Just Compensation for Eminent Domain Takings and Property Tax Appraisals:

Is a Synergistic Improvement in Fairness and Equity Possible?

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Abstract

The Part 1 research paper for Northcentral University Course PUB5004, Urban and Regional Planning (Moore, 2006c) provided the historical and judicial foundation for review of the topic of eminent domain takings for public use. The Part 2 research paper in PUB5004 presented a literature review of current scholarly articles on eminent domain, both pre- and post-*Kelo,* and provided my analysis and conclusion as to what might be a reasonable expectation for the future in view of the Supreme Court decision in *Kelo v. City of New London*, 125 S. Ct. 2655 (2005), which is the broadest expansion of eminent domain power in the history of the nation according to scholars of constitutional law (Christensen, 2005). The PUB5004 research resulted in my discovery that "just compensation," the other key element of the Takings Clause, has been routinely accepted by the courts as meaning *market value*, which the literature and my empirical experience with property appraisal rejects. Bell and Parchomovsky (2006) presented a novel solution for deciding just compensation that has considerable merit, but needs to be refined. This report provides a foundation of the necessary historical appraisal context and value theory as well as a possible local government business process for implementation of the proposed Bell and Parchomovsky solution for the problem of just compensation in eminent domain takings. In doing so this paper extends existing appraisal theory by showing the technical flaw of using *market value* appraisal for condemnation procedures and provides a practical process for synergistically integrating the determination of a just compensation price with local government property assessment and taxation, effectively combining two of the fundamental property rights retained by government.

Table of Contents

Chapter 1 - Introduction and Overview[1]

In what is referred to as the Takings Clause, the Fifth Amendment of the Constitution declares, almost as an afterthought, "… nor shall private property be taken for public use, without just compensation." These 12 words are fundamental to property law and the power of *eminent domain*. The words convey only the recognition that governments would find it necessary to take private property for public use and when such necessity arises the owner must be *justly* compensated. Some propose that this phrase was added because of the uncompensated taking of horses, teams, carriages, etc. by the army during the Revolutionary War (Dana & Merrill, 2002). Scholars attribute the origin of the term "eminent domain" to Grotius, who, in his 1625 classic, *On the Law of War and Peace,* wrote:

> … through the agency of the king even a right gained by subjects can be taken from them in two ways, either as a penalty, or by the force of eminent domain. But in order that this may be done by the power of eminent domain the first requisite is public advantage; then, that compensation from the public funds be made (Lopez, 2006, p. 245).

The Takings Clause, both as originally written by Madison and as enacted by Congress and the state legislatures, intertwines the two fundamental philosophies originally identified by Grotius over 160 years earlier: 1) individual property owners *are* required to sacrifice their property rights for the good of the public if the property taken is to be put to a "public use," because the good of society as a whole outweighs the individual rights to private property in that society; and 2) the property owner *does not bear the entire burden of eminent domain* because the sovereign must provide the dispossessed owner with a "just compensation" in exchange for the property. These are the fundamental concepts that are embedded in the 12 words of the Takings Clause. The balanced interpretation required of the Takings Clause of the Fifth

[1] The first section draws parts from PUB5004, Urban and Regional Planning papers (Moore, 2006c).

Amendment is evident in writings that influenced early American thought regarding the importance of private property and its relationship to the purpose of government. John Locke argued that the *preservation of property was the purpose of government*, and the purpose for which individuals enter into civilized society and form sovereign governments. The thinking of the constitutional framers was influenced by the writings and philosophies of Locke (1690) and Hobbes (1651). Hobbes had a dark view of human nature and believed that the only way to have a safe world for the individual was by the surrender of liberty and property to an absolute sovereign. "The control of power would be lodged in a single person, and no individual could set their own private judgments of right and wrong in opposition to the sovereign's commands" (Epstein, 1985, p. 8). The U.S. Constitution rejects the Hobbesian concept, but is influenced by two elements: the perils of unbridled self-interest, "which can turn neighbor against neighbor and against the common good" and the concept of a covenant whereby all individuals "surrender liberty and property in exchange for security" (p. 8). Constitutional theory and framing could be viewed as a response to the grim realities offered by Hobbes and his description of the nature of man in an unconstrained state of existence, combined with Locke's high ideals. Locke searched for "a set of institutional arrangements that would allow individuals to escape the uncertainty and risks of social disorder without having to surrender to the sovereign the full complement of individual rights" (Epstein, 1985, p. 10). Locke envisioned a sovereign that would maintain civil order while leaving all surpluses resulting from the union of individuals under the single state with the governed individuals themselves and not retaining the *surplus* for the government itself. These philosophies have a direct bearing upon economic thought, value theory, and the concept of just compensation under the Takings Clause.

1.1 Overview of the Report

This first chapter provides an introduction to the topic of eminent domain and just compensation, and the resurgence of scholarly interest in it since the *Kelo* decision in 2005. Chapter 2 provides a literature review of appraisal and value theory as a foundation for later discussion. Chapter 3 reviews the Bell and Parchomovsky proposed methodology for a more efficient guarantee of just compensation and offers a process for its implementation grounded in the appraisal and value theory of Chapter 2. Chapter 4 provides a discussion and analysis of the proposed Bell and Parchomovsky methodology for just compensation under the Takings Clause, and Chapter 5 provides a summary and conclusion.

1.2 Definitions of value terms

U.S. Supreme Court Justice Brandeis once said "value is a word of many meanings" (Boykin & Ring, 1993, p. 9). Value is extrinsic. It is created in the minds of people. It can change. It is complex. "… there is a wide variance of understanding as to the character, nature and meaning of value …" which "… is explained by the failure of most persons to recognize fully the difference between the value of a property to a particular individual and the value of that same property to the public in general" (Boykin & Ring, 1993, pp. 1-2). *Market value* is more closely related to the value of a property to the public in general. Value and valuation theories can produce an *opinion of value* based upon a wide range of value concepts and definitions. In an economic sense, value has a specific definition: Value is the present worth of future benefits realized from ownership. But how is the worth of those future benefits quantified when in addition to mere shelter and amenities, which in themselves have different values to

different individuals, they may also represent peace of mind, enjoyment, family history, communion with nature, etc.? Following are just a few of the commonly used value terms.

Appraisal is "the act or process of developing an *opinion of value*; an *opinion of value*. Comment: An appraisal must be numerically expressed as a specific amount, as a range of numbers, or as a relationship (e.g., not more than, not less than) to a previous value opinion or numerical benchmark (e.g., assessed value, collateral value)" (The Appraisal Foundation, 2006).

Appraised value is "the estimate of value of a property before application of any fractional assessment ratio, partial exemption or other adjustments" (IAAO, 1999).

Appraiser is "one who is expected to perform valuation services competently and in a manner that is independent, impartial, and objective" (Appraisal Institute, 2002).

Assessed value is "the monetary amount for a property as officially entered on the assessment roll for purposes of computing the tax levy" (IAAO, 1999).

Assignment is "a valuation service provided as a consequence of an agreement between an appraiser and a client" (The Appraisal Foundation, 2006).

Assignment results are an appraiser's opinions and conclusions developed specific to an *assignment* (Appraisal Institute, 2002).

Extrinsic value is the "value determined by persons who wish to purchase a property" (Boykin & Ring, 1993, p. 8), i.e. the willing buyer's opinion of value.

Fair market value is "the standard that applies to all federal and state tax matters, such as estate taxes, gift taxes, inheritance taxes, income taxes, and ad valorem taxes" (American Society of Appraisers, 1989). It is synonymous with *market value* for this study.

Fair value is “a transaction price that is fair to all parties of the transfer” (Boykin & Ring, 1993, p. 8). However, the specific definition of *fair value* has been under debate and a recently issued standard makes the Boykin and Ring definition obsolete with respect to financial reporting. On September 15, 2006, the Financial Accounting Standards Board issued *Fair Value Measurements* (FAS 157), which addresses how companies should measure fair value when they are required to use a fair value measure for recognition or disclosure purposes under generally accepted accounting principles (GAAP). The standard defines fair value as "the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date" (FASB, 2006). This definition of fair value retains the exchange-price notion contained (either explicitly or implicitly) in many earlier GAAP definitions of fair value. It clarifies that the term *fair value* is intended to mean a market-based measure, not an entity-specific measure. In measuring *fair value* for a financial statement item, FAS 157 gives the highest priority to quoted prices in active markets. However, FAS 157 also permits the use of unobservable inputs for situations in which there is little, if any, market activity for the asset or liability being measured. Whether there is significant market activity or not, the objective is a market-based measure, rather than an entity-specific measure. The Herrmann, Saudagaran, and Thomas (2005) report provided and excellent discussion of the *fair value* issue and was influential in the final creation of the FASB standard.

Intrinsic value is “the amount that an investor considers, on the basis of an evaluation of available facts, to be the ‘true’ or ‘real’ worth of an item, usually an equity security (American Society of Appraisers, 1989). “Value inherent in the object itself, such as a precious metal” (Boykin & Ring, 1993, p. 8).

Investment value [in real estate terminology] "is defined as value to a particular investor, based on individual investment requirements, as distinguished from the concept of *market value*, which is impersonal and detached. There can be many valid reasons for the investment value to one particular owner or prospective owner to be different from the fair market value. If sound analysis leads to a valid conclusion that the investment value to a particular owner exceeded *market value* at a given time, then the rational economic decision for that owner *would be not to sell at that time*, unless a particular buyer could be found to whom investment value would be higher than the consensus of value among a broader group of typical buyers" (American Society of Appraisers, 1989).

Highest and best use is defined as being the reasonably probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible, and that results in the highest value. The four criteria that *highest and best use* must meet are legal permissibility, physical possibility, financial feasibility, and maximum profitability (Appraisal Institute, 2002). In practice, especially in the valuation or trade of commercial or industrial properties, the specific highest and best use warrants the demolition of the existing building improvements to make way for a redevelopment of the land to its optimum use.

Just compensation is the full value to be paid for property taken by the government for public purposes guaranteed by the Fifth Amendment to the U.S. Constitution, which states: "…nor shall private property be taken for public use without just compensation." If the amount offered by the governmental agency taking the property is not considered sufficient, the property owner may demand a trial to determine just compensation (Source: LAW.COM Dictionary at http://dictionary.law.com).

Just compensation value is equal to the total of the *market value* estimate of real estate value made by the assessor for tax purposes plus an established increase in value determined according to a standard algorithm that represents the surplus *subjective value* of the real estate to the individual, not being a *willing seller*, but is forced to sell the real estate under eminent domain, where both the *market value* for taxation and the *just compensation value* for an eminent domain contingency are provided to all owners of the real estate for review, acceptance or appeal in accordance with the established regular assessment notice and appeal procedure in the law.

Market value is defined as "the most probable price, as of a specified date, in cash, or in terms equivalent to cash, or in other precisely revealed terms, for which the specified property rights should sell after reasonable exposure in a competitive market under all conditions requisite to a fair sale, with the buyer and the seller each acting prudently, knowledgeably, and for self-interest, and assuming neither is under undue duress" (Appraisal Institute, 2002).

Mass appraisal model is a mathematical expression of how supply and demand factors interact in a market (The Appraisal Foundation, 2006). "An automated valuation model (AVM) is a mathematically based computer software program that produces an estimate of market value based on market analysis of location, market conditions, and real estate characteristics from information that was previously and separately collected" (IAAO, 2003).

Mortgage loan value is the value "based on a percentage of market value or other mortgage underwriting standards" (Boykin & Ring, 1993, p. 8).

Price is "the amount asked, offered, or paid for a property. Comment: Once stated, *price* is a fact, whether it is publicly disclosed or retained in private. Because of the financial capabilities, motivations, or special interests of a given buyer or seller, the price paid for a

property may or may not have any relation to the value that might be ascribed to that property by others" (The Appraisal Foundation, 2006).

Opinion of value – "See *assignment results*" (Appraisal Institute, 2002). Since value is extrinsic and is created in the minds of people, any "statement" of value is merely an opinion because a single, precise, indisputable quantification of value cannot be made. In the case of real estate *market value*, the opinion of value is a probability estimate of the most likely exchange price from within a probability distribution of possible exchange prices derived from analysis of arm's length exchange prices of similar properties in an active market between willing sellers and willing buyers, neither being under undue duress (Moore, 2006a).

Real estate is "an identified parcel or tract of land, including improvements if any" (The Appraisal Foundation, 2006).

Real property is the term that represents "the interests, benefits, and rights inherent in the ownership of real estate" (The Appraisal Foundation, 2006).

Replacement value (cost) is "the sum of money necessary to rebuild a structure if destroyed" (Boykin & Ring, 1993, p. 8). "The cost … that would be incurred in constructing an improvement having the same utility to its owner as a subject improvement, without necessarily reproducing exactly any particular characteristics of the subject" (IAAO, 1999).

Reproduction value (cost) is "the cost of constructing a new property, reasonably identical (having the same characteristics) with the given property except for absence of physical depreciation, using the same materials, construction standards, design, and quality of workmanship" (IAAO, 1999).

Reserve value or price is synonymous with s*ubjective value* in the report.

Speculative value is "a hoped-for price that an investor expects based on an influential event such as rezoning or population or economic growth" (Boykin & Ring, 1993, p. 9).

Standard of value is the specific definition of value used for the appraisal *assignment*, such as market value, liquidation value, investment value, subjective value, use value, etc. (American Society of Appraisers, 1989).

Subjective value is "the amount of money or money's worth in return for which the owner would willingly part with a piece of property, whether or not there exists a willing purchaser at such a price" (IAAO, 1999). This is also referred to as *reserve price*.

Use value is "1. In economics, the attribution of value to goods and services based upon their usefulness to those who consume them. 2. In real estate appraisal, the value a specific property has for a specific use; may be the *highest and best use* of the property or some other use specified as a condition of the appraisal; may be used where legislation has been enacted to preserve farmland, timberland, or other open space land on urban fringes" (Appraisal Institute, 2002). Shenkel (1992) defines *use value* as "*... the value for a particular user*" and goes on to state, "Because of the particular circumstances of the owner who devotes property to a particular use, the property assumes a value to the particular user above the value in the market for persons generally" (p. 44). With respect to *use value* Boyce and Kinnard (1984) said "A custom-designed residence may have great value to the particular owner, but little marketability and hence a lower market value" (p. 10).

Value is "the monetary relationship between properties and those who buy, sell, or use those properties. Comment: Value expresses an economic concept. As such, it is never a fact but always an opinion of the worth of a property at a given time in accordance with a specific

definition of value. In appraisal practice, value must always be qualified for example, market value, liquidation value, investment value" (The Appraisal Foundation, 2006).

Value in use is "the value a specific property has to a specific person or firm as opposed to the value to [other] persons or the market in general" (Appraisal Institute, 2002).

Willing seller is a fundamental criterion and premise of the *market value* definition.

Throughout this report the terms defined in this section appear in *italics* for easy recognition and reference.

1.3 The Kelo "Public Use" Decision

Eminent domain takings, the definition of "public use," and property theory moved to the forefront of scholarly debate in the field of property law following the recent Supreme Court decision in *Kelo*, as evidenced by the number of high quality scholarly articles published on the subject in a wide variety of journals. A summary of the case provided by Totten and Lambert (2005) is brief and to the point:

> In 2000, the City of New London, Connecticut, approved a development plan that was projected to produce 1,000 new jobs, increase tax and other revenues, and revitalize what everyone agreed was an economically distressed city. Pfizer had previously announced that it was building a huge pharmaceutical research facility right next to the development site. The development plan envisioned that private developers would finance and construct a hotel, a marina and support area, a boardwalk, and other amenities. The plan was approved by the city council and a development agency was created and given the power of eminent domain and condemnation. Nine homeowners owning 15 properties refused to sell, and the development agency instituted condemnation proceedings.
>
> The New London Superior Court ruled that the taking of these homeowners' properties violated the "public use" restriction in the Fifth Amendment as it related to planned park areas and "marina support," but not as it related to properties located in a parcel that was to contain office space. On appeal, the Connecticut Supreme Court reversed the finding regarding the park and marina support areas, finding that these constituted a public use even though a private developer would own and develop them. Three dissenters on the court argued that the takings were for a public use, but they would have applied a heightened

> standard of review and required the city to adduce "clear and convincing evidence" that the economic benefits of the plan would in fact come to pass. The U.S. Supreme Court granted *certiorari* to determine whether a city's decision to take property for the purpose of economic development satisfies the "public use" requirement of the Fifth Amendment … (p. 349).

The U.S. Supreme Court decided the case on June 23, 2005 in a 5-4 split decision in favor of the City of New London, with Justice Stevens writing the majority opinion in *Kelo v. City of New London*, 125 S. Ct. 2655 (2005), in which the majority abandoned the constitutional phrase “public use” in favor of the revised phrase “public purpose,” stating that “use” by the public was “difficult to administer.” The majority admitted that there was "no principled way of distinguishing economic development from the other public purposes that we have recognized” (p. 2665). Justice Stevens and the majority felt bound by precedent. "For more than a century, our public use jurisprudence has wisely eschewed rigid formulas and intrusive scrutiny in favor of affording legislatures broad latitude in determining what public needs justify the use of the takings power” (p. 2664). The majority opinion additionally stated, "When the legislature's purpose is legitimate and its means are not irrational, our cases make clear that empirical debates over the wisdom of taking - no less than debates over the wisdom of other kinds of socioeconomic legislation - are not to be carried out in the federal courts” (p. 2667).

The minority dissent argued that the term "public purpose" was so broad that it lacked a meaningful limitation. “… nearly any lawful use of real private property can be said to generate some incidental benefit to the public." "Thus, if predicted (or even guaranteed) positive side-effects are enough to render the transfer from one private party to another constitutional, then the words 'for public use' do not realistically exclude any takings, and thus do not exert any constraint on the eminent domain power” (p. 2675).

Totten and Lambert (2005) believe that the Court has effectively changed the language of the Fifth Amendment and has “left intact a minefield that effectively prevents access to federal courts for Fifth Amendment takings claims where there are similar claims under state law that must be decided first” (p. 348). Also, “Kelo makes clear that property rights are now a second, lower class of rights than other civil rights and liberties, particularly the right against racial discrimination, the guarantee of equal protection, and the right to vote” (p. 349).

Cohen (2006) reminded readers that the so-called "broad view" of public use is so deeply entrenched in American case law that it would have required a radical break from history and precedent for the *Kelo* court to have ruled otherwise. Cohen also noted that both Justice O'Connor's and Justice Thomas's dissents, while correct in their assessment of the negative consequences flowing from the majority's decision, did not provide plausible legal arguments for ruling otherwise. It appears that the majority recognized the potential negative consequences of the decision to which they felt bound and their opinion practically invited state legislatures to pass laws prohibiting such takings: "We emphasize that nothing in our opinion precludes any State from placing further restrictions on its exercise of the takings power. Indeed, many States already impose 'public use' requirements that are stricter than the federal baseline ... as a matter of state constitutional law [or] state eminent domain statutes" (p. 2674). The conclusion of the PUB5004 paper (Moore, 2006c) was that history and precedent prevented the *Kelo* court from ruling otherwise, even if they recognized the potential negative consequences of the decision.

Other scholars contend that *courts* should forbid use of the economic development rationale as inconsistent with the “public use” clauses of constitutions because eminent domain often destroys as much wealth as it creates, and too easily becomes a “grasping hand serving the interests of the politically powerful at the expense of the weak” (Somin, 2006, July, p. 3). Somin

further argues that eminent domain condemnations "allow politically powerful interest groups to 'capture' the condemnation process for the purpose of enriching themselves at the expense of the poor and politically weak" (p. 4), contending that the courts have refused to consider the social costs of economic development condemnation as well as its claimed benefits. Scholars have outlined the alternatives as heightened judicial scrutiny, increasing the compensation awarded the targeted property owners, legislated procedural protections for property owners, and as a final possible alternative, some theorize that the threat that aggrieved property owners will move out of the offending jurisdiction is sufficient to curb potential abuse. Somin posits that "In advocating broad deference to local governments on public use issues, the Kelo majority ignored the serious defects in the political processes that control economic development takings" (p. 6). In the paper Somin made the important observation that "it is important to distinguish between 'strategic holdouts' - those who refuse to sell because they hope to obtain a higher price and are holdouts in economic sense of the term - and 'sincere dissenters' who genuinely value their land" (p. 22). Strategic holdouts attempt to take advantage of the land assemblage problem in order to receive a higher price, but the sincere dissenters are instead unwilling to sell because they genuinely place a high enough personal value on their property that they prefer to keep it rather than accept any payment that the buyer is willing to offer. These are distinctly different groups of holdouts and Somin cites Kelly (2005) as offering an approach that handles the problem. Kelly suggested that developers could prevent holdout problems without recourse to eminent domain by means of precommitment strategies and "most favored seller" contract clauses that prevent strategic holdouts, but cannot victimize sincere dissenters.

1.4 Ownership of Real Estate and Property Rights

Some understanding the special nature of the ownership of land rights is important to understanding eminent domain and just compensation. The concept of "ownership of land" is complex and different from ownership of other property; in actuality, it is not absolute (allodial) and relates to possession of "rights." Such rights are not "sold" in transfer of ownership transactions, but rather are "granted." The seller is the "Grantor" and the buyer is the "Grantee." The concept of real estate ownership has traditionally been explained as possession of a "bundle of rights" (Miceli, 2004), but a new theory of property has recently emerged (Bell & Parchomovsky, 2005). The word estate refers to the interest and rights in land held by a legal party, not the physical land itself. Estate is synonymous with bundle of rights. The most comprehensive ownership rights possible for private ownership (that is, every right except the four retained by government) is called a freehold estate, fee simple absolute. From this most comprehensive set of land rights, the owner may separate and *grant* specified rights such as mineral rights. Granting specific rights to others can be viewed as removing sticks from the full fee simple bundle of rights. When specific rights (only some of the sticks) are removed from the total bundle of private ownership rights as a result of zoning restrictions for example, it has been interpreted by the courts as for the common good and welfare under police power and not as an eminent domain taking; and therefore, "just compensation" need not be paid to the owner of the balance of rights in the property. On the other hand, when the entire bundle of rights is taken through eminent domain condemnation, "just compensation" is due the property owner and the primary question is concerned with determining the exact amount of compensation due, for which the courts have traditionally relied upon a *market value* determination.

First possession has historically been the primary method of establishing property rights in the law (Miceli, 2004). A grant from the government to the first possessor and conveyance to subsequent grantees establishes the chain of title for land property rights. To the philosopher John Locke, the first possession was justified on the grounds that when an individual applies his labor to the property, 99 percent of the realized value is due to the labor (Epstein, 1985). This is Locke's labor theory of value and provides the philosophical basis for the Homestead Act of 1862, which required five years of "working the land" for individuals to earn the right to be granted property rights in the land claimed through first possession.

1.5 Just Compensation

Just compensation as it is viewed by the courts.

Under law, eminent domain is a liability rule that requires payment of just compensation following a taking (Miceli, 2004). In the last three decades U.S. courts have widely interpreted this to mean *market value*, but Miceli is among many scholars who argue that this *standard of value* undercompensates the owners of condemned property because it fails to account for *subjective value*. Lopez (2006) suggests rethinking of how just compensation is determined and states that regardless of the compensatory scheme, because losses attributable to eminent domain do not have a perfect monetary equivalent, compensation is more like mitigation than restitution. Including a *subjective value* element in the just compensation determination increases the monetary mitigation factor and might remove some of the unseemliness associated with the ordeal. But compensating for subjective harm does more than place dispossessed property owners in a better financial situation post-condemnation. Accounting for speculative damages in the just compensation equation may lead to improved planning for projects slated to use eminent

domain as an advancement tool, because the relative certainty of cost associated with the *market value* standard diminishes. In that sense, allowing for speculative damages accomplishes its primary goal—better balancing the Taking Clause scale between public use and just compensation. "The 'just' in 'just compensation' would no longer be an adjective having little relevance in the text of the Takings Clause; the compensation would no longer be 'just' compensation but, rather, 'just compensation'"(Lopez, 2006, p. 301).

The Court reaffirmed its willingness to adapt doctrine to fit the evolving needs of society in its *Kelo* decision (Talley, 2006). Talley believes a new compensation standard is a possible evolving need that would not deter the use of eminent domain for economic development to the extent possible through vigorous enforcement of the public use doctrine; however, Talley agrees with Lopez that inefficient takings would occur with less frequency if total costs were considered. Talley suggests that the *Kelo* Court should have taken the opportunity to reexamine the appropriate measure of compensation granted to the targets of economic development takings. The majority and dissenting opinions spent a great deal of time discussing the public use question, but they virtually ignored the just compensation prong of takings analysis. This omission is not altogether unusual, since the *market value* standard of compensation is considered well settled law. "Nevertheless, the Court has maintained that market value is not a totem; in certain specific circumstances, an alternate measure of just compensation might be in order" (Talley, 2006, p. 764). Prior to the Kelo decision, Greenhut (2004) wrote a book titled *Abuse of Power: How the government misuses eminent domain* and devoted and entire chapter called "Unjust Compensation" to the subject, providing numerous anecdotal examples of undercompensation.

Just compensation is an unstudied question.

According to Serkin (2005), determining exactly what *value* satisfies the "just compensation" requirement turns out to be a largely unstudied question and the intent of this paper is to enlarge upon the body of knowledge that does exist. Additional study is essential for defining the extent of constitutional protection of private property, and *value* is central to the theory of property law offered by Bell and Parchomovsky (2005). Somin (2006) cited the lack of methodology for precisely determining *subjective value* as one of the weaknesses of the increased compensation approach for restraining eminent domain abuse relative to economic development. Serkin (2005) contends that the valuation problem has been hidden behind "a veil of apparent consensus" that *market value* is the only reasonable standard. "For all the disagreement and uncertainty in the rest of takings jurisprudence, compensation is considered straightforward; it is measured by the fair *market value* of the property taken" (Serkin, 2005, p. 678). In the context of just compensation under eminent domain, *market value* may appear to be the obvious standard, but it does present a fundamental problem. The definition of *market value* itself illustrates the problem:

> *Market value* is defined as the most probable price, as of a specified date, in cash, or in terms equivalent to cash, or in other precisely revealed terms, for which the specified property rights should sell after reasonable exposure in a competitive market under all conditions requisite to a fair sale, with the buyer and the seller each acting prudently, knowledgeably, and for self-interest, and assuming neither is under undue duress (Appraisal Institute, 2002).

It should be obvious to the casual observer that the definition of *market value* does not lend itself well for defining "just compensation" for eminent domain takings where the owner of the condemned property can hardly be viewed as a *willing seller* not being "under undue duress." Serkin contends that various "valuation mechanisms" can have a significant impact on a property

owner's ultimate award and that different valuation mechanisms are more or less well suited to advancing the goals of particular private property situations.

In the article Serkin assessed compensation under a variety of takings theories, arguing for the surprising conclusion that current valuation methods are flexible enough to advance the goals of a variety of those theories and are therefore not inadequate at all. The article concludes by offering that "Courts and commentators have for too long ignored the role of compensation in takings law. As a result, the connection between takings theories and compensation is under-theorized and courts' damage awards are frequently inconsistent" (Serkin, 2005, p. 742). Again, the purpose of this paper is to expand upon the theory of just compensation.

The political economy of "just compensation" was has been reviewed in depth by one scholar who contends that most of the literature discussing the risk of undercompensation ignores the important role that the government itself, acting as the "Taker," plays in the eminent domain process, and recently published a paper that was intended to begin filling that gap in the literature (Garnett, 2006). The paper posits that courts and judges only play a bit part in the eminent domain process because in the vast majority of condemnation actions (over 90%), formal eminent domain proceedings are never commenced and the government is able to settle with the property owners out of court. Garnett contends that a universal disregard for how the eminent domain process works outside of the courtroom may have led previous commentators to overstate the undercompensation problem because government "Takers" operate under incentives that may minimize the risk of undercompensation. A compelling case is made in the paper for the fact that the literature and the scholarly debate are centered on the exceptions rather than the rule in eminent domain proceedings and that government Takers need to avoid holdouts and the political fallout from negative publicity. Generally, they are legally obligated to bargain

with property owners in good faith and are penalized financially if the negotiations fail. Court proceedings are in fact costly and are the final option. Governments are almost always legally required to provide substantial relocation assistance to displaced owners, which is one of the indirect costs incorrectly cited as a problem. Garnett's paper needs to be considered as part of the study of the extent of the undercompensation problem, helping to bring reason and common sense to the debate. Garnett's preliminary analysis suggests that the risk of undercompensation has been overstated and perhaps the status quo is less problematic than commonly assumed. A central difficulty with all compulsory takings (whatever their purpose) is that the constitutionally mandated measure of compensation awarded in an eminent domain action based upon the condemned property's *market value* at the time of the taking can fail to fully indemnify the owners. The loss of economic autonomy may be particularly upsetting in the economic development context. Owners may be offended by the government's implicit suggestion that the current use of their property is less than socially optimal and that some other private owner would put it to a "better" use. Additionally, the targets of eminent domain may not share in the benefits generated that are used to justify economic development projects and the original owner does not directly recoup any of these benefits because the lump sum *market value* is calculated before the benefits accrue (Garnett, 2006). Totten and Lambert (2005) make the highly pertinent point that from the standpoint of condemnation appraisal, the *Kelo* decision suggests a potential impact in the application of the *highest and best use* principle. Under *highest and best use* appraisal theory, what might be considered reasonably possible or legally permissible is potentially more expansive than it had been and perhaps the *appraisal* of the condemned property should consider the intended new use rather than the existing use. Garnett's paper also mentions the eminent domain relocation studies that have been done and that show small

businesses as the most undercompensated when takings occur, another concern that is not covered well in the literature.

Is undercompensation the exception?

Academic discussions of the undercompensation problem overlook the important fact that the compensation that a property owner receives almost always results from a bargain between the condemned property owner and the government, rather than a judicial determination of the property's *market value*. Both state and federal laws require the government to attempt to purchase the property on the open market and through negotiation prior to resorting to eminent domain. Even if pre-condemnation bargaining were not required, the government would have important incentives to negotiate to avoid the high "due process costs" associated with a formal eminent domain proceeding (Garnett, 2006). However, the owner of the condemned property is in fact "under undue duress" and may be ignorant of available recourse, so the negotiations that precede a condemnation differ significantly from the arms-length market negotiations between typical buyers and sellers. "Eminent domain is the classic example of liability-rule protection of an entitlement: both parties to the negotiations understand that an objecting property owner cannot ultimately say no" (Garnett, 2006, p. 32). Recognition that the property owner has little leverage against the government probably influences the owner's "willingness" to sell. The Bell and Parchomovsky (2006) bargaining mechanism studied in this paper does not overlook the important fact that the compensation that a property owner receives almost always results from a bargain between the condemned property owner and the government, rather than being a judicial determination. In fact, it builds upon this fact and attempts to provide a bargaining environment that places the owner of the condemned property in a more rational bargaining position that could potentially reduce the need for judicial eminent domain determinations.

1.6 Efficiency and Equity Trade-off

The literature on government taking under eminent domain has generally indicated that all taking procedures result in a trade-off between efficiency and equity or fairness. Efficiency means that everybody bears the marginal cost of their actions. Fairness is more controversial and a subjective concept that is difficult to define and measure. A procedure can be efficient without being fair, and it can also be fair without being efficient. To provide the incentive for efficient behavior, the eminent domain process requires that government pay an amount equal to the full value of the property that it takes. But how is "full value" determined and what is "marginal cost"? Tideman and Plassmann (2005) argue that existing analyses of takings have failed to develop mechanisms that lead to full compensation mainly because they do not consistently apply the principle of marginal cost pricing. They hypothesize that existing compensation rules do not view a government's announcement of the possibility of a taking as itself a partial taking that requires compensation because it results in a loss of value and inefficiency. Economists explain that the principle of marginal cost pricing states that parties will have an incentive to behave efficiently if they bear the full marginal costs of their actions. They say behavior is "efficient" if it is impossible to change the behavior in a way that would make some parties better off without making other parties worse off. If the parties who benefit from a change (society in general in the case of a taking) offer compensatory payments to the parties who are made worse off (those whose private property is taken without their willing consent) and those who are made worse off consider these payments adequate compensation, then the change improves efficiency. The highest payment that society, represented by government, is willing to make is the monetary equivalent of the marginal benefit of the change, and the lowest

compensatory payment that those whose properties are taken consider adequate is the monetary equivalent of the marginal cost of the change. Utility is maximized when the marginal benefit obtained by society exactly equals the marginal cost. If those whose properties are taken are undercompensated, then government will continue its taking activity until its less than full marginal cost equals the less than maximized marginal benefit, instead of stopping at the earlier point where the maximized marginal benefit equaled the *entire* social marginal cost that includes "just compensation" for those whose properties were taken. This is the essence of the argument that undercompensation is inefficient.

1.7 Statement of the Problem

The question studied in this paper is: Should *market value* be the *standard of value* for just compensation under eminent domain? This question generates the following null and alternate hypotheses:

H_0: Just compensation = *market value*; and

H_a: Just compensation ≠ *market value*.

The null hypothesis will not be evaluated quantitatively with empirical data; instead, it will be evaluated qualitatively using inductive reasoning with existing definitions, theory and principles of valuation. As an alternative hypothesis of a normative theory of just compensation the bargaining mechanism suggested by Bell and Parchomovsky (2006) will be developed.

Chapter 2 - Literature Review: Appraisal and Value Theory

The literature pertinent to developing a new approach for just compensation under eminent domain encompasses a review of appraisal history and its evolution over the past century as well as the economic and value theory that is the foundation of property appraisal.

2.1 Evolving Property Theory

Eminent domain takings are a relatively small section of property law, but since they directly involve individual property rights, the *Kelo* taking case has precipitated significant new study of property rights. A theory of property was summarized in a major 85-page article in the *Cornell Law Review* (Bell & Parchomovsky, 2005). According to the authors, property law has eluded both a consistent definition and a unified conceptual framework (p. 531). The article provides a new and comprehensive treatment of property theory:

> This Article proposes a unified theory of property predicated on the insight that property law is organized around creating and defending the value inherent in stable ownership. Focusing on the value of stable ownership renders coherent the splintered theories currently plaguing property scholarship and provides useful conceptual, descriptive, and normative implications (Bell & Parchomovsky, 2005, p. 531).

This is entirely consistent with Locke's view that the preservation of property was the purpose of government, and the purpose for which individuals enter into civilized society and form sovereign governments. The theoretical framework proposed by Bell and Parchomovsky is based upon four questions:

> (1) Which legal entitlements qualify for legal recognition as property rights; (2) against whom do the rights apply; (3) what is the content of property rights—i.e., what kinds of rights does the legal category of property bestow upon the owner; and (4) what should be the remedies for property right infringement (Bell & Parchomovsky, 2005, p. 538).

It is a value-oriented theory of property that eliminates the universally accepted characterization of property as a bundle of rights; instead, property law is viewed as a mechanism for defending stable ownership value. Hence, the various property rights are best viewed not as random sticks, but rather as means to property's end. "Property accomplishes this feat by creating and protecting the relationship between a person and assets" (p. 551). The authors' overall theory is that a property system with stable rights increases the value of assets to owners and decreases the costs of obtaining and defending those assets. It proposes that a universally accepted and centrally policed property system provides the most cost-effective means of producing these benefits due to economies of scale and that, in general, the benefits provided by property systems increase with the stability of the property rights they create.

The government's eminent domain power seems to be completely at odds with Bell and Parchomovsky's value theory of property because eminent domain undermines the stability of property rights. However, the requirement for just compensation tends to support the argument that the value of stability in ownership is a value which in itself warrants special protection by the Fifth Amendment of the U.S Constitution and frequently stronger protection in state constitutions. Current takings jurisprudence is not necessarily consistent with Bell and Parchomovsky's value theory and many scholars have noted that there is little consistency in takings law no matter how it is viewed. However, Bell and Parchomovsky do argue that there is a place for both components of takings law ("taking for public use" and "just compensation") in their value theory. Eminent domain power enables the government to take property for public use, presumed to benefit society as a whole, and suspend the standard property rule protection that the owner enjoys, leaving the owner with fewer tools to defend property rights. Thus, the property owner enjoys less stability of ownership and may extract less value. Since current

eminent domain law relies upon *market value* for just compensation for takings, the net effect of eminent domain deprives property owners of that portion of the value they have personally attached to their property that exceeds market price. The fact that "for sale" signs are in front of only a few homes clearly suggests that *market value* supplies only a minimum bound of the *subjective value* that people attach to their own homes. The low frequency of home sales is powerful evidence that they have a *use value* that is greater than the *market value*. The reality is that most of the time particular properties are in the hands of individuals who value them most and existing *market value* is insufficient to induce them to consider selling.

Dagan (2000) argued that ownership was not merely a bundle of rights. Ownership also embodied a social institution that created bonds of commitment and responsibility among property owners. Dagan viewed property as an expression of a collection of values, primarily privacy, security, and independence, each of which involved the distribution as well as the retention of wealth. This included not only sentimental value, but also the value of stability that lies at the property system's heart. In property tax assessment, this relates to *use value* and is frequently applied to farm property in assessment administration to produce assessments that are far less than *market value*, which are socially justified as reducing urban sprawl and retaining open space for the benefit of all citizens, in addition to economically allowing the continuation of farm operations. Other applications of *use value* that would yield values higher than *market value* would be special purpose manufacturing properties and multi-million dollar one-of-a-kind custom-built homes that would be viewed by the market as white elephants, but have special value to the current owner. Thus, every property has a *use value* to its owner that does not correlate with *market value*, which only applies under the assumption of a desire to exchange.

Under the value theory offered by Bell and Parchomovsky (2005), the power to seize property by eminent domain may be justified only if exercised in limited circumstances. Eminent domain power would be invoked only where a large surplus value exists that could be obtained through public ownership of the property and where significant and costly barriers to successful negotiations also exist. Under these circumstances, Locke's philosophy envisioned a government that would maintain civil order while leaving all surpluses with the governed individuals themselves and not retaining the surplus for the government itself. Thus, the role of government would be to redistribute the beneficial value of public ownership of the taken property to all governed citizens, which implies that just compensation to the owner of the taken property could be huge if related to a measure of general public value. Yet, because compensation is usually restricted to *market value* by the courts, there is a significant risk that too much property will be taken from owners with rational high *reserve prices* (the use value that the owner actually places on the property that causes the "holdout" situation). The proposed value theory suggests that higher compensation should be awarded in place of the ordinary *market value* standard. Just compensation might be interpreted to include a surplus reflecting the expected gap between the actual *use value* enjoyed by the owner and the lower *market value*. The challenge is determining the true value of the gap.

2.2 Evolution of Value Theory and the Principles of Real Property Valuation[2]

Real estate appraisal principles and procedures are not as permanent as one may believe and the modern definition of *market value* was finally agreed upon less than two decades ago (Appraisal Institute, p. 108). Serkin observed that "For all the disagreement and uncertainty in

[2] Parts of this section are revised from a conference paper presented by the author (Moore, 2006a).

the rest of takings jurisprudence, compensation is considered straightforward; it is measured by the fair market value of the property taken" (2005, p. 678). Considering that the "accepted" *standard of value* has undergone considerable recent evolution, straightforward acceptance of *market value* for just compensation under eminent domain is questionable at best.

The 20th Century began with rent capitalization as the predominant valuation method, which had been used during the entire 19th Century. Two more approaches to value were defined and their use became widespread during the 20th Century. Although not generally recognized, all valuation methods are rooted in the concept of the present value of future benefits, whether those benefits are in the form of housing services or an income stream. The foundation of property appraisal theory is economics (Appraisal Institute, 2001, pp. 33-47; IAAO, 1990, pp. 39-73).

On March 28, 1874, the Social Science Association of Philadelphia was presented a paper discussing methods of valuation of real estate for taxation, proposing that standard procedures be established in order to "arrive at methods for the just and equal distribution of local taxation" (Cochran, 1874). The paper explained problems associated with the existing methods of rent multipliers and price paid (acquisition value). An early definition of *market value* appears in the reading, "… to wit: what they would sell for separately and singly at a *bona fide*, or fair sale, after public notice" (Cochran, 1874, p. 13); the paper uses phrases such as "full value" and "equalization" and seems to promote use of a market approach. From the text of this 24-page paper, it appears that the cost approach to value was unknown at the time. The phrase "cost to construct" is only mentioned once, which was not in connection with valuation. Note that Cochran's paper was presented only 98 years after the first published work on economic theory (Smith, 1776) and only 48 years after von Thünen, a German landowner, developed the first serious treatment of spatial economics, relating it to the theory of rent. Interestingly, the

concept of spatial economics is an important topic of current property valuation research and is called location value response surface analysis (LVRSA), providing "a means of adjusting smoothly for location in MRA, feedback, or other valuation models" (IAAO, 1999, p. 193). Another classic influence upon modern appraisal theory was Ricardo, whose work was based on the theory that, given free competition in trade, the *exchange value* of commodities would be determined by the amount of labor expended in production (1817). *Ricardian rent* is a type of economic rent created by variation in resource quality, which bears directly on valuation theory. Alfred Marshall was the first economist to investigate the techniques of establishing values, but it was incidental to his exposition of the central position of the pricing process in the functioning of the economic system. Near the end of the 19th Century, Marshall (1893) introduced the economic concept of quasi-rent, which explained how the fundamental concept of land rent could be expanded to include long-term improvements to the land. Marshall (1920) merged the supply-cost theory with the demand-price theory, which forms the basis for modern day value theory, and his writings illustrated the three basic approaches to value in use today: replacement cost, market comparison, and capitalization of income. Writing prior to WW I, Gustav Cassel further developed Marshall's principle of the tendency for long-run cost, market price, and capitalized income to be equal under conditions of equilibrium and developed what he called the "principle of cost" that represented a normal condition about which actual pricing oscillates (Wendt, 1956), which evolved into the concept of *normal value* by 1934.

Mertzke (1927) linked classical value theory with valuation and appraisal theory. He employed Marshall's concept of normal value translating economic value theories into a workable valuation theory and appraisal methodology, establishing a clear foundation for utilizing the three basic approaches to value. Based upon the contents of real estate appraisal

training materials published by The American Institute of Real Estate Appraisers in 1938, the "three approaches" and their correlation became a standard part of appraiser education within 11 years after Mertzke's writing (Wendt, 1956). A diagram of the "three approaches" to value in the appraisal process soon appeared in a book published by one of the strong advocates of the procedure (Schmutz, 1941). Adherence to the dogma of the three approaches to value and their correlation has remained central to the teaching of appraisal principles by the American Institute of Real Estate Appraisers since its introduction in 1938, but as will be shown later, acceptance of the dogma is not universal.

Shortly after the start of the 20th century the first known book on the subject of property valuation was written by a mortgage company executive after searching in vain for such a book in both England and this country (Hurd, 1903). The first sentence of the book states, "The basis of agricultural land values has been established since the time of Ricardo, and throws light on the fundamentals of our problem." He continued on the first page with a brief overview of rent capitalization, which was the primary method presented in the book. Hurd devoted considerable space in his book to the historical development of cities and voiced some of the same concepts of spatial economics observed by von Thünen (1826). Although land rent seemed to be his focus, Hurd did state that "…'value' means exchange value, average sales being considered the best test of value" (p. 2). Three years after Hurd, Fisher (1906) produced the defining work on income capitalization that continues to be reprinted and cited to this day. He expanded the view advanced by Marshall and others that the value of durable goods was represented by the present worth of future returns. Fisher emphasized the distinction between cost and value, and in his discussion of risk, capitalization rates, and the discounting process he presented a fully developed form of the income theory of value that became the basis of the work of Babcock

(1932) and much of the appraisal literature of the 20th century with respect to present value of future benefits.

Shortly after the books of Hurd and Fisher, and 35 years after Cochran's presentation in Philadelphia, a book was published in London with the practical intent "to give students and candidates in the examinations of the Surveyors' Auctioneers' Institute, &c., a general knowledge of the principles and practice of Valuation of Real Property for the various purposes for which it is required … and others who are called upon to value land and buildings …" (Webb, 1909). Webb's primary valuation method was rent capitalization for all types of properties (agricultural, residential, business) and the annual rent was capitalized at various interest rates, depending upon the risk involved for the type of property, to determine capital value. For ordinary houses he used "rack rent" and noted that "the rate percent of interest to be allowed in calculating the capital value is more difficult to determine … it depends, generally, on the suitability of the houses to the locality … the age and condition of the buildings … whether there is a tendency for rents to rise or fall in the *neighborhood* [italics added] … improvements in the means of transit between the centre and outlying districts, which has induced a large number of people to live farther out … building of a large number of flats has also had a great effect" (Webb, 1909, p. 11). In his attempt to explain the necessary variations in interest rates to use for income capitalization, Webb was using market and spatial factors that are being heavily investigated nearly 100 years later as if newly discovered. Because Webb intended his valuation guide to be used for various purposes, such as the determination of fire insurance loss, he included a chapter on valuation of land and buildings separately. For these purposes he wrote, "It is often necessary … to form an estimate of the cost of erecting a building similar to an existing building if built at the present time" (Webb, 1909, p. 37). This is the earliest reference located for

the concept of replacement cost. He mentions the quantity survey method (a take-off from detailed construction plans) as being too tedious for the purpose of valuation and suggests that a fair estimate might be made "by other methods, such as cubing, pricing for square foot of floor area, or per unit of accommodation" (p. 37). After discussing some precautions for this method, he provided a rudimentary table of cubic foot costs.

Pollock and Scholz (1926) also promoted the economic theory of Marshall and Cassel that "normal price" will tend to equal "normal cost" in the long run. This theory gained broad acceptance during the Great Depression years when prices became erratic and unpredictable, becoming the basis of viewing replacement cost as the most reliable approach for value estimation: "But in the long run the price of a reproducible good will be determined primarily by production costs, and this so-called normal price will not tend to vary to any great extent …" (p. 17). Pollock and Scholz did not apply the normal value theory to land, which was their primary interest; not being reproducible, land value would be determined by supply and demand. For this reason the authors concluded that the only "scientific method" of land valuation was one based upon a front-foot basis, with the aid of depth tables and corner influence charts for adjusting base values that were derived from available market activity. The influence of their work can still be seen in state assessment manuals that are simply copied from edition to edition with little thought given to evolving practice and methodology. The Pollock and Scholz book was an excellent example from the period of transition from economic theory to appraisal practice. Pollock was the chief executive of an appraisal company and Scholz was a Professor of Economics at the University of Pennsylvania. During the first half of the 20th century there was considerable scholarly interest in methods of property valuation with academic contributions from Marshall, Cassel, Fisher, Mertzke, Scholz, Babcock, Bonbright and many economists.

Emergence of appraisal procedure.

Babcock (1932) was extremely incisive from the prospective of economic theory and his work represents one of the major milestones in the development of appraisal practice in the 20th century. He introduced seven valuation methods, all being special cases of the concept of the three approaches to value. He proposed that each method be applied according to the type of property (Chapter 16) and did not propose using more than one method on any particular property type. Babcock seemed to favor the income method, but recommended the market comparison method when income to the property did not exist. He wrote, "In this method of valuation a qualitative analysis is made of the *future amenities* [emphasis added] offered to the prospective purchasers of the property" (Babcock, 1932, p. 170). He suggested this method as best for single family dwellings.

The first chapter of an early book for assessors provided an interesting summary of the early evolution of appraisal and assessment practice and the need for "scientific appraisal" (Prouty, Collins & Prouty, 1930). The new "scientific appraising" approach discussed by the early 20th century books is actually a form of the cost approach, which has the principle of substitution as an underlying economic premise: When property is replaceable, consumers will offer no more in the market than the cost of replacing the property itself or the cost of obtaining a comparable substitute. The book describes the Somers unit system for land appraisal that was also a primary source for Pollock and Scholz (1926) and mentions that in 1910 the City of New York developed a system of appraising land and buildings on a square-foot basis. According to Prouty et al. (1930), several other cities including Buffalo, Rochester, Jersey City, St. Paul and Denver made progress in scientific appraising during the period of 1915-1925. The book states that in 1910 one of the notable forward steps in scientific appraising was made by John A.

Zangerle, a member of the Board of Appraisers for the City of Cleveland. McMichael Publishing Company of Cleveland published a book on appraising by Zangerle (1924), which, in this author's view, established the standard appraisal methodology that was used the rest of the 20th century. Zangerle became one of the founders of the organization known today as the International Association of Assessing Officers (IAAO) in 1934 and its president in 1937.

Collapse of the real estate market during the depression of the 1930's, the ensuing volume of foreclosures, and the broadened influence of government in establishment of a need for *appraisals* for real estate loan insurance and guaranty resulted in appraising becoming a specialized profession separate from traditional real estate brokerage by 1934. Both the American Institute of Real Estate Appraisers (Appraisal Institute) and the International Association of Assessing Officers (IAAO) were established during the period of 1932 - 1934 and began setting standards for property valuation, appraisal practice and professional ethics. *Assessment Principles and Terminology,* the first assessment book from the National Association of Assessing Officers, was written by members of the Committee on Principles of Assessment Practice, appointed by Association President John A. Zangerle, and published in 1937. Phillip W. Kniskern was president of the American Institute of Real Estate Appraisers when his book (Kniskern, 1933) was published. It is likely that the book served as an early reference for members of the Appraisal Institute in the several years following its founding in 1932. During the early years, members of the Appraisal Institute wrote pamphlets, journal articles and essays on appraisal practice from which the work of 10 authors was accumulated into 28 chapters that became known by 1938 as Volume I of the *Text Material – Real Estate Appraisal*, used in connection with the Institute's beginning course in appraising (Kingsbury, 1946). At the close of each chapter of Volume I was given a list of references for further reading that serves as a view

of the acknowledged appraisal authorities of the period. References cited more than once included Babcock (1932), Bonbright (1937), Clark (1930), Kniskern (1933), McMichael (1932), Prouty et al. (1930), and FHA (1938) (Kingsbury, 1946, p. 136). According to Kingsbury, who personally examined original mimeographed copies of the *Text Material* in the Institute's Chicago offices while researching her book, the three methods of appraising property (replacement cost, market comparison and income capitalization) were presented in the writings, but the Institute called them "approaches" rather than methods. The *Text Material* listed difficulties with each approach and recommended using all three where possible, or at least two of the three as standard practice. The appraiser would then be expected to apply experience and judgment in deciding the *opinion of value* that would be best applied for the subject *assignment*, as bracketed by the two or three approaches. This is the methodology has been taught by the Institute to the present day, but is not universally accepted. An Opinion of the Fellows of the American Society of Appraisers stated:

> The College reaffirms its position taken in an earlier Opinion that the so-called "three approaches to value"—doctrine that requires that all three approaches be applied to any one property, regardless of its characteristics, and then that the three results be "correlated" to reach a conclusion as to value—is economically unsound and produces unreliable results (American Society of Appraisers, 1989, p. 5).

Speaking as an applied economist just 60 years in the past, Kingsbury (1946) stated:

> The comparatively new profession of real estate appraising, in spite of having done some excellent work toward "narrowing the margins of uncertainty" in valuation, is still unnecessarily burdened with vagueness and inconsistency in regard to several important matters. This is true not only among appraisers in general, but also within the work of individual appraisers (p. 142).

Value theory of James C. Bonbright.

The foreclosures of the Great Depression precipitated academic interest in improvement of valuation procedures, evidenced by the publication of a classic treatise by Bonbright (1937) as

well as others. Professor Bonbright was an economist at Columbia University and his treatise was the result of research conducted under the auspices of the Columbia University Council for Research in the Social Sciences. Bonbright was concerned with the precise legal concept of value used in court cases involving valuation and therefore his research findings are of particular interest when considering "just compensation" under eminent domain. Bonbright's two-volume, 1,271-page treatise held that the first and most important problem in any *appraisal* was to secure a definition of value acceptable for the purpose of the investigation. According to Bonbright's research, there are two basic concepts of value: market value and value to the owner. Bonbright embraced "value to the owner" as the more central and universal concept:

> … the *value* of property should always be taken to mean value to some specific individual or group of individuals, who have or may have an ownership interest in the thing. … But since any object of wealth may be capable of conferring different advantages on different owners – as in the case of a pair of eyeglasses, which is adapted to Smith's eyes, but which would be of no possible use to Jones – one cannot speak of the value of a property *in general*; instead, one must speak of its value to some specific person or group of persons. Strictly construed, therefore, property value should mean invariably value to some particular owner. … But in law, as in economics and in business, value is often used in an associated sense, as a synonym for market price or market value. "The worth of a thing, is the price it will bring," in the words of a jingle frequently repeated by judges as well as economists. When the term is thus construed, no property, however valuable it may be to the particular individual for whom it is specially adapted, has any value unless it can be sold to some other person … Properties like the New York Stock Exchange building [not the land] … would therefore be deemed utterly valueless (save for a possible salvage value), were this concept of value rigidly adhered to (Bonbright, 1937, pp. 15-16).
>
> The use of "market value" as the verbal basis settling all varieties of legal disputes represents a uniformity of mere words rather than one of principle. The multiformity of value standards is only concealed, not avoided, by the accepted legal definition of market value of the price at which the property would be exchanged between a "willing buyer" and a "willing seller" (Bonbright, 1937, p. 65).

Bonbright was critical of the *willing buyer-willing seller* concept of value for any estimate of value other than homogeneous goods in active markets. Different assumptions

implied in the valuation process, according to Bonbright, could lead to an infinite number of *opinions of value*. The *standard of value* for just compensation under eminent domain cannot be *market value* for reasons that will be argued later. This literature review provides the facts upon which the argument is based.

Lacking value theory to support appraisal procedure.

Wendt (1956) wrote, "… it seems fair to state that there have been no major contributions to appraisal theory since the writings of Babcock and Bonbright … recent writings have concentrated upon the appraisal process and techniques for establishing values" (p. 40). A more recent assessment of value and valuation theory contributions in the field of real estate appraisal is less kind:

> Competence supposes a professional foundation that includes a solid understanding of theory and its historical development. In real estate appraisal, for example, this theory is that of economic value … This literature review shows that the core of real estate appraisal literature has little place for this theoretical foundation, and allocates even fewer pages to the history of economic value. Appraisers face the challenge of erecting the edifice of basic concepts, laws and principles in appraisal so that the field can advance from art to science and from trade to profession (Canonne & Macdonald, 2003, p. 113).
>
> No wonder practitioners short circuit the practice of evaluation; the fundamental notion of value did not enter the classroom because it finds little or no foundation in the literature, with blatant errors in the theory of value and the history of value thought. The state of affairs in appraisal practice is simply the result of the way in which evaluation is taught, and of the way in which research is directed (Canonne & Macdonald, 2003, p. 114).

There has been essentially no research conducted on value theory as applied to real estate appraisal since Bonbright (1937). As reported by Canonne and Macdonald (2003), publications on real estate appraisal in the last half of the 20th century have devoted fewer and fewer pages to the underlying economic theory and history of appraisal. This author's literature review confirms Canonne and Macdonald (2003) and reveals that what has been presented in more recent writings

appears to be a re-hash of theory and principles presented earlier in condensed form. One of the few university scholars who became interested in the practice of valuation was Medici (1953), considered at the time to be one of the great theoreticians of appraisal. Medici added his scholarly support to the professional disdain of value theory and, and from there, its history. He openly renounced any theory of value and attempted to raise appraisal to the level of a science through the merits of its own methodology, asserting that the foundation of the doctrine of appraisal was its method (Canonne & Macdonald, 2003). Medici's influence appears to have had a dampening affect on interest in value theory during the last half of the 20th century, and thus upon the literature from which a new basis of just compensation might be drawn. Hence, this paper must proceed from the research of Bonbright (1937), the most recent writing on value theory as applied to appraisal.

Real estate tax assessment practice since 1970.

Tax assessments in North America are almost universally based upon a *standard of value* that is directly or indirectly related to *market value*. The price at which items are exchanged in a free market is determined by the fundamental laws of economics; supply, demand, competition, balance, contribution, marginal utility, substitution, economic rent and quasi-rent, external economies and diseconomies, the supply function, the demand function, and the long-term equilibrium price. The following economic theory of the housing market relies heavily upon the economic classics discussed earlier and the work of a contemporary economist, Professor Karl E. Case, a Harvard PhD who holds the Katharine Coman and A. Barton Hepburn Professor of Economics Chair at Wellesley College, where he has taught for more than 25 years. His research has focused on real estate markets and prices.

Students of economics learn about equilibrium prices that result from a market clearing process, but the notion of a single prevailing market price for each commodity is contradicted by empirical observation. Explanations offered for this reality include 1) that the products actually differ or are perceived as being different; 2) that transaction costs cause price differences; 3) that it is caused by market segmentation and price discrimination; and 4) that buyers and sellers possess imperfect knowledge about product quality and prices. All four realities affect real estate prices and imperfections of information play an even more important role because housing units are heterogeneous "goods" that differ in many ways. Buyers and sellers in the real estate market possess unique motivations and all suffer from imperfect information. Hence, even if the appraiser were to have complete and accurate property information and if ideal procedures were used to adjust for observable characteristics, the appraiser's *opinion of value* would merely be some function of an equilibrium *price distribution* and the distribution of assessment-sale ratios would always have a non-zero variance. The exact amount of variance will be different from market to market and even neighborhood to neighborhood, but in reality, there is no possible way for the appraiser to improve upon the random variance that is part of the market activity. There is no single *market value* for each property because a range of possible values influenced by many factors exists. The nature of tax assessing is that a single "estimate" must be chosen for the annual assessment roll and this estimate must be as close as possible to what the property owner would expect to receive for the property if it were sold (the mean of the expected price distribution). However, not all observed variation in assessment-sale ratios should be attributed to randomness in selling prices and imperfect markets; assessors make errors because of incomplete or inaccurate descriptive data about the property, incorrectly specified automated valuation models related to inadequate understanding of the housing market, or inaccurate model

calibration. However, as shown by recent research (Moore, 2006b), assessors have made tremendous progress in the past 30 years and most of the current property tax equity problems can no longer be attributed to assessor performance when they are properly using available tools.

In economists' terms, housing utility is obtained through the consumption of a large number of *individually identifiable attributes*, which Babcock (1932) called amenities. In choosing a home, buyers simultaneously choose a number of rooms and bathrooms, a kitchen type, a particular lot location and description, a structure type (1-story, 2-story, etc.), a set of neighbors and neighborhood, a school system, a type of street, a perceived crime level, and so on. Housing stock is durable and supply response is sluggish. Although some of the components that make up the bundle of individually identifiable attributes, such as decks, air conditioning, fireplaces and swimming pools may be added or altered on short notice, the majority such as house style, room configuration and size are not easily changed. Others, such as neighborhood attributes, cannot be changed at all except in the very long run. As a result, shifts in demand or technology changes, such as the recent emergence of the master suite as a very desirable attribute, may result in positive or negative quasi-rents depending upon whether that attribute exists in a particular housing unit or neighborhood. For a brief discussion of rents and quasi-rents, see Appendix A. According to Case, "Housing attributes can be broken down into two major groups: structural characteristics {X} and neighborhood characteristics {N}. In a sufficiently large area, a wide variety of alternative packages are available" (1978, p. 24). Buyers only negotiate a bundle price, but the existence of alternatives implies implicit prices associated with each bundle component even if they are subconscious in the minds of the buyers. Accordingly, it is possible to represent the *estimated* market value MV of a specific residential

housing unit as a function of the attributes {X} and {N} with a simple linear relationship (Case, 1978, p. 24).

$$MV = P_1X_1 + \ldots P_mX_m + b_1N_1 + b_nN_n \quad (1)$$

where

MV = Market price of the bundle

P_i = Price of structural attribute i

X_i = Quantity of structural attribute i

b_i = Price of neighborhood attribute i

N_i = Quantity of neighborhood attribute i

Each attribute price is made up of two components: a base price and a quasi-rent. That is,

$$P_i = (C_i + r_i) \quad (2)$$

C_i = Construction cost of an additional unit of attribute i

r_i = Quasi-rent associated with attribute i

The r_i may be negative or positive and will persist only where the supply of the attribute in question is either fixed or responds sluggishly. Where a particular attribute is in fixed supply, the entire return to that attribute is quasi-rent and $C_i = 0$, hence, construction cost is immaterial. Essentially all of the b_i neighborhood attribute prices (and site attributes S_i with prices z_i [added by me], to be discussed later) are quasi-rents. Certain attributes, such as view, are site-specific, being neither a structure attribute nor a neighborhood attribute. The contributed value of the view is completely in the form of quasi-rent. See the Appendix for examples.

Within a *clearly delineated market*, there will be a single short-run equilibrium price for each attribute. This framework is applicable to both owner-occupied and rental property. The value of any capital asset is equal to the present value of the net services that it is expected to

yield through its lifetime (future benefits). Owner-occupied housing yields a flow of services (shelter and amenities) for which owners implicitly pay rent. Since there is no recordable transaction, such rents must be imputed from the value of the homes (Case, 1978, p. 26). As Cochran (1874) argued over 130 years ago, and the "scientific appraisal" movement in the first third of the 20th century attempted to resolve, the practice of imputing market value from expected rental payments, the primary valuation methodology of the 17th to 19th centuries, can be very problematic, especially for housing, as also noted by Webb (1909).

Single family housing parcels may be viewed as bundles of structural, site and neighborhood attributes. At any point in time the market value of a property is approximated by the mean of the distribution of value estimates made as a function of the quantity of attributes that it possesses at that point in time. Moving through time the quantity of structural attributes {X} may change as a result of investment (additions to and replacement of structural components) or physical deterioration (depreciation), which may be of a voluntary or involuntary nature. The rate of deterioration and the rate of investment on general maintenance are critical elements in the supply side of the housing market. The rate of investment will depend upon the expected rate of return, either explicit or implicit. A site attribute {S} such as view can be changed by the erection of a structure that blocks the view. As a result of the movement through time, the quantity of neighborhood attributes {N} will likely change because of changes in the tax and public service package offered by local governments, changes in the level of environmental attributes such as noise and air pollution, changes in land use patterns, business firms relocating into or out of the area, zoning changes, quality and adequacy of roads, etc. Either structural prices P_i or neighborhood prices b_i or site prices z_i for attribute(s) i may change.

Thirty years ago when Professor Case was performing the research for his dissertation and subsequent book (1978), assessing methods were less refined from those in current use. He observed a significant need for reform and improvement in assessment methods. Upon first exposure to the field in 1973, this author observed the same need as a reliable computer-based method for estimating the market value of homes in mass for assessment purposes was under development. During this period the pioneers of statistical methodology such as MRA were appearing and it was implemented in progressive areas of the country such as California. In this author's view, the rapid introduction of MRA in California counties was a contributing factor in the modern American property tax revolt, which began with the now-famous Proposition 13.

The estimated real estate market values of properties are determined locally by an elected or appointed official. Conventional wisdom as well as assumptions of many academic researchers (including Professor Case) holds that the equitable distribution of the local property tax burden (its "fairness") depends upon the quality and accuracy of the annual market value estimates established by the responsible official. Researchers, including Case, have placed emphasis on the activities of the assessing official and uniformity in the property appraisal process of estimating market value, but have overlooked preferential assessment adjustments that benefit various special interest groups. These adjustments modify the assessor's estimate of market value according to various state statutes in order to establish a statutory taxable value. Each year assessors report the assessed value of all real property as of the tax lien date of the same year in an official "certified roll." This roll is can be stated mathematically as

$$V_A = \sum_{i=1,n} AV_i \qquad (3)$$

where

V_A = aggregate assessed valuation of all *n* properties in the jurisdiction, and

$$AV_i = [MV_i + e_i] + [\sum_{i,\, j = 1,m} (P_j + I_{ej})] = \text{the assessed value of property } i \quad (4)$$

where

$[MV_i + e_i]$ = the assessing official's estimated market value of property *i*

MV_i = the *true* market value of property *i* that nobody knows with certainty

$e_i = r_e + d_e + m_e$ = the market value estimating error, where

r_e = the error due to random market factors (see earlier text)

d_e = the error resulting from incorrect property descriptive data

m_e = the error introduced by the assessing official's estimating model

$[\sum_{i,\, j = 1,m} (P_j + I_{ej})]$ = the sum of *m* preferential adjustments for property *i*

where

P_j = the *j*th preferential assessment or exemption for property *i*

I_{ej} = the interpretation or error made in applying the *j*th P adjustment

Without the $[\sum_{i,\, j = 1,m} (P_j + I_{ej})]$ component, the taxable value of each real property is straightforward and accuracy of the market value estimate $[M_i + e_i]$ is easily verified with widely employed standard statistical tests. Much of the academic literature including Case (1978) has focused upon the process used to establish $[M_i + e_i]$ and very little attention has been paid to the $[\sum_{i,\, j = 1,m} (P_j + I_{ej})]$ component. When considering the "fairness" of the property tax, issues of horizontal equity, vertical equity and regressivity are considered in the literature. Horizontal equity is generally measured by the coefficient of dispersion (COD) that measures average deviation from the median assessment-sale ratio, with indicated equity improving with lower coefficients. Case (1978) used COD to support his empirical findings that assessing methods must be improved ("the need for reform"). The only question of property tax fairness is whether a subject house is being taxed the same as all other houses in the same price range in its

neighborhood, and higher-valued houses are paying proportionately higher taxes. This is the ad valorem concept: It is a "flat percentage tax" on wealth. The purpose of the assessment process is simply to determine how the cost of operating the local government, as represented by the local tax burden, is shared among the property owners. The amount of an individual property tax bill is determined by the aggregate cost of providing local services and the operating efficiency of the local government unit. This author's hypothesis is that the technical assessing methodology reform called for by Case and many others has been accomplished during the past 30 years; however, because of the delayed modernization of the American assessment system, followed by introduction of computer-based methods that could trace a rapidly inflating market, combined with the short-sightedness of local officials who took advantage of the property tax windfall, an American property tax revolt resulted, nullifying the assessment technology improvements. In many states property tax equity may now be worse than 30 years ago because of the tax revolt "reforms."

Market value estimating models used for assessment represent both the supply and demand sides of the real estate market. Modern textbooks provide a description of the generalized demand and supply functions as:

Demand: $Q_d = f(P, M, P_R, \mathcal{T}, P_e, N)$ (5)

where *f* means "is a function of" or "depends on" and

Q_d = quantity demanded of the good or service

P = price of the good or service

M = consumers' income (generally per capita)

P_R = price of related goods or services

$\mathcal{T}$ = taste patterns of consumers

P_e = expected price of the good in some future period

N = number of consumers in the market

Supply: $Q_s = g\ (P, P_I, P_r, T, P_e, F)$ (6)

Q_s = quantity supplied of the good or service

P = price of the good or service

P_I = price if inputs used to produce the good

P_r = prices if goods related in production

T = level of available technology

P_e = expectations of producers concerning the future price of the good

F = number of firms [builders] or the amount of productive capacity in the industry

The above generalized demand and supply functions show how all 10 variables (not 12) jointly determine the quantity demanded and supplied (Thomas & Maurice, 2005, pp. 35-54), and relate directly to the earlier discussion of house value theory. Long run equilibrium occurs when $Q_d = Q_s$. If $Q_s < Q_d$, as was the situation between 2001 and 2005 after the stock market bubble burst and investors turned to real estate, supply could not keep pace with demand and home prices rose in proportion to the imbalance. The real estate foreclosures during the period of the 1930's depression created the opposite situation where $Q_d < Q_s$ and the excess supply forced real estate prices lower.

This author recently presented a conference paper that covered some of the appraisal and value history contained in this section as well as an example of a derived hedonic model for housing price estimation currently used in many assessing jurisdictions (Moore, 2006a). The hedonic value estimating tool is the Transportable Cost-specified Market (TCM) automated valuation model. "Transportable" means that it does not need to be re-specified for use with

residential property in different jurisdictions because it has been specified based upon a clear understanding of the housing market and economic theory. The basic hedonic model is standard. This makes its use possible in jurisdictions where the necessary skill set to specify a model is not available. "Cost-specified" means that the fundamental specification takes the form of the cost approach model. The general model structure from assessment textbooks (IAAO, 1990, pp. 317-319) is of the form:

$$MV = \pi GQ * \{(\pi BQ * \sum BA) + (\pi LQ * \sum LA) + \sum OA)\} \quad (7)$$

This is also the general form of the TCM hedonic model. In fact, it is the exact same model that is found in a mass appraisal textbook under the heading "Calibrating Cost Models" (IAAO, 1999, p. 143), where the book explains how the general model structure of (7) is separated into replacement cost new (RCN), depreciation, land value, and general qualitative adjustments as the simple cost approach model,

$$MV = \pi GQ * \{(1 - BQ_D) * RCN + LV\} \quad (8)$$

where BQ_D is a building qualitative adjustment for depreciation (Case would call it quasi-rent) and LV is the land value, summed prior to application of the general qualitative adjustment πGQ. The simplified cost model definition shown in (8) does not describe the TCM general hedonic model structure that is derived from (7). Finally, the "market" part of TCM means that the model, although structured in the form of a comprehensive cost model for understandability, is actually a market-calibrated model. The TCM hedonic model specification contains elements of Case's model specification,

$$MV = P_1X_1 + \ldots P_mX_m + b_1N_1 + b_nN_n \quad (1)$$

as well as the additional elements for site $\{z_iS_i\}$ and response surface location $\{\alpha l_i b_i N_i\}$, which are discussed in more detail below. In the TCM hedonic model the structural components {X} of

Case's specification are decomposed into malleable components $\{X_M\}$ for those items that are easily added or removed and nonmalleable structure components $\{X_N\}$ for the fixed structural items that are not easily changed. Additionally, recall that $P_i = (C_i + r_i)$ where C_i is the construction cost of an additional unit of attribute $\{X_{Ni}\}$ and r_i is the quasi-rent associated with attribute $\{X_{Ni}\}$, and that for the malleable structure components $\{X_M\}$ the quasi-rent $r_i = 0$. Hence, the TCM hedonic model begins with standard constructions costs as the baseline and uses qualitative variables to account for quasi-rents as needed.

The TCM hedonic model is derived from the general assessment model structure above. Recall from previous discussion that

$[MV_i + e_i]$ = the assessing official's estimated market value of property *i*

MV_i = the *true* market value of property *i* that nobody knows with certainty

$e_i = r_e + d_e + m_e$ = the market value estimating error, where

r_e = the error due to random market factors (see earlier text)

d_e = the error resulting from incorrect property descriptive data

m_e = the error introduced by the assessing official's estimating model.

The TCM hedonic model is intended to reduce m_e, the error introduced through the assessing official's estimating model, by providing a standard transportable model that has been specified based upon a clear understanding of the housing market and economic theory. The result produced by any AVM is constrained by the errors introduced by random market factors and incorrect property descriptive data, and beyond the control of the model builder.

Substituting in the general model structure (7) with TCM specific terms influenced by the theory of the Case linear model (1) produces

$$MV = \alpha l_i b_i N_i * \{\beta B*(\sum r_N X_N + \sum C_M X_M) + z_i S_i * \sum LA + \sum OA\}. \quad (7a)$$

$\alpha l_i b_i N_i$ replaces πGQ in the general model structure and is the response surface location variable that accounts for the combination of general neighborhood attributes that are not site specific, which Case defined as $b_i N_i$ (schools, crime rate, street quality and maintenance, etc.) and geospatial factors αl_i first identified by von Thünen (1826) and described as location value response surface analysis (LVRSA) in the IAAO mass appraisal textbook (1999, pp. 193-196). If geospatial capabilities are not available, this variable assumes a value =1 and the remaining $b_i N_i$ variable applies uniformly across the neighborhood, potentially resulting in sharp value changes at neighborhood boundaries. Neighborhoods must be carefully delineated in either case. Given geospatial capabilities, the αl_i value is computed for each parcel using a technique such as Kriging from geostatistics, originally developed for mineral exploration. It can best be understood as a form of linear prediction. The known maximum or minimum value point is selected for each neighborhood and the Kriging algorithm uses those points together with the nearby known neighborhood value points to estimate the αl_i values, generating a value response surface of coefficients as a function of the x and y coordinates of each property.

βB replaces πBQ, the product of the building qualitative components, in the general model structure and is directly related to the joint interaction of the generalized demand function $Q_d = f(P, M, P_R, \mathcal{J}, P_e, N)$ and supply function $Q_s = g(P, P_I, P_r, T, P_e, F)$ in the defined housing market. This author hypothesizes that the supply and demand functions act primarily upon the structural attributes such as the architectural style that, at any given point in time, satisfy $\mathcal{J}$, the varying taste patterns of housing consumers. For this reason βB acts upon the $(\sum r_N X_N + \sum C_M X_M)$ term in the TCM hedonic model, providing the building qualitative variable. If the model builder believes that βB should only be applied to the nonmalleable structural components $r_N X_N$,

as Case might argue, then the term can be broken into its two parts setting $\beta B = 1$ for the malleable structural components $C_M X_M$.

$(\sum r_N X_N + \sum C_M X_M)$ replaces $\sum BA$, and is the sum of the building additive components in the general assessment model structure. It is separated into two terms in order to account for malleable and nonmalleable structural components. Recall that in the Case linear model, each attribute price P_i is made up of two components: a base price and a quasi-rent, so that $P_i = (C_i + r_i)$, and where a particular attribute is in fixed supply, therefore nonmalleable, the entire return to that attribute is quasi-rent r_i and $C_i = 0$, hence the construction cost for nonmalleable structural component X_N is immaterial. On the other hand, where an attribute is reasonably easy to add, change or remove and therefore malleable, construction cost C_i, adjusted for condition, approximates market value and $r_i = 0$. Hence, the TCM hedonic model has the construct $\sum r_N X_N$ for nonmalleable structural components where $C_i = 0$, and $\sum C_M X_M$ for malleable structural components where $r_i = 0$, because price $P_i = (C_i + r_i)$ and for each situation the respective variable (C_i or r_i) is zero.

$z_i S_i$ replaces πLQ, the product of the land qualitative components, in the general assessment model structure. It is factor associated with quasi-rent z_i attributed to site variable S_i for unique positive or negative site characteristics such as view and other influences.

$\sum LA$ remains unchanged from the general assessment model structure, as the sum of the land additive components in the TCM hedonic model. These are most easily described as the standard land valuation rates applied throughout the neighborhood such as price per lot.

$\sum OA$ remains unchanged from the general assessment model structure, as the sum of the other additive components in the TCM hedonic model. This term handles the structures and property features that are generally referred to as “outbuildings and yard items” in mass

appraisal. They were not considered in Case's research, but must be given consideration in assessment work.

As shown by recent research (Moore, 2006b), assessors have made significant progress in assessment accuracy using tools such as the TCM hedonic model just described and, assuming a competent, properly trained assessment staff, most property tax equity problems can no longer be attributed to assessor performance when they are properly using available tools. Hence, the assessed value provides a reliable annual reference base for *market value* that is a matter of public record for every property, which is reviewed and approved frequently by every property owner, and which gives them an opportunity for appeal if they believe it is in error.

This section has provided an overview of real estate assessment practice that determines the annual *market value* that is placed upon each property in local government jurisdictions for ad valorem tax collection. The *standard of value* for ad valorem tax assessment as well as mortgage banking is widely accepted as *market value*, which is reasonable and appropriate for defining a tax base and for mortgage collateral. However, mortgage collateral should be viewed as a form of liquidating value in case of default; it is considerably less than the *subjective value* of the property to its owner.

2.3 Value theory and principles of valuation as applied to just compensation

This final section of the literature review is devoted to how value theory and the principles of valuation are related to just compensation of the owners of private property that is taken by government using the eminent domain due process. It exposes the possible "unjust compensation" caused by blind reliance of the courts on *market value* as the standard.

According to Alfred Marshall, Irving Fisher, Frederick Babcock and others, the basis of value for all property lies in the prospect for future returns. In establishing demand prices in the market, *consumers* ("willing buyers") would theoretically offer prices that represent the discounted value of future returns. At the same time, owners of *all* existing properties would have established in their minds a *subjective value* for their properties based upon their evaluation of the future returns to them personally. Such personal returns from the amenities enjoyed in their individual properties would be in excess of the demand prices of buyers in the market as evidenced by the fact that only a very small fraction of all properties are even offered for sale. Thus, the *willing sellers* referenced in the definition of *market value* are not a properly drawn statistically random sample of all properties, but instead represent a very small fraction of all holders of the demanded good and likely have a compulsion to exchange their property in the market because of some other change in their personal circumstances such as new employment in a different community or a major change in personal economic circumstances (which becomes a confounding variable). That significant personal change in circumstances directly offsets their own opinion of the current property's *subjective value* (such as substitution of considerably higher future returns from new employment elsewhere) to the extent that they are willing to place the current property on the market at the high end of the current *market value* range, causing them to temporarily assume the role of a *willing seller*.

Such circumstances, which operate to create *market value*, certainly do not exist under eminent domain takings and represent a sad distortion of the concept of "just compensation." When the market transaction is consummated, the *willing buyer* acts upon imperfect information and discounts the transaction for potential risk resulting from all possible unknowns, offering the highest market price considered prudent. At the same time the *willing seller* has other unrelated

factors affecting the transaction decision that have caused the previously established *subjective value* to be discounted to the highest acceptable market price. Following the transaction, as the new owner enjoys the future returns from the property amenities that had been anticipated yet discounted for uncertainty at the time of the transaction, the new owner's personal *opinion of value* increases to a level well above *market value* as the original discount for uncertainty is capitalized into a new individual *subjective value* for the property.

The above explanation of the relationship between *market value* and *subjective value* is consistent with the definition of *value* offered by Bonbright (1937) and represents the author's original hypothesis derived from the literature review. Hence, there is no reference source other than this paper for the hypothesis.

Chapter 3 - Bell and Parchomovsky's Proposal

3.1 Overview of the Bell and Parchomovsky bargaining mechanism

Bell and Parchomovsky (2006) reviewed the various problems associated with just compensation and then introduced an innovative bargaining mechanism they contend will dramatically reduce the scope of compensation problems and should do it at a very small cost. As part of the Introduction, the authors provided an overview of the proposed model that offers a self-assessment mechanism designed to induce owners of targeted properties to accurately report the *subjective value* they place on the property that is potentially subject to condemnation:

> At stage I, the government announces its intention to take property by eminent domain. Thereafter, at stage II, affected property owners name the price they want for their properties. Finally, at stage III, the government either proceeds with its plan and seizes the properties at the named price, or abandons the proposed taking. If the government decides not take at the self-assessed price, the owner will retain title to the properties, but they will become subject to two restrictions. First, for the life of the owner, the property cannot be sold for less than the self-assessed price. If the property is transferred for less than that price, the owner will have to pay the shortfall to the government. Second, the self-assessed price will become the benchmark for the owner's property tax liability. As we will show, the combined effect of partial inalienability and enhanced tax liability should suffice to keep the owner honest in reporting her subjective value (Bell & Parchomovsky, 2005, p. 6).

This novel approach has considerable merit but does create implementation issues that would best be resolved by means of a synergistic integration with existing tax assessment processes that are fully implemented and operating throughout North America. Before considering a synergistic integration with tax assessment, the following paragraphs provide greater detail about the Bell and Parchomovsky's innovative bargaining mechanism.

The decline in importance of the public use component of the Takings Clause was made clear by the U.S. Supreme Court in the 2005 *Kelo* decision, leaving the just compensation component of the Clause as the only meaningful constitutional safeguard against unlimited use and abuse of the eminent domain power by governments at all levels. Many scholars, however, state that by reliance upon *market value* as the default *standard of value*, the governments and courts have effectively created a condition of "unjust compensation."

In presenting a proposed solution for "unjust compensation," Bell and Parchomovsky (2006) provide an Introduction followed by Parts I – IV and a Conclusion. Part I discusses theoretic reasons for just compensation; Part II discusses the flaws in market compensation; Part III discusses a self-assessment model of eminent domain compensation; and Part IV discusses potential objections to the self-assessment model. The balance of the material for this section is drawn from Bell and Parchomovsky (2006) with page number citations provided as appropriate.

Theoretic reasons for just compensation.

The Supreme Court announced a fairness-based justification for the compensation requirement in *Armstrong v. United States*. Per Justice Blackmun, fairness in the takings context requires that the cost of takings not be shouldered by a small group of property owners, but the Court refrained from elaborating the means by which such fairness could be determined (p. 10). The concept originated with Locke (1690) and was reviewed by Epstein (1985). These concepts were covered fairly well in the literature review, which supports the fact that property owners should be *fully* compensated for their eminent domain losses. The payment of less than full compensation under eminent domain violates the demands of fairness. The psychological harm that incomplete compensation inflicts upon the owners of property taken by eminent domain and upon their sympathizers, and the economic and social harm caused by forgone investment in

property across the board that stems from the fear of undercompensated takings is substantial, but difficult to quantify. Bell and Parchomovsky (2006) also reviewed some of the literature on fairness with respect to just compensation in this section.

Efficiency-based justifications for full compensation under eminent domain were also addressed in Part I of Bell and Parchomovsky, as well as in Section 1.6 of this paper. If government could take property without paying compensation, it is reasonable to assume that government would take too much property. It follows that if government could take property without paying full compensation, government would still tend to take too much at the bargain price. When compensation is not paid in full, the surplus costs are borne by the private property owners whose property is taken. According to Bell and Parchomovsky (2006, p. 14), the most prominent efficiency-based explanation for inadequate compensation references fiscal illusion. Fiscal illusion is the presumed habit of government decisionmakers of ignoring costs that do not directly affect government budget inflows and outflows. When operating under fiscal illusion, a government decisionmaker ignores any costs of their actions to private property owners resulting from takings, aside from those that appear in the budget (such as lower tax yields). Thus, government decisionmakers suffering from fiscal illusion see most of the benefits engendered by uncompensated takings, but few of the costs. An extreme example of fiscal illusion would be a situation such as when a federal government agency such as HUD provides major funding for a project. Once the budget fully reflects social costs and benefits, fiscal illusion no longer distorts the decisionmaking process. To fully overcome the distorting effects of fiscal illusion, takings law must mandate full compensation for losses suffered by the owners of the taken property.

A third view was presented based upon the insights of public choice theory. In that model, an initial efficient proposal to take property for the benefit of society would not be

implemented until approved by a political process ruled by interest groups. Under such a model efficient takings would be likely blocked absent the payment of compensation (Bell & Parchomovsky, 2006, p. 16).

Flaws in market compensation.

In Part II Bell and Parchomovsky outline the flaws in market compensation with respect to surplus *subjective value*, goodwill and "community premiums." In addition, the authors looked at the adverse effects of transaction costs, particularly litigation costs. The *subjective value* that is recognized by the individual owner of the property but not by *market value* has been discussed at length earlier in the paper and will not be repeated here. Not mentioned earlier is the goodwill loss of businesses that must relocate. Many small businesses depend upon their location for a significant portion of their business traffic, especially if they have been in the same location for many years. This applies to both the businesses that own the real property being taken and those that lease their space at the location.

Bell and Parchomovsky (2006, p. 19) used the notorious case of *Poletown Neighborhood Council v. City of Detroit* to illustrate the loss of community premiums. Detroit seized over 1,000 residential properties, several churches, a hospital and more than 100 businesses, destroying the neighborhood in order to make way for the automobile plant. Poletown residents lost not only the value of their residential properties as individual units; they also lost the attendant community premium that stemmed from the existence of the neighborhood as a whole. After the Poletown taking, residents lost far more than the *market value* of their houses in individual sales. They also lost the value of their continuing life in the thriving residential neighborhood of Poletown with their long-time friends and social activities.

As reported by Garnett (2006), academic discussions of the undercompensation problem overlook the important fact that the compensation that a property owner receives almost always results from a bargain between the condemned property owner and the government, rather than a judicial determination of the property's *market value*. Bell and Parchomovsky point out that a voluntary settlement is advantageous for the government as it saves the government potential litigation costs as well as negative publicity. However, eminent domain practitioners caution that the settlement amount offered by the government in pre-takings negotiations is frequently much lower than the *market value* and owners who agree to accept it receive lower compensation than their neighbors who refuse the offer, and seek instead legal determination of just compensation. Various anecdotal horror stories about the government's abuse of its bargaining power are brought to substantiate this claim (Bell & Parchomovsky, 2006, p. 20). Another empirical study reported by Bell and Parchomovsky found that current just compensation doctrine leads to both undercompensation, and overcompensation: owners of high-value properties tend to get overcompensated while owners of low-value lots often receive undercompensation (p. 21). The report fails to support the belief that the government pays sub-market prices due to a superior bargaining position, but does imply that the inexactness of market appraisals almost certainly does lead to suboptimal compensation in general. See "*Lacking value theory to support appraisal procedure*" in Chapter 2 for more detail on inexactness of market appraisals.

Proposed just compensation mechanism.

Bell and Parchomovsky's discussion in Parts I and II of their paper demonstrated two central points that are support by the literature review in Chapter 2: First, fairness and efficiency theories require payment of full compensation at the property owner's *subjective value*. Second, existing compensation doctrine does not ensure property owners full compensation. In Part III

the authors proposed an alternative compensation mechanism that they posit aligns compensation practice with the demands of efficiency and fairness.

The *market value* of a property is generally observable and verifiable by third parties such as assessors where a reasonably active market exists, but the additional *subjective value* surplus enjoyed by the particular owner is generally not. If the government agreed to compensate owners for their *subjective value* surplus it would have to rely on non-verifiable information supplied by owners at the time of the eminent domain process. However, if the owner's testimony were to serve as the basis for determining compensation awards, owners have every incentive to exaggerate. For this reason compensation doctrine systematically disregards those components of *subjective value* surplus that cannot be readily verified. Takings law therefore pays less than full compensation for practical, rather than principled reasons. Currently there is no other choice.

Bell and Parchomovsky drew upon the experience of the income tax system for their solution, which has relied upon self-reporting for many years, and where practitioners have noted that sufficient penalties can curb taxpayers' tendency to under-report their taxable income. The same approach has been suggested for the collection of property taxes by allowing owners to assess their own property value subject to penalties designed to deter underreporting (Levmore, 1982). To balance the tendency to underreport and reduce tax liability, Levmore suggested that the self-reported value would also serve as the property's sale price. Essentially, Levmore proposed placing a "for sale" sign in front of every house at the reported value, which this author considers quite unrealistic for numerous reasons, but it did hint at a solution for the just compensation conundrum.

The Bell and Parchomovsky proposal is different from Levmore's, but does rely upon negative incentives to discourage false reporting. Obviously not understanding the role of the assessed value in the ad valorem property tax system, Levmore's naive goal was to produce higher tax revenues through higher assessments, whereas Bell and Parchomovsky sought to guarantee full compensation to property owners. By contrast to Levmore, the foremost challenge for achieving full compensation is over-reporting rather than the under-reporting that Levmore sought to correct. Property tax law and compensation law do not treat assessed property value identically. Consequently, the shift in focus from tax law to eminent domain compensation has important policy ramifications according to Bell and Parchomovsky (2006, p.25-25). The process proposed by Bell and Parchomovsky begins at the point that the government declares its intent to condemn a certain lot or set of lots and has three phases.

Once the government declares its intent to acquire the property or properties, the owner are all asked to report the value they attach to the property as their *opinion of value* as a fair selling price, which would include the owner's *subjective value*. After the owner states and submits the fair selling price report, under the Bell and Parchomovsky plan the government may either take the property at the declared value or forego its plan to condemn that property. In financial term, the property owner gets to set the "strike price" for the government option to take.

The third time period follows the government decision. If the government declines to take the property, the Bell and Parchomovsky plan would impose two restrictions on the property owners: First, the owners will not be able to transfer the property for less than the self-reported value; and second, their property tax liability will be based on the self-reported valuation. The authors described these restrictions in the following manner:

> The first limitation is essentially a partial inalienability restraint. It does not fully bar owners from transferring their property. Rather, it only sets a price floor (at the self-assessed amount) for transfer. Inalienability does not only apply to commercial sales but also to gifts and more generally to all fee simple transfers, in order to avoid fraudulent circumventions of the inalienability restriction. The partial inalienability restraint will remain in force for the life of the owner, unless the owner transfers the property, in which event the restraint will expire. If the owner wants to transfer the property at less than the self-assessed amount, she may overcome the inalienability restraint, by paying a redemption fee to the government at the time of an otherwise-forbidden transfer. Where an owner seeks to transfer the property for less than the self-reported value, she may do so if she pays to the government a fee equal to the difference between the sale price and the self-reported value (Bell & Parchomovsky, 2006, p.25-26).
>
> The tax restraint is more complicated … Only when the government indicates its intent to seize a particular parcel will our proposal come into play. Once the property owner has submitted her reported value for purposes of eminent domain, the property tax assessor will have to keep track of two values – the government-assessed value and the surplus, i.e., the amount by which the self-reported value exceeds the government assessed value. The government-assessed value will continue to serve as the basis of the regular property tax bill. However, there will be an additional property tax assessed on the surplus … We suggest, however, taxing the surplus at an assessment adjusted rate, rather than at nominal value. Specifically, rather than pay tax on the full amount of the surplus, the owner should pay tax only on the difference between self-reported value and market value, further discounted to reflect the ratio between assessed and market value (Bell & Parchomovsky, 2006, p. 26).

The authors continue for several pages with examples and illustrations of how the two restrictions would be implemented. They offer explanations of how the restrictions might be adjusted over time for inflation and fluctuations in the real estate market, as well as a "broad view" of what is considered a transfer of ownership in order to prevent circumvention of the restraint through creative assignment of rights without full transfer of ownership.

The authors use the balance of Part III to provide an assessment of their own proposal and a self- assessment literature review. In Part IV they discuss what they would anticipate as potential objections to the proposal and how they would be answered. The Conclusion provides a brief summary of the main points of the proposal and a quotation from a Nobel Prize winning economist on the subject of eminent domain.

3.2 Critique of Bell and Parchomovsky's Implementation Strategy

The general implementation strategy offered by Bell and Parchomovsky for their model has a weakness resulting from its limited application. Specifically, the proposed method is not initiated until the planned eminent domain taking is announced by the government, which retains a portion of the personal stress experienced by property owners of not knowing "where the bomb will drop." A better strategy would be to create a continuing awareness among all property owners that the *Kelo* decision has demonstrated that any property might be taken by the government for any perceived public benefit, and establish a system whereby those property owners know and have an official record of both the *market value* of their real estate for the purpose of mortgage collateral and property taxation, as well as the default *just compensation value* as a separately stated official price that includes *subjective value* and relocation expense. Such a system would provide each property owner the opportunity to appeal and negotiate the contingent *just compensation* price in the same forum that they currently have to appeal their *market value* assessment if they believe it to be incorrect. In this manner the bargaining mechanism is continuous and the "strike price" is established before the eminent domain action is ever initiated. In addition, such a system would provide the government project planning office accurate data with which to plan the feasibility of the project.

The incentives proposed by Bell and Parchomovsky to encourage honest self-reporting of *subjective value* provide the necessary concept, but need to be refined to allow smooth, seamless integration with the operations of the government offices responsible for assessment and tax collection in a manner that creates minimum additional administrative burden on the offices. The first limitation that produces what is essentially a partial inalienability restraint may not be realistic to implement in the real world. Instead, some form of a special assessment might be

levied against the real estate that produces a permanent monetary lien under existing procedures for creating special assessments might be used where the special assessment must be "paid off" just like a mortgage before the property can be transferred. The second limitation requires the assessor to keep two sets of value records for the handful of properties to which it might apply, creating an administration burden and considerable chance of error. Both limitations suffer from the potential problem of proper notification, communication and general public understanding of the processes and procedures. These practical problems must be resolved in order to implement the Bell and Parchomovsky bargaining mechanism in the real world of local government operations. The nest section offers some suggestions for improving their model.

3.3 Refinement of Bell and Parchomovsky's implementation

Practical refinements would make the Bell and Parchomovsky model more elegant, administratively easier to implement, and would create a self-reporting balance between the property owner's opinion of *value* for taxation and *value* for a forced taking. I propose the establishment of a system where every property owner would know and have an official record of both the *market value* of their real estate for the purpose of property taxation, as well as the default *just compensation value* as a separately stated official price that includes an estimate of the property owner's surplus *subjective value* and relocation expense. The general public's awareness of the eminent domain issue, resulting from media coverage of the *Kelo* decision, has resulted in a political environment that might allow implementation of a broad-based solution.

Every state has a statutory procedure by which local government jurisdictions certify a real estate assessment roll as part of the annual property tax collection process. In most states this process begins with an estimate of *market value* for every parcel of real property, as provided in

equation (4) in Section 2.2. Whenever the estimate of *market value* is changed by the jurisdiction, typical procedure requires that the property owner be notified in writing of the new *market value* estimate that would become the basis of their assessment. Some states use fractional assessments, but they remain a function of the market value. Preferential adjustments of the assessed value are sometimes applied as shown in equation (4); however, the original *market value* estimate remains available in the system. In any case, when the property owner receives the assessment notice, they are given the opportunity informally and formally protest the assessed value through an appeals process and even the courts. Normally a small percentage of the property owners do appeal their values and a small group can almost be counted upon to do so every time. If they are still dissatisfied after an informal visit to the local assessment office, they may formally file an appeal with the local Board of Equalization (Local Appeals Board, or similar name), or other independent body that hears such appeals.

The problem is that the appeal boards are frequently made up of political appointees who are not necessarily qualified to hear and decide complex valuation disputes and the general tendency in the majority of cases is to approve requests for lower assessments. The problem is exactly the opposite of the *just compensation* issue. Since the assessed amount establishes the property tax, the property owners have an incentive to seek lower assessments and willingly execute affidavits declaring their belief that a lower value is justified and is the correct value of their properties. A small number of property owners are regulars who appeal every time their assessed value is increased, which is a pattern that I have observed across the country. In 1988 I was directly involved in a project in Louisville, Kentucky, in which about 88,000 homes were reassessed at about 95 percent of *market value*. Many of the property owners were near the Louisville International Airport. Assessment notices were sent to the property owners and

several thousand appealed their new assessments, signing affidavits claiming lower values based upon various reasons including airport noise. The local Board of Appeals granted reductions for a majority of the cases.

The following year it was announced that Louisville had been selected as the new hub of UPS overnight package delivery operations and Standiford Field (the International Airport) would have to be expanded, requiring eminent domain condemnation of a large number of typical 1960's tract homes in the airport area, which, coincidentally, had just been reassessed in 1988. The new UPS operations were projected to create a large number of jobs for the community, but economic development was not used as the justification. The City of Louisville initiated negotiations with the homeowners and discovered that many were demanding high prices for the homes. This became headline news in the local media. In the process one reporter remembered the headline news from the previous year about the same homeowners in the area claiming to have been overassessed and began investigating records of the appeals, discovering that many of the homeowners were demanding prices that were more than double the values that they had claimed on their certified affidavits during the assessment appeals less than a year earlier. This also made headline news and the City representatives suddenly had new leverage in their negotiations. This part of the Louisville airport expansion story was not mentioned in a recent report about citizen involvement:

> Louisville, Kentucky, was the site of another case where citizen outcry and lawsuits added time and financial costs to the expansion of the local airport. In 1989 the city used urban renewal powers to acquire neighborhoods near Standiford airport. The government termed these neighborhoods "blighted," as the legal rationale for the taking. The residents took umbrage at that term, considering themselves to have been insulted, and filed suit. The Kentucky Supreme Court heard the case and found that the neighborhoods were, indeed, not "blighted." Louisville had to settle the case for $6.2 million, an agreement which then allowed the expansion to occur. Here is a clear case of enormous costs in money and time due to lack of public participation and "buy in" to a plan. There was

> further litigation involving appeals and re-hearings into the early 1990's and the original cost estimates for the relocation of the residents were based on the assumption of a seamless process and community acceptance. The conflict helped drive the actual costs from about $60 million to close to $130 million (Cairns, 2005, p. 6).

The Louisville airport expansion project is a real-world illustration of how a synergistic improvement in equity and efficiency could be made possible by integrating the basis for *just compensation* with the basis for property taxation. If the 1988 assessment notices had provided the property owners with both the *market value* estimate for property taxes and a *just compensation value* to be used as the contingent value in the event of an eminent domain action, considerable human stress reduction and project cost savings could have been realized. In fact, the Louisville airport expansion project also illustrates that there is a proper place for eminent domain takings for economic development, and government needs to be more honest in its dealings with its citizens. This author was there and can confirm that the condemned homes were not "blighted" – they were in fact typical homes owned by solid blue-collar citizens with median home values near the median value for the entire community. The project has been a tremendous economic success for the community and UPS is now one of the top employers in Louisville. The project was proper and justified, but the implementation was not handled correctly. Declaring those homes "blighted," as the legal rationale for the taking, was an insult to the owners. At the same time, those owners should not have falsified their declarations of value in 1988 and then demand much higher *just compensation* prices in 1989.

Property taxation and eminent domain are two of the four property rights reserved by government. Instead of waiting for an eminent domain condemnation to be initiated as proposed by Bell and Parchomovsky (2006), this author proposes integrating the *just compensation* determination as part of the assessed value determination procedure, yielding much improved

community awareness of the treat of eminent domain and the opportunity for property owners to realistically consider and appeal the *just compensation* price before any eminent domain action is ever considered. In this manner both values would have regular review by the property owners, just as the taxable value does now, and when an eminent domain action is determined to be necessary, it could be undertaken in a much more reasonable manner. Property owners will have reviewed and consented to the established *just compensation* price on each individual property, providing government planners with far more accurate and reliable cost data with which to do cost comparisons of alternative project sites.

Just compensation value would be equal to the total of the *market value* estimate of the real estate value as set by the assessor for tax purposes plus an established increase in value determined according to a standard algorithm that represented the surplus *subjective value* of the real estate to each individual property owner. The standard algorithm would be established by properly designed independent studies, but would necessarily be a function of the assessed value. For example, the independent study might establish that *subjective value* is equal to the *market value* established for tax assessment plus $50,000 plus 15% of the assessed value. Thus, for a home with a *market value* assessment of $200,000, the function would yield a *just compensation value* of $280,000 on the assessment notice along with the $200,000 tax value. If the property owner successfully appealed the tax assessment value, achieving a reduction to $160,000 for property taxation, then the *just compensation value* would automatically be adjusted to $234,000. On the other hand, if a property owner believed that $320,000 would be the fair *subjective value* of the property, the $280,000 could be appealed and if successful, would result in a $320,000 *just compensation value* along with an automatic assessed value of about $234,800, rounded to the nearest $100. Each value would then act as a damper on the other in the owner's mind.

The mechanism just described would be very easy to implement in existing assessment and tax systems and could be handled within existing appeal processes. The "markup" for *just compensation value* has been established historically by the Mill Acts in the middle of the 19th century (Moore, 2006c), which was part of the jurisprudence that the U.S. Supreme Court considered in its *Kelo* decision. The Mill Acts created a form of economic development in which the property would be taken from one private party for the benefit of another private party (the operator of the mill), since the resulting mill was viewed as benefiting the community as a whole. Under the Mill Acts, some states provided for a premium of up to 50% above the "normal value" of the property as *just compensation.*

Under the model being proposed in this paper, eminent domain takings should create less controversy with respect to *just compensation* since for the most part the prices will have been reviewed and accepted prior to announcement of the project. *Just compensation* court cases should be virtually eliminated. This paper does not consider controversy over the wisdom of the project, its location, or whether the purpose is "public use." However, the limitations proposed by Bell and Parchomovsky would still be needed for those rare situations were the property owner claimed misunderstanding of the *just compensation value* notice, etc. Assuming that under the plan proposed in this paper holdouts were legally possible, and they could de-rail the entire project, the two property rights restrictions would be implemented. The partial alienation should be accomplished by means of a special lien on the property, similar to a delinquent tax lien, that would be equal to the owner's holdout price less the established *just compensation price* that would require lien satisfaction at the time of property transfer equal to the differential between the actual transfer price and the owner's holdout price in much the same fashion as described by Bell and Parchomovsky. The second limitation on the property would be implemented as a

special value modifier that creates an additive preferential assessment (see equation 4) instead of a reduction in assessed value. Some states have programs intended to encourage investment in property improvement in deteriorated areas. Under plans such as in the City of Richmond, Virginia, the property value is determined prior to making the improvement and then immediately after the improvement is made. The difference in value is then established as a deduction from the assessed value for a period of 15 years. This allows the property to appreciate over the 15 year period, but with the amount of the investment always deducted from the assessed value prior to calculation of taxes. For the holdout in the eminent domain procedure, the difference between the holdout price and the established *just compensation price* at the time of the eminent domain action would also become a permanent value modifier on the property until it transfers ownership, with the new assessed value being established each year through the normal process, but with the difference in value between the holdout price and the established *just compensation price* at the time of the eminent domain action being added as a special preferential assessment to the new assessed value established each year through the normal assessment process prior to calculation of taxes. These procedures are capable of being implemented with minimum change to existing assessment and tax software because they are applied with methods that already exist.

Chapter 4 – Summary, Conclusion and Recommendation

4.1 Summary

The idea for this paper was conceived while researching eminent domain with respect to the meaning of "public use" in the aftermath of the 2005 U.S Supreme Court decision in the *Kelo* case, which demonstrated that "public use" will be very broadly interpreted in the federal courts. This means that almost any property might be taken for almost any legal purpose. With this reality, it becomes essential that *just compensation* be paid to the owners of condemned property when eminent domain takings do occur. But *just compensation* is dependent upon valuation of the taken property.

The problem of valuation becomes only more acute when we consider the question of individual *subjective value* – that value in use that is realized differently by each person. At this point we no longer have the hedonic models to guide us in valuation, but only the observed behavior of individuals and their individual preferences. The fact is that some people like spinach and others do not. We must learn to make peace with the uncertainty associated with personal valuations of property, finding a way to rationalize the recognition of such personal valuations even if they cannot be confirmed with certainty. We must also make accommodations for those people who purchase property at the current market price, but who will not sell when that price moves up by some determinate amount. The singular fact that we do not see for sale signs on every home suggests clearly that market value supplies only the *minimum bound* of *subjective value* that people attach to their own homes. The low frequency of sales is powerful evidence that most homes have a *use value* that is greater than the *market value*. This is another

way of saying that most of the time a particular property is in the hands of individuals *who value it most*.

We learned that value is a word of many meanings and provided a few of the in the section on definitions. We found that real estate ownership is more complex than one might think and that the theory of property is evolving. We learned that the courts view *just compensation* as *market value* by default and that scholars view the question as unanswered. We reviewed value theory and the history of the valuation process in depth, learning that current valuation dogma has actually evolved in the very recent past, that universal agreement does not exist, and that some scholars believe that valuation practice has moved away from theory in the past 50 years.

We then summarized the innovative bargaining mechanism that Bell and Parchomovsky (2006) contend will dramatically reduce the scope of compensation problems and do it at a very small cost. After that we suggested refinements to their mechanism and introduced a synergistic methodology for integrating *just compensation* with the local property assessment process.

Jurisprudence concerning eminent domain has a 200+ year history (Moore, 2006c). On the other hand, the economic foundation of appraisal practice began with Marshall and Fisher little more than 100 years ago, and has followed a meandering path through the 20th century, with the current definition of *market value* only being agreed upon in the past 20 years. Why, then, is *market value* the current default *standard of value*? Because it is the default in the absence of any better method that can be justified. The proposal of Bell and Parchomovsky as enhanced by this paper offers a better method that is justified by the facts. Placing the proposed *just compensation value* on the assessment notice along with the *market value* proposed as the basis of property taxation creates a synergism that balances the property owner's monetary incentives and provides a due process for review and appeal prior to eminent domain action.

4.2 Conclusion

The question studied in this paper was: Should *market value* be the *standard of value* for just compensation under eminent domain? The conclusion is that market value should not be the *standard of value* for just compensation under eminent domain. Blind reliance of the courts on *market value* as the standard results in "unjust compensation", or at best, inconsistent compensation.

According to Alfred Marshall, Irving Fisher, Frederick Babcock and others, the basis of value for all property lies in the prospect for future returns. In establishing demand prices in the market, *consumers* ("willing buyers") would theoretically offer prices that represent the discounted value of future returns. At the same time, owners of *all* existing properties would have established in their minds a *subjective value* for their properties based upon their evaluation of the future returns to them personally. Such personal returns from the amenities enjoyed in their individual properties would be in excess of the demand prices of buyers in the market as evidenced by the fact that only a very small fraction of all properties are even offered for sale. Thus, the *willing sellers* referenced in the definition of *market value* are not a properly drawn statistically random sample of all properties, but instead represent a very small fraction of all holders of the demanded good and likely have a compulsion to exchange their property in the market because of some other change in their personal circumstances such as new employment in a different community or a major change in personal economic circumstances (which becomes a confounding variable). That significant personal change in circumstances directly offsets their own opinion of the current property's *subjective value* (such as substitution of considerably higher future returns from new employment elsewhere) to the extent that they are willing to

place the current property on the market at the high end of the current *market value* range, causing them to temporarily assume the role of a *willing seller*.

Such circumstances, which operate to create *market value*, certainly do not exist under eminent domain takings and represent a sad distortion of the concept of "just compensation." When the market transaction is consummated, the *willing buyer* acts upon imperfect information and discounts the transaction for potential risk resulting from all possible unknowns, offering the highest market price considered prudent. At the same time the *willing seller* has other unrelated factors affecting the transaction decision that have caused the previously established *subjective value* to be discounted to the highest acceptable market price. Following the transaction, as the new owner enjoys the future returns from the property amenities that had been anticipated yet discounted for uncertainty at the time of the transaction, the new owner's personal *opinion of value* increases to a level well above *market value* as the original discount for uncertainty is capitalized into a new individual *subjective value* for the property.

4.3 Recommendation

Just compensation value would be equal to the total of the *market value* estimate of the real estate value as set by the assessor for tax purposes plus an established increase in value determined according to a standard algorithm that represented the surplus *subjective value* of the real estate to each individual property owner. The methodology for accurately determining the *market value* estimate of the real estate value exists and was described in detail in Chapter 2. The standard algorithm for determining the surplus *subjective value* of the real estate would be a function of the assessed value. It does not exist and research is needed to establish it by properly designed independent studies, which is the recommended next step.

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Appendix A: What is quasi-rent?

An easily understood explanation of economic rent and quasi-rent can be found at http://www.gmu.edu/departments/economics/bcaplan/quasi-rent. Professor Bryan Caplan of George Mason University explains the terms and concepts as follows:

> There are many different meanings of the word "rent" in economics, but the #1 modern usage is "An earning in excess of opportunity cost." A worker earning $10 an hour, when their alternative on the open market is merely $9, is considered to earn a $1/hr rent. (Why use the word "rent"? Well, it all goes back to Ricardo and other classical economists. Since the land is just "there," they figured that from some point of view, the opportunity cost of land is zero. The term rent then got expanded to apply to anything "land-like"; i.e., any resource that is "just there," which will exist whether or not it is paid.) The general assumption is that rents are just useless inefficiencies. They are basically just like the government granting a monopoly on salt; the price of salt then exceeds its opportunity cost, and for no good reason. A quasi-rent is different. It LOOKS a lot like a normal rent; from a superficial viewpoint, it is a reward paid to a factor which exceeds its opportunity cost. But if you look deeper, you see that in fact, the rent is a necessary incentive for something. For example, a patent looks a lot like a monopoly salt grant on the surface. The pricing policies of the patent-holder and the salt-monopolist look a lot alike. But the crucial difference is that the patent-holder had to do something to GET the rent; he had to develop a new product. In the long-run, no industry can earn more than the normal rate of return, so the effect of the patent is just to get more people to try to invent products; enough people so that inventing things earns the same average rate of return as anything else. What do quasi-rents compensate for? The obvious

> example is innovation. Other good candidates include search (a worker earns more money because looking around for better jobs takes effort which must be compensated). Also -- quasi-rents may be paid for product variety. When products are heterogeneous, there is room to charge a little above opportunity cost; but the incentive effect of this "breathing space" is to encourage the satisfaction of consumers' diverse tastes (2006).

Professor Caplan's examples can be translated directly to our economic discussion about the theory of housing prices. A home buyer is compensated with positive quasi-rent for a diligent search and gathering extensive market information prior to making a purchase decision. A developer is compensated with positive quasi-rent for creative design and ingenuity in making a new subdivision heterogeneous so that each street and each home has the appearance of uniqueness (Morrow-Jones, Irwin & Roe, 2004). On the other hand, an identical subdivision in another community with lower quality schools, as indicated by proficiency test scores, will suffer from lower home values (Haurin & Brasington, 1996, 2005; Fischel, 2001), which is a negative neighborhood quasi-rent attribute not related to the specific characteristics of a particular home. A recent study of 28,828 home sales reports that certain "improvements" such as a mother-in-law suite, a professional office or fencing can reduce selling price by as much as 5.2% (Lang, 2005), which are examples of property-specific negative quasi-rents. Satisfaction of home consumers' diverse tastes causes demand for certain home styles, floor plans and architectural features to vary through time, resulting in negative quasi-rent for out-of-fashion styles and positive quasi-rent for those in demand. This is one of several reasons why frequent reassessment is important.