



Commercial Mortgage Performance Index<sup>SM</sup>

1Q 2020 RESULTS AND ANALYSIS

The **Giliberto-Levy Monitor** reports quarterly results of the **Giliberto-Levy Commercial Mortgage Performance Index<sup>SM</sup>** and provides comprehensive in-depth market analysis and commentary on key aspects of the commercial mortgage industry. A subscription to the **Giliberto-Levy Monitor** includes access to the **Giliberto-Levy Analyzer**—a custom query tool enabling analysis of total return on a long-term historical basis.

## Update from the G-L 2

Our Giliberto-Levy High-Yield Real Estate Debt Index (the G-L 2) offers investors a performance benchmark for mezzanine debt, preferred equity, and A/B note structures, among others. The G-L 2 is fully consistent with other mark-to-market indexes, including other commercial real estate investment performance indexes. For the 12 months ended 3/31/20, the G-L 2 notched a return of 7.01%, which is 167 basis points lower than the 8.68% return tallied since its inception at the beginning of 2010. By contrast, the G-L 1 (our first mortgage, fixed-rate index covered in this Monitor) showed a return of 4.53% - 248 basis points lower - for the 12 months ended 3/31/20. Of equal interest, investment-grade CMBS, as measured by Bloomberg Barclays indices, showed a total return of 5.38% for the same 12 months, with slightly more volatility than the G-L 2.

To learn more about the G-L 2 or join the Founders Group, please contact **John Levy at 804-500-9025 or [jlevy@jblevyco.com](mailto:jlevy@jblevyco.com)**.

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## MARKET OVERVIEW

### FIRST QUARTER 2020 SUMMARY

		As of	
		2/28/2020	3/31/2020
<b>Total Return:</b> (in %)	Total (all sectors)	3.81	-0.92
	Office	3.63	-0.46
	Multi-family	3.80	-1.30
	Retail	3.86	-0.53
	Industrial	3.70	-0.87
<b>Spreads:</b>	Office	175	335
	Multi-family	160	320
	Retail	178	338
	Industrial	161	321
<b>Index Statistics:</b>	Capitalization (\$ billion)	267.54	
	Duration (years)	5.33	
	Coupon (%)	4.21	
	Maturity (years)	7.50	
	Book LTV (%)	49.90	

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) started 1Q 2020 on an upbeat note, generating positive returns in January and February. **In March the COVID-19 shutdown of the U.S. economy caused asset prices to fall as credit spreads widened, leading to a -0.92% total return for the G-L 1.**<sup>1</sup> Income return was 0.99%. Capital value, which reflects pricing movements and paydown effects, declined 1.91%. Trailing four-quarter total return dropped to 4.53% down from calendar year 2019's 8.39%.

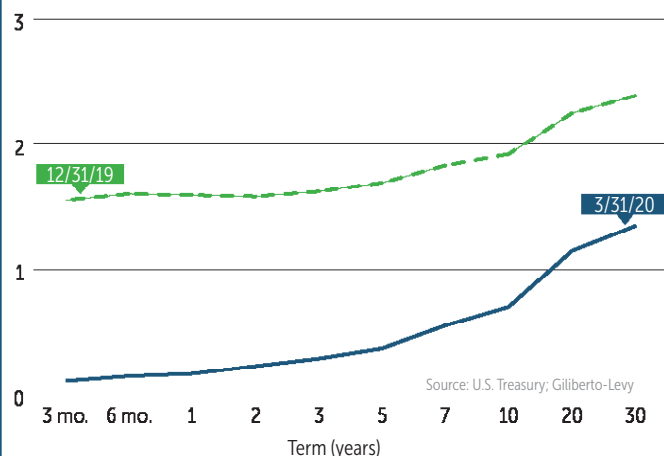
**U.S. Treasury yields fell across the board** (see Charts 1 and 2). Short-term rates declined the most. The yield curve's positive slope increased. (It was not too long ago that the curve was inverted.) The Federal Reserve essentially cut short rates to zero and put in place

<sup>1</sup> 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.

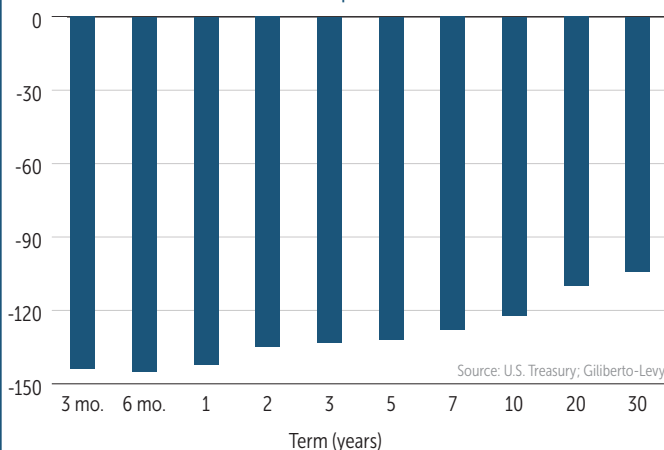
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massive lending and securities buying programs in an effort to prevent financial markets from seizing up.

**Chart 1: US Treasury Yields 12/31/19 and 3/31/20 (in %)**



**Chart 2: Changes in US Treasury Yields 12/31/19 to 3/31/20 (in basis points)**



**Our composite (of major sectors) credit spreads was up more than 160 basis points (bp) at the end of 1Q** (see Chart 3). Importantly, end-of-March spreads are estimates derived from examining spread changes for indexes of publicly traded fixed-income investments. This was done because, based on data reported to us, life insurance companies and pension funds priced no new commercial mortgage loans from March 18 through early April. Details of the information we had and how we used it to estimate spreads are contained in two notes that were sent out to accompany preliminary and final releases of G-L 2 returns, respectively. We believe the **March spreads**

**should be regarded as indicative or "asking" spreads.** In contrast, the spreads we regularly report reflect actual market transactions, i.e., where ask and bid spreads converged after negotiations and resulted in deals.

**Chart 3: Spreads over Treasuries for Ten-year Commercial Mortgages**

In basis points, reflecting 30/360 day count convention



## PRICING TRENDS: 1Q 2020

**Table 1: Key Rates (in %)**

	12/31/2019	3/31/2020	change
20-year Treasury Yield	2.25	1.15	-1.10
20-year Mortgage Spread	1.65	3.29	1.64
20-year Mortgage Yield	3.90	4.44	0.54
10-year Treasury Yield	1.92	0.70	-1.22
10-year Mortgage Spread	1.65	3.29	1.64
10-year Mortgage Yield	3.57	3.99	0.42
7-year Treasury Yield	1.83	0.55	-1.28
7-year Mortgage Spread	1.65	3.29	1.64
7-year Mortgage Yield	3.48	3.84	0.36
5-year Treasury Yield	1.69	0.37	-1.32
5-year Mortgage Spread	1.65	3.29	1.64
5-year Mortgage Yield	3.34	3.66	0.32

Source: U.S. Treasury; Giliberto-Levy

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- In addition to spread comments above, retail and office spreads have been “gapping out” relative to multifamily and industrial spreads for several quarters. We believe the gaps may get larger given the disparate effects the sectors are experiencing in the economic downturn caused by the health crisis. Not surprisingly, 1Q’s increase in lodging spreads exceeded the widening other sectors experienced.

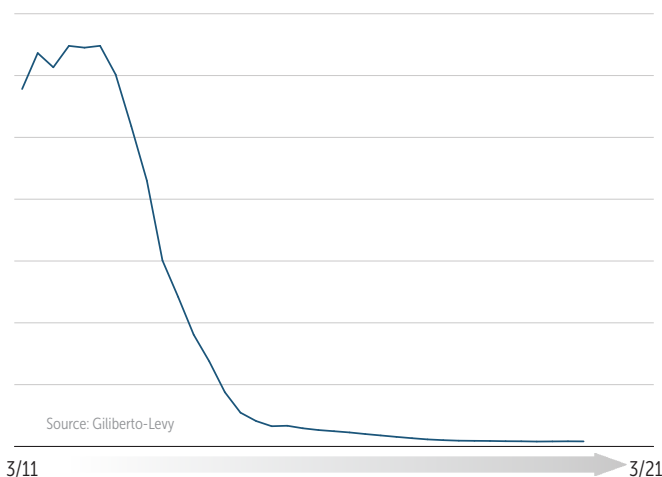
- **Loan size premiums appeared to be absent this quarter.** This may be a function of lower lending volume, though.

## CREDIT EFFECTS

**Our credit effect measure, which reflects losses and unpaid interest, was unchanged at 2 bp on a four-quarter trailing basis (see Chart 4).**

### Chart 4: Commercial Mortgage Credit Effects, 1Q 2011 to 1Q 2020

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



## RELATIVE PERFORMANCE

Other than Treasuries, all fixed-income categories we track showed significant price declines. In most cases that led to negative total returns for 1Q 2020 even with coupon interest income considered (see Table 2).

- Treasury issues with five to seven years of remaining term soared on the strength of sharply lower yields, producing 7.64% total return.
- CMBS, as measured by the Bloomberg Barclays index, posted a

positive 0.47%. Investment-grade CMBS yields did not increase as much as the “asking” yields and spreads ultimately used to construct G-L 1 results.

- Investment-grade corporate bonds had a not-so-bad to terrible quarter. For example, A-rated intermediate-term corporates posted a modest negative return, but Baa-rated intermediates, just one notch lower, were nearly 600 bp worse.

**Table 2: Total Return as of March 31, 2020**

Index	Total Return (%)		Duration	
	1Q 2020	YTD	Last 4Q	as of 3/31/20
Commercial Mortgages*	-0.92	-0.92	4.53	5.33
Duration-adjusted Baa Bond	-6.58	-6.58	0.93	5.33
CMBS: Investment Grade	0.47	0.47	5.37	5.21
CMBS 2.0	-1.50	-1.50	3.52	4.97
TSY Int. Term	5.25	5.25	9.02	3.84
TSY 5-7 yr. Term	7.64	7.64	12.51	5.69
Credit Int. Term	-2.35	-2.35	3.28	4.17
A Int. Term	-0.41	-0.41	5.08	4.24
Baa Int. Term	-6.16	-6.16	0.29	4.48
High-yield Int. Term	-12.60	-12.60	-7.09	3.70
Ba Int. Term	-10.04	-10.04	-3.60	3.80

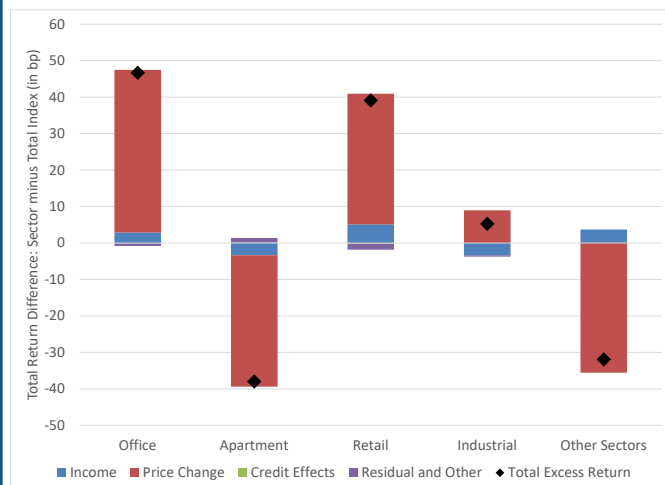
\*Giliberto-Levy Total Index includes office, retail, multifamily, industrial, and other Source: Bloomberg, Barclays; Giliberto-Levy

Property sector relative (to the overall index) performance variation is largely explained by differences in duration and income yields (see Chart 5). Duration is a driver of price performance. Sectors with shorter (than index average) duration generally benefited (see chart 2); these include office, retail and industrial. Keep in mind that in Chart 5, positive returns due to duration are positive *excess* returns relative to the index. No sector turned in positive price return on an absolute basis.

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## Chart 5: Sector Performance Attribution 1Q 2020

Sector performance minus Total Index performance, in basis points.



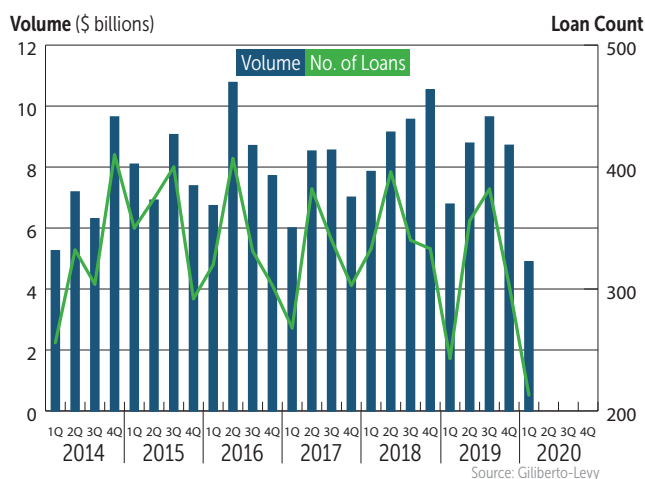
Source: Giliberto-Levy

## LENDING ACTIVITY

• **1Q origination of loans eligible for the Index came in just under \$5.0 billion**, compared with 4Q 2019's \$8.7 billion, revised from the previously reported \$7.7 billion. First quarter generally is the lowest volume period, so not all the fall off in volume should be attributed to March's market dislocation. For example, in 2019 our initial report showed \$5.5 billion, not much higher than this year's data. Once late reports were tallied, 1Q 2019's volume came in at \$6.8 billion.

## Chart 6: Index-eligible Loan Production

1Q 2014 to 1Q 2020



Source: Giliberto-Levy

• **Average loan size was \$23 million**, a drop from last quarter's \$30 million. Loan sizes ranged from \$1.6 million to well over \$200 million. Loans above \$25 million made up roughly two-thirds of dollar volume but accounted for only 30% of the number of loans.

• **The average LTV on new loans eligible for inclusion in the Index was 61%.** This was an increase from last quarter's 58%. However, the average prior to 4Q 2019 was about 62%. The uptick this quarter is in line with that average. Reported DSC was 2.2 times, down from last quarter's 2.4 times.

• The **ten-year segment's market share by volume retreated to 38%, putting it near its recent average.** Last quarter the segment had an unusually high share at 58%. There was a bit of symmetry in the distribution: seven-year deals were about 19% of reported volume, and 15- and 20-year deals together captured about 16%.

• **Full-term interest-only loan market share also retreated, garnering about 40% of volume compared with 51% in 4Q 2019.** Fully amortizing loans were only 4% of total reported volume. These loans tend to be smaller in size. The remaining lending volume was loans that partially amortize prior to scheduled maturity. Within this segment, about 66% had a period of interest-only payments before amortization commences.

• We also noted that **private-market valuations of commercial real estate declined.** The National Council of Real Estate Investment Fiduciaries (NCREIF) compiles a daily valuation index, which is drawn from a limited data set. It showed that appraisal-based valuations of private-market equity real estate declined at an accelerated rate starting in mid-March 2020.

**About \$10 billion of new loans was added to the Index** (see Table 3a for details). This came from two sources: (1) loans originated in December 2019, and January and February 2020 (see Table 3b) and (2) loans originated from January 2019 through November 2019 that were reported too late to be included during the appropriate quarters of 2019 (see Table 3c).

March 2020 loans, which are included in the production number cited above and depicted in Chart 5, will be added to the Index for 2Q 2020.



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**Table 3a: Total Index Additions**

(First Quarter 2020: Current plus Late Reports)

	Amount (\$)	No. of Loans	Weighted-Average				
			Coupon (bp)	Spread	DSCR	LTV (%)	Term (years)
Office	1,055,050,200	40	3.52%	165	2.23	62.8	16.0
Apartment	4,363,222,799	202	3.49%	167	2.12	60.6	11.5
Retail	1,159,033,500	59	3.65%	173	2.17	60.7	10.6
Industrial	1,403,089,915	99	3.54%	158	2.08	58.4	11.8
Other	1,963,586,481	22	3.62%	158	2.53	55.1	10.6
<b>Total</b>	<b>9,943,982,895</b>	<b>422</b>	<b>3.55%</b>	<b>164</b>	<b>2.21</b>	<b>59.5</b>	<b>11.8</b>

Source: Giliberto-Levy

**Table 3b: New Loans**

(Dec. 2019 - Feb. 2020: Current Period Originations)

	Amount (\$)	No. of Loans	Weighted-Average				
			Coupon (bp)	Spread	DSCR	LTV (%)	Term (years)
Office	627,650,000	21	3.55%	167	2.07	65.5	19.6
Apartment	3,501,713,000	148	3.47%	170	2.11	61.0	11.5
Retail	779,243,500	32	3.55%	184	2.19	61.3	9.9
Industrial	851,839,525	58	3.45%	166	2.03	59.8	10.8
Other	1,871,186,481	17	3.61%	155	2.52	54.7	10.8
<b>Total</b>	<b>7,631,632,505</b>	<b>276</b>	<b>3.52%</b>	<b>167</b>	<b>2.21</b>	<b>59.7</b>	<b>11.8</b>

Source: Giliberto-Levy

**Table 3c: Late Reports from 2019**

(Jan. 2019-Nov. 2019 Late Reports)

	Amount (\$)	No. of Loans	Weighted-Average				
			Coupon (bp)	Spread	DSCR	LTV (%)	Term (years)
Office	427,400,200	19	3.49%	162	2.48	58.9	10.7
Apartment	861,509,800	54	3.57%	154	2.14	58.9	11.8
Retail	379,790,000	27	3.86%	150	2.14	59.6	11.9
Industrial	551,250,390	41	3.69%	144	2.16	56.4	13.3
Other	92,400,000	5	3.70%	212	2.61	61.7	7.0
<b>Total</b>	<b>2,312,350,390</b>	<b>146</b>	<b>3.64%</b>	<b>155</b>	<b>2.20</b>	<b>58.5</b>	<b>11.8</b>

Source: Giliberto-Levy

Please note that spreads reported in Tables 3a through 3c are weighted averages of loans made during periods prior to March 2020. These averages do not represent quarter-end pricing parameters. Those 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.

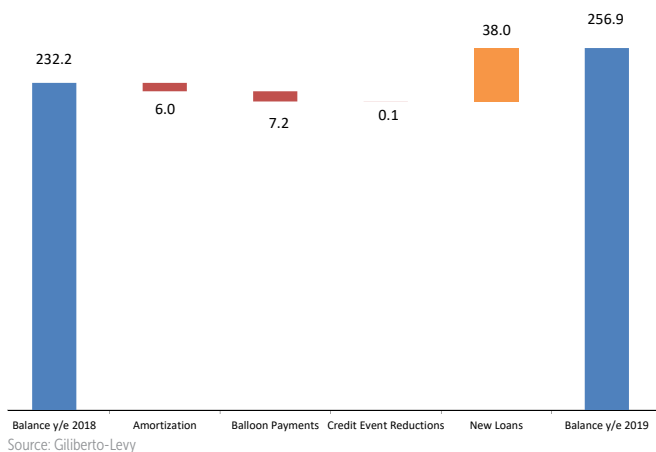
## COMMERCIAL MORTGAGE PERSPECTIVE

We compiled our annual review of the change in the Index's outstanding principal balance over the prior calendar year.

**The Index's outstanding principal balance increased by almost \$25 billion** (see Chart 7). For comparison, in 2018 the outstanding balance increased by \$24.0 billion.

**Chart 7: Components of G-L 1 Index Principal**

Balance Change from Year-end 2018 to Year-end 2019

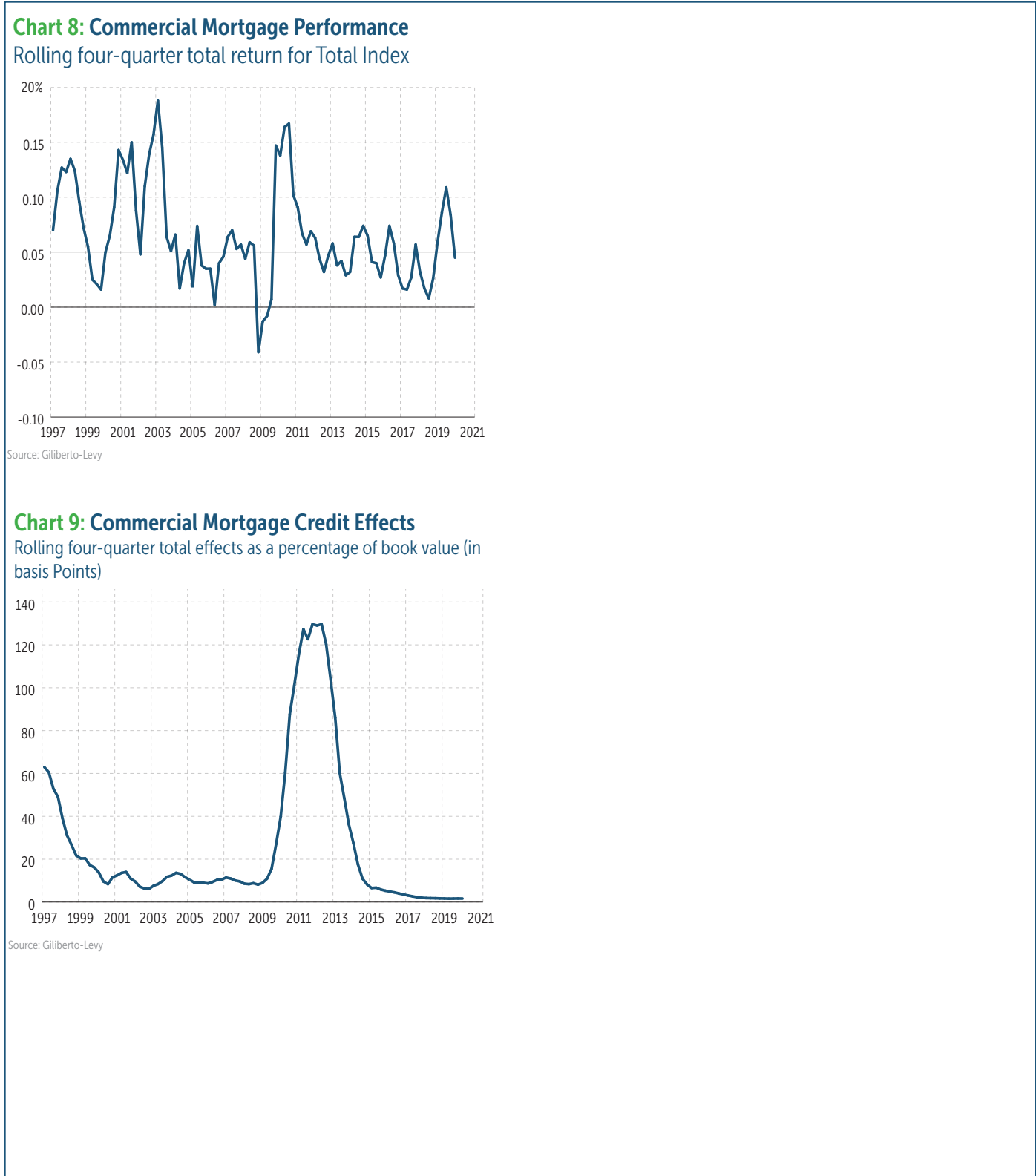


New loans added during 2019, including late reports from 2018, totaled about \$38 billion. This was about the same as the volume reported in 2018.

Chart 7 reconciles the gap between the net increase in principal and the amount of new loans: amortization and balloon payments at loan maturity caused almost all the \$13 billion difference. The value of loans removed due to credit issues was under \$95 million, less than 0.05% of the beginning-of-year outstanding principal. Loss severity during 2018 was about 25%, according to our credit event model.

Last quarter we wrote "we would not be surprised if credit losses drift slightly higher due to continued issues in retail and an overall seasoning effect." That was, of course, written before COVID-19 became pandemic. The potential for credit losses in all sectors has increased, with retail, lodging and office being most vulnerable. As always, we welcome your comments and questions.

June 2020



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## SUPPORTING TABLES AND CHARTS

**Table A: Performance by Property Sector - For the quarter ended March 31, 2020**

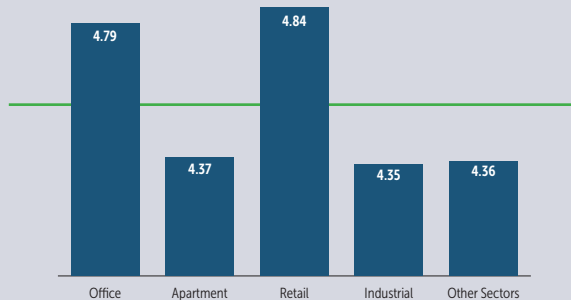
Sector	Returns (%)						Credit Losses (book value; bp)			
	Last 3 months				YTD	Last 12	Index	Last 3		
	Income	Price	Other	Total	Total	Months		Months	YTD	Last 12
Office	1.01	-1.45	-0.02	-0.46	-0.46	4.79	2251.05	0	0	2
Apartment	0.95	-2.25	0.00	-1.30	-1.30	4.37	2901.30	0	0	1
Retail	1.04	-1.54	-0.03	-0.53	-0.53	4.84	2676.16	1	1	3
Industrial	0.95	-1.81	-0.02	-0.87	-0.87	4.35	2618.32	0	0	1
Other Sectors	1.02	-2.25	-0.02	-1.24	-1.24	4.36	N/A	0	0	2
<b>Total</b>	<b>0.99</b>	<b>-1.90</b>	<b>-0.01</b>	<b>-0.92</b>	<b>-0.92</b>	<b>4.53</b>	<b>2448.02</b>	<b>0</b>	<b>0</b>	<b>2</b>
Aggregate	0.98	-1.87	-0.02	-0.90	-0.90	4.54	3960.90	0	0	2

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  
bp Basis Points

**Total Return by Sector Last 12 months (%)**



**Credit Effect by Sector Last 12 months (bp)**



### APPENDIX (Following pages)

#### Supporting Tables and Charts 1Q 2020

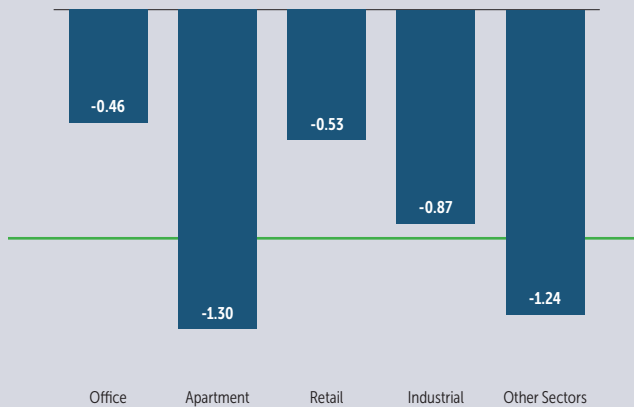
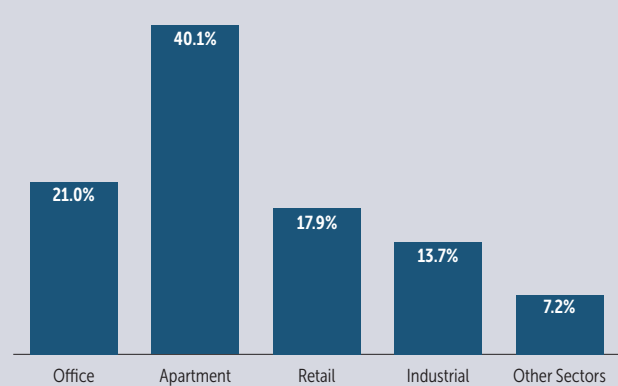
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**Table B: Giliberto-Levy Index Performance by Property Sector - For the quarter ended March 31, 2020**

Sector	Returns (%)				Statistics		Averages			Pct. of Portfolio	No. of Cohorts
	Income	Price	Other	Total	Adj. Duration	Coupon	Maturity	Price	Yield		
Office	1.01	-1.45	-0.02	-0.46	4.80	4.32	6.77	102.2	3.57	21.0%	2,564
Apartment	0.95	-2.25	0.00	-1.30	5.84	4.09	8.03	101.8	3.63	40.1%	5,423
Retail	1.04	-1.54	-0.03	-0.53	4.96	4.42	7.15	102.1	3.67	17.9%	3,965
Industrial	0.95	-1.81	-0.02	-0.87	5.03	4.07	7.01	102.1	3.43	13.7%	2,720
Other Sectors	1.02	-2.25	-0.02	-1.24	5.55	4.36	8.50	100.3	3.99	7.2%	1,313
<b>Total</b>	<b>0.99</b>	<b>-1.90</b>	<b>-0.01</b>	<b>-0.92</b>	<b>5.33</b>	<b>4.21</b>	<b>7.50</b>	<b>101.9</b>	<b>3.63</b>	<b>100.0%</b>	<b>15,985</b>
Aggregate	0.98	-1.87	-0.02	-0.90	5.31	4.20	7.42	102.0	3.60	92.8%	14,672

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

**Total Return by Sector For the quarter (%)**

**Portfolio Composition by Sector**




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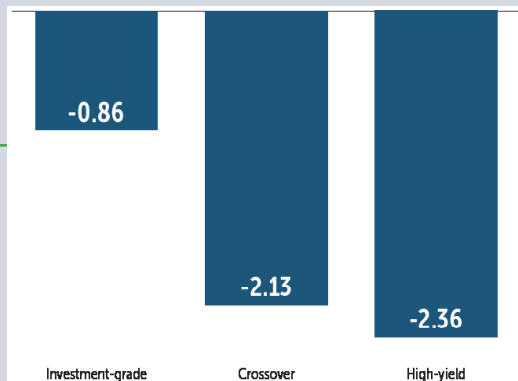
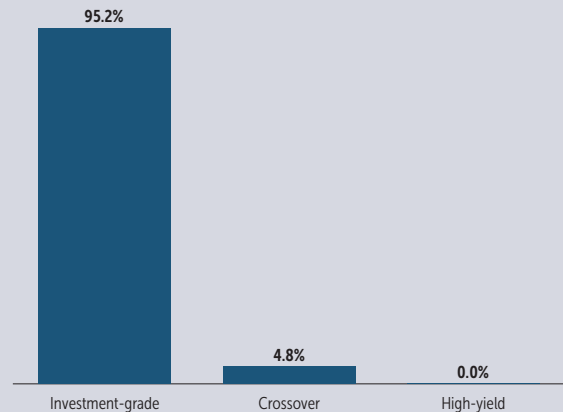
**Table C: Giliberto-Levy Index Performance by Book LTV - For the quarter ended March 31, 2020**

Credit Quality Using Book Value	Returns (%)				Statistics		Averages			Pct. of Portfolio	No. of Cohorts
	Income	Price	Other	Total	Adj. Duration	Coupon	Maturity	Price	Yield		
Investment-grade	0.99	-1.83	-0.02	-0.86	5.25	4.22	7.40	102.0	3.60	95.2%	15,371
Crossover	0.97	-3.12	0.02	-2.13	6.98	4.13	9.62	99.1	4.14	4.8%	612
High-yield	1.04	-3.43	0.02	-2.36	6.53	4.11	8.45	90.5	5.16	0.0%	2
<b>Total</b>	<b>0.99</b>	<b>-1.90</b>	<b>-0.01</b>	<b>-0.92</b>	<b>5.33</b>	<b>4.21</b>	<b>7.50</b>	<b>101.9</b>	<b>3.63</b>	<b>100.0%</b>	<b>15,985</b>

**Credit Quality Definition**

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

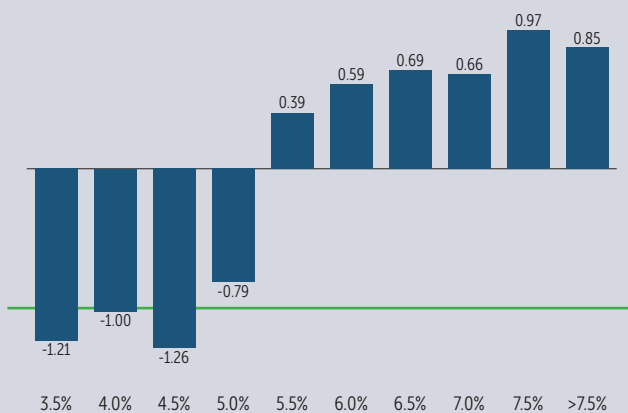
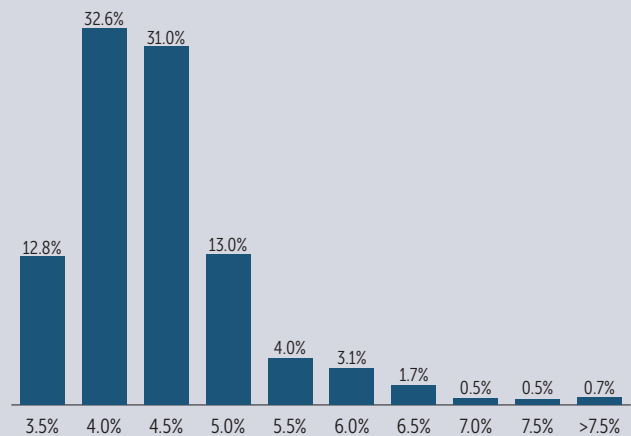
Please note that all G-L 1 loans are senior loans. "Crossover" loans are those with LTVs above 75% and below 85%. They are not subordinate positions that "attach" at 75% LTV and go up to 85% of the capital stack.

**Total Return by Credit Quality For the quarter (%)**

**Portfolio Composition by Credit Quality**


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**Table D: Giliberto-Levy Performance by Coupon Rate - For the quarter ended March 31, 2020**

Credit Quality Using Book Value	Returns (%)				Statistics		Averages			Pct. of Portfolio	No. of Cohorts
	Income	Price	Other	Total	Adj. Duration	Coupon	Maturity	Price	Yield		
0.0% to 3.5%	0.80	-2.01	0.01	-1.21	5.28	3.30	6.91	97.7	3.59	12.8%	1,335
3.5% to 4.0%	0.90	-1.90	0.00	-1.00	5.35	3.79	7.07	100.4	3.62	32.6%	3,712
4.0% to 4.5%	0.98	-2.23	-0.01	-1.26	5.98	4.25	8.63	102.6	3.71	31.0%	3,891
4.5% to 5.0 %	1.09	-1.86	-0.02	-0.79	5.48	4.73	8.15	104.9	3.68	13.0%	1,966
5.0% to 5.5%	1.22	-0.78	-0.05	0.39	3.73	5.24	5.91	105.5	3.44	4.0%	1,030
5.5% to 6.0%	1.34	-0.65	-0.10	0.59	3.06	5.75	5.21	105.8	3.38	3.1%	1,334
6.0% to 6.5%	1.44	-0.60	-0.15	0.69	3.10	6.24	5.48	107.1	3.37	1.7%	1,034
6.5% to 7.0%	1.55	-0.70	-0.19	0.66	3.12	6.71	5.51	107.7	3.37	0.5%	370
7.0% to 7.5%	1.67	-0.47	-0.22	0.97	2.95	7.26	5.39	108.0	3.27	0.5%	350
7.5% and above	1.86	-0.76	-0.26	0.85	2.06	8.06	3.82	106.8	3.22	0.7%	963
<b>Total</b>	<b>0.99</b>	<b>-1.90</b>	<b>-0.01</b>	<b>-0.92</b>	<b>5.33</b>	<b>4.21</b>	<b>7.50</b>	<b>101.9</b>	<b>3.63</b>	<b>100.0%</b>	<b>15,985</b>

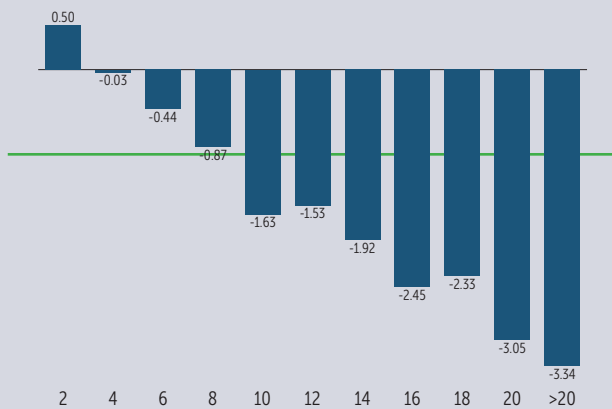
**Total Return by Coupon Rate For the quarter (%)**

**Portfolio Composition by Coupon Rate**


# MONITOR

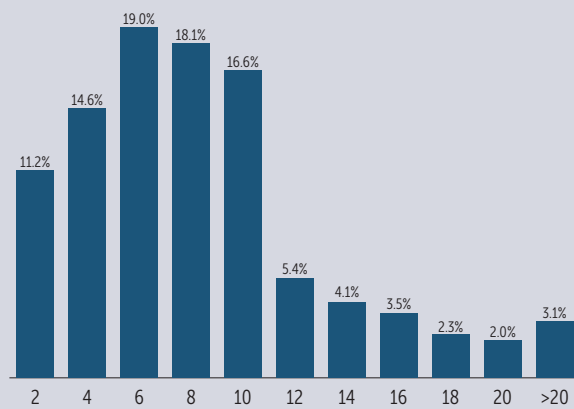
**Table E: Giliberto-Levy Total Performance by Remaining Term to Maturity - For the quarter ended March 31, 2020**

Maturity Cell	Returns (%)				Statistics		Averages			Pct. of Portfolio	No. of Cohorts
	Income	Price	Other	Total	Adj. Duration	Coupon	Maturity	Price	Yield		
0 to 2 years	1.14	-0.61	-0.03	0.50	1.02	4.65	1.09	101.3	3.23	11.2%	2,503
2 to 4 years	1.00	-1.01	-0.03	-0.03	2.73	4.23	3.06	102.3	3.37	14.6%	2,612
4 to 6 years	0.97	-1.39	-0.02	-0.44	4.28	4.13	5.03	102.5	3.49	19.0%	2,990
6 to 8 years	0.94	-1.81	-0.01	-0.87	5.67	4.04	6.93	101.6	3.69	18.1%	2,399
8 to 10 years	0.96	-2.59	0.00	-1.63	7.02	4.16	8.98	101.8	3.82	16.6%	1,995
10 to 12 years	0.96	-2.47	-0.02	-1.53	7.48	4.20	11.02	102.2	3.79	5.4%	923
12 to 14 years	0.99	-2.89	-0.02	-1.92	8.22	4.37	13.06	103.7	3.85	4.1%	728
14 to 16 years	0.95	-3.39	-0.01	-2.45	8.79	4.12	14.86	100.5	3.95	3.5%	657
16 to 18 years	0.98	-3.29	-0.02	-2.33	9.00	4.33	16.97	101.9	3.98	2.3%	423
18 to 20 years	0.96	-4.01	0.00	-3.05	9.95	4.25	18.90	101.1	4.06	2.0%	355
20 years or more	0.97	-4.31	0.00	-3.34	11.40	4.28	26.15	100.0	4.16	3.1%	400
<b>Total</b>	<b>0.99</b>	<b>-1.90</b>	<b>-0.01</b>	<b>-0.92</b>	<b>5.33</b>	<b>4.21</b>	<b>7.50</b>	<b>101.9</b>	<b>3.63</b>	<b>100.0%</b>	<b>15,985</b>

**Total Return by Maturity Cell For the quarter (%)**



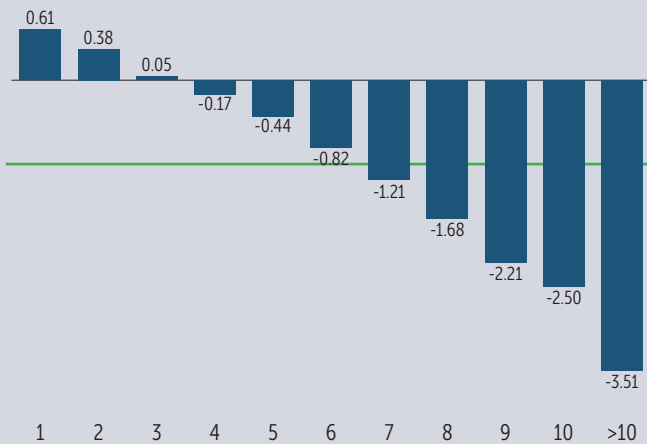
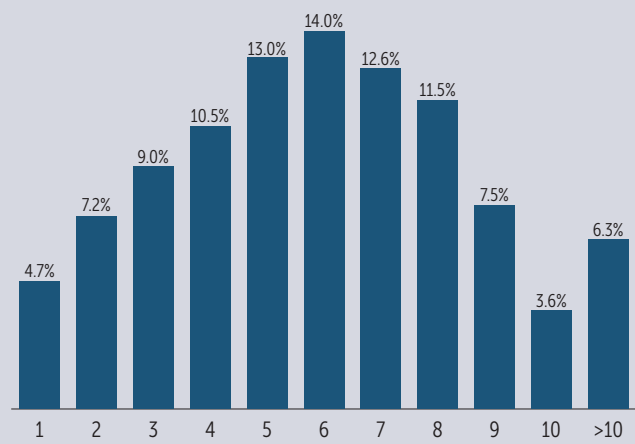
**Portfolio Composition by Maturity Cell**



# MONITOR

**Table F: Giliberto-Levy Index Performance by Duration - For the quarter ended March 31, 2020**

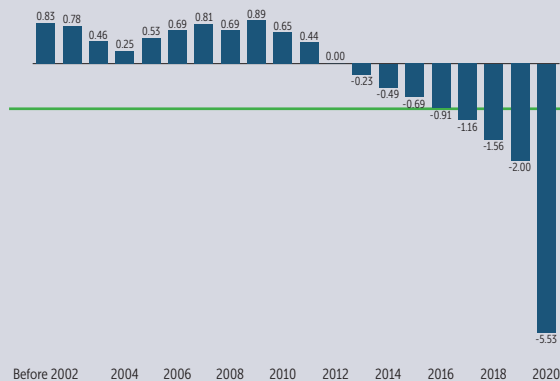
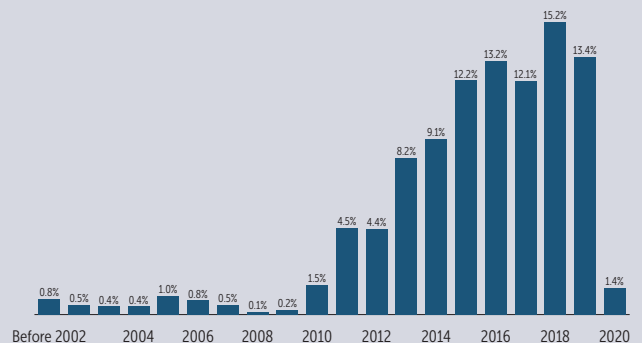
Duration Cell	Returns (%)				Statistics		Averages			Pct. of Portfolio	No. of Cohorts
	Income	Price	Other	Total	Adj. Duration	Coupon	Maturity	Price	Yield		
0 to 1 year	1.18	-0.52	-0.05	0.61	0.53	4.85	0.57	100.9	3.18	4.7%	1,515
1 to 2 years	1.12	-0.70	-0.04	0.38	1.40	4.59	1.59	101.8	3.25	7.2%	1,759
2 to 3 years	1.01	-0.92	-0.04	0.05	2.46	4.22	2.92	102.1	3.36	9.0%	2,043
3 to 4 years	1.03	-1.17	-0.03	-0.17	3.42	4.38	4.14	103.2	3.41	10.5%	1,842
4 to 5 years	0.96	-1.38	-0.02	-0.44	4.42	4.11	5.43	102.5	3.51	13.0%	1,892
5 to 6 years	0.94	-1.75	-0.01	-0.82	5.42	4.00	6.87	101.7	3.66	14.0%	1,811
6 to 7 years	0.96	-2.16	-0.01	-1.21	6.37	4.18	8.41	102.5	3.77	12.6%	1,620
7 to 8 years	0.96	-2.64	0.00	-1.68	7.28	4.17	10.23	102.1	3.85	11.5%	1,365
8 to 9 years	0.92	-3.12	0.00	-2.21	8.17	3.96	12.13	100.4	3.88	7.5%	896
9 to 10 years	0.94	-3.44	0.00	-2.50	9.11	4.12	14.87	101.2	3.94	3.6%	504
10 years or more	0.95	-4.48	0.02	-3.51	11.18	4.18	20.77	99.9	4.12	6.3%	738
<b>Total</b>	<b>0.99</b>	<b>-1.90</b>	<b>-0.01</b>	<b>-0.92</b>	<b>5.33</b>	<b>4.21</b>	<b>7.50</b>	<b>101.9</b>	<b>3.63</b>	<b>100.0%</b>	<b>15,985</b>

**Total Return by Duration Cell For the quarter (%)**

**Portfolio Composition by Duration Cell**


# MONITOR

**Table G: Giliberto-Levy Index Performance by Vintage Year - For the quarter ended March 31, 2020**

Vintage Year	Returns (%)				Statistics		Averages			Pct. of Portfolio	Num. of Cohorts
	Income	Price	Other	Total	Adj. Duration	Coupon	Maturity	Price	Yield		
Before 2002	1.79	-0.68	-0.28	0.83	2.27	7.76	4.39	107.1	3.21	0.8%	1,157
2002	1.54	-0.57	-0.19	0.78	3.03	6.68	5.67	107.4	3.26	0.5%	301
2003	1.36	-0.67	-0.24	0.46	2.82	5.93	4.98	106.8	3.25	0.4%	400
2004	1.36	-0.89	-0.22	0.25	3.18	6.06	5.54	108.4	3.31	0.4%	341
2005	1.31	-0.63	-0.15	0.53	2.77	5.64	4.82	106.0	3.28	1.0%	841
2006	1.41	-0.58	-0.14	0.69	3.09	6.11	5.44	107.0	3.40	0.8%	557
2007	1.42	-0.47	-0.14	0.81	4.03	6.22	7.87	107.9	3.49	0.5%	288
2008	1.51	-0.66	-0.15	0.69	2.71	6.53	4.47	106.9	3.34	0.1%	54
2009	1.72	-0.65	-0.17	0.89	2.74	7.51	4.44	107.6	3.33	0.2%	29
2010	1.31	-0.61	-0.05	0.65	1.30	5.35	1.98	102.3	3.19	1.5%	342
2011	1.20	-0.72	-0.04	0.44	2.31	5.05	3.18	103.7	3.27	4.5%	803
2012	1.02	-0.98	-0.04	0.00	3.17	4.31	4.55	102.9	3.36	4.4%	843
2013	1.01	-1.21	-0.03	-0.23	4.01	4.31	5.82	103.4	3.44	8.2%	1,270
2014	0.97	-1.44	-0.02	-0.49	4.52	4.16	6.39	102.9	3.50	9.1%	1,153
2015	0.92	-1.61	-0.01	-0.69	4.86	3.92	6.76	101.6	3.57	12.2%	1,577
2016	0.90	-1.80	0.00	-0.91	5.30	3.78	7.42	100.4	3.66	13.2%	1,474
2017	0.93	-2.09	0.00	-1.16	5.88	3.96	7.99	101.2	3.73	12.1%	1,440
2018	1.00	-2.56	0.01	-1.56	6.91	4.37	9.69	103.7	3.79	15.2%	1,524
2019	0.89	-2.90	0.01	-2.00	7.62	3.80	10.60	98.7	3.89	13.4%	1,431
2020	0.55	-6.10	0.02	-5.53	7.95	3.48	11.05	95.3	3.94	1.4%	160
<b>Total</b>	<b>0.99</b>	<b>-1.90</b>	<b>-0.01</b>	<b>-0.92</b>	<b>5.33</b>	<b>4.21</b>	<b>7.50</b>	<b>101.9</b>	<b>3.63</b>	<b>100.0%</b>	<b>15,985</b>

**Total Return by Vintage Cohort For the quarter (%)**

**Portfolio Composition by Vintage Cohort**






### **About the Gilberto-Levy Index**

Established in 1993, the Gilberto-Levy Index provides essential information and accurate research on emerging trends affecting commercial mortgage investments. Investment professionals, actuaries, consultants, plan sponsors, banks, life companies, regulators and rating agencies use the index as a reliable way to evaluate the performance of commercial mortgages on a total return, marked-to-market basis.

### **Contact**

To subscribe or receive more information on the Gilberto-Levy Commercial Mortgage Performance Index<sup>SM</sup> Monitor, please contact [jgrant@jblevyco.com](mailto:jgrant@jblevyco.com).

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