

Giliberto-Levy Commercial Mortgage Performance Index (G-L 1)

Monitor Fourth Quarter 2024



GILIBERTO-LEVY
COMMERCIAL REAL ESTATE DEBT INDEXES

Giliberto-Levy Commercial Mortgage Performance Index

Fourth Quarter 2024 Summary

| Total Return: (in %) | | Spreads: (as of 12/31/2024) | | Index Statistics: (as of 12/31/2024) | |
|----------------------|-------|-----------------------------|-----|--------------------------------------|--------|
| Office | -0.96 | Office | 240 | Principal (\$ billion) | 306.60 |
| Multi-family | -1.12 | Multi-family | 165 | Capitalization (\$ billion) | 281.00 |
| Retail | -0.68 | Retail | 189 | Duration (years) | 4.08 |
| Industrial | -1.10 | Industrial | 171 | Coupon (%) | 4.25 |
| Total (all sectors) | -1.05 | | | Maturity (years) | 5.60 |
| | | | | Book LTV (%) | 55.24 |

Spreads are averages for new ten-year loans at 60%-65% loan-to-value ratio.
Source: Giliberto-Levy

Rising U.S. Treasury yields caused the Giliberto-Levy Commercial Mortgage Performance Index (G-L 1) total return for 4Q 2024 to drop to -1.05%.¹ Income return, as usual, was fairly steady, coming in at 1.12% compared with 1.16% in 3Q. Yield increases produced a -2.29% capital-value decline as loan values were marked to market yields; credit effects had a slight (negative) effect.

Calendar-year 2024 total return was 4.98%. In 2023, G-L 1 posted 5.62% total return. Most of 2023's higher return was due to mark-to-market capital-value gains, amounting to more than 1%. In contrast, in 2024 the index eked out less than 25 basis points (bp) of gain.

The upward move in U.S. Treasury yields was largely unexpected since the Federal Reserve's policy stance had tilted toward reducing interest rates. Indeed, rates at the short end of the yield curve went down in 4Q. However, yields on issues with two or more years of term rose 60 to 80 bp (see Charts 1 and 2).

¹ The Index's components are fixed-rate commercial mortgage loans held on balance sheets of institutions such as life insurance companies and pension funds. Index returns are a market-value-weighted blend of office, apartment, retail, industrial, lodging, mixed-use and other miscellaneous property types. Index performance tracks senior loans only; it does not include construction loans, mezzanine and other subordinate instruments and bridge loans made by such institutions.

Chart 1

US Treasury Yields

In %

Source: U.S. Treasury; Giliberto-Levy

◆ September 30, 2024
■ December 31, 2024

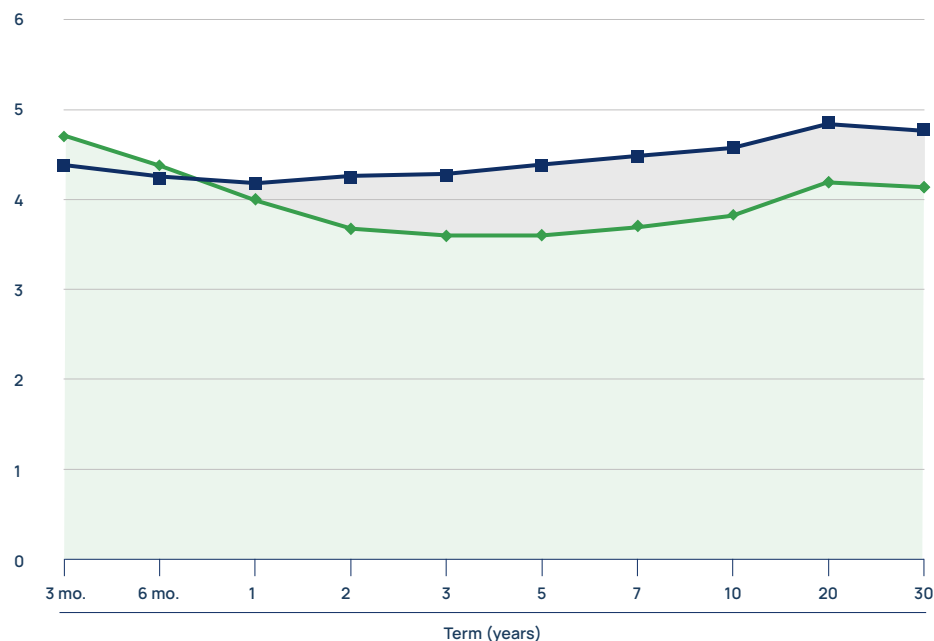
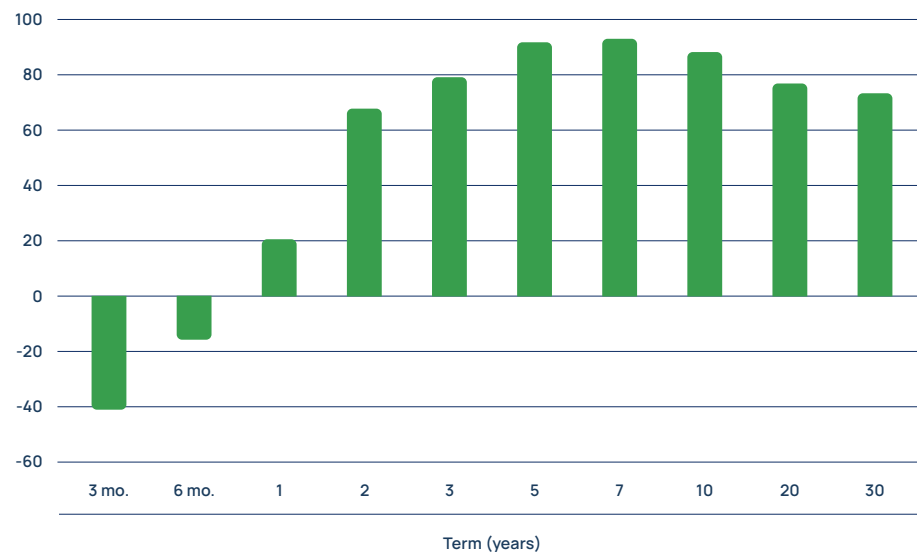


Chart 2

Changes in US Treasury Yields September 30, 2024 to December 31, 2024

In basis points

Source: U.S. Treasury; Giliberto-Levy



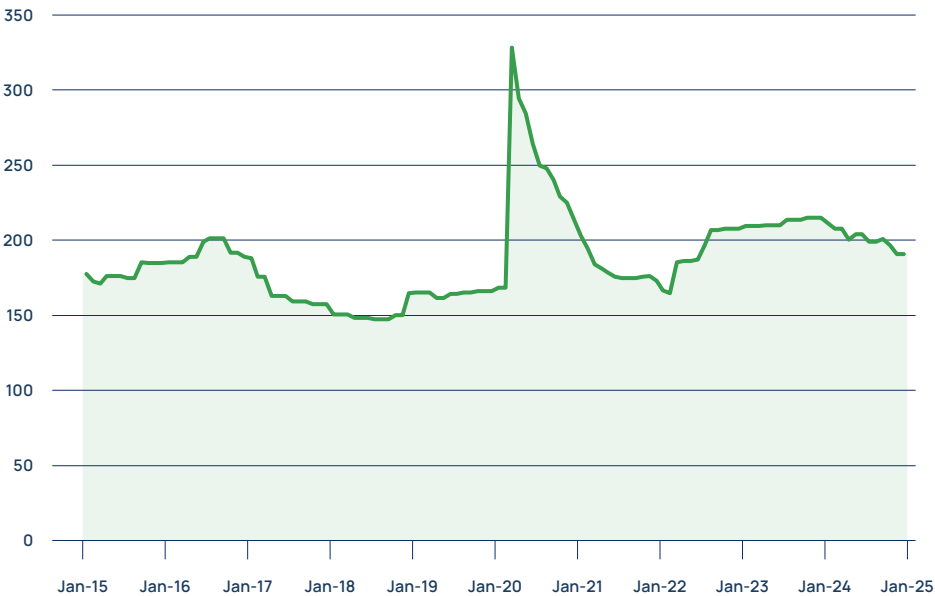
As Treasury yields rose, credit spreads tightened (see Chart 3). This pattern is normal: we have observed commercial mortgage spreads moving inversely with Treasury yields about two-thirds of the time.

Chart 3

Spreads over Treasuries for Ten-year Commercial Mortgages

In basis points, reflecting 30/360 day count convention

Source: Giliberto-Levy. Chart data are equally weighted averages of office, apartment, retail and industrial property loans at 60% to 65% LTV.



Market Trends: 4Q 2024

Table 1

Key Rates (in %)

| | 9/30/2024 | 12/31/2024 | change |
|-------------------------|-----------|------------|--------|
| 10-year Treasury Yield | 3.81 | 4.58 | 0.77 |
| 10-year Mortgage Spread | 2.01 | 1.91 | -0.10 |
| 10-year Mortgage Yield | 5.82 | 6.49 | 0.67 |
| 7-year Treasury Yield | 3.67 | 4.48 | 0.81 |
| 7-year Mortgage Spread | 2.01 | 1.91 | -0.10 |
| 7-year Mortgage Yield | 5.68 | 6.39 | 0.71 |
| 5-year Treasury Yield | 3.58 | 4.38 | 0.80 |
| 5-year Mortgage Spread | 2.01 | 1.91 | -0.10 |
| 5-year Mortgage Yield | 5.59 | 6.29 | 0.70 |

Sources: U.S. Treasury; Giliberto-Levy

➤ **Quarter-end coupon rates and yields were up about 70 bp from September 30, 2024 levels.** Rising Treasury rates pushed these back up to about where they were at the end of 2Q 2024.

- G-L spreads were calculated from loan transactions during the quarter. Spreads in Table 1 and Chart 3 are equally-weighted averages across major sectors for loans with 60% to 65% LTV. Loans with LTVs in the 50% to 60% range tended to be about 10 to 15 bp lower.
- Differences between the 191-bp major sector average and the sector spreads provided at the top of the *Monitor* show how yields varied across sectors.
- We continued to see premiums for loans under \$10 million. Premiums were in the 10 to 25-bp range. Not all small loans had premiums, but average premiums reported were statistically significant. Spreads reported in the *Monitor* do not include these premiums.
- We updated cumulative property value reductions since prices peaked in 2022. For this calculation we used a subset of the NCREIF Property Index (NPI): assets that are held in open-end funds that make up the ODCE Fund Index, which is also published by NCREIF. Assets in these funds are marked to market quarterly, which is not the case for all assets in the broader NPI.
- **In 4Q 2024, all major sectors except office generated value increases, albeit modest ones.**
- For calendar-year 2024, multifamily was down less than 2%, and industrial was nearly flat. Retail posted a 3.3% increase.
- **Office valuations per ODCE remain roughly 37% down** from their 2022 peak. During 2024, appraised values fell about 11%.

Credit Tracker

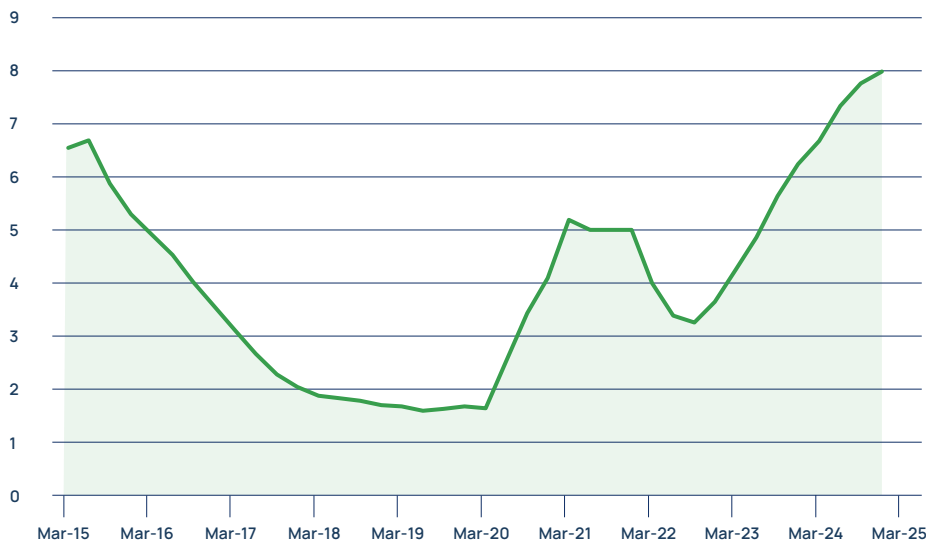
Trailing four-quarter credit effects registered a moderate increase (see Chart 4). This mainly reflects higher losses on office assets. That sector's impact was muted by its relatively low 12% share within G-L 1.

Chart 4

Commercial Mortgage Credit Effects

Rolling four-quarter effect as a percentage of book value, in basis points

Source: Giliberto-Levy



The percentage of G-L 1 loans with elevated risk topped 15% (see Table 2 and Chart 5). ("Elevated risk" is the share of loans that are in the amber and red risk zones in Table 2, which is our credit tracker heat map.)

Table 2

Credit Quality Distribution: All G-L 1 Loans

As a percentage of December 31, 2024 balances of these loans

| DSC | LTV | | | | | | Total |
|--------------|-----------|------------|------------|------------|------------|-----------|---------|
| | 0% to 50% | 50% to 60% | 60% to 65% | 65% to 70% | 70% to 75% | above 75% | |
| 1.0 and less | 0.14% | 0.44% | 0.13% | 0.17% | 0.16% | 0.32% | 1.36% |
| 1.01 to 1.15 | 0.27% | 0.53% | 0.37% | 0.35% | 0.33% | 0.35% | 2.20% |
| 1.15 to 1.5 | 0.98% | 2.91% | 2.62% | 2.69% | 1.77% | 1.71% | 12.69% |
| 1.5 to 1.75 | 2.21% | 4.38% | 4.62% | 3.41% | 1.67% | 1.61% | 17.90% |
| above 1.75 | 26.95% | 17.38% | 7.57% | 5.45% | 3.49% | 3.94% | 64.79% |
| Unknown | 0.38% | 0.31% | 0.15% | 0.05% | 0.03% | 0.14% | 1.05% |
| Total | 30.94% | 25.95% | 15.46% | 12.13% | 7.44% | 8.08% | 100.00% |

LTV and DSC are updated from the original underwriting to reflect seasoning and market movements.

Source: Giliberto-Levy

| Zone | Red | Amber | Green | Unknown |
|-------|------|-------|-------|---------|
| Total | 3.8% | 11.5% | 83.7% | 1.0% |

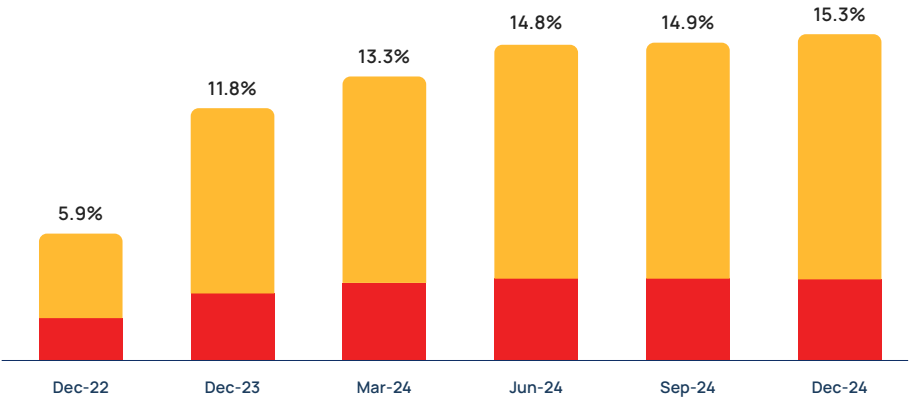
Chart 5

Potential At-Risk Loans

As a percentage of loan balances at month end

Source: Giliberto-Levy

- Red zone
- Amber zone



Relative Performance

G-L 1 quarterly total return modestly outpaced many other investment-grade fixed-income categories (see Table 3). Investment-grade CMBS returned -1.42% in 4Q 2024, according to Bloomberg Index Services. Interestingly, calendar-year 2024 results for G-L 1 and CMBS were almost identical, and both mortgage measures surpassed results for (duration-adjusted) Baa intermediate bonds.

Table 3

Total Return as of December 31, 2024

| Index | Total Return (%) | | | Duration as of 12/31/2024 |
|----------------------------|------------------|------|----------|---------------------------|
| | 4Q24 | YTD | Last 4 Q | |
| Commercial Mortgages* | -1.05 | 4.98 | 4.98 | 4.08 |
| Duration-adjusted Baa Bond | -1.37 | 4.33 | 4.33 | 4.08 |
| CMBS: Investment Grade | -1.42 | 4.96 | 4.96 | 4.11 |
| CMBS 2.0 | -0.72 | 7.02 | 7.02 | 3.77 |
| TSY Int. Term | -1.70 | 2.42 | 2.42 | 3.61 |
| TSY 5-7 yr. Term | -3.38 | 0.95 | 0.95 | 5.46 |
| Credit Int. Term | -1.46 | 4.01 | 4.01 | 3.96 |
| A Int. Term | -1.58 | 3.91 | 3.91 | 3.95 |
| Baa Int. Term | -1.34 | 4.49 | 4.49 | 4.16 |
| High-yield Int. Term | 0.19 | 8.23 | 8.23 | 3.02 |
| Ba Int. Term | -0.45 | 6.31 | 6.31 | 3.18 |

* GL-1 Total Index, includes office, retail, apartment, industrial and other

Sources: Bloomberg Index Services; Giliberto-Levy

Return Attribution

Table 4 below breaks out each property sector's contribution to G-L 1 total return. A sector's contribution (abbreviated "CTR") is its weight in the index, using market values, multiplied by its total return.² The sum of all sector CTRs equals index total return.

Table 4

G-L 1 Return Attribution 4Q 2024

| Property Type | Total Return | Average Weight | CTR - Contribution to total return |
|---------------|--------------|----------------|------------------------------------|
| Office | -0.96% | 11.95% | -0.12% |
| Multifamily | -1.12% | 46.16% | -0.52% |
| Retail | -0.68% | 13.22% | -0.09% |
| Industrial | -1.10% | 21.62% | -0.24% |
| Other | -1.28% | 7.05% | -0.09% |
| All Loans | -1.05% | 100% | -1.05% |

Source: Giliberto-Levy

² All G-L 1 total returns are produced by chain linking monthly data, i.e., results are time-weighted returns. Weights shown are averages of start-of-month market-value weights. CTRs for periods longer than one month are generated using a "link backward" calculation. This preserves "additivity": the sum of multiperiod CTRs exactly equals the multiperiod total return inclusive of compounding effects.

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Lending Activity

Observations are based on data received at the time we prepared this report. Statistics are subject to change as we receive more information about lending activity. *Please note that any such revisions do not alter published G-L 1 returns.*

Table 5

G-L 1 Lending Activity Summary

| | Most Recent Period 4Q 2024 P | Prior Period 3Q 2024 | Year Ago Comp. Period 4Q 2023 |
|---------------------------|---------------------------------|-------------------------|----------------------------------|
| Loan Volume (\$ billions) | 8.8 | 9.5 | 6.0 |
| Weighted Average: | | | |
| LTV | 59.1% | 61.3% | 59.7% |
| DSCR | 1.57 | 1.62 | 1.40 |
| Coupon Rate | 5.91% | 5.68% | 6.39% |
| Spread (basis points) | 182 | 179 | 185 |
| Term to Maturity (years) | 6.7 | 7.0 | 6.4 |
| Loan Size (\$ millions) | 40.7 | 35.6 | 30.4 |

Spread is reported with respect to comparable maturity U.S. Treasury yield.
P Preliminary and subject to revision

Source: Giliberto-Levy

> **Lending volume held up despite higher coupon rates (see Chart 6).** (There is often a push to close deals before year end.) Increased lending on retail assets was notable in 2024, with volume nearly doubling in that sector.

Chart 6

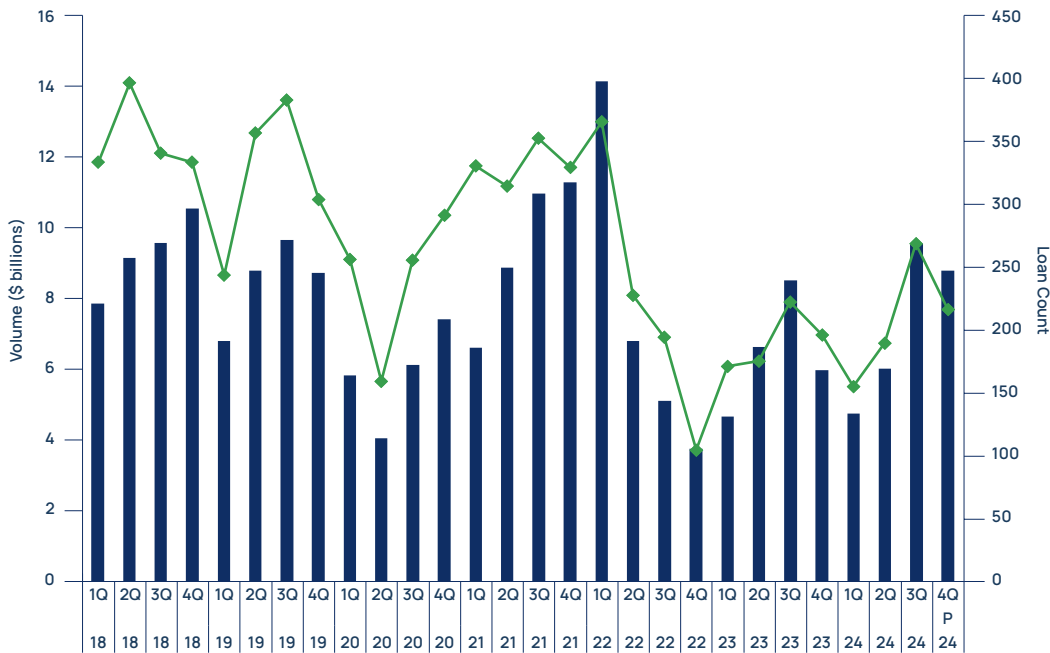
Index-eligible
Loan Production

P Preliminary and subject to revision

Source: Giliberto-Levy

of Loans

Volume



➤ **Nearly all reported lending was for loans with ten or fewer years to maturity** (see Chart 7). Five-year deals once again had the largest market share.

Chart 7

Distribution of Lending Activity

by Term to Maturity, 4Q 2024

Source: Giliberto-Levy



- **Volume split roughly 55% in full-term interest-only loans and 44% in loans with partial amortization.** About 65% of partially amortizing loans had an initial interest-only period. Fully amortizing loans got 1% share.
- Loan sizes ranged from \$1.7 million to \$400 million. Around 51% of dollar volume was in loans in the \$10 million to \$100 million range; these loans accounted for 63% of reported transactions. Loans for more than \$100 million grabbed 44% of total volume while making up about 11% of deals done. Around 25% of reported transactions were smaller investments, totaling 4% of dollar volume.

More than \$9.4 billion of new loans entered the Index (see Table 6 for details). This reflects index-eligible lending in September, October and November 2024. December 2024 loans, which are included in the production number cited above and depicted in Chart 6 will appear in the 1Q 2025 index.

Table 6

Additions to G-L I Index

| | Amount (\$) | Number of Loans | Weighted-Average | | | | |
|--------------|----------------------|-----------------|------------------|-------------|-------------|-------------|------------|
| | | | Coupon | Spread (bp) | DSCR | LTV (%) | Term Years |
| Office | 319,900,000 | 4 | 7.66% | 356 | 2.05 | 61.9 | 5.2 |
| Apartment | 4,356,987,560 | 130 | 5.50% | 161 | 1.44 | 63.7 | 7.8 |
| Retail | 1,341,622,000 | 50 | 5.70% | 184 | 1.96 | 56.0 | 7.6 |
| Industrial | 2,133,320,031 | 67 | 5.70% | 186 | 1.68 | 57.7 | 6.6 |
| Other | 1,282,910,918 | 13 | 6.22% | 226 | 1.64 | 56.4 | 5.8 |
| Total | 9,434,740,509 | 264 | 5.75% | 186 | 1.62 | 60.2 | 7.2 |

Source: Giliberto-Levy

Please note that spreads reported in Table 6 are weighted averages (by loan amount) of loans made during periods prior to December 2024. Spread averages shown are not quarter-end pricing parameters. Pricing spreads reported in the summary table at the top of this report are for standardized ten-year loans at 60% to 65% LTVs. The average standardized spread also appears in Table 1. Standardized spreads are generated from new loan originations and form the baseline for marking to market all loans in the Index. ("Standardization" adjusts for spread variability due to factors such as differing amortization patterns, LTVs, DSCRs, prepayment penalties, loan sizes and so forth. Spreads in Table 6 are differences between coupon rates and Treasury yields without any consideration of these factors.)

Commercial Mortgage Perspective: Loans Maturing in 2025

In this issue, we examine 2025 loan maturities. Approximately 8% of the index's unpaid principal balance is set to mature this year. As usual, we focus on credit quality and refinancing considerations.

We used the analysis format from Table 2, which includes loans at all maturities, to create a heat map for the subset of loans that mature in 2025 (see Table 7). As a reminder, the table uses updated LTV and DSC ratios, not metrics from original underwriting.

Table 7

Credit Quality Distribution: G-L 1 Loans With 2025 Maturity Dates

As percentages of December 31, 2024 balances of these loans

| DSC | LTV | | | | | | Total |
|--------------|---------------|---------------|--------------|--------------|--------------|--------------|----------------|
| | 0% to 50% | 50% to 60% | 60% to 65% | 65% to 70% | 70% to 75% | above 75% | |
| 1.0 and less | 0.24% | 0.16% | 0.00% | 0.00% | 0.06% | 0.32% | 0.79% |
| 1.01 to 1.15 | 0.00% | 0.14% | 0.15% | 0.00% | 0.61% | 0.05% | 0.96% |
| 1.15 to 1.5 | 0.70% | 1.29% | 1.37% | 0.29% | 0.23% | 1.16% | 5.05% |
| 1.5 to 1.75 | 1.39% | 2.37% | 3.28% | 0.87% | 0.02% | 0.41% | 8.32% |
| above 1.75 | 53.02% | 20.59% | 4.34% | 2.07% | 2.67% | 1.61% | 84.29% |
| Unknown | 0.60% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.60% |
| Total | 55.94% | 24.55% | 9.15% | 3.23% | 3.59% | 3.55% | 100.00% |

Uses LTV and DSC submitted to G-L

Source: Giliberto-Levy

| Zone | Red | Amber | Green | Unknown |
|--------------|-------------|-------------|--------------|-------------|
| Total | 2.6% | 2.8% | 94.0% | 0.6% |

The elevated-risk metric – the red and amber zones – from Table 7 totals 5.4%, well below the 15.3% reported in Chart 5 for the entire G-L 1. Nearly 75% of maturing loans (by dollar amounts) have LTV at or below 60% and DSC above 1.75 times.

As we explained in the 4Q 2023 *Monitor*, the below-index-level risk exposure is largely a vintage-year story. About 84% of scheduled maturities come from three vintage years (2015, 2018 and 2020) that correspond to original loan terms of ten, seven and five years, respectively. This vintage-year concentration is important.

Tables 8a and 8b show index composition and year-end credit metrics by sector for all maturing loans and for a composite of the three key vintage years. Averages reported in the tables are calculated using investments counts; the averages are not weighted by investment size. However, the “% of Maturing Loans” was calculated using unpaid principal balance as of December 31, 2024, consistent with Table 7.

Table 8a

Credit Metrics for G-L I Loans With 2025 Maturity Dates: All Loans

| Sector | % of Maturing Loans | Average | | |
|------------------|---------------------|-------------|--------------|-------------|
| | | Coupon Rate | LTV | DSCR |
| Office | 15.4% | 4.96 | 34.1% | 2.68 |
| Multifamily | 40.8% | 4.26 | 44.0% | 2.93 |
| Retail | 12.1% | 5.03 | 26.9% | 2.15 |
| Industrial | 25.9% | 4.54 | 19.0% | 4.10 |
| Other | 5.8% | 5.24 | 27.8% | 3.02 |
| All Loans | 100.0% | 4.69 | 32.2% | 2.94 |

Source: Giliberto-Levy

Table 8b

Credit Metrics for G-L I Loans With 2025 Maturity Dates: 2015, 2018 and 2020 Vintage Years

| Sector | % of Maturing Loans | Average | | |
|------------------|---------------------|-------------|--------------|-------------|
| | | Coupon Rate | LTV | DSCR |
| Office | 11.9% | 3.96 | 56.5% | 2.67 |
| Multifamily | 35.3% | 4.00 | 48.2% | 2.75 |
| Retail | 9.0% | 3.97 | 50.4% | 2.25 |
| Industrial | 22.9% | 3.84 | 25.0% | 4.15 |
| Other | 4.9% | 3.97 | 43.6% | 3.01 |
| All Loans | 84.1% | 3.96 | 44.5% | 2.97 |

Note: % of Maturing Loans is for the select vintage years measured as a share of all 2025 maturing loans per Table 8a. For example, loans from the three vintage years constitute 84.1% of the total amount of loans scheduled to mature.

Source: Giliberto-Levy

Comparing Table 8a with Table 8b indicates some potentially meaningful differences in in-place coupon rates and current LTV ratios between the overall set of maturing loans and those from key vintage years. For example, the average coupon rate on office loans from the vintage-year group is 100 bp lower than the overall office-loan average. Its LTV ratio is more than 20% higher.

How might a hypothetical refinancing be priced? For convenience, assume refinancing at 50% of current asset value. The year-end 2024 G-L 1 pricing matrix indicates a 225-bp spread for a 50% LTV office loan. Posit a 4.5% Treasury yield. Coupon rates on 50% LTV refinancings would be 6.75%, well above average in-place rates. But the gap is larger for the vintage-year group at 279 bp versus 179 bp for the entire cohort. Critically, most of the dollar amount maturing is from the former group.

Applying the same back-of-the-envelope analysis shows gaps for multifamily of 206 bp and 180 bp for the vintage-year subset and all loans, respectively. Industrial comes in at 228 bp versus 158 bp. Retail shows 231 bp and 125 bp. (We did not examine non-major sectors due to the mix of different property types that are grouped into Other, but it is reasonable to expect similar outcomes.)

It is important to keep in mind that higher coupon rates generally mean lower DSC ratios. That could, in some cases, lead to higher credit spreads than those indicated by LTV alone.

At this time last year we said, “We expect 2024 will be a year of “quiet losses” for balance-sheet lenders.” The recorded rate, per the G-L 1 credit model, was, unsurprisingly, higher than 2023. However, the absolute rate was quite low compared with the historical average. We expect this to continue. (A discussion of our rationale is in the 2Q 2024 *Monitor*.)

We highlighted above that 75% of amounts maturing in 2025 have LTVs at or below 60% and DSCR at 1.75 or higher. The comparable figure for the entire G-L 1 is 44%. Moreover, the G-L 1 elevated risk level of 15.3% is considerably higher than 5.4% in the maturing loan subset. This suggests that 2025 will not be the last year of balance sheet clean-up.

As always, we welcome your comments and questions.

February 2025

Chart 8

Commercial Mortgage Performance

Rolling four-quarter total return for Total Index

Source: Giliberto-Levy

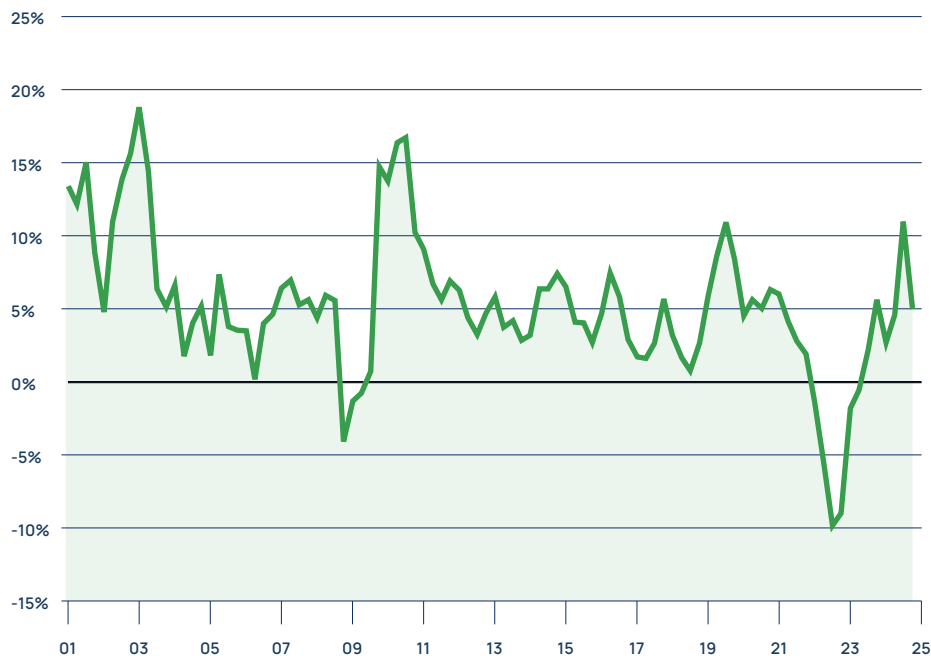


Chart 9

Commercial Mortgage Credit Effects

Rolling four-quarter effects as a percentage of book value, in basis points

Source: Giliberto-Levy

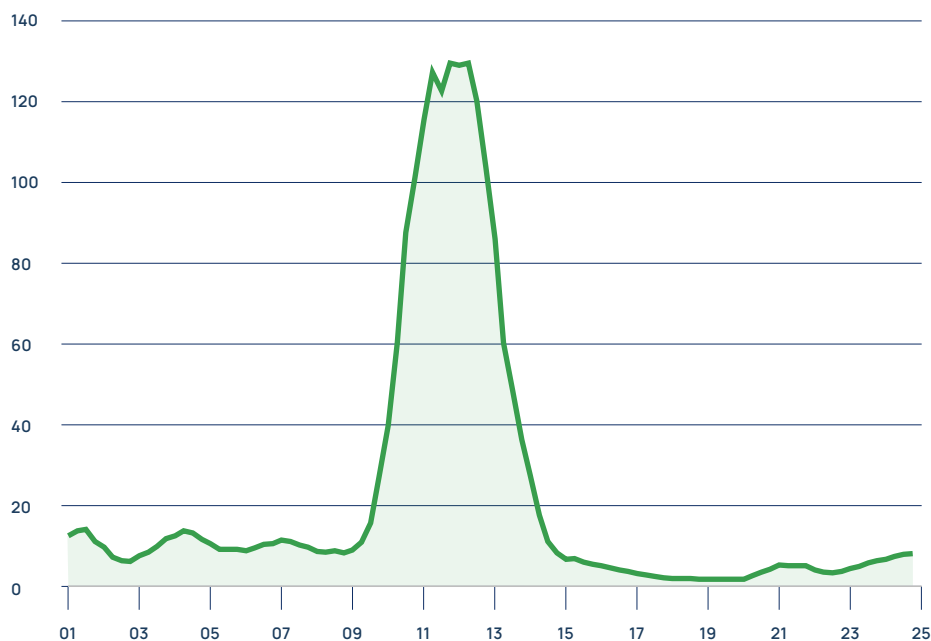


Table A

Giliberto-Levy Commercial Mortgage Index (G-L I) Performance by Property Sector

For the quarter ended December 31, 2024

| Sector | Returns (%) | | | | | | Credit Effects (book value; bp) | | | |
|--------------|---------------|--------------|-------------|--------------|-------------|----------------|---------------------------------|---------------|----------|----------------|
| | Last 3 months | | | | YTD Total | Last 12 Months | Index Level | Last 3 Months | YTD | Last 12 Months |
| | Income | Price | Other | Total | | | | | | |
| Office | 1.14 | -2.16 | 0.06 | -0.96 | 3.59 | 3.59 | 2443.80 | 6 | 21 | 21 |
| Apartment | 1.09 | -2.24 | 0.03 | -1.12 | 5.25 | 5.25 | 3200.65 | 2 | 5 | 5 |
| Retail | 1.17 | -1.89 | 0.04 | -0.68 | 5.78 | 5.78 | 3018.21 | 2 | 10 | 10 |
| Industrial | 1.13 | -2.26 | 0.03 | -1.10 | 4.83 | 4.83 | 2877.76 | 1 | 4 | 4 |
| Others | 1.23 | -2.55 | 0.05 | -1.28 | 4.69 | 4.69 | N/A | 2 | 11 | 11 |
| Total | 1.12 | -2.21 | 0.04 | -1.05 | 4.98 | 4.98 | 2702.13 | 2 | 8 | 8 |
| Aggregate | 1.12 | -2.19 | 0.04 | -1.03 | 4.99 | 4.99 | 4368.41 | 2 | 8 | 8 |

Aggregate excludes Other Sectors (hotel/motel, mixed-use and miscellaneous)

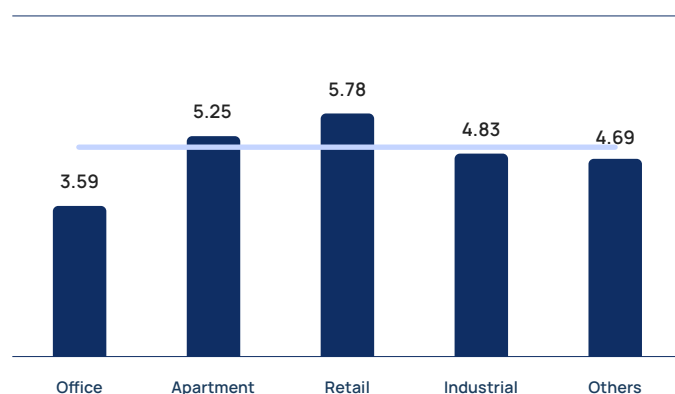
Other Return is paydown return and compounding

Index bases: Aggregate Dec. 1971 = 100; Total and major sectors Dec. 1977 = 100

bp basis points

Total Return by Sector

Last 12 months; in percent



Credit Effect by Sector

Last 12 months

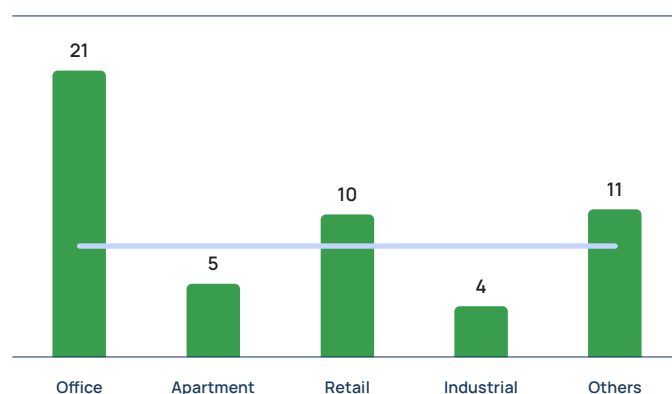


Table B

Giliberto-Levy Commercial Mortgage Index (G-L I) Performance by Property Sector

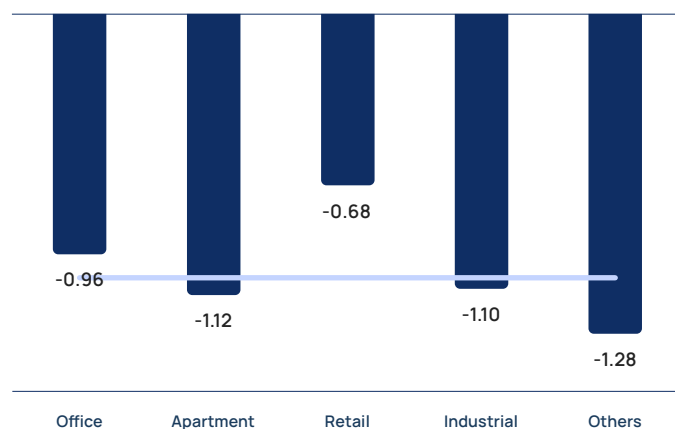
For the quarter ended December 31, 2024

| Sector | Returns (%) | | | | Statistics | | | | | | |
|--------------|-------------|--------------|-------------|--------------|---------------|-------------|-------------|-------------|-------------|-------------------|-----------------|
| | Income | Price | Other | Total | Mod. Duration | Coupon | Maturity | Price | Yield | Pct. of Portfolio | Num. of Cohorts |
| Office | 1.14 | -2.16 | 0.06 | -0.96 | 3.50 | 4.25 | 5.07 | 88.5 | 7.24 | 11.9% | 1684 |
| Apartment | 1.09 | -2.24 | 0.03 | -1.12 | 4.32 | 4.13 | 5.86 | 91.3 | 6.04 | 46.1% | 6156 |
| Retail | 1.17 | -1.89 | 0.04 | -0.68 | 3.83 | 4.48 | 5.35 | 93.1 | 6.26 | 13.2% | 2952 |
| Industrial | 1.13 | -2.26 | 0.03 | -1.10 | 3.97 | 4.39 | 5.22 | 93.5 | 5.98 | 21.7% | 2968 |
| Others | 1.23 | -2.55 | 0.05 | -1.28 | 4.26 | 4.67 | 6.35 | 91.1 | 6.65 | 7.1% | 1027 |
| Total | 1.12 | -2.21 | 0.04 | -1.05 | 4.08 | 4.29 | 5.60 | 91.7 | 6.24 | 100.0% | 14787 |
| Aggregate | 1.12 | -2.19 | 0.04 | -1.03 | 4.06 | 4.26 | 5.54 | 91.7 | 6.21 | 92.9% | 13760 |

Aggregate excludes Other Sectors (hotel/motel, mixed-use and miscellaneous)

Total Return by Sector

For the quarter; in percent



Portfolio Composition by Sector

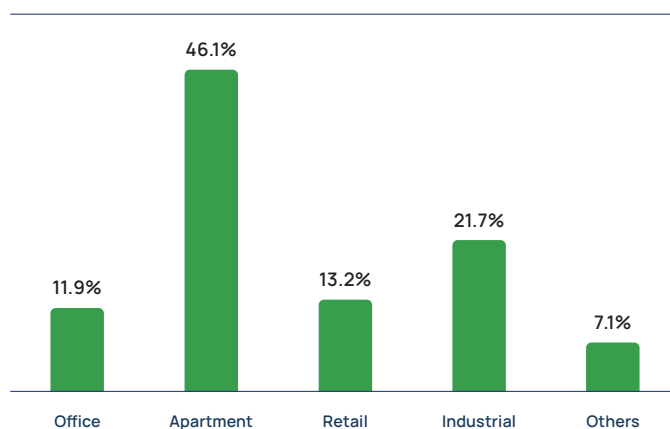


Table C

Giliberto-Levy Commercial Mortgage Index (G-L I)

Performance by Book LTV Classification

For the quarter ended December 31, 2024

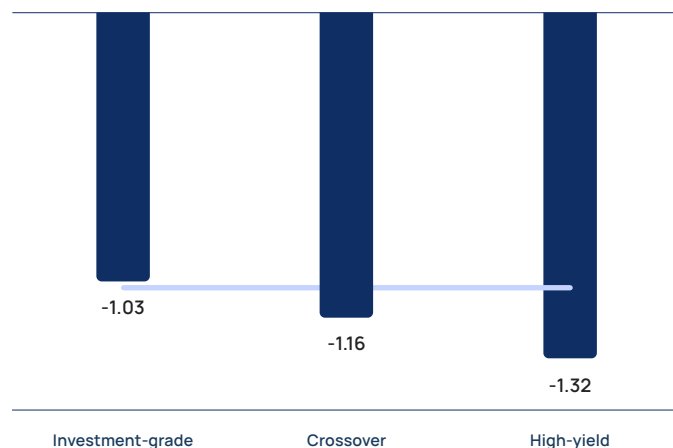
| Credit quality using book value | Returns (%) | | | | Statistics | | | | | | |
|---------------------------------|-------------|--------------|-------------|--------------|---------------|-------------|-------------|-------------|-------------|-------------------|-----------------|
| | Income | Price | Other | Total | Mod. Duration | Coupon | Maturity | Price | Yield | Pct. of Portfolio | Num. of Cohorts |
| Investment-grade | 1.11 | -2.17 | 0.04 | -1.03 | 4.05 | 4.26 | 5.59 | 92.3 | 6.10 | 84.9% | 13308 |
| Crossover | 1.19 | -2.39 | 0.03 | -1.16 | 4.23 | 4.50 | 5.56 | 90.3 | 6.71 | 13.3% | 1280 |
| High-yield | 1.22 | -2.63 | 0.10 | -1.32 | 4.24 | 3.99 | 6.13 | 75.6 | 9.60 | 1.7% | 199 |
| Total | 1.12 | -2.21 | 0.04 | -1.05 | 4.08 | 4.29 | 5.60 | 91.7 | 6.24 | 100.0% | 14787 |

| Credit quality definition | Book LTV | |
|---------------------------|----------|---------|
| | Minimum | Maximum |
| Investment-grade | NA | 70.0% |
| Crossover | 70.1% | 85.0% |
| High-yield | 85.1% | NA |

Please note that all G-L I loans are senior loans. "Crossover" loans are those with LTVs above 70% and below 85%. They are not subordinate positions that "attach" at 70% LTV and go up to 85% of the capital stack.

Total Return by Credit Quality

For the quarter; in percent



Portfolio Composition by Credit Quality

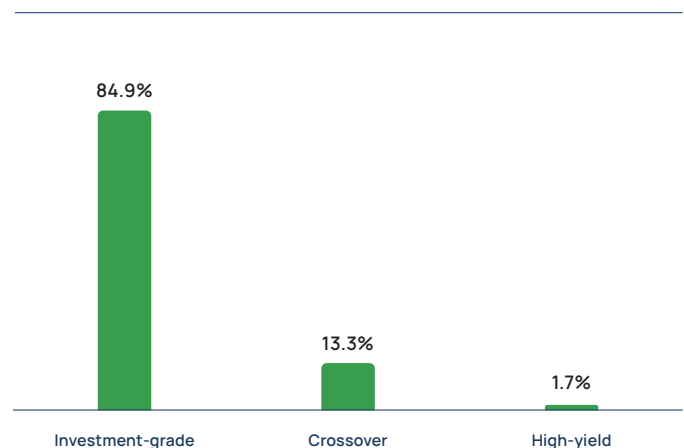


Table D

Giliberto-Levy Commercial Mortgage Index (G-L I)

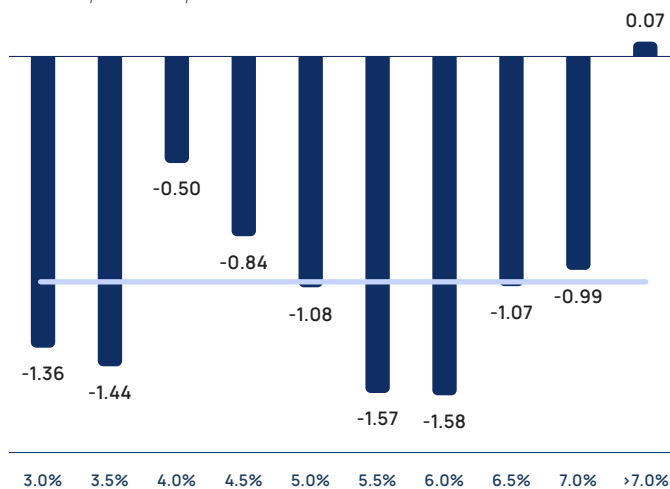
Performance by Coupon Rate

For the quarter ended December 31, 2024

| Coupon Rate | Returns (%) | | | | Statistics | | | | | | |
|--------------|-------------|--------------|-------------|--------------|---------------|-------------|-------------|-------------|-------------|-------------------|-----------------|
| | Income | Price | Other | Total | Mod. Duration | Coupon | Maturity | Price | Yield | Pct. of Portfolio | Num. of Cohorts |
| 0.0% to 3.0% | 0.78 | -2.18 | 0.04 | -1.36 | 4.37 | 2.74 | 5.46 | 85.9 | 6.09 | 10.1% | 1093 |
| 3.0% to 3.5% | 0.93 | -2.42 | 0.05 | -1.44 | 4.60 | 3.27 | 6.10 | 86.1 | 6.27 | 16.3% | 2062 |
| 3.5% to 4.0% | 1.01 | -1.56 | 0.05 | -0.50 | 3.29 | 3.78 | 4.49 | 91.6 | 6.21 | 20.8% | 3096 |
| 4.0% to 4.5% | 1.13 | -2.01 | 0.05 | -0.84 | 3.81 | 4.25 | 5.65 | 92.0 | 6.24 | 19.9% | 2993 |
| 4.5% to 5.0% | 1.24 | -2.36 | 0.04 | -1.08 | 4.10 | 4.73 | 5.98 | 92.7 | 6.38 | 8.9% | 1494 |
| 5.0% to 5.5% | 1.35 | -2.93 | 0.01 | -1.57 | 4.87 | 5.27 | 6.90 | 94.8 | 6.30 | 5.7% | 830 |
| 5.5% to 6.0% | 1.44 | -3.02 | 0.00 | -1.58 | 4.86 | 5.77 | 6.56 | 97.7 | 6.19 | 8.8% | 1197 |
| 6.0% to 6.5% | 1.53 | -2.60 | 0.00 | -1.07 | 4.10 | 6.25 | 5.33 | 100.0 | 6.21 | 6.1% | 920 |
| 6.5% to 7.0% | 1.62 | -2.61 | 0.00 | -0.99 | 3.96 | 6.72 | 5.13 | 101.3 | 6.33 | 2.3% | 406 |
| 7.0% & above | 1.82 | -1.72 | -0.03 | 0.07 | 2.74 | 7.60 | 3.79 | 102.6 | 6.57 | 1.0% | 696 |
| Total | 1.12 | -2.21 | 0.04 | -1.05 | 4.08 | 4.29 | 5.60 | 91.7 | 6.24 | 100.0% | 14787 |

Total Return by Coupon Rate

For the quarter; in percent



Portfolio Composition by Coupon Rate

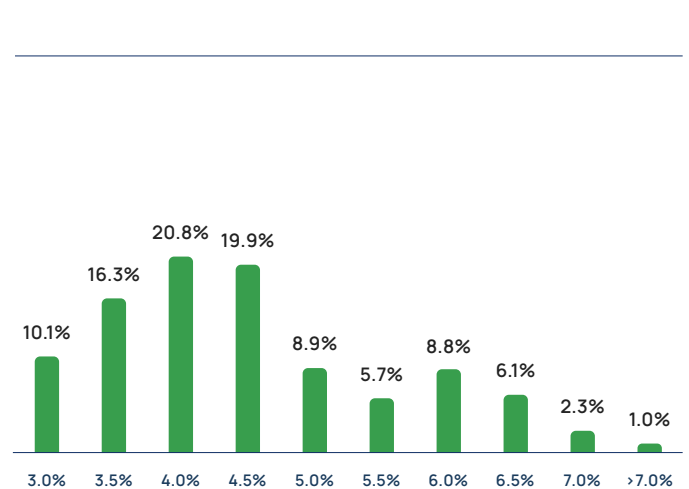


Table E

Giliberto-Levy Commercial Mortgage Index (G-L I)

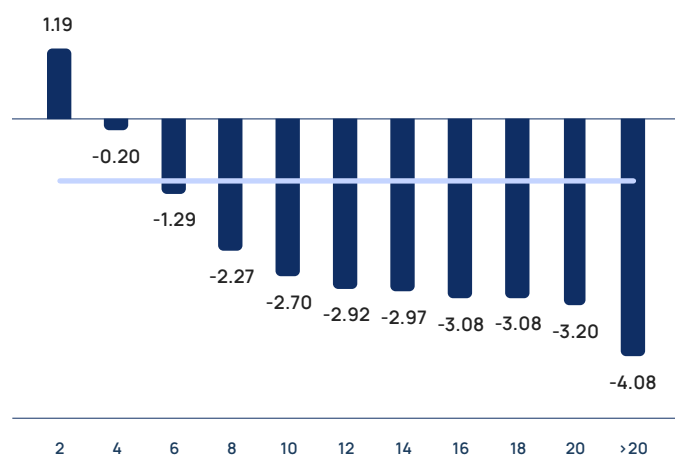
Performance by Remaining Term to Maturity

For the quarter ended December 31, 2024

| Maturity Cell | Returns (%) | | | | Statistics | | | | | | |
|-----------------|-------------|--------------|-------------|--------------|---------------|-------------|-------------|-------------|-------------|-------------------|-----------------|
| | Income | Price | Other | Total | Mod. Duration | Coupon | Maturity | Price | Yield | Pct. of Portfolio | Num. of Cohorts |
| 0 to 2 years | 1.00 | 0.16 | 0.03 | 1.19 | 1.05 | 3.95 | 1.10 | 97.7 | 6.08 | 19.6% | 3244 |
| 2 to 4 years | 1.14 | -1.36 | 0.02 | -0.20 | 2.85 | 4.48 | 3.18 | 95.3 | 6.15 | 24.1% | 3074 |
| 4 to 6 years | 1.15 | -2.47 | 0.02 | -1.29 | 4.20 | 4.43 | 4.92 | 92.2 | 6.24 | 20.5% | 2529 |
| 6 to 8 years | 1.09 | -3.39 | 0.03 | -2.27 | 5.59 | 4.02 | 6.94 | 87.4 | 6.33 | 16.0% | 2166 |
| 8 to 10 years | 1.27 | -4.01 | 0.04 | -2.70 | 6.50 | 4.87 | 8.99 | 90.4 | 6.35 | 8.6% | 1302 |
| 10 to 12 years | 1.10 | -4.12 | 0.10 | -2.92 | 7.03 | 3.85 | 11.06 | 82.8 | 6.37 | 3.6% | 827 |
| 12 to 14 years | 1.23 | -4.29 | 0.09 | -2.97 | 7.27 | 4.47 | 12.85 | 85.8 | 6.46 | 2.5% | 536 |
| 14 to 16 years | 1.16 | -4.39 | 0.15 | -3.08 | 7.50 | 3.98 | 15.02 | 81.3 | 6.53 | 1.4% | 361 |
| 16 to 18 years | 1.17 | -4.40 | 0.15 | -3.08 | 7.88 | 4.00 | 16.90 | 80.2 | 6.54 | 1.2% | 295 |
| 18 to 20 years | 1.29 | -4.59 | 0.09 | -3.20 | 8.07 | 4.71 | 18.98 | 85.8 | 6.46 | 0.6% | 148 |
| 20 years & more | 1.30 | -5.49 | 0.12 | -4.08 | 9.60 | 4.21 | 24.59 | 75.3 | 6.74 | 1.9% | 305 |
| Total | 1.12 | -2.21 | 0.04 | -1.05 | 4.08 | 4.29 | 5.60 | 91.7 | 6.24 | 100.0% | 14787 |

Total Return by Maturity Cell

For the quarter; in percent



Portfolio Composition by Maturity Cell

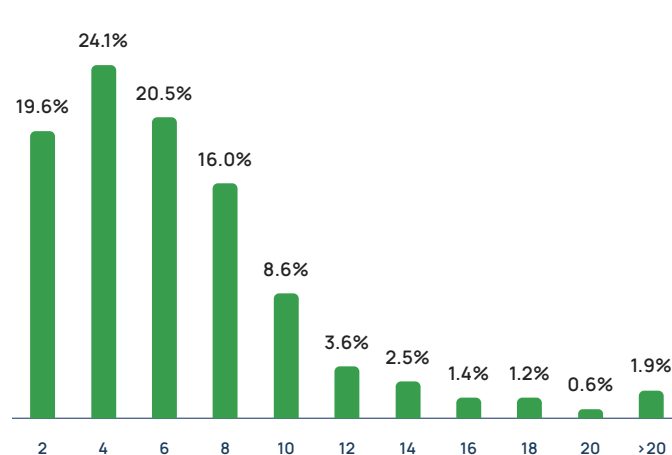


Table F

Giliberto-Levy Commercial Mortgage Index (G-L I)

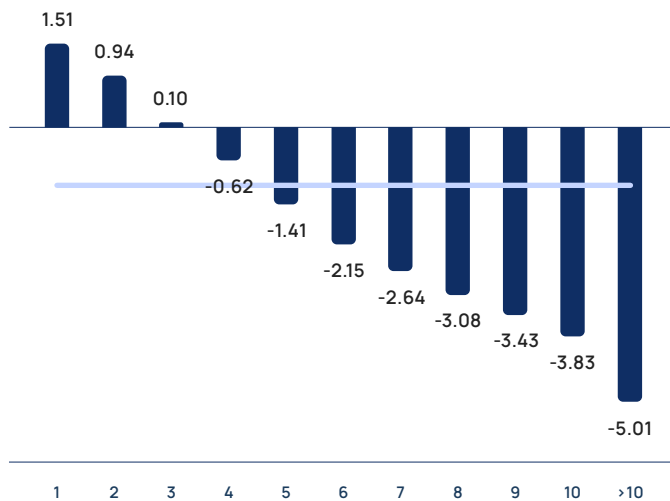
Performance by Duration

For the quarter ended December 31, 2024

| Duration Cell | Returns (%) | | | | Statistics | | | | | | |
|-----------------|-------------|--------------|-------------|--------------|---------------|-------------|-------------|-------------|-------------|-------------------|-----------------|
| | Income | Price | Other | Total | Mod. Duration | Coupon | Maturity | Price | Yield | Pct. of Portfolio | Num. of Cohorts |
| 0 to 1 year | 1.02 | 0.45 | 0.05 | 1.51 | 0.48 | 4.03 | 0.50 | 99.1 | 6.04 | 7.9% | 1898 |
| 1 to 2 years | 1.01 | -0.09 | 0.02 | 0.94 | 1.45 | 3.95 | 1.57 | 96.9 | 6.11 | 12.1% | 1873 |
| 2 to 3 years | 1.10 | -1.03 | 0.02 | 0.10 | 2.44 | 4.32 | 2.77 | 95.3 | 6.20 | 11.6% | 1786 |
| 3 to 4 years | 1.19 | -1.83 | 0.02 | -0.62 | 3.41 | 4.63 | 4.00 | 94.7 | 6.17 | 18.7% | 2299 |
| 4 to 5 years | 1.15 | -2.60 | 0.03 | -1.41 | 4.36 | 4.45 | 5.40 | 92.2 | 6.23 | 14.5% | 1933 |
| 5 to 6 years | 1.07 | -3.27 | 0.05 | -2.15 | 5.43 | 3.96 | 7.23 | 87.2 | 6.36 | 12.6% | 1856 |
| 6 to 7 years | 1.18 | -3.86 | 0.04 | -2.64 | 6.32 | 4.40 | 8.80 | 87.8 | 6.37 | 11.7% | 1479 |
| 7 to 8 years | 1.20 | -4.34 | 0.06 | -3.08 | 7.30 | 4.42 | 11.61 | 85.9 | 6.39 | 5.8% | 828 |
| 8 to 9 years | 1.19 | -4.71 | 0.09 | -3.43 | 8.27 | 4.13 | 15.66 | 81.1 | 6.50 | 2.7% | 490 |
| 9 to 10 years | 1.16 | -5.05 | 0.06 | -3.83 | 9.22 | 3.89 | 17.41 | 78.3 | 6.37 | 1.5% | 248 |
| 10 years & more | 1.29 | -6.32 | 0.03 | -5.01 | 11.69 | 4.12 | 24.46 | 73.2 | 6.48 | 0.8% | 97 |
| Total | 1.12 | -2.21 | 0.04 | -1.05 | 4.08 | 4.29 | 5.60 | 91.7 | 6.24 | 100.0% | 14787 |

Total Return by Duration Cell

For the quarter; in percent



Portfolio Composition by Duration Cell

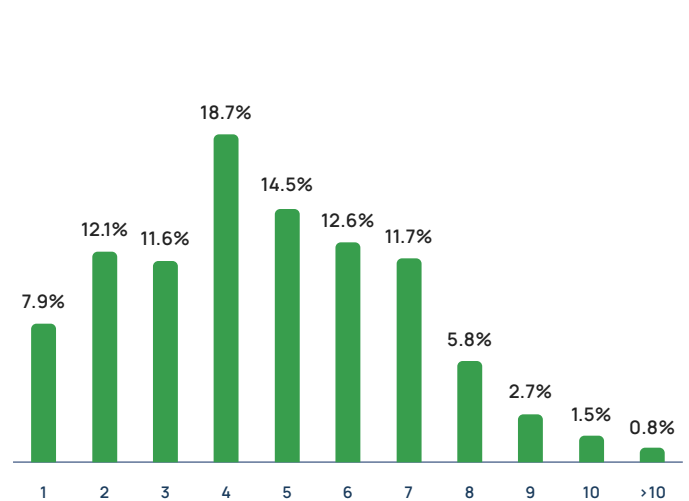


Table G

Giliberto-Levy Commercial Mortgage Index (G-L I)

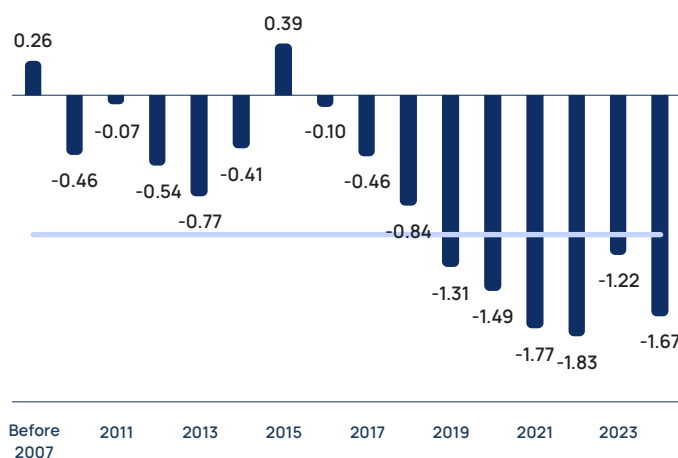
Performance by Vintage Year

For the quarter ended December 31, 2024

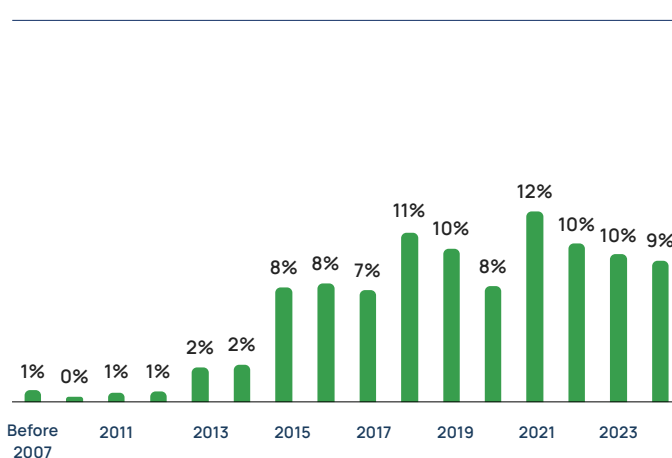
| Vintage Year | Returns | | | | Statistics | | | | | | |
|--------------|---------|-------|-------|-------|---------------|--------|----------|-------|-------|-------------------|-----------------|
| | Income | Price | Other | Total | Mod. Duration | Coupon | Maturity | Price | Yield | Pct. of Portfolio | Num. of Cohorts |
| Before 2007 | 1.53 | -1.24 | -0.03 | 0.26 | 2.21 | 6.27 | 4.21 | 100.8 | 5.98 | 0.8% | 1540 |
| 2007 to 2010 | 1.52 | -1.97 | -0.01 | -0.46 | 3.06 | 6.21 | 6.02 | 99.9 | 6.18 | 0.4% | 261 |
| 2011 | 1.33 | -1.44 | 0.03 | -0.07 | 2.57 | 5.30 | 4.28 | 97.8 | 6.08 | 0.6% | 233 |
| 2012 | 1.14 | -1.78 | 0.10 | -0.54 | 3.36 | 4.45 | 5.72 | 94.8 | 6.08 | 0.7% | 284 |
| 2013 | 1.17 | -2.02 | 0.07 | -0.77 | 3.49 | 4.54 | 5.64 | 94.4 | 6.14 | 2.3% | 523 |
| 2014 | 1.10 | -1.62 | 0.11 | -0.41 | 3.75 | 4.35 | 6.13 | 93.0 | 6.21 | 2.4% | 407 |
| 2015 | 1.03 | -0.67 | 0.04 | 0.39 | 1.93 | 3.95 | 2.99 | 95.6 | 6.13 | 7.5% | 1339 |
| 2016 | 1.01 | -1.16 | 0.05 | -0.10 | 2.72 | 3.81 | 4.00 | 93.3 | 6.26 | 7.8% | 1188 |
| 2017 | 1.05 | -1.57 | 0.05 | -0.46 | 3.25 | 4.00 | 4.47 | 92.8 | 6.20 | 7.3% | 1151 |
| 2018 | 1.15 | -2.02 | 0.03 | -0.84 | 3.74 | 4.36 | 5.29 | 92.9 | 6.21 | 11.1% | 1383 |
| 2019 | 1.03 | -2.39 | 0.05 | -1.31 | 4.42 | 3.78 | 6.16 | 88.9 | 6.25 | 10.0% | 1311 |
| 2020 | 0.88 | -2.42 | 0.05 | -1.49 | 4.58 | 3.09 | 6.23 | 85.5 | 6.22 | 7.5% | 1098 |
| 2021 | 0.87 | -2.69 | 0.04 | -1.77 | 5.06 | 3.02 | 6.56 | 84.4 | 6.25 | 12.5% | 1491 |
| 2022 | 1.21 | -3.06 | 0.02 | -1.83 | 5.22 | 4.47 | 6.96 | 88.9 | 6.45 | 10.3% | 978 |
| 2023 | 1.50 | -2.71 | 0.00 | -1.22 | 4.29 | 6.05 | 5.45 | 98.8 | 6.23 | 9.7% | 831 |
| 2024 | 1.46 | -3.13 | 0.00 | -1.67 | 4.99 | 5.88 | 6.56 | 98.0 | 6.21 | 9.2% | 769 |
| Total | 1.12 | -2.21 | 0.04 | -1.05 | 4.08 | 4.29 | 5.60 | 91.7 | 6.24 | 100.0% | 14787 |

Total Return by Vintage Cohort

For the quarter; in percent



Portfolio Composition by Vintage Cohort





GILIBERTO-LEVY
COMMERCIAL REAL ESTATE DEBT INDEXES

The Gilberto-Levy High-Yield Real Estate Debt Index or G-L 2 posted 2.53% total return in 3Q 2024, compared with 1.06% (revised) reported for 2Q 2024. An interesting, but not unexpected, outcome this quarter was that fixed-rate loans posted a 1.33% increase in capital values due to lower interest rates.

**If you'd like more
information on the G-L 2
Index, please contact us at
jgrant@jblevyco.com**

The Gilberto-Levy Indexes

The G-L Commercial Mortgage Performance Index or G-L 1 tracks investment results for fixed-rate senior mortgages made by lenders such as life insurance companies, GSEs, pension funds and investment managers and held on their balance sheets. G-L 1 has been produced continuously since 1993, with a return inception date of January 1, 1972.

The G-L High-yield Real Estate Debt Index or G-L 2 measures performance for a variety of investments, such as mezzanine loans, leveraged whole loan and B-notes. G-L 2 production started in 2018. The return inception date is January 1, 2010.

To receive more information about the indexes, please contact Julia Grant (jgrant@jblevyco.com).

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