



# CaITRUST

July 25, 2018



BLACKROCK®

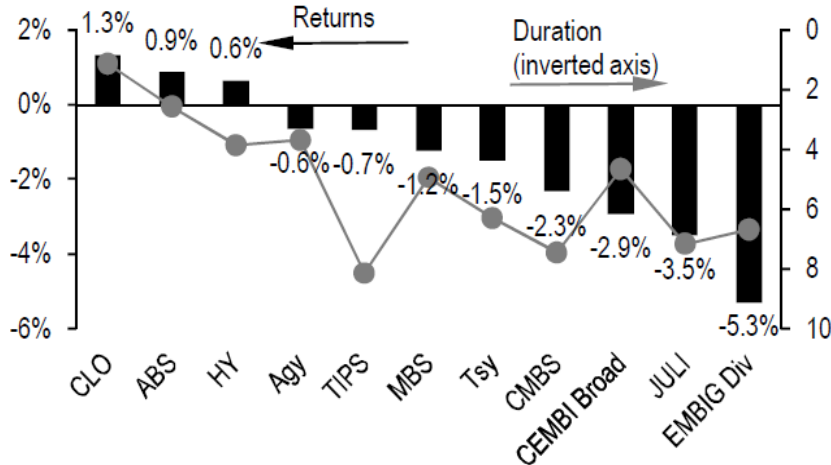
# Market Review

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# Overview

- June Non-Farm Payroll:** U.S. non-farm payroll data for June showed another strong print with 213k, handily beating the 195k estimate. The biggest surprise of the June jobs report was the participation report, which jumped to 62.9% from 62.7% the previous month, suggesting that the U.S. economy is still absorbing sidelined workers. To further underline this development, the unemployment rate moved up to 4% from 3.8%.
- Federal Reserve:** The Federal Open Market Committee (FOMC or Fed) at its June meeting raised its benchmark interest rate by 25 basis points (bps), its second rate hike this year and the third since December 2017, bringing the Fed Funds Rate to a range of 1.75% to 2.00%. The Fed's outlook for the economy remains quite positive as it raised the 2018 and 2019 median dots for projected rates moving up 25 bps, to 2.375% in 2018, and 3.125% in 2019. The FOMC collectively moved its expected growth rate for 2018 up by 0.1% to 2.8% and raised its core inflation forecast from 1.9% to 2%.
- Tariffs:** The trade tensions have further intensified over the past few weeks, as the U.S. and its trading partners already put tariffs or are in the process of doing so for a total of \$165bn of imports. The U.S. imposed 25% duties on \$34bn of imported goods from China in a first of possible series of increases that President Trump says could affect up to \$550bn of Chinese goods. China shipped \$506bn in goods to the U.S. last year.
- U.S. Treasury Yields:** The risk-off appetite continues to dominate the U.S. rates market with the 10-year U.S. Treasury yield rallying to 2.82% and the 2s10s spread reaching 33 bps, a near 11-year low.

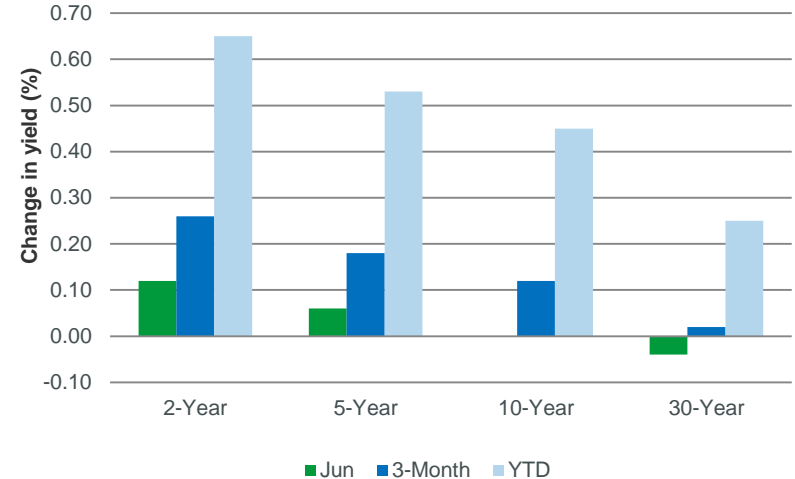
Shorter-duration sectors have outperformed year-to-date, while longer-duration sectors have generally underperformed



See appendix page 30 for information on economic data sources. **Past performance is not a reliable indicator of future results.**

Source: JPMorgan. Report as of 22 June, 2018.

Since the meeting of the FOMC in mid-June, the U.S. Treasury yield curve flattened further to a near 11-year low



**The figures shown relate to past performance. Past Performance is not a reliable indicator of future results and should not be the sole factor of consideration when selecting a product or strategy.**

Source: Bloomberg. Data as of June 30, 2018.

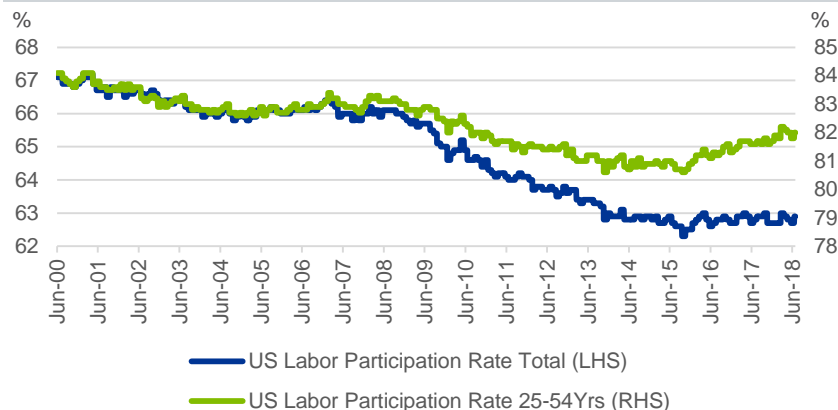
# U.S. Economy

## Continued Strength in Labor Market Accompanied by Rising Price Pressures

The performance of the U.S. economy appeared robust relative to the Eurozone and Asia throughout most of Q2 with strong labor market data and sufficient inflationary pressure to keep the Fed on the path to higher front end yields.

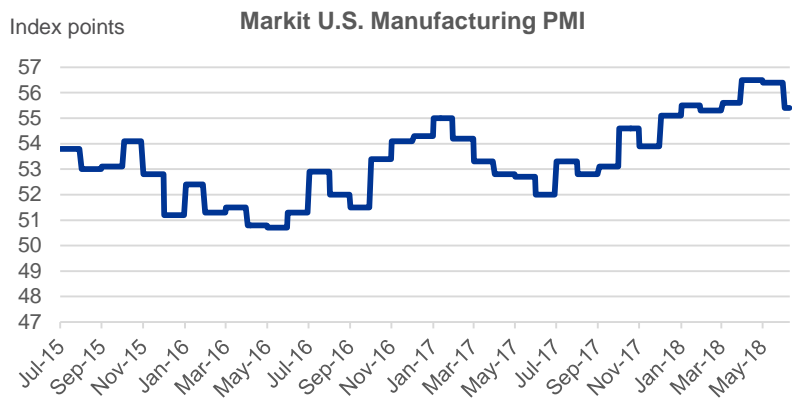
- **Labor Market:** Payrolls in Q2 continued to exhibit strength with a +200k monthly average. Unemployment moved up slightly to 4.0% but this was largely due to improvements in the participation rate. Despite the tight labor market, wage gains continue to be gradual. One potential explanation could be the continued low level of overall participation in the labor market reflective of the aging population. Prime age workers are exhibiting significantly better participation than older peers.
- **Inflation:** Inflation releases for May reflected continued rising price pressures. While goods prices moderated, housing and medical costs have been consistently strong.
- **Manufacturing Sentiment:** A weaker outlook for new orders and exports orders, perhaps reflective of trade tensions and the stronger dollar, resulted in softer business sentiment with similar outcomes reflected globally in Q2.

Despite rising participation rates among prime age workers, overall participation rates have been anchored by demographics



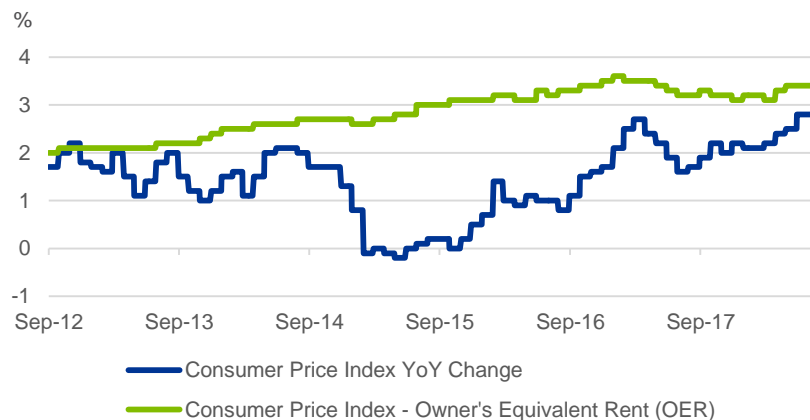
Source: BEA, Bloomberg. Graph by BlackRock. Data as of July 6, 2018.

Manufacturing PMIs in the U.S. exhibited a softer tone throughout much of Q2



Source: Markit. Bloomberg. Graph by BlackRock. Data as of 2 July, 2018. See appendix page 30 for information on economic data sources.

Owners equivalent rent and medical costs have been among the leading drivers of inflation pressure in the US



Source: BLS, Bloomberg. Graph by BlackRock. Data as of 12 June, 2018.

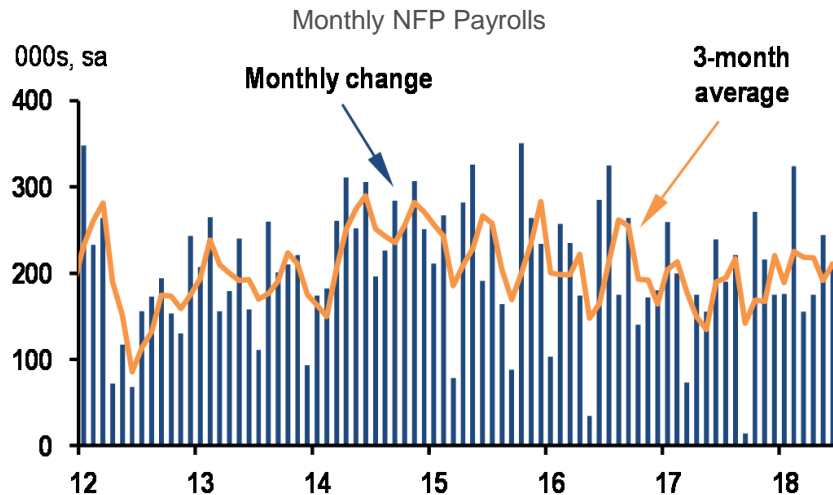
# U.S. Labor Market

## As sidelined workers enter the workforce, slack still apparent as market tightens

The June non-farm payroll posted its second consecutive monthly print of +200k and upward revisions of two months' job figures of 37k moved the 3-month average monthly gain for 2018 to 213k.

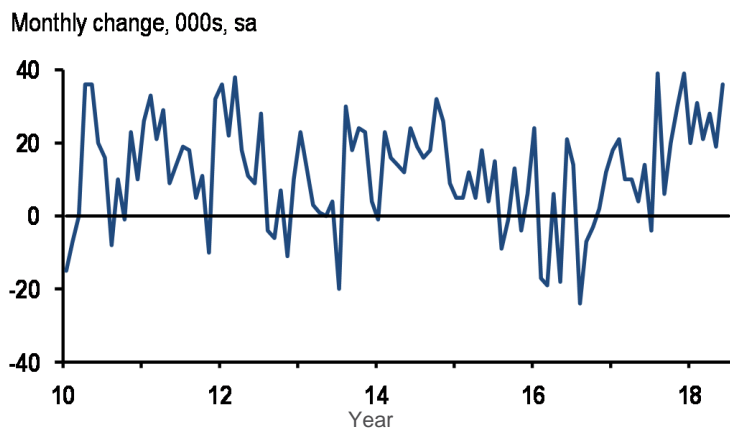
- **Participation/Unemployment Rate:** With the participation rate rising to 62.9% from 62.7%, it appears that there is still slack in the U.S. job market as sidelined workers enter the workforce. Similar to the participation rate, the unemployment rate rose to 4% from 3.8% the previous month.
- **Wage Growth:** Sidelined workers are still entering the U.S. jobs market which caused wages to remain somewhat subdued with a monthly rise of 0.2% (estimate 0.3%), bringing the annualized rise to 2.7%.
- **Fed's Gradual Pace Remains in Tact:** Overall the report is good news insofar as it suggests the economy still has some capacity to grow at an above-trend pace without generating much inflationary pressure. It also could ease concerns by the hawks within the Fed who may have seen the gradual pace as too slow.
- **Industries/Diffusion Index:** The diffusion index remained elevated, as 65.5% of private industries increased employment last month. The manufacturing industry posted robust hiring with 36k jobs added in June.

With the additional upward revision of 37k for the prior two months, the three-month average rose to 213k



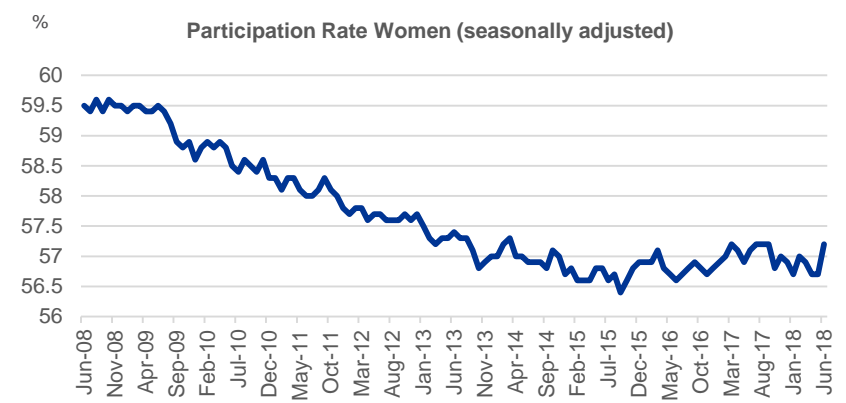
Source: BLS, JPMorgan. Report as of 6 July, 2018.

Despite concerns of a potential trade war, manufacturers have added 36k jobs in June, bringing the 2018 number to 160k



Source: BLS, JPMorgan. Report as of 6 July, 2018.

The rise in the participation rate in June was mainly driven by the re-entry of women into the labor force



Source: Chart by BlackRock using data from BLS. Data as of 6 July, 2018. See appendix page 30 for information on economic data sources.

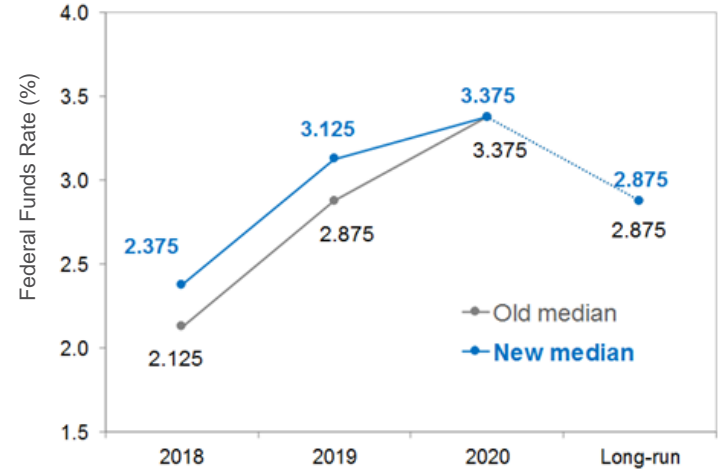
# Federal Open Market Committee (FOMC)

## With economic outlook positive, Fed steepens rate hike path for 2018 and 2019

As expected, the FOMC raised its benchmark interest rates by 25 bps to a range of 1.75% to 2%, the third quarterly rate hike since December 2017. Chairman Powell sounded upbeat about the economy which was reflected by the steeper rate path for 2018 and 2019.

- **Median Dots for 2018 and 2019:** With only one voting member shy to add a fourth rate hike for 2018, the bar was rather low for this adjustment. Somewhat surprising, however, was the added rate increase for 2019 from two to three rate increases.
- **Summary of Economic Projections (SEPs):** Since the unemployment rate already reached the Fed’s forecast for all of 2018 at 3.8%, the FOMC lowered its estimate for this year to 3.6%. Similarly, with Personal Consumption Expenditure (PCE) hovering close to 2% in May, the Fed has also increased its inflation forecast to 2% for this year. Lastly, given the possible tailwind from fiscal policies, the Fed raised its real GDP estimate to 2.8% from 2.7%.
- **Fed June Minutes:** There was little surprise in the subsequent Fed minutes, which showed a Committee comfortable with the steeper rate path. The Committee still sees a gradual raise in interest rates to a setting that may be “somewhat above” the longer-run level.

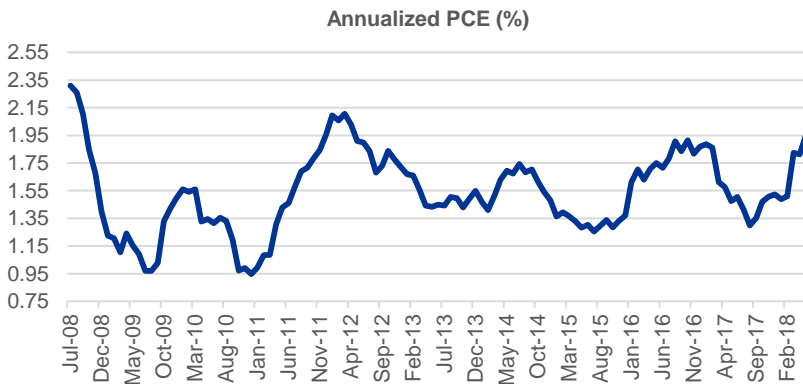
Given the positive outlook on the U.S. economy, the FOMC effectively steepened its rate path for this year and next



Source: Federal Reserve. Data as of June 13, 2018.

The Committee also pointed to trade policy risks that could impede business sentiment, which dropped since 2017

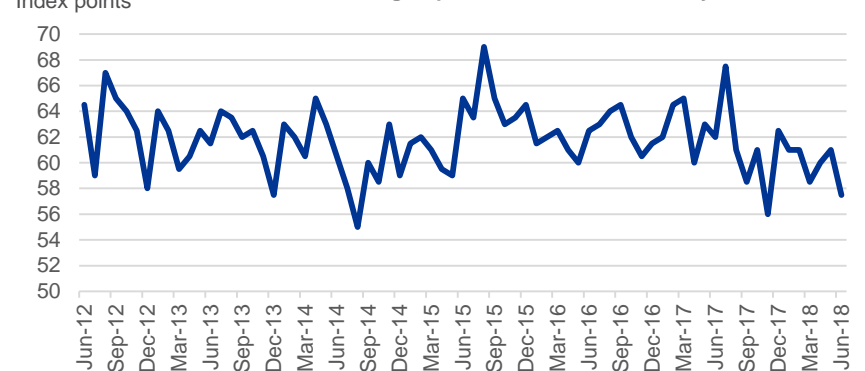
PCE Index, the Fed’s preferred indicator, closed in on 2% for the first time since 2012



Source: BEA. Graph from BlackRock. Data as of 29 June, 2018.

See appendix page 30 for information on economic data sources

ISM Non-Manufacturing Report on Business Inventory Sentiment



Source: ISM. Data as of 5 July, 2018

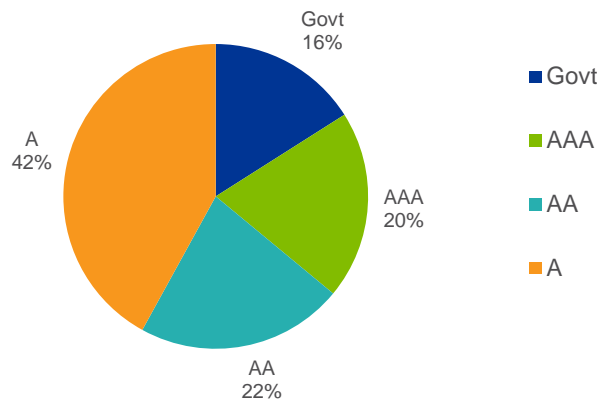
# Portfolio Review

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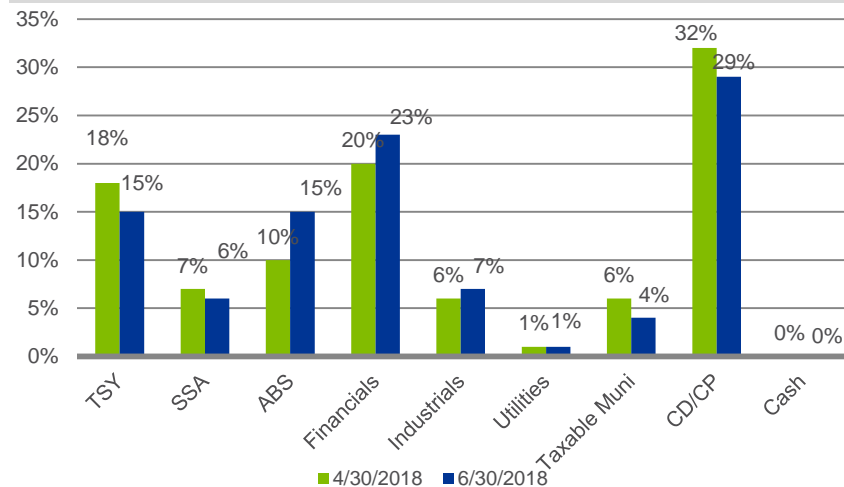
# CalTRUST Short Term Bond Fund Portfolio Composition

June 2018

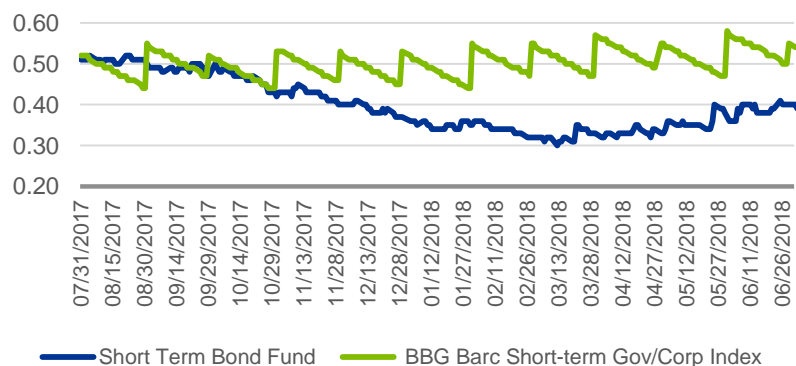
## Credit Quality (% NAV)



## Sector Allocation (%NAV)



## Portfolio duration vs. benchmark (Years)



## Portfolio characteristics

	Portfolio	Benchmark	Difference
Effective Duration (yrs.)	0.40	0.55	-0.15
Spread Duration (yrs.)	0.70	0.16	0.54
Convexity	0.00	0.01	-0.01
Gross Yield (%)	2.43	2.28	0.15
Avg Credit Qual (Mdy/S&P)	Aa3/AA-	Aa1/AA	-
Floating Rate Bonds (%)	42%	-	-

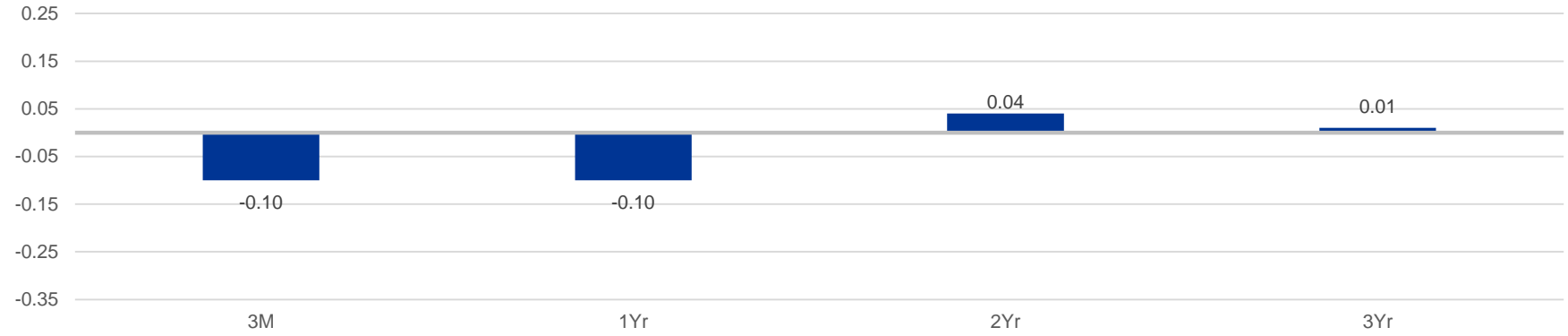
Source: BlackRock



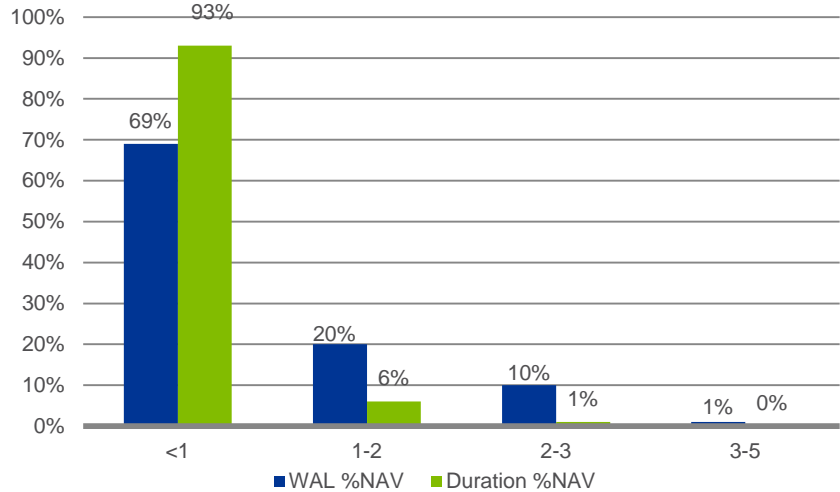
# CalTRUST Short Term Bond Fund Positioning

June 2018

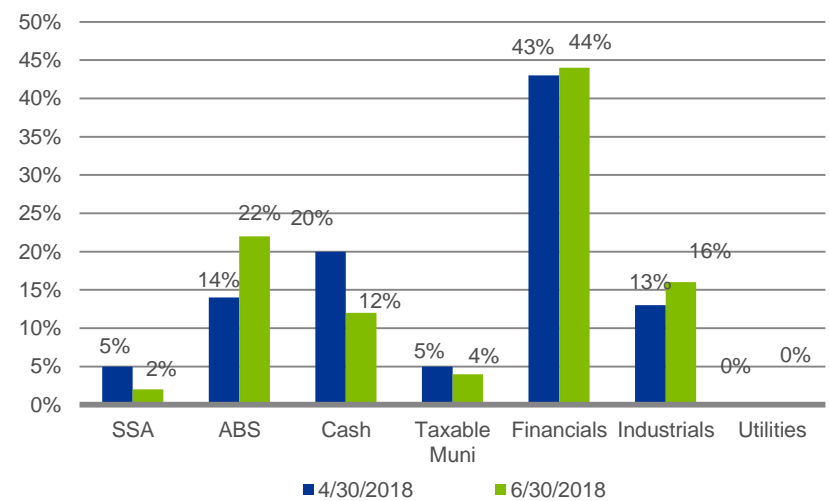
## Active Portfolio Yield Curve Positioning (years)



## Effective Duration and WAL Breakdown (% NAV)



## Spread Duration Change (% NAV)

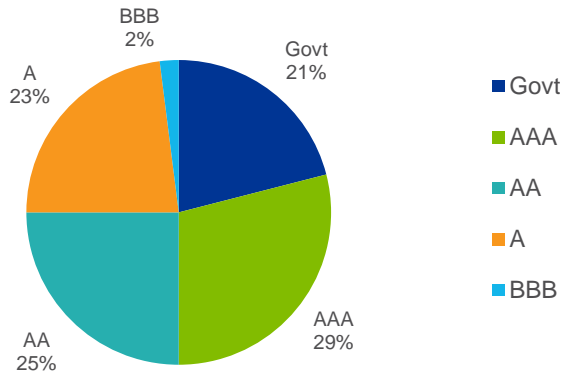


Source: BlackRock

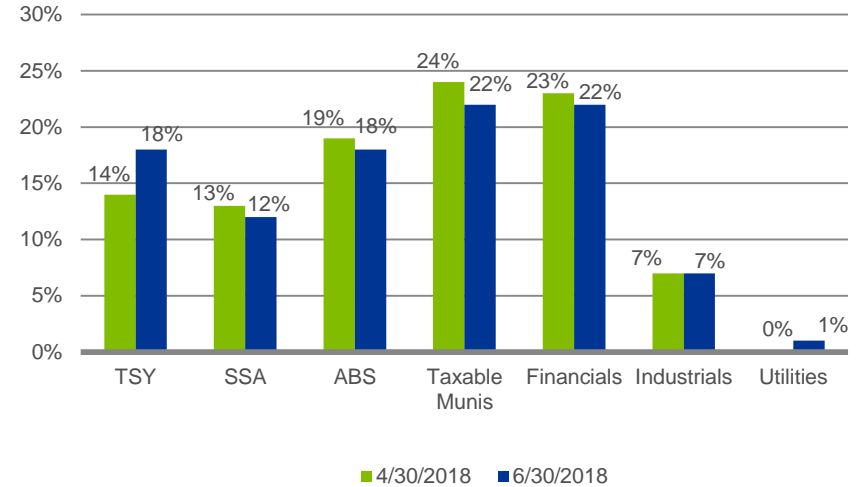
# CalTRUST Medium Term Bond Fund Portfolio Composition

June 2018

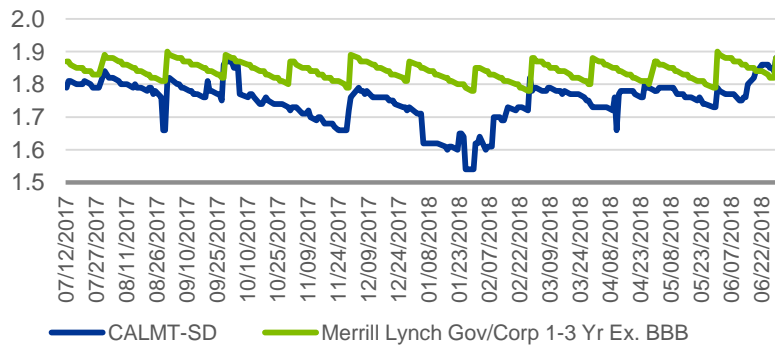
## Credit Quality (% NAV)



## Sector Allocation (%NAV)



## Portfolio duration vs. benchmark (Years)



## Portfolio characteristics

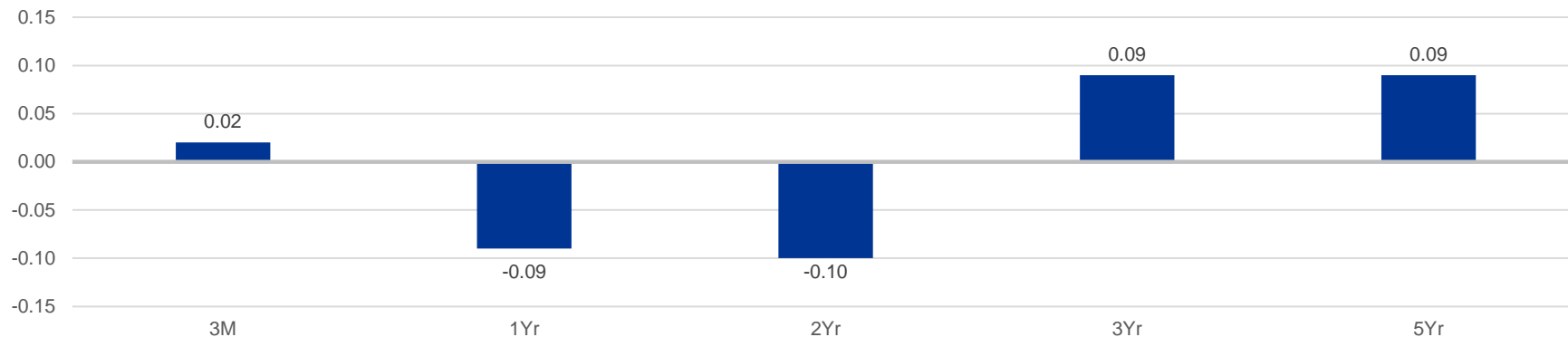
	Portfolio	Benchmark	Difference
Effective Duration (yrs.)	1.88	1.88	0.00
Spread Duration (yrs.)	1.46	0.62	0.84
Convexity	0.04	0.05	-0.01
Gross Yield (%)	2.83	2.66	0.17
Avg Credit Qual (Mdy/S&P)	Aa2/AA	Aa1/AA	-
Floating Rate Bonds (%)	6%	-	-

Source: BlackRock

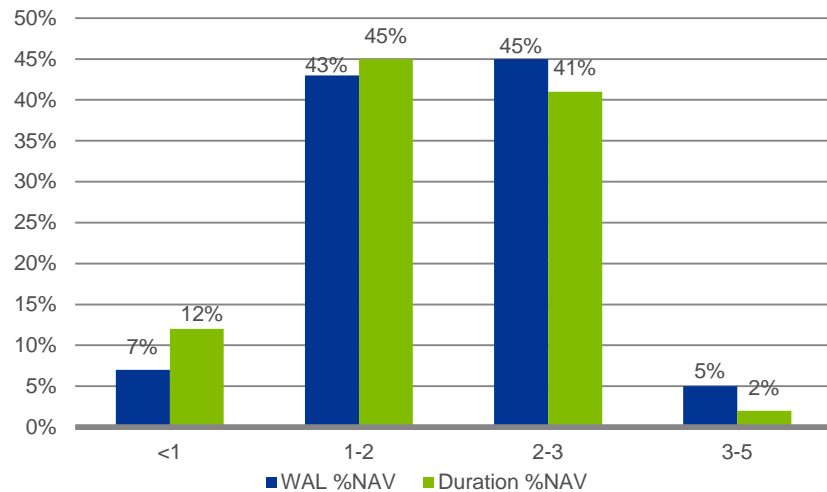
# CalTRUST Medium Term Bond Fund Positioning

June 2018

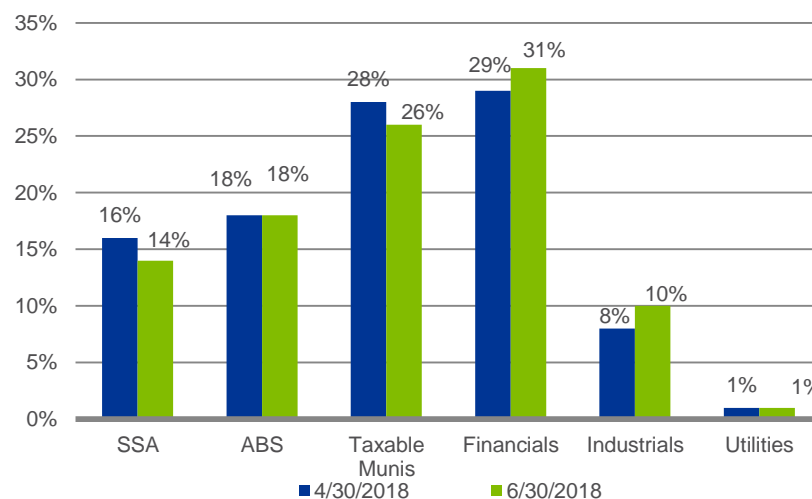
## Active Portfolio Yield Curve Positioning (years)



## Effective Duration and WAL Breakdown (% NAV)



## Spread Duration (% NAV)

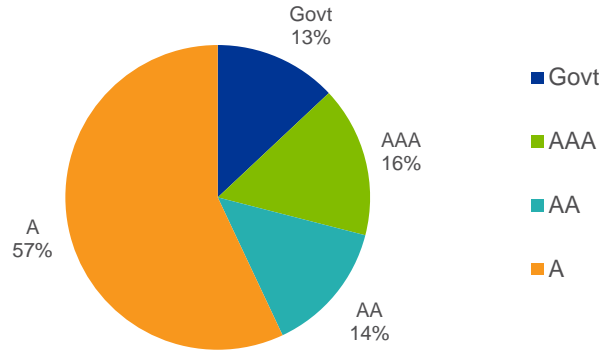


Source: BlackRock

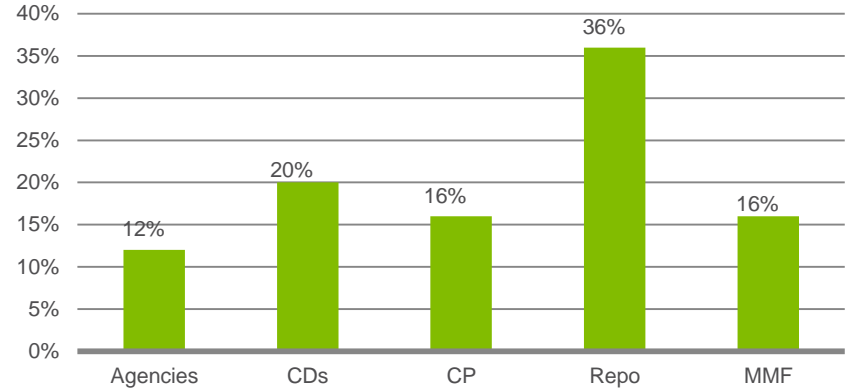
# CalTRUST Liquidity Fund Portfolio Composition

July 18, 2018

## Credit Quality (% NAV)



## Sector Allocation (%NAV)



■ 6/30/2018

## Portfolio characteristics

	Portfolio	Benchmark	Difference
Effective Duration (yrs.)	0.08	0.19	-0.11
Spread Duration (yrs.)	0.18	0.00	0.18
Convexity	0.00	0.00	0.00
Gross Yield (%)	2.04	1.90	0.14
Avg Credit Qual (Mdy/S&P)	Aa1/AA	Aaa/AA	-
Floating Rate Bonds (%)	15%	-	-

Source: BlackRock

# BlackRock Liquidity Funds

## TempFund Institutional: TMPXX

Institutional | Prime | Floating Net Asset Value

The Fund seeks as high a level of current income as is consistent with liquidity and stability of principal. The portfolio primarily invests in first-tier securities, which may include domestic and foreign corporate obligations, domestic bank obligations, securities issued or guaranteed by the US government or its agencies, and fully collateralized repurchase agreements.

### Fund Details

Size of Fund*	\$11,312.7 million
Share Class Inception Date	October 10, 1973
Minimum Investment	\$3 million
Trading Deadline	8:00 AM/ 12:00 PM/ 3:00 PM (ET)
Weighted Average Maturity <sup>1</sup>	27 Days
Weighted Average Life <sup>2</sup>	69 Days
7 Day SEC Yield <sup>3</sup>	2.06%
30 Day Yield <sup>4</sup>	1.99%
Gross Expense Ratio <sup>5</sup>	0.22%
Net Expense Ratio <sup>5</sup>	0.18%
CUSIP	09248U619
Rating <sup>6</sup>	AAAm; Aaa-mf (S&P; Moody's)

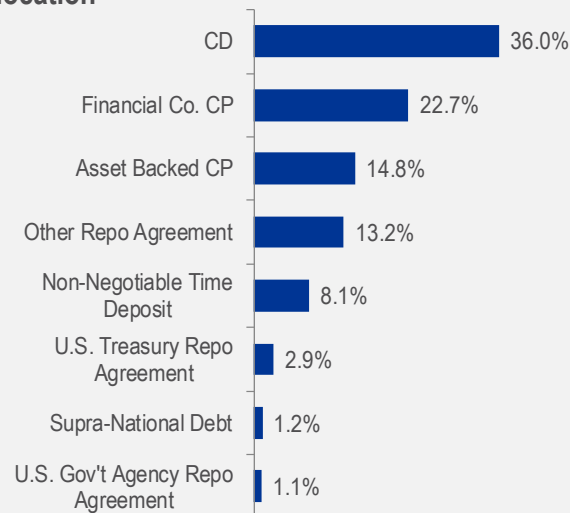
Source: BlackRock, Inc.

\* Assets under management are reflective of all shares available for investment.

### % Net Total Return<sup>7</sup> (Period Ending 6/30/18)

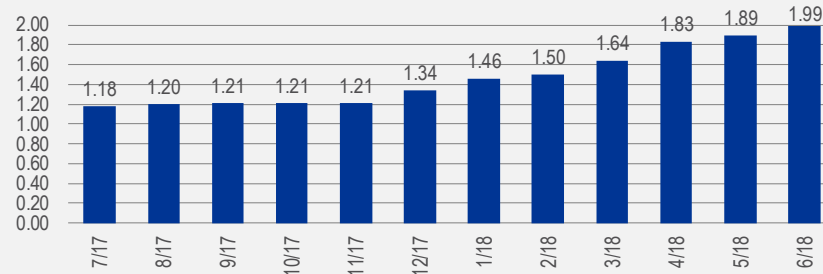
1 Year	3 Year	5 Year	10 Year
1.47	0.84	0.53	0.49

### Asset Allocation



Source: BlackRock, Inc.

### Performance (30 Day Yields%)



Source: BlackRock, Inc.

**Information as of June 30, 2018, unless otherwise noted.** Performance data represents past performance and does not guarantee future results. Current performance may be lower or higher than the performance data quoted. Please see Important Notes at the end of this presentation for footnote disclosures. Ratings by S&P and Moody's apply to the credit quality of a portfolio and are not a recommendation to buy, sell or hold securities of a fund, are subject to change and do not remove market risks associated with investments in the fund. For complete information on the methodology used by each rating agency, please visit the following websites. S&P: [http://www.standardandpoors.com/en\\_US/web/quest/article/-/view/sourceId/504352](http://www.standardandpoors.com/en_US/web/quest/article/-/view/sourceId/504352); Moody's: [https://www.moody.com/researchdocumentcontentpage.aspx?docid=PBC\\_79004](https://www.moody.com/researchdocumentcontentpage.aspx?docid=PBC_79004)

# BlackRock Liquidity Funds

## FedFund Institutional: TFDXX

Institutional | Government | Constant Net Asset Value

The Fund seeks current income as is consistent with liquidity and stability of principal. FedFund invests at least 99.5% of its total assets in cash, U.S. Treasury bills, notes and other obligations issued or guaranteed as to principal and interest by the U.S. Government, its agencies or instrumentalities, and repurchase agreements secured by such obligations or cash.

### Fund Details

Size of Fund*	\$96,452.1 million
Share Class Inception Date	October 1, 1975
Minimum Investment	\$3 million
Trading Deadline	5:00 PM (ET)
Weighted Average Maturity <sup>1</sup>	34 Days
Weighted Average Life <sup>2</sup>	90 Days
7 Day SEC Yield <sup>3</sup>	1.80%
30 Day Yield <sup>4</sup>	1.73%
Gross Expense Ratio <sup>5</sup>	0.19%
Net Expense Ratio <sup>5</sup>	0.17%
CUSIP	09248U700
Rating <sup>6</sup>	AAAm; Aaa-mf (S&P; Moody's)

Source: BlackRock, Inc.

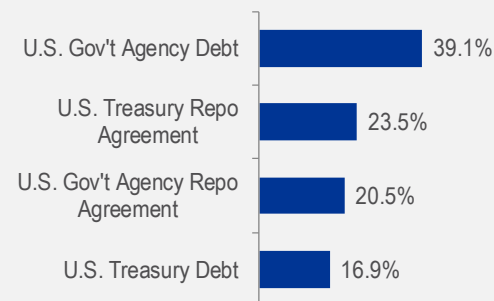
\* Assets under management are reflective of all shares available for investment.

This Fund fits an exemption from that rule which permits a state regulated insurance company to report shares of this fund as debt. Representatives of state regulated insurance companies should contact the NAIC's Securities Valuation Office for further information on the criteria for listing on the U.S. Direct Obligations/Full Faith and Credit Exempt List ([http://www.naic.org/prod\\_serv/MMF-ZS-18-06.pdf](http://www.naic.org/prod_serv/MMF-ZS-18-06.pdf)).

### % Net Total Return<sup>7</sup> (Period Ending 6/30/18)

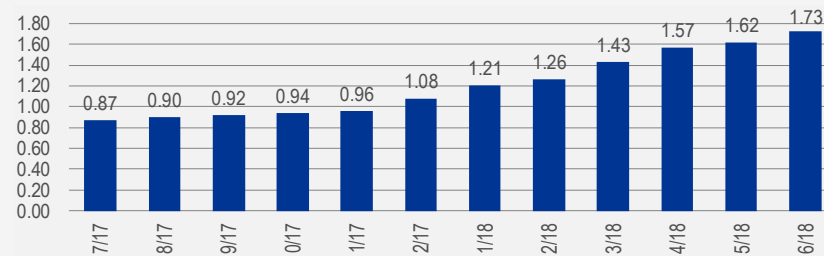
1 Year	3 Year	5 Year	10 Year
1.21	0.60	0.36	0.30

### Asset Allocation



Source: BlackRock, Inc.

### Performance (30 Day Yields%)

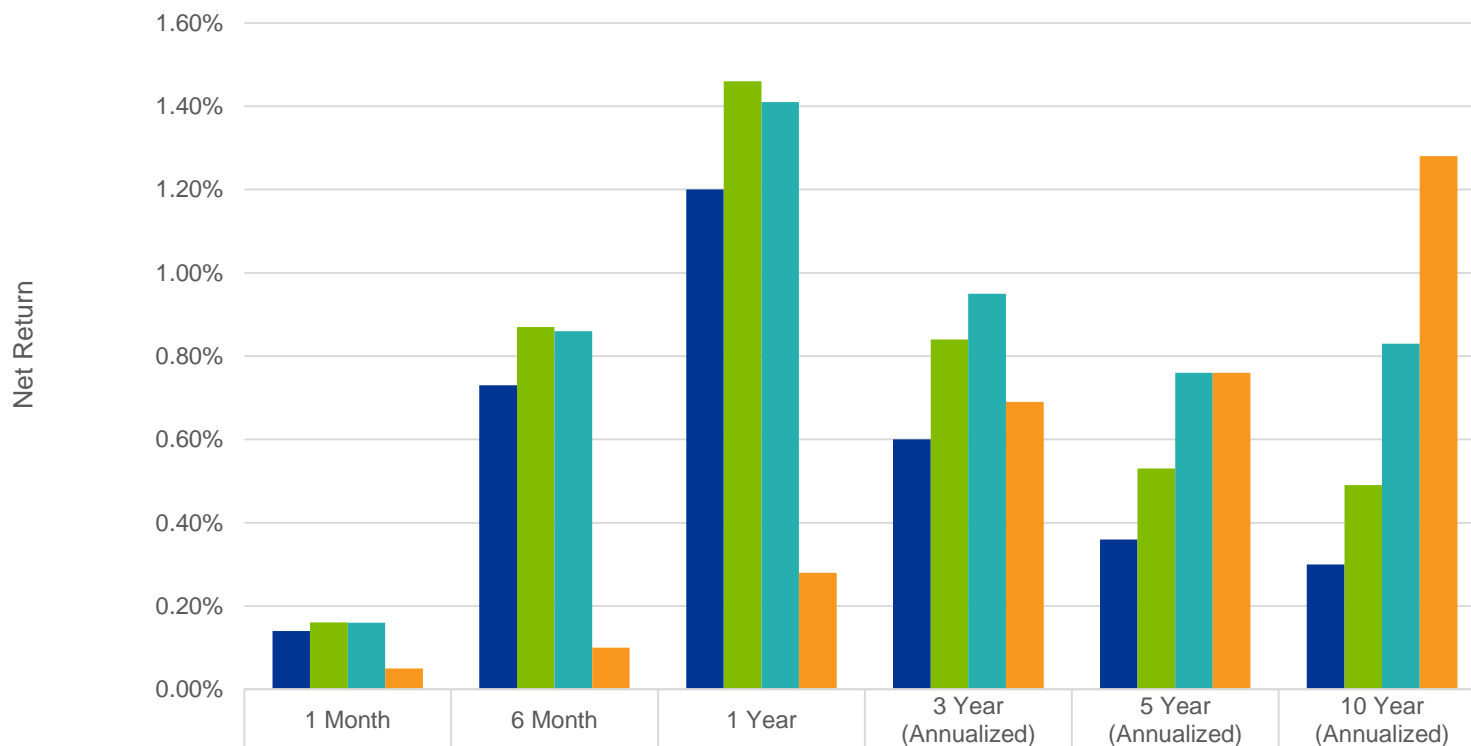


Source: BlackRock, Inc.

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Moody's: [https://www.moody.com/researchdocumentcontentpage.aspx?docid=PBC\\_79004](https://www.moody.com/researchdocumentcontentpage.aspx?docid=PBC_79004)

# CalTRUST Portfolio Performance | June 30, 2018



■ BlackRock Liquidity:FedFund Inst	0.14%	0.73%	1.20%	0.60%	0.36%	0.30%
■ BlackRock Liquidity:TempFund Inst	0.16%	0.87%	1.46%	0.84%	0.53%	0.49%
■ CalTrust Short Term Fund	0.16%	0.86%	1.41%	0.95%	0.76%	0.83%
■ CalTrust Medium Term Fund	0.05%	0.10%	0.28%	0.69%	0.76%	1.28%

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Source: Gemini Fund Services, and performance information for the Money Market funds was provided by iMoneyNet, Inc. (formerly IBC Financial Data, Inc.). No representation is made that the information gathered from iMoneyNet, Inc. (formerly IBC Financial Data) is accurate or complete. Performance information is net management fees.

# Credit Research Process

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## Short-Term Credit Markets

- During the financial crisis, various supervisory authorities concluded that banks were undercapitalized leading up to 2007.
- Many supervisory authorities suggest that capital standards needed to be raised materially to address the leveraged and interconnected nature of banks around the world.

### Summary of Short-Term Credit Markets



**Short-Term Credit Analysis**



**Bank Credit Ratings over time**



**Bank Capital Levels and Reserves**



**Credit Research Process**

# Short Term Credit Analysis Framework

## CAMELS ratings

(C) apital adequacy

(A) ssets

(M) anagement capability

(E) arnings

(L) iquidity

(S) ensitivity

→ This framework is used by many institutions to assess the condition of a bank.

→ All criteria are important. Liquidity, the ability of that issuer to pay you back, may be particularly important to short term investors.

## Dupont Model (ROE)

**Asset Turnover** (*Revenue/Total Assets*) x **Operating Margin** (*Net Income/Revenue*) x **Leverage** (*Total Assets/Net Worth*)

## Loan Types

- a) Asset conversion loans
- b) Asset protection loans
- c) Cash flow loans

## Cash Flow Timing Difference

## (C)apital Adequacy

Is the amount of Capital sufficient to absorb declines in asset value or future cash flow generated by those assets?

### Regulatory Capital Ratios

- *Common Equity Tier 1 Ratio = Risk-Weighted Assets/Common Equity*
- *Tier 1 capital is calculated as common equity tier 1 (CET1) capital plus additional Tier 1 capital (AT1)*
- *Total Capital Ratio: Tier 1 and Tier 2 Capital/Risk-Weighted Assets*

### Notional Capital Ratios

- *Tangible Common Equity to Total Assets*
- *Total Debt to Total Equity*

### JPMorgan Chase & Co in Millions of USD except Per Share

12 months ending	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	Current 07/18/2018
Risk-Weighted Assets	1,390,854.0	1,472,602.0	1,465,262.0	1,483,132.0	1,499,506.0	1,549,063.0
Book value	200,020.0	212,002.0	221,505.0	228,122.0	229,625.0	231,390.0
Total Capital	876,119.0	931,629.0	841,555.0	876,019.0	862,458.0	898,433.0
Tangible Common Equity Ratio	6.35%	6.46%	7.52%	7.37%	7.29%	7.20%
Total Debt to Total Equity Ratio	314.87%	301.45%	239.92%	244.63%	237.30%	248.96%

Source: Bloomberg

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# (A)sset Quality

## Asset Quality Parameters:

- Volume of problem of all assets
- Volume of overdue or rescheduled loans
- Ability of management to administer all the assets of the bank and to collect problem loans
- Large concentrations of loans and insiders loans, diversification of investments
- Loan portfolio management, written policies, procedures internal control
- Management Information System
- Loan Loss Reserves in relation to problem credits and other assets
- Growth of loans volume in relation to the bank's capacity

## Ratios:

JPMorgan Chase & Co in Millions of USD except Per Share						
12 months ending	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	Current 07/18/2018
<b>Non-Performing Loans:</b>						
Non-Performing Loans	8,540.0	7,133.0	6,429.0	6,883.0	5,943.0	5,310.0
Non-Performing Loans to Total Loans Ratio	1.16%	0.94%	0.77%	0.77%	0.64%	0.56%
<b>Delinquent Loans and Seriously Delinquent Loans:</b>						
Accruing Loans 90+ Day Past Due	1,965.0	1,500.0	1,338.0	1,011.0	1,277.0	1,520.0
<b>Loss Reserve to Non-Performing Loans:</b>						
Reserve for Loan Losses	16,264.0	14,185.0	13,555.0	13,776.0	13,604.0	13,250.0
Reserve for Loan Losses to Non-Performing Loans Ratio	190.44%	198.86%	210.84%	200.15%	228.91%	249.53%

Source: Bloomberg

Information as of June 18, 2018, unless otherwise noted. Performance data represents past performance and does not guarantee future results. Current performance may be lower or higher than the performance data quoted.

# (M)anagement Tactics and Strategy

## Considerations in reviewing Management:

- What business does the bank want to be in?
- How/where is their capital employed allocated?
- What return on invested capital (“ROIC”) do they require and what does management do when the hurdle rate is not met?
- Market share by segment
- Macro profile of the market they operate in

## Business banks operate in:

### JPMorgan Chase & Co in Millions of USD except Per Share

12 months ending	12/31/2014		12/31/2015		12/31/2016		12/31/2017	
Net Revenues	95,112.0	100.0%	95,543.0	100.0%	95,668.0	100.0%	99,624.0	100.0%
Consumer & Community Banking	44,368.0	45.3%	43,820.0	45.5%	45,151.0	45.2%	46,485.0	45.4%
Corporate & Investment Banking	34,595.0	35.3%	33,542.0	34.8%	35,216.0	35.3%	34,493.0	33.7%
Asset Management	12,028.0	12.3%	12,119.0	12.6%	12,045.0	12.1%	12,918.0	12.6%
Commercial Banking	6,882.0	7.0%	6,885.0	7.1%	7,453.0	7.5%	8,605.0	8.4%
Corporate	12.0		267.0		-487.0		1,140.0	

### Cost of Capital – Current Market Value <sup>1</sup>

	Weight	Cost	W x C
Equity	34.4%	11.3%	3.9%
Debt Cost (A-T)	63.0%	2.6%	1.6%
Preferred Equity	2.6%	6.2%	0.2%
<b>WACC</b>			<b>5.7%</b>

Performance data represents past performance and does not guarantee future results.

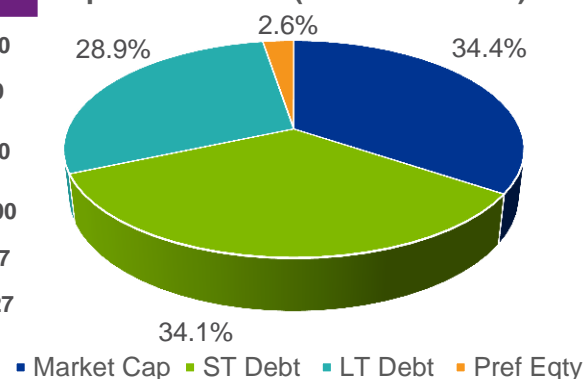
<sup>1</sup>as of 2Q2018

Source: Bloomberg

### Economic Value Added (USD mm)<sup>1</sup>

Net Operating Profit	45,080.00
Cash Operating Taxes	7,127.00
Net Operating Profit After Tax	37,953.00
Total Investment Capital	91,391.00
Capital Charge	52,048.27
Econ Value Added	-14,095.27
ROIC	4.15%
Econ Value Added Spread	-1.54%

### Capital Structure (Millions of USD)<sup>1</sup>



# (E)arnings Generation

## Earnings:

- a) Sufficient earnings to cover potential losses, provide adequate capital and pay reasonable dividends
- b) Composition of net income (e.g. net interest income; fees; trading income etc.).
- c) Level of expenses in relation to operations
- d) Reliance on extraordinary items, securities transactions, high risk activities
- e) Non traditional or operational sources
- f) Adequacy of budgeting, forecasting, control MIS of income and expenses
- g) Adequacy of provisions
- h) Earnings exposure to market risks, such as interest rate variations, foreign exchange fluctuations and price risk

## Ratios:

JPMorgan Chase & Co in Millions of USD except Per Share					
12 months ending	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017
Return on Common Equity Ratio	8.38%	9.75%	10.45%	10.16%	9.86%
Return on Assets Ratio	0.75%	0.87%	0.99%	1.02%	0.97%
Return on Capital Ratio	2.01%	2.41%	2.76%	2.88%	2.81%
Sustainable Growth Rate Ratio	5.56%	6.80%	7.46%	7.08%	6.56%
Dividend Payout Ratio	33.73%	30.27%	28.63%	30.27%	33.42%
Decrease in Capital Stocks	-6,589.0	-4,760.0	-5,616.0	-9,082.0	-16,668.0

Source: Bloomberg

Performance data represents past performance and does not guarantee future results.

# (L)iquidity & (S)ensitivity

## Considerations in reviewing Liquidity:

- Sources and volume of liquid funds available to meet short term obligations
- Volatility of deposits and loan demand, interest rates and maturities of assets and liabilities
- Access to money market and other sources of funds
- Diversification of funding sources
- Reliance on inter-bank and wholesale market for short term/long-term funding
- Management ability to plan, control and measure liquidity process.
- Contingency plan: what if?

## Ratios:

Liquidity Ratios	Requirements
Basel III Liquidity Coverage Ratio (LCR)	Banks are required to hold high quality liquid assets to cover the amount of bank liabilities that might run in a 30-day stressed period
Basel III Net Stable Funding Ratio (NSFR)	Banks are required to hold more deposits and reduce short-term wholesale funding, making them fund their activities with more stable sources of funding
Supplementary Leverage Ratio (SLR)	Raises the cost of low margin business and low-risk assets

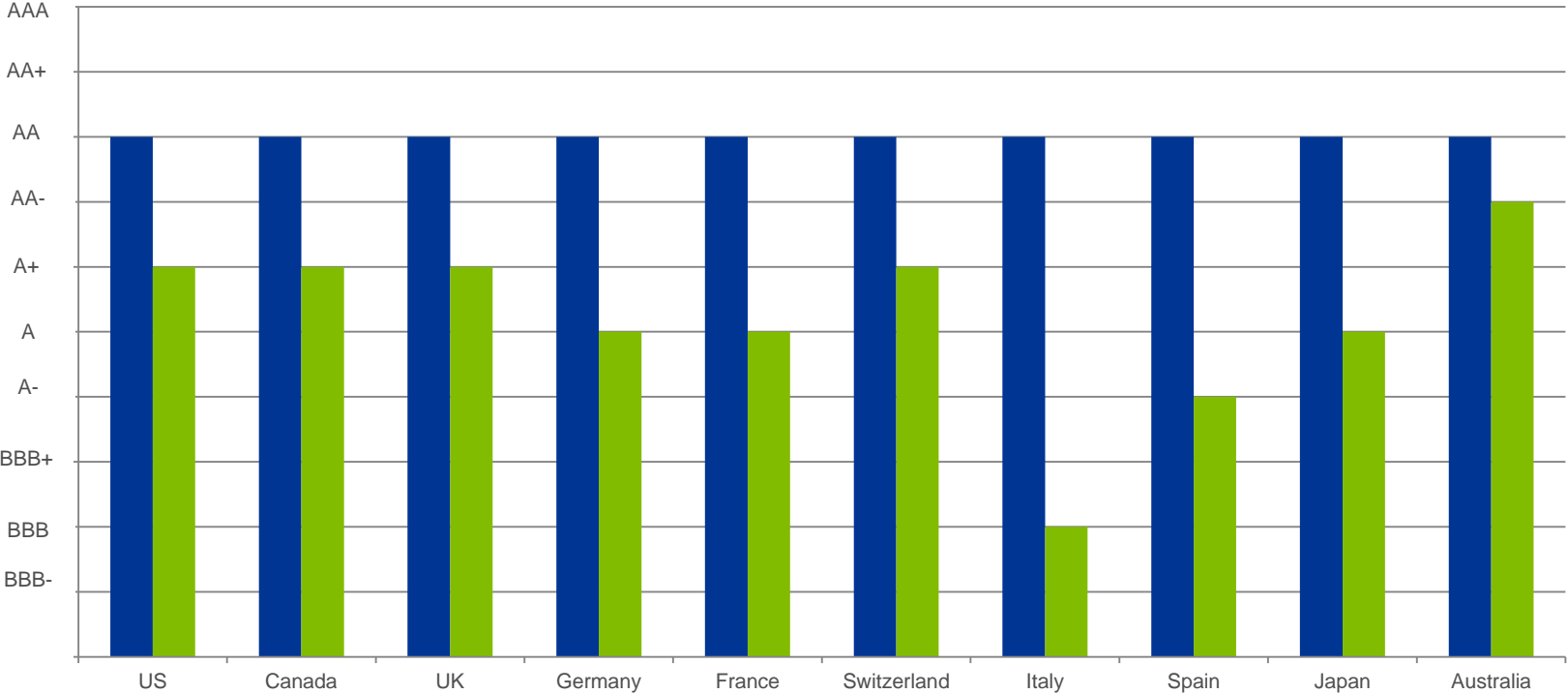
## Sensitivity – Stress Tests :

- Capital Adequacy under stress
- Operational Risk Assessment
- Market Risk
- Nature of the operations of the bank
- Trends in the foreign currencies exposure
- Changes in the value of the fixed assets of the bank
- Importance of real estate assets resulting from loan write offs

# S&P Bank Credit Ratings

Average S&P long term bank credit ratings have fallen over time

■ Peak Rating\*      ■ Current Rating



\*2007, 2008

Source: S&P

Performance data represents past performance and does not guarantee future results.

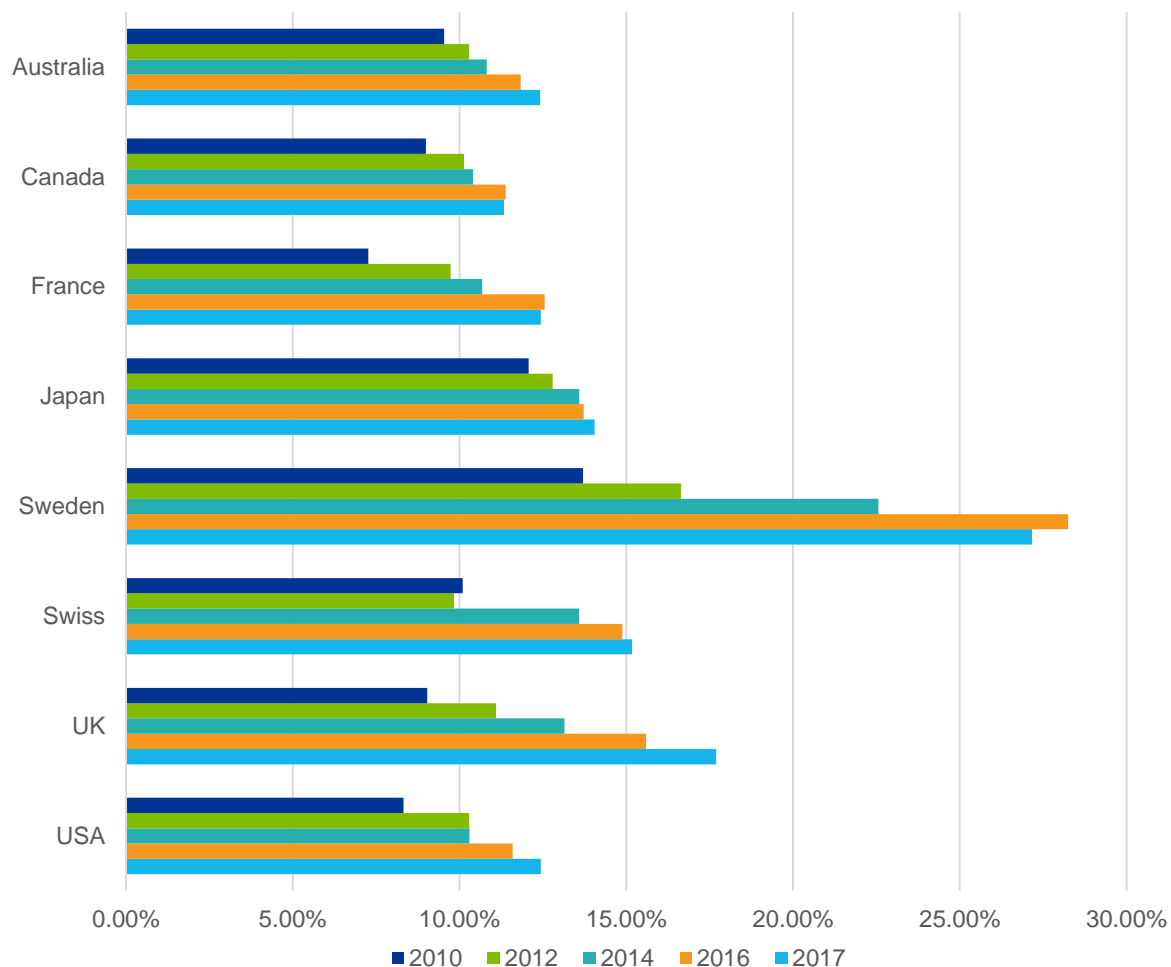


# Bank Capital Levels have Strengthened

Global banks have de-risked and improved capital through a build-up of retained earnings and capital raises

## Capital Ratio

Tangible Common Equity / Risk Weighted Assets (TCE/ RWA)



- Banks Included**
- **USA:** BAS, WF, JPM
  - **UK:** BARC, Lloyds, HSBC
  - **France:** BNP, Soc Gen, Credit Ag
  - **Canada:** RBC, TD, BNS
  - **Swiss:** UBS, CSFB
  - **Japan:** SMBC, MUFG, MIZ
  - **Australia:** CBA, WSTP, ANZ
  - **Sweden:** Nordea, Svenska, Swedbank

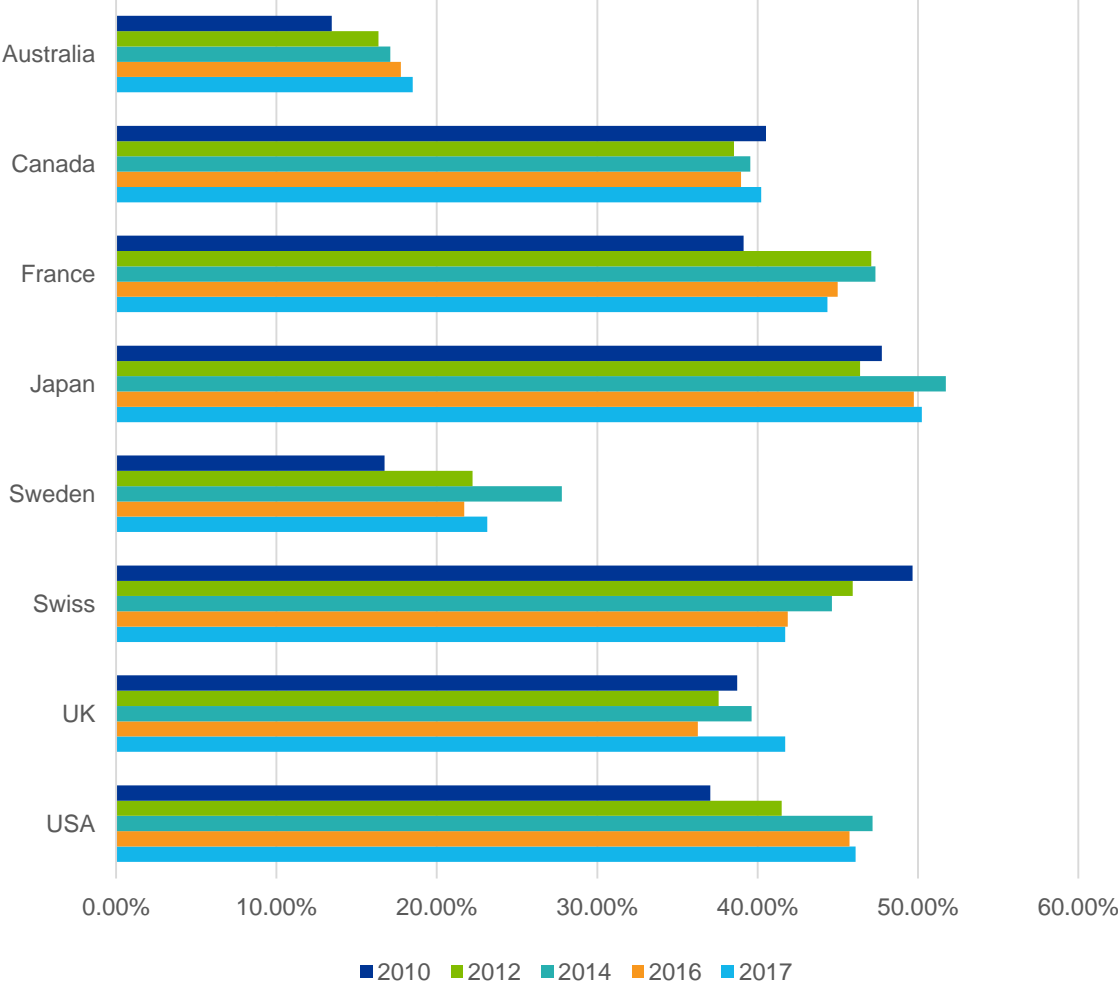
Source: Moody's December 31, 2017, SMBC and MIZ Data as of September 30, 2017

# Bank Reserves Ratios show Improved Liquidity

Basel III has pushed banks to bolster liquidity and reduce reliance on wholesale funding

## Bank Reserves Ratio

(Liquid Banking Assets / Tangible Banking Assets)



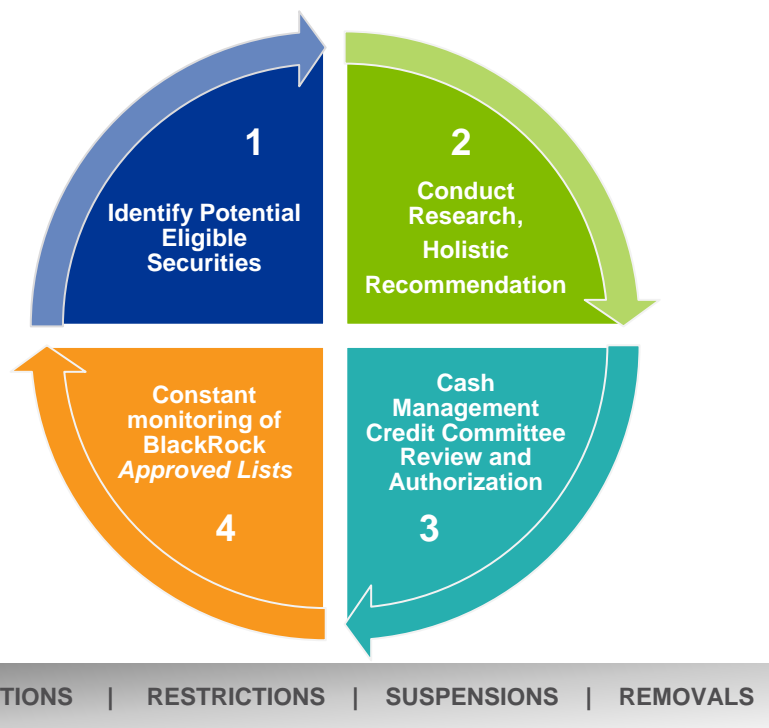
- Banks Included**
- **USA:** BAS, WF, JPM
  - **UK:** BARC, Lloyds, HSBC
  - **France:** BNP, Soc Gen, Credit Ag
  - **Canada:** RBC, TD, BNS
  - **Swiss:** UBS, CSFB
  - **Japan:** SMBC, MUFG, MIZ
  - **Australia:** CBA, WSTP, ANZ
  - **Sweden:** Nordea, Svenska, Swedbank

Source: Moody's December 31, 2017, SMBC and MIZ Data as of September 30, 2017

# Banking System Risk Indicators

- GDP per capita
- Real GDP Growth
- Net General Government Debt
- Change in Domestic Sector Credit
- Change in inflation-adjusted housing prices
- Change in inflation-adjusted CRE prices
- Change in inflation-adjusted equity prices
- Current Account Balance (%GDP)
- Net External Debt (%GDP)
- Domestic Private Sector Credit (%GDP)
- Household Gross debt (%GDP)
- Household Net Debt (%GDP)
- Nonfinancial Corporate Debt (%GDP)
- Domestic Nonperforming Assets (% domestic loans)
- Domestic Credit Losses (% domestic loans)
- Domestic Banks ROE (%)
- Domestic Banks ROAA (%)
- Market share of largest three banks (%)
- Domestic core customer deposits (% of domestic loans)
- Net External Debt of Banks (% domestic loans)
- Domestic Loans (% domestic bank assets)
- Domestically issued private sector bond and CP (% GDP)

# Credit research: *Approved Lists* construction



Credit analysts retain the ability to take action on restricting, suspending or removing names from the approved lists and those actions are not subject to debate by committee.

\* Nationally Recognized Statistical Ratings Organization (NRSRO)

Source: BlackRock

BlackRock's Approved Lists for Money Market Funds consists of Issuers that have been authorized for inclusion on our approved list after a thorough due diligence process. New Names/Issuers are evaluated and analyzed by dedicated credit analysts for appropriate exposure and maturity limits as well as creditworthiness of the Names/Issuers. BlackRock's Cash Management Credit Committee, Fund Managers and Credit Analyst Teams all play an active part in the approval process, which is reviewed and monitored continually.

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## BlackRock Approved Lists for Money Market Funds

	Number of issuers on our Approved Lists downgraded by NRSRO*	Number of issuers acted upon in advance by BlackRock	Number of months BlackRock acted prior to NRSRO downgrade
2008	18	18	6
2009	16	16	8
2010	2	2	12
2011	38	38	6
2012	4	4	12
2013	3	3	12
2014	1	1	12
2015	8	8	11
2016	4	4	12
2017	3	3	12
2018	1	1	12
<b>TOTAL</b>	<b>98</b>	<b>98</b>	<b>10 mos. (avg)</b>

As of 30 June 2018

# Appendix

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# Important Notes

## **Data Sources:**

Unless otherwise noted, all information pertaining to Treasury yields, inflation, breakeven levels and economic data releases are sourced from Bloomberg as of the date/ month referenced on each respective slide. Unless otherwise noted, option adjusted spreads and excess returns are sourced from Barclays. Information provided in the “Market color” and “Issuance” sections of the corporate, ABS and CMBS slides is calculated internally from the BlackRock trading and capital market’s desk. Information pertaining to the FOMC can be found on the Federal Market Committee website. Information on Treasury Bill issuance comes from SIFMA.

Information on the LIBOR slides are sourced from Blackrock viewpoint: LIBOR the next chapter, JP Morgan and the New York Fed.

# Important Notes- BlackRock Liquidity Funds

*One should consider the investment objectives, risks and expenses of the Funds carefully before investing.*

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*This material must be preceded or accompanied by a prospectus.*

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<sup>1</sup> Dollar-Weighted Average Maturity - the average maturity of a fund is the average amount of time until the organizations that issued the debt securities in the fund's portfolio must pay off the principal amount of the debt. "Dollar-weighted" means the larger the dollar value of a debt security in the fund, the more weight it gets in calculating this average. To calculate the dollar-weighted average maturity, the fund may treat a variable or floating rate security as having a maturity equal to the time remaining to the security's next interest rate reset date rather than the security's actual maturity. <sup>2</sup> Dollar-Weighted Average Life - the dollar-weighted average maturity of a fund's portfolio calculated without reference to the exceptions used for variable or floating rate securities regarding the use of the interest rate reset dates in lieu of the security's actual maturity date. "Dollar-weighted" means the larger the dollar value of a debt security in the fund, the more weight it gets in calculating this average. <sup>3</sup> 7-Day SEC Yield: The 7-Day yield is computed in accordance with methods prescribed by the SEC. The 7-Day SEC yield excludes distributed capital gains/losses. <sup>4</sup> Average annualized 30-day yields are based on net investment income and distributed gains or losses for the period shown. Yields will fluctuate as market conditions change. <sup>5</sup> Expenses are as of the most current prospectus. Investment dividend expense, interest expense, acquired fund fees and expenses and certain other fund expenses are included in the Net. BlackRock may contractually agree to waive or reimburse certain fees and expenses until a specified date. Contractual waivers are terminable upon 90 days' notice by a majority of the funds non-interested trustees or by a vote of the majority of the outstanding voting securities of the fund. The investment advisor and/or other service providers may also voluntarily agree to waive certain fees and expenses which can be discontinued at any time without notice. When waivers or reimbursements are in place, the operating expenses are reduced and total returns to the shareholder in the fund increase. Please see the prospectus for additional information. <sup>6</sup> A rating by Standard & Poor's and/or Moody's Investor Service applies to the credit quality of the portfolio and is not a recommendation to buy, sell or hold securities of the Funds and does not remove market risks associated with investments in the Fund. <sup>7</sup> The Fund's current yield more closely reflects the current earnings of the Fund than the total net return quotations.

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# Important Notes

## Index

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