

US Rates Watch

CP monitor: stability now but watch supply

Commercial paper monitor: stable conditions & rates

We update our commercial paper (CP) monitor introduced in July. Overall CP conditions have remained stable from a supply & CP spread to OIS basis. Financial CP issuance modestly ticked higher but has been dwarfed by the increase in CD issuance. Banks continue to compete for funds which may cheapen levels in coming months.

Supply: outstanding stabilized, tier-2 saw further decline

Supply: Total CP outstanding has largely stabilized since regional bank stress. The decline in non-financial issuance and pickup in asset-backed CP (ABCP) supply also moderated in recent weeks (Exhibit 2). Tier-2 CP dropped further since mid-July following the sharp decline from the March banking stress (Exhibit 3), suggesting more cautious sentiment from investors in short-term lower-quality paper.

The most notable shift in short-term credit supply has come from bank CD issuance (Exhibit 6). We use Fed commercial bank large time deposit data as a proxy for CDs. CD supply has increased sharply from mid-'22 as the Fed started raising rates. Banks have needed to compete more aggressively for funding, especially given focus on funding liquidity post regional bank stress. Aggressive CD supply has not yet materially impacted CP levels or end user demand, but it poses a risk to both.

Demand: CP demand still strong due to prime retail

Demand: CP demand remains strong with continued MMF inflows (see [MMF portfolio update](#)), as prime retail funds continue to attract inflows (Exhibit 7). In addition, prime MMF have maintained a higher WAM to support CP issuance at longer tenors. Prime MMF WAMs are now 25-30 days vs start of year levels at 10-15 days.

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

Rates: Financial & non-financial CP rates currently trade in-line with other money market rates (Exhibit 9). Z-scores of 1m & 3m CP spreads to OIS also reflect stable valuations (Exhibit 10, Exhibit 11). We see risks that continued aggressive bank CD issuance & funding competition could eventually cheapen financial CP. The sharp increase in Treasury bill & coupon supply has not yet materially impacted CP levels.

Maturity distro & issuance: slightly longer for high quality

Maturity distribution: average maturity of CP extended slightly, led by tier 1 non-ABCP (Exhibit 12, Exhibit 13). We think MMF WAM & CP maturity extension are likely linked. CP maturing in the next 3 months are primarily in financial (Exhibit 15). Country-wise, the amount of CP maturing are mostly seen in Canada, Japan, and France (Exhibit 17). Canada was the largest issuer in July with \$58bn total CP.

Bottom line: CP market remains stable, including in supply & levels. Bank CD issuance risks spilling over to financial CP. Higher supply risks wider spreads into end '23.

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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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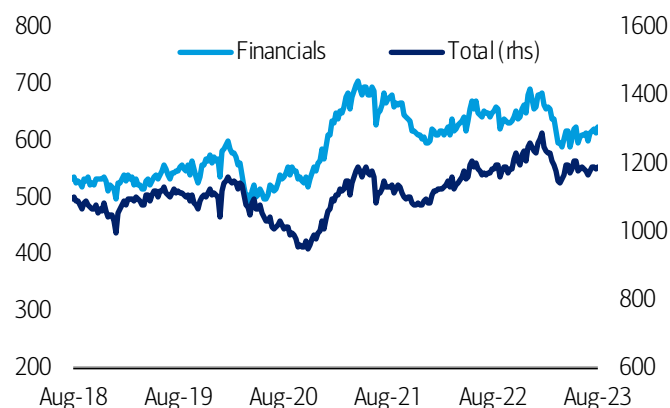
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Commercial paper outstanding

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

CP outstanding largely stabilized following sharp decline post bank stress



Source: BofA Global Research, Haver

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

Decline in nonfin CP and pickup in ABCP moderated recently

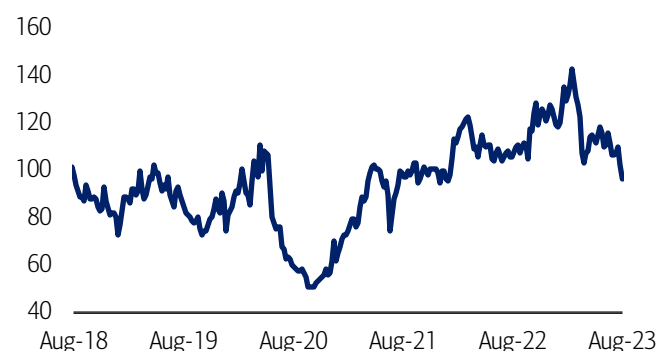


Source: BofA Global Research, Haver

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

Tier-2 CP saw another drop over the past couple of weeks



Source: BofA Global Research, Haver

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Exhibit 4: CP outstanding as of 08/09/2023 (NSA, \$bn)

MoM fin CP O/S picked up the most but z-score suggests still in range

	O/S	ΔMoM	Z-score since 2020	ΔYoY	Z-score since 2001
Financials	625	12	0.50	-27	-0.38
ABCP	303	2	0.12	34	0.49
Corporates	263	2	0.21	2	0.00
Total (rhs)	1192	16	0.50	10	0.12

Source: BofA Global Research, Haver

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

Further breakdown indicates pickup mostly led by domestic fin CP issuers

	O/S	ΔMoM	Z-score since 2020	ΔYoY	Z-score since 2001
Fin - domestic	258	8	0.74	24	0.58
Fin - foreign	367	4	0.19	-51	-1.99
Corp - domestic	189	-8	-0.60	-12	-0.29
Corp - foreign	74	10	1.39	13	1.59

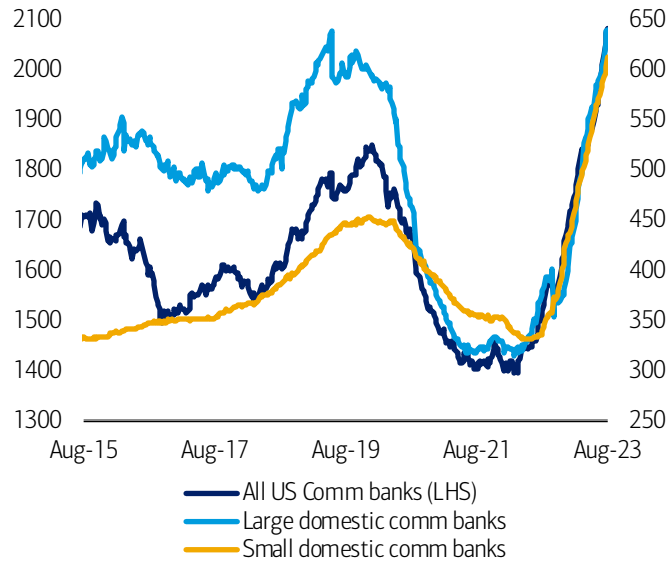
Source: BofA Global Research, Haver

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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



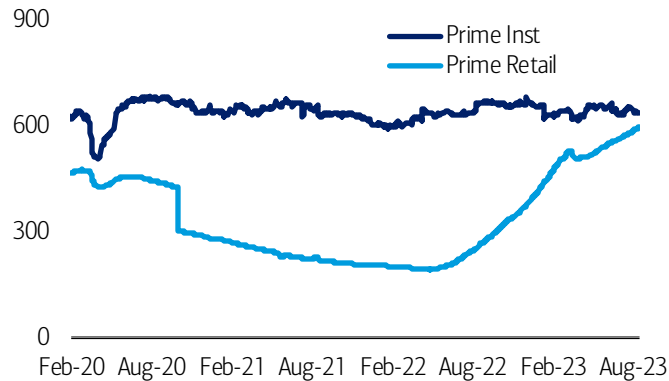
Source: BofA Global Research, Bloomberg

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MMF AUM & WAM

Exhibit 7: MMF AUM (\$bn)

Retail funds continued to attract inflows due to low deposit alternatives

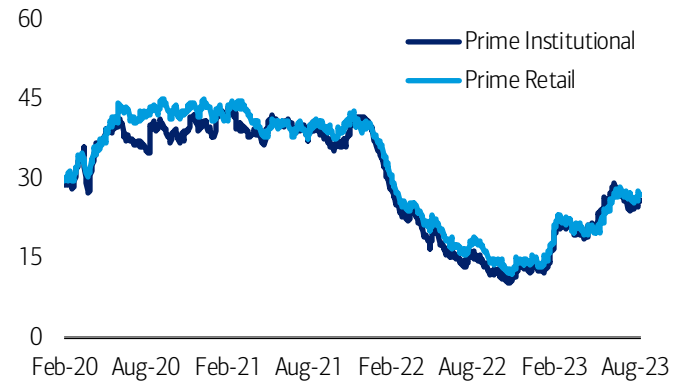


Source: BofA Global Research, Crane Data

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Exhibit 8: MMF WAM (days)

Prime institutional & retail funds have both been extending WAM



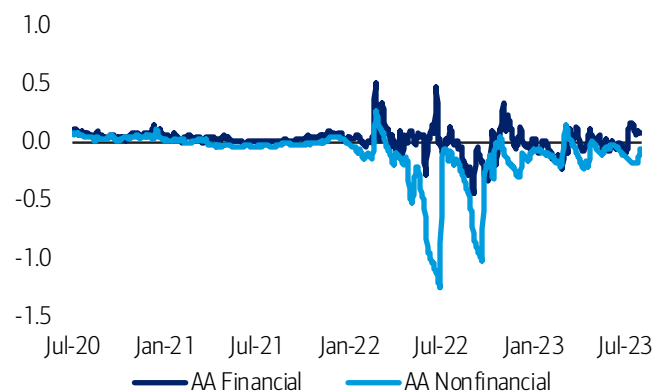
Source: BofA Global Research, Crane Data

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CP rates & spreads to OIS

Exhibit 9: 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 10: 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 08/15/2023	5D MA spreads	Z-score of spreads (5d MA) since 2020
AA Fin	5.43	9.2	0.1
AA Nonfin	5.32	-1.8	0.0
A2 P2 Nonfin	5.53	18.0	-0.3
AA Asset backed	5.36	1.6	-0.3

Source: BofA Global Research, Bloomberg

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Exhibit 11: 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 08/15/2023	5D MA spreads	Z-score of spreads (5d MA) since 2020
AA Fin	5.42	8	-0.1
AA Nonfin	5.32	-6	-0.1
A2 P2 Nonfin	5.45	6	-0.6
AA Asset backed	5.46	9	-0.3

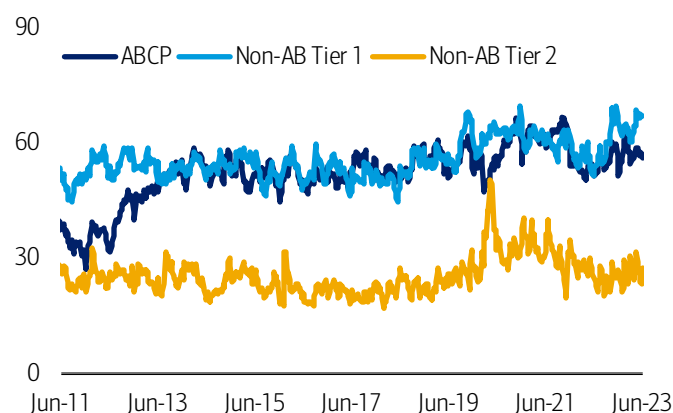
Source: BofA Global Research, Bloomberg

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CP maturity distribution

Exhibit 12: Avg maturity distribution of CP O/S by category (days)

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

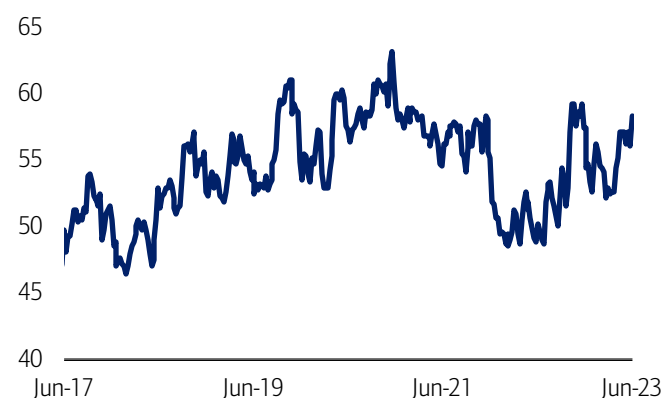


Source: BofA Global Research, Federal Reserve

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Exhibit 13: Avg maturity distribution of total CP outstanding (days)

Maturity extension for total CP ticked up in June

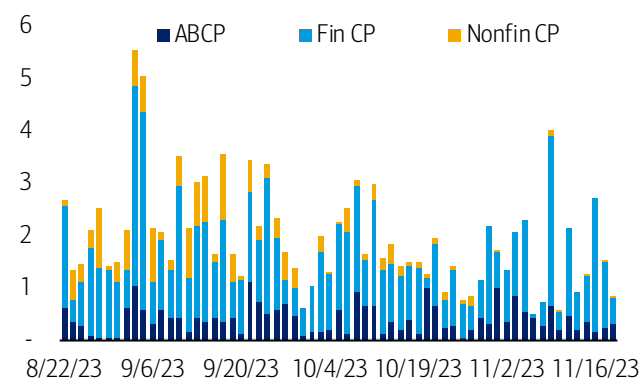


Source: BofA Global Research, Federal Reserve

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Exhibit 14: CP maturing in the next 3 months (\$bn)

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

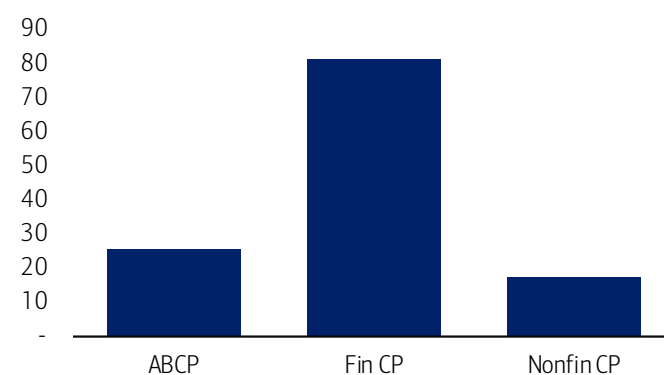


Source: BofA Global Research, Crane

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Exhibit 15: Total CP maturing in the next 3 months by category (\$bn, as of 08/21/2023)

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

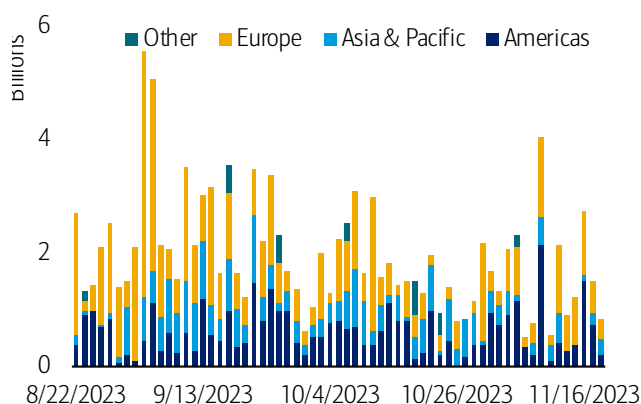


Source: BofA Global Research, Crane

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Exhibit 16: CP maturing by region (\$bn)

Amount of CP maturing mostly seen in Europe & Americas

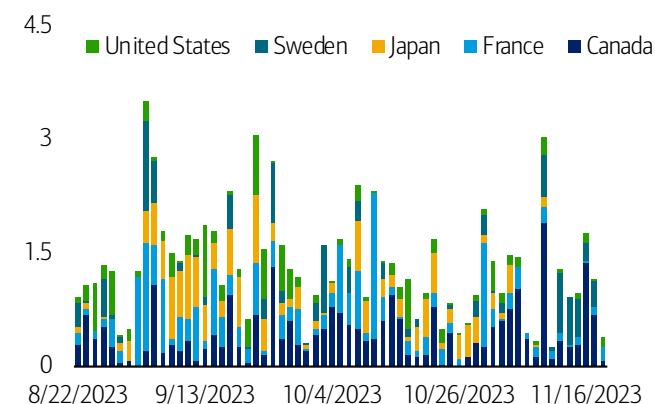


Source: BofA Global Research, Crane Data

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Exhibit 17: Top 5 CP maturing by country (\$bn)

Country-wise amount of CP maturing mostly seen in Canada, France & Japan



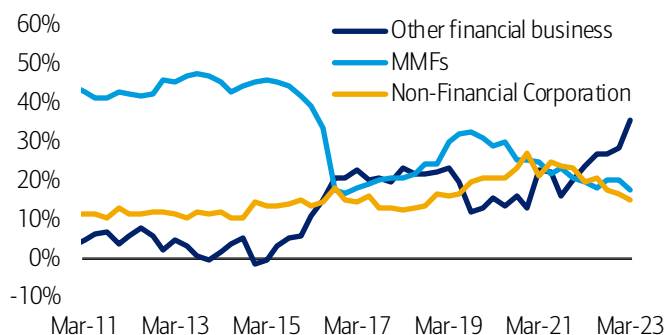
Source: BofA Global Research, Crane Data

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CP holders

Exhibit 18: Top 3 holders CP holdings over time

CP demand from other financial business has continued to increase over the years while demand from MMFs and non-financials have declined



Source: BofA Global Research, Federal Reserve

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Exhibit 19: CP holders as of end Q1 2023 (% total)

Largest CP buyer at end of Q1 '23 is other financial business

	\$bn	% Total
Other financial business	505	36%
MMFs	251	18%
NonFinancial Corporation	211	15%
Foreign Institutions	206	15%
Other	122	9%
State & Local Govt	86	6%
Mutual Funds	38	3%
Total	1418	100%

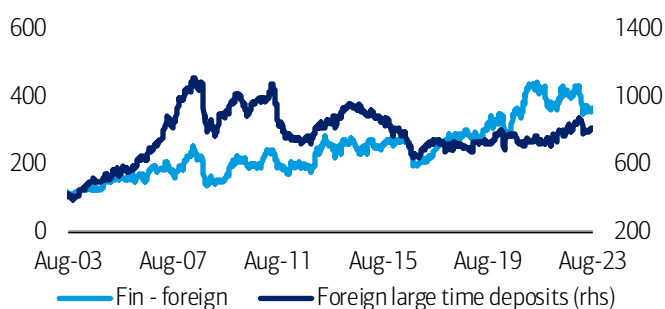
Source: BofA Global Research, Federal Reserve

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Foreign CP

Exhibit 20: Foreign fin CP outstanding & large time deposits (NSA, \$bn)

Foreign fin CP & large time deposits have stabilized recently



Source: BofA Global Research, Haver

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CP issuers

Exhibit 21: Total CP top 5 issuers by country (as of 07/31/2023)

Canada was the largest issuer in terms of total CP

	\$bn	% Total
Canada	58	21%
France	48	17%
United States	35	13%
Japan	23	8.2%
United Kingdom	21	7.4%

Source: BofA Global Research, Crane

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Exhibit 22: ABCP top 5 issuers by country

France saw the largest issuance in ABCP

	\$bn	% Total
France	20	34%
United States	12	21%
Canada	11	19%
United Kingdom	7	11%
Japan	6	11%

Source: BofA Global Research, Crane

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Exhibit 23: Fin CP top 5 issuers by country

Canada led the largest issuance in financial CP

	\$bn	% Total
Canada	42	24%
Sweden	19	11%
Australia	16	9%
France	16	9%
Japan	14	8%

Source: BofA Global Research, Crane

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Exhibit 24: Nonfin CP top 5 issuers by country

France led the largest issuance in non-financial CP

	\$bn	% Total
France	12	31%
United States	10	27%
Netherlands	4	11%
Canada	4	11%
Japan	2	6%

Source: BofA Global Research, Crane

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