

US Rates Watch

CP monitor: supply stable & levels tight

Commercial paper monitor: new front-end tool

We introduce a new commercial paper (CP) monitor. We intend to use this as a tool to follow developments in short-term credit markets. This monitor is expected to be updated monthly with a focus on supply, demand, CP spreads, and maturity factors.

Supply: outstanding has stabilized post bank shock

Supply: Total CP outstanding has largely stabilized after falling sharply in the weeks after regional bank stress in late March, largely led by financial CP outstanding (Exhibit 1). Non-financial has modestly declined over recent weeks & remains near the low end of recent ranges. ABCP outstanding has ticked up and may be related to some banks using a wider range of sources to bolster liquidity post regional bank stress (Exhibit 2).

Demand: demand healthy with MMF extension

Demand: CP demand appears strong with recent MMF inflows & prime MMF WAM extension (Exhibit 7). Prime retail funds continue to attract inflows due to lower yielding deposit alternatives; institutional fund AUM has been stable likely due to stiffer deposit competition which means investors have less incentive to leave banks (Exhibit 6).

Rates: spreads to OIS are stable despite bill supply

Rates: Financial & non-financial CP rates trade in-line with other money market rates (Exhibit 8), reflecting limited impact from higher bill supply post debt limit. Z-scores of 3m CP spreads to OIS reflect relatively stable valuations (Exhibit 10). The CP to OIS spread cheapening we expected with elevated bill supply has yet to materialize.

Maturity distribution: longer maturities w/ WAM extension

Maturity distribution: CP maturity distribution has lengthened modestly likely due to (1) relatively tight CP to OIS spreads (2) prime MMF WAM extension. The maturity extension has been most pronounced for non-asset backed tier 1 issuers (Exhibit 11). These issuers likely see strong demand with recent MMF inflows & WAM extension.

Broader trends: MMF reform 3.0 & demand shift

Recent SEC MMF reform finalization poses a risk to prime MMF AUM, though the final rule was better than expected (see [SEC MMF final rule](#)). We expect prime institutional MMF outflows because of the new rule, which will likely require new demand sources. Fed Flow of Funds suggests the largest CP buyer is “other financial business” (Exhibit 18), which is likely separately managed accounts & securities lenders. These investors will likely be key sources of CP demand post MMF reform rule implementation in 2H '24.

Bottom line: CP supply has recently stabilized after declining with regional bank stress. Levels are tight & MMF are extending, despite the recent bill supply surge.

26 July 2023

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CP = commercial paper

MMF = money market mutual funds

OIS = overnight index swap

O/S = outstanding

ABCP = asset-backed commercial paper

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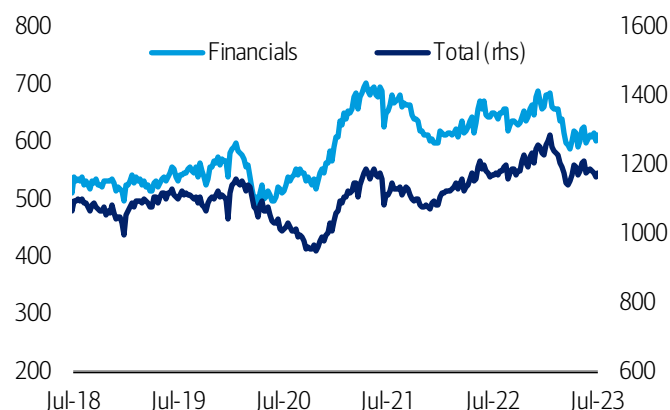
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Commercial paper outstanding

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)

Nonfin CP modestly declined recently while ABCP saw demand pickup



Source: BofA Global Research, Haver

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

Tier-2 CP also dropped sharply after regional bank stress



Source: BofA Global Research, Haver

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Exhibit 4: CP outstanding as of 07/19/2023 (NSA, \$bn)

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

	O/S	ΔMoM	Z-score since 2020	ΔYoY	Z-score since 2001
Financials	617	7	0.28	-31	-0.41
ABCP	303	12	1.47	38	0.38
Corporates	271	-11	-0.66	11	0.22
Total (rhs)	1193	8	0.20	18	0.15

Source: BofA Global Research, Haver

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

Further breakdown indicates decline largely led by non-fin domestic CP

	O/S	ΔMoM	Z-score since 2020	ΔYoY	Z-score since 2001
Fin - domestic	256	5	0.35	20	0.53
Fin - foreign	361	3	0.13	-51	-1.97
Corp - domestic	198	-17	-1.31	-3	-0.07
Corp - foreign	73	5	0.73	13	1.35

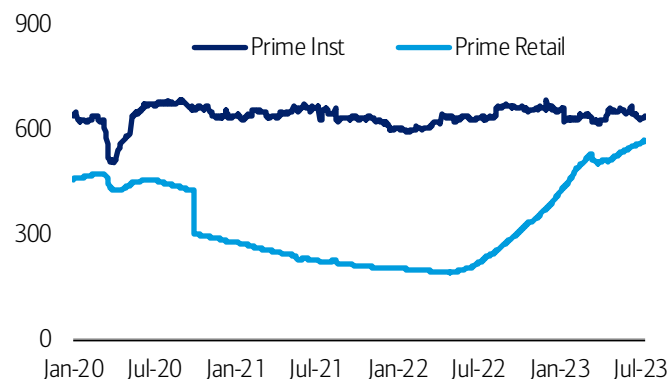
Source: BofA Global Research, Haver

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MMF AUM & WAM

Exhibit 6: MMF AUM (\$bn)

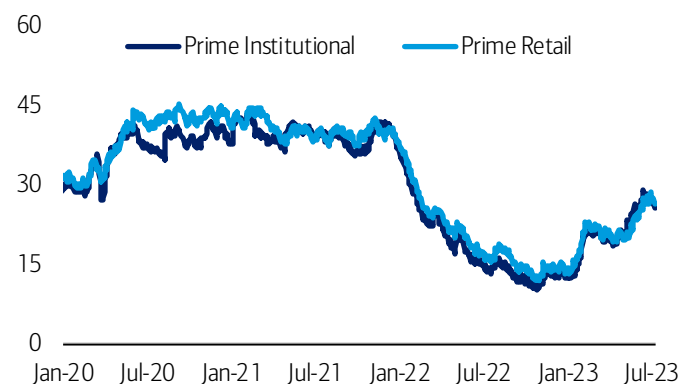
Retail funds continued to attract inflows likely due to lower yielding deposit alternatives



Source: BofA Global Research, Crane Data

Exhibit 7: MMF WAM (days)

Prime institutional & retail funds have both been extending WAM

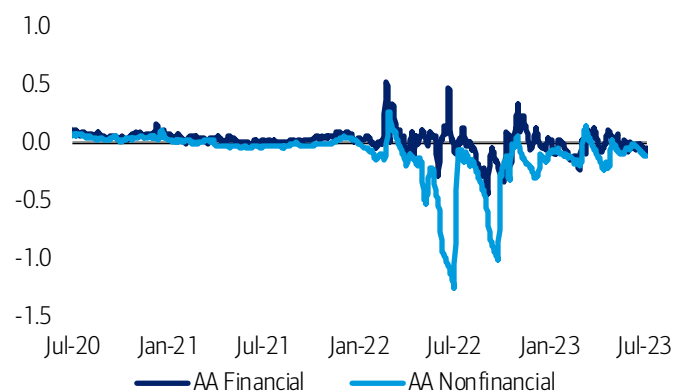


Source: BofA Global Research, Crane Data

CP rates & spreads to OIS

Exhibit 8: 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 9: 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 07/25/2023	5D MA spreads	Z-score of spreads (5d MA) since 2020
AA Fin	5.21	-11.0	-0.5
AA Nonfin	5.2	-12.0	-0.5
A2 P2 Nonfin	5.53	17.9	-0.3
AA Asset backed	5.34	-0.5	-0.3

Source: BofA Global Research, Bloomberg

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Exhibit 10: 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 07/25/2023	5D MA spreads	Z-score of spreads (5d MA) since 2020
AA Fin	5.54	17	0.1
AA Nonfin	5.2	-17	-0.4
A2 P2 Nonfin	5.53	17	-0.4
AA Asset backed	5.46	9	-0.3

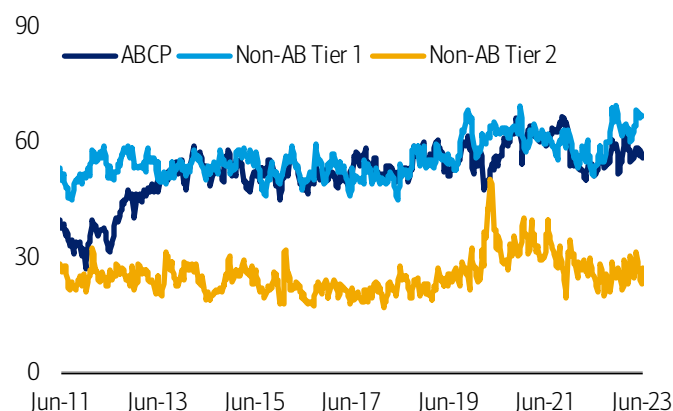
Source: BofA Global Research, Bloomberg

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CP maturity distribution

Exhibit 11: Avg maturity distribution of CP O/S by category (days)

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

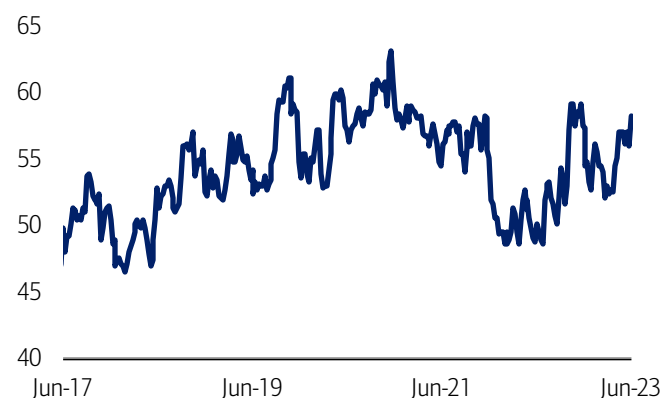


Source: BofA Global Research, Federal Reserve

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Exhibit 12: Avg maturity distribution of total CP outstanding (days)

Maturity extension for total CP ticked up in recent weeks

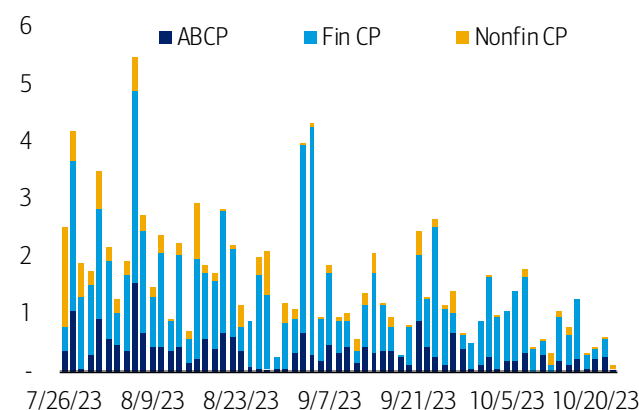


Source: BofA Global Research, Federal Reserve

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Exhibit 13: MMF CP maturing in the next 3 months (\$bn)

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

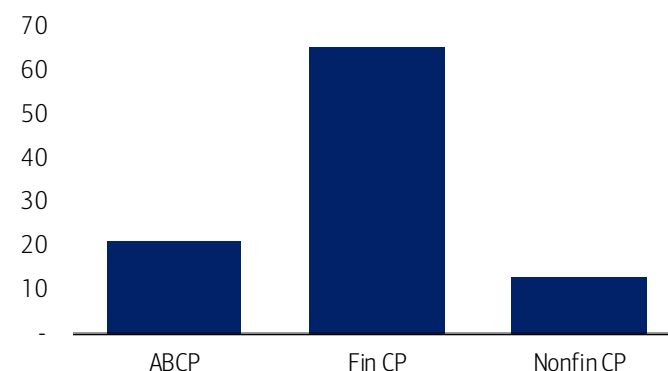


Source: BofA Global Research, Crane

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Exhibit 14: MMF CP maturing in the next 3 months by category (\$bn, as of 07/25/2023)

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

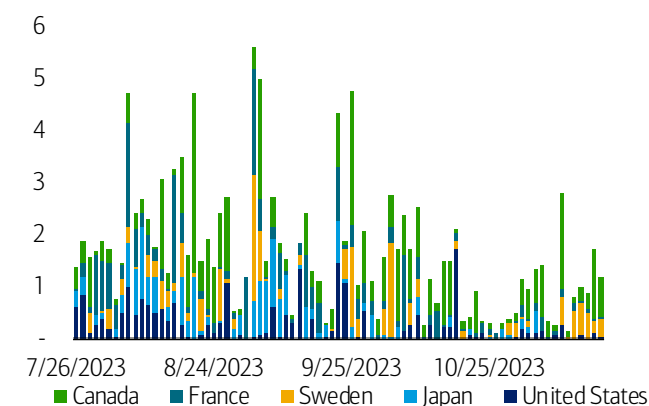


Source: BofA Global Research, Crane

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Exhibit 15: MMF top 5 CP maturing by country (\$bn)

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

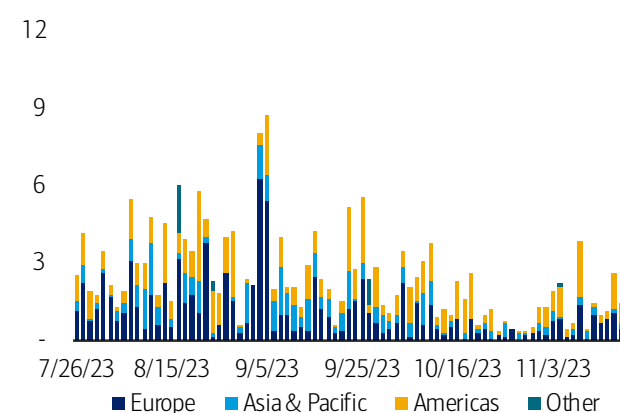


Source: BofA Global Research, Crane Data

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

Amount of CP maturing mostly seen in Americas & Europe



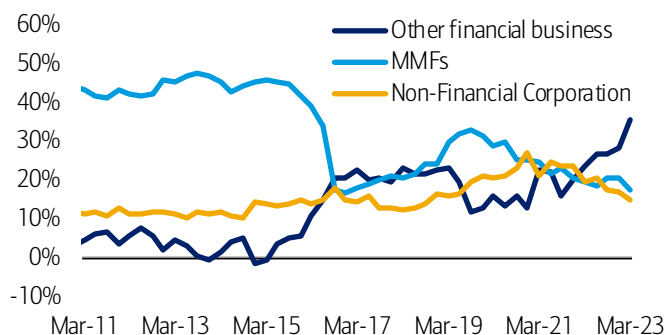
Source: BofA Global Research, Crane Data

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CP holders

Exhibit 17: Top 3 holders CP holdings over time

CP demand from other financial business has continued to increase over the years while demand from MMFs has declined



Source: BofA Global Research, Federal Reserve

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Exhibit 18: 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%

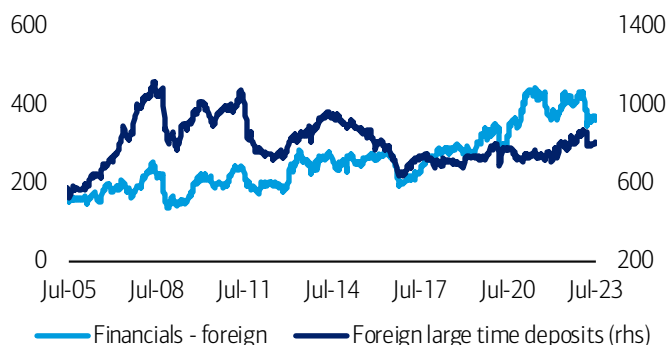
Source: BofA Global Research, Federal Reserve

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Foreign CP

Exhibit 19: Foreign fin CP O/S & 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 20: MMF CP top 5 issuers by country (as of 06/30/2023)

Canada the largest issuer in terms of total CP

	\$bn	% Total
Canada	58	23%
France	39	15%
United States	32	13%
Sweden	19	8%
Japan	19	8%

Source: BofA Global Research, Crane

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Exhibit 21: MMF ABCP top 5 issuers by country

France has the largest issuance in ABCP

	\$bn	% Total
France	18	35%
United States	11	21%
Canada	10	19%
Japan	6	11%
United Kingdom	5	10%

Source: BofA Global Research, Crane

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Exhibit 22: MMF Fin CP top 5 issuers by country

Canada leads the largest issuance in financial CP

	\$bn	% Total
Canada	43	26%
Sweden	18	11%
Australia	16	10%
France	14	9%
United Kingdom	13	8%

Source: BofA Global Research, Crane

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Exhibit 23: MMF Nonfin CP top 5 issuers by country

US leads the largest issuance in non-financial CP

	\$bn	% Total
United States	10	27%
France	7	18%
Canada	5	13%
Netherlands	4	11%
Germany	3	8%

Source: BofA Global Research, Crane

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