

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

Monitor Second Quarter 2022



GILBERTO-LEVY
COMMERCIAL REAL ESTATE DEBT INDEXES

Giliberto-Levy Commercial Mortgage Performance Index

Second Quarter 2022 Summary

Total Return: (in %)		Spreads: (as of 6/30/2022)		Index Statistics: (as of 6/30/2022)	
Office	-1.47	Office	200	Capitalization (\$ billion)	286.30
Multi-family	-2.20	Multi-family	176	Duration (years)	5.05
Retail	-1.54	Retail	203	Coupon (%)	3.90
Industrial	-2.15	Industrial	170	Maturity (years)	6.98
Total (all sectors)	-1.94			Book LTV (%)	44.62

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) produced -1.94% total return for 2Q 2022.¹ As in 1Q, Treasury yields rose at all points on the yield curve. This caused a -2.93% capital value change in the index. After a sharp uptick in March 2022, commercial mortgage credit spreads were mostly flat during the quarter. However, we noted some increases in June (see Chart 1). Although this barely registered in Chart 1, the intra-month reduction in Treasury yields – the ten-year peaked at 3.49% in mid-June and was down to 2.98% at month end – could have prompted larger increases.

We noted last quarter that coupon rate increases likely would dampen the pace of lending in 2Q. Loan production volume did fall back meaningfully from 1Q's strong showing; we describe details in the Lending Activity section below.

Chart 1

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.



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.

All maturities on the U.S. Treasury yield curve increased (see Charts 2 and 3). The curve remained relatively flat for intermediate maturities.

Chart 2

US Treasury Yields

(In %)

Source: U.S. Treasury; Giliberto-Levy

◆ Mar 31, 2022
■ Jun 30, 2022

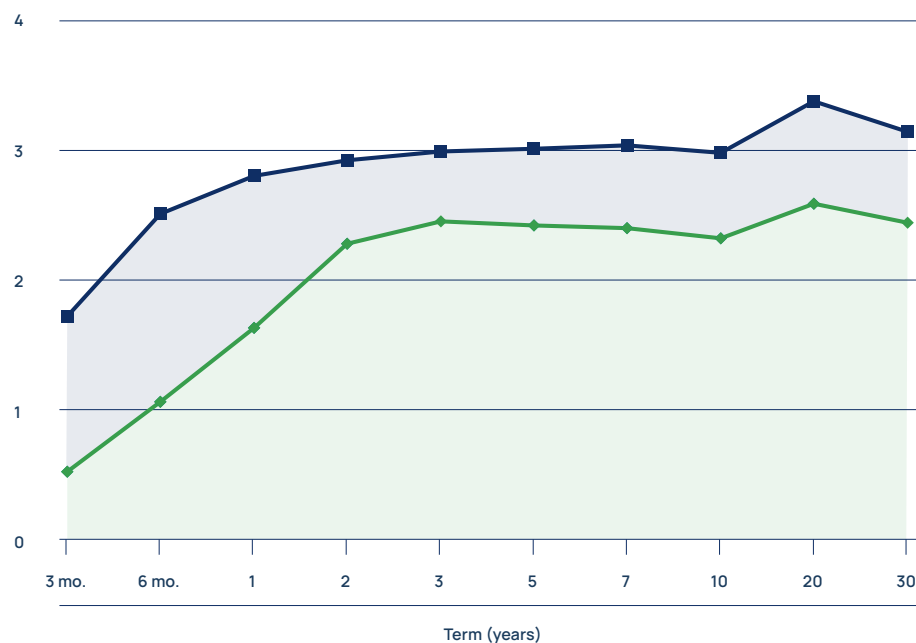
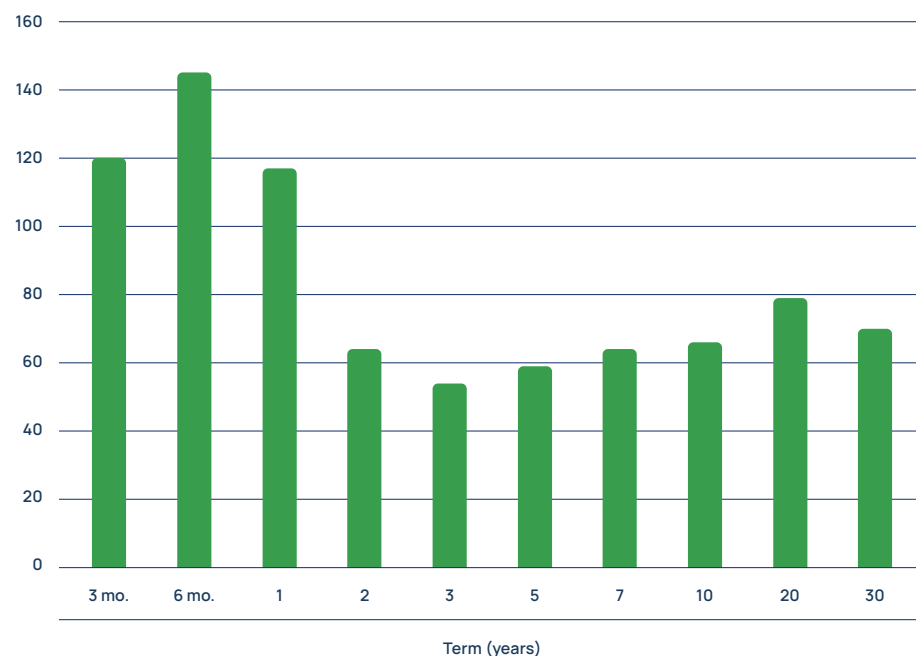


Chart 3

Changes in US Treasury Yields March 31, 2022 to June 30, 2022

(In basis points)

Source: U.S. Treasury; Giliberto-Levy



Market Trends: 2Q 2022

Table 1

Key Rates (in %)

	3/31/2022	6/30/2022	Change
20-year Treasury Yield	2.59	3.38	0.79
20-year Mortgage Spread	1.85	1.87	0.02
20-year Mortgage Yield	4.44	5.25	0.81
10-year Treasury Yield	2.32	2.98	0.66
10-year Mortgage Spread	1.85	1.87	0.02
10-year Mortgage Yield	4.17	4.85	0.68
7-year Treasury Yield	2.40	3.04	0.64
7-year Mortgage Spread	1.85	1.87	0.02
7-year Mortgage Yield	4.25	4.91	0.66
5-year Treasury Yield	2.42	3.01	0.59
5-year Mortgage Spread	1.85	1.87	0.02
5-year Mortgage Yield	4.27	4.88	0.61

Source: U.S. Treasury; Giliberto-Levy

- Table 1 shows the effect of rising Treasury yields on commercial mortgage yields. The mortgage curve is basically flat from five through ten years, reflecting the flatness of the Treasury curve.
- We measured a 25-basis point (bp) size premium across most sectors for loans below \$10 million. Small industrial loans carried a larger 40-bp premium. Apartments had a 25-bp premium, but it was limited to loans below \$5 million. Not all small loans had premiums, but on average premiums were statistically significant.
- Lending on hotel/lodging assets continued to pick up. Spreads ranged from 200 bp to 300 bp, and LTVs generally were below 60%. This was unchanged from 1Q 2022.
- The National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index posted a 2.7% price increase for the quarter. Office registered an insignificant decline. Retail and lodging were each up less than 1%. Apartment and industrial continued to appreciate but at a reduced pace, adding 3.2% and 5.6%, respectively. Prices reflect both property sales and appraisals.

Credit Tracker

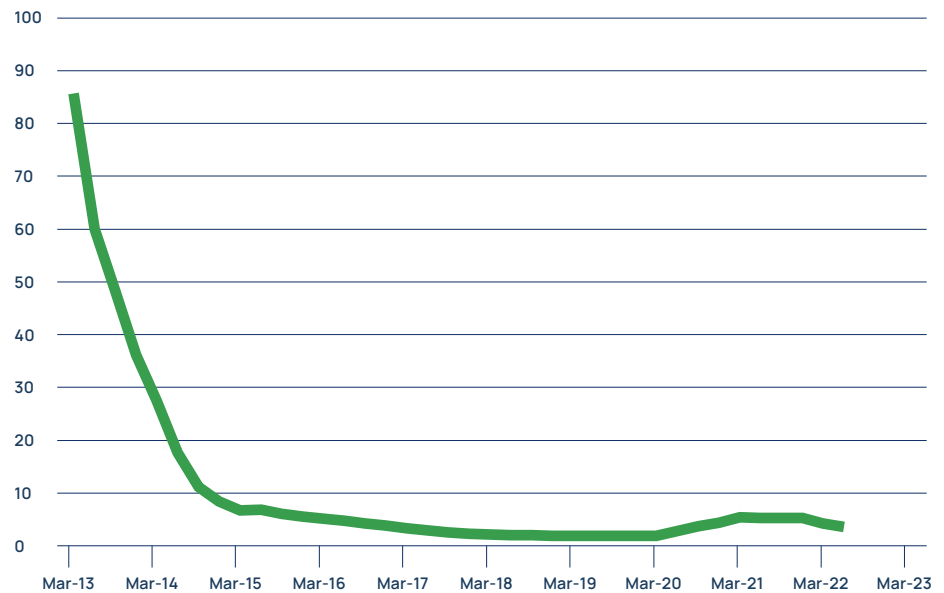
Trailing four-quarter credit effects shaved off another 1 bp from the prior quarter's pace, coming in at 3 bp (see Chart 4).

Chart 4

Commercial Mortgage Credit Effects

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

Source: Giliberto-Levy



The reduced rate reflects, in part, an increase in the index's total principal outstanding due to the addition of new loans. This also contributed to a fall in the elevated risk percentage, which is the share of loans in G-L 1 that are in the amber and red risk zones in our credit tracker heat map (see Table 2 and Chart 5).

Table 2

Credit Quality Distribution: All G-L 1 Loans

As a percentage of June 30, 2022 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	0.7%	0.6%	0.1%	0.2%	0.2%	0.2%	1.9%
1.01 to 1.15	0.6%	0.9%	0.1%	0.2%	0.1%	0.0%	2.0%
1.15 to 1.5	3.9%	4.9%	1.1%	0.9%	0.4%	0.1%	11.3%
1.5 to 1.75	6.3%	4.8%	1.1%	0.4%	0.2%	0.0%	12.9%
above 1.75	48.5%	17.1%	3.6%	0.9%	0.4%	0.1%	70.7%
Unknown	0.6%	0.5%	0.0%	0.0%	0.0%	0.0%	1.2%
Total	60.6%	28.9%	6.0%	2.7%	1.4%	0.4%	100.0%

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

Zone	Red	Amber	Green	Unknown
Total	2.2%	3.2%	93.4%	1.2%

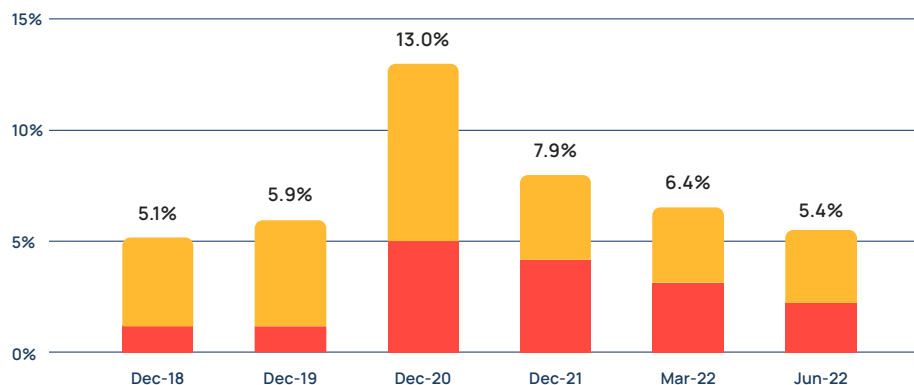
Source: Giliberto-Levy

Chart 5

Potential At-Risk Loans

As a percentage of loan balances at month end

Source: Giliberto-Levy



Relative Performance

Treasury yield increases again caused investment-grade fixed-income investments to have a horrible quarter (see Table 3).

Table 3

Total Return as of June 30, 2022

Index	Total Return (%)			Duration as of 6/30/2022
	2Q 2022	YTD	Last 4 Q	
Commercial Mortgages*	-1.94	-6.27	-5.61	5.05
Duration-adjusted Baa Bond	-5.36	-11.01	-11.24	5.05
CMBS: Investment Grade	-2.88	-8.28	-8.90	4.83
CMBS 2.0	-3.26	-8.44	-8.96	4.31
TSY Int. Term	-1.67	-5.80	-6.35	3.86
TSY 5-7 yr. Term	-2.81	-8.28	-8.90	5.63
Credit Int. Term	-3.63	-8.52	-8.96	4.21
A Int. Term	-3.37	-8.25	-8.79	4.18
Baa Int. Term	-4.56	-9.76	-10.08	4.45
High-yield Int. Term	-9.59	-13.58	-12.35	4.07
Ba Int. Term	-7.89	-12.73	-11.40	4.28

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

Sources: Bloomberg Barclays Indexes; Giliberto-Levy

Investment-grade CMBS had -2.88% total return, according to Bloomberg Barclays Indices. Interestingly, both G-L 1 and CMBS returns were in the same zone as intermediate-term Treasury issues. In contrast, corporate bonds experienced another drubbing: Baa-rated bonds with duration like G-L 1 were down more than 5%.

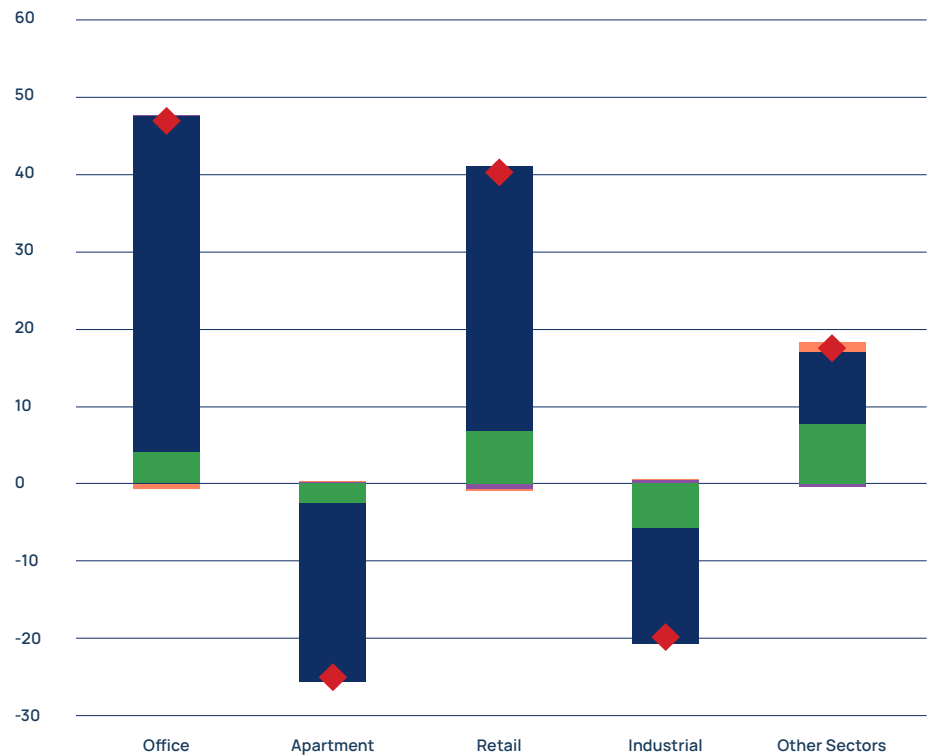
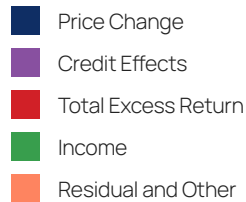
Property sector relative (to the overall index) performance variation is largely explained by differences in duration and income yields (see Chart 6). Duration is a driver of price performance. With commercial mortgage yields moving up, as shown in Table 1, most of this quarter's performance differences resulted from different maturity/duration distributions within property sectors.

Chart 6

Sector Performance Attribution 1Q 2022

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 any such revisions do not alter posted G-L 1 returns.*

Table 4

G-L 1 Lending Activity Summary

	Most Recent Period 2Q 2022 P	Prior Period 1Q 2022	Year Ago Comp. Period 2Q 2021
Loan Volume (\$ billions)	5.9	14.1	8.9
Weighted Average:			
LTV	59.6%	58.9%	59.6%
DSCR	1.50	1.96	2.29
Coupon Rate	4.64%	3.61%	3.11%
Spread (basis points)	174	163	157
Term to Maturity (years)	10.1	9.8	10.5
Loan Size (\$ millions)	29.4	38.7	28.2

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

Source: Giliberto-Levy

Even when as-yet-unreported loans are added to 2Q production, it seems unlikely that 2Q volume will match 1Q (see Chart 7). (There has never been a lending volume revision greater than 50%.)

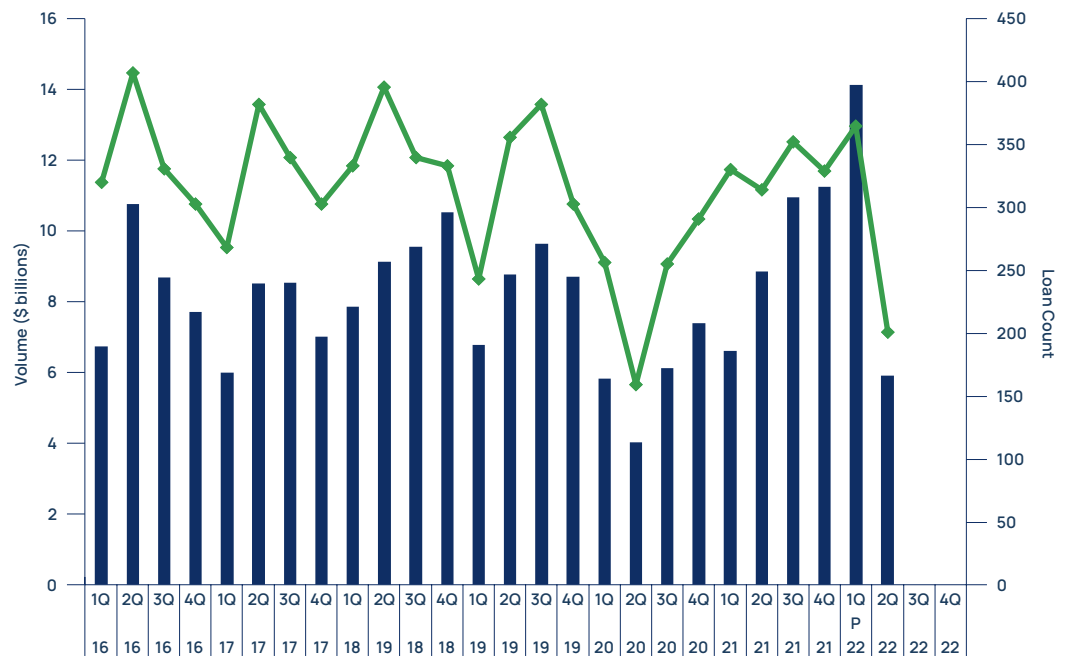
Chart 7

Index-eligible Loan Production

P Preliminary and subject to revision

Source: Giliberto-Levy

◆ # of Loans
— Volume



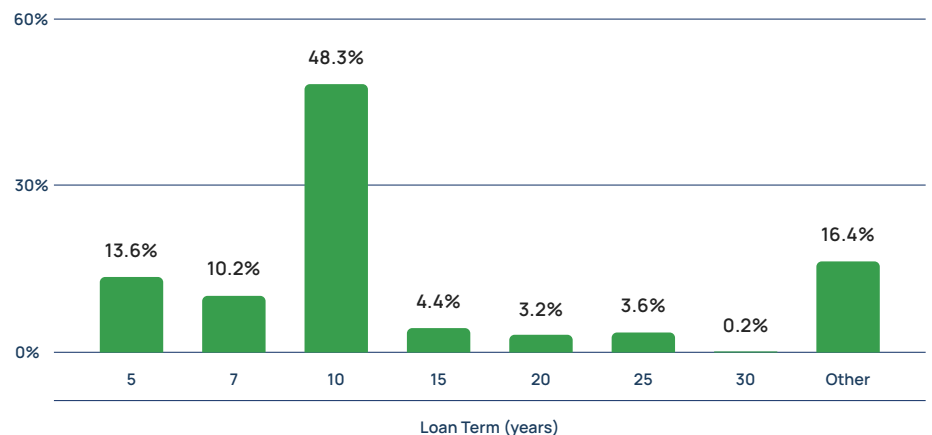
The **ten-year segment's market share by volume held steady at nearly 50%** (see Chart 8). In contrast to last quarter, the 16% share for "other" terms tilted toward terms shorter than ten years.

Chart 8

Distribution of Lending Activity

by Term to Maturity, 2Q 2022

Source: Giliberto-Levy



New loan production was **42% full-term interest-only loans, 50% loans with partial amortization, and 8% fully amortizing loans**. (Sum may differ from 100% due to rounding.) Partially amortizing loans often include an interest-only period up front; more than 70% of these loans, by volume, had an interest-only period this quarter.

We added nearly \$10 billion of new loans to the Index (see Table 5 for details). These were loans made in March, April and May 2022. June 2022 loans, which are included in the production number cited above and depicted in Chart 7 will be added to the 3Q 2022 Index.

Table 5

Profile of Loans Added to Index Second Quarter 2022

	Amount (\$)	Number of Loans	Weighted-Average				
			Coupon	Spread (bp)	DSCR	LTV (%)	Term Years
Office	691,524,250	16	4.26%	188	2.07	51.2	9.9
Apartment	4,416,653,604	149	4.04%	153	1.70	61.3	10.7
Retail	598,278,000	36	4.55%	198	1.59	61.9	9.6
Industrial	2,772,432,321	79	4.30%	175	1.70	57.9	10.5
Other	1,176,530,000	23	4.62%	216	1.57	55.5	11.6
Total	9,655,418,175	303	4.23%	172	1.70	58.9	10.6

Source: Giliberto-Levy

Spreads reported in Table 5 are weighted averages for all loans made during the months listed above. These averages are not spreads used to mark loans to market. We report quarter-end spreads used to value ten-year loans at 60% to 65% LTVs in the exhibit at the top of the *Monitor*. The average of these spreads also appears in Chart 1 and Table 1. These ten-year spreads were drawn from the G-L 1 pricing matrix, which we generate from new loan originations. The pricing matrix captures spread variation in the market due to differences in credit quality, property type, loan term, and other factors.

Commercial Mortgage Perspective

The Federal Reserve is expected to continue to raise interest rates, aiming to slow the economy and moderate inflation. The Fed's challenge is to achieve this without inducing a recession. Investors are not convinced the Fed can pull it off.

Increases and decreases in economic activity generally affect commercial real estate with a modest time lag. In a downturn, for example, property income gradually declines as vacancy increases due to reduced tenant demand for space. Capital markets factors affect discount rates, often leading to lower asset values. Depending on a downturn's severity and length, these market forces can produce credit losses in commercial mortgage portfolios.

The G-L 1 credit tracker heat map's (Table 2) elevated risk level measure (Chart 5) is an early warning system for possible credit losses. This is illustrated by recent history. Table 6 places elevated risk readings from Chart 5 alongside credit effects measured as of the next quarter. Movement in the risk reading is mirrored in credit effects.

Table 6

G-L 1 Elevated Risk Reading and Subsequent Credit Effects

Risk Reading Date	Elevated Risk Reading	Credit Effect Date	Trailing Four-Quarter Credit Effect (bp)
12/31/2018	5.1%	3/31/2019	2
12/31/2019	5.9%	3/31/2020	2
12/31/2020	13.0%	3/31/2021	5
12/31/2021	7.9%	3/31/2022	4
3/31/2022	6.4%	6/30/2022	3

Source: Giliberto-Levy

Given this causal relationship we looked at how risk exposure of G-L 1 commercial mortgages might be affected by a recession. We examined multiple historical scenarios:

- > Early 1990s recession
- > Global financial crisis (GFC)
- > COVID-19 in 2020

We measured declines in property incomes and values that the NPI experienced in the above downturns. We then constructed two more scenarios:

- > The average of income and value declines from the three historical scenarios
- > A worst case, which paired the most severe declines in income and value from the historical scenarios

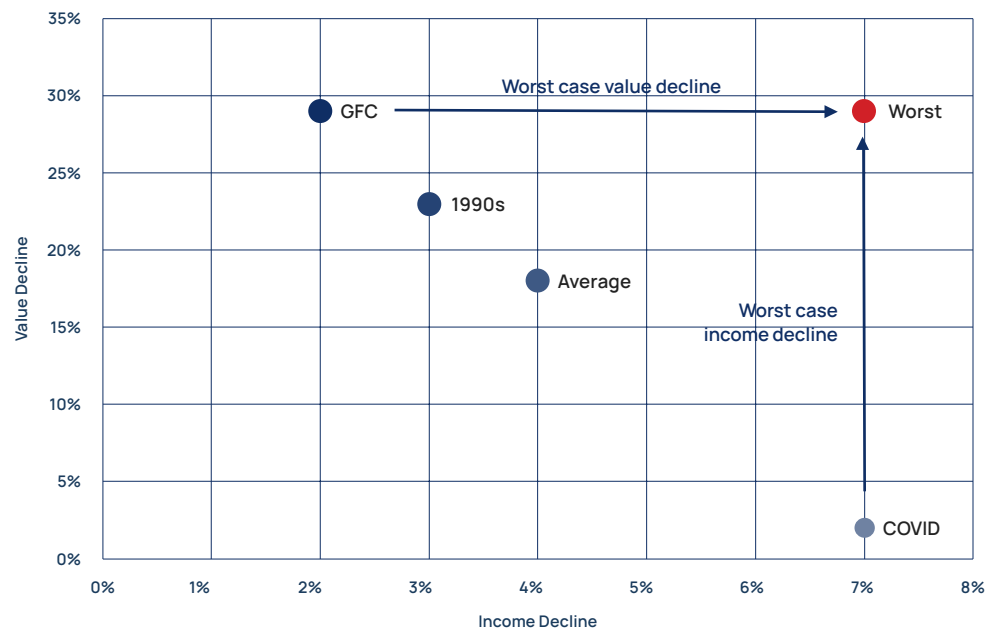
Chart 9 shows peak-to-trough decreases in property incomes and values for the scenarios.

Chart 9

Declines in Property Income and Value for Scenarios

Source: Giliberto-Levy

Note: We used positive numbers in the chart for ease of illustration. For example, for the COVID scenario, income change was -7%; this is shown on the chart as a 7% decline. "Average" is the average of GFC, 1990s and COVID scenarios.

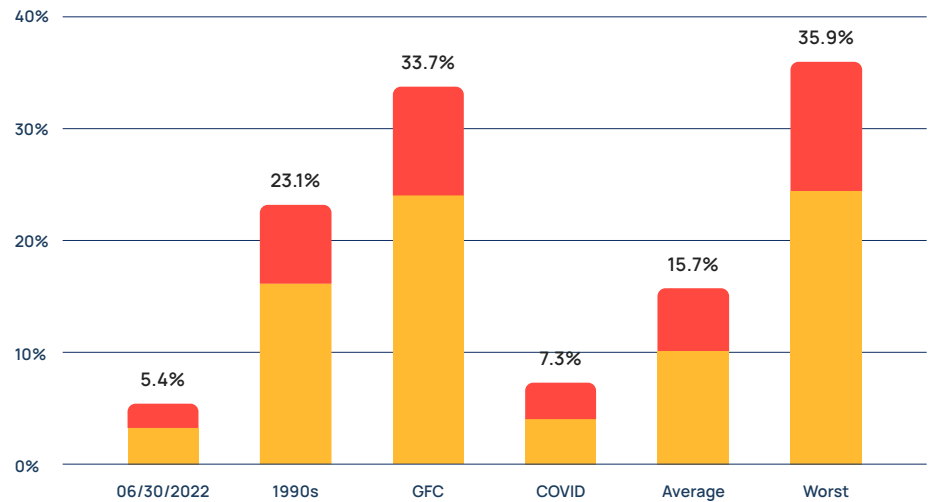
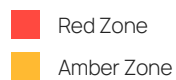


For each scenario, we re-calculated mark-to-market LTV and DSCR for every G-L 1 loan. We noted the total (amber-plus red-zone) elevated risk percentage. Chart 10 shows these plus the current (June 30, 2022) risk reading for comparison.

Chart 10

Downturn Scenarios: Percentage of G-L 1 Loans with Elevated Risk Levels

Source: Giliberto-Levy



Substantial drops in property values in the 1990s and GFC scenarios increased marked-to-market LTVs and pushed more of the (current) index into higher risk zones. The COVID scenario was different: income decline outpaced value decline. As a result, LTVs did not change much, and there was only a modest increase in the elevated-risk percentage.

Our takeaway is that a mild and short recession is unlikely to cause a large uptick in credit effects for commercial mortgage portfolios. However a repeat of a GFC-sized economic contraction coupled with today's higher interest rate environment would have more serious effects.

As always, we welcome your comments and questions.

August 2022

Chart 11

Commercial Mortgage Performance

Rolling four-quarter total return for Total Index

Source: Giliberto-Levy

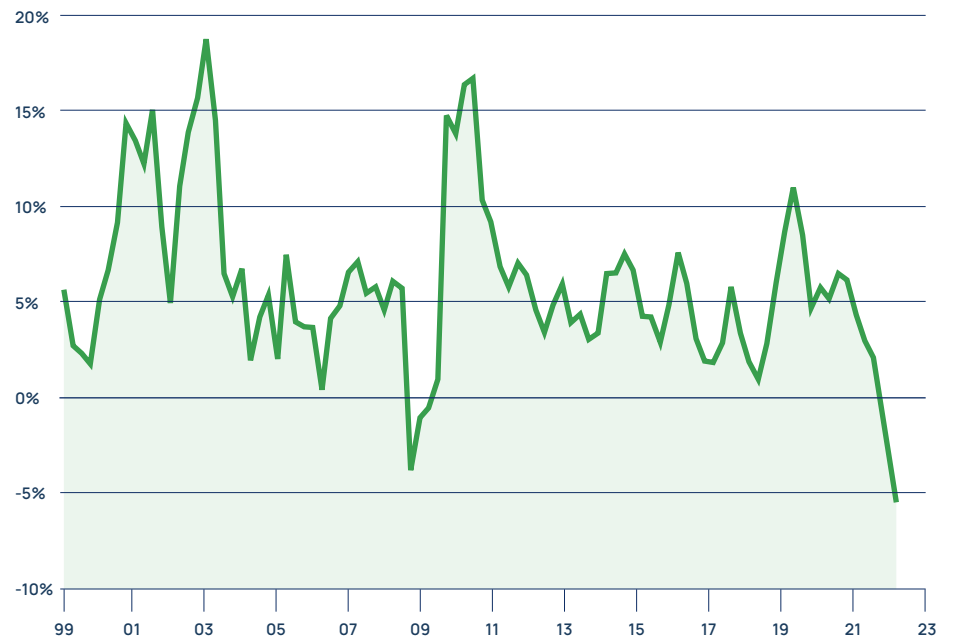


Chart 12

Commercial Mortgage Credit Effects

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

Source: Giliberto-Levy

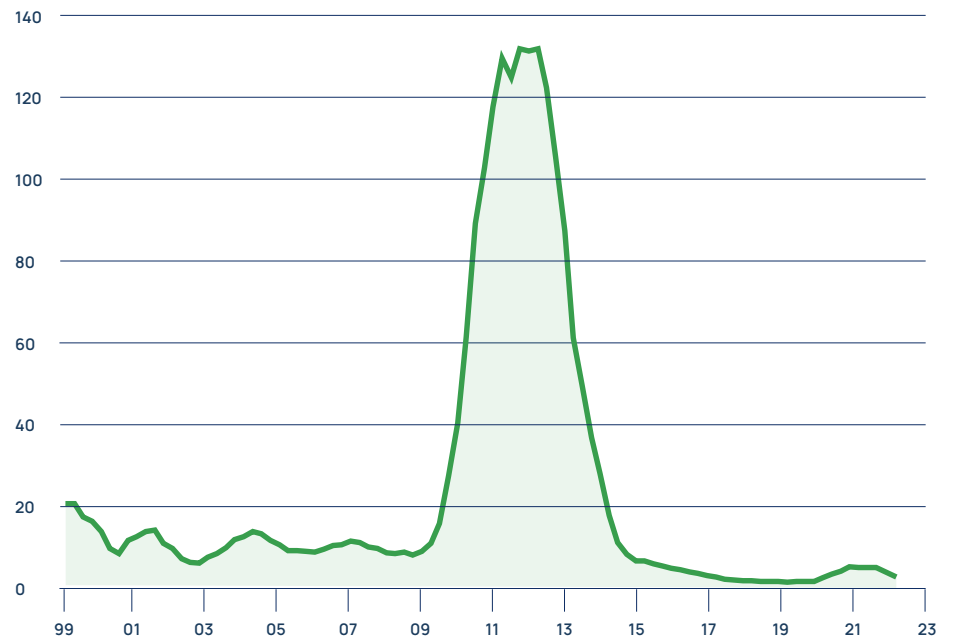


Table A

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

For the quarter ended June 30, 2022

Sector	Returns (%)						Index Level	Credit Effects (book value; bp)		
	Last 3 months				YTD Total	Last 12 Months		Last 3 Months	YTD	Lasat 12 Months
	Income	Price	Other	Total						
Office	1.02	-2.51	0.02	-1.47	-5.28	-4.75	2313.91	1	2	4
Apartment	0.96	-3.18	0.03	-2.20	-6.77	-6.02	2976.97	1	1	2
Retail	1.05	-2.62	0.02	-1.54	-5.44	-4.78	2749.22	2	3	6
Industrial	0.92	-3.10	0.03	-2.15	-6.74	-6.40	2672.32	0	1	2
Others	1.06	-2.86	0.04	-1.76	-5.93	-4.86	N/A	1	2	4
Total	0.98	-2.95	0.03	-1.94	-6.27	-5.61	2509.67	1	2	3
Aggregate	0.98	-2.96	0.02	-1.95	-6.28	-5.65	4059.58	1	2	3

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

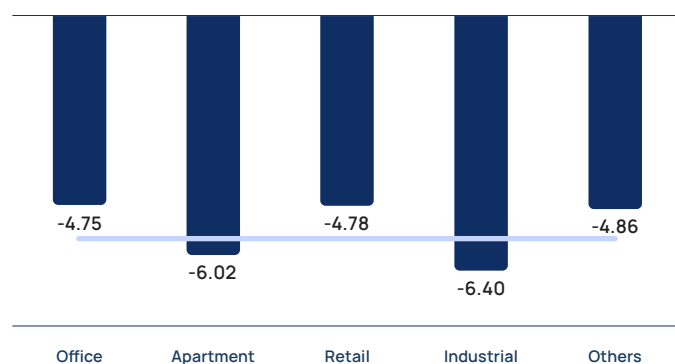
Other Return is paydown return and compounding

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

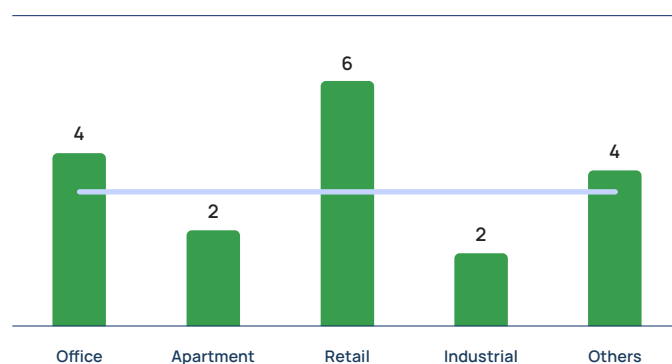


Table B

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

Performance by Property Sector

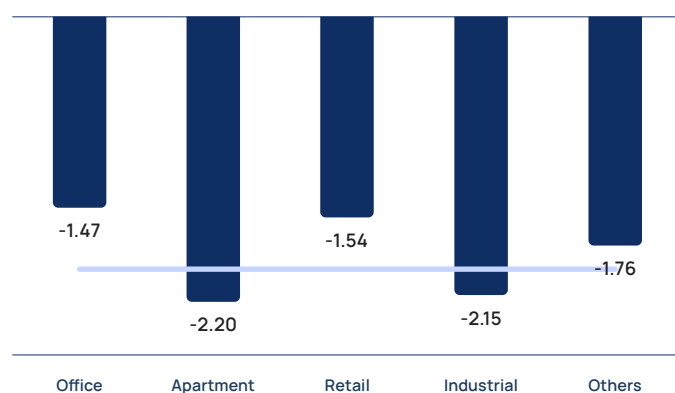
For the quarter ended June 30, 2022

Sector	Returns (%)				Statistics						
	Income	Price	Other	Total	Mod. Duration	Coupon	Maturity	Price	Yield	Pct. of Portfolio	Num. of Cohorts
Office	1.02	-2.51	0.02	-1.47	4.37	4.09	6.19	96.3	4.75	16.5%	2176
Apartment	0.96	-3.18	0.03	-2.20	5.43	3.78	7.33	94.6	4.64	45.4%	6340
Retail	1.05	-2.62	0.02	-1.54	4.45	4.19	6.33	95.9	4.90	14.4%	3510
Industrial	0.92	-3.10	0.03	-2.15	5.09	3.67	6.88	94.9	4.51	17.2%	2946
Others	1.06	-2.86	0.04	-1.76	5.37	4.14	8.27	93.8	5.19	6.5%	1164
Total	0.98	-2.95	0.03	-1.94	5.05	3.90	6.98	95.1	4.71	100.0%	16136
Aggregate	0.98	-2.96	0.02	-1.95	5.03	3.88	6.89	95.2	4.67	93.5%	14972

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

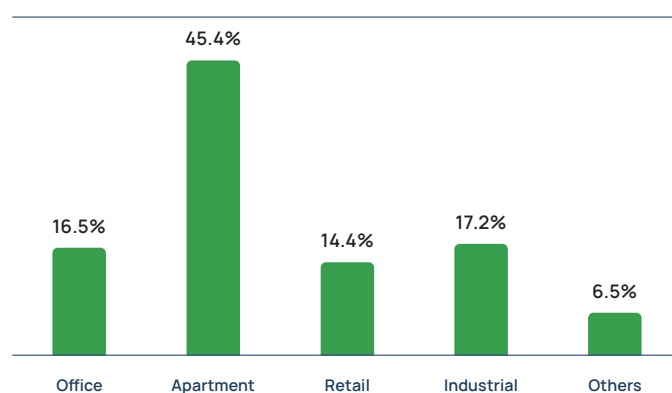


Table C

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

Performance by Book LTV Classification

For the quarter ended June 30, 2022

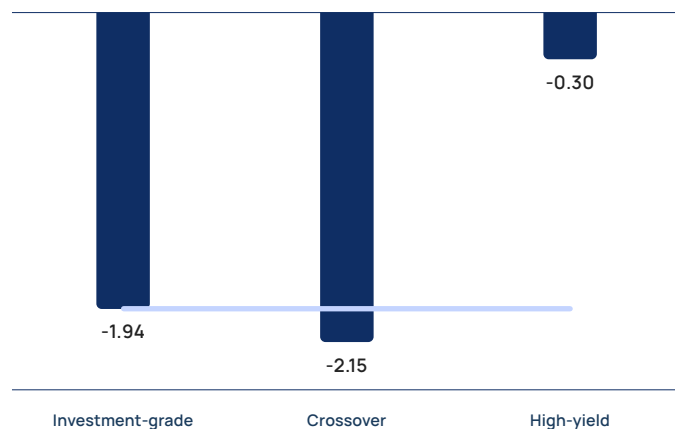
Credit quality using book value	Returns (%)				Statistics Averages						
	Income	Price	Other	Total	Mod. Duration	Coupon	Maturity	Price	Yield	Pct. of Portfolio	Num. of Cohorts
Investment-grade	0.98	-2.94	0.03	-1.94	5.04	3.89	6.98	95.1	4.70	98.1%	15862
Crossover	1.04	-3.24	0.04	-2.15	5.40	4.09	7.39	92.8	5.33	1.9%	272
High-yield	1.18	-1.50	0.02	-0.30	1.87	4.72	2.00	97.6	5.78	0.0%	2
Total	0.98	-2.95	0.03	-1.94	5.05	3.90	6.98	95.1	4.71	100.0%	16136

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 1 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

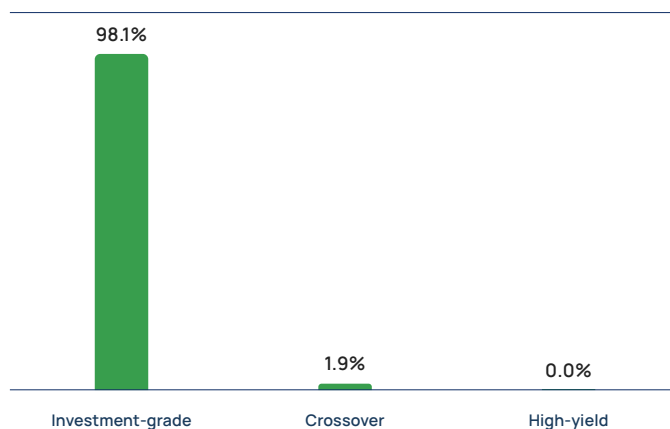


Table D

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

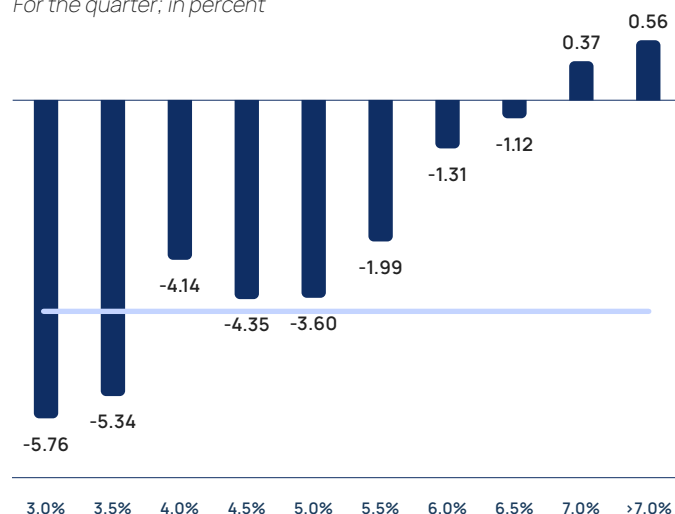
Performance by Coupon Rate

For the quarter ended June 30, 2022

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%	0.75	-3.70	0.04	-2.92	6.33	2.74	7.97	88.3	4.68	10.7%	1123
3.0% to 3.5%	0.86	-3.62	0.04	-2.72	6.08	3.28	8.09	91.1	4.70	18.9%	2252
3.5% to 4.0%	0.96	-2.45	0.03	-1.46	4.34	3.78	5.80	95.7	4.68	29.0%	3880
4.0% to 4.5%	1.06	-2.90	0.03	-1.82	4.89	4.25	7.08	97.3	4.74	26.3%	3744
4.5% to 5.0%	1.15	-2.98	0.02	-1.82	4.89	4.72	7.27	99.5	4.77	9.9%	1694
5.0% to 5.5%	1.25	-2.54	-0.01	-1.29	4.45	5.23	7.49	101.6	4.77	2.1%	612
5.5% to 6.0%	1.35	-1.75	-0.05	-0.45	3.58	5.73	6.42	103.4	4.65	1.4%	859
6.0% to 6.5%	1.46	-1.53	-0.10	-0.16	2.97	6.24	5.36	104.5	4.65	0.9%	753
6.5% to 7.0%	1.57	-1.09	-0.11	0.37	2.84	6.71	5.23	105.2	4.63	0.3%	282
7.0% & above	1.75	-0.97	-0.22	0.56	2.82	7.61	5.36	107.1	4.58	0.5%	937
Total	0.98	-2.95	0.03	-1.94	5.05	3.90	6.98	95.1	4.71	100.0%	16136

Total Return by Coupon Rate

For the quarter; in percent



Portfolio Composition by Coupon Rate

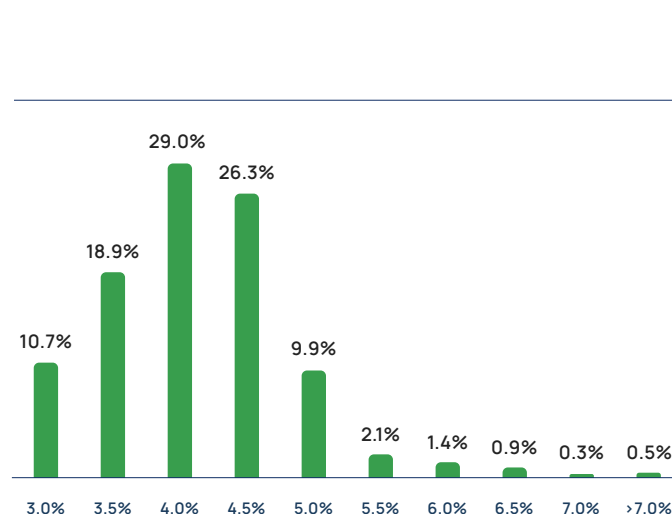


Table E

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

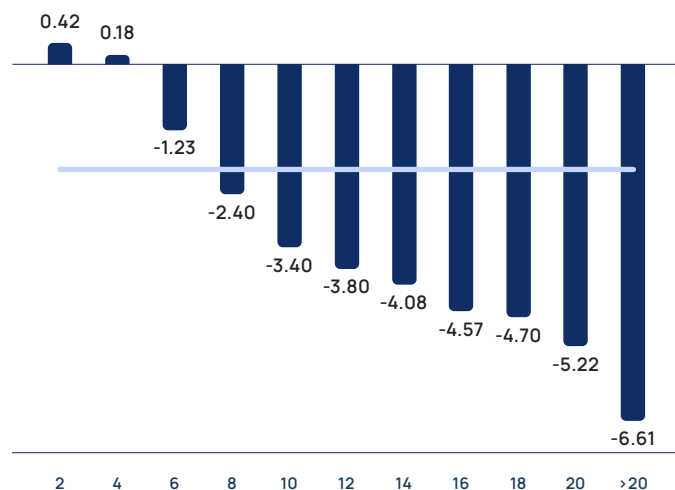
Performance by Remaining Term to Maturity

For the quarter ended June 30, 2022

Maturity Cell	Returns (%)				Statistics						
	Income	Price	Other	Total	Mod. Duration	Coupon	Maturity	Price	Yield	Pct. of Portfolio	Num. of Cohorts
0 to 2 years	1.03	-0.60	-0.02	0.42	1.03	4.15	1.09	99.7	4.34	13.3%	2673
2 to 4 years	1.00	-0.83	0.01	0.18	2.79	3.98	3.10	97.8	4.71	18.0%	3166
4 to 6 years	0.97	-2.22	0.02	-1.23	4.28	3.87	4.99	96.1	4.76	18.2%	2655
6 to 8 years	0.98	-3.41	0.03	-2.40	5.69	3.89	6.91	94.7	4.78	17.1%	2173
8 to 10 years	0.91	-4.34	0.04	-3.40	7.14	3.53	9.07	91.2	4.75	15.1%	2117
10 to 12 years	1.00	-4.84	0.04	-3.80	7.65	4.02	11.01	94.1	4.71	5.2%	869
12 to 14 years	0.98	-5.12	0.07	-4.08	8.14	3.81	13.01	91.9	4.77	4.0%	821
14 to 16 years	1.01	-5.65	0.06	-4.57	8.68	4.04	14.84	92.3	4.85	3.2%	575
16 to 18 years	1.03	-5.81	0.07	-4.70	8.96	4.12	16.95	92.9	4.88	1.7%	353
18 to 20 years	0.95	-6.28	0.11	-5.22	9.22	3.63	18.96	87.8	4.94	1.6%	323
20 years & more	1.03	-7.73	0.09	-6.61	10.99	4.09	25.82	89.8	4.95	2.6%	411
Total	0.98	-2.95	0.03	-1.94	5.05	3.90	6.98	95.1	4.71	100.0%	16136

Total Return by Maturity Cell

For the quarter; in percent



Portfolio Composition by Maturity Cell

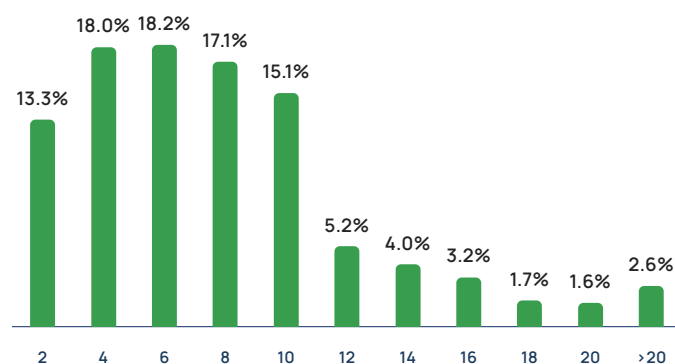


Table F

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

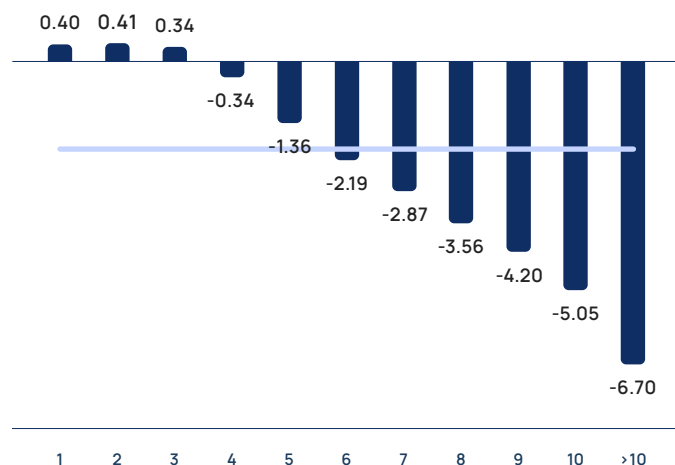
Performance by Duration

For the quarter ended June 30, 2022

Duration Cell	Returns (%)				Statistics						
	Income	Price	Other	Total	Mod. Duration	Coupon	Maturity	Price	Yield	Pct. of Portfolio	Num. of Cohorts
0 to 1 year	1.00	-0.56	-0.04	0.40	0.53	4.03	0.56	99.8	4.11	5.8%	1555
1 to 2 years	1.08	-0.66	-0.01	0.41	1.44	4.38	1.61	99.8	4.53	8.2%	2001
2 to 3 years	1.01	-0.68	0.01	0.34	2.45	4.02	2.82	98.4	4.70	10.3%	2056
3 to 4 years	0.99	-1.35	0.01	-0.34	3.47	3.92	4.08	97.1	4.74	12.8%	1861
4 to 5 years	0.99	-2.38	0.02	-1.36	4.42	3.97	5.49	96.5	4.77	12.1%	1849
5 to 6 years	0.99	-3.21	0.03	-2.19	5.44	3.95	6.89	95.4	4.78	14.1%	1841
6 to 7 years	0.95	-3.86	0.04	-2.87	6.43	3.73	8.86	93.3	4.78	10.9%	1681
7 to 8 years	0.92	-4.53	0.04	-3.56	7.47	3.58	10.38	91.4	4.75	11.5%	1456
8 to 9 years	0.94	-5.19	0.05	-4.20	8.33	3.67	12.37	91.1	4.76	7.2%	864
9 to 10 years	0.96	-6.08	0.07	-5.05	9.41	3.78	16.13	90.5	4.80	3.7%	520
10 years & more	0.98	-7.75	0.07	-6.70	11.51	3.74	20.96	86.8	4.91	3.5%	452
Total	0.98	-2.95	0.03	-1.94	5.05	3.90	6.98	95.1	4.71	100.0%	16136

Total Return by Duration Cell

For the quarter; in percent



Portfolio Composition by Duration Cell

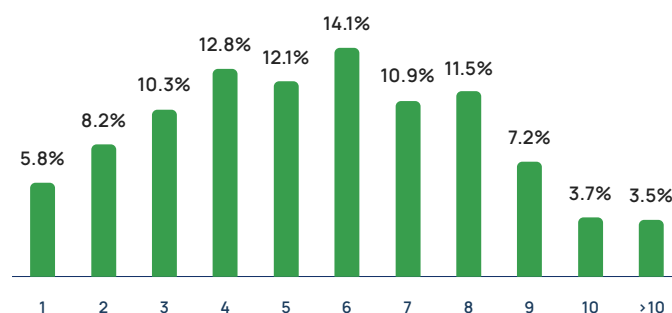


Table G

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

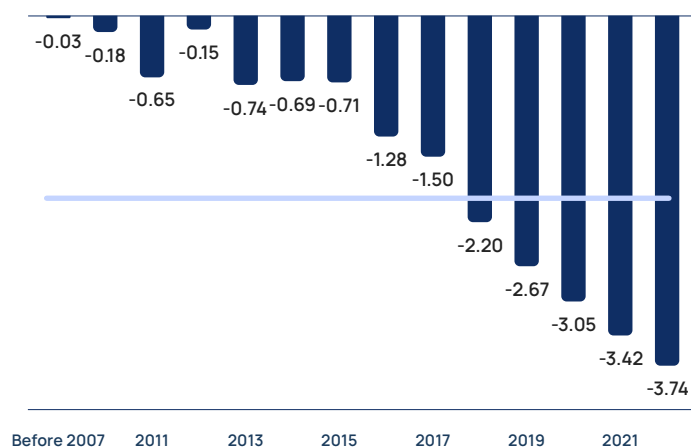
Performance by Vintage Year

For the quarter ended June 30, 2022

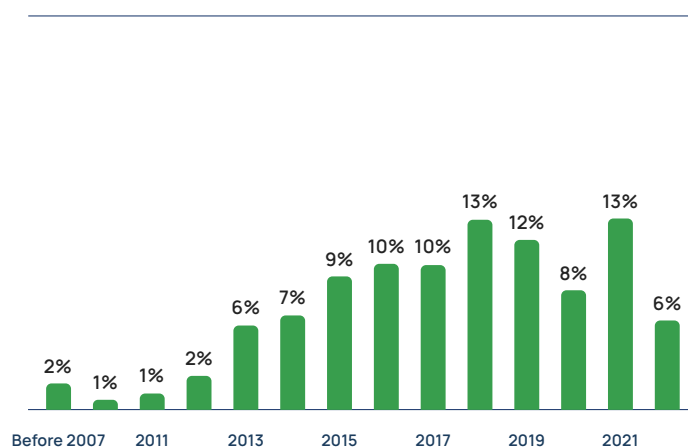
Vintage Year	Returns				Statistics						
	Income	Price	Other	Total	Mod. Duration	Coupon	Maturity	Price	Yield	Pct. of Portfolio	Num. of Cohorts
Before 2007	1.48	-1.38	-0.13	-0.03	2.66	6.30	4.86	104.2	4.58	1.8%	2517
2007 to 2010	1.43	-1.52	-0.09	-0.18	3.26	6.12	6.23	104.6	4.53	0.7%	385
2011	1.22	-1.87	-0.01	-0.65	3.09	5.11	4.85	101.6	4.65	11.1%	266
2012	1.06	-1.18	-0.03	-0.15	2.23	4.32	3.56	99.6	4.25	2.4%	569
2013	1.07	-1.82	0.02	-0.74	2.85	4.35	4.29	99.4	4.62	5.8%	1122
2014	1.05	-1.76	0.02	-0.69	3.42	4.22	4.93	98.4	4.70	6.5%	1007
2015	0.99	-1.72	0.02	-0.71	3.60	3.94	5.08	97.3	4.64	9.2%	1444
2016	0.96	-2.28	0.04	-1.28	4.11	3.80	5.80	96.1	4.75	10.1%	1348
2017	0.99	-2.52	0.03	-1.50	4.39	3.96	5.94	96.6	4.71	10.0%	1379
2018	1.07	-3.30	0.03	-2.20	5.30	4.36	7.40	97.9	4.74	13.1%	1510
2019	0.97	-3.67	0.04	-2.67	5.99	3.79	8.27	94.0	4.76	11.7%	1427
2020	0.83	-3.92	0.04	-3.05	6.47	3.12	8.78	89.8	4.73	8.3%	1124
2021	0.82	-4.27	0.04	-3.42	7.03	3.04	9.17	88.6	4.74	13.2%	1512
2022	0.97	-4.75	0.04	-3.74	7.50	3.88	10.14	92.8	4.81	6.1%	526
Total	0.98	-2.95	0.03	-1.94	5.05	3.90	6.98	95.1	4.71	100.0%	16136

Total Return by Vintage Cohort

For the quarter; in percent



Portfolio Composition by Vintage Cohort



We've just prepared a new white paper on the G-L 2 Index (High-Yield CRE Debt Principal Loss Exposure) that examines how declines in property values might affect principal amounts in the G-L 2 index of high-yield commercial real estate (CRE) debt.

If you'd like a copy of the paper, 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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