

LDI Highlights

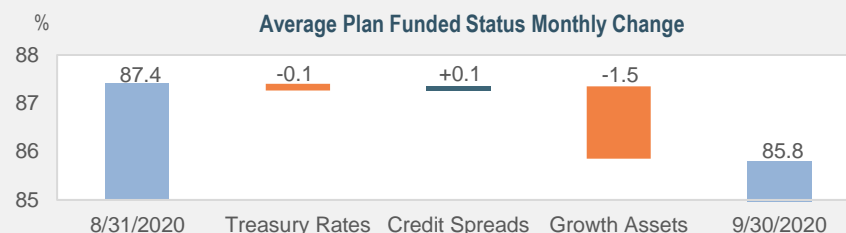
- Discount rates fell by 0.1%, from 2.66% to 2.65% and long corporate spreads widened by 4bps, from 184bps to 188bps; spreads retraced 171bps since the March wibes but are still 17bps wider than February levels.
- Issuers priced \$36 billion of long bonds in September, accounting for just 22% of total corporate issuance and behind the year-to-date average of 33%.
 - The majority of issuers were lower-rated with almost 70% of issuers rated BBB, the highest monthly percentage since June of 2019.

Rates Monitor	09/20	08/20	MoM Change	12/19	YTD Change
IR+M Average Plan Discount Rate (%)	2.31	2.31	0.00	3.00	(0.69)
Bloom Barc Long Corp Yield (%)	3.06	3.02	0.04	3.60	(0.54)
Bloom Barc Long Corp A+ Yield (%)	2.68	2.64	0.04	3.25	(0.57)
Bloom Barc Long Corp BBB Yield (%)	3.46	3.42	0.04	3.94	(0.48)
Long Corp Spreads (bps)	188	184	4	136	52
Curve (Long Corp - Int Corp) (bps)	85	88	(3)	66	19

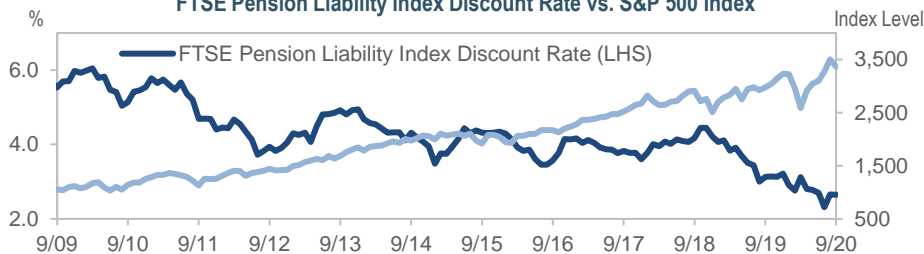
IR+M Funded Status Monitor

- Our sample average pension funded status decreased by 1.6% during September, closing at 85.8% - discount rates remained flat, but negative returns on growth assets drove the funded status lower.

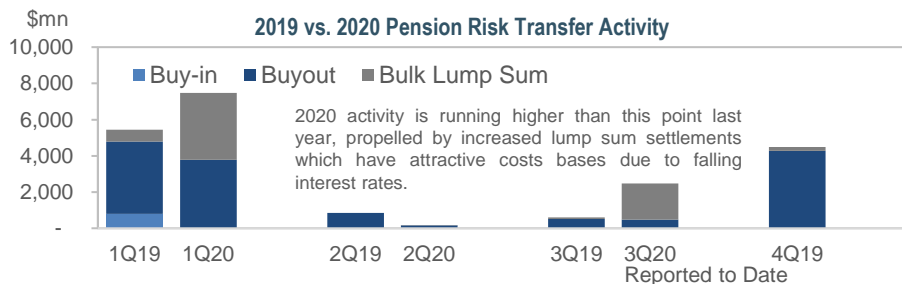
Funded Status (%)	09/20	08/20	MoM Change	12/19	YTD Change
Average Plan	85.8	87.4	(1.6)	89.8	(4.0)
End Stage Plan	99.0	99.7	(0.7)	100.0	(1.0)
Young Plan	74.4	76.5	(2.1)	80.0	(5.6)



FTSE Pension Liability Index Discount Rate vs. S&P 500 Index



2019 vs. 2020 Pension Risk Transfer Activity

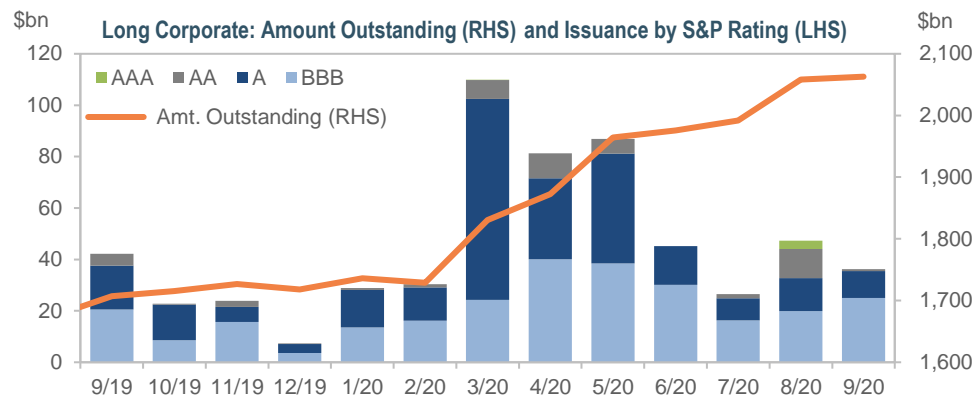


IR+M LDI Corner: A Monitor is Born

- We are excited to announce the development of our proprietary IR+M Funded Status Monitor. The Monitor calculates month-end funded statuses for three illustrative sample plans: end stage, average, and young.
- For plan sponsors committed to a de-risking journey and making progress towards their desired end state, it is critical to regularly track the health of their pension plans and act efficiently and accordingly as risks and market environments evolve.
- We created an in-house Monitor to better serve our clients; we hope this timely information will benefit our LDI clients in evaluating and understanding the impact of interest rates and market returns on their funded status.
- We welcome the opportunity to discuss the results of our Monitor and how it can be utilized as a resource in investment strategy decisions for your plan. Further details of our methodology and assumptions can be found in the Monitor's [whitepaper](#).

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

- Issuers prioritized liability management during the third quarter by terming out debt, as all-in yields remained at historically attractive levels.
 - Long corporate issuance totaled \$110 billion and brought year-to-date supply to over \$492 billion.
- Several issuers took part in exchanges and tenders to reduce longer-term interest costs.
 - Over \$60 billion of new bonds referenced “refinance” as a use of bond proceeds.
 - AT&T upsized their exchange offer from \$15 billion to \$21.5 billion due to large participation.
- There has not been any 20-year bonds priced versus the 20-year Treasury bond since June, resulting in inefficiencies and a lack of price transparency that can provide opportunities to take advantage of inverted credit curves.



Trailing 12 Month Long Corporate New Issuance (bn)

AAA	AA	A	BBB	Total
\$3.5	\$41.3	\$250.2	\$251.8	\$546.7

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)
T	AT&T Inc	11	7/27/2020	BBB	2.5	2.27	165	15	5.5	2
		22	7/27/2020	BBB	2.5	3.10	185	15	5.0	2
		31	7/27/2020	BBB	2.3	3.30	205	15	5.0	2
		40	7/27/2020	BBB	1.5	3.50	225	15	4.0	3
GOOGL	Alphabet Inc	20	8/3/2020	AA	1.3	1.94	73	-2	5.7	5
		30	8/3/2020	AA	2.5	2.09	88	-2	8.0	3
		40	8/3/2020	AA	2.0	2.29	108	-2	7.0	4
ICE	Intercontinental Exchange Inc	12	8/17/2020	BBB+	1.5	1.89	120	-5	4.7	3
		20	8/17/2020	BBB+	1.3	2.69	125	0	3.9	3
		40	8/17/2020	BBB+	1.5	3.04	160	0	3.9	3
JNJ	Johnson & Johnson	20	8/20/2020	AAA	1.0	2.14	75	5	2.9	3
		30	8/20/2020	AAA	1.0	2.29	90	5	2.4	2
		40	8/20/2020	AAA	1.3	2.49	110	5	2.8	2
AAPL	Apple Inc	30	8/13/2020	AA+	1.3	2.41	100	0	2.2	2
		40	8/13/2020	AA+	1.8	2.59	118	-2	3.4	2

Sources: Bloomberg and JPMorgan

All data in the above commentary is as of 9/30/20. This is not a recommendation to purchase or sell any of the securities listed. Yields are represented as of the aforementioned date and are subject to change. The views contained in this report are those of IR+M and are based on information obtained by IR+M from sources that are believed to be reliable. This report is for informational purposes only and is not intended to provide specific advice, recommendations for, or projected returns of any particular IR+M product. No part of this material may be reproduced in any form, or referred to in any other publication, without express written permission from Income Research & Management.