose among two different options: either take the part it originally planned to take and pay Anne 65% of the value of entire lot (\$130,000) or take the whole parcel and pay Anne full compensation in the amount of \$200,000. Anne would also have the ability to exercise her put option, forcing the government to take the

---

<sup>115</sup> See *infra* Part I.

<sup>116</sup> For a broader discussion of the benefits of self-assessment, see Bell & Parchomovsky, *supra* note 36.

*Incomplete Takings*

remainder of the land for an additional \$70,000. We assume, for purposes of this example, that the government's appraisal of the parcel as a whole is correct; if Anne chose to litigate this appraisal, the court could determine a different value of the parcel as a whole, while still accepting Anne's self-assessment of the relative value of the taken segment. For instance, if the court were to determine that the value of the lot as a whole were actually \$220,000, Anne's self-assessment of 65% would still stand, but the government's choice would now be between paying Anne \$143,000 to take the segment of the lot or paying her \$220,000 and taking the whole lot.

Self-assessment potentially brings two benefits.<sup>117</sup> First, self-assessment lowers the cost of assessing the value of the partially taken land. Neither party would have to bring expert witnesses to the court, nor would the court have to engage in any difficult analysis of the competing assessments. The property owner would simply have to make a declaration. Only if the parties disagreed about the value of the parcel as a whole would it be necessary to battle in court about appraisals, and, even then, the battle would only be about the value of the parcel as a whole, making it unnecessary to introduce any proof about the value of the taken segment or its interaction with the parcel as a whole.

Second, self-assessment potentially yields a more accurate approximation of the value of the partially taken land.<sup>118</sup> This is due to the strategic pressures created by the options. An understatement of the value of the partial taking makes the partial taking cheaper for the government, and renders it unlikely that the government will exercise its call option. There is little reason for a property owner to understate value in this way; the best the owner can achieve with such an underestimation is to later cut her losses by exercising her put, making the government take the entire property at the court-set price (which the owner could always have done, irrespective of the price of self-assessed price). It is more likely that a property owner would be tempted to overstate the value of the partially taken property. This would increase the compensation paid for the partial taking and therefore put more money in the hands of the owner, for the time being. However, the overestimation would also mean the untaken remainder of the property was underpriced. This would encourage the government to exercise its call option and take the rest of the property. Again, there would be little to recommend misstating the value in this way; while the self-assessment would

---

<sup>117</sup> Saul Levmore, *Self-Assessed Valuation Systems For Tort and Other Law*, 68 VA. L. REV. 771,771 (1982); Lee Anne Fennell, *Taking Eminent Domain Apart*, MICH. ST. L. REV. 957, 959 (2004); Abraham Bell and Gideon Parchomovsky, *Taking Reassessed*, 87 VIRGINIA LAW REVIEW 277, 300 (2001);

<sup>118</sup> See Bell & Parchomovsky, *supra* note 36, for a discussion of self-assessment and strategic pressures for truthful reporting.



### *Incomplete Takings*

encourage the government to exercise its call option, the owner could always exercise the put option to the same effect, without misstating the value.

To be sure, the self-assessed value will be imperfect, due to the anchoring effect of court's assessment of the value of the whole parcel. For instance, it would not make sense for an owner to attempt to use self-assessment to capture extra subjective value that she attaches to the parcel. This is because the compensation for the whole parcel will not include such subjective value.<sup>119</sup> Including a large subjective value in the self-assessment of the partial taking would have the same effect as an exaggerated self-assessment: it would encourage the government to exercise its call option to take the rest of the property. At that point, the owner would not only lose compensation for the subjective value, she would also lose the entire parcel.

There is, however, one flaw with self-assessment in the context of partial takings. Government decisions to take property are not purely pecuniary.<sup>120</sup> Even if the remainder property looks cheap due to an exaggerated self-assessment of the value of the partial taking on the part of the owner (Anne in our example), the government might still prefer to refrain from exercising its call option. If the owner could properly identify situations in which the government would refrain from taking the cheap remainder, it would be to her advantage to overstate the value of the partial taking. Such an overstatement would ensure a greater payment at the time of the partial taking, and the reluctance of the government to exercise its call option would make the owner secure in the belief that the overstatement will stand.

### *C. Partial Chattel Takings*

Takings are not restricted to land. While our proposal presumes that the partially taken asset is real estate, there is nothing in the law that restricts partial takings to realty. Indeed, some of the most prominent takings controversies in recent years have involved

---

<sup>119</sup> *Supra* note 36.

<sup>120</sup> Even theories of "fiscal illusion," which presume an important role for fiscal factors in the decision to take property, do not presume that the government will take property simply because the compensation that will be paid below market. Rather, theorists who believe in fiscal illusion believe in the much more modest proposition that government decisions regarding takings are distorted by the fact that certain costs are off-budget. "Fiscal illusion" is, itself, a highly debated phenomenon. *See supra* note 34. Those who reject theories of fiscal illusion naturally would reject the idea that the government takes property solely because the compensation to be paid will be below market.

*Incomplete Takings*

chattel, such as raisins,<sup>121</sup> intellectual property,<sup>122</sup> and funds in a bank account.<sup>123</sup> Yet, while partial takings of chattel are easily found, adapting our mechanism to chattel takings requires some adjustment.

The major issue that deserves special attention in the context of chattels is the definition of the asset. Our proposal for options that can reunify a partially taken asset is driven primarily by the advantages of the unified asset—easier evaluation, avoidance of suboptimal configurations, etc. However, assets are not defined in heaven.<sup>124</sup> One cannot a priori determine what an asset in property is. Even in the context of partial takings of land, defining the asset can be difficult. Land does not always come with clearly drawn border lines. Even where an individual owns one continuous area of land, the land might best be seen as multiple parcels; conversely, the discrete holdings of several individuals might best be seen as collectively comprising a single parcel. As we discussed in the context of offsets, the law often focuses on the owner rather than the number of parcels in deciding whether to consider a taking to be partial. Specifically, the law may consider a taking “partial” where only part of an owners’ realty is taken, even though the taking is of one or more discrete parcels.

These difficulties are greatly compounded when chattels are taken. To be sure, there are easy cases. When discussing an automobile, for instance, the car as a whole is clearly a discrete asset, and if the government sought to seize the hood, or a door, we would easily identify the proposed taking as a partial taking. But if the “taking” is of some or all of the interest paid to a bank account—the kind of taking addressed by the Supreme Court in *Phillips v. Washington Legal Foundation*<sup>125</sup>—it is harder to find an asset whose completeness is of interest to us. Of course, it is possible to talk about a bank account as a complete “asset.”<sup>126</sup> The seizure of half the money in a bank account could thus be described as a “partial taking.” But it is unclear why we should care that this taking is partial. The cash in a bank account — whether the full bank account, or only half — is just as easily measured in value and just as easily used in the marketplace. The difficulties we described as

---

<sup>121</sup> *Horne v. Department of Agriculture*, 133 S. Ct. 2053, 2062 (2013).

<sup>122</sup> *Zoltek Corp. v. United States*, 442 F.3d 1345 (Fed. Cir. 2006). *See also* Dustin Marlan, *Trademark Takings: Trademarks as Constitutional Property Under The Fifth Amendment Takings Clause*, 15 PENN. J. CONST. L. 1582 (2013).

<sup>123</sup> *Brown v. Legal Foundation of Washington Et Al.* 538 U.S. 216 (2003).

<sup>124</sup> Abraham Bell and Gideon Parchomovsky, *Reconfiguring Property in Three Dimensions*, 75 U. CHI. L. REV. 1015 (2008).

<sup>125</sup> 524 U.S. 156 (1998).

<sup>126</sup> E.g., *Matter of Filfiley*, 63 Misc.2d 824, 830, 313 N.Y.S.2d 793 (N.Y. Sur. 1970)

### *Incomplete Takings*

characteristic of partial takings of land,<sup>127</sup> would seem inapposite.

We therefore suggest that if our proposal were to be used in the context of chattel takings, it should be modified to take account of the difficulty in identifying assets whose wholeness should be protected. We suggest that the option created for a partial taking—the owner’s put—should only be created after a preliminary examination by the court of the asset in question. Specifically, in order to trigger our partial takings mechanism, the owner would have to prove to the satisfaction of the court that the taken property was only a part of larger asset, that the larger asset was one whose “wholeness” was valuable enough to warrant legal protection, and that the value of the “whole” asset could readily be measured by the court. Only if the court made this finding would the court proceed to the rest of the steps in our proposal: measuring the value of the asset as a whole and of the portion taken, and setting the strike price for the put option.

We anticipate that in some cases, the showing of the value of asset wholeness would be easy, as in the takings of part of a boat, a house, or a car. In other cases, such as cash, such a showing would be near-impossible. Finally, there would be cases that lend themselves to a showing of the importance of “wholeness,” but are not always clear cut, such as the seizure of shares of a corporation, or a share of a piece of intellectual property.

#### IV. Partial Regulatory Takings

Our model concerned itself so far with physical seizures of property, whether land or chattels. We intentionally left out a different dimension of the takings universe, that of regulatory takings. In the proceeding paragraphs, we fill this void by assessing the applicability of our model to regulatory takings.

Regulatory takings doctrine is perhaps the most complex doctrine within the world of takings, and, indeed, one of the most controversial and difficult in the world of law.<sup>128</sup> Generally

---

<sup>127</sup> *Infra*, Part I.C.

<sup>128</sup> See e.g., Mark Festner, *The Stubborn Incoherence of Regulatory Takings Law*, 28 *Stan. Environ. L. J.* 525, 529-30 (2009) (noting the “messiness” of regulatory takings doctrine and suggesting that it is inevitable); Eduardo Penalver, *Regulatory Taxings*, 104 *COLUM. L. REV.* 2182, 2186 (2004) (“Takings Clause jurisprudence is characterized by nothing if not the confusion and intense disagreement it generates.”); Holly Doremus, *Takings and Transitions*, 19 *J. Land Use & Envtl. L.* 1, 1-2 (2003) (describing regulatory takings doctrine as “famously incoherent”); Daniel A. Farber, *Public Choice and Just Compensation*, 9 *Const. Comment.* 279, 279 (1992) (“[T]akings doctrine is a mess.”); J. Peter Byrne, *Ten Arguments for the Abolition of Regulatory Takings Doctrine*, 22

*Incomplete Takings*

speaking, regulatory takings doctrine is designed to identify situations in which a government actor negatively influences the value of property while purporting to exercise a power other than the power of eminent domain.<sup>129</sup>

According to the Takings Clause of the U.S. Constitution<sup>130</sup> (and many state constitutions as well),<sup>131</sup> the government must pay “just compensation” to any owner whose property is “taken for public use,” but not to owners whose property values are affected by non-“takings.” Naturally, seizures of property by eminent domain are “takings.”<sup>132</sup> But government regulation of property may be deemed a “taking” as well, if it goes “too far.”<sup>133</sup> The problem and the controversy lie in determining when government action goes “too far.”

A variety of doctrines were developed to help courts draw the line between actions that have gone “too far” — regulatory takings that are unconstitutional unless accompanied by the payment of just compensation to owners — and those that have not — exercises of the regulatory power whose burdens must be suffered by owners.<sup>134</sup>

Two rules are particularly important for our analysis of partial takings. One of these rules is the “total wipeout” rule established by *Lucas v. South Carolina Coastal Council*.<sup>135</sup> According to the ruling in *Lucas*, a government action that completely wipes out all commercial value of property is a *per se* taking, for which compensation must be paid.<sup>136</sup> By contrast, the approach generally followed in cases where there is no wipeout is the balancing test

---

ECOLOGY L.Q. 90 (1995) (arguing for the negation of regulatory takings); Carol M. Rose, Mahon Reconstructed: Why the Takings Issue Is Still a Muddle, 57 S. Cal. L. Rev. 561, 561-62 (1984) (calling takings “[b]y far the most intractable constitutional property issue”).

<sup>129</sup> For comprehensive discussion, see WILLIAM FISCHER, REGULATORY TAKINGS: LAW, ECONOMICS AND POLITICS (1995). See also Bill Higgins, *Regulatory Takings and Land Use Regulation: A Primer for Public Agency Staff*, INSTITUTE FOR LOCAL GOVERNMENT 6 (2006).

<sup>130</sup> U.S. CONST. Amend. V.

<sup>131</sup> See generally Donna M. Nakagiri, Takings Provisions in State Constitutions: Do They Provide Greater Protections of Private Property than the Federal Takings Clause (1999) (A Research Paper) available at <http://www.law.msu.edu/king/1999/1999-Nakagiri.pdf>.

<sup>132</sup> Loretto, 458 U.S. 419.

<sup>133</sup> Pennsylvania Coal Co. v. Mahon, 260 U.S. 393, 415 (1922).

<sup>134</sup> See e.g., Raymond R. Colett, *The Measuring Stick Of Regulatory Takings: A Biological And Cultural Analysis*, 1 J. CONST. L. 21, 22 (1998) (discussing the rules used to determine when regulation requires payment of compensation under the Takings Clause).

<sup>135</sup> 505 U.S. 1003 (1992).

<sup>136</sup> There are some exceptions to this rule, such as total wipeouts that are attributable to abating a nuisance that would traditionally have been recognized as such. See Colett, *supra* note **Error! Bookmark not defined.**

*Incomplete Takings*

established by *Penn Central Transportation Co. v. New York City*.<sup>137</sup> Under the *Penn Central* approach, there are no hard and fast rules on identifying a regulatory taking. Instead, courts must make case-by-case determinations by evaluating the facts in light of three case-specific factors: the owner's reasonable investment-backed expectations, the nature of the government action, and the degree of diminution in property value.<sup>138</sup>

Questions associated with partial takings are particularly relevant to the issue of partial regulatory takings. Two clusters of cases of potential partial regulatory takings cases can be identified.

One cluster involves regulations that do not wipe out all commercial value of a property in perpetuity, but do wipe out all value for a period of time, or all value of some of the property. Consider, for instance, the case of *Palazzolo v. Rhode Island*.<sup>139</sup> In *Palazzolo*, the Court had to consider whether an owner who owned 74 lots of land (the result of subdividing three parcels that had been bought together) could claim the benefit of the total wipeout rule when some of the downland lots had lost all their commercial value, while some of the upland lots retained significant value.<sup>140</sup> As in all cases of partial regulatory takings, the Court declined to find a total wipeout. In *Palazzolo*, the Court ruled that all the lots should be considered together for purposes of the taking (just as courts rule that all lots should be considered together for purposes of evaluating the applicability of the offset doctrine in cases of partial takings), and that since some value was retained, there was no total wipeout.<sup>141</sup> Similarly, in the case of *Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency*,<sup>142</sup> the Court considered a regulation that wiped out all commercial value of certain lands during a moratorium period in which no construction was allowed.<sup>143</sup> The moratorium was lifted after several years, and on that basis, the Court determined that there had been no total wipeout.<sup>144</sup>

A second, and broader cluster of cases involves what is known as the “parcel as a whole” rule, or the “denominator problem.”<sup>145</sup> This cluster of cases requires courts to interpret the prong of the

---

<sup>137</sup> 438 U.S. 104 (1978).

<sup>138</sup> *Id.*

<sup>139</sup> 533 U.S. 606 (2001).

<sup>140</sup> *Id.*

<sup>141</sup> *Id.*

<sup>142</sup> 535 U.S. 302 (2002).

<sup>143</sup> *Id.*

<sup>144</sup> *Id.*

<sup>145</sup> See Michelman, *supra* note 38; Danaya C. Wright, A New Time for Denominators: Toward a Dynamic Theory of Property in the Regulatory Takings Relevant Parcel Analysis, 34 ENVIR. L. 175 (2004).

*Incomplete Takings*

*Penn Central* balancing test that requires courts to consider the degree to which the regulation has diminished property value. In order to know how much property value has been diminished, courts must first determine the baseline from which such diminution is to be measured. The facts of *Penn Central* are illustrative. In *Penn Central*, the Court considered whether an early historic preservation law (New York’s Landmarks Preservation Law) had worked a regulatory taking by forbidding development of Grand Central Station in New York.<sup>146</sup> The Court engaged in an explicitly “ad hoc” factual inquiry that examined many aspects of the particular property.<sup>147</sup> One argument that the property owner raised in its own favor was that the regulation essentially deprived the Penn Central company of all ability to profit from air rights above Grand Central Station.<sup>148</sup> The Court was unsympathetic. The Court insisted that what ought to be examined is the “parcel as a whole — here, the city tax block designated as the ‘landmark site.’”<sup>149</sup> In other words, the Court said that in evaluating whether a regulation unduly diminishes property value, courts should aggregate rather than disaggregate the owner’s holdings. Courts should not be bound by the manner in which the land is divided for future potential deeds; rather, courts should aggregate related pieces of land into a single “whole parcel.” Obviously, the more land aggregated into the “whole parcel,” the less any single regulation will be thought to have proportionately diminished its value.<sup>150</sup>

The “parcel as a whole” rule, and more generally partial regulatory takings, have been subject to fierce scholarly debate.<sup>151</sup>

---

<sup>146</sup> *Penn Central*, 438 U.S. 104.

<sup>147</sup> *Id.*

<sup>148</sup> *Id.*

<sup>149</sup> *Id.*

<sup>150</sup> See *Palazzolo v. Rhode Island*, 533 U.S. 606 (2001).

<sup>151</sup> See David Dana, *Why Do We Have the Parcel as a Whole Rule*, 39 VT. L. REV. 617 (2015); Steven J. Eagle, *The Parcel and Then Some: Unity and Ownership and the Parcel as a Whole*, 36 VT. L. REV. 549, 565–67 (2012) (arguing for a narrow application of the parcel as a whole rule that does not aggregate separately titled lots); John E. Fee, *Unearthing the Denominator in Regulatory Takings Claims*, 61 U. CHI. L. REV. 1535, 1557–58 (1994) (arguing for a very limited application of the parcel as a whole rule that would treat as separate any horizontal segment of land that has independent economic viability); Daniel L. Siegel, *How the History and Purpose of the Regulatory Takings Doctrine Help to Define the Parcel as a Whole*, 36 VT. L. REV. 603 (2012) (arguing for a broad application of the parcel as a whole rule that generally supports aggregation of contiguous lots, even if separately titled); Keith Woffinden, *The Parcel as a Whole: A Presumptive Structural Approach for Determining When the Government Has Gone Too Far*, B.Y.U. L. REV. 623, 638–40 (2008) (proposing an alternative to the holding in *Penn Central* whereby courts would include contiguous property held by the same owner when determining the relevant parcel).

*Incomplete Takings*

Some have suggested that the Court artificially reduces the likelihood that a regulation will be viewed as a regulatory taking, and decried the judicial deference.<sup>152</sup> Others have celebrated the Court for seeing through an obvious manipulation, denying owners the ability to engage in pretend divisions of the property (conceptual severance, in Margaret Radin's felicitous phrase),<sup>153</sup> and thereby blocking artificial inflation of regulatory takings claims. Be that as it may, the judicial approach to date has been clear. According to the courts, there are no "partial regulatory takings." A regulatory taking, if it occurs, relates to the entirety of the affected asset. We have to consider the whole of the asset, and even if there's a partial wipeout of value, or a total wipeout for a limited time (whose limits are not initially known), it's a matter for the balancing test.

Land is either considered to have been subject to a "regulatory taking" or not.<sup>154</sup> One cannot divide things up and say that part has been subject to a regulatory taking, and another part has not. The contrast to physical takings could not be sharper. The physical seizure of even a very small part of a large parcel is considered a *per se* taking, for which compensation must be paid.<sup>155</sup> But the regulatory taking of a huge portion of value of a parcel is not necessarily a taking,<sup>156</sup> and the effects must be considered for the "parcel as a whole."

One might imagine an extension to our proposal in which we would tackle partial regulatory takings just as we suggest partial physical takings be treated. Any regulation that diminished property values would be accompanied by a call option in the hands of the government and a put option in the hands of the owner. This would bring a completely new approach to "whole parcel" questions. Essentially, a parcel would be whole if the owner wanted it to be such (as proved by exercise of the put), but not otherwise.

Unfortunately, however, we cannot see how our proposal can easily be transferred to the world of partial regulatory takings. The greatest problem is establishing the strike price. Unlike in cases of partial physical takings, "partial regulatory takings" do not require courts to assess precisely the value of the land rights taken. Except

---

<sup>152</sup> See Epstein, *supra* note 39.

<sup>153</sup> Margaret Jane Radin, *The Liberal Conception of Property: Cross Currents in the Jurisprudence of Takings*, 88 COLUM. L. REV. 1667, 1674 (1988).

<sup>154</sup> *Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency*, 535 U.S. 302, 327 (2002) (The Court "does not divide a single parcel into discrete segments and attempt to determine whether rights in a particular segment have been entirely abrogated. ... [T]his Court focuses rather both on the character of the action and extent of the interference with rights in the parcel as a whole ....").

<sup>155</sup> *Loretto v. Teleprompter Manhattan CATV Corp.* 458 U.S. 419, 426-435 (1982).

<sup>156</sup> *E.g.*, *Penn Central* 438 U.S. 104 (essentially eliminating all air rights).

### *Incomplete Takings*

in the unlikely case where the regulatory action is challenged as a regulatory taking, the courts may entirely ignore the value of the “taking.” Even in the context of a regulatory takings challenge, the *Penn Central* test does not require a precise measure of the value of the “taking” in order to determine whether a regulatory taking has taken place, and courts can suffice with generalized statements.<sup>157</sup> Creating a mechanism for setting the strike price for the put and call options could thus be prohibitively expensive.

Moreover, it must be acknowledged that bringing our proposal to the world of regulatory takings would profoundly alter the world of regulation. Property regulation is ubiquitous.<sup>158</sup> Potentially, every zoning change, or even property tax, is a regulatory taking.<sup>159</sup> Giving the owner a put option to force a sale of her entire interest to the government whenever the government regulates property would turn every regulation into a taking (at the option of the owner). This would vastly expand the category of compensable regulatory takings. The administrative and judicial costs arising from the implementation of such a scheme would likely be enormous. We, therefore, caution against applying our model to regulatory takings. The boundary between physical and regulatory takings also demarcates the limits of our model.

### CONCLUSION

The ubiquity of partial takings, together with the unique challenges they present, create a clear case for creative solutions to longstanding problems posed by this important land use tool. A close inspection of current partial takings law reveals a handful of specialized doctrines that were adopted on an *ad hoc* basis to address specific problems without much attention to systemic effects and, in particular, to the misalignment these doctrines create between partial takings and total takings. Despite their immense practical significance, partial takings have been largely ignored in the takings world. This is unfortunate. The current approach fails to do justice to partial takings and comes at a significant cost to society.

In this Article, we carefully reviewed the defining characteristics of partial takings, and, then, built upon our findings to devise a novel approach to partial takings that balances social and private interests. The key element of our approach is the creation of a new set of options that would enable the government, if it so

---

<sup>157</sup> *Penn Central*, 438 U.S. 104.

<sup>158</sup> *E.g.*, *Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency*, 535 U.S. 302, 324 (2002) (“Land-use regulations are ubiquitous”).

<sup>159</sup> *See* EPSTEIN, *supra* note 38.



*Incomplete Takings*

desires, to acquire the remainder of the taken parcel from the private owner, and a corresponding option that would empower the owner of the partially condemned lot, if she so chooses, to sell her remainder to the government. Per our proposal, the exercise of both options would be voluntary, which means that either would be exercised only if doing so were desirable to one of the parties. Our mechanism would guarantee that the layout of the affected parcels would not be distorted by partial takings that threaten to leave a remainder that is unusable or unmarketable. Our mechanism would also have the salutary effect of transferring the title to the taken parcel as a whole to a new single owner, namely the government, giving it the full panoply of rights and powers that come with a fee simple interest. Furthermore, our proposal would reduce the transaction and litigation costs that currently attend instances of partial takings. Finally, the implementation of our proposal would lead to improved land use policies by concentrating parcels in the hands of the government, the social planner, which would allow it to engage in large scale planning that would inure to the benefit of society at large.