

US Rates Watch

CP monitor: issuers extend maturities while total issuance falls slightly

Supply: domestic CP issuance declined in Nov

Supply: CP outstanding has ove

rall decreased in the month through mid-November, led by decline in corporate CP outstanding (Exhibit 4, Exhibit 5). Financial issuance was flat over the past month as lower domestic fin CP was offset by higher foreign fin CP. As of end October, Canada continued to have the largest issuance across total & financial CP (Exhibit 23, Exhibit 25). US remained the largest issuer in non-financial CP (Exhibit 26).

Bank CD issuance continued to increase over recent weeks which has supported cheaper CD rates, according to FDIC & Bloomberg (Exhibit 7, Exhibit 8). We have argued ongoing CP & CD issuance raises the risk of a cheapening vs OIS, especially if prime fund WAM does not continue extending.

Demand: stable & strong with MMF WAM extension

Demand: MMF retail funds continued to attract inflows due to low yielding deposit alternatives. Prime MMF WAMs are now near 40 days vs start of year levels at 10-15 days (Exhibit 10). If prime MMF WAM stabilize around current levels there could be greater cheapening potential amidst continued term CP & CD issuance.

Rates: trading in-line with other front-end levels

<u>Rates</u>: Overall fin & non-fin CP rates trade in-line with other money market rates. We see risks that continued aggressive bank CD issuance & funding competition could cheapen rates further (Exhibit 7, Exhibit 11).

Maturity: distro for total CP at highest level since Dec '20

Maturity distribution: Maturity extension of non-asset backed tier-1 CP ticked up over the month through mid-November and is now c. 72 days (Exhibit 14). Notably, the maturity distribution of total CP also increased to c. 62 days, the highest level since Dec '20 (Exhibit 15). The increase in CP maturities likely reflects (1) issuer desire to lock-in funds beyond year-end (2) investor demand to extend WAMs with a Fed soon cutting.

CP maturing in the next 3 months remain primarily in financials (Exhibit 17). Countrywise, the amount of CP maturing is mostly seen in US, Canada, and France (Exhibit 19).

Bottom line: Domestic issuance of both financial and corporate CP declined in the month through mid-November. Maturity distribution of total CP reached the highest level since Dec '20, likely partially reflecting a desire to lock-in funds past year end.

22 November 2023

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CP = commercial paper

CD = certificate of deposit

MMF = money market mutual funds

WAM = weighted-average maturity

O/S = outstanding

ABCP = asset backed commercial paper

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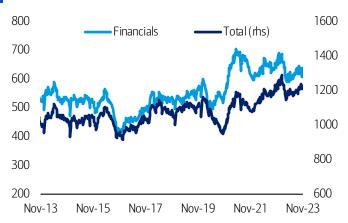
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Commercial paper outstanding

Exhibit 1: Financial CP vs total CP outstanding (\$bn)

Financials O/S has recovered since March bank stress & stable in recent weeks

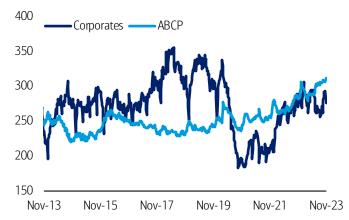


Source: BofA Global Research, Haver

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Exhibit 2: Nonfin CP vs ABCP outstanding (\$bn)

Over the month thru mid-November, nonfin CP issuance saw further decline



Source: BofA Global Research, Haver

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Exhibit 3: Tier-2 CP outstanding (NSA, \$bn)

Tier-2 CP modestlyly increased in November



Source: BofA Global Research, Haver

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Exhibit 4: CP outstanding as of 11/15/2023 (NSA, \$bn)

MoM total O/S decreased by \$12bn

	0/S	ΔΜοΜ	Z-score since 2020	ΔΥοΥ	Z-score since 2001
Financials	637	0	-0.15	-20	-0.37
ABCP	311	4	0.45	29	0.45
Corporates	276	-16	-0.96	-6	-0.22
Total (rhs)	1226	-12	-0.54	3	0.08

Source: BofA Global Research, Haver

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Exhibit 5: Domestic vs foreign issuers in Fin & Corp CP (NSA, \$bn)

Further breakdown shows MoM domestic corporate saw an above 1 sigma decline

			Z-score		Z-score
	O/S	ΔΜοΜ	since 2020	ΔΥοΥ	since 2001
Fin - domestic	258	-10	-0.68	13	0.42
Fin - foreign	379	9	0.51	-33	-1.28
Corp - domestic	214	-18	-1.34	-7	-0.20
Corp - foreign	62	3	0.53	0	-0.27

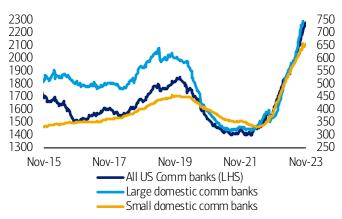
Source: BofA Global Research, Haver



CD activity

Exhibit 6: US Commercial bank large time deposits as a proxy for CD activity (\$bn)

CD activity saw significant increase since last year

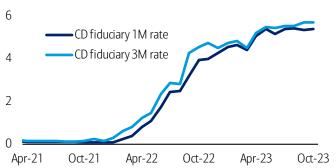


Source: BofA Global Research, Bloomberg

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Exhibit 8: US CD fiduciary 1M & 3M rates (monthly, %)

CD fiduciary rates have cheapened despite levels show signs of moderation recently

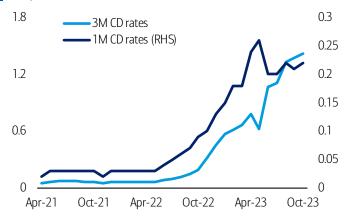


Source: BofA Global Research, Bloomberg; Note: see Appendix for pricing methodology

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Exhibit 7: US FDIC 1M & 3M CD rates (monthly, %)

CD rates has cheapened with aggressive bank CD issuance & funding competition since 2H '22



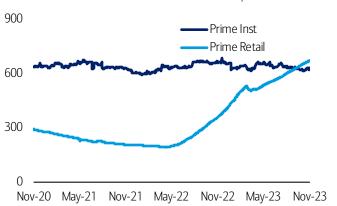
Source: BofA Global Research, Bloomberg; Note: see Appendix for pricing methodology

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MMF AUM & WAM

Exhibit 9: MMF AUM (\$bn)

Retail funds continued to attract inflows due to low deposit alternatives

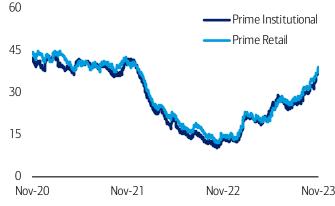


Source: BofA Global Research, Crane Data

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Exhibit 10: MMF WAM (days)

Prime institutional & retail funds have both been extending WAM



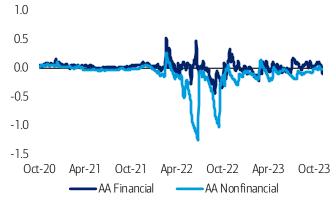
Source: BofA Global Research, Crane Data



CP rates & spreads to OIS

Exhibit 11: 3m AA fin & AA non-fin CP spreads to OIS (5D MA, %)

Fin & non-fin CP rates trade in-line with other money market rates



Source: BofA Global Research, Bloomberg

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Exhibit 12: 1-month CP rates levels %, spreads to OIS (5d MA, bp), and z-scores

Z-scores of 1m CP spreads to OIS reflect relatively stable valuations

	Levels as of 11/20/2023	5D MA spreads	Z-score of spreads (5d MA) since 2020
AA Fin	5.38	3.9	0.0
AA Nonfin	5.34	-0.3	0.0
A2 P2 Nonfin	5.58	23.3	-0.1
AA Asset backed	5.38	4.1	-0.1

Source: BofA Global Research, Bloomberg

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Exhibit 13: 3-month CP rates levels %, spreads to OIS (5d MA, bp), and z-scores

Z-scores of 3m CP spreads to OIS reflect relatively stable valuations

	Levels as of 11/20/2023	5D MA spreads	Z-score of spreads (5d MA) since 2020
AA Fin	5.27	-10	-0.5
AA Nonfin	5.35	-2	0.0
A2 P2 Nonfin	5.62	24	-0.2
AA Asset backed	5.5	13	-0.1

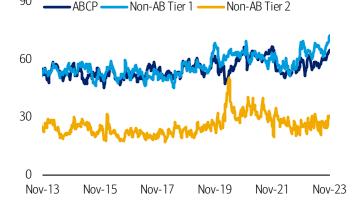
Source: BofA Global Research, Bloomberg

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CP maturity distribution

Exhibit 14: Avg maturity distribution of CP O/S by category (days)

Maturity extension most pronounced for non-asset backed tier 1 issuers

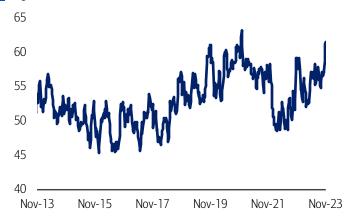


Source: BofA Global Research, Federal Reserve

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Exhibit 15: Avg maturity distribution of total CP outstanding (days)

Maturity extension for total CP increased in November to c. 62 days, the highest level since $\mbox{Dec}\,{}^\prime 20$

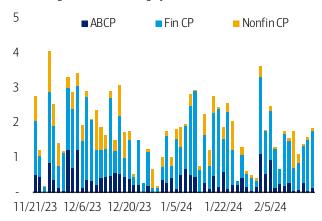


Source: BofA Global Research, Federal Reserve



Exhibit 16: CP maturing in the next 3 months (\$bn)

CP maturing in the next 3m largely concentrated in financial CP

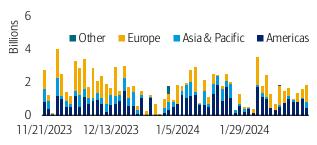


Source: BofA Global Research, Crane

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Exhibit 18: CP maturing by region (\$bn)

Amount of CP maturing mostly seen in Americas $\&\, Europe$

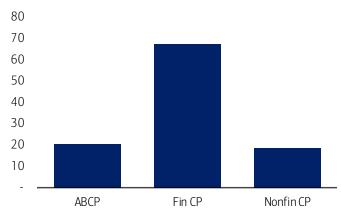


Source: BofA Global Research, Crane Data

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Exhibit 17: Total CP maturing in the next 3 months by category (\$bn, as of 11/20/2023)

CP maturing in the next 3m largely concentrated in financial CP

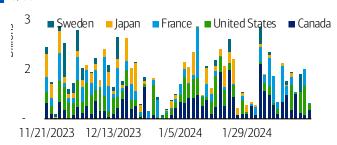


Source: BofA Global Research, Crane

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Exhibit 19: Top 5 CP maturing by country (\$bn)

Country-wise the amount of CP maturing are mostly seen in Canada, France & US

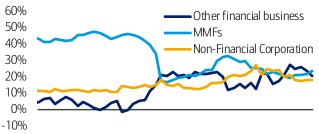


Source: BofA Global Research, Crane Data

CP holders

Exhibit 20: Top 3 holders CP holdings over time

CP demand from other financial business declined in Q2 '23



Mar-11 Dec-12 Sep-14 Jun-16 Mar-18 Dec-19 Sep-21 Jun-23

Source: BofA Global Research, Federal Reserve

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Exhibit 21: CP holders as of end Q2 2023 (% total)

The largest CP buyers in Q2 '23 is money market mutual funds

	Şbn	% Total
MMFs	263	23.3%
Other Financial Business	234	20.8%
NonFinancial Corporation	206	18.2%
Foreign Institutions	172	15.2%
Other	-875	-77.5%
State & Local Govt	87	7.7%
Mutual Funds	40	3.5%
Total	1130	100%

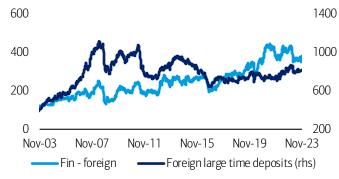
Source: BofA Global Research, Federal Reserve

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Foreign CP

Exhibit 22: Foreign fin CP outstanding & large time deposits (NSA, Sbn)

Foreign fin CP & large time deposits have stabilized recently



Source: BofA Global Research, Haver

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CP issuers

Exhibit 23: Total CP top 5 issuers by country (as of 10/31/2023)

Canada was the largest issuer in terms of total CP

	\$bn	% Total
Canada	63	21%
United States	53	17%
France	39	13%
United Kingdom	25	8.4%
Japan	24	7.9%

Source: BofA Global Research, Crane

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Exhibit 24: ABCP top 5 issuers by country

France has the largest issuance in ABCP

	\$bn	% Total
France	13.16	21.8%
Canada	12.91	21.4%
United States	12.89	21.3%
United Kingdom	12.36	20.5%
Japan	6.75	11.2%

Source: BofA Global Research, Crane

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Exhibit 25: Fin CP top 5 issuers by country

Canada leads the largest issuance in financial CP

	\$bn	% Total
Canada	42.7	21.8%
United States	19.9	10.1%
Sweden	18.8	9.6%
France	17.9	9.1%
Australia	17.7	9.1%
Source: BofA Global Resear	ch, Crane	

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Exhibit 26: Nonfin CP top 5 issuers by country

US leads the largest issuance in non-financial CP

	\$bn	% Total
United States	20	43%
France	8	17%
Canada	7	15%
Netherlands	4	8%
Germany	3	5%

Source: BofA Global Research, Crane

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Appendix

US CD fiduciary rates

The source for 1-month & 3-month CD fiduciary rates (BBG tickers: USFCDA CMPN Curncy & USFCDC CMPN Curncy) is the Bloomberg Composite Rate (CMP), which is a "best market" calculation. According to Bloomberg, "at any given point in time, the composite bid rate is equal to the highest bid rate of all of the currently active, contributed, bank indications. The composite ask rate is equal to the lowest ask rate offered by these same active, contributed, bank indications. For rates to be accepted into the composite, they must come from data contributors who have been "privileged" to send data to the composite, and the pricing must be considered valid and current."

US FDIC CD rates

The source for 1-month & 3-month FDIC CD rates (BBG tickers: USNTN1MO Index & USNTN3MO Index) comes directly from FDIC (www.fdic.gov/resources/bankers/national-rates/previous-rates.html). The latest update from FDIC indicates "The Final Rule redefined the "national rate" as the average of rates paid by all insured depository institutions and credit unions for which data is available, with rates weighted by each institution's share of domestic deposits. The "national rate cap" is calculated as the higher of: (1) the national rate plus 75 basis points; or (2) 120 percent of the current yield on similar maturity U.S. Department of the Treasury (U.S. Treasury) obligations plus 75 basis points. The national rate cap for non-maturity deposits is the higher of the national rate plus 75 basis points or the federal funds rate plus 75 basis points."





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