The Leasehold as an Alternative Ownership Structure

by

Justin Lai

B.A., Business Economics, 2012

University of California, Los Angeles

Submitted to the Program in Real Estate Development in Conjunction with the Center for Real Estate in Partial Fulfillment of the Requirements for the Degree of Master of Science in Real Estate Development

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Signature of Author____
Justin Lai
Center for Real Estate
July 26, 2019

Certified by____
David Geltner
Professor of Real Estate Finance
Department of Urban Studies and Planning
Thesis Supervisor

Accepted by____
Professor Dennis Frenchman
Class of 1922 Professor of Urban Design and Planning
Director, Center for Real Estate
School of Architecture and Planning

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ABSTRACT

Leaseholds play roles in many different types of transactions – from single-family home purchases to multitenant office tower developments. Despite their flexibility, however, leaseholds are rare in the US and are not widely understood by investors and developers. Compared with freeholds, leaseholds involve additional layers of complexity and can present valuation challenges. If not structured thoughtfully, they can substantially erode the value of the real estate by lowering its quality and usability.

Nevertheless, leaseholds can be useful devices to facilitate real estate investment and significantly impact communities by bringing together parties that would not have otherwise worked together. This thesis focuses on leaseholds in the US: how they are valued, how they are structured, and what issues they pose. It analyzes the motivations behind each party involved in a leasehold and finds that they can benefit from acting more like joint venture partners rather than opposing counterparts, specifically concerning issues related to leasehold improvement financing and the redevelopment option.

Thesis Supervisor: David Geltner
Title: Professor of Real Estate Finance

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Section 1: Introduction

1.1 Background

In the United States, there are two ways to own real estate: fee simple (freehold) and leasehold. The type of ownership dictates how the real estate is managed on a day-to-day basis as well as how it is valued in the capital markets. Fee simple ownership entitles the fee simple owner to use and dispose of the land and any improvements in perpetuity. The owner has the right to lease the property and transfer title of the land and improvements however the owner sees fit. On the other hand, leasehold ownership entitles the leasehold owner (lessee) to only use the land and any improvements for a predetermined amount of time at which point the ownership of any improvements reverts back to the fee simple landowner (lessor). The lessee obtains control of the site from the lessor through a legal document called a ground lease, which establishes the rights and obligations of each party. Typically, the ground lease permits the lessee to use the lessor's land to develop a structure and subsequently benefit from the structure's operating performance. Because a ground lease implements sustained obligations for the duration of the leasehold period, leasehold ownership is generally more complicated than fee simple ownership. Sometimes this added layer of complexity is enough to dissuade a party from engaging in a leasehold transaction altogether.

The National Association of Real Estate Investment Trusts (NAREIT) estimates the value of commercial real estate in the US in 2017 to be between $14 trillion and $17 trillion (National Association of Real Estate Trusts, 2018). Ownership of both residential and commercial real estate is predominantly fee simple and the majority of transactions are conducted on a fee simple basis. However, just as no piece of real estate is identical, no transaction is identical – parties to a transaction have unique motivations, backgrounds, and dynamics. A leasehold structure can be flexible, accommodating to a variety of situations. Accordingly, it should be considered when evaluating ownership structures as it can be a viable alternative to a freehold.

Ground leases underpin lessor-lessee relationships in leasehold ownership structures, which are often thought of as an alternative financing mechanism because the lessee pays for the right to use the

land in installments over time. But they are far from just financing mechanisms – ground leases directly influence how the urban landscape develops as a result of the many indirect implications of the provisions contained within. They are great tools for owners of vacant parcels of land or older buildings to facilitate investment if they do not have the capabilities to do so themselves. However, understanding how to utilize ground leases can be complex. This thesis will serve as a primer on leaseholds in the US: how they are valued, how they are structured, and what issues they pose.

1.2 Historical Context

"One great reason for people leaving their native country, was to avoid the dependence of landlords, and to enjoy lands in fee to descent to their posterity that their children my reap the benefit of their labor and industry" (New York (Colony) Surveyor general, 1849). During the 17th and 18th centuries, settlers from all over the world began to claim land in the US. People who made the dangerous journey across the ocean expected to be compensated for taking the risk – in land ownership. Moreover, those who could afford to lease at the time could usually afford to buy. As such, leaseholds during this period were very rare and only existed for farming purposes. As colonies began to mature and farming methods became more efficient, leasing land became more commonplace (Clawson, 1968). However, people maintained (and still do) a preference for owning land in fee, especially if they emigrated from countries with histories of colonialism.

Today ground leases play roles in many transactions – from single-family home purchase to multitenant office tower developments. Although the volume of leaseholds remains low, more real estate than people suspect sits on land owned by unrelated private properties, including many iconic buildings. In New York City alone, the historic Chrysler Building and the opulent Lotte New York Palace Hotel are both subject to ground leases stipulating substantial amounts of rent (Morris, 2019). Holding title to land in prime locations can be incredibly lucrative with the potential to build and preserve generational wealth. In recent years, the volume of leaseholds has been increasing and has therefore been playing an increasing role for investors (see Figure 1). Using Real Capital Analytics' reported $152.4B in total commercial real

estate investment volume in 2018[1], a significant portion of transactions (7%) appeared to have involved ground leases.

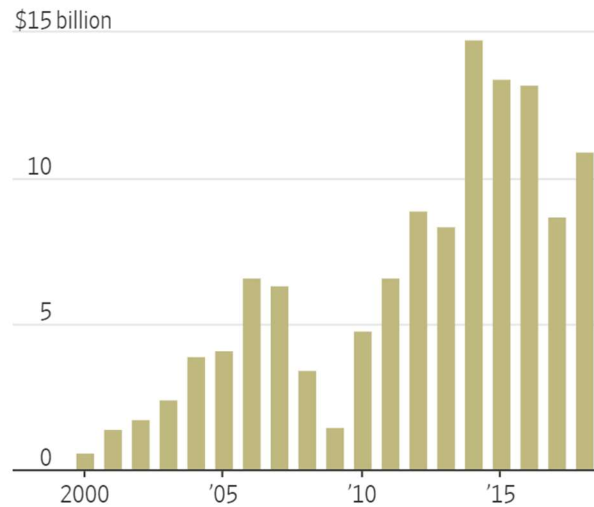

FIGURE 1: SALES OF COMMERCIAL BUILDINGS ON GROUND LEASES IN THE U.S. (COSTAR GROUP, 2019)

1.3 Relative Value between Freeholds and Leaseholds

The value of a property subject to freehold ownership is equal to the value of the land (L) plus the value of the structure (S). If the two are sold together in the market with no debt, the property would fetch a purchase price (P).

$$P = L + S$$

The value of the same property if subject to a ground lease (P*) is equal to the sum of its two claims, fee simple land ownership (L*) and leasehold ownership (S*).

$$P^* = L^* + S^*$$

A ground lease grants the lessee the right to use the land in return for an upfront payment, future payments, or a combination of both. In this case, the fee simple land ownership interest (L*) is equal to the present value of the payments due under the ground lease (GL) plus the residual value of the structure (RV) that reverts back to the landowner at the end of the term. Because L is the amount the land would

[1] Though there could be inconsistencies with the datasets, this gives a rough approximation of leasehold volume.

be sold for (as vacant) as fee simple, L* may be greater than, less than, or equal to L. For example, the present value of the payments would be high for longer lease terms, which increases the value of L*.

$$L^* = GL + RV$$

The leasehold interest (S*) gives the lessee the right to use the site to use or build a structure to generate cash flow. S* is equal to the present value of the operating cash flow generated for the duration of the ground lease term. S* may be greater than, less than, or equal to S. Consider a leasehold commencing at the beginning a structure's life. The structure itself has not yet depreciated, but if the ground lease is only in place for a few years, the lessee will only enjoy its potential operating cash flows for the short period it owns the leasehold. The present value of the net operating cash flows (S*) is low while the value of the physical structure (S) is high at the time the ground lease is executed.

$$S^* = PV(\text{net operating cash flow during lease term})$$

The value of the property subject to a ground lease is less than or equal to an otherwise identical property without a ground lease because of the loss in optionality (α) for both the lessor and lessee.[2] By minimizing this loss in value, a leasehold property's value would begin to resemble a fee simple property's value.

$$P \geq P^* - \alpha$$

The leasehold interest in a structure is typically valued slightly less than an otherwise similar freehold interest. Because the leasehold interest may carry additional leverage,[3] it can be inherently riskier. The lack of structure's residual value and impairment of the redevelopment option further reduce the leasehold's relative value. Additionally, an impending ground lease term expiration can limit the pool of sublessees willing to take occupancy but prefer to execute longer subleases. Because the lessee cannot sublease space for the period beyond the ground lease expiration date, the lessee may miss out on a lucrative sublessee, further degrading the value of its leasehold interest. Lastly, there are legal risks in

[2] The ground lease precludes the lessor from redevelopment and discourages the lessee from redevelopment. This will be discussed in detail in Section 4.2.
[3] Discussed in Section 4.1

owning a leasehold as the lessor may obtain additional rights subsequent to the execution of a legitimate ground lease (Capozza & Sick, 1991).[4]

Valuation methods for leaseholds look much different than those for freeholds. The length of the ground lease often gets the most attention for this inconsistency and for good reason. Because the property is not held into perpetuity and all the structure's residual value reverts to the lessor upon the expiration of the lease, short ground lease terms are problematic for developers or purchasers of leasehold interests because of the limited amount of time to generate net cash flow. Although additional factors influence a leasehold's valuation, it is helpful to establish a baseline to understand how the length of the ground lease relates to the value of the leasehold.

Suppose an existing income-producing property is purchased fee simple for $1,000. It yields $60 (6 percent of the purchase price) in operating income annually initially, increasing 2 percent per year thereafter. In year 30, the property is sold for $1,811, which reflects a 6 percent cap rate on the hypothetical operating income in year 31. Taking a net present value of the aggregate cash flows over the thirty years of operations using a discount rate of 8 percent shows that they are worth $820 in present value or 82 percent of the purchase price.[5] The results of a two-way sensitivity analysis are shown in the table below, which reflect changes in growth expectations and hold periods.

		Annual Growth				
	82%	0%	1%	2%	3%	4%
Horizon (Years)	10	54%	49%	44%	38%	31%
	20	79%	74%	68%	61%	53%
	30	90%	87%	82%	76%	68%
	40	95%	93%	90%	85%	78%
	50	98%	96%	94%	91%	85%

FIGURE 2: STRUCTURE VALUE SENSITIVITY TABLE (8% DISCOUNT RATE)

[4] For example, native tribes in Canada have successfully sued the Canadian government to obtain additional compensation or rights on existing leases (Capozza & Sick, 1991).

[5] Appendix A contains a schedule of annual property cash flows and assumptions.

Evidence suggests that approximately 30 percent of the market value in a newly-built commercial property (20 percent in a residential property) is attributable to its land component (Bokhari & Geltner, 2018), implying that about 70 percent of the value in a newly built commercial property (80 percent in a residential property) is attributable to its structure component. Because an interest in a leasehold does not receive the benefit of sale proceeds (residual asset value at the end of the 30-year lease), it is entirely valued by the cash flow it generates during operations. Figure 2 suggests that the structure value (S) in newly built properties approximates the present value of the cash flow during operations for ground lease term lengths between twenty and thirty years, assuming the 8 percent discount rate used in this example. Stated differently, the value of a leasehold at the beginning of a structure's life with a term between twenty and thirty years is approximately equal to the value of the structure in the newly built property.

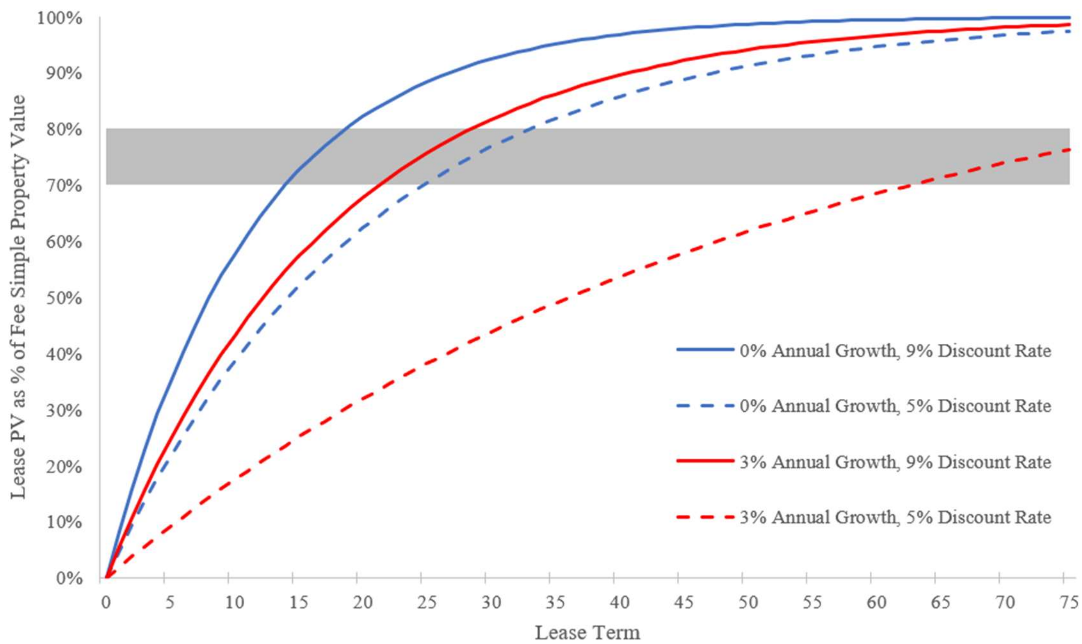

FIGURE 3: GROUND LEASE PV AS A PERCENTAGE OF FEE SIMPLE PROPERTY VALUE

Figure 3 graphically depicts the relationship between the length of the ground lease and the present value of the cash flows the leasehold generates as a percentage of the fee simple property value. The curves show the value of the leasehold to the lessee assuming all the ground rent payments are paid

upfront. Scenarios with alternate discount rates and annual growth rates[6] are drawn to compare the effects of each variable on the value of the leasehold to the lessee. The horizontal band represents the value of the structure in a newly built property. Where the curves intersect this band corresponds with the lease term lengths that approximate newly built structures. As seen in the figure, the lease term length that equates the leasehold value to a new structure value varies considerably as assumed growth rates and discount rates change.

[6] Because the model assumes constant growth rates throughout, higher rates over long periods are unlikely.

Section 2: Typical Ground Lease Provisions

Because ground leases are often heavily negotiated, they have the potential to be highly specific and unique. These leases generally last for multiple decades, so it is crucial to think through each of the terms, as the document will govern the partnership for years to come. Unlike a fee simple purchase agreement whereby all the value is exchanged instantaneously, much of the value in a ground lease is realized over the life of the lease. In the case of the lessee, for instance, this value can come in the form of options such as the option to redevelop or the option to obtain financing. Section 4 will focus on such options as well as additional issues that create and destroy value. These are multifaceted concepts that are often influenced by multiple provisions within the ground lease. The party who better understands how the provisions work together will generally stand a better chance to succeed. Although ground leases can become specialized, the provisions discussed below have evolved to become the "standard" terms that make up the framework of most ground leases today.

2.1 Base Rent

The lessee will pay the lessor periodic payments at an agreed upon rate either on a monthly or annual basis. In some cases, the lessee will prepay Base Rent for the entire ground lease term upfront.[7] The amount of Base Rent will often have some relationship to prevailing interest rates because it can be structured to mirror hypothetical land financing. Lessors and lessees can be creative when structuring the Base Rent schedule depending on the situation. For example, Base Rent may be set at reduced rates during construction periods before increasing when the improvements are completed and the structure is generating increased cash flow. Alternatively, Base Rent structures can be designed to penalize developers by increasing payments if certain construction milestones are not met. When the asset is in operation, it is common for adjustments to Base Rent to be made on a recurring basis. These adjustments may be tied to an index such as the Consumer Price Index or to a percentage of the prevailing fair market

[7] Brookfield Asset Management purchased the leasehold interest of 666 Fifth Avenue in New York in 2019, purportedly prepaying $1.1 billion on its ground lease to help meet the seller's immediate financial obligations (Bagli & Kelly, 2018).

value of the land.[8] In the case of fair market value adjustments, an annual Base Rent equal to 6 or 7 percent of the fair market value of the land is often used (Stein, 2013).

2.2 Participation Rent

Participation Rent (Percentage Rent) subjects the lessee to pay the lessor an amount tied to the financial performance of the leased property, which is usually equal to a percentage of the revenue or profit derived from the leasehold improvements. Participation Rent theoretically aligns economic interests and as a result, incentivizes a lessor to accommodate and encourage a lessee's building improvements and business operations if it feels it would be accretive to the lessee's financial performance. Participation Rent can also help avoid a lessee's monetary default in the event of a project going "dark" as the Participation Rent would decrease to zero. For a lessor, Participation Rent can be preferable to Base Rent as it is more resistant in periods of high inflation where the real value of future Base Rent payments erode. Figure 4 is a hypothetical example of how a ground rent payment structure can look. Payment to the lessor is reduced during the construction period before increasing in year five when the asset is completed and generating income. In this structure, the ground lessor will be paid a constant Base Rent subject to an adjustment every five years and a Participation Rent that is tied to the increasing profitability of the leased property.

[8] Fair market value adjustments occur every five or ten years as doing them more frequently is a cumbersome and expensive process.

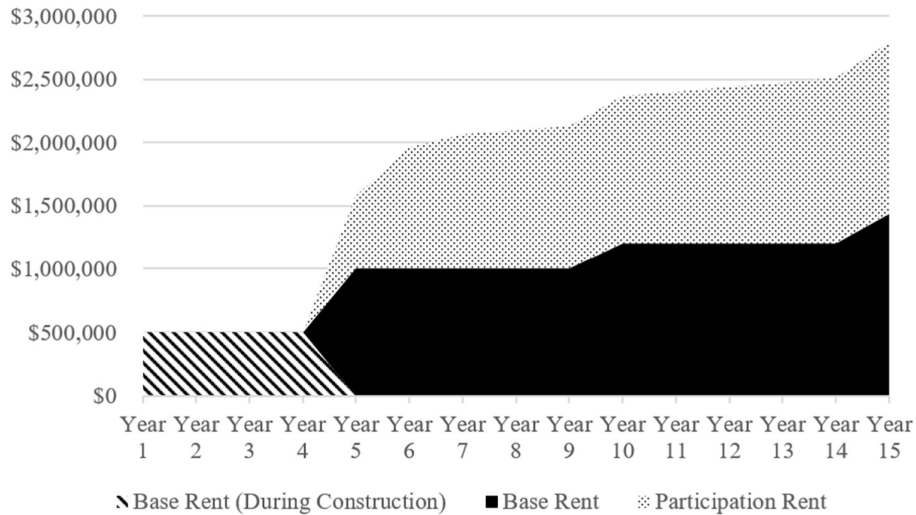

FIGURE 4: HYPOTHETICAL GROUND RENT SCHEDULE

2.3 Ground Lease Term

Because the intentions for entering ground leases vary, term lengths will vary. In ground-up developments, the ground lease term is typically a period of fifty years. The fifty-year term is comprised of an initial ten- or twenty-year term with multiple ten-year options to extend (Dale-Johnson, 2001). Regardless of the purpose for the ground lease, the lease term will have to be sufficiently long enough for the lessee to earn a "fair" return on its investment. Ground lease terms longer than ninety-nine years are rare, as they are viewed as sales from the US tax perspective, which can trigger an immediate liability from imputed capital gains. If a ground lease does not stipulate an upfront Base Rent payment, the lessor is forced to come up with capital elsewhere to settle its tax liability. Some states even limit ground leases to no more than ninety-nine years (Geltner, Miller, Clayton, & Eichholtz, 2014).

2.4 Subordination

The lessee will likely finance leasehold improvements through debt providers. In the case of a foreclosure, debt providers will want to not only be secured by the leasehold improvements, but also by the fee title to the land. In the case that a lessor voluntarily agrees to subordinate its rights to its land, granting the leasehold debt provider a priority claim in the case of default, the ground lease is known as a "subordinated" lease. An "unsubordinated" ground lease is just the opposite: a ground lease in place that

preserves the lessor's priority to its land during default. Subordination is done to give debt providers comfort when lending to the lessee and may result in more advantageous financing terms. In practice, it is very rare that a ground lease is subordinated to the lien of the leasehold lender.

2.5 Permitted Use

The lessor will generally want to limit the types of activities the lessee can conduct on its land. There could be many motivations for narrowing the allowed use, including protecting the income received from Participating Rent, maintaining a certain neighborhood character, minimizing environmental risk,[9] or protecting the value of adjacent parcels of lessor-owned land. Additionally, the lessor can set time limits on how long a use can be permitted. If the lessor only wants construction-related activities to occur on its land for a period of 12 months between normal business hours, it can articulate the limits in the ground lease. Naturally, the lessor wants to retain as much control over its land as possible.

2.6 Reversion

A key negotiating point between the two parties revolves around the ownership of leasehold improvements at the end of the lease term. The final ownership interest, timing of the transfer, and condition of the improvements need to be worked out. Complete ownership of the improvements will generally transfer to the lessor upon expiration. If the improvements are in excellent condition, this can benefit the lessor, but if the improvements are such that they are burdensome to remove or redevelop, this can be a liability.

2.7 Assignment and Subletting Rights

A lessor wants to ensure that the party it chooses to enter into the ground lease with will retain the responsibility of carrying out the activities it agreed to do. Oftentimes a lessor's land is in high demand, so in selecting a particular party, the lessor likely believes that that is the party that has the best

[9] Under various federal, state and local environmental laws, statutes, ordinances, rules and regulations, an owner of real estate can be held liable for removal and remediation regardless of who was responsible for the presence of the substances (Safety, Income & Growth Inc., 2018).

chance to perform under the terms of the ground lease. The lessor does not want the lessee to have a unilateral right to assign its interest in the ground lease to a less sophisticated, capable, or financially secure party, so the lessor will often ensure it has approval rights over whom the lessee can assign its rights and obligations under the ground lease to. Similarly, the lessor will also want approval rights over to whom the lessee can sublet its interest. If the sublessee is not financially secure, the ability of the lessee to perform under the ground lease would be jeopardized.

Section 3: Common Ground Lease Uses

Most ground leases originate because a landowner does not want to sell a parcel of land on which someone wants to develop. This reluctance to sell can come from a variety of reasons. Perhaps the land was passed down over generations, so a party wants to continue to hold it in the family for generations to come. Tax reasons, which will be discussed further in Section 4.4 may also discourage someone from selling. In some cases, selling land may even be prohibited due to restrictions such as those placed on private trusts or tribal lands (Dale-Johnson, 2001). Or simply, a party may just have an emotional attachment to its land. Regardless of the reason, the lessor still has an appetite to see development occur on its land, and a ground lease is a great instrument to maintain a level of ownership, influence the nature of the development, and earn a financial return.

Many people assign negative connotations to ground leases because they are only familiar with their ability to displace residents from their homes when ground lease payments escalate. Indeed, there are ground leases susceptible to steep increases in rents if tied to fair market value adjustments (as discussed in Section 2.1) that effectively force residents out of their homes because they cannot afford to make the payments. However, this is not the only way ground leases are used. The flexibility of ground lease provisions allows a ground lease to adapt to numerous scenarios and satisfy a broad spectrum of participants. Although leasehold ownership is not common in the US, a few situations and geographies have embraced its use. These are some of the more common ways ground leases are currently used in the US:

3.1 Public Agency Initiatives

Public agencies serve to raise money from their constituents and reallocate these funds for the benefit of the overall community welfare. Often this may entail the building of facilities such as airports, convention centers, or low-income housing. Public agencies will partner with private companies, as they generally do not have the expertise or capacity to develop property and infrastructure themselves. For example, in the case of creating and preserving low-income housing, public agencies will often enter into

ground leases with private developers that develop and operate the units on public agency-owned land. Because of the lower revenues associated with the below market rate rents collected, private developers face challenges in making their housing developments work financially without additional assistance such as free or reduced land cost upon which to build. Instead of gifting land in perpetuity (fee simple), public agencies will choose to lease the land to developers for a period of time long enough for the developers to make an appropriate amount of profit. In this way, the public agencies maintain ownership and long-term control of the land while ensuring that its use corresponds to intended policy goals. They dictate permitted uses over the life of the ground lease while generating revenue that they would not otherwise have been able to earn.

3.2 Single Tenant Retail Developments

Stronger "credit" tenants such as national banks or fast food restaurant chains will often own and operate leasehold improvements while paying the lessor a ground lease payment.[10] If the tenant is a profitable taxable corporation, the tenant may find it preferable from a tax perspective to lease land rather than own it outright because of the deductibility of ground lease payments and depreciation from leasehold improvements. Often these ground leases will require the lessee to be responsible for all maintenance and capital costs associated with operating the structure and hypothetical land ownership (referred to as "absolute triple net"). The lessor will not incur any costs through the term of the ground lease. Ground lease terms will typically run for an initial twenty or thirty years and have multiple multi-year options to extend. Reasons for tenants to enter into leasehold relationships are similar to the reasons tenants enter into sale-leaseback transactions:[11] to free up capital to focus on their underlying businesses and to relieve themselves of property ownership obligations.[12]

[10] Usually the lessee will structure the payment such that it equals 6 to 8 percent of gross sales initially with either 1.5% annual increases or 10% increases every 5 years.
[11] In a typical sale-leaseback structure, the tenant/operator will pay rent that covers the use of both the land and improvements. In a ground lease structure, the tenant/operator will pay rent that covers the use of the land only.
[12] In single-tenant absolute triple net situations, the lessee absolves itself from the land ownership obligations.

In practice, there are two main ways a single tenant net lease development gets built. The more common is when a real estate developer with an operator (e.g. drugstore) in-hand purchases fee simple land and then builds a structure for the operator to occupy. Having received an earlier commitment from the operator, the developer formally executes a long-term ground lease naming the operator as the lessee. The developer then sells the fee simple land, which is now set to receive a future stream of ground lease payments, to a private party in the market. The second way a structure gets built occurs when the fee simple landowner refuses to sell the land to the developer. Often these parcels of land are in prime locations and have owners who do not have the desire or expertise to develop the land themselves. In this case, the developer will sign a ground lease with the landowner, build the structure, and then immediately sell the leasehold interest to an operator. The leasehold interest generally trades for a roughly 150 basis point capitalization rate[13] premium than an otherwise similar fee simple property.

3.3 Mobile Home Parks

Mobile homes are built in factories off-site before getting transported to a mobile home park. Residents will own the home itself and lease the land beneath for varying lengths of time. Either an individual or a group of individuals, perhaps through an investment vehicle such as a publicly traded real estate investment trust (REIT), will own the park land and receive recurring rent payments from the residents. Sometimes amenities such as laundry facilities or pools will be provided within the park as amenities for the residents. Mobile homes are the fastest-growing type of housing and represent 7.6% of the housing units nationwide. They're concentrated mainly in the South, with some counties having more than 30% of its housing stock as mobile homes (US Census Bureau, n.d.). Equity Lifestyle Properties, Inc. (NYSE: ELS) is one of the largest owner-operators of mobile home parks in the US with 414 such properties providing 155,447 leasable sites as of December 31, 2018 (Equity Lifestyle Properties, Inc., 2019).

[13] Equal to the property's net operating income divided by its purchase price

Within the mobile home park market, there are two main types of communities: manufactured housing communities and recreational vehicle ("RV") communities. The manufactured housing communities segment refers to parks aimed at providing an affordable, unsubsidized option to low- and moderate-income residents. They will generally be located in rural and exurban locations. Typically, once the mobile home gets placed, it does not ever move again. RV parks, however, are geared toward travelers and campers with more mobile vehicles. Oftentimes, these will serve as second-homes or retirement retreats and be located in vacation-type destinations.

3.4 Universities

To support an increasing population of students, land around universities is often retained by the university to maintain the ability to expand in the future. Educational institutions typically remain in existence for generations and want to be able to provide enough facilities such as classrooms, administrative offices, and student housing when the need arises. Few universities sell land, opting to lease it instead to generate income in the interim. However, even though they lease their lands to private parties, they are keenly aware of and interested in how the surrounding neighborhood develops, as they want to maintain a certain community character that is in line with the university's goals and is attractive for future generations of students. As one professional put it, "when developers build buildings or centers, they generally want to get their money out and move onto the next project. Universities worry about image, about town/gown relations, [and] about the impact of land use on the university's character a century from now" (Deutsch, 1993).

Section 4: Leasehold Considerations

Because ground leases are usually in place for at least several decades, value in the agreements comes from much more than economic provisions such as the amount of ground rent. Negotiations are nuanced with potentially far-reaching implications of each provision. Although instinctually each party wants to capture as much benefit as possible, they should realize that the negotiation is not always a zero-sum game. Owing in large part to the length for which the ground lease relationship lasts, there are indeed areas in which compromise yields mutual gain. A ground lease is not merely a transactional agreement, but rather a form of partnership, which can look similar to a joint venture. This section will discuss some of the main issues each party faces that if dealt with properly through prudent ground lease provisions, can increase the value of the overall relationship.

4.1 Leasehold Improvement Financing

To finance the leasehold improvements, the lessee will commonly look to debt providers for capital. Figure 5 identifies the parties to a hypothetical ground-up development of an income-producing property. At the time of construction completion, the lessor has contributed the use of its land valued at $100M, the leasehold lender has loaned the project $300M, and the lessee has contributed $100M of its own equity. Over the term of the ground lease, the property generates $25M annually from the rent it receives from its occupants during operations. Portions of the $25M are then distributed to the lessor for use of the ground and to the leasehold lender to service the loan.

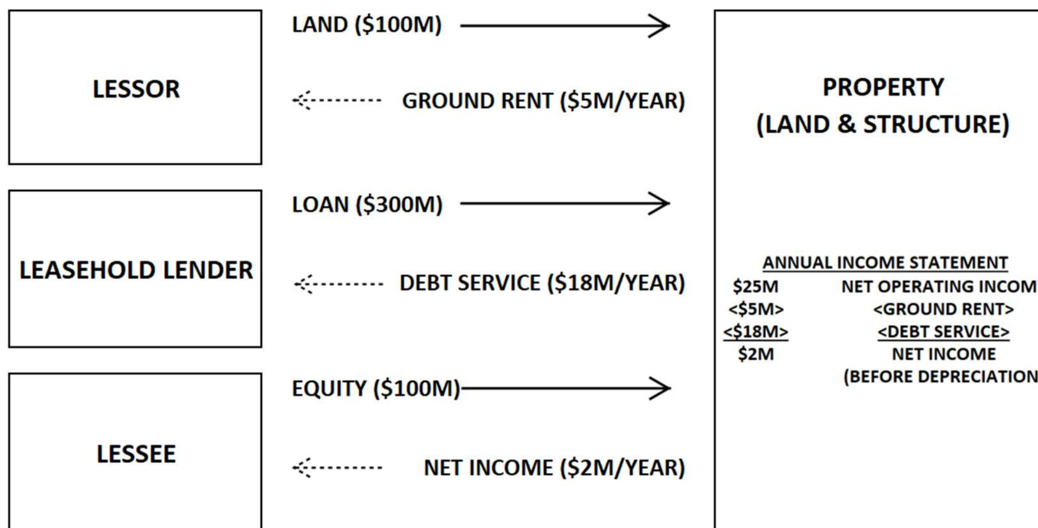

FIGURE 5: HYPOTHETICAL LEASEHOLD RELATIONSHIP

Naturally, lenders want to have much collateral as security behind their loan, so they will insist that title to the underlying land be included as collateral. One way this is achieved is if the lessor agrees to subordinate the ground lease to the leasehold mortgage. However, many lessors will refuse to subordinate the ground lease to the mortgage, claiming that it is nearly impossible to predict and control the success of the lessee's activities. In most cases, the lender will understand the lessor's rationale and give up pursuing subordination. In this case, if the lessee defaults on the ground lease, the lessor has rights to the improvements without being subject to the mortgage, stripping the lender's collateral entirely. Effectively, payments to the lessor take seniority over payments to the lender. A leading investment sales brokerage firm marketing its client's fee simple land subject to a stream of ground lease payments called such investment "the most secure form of real estate." To protect itself, the lender will want to ensure that it is up-to-date on the status of the relationship between the lessor and the lessee, which includes understanding if terms of the ground lease are being adhered to and receiving a copy of all notifications between the two parties. Furthermore, the lender may want to retain options to cure lessee defaults, exercise ground lease extension rights, or maintain approval rights over amendments to the ground lease. The lender may even require the lessee to escrow funds in order to help the lender cure in

instances of nonpayment. In short, if the lessor refuses to subordinate the ground lease, the leasehold lender needs to be extra vigilant and hands-on with regard to its involvement in the lessee's operations.

In the rare case, the lessor will agree to subordinate the ground lease to the mortgage, which gives the lender much more comfort in making the loan. In response, the lender may lend on more favorable terms (e.g. lower interest rate), giving the lessee a better chance to service the loan. For most lessees, the success of the entire deal is contingent on securing financing for leasehold improvements at acceptable terms (Mendenhall, 2007). However, by subordinating the ground lease, the lessor now has a real risk of losing its land if the lessee defaults on the loan. In fact, a moral hazard issue presents itself in that a lessee's loan default gives the lender rights to the lessor's land. The lessor would want to protect itself by requiring the lender to give it notice and a sufficient amount of time to cure any monetary defaults of the lessee. When the lessor's land is at risk, the lessor is forced to evaluate the true merits of a project as well as its confidence in the lessee to perform.

The term length of the ground lease is also of concern to leasehold lenders. If the term is too short, lenders will simply not lend, as they do not want to be in possession of a leasehold interest that is soon to expire (i.e. revert to the lessor) in the case of a foreclosure. In fact, one national lender stipulated that a borrower could not apply for a loan unless the ground lease under the leasehold interest extended for at least 5 years longer than the anticipated maturity date of the loan. Should the lessee default and the lender subsequently take possession of the improvements, more lease term remaining on the ground lease gives more options to the lender to recoup its investment. Perhaps the lender has a possibility to sign a lucrative lease with a tenant, but the ground lease's term does not justify the expense and time required to complete tenant improvements in order to get the space ready for occupancy. Or perhaps the lender feels that selling its newly acquired leasehold interest is the best course of action, but the short ground lease term is a deal-breaker for potential investors. An adequate amount of term remaining on the ground lease also gives the lender refinancing options to settle the initial loan.

Leasehold lenders consider how ground rent payments are structured. As mentioned previously, ground lease payments can be viewed as taking seniority over debt service payments. Higher fixed Base

Rent payments leave less net cash available to service the debt. If the income-producing property suffers a decline in performance, the lessee may not be able to make debt payments to the lender. In this way, lenders view the fixed ground rent as "additional debt," leveraging the lessee's equity in the leasehold. Alternatively, lenders view Participation Rent, which is based on the leased property's financial performance, to be less risky because a decline in performance would lessen the ground rent liability. The lessor acts more like an equity partner that shares in the upside and downside of the property's performance. Although the amount of Participation Rent can vary, lenders will prefer to see it over Base Rent because of its ability to help mitigate downside risk and reduce volatility.

Similarly, increases to Base Rent payments increase the leverage in the leasehold. Base Rent is often structured such that it continually increases by a set percentage annually, exclusive of the asset's value. Over time, the lender's position becomes riskier as the increasing ground lease liability leverages the lessee's equity in the leasehold. However, if Base Rent adjustments are tied to a value (e.g. land), then the risk to the lender can be reduced because the lessor absorbs some of the downside through reduced Base Rent payments, freeing up the property's capital to service the debt. As seen in Figure 6 below, average urban land values declined significantly from 2005 to 2010. Lessors receiving ground rent payments subject to fair market value readjustments over this period likely saw reductions in Base Rent. If ground rent were structured to increase over this time through fixed increases, leasehold interests became more leveraged, which put the lender's collateral at increased risk. No party prefers a scenario in which land values decline but if given a choice in such an event, a lender would much prefer to see a ground lease requiring the lessee's payments to be subject to downward fair market value adjustments rather than fixed escalations.

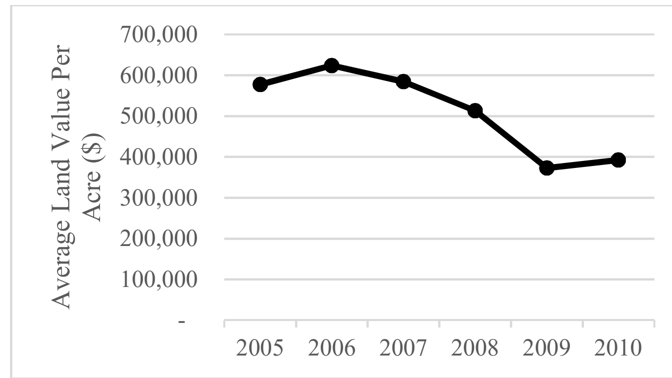

FIGURE 6: AVERAGE URBAN LAND VALUE PER ACRE[14]

Conversely, there are situations in which Base Rent increases so significantly from inflated land values[15] that the lessee does not have enough net cash flow to service the debt, forcing the lessee to default. Taking the average of fair market values for land over a range of dates or establishing caps[16] and floors to Base Rent adjustments from reappraisals may help avoid potential default scenario by smoothing out fair market value reassessments.

A lessee may also finance the leasehold improvements through equity. Depending on the joint venture agreement with the equity partners, these partners can similarly have a large influence on the project. However, they typically play a more limited "money partner" (i.e. passive) role by simply providing equity. These limited partners can have different motivations and time horizons for their investments, which can influence the terms of the ground lease. For instance, they may want the partnership to have the right to sell the leasehold interest quickly or to minimize the amount of periodic ground lease payments at the expense of other terms in the ground lease agreement. There are endless trade-offs that must be evaluated to appease each of the financing sources. The lessee has a complicated job in managing and anticipating the expectations and motivations of them as it negotiates the ground lease, which may get negotiated far in advance of even securing financing commitments.

[14] Land-value data is from CoStar COMPS database. Transactions CoStar considered "land" are used.
[15] The leasehold for the Chrysler Building in New York City was subject to a ground rent adjustment in 2018 from $7.8 million annually to $32.5 million annually (Morris, 2019).
[16] Though setting a cap on fair market value readjustments to Base Rent may lessen the risk of monetary default on the leasehold loan, the cap erodes some of the value of the redevelopment option discussed in Section 4.2 by disincentivizing redevelopment to the HBU

There are many other issues in the ground lease that make the leasehold improvements more financeable. While not an exhaustive list, among them are the lessee's right to mortgage, lender's right to a new lease, purchase options, assignment rights, lessee's subletting rights, notice and cure periods for lessee defaults, and rights to estoppel certificates[17] for both the lessee and lessor (Mendenhall, 2007). In a ground lease transaction, there are many integral parties downstream that rely on the terms stated in the ground lease. A ground lease so onerous for the lessee to the point that it cannot obtain financing for new development (or redevelopment) may, in fact, be counterproductive to the landowner who has a financial interest in seeing the project succeed.

4.2 Redevelopment Option

Developers will go through rigorous analyses to determine the best use of a vacant parcel of land. Demographics, construction costs, and markets rents are just a few factors that they will consider before deciding what to build. Vacant land has what is known as its highest and best use ("HBU"), which represents the most productive use while considering the costs to deliver (e.g. construction costs). Because there are so many variables that contribute to a vacant land's HBU, the optimal structure to build constantly changes. A vacant site that was once the most valuable with an office building could change for any number of reasons to be most valuable with a residential condominium building.

Even when a site gets developed, the HBU of the land as if vacant can continue to change. But this does not necessarily mean that the existing building should be redeveloped. The opportunity cost of giving up the existing building (i.e. a future stream of cash flows and residual value) and cost of demolition needs to also be considered when contemplating redevelopment. Although the HBU of the land as if vacant calls for redevelopment, keeping the existing structure in its present use may actually be the optimal profit-maximizing choice. Real estate is a long-lived asset and is slow to adapt to changing economic and environmental conditions. In fact, empirical evidence has shown that the average lifespan of the typical commercial structure in the US is much longer than fifty years, implying that keeping the

[17] An estoppel certificate certifies specifics of an existing lease. In the leasehold context, the leasehold lender will want the lessor to verify details of the existing ground lease.

existing structure as is often makes more economic sense than redeveloping it because the existing HBU is slow to change.

In addition to a changing HBU, the structure itself will become obsolete over time. The structure will physically deteriorate, especially if it is not maintained adequately. But even if it has been maintained, roofs will eventually leak, and foundations will eventually fail. Buildings will also become functionally obsolete, which refers to the diminishing desirability of a building's design because of changing technology or consumer tastes. Obsolescence and an increasing HBU of vacant land will cause the fair market value of the land under the existing income-producing improvements to exceed the fair market value of the land at the time the improvements were initially constructed.[18] However, even if a property is ripe for redevelopment, an in-place ground lease can prevent redevelopment from occurring. In this manner, the leasehold structure destroys the value of the property by impairing the value of the redevelopment option,[19] which can be large especially in older buildings that are ready for redevelopment.

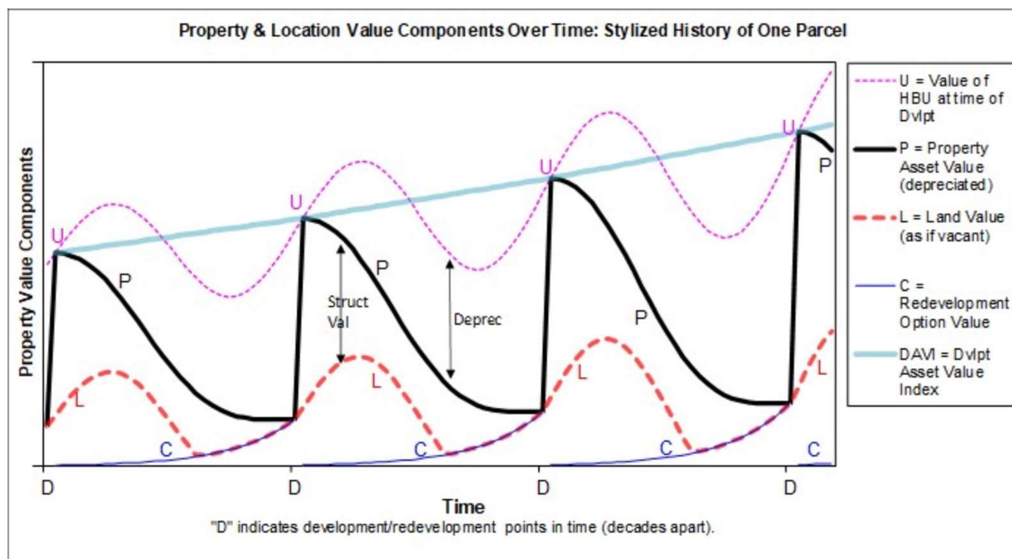

FIGURE 7: REDEVELOPMENT TIMING FRAMEWORK

The figure above demonstrates how the values of each component of a property change over a property's life. At the points labeled D on the horizontal axis, redevelopment is assumed to occur,

[18] Changes to legal structures such as land use regulations or rent control can also further widen the variance.
[19] Impairment of the redevelopment option is reflected by a higher alpha (α) in Section 1.3

effectively increasing the value of the property to the site's highest and best use. The dashed line labeled U indicates the site's HBU as if vacant. As discussed previously, even though the HBU of the site (as if vacant) constantly changes, redevelopment only actually occurs if the site (as built) warrants additional investment. The figure also shows that the value of the structure component depreciating until it is eventually worthless. Land never depreciates, so there becomes a point when the total property's value is composed only of the land component. This is the point that is profit-maximizing to a fee owner and therefore when redevelopment makes sense: the structure no longer carries any value, so to utilize the land, capital must be infused for redevelopment. It follows that the benefit of owning land at this point in time is solely for the option to build. Hence, the redevelopment option can be quantified to equal the value of the land, which as discussed in Section 1.3, also approximates 20 to 30 percent of a newly built property. The curves in the figure labeled C, represent the value of the redevelopment option over the life of each redevelopment cycle. Once the property is redeveloped, the value of the option drops immediately because the property has just been built to the site's HBU but begins to creep upward as the structure deteriorates until it is time to redevelop again.

Although the lessor maintains ownership of the fee simple land, it loses direct control of it and hence the opportunity to redevelop the improvements itself because of the ground lease. Control and the option to redevelop are given to the lessee instead. Perhaps the lessee, regardless of the merits of redevelopment, decides it does not want to redevelop. It may be in the lessor's best interest to allow the lessee to terminate the ground lease without default so that the lessor can regain control of the land to redevelop. Or the lessor may find that it would be willing to pay the lessee to terminate the ground lease in order to maximize the value of its land either through pursuing redevelopment itself or finding a different lessee that would redevelop to the HBU. In quickly growing neighborhoods, the lessor may find the option to terminate the ground lease with some form of payment extremely valuable. If the payment is based on the actual increase in economic value of the redevelopment, the lessee may too find that it is better off even if the lessor decides to pursue the option to terminate the ground lease.

On the lessee's side, a ground lease prevents the lessee from acting as a true fee simple owner. Even if the ground lease permits redevelopment to the optimal Permitted Use, the fact that the ground lease eventually transfers ownership of the residual value of the improvements disincentivizes the lessee to commit capital for redevelopment. Only if the ground lease term remaining is sufficiently long will the lessee decide that it is worth giving up a structure (that it paid for completely) and investing its capital to redevelop. This implies that the shorter the term remaining on a ground lease, the more impaired the option to redevelop will be for the lessee.

As mentioned in Section 2.5, the ground lease can prohibit certain uses on the land by narrowing what is permitted. If a scenario presents itself in which it makes economic sense to redevelop into a different type of use that is prohibited, the permitted use provision will effectively preclude redevelopment. The value of the leasehold is reduced as a result. Because the built environment constantly shifts, long-lived assets such as real estate will experience periods when the HBU of the land as vacant looks very different from what currently exists. It is worth considering that a lessor may intentionally narrow the scope of the permitted use in the ground lease in recognition of the land's spillover effects on adjacent parcels; the value of a group of parcels may in aggregate be enhanced despite the suboptimal use of a single parcel.

For the reasons previously stated, when faced with the prospect of redevelopment, the lessee will redevelop sooner and at lower density than would the fee owner (Capozza & Sick, 1991). From a public policy perspective, this may be an undesirable result if the goal of allowing private development through ground leasing is to catalyze development density. However, research has been done that identifies certain contractual alternatives not normally seen in ground lease provisions that enhance the value of both party's positions in the leasehold relationship (Dale-Johnson, 2001).

Because the cash flows of the leasehold improvements are shared between the lessor and lessee,[20] both parties benefit by redevelopment if cash flows increased. David Dale-Johnson tested for contracted

[20] The lessee benefits from the cash flow during the term of the ground lease and the lessor benefits from the cash flow through the residual value it receives at the end of the ground lease.

ground lease incentives that would encourage such redevelopment and found that including a lessee claim on the residual value of the improvements would result in higher intensity redevelopment. The lessee would be less likely of the mindset that further investment, especially toward the end of the lease, would be “throwing money down the drain” if it knew that it would continue to have rights in it even after the expiration of the ground lease. Incorporating compensation or equity interest in the new improvements would lead the lessee to decide more frequently to undertake redevelopment.

David Dale-Johnson also found that the intensity of redevelopment would increase if the lessee, if deciding to redevelop at any point in the first 50 years of the initial term, was granted an automatic lease term extension right for the number of years that expired in the initial term. For example, if redevelopment occurs in year forty of the ground lease, the lessee gets a right to extend the ground lease for an additional forty years. In this way, the increase in cash flows can be enjoyed long enough to warrant the additional investment in the improvements. “We find that both these alternatives enhance the value of the redevelopment option to the ground lessee and result in redevelopment that is more consistent with that which the fee owner would have undertaken in the absence of a ground lease” (Dale-Johnson, 2001).

Because the lessee only has rights for a limited number of years to the income from the new improvements, the lessee is not incentivized to redevelop if it is the one to commit all the capital and time required. Construction cost overruns, construction delays, and availability of financing are just a few of the factors that exacerbate the disincentive to redevelop. If the lessor were to absorb some of the construction cost and risk, it would encourage the lessee to redevelop. Examples of this could be in the form of setting a lower Base Rent while in construction or extending a line of credit for risky predevelopment costs. However, the method the lessor gets compensated for the ground lease is worth considering. If most of the lessor’s compensation is Participation Rent, the lessor may be less inclined to encourage redevelopment because any elongated construction delay would lower the amount of total Participation Rent received. If most of the lessor’s compensation is Base Rent, the lessor may also be less

inclined to encourage redevelopment because there may be less certainty of payment if the lessee's focus and priority are financing construction-related activities.

Many ground leases in the US are silent about redevelopment, even though much of the value in a leasehold interest (if the structure is old) comes from the ability to redevelop the improvements. As redevelopment can be Pareto preferred with certain contractual alternatives, this should be a significant part of all ground lease negotiations. Over the life of what is likely a long ground lease term, an opportunity to redevelop may present itself. If the provisions in the ground lease were thoughtfully negotiated, an incentive structure would be in place such that the value of the redevelopment option to the lessee would be increased, influencing a more optimal outcome for both parties.

4.3 Lessor Involvement

The level of engagement from the lessor can be a predictor of a project's success. Depending on the nature of the activities on the land, a high level of involvement and sophistication from the landowner can be invaluable. Alternatively, a high level of involvement can also prove detrimental in some situations. Some lessors want to take a passive approach in the development process and have no desire to control or manage the activities on their land. They view their ownership as a stable source of income similar to an annuity. Others want to be heavily involved in the activities that are happening on their land. Even though negotiated provisions in the ground lease spell out approval rights, access rights, and dispute resolution procedures, the best partnerships do not need to refer to the actual document. Each party needs to understand the other's personality traits in the context of the business plan when evaluating and negotiating the ground lease.

If a lessee is simply operating an asset, it may not want to have much lessor involvement. An opinionated lessor that has a say in leasing or capital expenditure decisions may cause the lessee to feel that the lessor's involvement is overburdensome and counterproductive. For instance, if a decision to sign a sublease with a large subtenant needs to be made immediately, the time needed for the additional layer of approval from the lessor may cause the tenant to look elsewhere. Because the lessee is involved

in the day-to-day operations of the asset, it may feel that it is in the best position to make decisions, so instances where the lessor overrides its choices could engender resentment.

However, if the lessee is involved in development or redevelopment, it may actually want a highly engaged lessor, as inevitably, documents requiring ownership approval or sign-off will be needed to proceed. If the lessor is up-to-date on current progress, it would cut down on the amount of time and questions and improve the chance that the project will be delivered timely. Lots of cooperation is necessary between the lessor and lessee in the development of a project. The ground lease terms can attempt to institute a procedure by which the lessor has to abide, but it ultimately comes down to the working relationship between the two parties. [21]

Of course, certain clauses in the ground lease are enough to incentivize action on behalf of the lessor. For example, if the lessor subordinates its interest in connection with the leasehold financing, it would naturally be more interested in the lessee's activities for fear of losing its land. Rent that is skewed more toward Participation Rent would similarly incentivize the lessor to influence the decision-making of the lessee, as it would directly affect the amount of ground lease payments. Additionally, a lessor would be particularly interested in the type of development should the lessee decide to redevelop if the lessor thought that ownership of a material amount of residual value would be transferred in the future. It is often impossible to avoid misalignment of interests, but naturally the more misalignment, the more the lessor would be attentive to the lessee's activities.

Sometimes lessor involvement is driven by a lender who has a mortgage on the fee simple land. Lenders are usually willing to lend for a period that matches the length of the ground lease, so their involvement can last the entirety of the leasehold ownership period. If the lender is looking to the ground lease as the primary means to make loan payments, the fee lender has an inherent interest in what the lessee does that may erode the value of its collateral – the land. An intercreditor agreement among the

[21] Sometimes there are situations whereby the landowner enters into a joint venture with a second party to create an entity that becomes the lessee in a ground lease with the landowner. In this way, the lessor will clearly be involved in the development as it has a stake in both parties.

lessor, fee simple lender, and leasehold lender may be required to clearly identify the rights, priorities, and obligations of each party (Whalen, 2019). Transactions can get convoluted quickly, so understanding the level of engagement of the lessor is crucial.

4.4 Tax and Accounting Regulations

Structuring a ground lease requires a thorough understanding of tax and accounting rules. They play a material role in decision making and are often influential enough alone to alter specific ground lease provisions. Regulations constantly change, so keeping up with the rules and implications is incredibly difficult and requires the help of experts such as Certified Public Accountants and specialized real estate consultants. Complicating matters further, changes in regulations may or may not allow for "grandfathering" of previously existing rules. Because ground leases are usually put in place for multiple decades, understanding what the effects of current and pending regulations can be of great value.

Most companies in the US follow a set of accounting standards set by the Financial Accounting Standards Board known as Generally Accepted Accounting Principles (GAAP). If a company is publicly traded, its financial statements are available to the public that reflect some version of GAAP. Changes to GAAP occur frequently, which can potentially affect the way real estate is valued on paper. Earlier this year, a noteworthy change with direct implications to ground leases, went into effect. Most lessees are now required to reflect all their payments due under a ground lease as a liability on their balance sheets, a requirement only a few lessees were mandated to do previously. For a ground lease spanning long periods, this additional liability reporting requirement, although accurately reflecting reality, could be substantial and consequently weaken the perception of the leasehold interest's financial stability in the eyes of the public. It could also negatively affect financial metrics that are used to obtain certain types of financing. Participation Rent because of its equity-like characteristics and "genuine variability" is not required to be reported as a liability (PricewaterhouseCoopers International Limited, 2018) and thus may be more favored over Base Rent, which is more predictable and measurable. As a result of these changes, a lessee may now be more reluctant to ground leases with longer terms and compensation that is fixed Base Rent.

Income tax benefits drive many business decisions, especially in high tax rate environments. When marginal tax rates change or rules regarding deductibility (i.e. tax liability reduction) change, economic benefits get shifted. In the context of ground leases, tax regulations play a large role on both sides. While not nearly exhaustive, the list below contains a few examples of how taxes can influence the structure and suitability of a ground lease:

- A lessor, as a landowner, is not allowed to take depreciation deductions on its land while a lessee can take depreciation deductions on its depreciable basis of the leasehold improvements.[22]
- A fee owner can deduct interest expense from financing the ownership of a property, which gets valued as the structure and land together. A leasehold owner can deduct interest expense from financing the leasehold improvements[23] and can deduct the ground lease payment.
- A landowner who desires to monetize its land may resist selling fee simple because of the immediate tax liability from a gain on sale and instead opt to collect ground rent payments through a leasehold.
- Capital gains from unrelated real estate investments can be deferred through a "like-kind" exchange[24] by purchasing fee simple land subject to a ground lease and in some cases, a leasehold interest .

[22] In new development, the depreciable basis is generally the lessee's cost of construction plus the up-front payment for the leasehold interest.

[23] In addition to the reasons discussed in Section 4.2, the loan for the leasehold improvements may be less than the loan for the property in fee simple ownership because the value used to secure the leasehold loan is reduced by the residual value of the improvements at the end of the ground lease term.

[24] IRS Code Section 1031

Section 5: Conclusion

The majority of real estate in the US is held through fee simple ownership despite the enormous variability in the types of real estate. No two properties are alike as each responds to a different set of factors in the built environment. Furthermore, real estate owners and investors have various financial goals that can favor certain types of real estate and risk profiles. For these reasons, alternative ownership structures such as leaseholds should at a minimum be considered. Public projects, single tenant triple net properties, mobile homes, and university-owned land are common uses that utilize the leasehold ownership structure. Yet outside of these, the use of leaseholds is generally rare.

In a leasehold structure, ownership interests get bifurcated into a fee simple landowner and a leaseholder who controls the leasehold improvements on the land. Valuing each of these interests is much different than valuing fee simple property ownership as it involves a deep understanding of the implications from the underlying ground lease and an awareness of the relationship between the site's HBU and structural condition. Ground leases eliminate optionality and hence destroy a portion of real estate value, so the challenge is to minimize the amount of loss through thoughtful ground lease provisions.

Leasehold transactions are more complicated than fee simple transactions because they involve two parties who maintain a relationship with each other throughout the ground lease term. They also involve the consideration of additional issues that have implications on property operations and performance. New development or redevelopment often requires the lessee to procure financing for improvements, so the parties need to work together to negotiate a "financeable" ground lease acceptable to the lender. The value of the redevelopment option can be significant, so the parties must be cognizant about the length of the ground lease term and age of the structure so as not to impair the option value. Contractual incentives can be created to help encourage investment for redevelopment. The extent of the lessor's involvement in the site's activities is also a factor, either positive or negative, depending on the nature of the project and each party's capabilities. Lastly, tax and accounting regulations constantly change, potentially enough to motivate business decisions. Only a solid grasp of these major issues in

addition to a fundamental understanding of how leaseholds are valued would the leasehold structure prove to be an effective means to own real estate. If done properly, leaseholds can be useful to facilitate real estate investment and significantly shape communities by bringing together parties that would not have otherwise worked together.

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Appendix A: Discounted Property Cash Flow

Year	Operating Income	Sale Proceeds	Total Proceeds	Discounted Operating Income	Discounted Sale Proceeds	Discounted Total Proceeds
1	60.00		60.00	55.56		55.56
2	61.20		61.20	52.47		52.47
3	62.42		62.42	49.55		49.55
4	63.67		63.67	46.80		46.80
5	64.95		64.95	44.20		44.20
6	66.24		66.24	41.75		41.75
7	67.57		67.57	39.43		39.43
8	68.92		68.92	37.24		37.24
9	70.30		70.30	35.17		35.17
10	71.71		71.71	33.21		33.21
11	73.14		73.14	31.37		31.37
12	74.60		74.60	29.63		29.63
13	76.09		76.09	27.98		27.98
14	77.62		77.62	26.43		26.43
15	79.17		79.17	24.96		24.96
16	80.75		80.75	23.57		23.57
17	82.37		82.37	22.26		22.26
18	84.01		84.01	21.02		21.02
19	85.69		85.69	19.86		19.86
20	87.41		87.41	18.75		18.75
21	89.16		89.16	17.71		17.71
22	90.94		90.94	16.73		16.73
23	92.76		92.76	15.80		15.80
24	94.61		94.61	14.92		14.92
25	96.51		96.51	14.09		14.09
26	98.44		98.44	13.31		13.31
27	100.41		100.41	12.57		12.57
28	102.41		102.41	11.87		11.87
29	104.46		104.46	11.21		11.21
30	106.55	1,811.36	1,917.91	10.59	180.01	190.60
				819.99	180.01	1,000.00
				82%	**18%**	

Assuptions	
Purchase Price:	1,000.00
Initial Cap Rate:	6.0%
Income Growth:	2.0%
Discount Rate:	8.0%
Exit Cap Rate:	6.0%