Pre-publication version of paper published in:

pp. 57-86 in: Analyzing Land Readjustment: Economics, Law and Collective Action, Edited by Yu-Hung Hong and Barrie Needham, Cambridge, Mass.: Lincoln Institute for Land Policy, 2007

Much More Than Land Assembly

Land Readjustment for the Supply of Urban Public Services

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Assembling land to supply the variety of public needs is a problem shared by local government, planners, and developers across the world. This problem transcends property systems and is not unique to the private freehold tenure system. Land assembly is also problematic in mixed systems in which public and private property rights coexist and even in systems in which the government owns the land but the market governs a significant amount of physical development initiatives.

One of the most promising tools for land assembly, a tool that can operate across land tenure systems, is land readjustment (LR). However, LR is practiced in only a limited number of countries. While there is no scarcity of academic literature about LR, the literature is just beginning to look in depth at how this tool functions in practice within different land tenure contexts and at its effectiveness relative to alternative tools for assembling land.

Israel as a Case Study

Though small, Israel possesses four attributes that make it a good laboratory for studying land assembly issues. [3] First, it represents a broad spectrum of land tenure regimes that operate together, and the challenge of supplying urban public services cuts across all of them. Second, Israel has a high rate of demographic growth relative to other countries with advanced economies and thus must supply much land for public services. Third, because land is scarce and is quite expensive in many regions, purchase of sites for public services is a financial burden, and local

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[3] The discussion of the laws, court decisions, and planning policy in this chapter apply to Israel in its pre-1967 international borders, excluding the occupied areas. Under international law, Israeli domestic law does not apply to the occupied areas.

governments need to invent solutions that do not burden the public. Fourth, Israel inherited land readjustment many decades ago, so this instrument has been operating alongside the more common ways of assembling land for public services. Israel therefore provides an excellent opportunity to study and evaluate LR in comparison with the alternative land assembly tools available in most countries.

To date, international literature on land readjustment has been oblivious to the Israeli experience. Yet Israel has one of the world's most widely practiced systems of LR and uses it for a wide range of purposes in both urban and rural areas.[4] Planners in Israel have been applying LR for many decades. For the most part, LR has been successfully defended in the courts, despite the increasing entrenchment of property rights law and ideology.

Israeli planners and lawyers take LR for granted, unaware that LR is to be found in only a few countries in the world. They are not aware that they have one of the more effective versions of LR—one that planners in many other countries might envy. Initially an esoteric tool applied only in very special conditions in Israel, LR has evolved into the preferred option in many contexts and regions. My guess is that, in Israel today, the proportion of LR-based local plans is among the highest in the world. (No comparative statistics are available to corroborate this hypothesis.)

This chapter analyzes the version of LR practiced in Israel. Among the wide range of purposes that LR serves in Israel, the focus is on the supply of public infrastructure and other services. The core of this chapter is an analysis of the legal aspects of LR, its relationship to property rights, and its advantages (and some disadvantages) compared with alternative instruments for assembling land for public purposes.

The basic underpinnings of LR are well established in law and practice and are not likely to be challenged in the courts. However, the relationship between LR and property rights is paradoxical. On one hand, the increasing popularity of LR is a result of its relative advantage over alternative public planning tools in preserving property rights; but on the other hand, certain important elements of LR are currently threatened by the rising trend of property rights protectionism. This trend might lead to the gradual erosion of the utility of LR.

Before delving into the analysis of LR in law and practice today, two short detours are in order: a brief historical account of how LR landed in this small corner of the world, and an introduction to the Israeli geodemographic and economic contexts to explain the growing demands placed on the use of land. An introduction to Israel's land tenure system explains in greater detail why local authorities find it difficult to finance the purchase of adequate amounts of land for public services and need to rely on a range of nonfinancial tools.

The central parts of this chapter are an analysis of the law and versatile practice of LR and a comparison of LR with the alternative land use–based instruments for obtaining land for public services. This analysis explains why LR has become the preferred tool in many cases despite, or

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[4] In the absence of comparative statistics, I rely on my own "guesstimate," based on my familiarity with planning practice in several countries that use LR and on reading the international literature. None of the major academic analyses of LR were aware of the Israeli experience. See Doebele (1982); Archer (1986, 1999); Schnidman (1988); Fernandez (2001), Minerbi et al. (1986); Larsson (1993, 1997); and Sorensen (2000).

perhaps thanks to, Israel's growing trend of property rights protectionism. The conclusions attempt to draw lessons for potential transfer to other countries.

Historical Background

The history of LR in Israel goes back to the time the British ruled Palestine (the region that became Israel, the West Bank of Jordan, and, more recently, the Palestinian Authority). The 1936 Town Planning Ordinance enabled reparcellation only with the consent of all landowners. The ordinance was absorbed intact into Israeli law, and in 1957, nine years after the establishment of the State of Israel, it was revised by the Knesset (parliament). The revision created a second track of LR, in which it was not necessary to obtain the consent of all or most of the landowners. This important legal change enabled the expansion of LR from an isolated to a large-scale practice.

The introduction of a nonconsent track was seen as necessary for the quick pace of development of the new nation. The goal was to enable the development of as much vacant land as possible in order to enable the intake of waves of immigrants. Although most vacant land was already in public ownership, there was considerable private land in some regions. Private ownership as such has never been a detriment to development in Israel; some facts indicate the opposite (Alterman 2003). In some cases, because of Israel's special history, private ownership became a complex mix of known and unknown owners,[5] absentee and present owners,[6] and mixed public and private ownership. LR came to be an important tool for releasing such parcels for development without having to obtain the consent of all owners.

Today the range of uses of LR in Israel has expanded well beyond its classical purposes of modernizing antiquated subdivisions and sorting out ownership patterns. Newer objectives include urban regeneration, densification, environmental conservation, historic preservation, and, of course, provision of an adequate amount and layout of land for infrastructure and public services. For all these purposes, the full-consent and the less-than-full-consent tracks function in parallel. As we shall see, the nonconsent track has proven to be most important.

Geographic, Demographic, and Economic Contexts

The steep increase in the use of LR in Israel is partly reflective of the country's small size, fast population growth, and economic development. In 2006 Israel’s population was seven

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[5] Thousands of land parcels that had been subdivided in the 1920s and 1930s were sold to Jewish families in the Diaspora. Most of the parcels were located along the Mediterranean coast, which later became prime land for development. Receiving the consent of numerous owners would be difficult in any context. In this case, many of the landowners had been murdered by the Nazis, and it was not possible to locate heirs or owners of parts of parcels. Thousands of parcels thus came under the custody of a special state authority.

[6] The 1948 War of Independence led to extensive absentee ownership. This land belonged to Arab families that left or were forced to leave during the fighting. The land later came under state ownership. In some cases, some family members remained and others left, resulting in coownership by the state and the original owners.

million, having grown tenfold since 1948 (due to both immigration and natural growth).[7] Israel's land area is approximately 20,500 square kilometers (8,000 square miles), meaning that population density is approximately 300 persons per square kilometer (1,140 per square mile). This level of density is already one of the highest in the world other than in city-states. Taking into account the fact that 50 percent of Israel's area is an inhospitable southern desert, the effective density is higher yet. Israel's population is already 92 percent urban—high in comparative terms. Intensive use and good management of land are therefore essential.

The standard of living rose from the level of a developing country in 1948 to the per capita GDP of approximately US$22,000,[8] lower than other Western countries, but much higher than developing countries. Economic development caused a steep rise in demand for developable land and in land prices. There has been a concomitant enhancement of the norms for public services and open space.

These factors have made it more difficult to rely solely on traditional land use regulation tools. The easy-to-develop land reserves have largely been exhausted. Land development today must contend with complicated landownership patterns, with vested development rights that are no longer in accordance with current planning policies, or with underallocation of land for roads, schools, or open space.

Israel's Mixture of Public and Private Property Rights

Israel's spectrum of property rights regimes and mixture of national and private land make this country an interesting case study and holds lessons transferable to other countries.

Nationally owned land covers 93 percent of the country's area. An onlooker unfamiliar with the complexities of land policy regimes might conclude that Israel does not need LR as a land policy tool. Wouldn't national ownership ensure an adequate and inexpensive supply of land for public services as well as unbridled powers for urban regeneration and restructuring? That is not the case. Public land ownership in Israel and elsewhere is not necessarily a recipe for easy implementation of public services.

In Israel, publicly owned land is leased out by means of long-term leaseholds for all types of land use—residential, commercial, and industrial. In the case of households, the life of a public lease extends over several generations, in fact indefinitely. Through a process similar to that in Hong Kong,[9] public leaseholds in Israel function in the marketplace similarly to private land and have received a similar degree of protection from the courts as freehold land (Alterman 2003).

Not all land in Israel is public. There is also private freehold ownership which, although small in absolute numbers, is much more important for development and the market. For a number of historical reasons, private property happens to be concentrated in central cities and other regions of high economic or demographic growth. The LR method functions well within

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[7] At the time of independence in 1948, Israel's Jewish population was approximately 670,000, and the Arab population that remained in the area after the 1948 war was approximately 160,000 (Statistical Abstracts of Israel 2000, table 2.1).

[8] Purchase power parity estimate for 2005 (U.S. Government, 2006

[9] See chapter 6. Burassa and Hong (2003) report similar tendencies of public leaseholds in additional countries.

this entire spectrum of tenure rights. It is used extensively not only on private land, but on public land as well.

Land Use Regulation and Taxation as Applied to Public and Private Property

How does land use planning, including LR, apply to nationally owned land? The answer is that the Israel Planning and Building Law of 1965 (the Planning Law) applies to government-initiated development and to public leaseholders in the same way as to private initiative and private landowners. The numerous real-property-based taxes, too, apply equally to private and publicly leased land. The LR procedures thus apply similarly to nationally owned land and to private land. Often, sites targeted for LR involve a mixture of public and private property rights and a variety of public and private developers.

Local Governments' Challenge of Obtaining Land for Public Services

Local authorities in Israel, as in many other countries, rely on land use regulation such as compulsory dedications or exactions as a substitute for outright purchase of land for infrastructure and public services. One of the major uses (although not the only one) of LR in Israel is for these purposes. LR is usually carried out by local authorities, and it is usually applied to help them overcome financial predicaments and legal constraints. Such constraints are increasingly faced by local authorities even in the wealthier countries (for example, as a result of voters' tax revolts or the receding involvement of central governments). The specifics of these constraints, however, differ from one country to another. To understand the place of LR, it is necessary know more about Israeli local governments.

The Financial Weakness of Local Governments

Local authorities in many countries have insufficient financial sources to buy up all the land sites necessary for supplying the full range and level of infrastructure and public services. The legal and financial powers of Israeli local authorities are weaker than those of their counterparts in some other countries with advanced economies. All but the most prosperous local authorities have weak tax bases and are dependent on central government transfers. Most major budgetary decisions require central government approval.

The land use and development controls offer local governments a set of instruments for obtaining land or financing in-kind. In this case, central-government control is less direct than in taxation and budgetary decisions. LR has become one of the major ways local governments compensate for financial weakness. Proactive mayors and planners have learned how to use LR and other tools creatively to link the approval of land use plans to the exaction of land or finances for the construction for public services (Margalit and Alterman 1998).

The Dearth of Municipally Owned Land

In view of the extensive national landholdings in Israel, one might think that local authorities would not have too much difficulty in obtaining land for public uses. But nationally owned land is managed by a central-government agency, which does not regard itself as primarily

a land bank at the service of municipal needs. Municipalities in Israel do not usually have significant landholdings registered in their names (except for roads and the like). This is because Israeli municipalities have never practiced land banking in advance of development to any significant extent.[10]

In practice, sites designated for public services in land use plans may fall on either nationally owned land or private land, depending on the configuration of the land use designations. In the past, the Lands Administration was more generous in the amount of land it allocated for public uses, and it voluntarily transferred title to the municipalities. For legal and administrative reasons,[11] the Lands Administration is increasingly acting like a private landowner. Paradoxically, the Lands Administration insists that the municipalities expropriate the land according to the full formal compulsory-purchase proceedings because the Planning Law grants the original owner the right of first refusal if the original use is changed (Alterman 1990a.[12] The Lands Administration doesn't believe that the local authorities should retain the dedicated land, and it wants the land returned.

Furthermore, much of the nationally owned land is already developed, and its holders are long-term leaseholders who have the same protections in the law as private owners. Therefore, despite the large national landholdings within or near cities and towns, municipalities are by no means free of worry about obtaining land for public services. Like planners in other advanced economies, Israeli planners must use the full scale of legal tools in their possession—regulative or contractual—in order to obtain enough land to serve public needs.

The Protection of Property Rights

In today's Israel, as surprising as this may seem to most readers, some aspects of property rights protectionism are more potent than in the United States, Canada, and most Western European countries (Alterman forthcoming b). This is especially true for the law of regulatory takings (to use a U.S. term) and of expropriation (eminent domain). As noted, most of the land area is nationally owned, and property rights protectionism encompasses this type of tenure as well. Through a gradual process over decades, today the public leaseholds are almost tantamount to freehold and receive the same degree of protection.

Constitutional Protection

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[10] See Alexander et al. (1983); Alterman (1998, 2000, 2001, 2003); Alterman et al. (1990)[Hebrew].

[11] The legal reason has to do with the Lands Administration's desire to ensure that local authorities have to offer land to the Lands Administration before they may initiate a land use change in the future. The fear is that local authorities who were granted national land for, say, a school would change the land use designation to a commercially lucrative use and then sell or exchange the land for financial purposes.

[12] The common legal opinion and the practice are that local authorities are fully authorized to expropriate state-owned land under the same conditions as private property. Recently, some legal experts have cast doubt on this approach, but the High Court has not yet had the opportunity to rule on this topic.

Despite the quantitative dominance of state-owned land in Israel, the ethos of private property rights dominates both legally and politically. Israel thus presents a dual set of laws and ideologies that on one hand bolster public ownership (or did so in the past) and on the other hand are increasingly placing private property rights on a high pedestal. Since the enactment of an important law in 1992 (and gradually before then through case-based law), Israel's constitutional doctrine accords private property rights a very high degree of protection. This protection applies equally to property held under most forms of long-term public leaseholds (especially in urban areas).

The 1992 Basic Law: Human Dignity and Liberty carries constitutional or quasi-constitutional status. It has raised the protection of property rights, already quite high in prior Supreme Court decisions, onto an even higher tier. Three articles are most relevant.

> *Article 3. There shall be no violation of the property of a person.*

This clause has no qualifiers, but all the rights protected by the Basic Law are qualified by a general clause:

> *Article 8. There shall be no violation of rights under this Basic Law except by a law befitting the values of the State of Israel, enacted for a proper purpose, and to an extent no greater than is required.*

Existing laws, including the Planning Law along with its LR provisions, are grandfathered in and do not have to pass the test of Article 8. But all government agencies have to abide by Article 11:

> *Article 11. All governmental authorities are bound to respect the rights under this Basic Law.*

The Implications of the Basic Law for LR

In assessing the implications of the Basic Law on LR, one should distinguish between new legislation and the interpretation and application of the existing law. If the current rules of LR were to be reenacted, my guess is that the legislation would easily pass the three open-ended criteria of Article 8. The courts are likely to accept that, in principle, "proper purpose" and "the values of the State of Israel" are met because LR is part of a land use plan approved by the statutory planning bodies. An additional key attribute of LR is that "befitting the values of the State of Israel" is the built-in rule of distributive justice. As for "proper extent," the courts would likely accept that, in principle, LR usually meets this criterion because property values are usually enhanced through the application of LR. In many cases, LR will be the preferred avenue not only from the perspective of local authorities, but also from the landowners' perspective. By contrast, if the major alternative to LR—compulsory dedication of land (discussed below)—were enacted anew in its present form, it would in principle be unlikely to pass these constitutional tests.

A more complex legal question is the application of Article 11 to actual decisions made by planning bodies. Article 11 implies that when planning authorities have a choice among alternative legal paths, such as between applying LR and compulsory dedication or other ways

for assembling land, they are to select the avenue that least infringes on property rights. In specific situations, one of the alternative tools may be more beneficial to the specific landowners. If the courts were to decide on the legality of how LR is applied in specific situation solely from the property rights perspective, ignoring the public benefits or the equitable distribution among the landowners, they would likely rule that LR should not have been applied in that particular case. If the extreme property rights position were to prevail in court decisions, some of the key advantages of LR over the alternative tools might be diminished. This type of legal dilemma has not yet been clarified by case law, and the few decisions to date go in both directions.

In today's Israel, the protection of property rights thus has a double-edged effect on LR. On one hand, the property rights orientation of many court decisions has greatly constricted the usefulness of the alternative implementation tools—namely, expropriation (eminent domain), compulsory dedication, negotiated development, or downzoning (to use a U.S. term). The restrictions on the use of these alternatives by the planning bodies leave LR as the more attractive alternative in many cases. On the other hand, the heightened protection of property rights might also have the opposite effect on LR. The enhanced legal status of property rights offers landowners new legal grounds to challenge the legality of particular applications of LR. If these challenges prove successful, the relative advantage of LR would gradually be reduced. In my view, this would lead to undesirable results for the general public good and in many cases for landowners as well.

The Legal Rules for Land Readjustment

The 1965 Planning and Building Law devotes chapter 3, section 7 to reparcellation. The Hebrew term for LR in the Planning Law is *halukah hadasha,* which translates literally as "new division" or "new allocation." Many Israeli practitioners still prefer the original term used in the 1936 Ordinance—reparcellation (pronounced with a Hebrew-like suffix as *repartzellazia*).

The 1965 law has basically kept the rules set out in the 1936 Ordinance as amended in 1957. The only noteworthy amendment, enacted in 1995, relates to institutions and procedures rather to the key legal rules.

The Authority to Conduct LR

Article 121 of the Planning Law sets out the basic authority to undertake LR and also determines much of the process. Local planning commissions are authorized to conduct LR by embedding it in a local outline or detailed plan or as an amendment to the outline or plan.[13] Because LR is anchored in a regular plan, it does not require a separate and special type of planning procedure. It is part of the regular statutory land use planning and regulation process.

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[13] U.S. readers can understand a local outline plan as a combination of elements of a land use plan along with zoning and subdivision regulations. Most approved plans are in fact amendments to outline plans. A detailed plan, depending on its size, may be like a small outline plan, a site plan, or a planned unit development. European readers (except the British) will recognize outline and detailed plans as similar to local plans prevalent in their respective countries. British readers can consider these plans as similar to their planning schemes before 1947.

In Israel, unlike in Germany, the statute does not limit LR to situations where land values go up or at least stay as before. In theory, LR in Israel may apply to situations where the planning authorities wish only to distribute the burden of downzoning more fairly and evenly, without adding development rights. However, that is not the typical practice. The rationale and the underlying generator of LR schemes is the capacity to enhance land values by means of upzoning. The de facto applications of LR in Israel almost always entail value upgrading. In most cases, LR releases land from situations where there are no development rights at all, where these are not feasible, or where the planning bodies are not ready to approve an upzoning because the current allocation or layout of infrastructure and public services is inadequate.

In Israel, LR may be applied to a wide range of tenure rights. The Planning Law defines *owner* to mean not only freeholders but also long-term leaseholders, and not only individual ownership but also condominiums.

Institutions and Procedures

Because LR piggybacks onto regular statutory plans, it does not require the creation of special institutions. The regular planning bodies handle LR alongside other plans and planning procedures. Israel's regular planning procedures provide formal hearing rights and several opportunities for administrative appeals.[14] In the case of LR plans, the Planning Law fortifies the rights of public participation by adding an extra stage in the public participation process. In LR plans, unlike in regular plans, the local planning commissions are required to send personal notices to each of the landowners (according to the broad definition noted above) early in the planning process. The landowners thus have the opportunity to conduct informal negotiations from the initial stages.

A 1995 amendment to the Planning Law created a new and efficient institution—the Appeals Committee. It is tailored to hear appeals about specific kinds of planning decisions that concern property rights issues, including LR. (The other topics are compensation claims and expropriations.) This new quasi-judicial body is professionally and administratively structured to handle detailed development-rights and land-valuation issues in a fair manner and with relative speed and efficiently. The Appeals Committee is authorized to appoint arbitrating appraisers, enabling it to reach a clear-cut decision.

The Two Tracks: Full Consent and Less-Than-Full Consent

The issue of owners' consent figures high in the literature on LR. But both the Israeli and the German experiences indicate that obtaining formal consent may be of less importance than initially believed. In law or in practice, the consent and nonconsent tracks are not as diametrically opposed as they may appear.

Article 121 authorizes two tracks for LR: one with the formal consent of all the owners, and one with less-than-full consent. As with German law, if even a single landowner does not consent,

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[14] Comparative research now in process shows that these rights are extensive when compared with such European countries as the United Kingdom and The Netherlands (Carmon and Alterman, in preparation).

LR is to proceed in the nonconsent track. The Planning Law sets out clear rules for the less-than-full consent track. These offer distribution and protection to the landowners, as described below. In both countries, most LR plans of significant size are undertaken through the less-than-full consent tracks.

The Rules Governing Reallocation

The literature about LR talks about a step in which the existing subdivision is officially abolished and the plots are joined into a single mass, presumably to be registered under the name of the authority. An important attribute of LR in Israel is that the "pooling" stage does not exist as a formal step. It is carried out virtually on the drawing board and in the calculators of the land appraisers.

Article 122 sets out the rules of valuation and redistribution that apply to the track that does not require full consent. The assumption is that where there is full consent, the landowners will have also agreed about the allocation rules, so the legislation need not prescribe them. In practice, however, the landowners in the full-consent track usually choose to apply the same allocation rules as those that Article 122 of the Planning Law sets out for the nonconsent track. This is a good indication that the rules prescribed by the legislation make sense in practice.

Section 122 prescribes three key principles:

1. The proximity principle: Each reallocated plot should be as close as possible to the original plot.
2. The proportionality principle: The proportionate value of each plot (whether vacant or built up) relative to the total value of all the plots in their original state should be as close as possible to its share of the total value of all the plots after reallocation. That is, the proportional share before and after the reparcellation should be as similar as possible.
3. The balancing fees: If it turns out that keeping the proportionate share of all the plots is not feasible, landowners who are in the "plus" must pay the excess value to the planning commission, and landowners in the "minus" have the right to receive the difference from the local commission. In professional jargon, these payments are called balancing fees. While this arrangement sounds fair and easy to administer in a self-financing mode, local planning commissions have learned (the hard way) that it is difficult to apply.

On paper, the "givings" and "takings" seem well balanced. In practice, they are not. Local authorities have found that landowners in the "minus" are quick to claim their fair share from the local planning commission, but that it is difficult to extract payments from landowners in the "plus." Therefore, savvy planning commissions and appraisers do everything they can to configure the parcel alignments so that the result will fully abide by the proportionality rule without the need for monetary payments. While at times this may require compromise with the optimal configuration, there is usually enough leeway in land use planning and subdivision to accommodate alternatives.

The local or district planning commissions are authorized to decide the extent to which the proximity and proportionality principles should be adhered to (and extent to which balancing fees should be paid out). The second criterion represents the monetary value of the real estate to be

received in place of the original plot. The first criterion was perhaps intended to represent the emotional attachment to place. The planning bodies have found that landowners (and therefore appraisers, too) usually place much more importance on proportionality than on proximity. There is hardly any case law on this seemingly difficult issue of competing criteria.

Land value appraisal is carried out by certified appraisers who are generally well skilled in conducting valuations for planning and taxation purposes. Because land assessment is never a science, assessments may be appealed (and often are, at more than one stage). The quasi-judicial Appeals Committee often assigns a third land appraiser as arbitrator.

The Buy-Out Option in Cases of Joint Ownership and Vertical Reallocation

Another important difference between Israeli LR law and the classic use of LR, as reported in the literature, is that the Israeli law enables the reallocation to be done not only through land parcels, but also through development rights. While this authority is not explicitly stated in the Planning Law, it can be indirectly deduced from the special attention given to situations in which the reallocation process does not yield separate plots for each original owner, but results instead in plots in joint ownership. To deal with such situations, Article 127 provides the following rules:

- If plots have been joined without the consent of the landowners and have not been reparcelled among the owners into separate plots, or if some of the plots have been reparcelled as jointly owned plots, owners who did not consent have the right to demand that the local planning commission purchase their[15] shares in the joined plots.
- The local planning commission may notify owners about the period of time during which claims must be filed.

These rules set up what may be called a limited buy-out option. They are obviously based on the assumption that LR can change the location or the size of land parcels, but it should not force people to share a property title. This wise human observation is, however, rarely relevant in practice; the joint ownerships that LR creates are usually translated (once built) into condominium ownership in multistory buildings. Each owner ends up owning one or more separate residential or commercial units, with the units sized to match the proportionate shares. So joint ownership is usually not a problem because the units, once built, will be fully transactable in the marketplace.

Furthermore, landowners who wish to be released from a joint-ownership structure might be better off looking for buyers on the open market than forcing the local authority to buy the rights. To understand this seemingly counterintuitive statement, I should explain that LR proceedings in Israel do not create a moratorium on the right to carry out market transactions, only on the right to build, which must, of course, await the conclusion of the process.[16]

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[15] This language is my own egalitarian upgrading; the original Hebrew and the formal translation into English made at the time use only the masculine. (There is no longer a formal translation into English of the Planning and Building Law's amendments).

[16] A landowner's right to receive a plot of land in single or joint ownership has market value even at the early stages of LR. There is usually no advantage to imposing the purchase on the local authority because it, too, would not offer more than current market value. Of course, the value of the

In some countries, LR legislation offers landowners a general buy-out option, not restricted as in Israel to cases where partnerships are mandatorily formed. But in the countries that incorporate this type of right into LR law (or where there is a freeze on development), the buy-out option is usually not much better for the landowners than expropriation, and the law stipulates that the same rules of assessment and compensation apply. The marketplace might be more friendly.

The Alternative Instruments and Comparison with LR

In addition to LR, municipalities in Israel can obtain land for public services in four other ways: expropriation (eminent domain) of an entire parcel of land, downzoning or other regulation, compulsory dedication (exaction) of a limited part of a plot of land, and negotiated exactions. Unlike LR, these tools are used in many countries. To understand the advantages and disadvantages of LR, it is useful to briefly present each alternative.

Expropriation (Eminent Domain)

An obvious tool for obtaining land for public services is what Americans call eminent domain, the British call compulsory purchase, and the international literature usually calls expropriation. The powers to expropriate land exist in most nations of the world. There are, however, differences in the legal conditions and restrictions.

The literature often presents LR as an alternative to land expropriation (eminent domain). The argument is that LR may be preferable to expropriation in some specific cases. By contrast, in Israel LR is only occasionally used as an alternative to expropriation because the exercise of eminent domain is, in many cases, not a realistic option. In such cases, if no other tool were available, development might become frozen for a long time. More frequently, LR is an alternative to less onerous (but also less efficient) tools.

There are two sets of reasons why expropriation is no longer commonly used in Israel. The first set is legal; Israeli courts have increasingly introduced many restrictions on the use of this tool. The second set is practical.

Legal restrictions

Without any change in the language of the legislation that authorizes expropriation of real property, in recent years the courts have gradually reinterpreted the law, considerably narrowing the range of public purposes for which land may be taken. A decision such as the famous U.S. Supreme Court's *Kelo et al. v. City of New London*, 545 U.S. 469 (2005), may have been similarly decided in Israel in the past. In the U.S. decision, built-up residential lots were taken in order to assemble land and hand it over to a large private commercial concern. The rationale was that this would contribute to the economic revitalization of a city. Under current Israeli case law, my guess is that today's court would have decided on *Kelo* according to the minority opinion that government has no authority to expropriate people's homes in those specific circumstances. Israeli jurisprudence on expropriation is in some respects oriented more to property rights than

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properties before the process is completed will not reflect their full future value, but they certainly will reflect the expectation that the property will be upzoned. The rest is up to the market.

are its U.S. equivalents. The Israel courts would, however, have an alternative, LR, to recommend to the authorities. In the circumstances of *Kelo*, LR would likely be fairer and more protective of property rights.

Gradually over the years, and especially since the 1990s, Israeli courts have been placing greater restrictions on the authority to expropriate land (see Dagan 2005, 116–129). In *Karasik v. The State of Israel, Israel Lands Administration et al.*, P.D. 55 (2) 625. H.C.J. 2390/96, a dramatic decision delivered in 2001, the High Court of Justice (with an enhanced number of judges) voided a decision by the Lands Administration to initiate a rezoning of land expropriated from private owners decades earlier for a distinctly public use that has since been phased out. The High Court unanimously concurred[19] that government is limited in its authority to substitute a new use for the original public use. In that particular case, housing should not be regarded as a substitutable public purpose because it could in theory have been developed by the original owner.

Needless to say, this decision and the lower-court decisions that follow it place greater restrictions than in the past on the range of public purposes for which property may be expropriated and especially on the reuse of the land once the original use is no longer necessary. From a legal perspective, expropriation of property is becoming more and more out of step with current needs for public services. Urban areas change through time, new public needs emerge, and the division of labor between public and private is becoming less distinct. Expropriation is therefore no longer as useful a tool as in the past in assembling land for services and amenities to the public.

Practical constraints

Beyond the legal constraints, expropriation is also not a practical option. There are three reasons. The first is that expropriation is never a popular measure, and Israeli voters in local elections may not like it.

The second reason is that municipalities would have to pay compensation for the property according to the value of the property under the original land use designation (a rule that may at times be lucrative for the municipality, and at times not, depending on the original designation). Because municipalities are generally financially tight, they do their best to avoid expropriation claims.

A third reason is that even though the law stipulates that, in many situations, government is authorized to take hold of the property immediately, the courts tend to be attentive to the landowners' position. Courts often issue injunctions that prevent the public authority from taking possession of the land before the financial claim is settled. In practice, expropriation usually entails long and expensive proceedings in the courts, during which the level of compensation is usually determined through lengthy negotiations with the landowners. The sum, once settled, often turns out to be considerably higher than the amount the legislators had envisioned.

Expropriation and the holdouts problem

[19] This decision is long and complex, and each of the judges presents a somewhat different rationale for the unanimous decision.

Local governments in many countries (and at times private developers as well) encounter holdouts—a few landowners who refuse to participate voluntarily in land assembly or realignment. The negotiating leverage of the last properties is large, and their price may be very high. Expropriation is viewed as a solution for this type of problem. In Israel, however, the use of expropriation for holdouts would encounter the same lengthy and costly procedure as encountered in expropriation generally. An alternative may be the LR nonconsent track. It could serve a similar purpose with greater fairness.

Regulatory Takings, Downzoning, and Compensation Rights

Another way of obtaining land for public services is by designating private land for a use that serves public goals without taking the title or the full economic use of the property. Although this method cannot cover the full spectrum of public needs, it may be feasible for some purposes, especially those that fall within the increasingly large category of quasi-public or public-private service. For example, in some cases the authorities may wish to designate private land for open space (such as green space that is open to a limited public only). Or they might rezone private land to permit only public-type buildings, such as those for health, education, or cultural uses. In some countries, including Israel, such designations might encounter legal challenges for what Americans call regulatory takings. The landowner may have the legal right to claim compensation for the partial value lost. In some countries, the owner may have the right to require the authority to expropriate the land and pay compensation.

Comparative research (Alterman forthcoming a) shows that Israel has one of the world's most generous legal protections of property rights related to compensation for injuries caused by land use planning (regulatory takings). The statutory right to compensation dates back to 1936. The protection of property rights based on this statute has been gradually expanded both through legislative amendments and, most important, through the Supreme Court's interpretation of the phrase *unreasonable degree* of injury. Recent court decisions have ruled that compensation must be paid for a property that suffered as little as a 10 percent reduction in value due to the approval of an injurious amendment to a plan. Furthermore, the Supreme Court has interpreted the statute to cover not only direct injury but also *indirect* injury to the value of abutting plots from the approval of an amendment to the current land use plan (Alterman forthcoming b).

The right to compensation applies also to properties abutting or adjacent to land designated for roads, schools, kindergartens, or similar uses that are likely to generate negative externalities. Needless to say, the steep rise in compensation claims in recent years is increasingly worrying local authorities. The allocation of land for public services is likely to expose local authorities to a new financial burden caused by compensation claims from neighboring landowners.

Land readjustment can help preclude compensation claims. Because LR redistributes land plots and land uses and the proportionate values of the reallocated plots must be maintained, LR can partially "internalize" or entirely eliminate potential decreases in property values. At the least, LR can proportionately redistribute the decreases among the landowners. If, after the LR process is completed and the plan is approved, there is still a decrease in the absolute property value, the landowner has the right to claim compensation.

Compulsory Dedication of Part of the Land

Planning practice in some, but not all, countries empowers local authorities to require landowners who are seeking permission to develop to transfer a limited portion of the land to the local authority for public needs. No compensation is paid. This practice has different names in different countries; Americans call it compulsory dedication. The specific rules differ from one country to another and, in the United States, from one state to another and among local authorities (for a comparative analysis, see Alterman 1988).

In Israel, compulsory dedication is the most widely used method for obtaining land for public services. The Planning Law calls it "partial expropriation without compensation." Compulsory dedication is so well rooted in Israeli planning practice that it has become a benchmark for land value appraisals. Like most other land use instruments in the Planning Law, it applies equally to nationally owned land[20] and to private land. The maximum proportion of a parcel of land that a local planning body may require as dedication is 40 percent. The law permits the authorities to locate a wide range of public services on land exacted in this way. This range includes not only the traditional infrastructure (roads and playgrounds) permitted under equivalent instruments in many (but not all) other countries, but also schools and health clinics, sports facilities, community buildings, and religious facilities (see Alterman 1990a).

At this point, you may be wondering why LR is needed, since local authorities have what seems to be such a powerful tool for obtaining land for public services. There are three limitations to compulsory dedications: quantitative, physical-geographic, and legal-constitutional.

On the quantitative level, although 40 percent may sound high, in most cases it is insufficient to provide all the roads, open spaces, and public buildings necessary in a typical neighborhood. This quantitative gap reflects Israel's high urban densities and relatively large family sizes.[21] With the rise in the standard of living, the range and quality of public services that voters expect have also risen. The 40 percent ceiling is often insufficient for supplying adequate public services. In a typical urban density of, say, 300 units per net hectare (120 housing units per net acre), more than 50 percent of a tract of land would be needed. So the compulsory dedication tool would not be enough, and local governments scramble for ways to bridge the gap. Without financial resources to purchase or expropriate the additional land, the local authorities look for further ways of using the land use regulation system. Here enters LR.

The second constraint on compulsory dedication is physical-geographic. It arises from the difficulty of using compulsory dedication to assemble adequately large and contiguous sites. Urban land parcels that come into development today are rarely large and undivided (except where nationally owned land is still undivided). Moreover, in today's Israel, planning policy encourages urban containment through infill and redevelopment rather than through extension into scarce open space. This means having to contend with the existing configuration. If LR is not

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[20] The right of local planning commissions to exercise this power over nationally owned land that has been leased out is not in question. Their power to exact land dedications from the Lands Administration for land still "in stock" was viewed as obvious and was not contested for many years. Recently, the Lands Administration has been arguing that there is no such right. This is currently a topic of legal debate.

[21] Children are prime consumers of public services, and differences in average family sizes may entail large differences in public land requirements.

applied, the 40 percent limit would have to be calculated and physically demarcated for each individual parcel, thus making it difficult to collate contiguous land for public services in a rational alignment.

The final constraint—the legal-constitutional limitation—reflects the growing protection of property rights. For many years, planners and lawyers had assumed that the compulsory dedication instrument was immune to claims of compensation. After all, it was argued, the authority to apply compulsory dedication is grounded in explicit legislation and for decades has been applied in almost every statutory plan. The practice has become so routine that, when a parcel has as yet not undergone reduction in size through dedication, its market value reflects this expectation. Empirical research found that, in the majority of cases, the planning authorities find that they do not have to go through the full legal procedures of compulsory dedication. Landowners who are interested in a new plan routinely sign away the relevant portion of land before the planning bodies apply their formal powers because they know that the requirement is well grounded in precedent and need (.

However, in recent years, through a complex legal grafting of arguments, landowners have been able to win several court cases that are gradually limiting the usefulness of compulsory dedication. They argue that the remaining developable part of each parcel should show a direct benefit from the part taken for the public; that is, there must be positive externalities measured in a rise in property values. But if land dedication is to serve a variety of community services, it is not possible to meet this criterion for each and every parcel and each and every public use. Some public infrastructure or services produce only positive externalities (such as a cul-de-sac road or green space that does not draw noisy or criminal users), but other public services may produce a mix of both positive and negative externalities depending on their location vis-à-vis each individual parcel (for example, through-roads, kindergartens, schools, or community centers).

In other words, the 40 percent compulsory dedication instrument does not have a built-in mechanism to ensure distributive justice of positive and negative externalities. Recent property rights–oriented court decisions have opened the door (as yet, slightly) to a new legal ground for landowners to file lawsuits. - one that would have been hard to imagine a decade or two ago. Landowners who dedicated the customary 40 percent may now be able to claim compensation for the decline in the value of their property as a result of the anticipated use next door, such as a kindergarten, a health clinic, or the like.

The result of the courts' property rights orientation is a gradual reduction in the effectiveness of the compulsory dedication tool. Where land values are high (and that's where the claims tend to occur), such claims could create an enormous financial burden on the municipality and would in effect offset the benefit of the land ostensibly dedicated free of charge. Most landowners and lawyers have not yet realized the significance of the recent court decisions, and the 40 percent compulsory dedication instrument is still practiced as a planning routine in most towns and cities. But an increasing number of quasi-judicial and court challenges will continue to erode its usefulness. Because LR has a built-in mechanism for allocating the positive and negative externalities equally and justly, thus avoiding compensation claims related to the 40 percent dedication, LR is increasingly becoming the preferred tool.

Negotiated Exactions

Where compulsory dedications are either not sufficient or not geographically feasible, local governments increasingly rely on negotiated exactions. The secret to understanding why landowners and developers may at times be willing to negotiate over additional contributions is that existing statutory plans are often anachronistic. They either do not permit nonagricultural development, or they allow development rights considerably below market demand and below what current planning policy would permit. To have an amendment approved, the developer, either private or public, needs the local planning authorities. They can therefore negotiate for more land dedications or for commitment to construct certain public infrastructure. Since the margin of land value increase is usually high, landowners and developers are usually willing to allocate more land than the compulsory 40 percent or to carry out in-kind construction of a public facility in order to have their development rights upgraded. Due to the usual shortage of land for public services, the planning authorities can generally justify the need for extra dedications.

However, negotiated exaction has limitations, too. It is usually reactive, not proactive, and ad hoc rather than comprehensive. For the give-and-take relationship to exist, the local commissions must usually wait for the landowners or developers to approach them to request an amendment. The leeway for negotiation varies case by case according to the land value increments and to the balance of interests of the various sides.

In Israel, negotiated exaction is not yet explicitly grounded in legislation. It relies on the contractual powers of the authorities and on the willingness of the courts to interpret planning powers broadly. As with negotiated exaction everywhere (regardless of whether it is explicitly authorized in a statute), in Israel this type of exaction is often in the gray area of the law and is susceptible to legal challenge.[22] Furthermore, negotiated exaction obligations are not transparent to the public, and the rules and formulas are not uniform. In some contexts, municipalities view negotiated exactions as preferable to LR because they are likely to be faster and, in some cases, less susceptible to court challenges (because contracts have been signed). Yet in many other contexts, LR is preferable because it provides more legal certainty for all sides, because it can be used proactively by the planning authorities, and because its rules are clear and transparent.

Limitations of LR

No land use planning tool is perfect. Even in its flexible and fair Israeli version, LR has limitations—some legal, others practical.

The Legal Challenge Regarding the Ceiling for Allocation for Public Use

Earlier in this chapter, it was mentioned that the escalating legal protection for property rights in Israel has a double-edged effect on LR. The discussion of the alternative tools for obtaining land or financing for public services pointed out the positive edge: the advantages of LR over the other tools. Also noted was how the growing protection of property rights tends to diminish the utility of each alternative tool and to enhance the attractiveness of LR. But the heightened protection of property rights also challenges some aspects of LR. If the challenges should prove successful, the relative advantages of LR over alternative tools would be reduced.

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[22] In England, for example, negotiated benefits are explicitly authorized by the legislation, yet they are challenged from time to time. See Healey et al. (1995).

The legal challenges are not to the basic constitutionality of LR. They are based on the interpretation of the existing legislation in the light of the Basic Law's constitutional protection of property and on Article 11 regarding situations where the administrative planning bodies are in a position to exercise discretion regarding alternate ways.

The major unsettled legal question is whether LR is subject to the same limits regarding set-aside of land for public purposes as the 40 percent compulsory dedication or whether it has its own internal rationale that exempts it from this limit. According to one view, planning authorities doing LR are allowed to deduct up to only 40 percent of the mass of land, regardless of the contents of the readjustment plan. This view is based on a complex legal grafting of the law regarding compulsory dedications onto the law governing LR. So, even if the densities allowed after the readjustment are high (and property values have increased accordingly) and even if the development needs more land for public uses, LR could not be used to allocate more public land. The authorities are expected to pay for the extra land but, as explained above, this is not realistic financially.

If this position were to prevail in the courts, it would undercut one of the major advantages of LR over the alternative land use–based options. Because each of the alternative instruments is inferior to LR in both law and practice, restricting LR would result in either undersupply of land for public services or greater reliance on negotiated exactions, a tool that is inferior both legally and socially. This interpretation of the law has supporters among some legal scholars and lawyers and has found its way into some administrative and quasi-judicial decisions and into at least one District Court decision. The arguments of those who hold this view have remained on the theoretical level; they do not address the large-scale consequences of its adoption.

The second position (which I hold) says that LR is an independent, free-standing instrument with its own internal rationale. If landowners all benefit from the increase in development rights, the planning authorities are empowered to dedicate as much land as needed for public uses. Recent empirical research shows that this position reflects the dominant practice by many (perhaps most) local planning commissions.[23] This interpretation of the law also has supporters among lawyers (especially in the public sector) and real estate practitioners and from administrative and quasi-judicial decisions, including the ruling in another decision of the very same District Court (by another judge). It so happens that the two contradictory decisions were about the same LR plans and with almost identical facts!

As yet, there is no Supreme Court ruling on this important legal controversy. The sides in the conflicting decisions mentioned above both appealed to the Supreme Court but were encouraged to settle out of court. However, the issue comes up routinely in planning decisions, so one can expect it to reach the Supreme Court in the not-distant future.

To contribute to the legal debate and help the court reach (what I consider) the right decision, a graduate student and I conducted field research (Hevroni and Alterman 2007). We interviewed representatives of a sample of nine local planning authorities in various parts of the country and also studied the files of sample of LR plans in each local planning area, looking especially at whether landowners submitted objections about the amount of land deducted for public use. We found that most of the planning authorities we interviewed use LR extensively and usually allocate more than 40 percent of the land mass to infrastructure and public services. They view LR as the preferred instrument. Landowners rarely contest these allocations because

[23] This is corroborated by recently conducted field research (Hevroni and Alterman 2007 [Hebrew].)

they generally view LR as a process that increases their development rights and prefer it to alternative processes.

The Time Issue

LR is often assumed to take more time than some of the alternatives it replaces. If one looks only at the length of time of the procedures within the planning bodies, this claim may be true.[24] As noted, the Planning Law requires the planning authorities to first identify the owner (or other legal status) of each plot and then send each owner a personal notification. Because LR deals directly with issues of land values, development rights, and criteria for reallocation, the process is likely to draw the direct involvement of the landowners. Owner participation is certainly a desirable process, but it is time-consuming. However, if one adds in the time taken by administrative appeals to quasi-judicial bodies and by litigation in the courts, it is not certain that LR would turn out to take longer than the alternatives. There are no empirical data on this topic.

Even if, on average, LR takes longer than other land use or property instruments, the outcomes of LR in terms of land assembly and allocation for public purposes can be assumed to be superior on many counts. The time variable should be assessed along with other criteria of outcomes. Systematic assessment of this sort has, however, not been researched in Israel or (to the best of my knowledge) in the other countries where LR is practiced.

Conclusions for Potential Transfer

Local authorities in many countries are increasingly relying on land use regulation as a substitute for outright purchase of land for infrastructure and public services. Local governments are often short of cash, voters are not favorable to more taxes, and central government's transfers are less generous than in the past. Similar trends have occurred in Israel as well, so local governments have found it necessary to rely on the instruments available through the land use Planning Law and to adapt them creatively. Land readjustment has increasingly become one of the most attractive tools to local governments.

Israel possesses several attributes than make it a good laboratory for studying LR and for drawing potentially transferable lessons for other countries and contexts. First, Israel harbors a broad spectrum of land tenure regimes—from national ownership to private property—and LR is applied to the full range. Thus, the lessons from Israel are potentially relevant to countries with various property systems.

Second, Israel has a high rate of demographic and economic growth. Thus, planners in regions of high growth (such as the U.S. sunbelt) may find LR as practiced in Israel to be an attractive growth management tool.

Third, in addition to LR, Israel uses the same set of regular tools as other countries to achieve land assembly. The parallel application of alternative tools provides an opportunity to

[24] There are no base data available. Research that I supervised in 1980 for a thesis by Nehama Amirav (not published) did show a longer average time for LR procedures. That was, however, before many of the procedures in the Planning Law were amended and, most important, before Israeli society became litigious.

assess LR comparatively. The fact that LR has been successful in Israel while competing with these other tools is a good indicator of its attractiveness and its potential transferability.

Fourth, Israeli law and jurisprudence have become increasingly protectionist of property rights. Both planners and landowners generally regard LR as the more property-friendly alternative for implementing land use goals. If enacted today, it would likely withstand constitutional tests. Israel's current high level of property rights protection has not cast any doubt about the constitutionality of LR. From a property rights perspective, LR can be shown to be superior in principle to alternative options.

The application of LR in Israel has gone beyond its regular use described in the literature. The extent of application of LR in Israel is high, and it has not declined over the years despite the exhaustion of antiquated subdivisions. Israeli planners and decision makers have been able to adapt LR legislation to changing development challenges and concepts without legislative change. LR is a major way of implementing a broad range of public purposes, such as unlocking complex ownerships and supplying land for public services, environmental set-asides, urban regeneration and restructuring, and a variety of other objectives. The range of purposes to which LR is applied in Israel is probably broader than in most other countries. This chapter has focused mainly on the capacity of LR to assemble, locate, and configure an adequate amount of land for a broad spectrum of public infrastructure and other services.

In view of Israel's high development densities in terms of housing units per area, planning bodies are called on to dedicate large proportions of land to public services. LR has been found to be the most effective and just tool. Planners in the United States and elsewhere who are looking for methods for growth management, urban regeneration, and higher densities may find land readjustment to be a useful tool.

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