THE TRAGEDY OF CONDOMINIUMS: LEGAL RESPONSES TO COLLECTIVE ACTION PROBLEMS AFTER THE KOBE EARTHQUAKE

MARK D. WEST

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The Tragedy of the Condominiums:
Legal Responses to Collective Action Problems After the Kobe Earthquake

Mark D. West* & Emily M. Morris **

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Abstract

This Article explores condominium recovery following the 1995 Kobe (Great Hanshin) Earthquake as a case study of law’s role in facilitating collective action. The quake damaged more than 2,500 condominium complexes, leaving unit owners with the collective action problem of how to dispose of the property from among their options under the Japanese Condominium Law: restore, reconstruct, or sell. The evidence from Kobe, buttressed by (or at least not inconsistent with) comparative evidence from California, shows that law was facilitative, and, at a minimum, satisfactory, in the disposition of property. This finding suggests that a law that includes (a) a high supermajority vote threshold and (b) a method for combining fragmented interests encourages timely recovery and aids owners in overcoming collective action problems in a fair and efficient manner. While market forces might lead to similar private solutions, we argue that market failures such as those seen in the Japanese condominium market probably make law a preferable option.

* Professor of Law and Director, Center for Japanese Studies, University of Michigan.

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INTRODUCTION

In the early morning hours of January 17, 1995, an earthquake measuring 7.2 on the Richter scale leveled the Japanese port city of Kobe and surrounding areas. Over two hundred people died during the first wave of tremors, and another six thousand died while trapped in rubble or resulting fires. The Great Hanshin Earthquake, as the disaster came to be called, left an additional fourteen thousand injured, over 410,000 homeless, and damages of $100 billion.

Recovery was difficult. Although the Hanshin elevated highway and many of the major department stores recovered and reopened to the public with relative speed, by May 1996, 48,300 households still lived in temporary housing, and most had no concrete relocation plans. In 2001, 3,548 still remained there. By December 1996 seven out of ten buildings were still damaged or in ruins, and one out of five small retail businesses had not yet reopened. Alcoholism increased, and many elderly and ill persons died from exposure and neglect.¹

The scars of disaster are multiple and lasting, but recent studies on major disasters suggest that relatively rapid recovery is the norm.² But significant questions remain: Can the recovery period be shortened? What process of recovery best answers concerns of welfare maximization and distributive justice? What formal and informal mechanisms affect the speed,
fairness, and efficiency of recovery? In this Article, we discuss one possible means of hastening some aspects of recovery post-catastrophe: formal legal institutions.

We analyze the role of law in post-disaster recovery through an examination of the Kobe earthquake’s effect on 2,500 damaged condominium complexes (manshon). Our study of Japanese condominiums, owner agreement patterns after the quake, and the law’s impact on decision making constitutes the first detailed analysis of post-disaster collective action in the shadow of the law. Because of the rich body of data available on the condominiums, the quake, and the relevant legal rules, the Japanese situation is an especially promising case study for examining theories on the relation of law and collective action.

The traditional collective action problems discussed in the literature help explain post-quake Kobe phenomena. Common-interest communities (CICs) such as condominiums are said to fall prey to a “one-way ratchet” of increasingly fragmented property rights, as transaction costs and rational self-interest often prevent CIC developers and owners from cooperatively compromising their decentralized rights to exclude others. To make matters worse, the law often has the perverse effect of helping to ossify these rights of exclusion. As a result, property becomes entrenched as an anticommons: rights of exclusion become distributed among so many owners that they cannot agree to develop the property to a higher use.

Such problems have been said to be virtually intractable. But recently, a general solution has been proposed: re-aggregation of rights, which in some cases would take the form of “land assembly districts.” These land assembly districts – and, we suspect, other related property

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solutions -- borrow heavily from condominium law, and in particular on governance in mixed-use condominiums that are prevalent in Japan. This theoretical attention underscores the need for empirical investigation of condominium law and governance issues of the sort that we undertake.

Based on our empirical study, we argue that specific provisions of Japanese property law encouraged the efficient resolution of CIC collective action problems. Our analysis of decision making in this crucial period leads to two central claims. First and most simply, we find that differing levels of agreement among condominium owners are a function of economic and institutional incentives. While social interactions surely play a large role in decision making, the data from Kobe suggest that institutions have much explanatory power as well.

We find that law in Kobe was not necessarily essential, but at a minimum, it was facilitative and satisfactory. Coupled with the first claim, this finding suggests a second claim: law can help overcome collective action problems if it (a) encourages timely resolution, without unduly sacrificing fairness or efficiency, through carefully formulated supermajority votes, and (b) provides a mechanism for the aggregation of property rights. Japanese law was largely successful in achieving this end by incorporating graduated supermajority decision rules in combination with put and call options. “Success” can have many different meanings; in this context, as we discuss more fully later, we define it as the efficient, fair, and timely disposition of damaged property.

We argue that this solution is probably best implemented through law. Commentators have documented a variety of ways in which parties have removed or ameliorated obstacles to
collective decision making, most often by private ordering. In the case of major condo decision making in Japan, we argue that market failures made some degree of public ordering desirable, both after the quake and at other times as well.

At least two caveats are in order. First, we do not mean to imply that the Japanese law is optimally efficient or fair. We note here only that in this limited context, public ordering appears to be superior to private ordering alone, and we address this subject in more detail in Part III. Second, while we believe that the theory and evidence discussed herein contain lessons for many types of collective action decisions and have in fact been employed elsewhere, some aspects may be limited to the specific dynamics of Japan, disaster recovery, or both. In fact we present evidence that shows differences in earthquake and non-earthquake condo reconstruction within Japan itself. Through this dual analysis, we hope to add the developing literature on not only disaster recovery but also the broader issue of the cost of collective governance in condominiums and other CICs.

The Article proceeds as follows. Part I sets forth the problem of condos and earthquakes and describes the legal solution provided in the Japanese Condominium Law. Part II provides empirical evidence on the efficacy of the Law, focusing on timeliness. Part III analyzes the Law’s response to fairness and efficiency concerns.

I. CONDO RECOVERY FROM EARTHQUAKE DAMAGE

A. Condominiums

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Since the 1960s, one of the more ubiquitous and enduring features of modern Japanese urban life is the high-rise condominium building. The Tokyo area contains about 104,000 “new” units, while the Kansai (Osaka-Kobe-Kyoto) area and Nagoya account for another 41,000 and 10,000 respectively. With the inclusion of older condominiums in more rural areas, the national total comes to nearly four million units. By comparison, the United States, with twice Japan’s population, contains roughly the same number of condominium units, with the highest proportion of condominiums to total housing units in Hawaii (twenty-one percent), followed by Florida (fifteen percent) and Washington, DC (ten percent).\(^8\)

Japanese condos are tiny and expensive; although new condominiums in Tokyo have grown from an average of 615 square feet in 1990 to 730 square feet in 1999 while the average price remains at around $400,000. The market for condominiums, however, like virtually all real property in Japan, has fallen in the last decade, which has in turn exacerbated the problems faced by owners of aging condominiums.\(^9\)

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\(^8\) For Japan, see Naohiro Yoshida, Manshon no Kanri to Tekiseika no Suishin ni Kansuru Horitsu ni Tsuite [Regarding the Law to Improve Condominium Management], 1195 Jurisuto 64, 65 (2001)(citing Construction Ministry data that show 3.84 million units, up from fewer than one million in 1980). For the United States, see U.S. Census Bureau American Housing Survey, at http://www.census.gov/hhes/www/housing/ahs/99dtcht/tab2-1.html. In broad demographic terms, Japanese condominium owners tend to be older, to receive higher salaries, and to have older children, when compared to those who rent privately or publicly owned apartments. Wataru Egami, Danchi no Kinjo Kankei to Community [Community and Relationship in Housing Complexes], in Shin Kurasawa ed., Daitoshi no Kyodo Seikatsu: Manshon / Danchi no Shakaigaku [Group Life in Urban Condominiums: The Sociology of Condominiums and Housing] 61, 84, 85, 98 (1990). In social terms, Japanese condo owners also tend to interact less and to be on less familiar terms with their neighbors than their lessee counterparts. Id.; Ichiro Ozaki, Toshi no Kokyosei to Ho: Manshon / Danchi no Shakaigaku [Group Life in Urban Condominiums: The Sociology of Condominiums and Housing] 61, 84, 85, 98 (1990). On age, see Aging Condos Pose Intractable Issues, Nikkei Weekly, Aug. 20, 2001.

about one-third of condominium stock is over thirty years old, and by 2010, one million units will have hit that mark.¹⁰ Thirty years may seem relatively young for any building, but some experts state that Japanese condominiums are not designed to survive more than thirty years; others claim that such buildings could last 100 years with regular maintenance, but that Japanese residents, for reasons systemic (relating to increases in the standard or living, perhaps) or otherwise, simply prefer rebuilding.¹¹ In any case, two-thirds of these aging condominiums (about twenty-two percent of all condos) now struggle with the decision of whether to rebuild. Besides falling prices, a number of factors frustrate the decision making process, including building code changes, neighborhood opposition, and perhaps the fact that about half the residents of buildings that are over twenty years old are themselves over the age of sixty.¹² Disposition of these aging buildings is one of the more complex issues facing urban Japan in the twenty-first century and suffers primarily from a simple phenomenon: unit owners cannot agree.

B. Some Basic Problems

Post-quake condominium owners might be expected to have a particularly difficult time reaching agreement. In addition to the usual sociological, psychological, and financial problems of adjustment after a natural disaster, Kobe condominium owners faced four relatively unique legal problems.


First and foremost, insurance funds were sorely lacking in Kobe. The typical Japanese earthquake insurance policy is a modified fire insurance policy but provides only thirty to fifty percent as much coverage.\textsuperscript{13} In total, insurance covered only 10\% of all Kobe quake damage.\textsuperscript{14} Many Japanese property owners sued their insurance companies when they discovered that their policies also contained “exceptions clauses” that denied coverage for fire damage caused or aggravated by earthquakes. Government recovery funds did not provide much recourse, for they went first to public facilities and infrastructure in order to stabilize the economy and foster commerce. Only afterward did remaining funds go to private recovery efforts.\textsuperscript{15}

Second, a web of zoning regulations strictly controlled the construction of new buildings. Rebuilding condominiums, even if only to their original size, would often violate regulations regarding sunlight exposure, height restrictions, or garages. Capacity restrictions (from which many previously had been exempt) were especially problematic. At least in part because the Ministry of Construction encouraged local governments to relax regulations, the city of Kobe and Hyogo prefecture both reformulated their land usage rules, but uncertainty remained.\textsuperscript{16}

\textsuperscript{12} Nissai Sogo Kenkyujo, Nihon no Chika to Fudosan 172 (1996) (citing Construction Ministry data).


\textsuperscript{15} Kobe Shimbun, Towazu ni Irarenai [Can’t Help But Ask] 368 (1999).

\textsuperscript{16} Sachihiko Harashina, Toshi no Seicho o Kanri suru [Managing Urban Development], in Yoshiteru Murosaki & Kazuo Fujita, Daishyinsai Igo [After the Big Quake] 268, 276-80 (1998); Yasuhiro Orita, Shinsai to Kubun Shouyutatemono [Condominium Buildings and the Earthquake], 67 Horitsu Jiho 36 (1995). One study found that of 107 condominium complexes judged to have sustained “severe” damage, only twenty-eight would comply with restrictions if rebuilt, while another thirty-four would exceed local capacity restrictions by over four hundred percent. Tsuneo Kajiura, Shinseiki no Manshon Kyojo [Condominium Residence in the New Century] 74-76 (2001).
Second, most of the destroyed condominiums were mortgaged. Financing reconstruction or repair by means of a second mortgage became difficult because the underlying collateral was destroyed in the earthquake. More significantly from a legal perspective, mortgage agreements often stipulated lender consent as a prerequisite to rebuilding.

Third, many condominium owners rented their units to third parties, to whom Japanese lease laws give significant rights. In many instances, the law effectively forced unit owners to find substitute housing for their lessees, often at considerable expense, while disposition of the condominium unit was pending.

Finally, and the focus of this Article, unlike owners of stand-alone dwellings, individual condominium owners had to decide jointly what to do with their damaged buildings. We discuss the role of the law in structuring those collective action decisions in the next Part.

C. Decision Making Under Japanese Law

If condominium unit owners unanimously agree, they can improve, dispose of, or terminate the property as they see fit, pursuant to the Civil Code. But in many cases, unanimity is unachievable. Accordingly, the Japanese Condominium Law in effect at the time of the earthquake provided condominium unit owners with two basic decision trees to channel resolutions: “restore” (fukko, used if the damaged portion of the building accounts for less than

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17 Shimamoto, supra note 11 (providing details of mortgage problems and the invention of the reverse mortgage in Japan). A 1999 Asahi Shinbun poll of 1,000 residents of reconstructed Kobe condominiums found that forty percent had two mortgages, and five percent had mortgages of over $400,000. The average cost of reconstruction per unit was $217,000. Heikin 2170 man’en Hanshin Daishinsai Higai no Manshon Saiken Hiyo [Average Cost for Condominium Reconstruction Post-Quake of ¥21.7 million], Asahi Shinbun, Sept. 26, 1999, at 1.

18 The Law for Temporary Disposition of Rental Property in Disaster Areas allowed renters of destroyed properties to assert priority claims on the property up to two years after the quake. Risai Toshi Shakuchi Shakuya Kinji Shoriho, Law no. 13 of 1946, as implemented by Cabinet Order 16 of 1995.
half of the building’s value) or “rebuild” (tatekae, used when maintaining or restoring the building due to deterioration, damage, or partial destruction involves “excessive cost”). Two months after the earthquake, the Japanese legislature, recognizing that the Condominium Law failed to address cases in which buildings were completely destroyed, passed a new law (the “Special Law”) to create a third legal option for specified disaster areas, “reconstruct” (saiken).

As the summary of the provisions in Table 1 illustrates, Japanese law employs very specific provisions to structure the condominium decision making process. The law uses two graduated mechanisms to reflect the extent and cost of various recovery measures. First, as the stakes of the decision grow, the applicable decision rule likewise grows: rebuilding and reconstruction require the agreement of a larger supermajority than major restoration, which in turns requires a higher level of agreement than minor restoration.

Second, the law incorporates buyout measures in the form of put and call options. Put options first appear in the provisions governing restoration of buildings that have lost more than half their value: unit owners who opposed a winning restoration resolution may demand that assenting owners purchase their units at the current market price. If unit owners do not pass a

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19 Tatemono no Kubun Shoyu to ni kansuru Horitsu, Law no. 69 of 1962, as substantially amended by Law no. 51 of 1983.

20 Hisai Kubun Shoyu Tatemono no Saiken to ni kansuru Tokubetsu Sochiho, Law no. 43 of 1995.

21 Special Law §2(1). The Kobe region was so designated pursuant to Hisai Kubun Shoyu Tatemono no Saiken to ni kansuru Tokubestu sochiho Dainijo ikko no Saigai o Kimeru Horei, Order no. 81 of 1995. Without the Special Law, destruction of an entire building destroys each owner’s right of ownership as well, leaving them merely joint tenants of the underlying land and thus subject to the Civil Code’s unanimity requirement before they can construct a building or make any other use of the property. Civil Code art. 251. See Akio Yamanome, Tatemono Kubun Shoyu no Kozo to Dotai [Structure and Change in Condominiums] 34-35 (1999); Homusho Minjikyoku Sanjikanshitsu ed., Hisai Manshonho Q&A [Special Law Q&A] 16 (1995).

22 A provision interpreted by the Osaka District Court in the context of the earthquake to mean (a) the price of the unit before the quake minus (b) the costs of restoration. Kono v. Urban Life K.K., Osaka District Court, 1668 Hanji 112 (Aug. 25, 1998).
restoration resolution six months after the building is damaged, the law provides that *any* owner may demand that any other owner purchase his unit at the current market price. If a building becomes so damaged that demolition and rebuilding or reconstruction becomes an option, the law makes call options available. Two months after resolving to rebuild, supporters or their designees may demand the sale of units from dissenting owners. If the requisite demolition has not started within two years of the resolution (or if construction has been delayed for no reason for six months, § 61(7)), dissenters may buy their units back at the price they were earlier paid.

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23 § 61(8). In the aftermath of the quake, the legislature extended this put-option period to one year (Special Law §5), but the larger practical problem is the allocation of demand rights, not the time frame. Although most commentators hold that only dissenters may demand purchase, the law makes no such specification. See, e.g., Yonosuke Inamoto & Kuniki Kamano, Komentaaru Manshon Kubun Shoyuho [Annotated Condominium Law] 317-318 (4th prtg. 2001); Eiki Maruyama, Manshon no Tateke to ho 143 (2000). Owners who sell their units are no longer considered “any other owner” and therefore cannot receive demand, but an impasse could result in which all owners demand that all other owners purchase their units. See Akio Yamanome, Kubun Shoyuken no Baishu Seikyu [Buyout Rights in Jointly Owned Property], 68 Horitsu Jiho 16, 17 (1996). This latter possibility is mitigated somewhat by the fact that owners receiving a demand cannot demand that yet another owner to buy the same unit. See Tsutomu Shiozaki & Nobuhiko Sawano, Shinsai Kankei Soshoho [Earthquake-Related Law] pt. II.8 (1998).

24 The law does not specify the purchaser. The Ministry of Justice’s official commentary on the law states that “in order to avoid confusion, the parties supporting the resolution should decide among themselves who will exercise the purchase right.” Homusho Minjikyoku Sanjikanshitsu ed., Atarashii Manshonho [New Condominium Law] 349 (1983). The right to purchase expires after two months (after which time a new resolution would be needed to renew the right, or rebuilding may not commence), see Shiozaki & Sawano, supra note 23, at 256-7, and the purchase must be made at the market price. When all is said and done, owners who originally supported the resolution, owners who
Table 1: Legal Provisions for Condominium Disposition

<table>
<thead>
<tr>
<th>Circumstances</th>
<th>Restoration</th>
<th>Rebuilding</th>
<th>Reconstruction</th>
<th>Civil Code Alternative in all Circumstances</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minor</td>
<td>Major</td>
<td>Major</td>
<td></td>
</tr>
<tr>
<td>Damage of less than 50% of value</td>
<td>Damage of more than 50% of value</td>
<td>Due to deterioration, damage, or partial destruction, maintaining or restoring building entails “excessive cost”</td>
<td>Entire building in designated disaster area is destroyed (Special Law)</td>
<td>Any (including partition and sale, Civil Code art. 258)</td>
</tr>
<tr>
<td>Vote</td>
<td>Unilateral (§ 61 (1)) or simple majority (§§ 61(3), 39(1)), but 3/4 if “excessively costly” (§ 17)</td>
<td>3/4 (§ 61(5))</td>
<td>4/5 (§ 62)</td>
<td>4/5</td>
</tr>
<tr>
<td>Minority Rights</td>
<td>None</td>
<td>Put option (§ 61(7))</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Majority Rights</td>
<td>Pro rata reimbursement for repairs (§ 61 (2))</td>
<td>None</td>
<td>Call option (§ 63(4))</td>
<td>Call option</td>
</tr>
<tr>
<td>No-action Rights</td>
<td>None</td>
<td>Put option (§ 61(8))</td>
<td>Option to repurchase two years after resolution (§ 61(6))</td>
<td>Option to repurchase two years after resolution</td>
</tr>
</tbody>
</table>

D. Additional Legal Factors

The Condominium Law, the Special Law, and other related laws created additional incentives and disincentives to reaching agreement.

1. Uniform terms. With the exception of minor restoration, the statute is silent as to the ability of the owners to alter statutory voting requirements. Commentators generally agree, however, that the respective vote thresholds for major and minor restoration, rebuilding, and reconstruction are not default rules but mandatory minima and in this way effectively constitute

answered that they support the resolution after notice was given, and owners who purchase dissenters’ units are deemed to have consented to rebuilding (§64).
safe harbor provisions; while owners may raise vote requirements, they may not lower them.\textsuperscript{26} Still, our research suggests an extremely high degree of uniformity among condominium agreements on this issue. None of the 86 Japanese condominium agreements that we examined deviate materially from the defaults of the law, and all appear to have followed with relative precision the government-led Housing and Building Advisory Committee’s model agreement (first written in 1983, and revised 1997), which also adopts the law’s requirements.

2. \textit{Time pressures.} Japanese law created time constraints that encouraged quick resolution by agreement. If a repair resolution was not passed within one year (by March 23, 1996), all owners received a put option (Special Law §5). Lessees of destroyed properties had to submit notice of their assertions to priority claims on properties by February 5, 1997.\textsuperscript{27} Public funds from the Ministry of Health were available for demolition only to owners who achieved unanimous agreement and applied for funds by March 31, 1997.\textsuperscript{28} In addition to the provisions above, the Special Law (§4) also prohibited parties from exercising their right under the Civil Code to partition jointly owned property until March 23, 1998. Finally, to allow for planning and policy development, the national government imposed a two-month moratorium on reconstruction.\textsuperscript{29}

\textsuperscript{25}See Nakatani v. Hirakata Kintetsu Hyakka K.K., Osaka District Court, 1351 Hanji 90 (May 31, 1990). Expenses are borne by the unit owners in proportion to their share or as otherwise specified in the agreement (§17).
\textsuperscript{26}Inamoto & Kamano, supra note 23, at 169, 328.
\textsuperscript{27}Risai Toshi Shakuchi Shakuya Rinji Shoriho, Law no. 13 of 1946, as implemented by cabinet order 16 of 1995.
\textsuperscript{29}Johnson, supra note 14, at 5.
II. RECOVERY PATTERNS OVER TIME

Although the post-quake decision process seemed slow to some observers, we find that the collective decision making process was relatively successful. Importantly, we do not define success simply as a decision to continue using a given piece of property as condominiums under the same general ownership as before. In some situations, selling the property for development into other uses or for a different form of ownership may very well have been the efficient outcome. Instead, we define successful outcomes as those possessing three fundamental qualities: timeliness, fairness, and efficiency. We find evidence of all three in the collecting decision making processes among the Kobe condominium owners. We begin by examining data suggesting that, despite the various institutional and economic obstacles face by condominium owners after the quake, the vast majority of them reached decisions regarding their complexes in a surprisingly rapid manner. While we recognize that bad decisions can be made quickly, in this setting we generally view timeliness as a virtue, for the prolonged loss of housing and infrastructure can be devastating to both the economic and psychosocial well-being of any community.

A. Dispositions

We rely on the very comprehensive longitudinal and cross-section study of 5,261 buildings in Hyogo Prefecture from 1995 to 2000 by Tokyo Kantei, an independent real estate information service. The data appear below in Table 2, along with two other sources for

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30 Three separate and slightly different sources of data exist. One is the more limited official statistics of Hyogo Prefecture, home to both the city of Kobe and epicenter of the quake. See Kobe Shimbun, supra note 15, at 363. A second is the more comprehensive results of a separate independent study conducted by academics and industry
comparison. “Large” refers to buildings whose foundations sustained fatal damage, have little structural use, and are good candidates for reconstruction or rebuilding. “Medium” refers to buildings that may need rebuilding, but may be usable after major restoration. “Small” refers to buildings that probably do not require reconstruction, but are appropriate candidates for restoration.

<table>
<thead>
<tr>
<th>Damage Level</th>
<th>Tokyo Kantei Data</th>
<th>Hyogo Prefecture Data</th>
<th>Reconstruction Committee Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large</td>
<td>83</td>
<td>172 more than half-destroyed and consulted with Hyogo authorities</td>
<td>122</td>
</tr>
<tr>
<td>Medium</td>
<td>108</td>
<td>189</td>
<td>189</td>
</tr>
<tr>
<td>Small</td>
<td>353</td>
<td>?</td>
<td>544</td>
</tr>
<tr>
<td>Light</td>
<td>1,988</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>No Damage</td>
<td>2,729</td>
<td>?</td>
<td>2,080</td>
</tr>
<tr>
<td>Unknown</td>
<td>N/A</td>
<td>?</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>5,261</td>
<td>172</td>
<td>2,935</td>
</tr>
</tbody>
</table>

The temporal data suggest that resolution and agreement were not automatic. Figures 1 and 2 show the development of agreement over time for buildings that sustained large and medium damage, respectively. The eighty-three condominium buildings that sustained “large” damage were the slowest off the mark. By the end of the first year, only thirty-two of the eighty-three large-damage buildings had reached agreement. Other data sources paint an even gloomier picture early on. The Great Hanshin Earthquake Special Committee on Reconstruction found that only twenty-four percent of large-damage buildings had obtained unit owner agreement eight

officials in the Great Hanshin Earthquake Special Committee on Reconstruction. See Tsuneo Kajiura, Shinseiki no Manshon Kyoju [Condominium Residence in the New Century] 58-59 (2001); Hidekazu Nishizawa & Yosuke Enmanji, Jishin to Manshon [Earthquakes and Condominiums] 46-47 (2000); Kajiura, supra note 16, at 143. Although a good case may be made for using the Committee numbers, we opted for a third data set, from Tokyo Kantei Eye. See Hisai Manshon no Fukko Jokyo [Recovery Conditions of Damaged Condominiums], 22 Kantei Eye, Dec. 1, 2000, at 7. Kantei Eye data to be appropriate for four reasons. First, the Tokyo Kantei categories correspond more directly to the legal disposition options. Although “Large” does not inevitably require reconstruction or rebuilding, the definition suggests that it should most often. Second, the Tokyo Kantei data appear to be more comprehensive. They include a much larger sample of buildings and properly account for the large number of buildings that sustained minor damage. Third, both news and academic sources report the Tokyo Kantei data to be authoritative. Finally, the annual updating of data by Tokyo Kantei is helpful in tracking the progress of condominium dispositions. Accordingly, unless otherwise noted, we rely on Tokyo Kantei macro-level data.
months after the quake. A year and a half after the quake, newspapers continued to headline disagreements preventing demolition of more than half of the 2,540 structures in need of rebuilding, including a significant number of condominium complexes. Similarly, Hyogo Prefecture’s official (but more limited) data show that of the 123 condominium buildings that the prefecture determined to need rebuilding, only eight had started the reconstruction process and ninety-six could not reach agreement one year after the quake.

As the figures show, however, by only a year after the quake, almost 70% of the medium-damage condominiums had at least decided what to do, and by the second year after the quake, this number had increased to well over 80% of both the large- and medium-damage buildings. Of course, in some cases, agreement fell apart even after a formal decision was reached. Some unit owners changed their minds, and one survey of ninety-nine buildings found that of the thirty-eight that had unanimous votes for reconstruction, only eighteen actually had full participation when it came time to pay the bill, and sixty-four had more agreeing than participating voters. Nevertheless, by the end of the year 2000, condo owners had resolved most of their issues, at least tentatively suggesting success. As Figure 3 shows, sixty-five such buildings had voted to rebuild or reconstruct by five years after the earthquake, and all but four were completed. Another twelve of the buildings sustaining “large” damage had voted for restoration, and all were completed. Five buildings – or what remained of them – had been sold. In only one

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31 Kajiura, supra note 16, at 64-5.
32 Hanshin Daishinsai: Hassei kara 1-nenhan: Nao Kaitai dekinai tatemono 1413 [1,413 Condos Can’t Rebuild One Year and a Half after the Quake], Mainichi Shinbun, July 16, 1996, at 1.
33 “Hassei ni Mukete” 9wari ga tatekae Susumazu [90% Can’t Rebuild], Kyodo News Service, July 19, 1996.
building did disputes prevent further developments.

[Figure 3 about here.]

A similar result obtained for the 108 buildings with “medium” damage. By December 1999, 31 buildings had voted to rebuild or reconstruct; all but one project was completed. Of another 75 buildings that voted for restoration, all were completed. One building was sold; another remained in dispute. In total, only two buildings of the 191 that had sustained medium or large damage were in dispute five years after the quake. Six were sold, 87 had completed restoration, 91 had completed rebuilding or reconstruction, and another 5 were in the process of reconstruction following a vote for such disposition. Among the buildings that sustained “small” or “light” damage, 99% (2,318) were restored, 20 were rebuilt, and only three of a total of 2,341 buildings were unable to reach resolution.

Sometimes owners used the call and put options to solve disputes; in other cases dissenters simply gave in. Our interviews with quake victims and experts found that in a few cases Coasean distributions solved the problem, as majority owners simply shouldered the recalcitrant owners’ share of the costs rather than lose their desired resolution or face costly litigation. Still, we found little evidence of strategic holdouts; whether because of legal, social, or other incentives, all holdout situations of which we are aware were at least perceived to be genuine, even by those in the majority.

In four cases involving building disposition, the courts decided. In all four cases -- by building name, Takurazuka, Towa Ashiya High Town, Higashiyama Corpo, and Rokko Grand Palace Takabane -- minority plaintiff owners brought suit to void resolutions to rebuild. Three suits were brought on the grounds that the “excessive cost” standard was not met; a fourth case (Higashiyama Corpo) involved a split vote in which a rebuilding resolution was approved by
80.2% (73/91) of voting interests, but only 79.5% (70/88) of owners.\footnote{The court voided the Higashiyama Corp resolution, as it failed to comply with the dual-vote provision of the Condominium Law. See infra text at note 82. Courts refused to void the resolutions in the Takarazuka and Grand Palace Takabane cases. See Tatekae Giketsu “Yuko”: Hankai no Takarakuzu no Manshon [Rebuilding Resolution Upheld in Half-Destroyed Takarazuka Condominium], Kobe Shinbun, Nov. 1, 2001, at 1; Tatekae Giketsu “Yuko” [Rebuilding Resolution Upheld], Asahi Shinbun, Nov. 1, 2001, at 38; Hisai Manshon Tatekae Giketsu Muko Hanketsu [Court Voids Rebuilding Resolution in Quake Case], Asahi Shinbun, Feb. 1, 2001, available at http://homepage1.nifty.com/nihonplanning/news.htm.}

As of January 2003, three of the four cases remain pending in the court system; only the Towa Ashiya High Town case settled (they rebuilt).\footnote{Hanshin Daishinsai Hisai Manshon, Tatekae Meguri Hajime no Waka i – Kosha, Tekichiken Ka itori [Public Housing Corporation Agrees to Purchase Property Rights in First Settled Case of Rebuilding: Condominiums Damaged in the Great Hanshin Earthquake], Nihon Keizai Shinbun, Oct. 26, 2001, at 43. Higashiyama Corp owners commenced safety-related structural repairs in September 2002. Id.} To be sure, these four cases were contentious, and the lack of a final resolution on three buildings even eight years after the quake is troubling, even if merely a reflection of more general problems of the Japanese judicial system. We also are aware of a fifth relevant case (the Ashiyagawa Urban Life case) not directly involving building disposition in which the court rejected arguments of a majority owner who claimed that the “market price” of the put options was too high (about $1.4 million) and that it was unfairly being singled out because it was the condominium developer and sales office.\footnote{Shinsai Higai Manshon Sosh o, “Kubun Shoyu, Hanbai Gaisha ga Kaitori wo” Hanketsu [“Real Estate Agent to Buy” Decision in Quake-Damaged Building Lawsuit], Nihon Keizai Shinbun, Jan. 20, 2003, at 18; supra note 25.}

Still, we find five court cases out of a decision-laden tragedy like Kobe to be minimal, if not trivial.

Of course, we do not claim that law was the sole factor in shaping decisions. We examined two building characteristics – building age and number of units – among the 108 quake-damaged condominium buildings that Hyogo Prefecture identified as undergoing reconstruction or rebuilding by the end of 2000, dater later used by the Ministry of Land, Transport and Industry. Building age was equivocal,\footnote{While older buildings sustained heavier damage, Kazusuki Kobayashi & Yoshiaki Fujiki, Manshon: Anzen to Hozen to tenami [Condominiums: Safety and Security] 211 (2000); Hidekazu Nishizawa & Yosuke Emmanji, Jishin to Manshon [Earthquakes and Condominiums ] 46-47 (2000), the Hyogo Prefecture data presented above show no} but the data suggest a negative relation

\footnote{80.2% (73/91) of voting interests, but only 79.5% (70/88) of owners.\footnote{The court voided the Higashiyama Corp resolution, as it failed to comply with the dual-vote provision of the Condominium Law. See infra text at note 82. Courts refused to void the resolutions in the Takarazuka and Grand Palace Takabane cases. See Tatekae Giketsu “Yuko”: Hankai no Takarakuzu no Manshon [Rebuilding Resolution Upheld in Half-Destroyed Takarazuka Condominium], Kobe Shinbun, Nov. 1, 2001, at 1; Tatekae Giketsu “Yuko” [Rebuilding Resolution Upheld], Asahi Shinbun, Nov. 1, 2001, at 38; Hisai Manshon Tatekae Giketsu Muko Hanketsu [Court Voids Rebuilding Resolution in Quake Case], Asahi Shinbun, Feb. 1, 2001, available at http://homepage1.nifty.com/nihonplanning/news.htm.}
between unit number and the speed with which agreement was reached.  

B. Comparison to Non-Earthquake Cases

1. Notable Differences. A comparison with earthquake-damaged buildings that opted not to rebuild would be probative, but the data simply do not exist. As a substitute, we compare the above data with data on the 25 rebuildings in the Kansai (Osaka-Kobe-Kyoto) area undertaken since 1984 that were not undertaken as a result of the earthquake. Three points arise. We first note that rebuilding not related to the disaster remains rare; only 69 total cases not involving the earthquake, and only 25 in Kansai have been identified – ever. The earthquake database thus may offer unique insights into the factors that encourage legally supported agreement. Second, the average age of buildings rebuilt for reasons not related to earthquake damage was 34.04 years, about 10 years older than the average quake-damaged building. Thus, assuming a thirty-year building lifespan as discussed above, rebuilding unrelated to the quake most likely occurred in buildings that were in poor condition. Third, while the average number of units in an obvious correlation between age and speed of resolution. The Tokyo Kantei data, however, show that of the eighty-three buildings they deemed to have sustained “large” damage, the rate of rebuilding was 83.8% for buildings built before 1970, 78.6% for buildings built in the 1970s, and only 50% for buildings built after 1980, while the rates of restoration were 6.5%, 14.3%, and 40%, respectively. Older buildings tended to be rebuilt, while newer buildings, despite consistent categorization by independent parties as “large” damage structures, were merely restored. Age also was a determining factor in the destruction of non-condominium buildings. Masatomi Tanba, Hanshin-Awaji Daishinsai ni okeru Jutaku Higai to Hisaisha no Doko/Fukko he no Shiten [Multi-Dwelling Building Damages in the Great Hanshin-Awaji Earthquake and the Recovery of Victims], in Kobe Toshi Mondai Kenkyujo ed., supra note 1, at 127, 131.

39 See Maruyama, supra note 29, at 55. It is also worth noting that while early reconstruction usually kept the same or fewer number of units, later reconstruction often included the addition of new units. As the data do not show any decrease in average floor space per unit, we interpret this result to reflect both relaxed capacity restrictions and a need for additional funding from new residents.

earthquake building that chose reconstruction was about 69, the average number in ordinary circumstances is only 48, suggesting that the earthquake tragedy, either by its magnitude or the pressures created by institutions, may have encouraged agreement that otherwise might not have arisen.

2. Agreement Patterns. The Condominium Law and the Special Law established clear numerical standards for agreement and provisions for subsequent buyouts relating to restoration, rebuilding, and reconstruction. As we noted in Part I, the only method by which unit owners can avoid the laws’ numerical requirements is by raising them to unanimity, as the Civil Code requires of ordinary co-owners. Before the earthquake, owners ignored the Condominium Law’s four-fifths rule for rebuilding and instead achieved unanimous consent, and as Table 3 shows, this occurred in all 69 historical cases of rebuilding nationwide that were not related to the earthquake.

<table>
<thead>
<tr>
<th>Table 3. Voting Patterns, 1975-2000</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td>Number of Rebuilt Condominiums</td>
</tr>
<tr>
<td>Location</td>
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<tr>
<td>Unanimous Civil Code decisions</td>
</tr>
</tbody>
</table>

The earthquake cases pose a startling contrast. Excluding currently pending litigation, 91 of 108 reconstruction and rebuilding cases after the Kobe tragedy were decided not by Civil-Code unanimous consent, but by the four-fifths rules of the Condominium Law and the Special Law. In another post-quake survey of thirty-five reconstructions pursuant to the Special Law and
twenty-three rebuildings pursuant to the Condominium Law, fourteen were decided by unanimous consent, and in another six cases owners achieved unanimity pursuant to the Civil-Code. Table 4 breaks down the levels of agreement for the 58 total cases decided pursuant to the two laws. The Kobe earthquake cases are the first instances in the history of Japanese Condominium law in which owners have reconstructed in the absence of unanimous consent – and most of them did. These agreement levels cannot be evaluated independently from the decision rule in place; we might see a different distribution under, for instance, a 70% supermajority rule. But the difference in the frequency of unanimity between earthquake and non-earthquake cases remains despite the underlying identity of available decision rules.

<table>
<thead>
<tr>
<th>Agreement Level</th>
<th>Number of Buildings</th>
<th>Percentage of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-85%</td>
<td>3</td>
<td>5.2%</td>
</tr>
<tr>
<td>85-90%</td>
<td>9</td>
<td>15.5%</td>
</tr>
<tr>
<td>90-95%</td>
<td>12</td>
<td>20.7%</td>
</tr>
<tr>
<td>95-100%</td>
<td>16</td>
<td>27.6%</td>
</tr>
<tr>
<td>100%</td>
<td>14</td>
<td>24.0%</td>
</tr>
<tr>
<td>Unknown</td>
<td>4</td>
<td>6.9%</td>
</tr>
<tr>
<td>Total</td>
<td>58</td>
<td>100%</td>
</tr>
</tbody>
</table>

At least five reasons account for the unanimity norm in non-earthquake cases and its relative absence in the Kobe earthquake aftermath. The first three reasons may be specific to disaster. First, the earthquake may have created unique social dynamics. Second, the Kobe earthquake often left disparate damage patterns; some units were destroyed, while others in the

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41 Manshon Tatake Enbotsuka Hosaku Kento Linkai, Manshon no Tatekae no Enkatsuka ni Mukete [Toward an Active Condo Reconstruction Market], Nov. 30, 2002, data appendix at 14, available as PDF file at [http://www.mlit.go.jp/kisha/kisha01/07/071130_2_.html](http://www.mlit.go.jp/kisha/kisha01/07/071130_2_.html)

42 Data from Manshon Tatake Enbotsuka Hosaku Kento Linkai, Manshon no Tatekae no Enkatsuka ni Mukete [Toward an Active Condo Reconstruction Market], Nov. 30, 2002, data appendix at 9, available as PDF file at [http://www.mlit.go.jp/kisha/kisha01/07/071130_2_.html](http://www.mlit.go.jp/kisha/kisha01/07/071130_2_.html) and Kajiura, supra note 16, at 78, 226-33. See also Ozaki, supra note 8, at 113 Hogaku Kyokai Zasshi 1324, 1701(discussing lack of unanimous decisions in reconstruction).
same complex were untouched. The age-related damage in non-earthquake cases may likely be more evenly spread across units. By the same token, evenly distributed damage patterns may explain why some buildings that were totally destroyed in the quake were able to achieve unanimity. Third, many owners simply wanted to move elsewhere rather than reconstruct following the quake. Although unit owners unaffected by earthquakes may feel the same way, the earthquake destroyed entire neighborhoods and alerted residents to the presence of conditions that might wreak havoc again in the future.

The remaining two reasons are institutional. First, although post-earthquake legislation attempted to encourage recovery by creating time periods that tolled several legal provisions, the effect of the legislation was to create deadlines for achieving agreement. Second, non-earthquake unit owners often seek unanimous consent in order to obtain “equal exchange” (toka kokan) rebuilding, commonly known as “rebuilding for free.” Although an equal exchange is not actually free, it often requires owners to procure no additional cash. In such a transaction, a developer rebuilds in exchange for partial ownership of the property. This method of reconstruction was extremely popular through the 1980s and early 1990s, as rising property values provided incentives to developers and tax-related disincentives to sale by owners. “Almost all” of non-earthquake-related reconstructions of condominiums are said to have relied on equal exchange for financing.

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43 Kajiura, supra note 16, at 184.


45 Manshon Tatakae Enkatsuka Hosaku Kento Inka ni Tsuite [Report of Committee to Investigate Plans for Condominium Reconstruction], Nov. 30, 2001, http://www.mlit.go.jp/kisha/kisha01/07/071130_2_.html. See also Kajiura, supra note 16, at 226-29 (51 of 64 cases). Ozaki reports that all reconstructions before 1995 were based on equal exchange. See Ozaki, supra note 8, at 113 Hogaku Kyokai Zasshi 1324, 1701. The remainder had similar incentives for unanimity such as eligibility for government aid under community redevelopment programs. See Iwata, supra note 44, at 60-61.
Equal exchange was not available to earthquake unit owners; because capacity restrictions were already exceeded, there usually was no unused portion of the property to trade to developers in exchange for their services, and the Condominium Law allows neither the purchase of additional land nor conversion of use. But even if capacity restrictions were eliminated, low property values likely made such arrangements prohibitively expensive for developers.\(^{46}\) The unavailability of equal exchange financing thus lessened incentives for achieving unanimity and could not help smooth over the differences in wealth among unit owners.

Still, Kobe condominium owners did not lack incentives to achieve unanimity, and as Table 4 shows, many buildings, perhaps about one-third, did so. A dominant factor in explaining unanimity in the absence of equal-exchange transactions appears to be the Ministry of Health’s policy that only those buildings that achieved unanimous consent were eligible for national funds for demolition.\(^{47}\)

In short, the levels of agreement seen in earthquake and non-earthquake condominium reconstruction cases suggest that despite some time lags and litigation, the Condominium Law and Special Law were useful in structuring rapid agreement among unit owners. Unit owners who could achieve unanimity did so. Those who could not achieve unanimity abided by the four-fifths rule, sold, or managed instead to satisfy the lower-threshold requirements for restoration. The buyout measures of the law also encouraged agreement, either by forcing the choice or by allowing the majority to squeeze out the minority in the name of overcoming collective action problems.


\(^{47}\) Kajiura, supra note 16, at 154.
C. Social Factors

The above data suggest that agreement patterns correlate with institutional incentives. Had the institutional incentives been the same for both earthquake and non-earthquake cases, we might have found less stark differences in agreement patterns. Still, we have not presented evidence that would refute a claim that timely agreement in earthquake cases would have arisen in other legal regimes. Given the dearth of available comparative data, we are unlikely to find such evidence. But we can investigate a related claim: if the social fabric in Japan is as strong as the literature often suggests, timely agreement might have arisen even in the complete absence of a formal legal regime.

Self-enforcing norms and social capital are often said to thrive in Japan, which might make solutions to commons problems relatively easy. As difficult as it may be to discuss such factors with precision, we find it extremely likely that social factors played an important role in decision making, and that these factors are important in explaining differences between Japan and other systems.

Still, the evidence for Japanese norms and social capital in this particular context is equivocal. Japanese sociologists, legal scholars, and lawyers note that condominium owners are often contentious on a wide range of issues, and the sociological studies that we cite above suggest owner heterogeneity and a lack of owner interaction. A survey on how Kobe condo owners formulated their votes suggest that social factors may not have been particularly

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important, at least in the owners’ perceptions of their own behavior.\textsuperscript{49} Consultants, attorneys, bureaucrats, and unit owners involved in Kobe condo dispute resolution told us a similar story. As one consultant explained, “Most owners don’t hate each other, and resident owners are usually fairly interconnected. But the quake was just beyond anyone’s comprehension. If there had been no legal provisions in place, the situation would have been pure chaos.” Or as one unit owner put it when we asked about the importance of social harmony, “If we ever had harmony, it ended in January 1995. After that, we needed law. . . . At some point in time, we might have reached a solution without the law, but I don’t even want to think about how that process would have worked or how long that would have taken.” Statements such as these from knowledgeable players suggest that social factors may not always lead to consensus, even in Japan.

We readily acknowledge the evidence either for or against social factors to be relatively weak. We simply note a lack of overwhelming evidence in favor of social factors, and much evidence that suggests a major facilitative role for law.

\textbf{D. A Comparison to the Northridge Earthquake}

The data presented above do not in themselves prove timely resolution in Kobe, and one difficulty of gauging success otherwise is the lack of a point of comparison. There are no “other” Kobes; no quake in post-condominium Japan approaches the Kobe magnitude of destruction, and non-Japanese earthquakes, though similar as geologic events, occur in vastly differing

\footnote{The survey studies owners who switched their vote from “yes” to “no” to achieve agreement. When asked why they changed their vote, the three most-cited factors were “the construction methods and plans became clear” (41.2%), “we received information about financial support for rebuilding” (38.2%), and “we received information that showed that rebuilding would raise property values” (32.4%). Kajiura, supra note 16, at 153. By way of comparison, attorneys working with the condominium owners after the quake tell us of the existence of a certain level of psychosocial bonding among unit owners.}
institutional and social settings. One important comparison point for measuring condo recovery
efforts in Kobe would have been the recovery of non-condominium properties that nevertheless
displayed similarly fragmented ownership rights, but the data simply do not exist. As a
substitute, we compare the Kobe condo recovery with that in the greater Los Angeles area after
the 1994 Northridge Earthquake.

We preface the comparison with one unavoidable caution: Kobe and Northridge differ
in some very material respects. Some of these differences are easily quantifiable, including
damage severity, government aid levels, insurance coverage levels, housing types and locations,
and the structure of the law (not only condominium law, but also bankruptcy, insurance, and so
on). But Kobe and Northridge may also differ in some less easily quantifiable ways, such as the
expected stability of their respective geologic faults, general demographic patterns, moving costs,
expected commutes, social capital, and the psychological effects of the quake on decisions to
rebuild. Still, because the comparison may help some readers place Kobe in context, we include
a summary of comparative damages, financial resources, law, and resolutions.

1. Damages. Exactly one year to the day before the Kobe quake, the Northridge
Earthquake hit Los Angeles and the San Fernando Valley at 6.9 on the Richter scale,
approximately equivalent to its Hanshin counterpart in intensity. But by almost all other
measures, Northridge paled in comparison to the Hanshin quake. Northridge’s estimated
damage figures run around $25 billion, only about one-fourth that of Kobe, and as
compared to Kobe, fatalities in Northridge were very low: only thirty-three. Both quakes
destroyed or seriously damaged about half the housing supply in each area, but while more
urban Kobe lost over 400,000 housing units, greater Los Angeles lost only 65,000. Only a
little over 3,500 individual condominium units in the Los Angeles area were condemned or
“yellow-tagged” after the quake, as opposed to a similar number of entire complexes that
were damaged in Kobe’s quake.\(^{50}\)

\(^{50}\) On damages, see Robert Bolin & Louise Stanford, The Northridge Earthquake: Vulnerability and Disaster 83-
89 (2001). On housing units, see Mary C. Comerio, Expenditures for Housing: Comparing the Costs of Temporary
Shelter and Rebuilding in Northridge and Kobe, in Proceedings, supra note 28, at 406, 408. On yellow-tagging, see
Jill Bettner, Dispute Divides the Owners of Damaged Reseda Condos, Los Angeles Times, May 29, 1994, pg. A1
[herinafter Bettner, Dispute]; Jill Bettner, Condo Crises Multiply in Quake’s Wake, Los Angeles Times, May 31,
2. Financial resources. Northridge condo owners received far greater financial support than Kobe owners. Like their Kobe counterparts, Northridge condo owners were disgruntled with the “abysmal” cooperation from their insurance companies, whom they perceived to under-estimate damage levels and unduly delay payment, and many sued their insurers.\(^{51}\) Nevertheless, unlike the Kobe insurers, private insurance payouts of over $12 billion represented the largest single source of reconstruction funds, benefiting primarily high- and middle-income homeowners.\(^{52}\) In addition, various federal and state government agencies contributed over $12.5 billion in loans and grants to cover costs of temporary housing, mortgage assistance, and real and personal property repair and replacement, as well as immediate disaster services.\(^{53}\) Moreover, many Northridge owners were eligible for tax breaks that were usually available in Japan only to owners of new housing.\(^{54}\) According to attorneys in California who dealt with the post-quake aftermath whom we interviewed, it was the rare condominium complex that could not scrape together sufficient funds to cover their costs between insurance proceeds and low-interest, long-term government loans.

3. California condominium law and other institutional recovery factors. The available data suggest that Northridge owners faced a number of the same difficulties Kobe owners would face the succeeding year. Northridge owners faced time pressures reminiscent of those in Kobe, for the moratoria on their mortgage payments quickly expired. Similarly, even after agreeing to rebuild, owners faced delays due to the insurance adjustment process, asbestos abatement, seismic retrofitting, building permits, and shortages of contractors and supplies. Like Japanese real estate, Los Angeles condominium values had also dropped drastically in the previous four years. With an average decrease in price of 15%, many condominium owners effectively lost most or all of their equity in what probably constituted one of their only assets. Owners without adequate insurance funds therefore had little incentive to invest further in assets that were already costing them more than they were currently worth. Even owners with insurance often had to shoulder significant deductibles and other costs. Also like their Kobe counterparts, lenders in California further aggravated matters by demanding control, sometimes through litigation.\(^{55}\) Some lenders offered transfer or purchase of deeds in lieu of foreclosure, strengthening their rights in the property and injecting further disparity of interest into deliberations.\(^{56}\) Others sold off their liens at firesale prices to speculators, who later tripled

\(^{51}\) Bettner, Dispute, supra note 50; Bettner, Crises, supra note 50; Ron Galperin, Why Is It Taking So Long for Condo Earthquake Repairs?, Los Angeles Times, Feb. 28, 1995, Bus. At 8.

\(^{52}\) Twelve percent of recovery funds were paid out under condominium policies. Bolin and Stanford supra note 56, at 133, leading to an insurance crisis in the state of California. By contrast, the Kobe quake had relatively little impact on the Japanese insurance industry, which covered only $2 billion of the estimated $100 billion in damage.

\(^{53}\) Bolin and Stanford, supra note 50, at 132.

\(^{54}\) Mark Magnier, supra note 11, at A1.

\(^{55}\) Bettner, Dispute, supra note 50; Bettner, Crises, supra note 50.

\(^{56}\) Chip Johnson, West Valley Focus: Reseda – Condo Owners Vote Against Rebuilding, Los Angeles Times, June 16, 1994, pg. B3; Eric Slater, West Valley Focus: Reseda – Residents in Limbo on Fate of Condos, Los
their investment.  

4. California Law and Bylaws. Importantly for our argument, California condo law differs in many ways from Japanese law (and law in other U.S. states, for that matter). First, California condominium law leaves a great deal to private ordering. Rules governing decision making about repairs and reconstruction arise not by statute but by Covenants, Conditions, and Restrictions (CC&Rs). California statute stipulates only the terms by which owners can partition a complex. Second, most California condominium CC&Rs provide that when insurance funds cover most or all of the cost, repair or rebuilding will automatically take place unless voted down by a specified percentage of owners, usually ranging from a simple majority to a supermajority. Notably, neither the law nor the CC&Rs make use of any type of buyout provisions. If private ordering were key, we might have expected decision making among Northridge condominium owners to be faster and less fraught with difficulties than among Kobe condominium owners.

5. Condo resolutions after the Northridge quake. At first glance, a comparison of resolution rates between Kobe and Northridge suggests that the results were similar: five years out, both areas saw an almost complete recovery of their condominium communities. But a closer examination of that five-year period suggests some salient differences. Although no comparably detailed data exist for the California condominiums (hence our focus on Kobe), various reports provide a crude picture of Northridge condo recovery rates.

57 Disagreements often arose not over whether to rebuild but how: according to the attorneys we interviewed, owners wanted thorough and high quality repairs while speculators simply wanted to make cheap and fast cosmetic repairs in order to resell the units quickly.

58 California law provides that a condominium can be partitioned if (a) the condo has been damaged or destroyed and is materially unfit for use for more than 3 years without being rebuilt or substantially repaired, or (b) three-fourths of more is damaged or destroyed and 50% of ownership in interest votes against rebuilding or reparation, or (c) the building is 50 or more years old and is obsolete and uneconomic and 50% or more of ownership in interest votes against rebuilding or reparation, or (d) the declaration otherwise provides for partition and sale. CA Civil § 1359 (West 2002). Although subsection (d) might appear to be a default provision, the court’s decision in Moorpark Homeowner's Ass’n v. VRT Corp., 63 Cal.App.4th 1396 (1998), makes clear that judicial involvement in the partition is mandatory. Most states, however, have adopted Uniform Condominium Act § 2-118(a), which states, “a condominium may be terminated only by agreement of unit owners of units to which at least 80 percent of the votes in the association are allocated, or any larger percentage the declaration specifies. The declaration may specify a smaller percentage only if all of the units in the condominium are restricted exclusively to non-residential uses.”

59 Jan Hickenbottom, Condo Q & A: Who Is Responsible for Quake Repairs?, Los Angeles Times, February 13, 1994, Sunday, Home Edition, Real Estate, Part K, Page 2, Column 3, Real Estate Desk. In this way, California CC&Rs adopt a variation on Uniform Condominium Act § 3-113, which has also been adopted by statute in a number of states. Section 3-113 requires an agreement of 80% to block the use of insurance funds to repair or rebuild a damaged or destroyed condominium complex. Where earthquake insurance is both commonplace and sufficient, which it was for most Northridge complexes, such automated decision making may be a fair and efficient means of avoiding collective action problems.
A full year after the quake, only a quarter of the complexes had yet begun repairs; by contrast, over a third of Kobe’s large-damage condos had at least reached agreement by the same point in time, and many had begun repairs. Eighteen months post-quake, only 14% of the Northridge condos had been repaired, whereas half of the Kobe structures in need of rebuilding had already begun to do so. In the second year after the quake, many Northridge owners began to complain about the slow pace of recovery, and condominium associations became battlegrounds over recovery resolutions; in Kobe, on the other hand, over three-quarters of those condos with large- and medium-scale damage had reached agreement. By the third year afterward, only a little over 20% of all housing units damaged in Northridge had been repaired. Apartment complexes – not condos – comprised the vast majority of completed repairs; according to Los Angeles Housing Department data, 65% of the city’s 1,843 damaged condos were still vacant, directly attributable to “complications of multiple ownership.” Among Kobe condos, by contrast, over 95% of the complexes had reached agreement. It was not until the fifth year after the Northridge quake that recovery efforts neared completion.

Thus, in comparison to the Northridge recovery rates, condominium recovery in Kobe after the Hanshin quake appears rapid, particularly in light of the relative dearth of insurance funds and government aid for Kobe condos. Northridge displayed broad similarities in terms of real estate values, building code, and inadequate construction, but also sustained much less damage

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60 Galperin, supra note 51. Those that had begun repairs were either minimally damaged or wealthier communities. Id.; Hugo Martin & Julie Tamaki, 2nd Wave Of Quake Destruction: Some Owners Let ‘Ghost Town’ Properties Go Into Foreclosure, Leaving Stubborn Criminal Havens. Officials Say Drastic Solutions May Be Required To Avoid Festering Problem, Los Angeles Times, Metro A1 (Sept. 18, 1994).


63 Doug Smith, Northridge Quake Housing Repairs Close to Complete; Disasters: With 75% of Work Done, L.A. is Ahead of Bay Area Cities Still Recovering from ’89 Temblor, Los Angeles Times, Metro A1 (Feb. 3, 1997).

64 “Practically all” uninsured condominiums were not restored or rebuilt by their original owners; rather, the owners ultimately sold their complexes at huge losses to developers, who then restored the complexes themselves. Personal telephone conversation with Mary C. Comerio, Univ. of Berkeley Dept. of Archit., (Mar. 20, 2002).

65 Although the longitudinal data available require us to compare agreement rates in Kobe with reparation rates in Northridge, our interviews suggest that these two seemingly different variables may be more comparable than they first appear, as delays in commencing repairs after the Northridge quake were due mostly to unit owner disagreements, occasionally with other owners, but often with insurers and lenders.
and received much more insurance proceeds and government funding than Kobe. The comparison, even with these best-available data, is undeniably rough. Still, even this rough sketch suggests that the situation in Northridge was certainly no better, and probably worse, than in Kobe.

III. FAIR AND EFFICIENT RECOVERY

In this Part, we shift our focus from timeliness to the fairness and efficiency of the particular decision-making structures of Japanese condominium law. We begin by exploring two background issues: the costs and benefits of collective action in condominiums, and the range of options for structuring and facilitating collective action. We then turn to an examination of Japan’s attempt to structure such collective action through public ordering.

A. Collective Action Costs and Benefits Among Condominium Associations

Condominiums offer many benefits. Like most private residential communities, condos can provide not only the benefits of private home ownership but also many public goods in a relatively efficient and cost-effective manner, largely by pooling resources and diffusing risk in much the same way that state actors do, but on a more localized, less bureaucratic level. Condominiums are also said to foster a sense of community and sharing and bring together people of like interests and tastes. Attempts to solve collective action problems simply by limiting the size or the number of rights to this common resource property form might unnecessarily sacrifice these benefits. More efficient solutions reconcile ownership rights in ways that conserve these benefits while simultaneously controlling costs.

As mentioned above, one of the primary transaction costs that plague condominium
governance is the cost of collective action. Many decisions, particularly those in which most or all of the owners have strong interests, provide an opportunity for holdouts and free riding. But strategic behavior is not the only source of collective-action costs among condominium owners. Genuine conflicts, or heterogeneity, of interest of three basic types were a major source of transaction costs that played at least a partial role in post-quake disputes between unit owners. First, heterogeneity of personal preference arose because resident owners’ respective investments in their residences yield non-pecuniary, in-kind, and often highly subjective returns because decisions regarding the complex affect each occupant differently.

Second, heterogeneity of pecuniary interests (that is, wealth effects such as the marginal utility of a dollar as well as the capacity to absorb risk) and time constraints (such as financial liquidity) also raise transaction costs among condominium owners, particularly after major events such as earthquakes.\textsuperscript{66} One obvious source of financial heterogeneity lies in variations in owner debt-equity ratios. Data on all but gross Japanese debt-equity ratios are difficult to find.\textsuperscript{67} The Prime Minister’s Office reports, however, that at the end of 1994, 29.4\% of homes in the Keihanshin (Kobe-Osaka-Kyoto) area had mortgages.\textsuperscript{68} These rough data do not discriminate between condominiums and other homes, nor do they account for a building’s age (newer buildings might be more likely to be mortgaged). Still, if approximately three of every ten units are mortgaged, heterogeneity could be problematic. Similarly, lender foreclosure on, or assumptions of, condominium ownership rights could also tend to exacerbate heterogeneity of


\textsuperscript{67} The media did not report such data post-quake, and the Bank of Japan informed us that they do not keep them. It would be possible to hand-collect this data from Ministry of Justice real estate registrations, but the viewing charge of 1,000 yen (about $10) per entry makes such a process prohibitively expensive.

\textsuperscript{68} Somucho, Chochiku Doko Chosa [Savings Movement Survey], available at \url{http://www.stat.go.jp/chochiku}. 
interests and consequent collective action problems.\textsuperscript{69}

Third, heterogeneity of damage suffered led to some disputes over not only what recovery measure is best for a particular complex but also much of the cost a particular unit owner must bear. Those suffering little damage might not be willing to vacate their units so that the entire complex can be demolished and rebuilt. Similarly, they might be unwilling to pay for repairs to what they see as someone else’s part of the complex.\textsuperscript{70}

Heterogeneity is malleable in two important ways. First, heterogeneity of interest can be highly context-dependent, even among the same group of owners. Second, owners can sometimes reduce the effects of heterogeneity by varying individual cost in proportion to individual interest. Alternatively, where individual interests are too difficult to ascertain or administer, Coasean private side payments between owners may serve to ease collective action problems. Both points suggest a need for a variety of tailored decision making options.

\textbf{B. Means of Structuring Collective Action}

In their seminal book on decision making and associated transaction costs, James Buchanan and Gordon Tullock describe a spectrum of decision making structures.\textsuperscript{71} Three basic forms in their spectrum are useful to our inquiry here: centralized rule by developers, representative management, and democratic member voting.

\textsuperscript{69} In this way, lender involvement in condominium decision making might create what can be seen as a “qualitative,” as opposed to purely “quantitative,” anticommons: even if the number of rights holders remains the same or decreases, the heterogeneity of interest increases enough that collective action problems actually become worse. According to attorneys who worked with the Northridge condominiums, this was perhaps the most significant problem inhibiting resolution after the quake.

\textsuperscript{70} This third type of conflict of interest was a common, although perhaps not significant source of disputes among Northridge condominium owners. Larry Gordon, The Road to Recovery: Repairs Add Stress on Condo Boards, Los Angeles Times, February 22, 1994, Tuesday, Home Edition, Metro, Part B, Page 1, Column 4, Metro Desk.
At the far end of the spectrum, condominiums could rely on the developer as the centralized decision maker, in much the same way a landlord manages a rental property. But while developers often remain involved with condominium complexes with regard to maintenance and other mechanical issues, they typically hand over association control as soon as a certain minimal number of units have been purchased.\textsuperscript{72} We see this phenomenon as beneficial: developers, as non-residents who would have great difficulty in ascertaining or empathizing with individual preferences, might not make the most efficient or fair decisions for the condominium community or individual owners, particularly on such major issues as those faced in Kobe.

Toward the middle of the spectrum is centralized governance by a committee of owners, a representative management solution such as that found in association boards. Because such delegated decision making might save both transaction costs and the cost of gathering information about various highly complex factors, it often serves in resolutions on rather mundane issues such as routine maintenance and repair and budgetary matters. As with any delegated power, however, association boards suffer from principal-agent noise and therefore may be undesirable candidates for such high-stakes decision making as was necessary after the Kobe quake. Given that board members are unit owners themselves with their own vested and heterogeneous interests, this lack of complete interest alignment may be particularly


A third alternative at the opposite end of the governance spectrum is democratic voting rights for all unit owners, an arrangement that seems best suited to address concerns of fairness and choice. Among the possibilities for democratic vote, simple majorities and increasingly more inclusive decision rules are the norm for the high-stakes condominium resolutions required by Japanese condominium law, and are thus the most relevant for our study of Kobe condo recovery. In the following Section we therefore present a more detailed analysis of this third governance form and its rather unique implementation under Japanese condominium laws.

C. Japanese Institutional Design and Collective Action

The context so framed, we now examine Japan’s relevant legal regime. We first explore the effect of collective decision rules in increasing allocative and overall efficiency. We then turn to the system of puts and calls and their synergistic effect in increasing efficiency still further while encouraging fairness and reducing dissenting owners’ burdens.

1. Inclusivity. A central starting point is the degree of inclusivity that the democratic governance form should require, a factor that depends primarily on how profoundly the decision affects the individual and the group. The more profound the effect, the more inclusive the decision rule should be. Because the effects in Kobe appear most profound, first consider the most inclusive rule: unanimity. Unlike majority and supermajority rules, unanimity guarantees
that all owners can and will participate in the decision making process. Unanimity rules also
guarantee efficient outcomes, as individual owners will not agree to a plan if it does not
maximize their welfare.

Nevertheless, a unanimity rule might be particularly difficult for Japanese condominium
owners facing such major decision without institutional support, for three primary reasons. First,
Japanese condos often mix residential and commercial uses, and owners for each use are likely to
have divergent interests, concerns, and experiences, and may be less likely to form significant
communitarian bonds than in single-use developments. Second, Japanese condominiums often
have hundreds, or in multiple-building complexes, thousands of units, again making them less
likely to foster communitarian bonds and increasing the likelihood of interest heterogeneity.
Finally, in part due to the expense of single-family housing, many owners in Japan purchase their
units for financial reasons, as opposed to the non-pecuniary, lifestyle reasons cited by U.S.
purchasers.75 Although each of these three factors characterizes condominiums in the United
States, they tend to be true to a greater degree of Japanese condominiums.

For these reasons, a unanimity rule can stall collective action and eventually impose even
greater costs than a supermajority rule, particularly when the costs of no action are as high as
they were for the Kobe condominium owners. We therefore posit that something less than a
unanimity rule may be preferable as a statutory minimum requirement, particularly in
conjunction with additional measures that can help protect fairness and efficiency when
unanimity is not possible. We first address the proper minimum supermajority rule, then the
additional measures.

75 In the U.S., the leading reasons for moving into community associations are said to be: the provision of
services, companionship, and security for retirees; the provision of private services and amenities such as swimming
a. **Supermajorities.** Laws requiring supermajorities are said to have three general benefits, particularly in comparison to less inclusive rules.\(^{76}\) First, in some cases, they may minimize the coercive effect of democratic control: more inclusive decision rules minimize the number of dissenters who must either surrender their units or shoulder the burden of decisions they do not support. Supermajority rules may therefore also have a politically legitimizing effect on resulting decisions. Second, supermajorities may protect against recurrent domination by the given majority because relatively small minorities can successfully veto any given proposal.\(^{77}\) Similarly, more inclusive decision rules may also help reduce opportunities for wealth transfers between unit owners. Third, supermajority requirements tend to ensure that adopted recovery measures will increase not only net social welfare but also individual welfare for the supermajority as well: the closer the decision rule moves toward unanimity, the closer the end result will move toward Pareto optimality.\(^{78}\)

Supermajority decision rules are not a panacea. In the context of the Kobe quake, these rules ostensibly created a barrier to major restoration, rebuilding, and reconstruction because, in

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\(^{77}\) John O. McGinnis and Michael B. Rappaport, Supermajority Rules and Constitutional Solution, 40 Wm. & Mary L. Rev. 365, 428-434 (1999). Some scholars object to supermajority rules as effectively shifting control to the dissenting minority, see, e.g., Sterk, supra note 72, at 288-91, but others assert that this is true only when the alternatives being voted on are mutually exclusive and when inaction is equivalent to action. See Lynn A. Baker & Samuel H. Dinkin, The Senate: An Institution Whose Time Has Gone?, 13 J.L. & Pol. 21 (1997). Neither condition dominated in post-quake Kobe.

\(^{78}\) See Gordon Tullock, Problems of Majority Voting, 67 J. Pol. Econ 571 (1959). Still, a high threshold such as that of the Japanese Condominium Law may forfeit opportunities to achieve the Kaldor-Hicks efficiency that might have occurred under simple majority rule *in a particular instance*. But the magnitude of individual gains and losses from any given recovery measure will vary widely from case to case, and policymakers cannot easily predict whether a simple majority rule will yield a net positive balance in social welfare in any particular case. The heterogeneity of owners’ utility functions suggests that a more inclusive, supermajority measure is more likely *on average* to increase net efficiency than a simple majority. See Buchanan & Tullock, supra note 71, at 126; McGinnis & Rappaport, supra note 77.
the absence of the requisite supermajority, no recovery measures could be implemented. They also leave in their wake varying, although small, percentages of dissenting owners now saddled with burdens for which they do not receive corresponding benefits. And like simple majority rules, supermajority thresholds are, by themselves, unable to respond positively to intensity of voter preferences and to aggregate them for optimal efficiency.

Side payments may change the equation. Under any decision rule, Pareto-superiority can be achieved with side payments between benefited and burdened unit owners. Many commentators note that side payments among condominium owners are uncommon, but such exchanges did occur in the rather extreme circumstances of post-quake Kobe. As mentioned above, some Kobe condo owners paid the dissenters’ share of recovery costs rather than lose their desired outcome. Nevertheless, when individuals make collective decisions that could affect their personal residences and finances in rather profound ways, they may seek deeper involvement in the decision making process than the purely economic exchange. We therefore find logrolling and other forms of side payments to be an unsuitable primary strategy on which to base these large-scale decisions.

b. Additional measures. Additional measures may be helpful in protecting minorities when unanimity is unachievable. Consider one particular measure in the Japanese Condominium Law: the Law allows rebuilding only when major restoration entails “excessive cost.” The

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79 Hansmann, Condominium and Cooperative Housing, supra note 7, at 36.
80 Buchanan & Tullock, supra note 71, at 134-35.
81 In the draft plan of the statute, the Ministry of Justice initially proposed a provision allowing unit owners to restore the building if “due to changes surrounding property or other circumstances, and compared to the amount of costs involved, the use of the building could be markedly improved,” in addition to the “deteriorating, damaged, or partially destroyed” and “excessive cost” provisions. Another plan proposed to drop both provisions and simply require a nine-tenths vote, which might have reduced lawsuits and forced sales but also might hinder agreement. (Some legislators thought the four-fifths supermajority too high. Homuiinkai Giroku, March 15, 1995, at 3.) In the end, the Ministry and the legislature chose a rule that, in exchange for creating a more easily met four-fifths voting
statute thus attempts to mitigate the possibility that an 80% majority will resolve to rebuild solely for the purpose of squeezing out the minority. Although the rule might not necessarily result in the optimal social use of the property, the Japanese condo law’s four-fifths provision for rebuilding and reconstruction can thus be seen as an attempt to create a threshold that properly balances majority interests with minority rights.

Another crucial factor in democratic voting is allocation of voting power. Condominium law in Japan (and elsewhere) bases both proportional ownership of common areas (areas not exclusively owned by individual owners) and proportional voting power on the ratio of individually owned floor-space to the total floor space of the entire complex. This allocation is also used to determine shares in the liability for the maintenance and repair of common areas (as well as some other forms of liability not relevant here).\(^{82}\) Thus, each owner’s voting power correlates well with each owner’s share of the costs of any given decision affecting common areas. In addition, Japan’s Condominium Law requires that all decisions meet the specified decision rules in terms of both (a) number of unit owners and (b) proportion of total voting rights.\(^{83}\)

2. Put and Call Options. The Japanese Condominium Law’s innovative use of put and
call options effectively creates a system allowing side payments among owners, helping to ease the costs of less-than-unanimity decision rules. Like side payments, put and call options help force majority assenters to internalize the costs of their decisions and in this way follow what a minority dissenter would have wanted, *at minimum*, had she anticipated and consented to being in the minority on any given decision. The Condominium Law’s put and call options may provide secondary benefits by encouraging true side payments in lieu of forced sales of one or more entire units.  

More importantly, however, the options help defragment the property rights bundle by concentrating ownership into fewer hands. When decision making about a major restoration proposal stalls for over a year, impatient unit owners can force others to buy them out, thereby ending stalemate. Likewise, stalemates over decisions about how to proceed *after* a resolution to rebuild or reconstruct has been passed can be eased by buying out forcibly dissenting unit owners. Dissenting owners may also benefit from the relative ease of exit that options provide.  

Moreover, put and call options allow voluntary or involuntary elimination of “less efficient users” when heterogeneity among unit owners is high. While involuntary elimination may be troubling, the Law specifically provides for re-admission of earlier eliminated owners, primarily in cases of majority inaction. Such provisions may help alleviate egalitarian concerns.

### D. Public Versus Private Ordering

The optimality of supermajority requirements and the benefits of put and call options do

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84 Put and call options also increase efficiency by applying what is essentially a liability rule to exchanges of condominium property entitlements. By contrast, bargaining and contract based property-rule methods of determining a dissenter’s reservation price can entail huge transaction costs, especially if the dissenter’s reservation price is based on private information, such as the dissenter’s true subjective valuation of the unit.

85 See Jean-Marie Baland and Jean-Phillipe Platteau, Wealth Inequality and Efficiency in the Commons, II: The Regulated Case, 50 Oxford Econ. Papers 1, 16-17 (1998).
not dictate that such provisions be supplied by the state. As is the case for many run-of-the-mill
governance issues, owners can reduce transaction costs privately through their own rules,
declarations, and bylaws to establish decision making structures and procedures, as is seen
among California condominiums. In certain circumstances, however, these privately ordered
structures and procedures may not adequately safeguard fairness and efficiency.

1. Market Failures. In addition to heterogeneity issues (discussed in Part III.A) that might
make the transaction costs of private ordering prohibitively high, at least three deficiencies in the
condominium market also suggest a role for public ordering in the form of special voting rules.86

a. Myopia. Because part or all of the costs of failing to specify an efficient decision rule
fall on the members of the condos themselves, owners have both incentive and opportunity to
protect themselves, but they may still fail to do so for a number of reasons. First, condos are a
relatively recent form of property, so the condo marketplace may not yet have addressed all the
contingencies that affect condo governance. Individual owners also have difficulties calculating
the expected costs and benefits of many types of future events, such as natural disasters, because
owners’ ex ante interests with regard to them are rather homogeneous. Given the unpredictability
of when such events will occur, whom they will affect, and how severely, as well as one’s future
ability to cope with consequent damage, the expected value of any given recovery measure will
tend to be much more uniform across all owners.

In this way, uncertainty about future market values, technologies, and other events pose
obstacles to ex ante resolution of collective action problems, limiting the ability of condominium
developers and residents to modify declarations and bylaws so as to anticipate and accommodate
the major decisions necessary to recover from major disasters. As many commentators have
noted, the earthquake devastated the Hanshin area to a degree beyond both expectation and imagination. Despite years of earthquake preparedness drills, no one could have planned fully for both the urgency and the magnitude of collective action problems it left in its wake, not to mention the resulting insurance and funding problems.

Moreover, cognitive biases might make owners less rational than some economic models would predict. Egocentric interpretations of fairness may lead them to favor any rule that benefits them as individuals, and skewed estimations of one’s own cooperativeness and reliability as compared to that of others may in turn skew estimations of the present value of a supermajority rule versus a unanimity rule. Owners may also fail to take potential preference heterogeneity into account, as well as the burdens and disutilities that may result under less inclusive decision rules. While the lack of a unified theory of cognitive biases in the law-and-behavioral-economics literature makes it difficult to offer firm conclusions as to whether the rules owners might adopt would be under- or over-inclusive, that very uncertainty even among expert commentators underscores our point: behavior is unpredictable and may not lead to expected or rational outcomes.  

b. Unit Owner Self-Interest. We suspect that many potential condominium owners are rationally apathetic about the decision rules of their future complexes. Unlike securities markets, housing purchases in relatively immobile Japan are often once-in-a-lifetime occurrences, so

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87 For example, after the Northridge earthquake, new condominiums continue to require pro rata distribution of deductibles and other costs according to ownership share, even though experience during the quake show that this was a cause of many disputes between owners.
future owners may have less opportunity to compare and evaluate.\textsuperscript{88} The value of efficient
decision rules (discounted by the likelihood of having to employ those decision rules) may
simply be outweighed by the information costs of finding out what those rules are. These same
factors may also explain why owners do not appear to protect themselves by publishing
comparative data about various complexes and their value-affecting characteristics (such as the
decision rules they use to resolve various issues) or by patronizing market-created real estate
analysts or other third parties.\textsuperscript{89} Moreover, much information is available on condominiums
generally by academic and real estate groups, but little on the specific issue of collective
decision-making rules.

c. \textit{Developer Incentives}. Private ordering in condominiums is clearly widespread but
often is led by condominium developers at the outset and only rarely, if ever, by unit owners.\textsuperscript{90}
Because developers derive revenue by marketing their condominium units to potential buyers,
they have incentives to optimize the expected costs and benefits of ownership. In theory, an
equilibrium should result in which developers respond appropriately to buyer needs.

But determining the needs of prospective buyers is difficult, and even if it were not, little
institutional structure for negotiated change exists in Japan. Due at least in part to the scarcity of
lawyers in Japan and the complete absence of a residential real estate bar, condominium

\textsuperscript{88} Turnover in Japan is quite limited; at least in part because of tax breaks for first owners only, see supra note 54,
only 11\% of home sales in Japan are for preowned houses, compared to 76\% in the United States. Mark Magnier,
supra note 11, at A1.

\textsuperscript{89} See Ronald J. Mann, Verification Institutions in Financing Transactions, 87 Geo. L.J. 2225 (1999). In fact,
some real estate attorneys in California now encourage new complexes to draft CC&Rs that allow selection of
contractors and consultants who can act as their advocates against insurers and lenders. Nonetheless, most
developers continue to implement CC&Rs that select contractors purely on the basis of their bids, not their services.

\textsuperscript{90} See Barzel & Sass supra note 74, at 747; Sterk, supra note 71, at 277-78.
purchasers receive professional legal advice only on rare occasions. On the seller’s side, the ten largest developers manage about one-third of all Japanese condominiums, which may account at least in part for the uniform terms that we observed in Japanese condominium contracts. The lack of lawyers and consumer advisors, combined with this semi-oligopoly, tend to create a market in which uneducated buyers purchase with relatively little view to future contingencies or detail, a not irrational development.

Market demands do have some effect: variables like price changes, architecture, and security systems surely are brought about by market changes and not developer fiat. But in the context that is our focus – collective decision making rules – the market simply does not work very well. Collective decision making within condominiums is a relatively rare occurrence and are usually not particularly high-stakes decisions when they do occur.

2. Public Ordering Strengths. Three basic rationales underlie public ordering of collective decision making rules among Japanese condominiums. First, speedy recovery after a major disaster is a public good, and the process might be hindered by a hodge-podge of private ordering. Second, the lack of an adequately inclusive decision rule may lead to more litigation, another negative externality that society at large would have to bear. Finally, a clear and easily available decision rule, along with a put and call option counterpart, may help increase confidence in the condominium as a form of residential property.

Two related types of externalities arising from privately ordered condominium decision rules may also justify state intervention. First, because property rights, unlike contract rights, are

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92 Kazusuki Kobayashi & Yoshiaki Fujiki, Manshon: Anzen to Hozen no tameni [Condominiums: Safety and Security] 78-79 (2000). The largest five manage about 24,000 buildings 800,000 units, or about one out of every five units in Japan. Id.
often *in rem* (good against third parties) as well as *in personam* (good against specific people), the law may be justified in limiting variation in property forms to give third parties notice of the property rights to which they might be subject.\(^{93}\) Second, over- innovation in condominium governance may lead to unpredictable results. If potential owners and, more importantly, their lenders are uncertain about the risks and expected value of their investment, they may decide to forgo it altogether.\(^{94}\) Third, rules are said to be much easier to administer than standards.\(^{95}\) Clear procedures for decision making on high-stakes issues likely to cause litigation may save considerable costs.

Some commentators criticize uniform laws as prone to the inefficiencies typical of highly centralized public ordering, and some advocate giving such public ordering over to local law for at least some level of localized tailoring. Uniformity of decision rules in this instance, however, may cause few costs in terms of lack of tailoring. The issues and interests of owners of destroyed or decrepit buildings in a specific location may be relatively homogeneous even if individual interests in a given building are not. When issues and interests lack homogeneity (for example, when commercial unit owners or owners benefit more from less inclusive, lower transaction cost rules than residential, risk-averse owners), externally imposed uniform rules may force a separation in the market for these different types of condominium owners, and therefore a potentially more efficient and equitable market.\(^{96}\)

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\(^{94}\) Some Northridge unit owners defaulted on their association fees even their mortgages because they were unable or unwilling to deal with the uncertainty surrounding disposition of their units. Many owners lost their voting rights as a result. See, e.g., Bettner, Crises, supra note 50.


\(^{96}\) Uniform Condominium Act § 2-118, and those state statutes that adopt it, treat residential and exclusively non-residential condominiums differently in that the 4/5 supermajority is required for termination only of residential condominiums.
3. Private Ordering in Practice. Our survey of Japanese condominium agreements gives empirical support to the absence of private ordering in major condominium decision making. As discussed in Part I.D.1, none of the eighty-six condo agreements that we examined materially deviates from the defaults of the law. The evidence from the U.S. is similar; Covenants, Conditions, and Restrictions (CC&Rs) in the United States almost invariably track some variation of Uniform Condominium Act §§ 3-113 and 2-118, which also employs supermajority decision rules.97

Similarly, we are not aware of any put or call options in condominium agreements that have arisen via private ordering in Japan, or, for that matter, anywhere else. A review of individual incentives to do so reveals why. First, unit owners who are wealthier or otherwise dominant in terms of voting power will tend to eschew terms requiring them to give up any of their surplus. In a world of purely private ordering, this could lead to adverse selection, where only the less wealthy are willing to buy into associations with such redistributive clauses. Second, as Bob Ellickson puts it, “[a]dministrative-cost considerations may explain why . . . drafters of association constitutions have never included express taking clauses, and why condominium statutes do not impose a taking clause as a matter of law. Nor have courts and commentators discussed the compensation possibility; they seem to perceive the only alternative to be property-rule protection of either the majority or minority.”98 Third, call options force unit owners out of the condominium community, which may offend many potential unit owners as

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97 Section 3-113 requires insurance for eighty-percent of the value of the complex, which is presumptively applied to the costs of repair or reconstruction unless the owners terminate the condominium or a supermajority of four-fifths votes or higher votes against such use of the funds. Section 2-118 similarly provides for termination by a vote of four-fifths or more. Twenty-three states and Washington, D.C. employ some variation of one or both of these examples. At least another nine states, including Florida (Fl. Stat. §§ 718.113) and Hawai‘i (Haw. Rev. Stat. § 514A-21), require supermajorities in other forms in order to terminate, rehabilitate, or alter a condominium.

Japanese agreements differ only in one respect, see supra note 83.
overly coercive. Finally, put options force large expenditures. Many risk-averse parties might be reluctant to face potential liability for such a large payment, even if they were to receive property in exchange.

Of course, it is difficult to determine whether parties are not contracting around the default rules because the rules are efficient, or because market failures make it difficult to do so. What our evidence does suggest, however, is that nearly all, if not all, of the condo complexes in Kobe relied on public ordering. That they did so suggests the importance of getting such institutions “right.”

CONCLUSION

In this Article, we have argued that law can have a beneficial role in ameliorating collective action problems in a timely, efficient, and fair manner through (a) carefully formulated supermajority votes, and (b) mechanisms for the aggregation of property rights. Relying on a case study of eight years of post-earthquake recovery measures and a slightly longer period of rebuilding and restoration unrelated to natural disasters, we found that such provisions helped address collective action problems.

The levels of agreement seen in both earthquake and non-earthquake condominium reconstruction cases suggest two conclusions. First, law matters. Sociological factors also encourage agreement, but we find that differences in Japanese agreement patterns coincide with differences in legal incentives. The comparative evidence from Northridge does not necessarily confirm our institutional story, but at a minimum shows that in a quake much smaller than Kobe and with fewer obvious CIC-related problems, residents fared no better, and probably fared

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98 Ellickson, supra note 72, at 1533-35 (citations omitted).
much worse, without Kobe-style legal rules that provide for supermajority votes and property aggregation. Second, the evidence also suggests that the Condominium Law and Special Law were effective, or at a bare minimum, satisfactory, in encouraging timely, efficient, and fair agreement among unit owners.

Eight years after the quake, in response to concerns related both to disaster and aging buildings, the Japanese legislature revised some of the terms and restrictions in the Condominium Law. But the most significant feature of the new law is that which does not appear: after months of negotiation and logrolling in a revision panel that included bureaucrats, judges, academics, and representatives from citizens’ groups and industry, the new law retains the heart of the old law, including the four-fifths and put/call option provisions. While these rules may not be optimal in all contexts, the continued existence of these provisions, given the evidence presented in this Article, suggests that their benefits outweigh whatever costs they impose.
Figure 2. Medium-Damage Building Dispositions

- Rebuilding or Reconstruction
- Restoration
- Sale
- Undecided
- Unknown

Figure 3. Large-Damage Buildings, 1999

- Rebuild/Reconstruct
- Restore
- Sold
- Undecided