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EMINENT DOMAIN LAW IN TAIWAN: NEW LAW, OLD PRACTICE?

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Abstract

This chapter summarizes the latest (post-2012) eminent domain law in Taiwan. It focuses on the six pillars of takings law, namely public interest criteria, subjects of the eminent domain power, just compensation, due process, distribution of development surpluses, and the dispute resolution system. The 2012 reform brings along takings laws in books that are stricter than ever in terms of public interest and necessity analysis, but administrative courts typically defer to the administrative agencies’ judgments. Only government agencies and certain public legal persons can apply to the state to condemn. Just compensation now means payment of current market value, but the differences between how much condemnees receive pre- and post-2012 remain unclear. Procedural requirements regarding expropriation constitute an intricate web of rules. Nonetheless, in the process of negotiated purchase, local governments are often criticized for not bargaining in good faith. Thus, the due process requirement does not guarantee substantive equity or efficiency. Development surpluses go entirely to the state. The dispute resolution system consists of two or three levels of re-examination within the administrative branch before the condemnees can bring their cases to the administrative court. This chapter concludes with a policy recommendation that uses hedonic regression models to estimate land value for offers in the negotiated purchase stage and for the land value in the takings compensation stage.

Keywords

Takings compensation, due process, hedonic regression model, public interest, just compensation, dispute resolution, development surplus, appraisal, judicial review
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I. INTRODUCTION

The Constitution of Taiwan fails to include a “just compensation” clause or a “public use” clause. Article 143, Section 1 of the Constitution of Taiwan does prescribe that “[a]ll land within the territory of the Republic of China shall belong to the whole body of citizens. Private ownership of land, acquired by the people in accordance with law, shall be protected and restricted by law. Privately-owned land shall be liable to taxation according to its value, and the Government may buy such land according to its value.” As the final clause (buy…land) is interpreted as different from expropriation, the constitution provides little guidance in determining the scope and limit of eminent domain. However, the Constitutional Court is not entirely absent from this scene. In fact, in a number of constitutional interpretations, the Constitutional Court constructed the constitutional mandate regarding the governmental use of the eminent domain power. Not all of the interpretations are equally influential. It should be fair to say that those on due process have shaped the evolution of takings law by prompting the revision of the relevant statutes formerly declared unconstitutional. By contrast, the interpretations regarding just compensation and public interest are more expressive than substantive, as the Constitutional Court has yet to advance concrete tests that the government or the administrative courts can

1 Interpretation Nos. 110, 215, 236, 336, 400, 409, 425, 440, 508, 513, 516, 534, 579, and 652.
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apply in future cases.

As a result, eminent domain law in Taiwan is mainly statutory and regulatory. The legislature and the administration have a wide discretion in shaping the takings law. In introducing the “Six Pillars” of the taking laws in Taiwan, this chapter draws heavily on statutes and administrative regulations, while also keeping an eye on decisions made by the administrative courts. Since the year 2000, the Land Expropriation Act (hereinafter “LEA”) has been the major source of law for takings of land and fixtures. Before then, expropriation stipulations were scattered in many different statutes. Now, pursuant to Article 1, Paragraphs 1–2 of the LEA, “Land expropriation shall be governed by this Act. Matters not provided in this Act shall be governed by other applicable laws. Where other laws are inconsistent with this Act with regard to expropriation procedures and expropriation compensation standards, this Act shall prevail.” Hence, this chapter frequently turns to the LEA and the regulations stipulated to complement the LEA.

In the LEA, there are three types of expropriation: land expropriation, zone

\[\text{2} \text{ In this chapter, I will rely on the official translations of the Constitution, statutes, and regulations, available at the official website of the Ministry of Justice, Taiwan, http://law.moj.gov.tw/Eng/}.

\[\text{3} \text{ The Land Act also considers a “moratorium to develop” as one type of takings. Land subject to the moratorium will usually be condemned at a later date.}
expropriation, and incidental expropriation. This chapter focuses on land expropriation, which is used in a broad swath of undertakings to condemn one or multiple land parcels. Zone expropriation is the condemnation of all land parcels in one specific area. The fundamentals of zone expropriations and land expropriation are the same, but zone expropriation can only be used in more limited circumstances (such as urban revitalization) and is subject to stricter procedural requirements. Due to limited space, zone expropriation will be covered only in Part VI, where the unique compensation options are summarized. Incidental expropriation refers to the condemnation of fixtures on the land. Its procedure is combined with that of land expropriation and zone expropriation. As such, incidental expropriation will be covered in the discussions of the six pillars below. Official statistics regarding the practice of land expropriation and zone expropriation in Taiwan from 2001 to 2013 are shown in Table 1 and Table 2, respectively.

This chapter is divided into seven parts, the first six of which introduce the six pillars of eminent domain: public interest criteria, subjects of the eminent domain power, just compensation, due process, distribution of development surpluses, and the dispute resolution system. Before concluding, Part VII provides the author’s own reform proposal of eminent domain law in Taiwan.
II. PUBLIC INTEREST CRITERIA

Public interest and necessity are the two key criteria to meet before the state exercises its eminent domain power. Article 15 of the Taiwan Constitution protects private property rights, and Article 23 and a long list of constitutional interpretations have established that private property rights and other human rights can be limited, if commensurate with the “proportionality principle.” Article 3 of the LEA further spells out that takings must be “for public interest purposes” and “to the extent strictly required.” These two criteria are abstract. Unfortunately, neither the Constitutional Court nor the Supreme Administrative Court has developed clearer tests to implement these two statutory requirements. Administrative courts, in particular, have been extremely deferential to the government in these two matters, essentially giving the latter a blank check (Chang 2010).

Takings of real properties are further limited to certain undertakings. Article 3 of the LEA first lists nine concrete undertakings: National defense; communication or transportation; public utility enterprises; water conservancy; public health and environmental protection; government office buildings, office buildings of local self-governing bodies and other public buildings; educational, academic and cultural

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4 For application of the proportionality principle in Taiwan and other East Asian countries, see Huang and Law (2015)
undertakings; social welfare; and state-owned enterprises. Then Article 3 of the LEA is willing to accommodate “other undertakings for which land may be expropriated according to law.” The devil is in the details. The Ministry of the Interior, the central competent agency in charge of the LEA, has identified 29 other statutes that authorize expropriation of real estates. In short, the state can also condemn properties for the following undertakings: building subways, railroads, highways, city roads, science parks, export zones, national parks, public housing, public cemetery, airports, fishery ports and international business ports, wild animal protection zones, water aqueducts, and high schools and elementary schools; preserving landmarks; consolidating oddly-shaped land; urban renewal; flood prevention; establishing produce markets; among others (the Ministry of the Interior 2013a: 7–10). Due to the open-ended nature of the list, the legislature can at any time expand the scope of takings without amending the high-profile LEA.

The hands-off attitude of the court led to several controversial, large-scale takings around 2011. Mass protests, scholarly critiques, and the presidential election in March 2012 led to a major revision of the LEA in December 2011. The newly enacted Article 3-1 of the LEA, for the first time in decades, tied the hands of the state from wielding eminent domain power. More specifically, a “land use applicant” (more on this in Part III) should “whenever possible, avoid choosing farmland and give
priority consideration to public land or land owned by state-owned enterprises without existing land use plan.” In response to the controversy of condemning premium farmland to build science parks, Article 3-1 stipulates that for agricultural land, “the competent authority in charge of the relevant industry should give consideration to the public interest purpose and necessity of expropriation at the time of designation or rezoning….If the agricultural land located within the land selected by a land use applicant is exempted from the approval of the regional plan preparing authority with regard to its rezoning, the approval of the agriculture authority under the municipal or county (city) government shall first be obtained before the land is changed to non-agricultural use.” Premium agricultural land, according to the last paragraph of Article 3-1, in principle cannot be condemned, unless odd pieces of such land are interspersed and it is difficult to circumvent condemning it.\(^5\)

Moreover, the also newly enacted Article 3-2 of the LEA requires a comprehensive assessment of the public interest and necessity of the takings project. The legislature even lays out the variables to be considered:

\(^5\) Article 3-1 of the LEA also details that the exceptions to this no-taking principle are takings for “national defense, communication or transportation, or water conservancy undertaking; a public utility enterprise for erecting power transmission lines; or for use in an infrastructure project already approved by the Executive Yuan.”
“1. Social factors: Including the size of population affected by the expropriation, the age structure of the affected population, and the extent of effects of the expropriation plan on the current status of the surrounding communities, the life style of and health risk to disadvantaged groups.

2. Economic factors: Including the effects of the expropriation plan on tax revenue, food security, increase/decrease in jobs or population that might be forced to change jobs, the costs of expropriation, public facilities required of governments at all levels, the fiscal expenditure and burden of governments, the agriculture, forestry, fishery, or animal husbandry industry chain and the integrity of land use.

3. Cultural and ecological factors: Including changes in natural urban/rural sceneries, cultural relics, living conditions or life style caused by the expropriation plan, and its impacts on the ecological environment of the area, surrounding residents or the society as a whole.

4. Sustainable development factors: Including national sustainable development policies, sustainability indicators, and national land use planning.

5. Others: Other relevant factors or factors that should be evaluated
The Ministry of the Interior reviews the assessment of public interest and necessity. Articles 2, 14, and 15 of the LEA prescribe that the Ministry of the Interior establish a “Takings Review Task Force.” Articles 13 and 13-1 authorize the Ministry of the Interior, through the Takings Review Task Force, to review the assessment of public interest and necessity, among others. The Ministry of the Interior, in two administrative rules announced in 2011 and 2012 (the Ministry of the Interior 2013a:1044), requires an additional review of public interest and necessity for certain takings projects in an earlier stage of the whole process (see Part V and Figure 1). More specifically, these takings projects (1) are implemented as zone expropriation (see also Article 4 of Regulations on Implementing Zone Expropriation); (2) involve certain undertakings (for example, building or establishing export zones, science parks, produce markets, airports); (3) expand urban planning; or (4) develop more than 30 hectares. The two-time reviews have to be substantive and de novo each time (Chen 2013: 283–84).

Administrative courts since 2012 also have to review the public interest and

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6 The Task Force consists of 17 members. Eight members are officials from several relevant government agencies. Nine members are scholars, experts, and representatives of private organizations.
necessity of the takings project. In the several cases so far, courts appear to spill more
ink on necessity than on public interest. Nonetheless, in every case the court
concludes that the government has passed the tests. Thus, the more stringent
requirements by the legislature may not have nudged the administrative courts to
adopt a stricter review standard of the takings projects by the administrative branch.

III. SUBJECTS OF THE EMINENT DOMAIN POWER

Only the state can exercise the eminent domain power. The Ministry of the
Interior has the power to approve or disapprove a takings project as the designated
organ of the state (Article 14 of the LEA). The more important question under Taiwan
law is who can apply as a “land use applicant” to the Ministry of the Interior for
condemning real properties. In theory, private (legal) persons can be a land use
applicant (Wen 2013:528), but in practice, no statute has authorized any private
parties to become a land use applicant (the Ministry of the Interior 2013a:11).

According to Article 15 of the Enforcement Rules for the LEA, central government
agencies, city governments, county governments, town governments, and irrigation
associations7 are land use applicants.

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7 Irrigation associations are public legal persons in Taiwan law.
Private takings, however, are not an empty set. As Bell (2009) points out, private takings are often disguised. Article 787 of the Taiwan Civil Code, for instance, recognizes “statutory easement” (Chang 2013a). Statutory easement, often called legal servitude of passage in civil law jurisdictions such as Louisiana (Wilmore 1986; Sentell 1994; Yiannopoulos 1996; Merwe 1999; Huffstetler 2002), deals with the problem of accessing public roads for landlocked land. In general, a statutory easement is granted to landlocked owners to pass through neighboring land. The passage has to be necessary, and landlocked owners are required to compensate owners of neighboring parcels. In the U.S., the takings nature of statutory easement is clearer because administrative agencies are often involved in the process of establishing a statutory easement (Merrill and Smith 2010: 204; Bruce and Ely 2011: 4:14). The U.S. Supreme Court, in Leo Sheep Co. v. United States, 440 U.S. 668, 679–80 (1979), has explicitly pointed out that easements of necessity (the doctrinal brother of statutory easement) and eminent domain are alternative ways to reach the same results for the state. Civil law, including Taiwan law, however, has rarely drawn analogy of private condemnation to statutory easement. Hence, this chapter will not foray further into statutory easement, but it is worth pointing out that statutes regarding administrative law are not the exclusive sources for stipulations of takings (in the functional sense).
IV. JUST COMPENSATION

In Chang (2009, 2012, 2013b), I provide theoretical analysis and empirical examinations of takings compensation law in Taiwan in 1954–1977 and 1977–2012. One of the major changes in the 2012 revision of the LEA reformed the compensation law. Before the reform, land value was assessed by combining a pre-determined and under-assessed official land value with a pre-determined extra bonus. After the reform, market value of land should be used to compensate condemnees. While land value is a major component of the compensation package, it is not the only one. Section A describes all the elements of takings compensation. Section B then focuses on how market value of land has been appraised since 2012. Section C surveys the judicial review of takings compensation cases.

A. The Elements of Takings Compensation

Total takings compensation includes that for land; constructional improvements (such as a house); agricultural improvements (such as trees); incurred expenses for land improvements; business losses; and relocation expenses. Takings compensation “shall be paid within fifteen days after the expiration of the public announcement
period” (Article 20 of the LEA), and the public announcement period is 30 days after the city/county government, upon receiving the notice of approval from the Ministry of the Interior, makes a public announcement and notifies condemnees (Article 18 of the LEA). Except for land value compensation (which is discussed in Section B), I introduce the appraisal methods for these compensations in turn.\(^8\)

Compensation for constructional improvements equals “replacement cost at the time of expropriation” (Article 31 of the LEA). The Ministry of the Interior has stipulated a few regulations that detail the proper assessment method. The city/county governments (the first-level local governments in Taiwan) are responsible for calculating the replacement costs themselves or commissioning real estate appraisers to do the work (the Ministry of the Interior 2013a: 288). Only legal buildings are eligible for compensation.\(^9\)

Compensation for agricultural improvements “shall be determined based on the value of the ripened crops thereof, provided the crops are due to ripen in less than one year from the date of expropriation, or based on the cost incurred in their planting and cultivation with reference to their current value, provided the crops are due to ripen in more than one year from the date of expropriation” (Article 31 of the LEA). The

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\(^8\) I omit the discussion of compensation for contiguous land (not condemned but affected).

\(^9\) For a study on illegal buildings in Taiwan, see Chang and Smith (2015).
Ministry of the Interior has enacted incredibly detailed tables for determining the compensable value of various types of trees and flowers. As the tables are public information and some plants are more valuable than others, condemnees have incentives to rush to grow certain highly-compensable plants before the date of expropriation. The Ministry of the Interior, in response, stipulates in its regulation that only “normal planting” is compensable. Many litigants in the administrative courts dispute whether their planting process is normal. Satellite photos of the land in question are often used to solve these cases (Chang 2012b).

According to the relevant laws and regulations, landowners who have incurred expenses for improving land (such as constructing a conduit or a dam and paving a road) and stopped the improvement work can receive reimbursement for the expenses (Article 32 of the LEA).

Article 33 of the LEA stipulates that “[i]f the expropriated land or land improvement was originally provided for legal business operations, the loss sustained due to the cessation of business or shrinkage of business scale as a result of land or land improvement expropriation shall be compensated.” Note that, again, only legal

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10 This practice is authorized by Article 23 of the LEA: “…Nor shall the landowners or users …plant more agricultural improvements on the land [since the public announcement of expropriation]. In case any of the aforementioned works is ongoing when the public announcement is made, it shall be immediately stopped.”
businesses will be compensated. The Ministry of the Interior designed a formula to compute positive business losses (the Ministry of the Interior 2013a: 291). Firms that are losing money will of course not receive compensation.

Relocation expenses are a combination of different fees related to moving. In short, the following items are compensable: Moving fees for graves, memorials, and other constructions that owners prefer relocating; moving fees for residents whose household registration records show that they are in residence six months before the takings notice is posted; moving fees for large machinery, livestock, etc. There are assessment standards for each category (the Ministry of the Interior 2013a: 292–93).

B. *Appraisal of Land Value*

Assessment of land value is the most complicated and controversial part of determining the amount of takings compensation, as appraisal of land value now is not formulaic and land value takes up a lion’s share of the total takings compensation. Before 2012, determining the compensable land value was mechanical. Chang (2009; 2013b) has shown that a majority of condemnees were under-compensated under the old regime, which relied on official land value for tax purposes in the critical calculation. This section introduces and evaluates the new regime. My reform proposal will appear in Part VIII.
Condemnees shall receive “current market value” as compensation for expropriation of their land (Article 30 of the LEA). The Land Value Evaluation Committee in each city/county government determines the current market value.\textsuperscript{11} The Committee is not itself an agency; rather, it makes decisions in the name of the local city/county government. The compensation is paid from the budget of the land use applicant. Below is a summary of how current market value is assessed and adjusted.

The current market value is appraised by either local governments themselves or real estate appraisers commissioned by local governments. Both have to follow the Regulations on Appraising Current Market Value for Takings Compensation Purposes in assessing the value of condemned land.\textsuperscript{12} In short, the Regulation prescribes that the comparable sale approach (also known as the market data approach) is the principle, and the income capitalization approach is the exception.

More specifically, in principle, appraising current market value for takings

\textsuperscript{11} This committee has 17–19 members, and comprises the (deputy) mayor, a local legislator, five local government officials, and several representatives from relevant associations.

\textsuperscript{12} Scholars have heavily criticized this stipulation, contending that (1) Regulations on Appraising Current Market Value for Takings Compensation Purposes is not as sophisticated and accurate as Regulations on Real Estate Appraisals; (2) real estate appraisers have to follow Regulations on Real Estate Appraisals in their other works. Why is an idiosyncratic approach necessary for assessing compensable land value? (Kang 2014: 21–22; Lin 2012: 84; Chen 2012: 102).
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compensation purposes can be broken down into several steps (Articles 4–21 of the
Regulations on Appraising Current Market Value for Takings Compensation
Purposes):

1) collecting or revising all kinds of maps (such as urban planning and zoning maps);

2) collecting information on real estate sales between March 2 and September 1 of the
“baseline year” (Y₁);

3) demarcating the jurisdictions into “land value zones” by land value, zoning,
infrastructure, among others;

4) estimating the “normal”\(^{13}\) adjusted-to-September-1\(^{st}\) unit price (Taiwan Dollars per
square meter) of the collected sales;

5) among the collected sales, choosing 3 comparable land parcels within the land
value zones where the takings project in question takes place;

6) comparing with the comparable land parcels and estimating the unit price of the
condemned land;

7) submitting the estimations to Land Value Evaluation Committee for approval or

\(^{13}\) The Regulations on Appraising Current Market Value for Takings Compensation Purposes specifies
rules for appraisers to adjust the abnormality of the sale prices.
adjustment. The approved unit land will then be used for condemnations taking place in the next, “current year” (Y2=Y1+1).\(^{14}\)

Market value of land fluctuates on a daily basis, so an up-to-date land value has to be estimated for land expropriations that take place after July 1 of the current year. An adjustment ratio should be computed based on the relative estimated price on September 1 of the baseline year and March 1 of the current year.\(^{15}\) Since August 2012, the actual sale prices of all real estate transactions have to be reported to the government (Chang 2015). Thus, the government now has a firm grasp of the market value of land. Since 2014 (the Ministry of the Interior 2013b: 14), the actual sale price data were used to compute the adjustment ratio. More specifically, local governments compare the average sale prices of comparable properties whose unit prices are between the 25 percentile and the 75 percentile in both the baseline period (March 2 to September 1 of the baseline year) and the current period (September 2 of the baseline year to March 1 of the current year) to estimate the percentage changes in land value (the Ministry of the Interior 2013b: 14–16; Articles 26 and 29 of the Regulations on Appraising Current Market Value for Takings Compensation

\(^{14}\) There are exceptions, but I omit the details here.

\(^{15}\) March 1 of the current year is six months after September 1 of the baseline year. September 1, as described in the text, is the baseline date for adjusting sale prices of comparable land. Article 30 of the LEA prescribes that local governments have to investigate market conditions every six months.
Finally, the estimations of adjustment ratios should be sent to Land Value Evaluation Committee for approval or adjustment.

In principle, condemnees receive the up-to-date current market value as compensation. Takings projects finalized between January 1 and June 30 of the current year should use the current market value estimated on the basis of market value on September 1 of the baseline year. Those closed in the second half of the current year should use the aforementioned market value adjusted by the adjustment ratio, to update the current market value to March 1 of the current year. An exception: if the current market value of the baseline year has been publicly announced and notified to the condemnees, and the adjusted current market value of the current year is lower than the former value, the higher market value of the baseline year shall still be used to compensate the condemnees (Article 30 of the Enforcement Rules for the LEA).

C. Judicial Review

Administrative courts defer to the local governments’ assessment of current

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16 That is, the 25% highest and 25% lowest unit prices are excluded. The average prices of the rest of the unit prices in both periods are calculated separately and then compared.

\[
\text{Adjustment ratio} = \frac{\text{average price in the current period}}{\text{average price in the baseline period}}.
\]
market value. In the pre-2012 regime, takings compensation was determined by the pre-announced official land value. Administrative courts’ hesitation in giving the official values a hard look is understandable, but not justified. In the post-2012 regime, however, the legislature prescribes compensation of current market value. As current market value is an objective, verifiable fact that anyone with the right training can estimate, administrative courts should substantively review the estimates of current market value by the governments, rather than deferring to them. So far (until October 10, 2014), I have found 6 administrative court cases which apply the new Article 30 of the LEA. In all six cases, however, the courts defer to the local governments. In Chang (2013c), I found that administrative courts in Taiwan before 2012 only conducted a “procedural review” of takings compensation determination, rather than a “substantive review.” That is, administrative courts only examined whether all the procedures stipulated in the regulations and statutes were followed. If they were, administrative courts assumed that the estimates were correct, or at least worthy of their deference. It appears that this mindset has not changed.

V. OVERALL DUE PROCESS

The due process for takings and its preceding procedures stipulated by the LEA is shown in a flow chart, Figure 1. Stages 1–5 are the preceding procedures, and
stages 6–15 are the takings procedures. Due to limited space, I will only focus on the negotiated purchase procedure (stage 5), a mandatory process before a land use applicant can apply for expropriation.

In principle, land use applicants have to negotiate in good faith and in their best efforts with the owners of the land needed for the undertakings, before applying to the Ministry of the Interior for expropriation (Article 11 of the LEA). Land use applicants should bargain with the owners based on “market value” (Article 11 of the LEA). In both the negotiated purchase here and the takings setting, the legislature uses market value as the standard for compensation. Nonetheless, Article 30 of the LEA stipulates that the market value in the takings procedure has to be approved by the Land Value Evaluation Committee, while Article 11 of the LEA defines market value as “mean normal transaction price in the market” without designating any agency or committee to approve the estimated market value. The Ministry of the Interior has advised land use applicants that the market value used in the negotiated purchase procedure need not equate the market value approved by the Land Value Evaluation Committee; in fact, a hard, non-negotiable bottom-line is the antithesis of the spirit of negotiated purchase (the Ministry of the Interior 2013a: 50–51, 1071–73).

The current practice of negotiated purchase is still in flux. Taoyuan County still relied on the pre-2012 regime, using Publicly Announced Land Value (an official land
value for property tax purposes) plus a 40 percent bonus, claiming that this would give condemnees more than the government-assessed market value—which, I should note, probably is below the real market value. By contrast, the New Taipei City commissioned independent real estate appraisers to assess the market value to be offered to condemnees. I cannot find any data on how often land use applicants “successfully” persuade the landowners to sell the land in question to them. My conjecture is that if the offered price in the negotiation is not much different from the current market value to be used in the takings stage (as it is often alleged to be the case), landowners would not have incentives to sell their properties to the land use applicants, as they receive tax benefits and condemnee status in takings procedures, among other reasons. Finally, I have found a Supreme Administrative Court case rendered in 201 that took a hard look at the negotiated purchase procedure, revoking and remanding the case to the lower court to review again whether the land use applicant had made a good-faith negotiated purchase.

VI. DISTRIBUTION OF DEVELOPMENT SURPLUSES

In Taiwan, landowners are excluded from appropriating any part of the development surplus. Sharing surpluses implies that condemnees will receive more than the market value of their properties as compensation. For Taiwanese condemnees
in the past few decades who did not receive even market-value compensation, getting a dip of the surplus is unrealistic. The Constitutional Court of Taiwan, in Interpretation No. 579, has ruled that the takings compensation must be commensurate with the losses of the condemnees.\textsuperscript{17} Losses refer to the property value taken away from the condemnees, not the lost opportunities to gain from the takings project. Hence, for ordinary takings, all development surpluses go to the state.

The compensation mechanism for zone expropriation, however, might enable condemnees to share some of the development surpluses. In zone expropriation procedures, condemnees have the option to choose between compensation in cash (as in land expropriation procedure) and compensation in kind—namely, condemnees can request to receive post-development land in lieu of cash compensation (Articles 39–40 of the LEA). The size of the post-development land parcel shall, in principle, be no larger than 50\%, but be larger than 40\% of the area of the condemned land parcel, unless “otherwise approved by the superior competent authority under special circumstances” (Article 39). In general, the floor-area ratios of the post-development land increase, market unit value often more than doubles, and condemnees who choose the in-kind option also receive tax benefits (Chen 2013: 272). As a result, the

\textsuperscript{17} English translation of this Interpretation is available at the official website of the Constitutional Court http://www.judicial.gov.tw/constitutionalcourt/en/p03_01.asp?expno=579.
market value of the smaller post-development plot received by the condemnees as in-
kind compensation is higher than the cash compensation the condemnees would have
received. As the cash compensation is assessed based on pre-development land value,
condemnees in zone expropriation who opts for in-kind compensation receive some of
the development surplus. The government, however, still keeps most of the
development surplus.

VII. THE DISPUTE RESOLUTION SYSTEM

The dispute resolution system regarding takings contains several levels of
scrutiny. Any person with an interest in the expropriated land or land improvement
(often, but not limited to, condemnees of land ownership) can object to the contents of
the public announcements of takings within the announcement period. The amount of
compensation is included in the announcement, but other matters (such as the scope of
the expropriation) are contained, too. The local governments shall investigate the
matter and notify the interested person in writing of the findings and actions taken. If
those interested are still discontent, and they have contested the amount of the
compensation, the local government has the discretion to refer the matter to the Land
Value Evaluation Committee for re-consideration. If those interested still disagree
with the result of reconsideration, they can initiate “administrative appeal.” Provided
that the interested people challenged matters other than compensation, the reconsideration stage would be skipped.

“Review committees” in the administrative appeal are expected to conduct “merits review”; that is, modifying improper yet legal administrative decisions. In other words, they should consider every aspect of an administrative act, examine whether it fits the government policies, and explore whether a different decision would better realize the legislative intent. When an agency uses its discretion and makes a bad judgment (but not to the extent of abuse of discretion), or an agency interprets a statute in an allowable (but not ideal) way, the administrative court cannot vacate it. Instead, the law requires the review committees to redress the harms by revoking the original administrative act and directing the administrative agencies to come up with a better decision. Therefore, although administrative agencies have discretion in interpreting statutes, review committees’ discretion trumps the agencies’, and the law does not expect review committees to defer to administrative agencies’ discretion in fact-finding or statutory interpretation. Review committees, however, do not appear to be very active. The revocation rate in all the administrative appeal procedures in the central government level was 10% between 2005 and 2009 (Chang 2014). In a prior empirical study, I found that takings compensation cases took up about 14% of all administrative appeal cases handled by Review Committee of the
Ministry of the Interior in 2006–2009, and the revocation rate of these takings compensation cases was 10.3%; more importantly, review committees rarely conducted merits reviews, limiting themselves to merely legality reviews (Chang 2012b). My comprehensive survey of all administrative reviews rendered in the first nine months of 2014 revealed that, in applying the new law, the Review Committee of the Ministry of the Interior has taken a more active role in certain cases, revoking the assessment of takings compensation by the administrative agency; nevertheless, deference to such decisions still appears to be the norm.

The last stop in the dispute resolution mechanism is the administrative court—unless the condemnees lose and bring their cases to the Constitutional Court, and the cases are taken. As the condemned land or fixtures are most likely worth more than 13,000 US dollars, the court of the first instance is the High Administrative Court (Articles 104-1 & 229 of the Administrative Litigation Act). In principle, the condemnees can appeal to the Supreme Administrative Court if the high court decisions are in contravention of the law (Articles 238, 242–243 of the Administrative Litigation Act). The administrative courts in Taiwan generally are not big believers in judicial activism. Chen (2013: 165), however, has identified several administrative court cases that chastised the administrative agencies that treat negotiated purchases as a mere formality, instead of bargaining in good faith. That said, as noted above,
administrative courts are highly deferential to the administrative agencies in terms of assessment of takings compensation.

VIII. EVALUATING THE TAKINGS REGIME IN TAIWAN

The 2012 reform of the LEA marks the third major change of takings compensation since 1949 (Chang 2013b). Generally speaking, this latest reform may be optimal in terms of law in books. Of course, it is the law in action that matters for the condemnees and the general public. As the new LEA is still young, it is unclear whether the amended regime can guarantee condemnees with the basic respect they deserve in a democracy. This chapter has offered evidence for worries, as the administrative agencies have not shown significant changes in their course of business and the administrative courts appear to be deferential as usual. Given an inactive court, one should not rely too heavily on the administrative court to raise the standard of review of the public interest in takings cases. If land value appraisals are still considered highly technical matters that only the governments or the real estate appraisers they hire can understand, administrative courts will still pass on reviewing these critical decisions. This part advances a new approach, under which estimation of market value of condemned land through hedonic regression models with block-level sale data is mandatory. By making the estimation more transparent, I hope that courts
will become more willing to review the decision. Provided that condemnees can really receive market value as compensation, it leaves much less room for governments to condemn unnecessary land. This is the law of demand.

Real estate appraisers in Taiwan, like their colleagues elsewhere, still largely rely on the conventional method to estimate market value. Appraisals are handiwork, based on experience, and their subjectivity makes them unlikely to be contested.

The era of big data has come to Taiwan, and hedonic regression models that utilize big data to assess market value of land have become too powerful to ignore. Actual market sale prices of real estates had been kept secret for decades. None other than the transacting parties themselves (and perhaps their agents) knew the actual prices. Transaction taxes were levied based on official land value, not actual sale prices. As a result, no one had large enough data to utilize regression models.

Things changed, however, in 2012. As part of his presidential re-election campaign, President MA Ying-jeou advocated “residential justice.” The legislature passed or revised five statutes, three of which mandate that the actual sale prices of immovable properties be reported to the government. The “actual price report” regime came into effect on August 1, 2012. The raw data are available for download, and the competent agency, the Ministry of the Interior, started a website that enables users to
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check sale prices in any region in Taiwan through a graphic interface. Users can also acquire information on that website regarding the transacting month, total area, zoning, layout of the apartment (such as how many rooms), etc. (Chang 2015).

New and larger data sets are churned out every day. From August 2012 to February 2013 alone, there were 188,900 reported sales of land and/or building. The data regarding the sales of land are summarized in Table 3. From August 2012 to November 2014, the reported number of sales of land and/or building increased to 840,165.

With these (ever-increasing) sets of data and a properly specified hedonic regression model, market value of any land parcel in Taiwan since August 2012 can be estimated with pretty high accuracy. My co-authors and I have developed a hedonic regression model elsewhere (Chang, Chen, and Lin 2014). The model, introduced in details below, is an ordinary least square (OLS) model with robust standard errors. The dependent variable is the actual sale price. The independent variables control for the land size, zoning, transaction month, and the number of plots involved. The models take the following form:

\[ P_i = \alpha + \beta A_i + \theta N_i + \delta Z_i + \eta M_i + \gamma S_i + v_i \]

\[ \text{http://lvr.land.moi.gov.tw/N11/homePage.action#}. \]
where $P$ is natural log of sale prices; $A$ is natural log of land area; $N$ is natural log of the number of land plots involved; $Z$ are 9 zoning dummies that capture 10 types of zonings: non-urban (agricultural—not prime), non-urban (agricultural—prime), non-urban (industrial), non-urban (preserved), non-urban (residential), urban (industrial), urban (residential), urban (business), urban (agricultural), and urban (other); $M$ are dummy variables indicating the month of the transaction. $S$ are a series of dummies indicating the strata of the town/city in which the land in question is located. Strata 1 to 7 represent central business districts, industrial and business districts, growing towns, towns with traditional industries, lowly developed towns, aging towns, and least developed towns, respectively.  

$v$ is the error term. The coefficients to be estimated are $\alpha$, $\beta$, $\delta$, $\theta$, $\eta$, $\gamma$. The regression result is shown in Table 4. A high R-square of 0.73 means that this simple model can capture 73% of the deviations of the actual market prices from the average market prices. I am positive that most social scientists who do quantitative work will agree that an R-square of 0.73 is very satisfactory. With more data and more information to improve the model, using hedonic regression models to estimate market value will become more and more accurate in Taiwan.

---

19 The stratum classification is based on Hou et al. (2008).
I am not proposing the banishment of real estate appraisers from the takings procedure. Not at all. There is a confidence interval in any statistical estimates, and hedonic regression models are vulnerable to idiosyncrasy of land characteristics. Instead of entirely relying on statistical methods or subjective appraisals, why not get the best of both worlds? The governments can (and, I think, should) use the estimates (with, say, a 95% or 90% confidence interval) by the hedonic regression model as the benchmark, and require real estate appraisers to adjust the benchmark, if necessary. The appraisal reports should detail the reasons for the adjustments. Both the regression estimates and the appraisal reports should be provided to the landowners no later than the negotiated purchase stage. The informed landowners can then decide to accept the offer or challenge the amount of takings compensation later. Market value appraisal is objective, and local governments and real estate appraisers should thus be held more accountable than before by administrative courts. In other words, administrative courts should no longer defer on appraisal matters. Rather, experts hired by the condemnees should be allowed to debate the merits of the land value assessed by local governments. Administrative courts should commission independent appraisers to evaluate the quality of the appraisal reports by both sides. In the long run, only a more active court can bring equity to the condemnees.
IX. CONCLUSION

A pessimistic story emerges from my survey of the six pillars of eminent domain law in Taiwan. In four pillars—public interest criteria, just compensation, due process, and the dispute resolution system—the 2012 legislative reform improved the takings law in the book. Nevertheless, the new law did not appear to bring along new practices, at least not yet. The administrative agencies and the administrative courts, as current evidence suggests, followed the letter but not the spirit of the new legislature mandate. The subjects of the eminent domain power remain unchanged, as also their attitude toward wielding the eminent domain power. The new law promises market value compensation for landowners, who still have no share of the development surpluses.

The lesson for other jurisdictions is that a quantitative method should be used in the eminent domain procedure. In my prior work and this chapter, I have demonstrated the power of hedonic regression models in accurately estimating land value. Also, I have shown that various assessment methods, based on owners’ self-assessment or on real estate appraisers’ assessments for condemns, have failed to reach the goal of giving condemnees market value compensation. It is not that human being’s evaluation is always inaccurate (though it is sometimes). Rather, the problem has often been that the evaluation is biased by various other concerns, such as paying
less taxes or gaining more business. Statistical methods have a cold appearance.

Human right advocates hardly characterize statistics as protectors of property or other human rights. The counter-intuitive lesson from the takings law is that cold method can yield warm results.
References in Chinese


References in English

585.


Yiannopoulos, A. N. 1996. The Legal Servitude of Passage. *Tulane Law Review* 71:1-
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44.
Table 1 Land Expropriation in Taiwan, 2001–2013

<table>
<thead>
<tr>
<th>Year</th>
<th>Grand Total</th>
<th>National Defense</th>
<th>Transportation</th>
<th>Public Utilities</th>
<th>Water Conservation</th>
<th>Public Health and Environmental Protection</th>
<th>Education and Culture</th>
<th>Public Building</th>
<th>State-own enterprise</th>
<th>Social Welfare</th>
<th>Others</th>
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<td>4.2</td>
<td>267.7</td>
<td>14.4</td>
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<td>1.3</td>
<td>22.7</td>
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</tr>
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<td>2002</td>
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Table 2 Zone Expropriation in Taiwan, 2001–2013

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<th>Usage of Land</th>
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<td>Private</td>
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<td>2686.4</td>
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<td>1973.0</td>
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<td>5320.0</td>
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Table 3 Summary Statistics of Variables Used in the Hedonic Regression Models

Panel A: Continuous variables

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<th>Median</th>
<th>St. Dev.</th>
<th>Min.</th>
<th>Max.</th>
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<td>110,258,700</td>
<td>2,900,000</td>
<td>524,863,400</td>
<td>54</td>
<td>5,682,620,000</td>
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<tr>
<td>Land Area</td>
<td>60,530</td>
<td>1,471</td>
<td>358</td>
<td>4,598</td>
<td>0.01</td>
<td>411,300</td>
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<td>1</td>
<td>2.8</td>
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Panel B: categorical variables (N=60,530.)

<table>
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<th>Variable types and names</th>
<th>%</th>
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<td>non-urban (agricultural—non prime)</td>
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<tr>
<td>non-urban (preserved)</td>
<td>0.8</td>
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<tr>
<td>non-urban (industrial)</td>
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<tr>
<td>non-urban (agricultural—prime)</td>
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</tr>
<tr>
<td>non-urban (residential)</td>
<td>1.7</td>
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<tr>
<td>urban (industrial)</td>
<td>21.0</td>
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<td>urban (residential)</td>
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<tr>
<td>urban (agricultural)</td>
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<table>
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<td>6</td>
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<td>1.6</td>
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<table>
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<th>Months</th>
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<tr>
<td>2012/8</td>
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<td>2012/12</td>
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<td>2013/2</td>
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Source: Chang, Chen, and Lin (2014).
Table 4 Regression results for estimating market price and market rent

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<th>Dependent variable: ln of total sale price</th>
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<td>=1 if stratum 1</td>
<td>2.746***</td>
</tr>
<tr>
<td></td>
<td>(0.025)</td>
</tr>
<tr>
<td>=1 if stratum 2</td>
<td>2.024***</td>
</tr>
<tr>
<td></td>
<td>(0.021)</td>
</tr>
<tr>
<td>=1 if stratum 3</td>
<td>1.549***</td>
</tr>
<tr>
<td></td>
<td>(0.018)</td>
</tr>
<tr>
<td>=1 if stratum 4</td>
<td>1.394***</td>
</tr>
<tr>
<td></td>
<td>(0.018)</td>
</tr>
<tr>
<td>=1 if stratum 5</td>
<td>0.424***</td>
</tr>
<tr>
<td></td>
<td>(0.018)</td>
</tr>
<tr>
<td>Ln of land area</td>
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</tr>
<tr>
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<td>(0.003)</td>
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<td>Ln of number of plot</td>
<td>0.053***</td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
</tr>
</tbody>
</table>

| Zoning dummies                          | Yes |
| Month dummies                           | Yes |
| Constant                                | 7.779*** |
|                                          | (0.088)  |
| Observations                            | 60,530 |
| R-squared                               | 0.730  |

Robust standard errors in parentheses

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Source: Chang, Chen, and Lin (2014).
Figure 1 Flow Chart of the Eminent Domain Procedure

Source: The Ministry of the Interior (2013a: 24). Note: dotted arrows and boxes are procedures not always required.
Yun-chien Chang