

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

Monitor Second Quarter 2023

Giliberto-Levy Commercial Mortgage Performance Index

Second Quarter 2023 Summary

Total Return: (in %)

Office	-0.75
Multi-family	-0.80
Retail	-0.45
Industrial	-0.81
Total (all sectors)	-0.74

Spreads: (as of 6/30/2023)

Office	225
Multi-family	198
Retail	224
Industrial	193

Index Statistics: (as of 6/30/2023)

Principal (\$ billion)	299.21
Capitalization (\$ billion)	270.40
Duration (years)	4.66
Coupon (%)	4.00
Maturity (years)	6.45
Book LTV (%)	49.73

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

Source: Giliberto-Levy

The Giliberto-Levy Commercial Mortgage Performance Index (G-L 1) slipped in 2Q 2023, generating **-0.74% total return**.¹ Income return was 1.06%, down from 1.09% in 1Q 2023 due to first quarter's increase in the index's value. Rising yields caused capital value to decline 1.80%, reversing some of the gain recorded in 1Q. Year to date G-L 1 total return is 2.38%.

U.S. Treasury yields rose across the board (see Charts 1 and 2). For example, the benchmark ten-year yield went from 3.48% to 3.81%, a 33-basis point (bp) increase over the quarter. Yields for maturities shorter than ten years were up more. For issues with two to seven years remaining, the average increase was more than 60 bp.

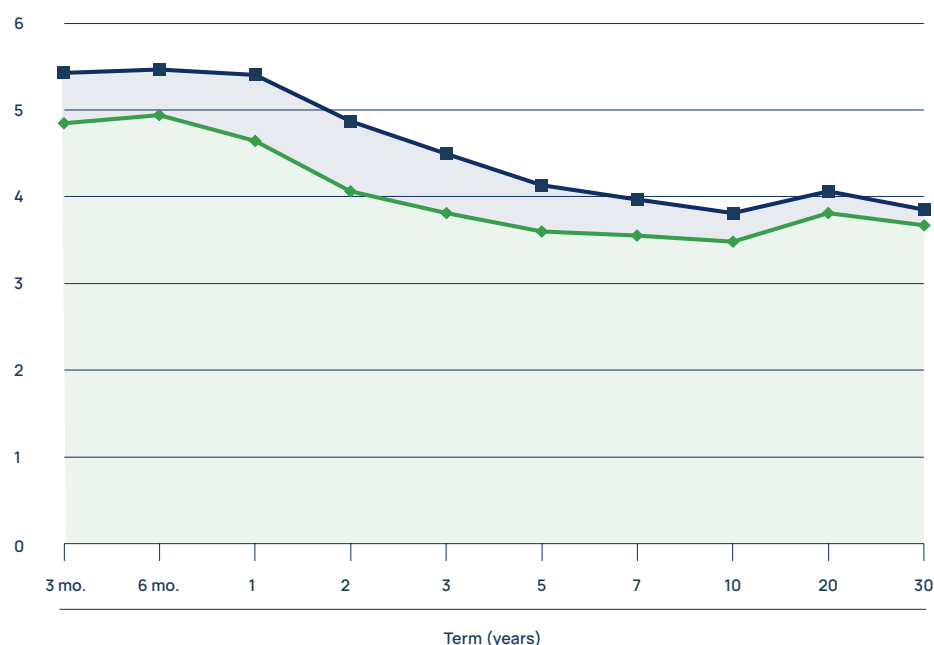
Chart 1

US Treasury Yields

In %

Source: U.S. Treasury; Giliberto-Levy

◆ Mar 31, 2023
■ Jun 30, 2023



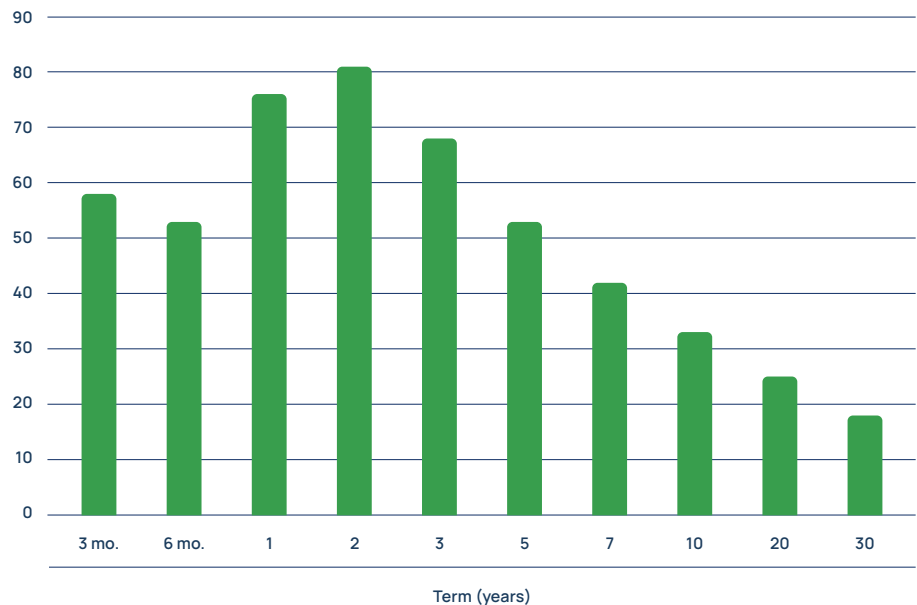
¹ The Index's components are fixed-rate commercial mortgage loans held on balance sheets of institutions such as life insurance companies and pension funds. Index returns are a market-value-weighted blend of office, apartment, retail, industrial, lodging, mixed-use and other miscellaneous property types. 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 2

Changes in US Treasury Yields March 31, 2023 to June 30, 2023

In basis points

Source: U.S. Treasury; Giliberto-Levy



These increases in base rates implied that fixed-income investment values would go down absent other factors.

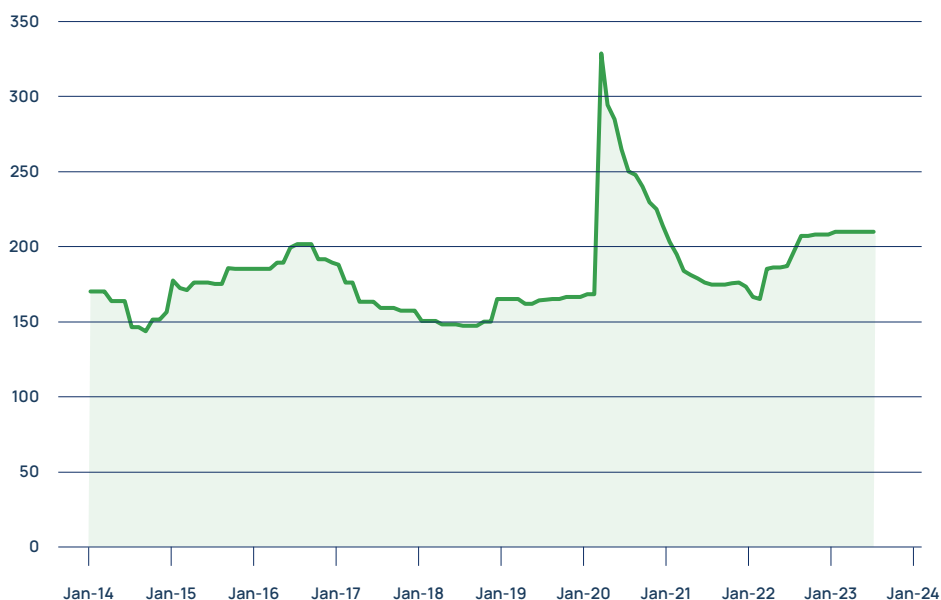
Reduced credit spreads are one potential offsetting factor that can blunt the deleterious effect of Treasury yield increases. Good fortune smiled on some corporate bond sectors, with spread declines providing some support for valuations. Unfortunately, commercial mortgage spreads during the quarter held relatively steady (see Chart 3). As a result, no buffer materialized, and Treasury yield moves swamped capital values.

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: 2Q 2023

Table 1

Key Rates (in %)

	3/31/2023	6/30/2023	change
20-year Treasury Yield	3.81	4.06	0.25
20-year Mortgage Spread	2.10	2.10	0.00
20-year Mortgage Yield	5.91	6.16	0.25
10-year Treasury Yield	3.48	3.81	0.33
10-year Mortgage Spread	2.10	2.10	0.00
10-year Mortgage Yield	5.58	5.91	0.33
7-year Treasury Yield	3.55	3.97	0.42
7-year Mortgage Spread	2.10	2.10	0.00
7-year Mortgage Yield	5.65	6.07	0.42
5-year Treasury Yield	3.60	4.13	0.53
5-year Mortgage Spread	2.10	1.90	-0.20
5-year Mortgage Yield	5.70	6.03	0.33

Sources: U.S. Treasury; Giliberto-Levy

- Table 1 shows the effects of Treasury yield and spread changes on commercial mortgage yields. (G-L spreads are calculated from loan transactions during the quarter.) Coupon rates basically are back at or above 6%. Reminder: rates are for 60% to 65% LTV loans; loans with LTV in the 50% to 60% range were about 10 bp lower on average.
- Size premiums persisted across most sectors for loans below \$5 million. Typical premiums again ranged from 20 bp to 40 bp, with office loans being at the high end. Industrial loans between \$5 million and \$10 million showed a 10-bp add-on; these are not loans on bulk distribution warehouses. Not all small loans had premiums, but on average premiums were statistically significant.
- The National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index (NPI) continued to reflect reductions in carrying values for institutionally owned commercial real estate. Values were down about 3% in 2Q 2023, similar to what was recorded in 1Q.
- We again calculated cumulative value reductions since prices peaked. For this calculation we used a subset of the 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.
 - Industrial has been written down 6%.
 - Apartments are down about 10%.

- Office has registered a 20% reduction.
- Retail is off almost 18%. However, retail prices peaked in 4Q 2018, while the other major sectors' peaks were in 2022. Since March 2022, retail is down 10%.

Credit Tracker

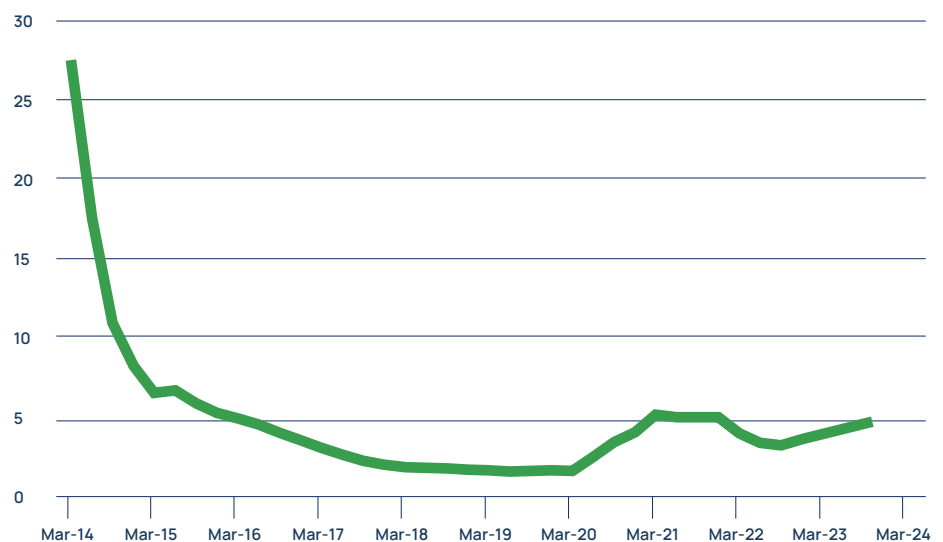
Trailing four-quarter credit effects ticked up 1 bp to 5 bp (see Chart 4). Second quarter 2023's annualized credit effect was 6 bp. These levels remain low compared to an average rate of about 50 bp for G-L 1 history from 1972 through 2022, including recessions. If one excludes periods of recession and their aftermaths, the average annual effect is around 20 bp, so today's level still can be considered quite low.

Chart 4

Commercial Mortgage Credit Effects

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

Source: Giliberto-Levy



The increase is consistent with a higher percentage of loans with elevated risk (see Table 2 and Chart 5). (The percentage is the share of loans that are in the amber and red risk zones in our credit tracker heat map.) Higher marked-to-market LTVs – arising from the cumulative value declines noted above – have been the main driver.

Table 2

Credit Quality Distribution: All G-L 1 Loans

As a percentage of June 30, 2023 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	0.11%	0.37%	0.26%	0.12%	0.11%	0.19%	1.17%
1.01 to 1.15	0.30%	0.61%	0.30%	0.25%	0.33%	0.07%	1.86%
1.15 to 1.5	1.56%	2.61%	1.79%	1.59%	1.22%	0.49%	9.26%
1.5 to 1.75	3.14%	5.29%	2.87%	1.32%	0.78%	0.71%	14.11%
above 1.75	38.28%	19.92%	7.80%	4.03%	1.52%	0.95%	72.51%
Unknown	0.06%	0.82%	0.03%	0.16%	0.01%	0.01%	1.09%
Total	43.46%	29.63%	13.05%	7.47%	3.97%	2.42%	100.0%

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

Source: Giliberto-Levy

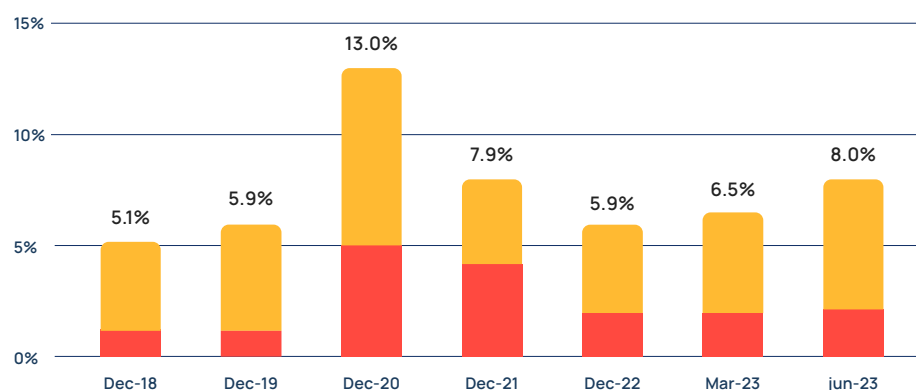
Zone	Red	Amber	Green	Unknown
Total	2.1%	5.9%	90.9%	1.1%

Chart 5

Potential At-Risk Loans

As a percentage of loan balances at month end

Source: Giliberto-Levy



Relative Performance

G-L 1 performance was below investment-grade bonds (see Table 3). Securitized commercial mortgages experienced comparable results: investment-grade CMBS returned -0.63%, according to Bloomberg Index Services. On a year-to-date basis, though, results for G-L 1 at 2.38% have been like those produced by Baa-rated intermediate bonds.

Table 3

Total Return as of June 30, 2023

Index	Total Return (%)			Duration as of 6/30/2023
	2Q 23	YTD	Last 4 Q	
Commercial Mortgages*	-0.74	2.38	-0.59	4.66
Duration-adjusted Baa Bond	-0.03	2.64	2.31	4.66
CMBS: Investment Grade	-0.63	1.07	-1.86	4.42
CMBS 2.0	-0.56	0.47	-2.09	3.91
TSY Int. Term	-1.15	1.10	-1.02	3.73
TSY 5-7 yr. Term	-1.61	1.32	-1.94	5.35
Credit Int. Term	-0.26	2.21	1.56	4.02
A Int. Term	-0.24	2.24	1.32	4.05
Baa Int. Term	-0.03	2.46	2.49	4.19
High-yield Int. Term	1.76	5.39	9.11	3.34
Ba Int. Term	0.84	4.29	8.13	3.55

* Giliberto-Levy Total Index, includes office, retail, apartment, industrial and other

Sources: Bloomberg Index Services; Giliberto-Levy

Property sector relative (to the overall index) performance variation continues to be driven by differences in duration and income yields (see Chart 6).

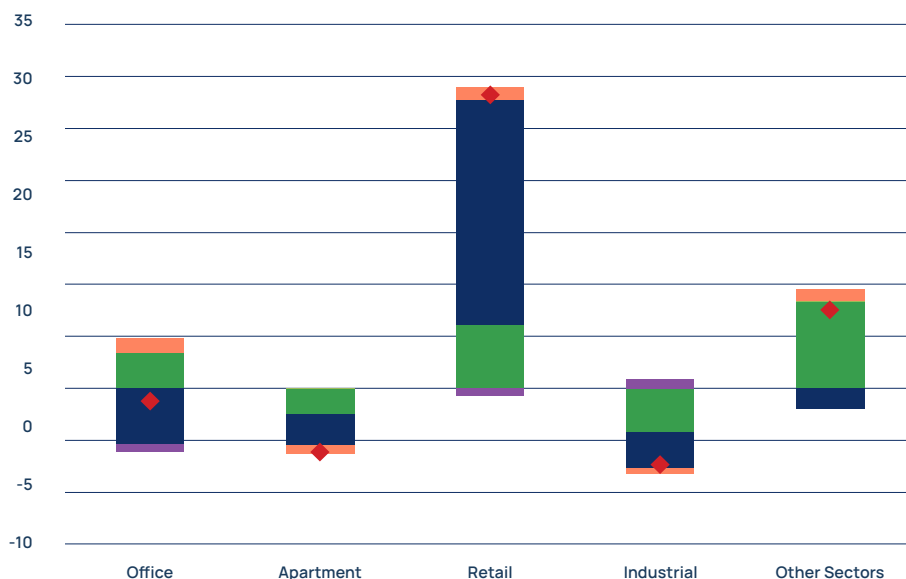
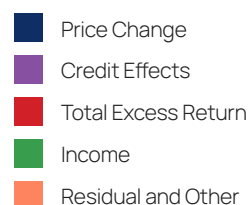
Retail produced the only positive relative return for a major sector. Two favorable factors were at work: (1) retail has a shorter average duration than the overall index, so price changes resulting from higher Treasury yields were less severe and (2) retail loans with moderate LTVs benefitted from small reductions in credit spreads.

Chart 6

Sector Performance Attribution 2Q 2023

Sector performance minus Total index performance, in basis points

Source: Giliberto-Levy



Lending Activity

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

Table 4

G-L 1 Lending Activity Summary

	Most Recent Period 2Q 2023 P	Prior Period 1Q 2023	Year Ago Comp. Period 2Q 2022
Loan Volume (\$ billions)	6.2	4.6	6.8
Weighted Average:			
LTV	61.0%	59.4%	59.7%
DSCR	1.63	1.70	1.71
Coupon Rate	5.74%	5.74%	4.68%
Spread (basis points)	195	182	175
Term to Maturity (years)	7.8	7.0	9.8
Loan Size (\$ millions)	39.2	27.2	29.9

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

Source: Giliberto-Levy

- **Lending volume rebounded from 1Q's anemic pace** (see Chart 7). Lenders continued to favor multifamily and industrial assets. Office loans were hard to come by and we did see some spread widening in that sector. Selective retail lending, concentrated in neighborhood and community centers, continues.

Chart 7

Index-eligible Loan Production

P Preliminary and subject to revision

Source: Giliberto-Levy

◆ # of Loans
— Volume



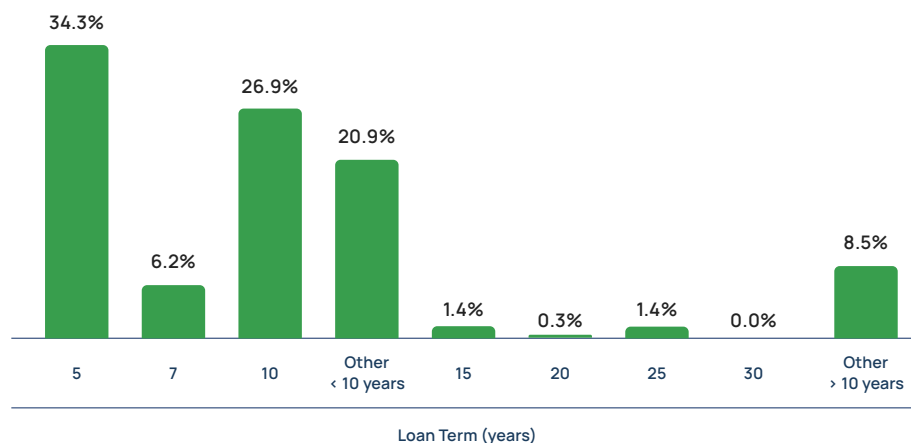
- > The **ten-year segment's market share by volume continued to slide**, registering 28% (see Chart 8). Compare this with 32% in 1Q 2023 and a longer-term average above 40%. **Five-year loans again took the top market-share spot.** We discuss this below in the Perspectives section.

Chart 8

Distribution of Lending Activity

by Term to Maturity, 2Q 2023

Source: Giliberto-Levy



- > **Full-term interest-only loans market share rebounded to 65% of total volume.** The rebound resulted, in part, from several large loans. Partially amortizing loans made up 32% of the volume, with about half having an interest-only period up front. Only about 3% of the volume came from fully amortizing loans.
- > **Loan sizes ranged from just under \$2 million to well over \$300 million.** Loans of \$100 million and more accounted for more than one-third of total volume and explain most of the increase in average loan size reported above in Table 4.

We added \$6.6 billion of new loans to the Index (see Table 5 for details). These were loans from March, April and May 2023. June 2023 loans, which are included in the production number cited above and depicted in Chart 7 will be added to the Index for 3Q 2023.

Table 5

Additions to G-L I Index

	Amount (\$)	Number of Loans	Weighted-Average				
			Coupon	Spread (bp)	DSCR	LTV (%)	Term Years
Office	390,500,000	9	5.91%	228	1.91	53.6	7.8
Apartment	2,502,759,000	68	5.43%	172	1.51	64.9	7.6
Retail	667,474,000	25	5.99%	198	1.55	60.9	7.7
Industrial	2,507,469,390	75	5.61%	184	1.60	60.2	6.2
Other	522,310,000	11	6.57%	283	2.10	55.7	8.5
Total	6,590,512,390	188	5.67%	191	1.62	61.3	7.2

Source: Giliberto-Levy

Please note that spreads reported in Table 5 are weighted averages of loans made during periods prior to June 2023. These averages do not stand for quarter-end pricing parameters. Pricing spreads are reported in the summary table at the top of this report for standardized ten-year loans at 60% to 65% LTVs. These standardized spreads also appear in Table 1. Standardized spreads are generated from new loan originations and form the baseline for marking to market all loans in the Index.

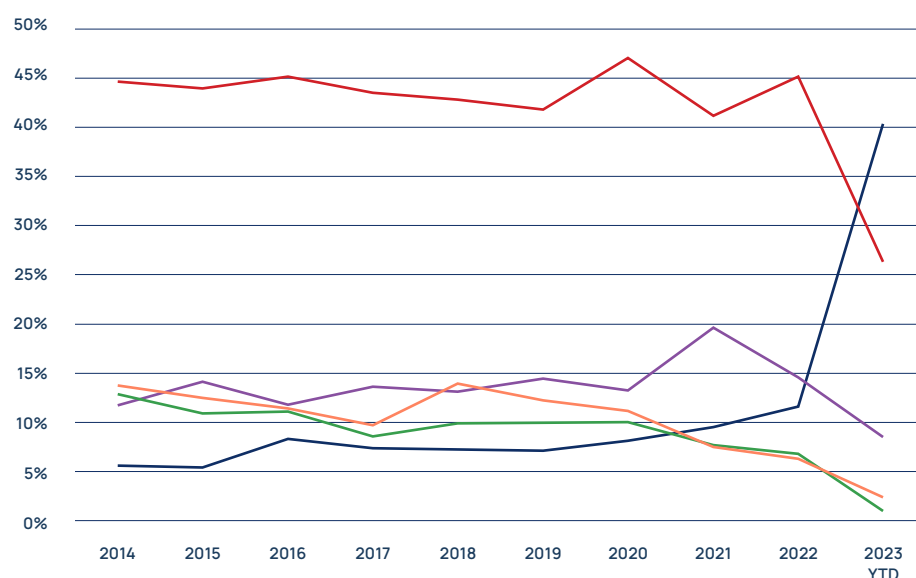
Commercial Mortgage Perspective: Annual Principal Change Review

Once the Federal Reserve started raising interest rates in 2Q 2022, five-year loans started to increase in popularity, as measured by share of total G-L 1 lending volume. In 2022, five-year deals outpaced seven-year deals, altering a pattern that had been in place since 2014 (see Chart 9). In 2023, five-year loans overtook ten-year loans, knocking that long-time market share leader out of first place. Indeed, Chart 9 shows that there has been a significant shift away from all long-term loans.

Chart 9

Share of New Loan Volume by Term to Maturity

Source: Giliberto-Levy



Yet the inverted Treasury yield curve (per Chart 1 above) has a five-year yield 32 bp higher than the ten-year. As result, one would expect five-year commercial mortgage coupon rates to exceed ten-year coupon rates by roughly that 32-bp differential as calculated in Table 1. However, when we compared transaction coupon rates for five- and ten-year deals done in 2023, we found only a 10-bp difference. No surprise that when we looked at spreads, five-year deals averaged 20 bp lower than ten-year deals.²

We suspect that borrowers who qualified for these loans are willing to pay a 10-bp annual “premium” for the option to venture into the market for a refinance five years out, rather than get locked into today’s rates for longer periods. The expectation of a more benign interest-rate environment in five years is reasonable.

² Average LTVs were nearly identical so that metric does not explain the difference. Property sector allocations also were similar, eliminating “mix” as a factor.

In addition, there's also a chance that some current risk factors (among them, war in Europe, trade tensions, and 2024 US elections) will have abated and not been replaced by other similarly worrisome possibilities.

It appears that "stay short and hold on" appears to have superseded "lock in and go long" as a borrower catchphrase. For more challenging situations, it's "stay alive until '25".

As always, we welcome your comments and questions.

August 2023

Chart 10

Commercial Mortgage Performance

Rolling four-quarter total return for Total Index

Source: Giliberto-Levy

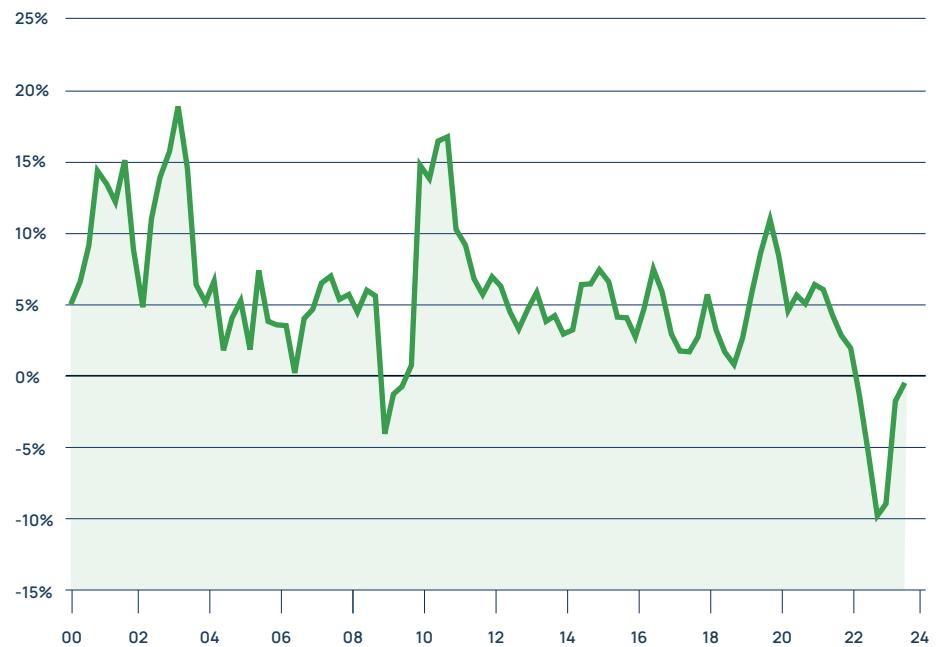


Chart 11

Commercial Mortgage Credit Effects

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

Source: Giliberto-Levy

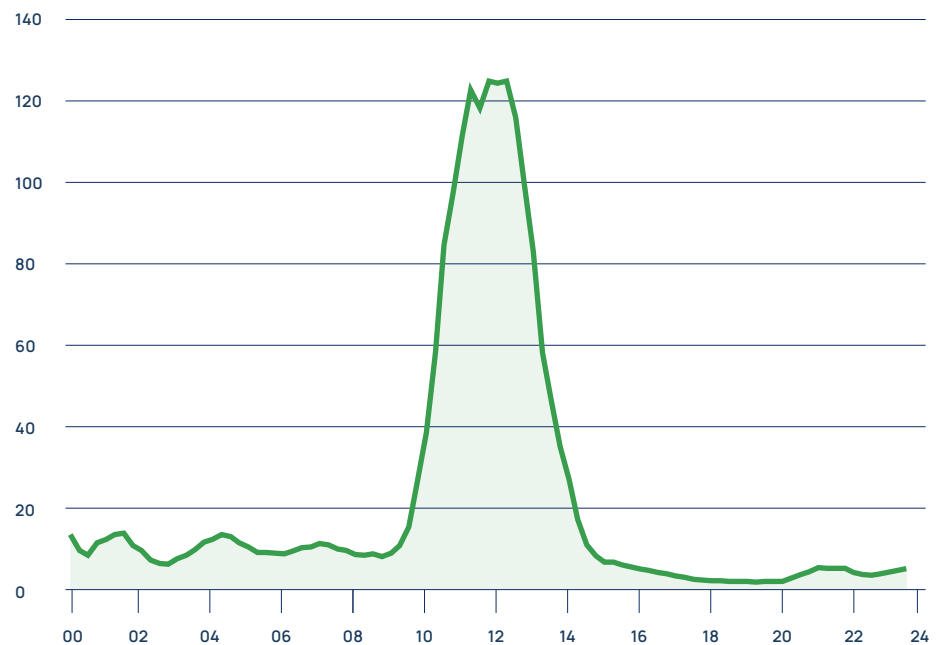


Table A

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

For the quarter ended June 30, 2023

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	1.10	-1.91	0.06	-0.75	2.05	-0.47	2303.08	2	5	8
Apartment	1.04	-1.87	0.04	-0.80	2.43	-0.94	2949.02	1	2	4
Retail	1.12	-1.64	0.06	-0.45	2.46	0.11	2752.22	2	5	8
Industrial	1.02	-1.87	0.04	-0.81	2.33	-0.66	2654.66	0	1	1
Others	1.15	-1.86	0.06	-0.66	2.73	0.27	N/A	2	3	5
Total	1.06	-1.85	0.05	-0.74	2.38	-0.59	2494.98	2	3	5
Aggregate	1.06	-1.84	0.05	-0.74	2.35	-0.64	4033.50	1	3	5

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

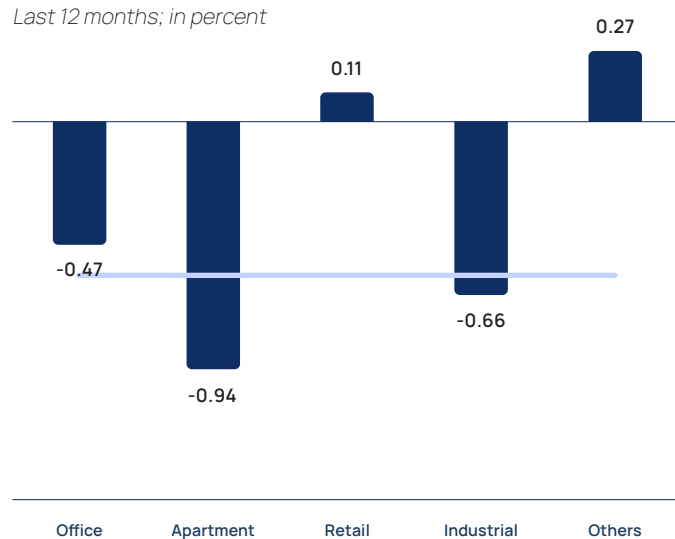
Other Return is paydown return and compounding

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

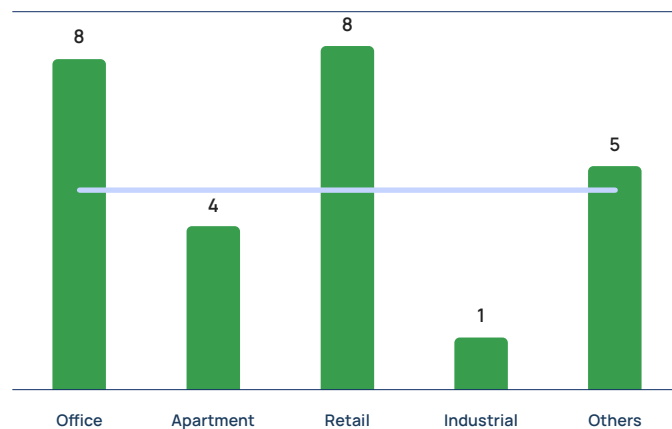


Table B

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

Performance by Property Sector

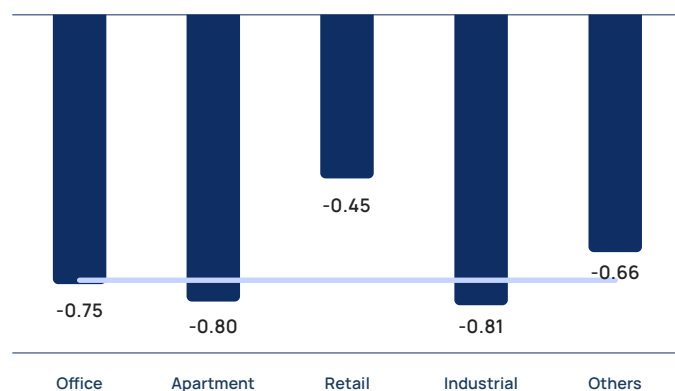
For the quarter ended June 30, 2023

Sector	Returns (%)				Statistics						
	Income	Price	Other	Total	Mod. Duration	Coupon	Maturity	Price	Yield	Pct. of Portfolio	Num. of Cohorts
Office	1.10	-1.91	0.06	-0.75	4.13	4.16	5.89	90.9	6.56	14.9%	1970
Apartment	1.04	-1.87	0.04	-0.80	4.95	3.88	6.72	89.8	6.13	46.0%	6278
Retail	1.12	-1.64	0.06	-0.45	4.14	4.25	5.89	91.3	6.53	13.7%	3258
Industrial	1.02	-1.87	0.04	-0.81	4.64	3.88	6.23	90.9	6.03	18.7%	2915
Others	1.15	-1.86	0.06	-0.66	4.93	4.30	7.53	90.0	6.53	6.8%	1123
Total	1.06	-1.85	0.05	-0.74	4.66	4.00	6.45	90.4	6.26	100.0%	15544
Aggregate	1.06	-1.84	0.05	-0.74	4.64	3.98	6.37	90.4	6.24	93.2%	14421

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

Total Return by Sector

Last 12 months; in percent



Portfolio Composition by Sector

in percent

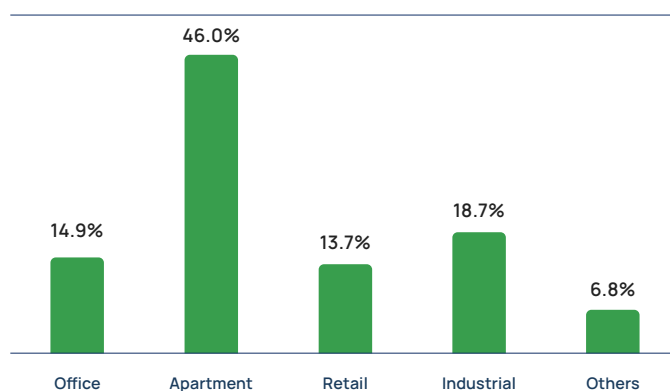


Table C

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

Performance by Book LTV Classification

For the quarter ended June 30, 2023

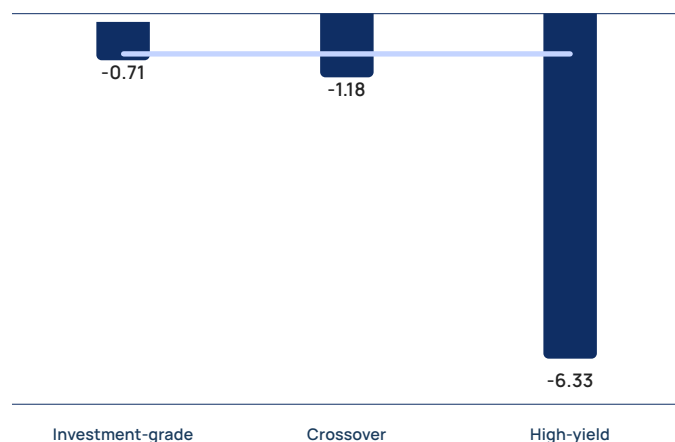
Credit quality using book value	Returns (%)				Statistics						
	Income	Price	Other	Total	Mod. Duration	Coupon	Maturity	Price	Yield	Pct. of Portfolio	Num. of Cohorts
Investment-grade	1.06	-1.81	0.05	-0.71	4.62	3.98	6.39	90.5	6.23	94.4%	14891
Crossover	1.16	-2.38	0.05	-1.18	5.31	4.32	7.31	89.0	6.54	5.4%	645
High-yield	1.68	-8.10	0.10	-6.33	5.16	4.56	10.35	67.0	9.93	0.1%	8
Total	1.06	-1.85	0.05	-0.74	4.66	4.00	6.45	90.4	6.26	100.0%	15544

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

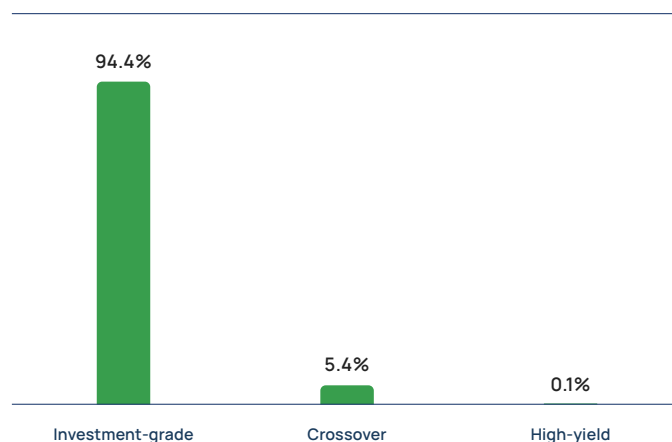


Table D

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

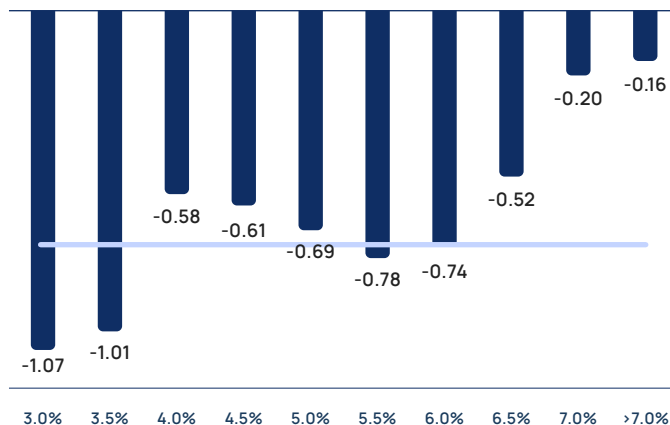
Performance by Coupon Rate

For the quarter ended June 30, 2023

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%	0.79	-1.91	0.05	-1.07	5.55	2.74	6.97	83.8	5.97	10.5%	1109
3.0% to 3.5%	0.93	-1.98	0.05	-1.01	5.58	3.28	7.42	85.7	6.09	18.0%	2163
3.5% to 4.0%	1.01	-1.65	0.06	-0.58	4.01	3.78	5.40	90.8	6.36	25.5%	3527
4.0% to 4.5%	1.12	-1.78	0.05	-0.61	4.34	4.25	6.34	92.2	6.33	25.0%	3497
4.5% to 5.0%	1.22	-1.96	0.04	-0.69	4.52	4.73	6.63	93.7	6.34	11.0%	1758
5.0% to 5.5%	1.32	-2.14	0.04	-0.78	5.22	5.25	7.75	95.9	6.21	4.0%	786
5.5% to 6.0%	1.41	-2.18	0.03	-0.74	4.80	5.73	7.14	98.5	6.25	3.3%	932
6.0% to 6.5%	1.51	-2.05	0.02	-0.52	3.61	6.24	5.29	100.0	6.38	1.6%	697
6.5% to 7.0%	1.60	-1.80	0.00	-0.20	4.11	6.72	6.06	102.2	6.43	0.5%	259
7.0% & above	1.80	-1.91	-0.05	-0.16	2.76	7.65	4.49	103.2	6.58	0.6%	816
Total	1.06	-1.85	0.05	-0.74	4.66	4.00	6.45	90.4	6.26	100.0%	15544

Total Return by Coupon Rate

For the quarter; in percent



Portfolio Composition by Coupon Rate

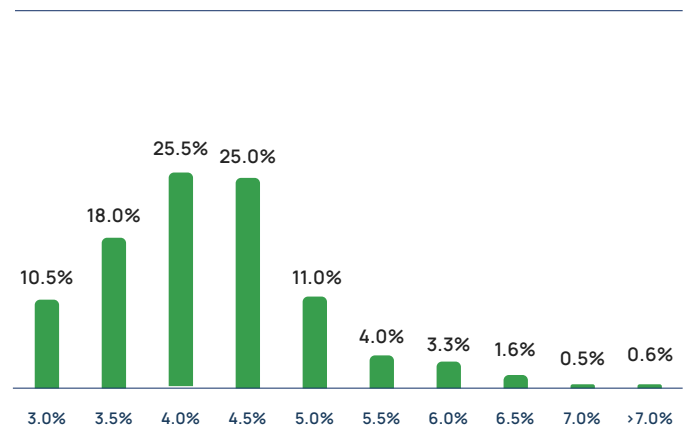


Table E

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

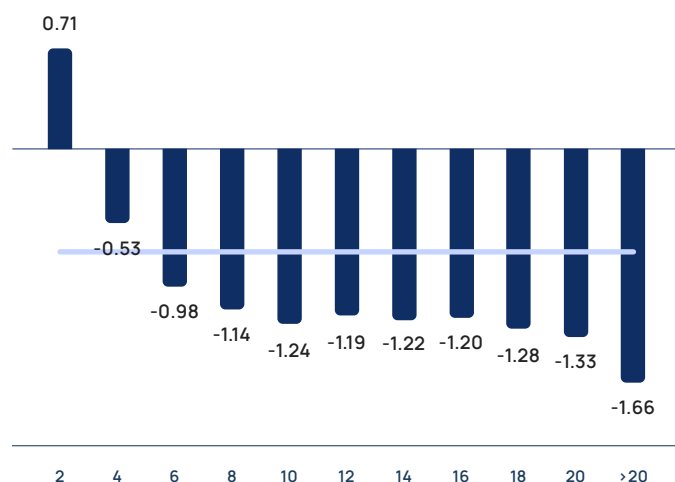
Performance by Remaining Term to Maturity

For the quarter ended June 30, 2023

Maturity Cell	Returns (%)				Statistics						
	Income	Price	Other	Total	Mod. Duration	Coupon	Maturity	Price	Yield	Pct. of Portfolio	Num. of Cohorts
0 to 2 years	1.05	-0.39	0.05	0.71	1.05	4.12	1.11	96.8	7.17	15.1%	2870
2 to 4 years	1.03	-1.59	0.03	-0.53	2.74	3.97	3.04	93.3	6.47	20.2%	3073
4 to 6 years	1.08	-2.10	0.03	-0.98	4.31	4.16	5.03	91.7	6.12	20.9%	2649
6 to 8 years	1.01	-2.19	0.04	-1.14	5.71	3.68	7.02	87.3	5.97	14.9%	2201
8 to 10 years	1.07	-2.36	0.04	-1.24	6.85	3.97	8.91	87.4	5.88	13.5%	1764
10 to 12 years	1.11	-2.37	0.07	-1.19	7.28	4.09	10.99	87.6	5.82	4.4%	813
12 to 14 years	1.09	-2.40	0.09	-1.22	7.97	3.88	13.11	84.7	5.85	4.1%	778
14 to 16 years	1.20	-2.48	0.08	-1.20	8.12	4.42	15.03	88.7	5.85	1.9%	451
16 to 18 years	1.07	-2.49	0.14	-1.28	8.45	3.69	17.06	82.0	5.90	1.5%	339
18 to 20 years	1.12	-2.59	0.13	-1.33	8.71	3.96	18.73	83.1	5.94	0.9%	234
20 years & more	1.21	-2.98	0.11	-1.66	10.33	4.17	25.26	81.2	5.98	2.5%	372
Total	1.06	-1.85	0.05	-0.74	4.66	4.00	6.45	90.4	6.26	100.0%	15544

Total Return by Maturity Cell

For the quarter; in percent



Portfolio Composition by Maturity Cell

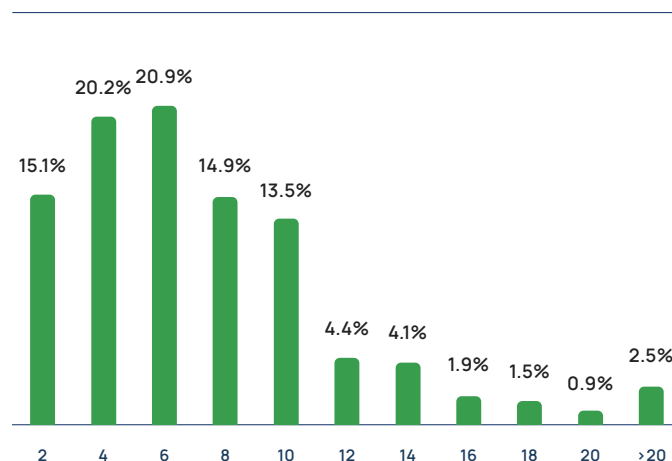


Table F

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

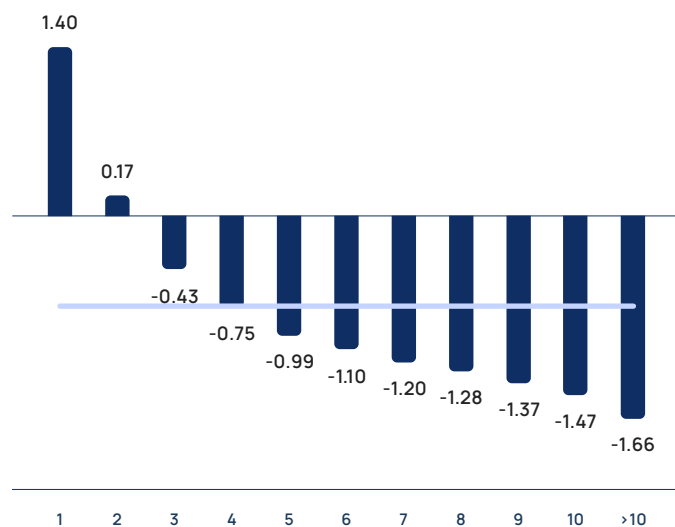
Performance by Duration

For the quarter ended June 30, 2023

Duration Cell	Returns (%)				Statistics						
	Income	Price	Other	Total	Mod. Duration	Coupon	Maturity	Price	Yield	Pct. of Portfolio	Num. of Cohorts
0 to 1 year	1.08	0.23	0.09	1.40	0.51	4.34	0.54	98.4	7.33	6.2%	1569
1 to 2 years	1.04	-0.90	0.03	0.17	1.44	4.05	1.59	95.8	7.03	9.5%	2155
2 to 3 years	1.04	-1.51	0.04	-0.43	2.46	4.02	2.79	93.9	6.54	12.4%	1889
3 to 4 years	1.05	-1.84	0.04	-0.75	3.42	4.05	4.06	92.7	6.28	12.6%	1898
4 to 5 years	1.09	-2.12	0.04	-0.99	4.41	4.19	5.41	91.8	6.09	14.8%	1925
5 to 6 years	1.04	-2.19	0.05	-1.10	5.40	3.90	7.06	89.0	6.01	12.7%	1801
6 to 7 years	1.02	-2.28	0.05	-1.20	6.46	3.72	8.96	86.5	5.90	11.3%	1713
7 to 8 years	1.08	-2.41	0.05	-1.28	7.31	3.96	10.33	86.8	5.85	11.1%	1291
8 to 9 years	1.08	-2.53	0.07	-1.37	8.42	3.83	13.92	84.2	5.80	5.0%	682
9 to 10 years	1.13	-2.68	0.08	-1.47	9.42	4.00	18.18	83.3	5.86	2.3%	380
10 years & more	1.15	-2.86	0.05	-1.66	11.46	3.76	21.23	77.5	5.86	2.1%	241
Total	1.06	-1.85	0.05	-0.74	4.66	4.00	6.45	90.4	6.26	100.0%	15544

Total Return by Duration Cell

For the quarter; in percent



Portfolio Composition by Duration Cell

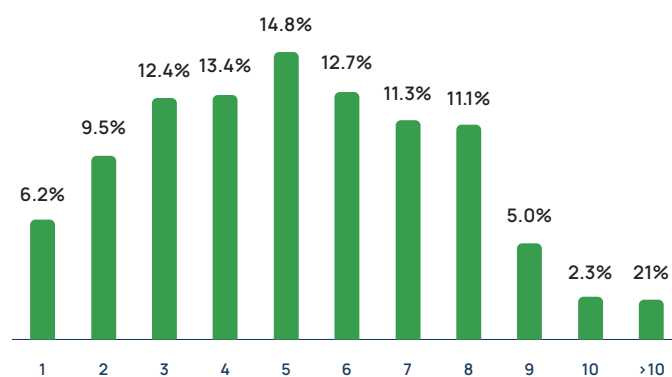


Table G

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

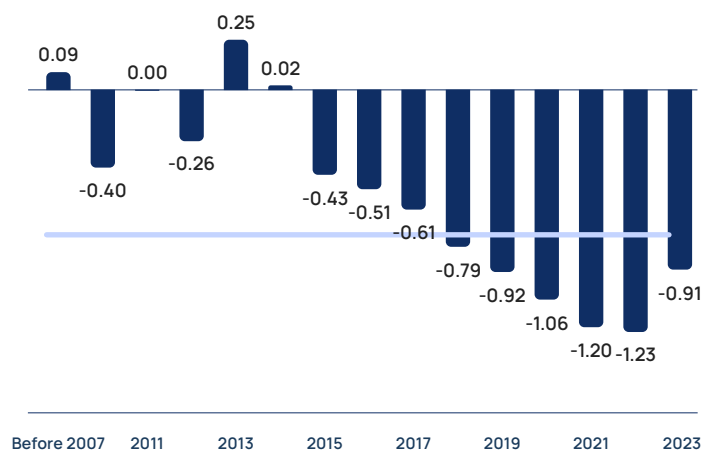
Performance by Vintage Year

For the quarter ended June 30, 2023

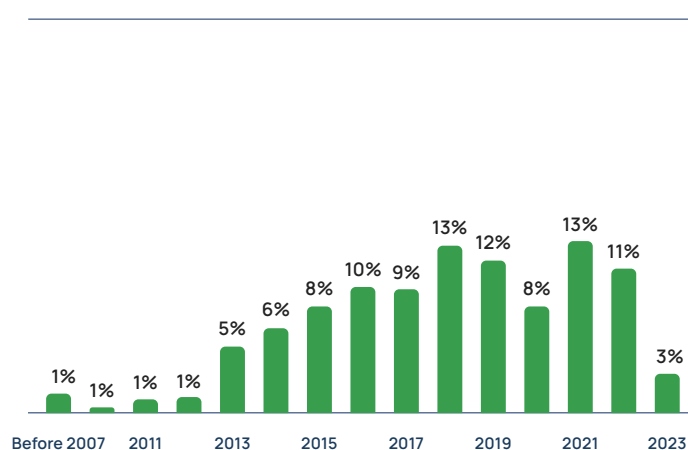
Vintage Year	Returns				Statistics						
	Income	Price	Other	Total	Mod. Duration	Coupon	Maturity	Price	Yield	Pct. of Portfolio	Num. of Cohorts
Before 2007	1.53	-1.44	0.01	0.09	2.39	6.28	4.43	100.1	6.53	1.4%	2173
2007 to 2010	1.50	-1.91	0.01	-0.40	3.52	6.23	6.84	100.3	6.30	0.5%	294
2011	1.29	-1.35	0.06	0.00	2.65	5.15	4.30	97.6	6.57	1.0%	256
2012	1.16	-1.51	0.08	-0.26	3.20	4.55	5.29	95.0	6.49	1.2%	328
2013	1.14	-0.98	0.10	0.25	2.91	4.55	4.63	95.6	6.56	4.0%	791
2014	1.09	-1.11	0.04	0.02	2.57	4.21	3.83	94.9	6.78	6.5%	1005
2015	1.04	-1.52	0.05	-0.43	3.18	3.96	4.58	93.0	6.53	8.1%	1353
2016	1.01	-1.59	0.08	-0.51	3.67	3.81	5.24	91.6	6.39	9.0%	1265
2017	1.05	-1.71	0.05	-0.61	3.85	3.98	5.23	92.0	6.37	9.3%	1331
2018	1.14	-1.97	0.04	-0.79	4.67	4.36	6.56	92.5	6.20	12.4%	1450
2019	1.03	-1.99	0.04	-0.92	5.21	3.78	7.21	88.9	6.15	11.5%	1416
2020	0.89	-2.00	0.06	-1.06	5.73	3.10	7.80	84.7	6.02	8.0%	1111
2021	0.88	-2.12	0.04	-1.20	6.23	3.03	8.12	83.4	5.96	13.1%	1510
2022	1.19	-2.45	0.03	-1.23	6.34	4.48	8.54	89.9	6.07	11.0%	981
2023	1.41	-2.34	0.02	-0.91	5.33	5.70	6.96	97.7	6.13	3.1%	280
Total	1.06	-1.85	0.05	-0.74	4.66	4.00	6.45	90.4	6.26	100.0%	15544

Total Return by Vintage Cohort

For the quarter; in percent



Portfolio Composition by Vintage Cohort



If you missed the 2023 G-L 2 High-Yield Real Estate Debt Symposium, [Click Here](#) to watch the recording online. For a copy of the deck, please contact Julia Grant at jgrant@jblevyco.com.

The 1Q-2023 G-L Indexes Summary is now available.
Contact us if you'd like a copy.

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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