

Economic Analysis of Takings Law: *Reexamination*

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ABSTRACT

The mainstream literature does not seem to pay adequate attention to the following important features of the use of ‘takings’ in the real-world: One, compensation for the takings under ‘eminent domain’ is systematically less than the compensation in ‘civil liability’ cases; Two, the compensation is not the main driving force for decision making of the government and its agencies; Three, the most legal jurisdictions provide for ‘constitutional review’ the judiciary of the takings decisions. In this paper, we analyze and model the takings by factoring in these issues. We show that the provision of the constitutional review can help achieve efficient outcome - it can induce efficient decision making by the government and simultaneously ensure efficient investments by the property owners. We extend our model to make distinction between the ‘public’ versus ‘private’ purpose takings. Contrary to the mainstream literature we show that the property owners can simultaneously be compensated generously while maintaining incentive for efficient investment. We provide a framework to analyze the main pillars of the eminent domain; namely, just compensation and distribution of the surplus, public interest or the common good, the due process and dispute resolution, and finally the issue of the power of the eminent domain itself.

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1 Introduction

The institution of private property assigns the use, the appropriation of the fruits and the voluntary transfer right attached to a resource to an individual or a private person. It protects the owner against anybody - including the state - and is thus widely considered to be a human right, even though the most legal jurisdictions permit the state to infringe on this right under some circumstances. Unsurprisingly, a large literature exists on the issue of the takings of private properties by the state. However, the mainstream literature does not seem to pay adequate attention to several important features of the use of ‘takings’ in the real-world.

First of all, the compensation for the takings under ‘eminent domain’ is systematically less than the compensation in ‘civil liability’ cases. As is demonstrated in Section 2, the takings compensation for a lawful expropriation tend to systematically less than civil liability. This is true not only for the socialist countries and the countries with a weak legal system, but also for the international law and the states with a democratic rule of law.¹ Is this efficient in terms of deterrence and, is it fair? We address these questions in detail.

Second, the economics model on eminent domain apply the approach of civil liability to study the takings decisions by the state. We argue that the compensation is not the main driving force for decision making of the government and its agencies. The government agencies are not profit-oriented like a private firm. The literature on state liability shows that this view must be rejected outright. The use of models of civil liability to study the decision making by the state are misleading. In an early article Cohen wrote “The critical assumption behind such recommendations (*of state liability*) is that the government reacts to liability rules as a private actor would”.² Cohen goes as far as to question the rationale of state liability in general. “We might better direct our efforts to designing effective “political” markets instead of attempting to use economic signals to influence state and bureaucratic action”.³ These observations, which Cohen related to wrongful acts of government officials, are even more important

¹See, P. Niemann, P. Shapiro, Efficiency and Fairness, Compensation for Takings, International Review of Law and Economics 28 (2008) 157-165. These authors work with a budget maximizing bureaucracy, which is however a very special case.

²D.S. Cohen, (1990), “Regulating Regulators: The Legal Environment of the State,” 40 U. Toronto. L.J. (1990) pages 213-270.

³D.S. Cohen, (1990), “Regulating Regulators”: op.cit. p.270.

for the acts of the parliaments or governments. Moreover, bureaucrats might be interested to maximize their budget.⁴ as analyzed by Miceli and others.⁵ Indeed, models used in civil law to determine liability for damages are not suitable for the state. In Section 2.2 this issue is discussed in greater details.

Third, the most legal jurisdictions provide for ‘constitutional review’ the judiciary of the takings decisions. We show that the provision of the constitutional review along with less than full compensation can help achieve efficient outcome - it can induce efficient decision making by the government and simultaneously ensure efficient investments by the property owners. Less than full compensation incentivizes owners to fight illegal acts and claim restitution. This, in turn, ensures that legal takings are made only in the interests of the public. The less the interests of the public attached to takings can effectively be controlled by the law and the courts, the more reasonable full compensation would be. Moreover a law that better guarantees that a taking pursues the public interest would reduce the rationale of full compensation without any contribution on the part of the owner. Hence a less than full compensation avoids over investment and incentivises filings for restitution rather than for damages and thus avoids the suffer and cash in effect’.

Our framework allows the crucial distinction between the ‘public’ versus ‘private’ purpose takings. We show that the property owners can simultaneously be compensated generously while maintaining incentive for efficient investment. This result is in contrary to the mainstream literature literature which argues that full compensation cannot guarantee the socially optimal level of investment, as especially argued by Blum and Rubinfeld.

Finally, we analyze the main pillars of the eminent domain; namely, just compensation and distribution of the surplus, public interest or the common good, the due process and dispute resolution, and finally the issue of the power of the eminent domain itself.

To put the issue in historical perspective, institutions of property has its

⁴For an analysis in Korea see J. Choa, I. Kim (2001) An economic analysis of takings in Korea: endogenous probability and announcement effects, *International Review of Law and Economics*, 22 (2002) 331-346

⁵Such compensation shall be determined by establishing an equitable balance between the public interest and the interests of those affected.

roots in Roman law, rather than in the laws and institutions of traditional communities or tribes. So, property is not an investiture or privilege which a ruler can assign or withdraw. This concept has become strongest in those areas that have embraced the market economy, even though scholars have criticized the Roman property law as cold, un-fraternal and capitalistic. Historically it replaced or crowded out other forms of property rights like the commons or commandries, which reflected traditional community values rather than individualism and market capitalism. Strongly protected, well defined and undiluted property rights are a prerequisite for well functioning markets.

In many developing countries and in countries like Korea, which have recently accumulated substantial wealth, private property is less well protected against the state than in western countries. The reasons for this are economic and cultural.

One important economic reason was the influential theory of state led economic development, which dominated development economics from the 1950ies to the 1980ies. From the 1940ies onwards the newly independent countries of Africa and Asia implemented various types of socialism. Within this political environment development economics emerged as an academic discipline. In the 1940's and 50's, many of its most prominent scholars taught that developing countries needed state leadership of the economy.⁶ These theories maintained that a market economy might be good for rich countries, but that in poor countries free markets would lead to so many departures from the workable market model that the state were to lead the economy. Development theory diagnosed a whole Olympus of market failures in poor countries. These ranged from increasing returns to scale and natural monopoly via unbalanced growth to the necessity of a state led big push. Moreover such market failures were also attributed to linkages between firms not internalized by prices as well as dualistic economies with wages differing from the opportunity costs of labor. These considerations triggered the demand for a strong hand on the part of the government to plan the economy. Within a planned or mixed economy private property must necessarily be less well protected by the law than in a market economy. Also the state must have planning capacity and the taking of private property by the state must be relatively easy in order to promote economic development.

⁶See P. Krugman, 'Complex Landscapes in Economic Geography', (1994) 84(2) American Economic Review 412.

Development economics has ceased to be the dominant paradigm pertaining to developing countries, yet the legal structures supporting a planned or mixed economy still exist. However the shift of the sustainable development paradigm from state led growth with a strong hand from above to a decentralized market economy will also tend to change the laws of eminent domain in favor of enhanced private property protection.

In East Asian countries a cultural Confucian influence supports taking laws with ample discretion for the state. Ginsburg argues in an article on constitutional judicial review in Korea and Taiwan that this tradition emphasizes social order over individual autonomy as well as responsibilities over rights.⁷ Ideally the state organs would form a harmonious unity under a strong leadership which is to be constrained by a community oriented ethic. They are traditionally not seen as organizations monitoring and controlling each other. Yet Ginsburg also shows how innovative legal systems in these two countries have developed in recent years by introducing constitutional judicial review and protecting individual rights including property against the administration and parliament.

Both, development economics and culture favored taking without an elaborated due process, with ample discretion of the bureaucracy with outsourcing the taking decisions from the state to private firms, with no temporary relief, without constitutional review of the taking decisions and with damage compensation often much lower than a damage award in civil law cases. This article deals with some basic problems of expropriation law from a law and economics perspective. It makes reference to German rules pertaining to takings.

2 The Real-world Takings: *Salient Features*

2.1 Taking Compensation Vs. Civil Liability

An individual who loses property is faced with a loss or disutility thus placing her on a lower ranked indifference curve. Full compensation would require providing the individual with those goods or the money required to buy them, such

⁷T. Ginsburg (2002) Confucian Constitutionalism? The Emergence of Constitutional Review in Korea and Taiwan Law & Social Inquiry, Vol. 27, No. 4, pp. 763-690

that this possession would place her back on the original indifference curve possibly endowed with a different basket of goods. Legal orders do not fully meet this economic requirement for full compensation even in cases of tort law, in which an unlawful act would trigger damage compensation. In many countries including Germany damage compensation is conceptualized by the so called differential method.⁶ According to this method a court would weigh the actual wealth of the claimant against the hypothetical wealth assuming the wrongful act, which led to the damage, had not occurred. The difference between these two numbers defines the damage award. As a result the original wealth is restored rather than placing the claimant on the original indifference curve had the wrongful act not occurred. This way of damage assessment includes all future expectation, the good will, interest, and losses from currency devaluation or any other loss of wealth. However in many countries - including Germany - it does not include sentimental value, mental stress or other non-financial damages. Some countries like France compensate non-financial damages. From an economic view the exclusion of non-financial damages economizes on the costs of the judicial procedure but leads to under-compensation and possibly under-deterrence.

In the law of eminent domain a precise definition of the damage award such as the differential method is missing. Instead one finds a large number of definitions which are often vague and have to be substantiated by jurisdiction. However, almost all of these definitions have one thing in common. They generally lead a damage claim, which is below the level of compensation in a tort law case under the differential method.⁸ Before turning to the question of whether this is in any way defensible from an incentive perspective or fairness point of view, we provide you with some examples.

In international law the damage award has to be calculated according to the differential method, whenever the act of expropriation occurred in violation of international law⁹. A Korean investor whose foreign owned land is taken by the foreign state, would be awarded full damages under international law, provided the act of taking violates a bilateral investment treaty and provided that restitution is impossible, for instance due to the fact that the expropria-

⁸In recent years some of the states in US have increased compensation for takings. On this see Section 4.

⁹N. Birch (2010), Comparative Compensation, in W.Schill, International Investment Law and Comparative Public Law, 2011 Published to Oxford Scholarship Online, pp.2-31

tion does not violate national law. If however the act of taking was legal under international law very different formulas are applied in order to describe the damage award. The frequently/broadly used Hull formula requires a “prompt, adequate and effective” compensation, meaning compensation without unreasonable delay, covering the fair market value and being transferable. This is amounts to a lower damage award than under the differential method. Developing countries used the term “just compensation” in a UN resolution on the “New International Economic Order”, a damage award of which is again lower than according to the Hull formula and would allow the government to take into account instances of colonialism when calculating damages and thus potentially reduce the award to a nominal compensation. The term fair market value is also subject to dispute since it could be viewed at as the actual market value, the discounted future income stream or the book value. Different views also exist on the date of valuation. Should this be the value at the time of the decision on a public project, the taking decision, the time of taking or at the time of judgment? In the latter case compensation would be higher, because the subsequent increase of the value resulting from the taking would be included in the compensation. However, the general practice of international law is to disregard this surplus value when calculating the damage award. Current practice of international law follows the Hull formula, which leads to an award higher than according to other formulas but lower than under the differential method.

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In Germany compensation for taking/expropriation is regulated by the constitution (Art. 14 Abs. 3)¹¹ and by many sub-constitutional laws, which are often not federal but state laws. The constitution does not require full compensation but rather a compensation which balances the interests of the society and of the individuals affected. The constitution requires that taking must be regulated by sub-constitutional laws, for instance zoning laws, regional planning laws, energy laws etc. and that these laws must describe the compensation formula. This also applies to cases in which sub-constitutional law does not regulate or is too imprecise with regard to the level of compensation. The constitution does not force but allows the sub-constitutional lawmaker to fix a damage award below a civil liability award. The constitution states that the compensation must be determined by law and that the rules of compensation

¹⁰N.Birch, op.cit.

¹¹“Such compensation shall be determined by establishing an equitable balance between the public interest and the interests of those affected.”

must balance the interests of the society and of the affected persons. This rules out a purely nominal compensation, it allows but does not require full damage compensation. Usually the market value is compensated but, if circumstances require less than the market value may be paid as compensation (Reduction clauses). Chances and expectations which are not reflected in the price are not protected in sub-constitutional taking laws.

One possible rationale for this legal dogma is that a civil liability award is to compensate the consequences of an unlawful tortuous act, whereas a taking is considered to be lawful and in the interests of the public. It may imply that the citizen affected by the taking decision has to make some contribution and sacrifice some personal wealth for the pursuance of the common good for which the taking decision was made. It may also require that the damage award is further reduced if the citizen not only loses property and wealth but at the same time enjoy positive externality and gains wealth by the taking decision.

What is the difference of compensation for taking and compensation in a tort case if the market value is the underlying standard for both rules? This complicated matter cannot be dealt with in substantial detail but rather be illustrated as follows.

1. If as a result of a tortuous act or breach of contract a business must be relocated to a different location and the owner can show that the expected income to be earned is below the income level of the old location, the owner must be compensated with the present value of these losses, assuming that the market value for both locations is identical. This would be an award over and above the market price of the old location. In Germany compensation for taking would be constitutional if the sub-constitutional law rules out or limits compensation for this additional loss.
2. Under tort law a tenant of the owner, who is forced to use new premises which are less profitable, has a claim for compensation of these losses. Taking law/Regulatory taking might either exclude him from these losses or to a payment of only a quota of them.

In sum, the takings systematically lead to lower compensation for a lawful expropriation than civil liability. This does not only apply to socialist countries or such countries with a weak legal system but also to international law and to states with a democratic rule of law such as Germany. Is this efficient in terms

of deterrence and is it fair?¹²

2.2 Compensation Cost and Takings Decisions

Does Compensation Cost affect Takings Decisions? We argue that the level of damage compensation cannot provide foreseeable incentives for the state. Taking is an involuntary transaction. A theory of taking is therefore part of the theory of involuntary transactions, which dates back to the seminal article of Calabresi and Melamed on ‘property versus liability rules. These authors argued that if a right or entitlement is protected by an injunction, which excludes any involuntary transfer of title, this guarantees that resources flow to the highest valued user only by voluntary transactions. It also guarantees that any such transaction is beneficial to both parties. However this result is dependent on low transactions costs, which also includes the absence of free rider and hold up positions. Therefore some legal entitlements should be transferred by force if transaction costs are very high. A typical example in corporate law are squeeze out rules which allow the majority owner of between 90 and 95 per cent of a company’s shares to take the other 5 per cent against compensation.¹³ The compensation that covers all losses of a forced transaction is argued to be efficient in the sense of a Pareto improvement.

Can this argument be extended to a takings on the part of the state? For the sake of argument let us disregard all critique in the broad literature on the Calabresi-Melamed proposition. Namely this critique includes the fact that often not all damages are covered by compensation rules and that many recoverable damages cannot be sufficiently proven e.g. the value of “good will” or a patent. Moreover the critique is extended by the claim that judges are outside observers and hence cannot know the parties’ subjective valuation which thus tends to result in under-compensation despite a full damage award under civil liability. Ultimately this would question the proposition that a forced transaction is be a Pareto improvement.

¹²P. Niemann, P. Shapiro, Efficiency and Fairness, Compensation for Takings, International Review of Law and Economics 28 (2008) 157-165. These authors work with a budget maximizing bureaucracy, which is however a very special case.

¹³This would save huge costs of informing the public about the state of the company as it would then be owned by one person only. The minority shareholders then lose their hold up position, which might make a voluntary transfer difficult or even impossible.

However, assuming that all damages were compensated, the question is: Would full state liability lead the state to only expropriate property if it becomes more valuable in the hands of the new owner?

In view of the insights of Mancur Olson’s seminal book on “The Logic of Collective Action”. Therefore one should not be too optimistic with regard to the incentive effects of more compensation on the part of the state to avoid such takings which are not in the interests of the public. It is always possible that an overriding public interest is not within the interests of the government and vice versa. To prevent takings that do not pursue the public interest is the task of the constitutional and sub-constitutional legal norms, as well as those courts which adjudicate the norms.

Moreover, the literature on state liability shows that this view must be rejected outright. Authors who transfer models of civil liability to the state are mistaken. In an early article Cohen wrote “The critical assumption behind such recommendations (*of state liability*) is that the government reacts to liability rules as a private actor would”.¹⁴ Cohen goes as far as to question the rationale of state liability in general. “We might better direct our efforts to designing effective “political” markets instead of attempting to use economic signals to influence state and bureaucratic action”.¹⁵ These observations, which Cohen related to wrongful acts of government officials, are even more important for the acts of the parliaments or governments.

Indeed, models used in civil law to determine liability for damages are not suitable for the state. Parliaments are not profit-oriented like a private firm. Rather, the effect of liability on voting behavior of members of parliament is most relevant and must be analyzed. Parliaments engage in rent seeking activities, they are dependent on voters in their constituency. Whether liability can change the median voting behavior in parliament is an open question.

Bureaucrats might maximize their budget¹⁶ as analyzed by Miceli and others.¹⁷ It is difficult to model the effects of liability rules on administrations and

¹⁴D.S. Cohen, (1990), “Regulating Regulators: The Legal Environment of the State,” 40 U. Toronto. L.J. (1990) pages 213-270.

¹⁵D.S. Cohen, (1990), “Regulating Regulators”: op.cit. p.270.

¹⁶For an analysis in Korea see J. Choa,I. Kim (2001) An economic analysis of takings in Korea: endogenous probability and announcement effects, International Review of Law and Economics, 22 (2002) 331-346

¹⁷Such compensation shall be determined by establishing an equitable balance between the

even more so to model them on parliaments.¹⁸

Comparable observations apply to bureaucrats, who might want to increase their budgets or engage in empire building and many other activities not related to the common good. State liability, whose costs can be passed on to the general taxpayer can by no means guarantee that members of parliament and bureaucrats do what they should do. Unlike for the utility maximizing individual or a profit-maximizing firm the incentive effects of state liability are unclear even in their direction and no robust models exist unlike in the literature for civil liability. The level of compensation, be it full compensation, reduced compensation or no compensation at all, provides little information on how parliaments and bureaucracies decide. Therefore liability as such has no predictable incentive effect on the state. Especially little can be said about whether full compensation would deter a public organization from taking land unless the social value of the land were to increase. Moreover, the argument of fiscal illusion becomes problematic if compensation costs can be easily shifted and spread around to the general taxpayer and if the benefit of taking goes to a small and highly motivated group.

It may appear counterintuitive but full liability can even lead to the perverse effect that the state engages in more unconstitutional takings in the private interest of oligarchs or lobby groups, which are ultimately against the constitution and detrimental to the economy.

To sum up, full compensation for taking is no safeguard against rent seekers demanding taking decisions from the state.

2.3 Constitutional Review

The provision of an effective constitutional review can change things drastically. This can be shown with a thought experiment. Assume that a government plans a whole series of takings of which half are constitutional and pursue the interests of the public whilst the other half are privately incentivised and uncon-

public interest and the interests of those affected.

¹⁸The first author here has shown elsewhere that state liability pertaining to state decisions is highly unpredictable even in its direction and that it may even lead to the perverse outcome that more liability leads to more unwanted or unlawful state activity.

stitutional. Assume also that courts are independent, law abiding and protective towards the constitution. Assume further that compensation for taking is below full compensation, for instance 70 per cent. Then all owners have a strong incentive to go to court and demand restitution rather than compensation, since restitution is more valuable to them. The constitutional review will guarantee that that half of them will get their land back and the other half gets 70 per cent compensation whilst all takings permitted by the courts will be constitutional. In other words this rule would prevent unconstitutional government activity. Assume now that the rule is not 70 but 100 per cent including all non-financial damages plus a small epsilon. Then no affected citizen will go to court for restitution and the government would get away with all constitutional as well as unconstitutional takings. Therefore as long as the judiciary is loyal to the law a rule stipulating less than full compensation has the tendency to curb unlawful taking decisions of an administration. It avoids an attitude of citizens not to fight for the restitution of their property and thus to check unlawful acts of the government with the help of courts.

3 Model

3.1 Basics

Consider a context of takings. A government may take away m properties. Let different properties be owned by different individuals. The taking may be for provision of a public or a private good/purpose. Suppose the taking decision will be made in future, say at date $t = 1$. However, in the mean time, the property owners can make investment in land/property. The investment affect the value of the property to the owner. Let x denote the (self-interested) investment made by the owner at date $t = 0$. The value of the property to the owner increases with investment x . In the interest of simplicity assume that all properties and individuals are identical. Let V be the value created due the investment x by the owner. Plausibly, $V = V(x)$, $V'(x) > 0$, $V''(x) < 0$. If government takes away the property, the entire $V(x)$ goes waste, so entire investment will turn out to be a waste.

However, the taking/acquisition will result in a net benefit of B to the beneficiaries of the project for which taking is done; $B \in (0, \bar{B}]$, $\bar{B} > 0$. If the taking is for provision of a public, one can think of the beneficiaries as the users of the good. Alternatively, if the taking is for a private project, the beneficiary will be the project sponsoring entity that will receive the acquired

land/properties. Plausibly, B will vary across the possible projects for which taking can be done.

Besides, each taking generates an ‘externality’ with an associated cost denoted by E ; $[0, \bar{E}]$, $\bar{E} > 0$. The externality could be in the form of involuntary costs imposed by the project on the ‘third parties’. Alternatively, it could be the social dis-utility associated with an ‘unconstitutional’ use of the eminent domain power by the government, if the use is indeed unconstitutional. Dis-utility caused by an unconstitutional taking may be small or large, depending on the degree of unconstitutionality involved. The serious unconstitutionality of taking can be treated as if E is very large, say $E = \bar{E}$. If all types of unconstitutionality are equally unacceptable, then $E = \bar{E}$ whenever the taking is unconstitutional. In general, the constitutionality or otherwise of a taking would depend on the purpose of the taking. Besides, the constitutionality may depend on the number of properties taken for a project - if the number of properties is greater than what is absolutely necessary, the taking can be treated as unconstitutional even though the project is public interest. That is, E may be function of m . By a similar logic, B may also be function of m . However, in this section, we will take m to be exogenously given.

Assume that at date $t = 0$ when owners choose how much to invest in properties, there is uncertainty about B and E . In other words, at $t = 0$ several projects requiring the above m properties are possible. The uncertainty about which project is actually possible and the associated B and E gets resolved at date $t = 1$. Thereafter, government decides whether to take away the m properties for the project under the eminent domain.

Formally speaking, B and E depend on the state of nature θ that materializes at $t = 1$; $B(\theta)$ and $E(\theta)$. At date $t = 0$, θ is a random variable. Let $\theta \in [\underline{\theta}, \bar{\theta}]$, $\underline{\theta} < \bar{\theta}$, be the support of θ , and $F(\theta)$ and $f(\theta)$, respectively, be its distribution and density functions. The uncertainty about θ is resolved at $t = 1$. Note that:

$$\begin{aligned}\bar{B} &= \max\{B(\theta) | \theta \in [\underline{\theta}, \bar{\theta}]\} \\ \bar{E} &= \max\{E(\theta) | \theta \in [\underline{\theta}, \bar{\theta}]\}\end{aligned}$$

Assume $\bar{B} < \bar{E}$. In other words, for some projects (for some states of nature) the externality related cost of acquisition far exceeds the benefits of the taking to the beneficiary. For instance, when the taking is unconstitutional.

3.2 Courts

We consider the alternative scenario about the constitutional review. First, we assume that the judiciary has the power, the ability and the information to review the takings decisions. Next, we consider the scenario when this is not the case. Specifically, first we will consider the following situations: If there is litigation against a taking, the courts can determine whether the acquisition ‘constitutional’, i.e., can assess $V(x)$, $B(\theta)$, $E(\theta)$, and therefore can assess whether the benefits of acquisition are greater than costs or not. Later on we will analyze the equilibrium outcome when the courts cannot or do not have the power to determine whether the acquisition constitutional. This will also include the case when courts do not have information to assess $V(x)$, $B(\theta)$, $E(\theta)$, and therefore cannot assess whether the benefits of acquisition are greater than costs or not.

The litigation is assumed to be costly for the litigants - the owners and the government.

3.3 The First Best

We can use backward induction to find the first best investment decision property by property owners at $t = 0$ and the taking decision by the government at $t = 1$. Note that at date $t = 1$, x is a sunk cost. So, the opportunity cost of taking up the project is the direct costs to the m owners who will lose the benefits associated with their properties, i.e., $mV(x)$, *plus* the externality costs $E(\theta)$. That is, the social costs of taking are $mV(x) + E(\theta)$. Therefore, for any given level of x , the efficiency requires that the land transfer should take place if and only if the realized state of nature θ is such that $B(\theta) > mV(x) + E(\theta)$. In other words, for given x , the efficient acquisition set, $\Theta^*(x)$, is given by

$$\Theta^*(x) = \{\theta | B(\theta) > mV(x) + E(\theta)\} \quad (1)$$

Let $\tilde{\Theta}^*(x)$ be the complement of $\Theta^*(x)$ in $[\underline{\theta}, \bar{\theta}]$. That is, $\tilde{\Theta}^*(x)$ is the set of states of nature under which taking is undesirable, for given level of x . Formally,

$$\tilde{\Theta}^*(x) = \{\theta | B(\theta) \leq mV(x) + E(\theta)\}. \quad (2)$$

Clearly, for any given x , $\Theta^*(x) \cap \tilde{\Theta}^*(x) = \emptyset$ and $\Theta^*(x) \cup \tilde{\Theta}^*(x) = [\underline{\theta}, \bar{\theta}]$. All unconstitutional takings belong to $\tilde{\Theta}^*(x)$. Since, for an unconstitutional taking $E \rightarrow \bar{E}$, therefore $B > mV(x) + E$ can never hold in a state of nature that renders the taking as unconstitutional.

Further, when the takings are ex-post efficient, i.e., a taking is done if and only if the state of nature $\theta \in \Theta^*(x)$, then the probability that eminent domain will be used is $Prob\{\theta|B(\theta) > mV(x) + E(\theta)\} = Prob[\Theta^*(x)]$. Therefore, $Prob\{\theta|B(\theta) \leq mV(x) + E(\theta)\} = 1 - Prob[\Theta^*(x)] = Prob[\tilde{\Theta}^*(x)]$ is the probability that project will not be implemented, i.e., land will not be acquired.

Now we can solve for the efficient level of investment by the owners. To do so, assume that at date $t = 1$ the acquisition decision will be efficient. That is, for given x project will be taken up iff $\theta \in \Theta^*(x)$. Recall, the taking implies an ex-post surplus of $B(\theta) - E(\theta) - mx$ and no-taking will give $mV(x) - mx$. Therefore, for given x opted by each owner at $t = 0$, and θ as the realized state of nature at date $t = 1$, the ex-post social surplus can be written as

$$\max \left\{ \begin{array}{c} B(\theta) - E(\theta) - mx \\ mV(x) - mx \end{array} \right\} \quad (3)$$

Let $Z(x, \Theta^*(x))$ denote the (expected) ex-post social surplus, from the perspective of date $t = 0$. So, $Z(x, \Theta^*(x))$ is the expected value of (3), i.e.,

$$Z(x, \Theta^*(x)) = \int_{\underline{\theta}}^{\bar{\theta}} \max \left\{ \begin{array}{c} B(\theta) - E(\theta) - mx \\ mV(x) - mx \end{array} \right\} dF(\theta)$$

Therefore, the efficient level of x is a solution to the following optimization problem:

$$\begin{aligned} & \max_x \left\{ \int_{\underline{\theta}}^{\bar{\theta}} \max \left\{ \begin{array}{c} B(\theta) - E(\theta) - mx \\ mV(x) - mx \end{array} \right\} dF(\theta) \right\}, i.e., \\ & \max_x \left\{ \int_{\theta \in \tilde{\Theta}^*(x)} mV(x) dF(\theta) + \int_{\theta \in \Theta^*(x)} [B(\theta) - E(\theta)] dF(\theta) - mx \right\} \end{aligned} \quad (4)$$

Assume that the optimization problem (4) has an interior solution denoted by x^* . Therefore, the first best is characterized by choice of x^* by each owners, and the use of takings by the government if and only if $\theta \in \Theta^*(x^*)$, where

$$\Theta^*(x^*) = \{\theta|B(\theta) > mV(x^*) + E(\theta)\} \quad (5)$$

To keep the analysis interesting we assume that depending on the state of nature, the taking may or may not turn out to be socially desirable, even when the

owners make efficient investment. Formally, $\Theta^*(x^*)$ is non-empty and a proper subset of $[\underline{\theta}, \bar{\theta}]$. Note that since x^* solves (4) implies that x^* a unique solution to the following optimization problems as well:

$$\max_x \left\{ \int_{\theta \in \tilde{\Theta}^*(x^*)} mV(x)dF(\theta) + \int_{\theta \in \Theta^*(x^*)} [B(\theta) - E(\theta)]dF(\theta) - mx \right\}. \quad (6)$$

$$\max_x \left\{ \int_{\theta \in \tilde{\Theta}^*(x^*)} V(x)dF(\theta) - x \right\}, \quad (7)$$

where $\tilde{\Theta}^*(x^*)$ is a proper subset of $[\underline{\theta}, \bar{\theta}]$. Therefore, x^* uniquely solves

$$\int_{\theta \in \tilde{\Theta}^*(x^*)} V'(x)dF(\theta) - 1 = 0, \quad (8)$$

which is the first order condition for (7).

4 Full Compensation: *Suffer injustice and Cash-in*

If the affected individuals are ensured full compensation, none of the owners will go to court for restitution and the takings are not subjected to any meaningful scrutiny. Therefore, the government would get away with all constitutional as well as unconstitutional takings.

Proposition 1 *If the judiciary has full information for the constitutional review of a taking and the owners are entitled to ‘full compensation’, the outcome cannot be efficient. In equilibrium there will be excessive invests and inefficient number of takings.*

Proof: Let $C(x)$ denote the compensation paid to the owner. Suppose, the compensation is paid at the time of acquisition. Given the assumption that litigation is costly, under full compensation the owners have no incentive to appeal against the acquisition. Moreover,

- due to the reasons mentioned in Section 2 b of the paper, the taking decision of the government is unpredictable. Therefore, it seem plausible to assume that the takings decision does not depend on the level of x opted by the owners.

Suppose, the government will resort to takings if and only if $\theta \in \Theta^{FC}$; where $\Theta^{FC} \subseteq [\underline{\theta}, \bar{\theta}]$ is decided by govt. By assumption, the owners have no control over the acquisition decision by the government. That is, from the perspective of the owners, Θ^{FC} and therefore the acquisition decision is exogenously given. Let $\tilde{\Theta}^{FC} = [\underline{\theta}, \bar{\theta}] - \Theta^{FC}$.

Since, $C(x) = V(x)$, the taking has no effect on the payoff of the owner. Formally, his ex-post payoff is $V(x)$, regardless of whether the state of nature $\theta \in \Theta^{FC}$ or $\theta \in \tilde{\Theta}^{FC}$. So, an owner will choose x to maximize

$$\max_x \left\{ \int_{\theta \in [\underline{\theta}, \bar{\theta}]} V(x) dF(\theta) - x \right\} \quad (9)$$

The solution is identified by the following first order condition:

$$\int_{\theta \in [\underline{\theta}, \bar{\theta}]} V'(x) dF(\theta) - 1 = 0. \quad (10)$$

Let x^{FC} be the solution. Comparison of (8) with (10) in view of $\tilde{\Theta}^*(x^*) \subset [\underline{\theta}, \bar{\theta}]$ implies that:

$$x^{FC} > x^*.$$

That is, the owners will choose \bar{x}^* - that is excessive investment by owners. Moreover, due to the reasons listed in the paper, there may be excessive takings by the government, i.e., the acquisition set Θ^{FC} will also be inefficiently large. In general, however, it is difficult to make any plausible prediction about the acquisition set. \square

5 Constitutional Review

5.1 Courts with Power and Information

In this subsection, we assume that the courts have the power to subject the takings decisions to scrutiny. Moreover, if there is litigation against a taking, the courts can correctly assess $V(x)$, $B(\theta)$, $E(\theta)$, and therefore can assess whether the benefits of acquisition are greater than costs or not. Later on we will analyze the equilibrium outcome when the courts cannot or do not have the power to determine whether the acquisition constitutional. This will also include the case when courts do not have information to assess $V(x)$, $B(\theta)$, $E(\theta)$, and therefore cannot assess whether the benefits of acquisition are greater than costs or not.

Proposition 2 *If the judiciary has full information for the constitutional review of a taking, the first best outcome can be achieved. In equilibrium, the taking and the investment decisions are efficient, and there is no litigation. However, the owners are under compensated.*

Proof: Let $C = C^*$ be the compensation paid by the government to an owner, if land is acquired. Assume that

- $C^* < V(x^*)$, where x^* the efficient level of investment, i.e., x^* solves (4).

Below we show that for a suitable choice of $C^* < V(x^*)$ the outcome is efficient. That is, there is a Nash equilibrium in which each owner invests x^* in his property, and the government resorts to the taking if and only $\theta \in \Theta^*(x^*)$, as defined in (5) above. To see this, assume that at $t = 1$ the government will engage in taking if and only $\theta \in \Theta^*(x^*)$. This means that given choice of efficient investment by the other owners, at $t = 0$ an owner's optimization problem is:

$$\max_x \left\{ \int_{\theta \in \tilde{\Theta}^*(x^*)} V(x) dF(\theta) + \int_{\theta \in \Theta^*(x^*)} C^* dF(\theta) - x \right\}. \quad (11)$$

Let x^{LFC} be the solution to this optimization problem. Note the second term in the optimization problem is independent of x . Therefore, the first order condition is nothing but (8). Formally, $x^{LFC} = x^*$ is a unique payoff maximizing choice by the owner. Put differently, if the government chooses $\Theta^*(x^*)$ as the acquisition set, then the choice of x^* is a dominant strategy for each owner.

Next, assume that at $t = 0$ each owner opts for x^* . Note that $C^* < V(x^*)$ implies that taking results in strictly lower payoffs for the owners. Now, suppose $\theta \in \tilde{\Theta}^*(x^*)$ but the government announces the taking. By assumption, in such a case, the court will declare the takings as illegal if there is litigation. As long as litigation costs are low, i.e., the owners will have incentive to litigate if government uses takings when $\theta \in \tilde{\Theta}^*(x^*)$. Specifically if the litigation cost, c_0 , is such that $c_0 < V(x^*) - C^*$, each owner is better off challenging the takings pertaining to the set $\tilde{\Theta}^*(x^*)$. So, the threat to litigate is credible. On the other hand, there is no threat to the takings pertaining to the set $\Theta^*(x^*)$. So, the government's best response is to acquire land iff $\theta \in \Theta^*(x^*)$. To sum up, acquisition set is efficient.

In other words, if $C < V(x^*)$, then the outcome has following properties:

- The government uses eminent domain if and only $B(\theta) > mV(x^*) + E(\theta)$, i.e., iff $\theta \in \Theta^*(x^*)$.

- The owners' investment decision is optimal
- That is, the takings decision and investment levels are first best efficient
- There is no litigation in equilibrium

□

5.2 Ineffective Judiciary

The above analysis suggests that when the courts are loyal to the law, the less than full compensation incentivizes owners to fight illegal acts and claim restitution. Of course, the result depends on the assumption that courts make no mistakes. In that case, the legal takings will only be made within the interests of the public. Therefore, a law that better guarantees that a taking pursues the public interest would reduce the rationale of full compensation without any contribution on the part of the owner. Hence a less than full compensation avoids overinvestment and incentivises filings for restitution rather than for damages and thus avoids the “suffer and cash in effect”.

Below we show that the less the interests of the public attached to takings can effectively be controlled by the law and the courts, the more reasonable full compensation would be.

Formally, put assume that the courts have the power to subject the takings decisions to scrutiny. Moreover, if there is litigation against a taking, the courts can correctly assess $V(x)$, $B(\theta)$, $E(\theta)$ for only a subset of the states. As a special case, this includes ineffective judiciary as well as the judiciary with imperfect information.

Formally speaking, suppose the judiciary can observe only a subset of unconstitutional takings. Further, it may or may not be able to observe the constitutional takings correctly. Specifically, let

$\hat{\Theta}_1(x)$ be the set of unconstitutional takings correctly observed and enjoined by the judiciary;

$\hat{\Theta}_2(x)$ be the set of constitutional takings correctly observed and granted by the judiciary;

$\hat{\Theta}_3(x)$ be the set of those takings that are observed with errors by the judiciary.

Clearly, $\hat{\Theta}_1(x) \subseteq \tilde{\Theta}^*(x)$, $\hat{\Theta}_2(x) \subseteq \Theta^*(x)$, and $\hat{\Theta}_3(x) \subseteq [\underline{\theta}, \bar{\theta}]$. When $\theta \in \hat{\Theta}_3(x)$ there is uncertainty about the judicial finding. Assume that when $\theta \in \hat{\Theta}_3(x)$, if the government undertakes acquisition, the court will uphold the taking to be

constitutional with probability π_J ; with remaining probability $1 - \pi_J$ the taking will be held illegal.

Proposition 3 *If the judiciary review of the constitutional status of a taking is subject to partial observability, the outcome cannot be efficient regardless of the nature of compensation.*

Proof: Recall, for given x , the efficient acquisition set, $\Theta^*(x)$, is given by

$$\Theta^*(x) = \{\theta | B(\theta) > mV(x) + E(\theta)\}$$

and the set of states of nature under which taking is undesirable/unconstitutional is

$$\tilde{\Theta}^*(x) = \{\theta | B(\theta) \leq mV(x) + E(\theta)\}.$$

Whenever the taking takes place, the owner gets compensation, say $C(x)$. Depending on the compensation level, owners might or might not have incentive to litigate the use of eminent domain. In a scenario when there is no litigation over the use eminent domain for $\theta \in \hat{\Theta}_3(x)$, at $t = 0$ an owner will chose x to solve:

$$\begin{aligned} \max_x \{ & \int_{\theta \in \hat{\Theta}_1(x)} V(x) dF(\theta) + \int_{\theta \in \hat{\Theta}_3(x)} [\pi_G C(x) + (1 - \pi_G)V(x)] dF(\theta) \\ & + \int_{\theta \in \hat{\Theta}_2(x)} C(x) dF(\theta) - x \}, \end{aligned} \quad (12)$$

where π_G the probability that the; government will start the takings process conditional on $\theta \in \hat{\Theta}_3(x)$. However, if the owners will resort to litigation whenever the government uses eminent domain for $\theta \in \hat{\Theta}_3(x)$, at $t = 0$ an owner will chose x to solve:

$$\begin{aligned} \max_x \{ & \int_{\theta \in \hat{\Theta}_1(x)} V(x) dF(\theta) + \int_{\theta \in \hat{\Theta}_3(x)} \pi_G [(1 - \pi_J)V(x) + \pi_J C(x)] dF(\theta) \\ & + \int_{\theta \in \hat{\Theta}_3(x)} [(1 - \pi_G)V(x) - \pi_G c_O] dF(\theta) + \int_{\theta \in \hat{\Theta}_2(x)} C(x) dF(\theta) - x \}, \end{aligned} \quad (13)$$

where π_G the probability that the government will start the takings process when $\theta \in \hat{\Theta}_3(x)$.

From a comparison of (11) with (12) and (13) it is obvious that the owners will not choose efficient level of investment, regardless of how the compensation

is determined in case of taking. The equilibrium will depend on the values of $C(x)$, as well as the litigation costs c_O and c_G for the owners and the government, respectively. However, as long as $\widehat{\Theta}_3(x)$ is non-empty, i.e., as long as there is partial observability, the equilibrium outcome cannot be efficient. \square

Proposition 4 *If the judiciary review of the constitutional status of a taking is subject to partial observability and the compensation is full, the outcome will be the same as in case of Proposition 2.*

Proof: When $C(x) = V(x)$, (12) and (13) reduce to $\max_x \left\{ \int_{\theta \in [\underline{\theta}, \bar{\theta}]} V(x) dF(\theta) - x \right\}$, and $\max_x \left\{ \int_{\theta \in [\underline{\theta}, \bar{\theta}]} V(x) dF(\theta) - \int_{\theta \in \widehat{\Theta}_3(x)} \pi_G c_O dF(\theta) - x \right\}$, respectively. Clearly, the owners have no incentive to opt for costly litigation, and are indifferent between the acquisition and no-acquisition scenarios. That is, for an owner optimization problem reduces to $\max_x \left\{ \int_{\theta \in [\underline{\theta}, \bar{\theta}]} V(x) dF(\theta) - x \right\}$. Therefore, the solution is identified by the first order condition 10, and the outcome is as the case of Proposition 2. \square

6 Private Purpose Takings: A Case for Full Compensation

Many countries, including Korea, the USA and Germany allow taking in favor of a private investor. Sometimes as in Korea but not in Germany the state can even entitle the private investor to take the land. The Kelo case on which Ilya Somin wrote a thought provoking book, shows how easily a US investor can get the land even without showing that the taking leads to a better or higher valued use.¹⁹ In such cases of taking in favor of a private investor the fiscal illusion argument fully applies. Even if the state and not the private investor is legally obliged to pay the compensation these payments will ultimately be incurred by a private business for which profit maximization is the reasonable standard assumption. A private investor burdened with less than the full damage has an incentive to get the land, whenever it is valued higher than the damage award. This is fully compatible with a taking decision leading to a lower rather than a higher value of the land.

¹⁹Ilya Somin; *The Grasping Hand: Kelo v. City of New London and the Limits of Eminent Domain* University of Chicago Press (forthcoming), May 2014

Here, we consider the case wherein the judicial review of the taking is not possible because either judicial constitutional review which leads to restitution does not exist or is ineffective. However, the citizens can claim and litigate over compensation.

Nonetheless, the first best can be achieved if the government offers compensation $C = V(x^*)$, and uses the eminent domain if and only $B(\theta) > mV(x^*) + E(\theta)$, i.e., iff $\theta \in \Theta^*(x^*)$. Such a government would behave like a ‘social planner’ who is interested in maximizing the net expected gains from takings.

In real world, however, the takings decisions are not first best. The government may resort to constitutional takings or may not factor in all the costs of the acquisition. Alternatively, the government may be guided by the rationale of the higher value use (in a pure economic sense) of the land. A special case is given, if the land is not used by the state itself but is transferred to a profit maximizing company, for instance if agricultural land is used for an industrial plant.

Specifically, let $C(x) = \gamma V(x)$ be the Compensation paid by the government to an owner, if land is acquired, where $\gamma > 0$. Assume that the government uses the taking whenever the state of nature happens to be such that $B(\theta) \geq mC(x) = \gamma mV(x)$. That is, the taking decision factors in the full cost of compensation - this will be case for the use of the eminent domain private purpose takings. Formally, at $t = 1$, the acquisition set is given by:

$$\Theta^{NR}(x) = \{\theta | B(\theta) > \gamma mV(x)\} \quad (14)$$

Note that for given x , $\Theta^{NR}(x) \supset \Theta^*(x)$, i.e., there is excessive amount of takings by the government. Moreover, at $t = 1$, an owner’s optimization problem is given by

$$\max_x \left\{ \int_{\theta \in \tilde{\Theta}^{NR}(x)} V(x) dF(\theta) + \int_{\Theta^{NR}(x)} \gamma V(x) dF(\theta) - x \right\} \quad (15)$$

We assume that (15) has a unique solution for any given $\gamma > 0$. Let $x^{NR}(\gamma)$ be the solution. When $\gamma = 1$, the x opted by the owner solves the following first order condition:

$$V'(x) - 1 = 0. \quad (16)$$

From (10) and (16) clearly,

$$x^{NR}(\gamma = 1) = x^{FC}.$$

That is, the owners will choose excessive investment as in case of full compensation. Moreover, the equilibrium acquisition set is given by:

$$\bar{\Theta}^{NR} = \{\theta | B(\theta) > V(x^{NR})\} \quad (17)$$

In other words, both the investment levels as well as the acquisition decisions are inefficient. There is excessive investment by the owner. Moreover, there is excessive acquisition by the government, given the investment levels. In fact, the case when $\Theta^* \subset \Theta^{NR}$, leading to a second best outcome.

Curiously, as the following Proposition shows, the efficiency of the investment decisions can be restored by increasing the compensation beyond ‘full’ compensation.

Proposition 5 *There exists $\gamma > 1$ such that $x^{NR}(\gamma) = x^*$.*

Proof: Without loss of generality assume that $B(\theta)$ is increasing function of θ , i.e., $B'(\theta) > 0$. Note that $B(\theta) < mV(x)$ implies that $\underline{\theta} \leq \theta < B^{-1}(mV(x))$. Now, the social optimization problem (4) can be written as:

$$\max_x \left\{ m \int_{\underline{\theta}}^{B^{-1}(mV(x))} V(x) dF(\theta) + \int_{B^{-1}(mV(x))}^{\bar{\theta}} B(\theta) dF(\theta) - mx \right\} \quad (18)$$

The corresponding first order condition reduces to the following:

$$F(B^{-1}(mV(x)))V'(x) - 1 = 0. \quad (19)$$

Clearly, the optimum investment level x^* solves (19). However, the government will follow the acquisition set as in (20), which now can be redefined as:

$$\Theta^{NR}(x) = \{\theta | z < \theta \leq \bar{\theta}\}, \quad (20)$$

where $z = B^{-1}(m\gamma V(x))$. Given this acquisition set, a self-interested owner will choose x to solve

$$\max_x \left\{ \int_{\underline{\theta}}^z V(x) dF(\theta) + \int_z^{\bar{\theta}} \gamma V(x) dF(\theta) - x \right\}. \quad (21)$$

Since, $z = B^{-1}(m\gamma V(x))$, i.e., $B(z) = \gamma mV(x)$. Therefore, $B'(z) \frac{dz}{dx} = \gamma mV'(x)$. The first order condition is given by:

$$\int_{\underline{\theta}}^z V'(x) dF(\theta) + V(x)f(z) \frac{dz}{dx} + \int_z^{\bar{\theta}} \gamma V'(x) dF(\theta) - \gamma V(x)f(z) \frac{dz}{dx} = 1.$$

Using $\frac{dz}{dx} = \frac{\gamma m V'(x)}{B'(z)} > 0$ and rearranging, the above first order condition can be written as:

$$V'(x) [F(z) - \gamma(\alpha(\gamma) - \beta(\gamma))] = 1, \quad (22)$$

where

$$\begin{aligned} \alpha(\gamma) &= \frac{(\gamma - 1)mV(x)f(z)V'(x)}{B'(z)} \\ \beta(\gamma) &= (1 - F(z)). \end{aligned}$$

Note that when $0 = \alpha(\gamma = 1) < \beta(\gamma = 1)$. However, as γ becomes very large (approaches ∞), while $\beta(\gamma)$ remains less than one, $\alpha(\gamma)$ become much greater than one. Therefore, there exists $\gamma > 1$, say γ' , such that $\alpha(\gamma') = \beta(\gamma')$. That is, the equation $\alpha(\gamma) - \beta(\gamma) = 0$ has a solution.²⁰ For γ' , (22) also becomes identical to (19). That is, when $\gamma = \gamma'$, the investment decisions of the owners will be efficient, i.e., they will choose x^* . \square

Also, when $\gamma = \gamma'$ the acquisition set is such that

$$\Theta^{NR}(x^*) = \{\theta | B(\theta) > \gamma' m V(x^*)\} \subset \{\theta | B(\theta) > m V(x^*)\}$$

since $\gamma' > 1$, this means that compared to a scenario of ‘full’ compensation ($\gamma = 1$), the government will reduce frequency of acquisition. Therefore, if the problem of excessive acquisition is acute under the no-judicial-review situation, if the law increases compensation beyond $\gamma = 1$ situation can improve the efficiency on both the counts - it can ensure efficient investment by the owners and reduce the extent of excessive acquisition by the government.

The above analysis suggests that the compensation should more than ‘full’ compensation - which is taken to be the ‘market value’ of the property - and should cover all sentimental value in such cases, when residential land is taken. The sentimental value of land is sometimes reflected in the market price, e.g. a scenic view from the house, but often it is not, e.g. the number of friends in the neighborhood or the feeling of being at home. Consequently even full compensation for all financial damages cannot guarantee that taking transfers the land to the highest valued user. Therefore economic arguments indicate that taking in favor of a private profit oriented firm should lead to a full damage award

²⁰If there are multiple solutions we can choose one of them.

according to the differential method and that taking of residential land in favor of a profit oriented company should include compensation of sentimental value, which does not become part of the market price. This leads to higher costs of the legal procedure and possibly even to willful decisions if good information on the sentimental value is missing. This problem has led many countries - including Germany - to restrict damage awards to financial damages. However the example of French courts shows, that the latter can successfully develop routines for the compensation of such damages. For instance, it might be possible to calculate sentimental damages as a function of years a person has lived in a particular neighborhood. This would be similar to the golden handshake for a dismissed worker, who accumulates firm specific capital which is worth nothing in a new job. This compensation is often linked to the number of years employed by the company.

Existing taking laws do not seem to arrive at different levels of compensation depending on whether the taking decision is in favor of a private profit oriented investor. But economic arguments indicate that in this case full compensation can guarantee an improved use of land whereas in other cases of taking the effect of full compensation might be different and unpredictable.

6.1 Full compensation and investor decisions

A seemingly obvious argument for full compensation is the observation that less than full compensation reduces the investment level. If at the time of investment the investor can fully trust that he will receive full compensation in the event of a taking, the expected return on investment is comparatively higher and consequently the profit maximizing investment level will also be higher than without full compensation.

However, literature shows that full compensation cannot guarantee the socially optimal level of investment, as especially argued by Blum and Rubinfeld. The argument crucially depends on whether the taking is within the interests of the public and whether it would lead to a socially enhanced use of the land.

Assume as an extreme case a country in which the interests of the ruling oligarchy, rent seeking, corruption or public choice constellations lead the government to grab land in the private interest and that courts are not able

to monitor this because the legal system remains weak. Land owners will take this possibility into account and if they get little or no compensation they will invest little or nothing. Then the country suffers not only from the economically adverse effects of willful taking decisions, which are not in the interests of the public but also from a general underinvestment level. If however the state credibly commits itself to full compensation by passing the costs of its willful decisions on to the general tax payer the underinvestment can be avoided. Full compensation for taking is therefore a reasonable strategy for a state, which is continuously executing taking decisions in favour of private and against public interests whilst still aiming to maintain a high level of private investment and thereby promote economic development. Full compensation is therefore a second best solution for states with a weak legal system.

Now consider the other extreme case of a perfect rule of law state in which substantive and procedural taking law, judicial independence and swift law enforcement guarantee that takings always pursue the interests of the public and lead to a better social utilisation of the condemned property. Several authors, notably Rubinfeld, have argued that under such conditions full compensation might lead to a socially wasteful overinvestment on the later condemned land. Under this condition a risk neutral investor gets the right incentives for his investment level if no compensation is paid. As by assumption the taking leads to a higher valued use and the investor should discount the future income stream from his investment with the probability of a taking. He has an incentive to do so only if he receives no compensation at all. The picture changes if the investor is risk averse. The entitlement to compensation is then an insurance of the risk averse investor by the risk neutral state. However even then the optimal amount of compensation would be below full compensation in order to preserve incentives against overinvestment. This would induce the investor to take the possibility of a welfare increase into account and avoid socially wasteful overinvestment.

7 Discussion and Implications

7.1 Why full compensation for takings that pursue the public interest are unfair

Is full compensation always fair? Full compensation is questionable if one regards fairness as equal treatment by the law.

Winners and losers from a taking decision / Winners and losers from takings

If a piece of land is condemned/expropriated, full compensation can reinstate peoples' original wealth or utility level in some cases but in other cases it might privilege them. Assume the discovery of a well-preserved 2000 years old Roman mosaic in a South German village. There is no doubt that the taking of this land and the preservation of the mosaic in a local museum as a tourist attraction is in the interests of the public. Should the landowner get full compensation, if he is the owner of a neighboring restaurant, whose business is flourishing because of the many busloads of tourists visiting the site? It would be in line with fairness considerations not to fully compensate him. There would be no reason to criticize norms in taking laws on fairness grounds, which would allow a court to make deductions from full compensation in such a case.

An economically far more important extension of this insight pertains to takings with the aim of building an infrastructure in the interests of the public. Assume that the agricultural hinterland of a large metropolitan Asian megacity is undeveloped which leads to prohibitively high transportation costs from farms to the city. Agricultural markets remain scattered, local and cannot contribute much to the nutrition of the city population. Food is imported. Now assume that the state develops the traffic infrastructure in the southern but not in the northern hinterland of the city. Transportation becomes less costly, connects the agricultural region with the city markets and leads to opulence of farmers in the southern hinterland. Food prices drop in the city, prices of land increase steeply in the southern hinterland and decrease somewhat in the northern hinterland which remains poorly connected with the city. This public investment project and the related takings make people in the city better off. It makes landowners in the northern hinterland somewhat worse off. They have to accept this as members of a community with rights and duties. No law in the world entitles

them to compensation. It makes farmers in the southern hinterland much better off. Those who lost part of their land to road and irrigation systems are still better off than before but less so than other farmers in the southern hinterland. Should courts be entitled to consider these effects, when calculating the damage award? This would be fair and the compensation could be higher than a nominal compensation but lower than full compensation without violating the principle of just, fair and effective compensation. Taking laws (expropriation laws) which take this into account by way of balancing gains and losses of such takings, would not violate but rather underline fairness considerations.

Full compensation might lead to unequal treatment

The state often imposes some costly duties for the common good on its citizens. I refer to a much debated German case about a law imposing a duty on all publishers to send a free copy of every published book to a central library. This serves cultural purposes. The constitutional court decided in this regard that the rule of sub-constitutional law is not taking but a “definition of private property” which may include some sacrifice for the public good. However it also defined limits to this rule. In the present case the claimant was a publisher of reprints of bibliophile rarities, for instance of an exact reprint e.g. of Martin Luther’s medieval bible. These books were sold at high prices, for instance 1000 Euros, in small editions of perhaps 50 copies. The constitutional court ruled that an owner might have some costly duties. None/No one can however be forced to an outstanding or special sacrifice (so called “Sonderopfer”). It ruled that this so defined group of publishers were entitled to compensation. Parliament or courts must set the price limit above which the delivery of one book to the central library has to be compensated. Assume that this price limit is 300 Euros. Then if the price is 300 the loss of the book is not compensated and if it is 301 it is compensated. But full compensation would not be fair. Laws regulating the rules of compensation should give discretion to judges to take such aspects into account. The same logic applies to laws aimed at preserving buildings of national or historic importance. According to legal dogma this would not be considered a taking but rather a law’s definition of private property, which the owner must accept without any compensation but not beyond a certain threshold.

Taking and prior subsidies

Full compensation for taking might be unfair if a private firm gets huge subsidies and is later expropriated. Consider the following simplified example. After the Lehman crisis many private banks in Europe would have collapsed and their owners would have lost their equity capital without state intervention. To avoid conflagration in the financial sector many European states set up rescue plans and heavily subsidized such banks to keep them running as a going concern. Their market capitalization remained positive merely because they were saved with taxpayers' money. If later the state takes over the bank to restructure it and re-introduces it to the market after such a successful restructuring, would it then be fair to pay the full market price per share which would otherwise have been worthless without the heavy subsidies?

The different consequences of taking and regulatory taking

Some contribution of the citizen, whose property is rightfully taken in the interests of the public is defensible on grounds of fairness. Otherwise a huge gap would open between the legal consequence of taking and the legal consequence of regulatory taking. Parliaments and courts continuously change the content of property rights and consequently change their value. Ideally these new laws increase a nation's wealth or welfare. However they also continuously bear winners and losers among owners. The losers do not lose the title of ownership but some of the wealth which the ownership represented under the previous set of rules. The winners among the citizens enjoy the gains. The losers have to live with the losses, usually without any compensation. Assume for instance that in an attempt to promote public health a new regulatory law sets new and higher standards for medical x-ray machines, which makes some old machines valueless without taking the ownership titles. The law will probably not regard this as a taking but rather as a redefinition of property which may lead to no compensation at all. Without any contribution to the common good in case of a lawful taking that pursues the public interest the gap between the legal consequences of lawful taking and regulatory taking or redefinition of property would become even wider than it actually is.

7.2 How should the surplus be distributed?

Often the ex post value of expropriated land is higher than the ex ante value. Should the old owner be allowed to participate in this surplus value? With re-

gard to the above mentioned state's incentives the arguments laid down would apply. The extent and range within which a state can be incentivized to pay higher compensation is generally unknown. Takings, decisions to nationalize industries, privatize or renationalize utilities are often of overriding political importance at both local as well as at the national levels. They are often forged by political parties and powerful interest groups. This makes the taking decision relatively independent from the exact amount of compensation, especially since its costs can be passed on to millions of taxpayers. It is also questionable whether the compensation of the surplus should be divided on grounds of fairness.

1. No parallel exists in private contract law, which protects the surplus value from a higher valued use in favour of the buyer. A private buyer who is aware of the fact that the underlying piece of land would be worth much more than seller's perceived value, e.g. because the land could be used in a more profitable way, has no legal obligation to disclose this private knowledge to the seller. This rule implies that the buyer will reap all gains from the better use of the land, which are not already reflected in the market price. This is efficient, because a disclosure rule would shift the surplus value from the better use of the resource to the seller and destroy the incentives on the part of potential buyers to heavily invest in finding superior ways of resource utilisation. One can argue that this argument does not apply for the state, whose investment decisions are based not on valuable and profitable private knowledge but on public knowledge. Taking laws, which regulate the transfer of titles, are therefore not necessary to incentivize the state in the same way as a private profit maximizing investor, who buys land. And yet compensation for the surplus in taking laws (regulatory takings) would create a rift between the outcome of voluntary transactions in markets regulated by contract law and the outcome of takings by the state that pursue the interests of the public. It would also distribute some of the public benefits to private persons.
2. Also, as public investments are made on public information often some of the surplus will in any case be appropriated by the old owner. Assume for instance that in the vicinity of Seoul a new international airport shall be built. This plan initially triggers lengthy public and political debates. The information generated from such debates will increase the market value of the land on which the airport is to be built long before the date of the actual taking or planning decision, especially since in most legal systems

these dates are used for calculating the fair market price for the damage award.

3. In Germany most sub-constitutional taking laws are in line with these considerations. The Federal Construction Law (Bundesbaugesetz, BbauG) which stipulates rules for taking and compensation, explicitly states that for the calculation of the damage award the date of the taking decision and the market value of that date is decisive.²¹ It even explicitly excludes from compensation all increases of the value of the land caused by the imminent expectation of the taking decision. The Bavarian taking law contains similar provisions²². These are only two of a whole range of examples of federal or state laws, which explicitly exclude compensation of most of the surplus value by fixing an early date for assessing the value of the land.

In civil liability the differential method precisely defines damage compensation and leads to full compensation. The compensation rules pertaining to regulatory takings often lead to a damage award, which is much higher than a nominal compensation but somewhat lower than full compensation. The rationale of full compensation as an incentive mechanism is shown to ensure that the higher valued use of a resource after an involuntary transfer of title holds only if the condemned property is transferred to a private investor. It does not hold for the state, which might take property for many political reasons not reflecting the public interest and which can on the cost of compensation to the general tax payers.

Full compensation is not an optimal incentive for owners either, since it might lead them to disregard any possibility of a taking in the interests of the public which would lead to overinvestment. It might also induce them not to fight against takings that do not pursue the public interest. Generous compensation would thus not lead to filings for restitution but rather for damages. It is however in the interests of the public to incentivize citizens to fight unconstitutional takings. Also, fairness considerations often lead to a departure from full compensation.

²¹§95 (1) BbauG: Maßgebend ist der Verkehrswert in dem Zeitpunkt, in dem die Enteignungsbehörde über den Enteignungsantrag entscheidet.

²²Art. 10, Bavarian Taking Law, Bayerisches Gesetz über die entschädigungspflichtige Enteignung (BayEG)

Full compensation is -with exceptions- not a strategic instrument in states with a highly developed rule of law. It is only recommendable for countries with a weak legal system where it would generate more private investment without reducing the government's willfulness. The strategic instruments to avoid unlawful and unconstitutional takings are to be found in constitutional and sub-constitutional substantive and procedural legal norms.

7.3 Ensuring that takings pursue the public interest: Examples from German law

Governments, parliament or administrative agencies can pursue goals of their own that are incompatible with the "public good". Provided they are free to define this term, they might inflate its use to such an extent that a taking decision can be made whenever it is asserted that the state or a private investor can utilise it in a better way than the owner. The legal system can react to this danger in different ways. In a German context this reaction would comprise a combination of constitutional and sub-constitutional rules and safeguards.

- The rationale for the taking must be substantiated in a specific federal or state law
- The law must specify how the compensation is calculated
- The taking must be necessary
- Takings that pursue the interests of private persons need to pass additional tests.

German agencies or municipalities cannot execute takings based on their interpretation of "common good" according to Art. 14 of the German constitution, despite the fact that such an interpretation would be controlled by courts. The subjects of power to define what justifies a taking for the "common good" are the federal parliament, the state parliaments and the constitutional court. The latter has the power to reject the reasoning provided in the law on grounds of vagueness or because the extent of it being in the interests of the public is not large enough in order to justify such an infringement of a fundamental right. The constitutional court ruled that a specific public interest must be accurately defined in either a federal or state law. A zoning law or any other law made by a municipality does not have the qualification of a law in this regard. Any administrative decision that is based on a (municipal) zoning law would therefore be considered unconstitutional. The constitutional court has two channels of control at its disposal. If the rationale of the taking decision cannot be found in

either a federal or state law the taking is unconstitutional. If it is contained in a law it must be specific and describe a severe/strict/fundamental public interest. Not every common good rationale would justify a taking, as this would destroy the freedom preserving function of private property.

Sometimes it is difficult or even impossible to formulate the rationale of certain takings in an abstract way. Constitutional law then requires a specific law, containing the rationale for the taking in the underlying case. An example is a taking law in favor of Airbus industries in Hamburg. During the construction of the big Airbus 380 the existing runway had to be stretched. The parliament of the city state of Hamburg passed a specific law for the taking of land in favor of Airbus Corporation, describing in detail the importance of a longer runway on the premises of the firm for the economy of the city state. This law led the courts to accept the taking decision.²³

In a landmark decision (Bocksberg) the federal constitutional court decided that the state of Baden-Württemberg violated the federal constitution by taking farm land for the construction of a test track for Mercedes Company. The court rejected the view that the taking was based on municipal zoning law, given that zoning law does not qualify as a law in the constitutional sense and that municipalities are no subjects of power in this matter. It also rejected the government's view that the taking could be based on a state law regulating consolidation and reallocation of farm land. The reasons according to this law did not contain the purpose of the specific taking, namely to create about 600 jobs in an underdeveloped and remote area of the state. The constitutional court left unanswered, whether or not the criterion of a strict public interest were sufficiently fulfilled if it had been included in the state law. However doubts were raised on whether such a general description of the purpose of taking would pass the precision test and the strict public interest test.

Federal and state parliaments must substantiate the criterion of severe public interest in statutory laws. It is legally undisputed that taking rationales described in sub-constitutional laws are both constitutional and in the interests of the public, provided they serve the construction of electric lines, railway tracks, canals, roads, airports and with some further specifications also schools and sports facilities. The creation and preservation of jobs is disputed and its

²³Enteignungsgesetz für die Erweiterung des Werkflugplatzes in Hamburg-Finkenwerder(Werkflugplatz-Enteignungsgesetz)vom 18. February 2004

constitutionality would largely depend on the number of jobs created or preserved. More profitable use of the land or higher tax income is do not justify takings from a constitutional point of view²⁴. This is reasonable since higher tax income is not per se within the interests of the public. Please allow me to make yet another remark on this observation with regard to the Kelo case as described by Ilya Somin. In this case the US Supreme court decided in a 4:3 decision to allow the taking of residential land in favour of a private developer on the grounds of generating higher tax income. In Germany the Kelo taking would be considered unconstitutional for two reasons. First, the specific reason for taking must be described in a law and a municipality does not have the power to do this. Second, even if a federal or state law were to provide grounds for this rationale, the idea of raising tax income would still be considered unconstitutional as it does not qualify the strict pursuance of public interest.

This insight came as a surprise to me. The USA are the motherland of both free market capitalism and strong protection of private property. Germany on the other hand is a “social and democratic rule of law state” (Art. 20, Abs.1 of the constitution). Yet it seems to protect private property in a more libertarian way than the USA.²⁵

7.4 The necessity condition

Provided the realm specifying the the conditions for the common good does allow takings, the decision has to meet a second condition, namely “necessity” (so called “Erforderlichkeit”). This criterion is derived from the principle of proportionality which is generally applied in German administrative and constitutional law. In this context necessity implies that takings are the mildest form of violation of a right with the aim of reaching a policy target. The criterion is not fulfilled if a voluntary purchase is both possible and reasonable, or if more land is taken than would be necessary for the underlying purposes. Moreover it would also not be fulfilled if the public purpose could also be reached on pre-existing public ground or if a milder form of taking such as an easement

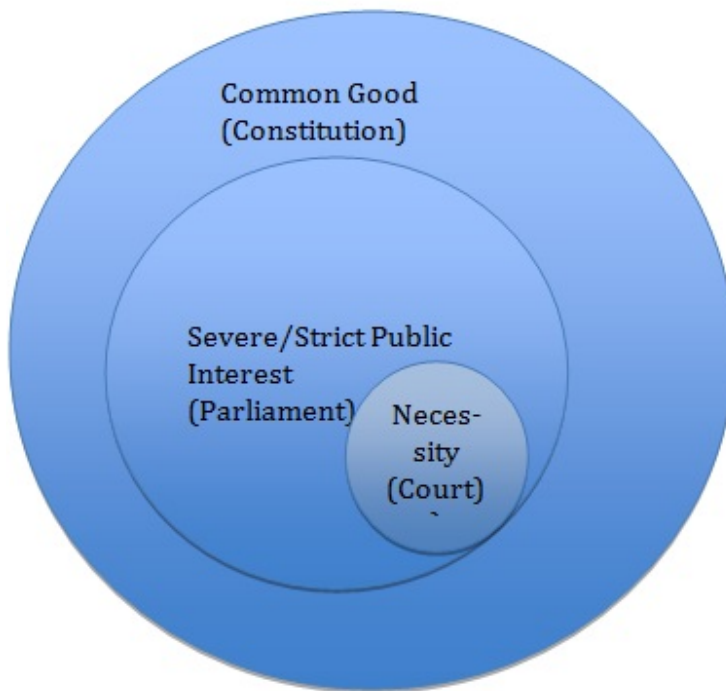
²⁴Taking for fiscal reasons is unlawful. W.Leisner, Eigentum, Handbuch des Staatsrechts, Vol. 8, 2010. 386.

²⁵T.J. Miceli, K.Segerson,T.F. Sirmans (2008) Tax Motivated Takings, National Tax Journal Vol. LXI, No. 4, Part 1 December 2008, pp.579-91 The US Supreme Court ruled that the spillover effect of a private project in terms of jobs and tax income justified the taking of residential land in the Kelo Case, p. 580.

would also sufficiently serve the public purpose. The necessity criterion does not require the state to prove that a project such as a rail track cannot be built somewhere else because often many alternatives to realize a project in the interests of the public do in fact exist. Yet it requires a “substantial contribution” on the part of the project towards the interests of the public. As an example, a second or third slip road from a city to a highway might not always qualify as a strict public interest.

The rules thus described require that any project for the common good that induces takings must make a considerable contribution to the public interest. This subset of projects further reduces lawful takings to such projects for which takings are necessary as defined by the courts. This can be illustrated by Figure 1 below.

Figure 1: Shrinking the Eminent Domain by Constitutional Rules in Germany



7.5 Specifying the compensation and the public interest in one law with a link

Art. 13 paragraph 3 of the German constitution states that takings are possible only to promote the common good and only on the basis of a law specifying the public interest and compensation. The way in which compensation is paid must be explicitly stated in the taking law. Without existence of a link between the exact rationale for a taking and its associated compensation within the same law, a taking would be unconstitutional. Administrative courts are neither allowed to create a missing link by means of analogy, nor would they be allowed to derive principles of just and fair compensation directly from the wording of the constitution. This does have far reaching consequences. Before this rule was introduced in the post war constitution the land owner had a choice between either taking action against the unlawful taking or by filing a damage claim. In cases where the owner preferred the latter, he had been able let all limitation periods for an injunction and restitution pass and then file a damage claim. This is no longer possible. If the described link is missing in the underlying law, the citizen/individual must fight against the unlawfulness and for restitution but cannot claim damages as a consequence of this unlawful act. This incentivizes the citizen/individual to focus all efforts on avoiding the illegal taking. It also incentivizes the state to clearly regulate both the public interest and its compensation in the same law. If no such link exists, the project cannot be realized by the state. It cannot be ransomed from the unlawful act by way of compensation and thus hold onto the taken property if the taking was unconstitutional. It would then have to retribute. This link rule also deters sub-constitutional courts from simply establishing a missing link between the specific public interest and the scope of compensation within the same law, since such courts are not given the competencies to derive such rules by way of analogy, interpretation or interpolation. Hence sub-constitutional courts cannot obstruct the power of the constitutional court to declare such a violation as unconstitutional.

The consequence of restitution removes any incentive on the part of the state to expropriate against the law. Hence restitution removes any potential advantage that might arise from an unlawful taking, regardless of the aims and potential benefits to the government or an agency.

7.6 Takings in favor of private persons

Expropriation in favor of a private person, for instance a company, poses a special problem. A profit maximizing private person legally acts within the realm of its private autonomy, whilst a public agency is bound by legally defined policy targets in the interests of the public. Public law provides the citizen with safeguards in case the public agency fails to do so. A private investor might utilise the taken land differently whenever circumstances change and make a different use more profitable. A public administration that is directly mandated by government tasks regulated by the law certainly works differently. Consider the following illustrative example: a private investor, who runs a private school, is legally free to close the school and utilise the building e.g. for a hotel or any other arbitrary purpose. A municipality which runs a public school does not have this freedom of choice. It is bound by the law to serve a specific public interest and can only close the school or sell its buildings as stipulated by the law.

This does not imply that takings in favour of private persons pose any conceptual problems. However a profit oriented private person serves the specific public purpose indirectly through the profit motive and the market mechanism. Therefore expropriation laws which cause an involuntary transfer of property to a private person should include safeguards that the specific public purpose on which the taking decision is based, will be reached. German law stipulates two specific rules pertaining to takings in favor of a private person.

-First, the state must show and convince the court that the private investor will use the land in pursuance of the specified public purpose for the longrun. The state is free to implement any instruments in order to ensure the investor's credibility. This could either be in the form of a contract between the private investor and the state which defines the specified use of the land, or a collateral or any other legal obligations on the part of the private investor that would ensure its credibility. Otherwise the taking would be unlawful. The much debated Kelo taking in the USA would probably have been unconstitutional in Germany for this reason as well. The residential land was transferred to a developing company for a large project. The owners were evicted and it turned out that the company did not have the financial resources for the planned investment. The land remained idle and later became a waste dump. In Germany a future/planned investment would have to be made credible, for instance by

means of a finance guarantee through a bank.

-Second, the taking decision should not be outsourced to an investor who is driven by a profit motive. The taking decision should be an administrative act of a public administration and fully governed by administrative and constitutional law. This applies in Germany where takings are merely allowed in favour of a private person but may not be executed by a private person.

7.7 Public Interest

In rule of law states the strategic instrument pertaining to regulatory takings is a set of rules, which can guarantee that the taking is in the interests of the public. In Germany this is achieved by the requirement that every taking decision must be based on a specific sub-constitutional federal or state law. Neither an administration nor a court is allowed to derive the specific public interest freehandedly from the constitution or through interpretation of the constitution. A taking not based on such a law is per se unconstitutional. The constitutional court also monitors whether the rationale for taking given in the law is precise enough and describes a severe/strict public interest. Also taking must be the mildest instrument applied to reach the described policy target. Incentives are given to the citizen, to file for restitution and not to “suffer and cash in”. These special rules regulating takings in favour of a private person are hardly questioned in German scholarship which is in line with economic reasoning. If the level of compensation as such can contribute little to guarantee that the takings pursue the interests of the public, the law must establish high hurdles. It must channel government decisions directly by means of legal requirements and tight judicial control in order to make the state observe the constitution. It must also motivate citizens to fight for their rights and to file claims for restitution. The procedural hurdles for takings are much more disputed and subject to critique than the rules of substantive law.

7.8 Elements and Problems of Due Process in German Taking Law

7.9 Preliminary injunctive relief

Due process is time consuming and costly. A tradeoff exists between due process and a speedy decision in favor of the public good. In Germany this tradeoff is reflected in a set of different rules protecting the interests of the private owner and the public interest: for instance the rule of preliminary injunctive relief aimed at protecting the private owner, or the rule of temporary putting into possession which pursues the interests of the public.

A taking decision is lawful only if the state authority has made serious but unsuccessful prior attempts to buy the property. The later taking decision of the state entitles the affected to objection. A court would then decide in an urgent decision, whether the objection has a chance of success. Only if this urgent decision is in the negative and even a quick look indicates that the taking is lawful the state may take possession of the condemned land. Otherwise the owner remains the possessor until the legal proceedings in the main action come to an end. In the meantime the project is bound to stand still. This is a strong protection as it postpones many projects in the public interest until a final and binding decision is taken. The plaintiff can move the case up to the federal administrative court and finally to the constitutional court. The final decision might take several years and only after the final and binding decision can the new owner take possession of the land and start with the investment project.

7.10 The right to participate in a planning decision

Many taking decisions are embedded in a long and complex planning process on zoning and land use. Take the construction of a large international airport, which might require takings of agricultural, residential and farm land, or the production of brown coal by daylight mining, which might require the removal of whole villages and the taking of almost all land of their territory. The planning decisions for such projects predetermine to a large extent which parcels of land must later be taken. At the outset of the planning process alternative options still exist. During this stage of planning a procedure of due process should include an explicit balancing of public and private interests. Hence landowners and possibly associations of the civil society such as environmental groups must

be heard during the planning process and their views on alternatives have to be considered in the decision making process.

In Germany the planning of brown coal production displaced 7000 residents off their land and homes. As a result the Constitutional court strengthened the participation rights of the affected (Garzweiler decision 2013). The constitutional court in Germany also strengthened the participation rights of landowners in the planning process of such projects and imposed additional duties of balancing interests on the planning authorities.²⁶

7.11 Temporary putting into possession

Federal or State laws, for instance the Construction Law (BauGB) entitle the taking authority to transfer not ownership but possession to the new investor before courts have decided on the lawfulness of the underlying taking. This decision requires an urgent public interest. The new possessor can start his investment on the land. He has to compensate the owner for all losses during the temporary possession especially if they do not form part of the general compensation. If the final court decision regards the taking as unlawful the land must be restituted and any damages incurred must be compensated. The investment on the land is therefore at the investor's risk since the land must potentially be returned.

It would go beyond the scope of this presentation to review in detail the procedural rules, which might lead to or prevent takings in Germany. They are arcane, numerous and vary between different types of projects. Often even experienced and specialized legal practitioners in government agencies fail to meet all of them. They consist of a thicket of rules, exceptions and exceptions from the exceptions. Some of them prolong the planning procedure, others can shorten it. Some violations of the procedural rules have far reaching legal consequences whilst others do not. It is questionable whether the German combination of procedural rules strikes the balance between the protection of individual rights and economic development well. And although it seems that the rules of substantive expropriation law in Germany are very well designed this does certainly not hold true for the procedural rules. The thicket/abundance of these rules has

²⁶www.bundesverfassungsgericht.de/SharedDocs/Entscheidungen/DE/2013/12/rs20131217_1bvr313908.html

led to countless complaints about an overly lengthy planning duration of large projects such as a waterway or an international airport. The planning procedures were even criticized as a substantial cause for the economic stagnation of the German economy. These complains culminated after the German reunification in the early 1990ies, when the partly ailing and underdeveloped East German infrastructure was to be upgraded with public construction projects. This subsequently led to the introduction of new law in order to speed up the planning procedures. The wave of critique, which the very long planning procedures faced in the 1980ies and 1990ies has ebbed somewhat down.²⁷ Still it seems that in the field of planning and regulatory takings scholars of comparative law have broadly established, that the rules of German substantive law regularly outperform its equivalents in common law countries whilst the procedural law in common law countries often outperforms German procedural law.

8 Conclusions

This article has analysed the six pillars of taking law from an economic point of view with specific reference to German law. All constitutions of OECD countries protect private property and allow takings only in the interests of the public and against fair compensation. The constitutional safeguards alone can however not protect owners sufficiently. Governments, parliaments and bureaucracies might take property for purely political purposes, or for campaign sweeties, or to comfort powerful industries and lobby groups, or to maximize budgets and build bureaucratic empires. Yet they might still be in the position to hide their intentions under the veil of “common good”. In the USA the famous *Kelo* case has shown, how far practice can deviate from protecting private property as a fundamental right. It is therefore highly recommendable not to allow a public agency or bureaucracy to freehandedly specify the meaning of “common good”. German constitutional law requires that the precise specification of the specific public purpose for any taking to be stipulated in a federal or state law. These specifications are subject to judicial review of the constitutional court and might be rejected for vagueness or for not per se pursuing the public interest. Thus “raising taxes” would violate the latter and “economic

²⁷Bernhard Stür (1998), Bürgerbeteiligung und Rechtsschutz im Bau- und Fachplanungsrecht, in: Beschleunigung von Planungs- und Genehmigungsverfahren, Jan Ziekow (ed.), Duncker und Humblot, Berlin, pp. 141-170.

development” the former criterion. “Preserving energy safety” is however constitutional. The numerous precise sub-constitutional laws describing a “severe public interest” can therefore only define a subset of the broad term “common good”. This subset shrinks further by the necessity requirement according to which the state must show that the taking is the mildest available form to realize the underlying project. These two restrictions lead to an effective protection of private property. They principally allow takings, yet they are submitted to a tight and far reaching judicial control. The rules effectively monitor the “grabbing hand” phenomenon, which can be observed in many countries.

From this it follows that there exist three subjects of power in German law. Parliaments must specify precisely the “severe public interest” under which a taking decision is constitutional. This guarantees that the specific rationale for takings is subject to a democratic decision taking process in parliament. Bureaucracies take the decision without having much discretion with regard to the interpretation of the reasons given in the law and the decisions are subject to judicial control of administrative courts and constitutional review.

Takings in favor of private persons and profit seeking firms, poses no particular conceptual problems. A profit maximizing firm can promote public interests to the same extent as a bureaucracy, the latter directly, the former indirectly. However differences do exist. A profit maximizing firm acts within the realm of its private autonomy. Whenever it seems to be advantageous, it might deviate the utilisation of the land towards purposes other than the specific public interest legitimizing the taking. Safeguards should therefore guarantee that the expropriated property is used for its intended purpose in the long run. In Germany a taking in favor of a private person is unlawful, provided the administration cannot show that the new investor has made a credible commitment to guarantee this. This problem does not arise for state agencies, whose policy targets are defined by the law.

In many legal orders including Germany compensation for taking has to be prompt, adequate, fair and effective. This is normally somewhat less than a damage award under civil liability which applies the much more precise differential method and which fully restores either the claimant’s wealth or even utility.

This can be justified by way of economic reasoning in rule of law states.

The state cannot be incentivized and deterred by a damage award which is equal to the damage awarded to a private actor. The economic analysis of state liability therefore differs from the analysis of civil liability. Unlike a private actor the state can spread the compensation payment among millions of tax payers regardless of whether the compensation is full or somewhat less. The question of an appropriate level of compensation must be answered not with regard to incentives for the state but with regard to incentives for property owners. Hence one would have to differentiate between two different legal and political environments.

-A government that continuously amends the constitution and engages in willful takings within a weak legal system with no judicial independence, a low level of compensation could seriously affect the level of private investment in the country. Investors would potentially fear the grabbing hand of the government and whilst knowing that they would not be able to rely on the judiciary when filing law suits for restitution of their property. Should this pattern not be changed in the short run, a full and generous compensation could still maintain a high level of private investment in the underlying country. However, this is only a second best solution.

-Provided courts abide by the law and constitution in a system with swift law enforcement, full compensation according to the differential method would have adverse effects. Full compensation would disincentivise private investors to proceed against takings and file claims for restitution, since the latter would not be worth more than a damage award. Owners would then develop an attitude of “suffer injustice and cash in” rather than taking action against illegal or unconstitutional government acts. It is however in the interests of the public that citizens defend themselves against unlawful acts of their government rather than settle down as a result of generous compensation. A compensation which is somewhat lower than a full damage award motivates citizens to fight for their rights, i.e. for restitution of the land. They will do so if restitution is worth more to them than damage compensation. This guarantees that courts sort out the taking decisions which are not in the public interest and retribute the land to the affected. Less than full compensation thus helps to achieve a policy target of overwhelming importance namely to prevent effectively unconstitutional takings which do not pursue the public interest. The many specific rules of German taking law, which allow for some deduction from full compensation and some contribution to the lawful taking in the public interest find a justification

in economic considerations. Some of those rules even explicitly try to destroy a “suffer and cash in” attitude among those condemned. This rationale also speaks -at least in highly developed rule of law states- against a participation of the condemned in the surplus created by the taking.

Full compensation using the differential method can also not always be recommended on grounds of fairness. Takings might also lead to gains and they might follow huge subsidies. Both can justify a reduction of the damage award. Also the consequences of takings and regulatory takings are different, the latter leading to a damage award only in exceptional cases. This rift would be widened if in case of a legal taking in the interests of the public with no participation being required on the part of a citizen.

Not only substantive law but also a fair procedure, which includes hearings and participation of those condemned in planning decisions of large projects, committee meetings and procedures contributes to the justice of a taking decision. Extending those procedural rights will prolong planning procedures. If these procedural rights do not exist planners might even lack the information to make right decisions. The information coming from landowners in a planning process is valuable even though it emanates from a group pursuing specific interests. If procedural rights are overstretched or become too complex to handle they might lead to very lengthy and costly planning procedures and possibly even result in frustration, especially for large public investment projects. A tradeoff exists between the target of effectively protecting a citizen’s right and economic development. It is not certain that the thicket of German procedural rules properly strikes the balance between these two goals.