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What Bank Investors Are Asking | North America

What's Driving Changes In Bank ROEs?

Our DuPont analysis deconstructs bank ROEs in 2024 vs 2026e. Among Large Cap Banks, we see the greatest ROE improvement at C (OW) and BAC (OW). For Midcap Banks we see the greatest improvement at FLG (EW) and VLY (EW).

How It Works:

- Our DuPont analysis deconstructs return on equity (ROE) into return on assets (ROA) x leverage (average assets/average common equity).
- We further deconstruct ROA into NII/assets + fees/assets - provision/assets - expenses/assets - tax/assets - pref/assets.
- Inside, we show a bank by bank 2024 DuPont analysis, 2026e Dupont analysis, and comparison 2026e vs 2024.

Charts of the Week:

Exhibit 1: Comparing 2026 vs 2024 ROEs for our Large Cap Banks coverage, we see the greatest improvement at C (OW, from 6.3% to 7.9%) driven by lower expenses/assets and higher leverage driven by buybacks; second greatest improvement at BAC (OW, from 9.7% to 11%) driven by higher NII/assets and higher leverage driven by buybacks

DuPont Analysis: 2026 vs 2024 ROE Change and Drivers of Change																		
	Large Cap Banks Coverage																	
	Rank	NII / Assets	Rank	Fees / Assets	Rank	Provision / Assets	Rank	Expenses / Assets	Rank	Tax Expense / Assets	Rank	Pref / Assets	Rank	ROA	Rank	Leverage	Rank	ROE
C	8	0.0%	8	(0.0%)	5	0.0%	2	(0.2%)	9	0.0%	7	(0.0%)	2	0.1%	2	0.5x	1	1.6%
BAC	2	0.1%	6	0.0%	8	0.1%	9	(0.0%)	11	0.0%	1	(0.0%)	3	0.1%	4	0.5x	2	1.4%
STT	11	(0.0%)	11	(0.2%)	2	(0.0%)	1	(0.2%)	7	0.0%	11	0.0%	9	(0.0%)	1	0.7x	3	0.5%
BK	9	(0.0%)	2	0.1%	1	(0.0%)	5	(0.1%)	10	0.0%	12	0.0%	4	0.1%	8	(0.4x)	4	0.4%
WFC	10	(0.0%)	3	0.0%	11	0.1%	6	(0.1%)	3	(0.0%)	9	(0.0%)	10	(0.0%)	5	0.5x	5	0.3%
TFC	3	0.1%	9	(0.0%)	6	0.0%	10	0.0%	5	0.0%	6	(0.0%)	5	0.1%	9	(0.5x)	6	0.1%
NTES	7	0.0%	5	(0.0%)	4	0.0%	11	0.0%	6	0.0%	8	(0.0%)	8	0.0%	7	(0.2x)	7	(0.2%)
RF	6	0.0%	7	(0.0%)	10	0.1%	4	(0.1%)	8	0.0%	5	(0.0%)	6	0.1%	10	(0.8x)	8	(0.4%)
GS	5	0.1%	12	(0.3%)	7	0.0%	3	(0.1%)	2	(0.0%)	10	0.0%	11	(0.1%)	3	0.5x	9	(0.5%)
USB	4	0.1%	4	0.0%	9	0.1%	7	(0.0%)	12	(0.3%)	4	(0.0%)	7	0.1%	11	(1.5x)	10	(0.7%)
PNC	1	0.2%	1	0.1%	12	0.1%	12	0.1%	4	(0.0%)	2	(0.0%)	1	0.1%	12	(2.0x)	11	(0.8%)
JPM	12	(0.2%)	10	(0.0%)	3	0.0%	8	(0.1%)	1	(0.1%)	3	(0.0%)	12	(0.1%)	6	0.3x	12	(1.6%)
Wtd. Avg.		(0.0%)		(0.0%)		0.0%		(0.1%)		(0.0%)		(0.0%)		(0.0%)		0.2x		0.1%

Note: Leverage calculated as average assets / average common equity
Source: Morgan Stanley Research estimates, Company data

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Exhibit 2: Comparing 2026 vs 2024 ROEs for our Midcap Banks coverage, we see the greatest improvement at FLG (EW, from -10.7% to +4.1%) as restructuring efforts help shift the business model and drive the bank towards normalized ROE; second greatest improvement at VLY (EW, from 4.7% to 7.6%) driven by higher NII/ assets and lower provision/assets

DuPont Analysis: 2026 vs 2024 ROE Change and Drivers of Change

Midcap Banks Coverage																		
	Rank	NII / Assets	Rank	Fees / Assets	Rank	Provision / Assets	Rank	Expenses / Assets	Rank	Tax Expense / Assets	Rank	Prof / Assets	Rank	ROA	Rank	Leverage	Rank	ROE
FLG	2	0.8%	16	(0.0%)	1	(0.7%)	1	(0.2%)	20	0.3%	17	0.0%	1	1.1%	17	(2.6x)	1	14.8%
VLY	8	0.3%	6	0.0%	2	(0.2%)	8	0.0%	16	0.1%	18	0.0%	2	0.4%	12	(0.7x)	2	3.0%
AUB	5	0.4%	5	0.0%	3	(0.0%)	12	0.1%	19	0.1%	3	(0.0%)	4	0.3%	8	(0.5x)	3	1.9%
KEY	1	0.6%	1	0.1%	16	0.1%	18	0.1%	18	0.1%	12	(0.0%)	3	0.4%	20	(0.5x)	4	1.9%
CFC	6	0.3%	4	0.1%	10	0.0%	13	0.1%	11	0.0%	8	(0.0%)	6	0.2%	10	(0.6x)	5	1.5%
PR	3	0.4%	9	0.0%	13	0.1%	17	0.1%	15	0.0%	13	0.0%	5	0.2%	7	(0.4x)	6	0.7%
MTB	14	0.1%	2	0.1%	9	0.0%	16	0.1%	9	0.0%	18	0.0%	12	0.0%	1	0.4x	7	0.7%
CADE	7	0.3%	14	(0.0%)	15	0.1%	5	(0.0%)	14	0.0%	9	(0.0%)	7	0.1%	11	(0.7x)	8	0.4%
CMA	10	0.2%	3	0.1%	18	0.1%	19	0.1%	7	0.0%	16	0.0%	14	(0.0%)	4	(0.3x)	9	(0.2%)
HBAN	16	0.0%	13	0.0%	8	0.0%	4	(0.0%)	4	(0.0%)	2	(0.0%)	9	0.0%	9	(0.6x)	10	(0.2%)
WBS	18	(0.1%)	19	(0.1%)	4	(0.0%)	6	0.0%	4	(0.0%)	10	(0.0%)	16	(0.0%)	3	(0.0x)	11	(0.4%)
EWBC	17	(0.0%)	12	0.0%	7	0.0%	9	0.0%	8	0.0%	13	0.0%	18	(0.1%)	2	0.4x	12	(0.4%)
SNW	15	0.0%	7	0.0%	11	0.1%	3	(0.1%)	17	0.1%	7	(0.0%)	15	(0.0%)	5	(0.2x)	13	(0.5%)
UMBF	4	0.4%	20	(0.4%)	17	0.1%	2	(0.1%)	13	0.0%	20	0.0%	10	0.0%	13	(1.1x)	14	(0.8%)
FTB	9	0.2%	8	0.0%	12	0.1%	11	0.1%	10	0.0%	4	(0.0%)	8	0.1%	15	(1.6x)	15	(0.9%)
OKX	20	(0.2%)	17	(0.0%)	5	(0.0%)	10	0.0%	2	(0.1%)	5	(0.0%)	19	(0.2%)	6	(0.4x)	16	(2.2%)
CSB	13	0.1%	10	0.0%	14	0.1%	7	0.0%	12	0.0%	13	0.0%	13	0.0%	14	(1.4x)	17	(2.4%)
ZION	11	0.2%	11	0.0%	19	0.1%	14	0.1%	5	(0.0%)	1	(0.0%)	11	0.0%	19	(3.3x)	18	(2.4%)
CFR	12	0.2%	15	(0.0%)	6	0.0%	20	0.2%	3	(0.1%)	11	(0.0%)	17	(0.1%)	16	(2.4x)	19	(3.5%)
MSBK	19	(0.1%)	10	(0.0%)	20	0.0%	15	0.1%	1	(0.2%)	6	(0.0%)	20	(0.4%)	18	(2.7x)	20	(3.2%)
WTD Avg.		0.2%		0.0%		0.0%		0.0%		0.1%		(0.0%)		0.2%		(0.9x)		0.5%

Note: Leverage calculated as average assets / average common equity
Source: Morgan Stanley Research estimates, Company data

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What's Driving Our Bank ROE Outlooks?

2024 DuPont Analysis

Exhibit 3: 2024 Large Cap Banks Coverage: JPM delivered the highest ROE, driven by above average NII/assets and fees/assets, below average expenses/assets, and higher leverage

DuPont Analysis (2024 Rankings)

Large Cap Banks Coverage																		
	Rank	NII / Assets	Rank	Fees / Assets	Rank	Provision / Assets	Rank	Expenses / Assets	Rank	Tax Expense / Assets	Rank	Pref / Assets	Rank	ROA	Rank	Leverage	Rank	ROE
JPM	6	2.3%	5	2.0%	8	0.3%	4	2.2%	12	0.5%	2	0.0%	1	1.3%	4	13.1x	1	16.8%
NTRS	9	1.5%	1	3.7%	1	0.0%	12	3.7%	10	0.4%	1	0.0%	4	1.1%	6	12.8x	2	13.7%
GS	12	0.5%	4	2.7%	4	0.1%	1	2.0%	4	0.3%	4	0.0%	10	0.8%	1	15.7x	3	13.0%
USB	4	2.5%	7	1.7%	10	0.3%	7	2.5%	5	0.3%	8	0.1%	7	0.9%	3	13.2x	4	12.5%
BK	10	1.0%	2	3.5%	2	0.0%	11	3.0%	9	0.3%	5	0.0%	3	1.1%	10	11.4x	5	12.4%
RF	1	3.2%	8	1.6%	9	0.3%	8	2.7%	11	0.4%	12	0.1%	2	1.3%	11	9.6x	6	12.2%
PNC	5	2.4%	9	1.4%	5	0.1%	6	2.3%	8	0.3%	9	0.1%	6	1.0%	8	12.2x	7	12.1%
STT	11	0.9%	3	3.2%	3	0.0%	10	3.0%	3	0.2%	10	0.1%	9	0.8%	2	14.0x	8	11.8%
WFC	3	2.5%	6	1.9%	7	0.2%	9	2.8%	7	0.3%	7	0.1%	5	1.0%	9	11.8x	9	11.7%
BAC	8	1.7%	10	1.4%	6	0.2%	2	2.0%	1	0.1%	6	0.0%	11	0.8%	7	12.3x	10	9.7%
TFC	2	2.7%	11	1.1%	11	0.4%	5	2.2%	6	0.3%	11	0.1%	8	0.9%	12	9.4x	11	8.7%
C	7	2.2%	12	1.1%	12	0.4%	3	2.2%	2	0.2%	3	0.0%	12	0.5%	5	13.0x	12	6.3%
Wtd. Avg.		2.0%		1.8%		0.2%		2.3%		0.3%		0.0%		0.9%		12.7x		11.8%

Note: Leverage calculated as average assets / average common equity

Source: Morgan Stanley Research estimates, Company data

Exhibit 4: 2024 Midcap Banks Coverage: MBIN delivered the highest ROE, driven by below average expenses/assets, higher leverage and above average NII/assets

DuPont Analysis (2024 Rankings)

Midcap Banks Coverage																		
	Rank	NII / Assets	Rank	Fees / Assets	Rank	Provision / Assets	Rank	Expenses / Assets	Rank	Tax Expense / Assets	Rank	Pref / Assets	Rank	ROA	Rank	Leverage	Rank	ROE
MBIN	10	2.9%	10	0.8%	6	0.1%	1	1.3%	19	0.6%	20	0.2%	4	1.6%	8	12.5x	1	19.8%
CBSH	2	3.4%	1	2.0%	4	0.1%	20	3.1%	18	0.5%	1	0.0%	2	1.7%	13	9.7x	2	16.9%
EWBC	5	3.1%	16	0.5%	13	0.2%	2	1.3%	17	0.4%	1	0.0%	3	1.6%	12	10.0x	3	15.9%
CFR	3	3.4%	9	0.9%	5	0.1%	18	2.6%	16	0.4%	5	0.0%	8	1.2%	4	13.6x	4	15.8%
SNV	9	3.0%	12	0.8%	12	0.2%	8	2.1%	4	0.2%	17	0.1%	9	1.1%	7	12.8x	5	14.0%
UMBF	18	2.4%	2	1.5%	7	0.1%	14	2.3%	10	0.3%	1	0.0%	11	1.1%	6	13.0x	6	13.8%
OZK	1	4.2%	20	0.3%	18	0.5%	4	1.5%	20	0.6%	11	0.0%	1	1.9%	19	7.2x	7	13.8%
FITB	14	2.7%	4	1.4%	14	0.2%	15	2.3%	12	0.3%	18	0.1%	10	1.1%	9	12.3x	8	13.4%
ZION	11	2.8%	11	0.8%	3	0.1%	12	2.3%	9	0.3%	13	0.1%	16	0.8%	1	15.8x	9	13.1%
CMA	13	2.7%	5	1.3%	2	0.1%	19	2.8%	6	0.3%	8	0.0%	15	0.9%	5	13.4x	10	11.6%
HBAN	12	2.8%	7	1.1%	11	0.2%	11	2.3%	7	0.3%	16	0.1%	14	0.9%	10	11.3x	11	10.7%
WBS	6	3.1%	14	0.5%	16	0.3%	5	1.7%	15	0.4%	7	0.0%	7	1.2%	16	8.9x	12	10.7%
MTB	4	3.3%	6	1.1%	15	0.3%	17	2.5%	14	0.4%	15	0.1%	6	1.2%	17	8.2x	13	9.9%
CADE	7	3.0%	13	0.7%	8	0.1%	10	2.2%	11	0.3%	6	0.0%	12	1.1%	14	9.2x	14	9.8%
KEY	19	2.0%	3	1.4%	9	0.2%	16	2.4%	2	0.2%	19	0.1%	18	0.6%	2	14.5x	15	8.6%
AUB	8	3.0%	15	0.5%	10	0.2%	7	1.9%	8	0.3%	12	0.0%	13	1.0%	18	8.0x	16	8.1%
CFG	17	2.6%	8	1.0%	17	0.3%	13	2.3%	3	0.2%	14	0.1%	17	0.7%	11	10.0x	17	6.7%
PB	16	2.6%	17	0.4%	1	0.0%	3	1.4%	13	0.3%	1	0.0%	5	1.2%	20	5.5x	18	6.7%
VLV	15	2.6%	18	0.4%	19	0.5%	6	1.7%	5	0.2%	10	0.0%	19	0.5%	15	9.0x	19	4.7%
FLG	20	1.9%	19	0.4%	20	0.9%	9	2.2%	1	-0.1%	9	0.0%	20	(0.8%)	3	14.1x	20	(10.7%)
WTD. Avg.		2.7%		1.0%		0.3%		2.2%		0.3%		0.1%		0.9%		10.7x		9.6%

Note: Leverage calculated as average assets / average common equity

Source: Morgan Stanley Research estimates, Company data

2026 DuPont Analysis

Exhibit 5: 2026 Large Cap Banks Coverage: We expect JPM to continue delivering the highest ROE in 2026, but with Citi improving the most from 6.3% in 2024 to 7.9% in 2027E

DuPont Analysis (2026e Rankings)

Large Cap Banks Coverage																																			
Rank		NII / Assets		Rank		Fees / Assets		Rank		Provision / Assets		Rank		Expenses / Assets		Rank		Tax Expense / Assets		Rank		Pref / Assets		Rank		ROA		Rank		Leverage		Rank		ROE	
JPM	7	2.1%	5	1.9%	7	0.3%	4	2.2%	11	0.4%	1	0.0%	3	1.1%	4	13.3x	1	15.2%																	
NTRS	9	1.5%	1	3.7%	3	0.0%	12	3.8%	10	0.4%	2	0.0%	5	1.1%	6	12.7x	2	13.5%																	
BK	10	1.0%	2	3.5%	1	0.0%	11	3.0%	9	0.4%	11	0.1%	2	1.2%	9	11.0x	3	12.8%																	
GS	12	0.6%	4	2.5%	4	0.1%	1	1.9%	3	0.2%	5	0.0%	11	0.8%	1	16.2x	4	12.5%																	
STT	11	0.9%	3	3.1%	2	0.0%	10	2.8%	4	0.3%	12	0.1%	10	0.8%	2	14.7x	5	12.2%																	
WFC	5	2.5%	6	1.9%	8	0.3%	9	2.8%	5	0.3%	8	0.1%	8	1.0%	7	12.3x	6	12.1%																	
USB	4	2.6%	7	1.7%	11	0.4%	7	2.5%	8	0.3%	6	0.1%	6	1.0%	8	11.7x	7	11.8%																	
RF	1	3.2%	8	1.6%	9	0.4%	8	2.6%	12	0.4%	10	0.1%	1	1.3%	12	8.9x	8	11.8%																	
PNC	3	2.6%	9	1.5%	6	0.2%	6	2.5%	7	0.3%	7	0.1%	4	1.1%	10	10.2x	9	11.4%																	
BAC	8	1.9%	10	1.4%	5	0.2%	3	2.0%	1	0.1%	3	0.0%	9	0.9%	5	12.8x	10	11.0%																	
TFC	2	2.8%	11	1.1%	10	0.4%	5	2.2%	6	0.3%	9	0.1%	7	1.0%	11	8.9x	11	8.8%																	
C	6	2.2%	12	1.1%	12	0.4%	2	2.0%	2	0.2%	4	0.0%	12	0.6%	3	13.5x	12	7.9%																	
Wtd. Avg.		1.9%		1.8%		0.3%		2.2%		0.3%		0.0%		0.9%		12.9x		11.9%																	

Note: Leverage calculated as average assets / average common equity
Source: Morgan Stanley Research estimates, Company data

Exhibit 6: 2026 Midcap Banks Coverage: We expect EWBC/CBSH to have peer leading ROEs in 2026 of 15.5%/14.5%

DuPont Analysis (2026e Rankings)

Midcap Banks Coverage																		
	Rank	NII / Assets	Rank	Fees / Assets	Rank	Provision / Assets	Rank	Expenses / Assets	Rank	Tax Expense / Assets	Rank	Pref / Assets	Rank	ROA	Rank	Leverage	Rank	ROE
EWBC	7	3.1%	15	0.5%	13	0.3%	1	1.4%	18	0.4%	1	0.0%	3	1.5%	10	10.3x	1	15.5%
CBSH	3	3.5%	1	2.1%	4	0.2%	20	3.1%	19	0.5%	1	0.0%	1	1.7%	16	8.3x	2	14.5%
SNV	10	3.0%	11	0.8%	15	0.3%	9	2.0%	8	0.3%	18	0.1%	13	1.1%	2	12.6x	3	13.5%
UMBF	16	2.8%	6	1.1%	8	0.2%	11	2.2%	10	0.3%	5	0.0%	12	1.1%	4	11.9x	4	13.0%
FITB	15	2.9%	3	1.4%	16	0.3%	13	2.4%	9	0.3%	17	0.1%	9	1.2%	8	10.7x	5	12.5%
CFR	2	3.6%	9	0.9%	2	0.1%	18	2.9%	11	0.4%	6	0.0%	11	1.1%	6	11.3x	6	12.3%
MBIN	17	2.8%	10	0.8%	19	0.4%	2	1.4%	17	0.4%	20	0.2%	8	1.2%	11	9.8x	7	11.6%
OZK	1	4.0%	20	0.3%	20	0.5%	4	1.5%	20	0.6%	12	0.0%	2	1.7%	19	6.9x	8	11.5%
CMA	12	2.9%	4	1.4%	5	0.2%	19	3.0%	3	0.3%	9	0.0%	18	0.9%	1	13.3x	9	11.4%
ZION	11	3.0%	12	0.8%	6	0.2%	14	2.4%	5	0.3%	4	0.0%	19	0.9%	3	12.5x	10	10.7%
MTB	5	3.4%	5	1.2%	17	0.3%	17	2.6%	15	0.4%	16	0.1%	6	1.2%	14	8.6x	11	10.6%
KEY	19	2.6%	2	1.5%	14	0.3%	16	2.5%	6	0.3%	19	0.1%	15	1.0%	7	11.0x	12	10.5%
HBAN	18	2.8%	7	1.1%	10	0.2%	12	2.3%	4	0.3%	14	0.1%	14	1.0%	9	10.7x	13	10.4%
WBS	8	3.1%	16	0.5%	11	0.3%	5	1.7%	13	0.4%	8	0.0%	10	1.2%	13	8.9x	14	10.3%
CADE	6	3.3%	13	0.7%	9	0.2%	10	2.2%	12	0.4%	7	0.0%	7	1.2%	15	8.6x	15	10.2%
AUB	4	3.4%	14	0.5%	3	0.2%	8	2.0%	16	0.4%	10	0.0%	5	1.3%	18	7.5x	16	10.1%
CFG	14	2.9%	8	1.1%	18	0.4%	15	2.4%	2	0.2%	15	0.1%	17	0.9%	12	9.4x	17	8.2%
VLY	13	2.9%	18	0.4%	12	0.3%	6	1.8%	7	0.3%	13	0.0%	16	0.9%	17	8.2x	18	7.6%
PB	9	3.0%	17	0.4%	1	0.1%	3	1.5%	14	0.4%	1	0.0%	4	1.5%	20	5.1x	19	7.4%
FLG	20	2.4%	19	0.4%	7	0.2%	7	2.0%	1	0.2%	11	0.0%	20	0.4%	5	11.4x	20	4.1%
WTD. Avg.		3.0%		1.0%		0.3%		2.3%		0.3%		0.0%		1.1%		9.8x		10.4%

Note: Leverage calculated as average assets / average common equity
Source: Morgan Stanley Research estimates, Company data

2026 vs 2024 DuPont Analysis

Exhibit 7: Comparing 2026 vs 2024 ROEs for our Large Cap Banks coverage, we see the greatest improvement at C (OW, from 6.3% to 7.9%) driven by lower expenses/assets and higher leverage driven by buybacks; second greatest improvement at BAC (OW, from 9.7% to 11%) driven by higher NII/assets and higher leverage driven by buybacks

DuPont Analysis: 2026 vs 2024 ROE Change and Drivers of Change

Large Cap Banks Coverage																		
	Rank	NII / Assets	Rank	Fees / Assets	Rank	Provision / Assets	Rank	Expenses / Assets	Rank	Tax Expense / Assets	Rank	Pref / Assets	Rank	ROA	Rank	Leverage	Rank	ROE
C	8	0.0%	8	(0.0%)	5	0.0%	2	(0.2%)	9	0.0%	7	(0.0%)	2	0.1%	2	0.5x	1	1.6%
BAC	2	0.1%	6	0.0%	8	0.1%	9	(0.0%)	11	0.0%	1	(0.0%)	3	0.1%	4	0.5x	2	1.4%
STT	11	(0.0%)	11	(0.2%)	2	(0.0%)	1	(0.2%)	7	0.0%	11	0.0%	9	(0.0%)	1	0.7x	3	0.5%
BK	9	(0.0%)	2	0.1%	1	(0.0%)	5	(0.1%)	10	0.0%	12	0.0%	4	0.1%	8	(0.4x)	4	0.4%
WFC	10	(0.0%)	3	0.0%	11	0.1%	6	(0.1%)	3	(0.0%)	9	(0.0%)	10	(0.0%)	5	0.5x	5	0.3%
TFC	3	0.1%	9	(0.0%)	6	0.0%	10	0.0%	5	0.0%	6	(0.0%)	5	0.1%	9	(0.5x)	6	0.1%
NTRS	7	0.0%	5	0.0%	4	0.0%	11	0.0%	6	0.0%	8	(0.0%)	8	0.0%	7	(0.2x)	7	(0.2%)
RF	6	0.0%	7	(0.0%)	10	0.1%	4	(0.1%)	8	0.0%	5	(0.0%)	6	0.1%	10	(0.8x)	8	(0.4%)
GS	5	0.1%	12	(0.3%)	7	0.0%	3	(0.1%)	2	(0.0%)	10	0.0%	11	(0.1%)	3	0.5x	9	(0.5%)
USB	4	0.1%	4	0.0%	9	0.1%	7	(0.0%)	12	0.1%	4	(0.0%)	7	0.1%	11	(1.5x)	10	(0.7%)
PNC	1	0.2%	1	0.1%	12	0.1%	12	0.1%	4	(0.0%)	2	(0.0%)	1	0.1%	12	(2.0x)	11	(0.8%)
JPM	12	(0.2%)	10	(0.1%)	3	0.0%	8	(0.0%)	1	(0.1%)	3	(0.0%)	12	(0.1%)	6	0.3x	12	(1.6%)
Wtd. Avg.		(0.0%)		(0.0%)		0.0%		(0.1%)		(0.0%)		(0.0%)		(0.0%)		0.2x		0.1%

Note: Leverage calculated as average assets / average common equity
Source: Morgan Stanley Research estimates, Company data

Exhibit 8: Comparing 2026 vs 2024 ROEs for our Midcap Banks coverage, we see the greatest improvement at FLG (EW, from -10.7% to +4.1%) as restructuring efforts help shift the business model and drive the bank towards normalized ROE; second greatest improvement at VLY (EW, from 4.7% to 7.6%) driven by higher NII/assets and lower provision/assets

DuPont Analysis: 2026 vs 2024 ROE Change and Drivers of Change

Midcap Banks Coverage																		
	Rank	NII / Assets	Rank	Fees / Assets	Rank	Provision / Assets	Rank	Expenses / Assets	Rank	Tax Expense / Assets	Rank	Pref / Assets	Rank	ROA	Rank	Leverage	Rank	ROE
FLG	2	0.6%	16	(0.0%)	1	(0.7%)	1	(0.2%)	20	0.3%	17	0.0%	1	1.1%	17	(2.6x)	1	14.8%
VLY	8	0.3%	6	0.0%	2	(0.2%)	8	0.0%	16	0.1%	19	0.0%	2	0.4%	12	(0.7x)	2	3.0%
AUB	5	0.4%	5	0.0%	3	(0.0%)	12	0.1%	19	0.1%	3	(0.0%)	4	0.3%	8	(0.5x)	3	1.9%
KEY	1	0.6%	1	0.1%	16	0.1%	18	0.1%	18	0.1%	12	(0.0%)	3	0.4%	20	(3.5x)	4	1.9%
CFG	6	0.3%	4	0.1%	10	0.0%	13	0.1%	11	0.0%	8	(0.0%)	6	0.2%	10	(0.6x)	5	1.5%
PB	3	0.4%	9	0.0%	13	0.1%	17	0.1%	15	0.0%	13	0.0%	5	0.2%	7	(0.4x)	6	0.7%
MTB	14	0.1%	2	0.1%	9	0.0%	16	0.1%	9	0.0%	18	0.0%	12	0.0%	1	0.4x	7	0.7%
CADE	7	0.3%	14	(0.0%)	15	0.1%	5	(0.0%)	14	0.0%	9	(0.0%)	7	0.1%	11	(0.7x)	8	0.4%
CMA	10	0.2%	3	0.1%	18	0.1%	19	0.1%	7	0.0%	16	0.0%	14	(0.0%)	4	(0.1x)	9	(0.2%)
HBAN	16	0.0%	13	0.0%	8	0.0%	4	(0.0%)	6	(0.0%)	2	(0.0%)	9	0.0%	9	(0.6x)	10	(0.2%)
WBS	18	(0.1%)	19	(0.1%)	4	(0.0%)	6	0.0%	4	(0.0%)	10	(0.0%)	16	(0.0%)	3	(0.0x)	11	(0.4%)
EWBC	17	(0.0%)	12	0.0%	7	0.0%	9	0.0%	8	0.0%	13	0.0%	18	(0.1%)	2	0.4x	12	(0.4%)
SNV	15	0.0%	7	0.0%	11	0.1%	3	(0.1%)	17	0.1%	7	(0.0%)	15	(0.0%)	5	(0.2x)	13	(0.5%)
UMBF	4	0.4%	20	(0.4%)	17	0.1%	2	(0.1%)	13	0.0%	20	0.0%	10	0.0%	13	(1.1x)	14	(0.8%)
FITB	9	0.2%	8	0.0%	12	0.1%	11	0.1%	10	0.0%	4	(0.0%)	8	0.1%	15	(1.6x)	15	(0.9%)
OZK	20	(0.2%)	17	(0.0%)	5	(0.0%)	10	0.0%	2	(0.1%)	5	(0.0%)	19	(0.2%)	6	(0.4x)	16	(2.2%)
CBSH	13	0.1%	10	0.0%	14	0.1%	7	0.0%	12	0.0%	13	0.0%	13	0.0%	14	(1.4x)	17	(2.4%)
ZION	11	0.2%	11	0.0%	19	0.1%	14	0.1%	5	(0.0%)	1	(0.0%)	11	0.0%	19	(3.3x)	18	(2.4%)
CFR	12	0.2%	15	(0.0%)	6	0.0%	20	0.2%	3	(0.1%)	11	(0.0%)	17	(0.1%)	16	(2.4x)	19	(3.5%)
MBIN	19	(0.1%)	18	(0.0%)	20	0.3%	15	0.1%	1	(0.2%)	6	(0.0%)	20	(0.4%)	18	(2.7x)	20	(8.2%)
WTD. Avg.		0.2%		0.0%		0.0%		0.0%		0.1%		(0.0%)		0.2%		(0.9x)		0.9%

Note: Leverage calculated as average assets / average common equity
Source: Morgan Stanley Research estimates, Company data

Large Cap Bank ROE History

Bank of America (BAC)

Exhibit 9: BAC DuPont Analysis History

Bank of America DuPont Analysis

BAC																		
	Rank	NII / Assets	Rank	Fees / Assets	Rank	Provision / Assets	Rank	Expenses / Assets	Rank	Tax Expense / Assets	Rank	Pref / Assets	Rank	ROA	Rank	Leverage	Rank	ROE
2010	1	2.2%	1	2.4%	15	1.2%	11	2.8%	6	0.1%	7	0.1%	12	0.4%	5	11.4x	12	4.5%
2011	6	2.0%	2	2.3%	14	0.6%	14	3.3%	1	0.0%	8	0.1%	13	0.3%	7	10.9x	13	2.9%
2012	9	1.9%	3	2.2%	12	0.4%	13	3.3%	4	0.1%	12	0.1%	14	0.3%	8	10.1x	14	2.6%
2013	5	2.0%	4	2.2%	10	0.2%	12	3.2%	10	0.2%	10	0.1%	11	0.5%	9	9.9x	11	5.4%
2014	8	1.9%	6	2.1%	3	0.1%	15	3.5%	8	0.1%	3	0.0%	15	0.2%	11	9.6x	15	1.9%
2015	10	1.9%	5	2.1%	6	0.1%	10	2.7%	13	0.3%	13	0.1%	9	0.7%	13	9.4x	9	6.9%
2016	7	1.9%	7	2.0%	9	0.2%	9	2.5%	14	0.4%	15	0.1%	8	0.8%	15	9.1x	8	7.1%
2017	4	2.0%	8	1.9%	8	0.1%	8	2.4%	15	0.4%	14	0.1%	5	0.9%	14	9.2x	7	8.1%
2018	2	2.1%	9	1.9%	5	0.1%	7	2.3%	12	0.3%	11	0.1%	2	1.2%	12	9.6x	3	11.2%
2019	3	2.1%	10	1.8%	7	0.1%	6	2.2%	11	0.3%	9	0.1%	1	1.2%	10	9.8x	2	11.4%
2020	14	1.6%	11	1.5%	13	0.4%	5	2.1%	2	0.0%	6	0.1%	10	0.6%	6	11.0x	10	6.6%
2021	15	1.4%	12	1.5%	1	-0.2%	2	2.0%	9	0.1%	1	0.0%	3	1.0%	4	12.1x	1	11.6%
2022	13	1.7%	15	1.4%	2	0.1%	1	1.9%	7	0.1%	2	0.0%	6	0.8%	1	12.9x	5	10.8%
2023	11	1.8%	14	1.4%	4	0.1%	3	2.0%	5	0.1%	5	0.1%	4	0.9%	2	12.4x	4	10.9%
2024	12	1.7%	13	1.4%	11	0.2%	4	2.0%	3	0.1%	4	0.0%	7	0.8%	3	12.3x	6	9.7%

Note: Leverage calculated as average assets / average common equity

Source: Morgan Stanley Research estimates, Company data

BNY (BK)

Exhibit 10: BK DuPont Analysis History

BNY DuPont Analysis

BK																		
	Rank	NII / Assets	Rank	Fees / Assets	Rank	Provision / Assets	Rank	Expenses / Assets	Rank	Tax Expense / Assets	Rank	Pref / Assets	Rank	ROA	Rank	Leverage	Rank	ROE
2010	1	1.2%	1	4.6%	11	0.0%	15	4.3%	15	0.4%	1	0.0%	2	1.1%	15	7.6x	11	8.6%
2011	5	1.0%	2	4.0%	10	0.0%	14	3.8%	13	0.4%	1	0.0%	8	0.9%	14	8.7x	12	7.7%
2012	7	0.9%	4	3.6%	2	0.0%	13	3.6%	6	0.3%	3	0.0%	13	0.8%	11	9.3x	14	7.2%
2013	9	0.9%	7	3.5%	4	0.0%	12	3.3%	9	0.3%	4	0.0%	14	0.7%	9	9.8x	13	7.2%
2014	13	0.8%	12	3.2%	3	0.0%	10	3.1%	4	0.2%	5	0.0%	15	0.6%	7	10.2x	15	5.8%
2015	12	0.8%	11	3.3%	9	0.0%	4	2.9%	8	0.3%	6	0.0%	11	0.8%	6	10.4x	10	8.8%
2016	10	0.9%	9	3.4%	8	0.0%	5	2.9%	11	0.3%	7	0.0%	7	0.9%	8	10.1x	7	9.5%
2017	6	1.0%	5	3.6%	6	0.0%	8	3.1%	14	0.4%	14	0.1%	5	1.1%	10	9.5x	5	10.1%
2018	3	1.1%	3	3.7%	7	0.0%	11	3.2%	10	0.3%	12	0.0%	1	1.2%	13	9.1x	2	11.2%
2019	8	0.9%	6	3.6%	5	0.0%	9	3.1%	7	0.3%	11	0.0%	4	1.1%	12	9.2x	6	10.0%
2020	14	0.7%	13	3.1%	15	0.1%	2	2.6%	3	0.2%	10	0.0%	9	0.9%	5	10.5x	9	9.1%
2021	15	0.6%	15	2.9%	1	-0.1%	1	2.5%	1	0.2%	8	0.0%	12	0.8%	2	11.4x	8	9.1%
2022	11	0.8%	14	3.1%	12	0.0%	3	2.8%	2	0.2%	13	0.0%	10	0.9%	1	11.8x	4	10.1%
2023	2	1.1%	10	3.3%	14	0.0%	7	3.0%	5	0.2%	15	0.1%	6	1.0%	4	11.3x	3	11.1%
2024	4	1.0%	8	3.5%	13	0.0%	6	3.0%	12	0.3%	9	0.0%	3	1.1%	3	11.4x	1	12.4%

Note: Leverage calculated as average assets / average common equity

Source: Morgan Stanley Research estimates, Company data

Citigroup (C)

Exhibit 11: C DuPont Analysis History

Citigroup DuPont Analysis

C																		
	Rank	NII / Assets	Rank	Fees / Assets	Rank	Provision / Assets	Rank	Expenses / Assets	Rank	Tax Expense / Assets	Rank	Pref / Assets	Rank	ROA	Rank	Leverage	Rank	ROE
2010	1	2.8%	1	1.7%	15	1.3%	11	2.4%	1	0.1%	1	0.0%	10	0.6%	6	12.4x	7	7.1%
2011	4	2.5%	7	1.4%	13	0.7%	14	2.6%	4	0.2%	2	0.0%	11	0.5%	7	11.4x	13	5.5%
2012	7	2.4%	6	1.4%	12	0.6%	13	2.6%	7	0.2%	3	0.0%	9	0.6%	10	10.4x	11	6.0%
2013	6	2.5%	3	1.6%	11	0.5%	12	2.6%	11	0.4%	4	0.0%	7	0.7%	11	9.8x	8	6.8%
2014	3	2.5%	4	1.5%	5	0.4%	15	2.9%	14	0.4%	5	0.0%	15	0.4%	12	9.4x	15	3.6%
2015	2	2.6%	2	1.6%	10	0.4%	10	2.4%	15	0.4%	6	0.0%	3	0.9%	14	8.9x	4	7.9%
2016	5	2.5%	9	1.4%	4	0.4%	9	2.3%	12	0.4%	13	0.1%	6	0.8%	15	8.6x	9	6.5%
2017	10	2.4%	5	1.5%	7	0.4%	8	2.3%	13	0.4%	15	0.1%	5	0.8%	13	9.1x	6	7.1%
2018	9	2.4%	10	1.4%	6	0.4%	6	2.2%	10	0.3%	14	0.1%	4	0.9%	9	10.6x	3	9.2%
2019	8	2.4%	11	1.4%	9	0.4%	5	2.2%	8	0.2%	12	0.1%	2	0.9%	8	11.1x	2	10.2%
2020	14	2.0%	8	1.4%	14	0.8%	1	2.0%	2	0.1%	11	0.0%	13	0.4%	5	12.7x	12	5.7%
2021	15	1.8%	12	1.3%	1	-0.2%	2	2.0%	9	0.3%	9	0.0%	1	1.0%	4	12.9x	1	12.3%
2022	13	2.0%	13	1.1%	2	0.2%	3	2.1%	3	0.1%	8	0.0%	8	0.6%	1	13.3x	5	7.9%
2023	11	2.2%	15	0.9%	3	0.3%	7	2.2%	5	0.2%	10	0.0%	14	0.4%	2	13.0x	14	5.1%
2024	12	2.2%	14	1.1%	8	0.4%	4	2.1%	6	0.2%	7	0.0%	12	0.5%	3	13.0x	10	6.3%

Note: Leverage calculated as average assets / average common equity
Source: Morgan Stanley Research estimates, Company data

Goldman Sachs (GS)

Exhibit 12: GS DuPont Analysis History

Goldman Sachs DuPont Analysis

GS																																																						
	Rank			NII / Assets			Rank			Fees / Assets			Rank			Provision / Assets			Rank			Expenses / Assets			Rank			Tax Expense / Assets			Rank			Pref / Assets			Rank			ROA			Rank			Leverage			Rank			ROE		
2010	1	0.6%		2	3.8%		1	0.0%		14	2.8%		15	0.5%		15	0.1%		6	0.9%		9	13.3x		5	12.4%																												
2011	2	0.5%		15	2.4%		1	0.0%		9	2.4%		3	0.2%		2	0.0%		15	0.4%		7	13.7x		15	5.5%																												
2012	9	0.4%		10	3.2%		1	0.0%		10	2.4%		13	0.4%		1	0.0%		10	0.8%		5	13.9x		9	10.9%																												
2013	12	0.4%		9	3.3%		1	0.0%		8	2.4%		12	0.4%		4	0.0%		9	0.8%		8	13.4x		8	11.1%																												
2014	6	0.5%		6	3.4%		1	0.0%		13	2.5%		14	0.4%		7	0.0%		7	0.9%		11	12.4x		10	10.8%																												
2015	13	0.4%		4	3.5%		1	0.0%		15	2.9%		9	0.3%		11	0.1%		13	0.6%		14	12.1x		14	7.5%																												
2016	15	0.3%		11	3.2%		7	0.0%		5	2.3%		10	0.3%		13	0.1%		11	0.8%		15	11.8x		12	9.1%																												
2017	14	0.3%		7	3.3%		11	0.1%		4	2.3%		8	0.3%		14	0.1%		5	0.9%		13	12.2x		7	11.4%																												
2018	11	0.4%		5	3.4%		10	0.1%		11	2.4%		5	0.2%		12	0.1%		3	1.0%		10	13.0x		3	13.2%																												
2019	7	0.4%		8	3.3%		13	0.1%		12	2.5%		4	0.2%		10	0.1%		4	1.0%		12	12.3x		6	11.7%																												
2020	8	0.4%		3	3.6%		15	0.3%		6	2.3%		7	0.3%		9	0.0%		2	1.1%		6	13.9x		2	15.0%																												
2021	5	0.5%		1	3.9%		8	0.0%		7	2.3%		11	0.4%		5	0.0%		1	1.5%		2	14.9x		1	23.0%																												
2022	3	0.5%		13	2.6%		14	0.2%		2	2.0%		1	0.1%		3	0.0%		12	0.7%		4	14.7x		11	10.2%																												
2023	10	0.4%		14	2.6%		9	0.1%		3	2.2%		2	0.2%		6	0.0%		14	0.5%		3	14.7x		13	7.9%																												
2024	4	0.5%		12	2.7%		12	0.1%		1	2.0%		6	0.3%		8	0.0%		8	0.8%		1	15.7x		4	13.0%																												

Note: Leverage calculated as average assets / average common equity
Source: Morgan Stanley Research estimates, Company data

JPMorgan Chase (JPM)

Exhibit 13: JPM DuPont Analysis History

JPMorgan Chase DuPont Analysis

JPM																																		
	Rank		NII / Assets		Rank		Fees / Assets		Provision / Assets		Rank		Expenses / Assets		Rank		Tax Expense / Assets		Rank		Pref / Assets		Rank		ROA		Rank		Leverage		Rank		ROE	
2010	1	2.5%	1	2.6%	15	0.8%	15	3.0%	9	0.5%	4	0.0%	14	0.8%	6	12.7x	12	9.6%																
2011	4	2.2%	4	2.3%	13	0.3%	13	2.9%	6	0.4%	1	0.0%	13	0.8%	7	12.7x	11	9.6%																
2012	8	2.0%	3	2.4%	4	0.1%	12	2.8%	8	0.5%	2	0.0%	9	0.8%	8	12.3x	9	10.8%																
2013	10	1.8%	2	2.4%	2	0.0%	14	3.0%	13	0.5%	5	0.0%	15	0.7%	9	12.1x	15	9.0%																
2014	11	1.8%	6	2.2%	3	0.1%	11	2.5%	12	0.5%	9	0.0%	12	0.8%	10	11.8x	13	9.4%																
2015	12	1.8%	10	2.1%	5	0.2%	9	2.4%	11	0.5%	13	0.1%	11	0.8%	12	11.5x	14	9.2%																
2016	9	1.9%	9	2.1%	11	0.2%	6	2.3%	15	0.5%	15	0.1%	8	0.9%	15	11.0x	10	10.2%																
2017	7	2.0%	11	2.1%	9	0.2%	7	2.3%	14	0.5%	14	0.1%	6	1.0%	14	11.1x	8	10.9%																
2018	5	2.1%	7	2.1%	7	0.2%	10	2.4%	4	0.4%	12	0.1%	5	1.2%	13	11.4x	6	13.4%																
2019	6	2.1%	5	2.2%	8	0.2%	8	2.4%	5	0.4%	11	0.1%	4	1.2%	11	11.8x	4	14.5%																
2020	14	1.7%	8	2.1%	14	0.5%	3	2.1%	1	0.3%	10	0.0%	10	0.9%	4	13.5x	7	11.6%																
2021	15	1.4%	13	1.9%	1	-0.2%	1	1.9%	3	0.4%	8	0.0%	3	1.2%	2	14.8x	1	18.5%																
2022	13	1.7%	15	1.7%	6	0.2%	2	2.0%	2	0.3%	7	0.0%	7	0.9%	1	15.2x	5	14.5%																
2023	2	2.3%	14	1.9%	10	0.2%	5	2.2%	10	0.5%	6	0.0%	1	1.3%	3	13.6x	2	17.9%																
2024	3	2.3%	12	2.0%	12	0.3%	4	2.2%	7	0.5%	3	0.0%	2	1.3%	5	13.1x	3	16.8%																

Note: Leverage calculated as average assets / average common equity
Source: Morgan Stanley Research estimates, Company data

Northern Trust (NTRS)

Exhibit 14: NTRS DuPont Analysis History

Northern Trust DuPont Analysis

NTRS																		
	Rank	NII / Assets	Rank	Fees / Assets	Rank	Provision / Assets	Rank	Expenses / Assets	Rank	Tax Expense / Assets	Rank	Pref / Assets	Rank	ROA	Rank	Leverage	Rank	ROE
2010	6	1.3%	3	3.6%	15	0.2%	12	3.3%	14	0.5%	1	0.0%	9	0.9%	15	11.5x	12	10.0%
2011	8	1.1%	15	3.0%	13	0.1%	5	3.0%	3	0.3%	1	0.0%	15	0.7%	9	13.1x	15	9.1%
2012	9	1.1%	13	3.1%	12	0.0%	6	3.1%	7	0.4%	1	0.0%	14	0.7%	12	12.6x	14	9.4%
2013	12	1.0%	8	3.3%	11	0.0%	9	3.1%	9	0.4%	1	0.0%	13	0.8%	13	12.4x	13	9.4%
2014	14	1.0%	11	3.2%	8	0.0%	4	3.0%	10	0.4%	5	0.0%	12	0.8%	10	13.0x	11	10.1%
2015	13	1.0%	12	3.2%	2	0.0%	3	2.9%	13	0.5%	7	0.0%	11	0.8%	5	13.4x	10	11.1%
2016	10	1.1%	14	3.1%	4	0.0%	2	2.9%	12	0.4%	6	0.0%	10	0.9%	3	13.6x	9	11.6%
2017	7	1.2%	9	3.3%	3	0.0%	8	3.1%	15	0.5%	15	0.0%	8	0.9%	8	13.1x	8	11.9%
2018	4	1.4%	4	3.5%	6	0.0%	11	3.3%	8	0.4%	13	0.0%	2	1.2%	7	13.2x	1	15.7%
2019	2	1.5%	1	3.8%	5	0.0%	13	3.5%	11	0.4%	14	0.0%	1	1.2%	14	12.1x	2	15.1%
2020	11	1.1%	6	3.4%	14	0.1%	7	3.1%	1	0.3%	12	0.0%	6	0.9%	6	13.3x	6	12.3%
2021	15	0.9%	10	3.2%	1	-0.1%	1	2.9%	2	0.3%	8	0.0%	5	1.0%	2	14.5x	4	13.8%
2022	5	1.3%	7	3.3%	9	0.0%	10	3.2%	5	0.4%	9	0.0%	4	1.0%	1	15.0x	3	14.8%
2023	3	1.4%	5	3.5%	10	0.0%	14	3.6%	4	0.3%	11	0.0%	7	0.9%	4	13.4x	7	12.2%
2024	1	1.5%	2	3.7%	7	0.0%	15	3.7%	6	0.4%	10	0.0%	3	1.1%	11	12.8x	5	13.7%

Note: Leverage calculated as average assets / average common equity
Source: Morgan Stanley Research estimates, Company data

PNC Financial (PNC)

Exhibit 15: PNC DuPont Analysis History

PNC Financial DuPont Analysis

PNC																		
	Rank	NII / Assets	Rank	Fees / Assets	Rank	Provision / Assets	Rank	Expenses / Assets	Rank	Tax Expense / Assets	Rank	Pref / Assets	Rank	ROA	Rank	Leverage	Rank	ROE
2010	1	3.5%	1	2.2%	15	0.9%	12	3.1%	14	0.5%	5	0.1%	6	1.1%	5	9.6x	5	10.6%
2011	2	3.3%	3	2.1%	13	0.4%	14	3.3%	9	0.4%	1	0.0%	3	1.2%	13	8.4x	7	10.4%
2012	3	3.3%	5	1.9%	12	0.3%	15	3.4%	8	0.4%	8	0.1%	9	1.0%	12	8.6x	11	9.0%
2013	4	3.0%	2	2.2%	11	0.2%	13	3.1%	15	0.5%	15	0.1%	2	1.2%	14	8.4x	6	10.5%
2014	5	2.6%	4	2.0%	3	0.1%	11	2.9%	13	0.4%	13	0.1%	4	1.1%	15	8.2x	10	9.4%
2015	12	2.4%	6	1.9%	2	0.1%	9	2.7%	12	0.4%	10	0.1%	10	1.0%	10	8.7x	12	9.0%
2016	13	2.4%	7	1.9%	7	0.1%	6	2.6%	11	0.4%	7	0.1%	12	1.0%	11	8.7x	13	8.7%
2017	9	2.5%	9	1.7%	6	0.1%	8	2.7%	10	0.4%	11	0.1%	14	1.0%	8	8.9x	14	8.4%
2018	6	2.6%	10	1.7%	5	0.1%	10	2.7%	6	0.3%	9	0.1%	5	1.1%	9	8.8x	8	9.9%
2019	8	2.5%	8	1.7%	10	0.2%	7	2.6%	2	0.3%	6	0.1%	7	1.1%	7	9.0x	9	9.6%
2020	14	2.2%	12	1.5%	14	0.7%	1	2.3%	1	0.1%	3	0.1%	15	0.6%	6	9.4x	15	5.7%
2021	15	2.0%	11	1.6%	1	-0.3%	3	2.3%	7	0.3%	2	0.0%	1	1.3%	4	10.4x	3	13.5%
2022	11	2.4%	13	1.5%	4	0.1%	5	2.4%	5	0.3%	4	0.1%	8	1.1%	2	12.9x	1	13.6%
2023	7	2.5%	15	1.4%	8	0.1%	4	2.4%	3	0.3%	14	0.1%	11	1.0%	1	13.4x	2	13.5%
2024	10	2.4%	14	1.4%	9	0.1%	2	2.3%	4	0.3%	12	0.1%	13	1.0%	3	12.2x	4	12.1%

Note: Leverage calculated as average assets / average common equity
Source: Morgan Stanley Research estimates, Company data

Regions Financial (RF)

Exhibit 16: RF DuPont Analysis History

Regions Financial DuPont Analysis

RF																										
Rank			Rank			Rank			Rank			Rank			Rank			Rank								
NII / Assets			Fees / Assets			Provision / Assets			Expenses / Assets			Tax Expense / Assets			Pref / Assets			ROA			Leverage			ROE		
2010	15	2.5%	1	2.6%	15	2.1%	15	3.7%	1	-0.2%	14	0.2%	15	-0.6%	4	9.6x	15	-5.4%								
2011	13	2.7%	2	2.2%	14	1.2%	14	3.3%	2	0.0%	15	0.2%	14	0.2%	3	9.8x	14	2.2%								
2012	12	2.7%	3	1.7%	5	0.2%	12	2.9%	9	0.4%	3	0.0%	10	0.9%	7	8.9x	7	8.2%								
2013	9	2.8%	5	1.7%	3	0.1%	13	3.0%	10	0.4%	1	0.0%	9	1.0%	11	7.8x	9	7.5%								
2014	8	2.8%	12	1.6%	2	0.1%	8	2.8%	14	0.5%	2	0.0%	8	1.0%	15	7.4x	10	7.2%								
2015	11	2.8%	10	1.6%	7	0.2%	9	2.8%	11	0.5%	7	0.1%	11	0.9%	14	7.6x	11	6.6%								
2016	10	2.8%	7	1.7%	9	0.2%	11	2.9%	12	0.5%	4	0.1%	12	0.8%	13	7.7x	12	6.5%								
2017	6	2.9%	13	1.6%	4	0.1%	6	2.8%	15	0.5%	5	0.1%	7	1.0%	12	7.8x	8	7.9%								
2018	3	3.1%	8	1.6%	8	0.2%	10	2.8%	4	0.4%	6	0.1%	5	1.2%	9	8.5x	5	10.5%								
2019	4	3.0%	6	1.7%	10	0.3%	5	2.8%	5	0.4%	9	0.1%	6	1.2%	10	8.4x	6	10.1%								
2020	7	2.9%	4	1.7%	13	1.0%	3	2.6%	3	0.2%	13	0.1%	13	0.7%	8	8.7x	13	6.1%								
2021	14	2.6%	9	1.6%	1	-0.3%	1	2.4%	13	0.5%	12	0.1%	1	1.6%	6	9.3x	1	14.5%								
2022	5	3.0%	15	1.5%	6	0.2%	2	2.5%	7	0.4%	8	0.1%	3	1.3%	1	10.7x	2	14.4%								
2023	1	3.5%	14	1.5%	12	0.4%	7	2.8%	8	0.4%	10	0.1%	2	1.4%	2	10.3x	3	14.3%								
2024	2	3.2%	11	1.6%	11	0.3%	4	2.7%	6	0.4%	11	0.1%	4	1.3%	5	9.6x	4	12.2%								

Note: Leverage calculated as average assets / average common equity
Source: Morgan Stanley Research estimates, Company data

State Street (STT)

Exhibit 17: STT DuPont Analysis History

State Street Corporation DuPont Analysis

STT																		
	Rank	NII / Assets	Rank	Fees / Assets	Rank	Provision / Assets	Rank	Expenses / Assets	Rank	Tax Expense / Assets	Rank	Pref / Assets	Rank	ROA	Rank	Leverage	Rank	ROE
2010	1	1.4%	3	4.1%	12	0.0%	15	4.1%	11	0.3%	1	0.0%	2	1.1%	14	9.3x	9	10.3%
2011	2	1.3%	2	4.2%	2	0.0%	13	3.9%	15	0.5%	4	0.0%	4	1.1%	15	9.1x	13	9.9%
2012	3	1.3%	6	3.7%	3	0.0%	10	3.6%	14	0.4%	3	0.0%	5	1.0%	13	9.7x	14	9.5%
2013	7	1.1%	7	3.7%	5	0.0%	9	3.4%	13	0.4%	2	0.0%	6	1.0%	12	10.3x	11	10.0%
2014	9	1.0%	11	3.4%	6	0.0%	6	3.2%	8	0.2%	5	0.0%	13	0.9%	8	11.9x	10	10.3%
2015	13	0.9%	14	3.2%	9	0.0%	4	3.2%	2	0.2%	9	0.1%	15	0.7%	2	13.2x	15	9.1%
2016	10	0.9%	8	3.5%	7	0.0%	8	3.3%	5	0.2%	12	0.1%	12	0.9%	5	12.2x	8	10.5%
2017	6	1.1%	5	4.0%	4	0.0%	11	3.6%	12	0.3%	13	0.1%	3	1.1%	9	11.6x	2	12.8%
2018	4	1.2%	1	4.2%	10	0.0%	12	3.9%	10	0.3%	14	0.1%	1	1.2%	10	11.3x	1	13.4%
2019	5	1.2%	4	4.1%	8	0.0%	14	4.0%	7	0.2%	15	0.1%	7	1.0%	11	10.4x	12	10.0%
2020	14	0.8%	9	3.5%	15	0.0%	5	3.2%	3	0.2%	10	0.1%	10	0.9%	6	12.0x	7	10.7%
2021	15	0.6%	13	3.3%	1	0.0%	1	2.9%	1	0.2%	6	0.0%	11	0.9%	3	12.5x	6	11.0%
2022	12	0.9%	12	3.3%	11	0.0%	3	3.0%	4	0.2%	7	0.0%	8	1.0%	7	12.0x	4	11.5%
2023	8	1.0%	10	3.5%	13	0.0%	7	3.3%	6	0.2%	8	0.0%	9	0.9%	4	12.4x	5	11.3%
2024	11	0.9%	15	3.2%	14	0.0%	2	3.0%	9	0.2%	11	0.1%	14	0.8%	1	14.0x	3	11.8%

Note: Leverage calculated as average assets / average common equity
Source: Morgan Stanley Research estimates, Company data

Truist Financial (TFC)

Exhibit 18: TFC DuPont Analysis History

Truist Financial DuPont Analysis

TFC																		
	Rank	NII / Assets	Rank	Fees / Assets	Rank	Provision / Assets	Rank	Expenses / Assets	Rank	Tax Expense / Assets	Rank	Pref / Assets	Rank	ROA	Rank	Leverage	Rank	ROE
2017	2	2.9%	1	1.9%	4	0.2%	8	2.9%	8	0.5%	3	0.1%	5	1.1%	8	7.7x	8	8.1%
2018	1	2.9%	2	1.9%	3	0.2%	7	2.9%	6	0.4%	5	0.1%	2	1.3%	7	7.9x	3	10.5%
2019	3	2.9%	3	1.8%	5	0.3%	6	2.8%	4	0.3%	4	0.1%	4	1.2%	6	7.9x	4	9.7%
2020	4	2.8%	5	1.7%	8	0.5%	5	2.7%	3	0.3%	1	0.1%	6	1.0%	5	8.1x	7	8.4%
2021	8	2.5%	4	1.8%	1	-0.2%	4	2.5%	7	0.4%	8	0.1%	1	1.4%	4	8.4x	1	12.0%
2022	7	2.7%	6	1.6%	2	0.1%	3	2.5%	5	0.3%	2	0.1%	3	1.2%	2	9.5x	2	11.6%
2023	6	2.7%	8	1.0%	7	0.4%	1	2.1%	1	0.2%	6	0.1%	7	0.9%	1	9.8x	5	9.2%
2024	5	2.7%	7	1.1%	6	0.4%	2	2.2%	2	0.3%	7	0.1%	8	0.9%	3	9.4x	6	8.7%

Note: Leverage calculated as average assets / average common equity
Source: Morgan Stanley Research estimates, Company data

U.S. Bancorp (USB)

Exhibit 19: USB DuPont Analysis History

U.S. Bancorp DuPont Analysis

USB																		
	Rank	NII / Assets	Rank	Fees / Assets	Rank	Provision / Assets	Rank	Expenses / Assets	Rank	Tax Expense / Assets	Rank	Pref / Assets	Rank	ROA	Rank	Leverage	Rank	ROE
2010	1	3.4%	1	2.7%	15	1.5%	15	3.3%	2	0.2%	1	0.0%	11	1.1%	6	10.9x	14	12.1%
2011	2	3.3%	3	2.5%	14	0.7%	14	3.1%	12	0.5%	2	0.0%	5	1.4%	7	10.7x	4	15.4%
2012	3	3.2%	2	2.6%	12	0.5%	13	3.0%	15	0.6%	14	0.1%	2	1.6%	11	10.3x	1	16.1%
2013	4	3.1%	4	2.4%	11	0.4%	12	2.9%	14	0.5%	15	0.1%	1	1.6%	14	10.0x	3	15.8%
2014	5	2.9%	5	2.3%	8	0.3%	11	2.8%	13	0.5%	13	0.1%	4	1.4%	15	10.0x	7	14.4%
2015	9	2.7%	6	2.1%	2	0.3%	7	2.7%	11	0.5%	8	0.1%	7	1.4%	12	10.2x	9	14.0%
2016	10	2.7%	8	2.1%	4	0.3%	9	2.7%	9	0.5%	11	0.1%	10	1.3%	10	10.4x	12	13.1%
2017	7	2.8%	10	2.0%	6	0.3%	8	2.7%	10	0.5%	9	0.1%	9	1.3%	8	10.4x	11	13.4%
2018	6	2.9%	9	2.0%	3	0.3%	10	2.7%	4	0.3%	10	0.1%	3	1.5%	9	10.4x	5	15.2%
2019	8	2.8%	7	2.1%	7	0.3%	6	2.6%	7	0.4%	12	0.1%	6	1.4%	13	10.2x	6	14.7%
2020	14	2.4%	11	2.0%	13	0.7%	3	2.5%	1	0.2%	6	0.1%	15	0.9%	5	11.5x	15	10.0%
2021	15	2.3%	12	1.8%	1	-0.2%	2	2.5%	8	0.4%	7	0.1%	8	1.4%	4	11.6x	2	15.9%
2022	12	2.5%	13	1.7%	9	0.3%	1	2.5%	5	0.3%	4	0.1%	12	1.0%	2	13.6x	10	13.8%
2023	11	2.6%	15	1.6%	5	0.3%	5	2.6%	6	0.3%	3	0.1%	13	1.0%	1	14.2x	8	14.2%
2024	13	2.5%	14	1.7%	10	0.3%	4	2.5%	3	0.3%	5	0.1%	14	0.9%	3	13.2x	13	12.5%

Note: Leverage calculated as average assets / average common equity
Source: Morgan Stanley Research estimates, Company data

Wells Fargo (WFC)

Exhibit 20: WFC DuPont Analysis History

Wells Fargo DuPont Analysis

WFC																																			
Rank			Provision / Assets			Expenses / Assets			Tax Expense / Assets			Rank			Pref / Assets			Rank			ROA			Rank			Leverage			Rank			ROE		
	Rank	NII / Assets	Rank	Fees / Assets	Rank	Provision / Assets	Rank	Expenses / Assets	Rank	Tax Expense / Assets	Rank	Pref / Assets	Rank	ROA	Rank	Leverage	Rank	ROE																	
2010	1	3.7%	1	3.3%	15	1.3%	15	3.9%	10	0.6%	3	0.1%	9	1.1%	7	10.8x	11	11.4%																	
2011	2	3.4%	3	3.0%	13	0.6%	14	3.8%	12	0.7%	5	0.1%	4	1.3%	12	10.1x	3	12.8%																	
2012	3	3.3%	2	3.2%	12	0.5%	13	3.7%	14	0.8%	7	0.1%	3	1.3%	14	9.6x	4	12.7%																	
2013	4	3.0%	4	2.8%	8	0.2%	12	3.4%	15	0.8%	8	0.1%	1	1.4%	15	9.6x	1	13.9%																	
2014	6	2.8%	5	2.6%	3	0.1%	11	3.1%	13	0.7%	11	0.1%	2	1.4%	13	9.8x	2	13.5%																	
2015	8	2.7%	6	2.3%	6	0.1%	8	2.9%	11	0.7%	12	0.1%	5	1.2%	11	10.3x	5	12.6%																	
2016	10	2.6%	7	2.1%	9	0.2%	3	2.8%	9	0.6%	14	0.1%	7	1.1%	9	10.7x	9	11.4%																	
2017	9	2.6%	9	2.0%	5	0.1%	7	2.8%	8	0.5%	15	0.1%	8	1.1%	8	10.7x	12	11.4%																	
2018	7	2.7%	11	1.8%	4	0.1%	10	2.9%	7	0.3%	13	0.1%	6	1.1%	10	10.6x	10	11.4%																	
2019	12	2.5%	12	1.8%	7	0.1%	9	2.9%	3	0.2%	10	0.1%	13	1.0%	6	10.9x	14	10.4%																	
2020	14	2.1%	13	1.7%	14	0.7%	4	2.8%	1	-0.1%	9	0.1%	15	0.2%	1	11.9x	15	2.7%																	
2021	15	1.9%	8	2.1%	1	-0.2%	2	2.8%	6	0.3%	6	0.1%	11	1.0%	5	11.4x	8	11.5%																	
2022	13	2.4%	14	1.6%	2	0.1%	1	2.7%	2	0.2%	2	0.1%	14	0.9%	3	11.7x	13	11.0%																	
2023	5	2.8%	15	1.6%	11	0.3%	5	2.8%	4	0.3%	4	0.1%	10	1.0%	4	11.6x	6	11.8%																	
2024	11	2.5%	10	1.9%	10	0.2%	6	2.8%	5	0.3%	1	0.1%	12	1.0%	2	11.8x	7	11.7%																	

Note: Leverage calculated as average assets / average common equity

Source: Morgan Stanley Research estimates, Company data

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Summary Data: Fed H.8

Exhibit 21: Loan & Deposit Growth - Commercial Banks

Federal Reserve H.8 Data (Not seasonally adjusted)									
		Y/Y Growth (Avg)			Q/Q Growth (Avg)		Latest Week *		
		2025 YTD	2Q25	1Q25	2Q25	1Q25	W/W	Q/Q	Y/Y
All Banks	C&I Loans	1.2%	2.0%	0.9%	0.5%	0.1%	(0.4%)	2.0%	1.9%
	CRE	0.3%	0.3%	0.9%	0.1%	(0.0%)	0.0%	0.3%	0.3%
	Resi Loans	1.3%	0.8%	1.5%	0.2%	(0.0%)	0.2%	0.5%	1.6%
	HELOC	3.8%	2.6%	3.3%	0.9%	0.2%	(0.0%)	1.5%	4.4%
	Credit Card	2.9%	2.0%	3.6%	0.6%	0.0%	(0.4%)	(0.7%)	3.6%
	Auto	(0.8%)	(0.9%)	(2.3%)	(0.1%)	(0.1%)	(0.1%)	0.2%	(0.3%)
	Other Consumer	2.5%	1.0%	0.5%	0.6%	0.1%	0.1%	1.4%	3.7%
	Total Loans & Leases	2.1%	3.2%	2.8%	0.7%	0.1%	(0.3%)	0.4%	3.6%
	Core Deposits	3.6%	2.4%	2.7%	0.9%	0.2%	(0.3%)	0.7%	3.6%
	Large Time Deposits	1.1%	1.2%	2.6%	0.3%	0.0%	0.5%	0.6%	1.5%
	Total Deposits	3.3%	2.2%	2.6%	0.8%	0.2%	(0.2%)	0.7%	3.3%
	Loans / Total Deposits	-70bps	-70bps	-70bps	-0bps	-0bps	-7bps	+230bps	+23bps
	Loans / Core Deposits	-81bps	-80bps	-80bps	-0bps	-0bps	-0bps	+257bps	+5bps
Large Banks	C&I Loans	1.3%	2.3%	1.1%	0.6%	0.1%	(0.5%)	2.5%	2.1%
	CRE	(2.6%)	(3.7%)	(3.4%)	(0.9%)	(0.3%)	0.0%	(0.3%)	(3.8%)
	Resi Loans	0.1%	0.4%	0.4%	0.1%	(0.1%)	0.1%	0.2%	0.5%
	HELOC	0.1%	0.4%	(0.5%)	0.1%	0.0%	(0.1%)	0.5%	0.7%
	Credit Card	2.7%	3.7%	4.8%	0.8%	0.1%	(0.3%)	(0.5%)	4.6%
	Auto	(0.6%)	(0.4%)	(2.0%)	(0.0%)	(0.0%)	(0.1%)	0.3%	0.1%
	Other Consumer	2.5%	4.7%	2.1%	1.1%	0.2%	0.1%	2.8%	6.7%
	Total Loans & Leases	1.8%	3.0%	2.1%	0.7%	0.1%	(0.4%)	1.6%	3.4%
	Core Deposits	2.0%	3.3%	1.9%	0.8%	0.2%	(0.8%)	0.8%	3.1%
	Large Time Deposits	(3.4%)	(4.8%)	(3.0%)	(1.1%)	(0.8%)	0.1%	(0.4%)	(4.2%)
	Total Deposits	2.8%	2.7%	1.5%	0.7%	0.1%	(0.8%)	0.7%	2.5%
	Loans / Total Deposits	-62bps	-62bps	-61bps	+0bps	+0bps	+25bps	+57bps	+55bps
	Loans / Core Deposits	-67bps	-67bps	-66bps	-0bps	-0bps	+31bps	+55bps	+23bps

Note: Data released as of 5/16/2025 for the week ending 5/9/2025; Source: Federal Reserve, Morgan Stanley Research

*- End of Period

Macro Indicators Dashboard

Exhibit 22: Macro Indicators: Daily

Daily Indicators	16-May-25	9-May-25	31-Mar-25	31-Dec-24	15-May-24	W/W	QTD	Y/Y
Stock Market								
S&P 500	5,958	5,660	5,612	5,882	5,308	5.3%	6.2%	12.2%
Nasdaq Composite	19,211	17,929	17,299	19,311	16,742	7.2%	11.1%	14.7%
Russell 2000	2,113	2,023	2,012	2,230	2,109	4.5%	5.0%	0.2%
STOXX Europe 50	4,547	4,463	4,546	4,309	4,535	1.9%	0.0%	0.3%
STOXX Europe 600	549	538	534	508	525	2.1%	2.9%	4.7%
FTSE 100	8,685	8,555	8,583	8,173	8,446	1.5%	1.2%	2.8%
DAX	23,767	23,499	22,163	19,909	18,869	1.1%	7.2%	26.0%
CAC 40	7,887	7,744	7,791	7,381	8,240	1.8%	1.2%	-4.3%
Nikkei 225	37,754	37,503	35,618	39,895	38,386	0.7%	6.0%	-1.6%
Shanghai Composite	3,367	3,342	3,336	3,352	3,120	0.8%	1.0%	7.9%
Hang Seng	23,345	22,868	23,120	20,060	19,074	2.1%	1.0%	22.4%
MSCI EM	71,385	70,064	69,484	68,031	66,771	1.9%	2.7%	6.9%
MSCI EAFE	1,591	1,566	1,543	1,510	1,543	1.5%	3.1%	3.1%
VIX (Volatility)	17.8	21.9	22.3	17.4	12.5	-18.6%	-20.0%	43.2%
Stock Market: Banks								
S&P 500 Banks	498	470	466	471	410	6.1%	7.0%	21.6%
S&P 500 Regional Banks	102	96	98	105	92	6.3%	3.3%	10.6%
S&P 1500 Regional Banks	119	114	115	123	105	4.9%	3.6%	13.6%
S&P 500 Diversified Banks	947	893	881	888	771	6.0%	7.4%	22.7%
S&P 500 Asset Mgmt. & Custody Banks	386	363	362	409	327	6.1%	6.6%	18.0%
MSCI World Banks	174	168	165	158	143	3.9%	5.5%	21.9%
MSCI Europe Banks	96	92	90	74	72	3.8%	6.8%	33.3%
Asia Major Banks	157	153	151	144	131	2.7%	4.1%	20.3%
Asia Regional Banks	473	456	448	430	406	3.6%	5.6%	16.4%
Interest Rates / Spreads								
Fed Funds Target (% , Top End)	4.50	4.50	4.50	4.50	5.50	0	0	(100)
Effective Fed Funds (%)	4.33	4.33	4.33	4.33	5.33	0	0	(100)
SOFR	4.30	4.28	4.41	4.49	5.31	2	(11)	(101)
EFFR - SOFR Spread	0.03	0.05	(0.08)	(0.16)	0.02	(2)	11	1
TED Spread (%)	0.57	0.63	0.66	0.63	0.36	(6)	(9)	21
10-Year Treasury (%)	4.44	4.38	4.21	4.57	4.35	7	23	9
5-Year Treasury (%)	4.07	3.99	3.95	4.38	4.35	8	12	(28)
2-Year Treasury (%)	4.00	3.88	3.89	4.24	4.73	11	10	(74)
2-Year Swap Spread (bp)	8.25	6.50	11.75	12.25	19.75	175	(350)	(1150)
10Y-2Y Treasury Spread (%)	0.45	0.50	0.32	0.33	(0.38)	(5)	13	83
US 30 Yr Mortgage (%)	6.84	6.84	6.77	7.28	7.27	(0)	7	(43)
Credit Spreads (OAS)								
Global Corporate	95	102	96	88	97	(7)	(1)	(2)
Global Corporate (AAA)	44	48	48	39	42	(4)	(4)	2
Global Corporate (BBB)	118	127	118	107	119	(9)	0	(1)
Global High Yield	335	366	355	308	334	(31)	(20)	1
US Corporate	94	102	97	82	90	(8)	(3)	4
US Corporate (AAA)	37	41	44	34	37	(4)	(7)	0
US High Yield	320	353	355	292	313	(33)	(35)	7
Foreign Exchange								
US Dollar Index	100.98	100.34	104.21	108.49	104.35	0.6%	-3.1%	-3.2%
USD/EUR	0.90	0.89	0.93	0.97	0.92	1.0%	-3.2%	-2.7%
USD/GBP	0.90	0.89	0.93	0.97	0.92	1.0%	-3.2%	-2.7%
USD/JPY	145.96	145.02	149.54	157.16	155.33	0.6%	-2.4%	-6.0%
USD/CHF	0.75	0.75	0.77	0.80	0.79	0.3%	-2.7%	-4.7%
USD/AUD	0.84	0.83	0.88	0.91	0.90	1.2%	-5.1%	-7.3%
USD/CAD	1.56	1.56	1.60	1.62	1.50	0.4%	-2.6%	4.2%
USD/NZD	1.40	1.39	1.44	1.44	1.36	0.4%	-2.9%	2.6%
USD/NZD	1.70	1.69	1.77	1.78	1.64	0.6%	-3.6%	3.6%
Commodities								
WTI Crude (\$/bl)	61.68	62.37	71.87	72.44	80.23	-1%	-14%	-23%
Gold (\$/Troy Oz)	3,227.95	3,324.55	3,115.10	2,609.10	2,357.50	-3%	4%	37%
S&P GSCI Spot Index	533.10	531.53	568.08	549.64	578.87	0%	-6%	-8%
Baltic Dry Index	1,305.0	1,299.0	1,598.0	997.0	1,889.0	0%	-18%	-31%

Source: FactSet, Morgan Stanley Research

Exhibit 23: Macro Indicators: Weekly/Monthly

Weekly Indicators	09-May-25	02-May-25	25-Apr-25	17-Apr-25	11-Apr-25	04-Apr-25
Initial Unemployment Claims (000's)	-	228	241	223	216	224

Monthly Indicators	May-25	Apr-25	Mar-25	Feb-25	Jan-25	Dec-24
Consumption & Personal Income						
Consumer Expenditures (%m/m, sa)	-	-	0.66	0.55	-0.01	0.86
Retail & Food Svs Sales (%m/m, sa)	-	-	1.43	0.22	-1.01	0.73
Retail & Food Svs ex. Motor Vehicles (%m/m, sa)	-	-	0.52	0.65	-0.42	0.59
Retail Sales (%m/m, sa)	-	-	1.37	0.39	-1.24	0.94
Retail Sales ex. Motor Vehicles (%m/m, sa)	-	-	0.28	0.95	-0.60	0.84
Total Unit Vehicle Sales (Mil. Units)	-	17.27	17.83	15.96	15.53	16.87
Consumer Credit (Bil. \$, 1m change)	-	-	10.17	-0.61	9.36	-110.30
Personal Income (%m/m, sa)	-	-	0.46	0.75	0.61	0.35
Personal Savings Rate (%)	-	-	3.90	4.10	3.90	3.30
Employment						
Civilian Unemployment Rate (%)	-	4.2	4.2	4.1	4.0	4.1
Nonfarm Employment (Chg, 000's)	-	177	185	102	111	323
Average Hourly Earnings (%m/m)	-	0.32	0.16	0.36	0.42	0.29
Average Hourly Earnings - inflation adjusted (%y/y)	-	-	1.49	1.37	1.02	1.16
Misery Index	-	-	6.61	6.91	7.00	6.97
Exchange Rate Indices						
FRB Nominal Index of Major Currencies (3/1973=100)	-	113.99	117.73	120.27	121.49	119.88
Housing & Construction						
Building Permits (Mil. of Units, saar)	-	-	1.47	1.46	1.47	1.48
Housing Starts (Mil. of Units, saar)	-	-	1.32	1.49	1.36	1.53
New Home Sales (Mil. of Units, saar)	-	-	0.72	0.67	0.65	0.72
New Home Sales (%m/m, sa)	-	-	7.42	3.06	-9.17	6.51
Total Construction Put in Place (%y/y)	-	-	-0.49	0.57	0.15	0.29
Private Residential Construction Put in Place (%y/y)	-	-	-0.43	1.28	0.21	0.32
S&P/Case-Shiller Home Price Index (10-city)	-	-	-	354.26	351.40	350.60
S&P/Case-Shiller Home Price Index (20-city)	-	-	-	335.08	332.72	332.35
Money Supply						
M2 (Chg, Bil. \$)	-	-	92.00	93.50	87.10	35.70
M2 (%y/y)	-	-	4.12	3.88	3.87	3.81
Money Zero Maturity (MZM, %y/y)	-	-	4.80	4.45	4.30	4.04
TIC Net Flows (Bil. \$)	-	-	-	284.73	-46.57	75.49
TIC Net Foreign Purchases of LT US Securities (Mil. \$)	-	-	-	142.71	-1.65	56.34
Inflation						
CPI (%m/m, sa)	-	-	-0.05	0.22	0.47	0.36
Core CPI (%m/m, sa)	-	-	0.06	0.23	0.45	0.21
PCE (%m/m, sa)	-	-	-0.04	0.44	0.37	0.30
Core PCE (%m/m, sa)	-	-	0.03	0.50	0.34	0.21
Output & Capacity						
Industrial Production (%m/m, sa)	-	-	-0.32	0.85	0.22	1.13
Capacity Utilization (%)	-	-	77.80	78.20	77.60	77.57
Mfg Shipments (%m/m, sa)	-	-	-0.10	0.71	0.48	0.63
Mfg New Orders (%m/m, sa)	-	-	4.33	0.47	1.76	-0.60
Mfg Inventories (%m/m, sa)	-	-	0.08	0.11	0.08	0.35
Durable Shipments (%m/m, sa)	-	-	0.11	1.33	0.68	0.79
Durable New Orders (%m/m, sa)	-	-	9.20	0.83	3.36	-1.76
Durable Inventories (%m/m, sa)	-	-	0.10	0.01	0.00	0.42
Durable Goods Inventory to Shipments Ratio	-	-	1.82	1.82	1.84	1.86
Survey Data & Composite Indicators						
Consumer Confidence (CB, 1985=100)	-	86.0	93.9	100.1	105.3	109.5
ISM Manufacturing Report (%)	-	48.7	49.0	50.3	50.9	49.2
ISM Non-Manufacturing Report (%)	-	51.6	50.8	53.5	52.8	54.0
Leading Economic Index (%m/m)	-	-	-0.69	-0.20	-0.20	-0.10
Ratio, Coincident Index to Lagging Index (1996=100)	-	-	96	96	96	97
Trade						
Trade Balance (Bil. \$)	-	-	-140.50	-123.20	-130.65	-98.06
Exports (Bil. \$)	-	-	278.46	278.00	270.51	266.52
Exports (%y/y)	-	-	6.71	4.61	4.37	2.55
Imports (Bil. \$)	-	-	418.96	401.20	401.16	364.58
Imports (%y/y)	-	-	27.15	19.72	23.04	12.25

Source: FactSet, Morgan Stanley Research

Exhibit 24: Macro Indicators: Quarterly

Quarterly Data	Mar-25	Dec-24	Sep-24	Jun-24	Mar-24	Dec-23
Balance of Payments						
Current Account Balance (Bil. \$)	-	-303.94	-310.28	-276.69	-242.71	-221.78
% of GDP	-	-4.09	-4.23	-3.81	-3.39	-3.14
Corporate Profits						
Corporate Profits Before Tax (%q/q, sa)	-	5.39	-0.39	3.59	-1.74	4.54
Corporate Profits After Tax (%q/q, sa)	-	5.87	-0.42	3.45	-2.10	5.04
Nonfinancial Corp Profits (%q/q, sa)	-	3.19	1.45	3.32	0.33	4.17
Government Finance						
Federal Govt Debt (Bil. \$, ar)	-	31,616.72	30,965.98	30,400.73	29,928.79	29,471.81
Federal Govt Debt (%y/y)	-	7.28	7.70	8.53	10.23	9.76
Inflation						
GDP Price Index (%y/y)	3.7	2.3	1.9	2.5	3.0	1.5
Personal Income & Spending						
Household Net Worth (Bil. \$)	-	169,361	169,197	164,374	161,502	155,461
Household Net Worth (%y/y)	-	8.94	11.61	7.43	9.42	7.78
Output						
Real GDP Growth (%q/q, saar)	-0.3	2.4	3.1	3.0	1.6	3.2
Private Consumption (%q/q, saar)	1.8	4.0	3.7	2.8	1.9	3.5
Productivity & Labor Costs						
ECI - Total Compensation (%q/q, sa)	0.89	0.90	0.85	0.92	1.05	0.93
Productivity - Non-Farm Bus. Sector (%q/q, saar)	-0.8	1.7	2.9	2.1	1.6	3.5
Unit Labor Cost (%q/q, sa)	5.7	2.0	-1.5	-0.9	8.3	1.2

Source: FactSet, Morgan Stanley Research

Capital Markets - Advisory & Underwriting

Exhibit 25: Capital Markets - Advisory & Underwriting

Advisory and Underwriting (USD m)					
	Volumes (USD m)			Y/Y	Q/Q
	2Q24	1Q25	2Q25 Run-Rate		
M&A					
Announced	836,275	1,075,037	877,196	5%	-18%
Completed	811,928	845,298	675,892	-17%	-20%
Completed - North America	457,455	415,268	362,246	-21%	-13%
Completed - Europe	169,293	185,269	184,189	9%	-1%
Completed - Asia Pacific	142,428	215,415	103,328	-27%	-52%
ECM					
Total	172,806	165,416	100,796	-42%	-39%
ECM - IPOs (Global)	30,350	30,635	24,376	-20%	-20%
ECM - North America	56,629	64,008	50,383	-11%	-21%
ECM - Europe	41,904	36,427	14,046	-66%	-61%
ECM - Asia Pacific	54,438	56,876	31,830	-42%	-44%
DCM					
Total	2,327,695	2,711,323	1,925,456	-17%	-29%
DCM - HY	155,062	125,477	112,675	-27%	-10%
DCM - IG	1,151,050	1,320,034	1,114,751	-3%	-16%
DCM - North America	939,951	1,059,680	719,924	-23%	-32%
DCM - Europe	625,905	928,613	604,758	-3%	-35%
DCM - Asia	643,601	576,842	530,523	-18%	-8%
Loans					
Total	1,437,751	1,252,223	713,146	-50%	-43%
Leveraged Loans	695,857	645,678	231,555	-67%	-64%
Revenues (USD m)					
	2Q25			Y/Y	Q/Q
	2Q24	1Q25	Run-Rate		
Total	21,970	23,427	16,880	-23%	-28%
M&A	7,948	8,674	7,356	-7%	-15%
ECM	3,304	2,903	2,079	-37%	-28%
DCM	7,218	8,055	5,882	-19%	-27%
Loans	3,500	3,795	1,563	-55%	-59%

Source: Dealogic, Morgan Stanley Research

Weekly Loan & Deposit Tracker

Fed H.8 Loan & Deposit Growth

Note: Fed H.8 data released as of 5/16/2025 for the week ending 5/9/2025.

Exhibit 26: Loan growth decelerates by -7bps w/w to 3.6% y/y

All Commercial Banks, Latest Week			
Loan to Deposit Ratio	Latest Week	2Q25 QTD (Avg.)	2025 YTD (Avg.)
Loan to Total Deposit Ratio	71%	70%	70%
Loan to Core Deposit Ratio	82%	81%	81%
Loan/Deposit Growth Rate	Latest Week Y/Y Growth	Accel/ Decel vs. last week	Latest Week QTD Avg Y/Y Growth
Total Deposits	3.3%	+25bps	3.3%
Core Deposits	3.6%	+25bps	3.3%
Large Time Deposits	1.5%	+27bps	1.1%
Total Loans	3.6%	-7bps	3.2%
C&I	1.9%	+2bps	2.0%
CRE	0.3%	-9bps	0.3%
Resi Mtg	1.6%	+1bps	1.3%
HELOC	4.4%	+5bps	3.8%
Card	3.6%	-30bps	2.9%
Auto	-0.3%	+1bps	-0.8%
Other Consumer	3.7%	+77bps	2.5%

Source: Federal Reserve, Morgan Stanley Research
Note: Not seasonally adjusted.

Exhibit 27: Large banks seeing 3.4% y/y loan growth

Large Domestically Chartered Banks, Latest Week			
Loan to Deposit Ratio	Latest Week	2Q25 QTD (Avg.)	2025 YTD (Avg.)
Loan to Total Deposit Ratio	63%	62%	62%
Loan to Core Deposit Ratio	68%	67%	67%
Loan/Deposit Growth Rate	Latest Week Y/Y Growth	Accel/ Decel vs. last week	Latest Week QTD Avg Y/Y Growth
Total Deposits	2.5%	+1bps	2.7%
Core Deposits	3.1%	-3bps	3.3%
Large Time Deposits	-4.2%	+51bps	-4.8%
Total Loans	3.4%	-18bps	3.0%
C&I	2.1%	-22bps	2.3%
CRE	-3.8%	-9bps	-3.7%
Resi Mtg	0.5%	-10bps	0.4%
HELOC	0.7%	+6bps	0.4%
Card	4.6%	-40bps	3.7%
Auto	0.1%	+11bps	-0.4%
Other Consumer	6.7%	+123bps	4.7%

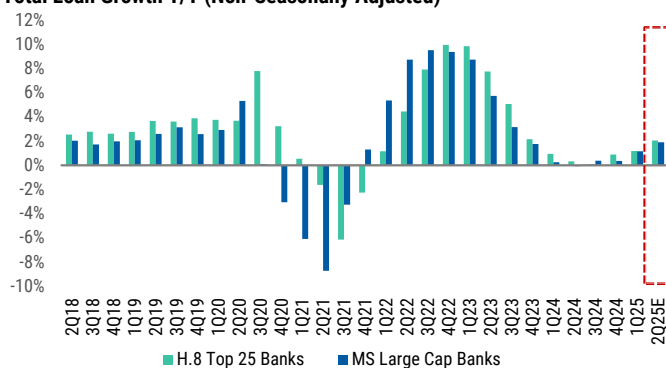
H.8 Top 25 Banks

Source: Federal Reserve, Morgan Stanley Research
Note: (1) Not seasonally adjusted, (2) Large domestically chartered banks are defined as the top 25 banks ranked by domestic assets.

MSe vs. Fed H.8

Exhibit 28: Total Loan Growth

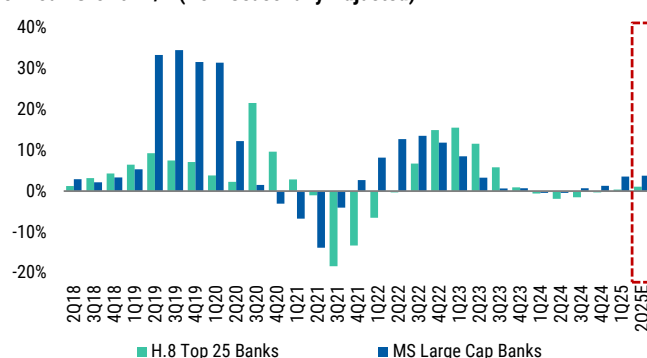
Total Loan Growth Y/Y (Non-Seasonally Adjusted)



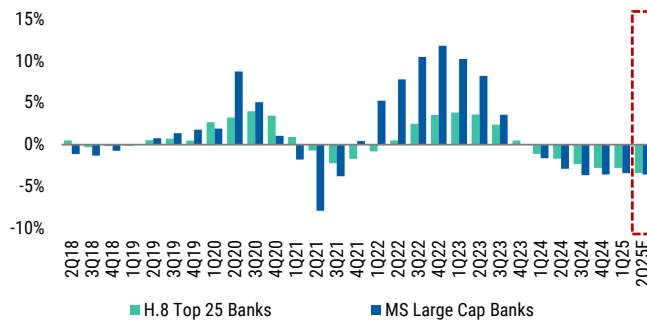
Source: Federal Reserve, Company data, Morgan Stanley Research Estimates

Exhibit 29: C&I Loan Growth

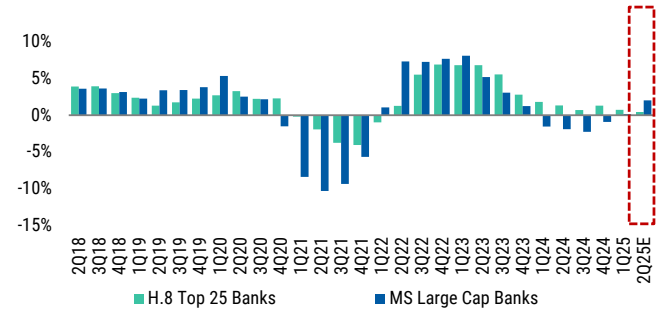
C&I Loan Growth Y/Y (Non-Seasonally Adjusted)



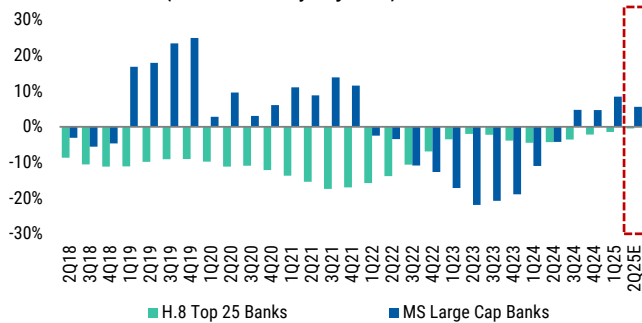
Source: Federal Reserve, Company data, Morgan Stanley Research Estimates

Exhibit 30: CRE Loan Growth**CRE Loan Growth Y/Y (Non-Seasonally Adjusted)**

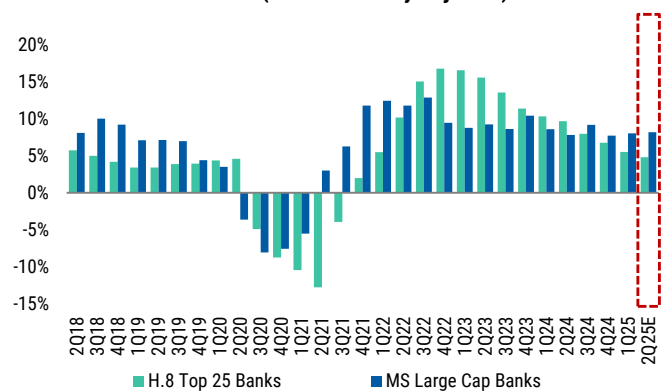
Source: Federal Reserve, Company data, Morgan Stanley Research Estimates

Exhibit 31: Resi Mortgage Loan Growth**Resi Mortgage Loan Growth Y/Y (Non-Seasonally Adjusted)**

Source: Federal Reserve, Company data, Morgan Stanley Research Estimates

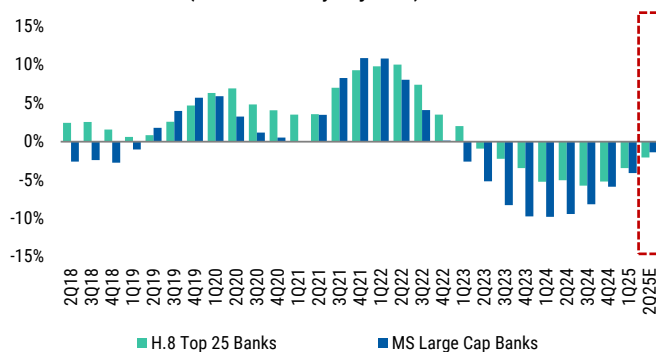
Exhibit 32: HELOC Loan Growth**HELOC Growth Y/Y (Non-Seasonally Adjusted)**

Source: Federal Reserve, Company data, Morgan Stanley Research Estimates

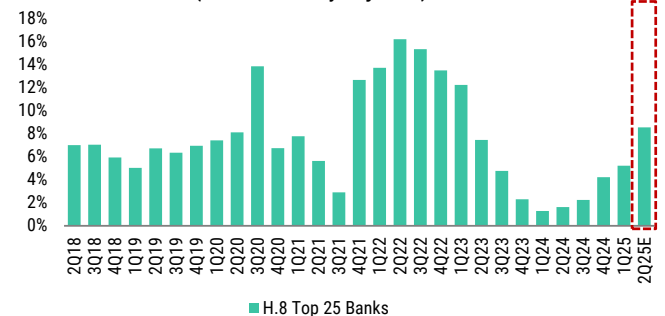
Exhibit 33: Credit Card Loan Growth**Credit Card Loan Growth Y/Y (Non-Seasonally Adjusted)**

Note: Card data reflects all commercial banks.

Source: Federal Reserve, Company data, Morgan Stanley Research Estimates

Exhibit 34: Auto Loan Growth**Auto Loan Growth Y/Y (Non-Seasonally Adjusted)**

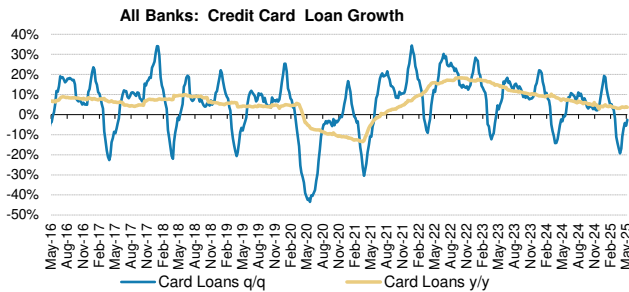
Source: Federal Reserve, Company data, Morgan Stanley Research Estimates

Exhibit 35: Other Loan Growth**Other Loan Growth Y/Y (Non-Seasonally Adjusted)**

Source: Federal Reserve, Company data, Morgan Stanley Research Estimates

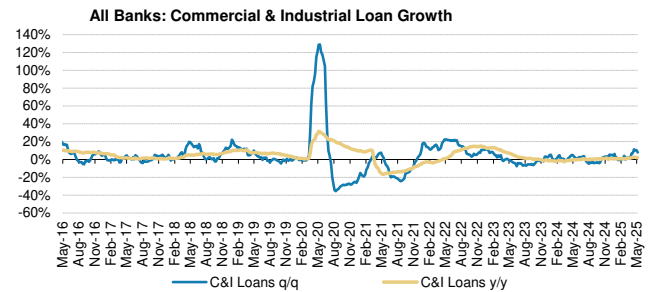
Fed H.8 Loan & Deposit Growth (All Banks)

Exhibit 36: All Banks: Credit Card Loan Growth



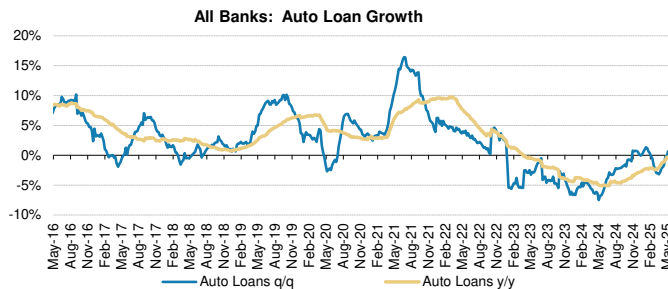
Source: Federal Reserve, Morgan Stanley Research Estimates

Exhibit 37: All Banks: Commercial & Industrial Loan Growth



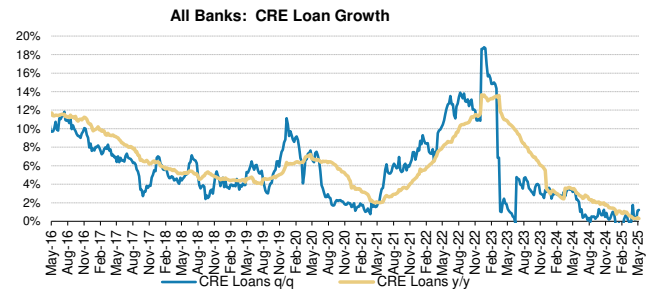
Source: Federal Reserve, Morgan Stanley Research Estimates

Exhibit 38: All Banks: Auto Loan Growth



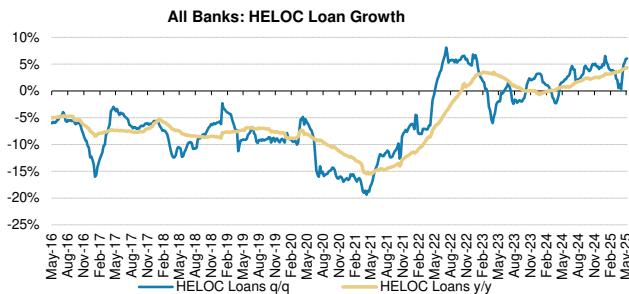
Source: Federal Reserve, Morgan Stanley Research Estimates

Exhibit 39: All Banks: CRE Loan Growth



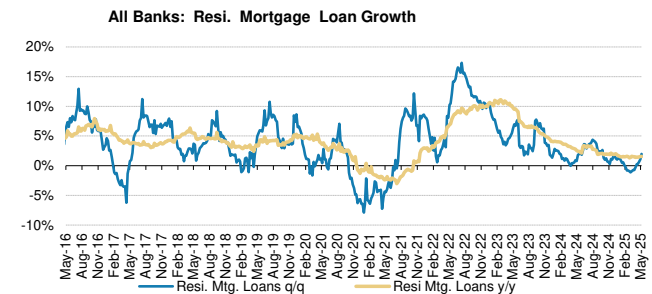
Source: Federal Reserve, Morgan Stanley Research Estimates

Exhibit 40: All Banks: HELOC Loan Growth



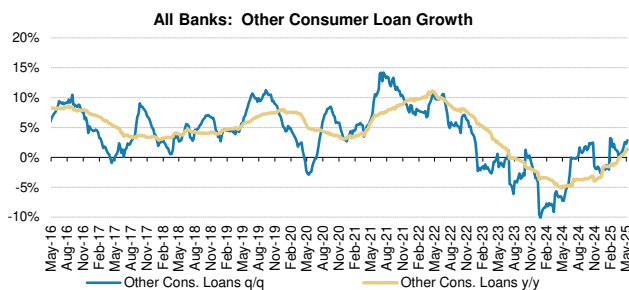
Source: Federal Reserve, Morgan Stanley Research Estimates

Exhibit 41: All Banks: Resi. Mortgage Loan Growth



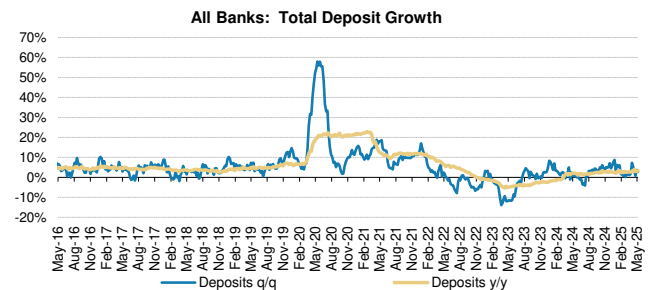
Source: Federal Reserve, Morgan Stanley Research Estimates

Exhibit 42: All Banks: Other Consumer Loan Growth



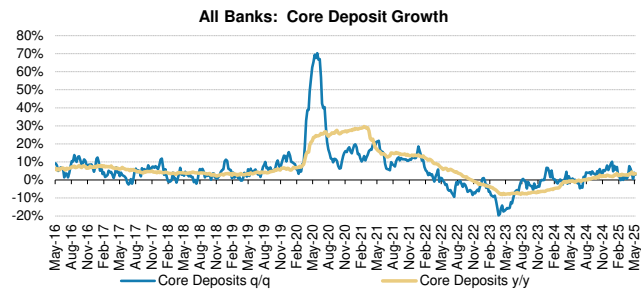
Source: Federal Reserve, Morgan Stanley Research Estimates

Exhibit 43: All Banks: Total Deposit Growth



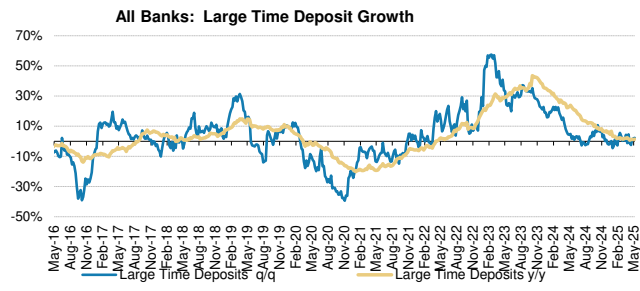
Source: Federal Reserve, Morgan Stanley Research Estimates

Exhibit 44: All Banks: Core Deposit Growth



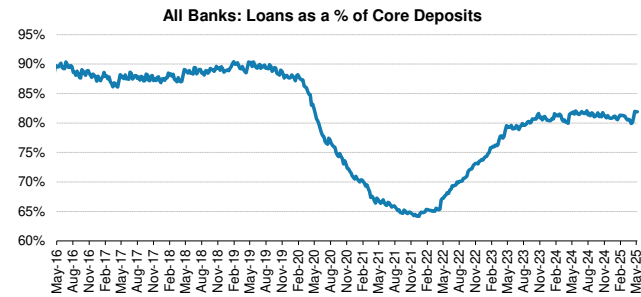
Source: Federal Reserve, Morgan Stanley Research Estimates

Exhibit 45: All Banks: Large Time Deposit Growth



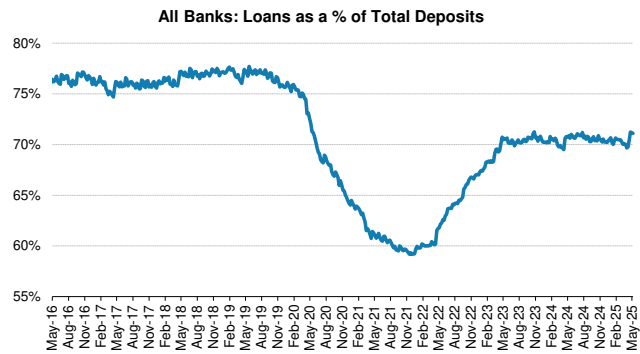
Source: Federal Reserve, Morgan Stanley Research Estimates

Exhibit 46: All Banks: Loans as a % of Core Deposits



Source: Federal Reserve, Morgan Stanley Research Estimates

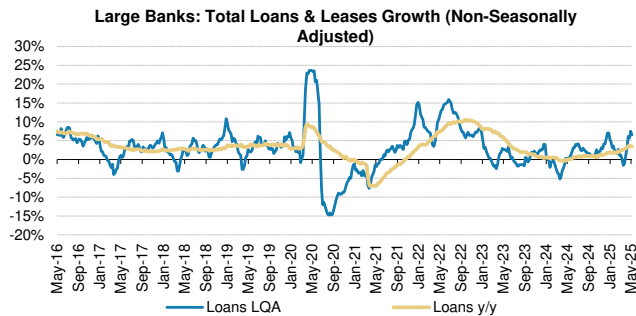
Exhibit 47: All Banks: Loans as a % of Total Deposits



Source: Federal Reserve, Morgan Stanley Research Estimates

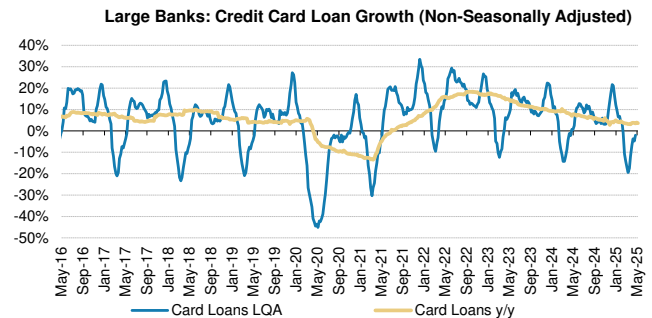
Fed H.8 Loan & Deposit Growth (Large Banks)

Exhibit 48: Large Banks: Total Loans & Leases Growth



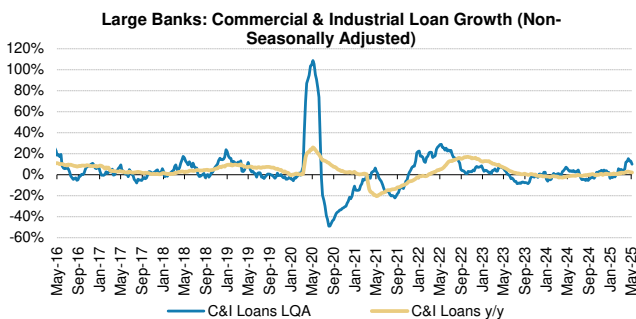
Source: Federal Reserve, Morgan Stanley Research Estimates

Exhibit 49: Large Banks: Credit Card Loan Growth



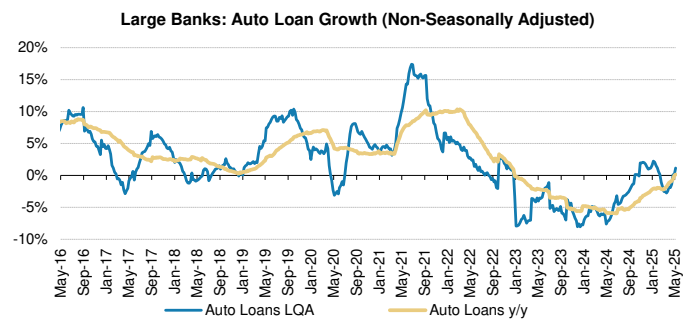
Source: Federal Reserve, Morgan Stanley Research Estimates

Exhibit 50: Large Banks: Commercial & Industrial Loan Growth



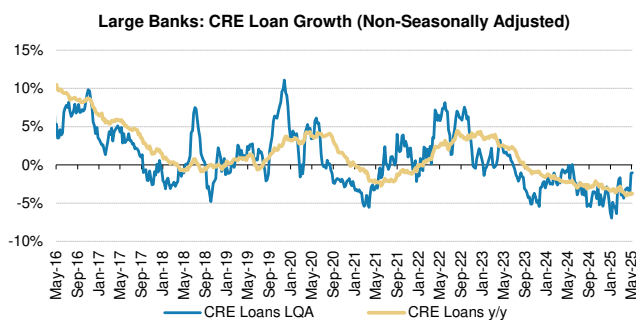
Source: Federal Reserve, Morgan Stanley Research Estimates

Exhibit 51: Large Banks: Auto Loan Growth



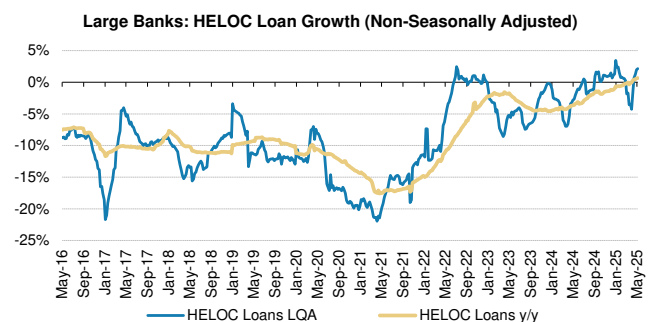
Source: Federal Reserve, Morgan Stanley Research Estimates

Exhibit 52: Large Banks: CRE Loan Growth

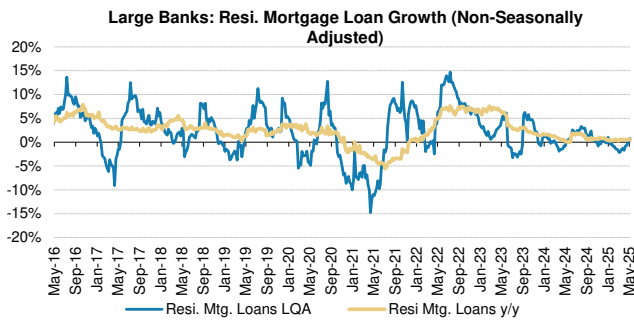


Source: Federal Reserve, Morgan Stanley Research Estimates

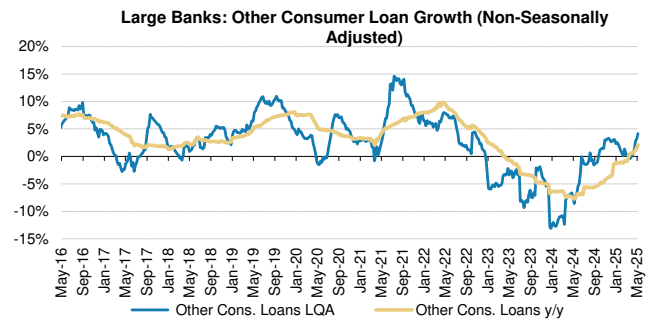
Exhibit 53: Large Banks: HELOC Loan Growth



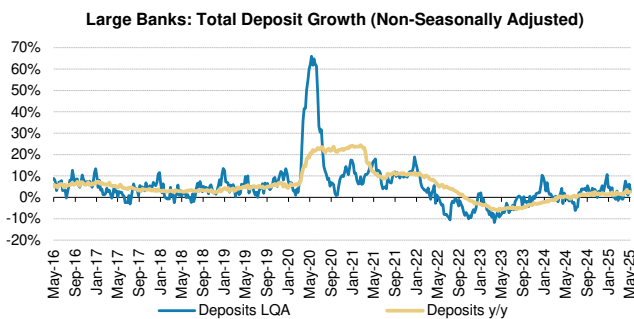
Source: Federal Reserve, Morgan Stanley Research Estimates

Exhibit 54: Large Banks: Resi. Mortgage Loan Growth

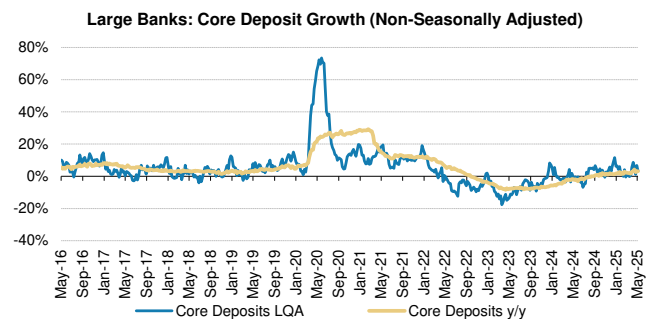
Source: Federal Reserve, Morgan Stanley Research Estimates

Exhibit 55: Large Banks: Other Consumer Loan Growth

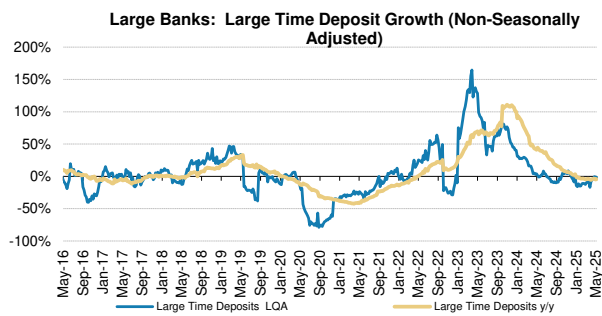
Source: Federal Reserve, Morgan Stanley Research Estimates

Exhibit 56: Large Banks: Total Deposit Growth

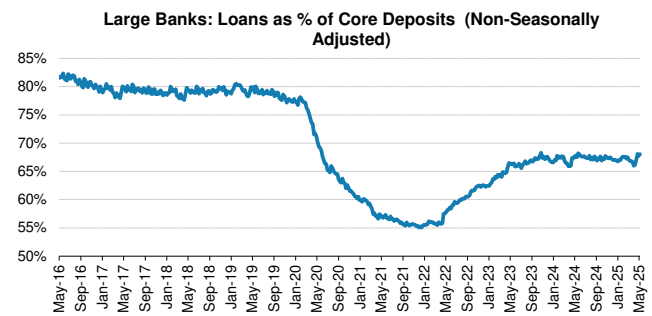
Source: Federal Reserve, Morgan Stanley Research Estimates

Exhibit 57: Large Banks: Core Deposit Growth

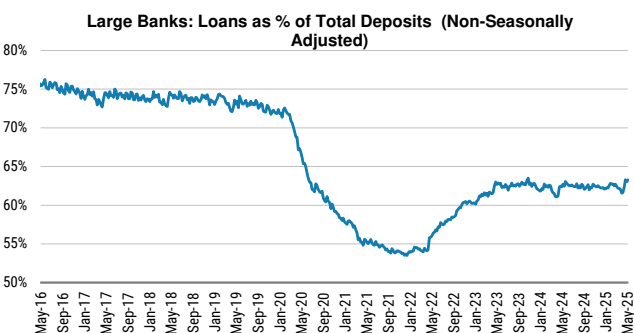
Source: Federal Reserve, Morgan Stanley Research Estimates

Exhibit 58: Large Banks: Large Time Deposit Growth

Source: Federal Reserve, Morgan Stanley Research Estimates

Exhibit 59: Large Banks: Loans as % of Core Deposits

Source: Federal Reserve, Morgan Stanley Research Estimates

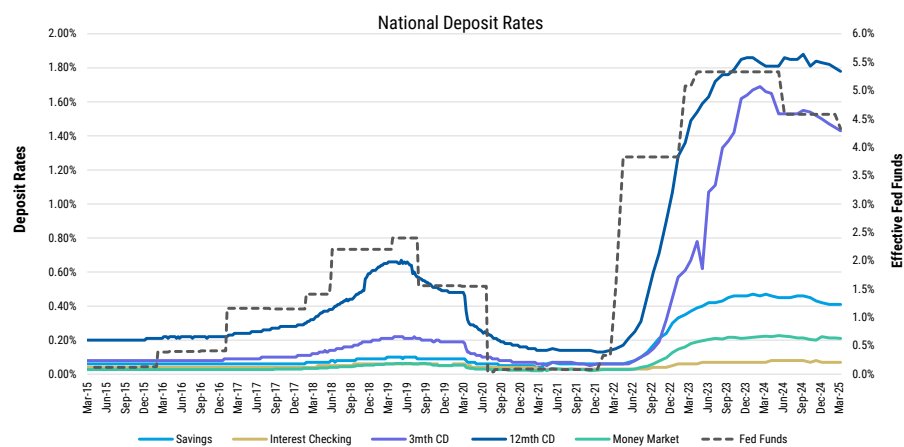
Exhibit 60: Large Banks: Loans as % of Total Deposits

Source: Federal Reserve, Morgan Stanley Research Estimates

Deposit Rates (All banks)

Note: Data as of 3/17/2025

Exhibit 61: National Deposit Rates



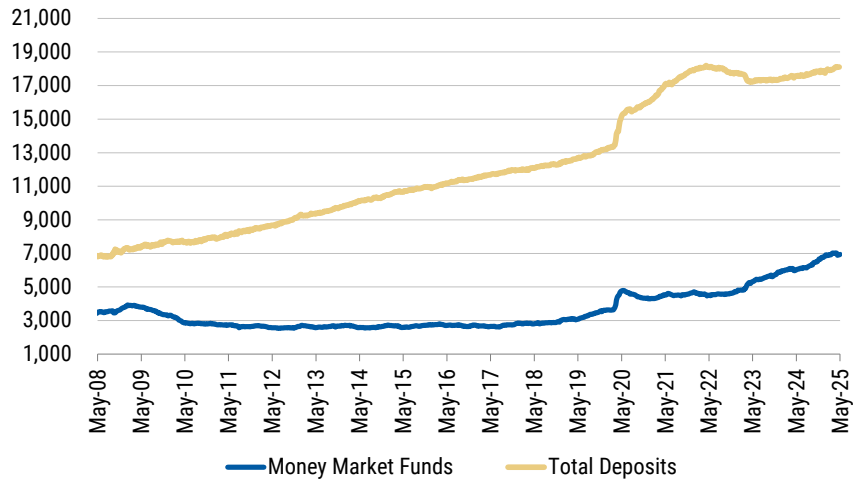
Source: FDIC, Morgan Stanley Research

Note - Data before April 1, 2021 is from non-jumbo deposits. Money market reflects deposit rates, not money market fund rates

Deposits vs. Money Market Funds

Exhibit 62: Weekly Total Deposits vs. Money Mkt Funds

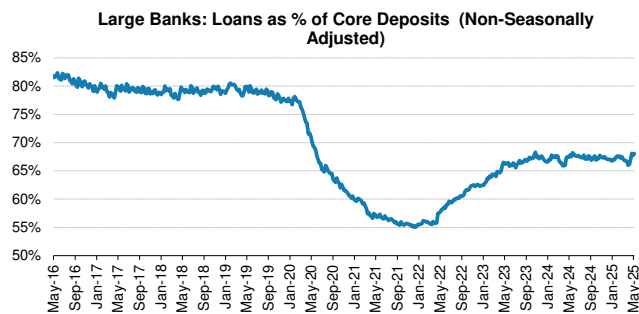
Weekly Total Deposits vs Money Mkt Funds (\$ bn)



Source: Federal Reserve, Investment Company Institute, Morgan Stanley Research

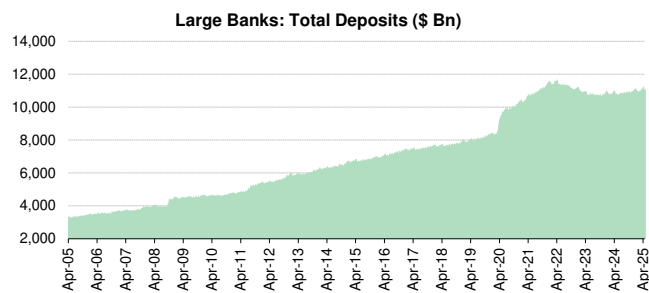
Loan-to-Deposit Ratio

Exhibit 63: Large Banks: Loans to Deposits



Source: Federal Reserve, Morgan Stanley Research

Exhibit 64: Large Banks: Total Deposits



Source: Federal Reserve, Morgan Stanley Research

Exhibit 65: All Banks, Ending Balance (\$b)**All Banks (Non-Seasonally Adjusted)**

	Ending Balance (\$ in billions)		
	Total Deposits	Total Loans	Total Cash
7/3/2024	17,569	12,469	3,365
7/10/2024	17,541	12,433	3,373
7/17/2024	17,529	12,425	3,357
7/24/2024	17,473	12,439	3,319
7/31/2024	17,665	12,484	3,242
8/7/2024	17,592	12,461	3,403
8/14/2024	17,662	12,458	3,381
8/21/2024	17,578	12,448	3,392
8/28/2024	17,637	12,471	3,293
9/4/2024	17,752	12,477	3,275
9/11/2024	17,738	12,469	3,372
9/18/2024	17,685	12,482	3,231
9/25/2024	17,666	12,503	3,151
10/2/2024	17,789	12,519	3,104
10/9/2024	17,730	12,500	3,199
10/16/2024	17,797	12,522	3,245
10/23/2024	17,665	12,520	3,246
10/30/2024	17,813	12,566	3,272
11/6/2024	17,818	12,547	3,249
11/13/2024	17,875	12,557	3,212
11/20/2024	17,800	12,558	3,284
11/27/2024	17,949	12,608	3,276
12/4/2024	17,952	12,613	3,227
12/11/2024	18,000	12,638	3,295
12/18/2024	18,023	12,686	3,269
12/25/2024	18,055	12,728	3,216
1/1/2025	17,945	12,681	2,961
1/8/2025	18,008	12,642	3,371
1/15/2025	18,027	12,624	3,400
1/22/2025	17,932	12,627	3,383
1/29/2025	17,887	12,635	3,266
2/5/2025	17,898	12,624	3,251
2/12/2025	17,905	12,619	3,289
2/19/2025	17,936	12,642	3,307
2/26/2025	17,952	12,649	3,416
3/5/2025	18,029	12,659	3,380
3/12/2025	18,081	12,659	3,461
3/19/2025	18,072	12,667	3,422
3/26/2025	18,136	12,700	3,447
4/2/2025	18,272	12,728	3,393
4/9/2025	18,244	12,734	3,460
4/16/2025	18,164	12,792	3,303
4/23/2025	17,964	12,797	3,231
4/30/2025	18,052	12,849	3,061
5/7/2025	18,025	12,817	3,214

Source: Federal Reserve, Morgan Stanley Research

Exhibit 66: Large Banks, Ending Balance (\$b)**Large Banks (Non-Seasonally Adjusted)**

	Ending Balance (\$ in billions)		
	Total Deposits	Total Loans	Total Cash
7/3/2024	10,878	6,797	1,588
7/10/2024	10,865	6,779	1,593
7/17/2024	10,856	6,773	1,589
7/24/2024	10,802	6,780	1,536
7/31/2024	10,951	6,815	1,545
8/7/2024	10,869	6,794	1,552
8/14/2024	10,915	6,791	1,559
8/21/2024	10,829	6,790	1,496
8/28/2024	10,875	6,801	1,521
9/4/2024	10,972	6,807	1,572
9/11/2024	10,939	6,799	1,572
9/18/2024	10,894	6,798	1,508
9/25/2024	10,873	6,814	1,456
10/2/2024	10,997	6,818	1,515
10/9/2024	10,912	6,800	1,520
10/16/2024	10,958	6,817	1,548
10/23/2024	10,861	6,810	1,484
10/30/2024	10,947	6,848	1,485
11/6/2024	10,945	6,831	1,461
11/13/2024	10,974	6,844	1,497
11/20/2024	10,935	6,839	1,514
11/27/2024	11,024	6,872	1,502
12/4/2024	11,045	6,877	1,506
12/11/2024	11,082	6,894	1,548
12/18/2024	11,107	6,918	1,538
12/25/2024	11,165	6,933	1,577
1/1/2025	11,126	6,910	1,494
1/8/2025	11,044	6,880	1,484
1/15/2025	11,041	6,870	1,495
1/22/2025	10,983	6,872	1,485
1/29/2025	10,950	6,878	1,407
2/5/2025	10,955	6,870	1,356
2/12/2025	10,950	6,872	1,389
2/19/2025	11,015	6,885	1,436
2/26/2025	10,985	6,890	1,425
3/5/2025	11,055	6,897	1,421
3/12/2025	11,085	6,893	1,455
3/19/2025	11,085	6,891	1,405
3/26/2025	11,142	6,915	1,455
4/2/2025	11,257	6,929	1,483
4/9/2025	11,255	6,937	1,496
4/16/2025	11,188	6,975	1,364
4/23/2025	11,013	6,970	1,256
4/30/2025	11,118	7,008	1,315
5/7/2025	11,034	6,982	1,280

Source: Federal Reserve, Morgan Stanley Research

Exhibit 67: Small Banks, Ending Balance (\$b)**Small Banks (Non-Seasonally Adjusted)**

	Ending Balance (\$ in billions)		
	Total Deposits	Total Loans	Total Cash
7/3/2024	5,388	4,556	464
7/10/2024	5,380	4,553	453
7/17/2024	5,380	4,554	459
7/24/2024	5,381	4,557	456
7/31/2024	5,412	4,568	477
8/7/2024	5,419	4,562	474
8/14/2024	5,420	4,562	471
8/21/2024	5,412	4,559	475
8/28/2024	5,439	4,564	498
9/4/2024	5,480	4,567	525
9/11/2024	5,472	4,570	516
9/18/2024	5,453	4,573	499
9/25/2024	5,451	4,574	492
10/2/2024	5,507	4,581	520
10/9/2024	5,507	4,579	516
10/16/2024	5,522	4,581	520
10/23/2024	5,488	4,585	491
10/30/2024	5,514	4,583	516
11/6/2024	5,534	4,579	532
11/13/2024	5,549	4,583	528
11/20/2024	5,530	4,582	520
11/27/2024	5,549	4,593	542
12/4/2024	5,565	4,589	549
12/11/2024	5,567	4,592	548
12/18/2024	5,586	4,603	545
12/25/2024	5,560	4,612	516
1/1/2025	5,563	4,601	534
1/8/2025	5,576	4,601	540
1/15/2025	5,570	4,602	528
1/22/2025	5,541	4,603	512
1/29/2025	5,525	4,605	505
2/5/2025	5,539	4,599	497
2/12/2025	5,535	4,592	500
2/19/2025	5,545	4,598	518
2/26/2025	5,555	4,601	531
3/5/2025	5,577	4,604	539
3/12/2025	5,587	4,607	547
3/19/2025	5,585	4,610	540
3/26/2025	5,593	4,617	542
4/2/2025	5,630	4,630	562
4/9/2025	5,633	4,634	559
4/16/2025	5,604	4,639	531
4/23/2025	5,559	4,643	509
4/30/2025	5,576	4,657	517
5/7/2025	5,568	4,656	492

Source: Federal Reserve, Morgan Stanley Research

Exhibit 68: All Banks W/W Change (\$b)**All Banks (Non-Seasonally Adjusted)**

	W/W Change (\$ in billions)		
	Total Deposits	Total Loans	Total Cash
7/3/2024	43	12	50
7/10/2024	(28)	(36)	9
7/17/2024	(12)	(8)	(17)
7/24/2024	(56)	14	(38)
7/31/2024	192	46	(77)
8/7/2024	(73)	(24)	162
8/14/2024	70	(3)	(22)
8/21/2024	(85)	(9)	11
8/28/2024	60	22	(99)
9/4/2024	115	7	(17)
9/11/2024	(15)	(8)	97
9/18/2024	(53)	12	(141)
9/25/2024	(19)	21	(80)
10/2/2024	124	17	(47)
10/9/2024	(60)	(20)	95
10/16/2024	67	23	46
10/23/2024	(132)	(2)	1
10/30/2024	148	46	26
11/6/2024	5	(19)	(23)
11/13/2024	57	10	(36)
11/20/2024	(75)	1	72
11/27/2024	149	50	(8)
12/4/2024	3	5	(49)
12/11/2024	48	25	68
12/18/2024	22	49	(26)
12/25/2024	32	41	(53)
1/1/2025	(110)	(46)	(255)
1/8/2025	63	(40)	410
1/15/2025	19	(18)	29
1/22/2025	(95)	3	(17)
1/29/2025	(46)	9	(116)
2/5/2025	12	(11)	(15)
2/12/2025	6	(5)	38
2/19/2025	31	23	18
2/26/2025	17	8	108
3/5/2025	76	10	(35)
3/12/2025	52	(0)	81
3/19/2025	(9)	8	(39)
3/26/2025	65	33	25
4/2/2025	135	28	(54)
4/9/2025	(28)	7	67
4/16/2025	(80)	58	(157)
4/23/2025	(201)	4	(71)
4/30/2025	88	53	(171)
5/7/2025	(27)	(33)	153

Source: Federal Reserve, Morgan Stanley Research

Exhibit 69: Large Banks W/W change (\$b)**Large Banks (Non-Seasonally Adjusted)**

	W/W Change (\$ in billions)		
	Total Deposits	Total Loans	Total Cash
7/3/2024	30	2	(10)
7/10/2024	(14)	(18)	5
7/17/2024	(9)	(6)	(4)
7/24/2024	(54)	7	(53)
7/31/2024	149	34	9
8/7/2024	(82)	(21)	8
8/14/2024	46	(3)	6
8/21/2024	(86)	(1)	(63)
8/28/2024	46	11	25
9/4/2024	97	5	52
9/11/2024	(32)	(8)	(1)
9/18/2024	(46)	(0)	(64)
9/25/2024	(20)	15	(52)
10/2/2024	123	4	59
10/9/2024	(85)	(18)	5
10/16/2024	46	17	28
10/23/2024	(97)	(7)	(65)
10/30/2024	86	39	1
11/6/2024	(2)	(17)	(24)
11/13/2024	29	13	36
11/20/2024	(39)	(6)	17
11/27/2024	89	34	(12)
12/4/2024	21	5	4
12/11/2024	37	17	42
12/18/2024	25	24	(10)
12/25/2024	58	15	39
1/1/2025	(39)	(23)	(83)
1/8/2025	(82)	(30)	(10)
1/15/2025	(3)	(9)	11
1/22/2025	(58)	1	(10)
1/29/2025	(33)	7	(78)
2/5/2025	5	(8)	(51)
2/12/2025	(5)	1	34
2/19/2025	66	13	47
2/26/2025	(30)	5	(11)
3/5/2025	69	7	(4)
3/12/2025	30	(4)	35
3/19/2025	0	(2)	(50)
3/26/2025	57	24	50
4/2/2025	115	14	27
4/9/2025	(1)	8	14
4/16/2025	(68)	38	(132)
4/23/2025	(175)	(4)	(108)
4/30/2025	106	37	59
5/7/2025	(85)	(26)	(35)

Source: Federal Reserve, Morgan Stanley Research

Exhibit 70: Small Banks W/W change (\$b)**Small Banks (Non-Seasonally Adjusted)**

	W/W Change (\$ in billions)		
	Total Deposits	Total Loans	Total Cash
7/3/2024	14	7	3
7/10/2024	(8)	(3)	(11)
7/17/2024	0	1	6
7/24/2024	2	3	(3)
7/31/2024	30	11	22
8/7/2024	7	(6)	(3)
8/14/2024	1	0	(3)
8/21/2024	(8)	(4)	4
8/28/2024	27	5	22
9/4/2024	41	3	27
9/11/2024	(8)	3	(9)
9/18/2024	(19)	2	(17)
9/25/2024	(2)	1	(7)
10/2/2024	55	7	28
10/9/2024	(0)	(2)	(4)
10/16/2024	15	3	4
10/23/2024	(33)	4	(29)
10/30/2024	26	(2)	25
11/6/2024	19	(4)	16
11/13/2024	16	3	(4)
11/20/2024	(19)	(1)	(8)
11/27/2024	19	11	21
12/4/2024	16	(4)	7
12/11/2024	2	3	(1)
12/18/2024	19	11	(2)
12/25/2024	(25)	9	(29)
1/1/2025	3	(11)	18
1/8/2025	13	(0)	6
1/15/2025	(6)	1	(12)
1/22/2025	(29)	0	(17)
1/29/2025	(15)	3	(7)
2/5/2025	14	(6)	(8)
2/12/2025	(4)	(7)	3
2/19/2025	11	5	18
2/26/2025	10	3	13
3/5/2025	21	4	8
3/12/2025	11	3	8
3/19/2025	(3)	3	(8)
3/26/2025	9	7	2
4/2/2025	36	13	20
4/9/2025	3	4	(3)
4/16/2025	(29)	6	(28)
4/23/2025	(45)	4	(22)
4/30/2025	17	15	8
5/7/2025	(8)	(2)	(25)

Source: Federal Reserve, Morgan Stanley Research

Exhibit 71: All Banks W/W change (%)**All Banks (Non-Seasonally Adjusted)**

	W/W % Change		
	Total Deposits	Total Loans	Total Cash
7/3/2024	0.2%	0.1%	1.5%
7/10/2024	-0.2%	-0.3%	0.3%
7/17/2024	-0.1%	-0.1%	-0.5%
7/24/2024	-0.3%	0.1%	-1.1%
7/31/2024	1.1%	0.4%	-2.3%
8/7/2024	-0.4%	-0.2%	5.0%
8/14/2024	0.4%	0.0%	-0.7%
8/21/2024	-0.5%	-0.1%	0.3%
8/28/2024	0.3%	0.2%	-2.9%
9/4/2024	0.7%	0.1%	-0.5%
9/11/2024	-0.1%	-0.1%	3.0%
9/18/2024	-0.3%	0.1%	-4.2%
9/25/2024	-0.1%	0.2%	-2.5%
10/2/2024	0.7%	0.1%	-1.5%
10/9/2024	-0.3%	-0.2%	3.1%
10/16/2024	0.4%	0.2%	1.4%
10/23/2024	-0.7%	0.0%	0.0%
10/30/2024	0.8%	0.4%	0.8%
11/6/2024	0.0%	-0.2%	-0.7%
11/13/2024	0.3%	0.1%	-1.1%
11/20/2024	-0.4%	0.0%	2.2%
11/27/2024	0.8%	0.4%	-0.3%
12/4/2024	0.0%	0.0%	-1.5%
12/11/2024	0.3%	0.2%	2.1%
12/18/2024	0.1%	0.4%	-0.8%
12/25/2024	0.2%	0.3%	-1.6%
1/1/2025	-0.6%	-0.4%	-7.9%
1/8/2025	0.4%	-0.3%	13.8%
1/15/2025	0.1%	-0.1%	0.9%
1/22/2025	-0.5%	0.0%	-0.5%
1/29/2025	-0.3%	0.1%	-3.4%
2/5/2025	0.1%	-0.1%	-0.5%
2/12/2025	0.0%	0.0%	1.2%
2/19/2025	0.2%	0.2%	0.6%
2/26/2025	0.1%	0.1%	3.3%
3/5/2025	0.4%	0.1%	-1.0%
3/12/2025	0.3%	0.0%	2.4%
3/19/2025	0.0%	0.1%	-1.1%
3/26/2025	0.4%	0.3%	0.7%
4/2/2025	0.7%	0.2%	-1.6%
4/9/2025	-0.2%	0.1%	2.0%
4/16/2025	-0.4%	0.5%	-4.5%
4/23/2025	-1.1%	0.0%	-2.2%
4/30/2025	0.5%	0.4%	-5.3%
5/7/2025	-0.2%	-0.3%	5.0%

Source: Federal Reserve, Morgan Stanley Research

Exhibit 72: Large Banks W/W Change (%)**Large Banks (Non-Seasonally Adjusted)**

	W/W % Change		
	Total Deposits	Total Loans	Total Cash
7/3/2024	0.3%	0.0%	-0.6%
7/10/2024	-0.1%	-0.3%	0.3%
7/17/2024	-0.1%	-0.1%	-0.2%
7/24/2024	-0.5%	0.1%	-3.4%
7/31/2024	1.4%	0.5%	0.6%
8/7/2024	-0.7%	-0.3%	0.5%
8/14/2024	0.4%	0.0%	0.4%
8/21/2024	-0.8%	0.0%	-4.0%
8/28/2024	0.4%	0.2%	1.7%
9/4/2024	0.9%	0.1%	3.4%
9/11/2024	-0.3%	-0.1%	0.0%
9/18/2024	-0.4%	0.0%	-4.1%
9/25/2024	-0.2%	0.2%	-3.5%
10/2/2024	1.1%	0.1%	4.1%
10/9/2024	-0.8%	-0.3%	0.3%
10/16/2024	0.4%	0.2%	1.9%
10/23/2024	-0.9%	-0.1%	-4.2%
10/30/2024	0.8%	0.6%	0.1%
11/6/2024	0.0%	-0.3%	-1.6%
11/13/2024	0.3%	0.2%	2.5%
11/20/2024	-0.4%	-0.1%	1.1%
11/27/2024	0.8%	0.5%	-0.8%
12/4/2024	0.2%	0.1%	0.3%
12/11/2024	0.3%	0.3%	2.8%
12/18/2024	0.2%	0.3%	-0.6%
12/25/2024	0.5%	0.2%	2.5%
1/1/2025	-0.3%	-0.3%	-5.3%
1/8/2025	-0.7%	-0.4%	-0.7%
1/15/2025	0.0%	-0.1%	0.7%
1/22/2025	-0.5%	0.0%	-0.7%
1/29/2025	-0.3%	0.1%	-5.3%
2/5/2025	0.0%	-0.1%	-3.6%
2/12/2025	0.0%	0.0%	2.5%
2/19/2025	0.6%	0.2%	3.4%
2/26/2025	-0.3%	0.1%	-0.8%
3/5/2025	0.6%	0.1%	-0.3%
3/12/2025	0.3%	-0.1%	2.5%
3/19/2025	0.0%	0.0%	-3.4%
3/26/2025	0.5%	0.4%	3.6%
4/2/2025	1.0%	0.2%	1.9%
4/9/2025	0.0%	0.1%	0.9%
4/16/2025	-0.6%	0.5%	-8.8%
4/23/2025	-1.6%	-0.1%	-7.9%
4/30/2025	1.0%	0.5%	4.7%
5/7/2025	-0.8%	-0.4%	-2.7%

Source: Federal Reserve, Morgan Stanley Research

Exhibit 73: Small Banks W/W change (%)**Small Banks (Non-Seasonally Adjusted)**

	W/W % Change		
	Total Deposits	Total Loans	Total Cash
7/3/2024	0.3%	0.2%	0.6%
7/10/2024	-0.2%	-0.1%	-2.4%
7/17/2024	0.0%	0.0%	1.3%
7/24/2024	0.0%	0.1%	-0.6%
7/31/2024	0.6%	0.2%	4.7%
8/7/2024	0.1%	-0.1%	-0.6%
8/14/2024	0.0%	0.0%	-0.7%
8/21/2024	-0.2%	-0.1%	0.9%
8/28/2024	0.5%	0.1%	4.7%
9/4/2024	0.8%	0.1%	5.4%
9/11/2024	-0.1%	0.1%	-1.7%
9/18/2024	-0.3%	0.1%	-3.3%
9/25/2024	0.0%	0.0%	-1.3%
10/2/2024	1.0%	0.2%	5.7%
10/9/2024	0.0%	-0.1%	-0.9%
10/16/2024	0.3%	0.1%	0.8%
10/23/2024	-0.6%	0.1%	-5.6%
10/30/2024	0.5%	0.0%	5.1%
11/6/2024	0.4%	-0.1%	3.1%
11/13/2024	0.3%	0.1%	-0.7%
11/20/2024	-0.3%	0.0%	-1.5%
11/27/2024	0.3%	0.2%	4.1%
12/4/2024	0.3%	-0.1%	1.3%
12/11/2024	0.0%	0.1%	-0.2%
12/18/2024	0.3%	0.2%	-0.4%
12/25/2024	-0.5%	0.2%	-5.3%
1/1/2025	0.1%	-0.2%	3.5%
1/8/2025	0.2%	0.0%	1.1%
1/15/2025	-0.1%	0.0%	-2.2%
1/22/2025	-0.5%	0.0%	-3.1%
1/29/2025	-0.3%	0.1%	-1.3%
2/5/2025	0.2%	-0.1%	-1.5%
2/12/2025	-0.1%	-0.1%	0.6%
2/19/2025	0.2%	0.1%	3.5%
2/26/2025	0.2%	0.1%	2.4%
3/5/2025	0.4%	0.1%	1.6%
3/12/2025	0.2%	0.1%	1.6%
3/19/2025	0.0%	0.1%	-1.4%
3/26/2025	0.2%	0.2%	0.4%
4/2/2025	0.7%	0.3%	3.7%
4/9/2025	0.1%	0.1%	-0.5%
4/16/2025	-0.5%	0.1%	-5.1%
4/23/2025	-0.8%	0.1%	-4.2%
4/30/2025	0.3%	0.3%	1.6%
5/7/2025	-0.1%	0.0%	-4.9%

Source: Federal Reserve, Morgan Stanley Research

Exhibit 74: W/W Deposits Change (\$b)**Deposits (Non-Seasonally Adjusted)**

	W/W Deposit Change (\$ in billions)		
	Large Banks	Small Banks	All Banks
7/3/2024	30	14	43
7/10/2024	(14)	(8)	(28)
7/17/2024	(9)	0	(12)
7/24/2024	(54)	2	(56)
7/31/2024	149	30	192
8/7/2024	(82)	7	(73)
8/14/2024	46	1	70
8/21/2024	(86)	(8)	(85)
8/28/2024	46	27	60
9/4/2024	97	41	115
9/11/2024	(32)	(8)	(15)
9/18/2024	(46)	(19)	(53)
9/25/2024	(20)	(2)	(19)
10/2/2024	123	55	124
10/9/2024	(85)	(0)	(60)
10/16/2024	46	15	67
10/23/2024	(97)	(33)	(132)
10/30/2024	86	26	148
11/6/2024	(2)	19	5
11/13/2024	29	16	57
11/20/2024	(39)	(19)	(75)
11/27/2024	89	19	149
12/4/2024	21	16	3
12/11/2024	37	2	48
12/18/2024	25	19	22
12/25/2024	58	(25)	32
1/1/2025	(39)	3	(110)
1/8/2025	(82)	13	63
1/15/2025	(3)	(6)	19
1/22/2025	(58)	(29)	(95)
1/29/2025	(33)	(15)	(46)
2/5/2025	5	14	12
2/12/2025	(5)	(4)	6
2/19/2025	66	11	31
2/26/2025	(30)	10	17
3/5/2025	69	21	76
3/12/2025	30	11	52
3/19/2025	0	(3)	(9)
3/26/2025	57	9	65
4/2/2025	115	36	135
4/9/2025	(1)	3	(28)
4/16/2025	(68)	(29)	(80)
4/23/2025	(175)	(45)	(201)
4/30/2025	106	17	88
5/7/2025	(85)	(8)	(27)

Source: Federal Reserve, Morgan Stanley Research

Exhibit 75: W/W Loan Change (\$bn)**Loans (Non-Seasonally Adjusted)**

	W/W Loan Change (\$ in billions)		
	Large Banks	Small Banks	All Banks
7/3/2024	2	7	12
7/10/2024	(18)	(3)	(36)
7/17/2024	(6)	1	(8)
7/24/2024	7	3	14
7/31/2024	34	11	46
8/7/2024	(21)	(6)	(24)
8/14/2024	(3)	0	(3)
8/21/2024	(1)	(4)	(9)
8/28/2024	11	5	22
9/4/2024	5	3	7
9/11/2024	(8)	3	(8)
9/18/2024	(0)	2	12
9/25/2024	15	1	21
10/2/2024	4	7	17
10/9/2024	(18)	(2)	(20)
10/16/2024	17	3	23
10/23/2024	(7)	4	(2)
10/30/2024	39	(2)	46
11/6/2024	(17)	(4)	(19)
11/13/2024	13	3	10
11/20/2024	(6)	(1)	1
11/27/2024	34	11	50
12/4/2024	5	(4)	5
12/11/2024	17	3	25
12/18/2024	24	11	49
12/25/2024	15	9	41
1/1/2025	(23)	(11)	(46)
1/8/2025	(30)	(0)	(40)
1/15/2025	(9)	1	(18)
1/22/2025	1	0	3
1/29/2025	7	3	9
2/5/2025	(8)	(6)	(11)
2/12/2025	1	(7)	(5)
2/19/2025	13	5	23
2/26/2025	5	3	8
3/5/2025	7	4	10
3/12/2025	(4)	3	(0)
3/19/2025	(2)	3	8
3/26/2025	24	7	33
4/2/2025	14	13	28
4/9/2025	8	4	7
4/16/2025	38	6	58
4/23/2025	(4)	4	4
4/30/2025	37	15	53
5/7/2025	(26)	(2)	(33)

Source: Federal Reserve, Morgan Stanley Research

Exhibit 76: W/W Cash Change (\$bn)**Cash (Non-Seasonally Adjusted)**

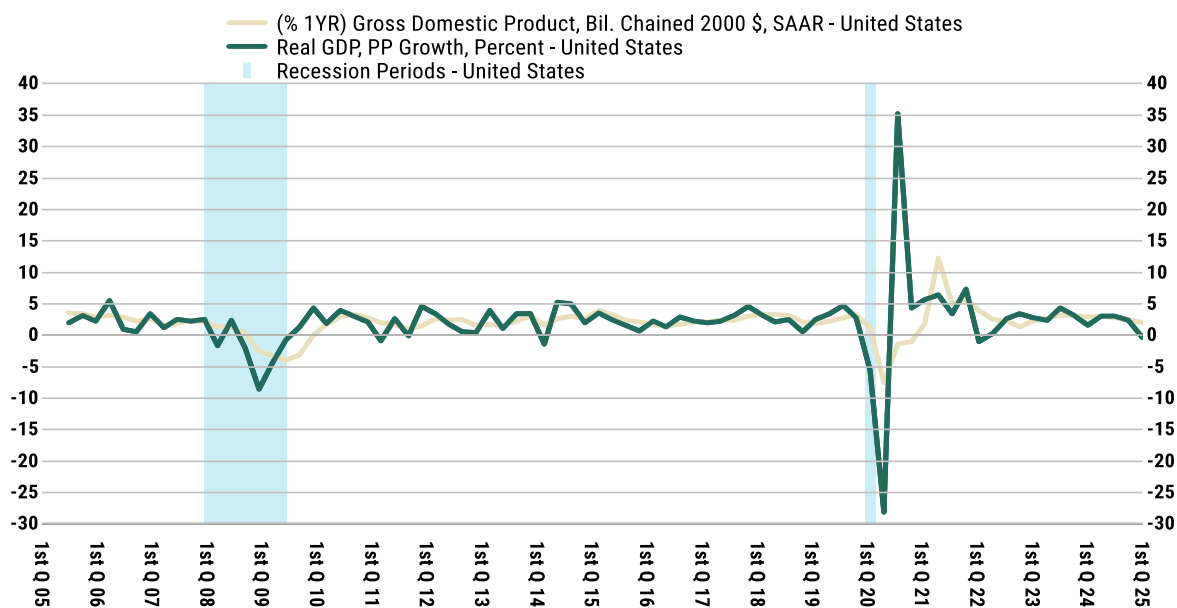
	W/W Cash Change (\$ in billions)		
	Large Banks	Small Banks	All Banks
7/3/2024	(10)	3	50
7/10/2024	5	(11)	9
7/17/2024	(4)	6	(17)
7/24/2024	(53)	(3)	(38)
7/31/2024	9	22	(77)
8/7/2024	8	(3)	162
8/14/2024	6	(3)	(22)
8/21/2024	(63)	4	11
8/28/2024	25	22	(99)
9/4/2024	52	27	(17)
9/11/2024	(1)	(9)	97
9/18/2024	(64)	(17)	(141)
9/25/2024	(52)	(7)	(80)
10/2/2024	59	28	(47)
10/9/2024	5	(4)	95
10/16/2024	28	4	46
10/23/2024	(65)	(29)	1
10/30/2024	1	25	26
11/6/2024	(24)	16	(23)
11/13/2024	36	(4)	(36)
11/20/2024	17	(8)	72
11/27/2024	(12)	21	(8)
12/4/2024	4	7	(49)
12/11/2024	42	(1)	68
12/18/2024	(10)	(2)	(26)
12/25/2024	39	(29)	(53)
1/1/2025	(83)	18	(255)
1/8/2025	(10)	6	410
1/15/2025	11	(12)	29
1/22/2025	(10)	(17)	(17)
1/29/2025	(78)	(7)	(116)
2/5/2025	(51)	(8)	(15)
2/12/2025	34	3	38
2/19/2025	47	18	18
2/26/2025	(11)	13	108
3/5/2025	(4)	8	(35)
3/12/2025	35	8	81
3/19/2025	(50)	(8)	(39)
3/26/2025	50	2	25
4/2/2025	27	20	(54)
4/9/2025	14	(3)	67
4/16/2025	(132)	(28)	(157)
4/23/2025	(108)	(22)	(71)
4/30/2025	59	8	(171)
5/7/2025	(35)	(25)	153

Source: Federal Reserve, Morgan Stanley Research

Loan Growth Indicators

GDP & Personal Consumption Expenditure

Exhibit 77: GDP Growth Rate



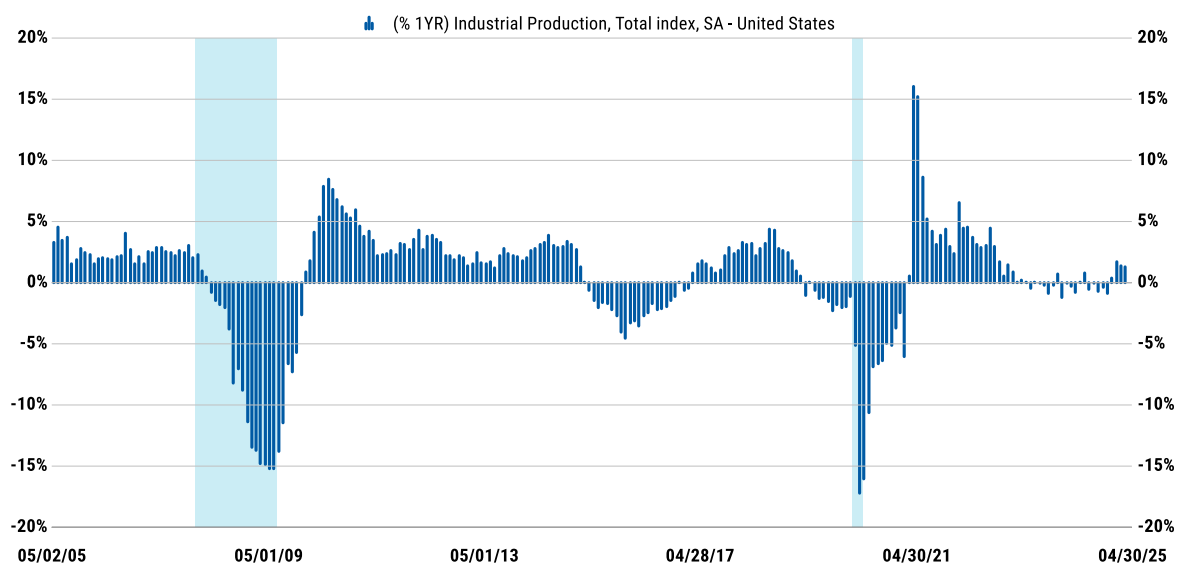
Source: FactSet, Morgan Stanley Research

C&I Loan Indicators

Industrial Production

Exhibit 78: Industrial Production

US Industrial Production



Source: FactSet, Morgan Stanley Research

Capacity Utilization & Leading Indicators Index

Exhibit 79: Capacity utilization (monthly)
US Capacity Utilization

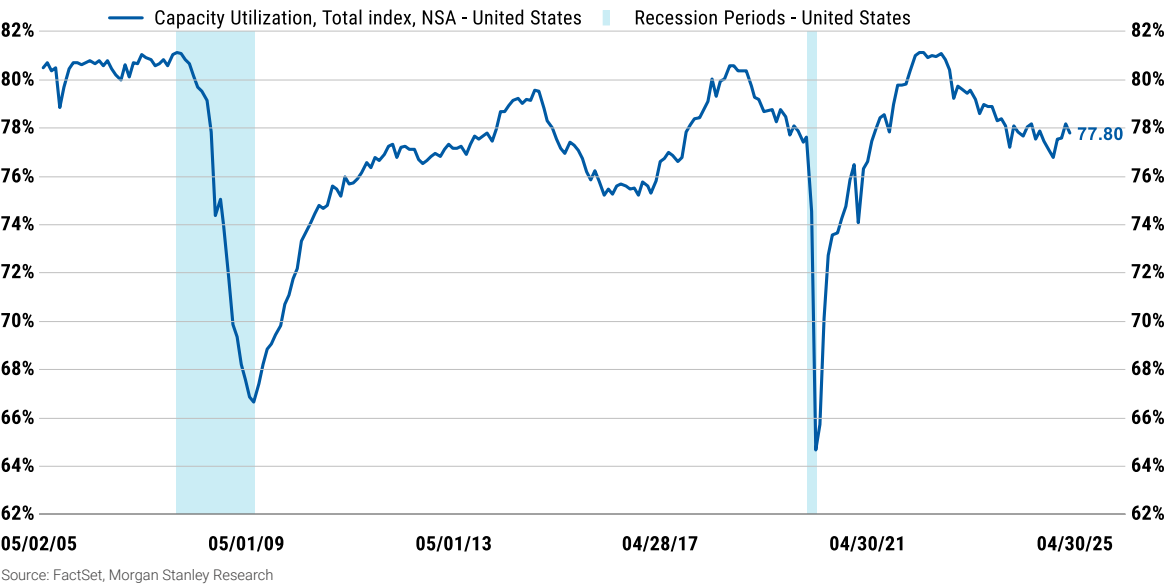
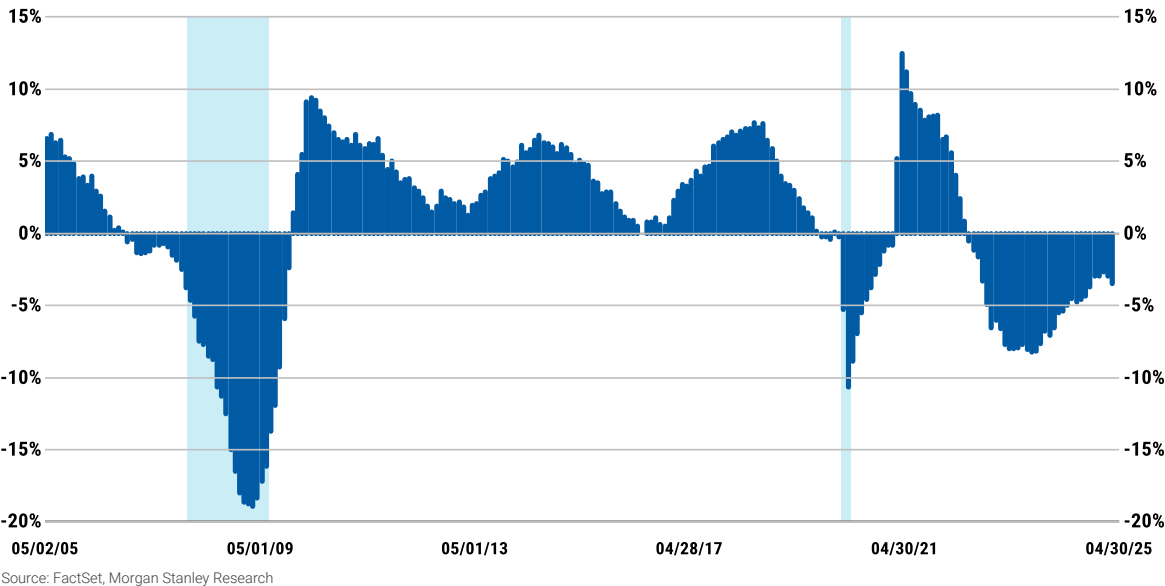


Exhibit 80: US Index of Leading Indicators Y/Y
US Index of Leading Indicators (YOY%)



Manufacturing PMI & Factory Orders

Exhibit 81: ISM Manufacturing PMI (monthly)
ISM Report on Business

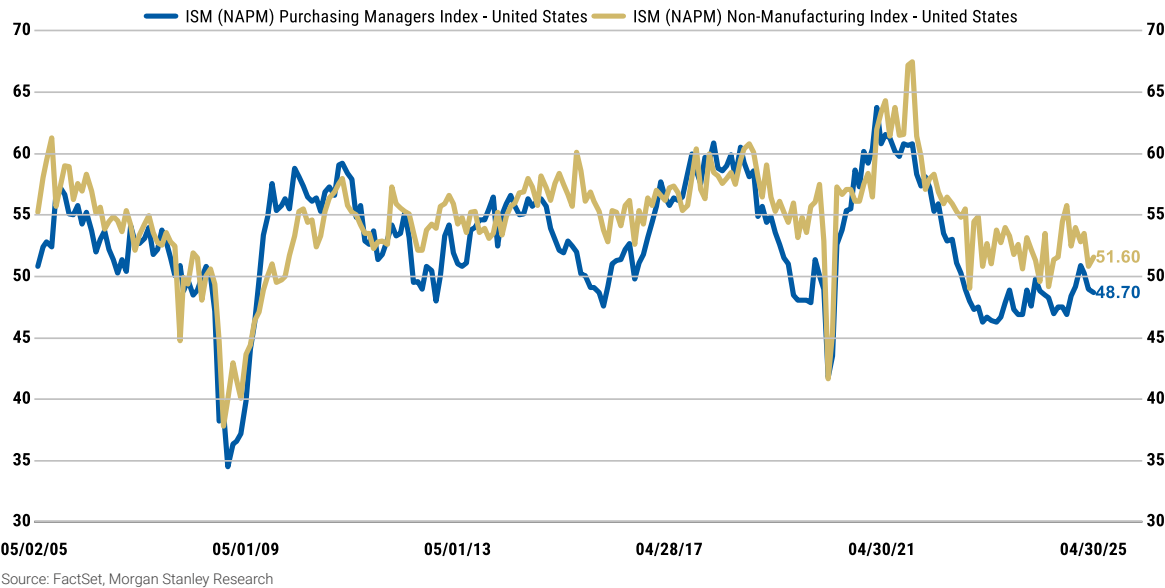
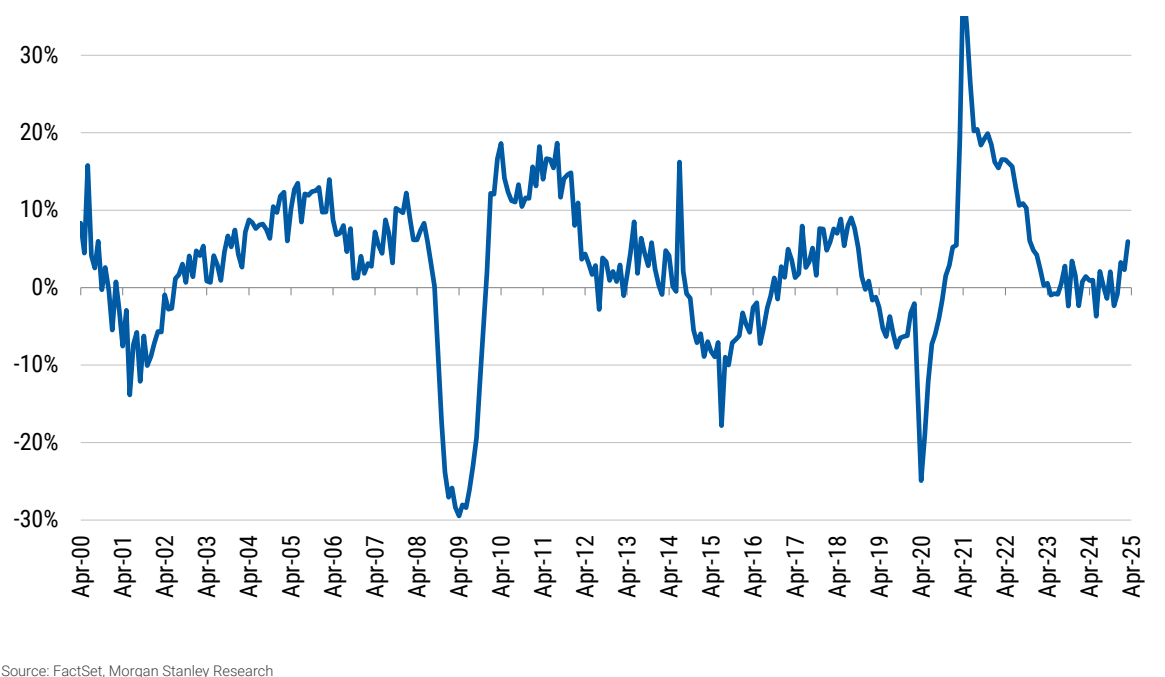
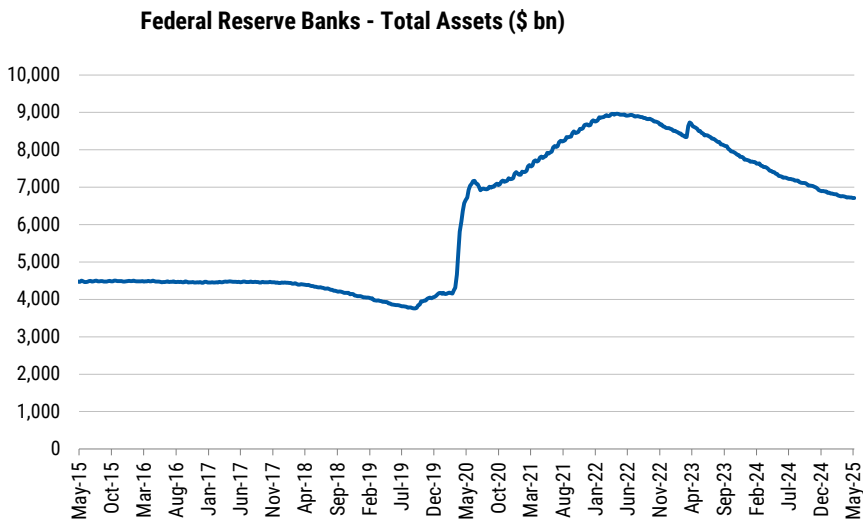


Exhibit 82: Factory Orders (Y/Y change)
Factory Orders (Y/Y % Change)



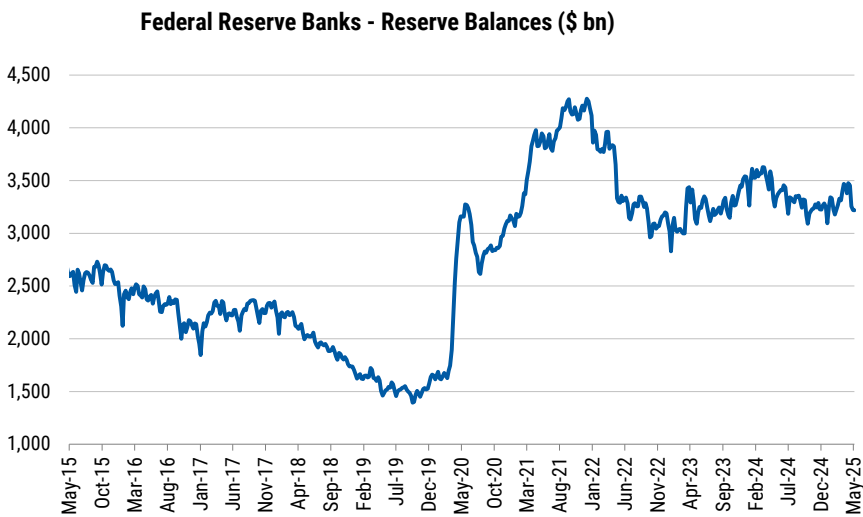
Fed Balance Sheet, General Business Activity Diffusion Index

Exhibit 83: Fed Balance Sheet



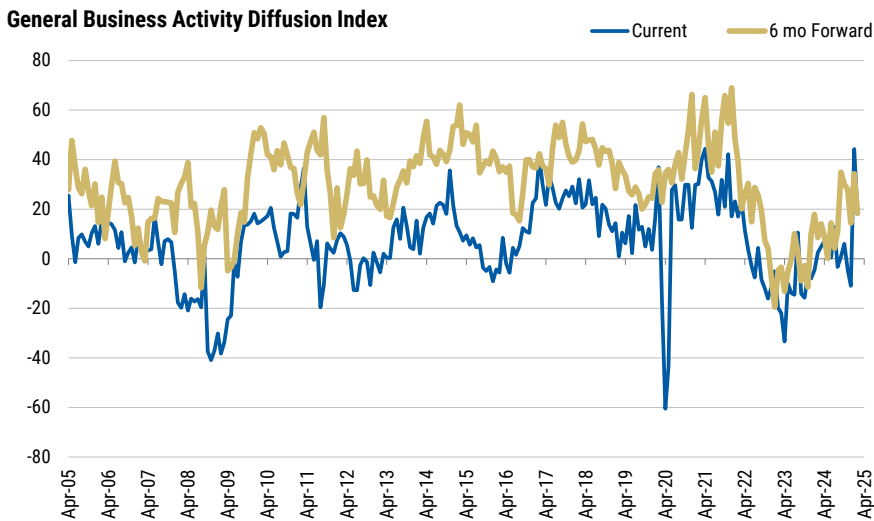
Source: Federal Reserve, FactSet, Morgan Stanley Research

Exhibit 84: Fed Reserve Balances



Source: Federal Reserve, FactSet, Morgan Stanley Research

Exhibit 85: General Business Activity Diffusion Index (monthly)



Source: FactSet, Federal Reserve, Federal Reserve Bank of Philadelphia, Morgan Stanley Research

Consumer Loan Indicators

Consumer Confidence Index, Jobless Claims

Exhibit 86: Consumer Confidence Index (monthly)

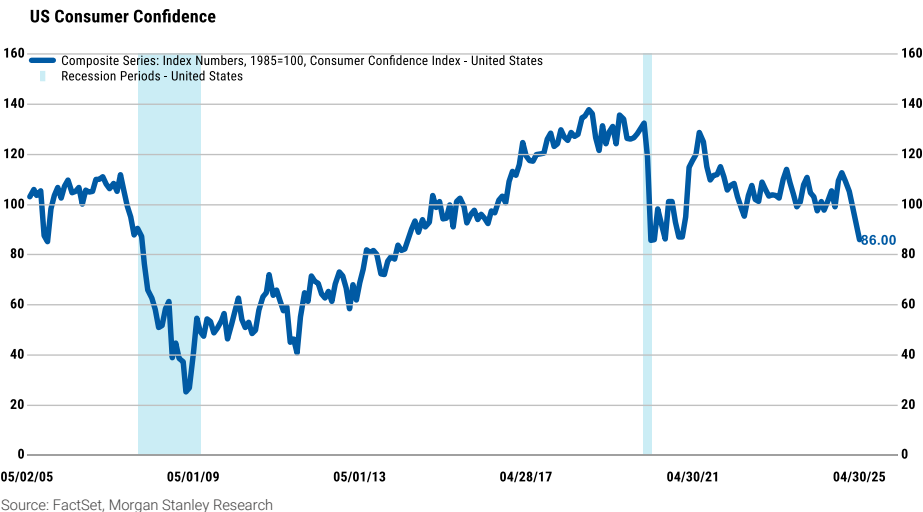
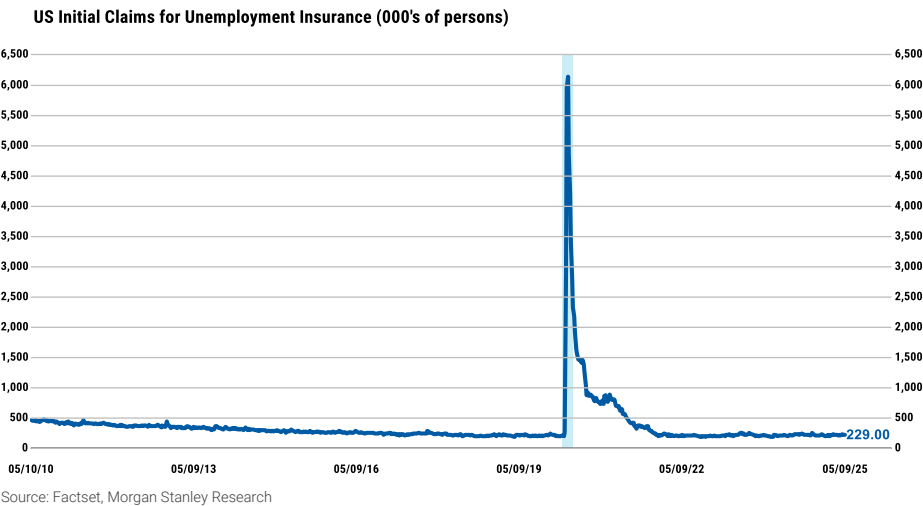
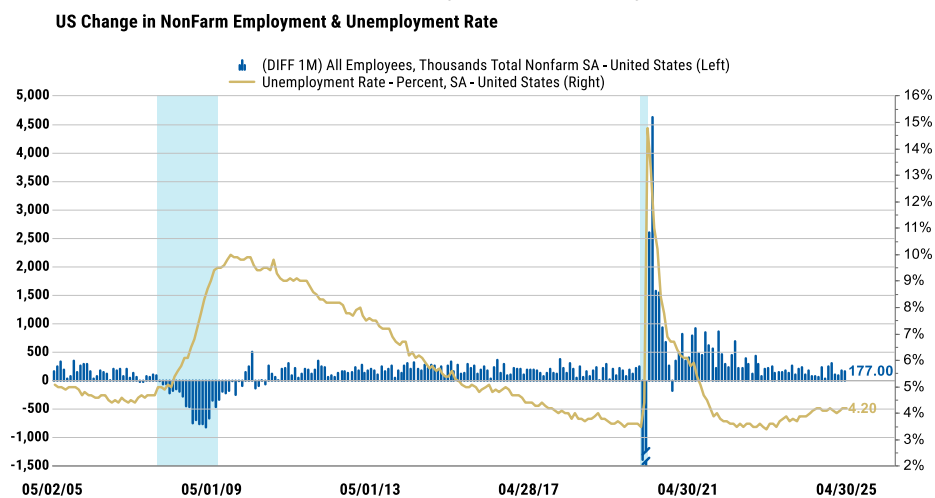


Exhibit 87: Jobless Claims (Weekly)



Nonfarm Payrolls, Unemployment Rate

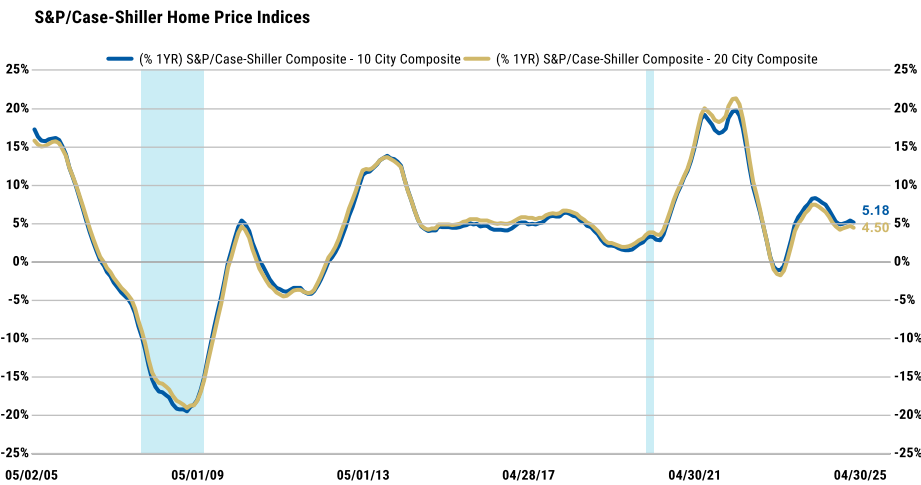
Exhibit 88: US Change in Nonfarm Employment & Unemployment Rate



Source: US Department of Labor, Morgan Stanley Research

Housing Price Index

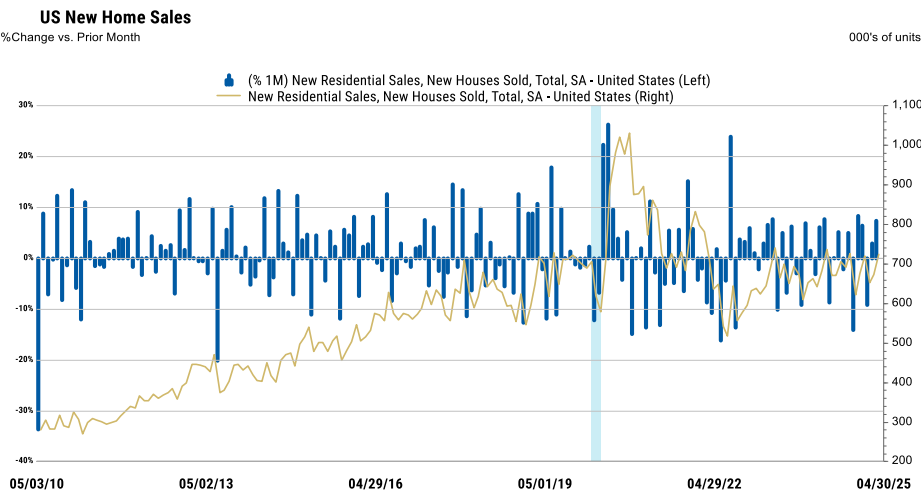
Exhibit 89: Housing Price Index - Y/Y growth (quarterly)



Source: FactSet, Morgan Stanley Research

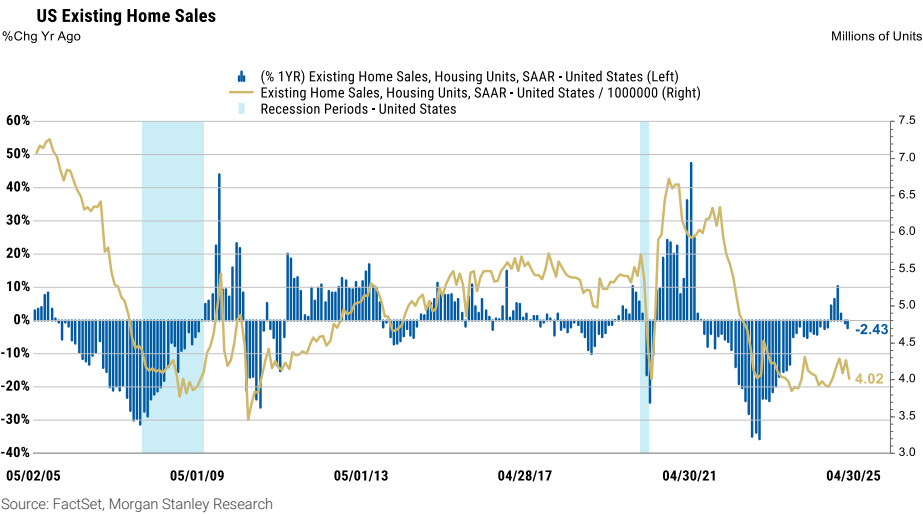
Home Sales

Exhibit 90: US New Home Sales



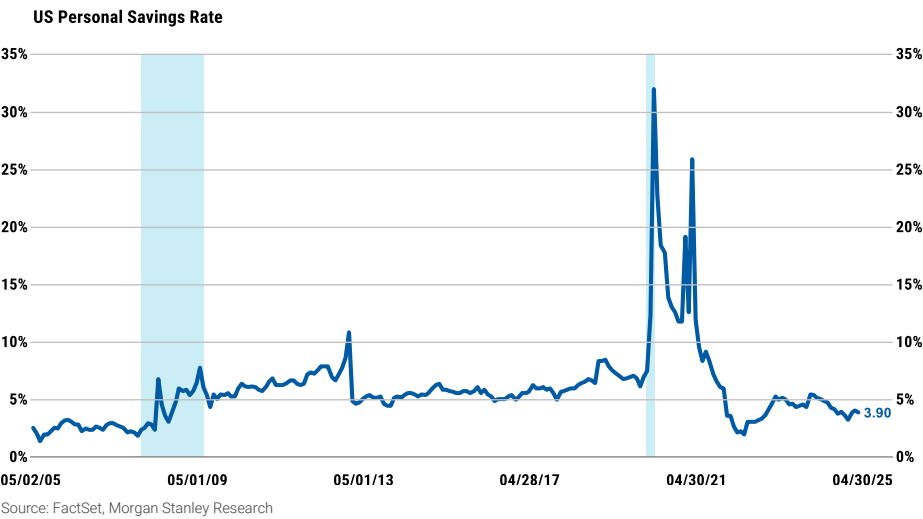
Source: FactSet, Morgan Stanley Research

Exhibit 91: US Existing Home Sales



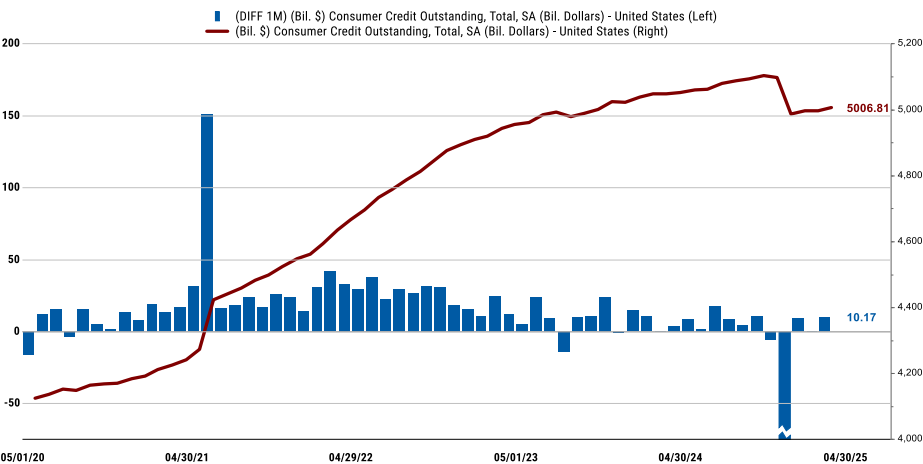
Personal Savings Rate

Exhibit 92: Personal Savings Rate (monthly)



US Consumer Credit

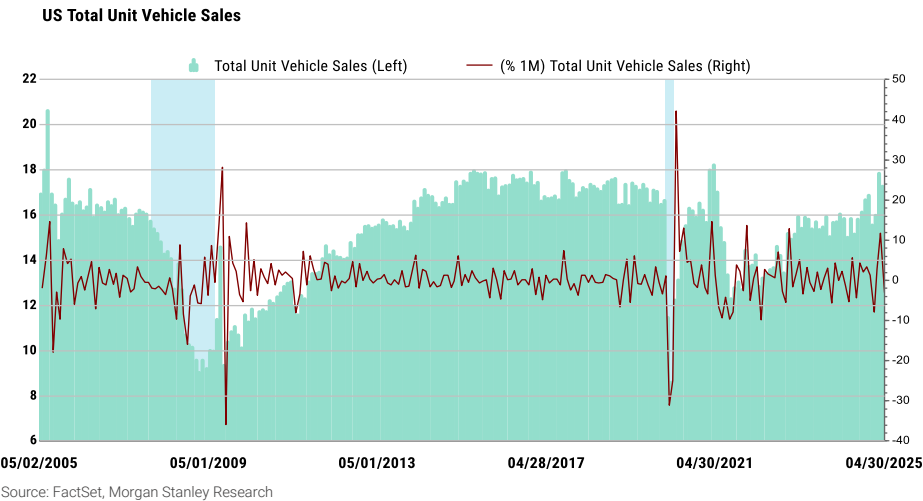
Exhibit 93: US Consumer Credit (Outstanding & M/M)



Source: FactSet, Morgan Stanley Research

Auto Loan Indicators: US Auto Sales and Auto Loan Portfolios

Exhibit 94: US Auto Sales (monthly)

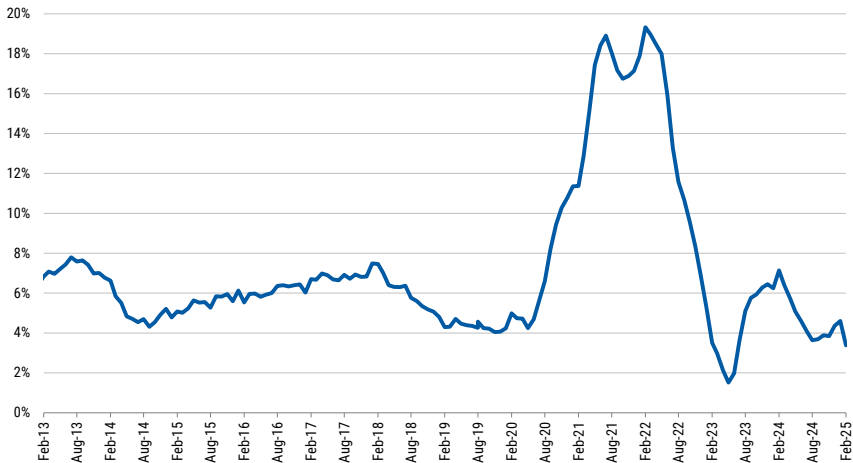


Real Estate Loan Indicators

HPI Index

Exhibit 95: % change in Purchase only HPI

Purchase only HPI for the US (YoY)

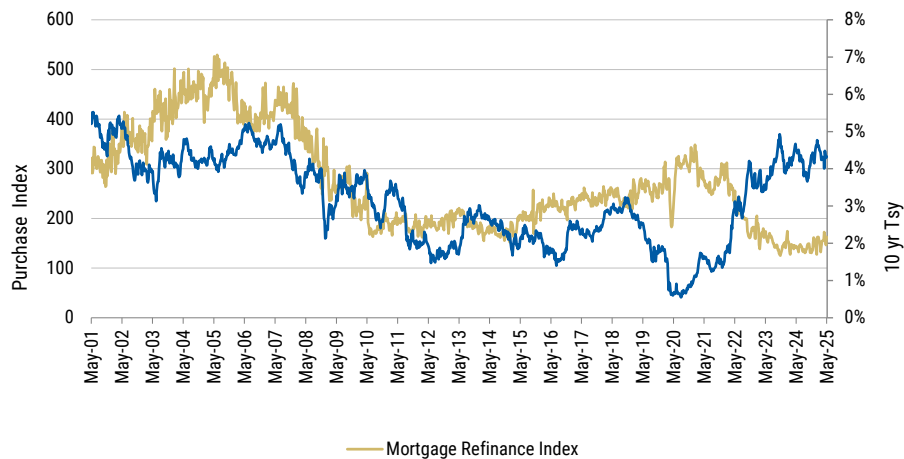


Source: FRED economic data, Morgan Stanley Research

Mortgage Purchase / Refinance Index

Exhibit 96: Mortgage Purchase Index vs. 10 year Treasury

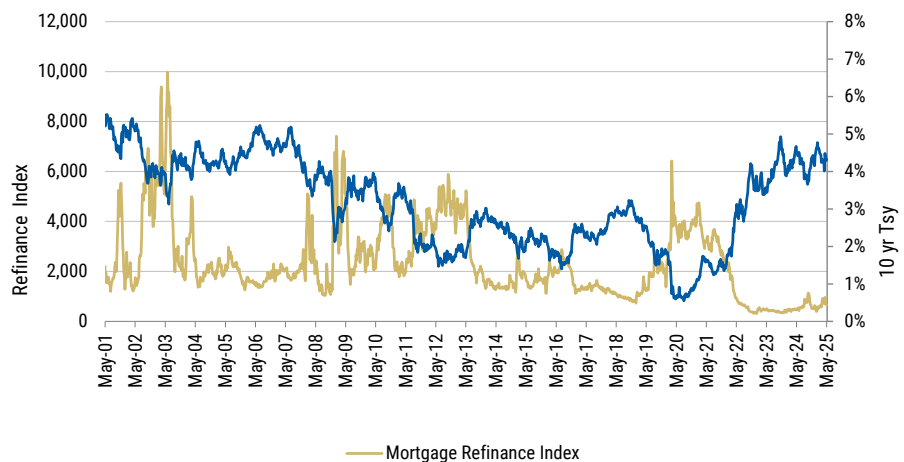
Mortgage Purchase Index vs 10yr. Treasury



Source: Federal Housing Finance Board, Monthly Selected Interest Rate Survey, Freddie Mac, Primary Mortgage Market Survey, Morgan Stanley Research

Exhibit 97: Mortgage Refinance Index vs. 10 year Treasury

Mortgage Refinance Index vs 10yr. Treasury

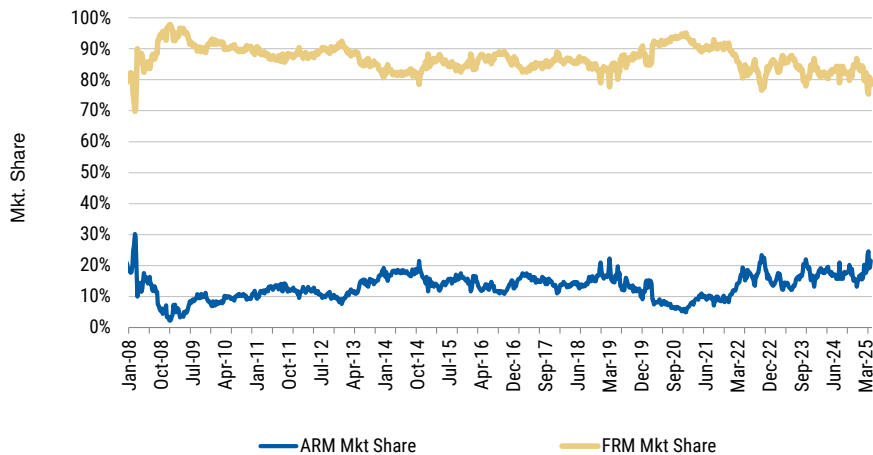


Source: Federal Housing Finance Board, Monthly Selected Interest Rate Survey, Freddie Mac, Primary Mortgage Market Survey, Morgan Stanley Research

Mortgage Market Share & Agency RMBS Servicer Spread

Exhibit 98: Fixed Rate vs. Adjustable Rate Mortgages (monthly)

Fixed Rate vs Adjustable Rate Mortgages

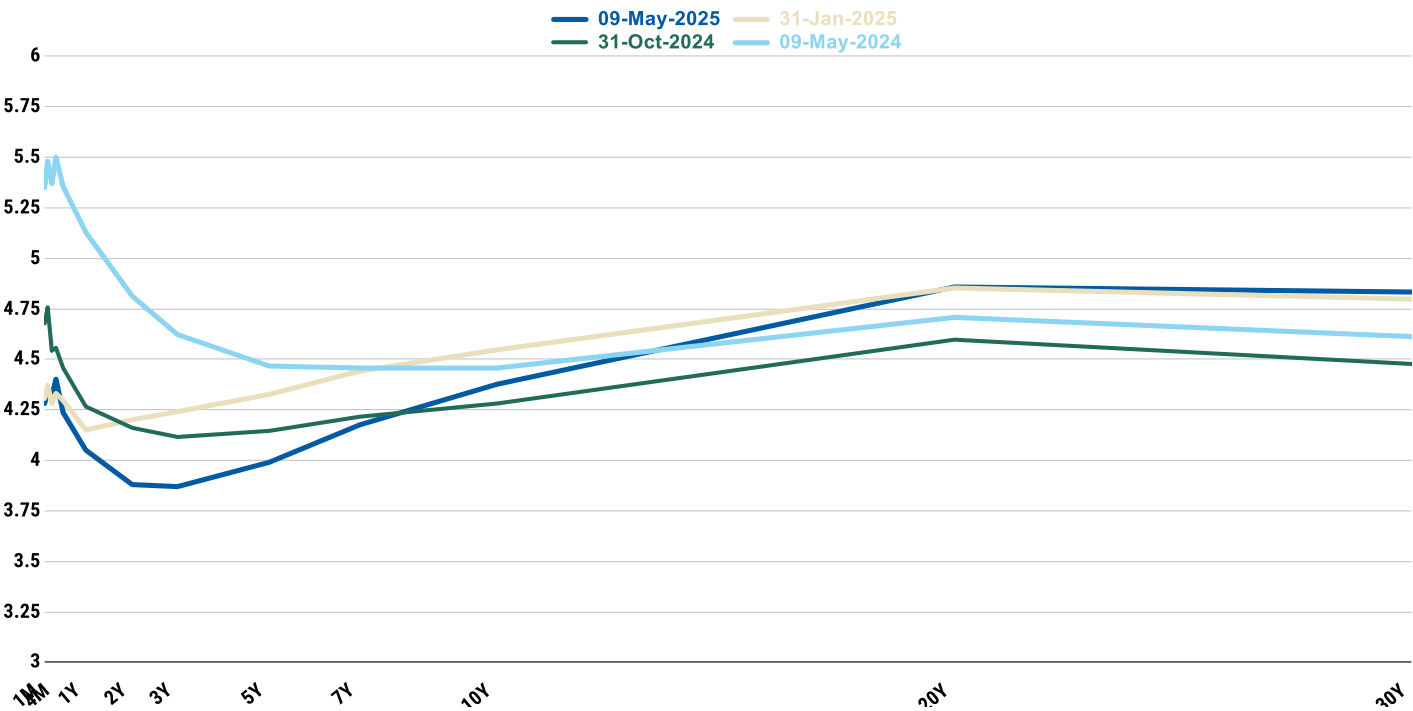


Note: Market share % is based on the \$ volume of mortgage applications that are fixed-rate mortgages vs. adjustable-rate mortgages.
Source: Federal Housing Finance Board, Monthly Selected Interest Rate Survey, Freddie Mac, Primary Mortgage Market Survey, Morgan Stanley Research

Interest Rates

Yield Curve

Exhibit 99: Yield Curve by Date
United States Treasury Yield Curve

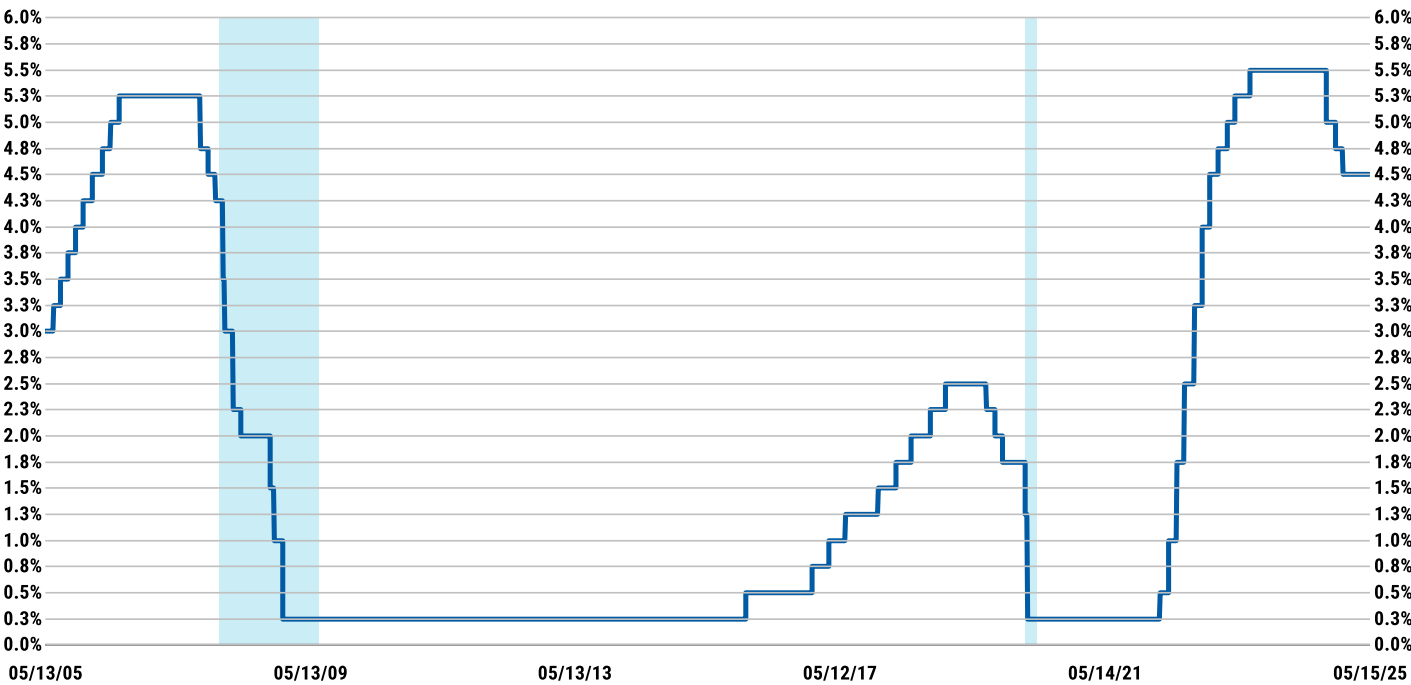


Source: FactSet, Morgan Stanley Research

Fed Funds Target

Exhibit 100: US Fed Funds Target (High End of Range)

US Federal Funds Target Rate (High End)



Source: FactSet, Morgan Stanley Research

10 Year Yields

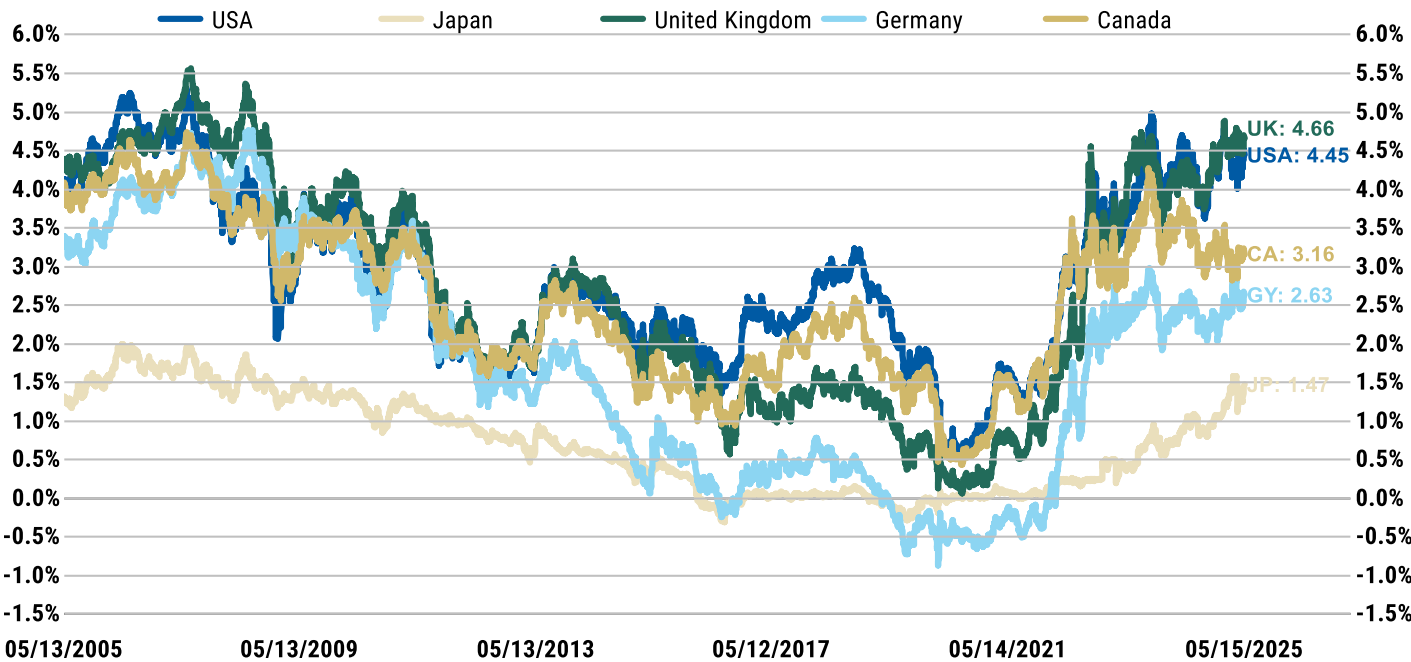
Exhibit 101: UST 10Y Yield

US 10Y Treasury Yield



Source: FactSet, Morgan Stanley Research

Exhibit 102: Global 10Y Yields
Global 10Y Treasury Yields



Source: FactSet, Morgan Stanley Research

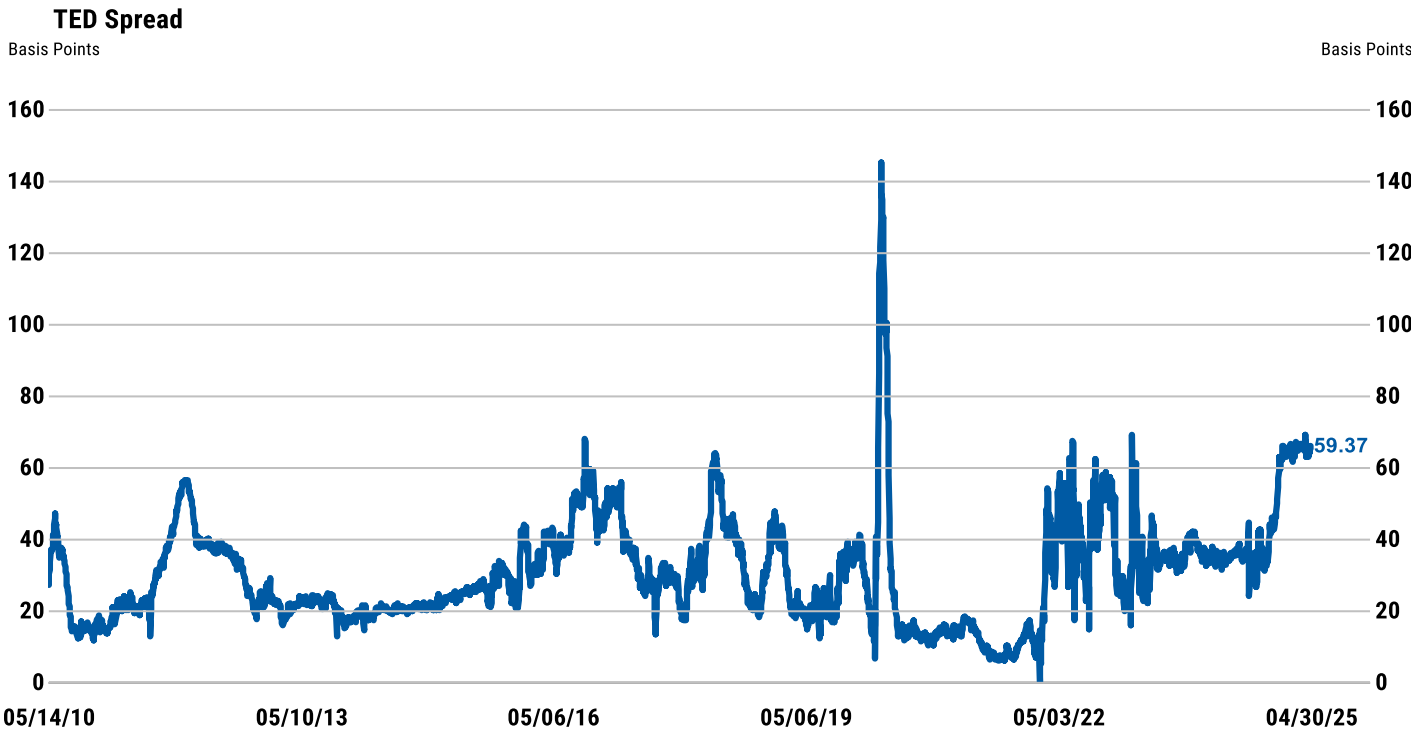
Spreads

Exhibit 103: 10Y-2Y UST Spread
10Y / 2Y US Treasury Spread



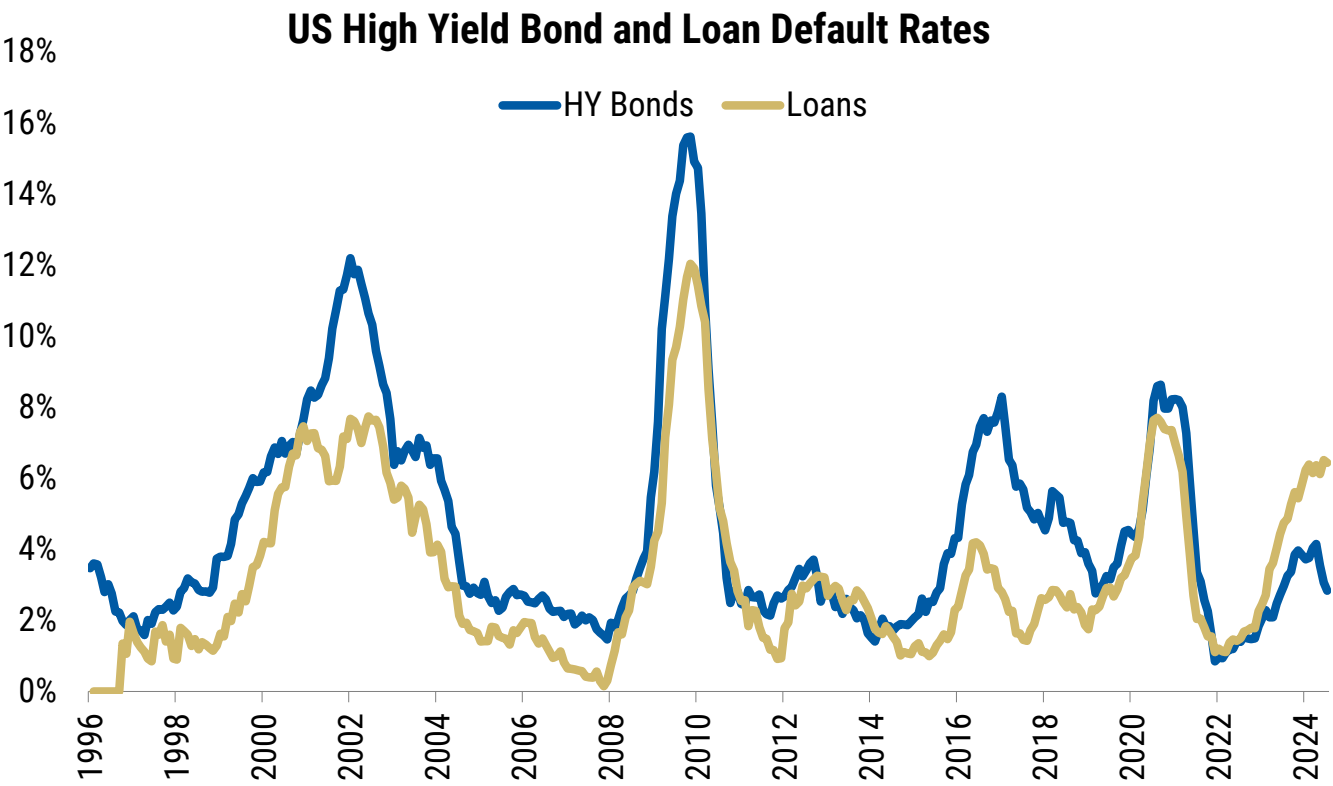
Source: FactSet, Morgan Stanley Research

Exhibit 104: TED Spread (3M LIBOR vs. 3M T-bill)



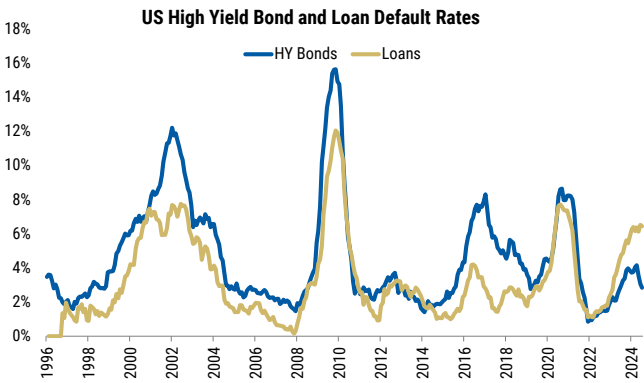
Credit Quality

Default Rates & Spreads



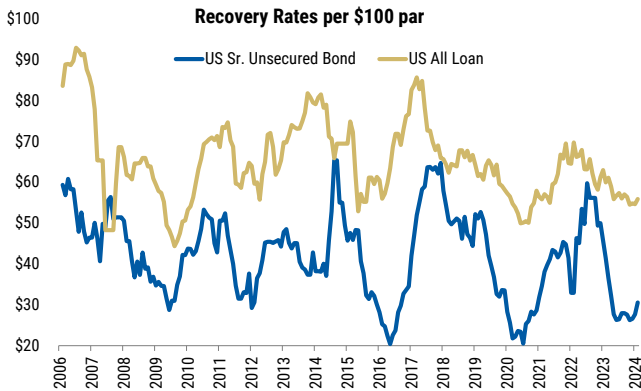
Source: Morgan Stanley Research, Moody's

Exhibit 105: US Defaults



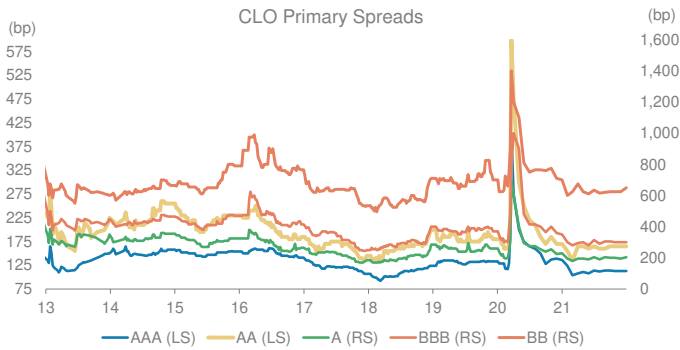
Source: Morgan Stanley Research, Moody's

Exhibit 106: US Recovery Rates



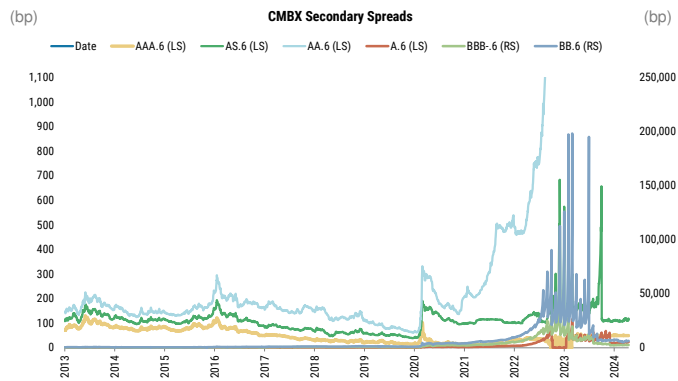
Source: Morgan Stanley Research, Moody's

Exhibit 107: US CLO Primary Market



Source: Morgan Stanley Research

Exhibit 108: CMBX Secondary Spreads



Source: Morgan Stanley Research

Credit Default Swaps

Corporate Spreads

Exhibit 109:A vs 10yr Treasury (weekly)

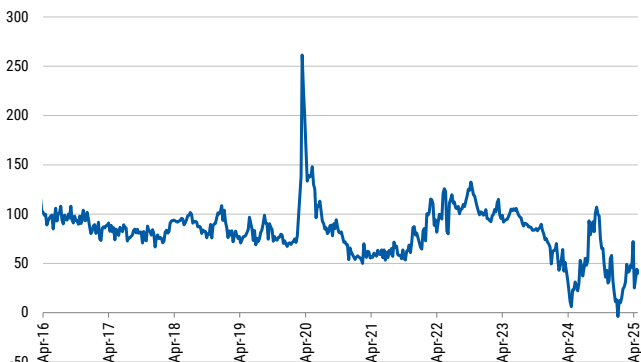
A vs 10yr Tsy (bps), 2000-to-Date



Source: Bloomberg, Morgan Stanley Research

Exhibit 110:A vs 10yr Treasury (weekly)

A vs 10yr Tsy (bps), 2016-to-Date



Source: Bloomberg, Morgan Stanley Research

Exhibit 111:BBB vs 10yr Treasury (weekly)

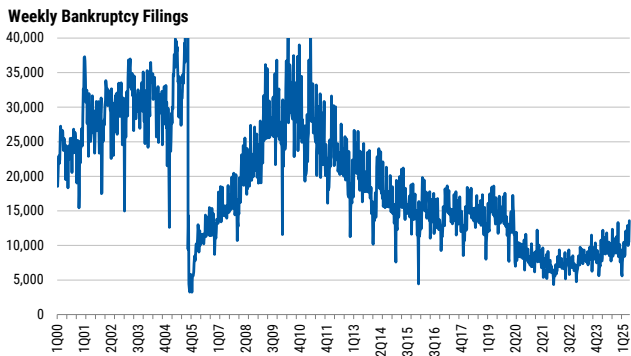
BBB vs 10yr Tsy (bps), 2016-to-Date



Source: Bloomberg, Morgan Stanley Research

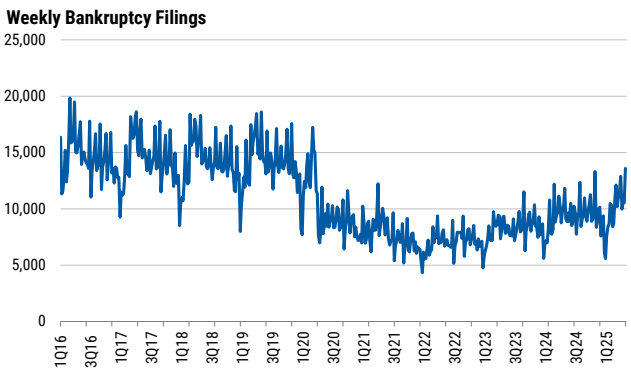
Bankruptcy Filings

Exhibit 112: Weekly Bankruptcy Filings



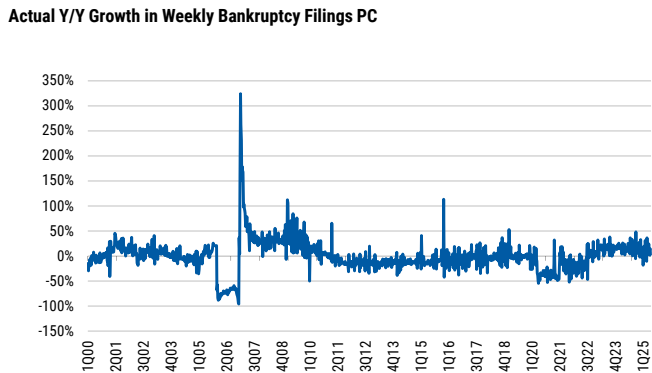
Source: Verisk Financials LCI, OECD, Morgan Stanley Research
Note : Spike from *rush-to-file* in 4Q05

Exhibit 113: Weekly Bankruptcy Filings



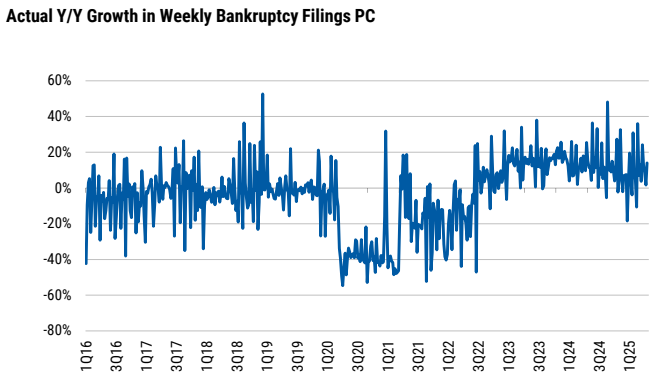
Source: Verisk Financials LCI, OECD, Morgan Stanley Research

Exhibit 114: Actual Y/Y growth in Weekly Bankruptcy Filings PC



Source: Verisk Financials LCI, OECD, Morgan Stanley Research
Note : Spike from *rush-to-file* in 4Q05

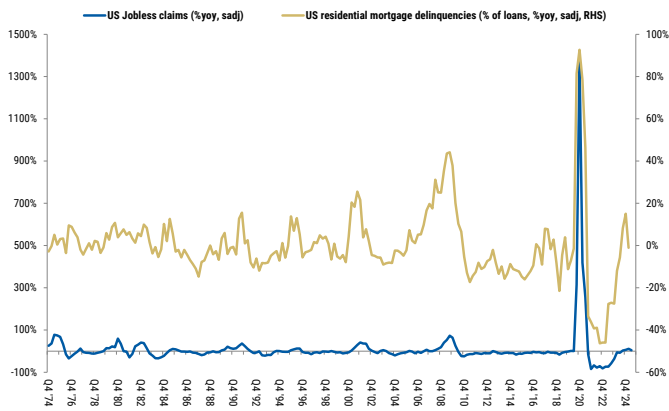
Exhibit 115: Actual Y/Y growth in Weekly Bankruptcy Filings PC



Source: Verisk Financials LCI, OECD, Morgan Stanley Research

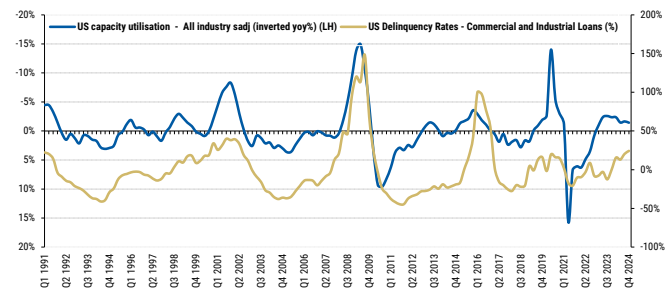
Real Estate and Commercial Loan Delinquency Rates

Exhibit 116:Residential Mortgage Delinquency vs. Jobless Claims



Source: US Department of Labor, Mortgage Bankers Association, Morgan Stanley Research

Exhibit 117:C&I Delinquencies vs. Capacity Utilization

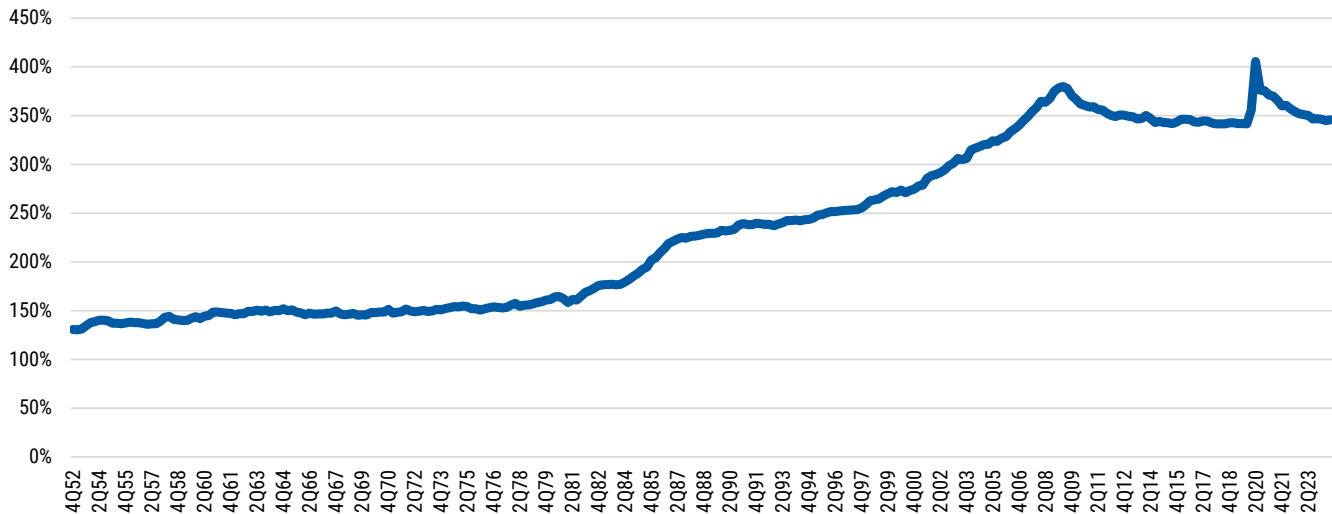


Source: Federal Reserve, FactSet, Morgan Stanley Research

Debt to GDP and Funding Sources

Exhibit 118: Total Debt to GDP

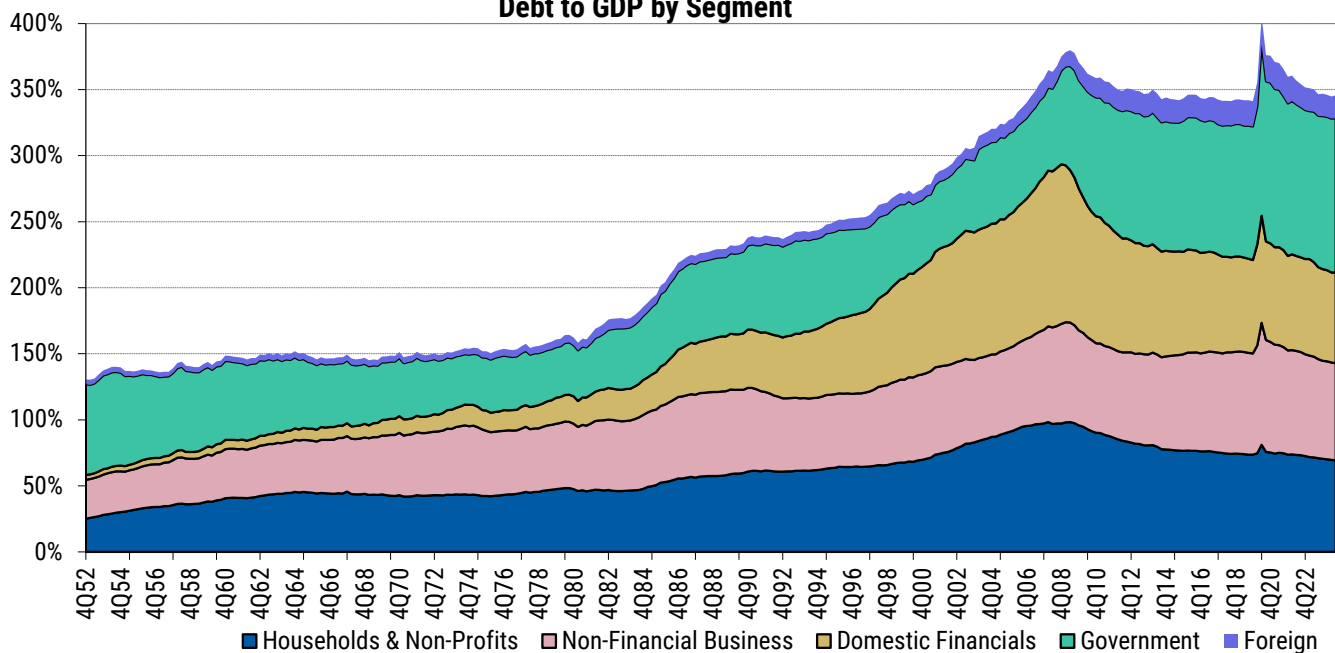
US Debt to GDP: 1951 - Current



Source: Federal Reserve, Morgan Stanley Research

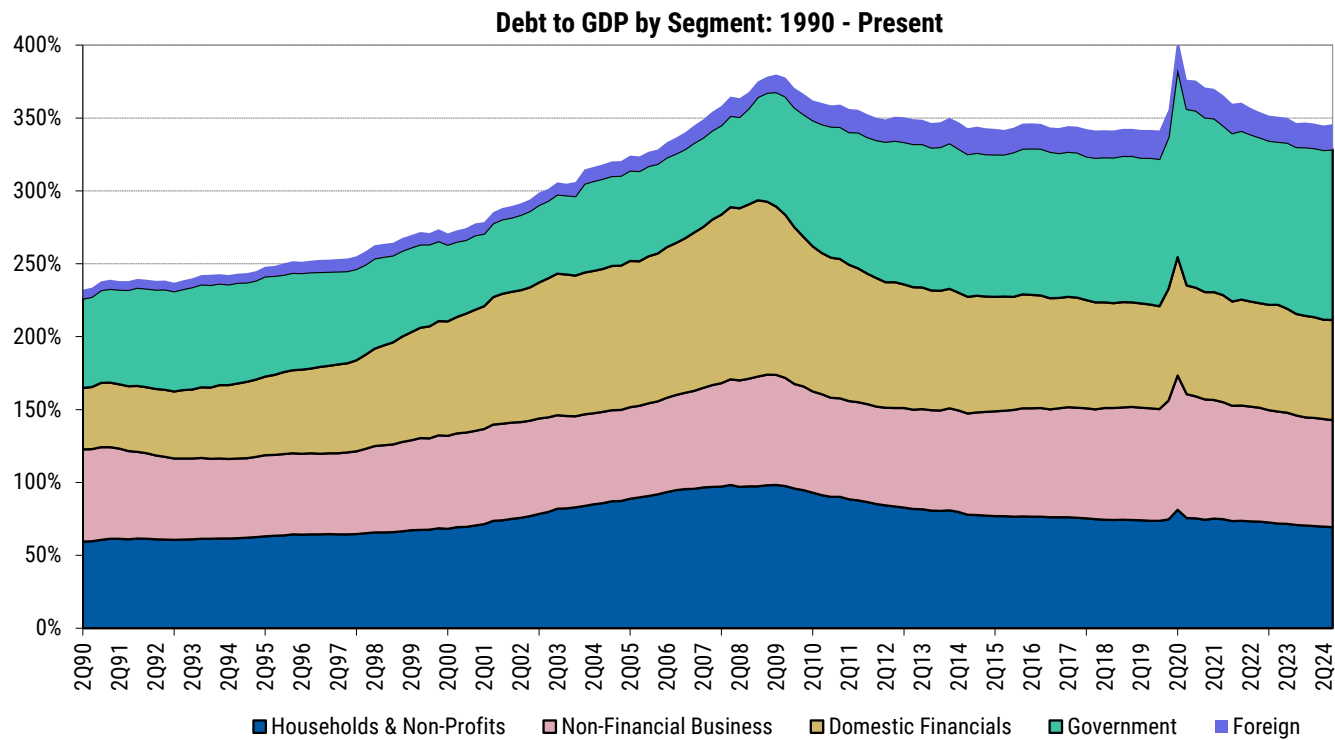
Exhibit 119: Debt to GDP by Segment

Debt to GDP by Segment



Source: Federal Reserve, Morgan Stanley Research

Exhibit 120: Debt to GDP by Segment: 1990 - Present



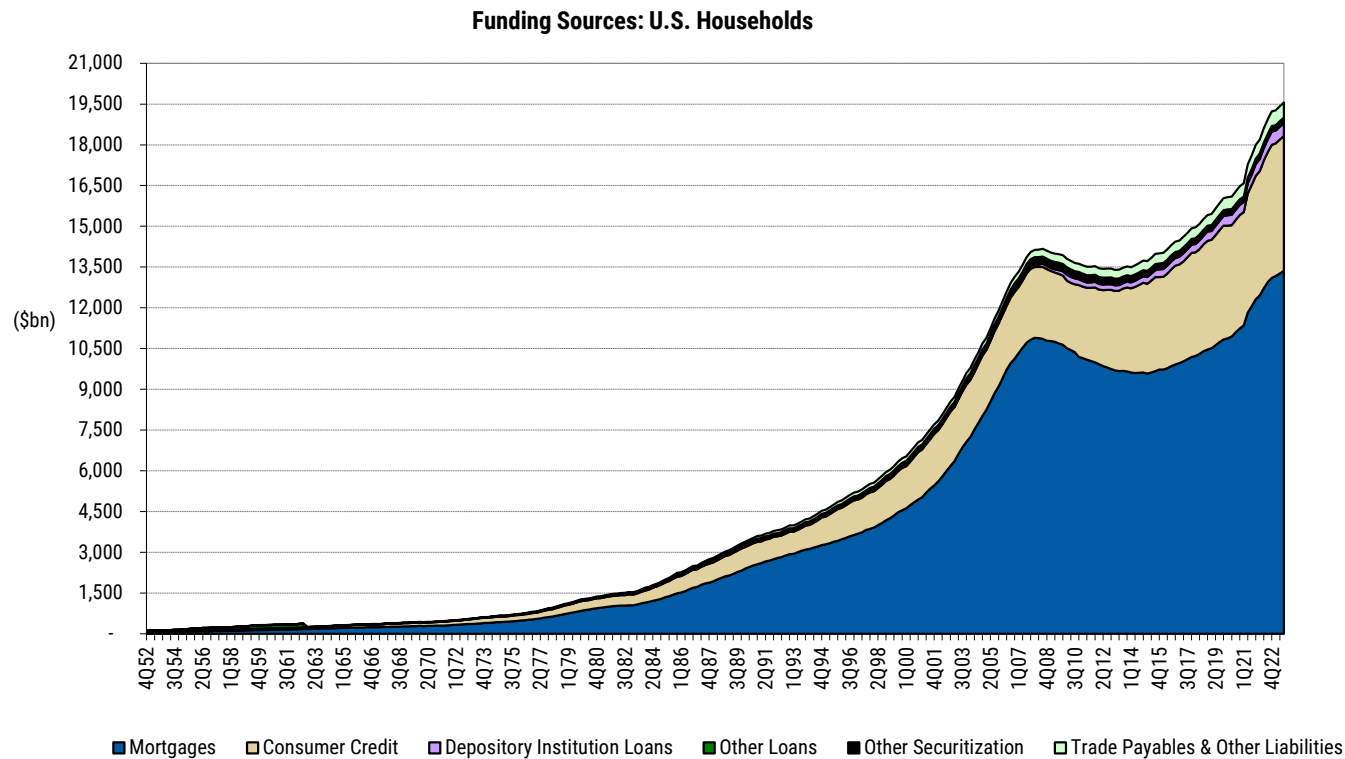
Source: Federal Reserve, Morgan Stanley Research

Exhibit 121: Debt to GDP - Summary

	Total Non-Financial Debt to GDP	Domestic Financial Debt to GDP	Total Debt to GDP
3Q23	277%	70%	347%
2Q24	277%	68%	345%
3Q24	277%	69%	346%

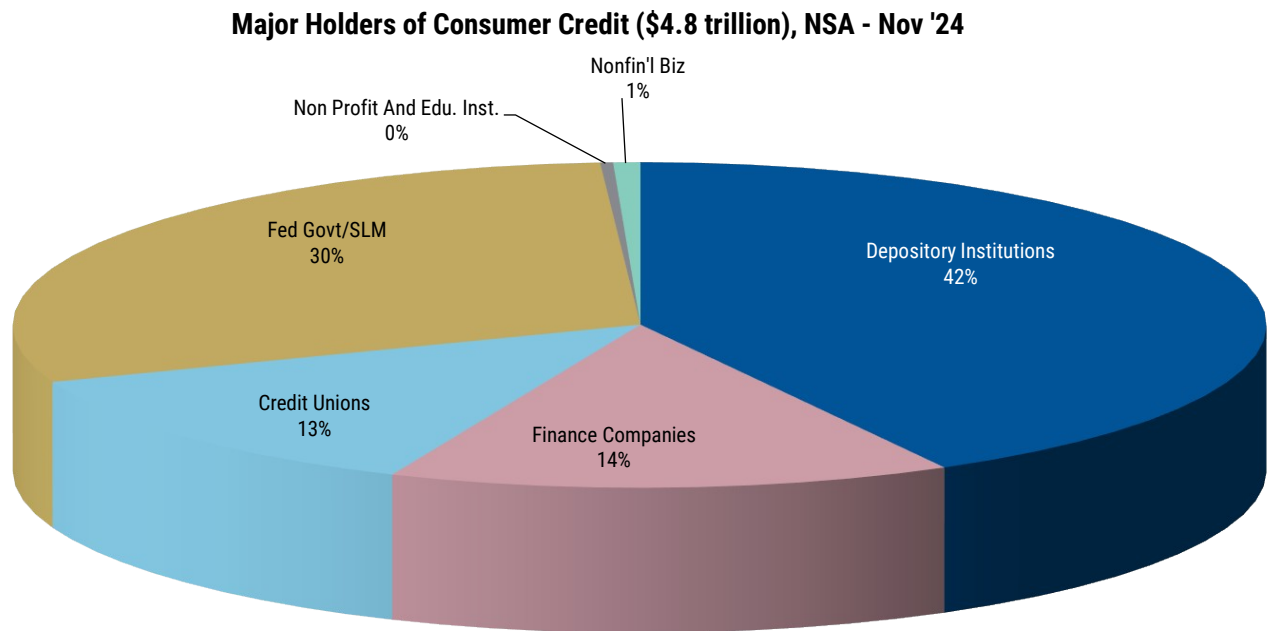
Source: Federal Reserve, Morgan Stanley Research

Exhibit 122: Funding Sources: U.S. Households

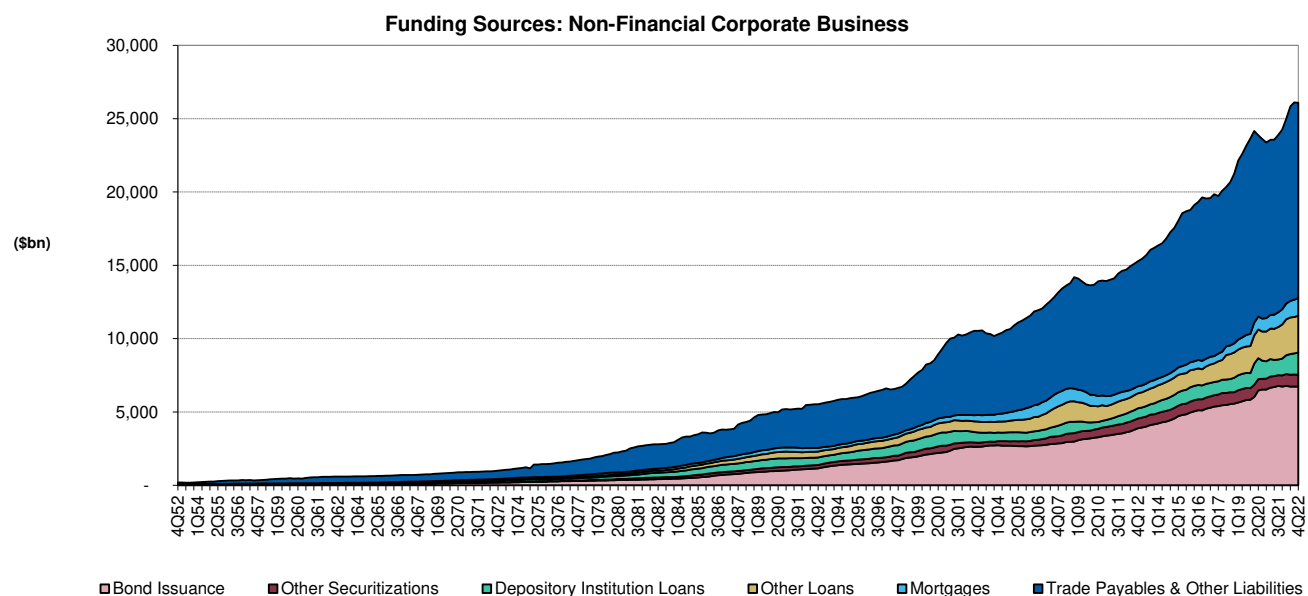


Source: Federal Reserve, Morgan Stanley Research

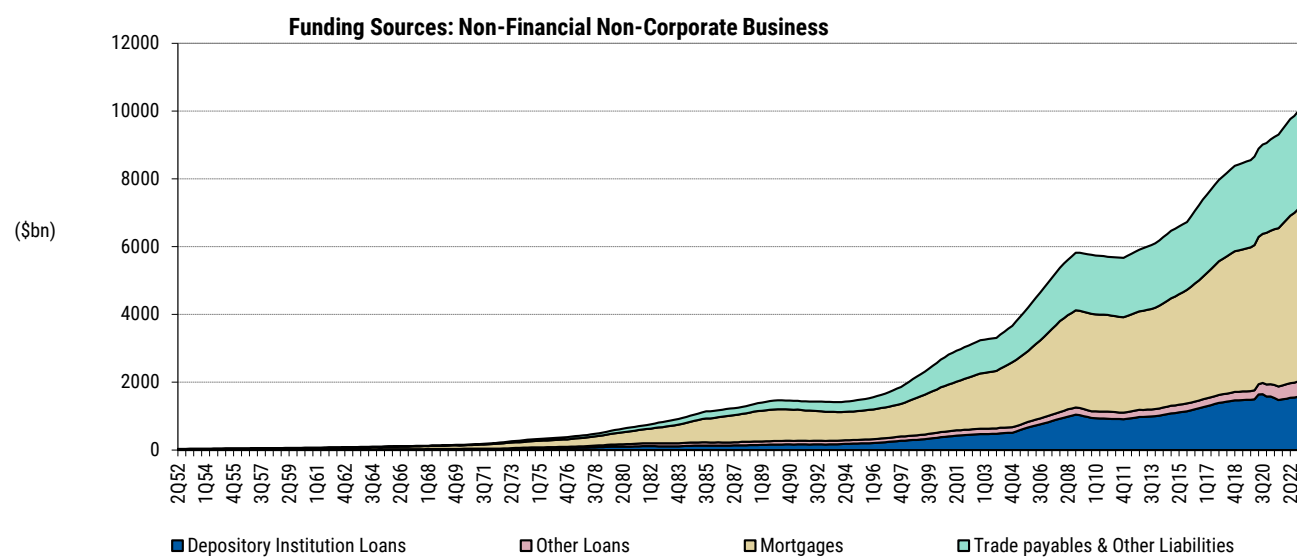
Exhibit 123: Holders of Consumer Credit



Source: Federal Reserve, Morgan Stanley Research

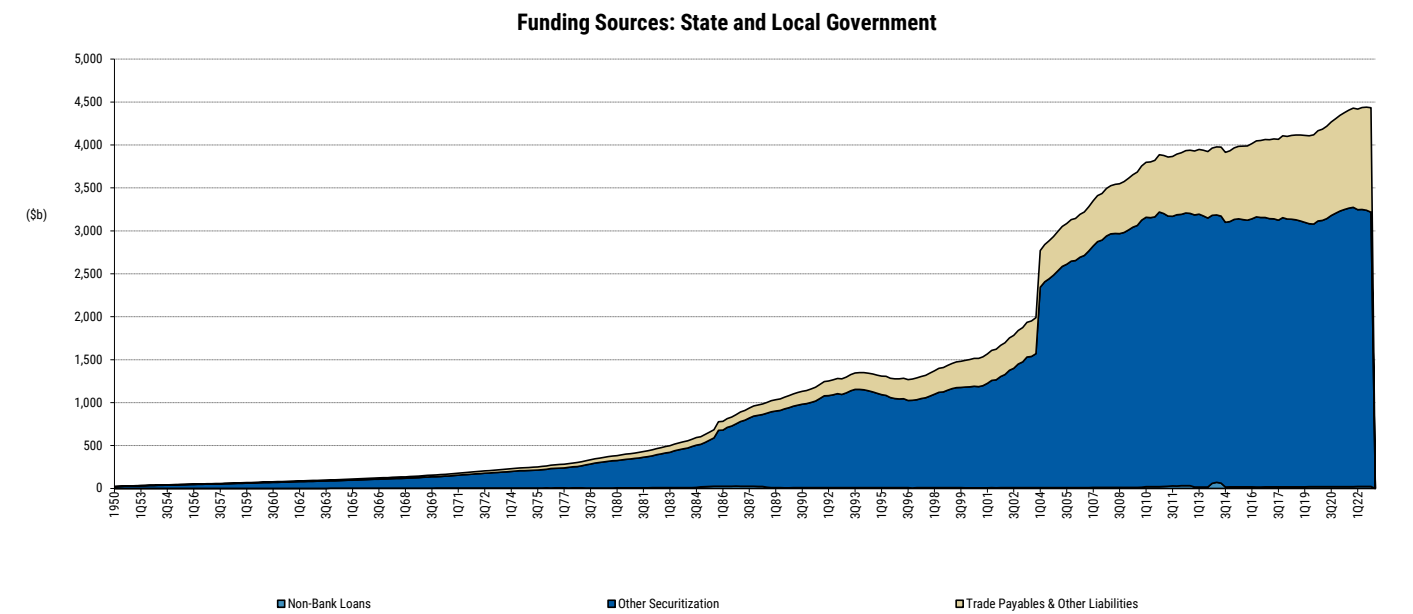
Exhibit 124: Funding Sources: Non-Financial Corporate Business

Source: Federal Reserve, Morgan Stanley Research

Exhibit 125: Funding Sources: Non-Financial Non-Corporate Business

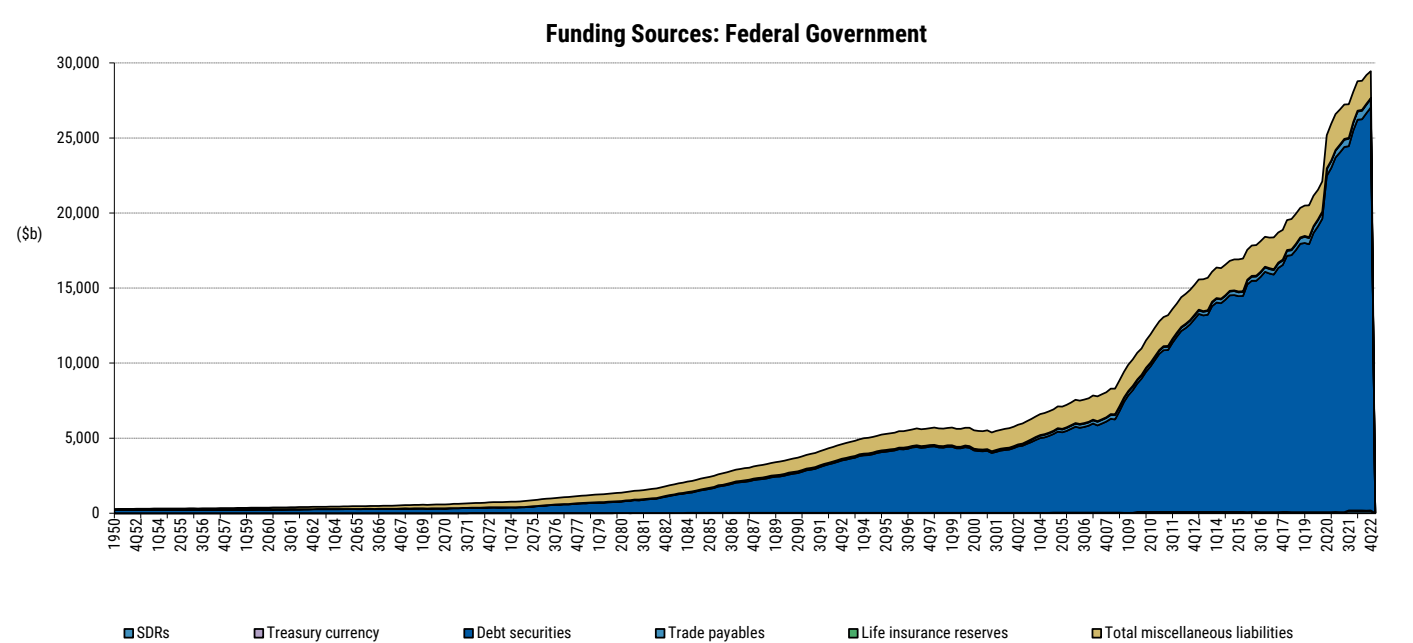
Source: Federal Reserve, Morgan Stanley Research

Exhibit 126: Funding Sources: State and Local Government



Source: Federal Reserve, Morgan Stanley Research

Exhibit 127: Funding Sources: Federal Government

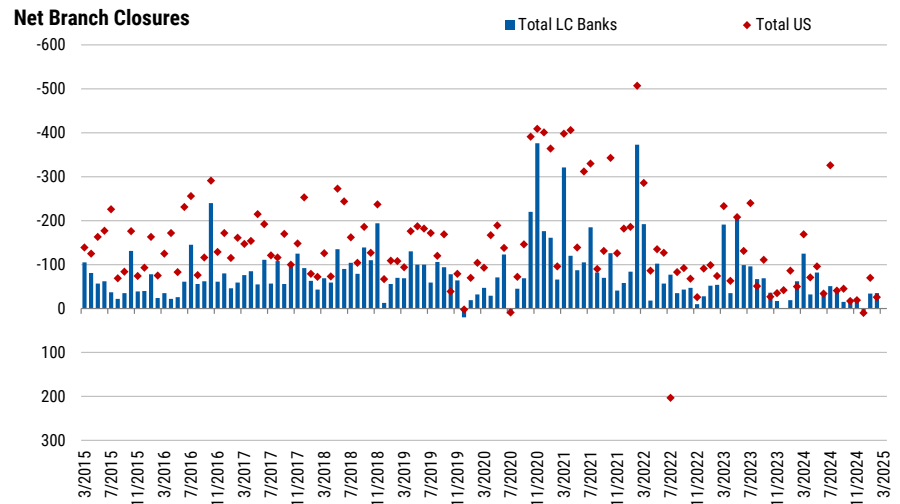


Source: Federal Reserve, Morgan Stanley Research

Branch Rationalization Tracker

Summary: Net Branch Closures

Exhibit 128: Net Branch Closures (US Large Cap Banks vs. Total US Banks)



Annual Branch Tracker

Exhibit 129: Annual Net Branch Closures

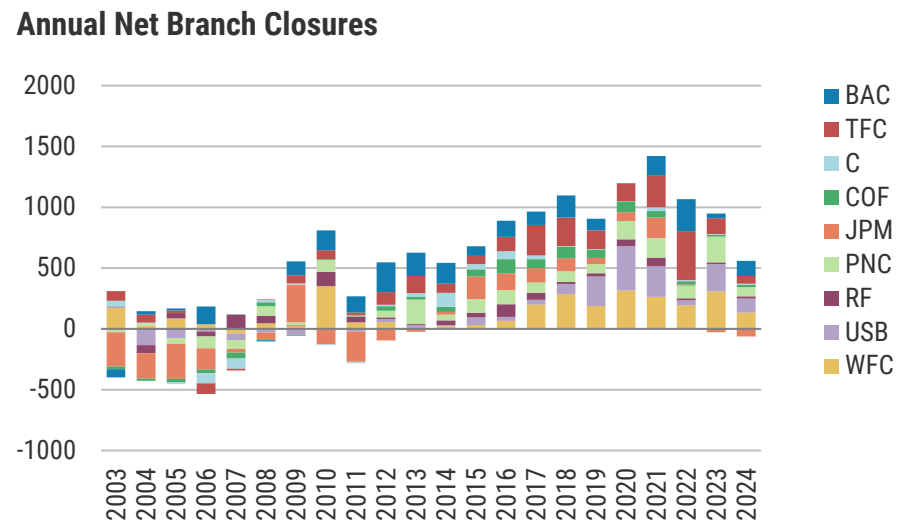


Exhibit 130: Annual Gross Branch Openings

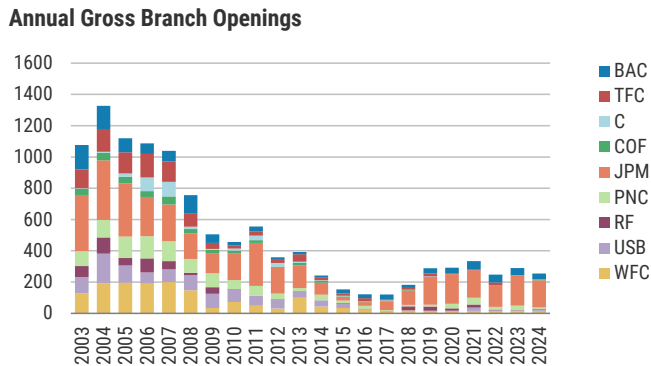
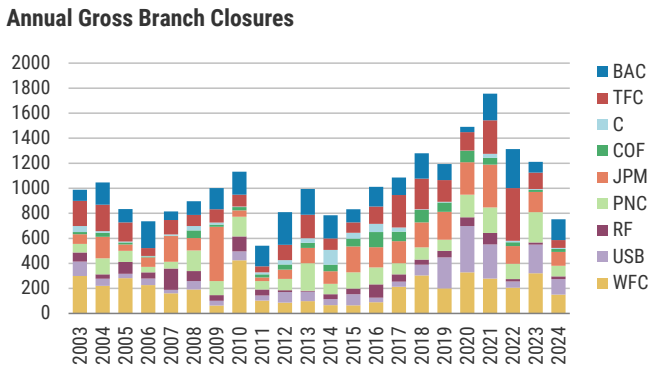


Exhibit 131: Annual Gross Branch Closures



Monthly Branch Tracker

Exhibit 132: Monthly Net Branch Closures

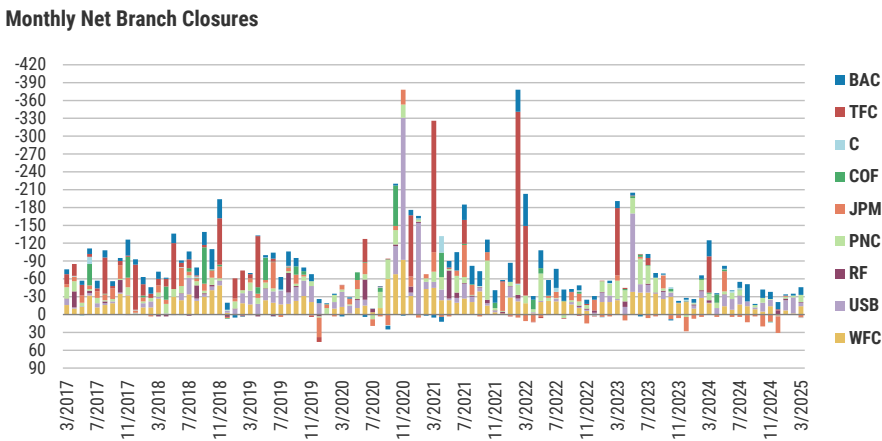


Exhibit 133: Monthly Gross Branch Openings

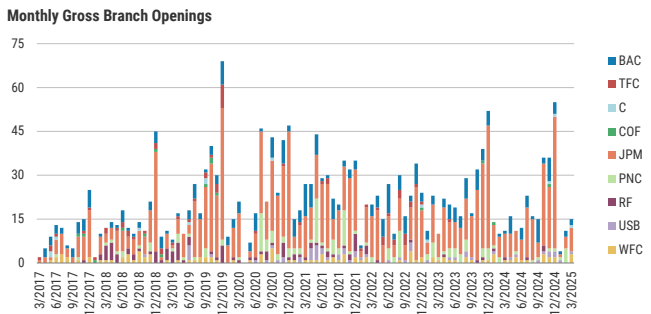
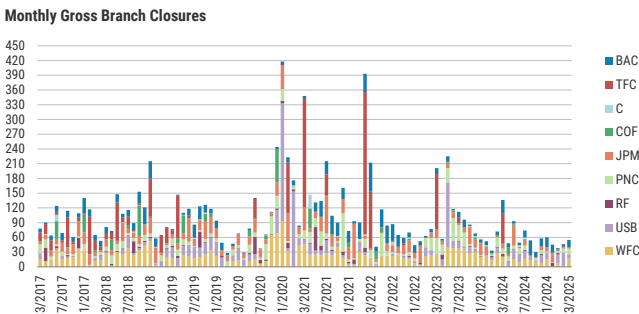


Exhibit 134: Monthly Gross Branch Closures



Capital Markets

Trading Dashboard: Volatility

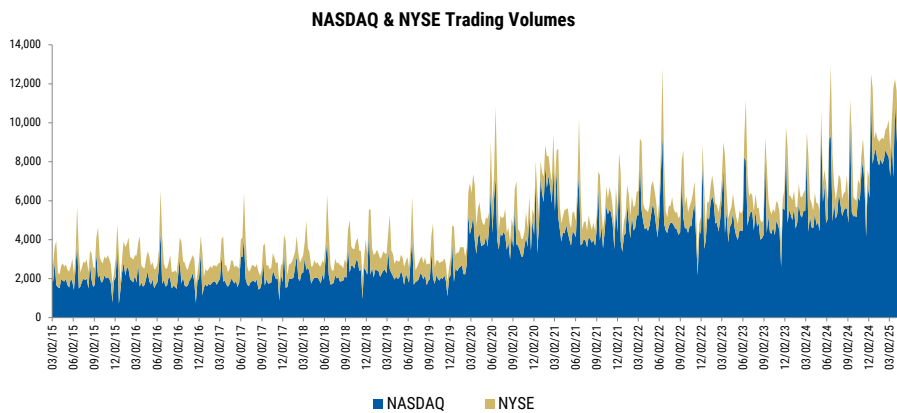
Exhibit 135: Volatility

		2Q24	1Q25	2Q25 QTD	Y/Y	Q/Q
Equities	VIX (EOP)	12.4	22.3	25.2	102%	13%
	VIX (AVG)	14.0	18.5	32.6	133%	76%
	STOXX60 (EOP)	17.5	21.9	25.2	44%	15%
	STOXX60 (AVG)	15.5	18.0	25.2	62%	39%
Commodities	Gold (EOP)	14.72	17.95	39.45	168%	120%
	Gold (AVG)	16.70	16.19	25.28	51%	56%
	Crude Oil -OVX (EOP)	26.54	30.88	48.41	82%	57%
	Crude Oil -OVX (AVG)	28.21	32.04	43.60	55%	36%
Foreign Currency	Average					
	EUR/USD	5.93	7.69	9.74	64%	27%
	USD/JPY	8.49	11.53	12.91	52%	12%
	GBP/USD	6.38	7.79	8.75	37%	12%

Source: Refinitiv, Bloomberg

Trading: NASDAQ & NYSE Trading Volumes

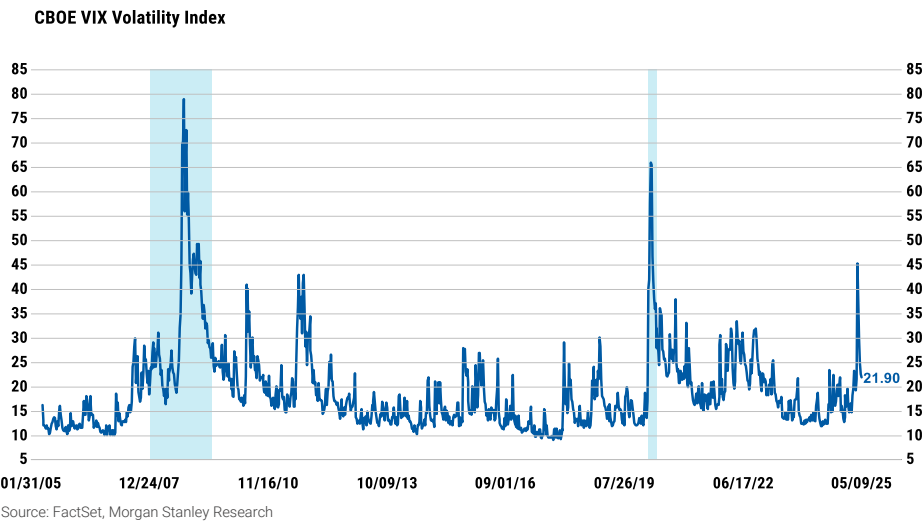
Exhibit 136:NASDAQ & NYSE Trading Volumes



Source: Bloomberg, Morgan Stanley Research

Trading: VIX - CBOE Market Volatility Index

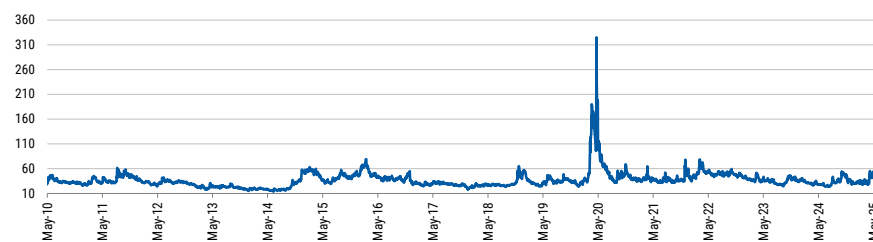
Exhibit 137: VIX - CBOE Mkt Volatility Index



Trading: Commodities - Oil & Gold Volatility

Exhibit 138: Oil Volatility

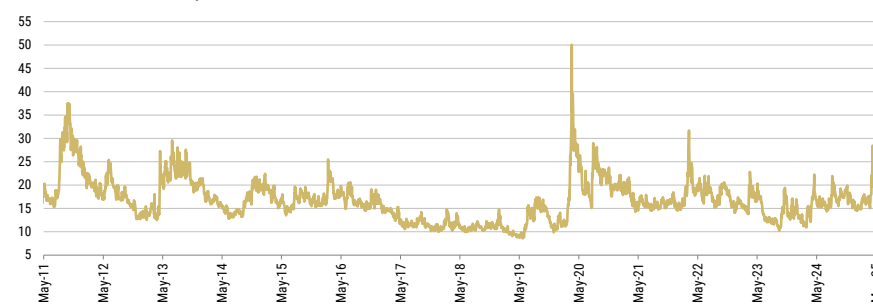
Crude Oil Volatility - OVX Index January '10 onwards



Source: Bloomberg, Morgan Stanley Research

Exhibit 139: Gold Volatility

CBOE/COMEX Gold Volatility Index



Source: Bloomberg, Morgan Stanley Research

Advisory & Underwriting: Global IB Volumes & Revenues

Exhibit 140: Global IB Volumes & Revenues

Advisory and Underwriting (USD m)					
Volumes (USD m)					
	2Q24	1Q25	2Q25 Run-Rate	Y/Y	Q/Q
M&A					
Announced	836,275	1,075,037	877,196	5%	-18%
Completed	811,928	845,298	675,892	-17%	-20%
Completed - North America	457,455	415,268	362,246	-21%	-13%
Completed - Europe	169,293	185,269	184,189	9%	-1%
Completed - Asia Pacific	142,428	215,415	103,328	-27%	-52%
ECM					
Total	172,806	165,416	100,796	-42%	-39%
ECM - IPOs (Global)	30,350	30,635	24,376	-20%	-20%
ECM - North America	56,629	64,008	50,383	-11%	-21%
ECM - Europe	41,904	36,427	14,046	-66%	-61%
ECM - Asia Pacific	54,438	56,876	31,830	-42%	-44%
DCM					
Total	2,327,695	2,711,323	1,925,456	-17%	-29%
DCM - HY	155,062	125,477	112,675	-27%	-10%
DCM - IG	1,151,050	1,320,034	1,114,751	-3%	-16%
DCM - North America	939,951	1,059,680	719,924	-23%	-32%
DCM - Europe	625,905	928,613	604,758	-3%	-35%
DCM - Asia	643,601	576,842	530,523	-18%	-8%
Loans					
Total	1,437,751	1,252,223	713,146	-50%	-43%
Leveraged Loans	695,857	645,678	231,555	-67%	-64%
Revenues (USD m)					
	2Q24	1Q25	2Q25 Run-Rate	Y/Y	Q/Q
Total	21,970	23,427	16,880	-23%	-28%
M&A	7,948	8,674	7,356	-7%	-15%
ECM	3,304	2,903	2,079	-37%	-28%
DCM	7,218	8,055	5,882	-19%	-27%
Loans	3,500	3,795	1,563	-55%	-59%

Source: Dealogic, Morgan Stanley Research

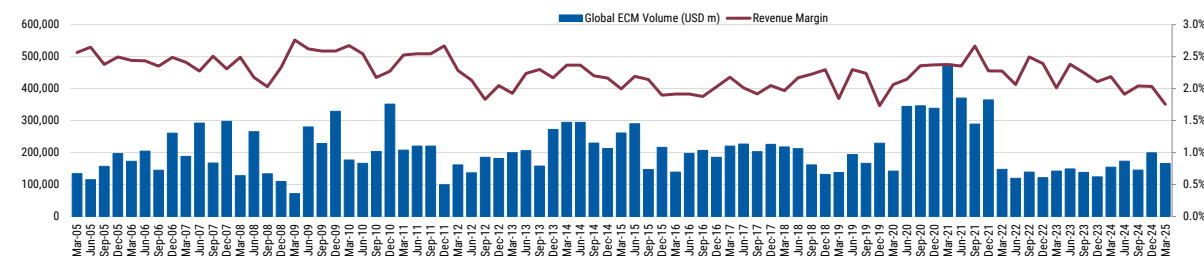
Advisory & Underwriting: Total Equity Underwriting

Exhibit 141: Total Equity Underwriting

ECM - Global Ranking																	
Bookrunner	2024					1Q25					2025 Run-Rate					Rev Growth	
	Deal Value (\$m)	Revenue (\$m)	No.	Rank	%share	Deal Value (\$m)	Revenue (\$m)	No.	Rank	%share	Deal Value (\$m)	Revenue (\$m)	No.	Rank	%share	Y/Y	Q/Q
US Money Center Banks																	
BoFa Securities	15,259	259	85	3	8.8	10,400	178	54	4	6.3	9,719	127	42	3	9.6	-51%	-28%
Citi	10,324	157	66	5	6.0	5,498	138	38	6	3.3	4,498	128	42	6	4.5	-18%	-7%
Goldman Sachs	16,043	341	93	2	9.3	19,007	245	68	1	11.5	9,918	186	61	2	9.8	-45%	-24%
JPMorgan	18,659	443	88	1	10.8	17,980	293	60	2	10.9	12,145	184	47	1	12.1	-58%	-37%
Morgan Stanley	12,035	229	71	4	7.0	12,728	221	53	3	7.7	7,140	153	47	4	7.1	-33%	-31%
US Super Regional Banks																	
PNC Bank NA	375	7	4	62	0.2	165	3	1	93	0.1	-	-	-	-	-	-100%	-100%
Regions Financial Corp	-	2	-	-	-	-	0	-	-	-	-	0	-	-	-	-85%	-46%
Truist Financial Corp	674	15	10	38	0.4	1,417	17	15	22	0.9	384	13	6	45	0.4	-15%	-25%
US Bancorp	274	3	3	73	0.2	-	0	-	-	-	-	-	-	-	-	-100%	-100%
Wells Fargo	2,954	55	22	12	1.7	1,735	31	15	21	1.1	1,086	48	12	17	1.1	-14%	53%
US Midcap Advisors																	
Evercore Inc	782	25	14	34	0.5	915	31	11	28	0.6	833	22	6	28	0.8	-13%	-30%
Jefferies LLC	5,235	127	51	8	3.0	3,468	72	35	13	2.1	1,395	65	24	13	1.4	-49%	-10%
Moelis & Co	185	4	2	92	0.1	540	4	4	39	0.3	349	4	2	48	0.4	-2%	6%
EU Banks																	
Barclays	8,458	161	33	6	4.9	6,572	79	34	5	4.0	1,050	36	14	19	1.0	-78%	-55%
BNP Paribas	3,791	32	24	10	2.2	4,908	34	34	9	3.0	1,787	16	16	9	1.8	-50%	-53%
Credit Agricole CIB	606	11	9	41	0.4	216	3	7	74	0.1	-	-	-	-	-	-100%	-100%
Deutsche Bank	2,340	22	14	13	1.4	2,534	24	21	16	1.5	1,815	42	24	8	1.8	93%	72%
HSBC	4,545	40	24	9	2.6	3,493	37	17	12	2.1	1,558	15	10	11	1.6	-62%	-60%
Santander	1,109	9	9	25	0.6	1,328	10	11	24	0.8	1,436	12	10	12	1.4	35%	23%
SG Corporate & Investment Banking	385	6	8	61	0.2	814	3	8	31	0.5	841	6	8	26	0.8	4%	86%
UBS	6,846	69	48	7	4.0	5,197	56	33	7	3.1	2,969	38	32	7	3.0	-45%	-31%
Other																	
Nomura	2,331	56	15	14	1.4	2,181	45	13	17	1.3	716	15	4	31	0.7	-73%	-66%
Mizuho	1,695	31	21	19	1.0	3,565	54	24	11	2.2	1,329	26	14	14	1.3	-14%	-51%
Sumitomo Mitsui Financial Group	605	27	14	42	0.4	1,774	34	17	20	1.1	942	25	2	22	0.9	-6%	-25%
MUFG	492	4	4	48	0.3	491	7	4	42	0.3	495	4	6	38	0.5	14%	-37%
Macquarie Group	486	8	9	50	0.3	305	4	6	57	0.2	122	2	2	92	0.1	-81%	-60%

Source: Dealogic

Exhibit 142: Total Equity Underwriting



Source: Dealogic

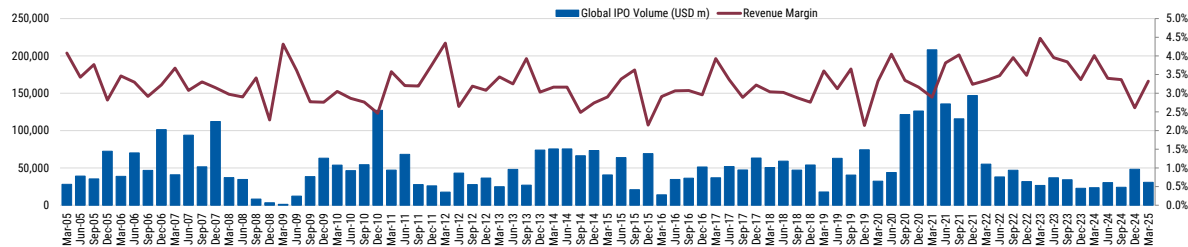
Advisory & Underwriting: IPO Underwriting

Exhibit 143: IPO Underwriting

ECM - IPO Ranking																	
Bookrunner	2024					1Q25					2025 Run-Rate					Rev Growth	
	Deal Value (\$m)	Revenue (\$m)	No.	Rank	%share	Deal Value (\$m)	Revenue (\$m)	No.	Rank	%share	Deal Value (\$m)	Revenue (\$m)	No.	Rank	%share	Y/Y	Q/Q
US Money Center Banks																	
BoFA Securities	1,783	59	12	2	5.9	1,113	54	14	4	3.6	131	2	2	47	0.5	-96%	-96%
Citi	1,471	56	15	4	4.9	1,158	68	12	3	3.8	834	58	10	6	3.4	3%	-15%
Goldman Sachs	1,600	125	14	3	5.3	1,058	81	13	5	3.5	209	44	6	27	0.9	-65%	-45%
JPMorgan	1,933	131	13	1	6.4	966	64	9	7	3.2	188	24	2	29	0.8	-82%	-62%
Morgan Stanley	1,258	67	16	5	4.2	1,190	54	9	2	3.9	257	31	6	17	1.1	-54%	-43%
US Midcap Advisors																	
Truist Financial Corp	199	8	2	32	0.7	278	4	4	30	0.9	188	8	2	29	0.8	-1%	100%
Wells Fargo	640	25	6	12	2.1	299	4	3	27	1.0	254	26	4	18	1.0	5%	542%
US Midcap Advisors																	
Evercore Inc	297	8	3	20	1.0	377	19	4	23	1.2	-	-	-	-	-	-100%	-100%
Jefferies LLC	646	26	9	11	2.1	660	22	9	10	2.2	252	22	6	22	1.0	-12%	4%
EU Banks																	
Barclays	636	37	7	13	2.1	402	8	4	20	1.3	-	-	-	-	-	-100%	-100%
BNP Paribas	867	13	5	8	2.9	416	7	5	17	1.4	-	-	-	-	-	-100%	-100%
Deutsche Bank	482	5	5	16	1.6	349	4	3	24	1.1	334	24	6	12	1.4	341%	505%
HSBC	777	12	6	9	2.6	751	12	5	9	2.5	178	3	2	35	0.7	-75%	-75%
Santander	532	5	2	14	1.8	1,002	6	6	6	3.3	726	0	2	8	3.0	-92%	-93%
UBS	1,180	28	10	6	3.9	322	11	6	25	1.1	254	13	6	21	1.0	-53%	16%
Other																	
Nomura	141	3	4	47	0.5	639	22	3	11	2.1	178	3	2	35	0.7	-13%	-86%
Mizuho	189	5	4	34	0.6	919	22	7	8	3.0	131	4	2	47	0.5	-22%	-83%
Sumitomo Mitsui Financial Group	104	6	7	64	0.3	633	15	7	12	2.1	-	0	-	-	-	-98%	-99%
MUFG	-	0	-	-	-	252	4	2	33	0.8	-	-	-	-	-	-100%	-100%
Macquarie Group	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	NA	-100%

Source: Dealogic

Exhibit 144: IPO Underwriting



Source: Dealogic

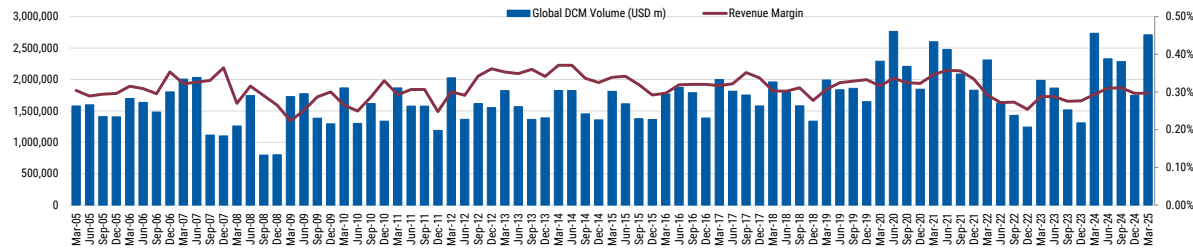
Advisory & Underwriting: Total Debt Underwriting

Exhibit 145: Total Debt Underwriting

DCM - Global Ranking																	
Bookrunner	2Q24					1Q25					2Q25 Run-Rate					Rev Growth	
	Deal Value (\$m)	Revenue (\$m)	No.	Rank	%share	Deal Value (\$m)	Revenue (\$m)	No.	Rank	%share	Deal Value (\$m)	Revenue (\$m)	No.	Rank	%share	Y/Y	Q/Q
US Money Center Banks																	
BoFA Securities	123,727	442	612	2	5.3	159,164	492	622	2	5.9	105,777	392	443	1	5.5	-11%	-20%
Citi	122,760	405	700	3	5.3	156,374	476	720	3	5.8	98,697	285	491	3	5.1	-30%	-40%
Goldman Sachs	79,030	324	524	6	3.4	105,110	367	506	7	3.9	78,834	251	330	5	4.1	-23%	-32%
JPMorgan	155,964	554	799	1	6.7	181,035	611	828	1	6.7	102,061	361	512	2	5.3	-35%	-41%
Morgan Stanley	95,281	320	609	4	4.1	106,564	304	656	6	3.9	82,936	255	615	4	4.3	-20%	-16%
US Super Regional Banks																	
PNC Bank NA	7,267	47	104	63	0.3	11,180	58	125	49	0.4	10,895	56	101	40	0.6	19%	-4%
Regions Financial Corp	1,736	13	27	135	0.1	2,397	19	31	117	0.1	1,340	12	16	140	0.1	-9%	-36%
Truist Financial Corp	9,640	64	99	51	0.4	13,324	72	102	39	0.5	5,628	33	53	62	0.3	-48%	-54%
US Bancorp	11,099	58	73	48	0.5	15,092	73	85	36	0.6	13,318	47	61	35	0.7	-18%	-36%
Wells Fargo	63,096	224	475	9	2.7	86,442	309	479	9	3.2	61,461	226	334	8	3.2	1%	-27%
US Midcap Advisors																	
Jefferies LLC	20,316	74	109	28	0.9	17,628	60	85	31	0.7	8,999	23	63	46	0.5	-69%	-62%
EU Banks																	
Barclays	78,639	260	504	7	3.4	116,957	327	568	5	4.3	77,250	206	394	6	4.0	-21%	-37%
BNP Paribas	80,633	237	432	5	3.5	118,563	295	451	4	4.4	72,712	196	299	7	3.8	-17%	-33%
Credit Agricole CIB	40,072	103	221	15	1.7	65,821	153	265	11	2.4	32,346	102	176	14	1.7	0%	-33%
Deutsche Bank	75,934	250	366	8	3.3	101,018	272	423	8	3.7	52,648	157	245	9	2.7	-37%	-42%
HSBC	57,546	142	317	10	2.5	79,196	202	347	10	2.9	50,583	151	210	10	2.6	7%	-25%
Santander	37,070	121	245	16	1.6	44,042	122	257	17	1.6	22,770	66	142	23	1.2	-46%	-46%
SG Corporate & Investment Banking	34,045	92	185	17	1.5	53,592	138	216	15	2.0	36,736	90	129	12	1.9	-3%	-35%
UBS	34,040	103	304	18	1.5	40,084	128	306	18	1.5	28,462	67	216	17	1.5	-35%	-47%
Other																	
Nomura	32,403	70	289	19	1.4	32,013	62	235	21	1.2	20,818	65	148	25	1.1	-7%	5%
Mizuho	42,702	170	365	12	1.8	47,384	178	360	16	1.8	35,986	121	265	13	1.9	-29%	-32%
Standard Chartered Bank	14,320	44	109	37	0.6	20,673	56	128	27	0.8	11,149	45	89	38	0.6	1%	-21%
Sumitomo Mitsui Financial Group	30,777	133	269	21	1.3	33,245	139	251	20	1.2	23,032	82	198	22	1.2	-38%	-41%
MUFG	18,661	95	160	30	0.8	23,127	103	175	24	0.9	14,649	83	101	30	0.8	-13%	-19%

Source: Dealogic

Exhibit 146: Total Debt Underwriting



Source: Dealogic

Advisory & Underwriting: High Yield Debt Underwriting

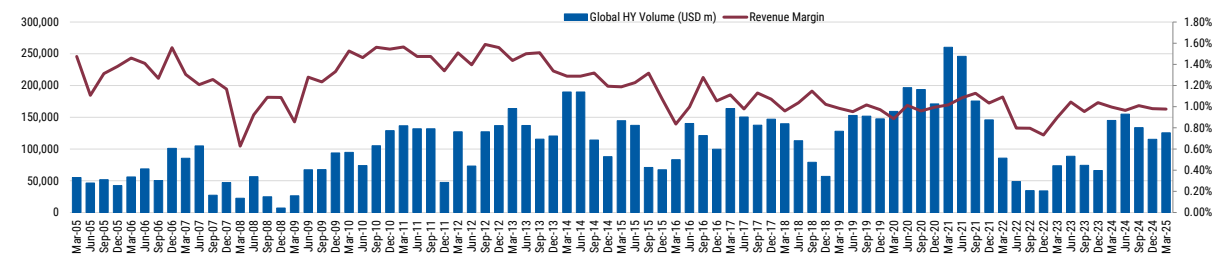
Exhibit 147: High Yield Debt Underwriting

DCM - HY Ranking

Bookrunner	2Q24					1Q25					2025 Run-Rate					Rev Growth	
	Deal Value (\$m)	Revenue (\$m)	No.	Rank	%share	Deal Value (\$m)	Revenue (\$m)	No.	Rank	%share	Deal Value (\$m)	Revenue (\$m)	No.	Rank	%share	Y/Y	Q/Q
US Money Center Banks																	
BoFa Securities	8,956	93	89	2	5.8	6,786	66	58	4	5.4	5,773	86	42	5	5.1	-8%	31%
Citi	8,935	77	81	3	5.8	7,755	76	65	3	6.2	6,529	69	51	2	5.8	-10%	-9%
Goldman Sachs	8,871	105	85	4	5.7	8,140	88	64	2	6.5	6,273	67	42	3	5.6	-37%	-24%
JPMorgan	13,279	168	118	1	8.6	11,406	148	94	1	9.1	8,943	80	57	1	7.9	-52%	-46%
Morgan Stanley	6,886	71	59	6	4.4	4,297	45	39	7	3.4	6,091	58	42	4	5.4	-17%	29%
US Super Regional Banks																	
PNC Bank NA	1,680	15	24	22	1.1	1,816	14	18	21	1.5	1,500	16	12	21	1.3	8%	11%
Regions Financial Corp	784	7	13	43	0.5	628	7	10	43	0.5	756	7	6	37	0.7	11%	10%
Truist Financial Corp	2,635	24	37	15	1.7	3,009	23	24	11	2.4	1,234	15	12	25	1.1	-37%	-34%
US Bancorp	1,039	10	15	36	0.7	652	6	11	41	0.5	607	4	2	40	0.5	-56%	-30%
Wells Fargo	4,999	53	56	8	3.2	4,661	66	45	5	3.7	4,871	58	32	7	4.3	9%	-13%
US Midcap Advisors																	
Jefferies LLC	2,872	35	14	14	1.9	1,872	22	11	19	1.5	1,510	14	16	20	1.3	-61%	-38%
EU Banks																	
Barclays	4,301	60	43	9	2.8	4,498	53	46	6	3.6	4,596	48	36	9	4.1	-20%	-9%
BNP Paribas	5,888	50	59	7	3.8	3,612	33	34	9	2.9	3,827	29	32	10	3.4	-41%	-11%
Credit Agricole CIB	2,225	19	26	18	1.4	2,884	21	27	13	2.3	2,779	29	18	15	2.5	52%	39%
Deutsche Bank	7,661	78	68	5	4.9	4,289	47	42	8	3.4	4,970	40	38	6	4.4	-49%	-14%
HSBC	4,285	30	46	10	2.8	2,873	25	35	14	2.3	2,842	31	22	14	2.5	4%	26%
Santander	2,573	23	32	16	1.7	1,282	14	17	25	1.0	1,887	19	16	18	1.7	-16%	32%
SG Corporate & Investment Banking	1,467	10	22	28	1.0	1,349	13	12	24	1.1	600	5	10	41	0.5	-46%	-59%
UBS	1,737	21	24	21	1.1	1,841	21	23	20	1.5	1,156	8	12	28	1.0	-63%	-62%
Other																	
Nomura	1,442	9	14	29	0.9	606	4	9	44	0.5	1,977	29	10	17	1.8	236%	703%
Mizuho	3,975	34	46	11	2.6	3,059	25	32	10	2.4	4,620	33	24	8	4.1	-5%	29%
Standard Chartered Bank	1,830	17	20	20	1.2	1,933	14	18	18	1.5	1,107	13	12	29	1.0	-23%	-7%
Sumitomo Mitsui Financial Group	3,530	32	34	13	2.3	2,440	19	26	16	1.9	3,210	24	16	11	2.9	-24%	26%
MUFG	1,534	14	26	25	1.0	1,807	18	25	22	1.4	2,928	25	22	12	2.6	83%	40%

Source: Dealogic

Exhibit 148: High Yield Debt Underwriting



Source: Dealogic

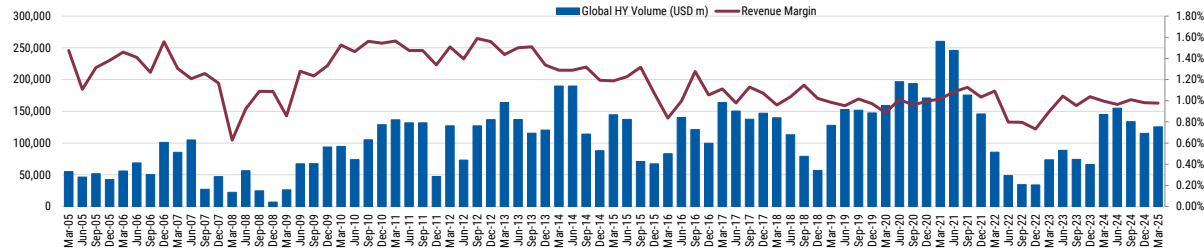
Advisory & Underwriting: Investment Grade Debt Underwriting

Exhibit 149: Investment Grade Debt Underwriting

DCM - IG Ranking																	
Bookrunner	2Q24					1Q25					2Q25 Run-Rate					Rev Growth	
	Deal Value (\$m)	Revenue (\$m)	No.	Rank	%share	Deal Value (\$m)	Revenue (\$m)	No.	Rank	%share	Deal Value (\$m)	Revenue (\$m)	No.	Rank	%share	Y/Y	Q/Q
US Money Center Banks																	
BoFa Securities	45,212	197	258	3	3.9	78,171	291	296	1	5.9	54,735	190	243	2	4.9	-4%	-35%
Citi	49,108	198	280	2	4.3	60,368	233	271	3	4.6	50,396	154	214	4	4.5	-23%	-34%
Goldman Sachs	34,365	130	191	5	3.0	46,272	183	189	4	3.5	42,124	137	150	5	3.8	5%	-25%
JPMorgan	56,299	235	282	1	4.9	68,045	284	311	2	5.2	52,556	221	226	3	4.7	-6%	-22%
Morgan Stanley	43,119	155	232	4	3.8	43,975	164	221	6	3.3	54,833	166	186	1	4.9	7%	1%
US Super Regional Banks																	
PNC Bank NA	4,614	30	41	64	0.4	7,851	41	52	42	0.6	8,606	39	40	36	0.8	32%	-4%
Regions Financial Corp	906	6	13	133	0.1	1,703	11	20	105	0.1	583	5	10	162	0.1	-23%	-59%
Truist Financial Corp	5,145	32	49	55	0.5	8,672	43	64	38	0.7	3,351	16	32	65	0.3	-49%	-62%
US Bancorp	9,217	45	55	33	0.8	13,854	65	72	24	1.1	11,118	37	53	28	1.0	-19%	-43%
Wells Fargo	27,728	112	178	10	2.4	36,589	147	184	10	2.8	38,792	140	146	6	3.5	25%	-5%
US Midcap Advisors																	
Jefferies LLC	1,425	6	5	106	0.1	2,017	8	7	94	0.2	710	2	4	151	0.1	-68%	-74%
EU Banks																	
Barclays	28,034	114	137	9	2.4	41,006	150	184	7	3.1	27,942	94	107	10	2.5	-17%	-37%
BNP Paribas	31,395	104	199	6	2.7	45,102	138	205	5	3.4	32,237	96	166	7	2.9	-8%	-31%
Credit Agricole CIB	16,650	55	114	20	1.5	25,550	75	129	13	1.9	15,445	49	103	18	1.4	-12%	-35%
Deutsche Bank	30,953	111	141	7	2.7	38,308	124	182	8	2.9	28,171	87	135	9	2.5	-22%	-30%
HSBC	24,114	77	151	13	2.1	36,834	111	182	9	2.8	31,878	99	123	8	2.9	28%	-12%
Santander	15,338	67	111	22	1.3	19,378	74	128	19	1.5	9,726	32	67	33	0.9	-53%	-57%
SG Corporate & Investment Banking	14,485	48	86	24	1.3	23,487	71	103	15	1.8	17,064	55	67	16	1.5	15%	-22%
UBS	19,418	59	144	16	1.7	19,767	76	111	18	1.5	12,599	36	63	23	1.1	-38%	-52%
Other																	
Nomura	6,313	20	81	48	0.6	5,692	18	72	50	0.4	3,172	15	36	69	0.3	-25%	-17%
Mizuho	23,276	104	189	14	2.0	29,666	123	204	11	2.3	23,338	72	148	14	2.1	-30%	-41%
Standard Chartered Bank	7,354	21	60	39	0.6	11,587	33	76	30	0.9	8,744	30	69	34	0.8	42%	-12%
Sumitomo Mitsui Financial Group	19,261	83	160	17	1.7	22,490	103	166	16	1.7	14,079	46	121	20	1.3	-44%	-55%
MUFG	12,467	62	101	28	1.1	15,662	67	108	22	1.2	11,492	55	77	27	1.0	-11%	-17%

Source: Dealogic

Exhibit 150: Investment Grade Debt Underwriting



Source: Dealogic

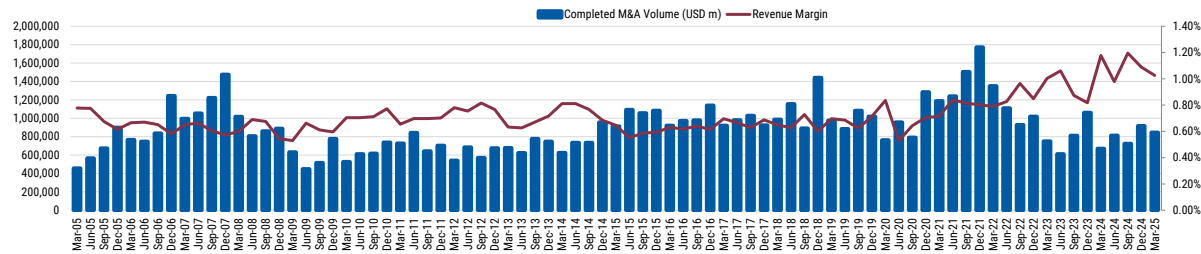
Advisory & Underwriting: Merger & Acquisition (Completed)

Exhibit 151: Mergers & Acquisitions (Completed)

M&A - Global Ranking (Completed)																	
Bookrunner	2024					1Q25					2025 Run-Rate					Rev Growth	
	Deal Value (\$m)	Revenue (\$m)	No.	Rank	%share	Deal Value (\$m)	Revenue (\$m)	No.	Rank	%share	Deal Value (\$m)	Revenue (\$m)	No.	Rank	%share	Y/Y	Q/Q
US Banks																	
BoFa Securities	222,337	367	77	3	27.4	110,180	431	73	5	13.0	62,932	211	38	11	9.3	-43%	-51%
Citi	205,016	288	49	4	25.3	123,711	423	54	4	14.6	139,178	404	63	4	20.6	40%	-4%
Goldman Sachs	284,978	648	94	1	35.1	235,897	834	97	1	27.9	286,088	1,107	103	1	42.3	71%	33%
JPMorgan	196,522	749	96	5	24.2	193,010	698	80	2	22.8	143,698	744	91	3	21.3	-1%	7%
Morgan Stanley	239,658	572	91	2	29.5	162,231	582	84	3	19.2	146,086	384	69	2	21.6	-33%	-34%
US Super Regional Banks																	
PNC Bank NA	1,385	29	23	92	0.2	710	23	13	139	0.1	-	4	8	233	-	-87%	-83%
Truist Financial Corp	20,901	34	5	23	2.6	10,653	20	12	45	1.3	201	3	2	137	0.0	-91%	-84%
Wells Fargo	53,740	81	17	15	6.6	38,581	104	18	12	4.6	89,703	167	10	6	13.3	107%	61%
US Midcap Advisors																	
Centerview Partners	88,720	317	28	8	10.9	36,581	287	19	14	4.3	75,346	304	16	10	11.2	-4%	6%
Evercore Inc	102,771	245	40	7	12.7	34,197	178	38	15	4.1	30,693	196	26	18	4.5	-20%	10%
Houlihan Lokey	18,105	198	99	27	2.2	13,260	248	104	36	1.6	12,702	214	93	29	1.9	8%	-14%
Jefferies LLC	59,469	317	62	14	7.3	55,135	338	73	9	6.5	76,482	317	51	9	11.3	0%	-6%
Lazard	26,921	173	45	20	3.3	54,882	173	51	10	6.5	134,715	321	49	5	19.9	86%	85%
Moelis & Co	9,068	89	27	39	1.1	16,405	160	36	32	1.9	8,961	78	32	38	1.3	-12%	-51%
Piper Sandler	5,421	64	38	50	0.7	8,962	102	44	52	1.1	6,102	81	26	45	0.9	27%	-20%
PJT Partners Inc	70,681	86	15	11	8.7	10,214	70	16	46	1.2	11,569	56	12	35	1.7	-34%	-20%
EU Banks																	
Barclays	77,146	197	43	10	9.5	80,405	209	42	6	9.5	43,491	152	28	14	6.4	-23%	-27%
BNP Paribas	81,826	59	26	9	10.1	18,981	59	27	29	2.3	77,917	99	22	8	11.5	68%	69%
Credit Agricole CIB	7,285	19	12	42	0.9	14,948	21	10	34	1.8	23,324	8	4	22	3.5	-58%	-61%
Deutsche Bank	66,014	161	39	13	8.1	67,024	132	33	8	7.9	52,311	128	34	12	7.7	-21%	-3%
HSBC	13,587	52	14	33	1.7	30,326	19	12	17	3.6	32,053	29	4	17	4.7	-44%	50%
Santander	20,221	24	24	25	2.5	8,412	39	22	53	1.0	17,590	33	18	27	2.6	41%	-14%
SG Corporate & Investment Banking	12,258	18	12	34	1.5	20,087	29	16	24	2.4	8,088	9	2	40	1.2	-54%	-71%
UBS	128,766	218	53	6	15.9	67,190	236	58	7	8.0	79,138	178	47	7	11.7	-18%	-24%
Other																	
Nomura	21,451	94	39	22	2.6	20,084	89	42	25	2.4	11,967	84	36	32	1.8	-10%	-5%
Mizuho	26,801	48	30	21	3.3	26,591	55	38	18	3.2	29,243	67	42	20	4.3	40%	23%
Sumitomo Mitsui Financial Group	5,520	13	16	49	0.7	15,566	27	40	33	1.8	4,501	29	28	53	0.7	116%	8%
Macquarie Group	14,068	75	20	31	1.7	13,257	63	18	37	1.6	12,675	56	12	30	1.9	-26%	-12%

Source: Dealogic

Exhibit 152: Mergers & Acquisitions (Completed)



Source: Dealogic

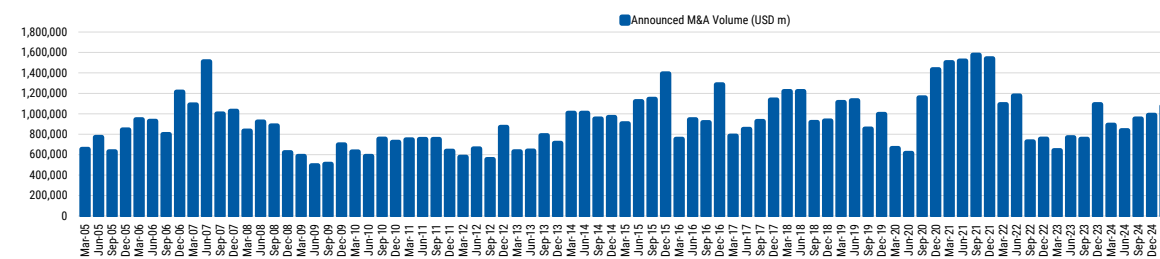
Advisory & Underwriting: Merger & Acquisition (Announced)

Exhibit 153: Mergers & Acquisitions (Announced)

M&A - Global Ranking (Announced)														
Bookrunner	2Q24				1Q25				2Q25 Run-Rate				Y/Y	Q/Q
	Deal Value (\$m)	No.	Rank	%share	Deal Value (\$m)	No.	Rank	%share	Deal Value (\$m)	No.	Rank	%share		
US Banks														
BoFA Securities	112,758	76	4	13.5	137,042	68	5	12.8	115,587	47	6	13.2	3%	-16%
Citi	80,296	59	6	9.6	173,192	62	4	16.1	110,329	57	7	12.6	37%	-36%
Goldman Sachs	246,871	116	1	29.5	366,512	130	1	34.1	248,316	87	1	28.3	1%	-32%
JPMorgan	184,896	101	3	22.1	293,895	113	2	27.3	232,028	79	2	26.5	25%	-21%
Morgan Stanley	197,150	102	2	23.6	227,690	92	3	21.2	131,837	53	4	15.0	-33%	-42%
US Super Regional Banks														
PNC Bank NA	3,720	28	65	0.4	398	18	168	0.0	-	10	255	-	-100%	-100%
Truist Financial Corp	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Wells Fargo	40,721	14	16	4.9	62,314	14	12	5.8	39,394	10	16	4.5	-3%	-37%
US Midcap Advisors														
Centerview Partners	72,236	30	7	8.6	79,387	28	9	7.4	44,144	14	14	5.0	-39%	-44%
Evercore Inc	47,441	44	12	5.7	63,055	44	11	5.9	129,543	61	5	14.8	173%	105%
Houlihan Lokey	12,185	99	32	1.5	8,968	108	43	0.8	4,191	85	50	0.5	-66%	-53%
Jefferies LLC	48,703	80	11	5.8	61,885	80	13	5.8	63,405	65	11	7.2	30%	2%
Lazard	49,221	66	10	5.9	95,715	43	7	8.9	7,413	44	42	0.9	-85%	-92%
Moelis & Co	9,586	34	40	1.2	13,480	30	28	1.3	17,695	24	26	2.0	85%	31%
Piper Sandler	5,378	35	54	0.6	7,769	45	48	0.7	5,538	24	48	0.6	3%	-29%
PJT Partners Inc	19,264	15	22	2.3	18,217	14	23	1.7	34,301	16	18	3.9	78%	88%
EU Banks														
Barclays	86,562	42	5	10.4	127,262	35	6	11.8	141,966	38	3	16.2	64%	12%
BNP Paribas	30,769	34	17	3.7	20,727	30	19	1.9	6,491	14	44	0.7	-79%	-69%
Credit Agricole CIB	14,956	16	27	1.8	23,227	10	18	2.2	582	4	111	0.1	-96%	-97%
Deutsche Bank	55,269	40	8	6.6	37,138	35	14	3.5	60,674	22	12	6.9	10%	63%
HSBC	20,509	14	21	2.5	3,332	10	72	0.3	2,119	4	71	0.2	-90%	-36%
Santander	3,903	19	64	0.5	18,535	32	22	1.7	18,705	10	25	2.1	379%	1%
SG Corporate & Investment Banking	24,025	14	19	2.9	7,098	10	49	0.7	-	2	255	-	-100%	-100%
UBS	41,886	66	15	5.0	79,393	59	8	7.4	68,377	44	8	7.8	63%	-14%
Other														
Nomura	13,794	38	28	1.7	16,042	40	27	1.5	67,262	69	9	7.7	388%	319%
Mizuho	11,686	31	33	1.4	34,781	47	15	3.2	64,342	47	10	7.3	451%	85%
Sumitomo Mitsui Financial Group	5,840	22	53	0.7	3,410	35	71	0.3	21,360	42	24	2.4	266%	526%

Source: Dealogic

Exhibit 154: Mergers & Acquisitions (Announced)



Source: Dealogic

Total Primary Dealer Positions

Corporate Securities

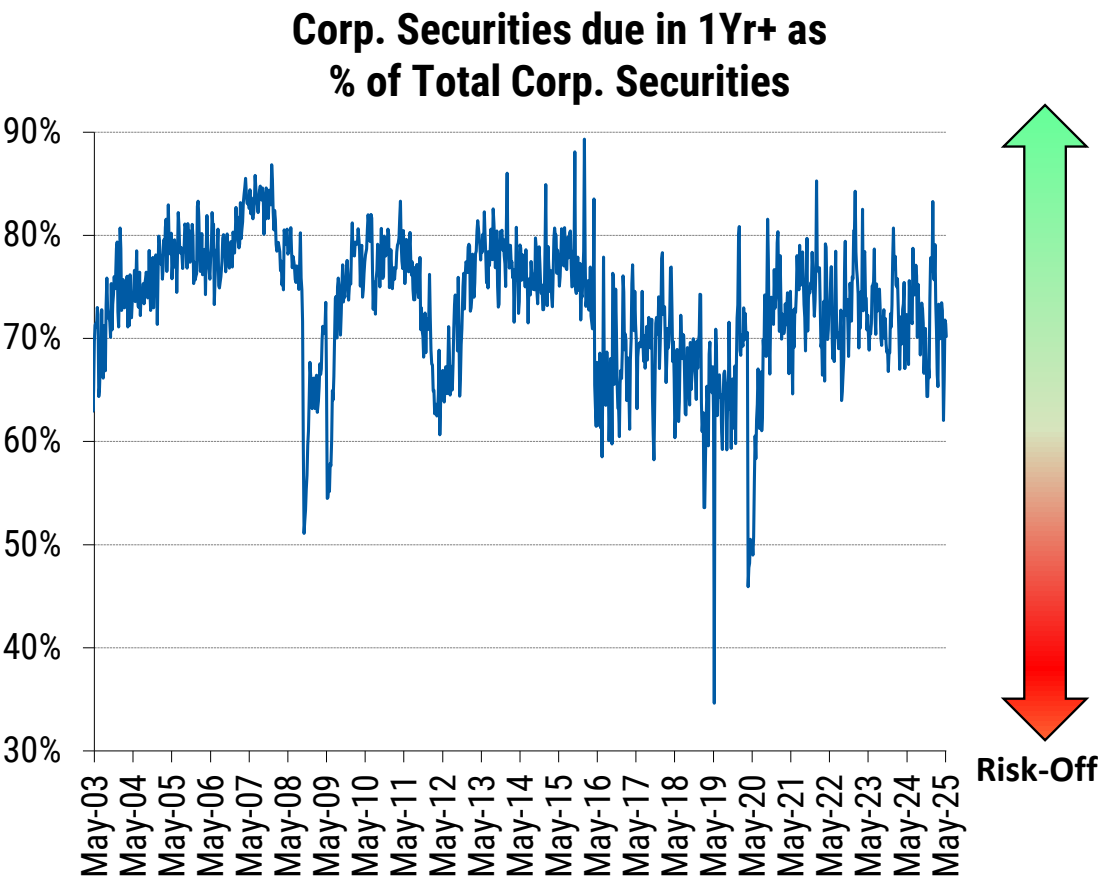
Exhibit 155: Corporate Securities

PD positions in corporate securities due in > one year (\$m)



Source: New York Fed, Refinitiv, Morgan Stanley Research

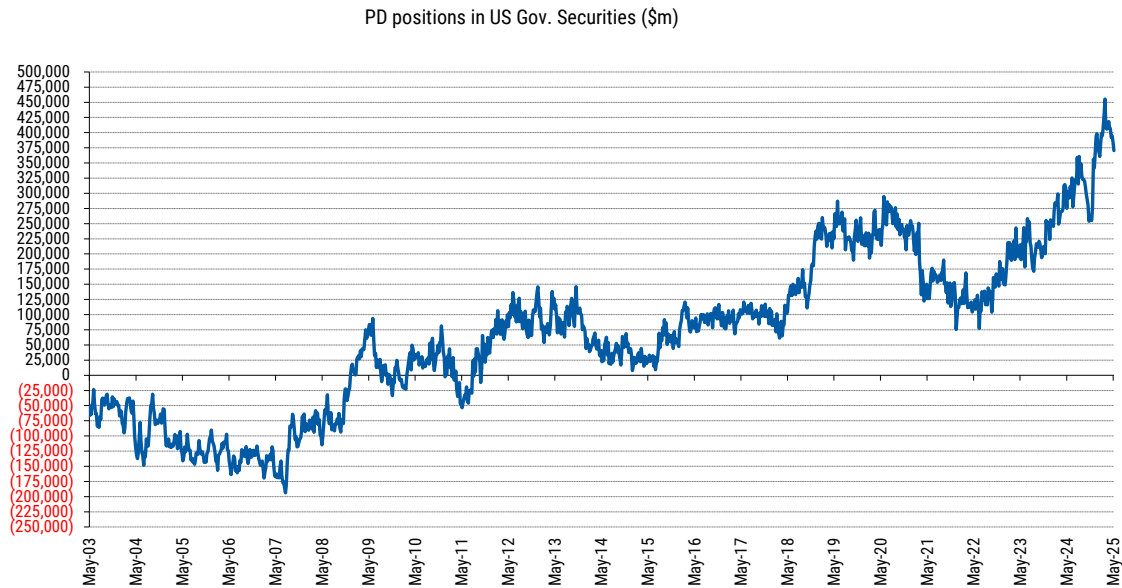
Exhibit 156: Corporate Securities



Source: New York Fed, Refinitiv, Morgan Stanley Research

US Government Securities

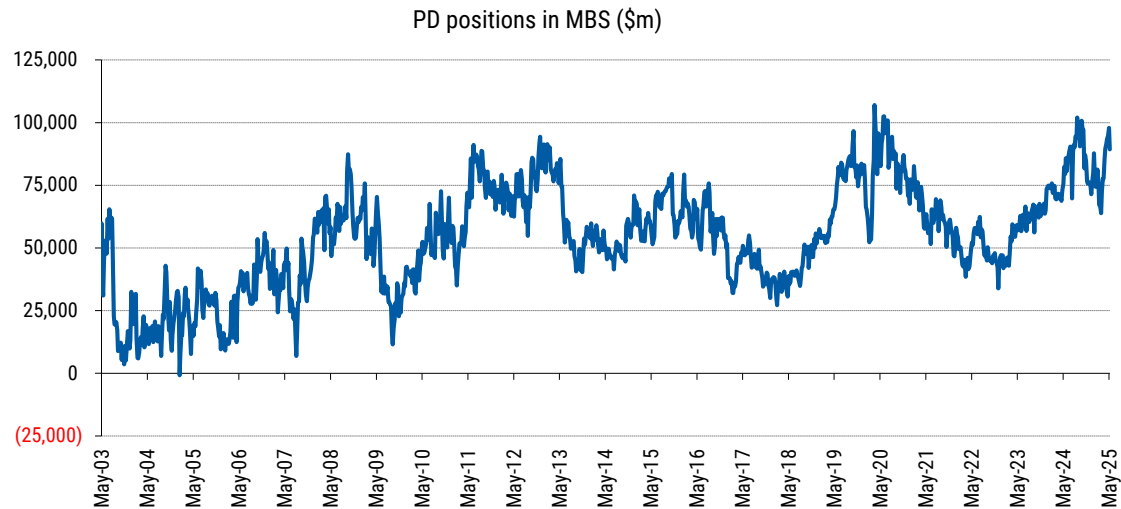
Exhibit 157: U.S Government Securities



Source: New York Fed, Refinitiv, Morgan Stanley Research

MBS

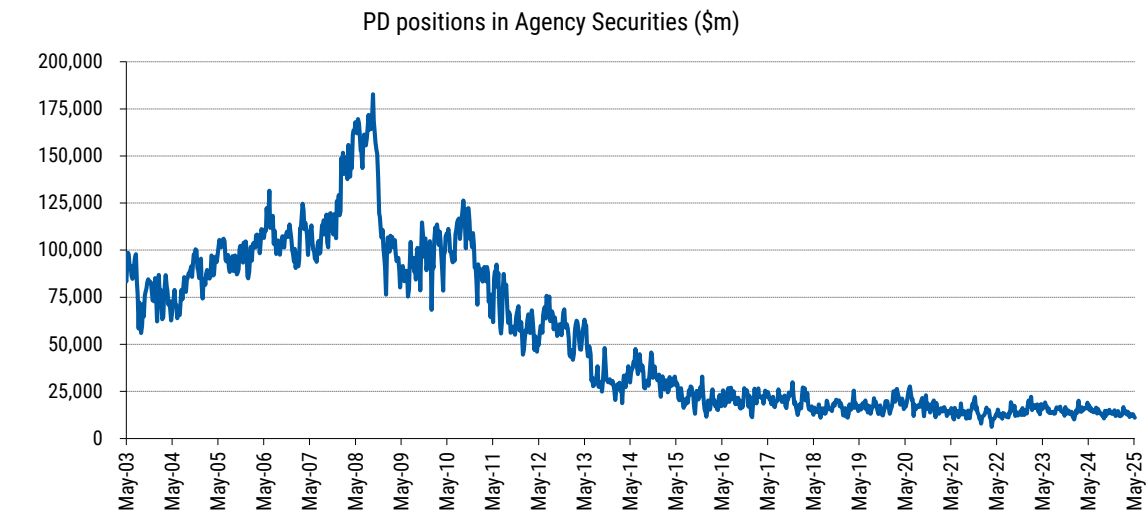
Exhibit 158: Mortgage-Backed Securities



Source: New York Fed, Refinitiv, Morgan Stanley Research

Agency Securities

Exhibit 159: Agency Securities

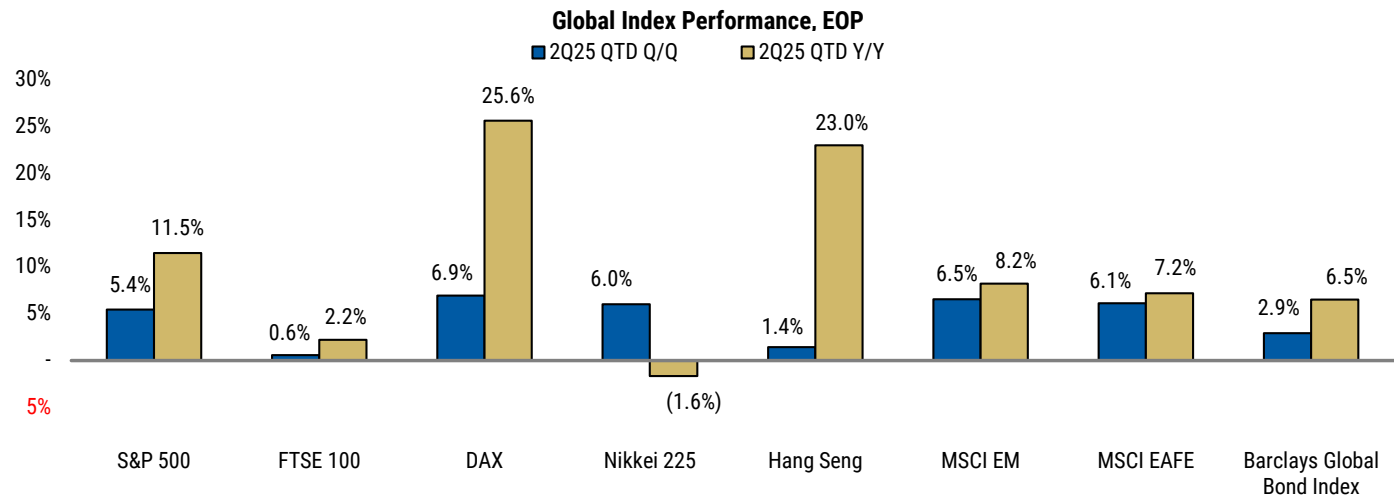


Source: New York Fed, Refinitiv, Morgan Stanley Research

Trust Bank Trends

Asset Servicing & Asset Management

Exhibit 160: Stocks Mixed, Bonds Higher QTD Through April



Equity Mutual Fund Flows - Quarterly (\$M)

Exhibit 161: Total Equity Mutual Fund Flows, \$MM

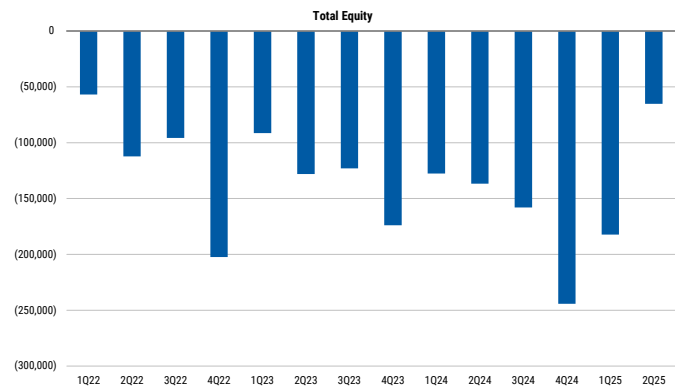


Exhibit 162: Domestic Equity Mutual Fund Flows, \$MM

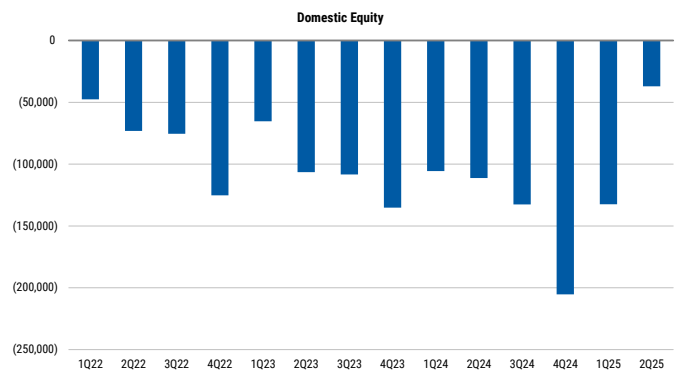
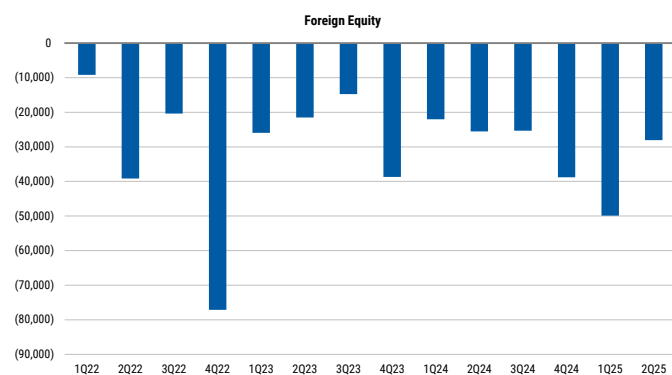


Exhibit 163: Foreign Equity Mutual Fund Flows, \$MM

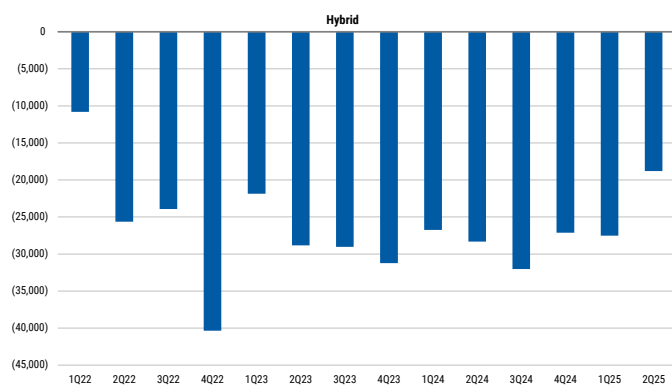
Source: ICI, Morgan Stanley Research estimates. Note: Mutual fund flow data are lagged by 2 wks

Exhibit 164: Summary: Mutual Fund Flows

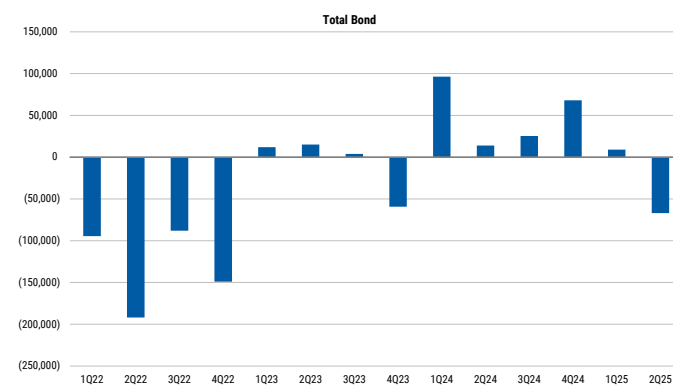
	Mutual Fund Flows (\$MM)		
	Total Equity	Domestic Equity	Foreign Equity
2Q25 QTD	(65,177)	(37,128)	(28,049)
1Q25	(182,304)	(132,442)	(49,861)
4Q24	(244,167)	(205,370)	(38,796)

Source: ICI, Morgan Stanley Research estimates. Note: Mutual fund flow data are lagged by 2 wks

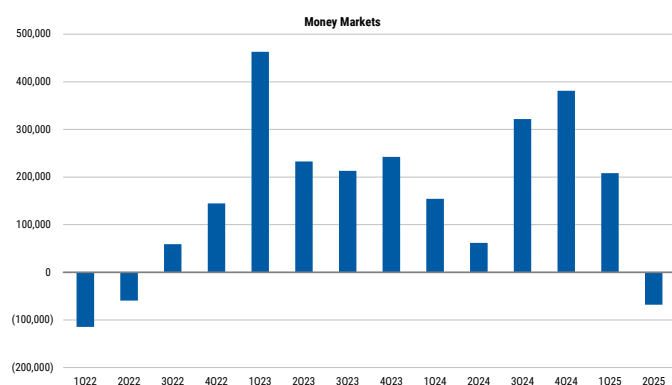
Market & Bond Mutual Fund Flows - Quarterly (\$M)

Exhibit 165: Hybrid Mutual Fund Flows, \$MM

Source: ICI, Morgan Stanley Research estimates. Note: Mutual fund flow data are lagged by 2 wks

Exhibit 166: Total Bond Mutual Fund Flows, \$MM

Source: ICI, Morgan Stanley Research estimates. Note: Mutual fund flow data are lagged by 2 wks

Exhibit 167: Money Markets Mutual Fund Flows, \$MM

Source: ICI, Morgan Stanley Research estimates. Note: Mutual fund flow data are lagged by 2 wks

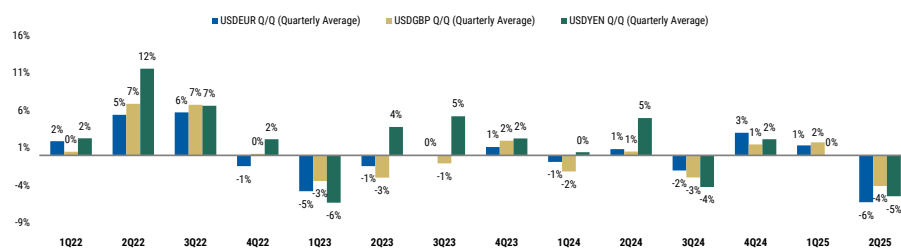
Exhibit 168: Summary: Mutual Fund Flows

	Mutual Fund Flows (\$MM)		
	Hybrid	Total Bond	Money Market
2Q25 QTD	(18,792)	(66,886)	(68,048)
1Q25	(27,527)	8,977	208,341
4Q24	(27,126)	67,948	381,361

Source: ICI, Morgan Stanley Research estimates. Note: Mutual fund flow data are lagged by 2 wks

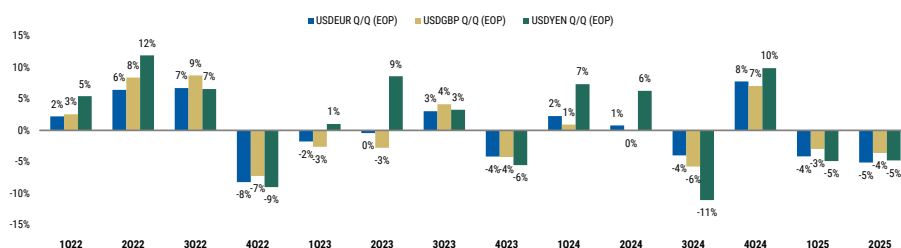
Trading Services - FX Trading Indicators

Exhibit 169: Q/Q Change - Average Basis



Note: Data as of 4/29/2025; Source: Refinitiv, Morgan Stanley Research estimates

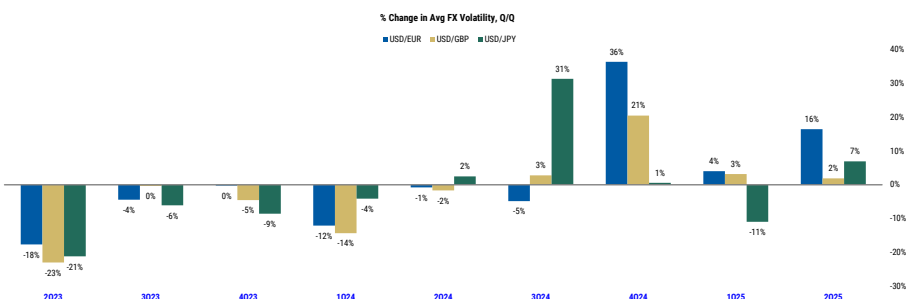
Exhibit 170: Q/Q Change - EOP Basis



Note: EOP shown data as of 4/29/2025.
Source: Refinitiv, Morgan Stanley Research estimates

Trading Services - FX Volatility

Exhibit 171: Change in Average Quarterly Volatility, Q/Q



Note: 2Q25 data through April; Source: Bloomberg, Morgan Stanley Research estimates

Exhibit 172: Details: % Q/Q Change in Average Quarterly Volatility

	Q/Q % Change in FX Vol (Quarterly Average)							
	1Q23	2Q23	3Q23	4Q23	1Q24	2Q24	3Q24	4Q24
USD/EUR	(21%)	(18%)	(4%)	(0%)	(12%)	(1%)	(5%)	36%
USD/JPY	2%	(21%)	(6%)	(9%)	(4%)	2%	31%	1%
USD/GBP	(24%)	(23%)	(0%)	(5%)	(14%)	(2%)	3%	21%
Average	(14%)	(21%)	(4%)	(5%)	(10%)	0%	13%	15%
								10Q25
								2Q25
								8%

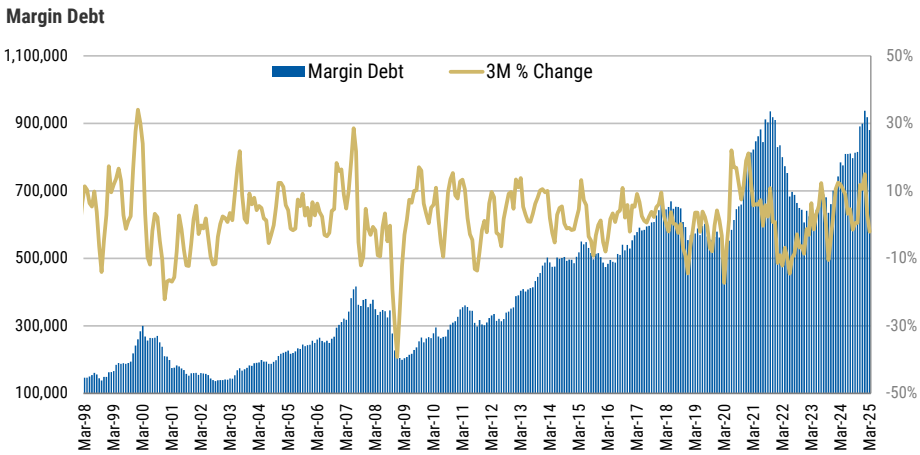
	Q/Q % Change in Trading Revenue							
	1Q23	2Q23	3Q23	4Q23	1Q24	2Q24	3Q24	4Q24
BK	(7%)	(10%)	(3%)	(7%)	6%	21%	(5%)	1%
NTRS	(13%)	(2%)	(4%)	(0%)	15%	(2%)	(3%)	17%
STT	(1%)	(11%)	3%	(2%)	8%	2%	7%	0%
								1Q25
								2Q25E
								38%
								2%
								8%

Source: Bloomberg, Morgan Stanley Research estimates

Note: NTRS trading revenue includes FX trading income and securities commissions & trading income

Securities Lending Indicators

Exhibit 173: Securities Market Credit



Source: NYSE Technologies, Morgan Stanley Research

Excess Capital Analysis

Exhibit 174: We estimate ~\$156B of excess capital across our coverage vs. regulatory minimums as of 1Q25, down from \$165B as of 4Q24

Constraint	Non-Stress Environment									
	1Q25	Req. Min	+ SCB / CCB	+ GSIB / SLR Surcharge	= Implied Regulatory Min	Excess Reg Cap (\$B)	Excess Reg Cap % of Reg Cap	Excess Reg Cap % of Market Cap	Reg Cap	Market Cap
CET 1 Ratio, Standardized										
BK	11.5%	4.5%	2.5%	1.5%	8.5%	\$ 5.1	26%	9%	\$ 19.4	\$ 56
C	13.4%	4.5%	4.1%	3.5%	12.1%	\$ 15.1	10%	12%	\$ 155.3	\$ 124
GS	14.8%	4.5%	6.2%	3.0%	13.7%	\$ 7.3	7%	4%	\$ 102.7	\$ 165
STT	11.0%	4.5%	2.5%	1.0%	8.0%	\$ 3.9	27%	16%	\$ 14.3	\$ 25
USB	10.8%	4.5%	3.1%	0.0%	7.6%	\$ 14.3	29%	23%	\$ 48.5	\$ 62
WFC	11.1%	4.5%	3.8%	1.5%	9.8%	\$ 15.9	12%	7%	\$ 135.8	\$ 222
Tier 1 Capital Ratio, Standardized										
BAC	12.9%	6.0%	3.2%	3.0%	12.2%	\$ 12.0	5%	4%	\$ 220.9	\$ 293
TFC	12.7%	6.0%	2.8%	0.0%	8.8%	\$ 16.5	31%	34%	\$ 53.9	\$ 48
Total Risk-Based Capital Ratio, Standardized										
JPM	18.2%	8.0%	3.3%	4.5%	15.8%	\$ 43.6	13%	7%	\$ 330.8	\$ 670
NTRS	15.7%	8.0%	2.5%	0.0%	10.5%	\$ 4.6	33%	26%	\$ 13.7	\$ 18
PNC	13.7%	8.0%	2.5%	0.0%	10.5%	\$ 13.6	23%	22%	\$ 58.2	\$ 62
RF	14.0%	8.0%	2.5%	0.0%	10.5%	\$ 4.3	25%	24%	\$ 17.4	\$ 18
Total Large Cap Banks						\$ 156.2	13%	9%	\$ 1,170.8	\$ 1,762
Money Centers (BAC, C, GS & JPM)						\$ 78.0	10%	6%	\$ 809.6	\$ 1,252

Source: Company data, Federal Reserve, Morgan Stanley Research estimates

Note: CET1 Ratio = Common Equity Tier 1 Capital / Standardized RWA. CET1 Ratio, Advanced = Common Equity Tier 1 Capital / Advanced RWA. T1 Capital Ratio = Total Tier 1 Capital / Standardized RWA. Total Capital Ratio = Total Capital / Standardized RWA. T1 Lev Ratio = Total Tier 1 Capital / Adjusted Total Assets. SLR = Total Tier 1 Capital / Leverage Exposure. SCB = Stress Capital Buffer, applied in Standardized CET1, Tier 1, and Total Capital Ratios. CCB = Capital Conservation Buffer, applied in Advanced CET1, Tier 1, and Total Capital Ratios.

Sector Valuation

Bank Multiples

Exhibit 175: Bank Absolute NTM P/E Over Time vs. Recession

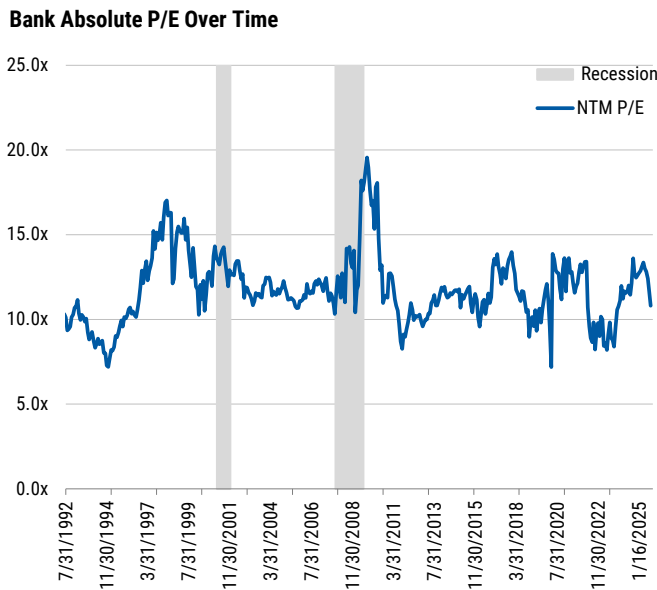


Exhibit 176: Bank Absolute LTM P/B Over Time vs. Recession

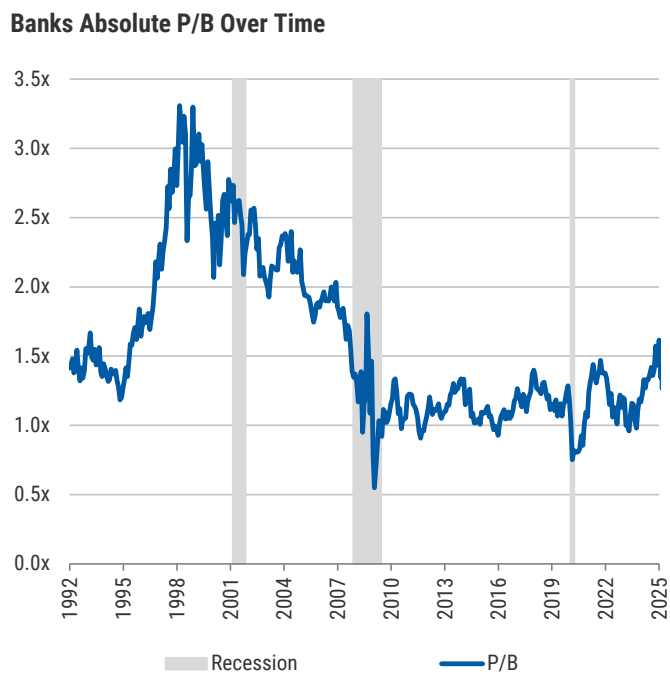
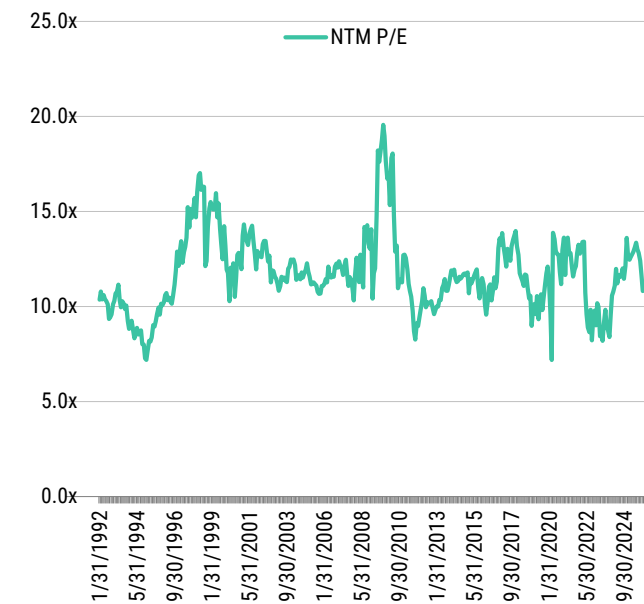


Exhibit 177: Bank Absolute NTM P/E Over Time vs. Flattening Yield Curve

Bank Absolute P/E Over Time

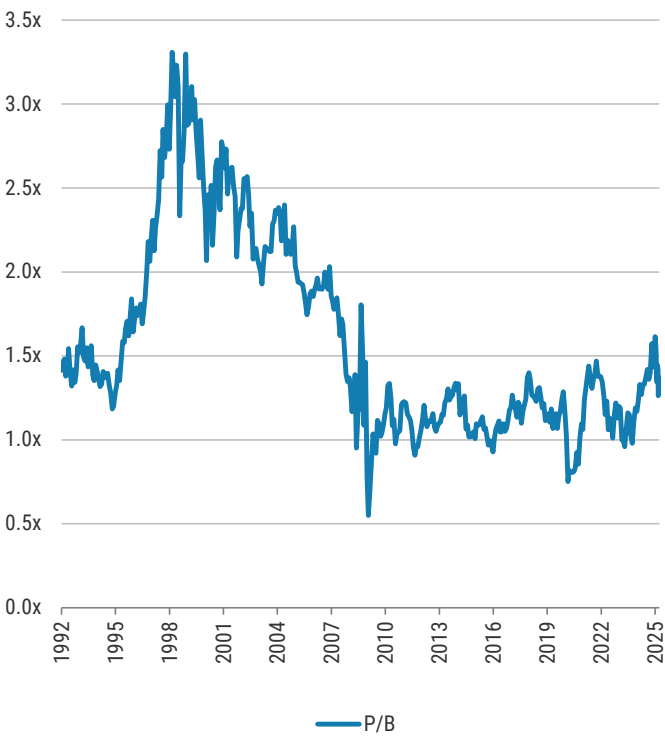


Source: Clarifi, Datastream, Morgan Stanley Research.

Note: NTM Earnings based on IBES Consensus

Exhibit 178: Bank Absolute LTM P/B vs. Flattening Yield Curve

Banks Absolute P/B Over Time



Source: Clarifi, Datastream, Morgan Stanley Research.

Market & Sector Performance

Market vs Bank Indices

Exhibit 179: S&P 500 vs. Bank Indices

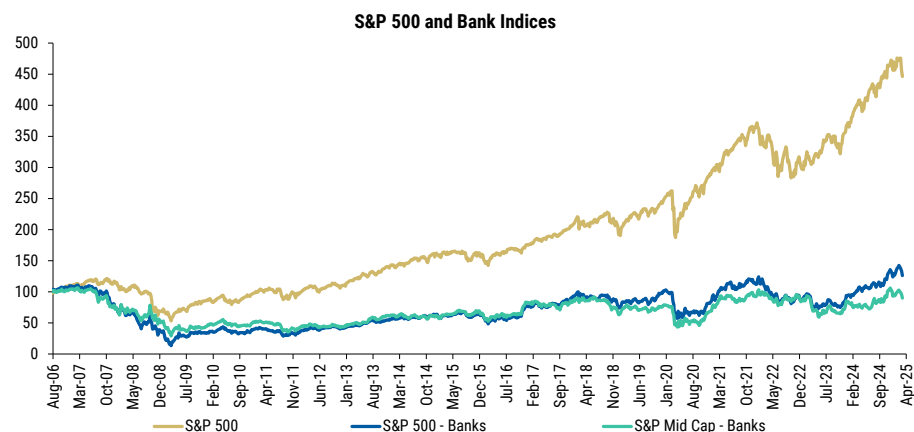


Exhibit 180: Global Market Indices

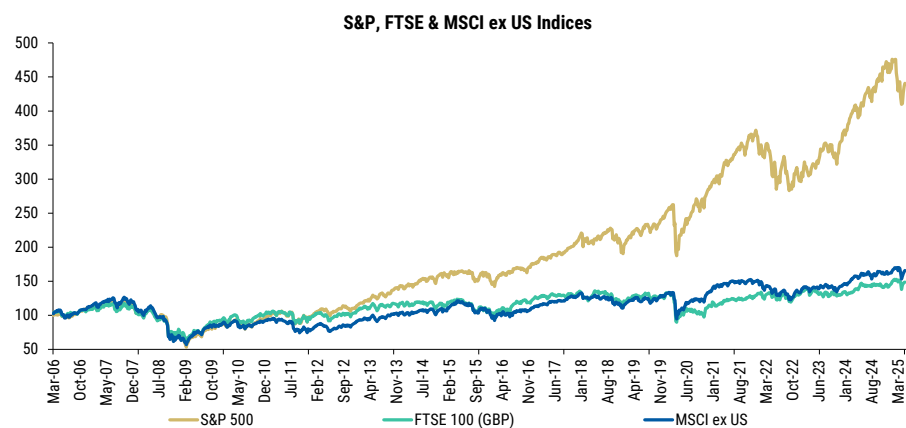
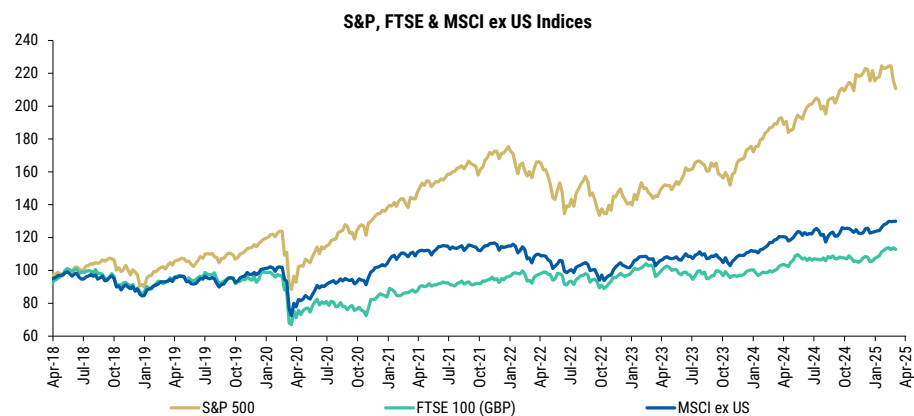
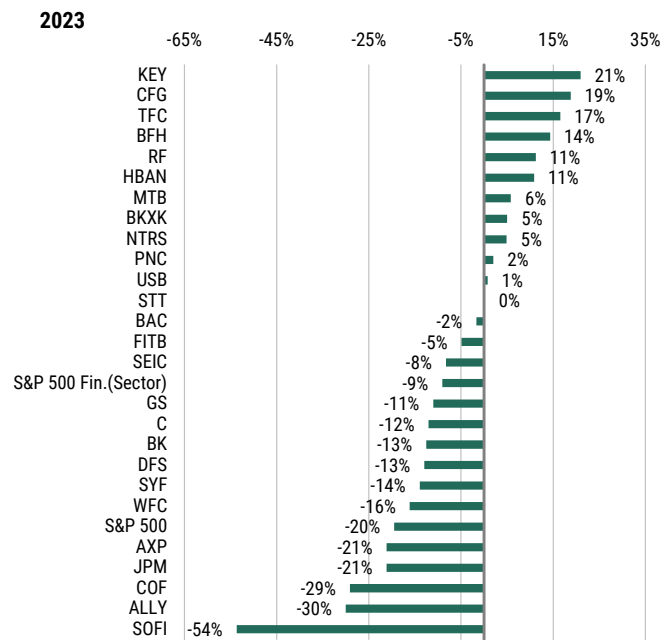


Exhibit 181: Global Market Indices

Source: FactSet, Morgan Stanley Research

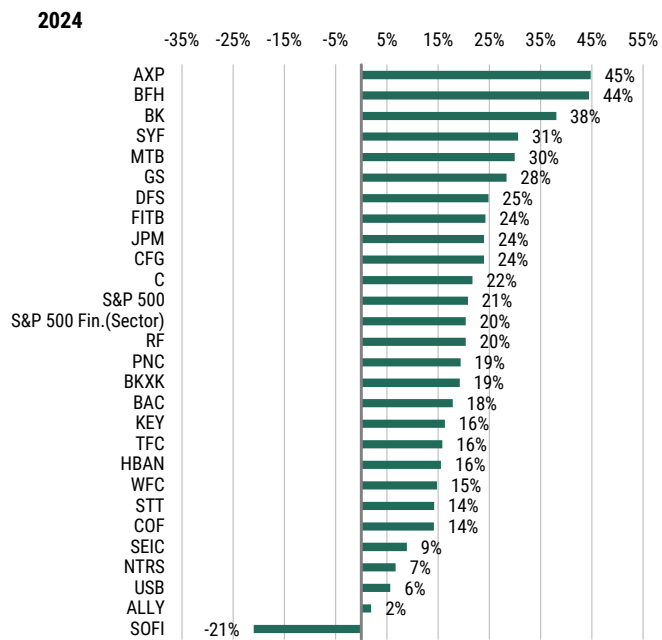
Coverage Universe Performance

Exhibit 182: 2023



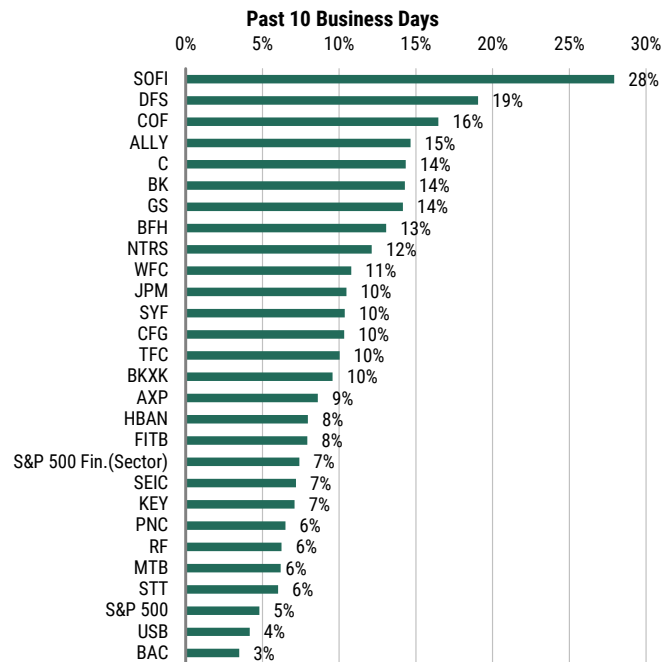
Source: FactSet, Company data, Morgan Stanley Research

Exhibit 183: 2024



Source: FactSet, Company data, Morgan Stanley Research

Exhibit 184: Past 10 Days



Source: FactSet, Company data, Morgan Stanley Research

Valuation Methodology and Risks

Bank of America (BAC.N)

Our price targets are set by triangulating PE, PB vs ROE (a deconstructed PE) and cost of equity relative to our outlook for asset growth, credit risk, operating efficiency and capital return. Our price target is based on an 11x 2026 PE. Multiple is in-line with group average.

Risks to Upside

- NIM expansion
- Capital markets rebound
- Faster rebound in US loan growth
- More cost saves drive higher operating leverage

Risks to Downside

- Recession with high inflation
- Slower capital markets growth
- Inability to drive positive operating leverage
- Geopolitical risks

Citigroup Inc. (C.N)

Our price targets are set by triangulating PE, PB vs ROE (a deconstructed PE) and cost of equity relative to our outlook for asset growth, credit risk, operating efficiency and capital return. Our price target is based on a 10x PE on 2026 EPS. Multiple is below group average.

Risks to Upside

- Faster execution on new strategy
- Higher capital return
- Faster rebound in global growth
- Quick exit from consent orders with limited incremental investment spend

Risks to Downside

- Recession with high inflation
- Higher investment spend needed for consent order
- Virus resurgence weakens global growth
- Geopolitical risks
- Stock market correction
- Slower loan growth
- Inability to optimize capital

Flagstar Financial Inc (FLG.N)

Assumptions for our price target for FLG include 0.75x BVPS given risk for higher CRE losses and execution risk around the company's strategic initiatives

Risks to Upside

- Office/multifamily losses increase by less than expected.

- Deposit costs increase by less than expected, and mix shift is slower.

Risks to Downside

- Office/multifamily losses increase by more than expected.
- Loan sales negatively impact CET1 capital.
- FLG is unable to generate expense savings to partially offset revenue headwinds.
- Funding costs accelerate by more than expected.

Valley National Bancorp (VLY.O)

Assumptions for our price target for VLY include a 9x target P/E multiple on our 2026e EPS, a 2.5x discount to its historical average given their skew to CRE (~65% of total loans) and lower level of loan loss reserves than peers.

Risks to Upside

- Better CRE credit as rates come down.
- Stronger higher yielding C&I loan growth as VLY looks to diversify their loan book.

Risks to Downside

- Higher for longer rates putting more pressure on deposit costs vs. peers given VLY's higher loan to deposit ratio (100%) and skew to CDs (29% of deposits).
- Major deterioration in CRE credit given VLY's higher exposure to CRE (63% of loans) and lower CRE reserve ratio.

Disclosure Section

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Global Stock Ratings Distribution

(as of April 30, 2025)

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Stock Rating Category	Coverage Universe		Investment Banking Clients (IBC)			Other Material Investment Services Clients (MISC)	
	Count	% of Total	Count	% of Total IBC	% of Rating Category	Count	% of Total Other MISC
Overweight/Buy	1501	40%	377	46%	25%	691	40%
Equal-weight/Hold	1667	44%	375	45%	22%	796	46%
Not-Rated/Hold	3	0%	0	0%	0%	1	0%
Underweight/Sell	603	16%	76	9%	13%	229	13%
Total	3,774		828			1717	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

Analyst Stock Ratings

Overweight (O). The stock's total return is expected to exceed the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Equal-weight (E). The stock's total return is expected to be in line with the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Not-Rated (NR). Currently the analyst does not have adequate conviction about the stock's total return relative to the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Underweight (U). The stock's total return is expected to be below the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Unless otherwise specified, the time frame for price targets included in Morgan Stanley Research is 12 to 18 months.

Analyst Industry Views

Attractive (A): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.

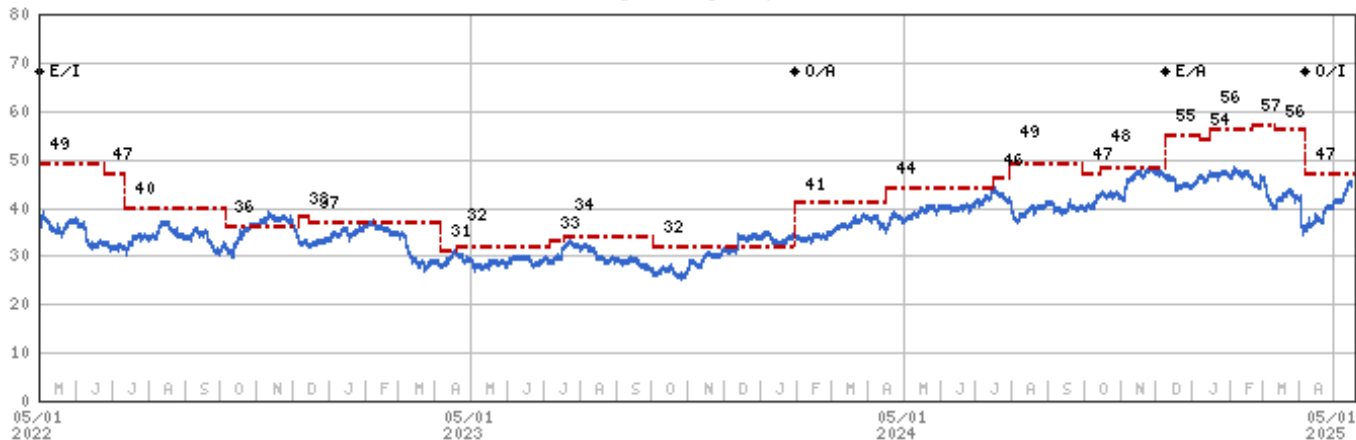
In-Line (I): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be in line with the relevant broad market benchmark, as indicated below.

Cautious (C): The analyst views the performance of his or her industry coverage universe over the next 12-18 months with caution vs. the relevant broad market benchmark, as indicated below.

Benchmarks for each region are as follows: North America - S&P 500; Latin America - relevant MSCI country index or MSCI Latin America Index; Europe - MSCI Europe; Japan - TOPIX; Asia - relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

Stock Price, Price Target and Rating History (See Rating Definitions)

Bank of America (BAC.N) - As of 05/18/25 GMT in USD
Industry : Large Cap Banks



Stock Rating History: 5/1/20 : O/I; 11/30/20 : U/A; 3/28/22 : E/I; 1/30/24 : O/A; 12/9/24 : E/A; 4/7/25 : O/I

Price Target History: 3/26/20 : 23; 6/25/20 : 24; 11/30/20 : 34; 1/20/21 : 36; 3/1/21 : 38; 7/29/21 : 42; 12/6/21 : 49; 1/20/22 : 51; 3/28/22 : 49; 6/24/22 : 47; 7/12/22 : 40; 10/5/22 : 36; 12/6/22 : 38; 12/15/22 : 37; 4/5/23 : 31; 4/19/23 : 32; 7/7/23 : 33; 7/19/23 : 34; 10/3/23 : 32; 1/30/24 : 41; 4/16/24 : 44; 7/17/24 : 46; 7/30/24 : 49; 9/30/24 : 47; 10/15/24 : 48; 12/9/24 : 55; 1/7/25 : 54; 1/16/25 : 56; 2/20/25 : 57; 3/12/25 : 56; 4/7/25 : 47

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target --- No Price Target Assigned (NA)

Stock Price (Not Covered by Current Analyst) — Stock Price (Covered by Current Analyst) —

Stock and Industry Ratings (abbreviations below) appear as ♦ Stock Rating/Industry View

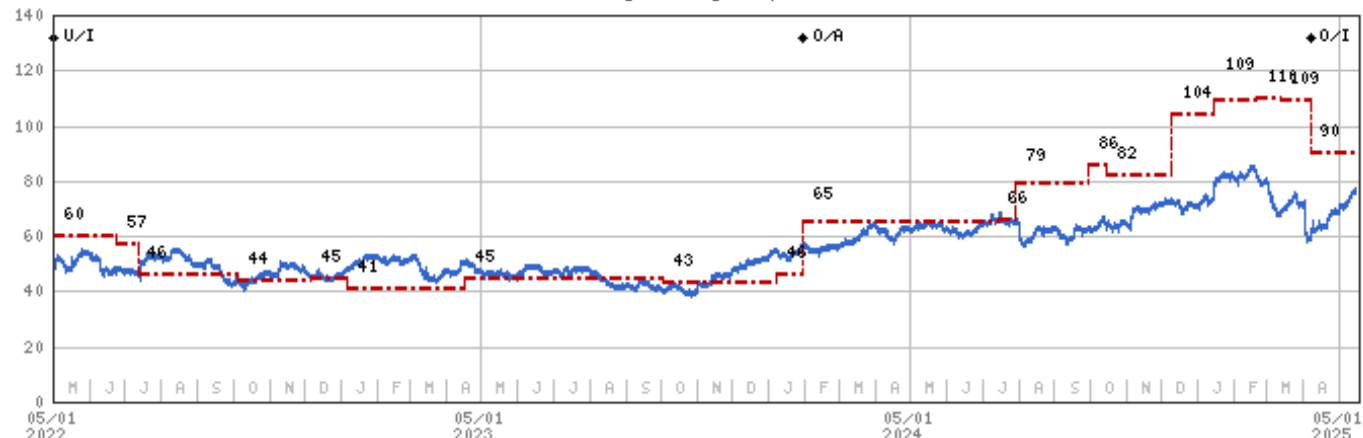
Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) No Rating Available (NA)

Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

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Citigroup Inc. (C.N) - As of 05/18/25 GMT in USD
Industry : Large Cap Banks



Stock Rating History: 5/1/20 : 0/I; 11/30/20 : 0/A; 12/6/21 : E/A; 3/28/22 : U/I; 1/30/24 : 0/A; 4/7/25 : 0/I

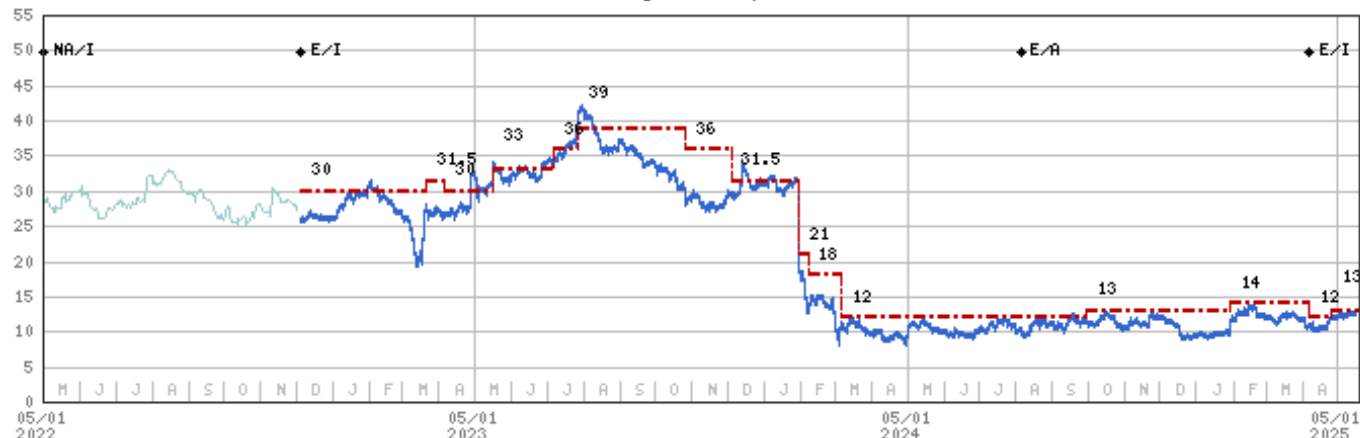
Price Target History: 4/16/20 : 59; 6/25/20 : 61; 9/15/20 : 58; 11/30/20 : 79; 3/1/21 : 81; 4/13/21 : 89; 7/29/21 : 91; 12/6/21 : 82; 1/18/22 : 75; 3/28/22 : 60; 6/24/22 : 57; 7/12/22 : 46; 10/5/22 : 44; 12/6/22 : 45; 1/6/23 : 41; 4/17/23 : 45; 10/3/23 : 43; 1/8/24 : 46; 1/30/24 : 65; 7/15/24 : 66; 7/30/24 : 79; 9/30/24 : 86; 10/15/24 : 82; 12/3/24 : 104; 1/15/25 : 109; 2/20/25 : 110; 3/12/25 : 109; 4/7/25 : 90

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target --- No Price Target Assigned (NA)
Stock Price (Not Covered by Current Analyst) — Stock Price (Covered by Current Analyst) —
Stock and Industry Ratings (abbreviations below) appear as ♦ Stock Rating/Industry View
Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) No Rating Available (NA)
Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

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Flagstar Financial Inc (FLG.N) - As of 05/18/25 GMT in USD
Industry : Midcap Banks



Stock Rating History: 5/1/20 : U/I; 11/6/20 : E/I; 4/26/21 : NA/I; 7/22/21 : NA/I; 8/4/21 : NA/I; 1/10/22 : NA/I; 12/5/22 : E/I; 8/5/24 : E/A; 4/7/25 : E/I

Price Target History: 4/7/20 : 29.25; 5/6/20 : 31.5; 6/8/20 : 33; 10/2/20 : 31.5; 11/3/20 : 30; 11/6/20 : 28.5; 12/7/20 : 34.5; 1/7/21 : 37.5; 2/24/21 : 39; 3/18/21 : 42; 4/26/21 : NA; 7/22/21 : NA; 8/4/21 : NA; 1/10/22 : NA; 12/5/22 : 30; 3/21/23 : 31.5; 4/5/23 : 30; 5/16/23 : 33; 7/7/23 : 36; 7/27/23 : 39; 10/26/23 : 36; 12/4/23 : 31.5; 1/31/24 : 21; 2/7/24 : 18; 3/6/24 : 12; 9/30/24 : 13; 1/30/25 : 14; 4/7/25 : 12; 4/25/25 : 13

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target -- No Price Target Assigned (NA)

Stock Price (Not Covered by Current Analyst) — Stock Price (Covered by Current Analyst) —

Stock and Industry Ratings (abbreviations below) appear as ♦ Stock Rating/Industry View

Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) No Rating Available (NA)

Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

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Effective January 13, 2014, the industry view benchmarks for Morgan Stanley Asia Pacific are as follows: relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

Valley National Bancorp (VLY.0) - As of 05/18/25 GMT in USD
Industry : Midcap Banks



Stock Rating History: 5/1/20 : E/I; 9/23/21 : NA/I; 12/10/21 : NA/I; 1/10/22 : NA/I; 1/18/22 : NA/I; 12/5/22 : E/I; 9/27/23 : U/I; 8/5/24 : E/A; 4/7/25 : E/I

Price Target History: 4/7/20 : 9; 5/6/20 : 9.75; 6/8/20 : 10.5; 8/4/20 : 9.75; 11/3/20 : 9.25; 12/7/20 : 11.25; 1/7/21 : 12; 2/24/21 : 13.5; 3/18/21 : 14.75; 5/3/21 : 15.25; 9/23/21 : NA; 12/10/21 : NA; 1/10/22 : NA; 1/18/22 : NA; 12/5/22 : 14; 1/27/23 : 13; 4/5/23 : 9; 5/16/23 : 8; 9/27/23 : 8.5; 2/7/24 : 9; 4/4/24 : 8; 8/5/24 : 9.5; 9/30/24 : 10; 11/18/24 : 12; 1/23/25 : 13; 3/13/25 : 12; 4/7/25 : 10

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target -- No Price Target Assigned (NA)

Stock Price (Not Covered by Current Analyst) — Stock Price (Covered by Current Analyst) —

Stock and Industry Ratings (abbreviations below) appear as ♦ Stock Rating/Industry View

Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) No Rating Available (NA)

Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

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INDUSTRY COVERAGE: Large Cap Banks

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/16/2025)
Betsy L. Graseck, CFA		
Bank of America (BAC.N)	O (04/07/2025)	\$44.69
BNY Mellon (BK.N)	O (12/09/2024)	\$90.07
Citigroup Inc. (C.N)	O (01/30/2024)	\$75.72
Goldman Sachs Group Inc (GS.N)	E (04/07/2025)	\$619.03
JPMorgan Chase & Co (JPM.N)	E (09/30/2024)	\$267.56
Northern Trust Corp. (NTRS.O)	U (04/07/2025)	\$107.90
PNC Financial Services (PNC.N)	U (12/06/2021)	\$179.42
Regions Financial Corp (RF.N)	E (12/09/2024)	\$22.59
State Street Corporation (STT.N)	O (12/09/2024)	\$98.29
Truist Financial Corp (TFC.N)	E (01/07/2018)	\$41.40
U.S. Bancorp (USB.N)	O (09/30/2024)	\$44.92
Wells Fargo & Co. (WFC.N)	O (12/06/2021)	\$76.18

Stock Ratings are subject to change. Please see latest research for each company.

* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Midcap Banks

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/16/2025)
Brian Wilczynski, CFA		
Atlantic Union Bankshares (AUB.N)	E (04/09/2025)	\$30.96
UMB Financial Corp (UMBF.O)	O (11/21/2024)	\$107.05
Manan Gosalia		
Bank Ozk (OZK.O)	E (12/05/2022)	\$46.93
Cadence Bank (CADE.N)	O (09/30/2024)	\$31.82
Citizens Financial Group, Inc (CFG.N)	E (12/04/2023)	\$41.82
Comerica Inc (CMA.N)	U (04/07/2025)	\$58.79
Commerce Bancshares Inc (CBSH.O)	E (04/07/2025)	\$65.63
Cullen/Frost Bankers (CFR.N)	U (08/05/2024)	\$131.14
East West Bancorp, Inc. (EWBC.O)	E (04/07/2025)	\$95.50

Fifth Third Bancorp (FITB.O)	E (03/28/2022)	\$39.64
Flagstar Financial Inc (FLG.N)	E (12/05/2022)	\$12.62
Huntington Bancshares (HBAN.O)	O (12/05/2022)	\$16.18
KeyCorp (KEY.N)	E (04/07/2020)	\$16.63
M&T Bank Corp. (MTB.N)	O (04/21/2022)	\$187.73
Merchants Bancorp (MBIN.O)	E (09/09/2024)	\$33.37
Prosperity Bancshares Inc (PB.N)	O (08/05/2024)	\$72.59
Synovus Financial Corp. (SNV.N)	E (12/05/2022)	\$49.47
Valley National Bancorp (VLY.O)	E (08/05/2024)	\$9.16
Webster Financial Corp (WBS.N)	E (08/05/2024)	\$52.90
Zions Bancorporation NA (ZION.O)	E (09/30/2024)	\$49.22

Stock Ratings are subject to change. Please see latest research for each company.

* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Midcap Advisors

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/16/2025)
Ryan Kenny, CFA		
Evercore Inc (EVR.N)	E (04/07/2025)	\$241.58
Houlihan Lokey Inc (HLI.N)	O (03/12/2025)	\$180.81
Jefferies Financial Group Inc (JEF.N)	E (04/07/2025)	\$52.70
Lazard Inc (LAZ.N)	U (04/07/2025)	\$46.36
Moelis & Co (MC.N)	U (03/12/2025)	\$61.47
SEI Investments Company (SEIC.O)	O (04/07/2025)	\$85.38

Stock Ratings are subject to change. Please see latest research for each company.

* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Consumer Finance

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/16/2025)
Jeffrey Adelson, CFA		
Ally Financial Inc (ALLY.N)	O (02/08/2024)	\$36.03
American Express Company (AXP.N)	E (02/08/2024)	\$299.72
Bread Financial Holdings, Inc. (BFH.N)	U (04/07/2025)	\$53.95
Capital One Financial Corporation (COF.N)		\$197.22
Discover Financial Services (DFS.N)		\$200.05
Navient Corp (NAVI.O)	E (12/01/2022)	\$13.76
Rocket Cos Inc (RKT.N)	++	\$13.24
SLM Corp (SLM.O)	O (04/05/2023)	\$33.69
SoFi Technologies, Inc. (SOFI.O)	U (01/31/2024)	\$13.92
Synchrony Financial (SYF.N)	E (04/07/2025)	\$60.80
UWM Holdings Corp (UWMC.N)	O (04/07/2025)	\$4.33

Stock Ratings are subject to change. Please see latest research for each company.

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