The Future of Ground Leases in Commercial Real Estate: Moonlighting the Numbers

Key Takeaways:

- **Across the United States, the average ground lease expense is 9.72% of reported total revenues**
- **CMBS loans with properties subject to a ground lease are heavily concentrated in New York, California, and Hawaii**

In this report, the Trepp team looks to capture some of the underlying data and trends found in commercial real estate (CRE) securitizations that include a ground lease. A footnote to some of the largest commercial mortgage-backed securitizations, the ground lease has recently become the focal point of CRE companies looking to help investors make better use of their capital – eliminating the need to own the underlying land as part of their investment and ideally helping them chase better returns.

Historically, ground leases added a level of complexity to CRE that was otherwise taken for granted. Once heavily focused in New York and Washington D.C, developers were locked into multi-decade leases and leaseholders were unable to make upgrades or sell their building without the ground lease holders' permission. Trepp's database contains the initial ground lease data and lease step-ups that automatically kick in after a predetermined rental period. This happens regardless of the performance of the loans and, ultimately, cuts into investors' bottom line.

FIGURE 1: GROUND LEASE BY MSA

STATE	LOAN W/ GROUND LEASE TOTAL BALANCE	GROUND RENT AS % OF TOTAL REVENUES (AVG)	AVERAGE GROUND RENT PAYMENT
New York	5,538,938,565	10.73	3,088,234
California	2,426,742,334	14.65	765,421
Hawaii	1,440,026,935	7.22	1,664,583
Arizona	669,966,318	9.32	466,416
Florida	580,968,361	4.83	599,465

Source: Trepp

According to Trepp data, commercial mortgage-backed securities (CMBS) loans with properties subject to a ground lease are heavily concentrated in New York, California, and Hawaii with $5.5 billion, $2.4 billion, and $1.4 billion in investment, respectively. Some of the largest loans include the $1.01 billion 9 West 57th Street loan (JPMCC 2016-NINE), the $975 million One Market Plaza loan (OMPT 2017-1MKT), and the $600 million Queens Center loan (QCMT 2013-QC).

Across the United States, the average ground lease expense is 9.72% of reported total revenues, varying widely depending on location. The average ground lease expense in New York, the location with the highest ground lease investment, equates to 10.73% of total revenues, whereas in Washington D.C., the average expense is 15.75% (albeit over a much smaller sample size). Equated into dollar values, the average ground lease payment across the United States is approximately $875,000 and the average remaining term on ground leases is approximately 44 years (average expiration date of May 2067).

A New Ground Lease Structure

Recently, new types of ground leases have emerged in the market, where companies like Safehold have tried to revolutionize the idea behind ground leases. Essentially, Safehold attempts to create additional value for CRE investors by modernizing ground-leases to be more leasehold lender and customer-friendly and reduce underwriting frictions. The idea is that, by carving out the land from an investment property that generally provides a low return on equity, Safehold helps investors maximize value and reduce risk by lowering the initial investment costs and promoting stronger returns while also reducing maturity risk without the normally restrictive stipulations of a traditional ground lease.

Below, the Trepp team has modeled out two securitizations to help moonlight the numbers.

The first example is a typical CMBS loan. The theoretical investment is valued at $100 million (land plus building), with $35 million in equity, and a 65% LTV ratio at a rate of 4.25%. The assumed going-in and going-out cap rates are 5.25% and 5.65%, respectively, year-one revenues are $7 million and operating expenses are $1.75 million.

For this first example, we have broken down what the unlevered and levered equity Internal Rate of Return (IRR) would be assuming a 3% cash flow growth rate. The unlevered cashflows provide an IRR of 7.66% and levered cashflows provide an IRR of 12.73%.

For the second example, we add a Safehold Ground lease to the capital stack. The ground lease accounts for 35% of the financing and the remaining $65 million is still financed with the same relative amount of debt and equity as the first example. Holding constant a 65% LTV, the new securitization consists of a $42.25 million loan and $22.75 million in equity.

Using this ground lease framework, holding the going-in cap rate, year-one revenues, and year-one OpEx equal, along with an assumed growth of 3% for both revenues and the ground lease, we can see how Safeholds' structure pans out financially. The unlevered and levered IRRs are 9.92% and 18.00% respectively, a 226-basis point and 527-basis point increase in the unlevered and levered returns, respectively.

FIGURE 2: CAPITAL STACK NON GROUND LEASE

CAPITAL STACK	
Purchase	$100,000,000
Ground	$0
Net	$100,000,000
Loan	$65,000,000
Equity	$35,000,000
Ground Lease %	3.50%
Ground Lease $	$0

PROFORMA YEARS	10
YEAR 1 ASSUMPTIONS	
Revenue	$7,000,000
OpEx	$1,750,000
LTV	65%
Loan	$65,000,000
Rate	4.25%
CF Growth	3%

CAP RATE ASSUMPTIONS	
Going-In	5.25%
Going-Out	5.65%
Unlevered IRR	7.66%
Levered IRR	12.73%

Source: Trepp

FIGURE 3: CAPITAL STACK GROUND LEASE

CAPITAL STACK	
Purchase	$100,000,000
Ground	$35,000,000
Net	$65,000,000
Loan	$42,250,000
Equity	$22,750,000
Ground Lease %	3.50%
Ground Lease $	$1,225,000

PROFORMA YEARS	10
YEAR 1 ASSUMPTIONS	
Revenue	$7,000,000
OpEx	$1,750,000
LTV	65%
Loan	$42,250,000
Rate	4.25%
CF Growth	3%

CAP RATE ASSUMPTIONS	
Going-In	5.25%
Going-Out	5.65%
IRR	9.92%
Unlevered IRR	18.00%

Source: Trepp

Comparing the two loans over a 10-year period helps bring the ideas behind the lease into perspective. For the non-ground lease loan, in year one the equity yield was 7.1%, but the projected equity yield at the end of the loan's 10-year life cycle reached 11.7% – equating to a yearly average yield of 9.3%. When looking at debt service coverage ratios (DSCRs), in year one it was 1.90x, and reached as high as 2.48x in a year's time – with an average DSCR of 2.18x.

For the ground lease loan, in year one, the average equity yield was projected to be 9.8% and eventually will grow to 15.2% – equating to an average annual yield of 12.4%. Additionally, DSCR was projected to be 2.24x in year one and grows to 2.92x in year 10, equating to an average DSCR of 2.57x.

FIGURE 4: EQUITY CASH YIELD NON GROUND VS. GROUND LEASE

	STANDARD	GROUND LEASE
Equity Cash on Cash Yield	7.11%	9.80%
Debt Yield	8.08%	9.53%
Equity Multiple (Total CF)	2.64	3.74
DSCR	1.90	2.24
Unlevered Yield (Cap)	5.25%	6.19%
Unlevered IRR	7.66%	9.92%
Levered IRR	12.73%	18.00%

Source: Trepp

FIGURE 5: 10 YEAR PROJECTED YIELD & DSCR

STANDARD	YR 1	YR 2	YR 3	YR 4	YR 5	YR 6	YR 7	YR 8	YR 9	YR 10	AVG
Equity Yield	7.1%	7.6%	8.0%	8.5%	9.0%	9.5%	10.0%	10.6%	11.1%	11.7%	9.3%
DSCR	1.90	1.96	2.02	2.08	2.14	2.20	2.27	2.34	2.41	2.48	2.18
GROUND LEASE	**YR 1**	**YR 2**	**YR 3**	**YR 4**	**YR 5**	**YR 6**	**YR 7**	**YR 8**	**YR 9**	**YR 10**	**AVG**
Ground Lease	9.8%	10.3%	10.9%	11.4%	12.0%	12.6%	13.2%	13.9%	14.5%	15.2%	12.4%
DSCR	2.24	2.31	2.38	2.45	2.52	2.60	2.68	2.76	2.84	2.92	2.57

Source: Trepp

The ground lease structure produced healthy margins relative to the baseline fee simple scenario. The equity investor in this hypothetical ground lease scenario was able to increase their year one yield by approximately 38% and their 10-year return by a little more than 40%. For the debt, the increase in excess cash flow lifted DSCR by 18%. To put the this example in perspective and evaluate the cost side, the ground lease expense in this example amounts to 17.9% of revenue and is at the high end of the Metro averages we noted earlier (average ground lease expense is 14.65% in California and 15.75% in Washington, DC). The golden question: Is the yield gain worth the ground lease cost(s)?

**Disclaimer: The baseline and ground lease scenarios are derived from the example found on Safehold's website (https://www.safeholdinc.com/capital-solutions). The decision to invest in or create a ground lease depends on a variety of factors. A few considerations include whether the ground lease is subordinated or unsubordinated, how the ground rent escalations are structured, and the tax effects for the fee and leasehold investors.*

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