

LDI Highlights

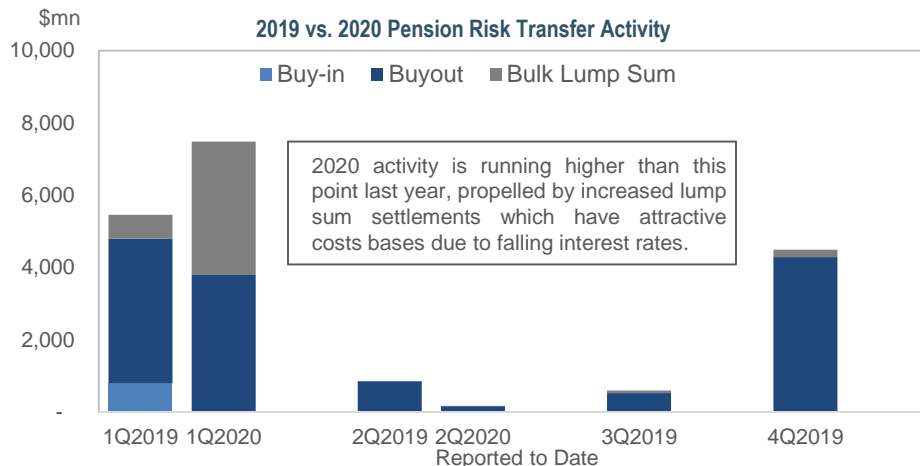
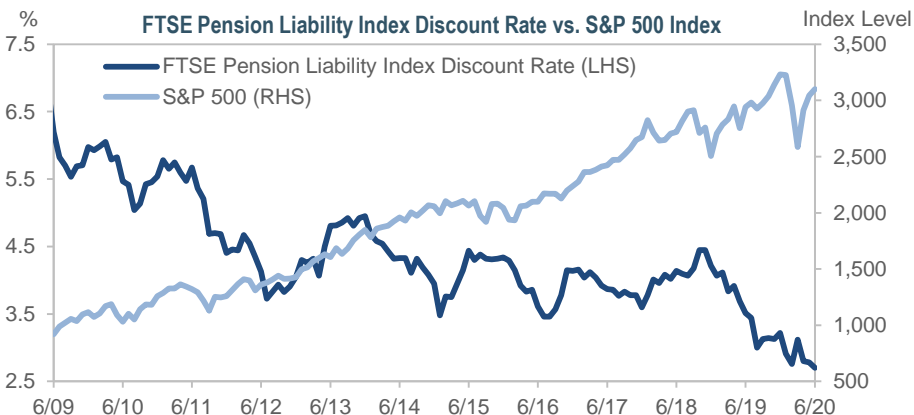
- Corporate pension funded status declined by 0.1% during June, closing the month at 83.7%.
 - Despite positive asset returns, discount rates decreased to all time lows.
 - Discount rates trended lower, falling by 0.08% to 2.70%.
- Issuance of long-duration bonds totaled roughly \$45 billion, above the 5-year monthly average of \$25 billion, but lower than the \$87 billion priced in the month of May.
- Long corporate spreads tightened by 15bps to 202bps in June; spreads have tightened by almost 160bps from the March wides of 359bps.
- Credit curves steepened from 68bps to 83bps driven by Fed buying, as short- and intermediate-duration spreads tightened more than long.

Rates Monitor	6/30/20	5/31/20	12/31/19
FTSE Pension Liability Discount Rate (%)	2.70	2.78	3.22
Bloom Barc Long Corporate Yield (%)	3.17	3.31	3.60
Bloom Barc Long Corporate A+ Yield (%)	2.75	2.86	3.25
Bloom Barc Long Corporate BBB Yield (%)	3.61	3.79	3.94
30 Year Swap Spread (bps)	-50	-47	-30

IR+M LDI Corner: 2Q in Review

- Federal Government intervention the past quarter has resulted in low rates, tighter spreads, and improved liquidity in the fixed income markets.
- We believe [credit curve steepening](#) will result in a wide distribution of returns in long investment grade bonds; investors seeking higher yields from the long end will benefit from thoughtful bottom-up security selection in the coming years.
- The 20-year treasury was issued in May (for the first time since 1986) with a \$20 billion deal; the new tenure is expected to improve corporate bond pricing transparency in the 20-year space as the 20-year Treasury market grows over time.
- The CARES Act postponed 2020 required contributions until after Jan. 1, 2021, and [the potential for additional relief](#) could have long term implications for depressed funded statuses and riskier strategic asset allocation decisions.
- While June long supply slowed compared to prior months, the issuance in the first half of 2020 has already exceeded the amount priced in all of 2019.

Glidepath Monitor	6/30/20	5/31/20	12/31/19	12/31/15
Funded Status (%)	83.7	83.8	89.8	81.7
Long Corporate Spreads (bps)	202	217	136	227
Curve (Long Corp - Int. Corp) (bps)	83	68	66	88

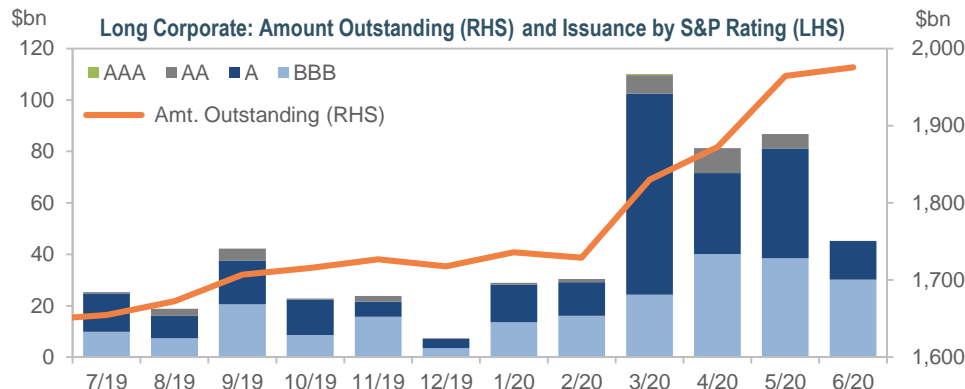


Sources: Milliman (Historical numbers revised as of 4/30/19), FTSE Russell (formerly Citigroup), Bloomberg Barclays, Bloomberg, JPMorgan, and Pension & Investments

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Second-Quarter 2020 Corporate Issuance: Largest Long-Dated USD Investment Grade Deals

- The funding environment markedly improved from March, despite record supply, as borrowers were able to complete deals at more attractive levels.
 - Long-end supply totaled \$213 billion in 2Q20, the highest quarterly total on record, and accounted for roughly 31% of total issuance over the quarter.
- After average new issue concessions reached over 25bps in March, concessions fell to below 15bps in the second quarter; however, some issuers, such as BA, TACHEM and DIS, paid 20bps or more above outstanding issues.
- Bank of America's \$3 billion deal on 6/16 was the first bond priced off of the newly issued 20-year Treasury Bond, and it was issued at a spread of 137bps over Treasuries; books were 2.2x oversubscribed and new issue concessions were -3bps.



Trailing 12 Month Long Corporate New Issuance (bn)

AAA	AA	A	BBB	Total
\$0.2	\$35.5	\$258.9	\$228.3	\$523.0

Ticker	Issuer Name	Maturity	Issue Date	Average Rating	Amount Issued (\$bn)	Yield at Issue (%)	Spread at Issue (bps)	Concession to Outstanding (bps)	Order Book (\$bn)	Oversubscription Level (times)
BA	Boeing Co/The	20	4/30/2020	BBB-	3.0	5.71	440	105	6.7	2.2
		30	4/30/2020	BBB-	5.5	5.81	450	105	12.1	2.2
		40	4/30/2020	BBB-	3.5	5.93	462.5	102.5	7.9	2.3
T	AT&T Inc	21	5/21/2020	BBB	2.5	3.52	215	0	5.9	2.4
		31	5/21/2020	BBB	3.0	3.67	230	5	6.4	2.1
		40	5/21/2020	BBB	1.5	3.87	250	5	5.0	3.3
DIS	Walt Disney Co/The	20	5/11/2020	A-	1.8	3.51	210	20	4.9	2.8
		31	5/11/2020	A-	2.8	3.61	220	20	7.0	2.5
		40	5/11/2020	A-	1.5	3.81	240	20	4.7	3.1
GE	General Electric Co	20	4/13/2020	BBB	1.5	4.27	290	60	1.2	1.5
		30	4/13/2020	BBB	3.8	4.37	300	15	3.5	2.3
TMUS	T-Mobile USA Inc	20	4/2/2020	BBB-	2.0	4.53	325	N/A	11.3	5.7
		30	4/2/2020	BBB-	3.0	4.53	325	N/A	14.9	5.0
AMZN	Amazon.com Inc	30	6/1/2020	A+	2.5	2.55	110	5	7.8	3.1
		40	6/1/2020	A+	2.0	2.75	130	20	7.0	3.5

Sources: Bloomberg and JPMorgan

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