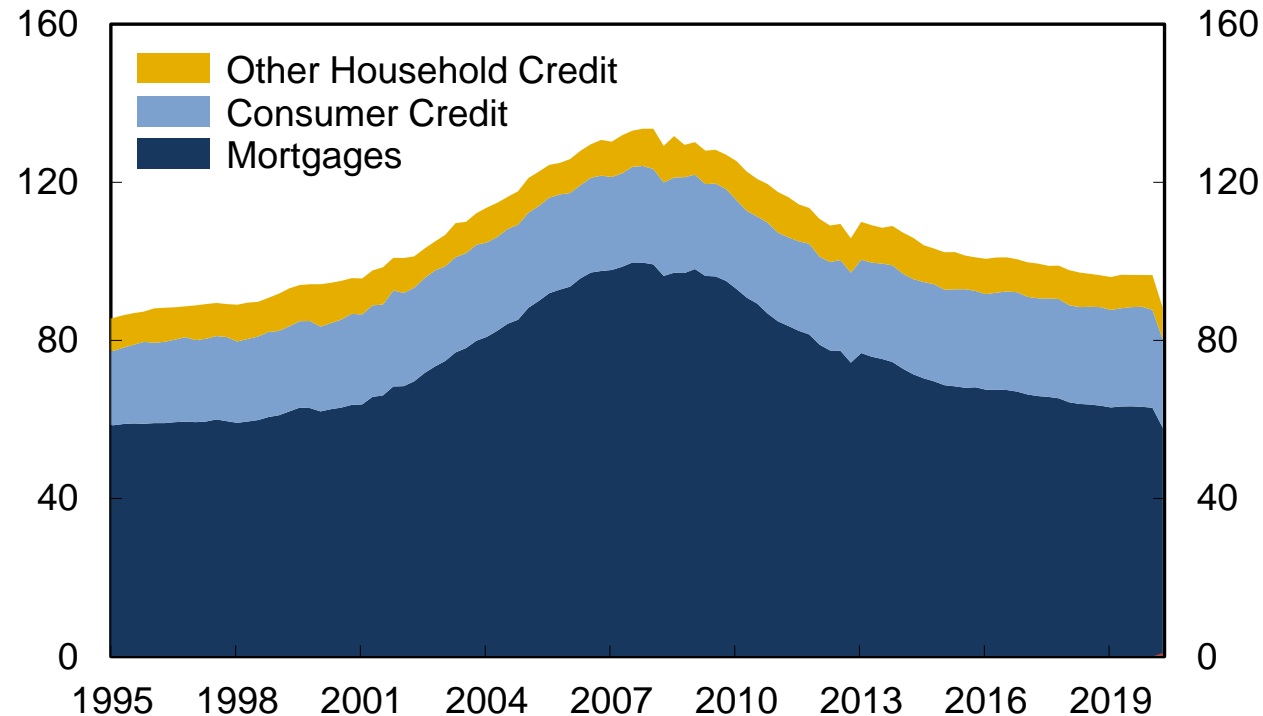


### 3.1.1 Household Debt as a Percent of Disposable Personal Income

Percent

As Of: 2020 Q2

Percent



Source: BEA, Federal Reserve, Haver Analytics

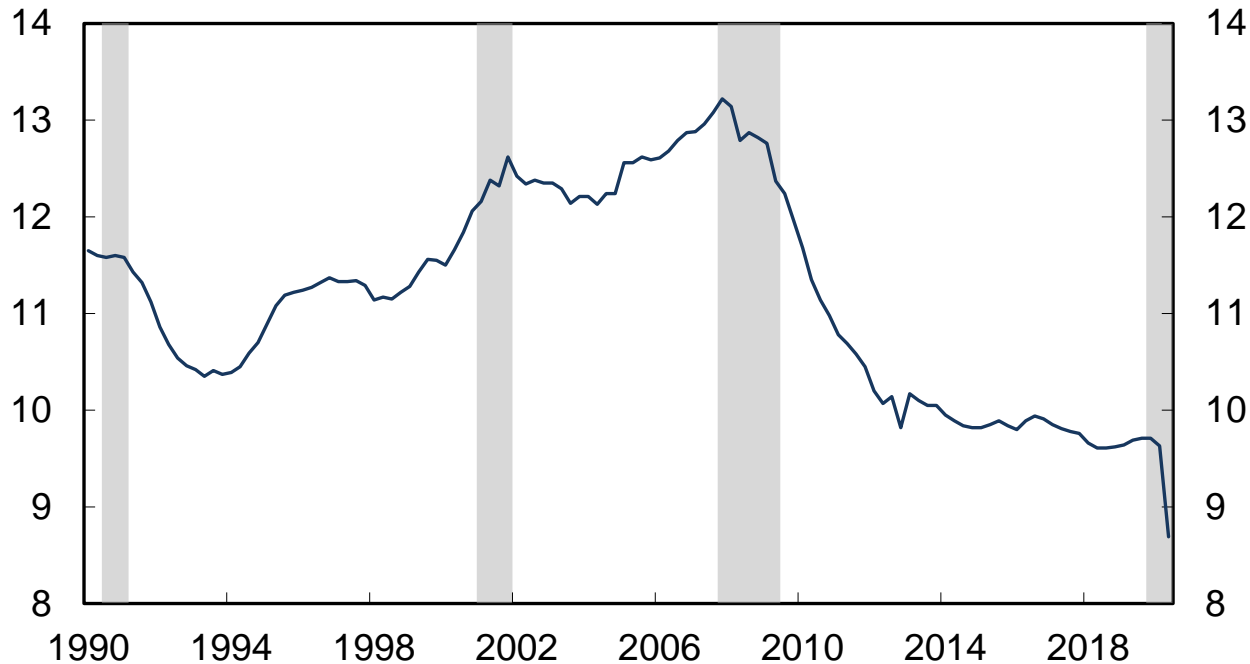
Note: Other Household Credit includes debts of both households and nonprofits.

### 3.1.2 Household Debt Service Ratio

Percent

As Of: 2020 Q2

Percent

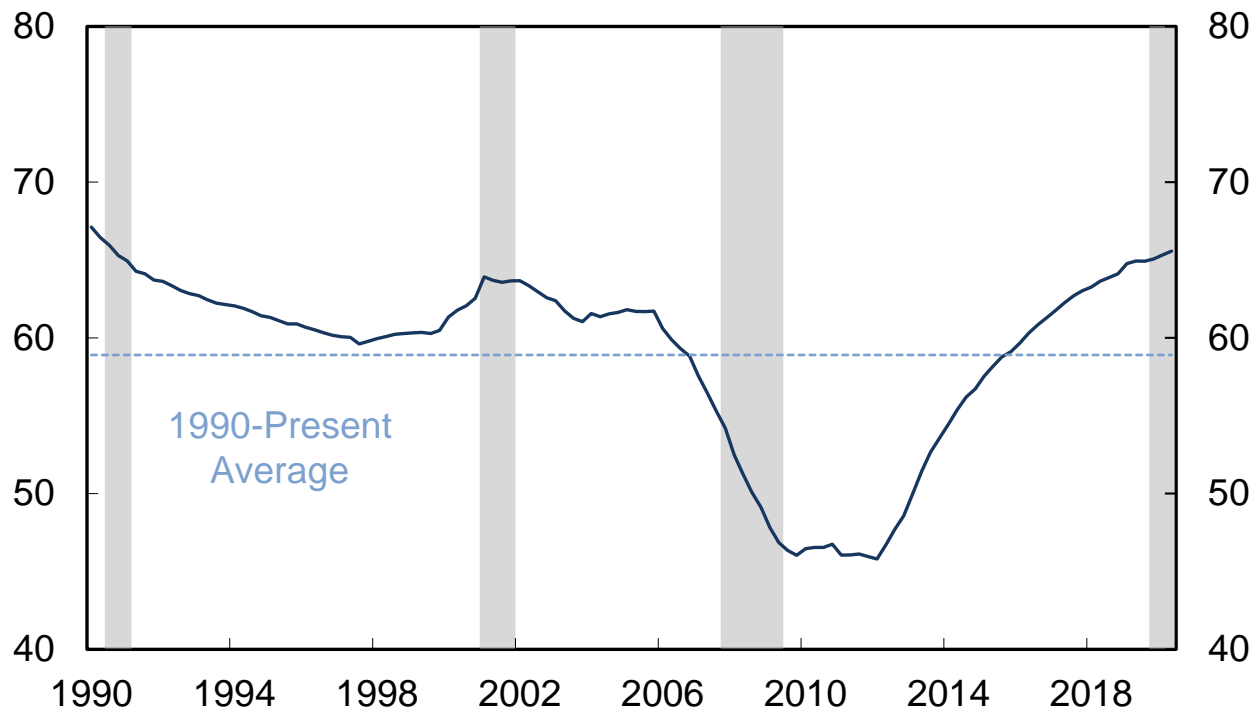


Source: Federal Reserve,  
Haver Analytics

Note: Ratio of debt-service payments to disposable personal income. Seasonally adjusted. Gray bars signify NBER recessions.

# 3.1.3 Owners' Equity as Share of Household Real Estate

Percent As Of: 2020 Q2 Percent



Source: Federal Reserve, Haver Analytics

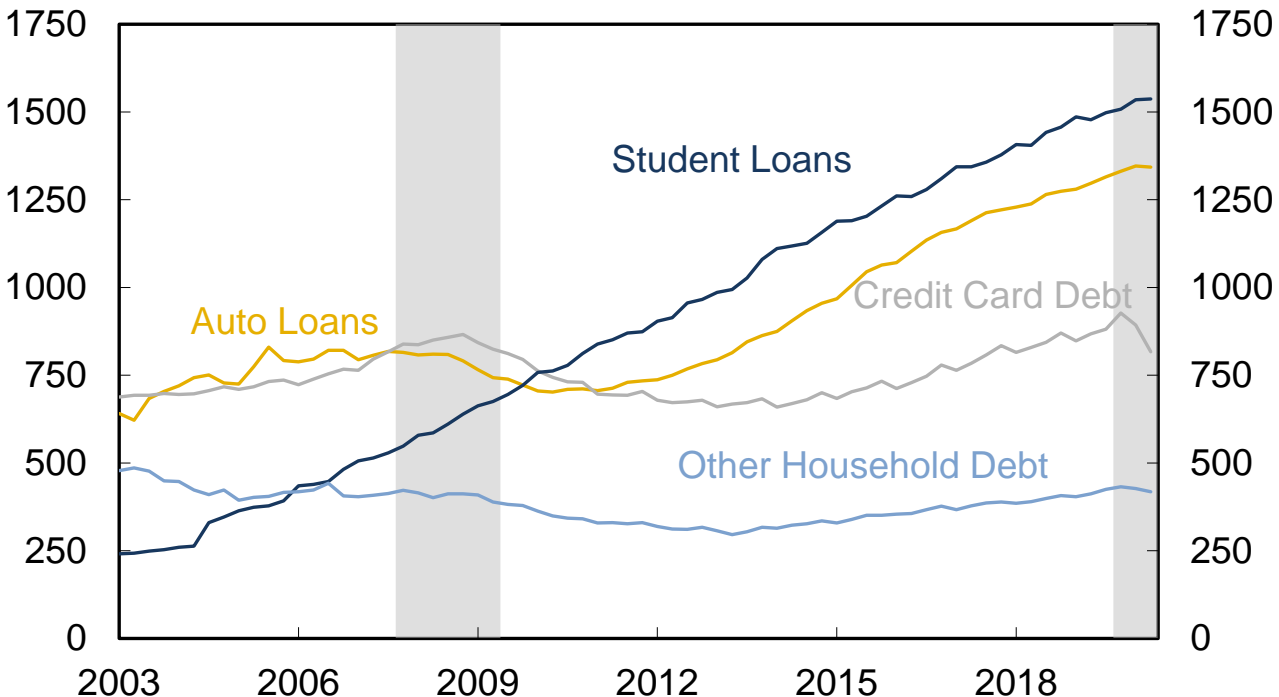
Note: Gray bars signify NBER recessions.

### 3.1.4 Components of Consumer Credit

Billions of US\$

As Of: 2020 Q2

Billions of US\$



Source: FRBNY Consumer Credit Panel/Equifax, Haver Analytics

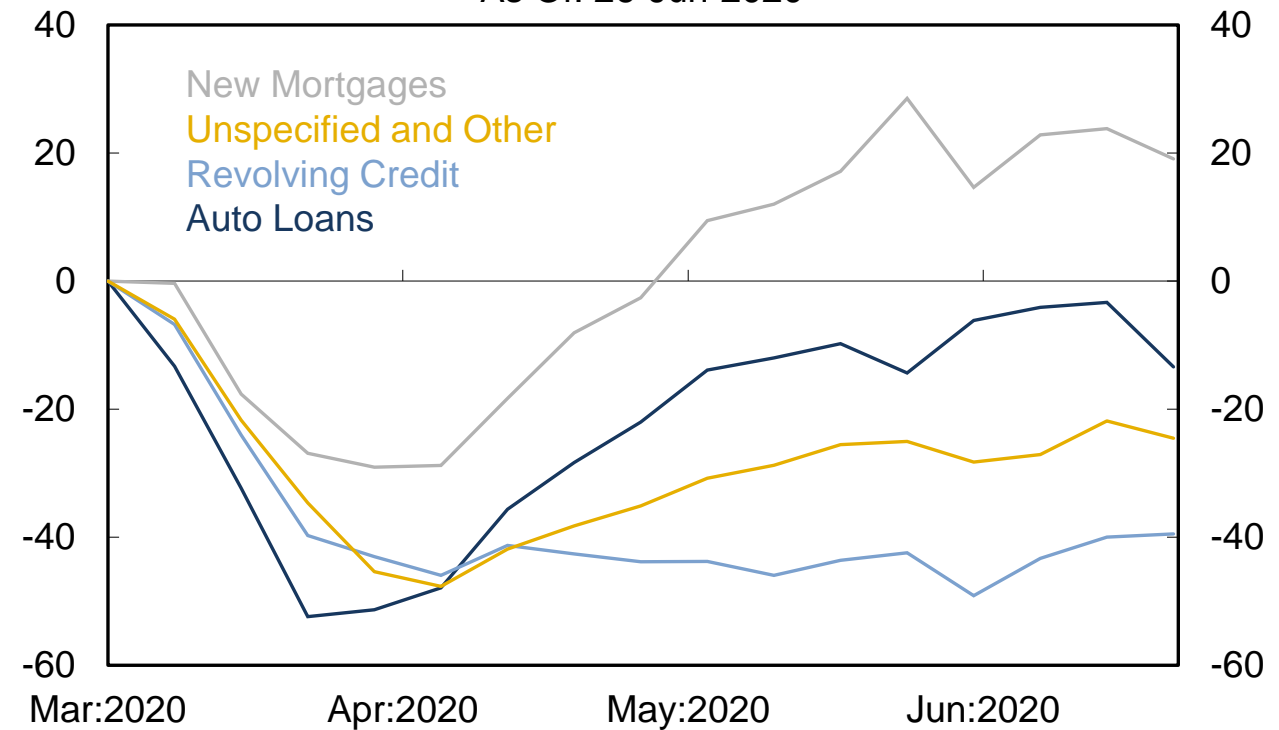
Note: Gray bars signify NBER recessions.

### 3.1.5 Change in Inquiries Relative to First Week of March 2020

Percent

As Of: 26-Jun-2020

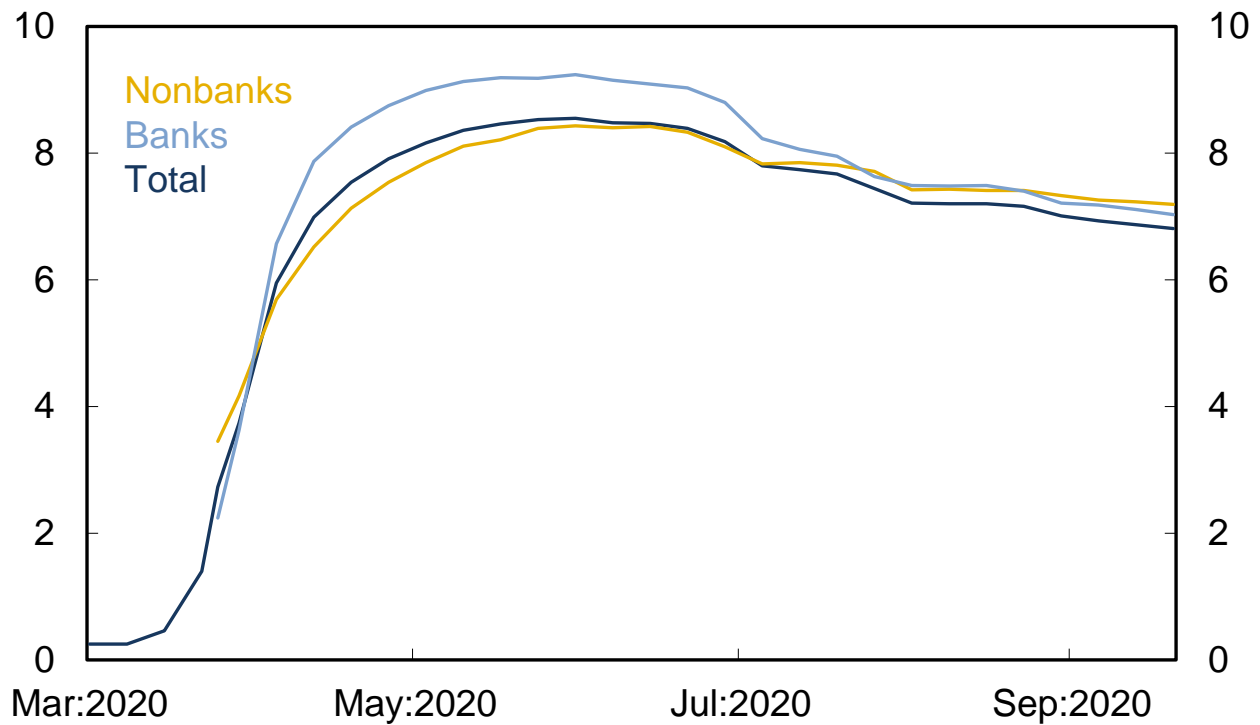
Percent



Source: CFPB

# 3.1.6 Percentage of Mortgages in Forbearance

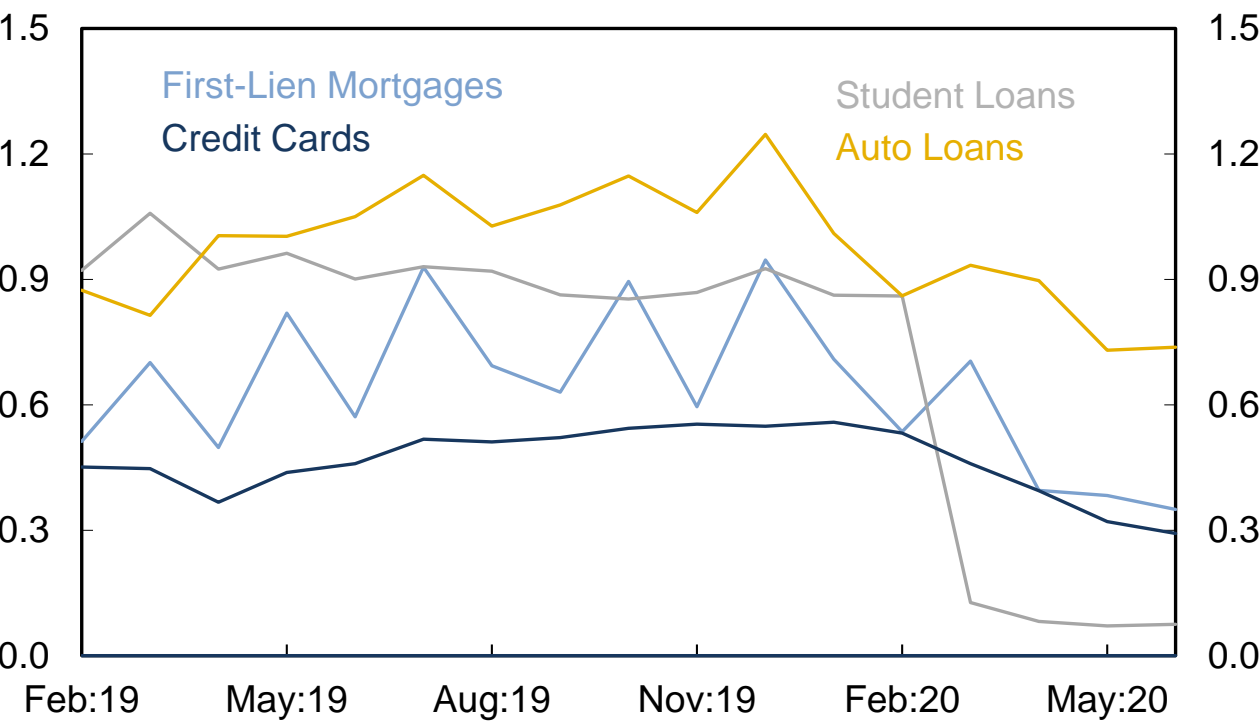
Percent As Of: 27-Sep-2020 Percent



Source: Mortgage Bankers Association

# 3.1.7 Share of Open Accounts that Transitioned to Delinquent

Percent As Of: Jun-2020 Percent



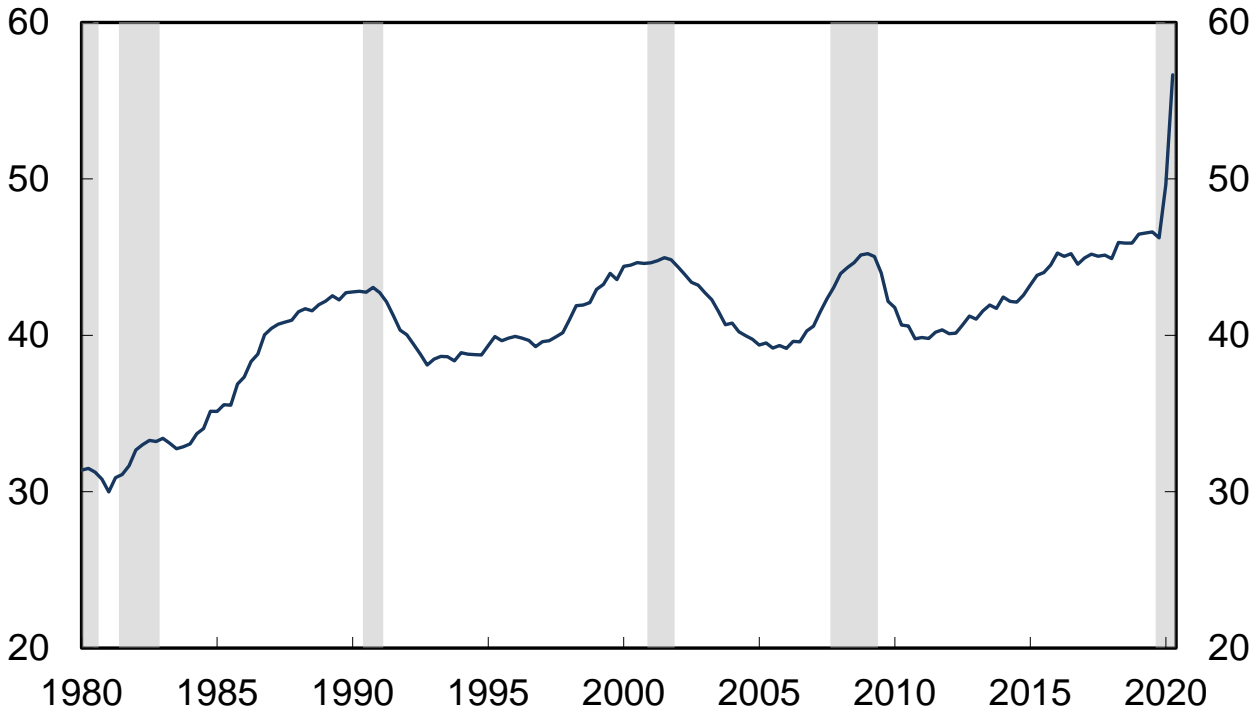
Source: CFPB

# 3.2.1.1 Nonfinancial Corporate Credit as Percent of GDP

Percent

As Of: 2020 Q2

Percent

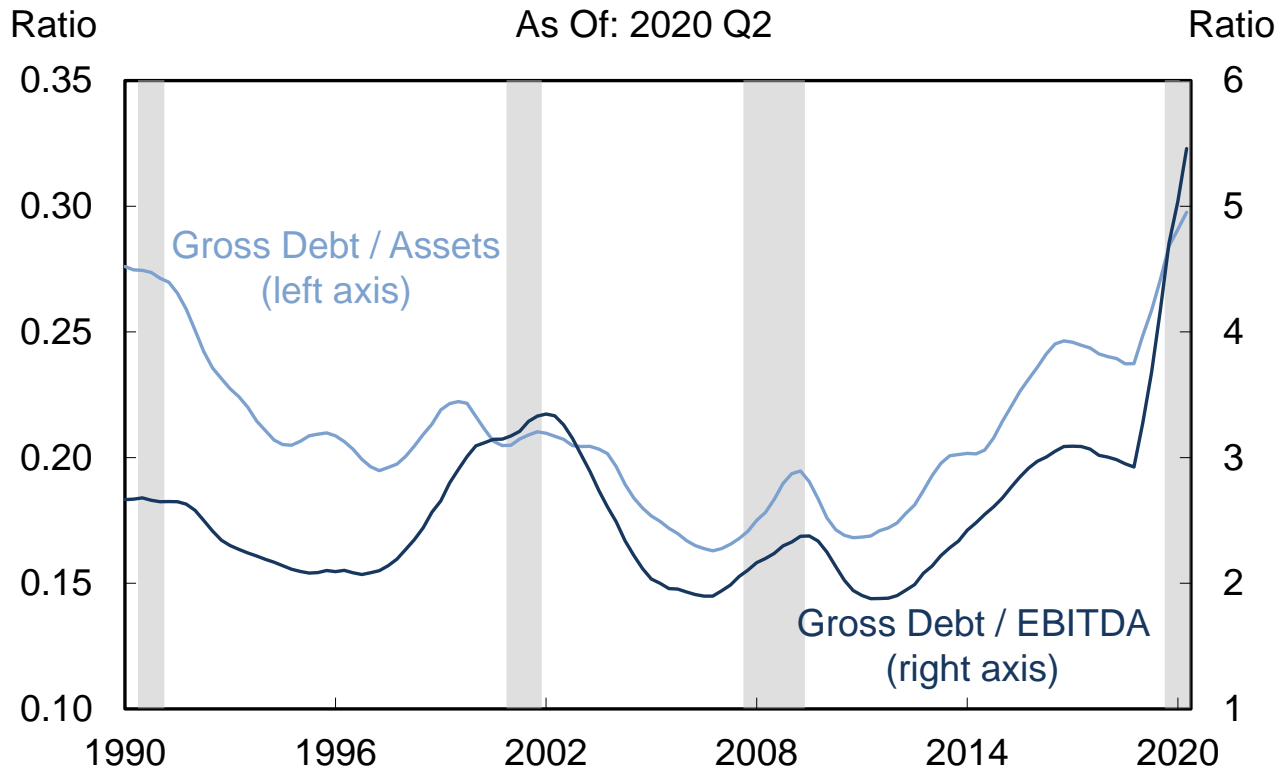


Source: Federal Reserve,  
Haver Analytics

Note: Gray bars signify NBER recessions.



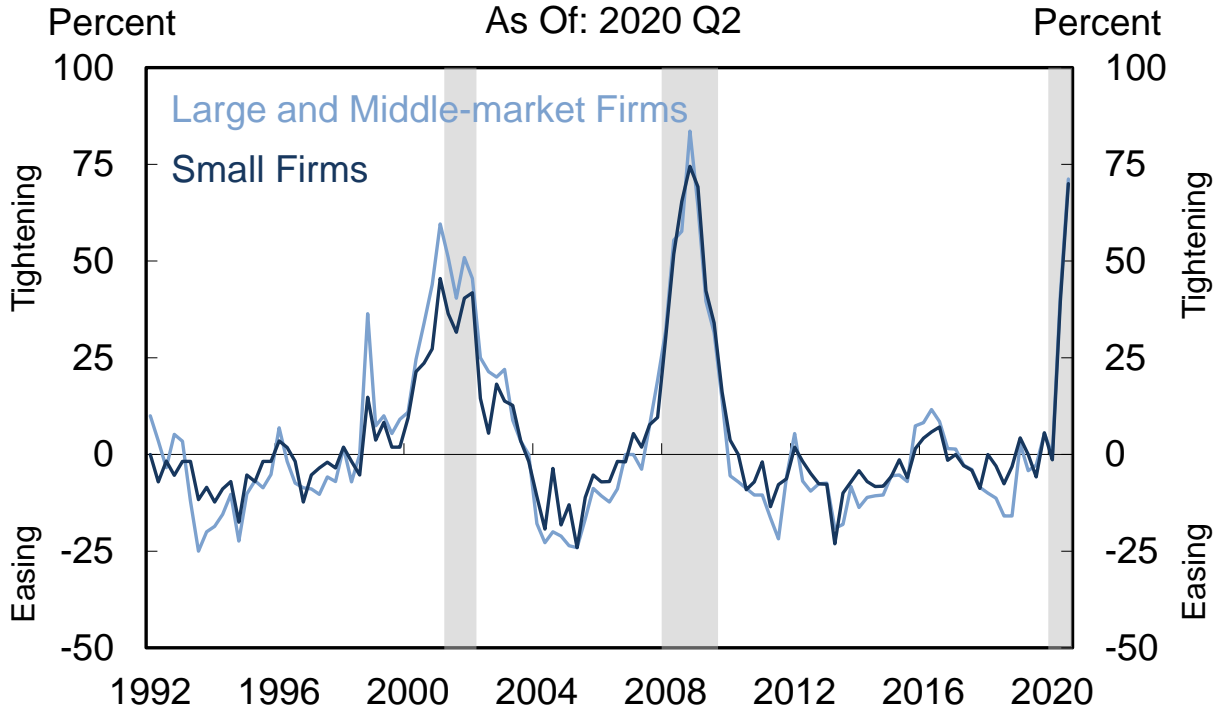
## 3.2.1.2 U.S. Nonfinancial Business Leverage



Source: Compustat, Haver Analytics

Note: Four-quarter moving average of the median ratio. Includes rated and unrated nonfinancial businesses. Gray bars signify NBER recessions.

# 3.2.1.3 Bank Business Lending Standards



Source: Federal Reserve Senior Loan Officer Opinion Survey

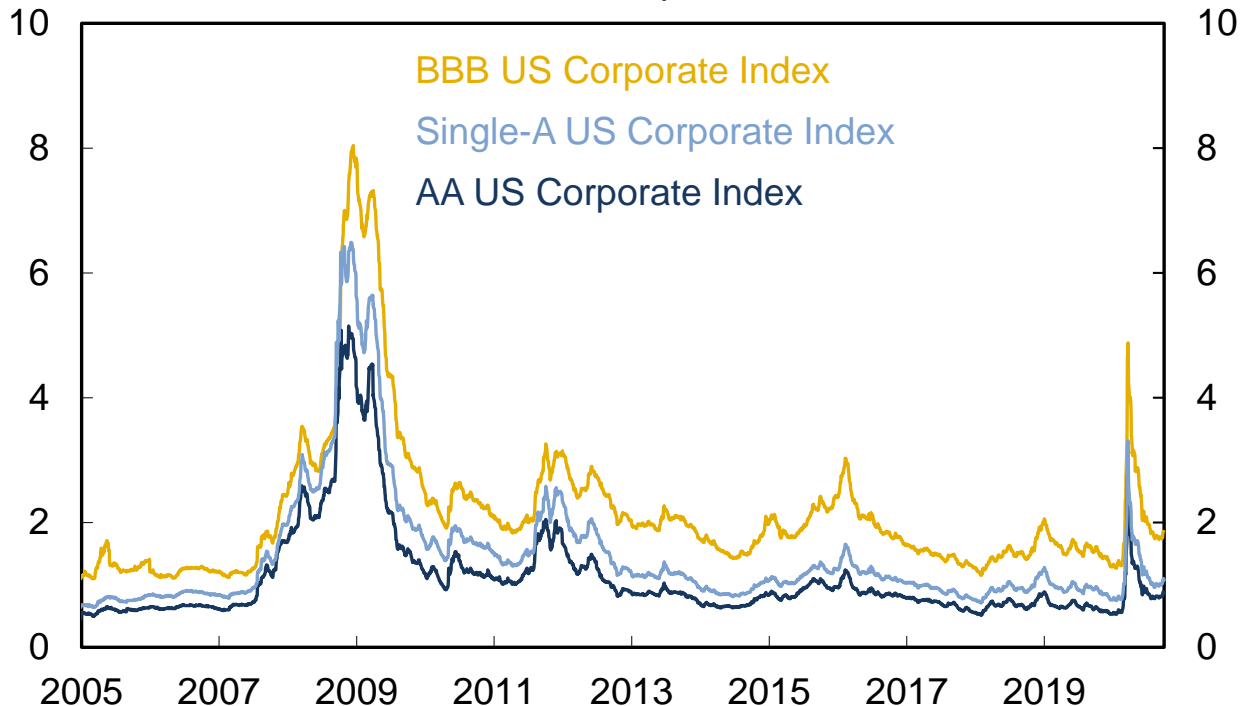
Note: Represents net percentage of banks reporting tightening standards for C&I loans. Large and middle-market firms are those with annual sales of \$50 million or more. Gray bars signify NBER recessions.

### 3.2.1.4 Investment Grade Corporate Bond Spreads

Percent

As Of: 30-Sep-2020

Percent



Source: Ice Data Indices,  
ICE BofA US, FRED

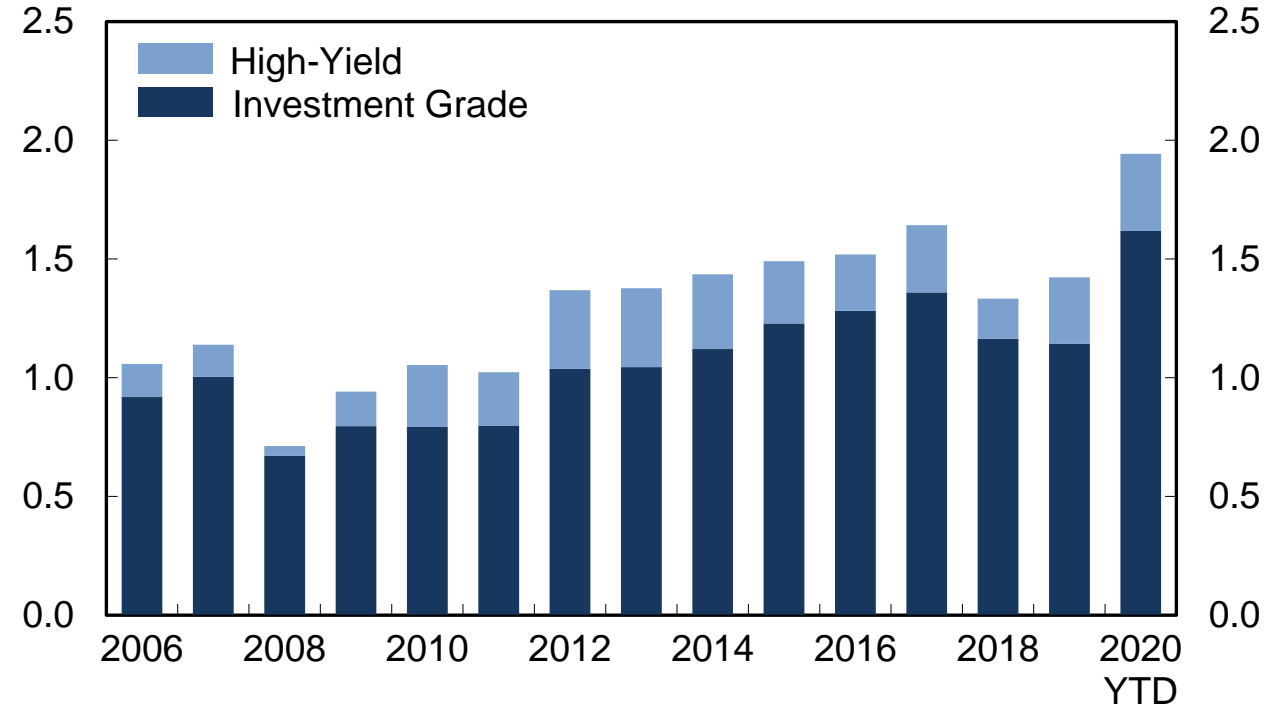
Note: The ICE BofA Option-Adjusted Spreads (OASs) are the calculated spreads between a computed OAS index of all bonds in a given rating category and a spot Treasury curve.

### 3.2.1.5 Gross Issuance of Corporate Bonds

Trillions of US\$

As Of: Sep-2020

Trillions of US\$



Source: Refinitiv,  
SIFMA

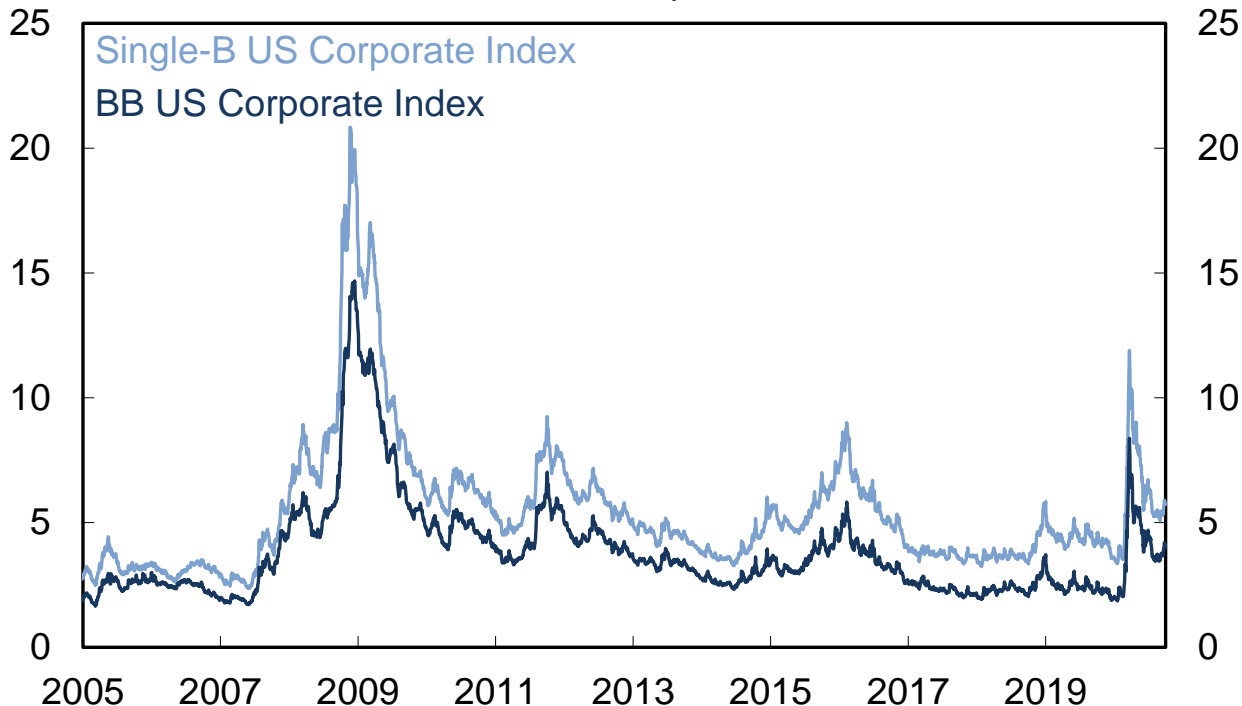
Note: Includes all non-convertible corporate debt, MTNs, and Yankee bonds, but excludes all issues with maturities of 1 year or less and CDs.

### 3.2.1.6 High-Yield Corporate Bond Spreads

Percent

As Of: 30-Sep-2020

Percent



Source: Ice Data Indices,  
ICE BofA US, FRED

Note: The ICE BofA Option-Adjusted Spreads (OASs) are the calculated spreads between a computed OAS index of all bonds in a given rating category and a spot Treasury curve.

### 3.2.1.7 Leveraged Loan Spreads

Percent

As Of: 30-Sep-2020

Percent



Source: S&P LCD

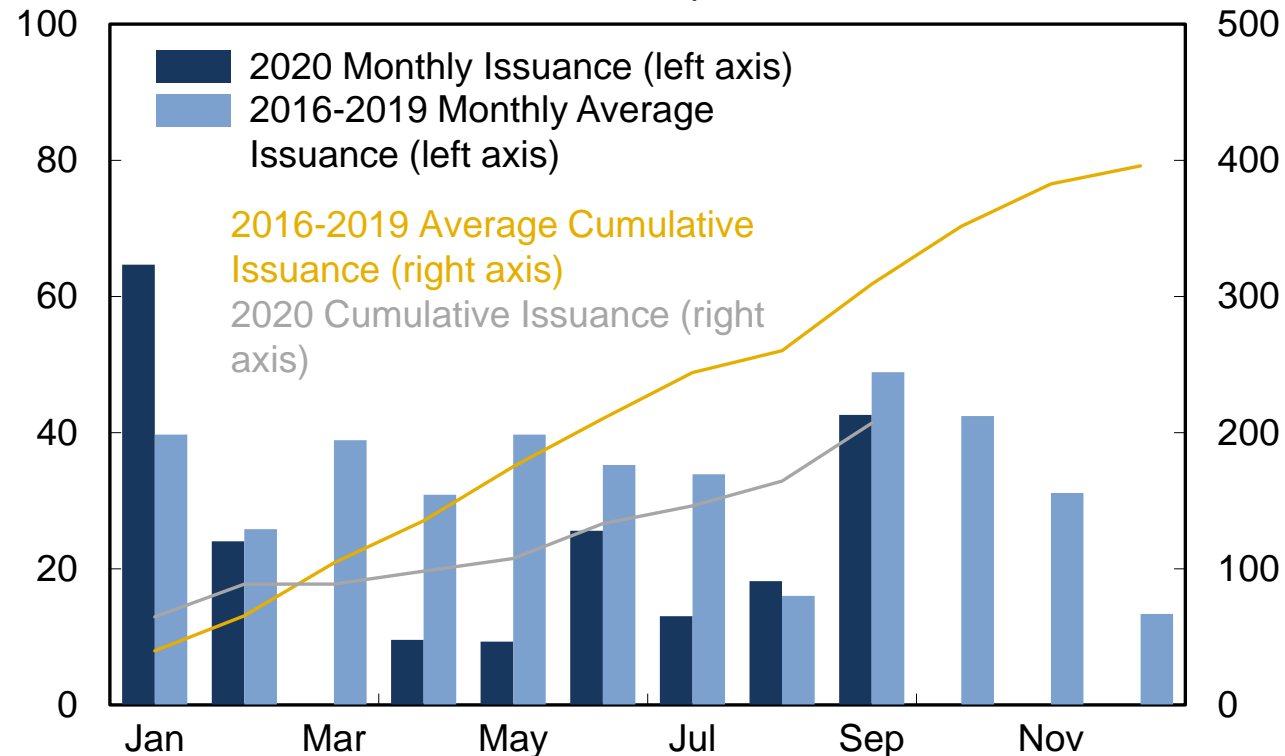
Note: Spread-to-maturity for syndicated loans included in the S&P LCD Leveraged Loan Index.

## 3.2.1.8 Institutional Leveraged Loan Issuance

Billions of US\$

As Of: 30-Sep-2020

Billions of US\$



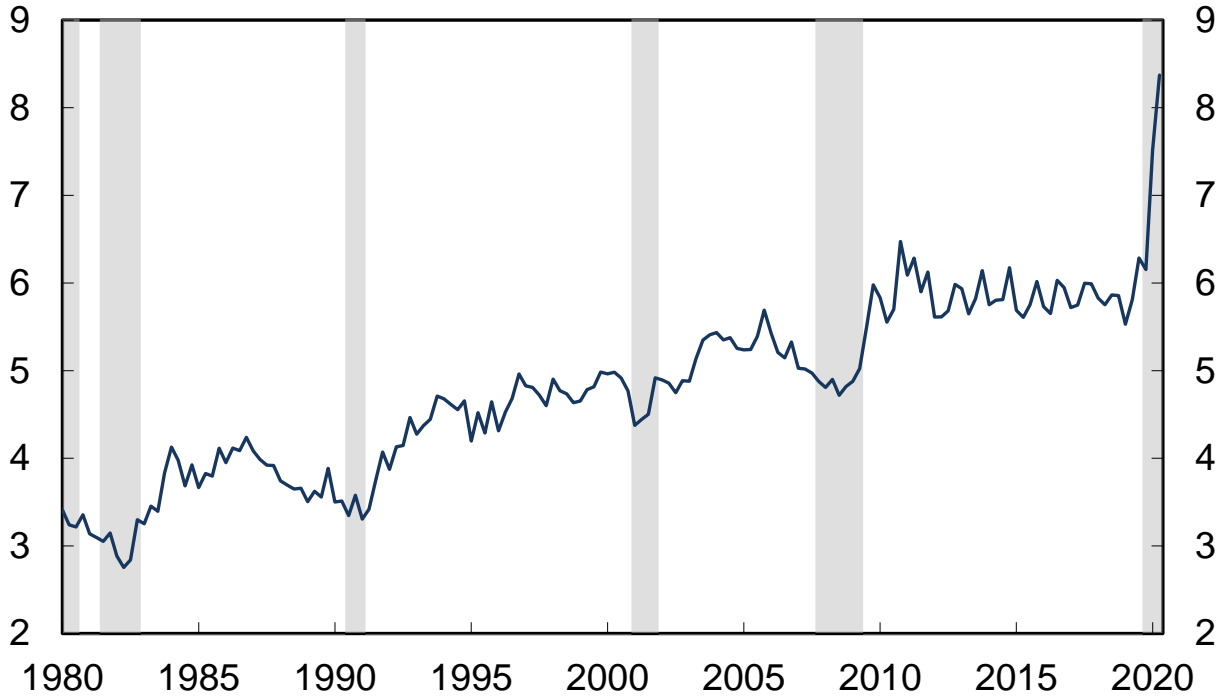
Source: S&P LCD

# 3.2.1.9 Nonfinancial Corporations Liquid Assets

Percent of Total Assets

As Of: 2020 Q2

Percent of Total Assets



Source: Federal Reserve, Haver Analytics

Note: Liquid assets includes foreign deposits, checkable deposits and currency, time and savings deposits, money market fund shares, security repurchase agreements, debt securities, and mutual fund shares. Gray bars signify NBER recessions.

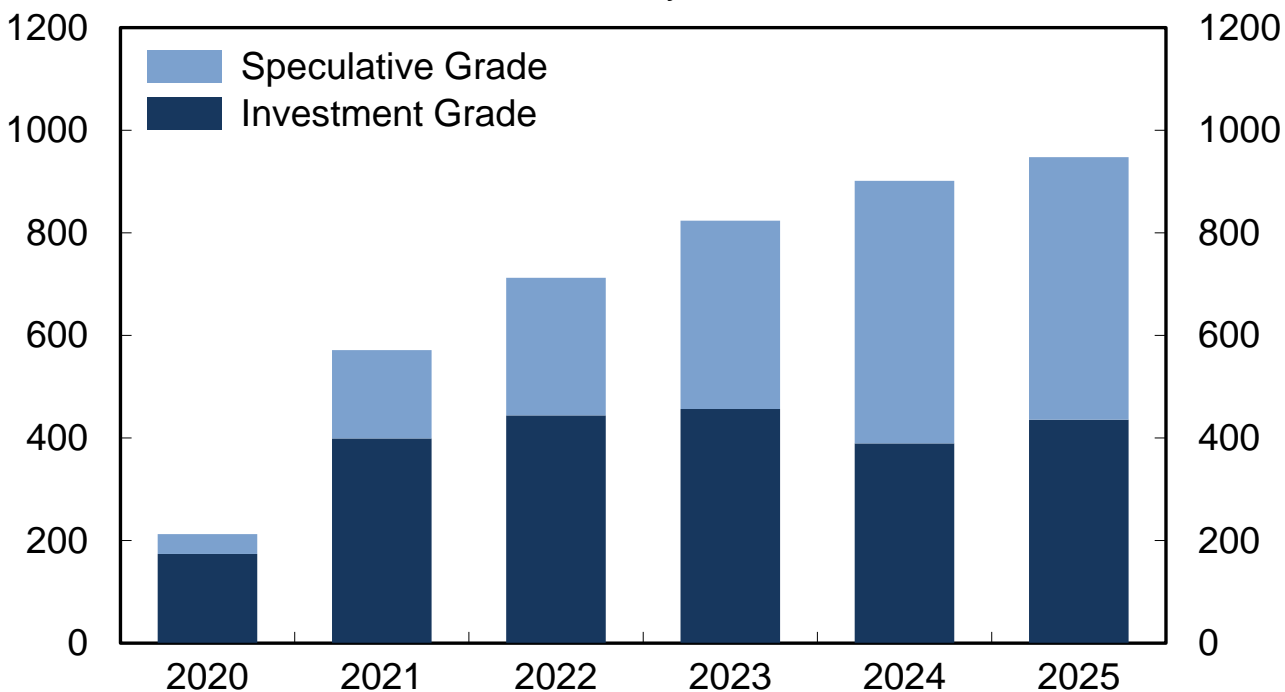


### 3.2.1.10 Maturity Profile of U.S. Nonfinancial Corporate Debt

Billions of US\$

As Of: July-2020

Billions of US\$



Source: S&P Global Ratings Research

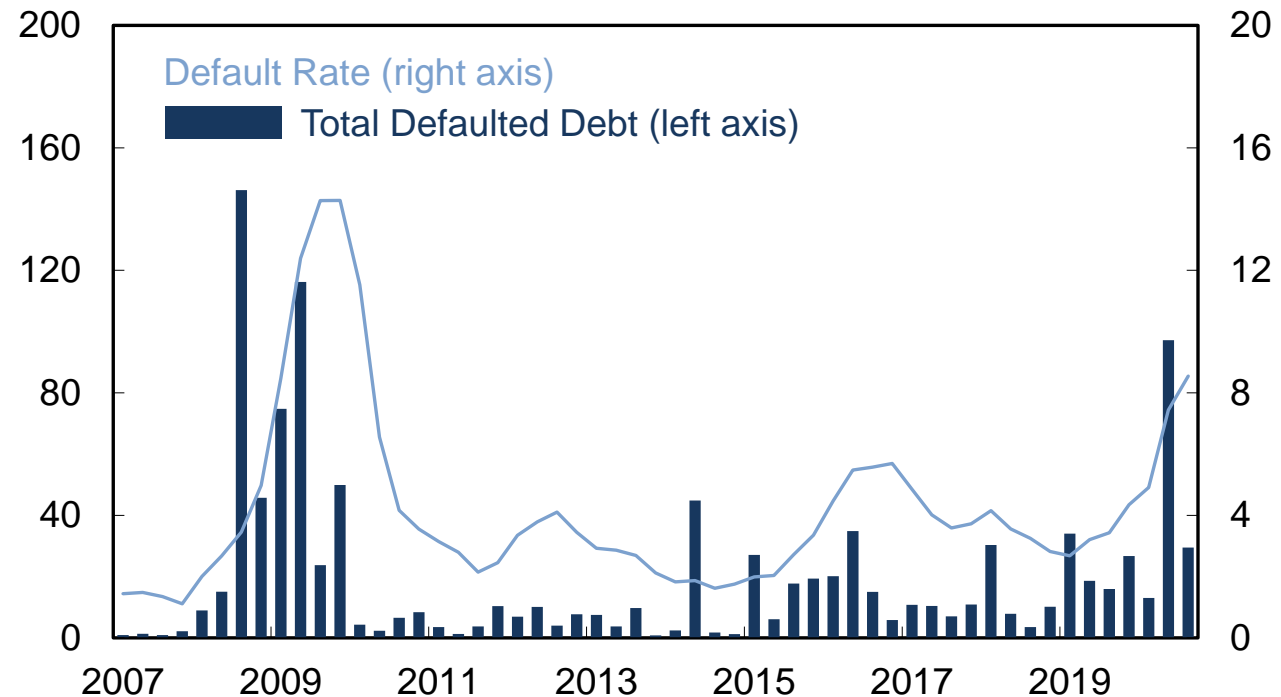
Note: Includes bonds, loans, and revolving credit facilities that are rated by S&P Global Ratings.

# A.1 U.S. Corporate Defaults

Billions of US\$

As Of: 2020 Q3

Percent



Source: Moody's  
Investors Service, OFR

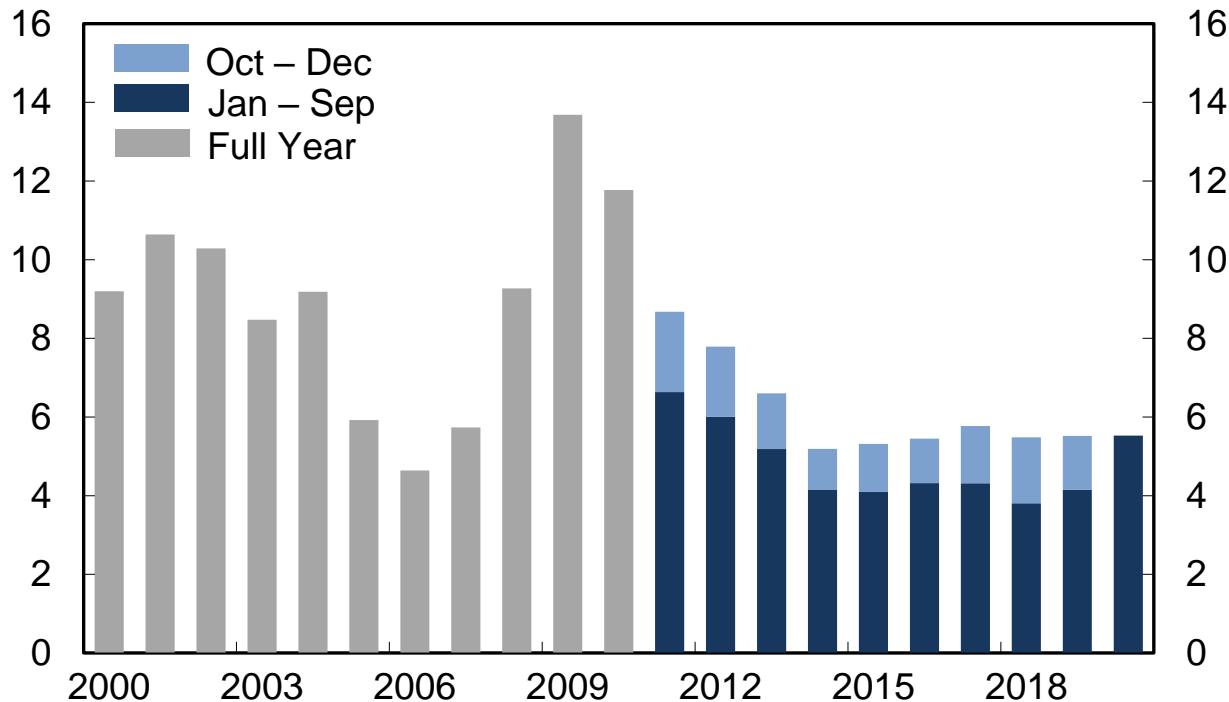
Note: Issuer weighted four quarter trailing default  
rate for speculative grade U.S. corporates.

# A.2 Chapter 11 Bankruptcy Filings

Count ('000s)

As Of: Sep-2020

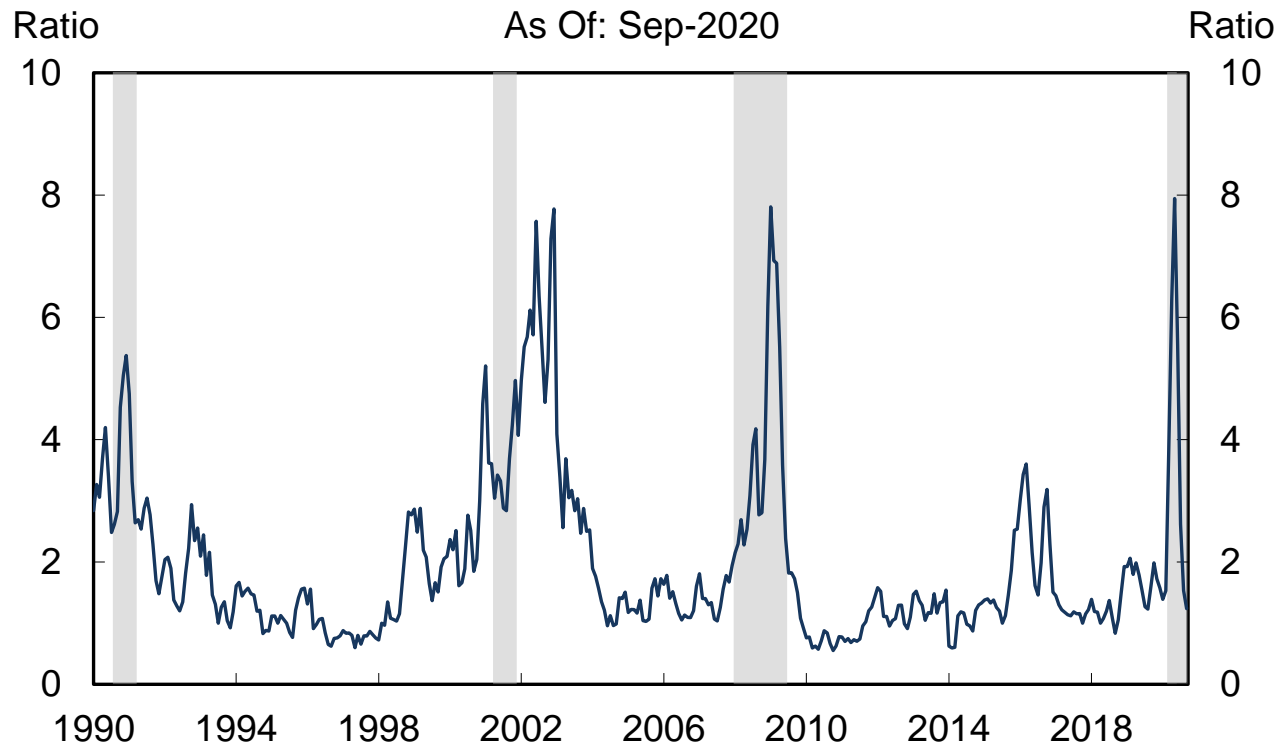
Count ('000s)



Source: ABI, AACER

Note: Annual bankruptcy filings from 2000 – 2010.  
Monthly bankruptcy filings from 2011 – 2020.

# A.3 U.S. Nonfinancial Corporate Downgrade-Upgrade Ratio



Source: Moody's,  
Haver Analytics, OFR

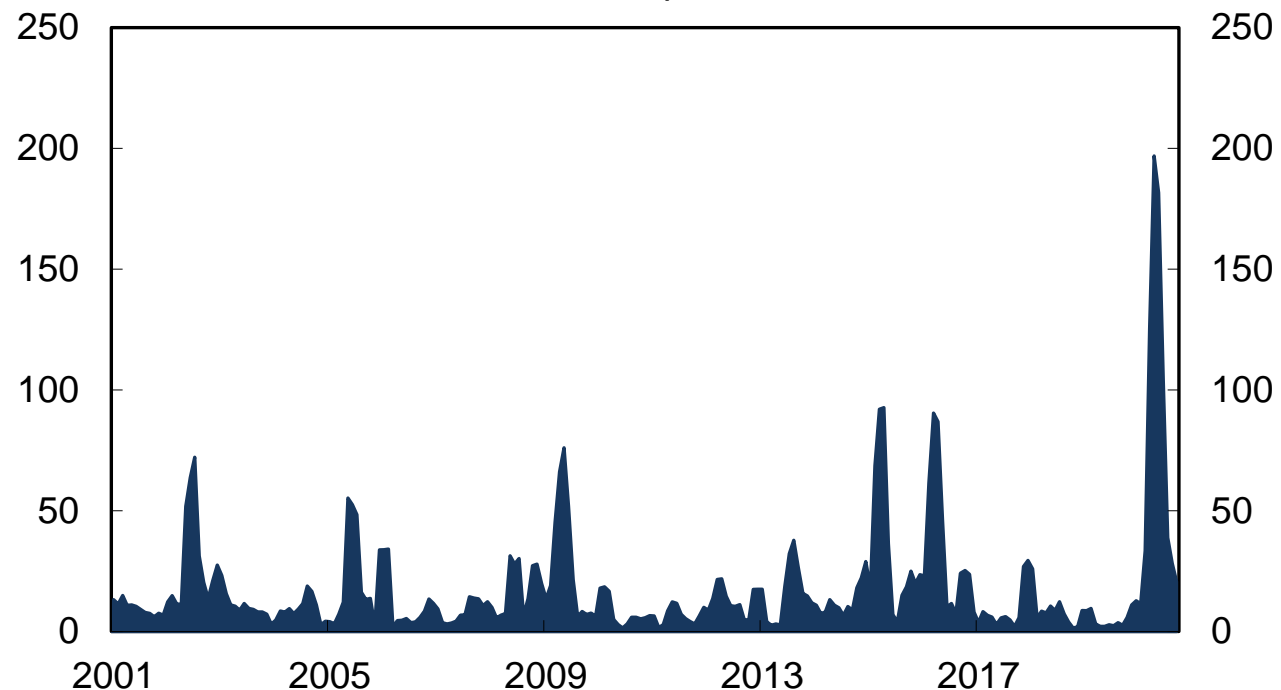
Note: Ratio is trailing 3-month downgrades divided  
by upgrades. Gray bars signify NBER recessions.

# A.4 Fallen Angel Debt

Billions of US\$

As Of: Sep-2020

Billions of US\$

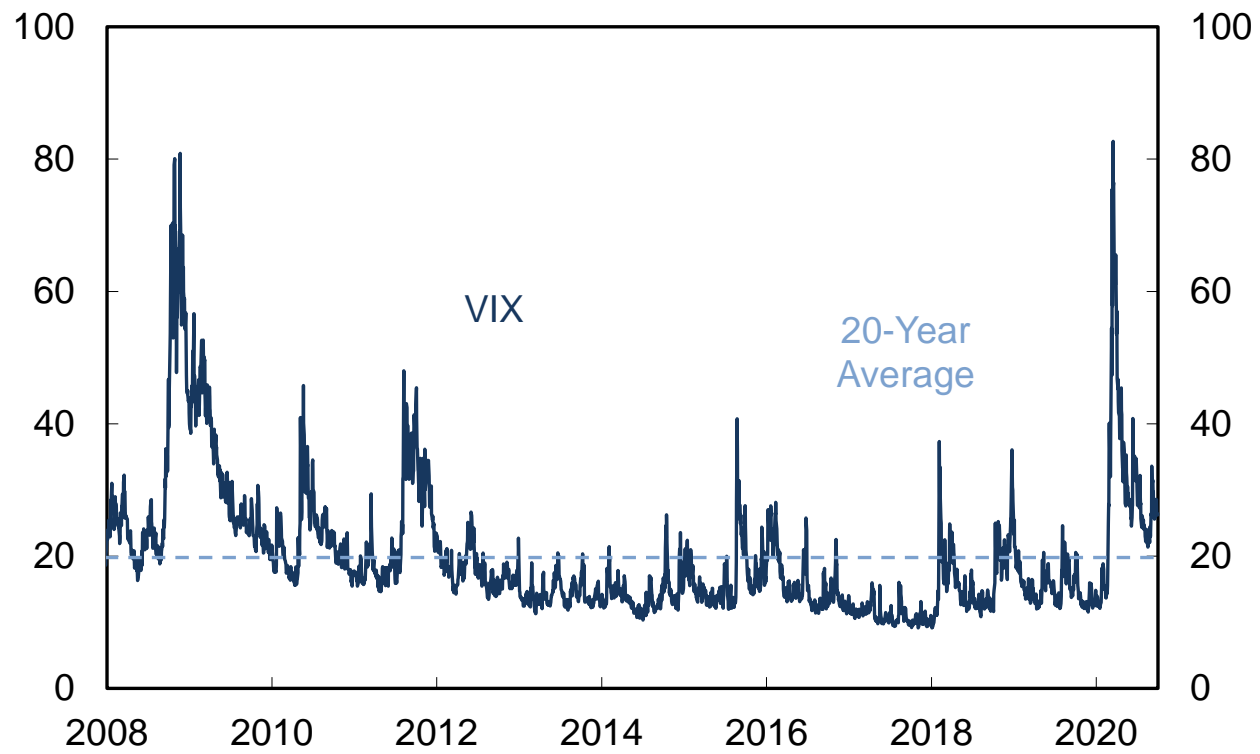


Source: BofA Global Research, ICE Data Services, OFR

Note: Rolling three months beginning in March 2020. Includes financial issuers. Fallen angels above refer to issuers previously included in the BofA U.S. Corporate Index.

# 3.2.2.1 S&P 500 Volatility

Index As Of: 30-Sep-2020 Index



Source: Bloomberg, L.P.

### 3.2.2.2 S&P 500 Forward Price-to-Earnings

P/E

As Of: 30-Sep-2020

P/E

30

30

25

25

20

20

15

15

10

10

2010

2011

2012

2013

2014

2015

2016

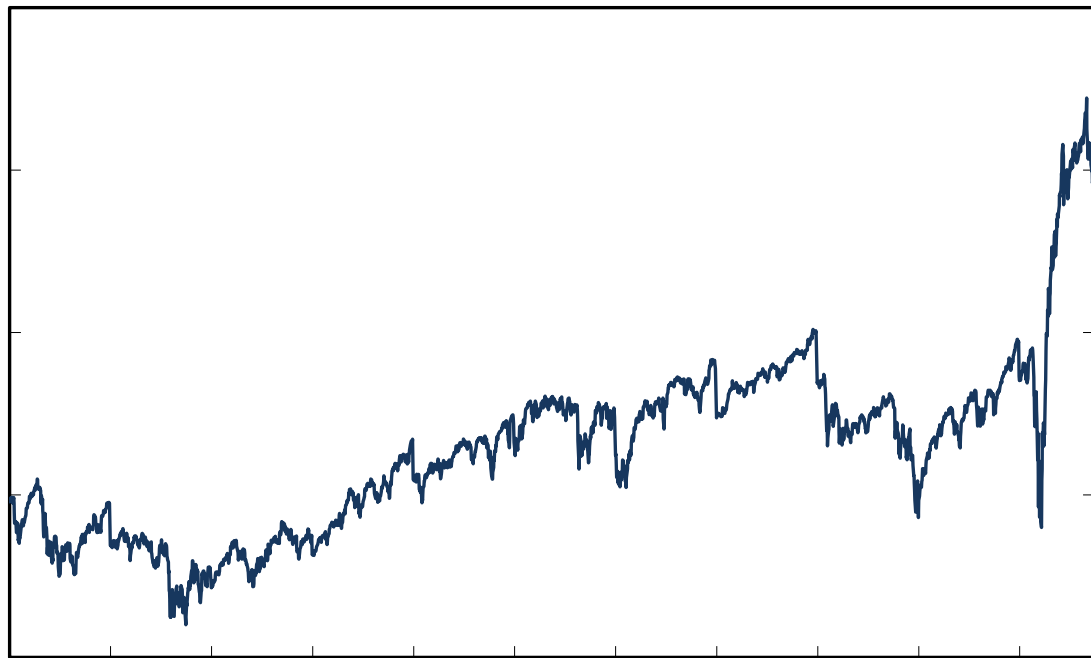
2017

2018

2019

2020

Source: Bloomberg, L.P.

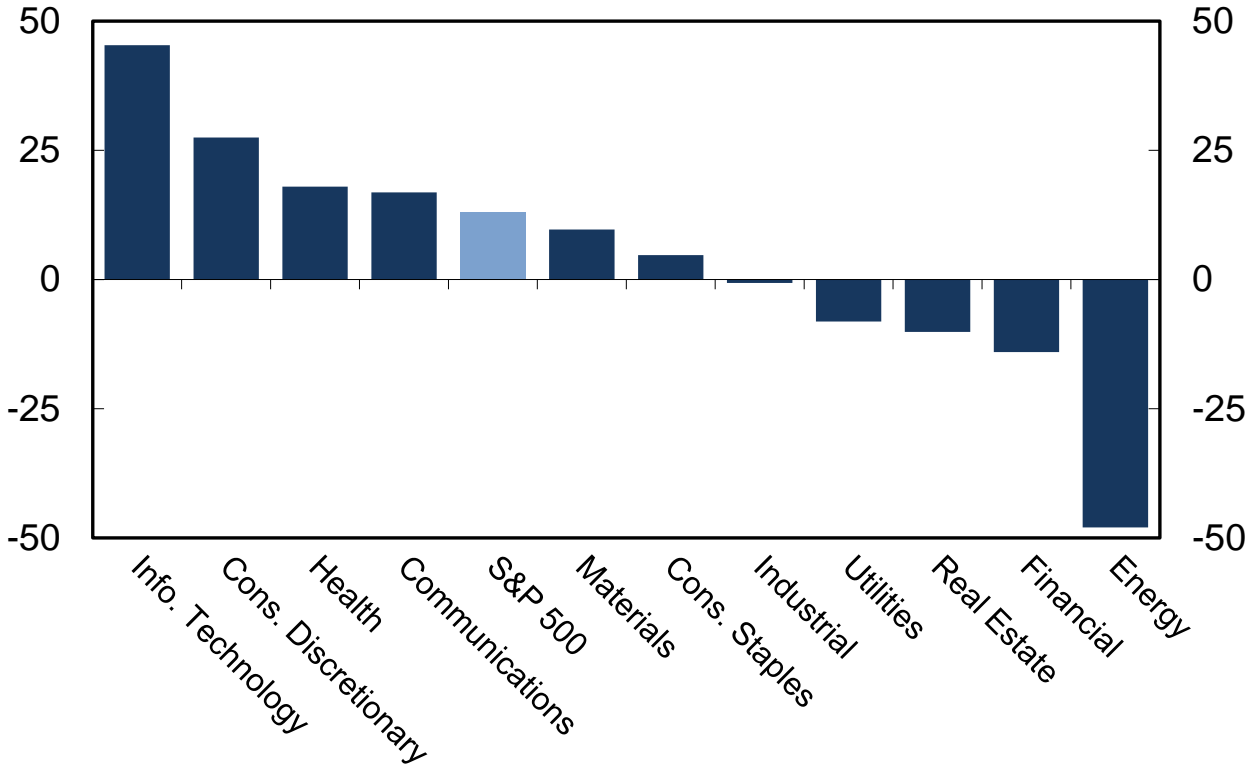


### 3.2.2.3 S&P 500 1-Year Price Returns by Sector

Percent

As Of: 30-Sep-2020

Percent



Source: Bloomberg, L.P.



### 3.2.2.4 Performance of Global Stock Indices

Percent

As Of: 30-Sep-2020

Percent



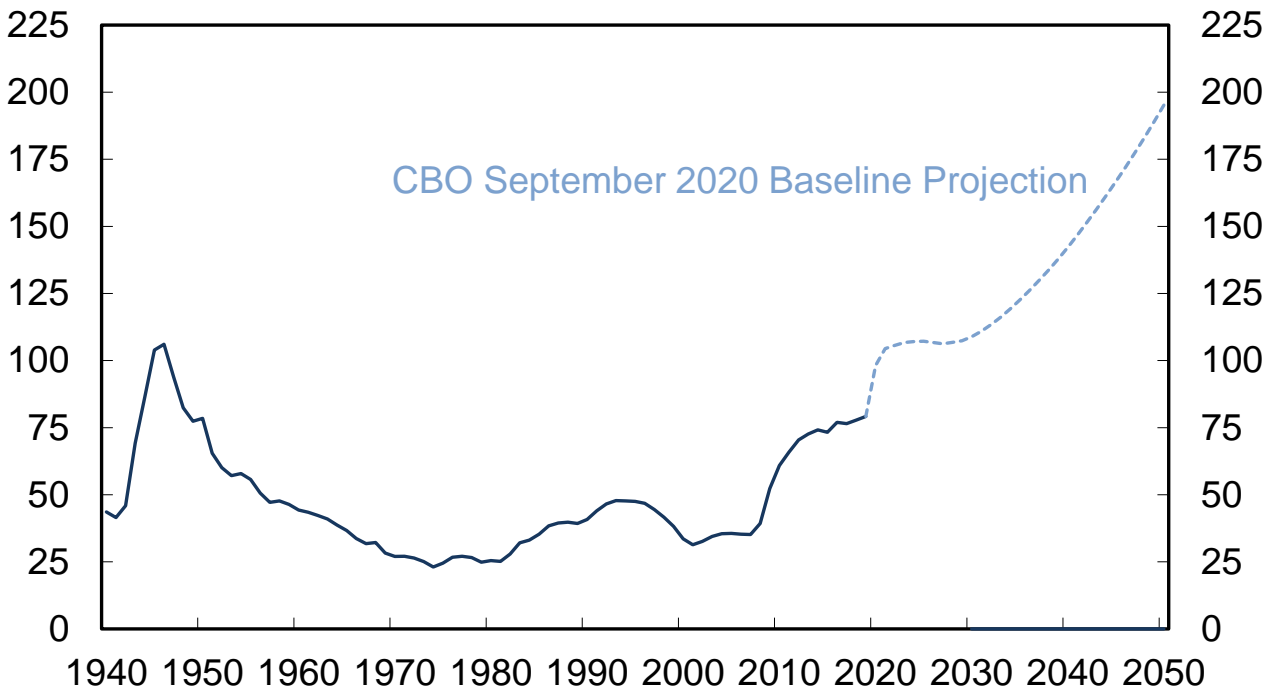
Source: Bloomberg, L.P.

Note: Indexed to 01-Jan-2019.

### 3.3.1.1 Federal Debt Held by the Public

Percent of GDP

Percent of GDP



CBO September 2020 Baseline Projection

Source: CBO, Haver Analytics

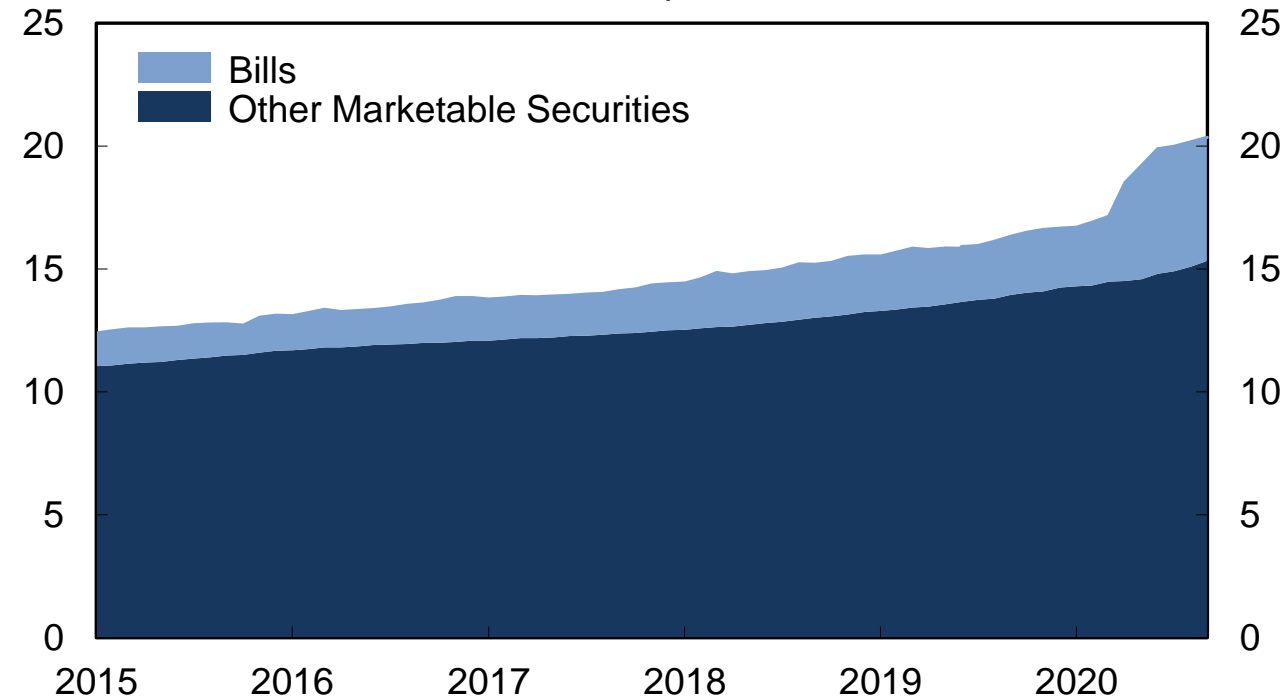
Note: Data for fiscal years.  
Years after 2019 are projected.

### 3.3.1.2 Publicly Held Treasury Securities Outstanding

Trillions of US\$

As Of: Sep-2020

Trillions of US\$



Source: Federal Reserve,  
Haver Analytics

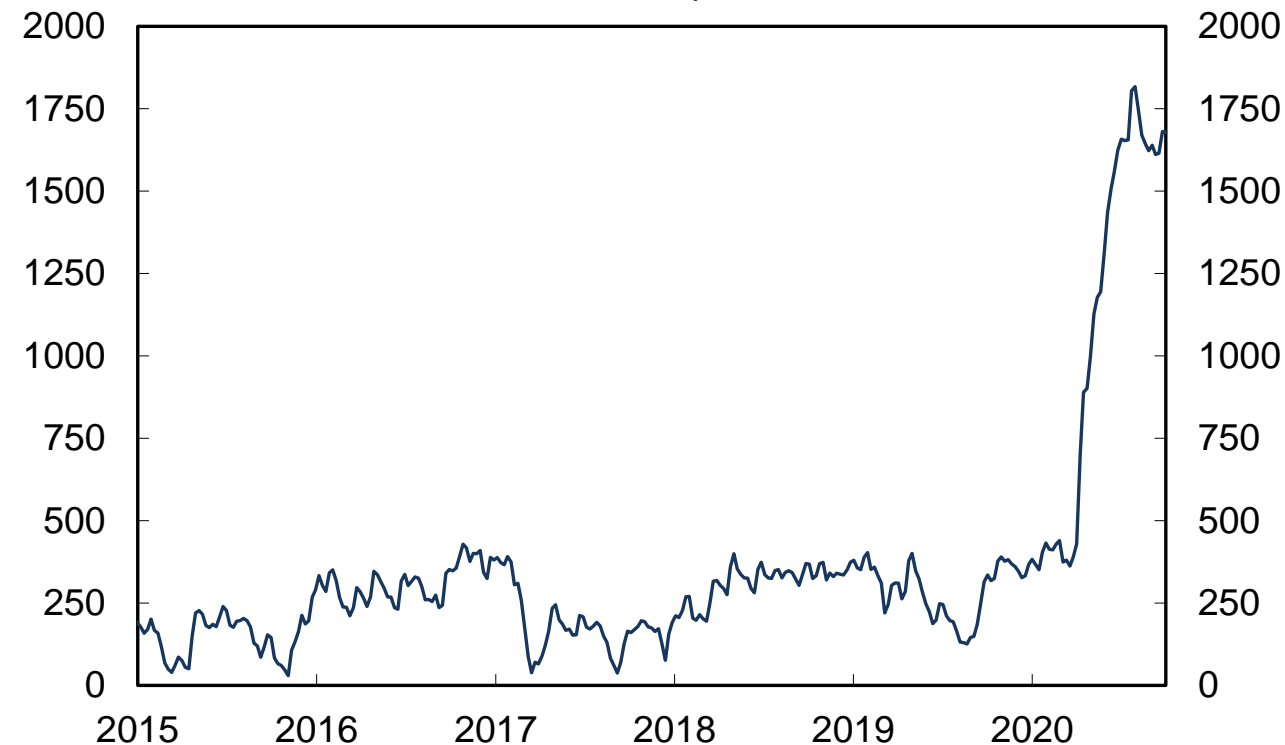
Note: Other marketable securities  
includes notes, bonds, TIPs, and FRNs.

### 3.3.1.3 Treasury General Account Balance

Billions of US\$

As Of: 30-Sep-2020

Billions of US\$



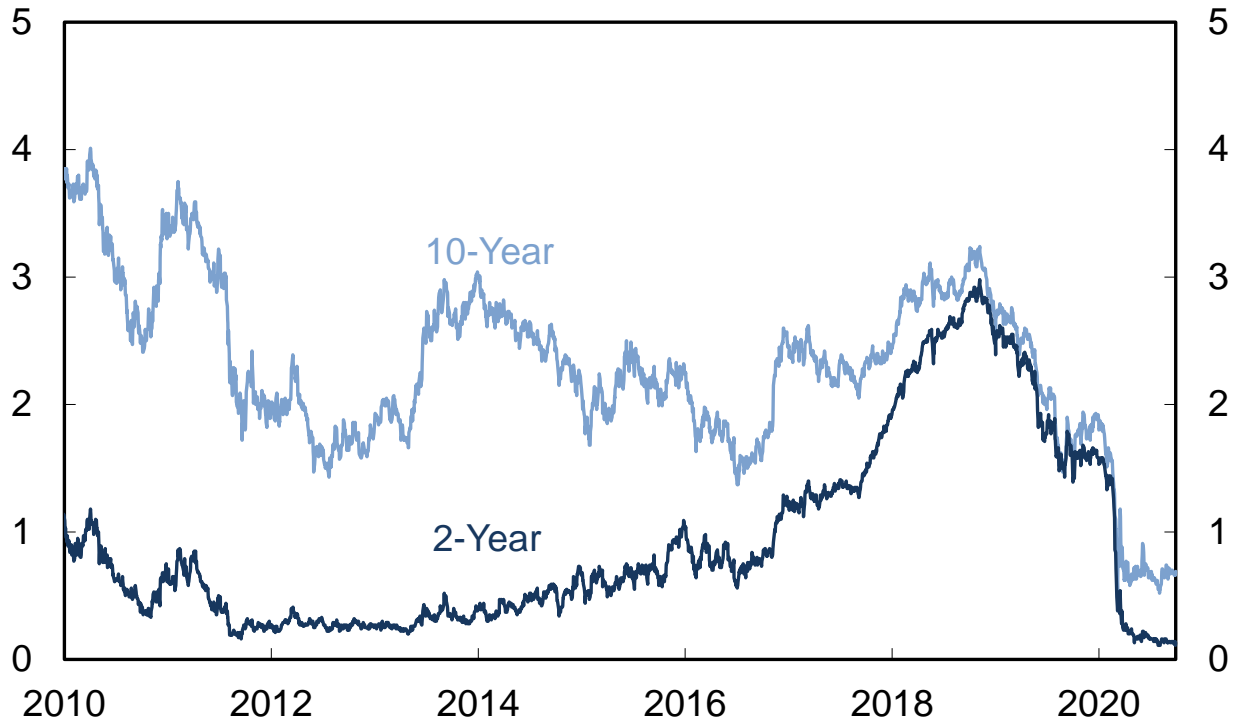
Source: Federal Reserve, Haver Analytics

### 3.3.1.4 U.S. Treasury Yields

Percent

As Of: 30-Sep-2020

Percent



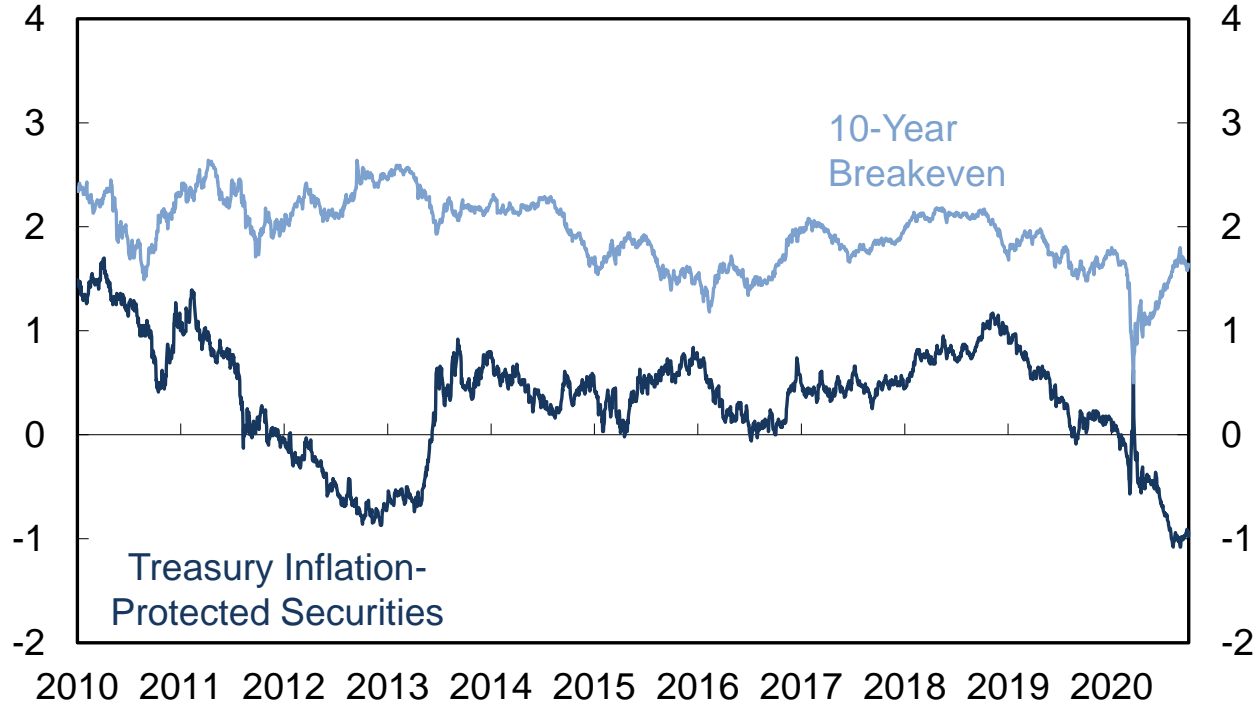
Source: U.S. Department of the Treasury

### 3.3.1.5 Ten-Year TIPS Yield and Breakeven

Percent

As Of: 30-Sep-2020

Percent



Source: U.S. Department of the Treasury

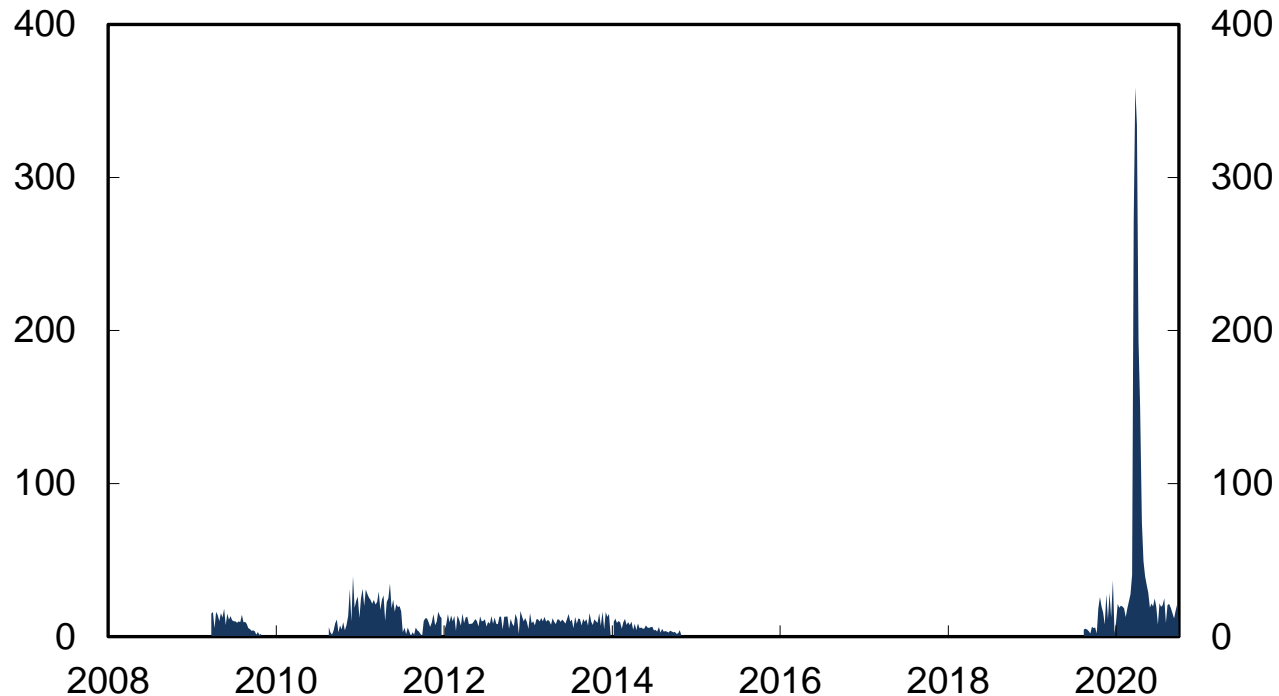
Note: Breakeven represents the difference between the nominal and TIPS yield.

### 3.3.1.6 FRBNY Open Market Operations: Treasury Purchases

Billions of US\$

As Of: 03-Oct-2020

Billions of US\$



Source: FRBNY

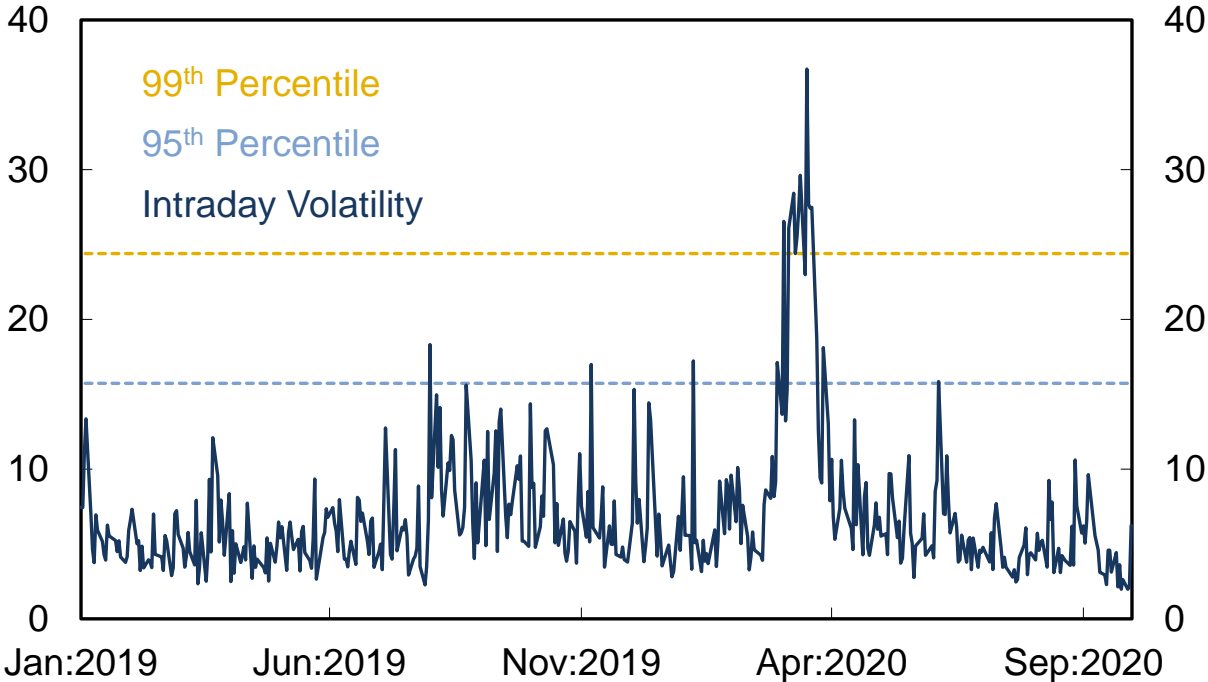
Note: Weekly amount of Treasury securities purchased by the Federal Reserve Bank of New York in accordance with the FOMC directive.

# B.1 Intraday Volatility for 10-Year Treasury Yields

Basis Points

As Of: 30-Sep-2020

Basis Points



Note: Intraday volatility calculated as daily high yield minus daily low yield on 10-year Treasury notes. Percentiles based on January 2005 – September 2020.

Source: Bloomberg, L.P.

Percentiles based on January 2005 – September 2020.

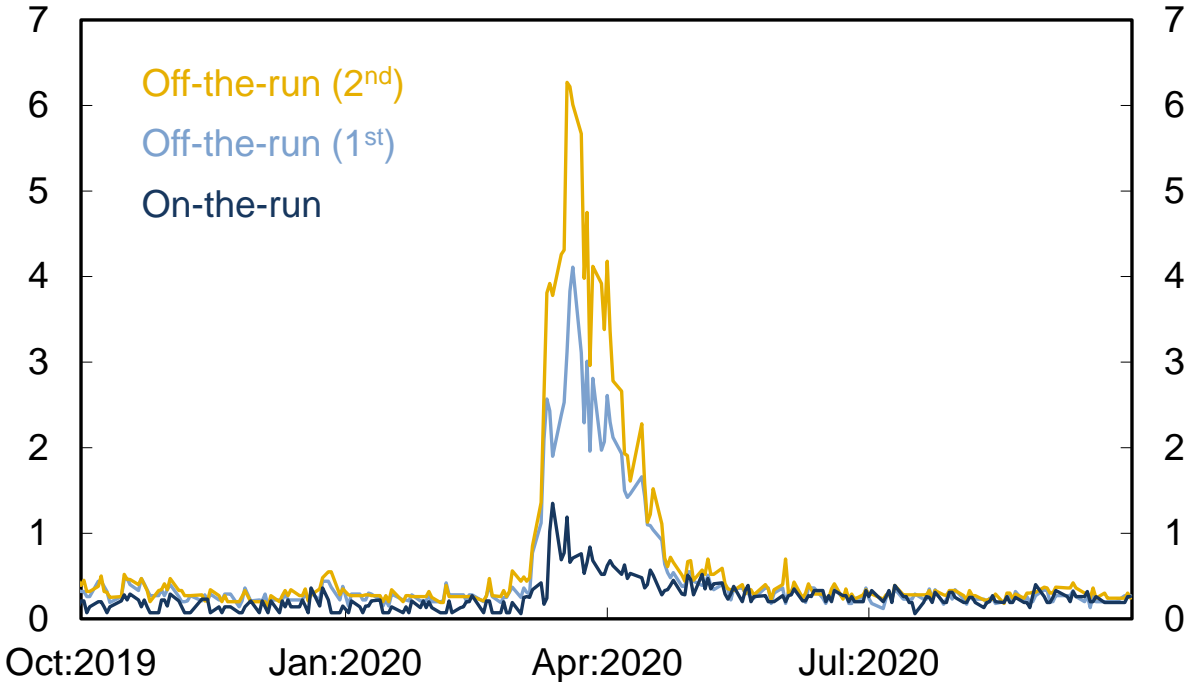


# B.2 Bid-Ask Spread for 30-Year Treasury Bonds

Basis Points

As Of: 30-Sep-2020

Basis Points



Note: Represents the bid YTM minus the ask YTM for on- and off-the-run U.S. Treasury bonds.

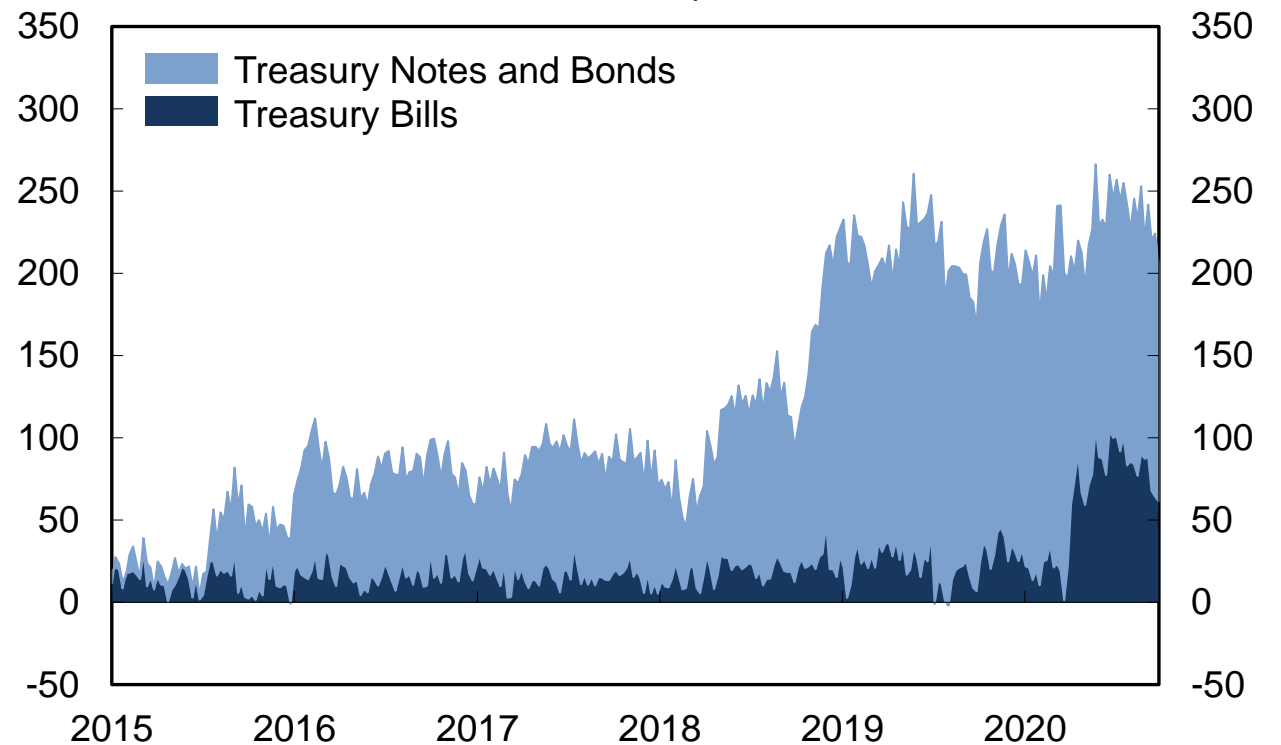
Source: Bloomberg, L.P.

# B.3 Primary Dealer Inventories

Billions of US\$

As Of: 30-Sep-2020

Billions of US\$



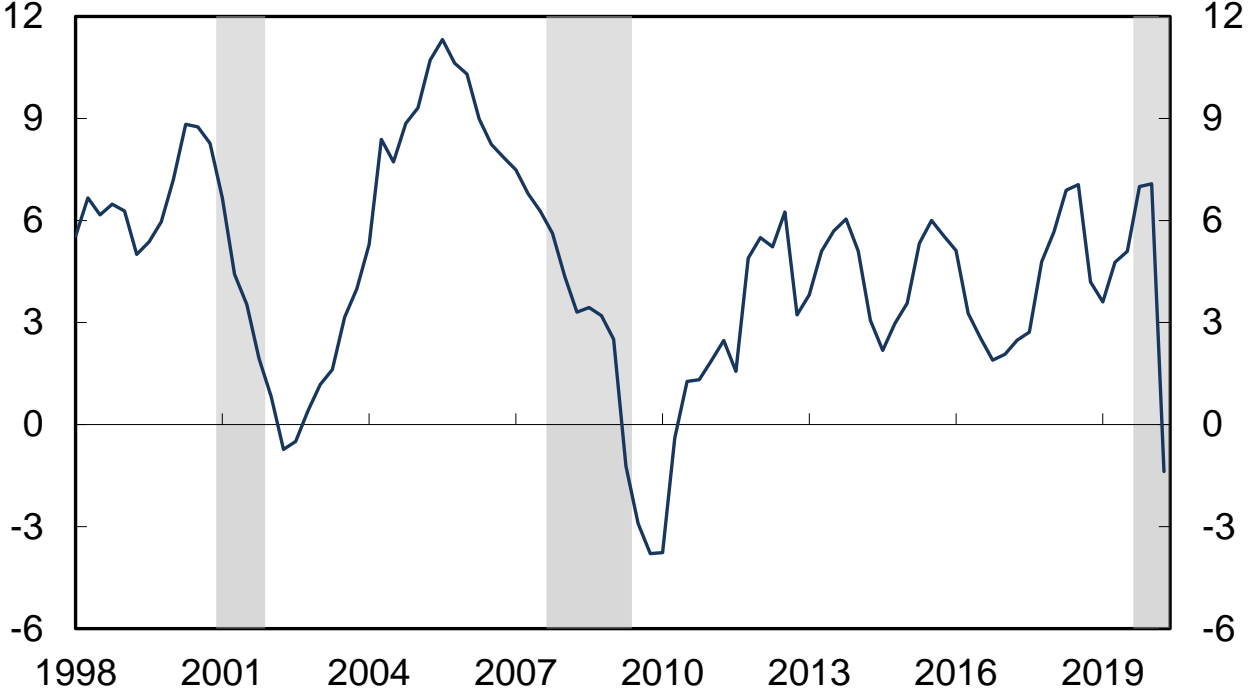
Source: FRBNY

### 3.3.2.1 Changes in State and Local Government Tax Revenues

Percent

As Of: 2020 Q2

Percent



Source: U.S. Census Bureau, Haver Analytics

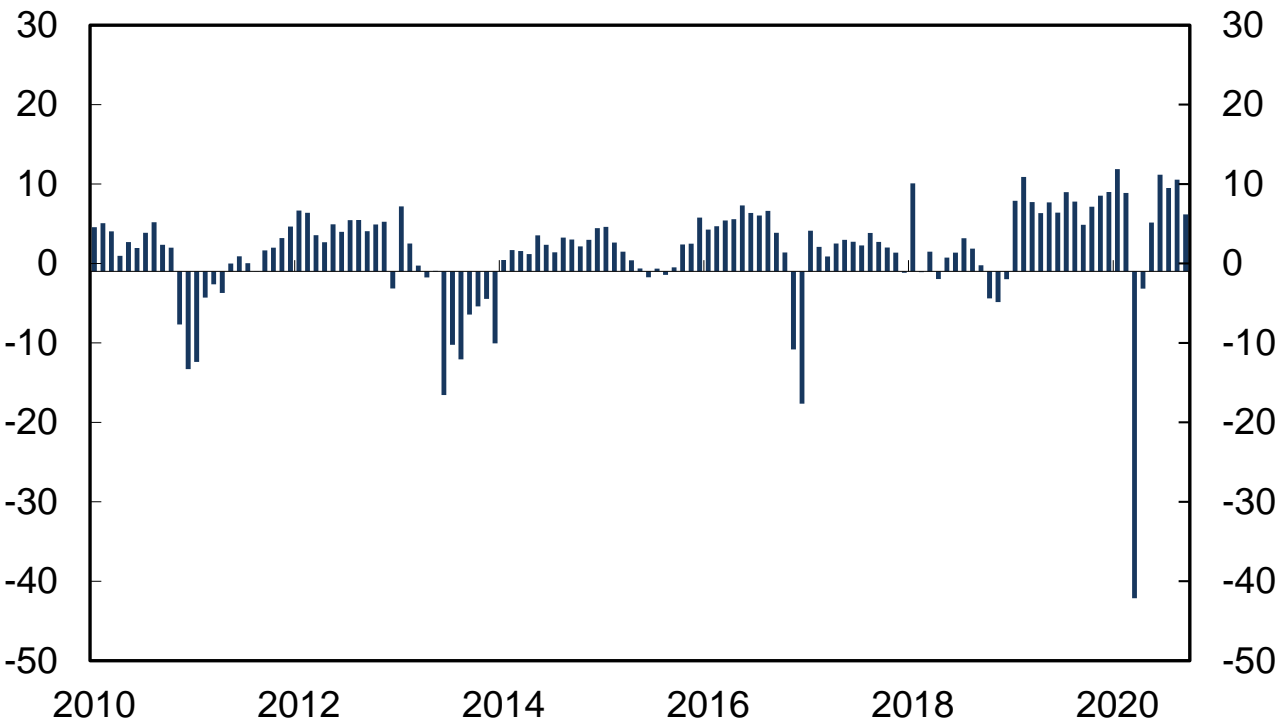
Note: Data represents year-over-year percentage change. Revenue measures includes revenues from property, individual income, corporate income, and sales taxes. Gray bars signify NBER recessions.

### 3.3.2.2 Municipal Bond Mutual Fund Flows

Billions of US\$

As Of: Sep-2020

Billions of US\$



Source: ICI, Haver Analytics

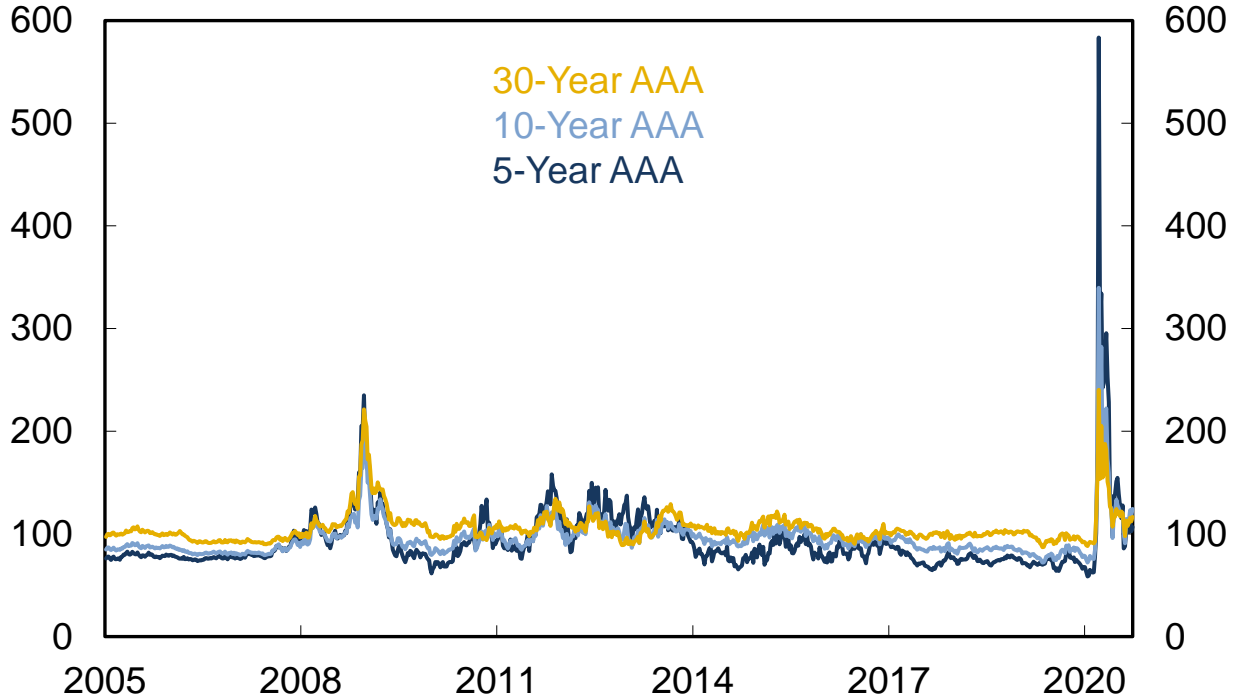
Note: Net fund flows.

### 3.3.2.3 Municipal Bonds to U.S. Treasuries

Percent

As Of: 25-Sep-2020

Percent



Source: Municipal Market  
Advisors, Bloomberg, L.P.

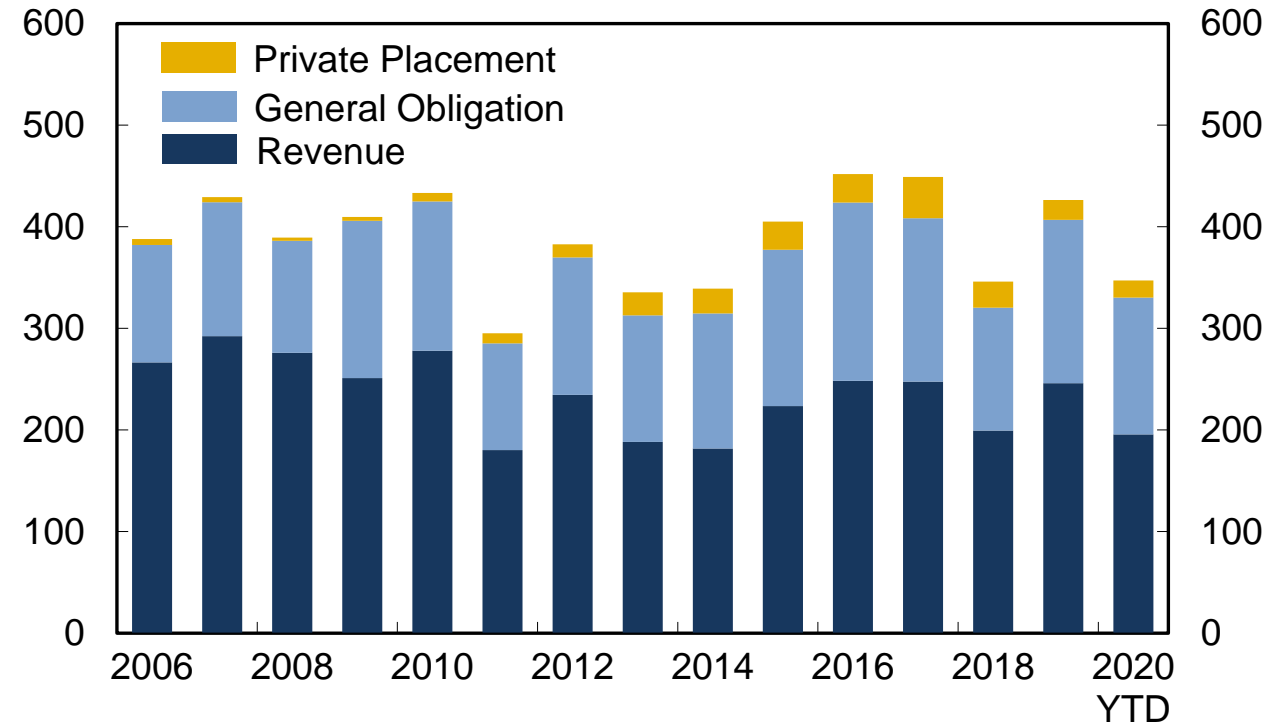
Note: Percentage of municipal yields against equivalent Treasury yields. Bloomberg's BVAL AAA Benchmark replaced MMA as the provider for municipal yields on September 1, 2010.

### 3.3.2.4 Municipal Bond Issuance

Billions of US\$

As Of: Sep-2020

Billions of US\$

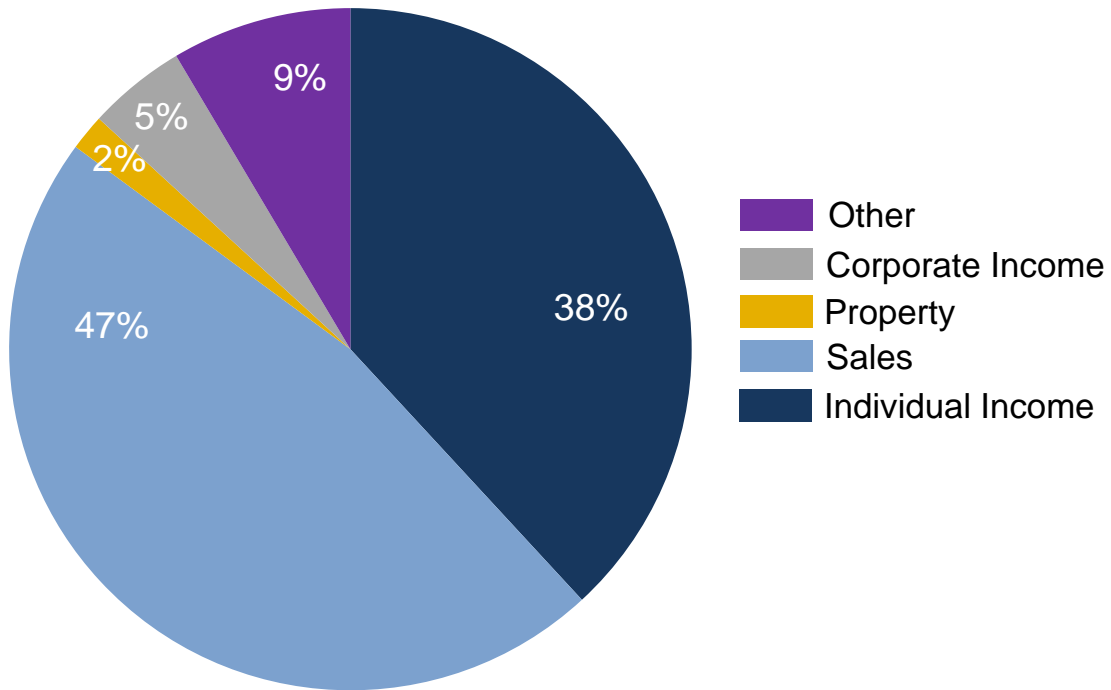


Source: Thomson Reuters, SIFMA

Note: Excludes maturities of less than 13 months.

# C.1 Breakdown of State Tax Revenues

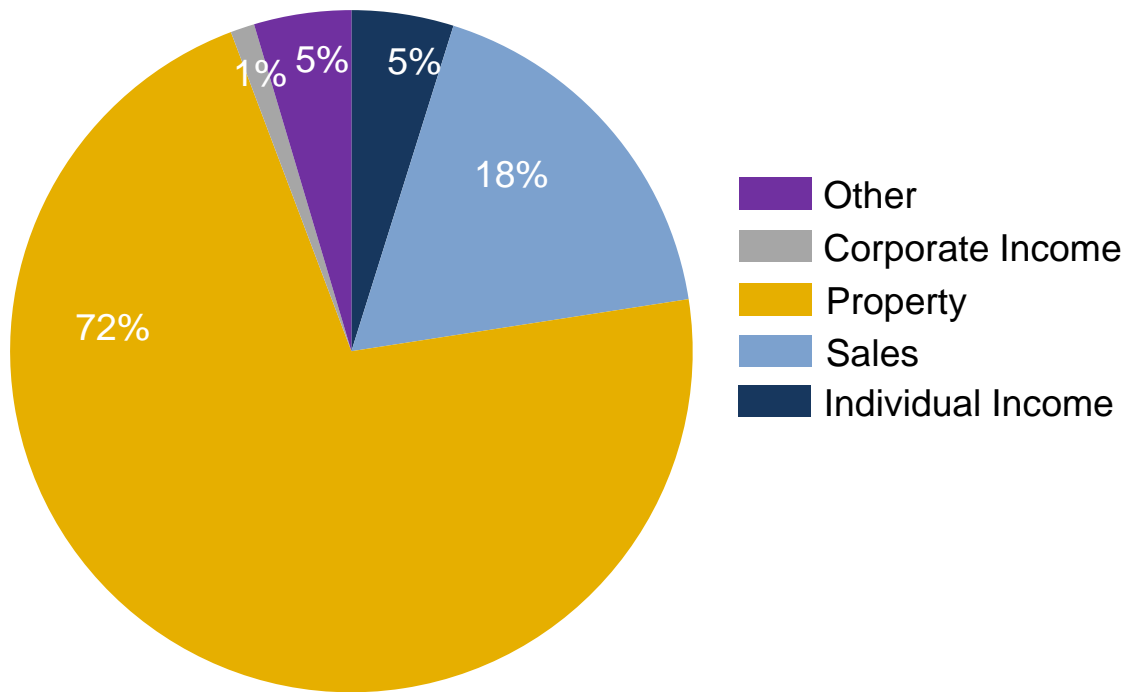
As Of: 2019



Source: U.S. Census Bureau

# C.2 Breakdown of Local Tax Revenues

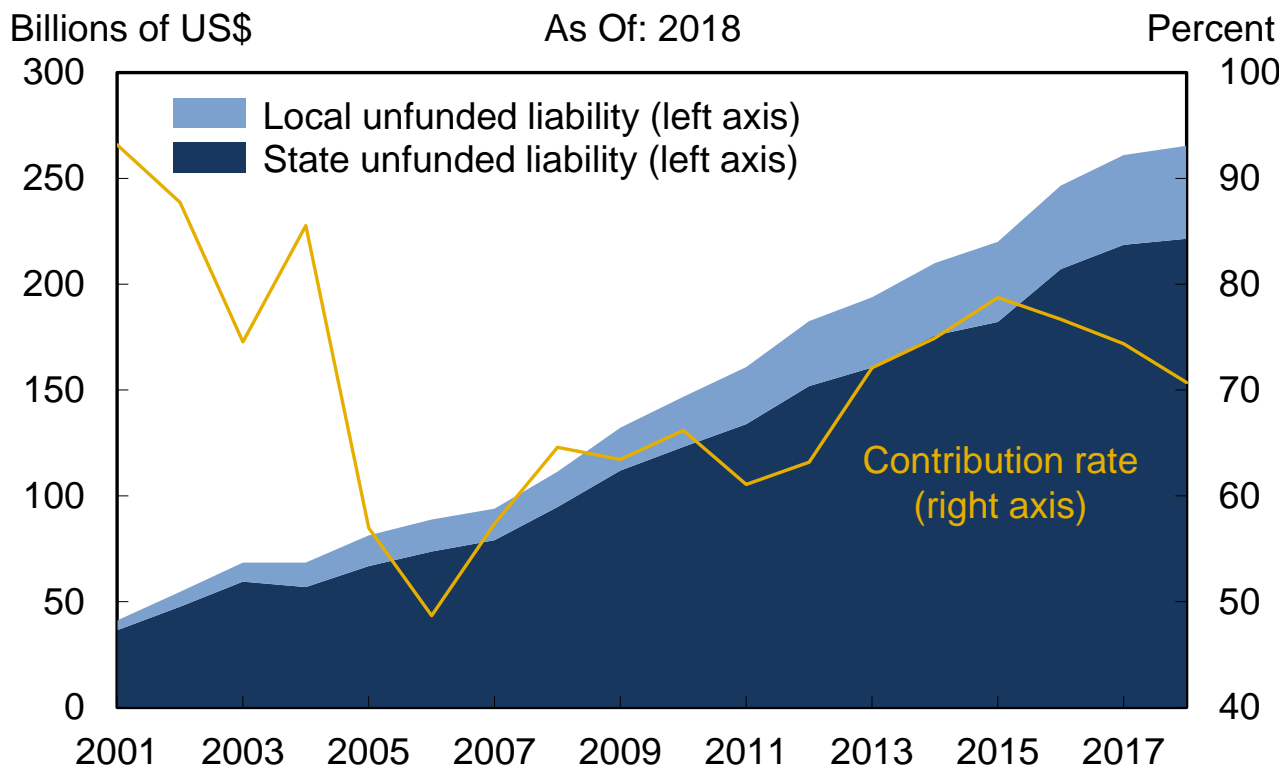
As Of: 2019



Source: U.S. Census Bureau



# C.3 Liabilities of Severely Underfunded Public Pension Plans



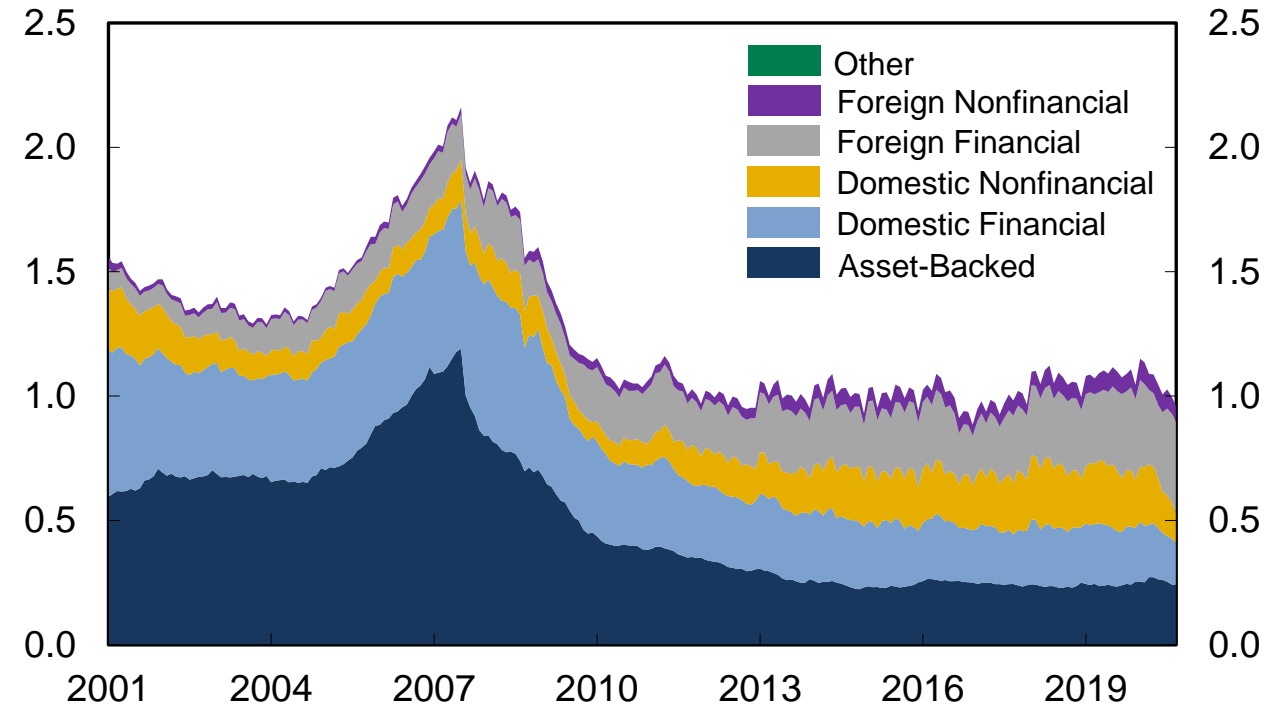
Note: Includes state and local pension plans with UAAL below 50 percent as of 2018. Contribution rate calculated as the weighted average contribution as a percent of actuarially required contribution.

### 3.4.1.1 CP Outstanding by Issuer Type

Trillions of US\$

As Of: Sep-2020

Trillions of US\$



Source: Federal Reserve, Haver Analytics

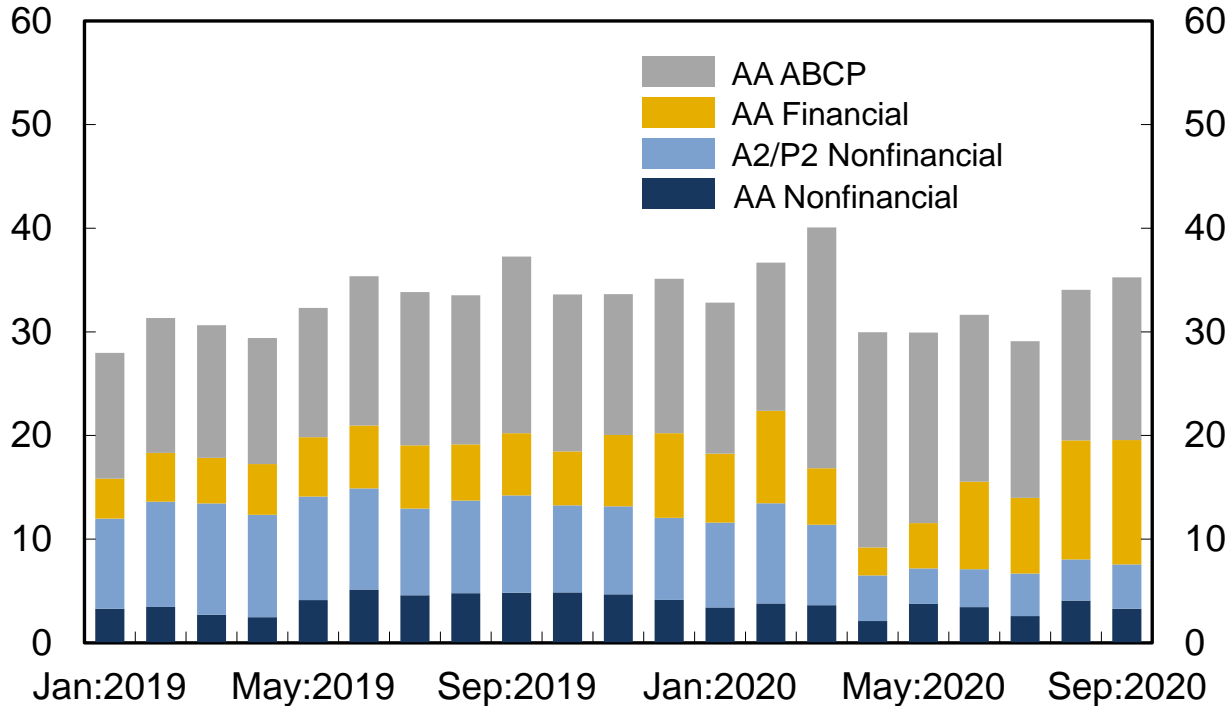
Note: Not seasonally adjusted; domestic includes CP issued in the U.S. by entities with foreign parents.

### 3.4.1.2 CP Issuance by Issuer Type and Rating

Billions of US\$

As Of: Sep-2020

Billions of US\$



Source: Federal Reserve,  
Haver Analytics

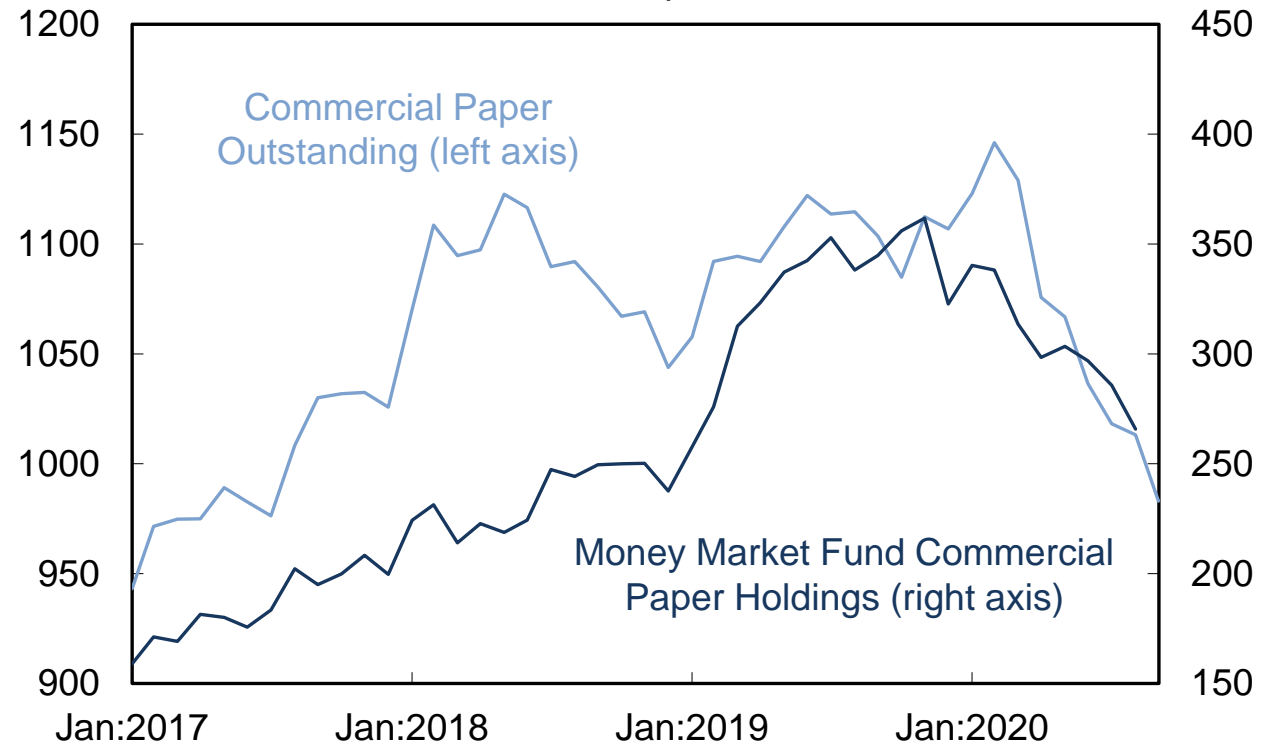
Note: Monthly average.

### 3.4.1.3 CP Outstanding & MMF Holdings

Billions of US\$

As Of: Sep-2020

Billions of US\$



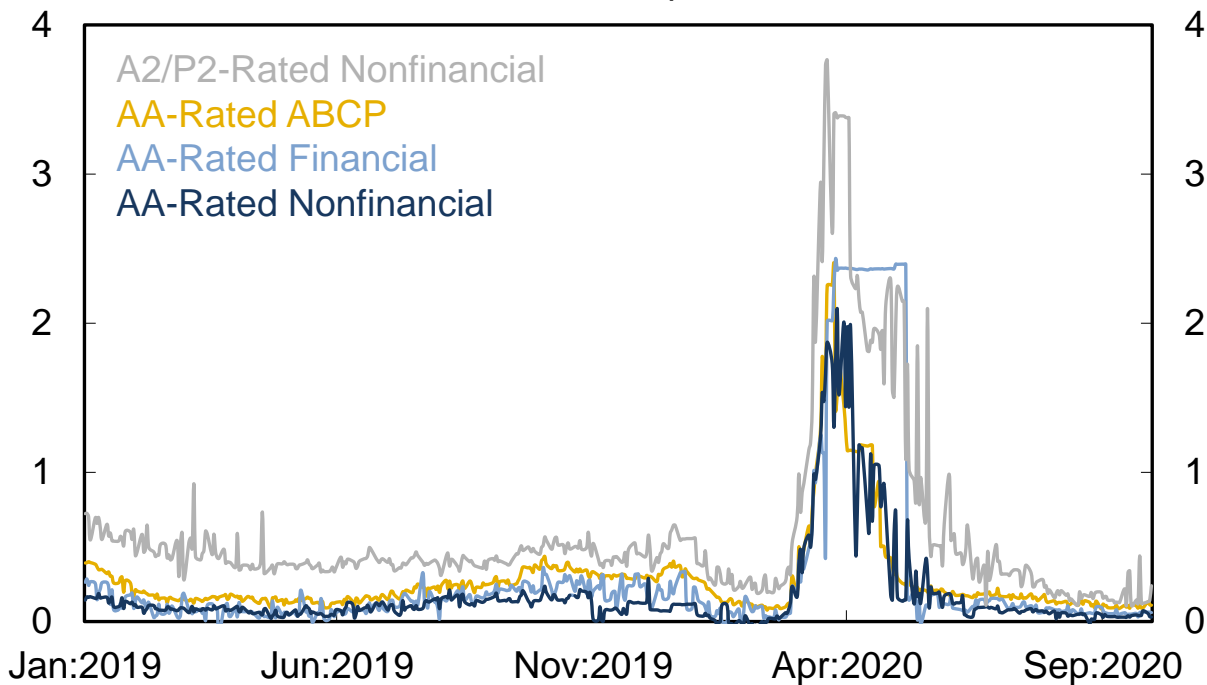
Source: Federal Reserve, SEC Form N-MFP, Haver Analytics

### 3.4.1.4 Three Month CP Interest Rate Spreads

Percent

As Of: 30-Sep-2020

Percent



Source: FRBNY, Bloomberg L.P.,  
Haver Analytics, OFR

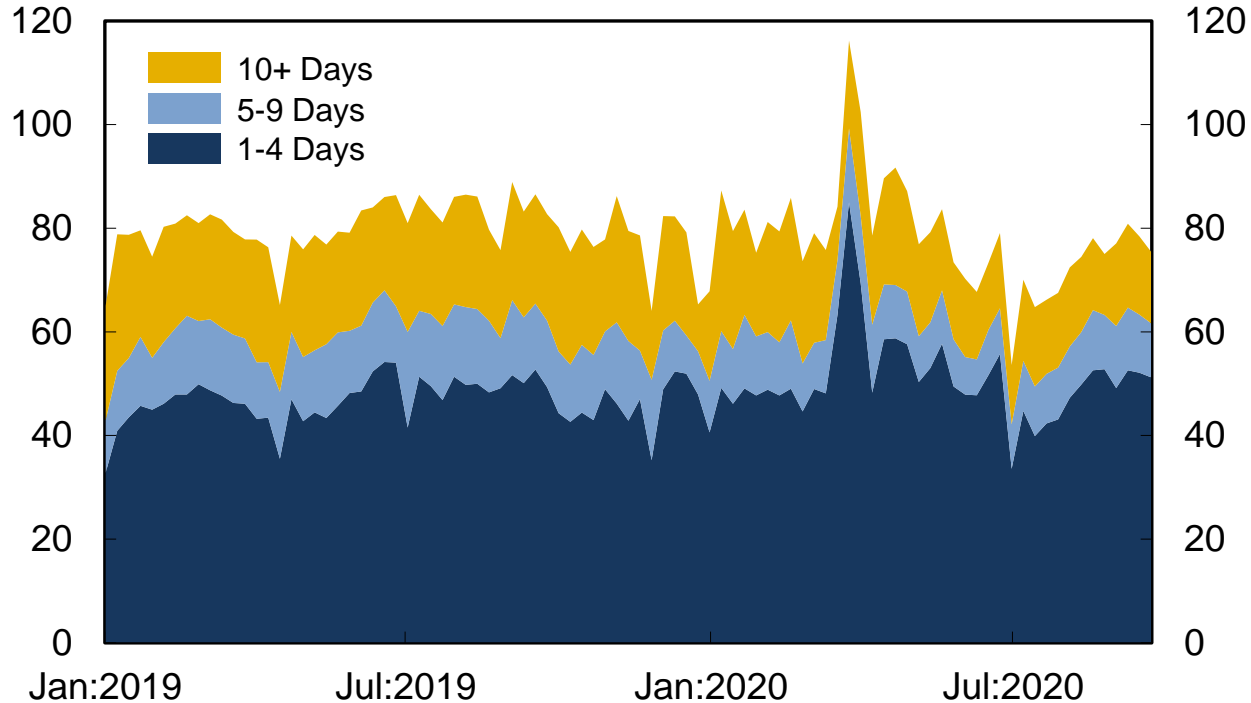
Note: Spread to 3-Month  
Overnight Index Swap (OIS) rate.

### 3.4.1.5 Weekly CP Issuance by Tenor

Billions of US\$

As Of: 25-Sep-2020

Billions of US\$



Source: Federal Reserve,  
Haver Analytics

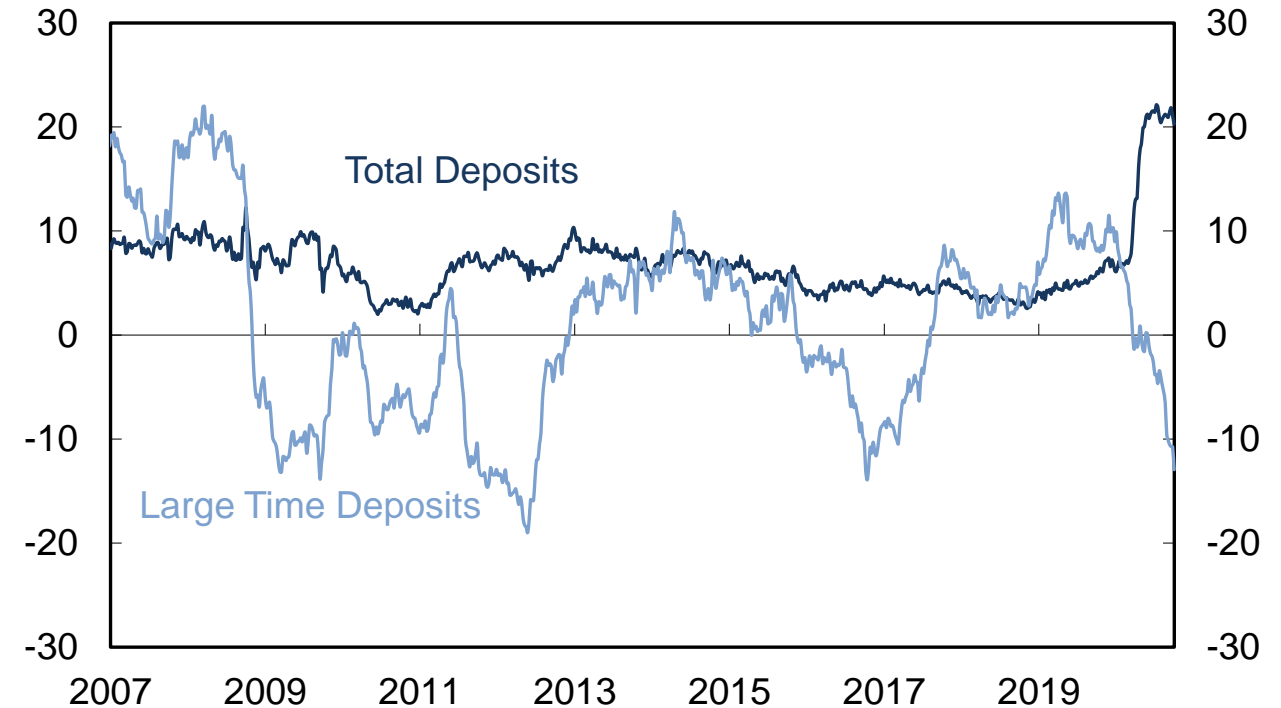
Note: Weekly average.

### 3.4.1.6 Commercial Bank Deposit Growth

Percent

As Of: 30-Sep-2020

Percent



Source: Federal Reserve,  
Haver Analytics

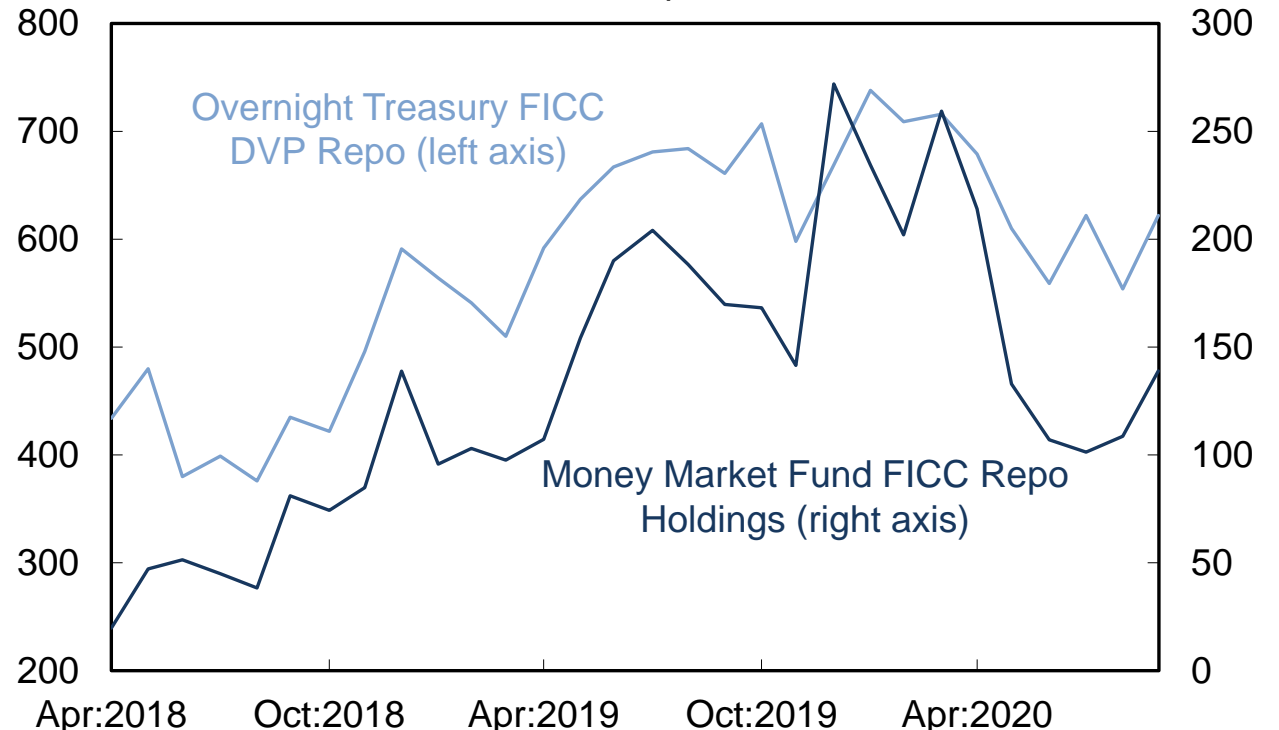
Note: Year-over-year percentage change.

### 3.4.2.1 FICC Repo Balances and MMF Holdings

Billions of US\$

As Of: Sep-2020

Billions of US\$



Source: FRBNY, SEC Form N-MFP, Bloomberg L.P.

Note: FICC cleared bilateral excludes term repo and repo backed by agency collateral.

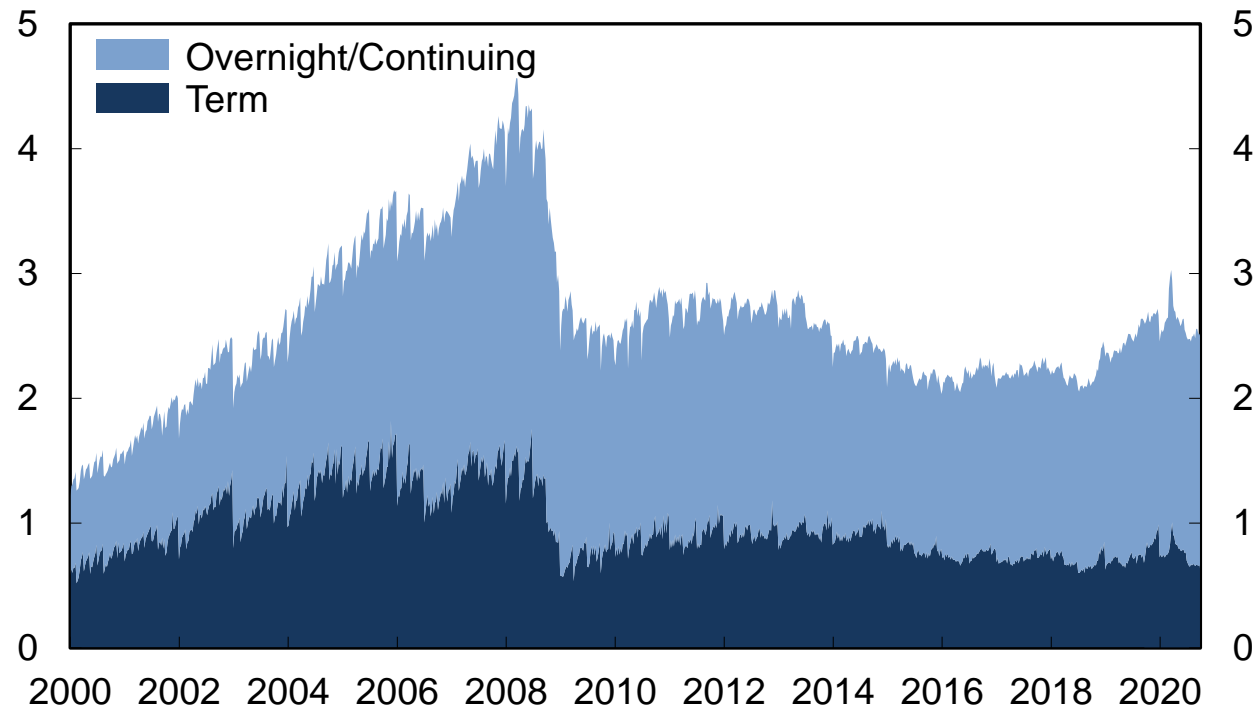


### 3.4.2.2 Primary Dealer Repo Agreements

Trillions of US\$

As Of: 30-Sep-2020

Trillions of US\$



Source: FRBNY,  
Haver Analytics

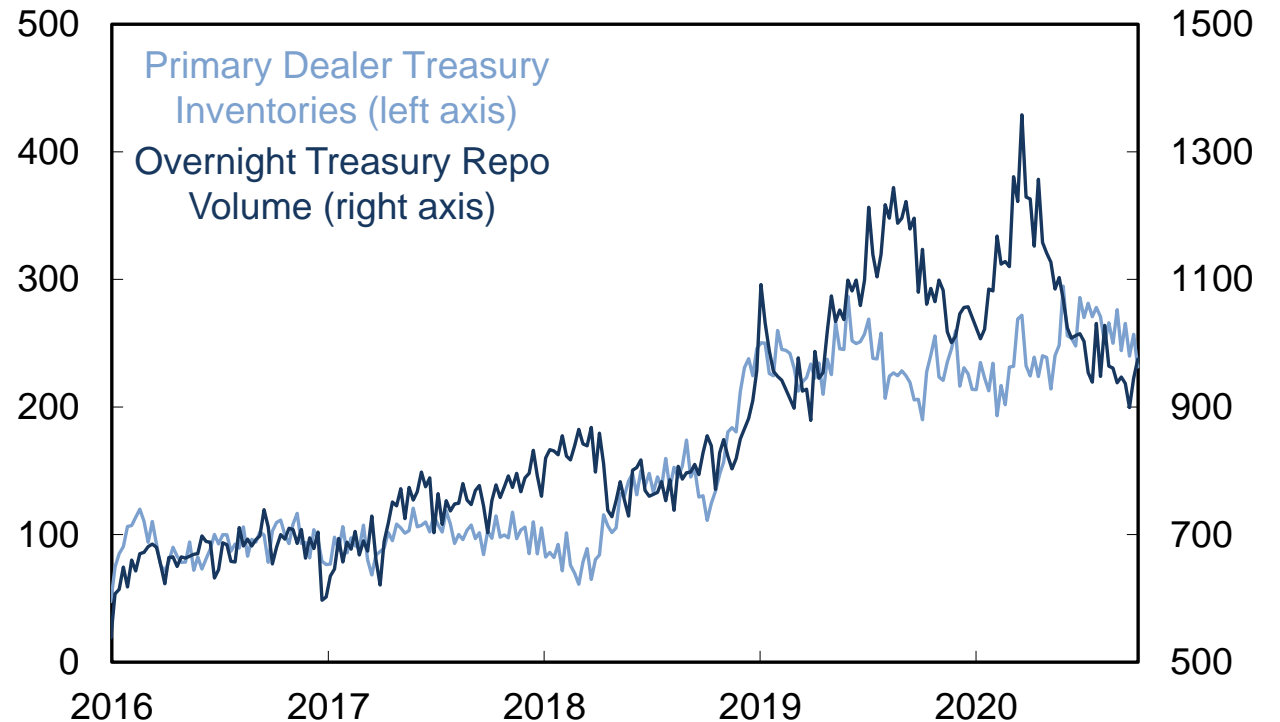
Note: Aggregation method removes missing data when occurs due to disclosure edits or non-trading days for specific security repo agreements.

### 3.4.2.3 Overnight Repo Volumes and Dealer Inventories

Billions of US\$

As Of: 30-Sep-2020

Billions of US\$



Source: FRBNY, Staff Calculations, Haver Analytics

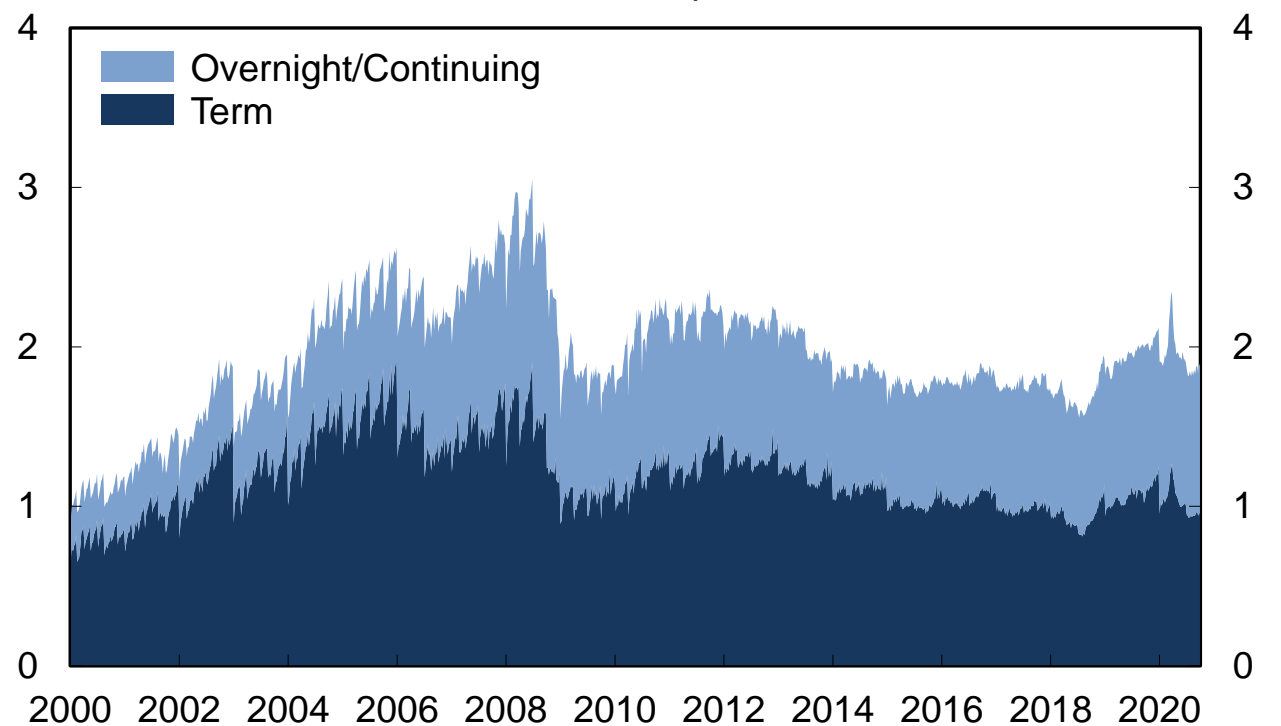
Note: Overnight Treasury repo volume includes published volumes for SOFR.

### 3.4.2.4 Primary Dealer Reverse Repo Agreements

Trillions of US\$

As Of: 30-Sep-2020

Trillions of US\$



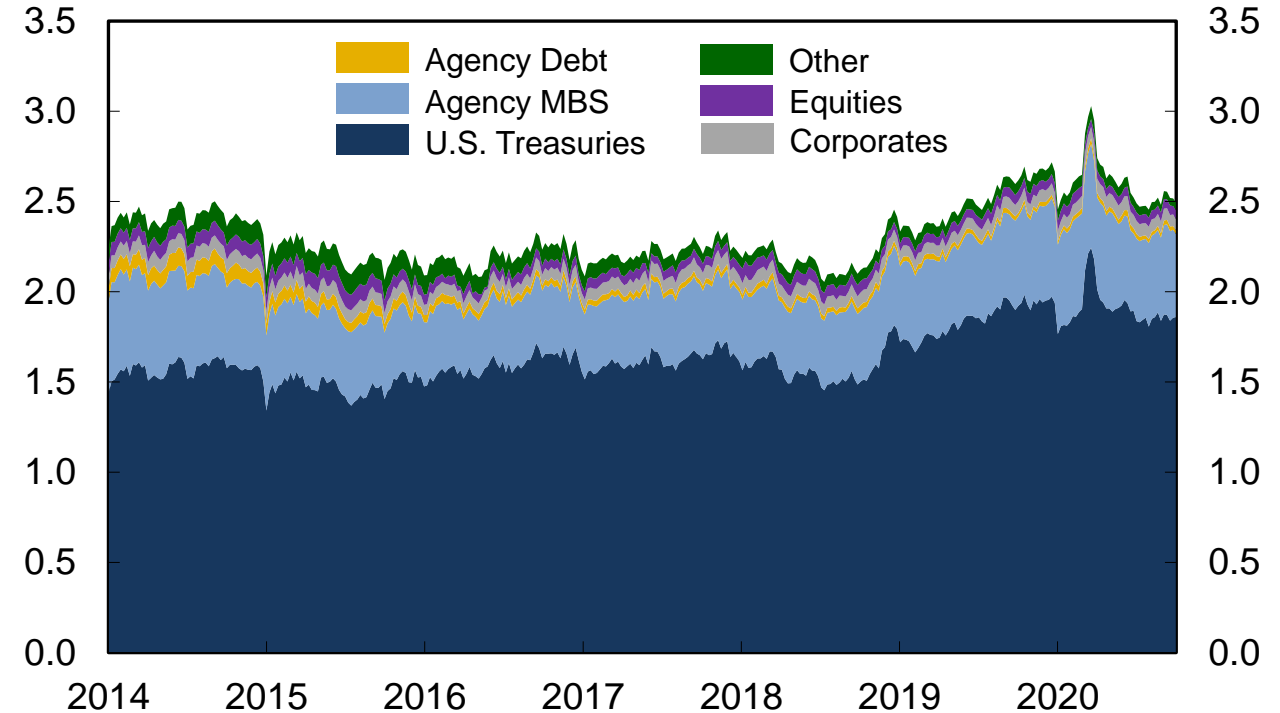
Source: FRBNY, Haver Analytics

### 3.4.2.5 Primary Dealer Repo Collateral

Trillions of US\$

As Of: 30-Sep-2020

Trillions of US\$



Source: FRBNY,  
Haver Analytics

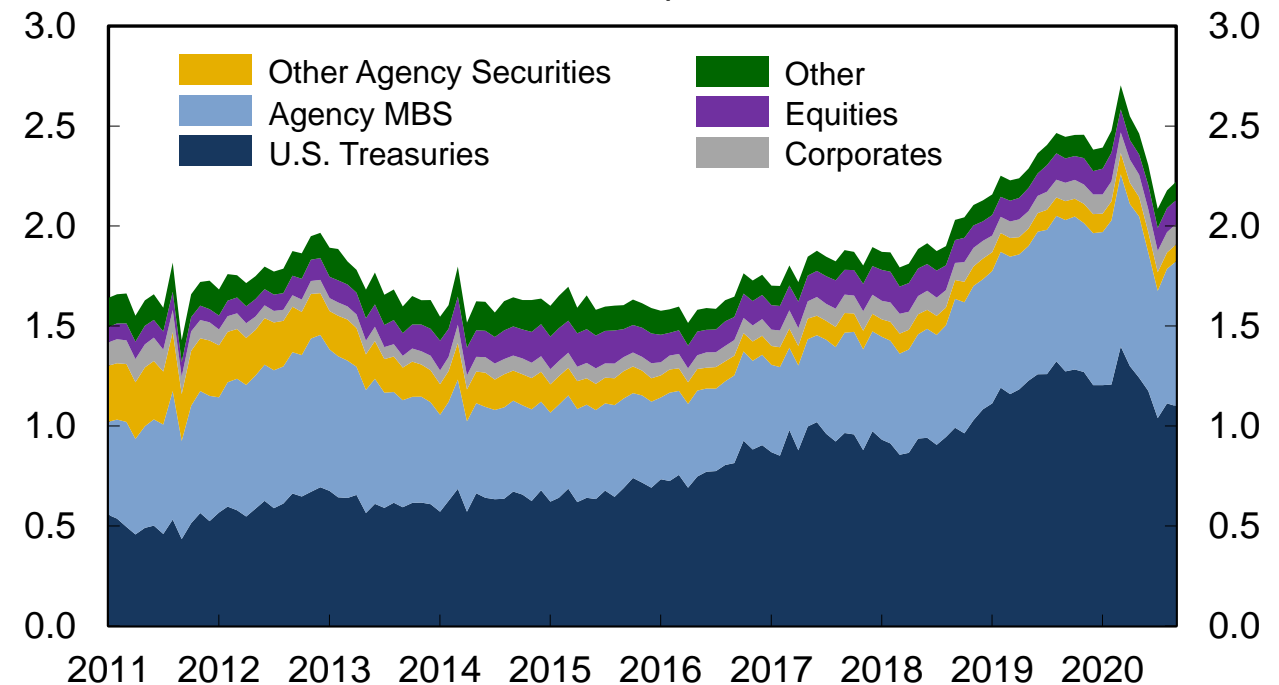
Note: U.S. Treasuries includes TIPS; other includes ABS

### 3.4.2.6 Collateral in the Tri-Party Repo Market

Trillions of US\$

As Of: Sep-2020

Trillions of US\$



Source: FRBNY,  
Haver Analytics

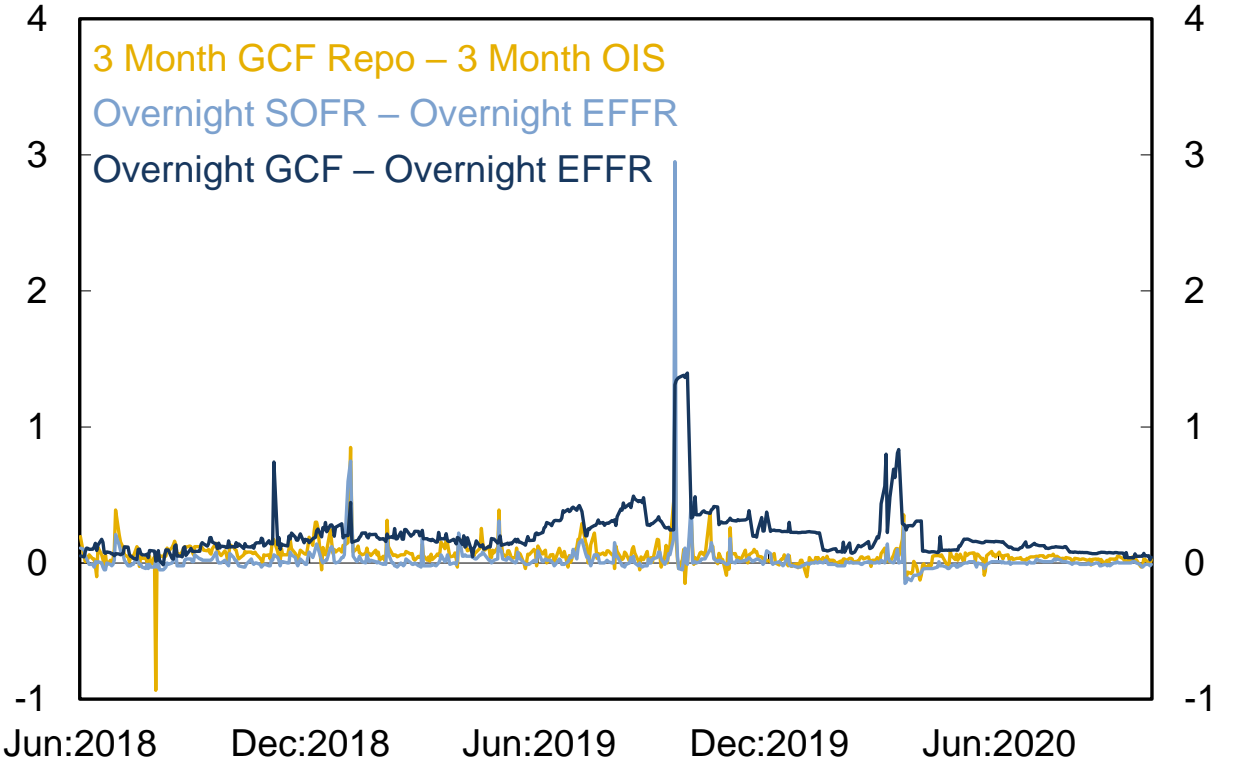
Note: Other includes ABS, CDOs, private label CMOs, international securities, money markets, municipal debt, and whole loans.

# 3.4.2.7 Repo Rate Spreads

Percent

As Of: 30-Sep-2020

Percent



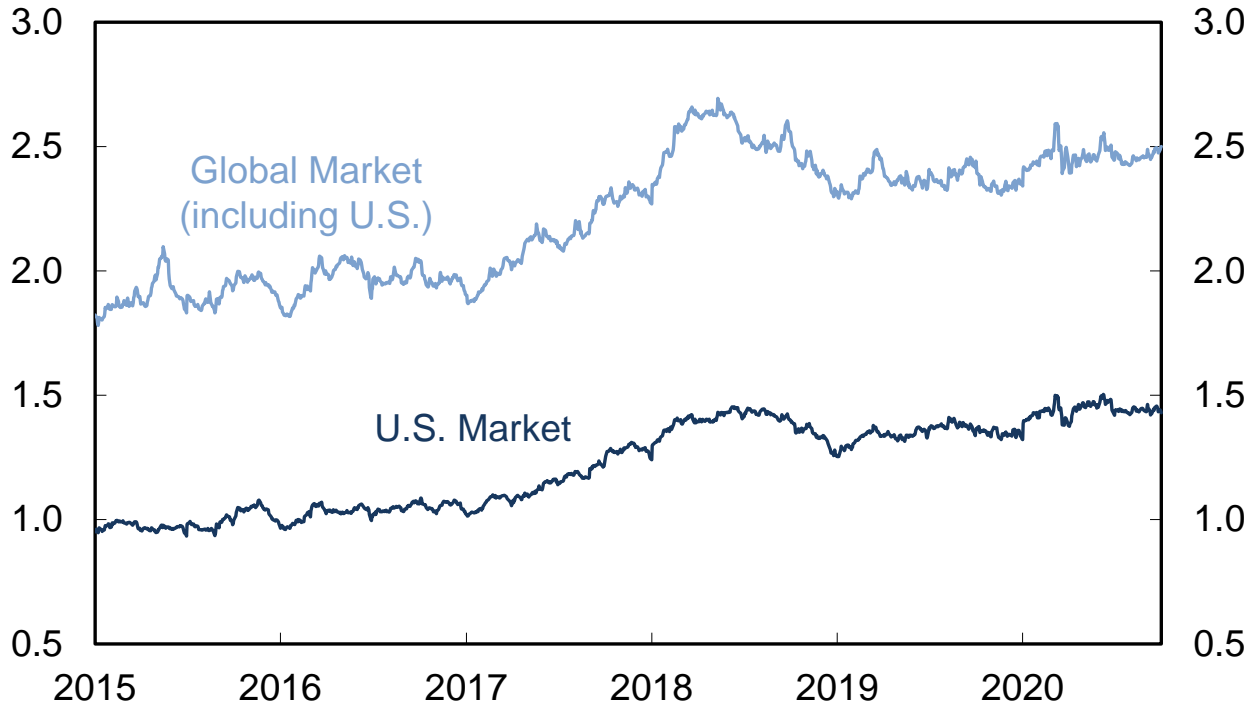
Source: FRBNY, Bloomberg, L.P.

### 3.4.2.8 Value of Securities on Loan

Trillions of US\$

As Of: 30-Sep-2020

Trillions of US\$



Note: Data is based on a survey of agent-based lenders.

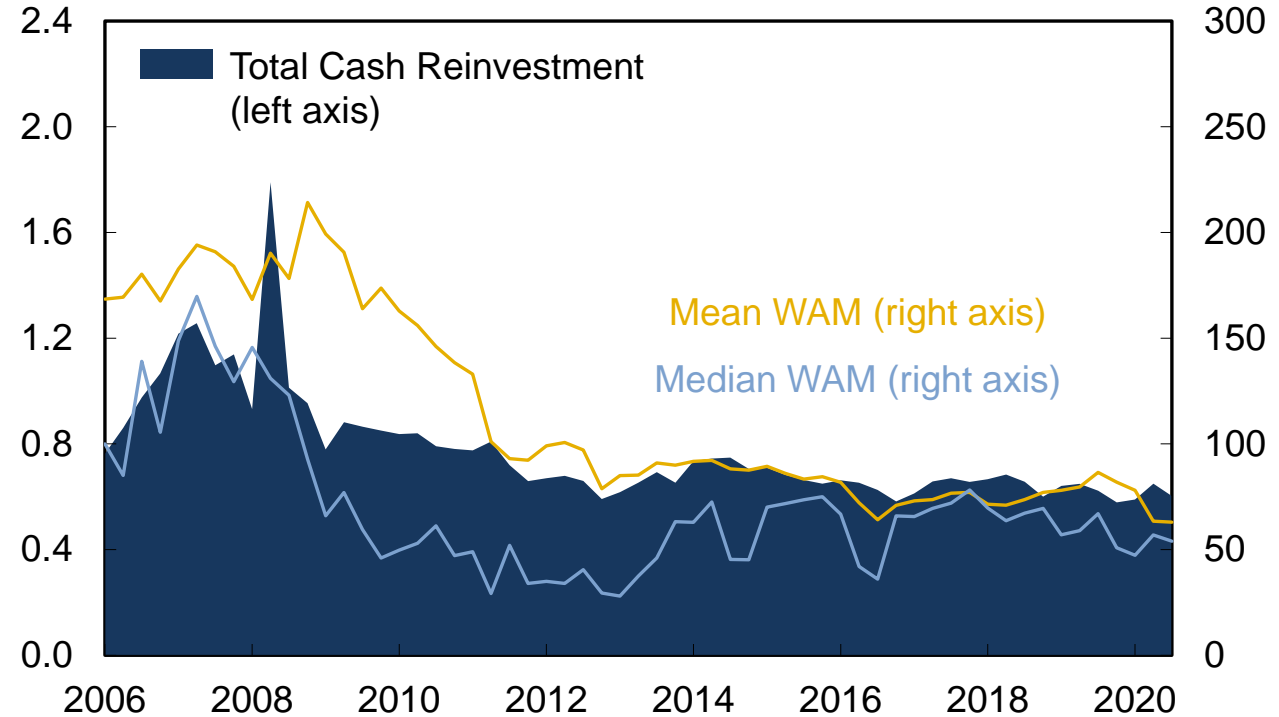
Source: Markit

# 3.4.2.9 U.S. Securities Lending Cash Reinvestment

Trillions of US\$

As Of: 2020 Q3

Days



Source: The Risk Management Association

Note: Data is based on a survey of agent-based lenders.

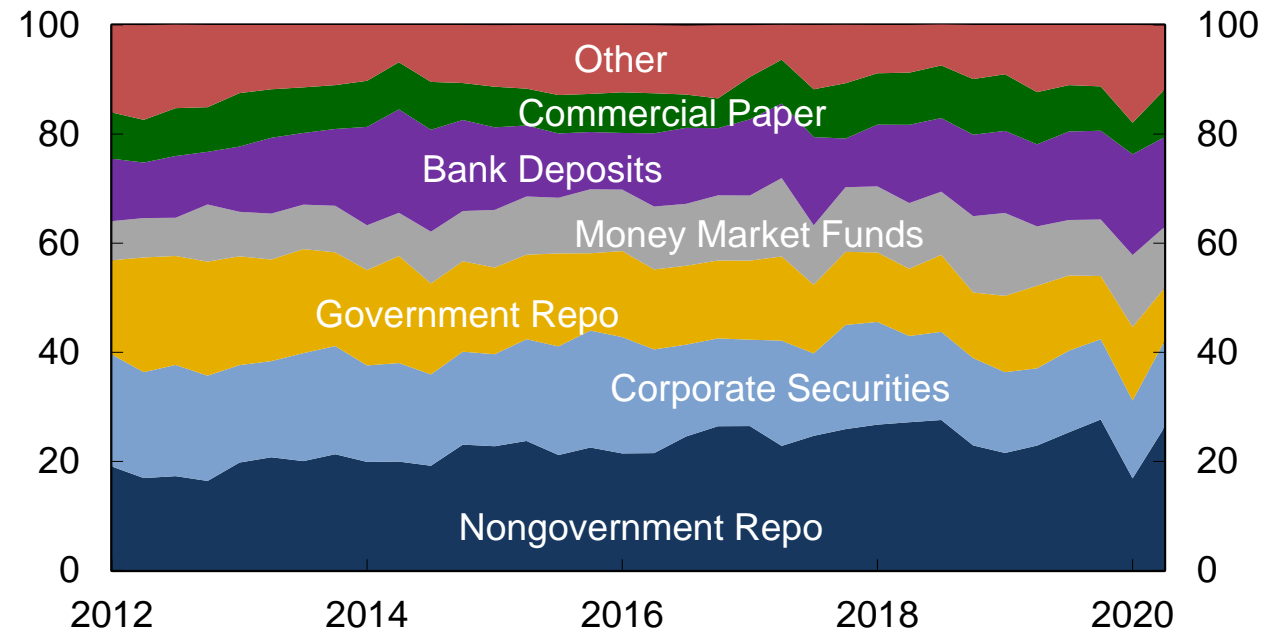


### 3.4.2.10 U.S. Securities Lending Cash Reinvestment Collateral

Percent of Total

As Of: 2020 Q3

Percent of Total



Source: The Risk Management Association, OFR

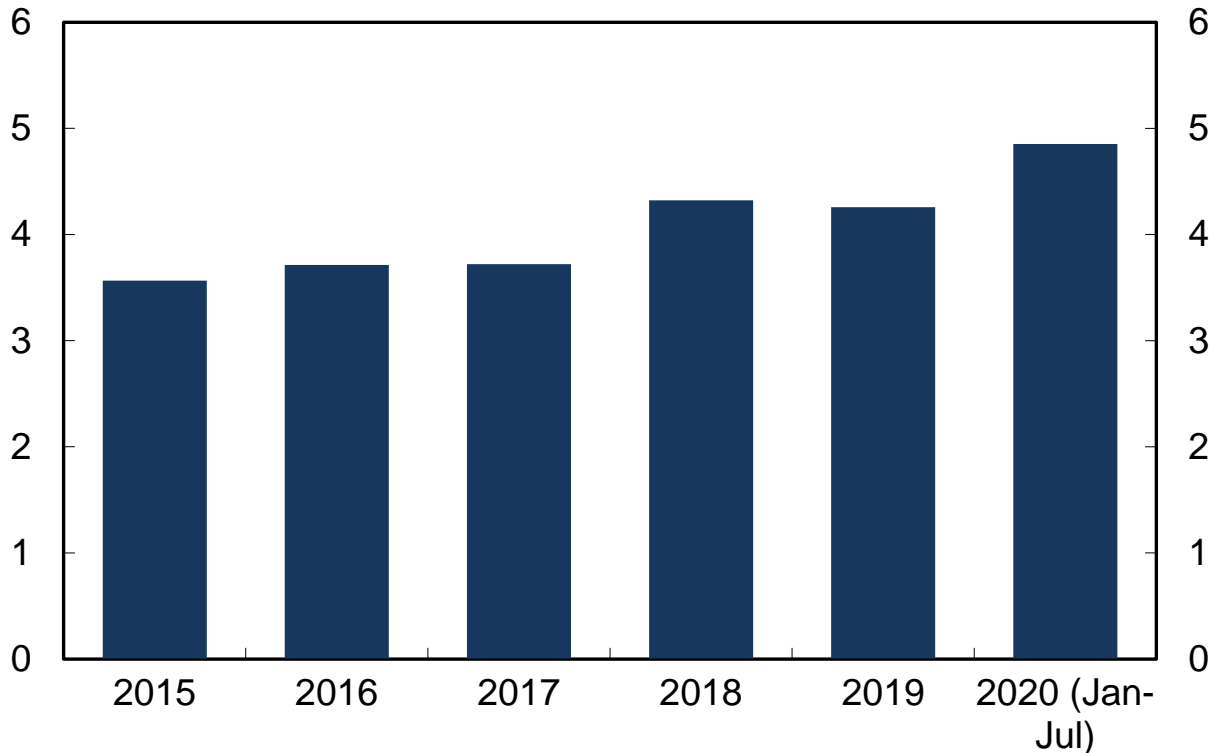
Note: Nongovernment repos have collateral of whole loans, equity, and corporate debt. Other includes ABS, funding agreements, other funds, and other vehicles. Data is based on a survey of agent-based lenders.

### 3.4.3.1 U.S. Futures Markets Volume

Billions of Contracts

As Of: Jul-2020

Billions of Contracts



Source: CFTC

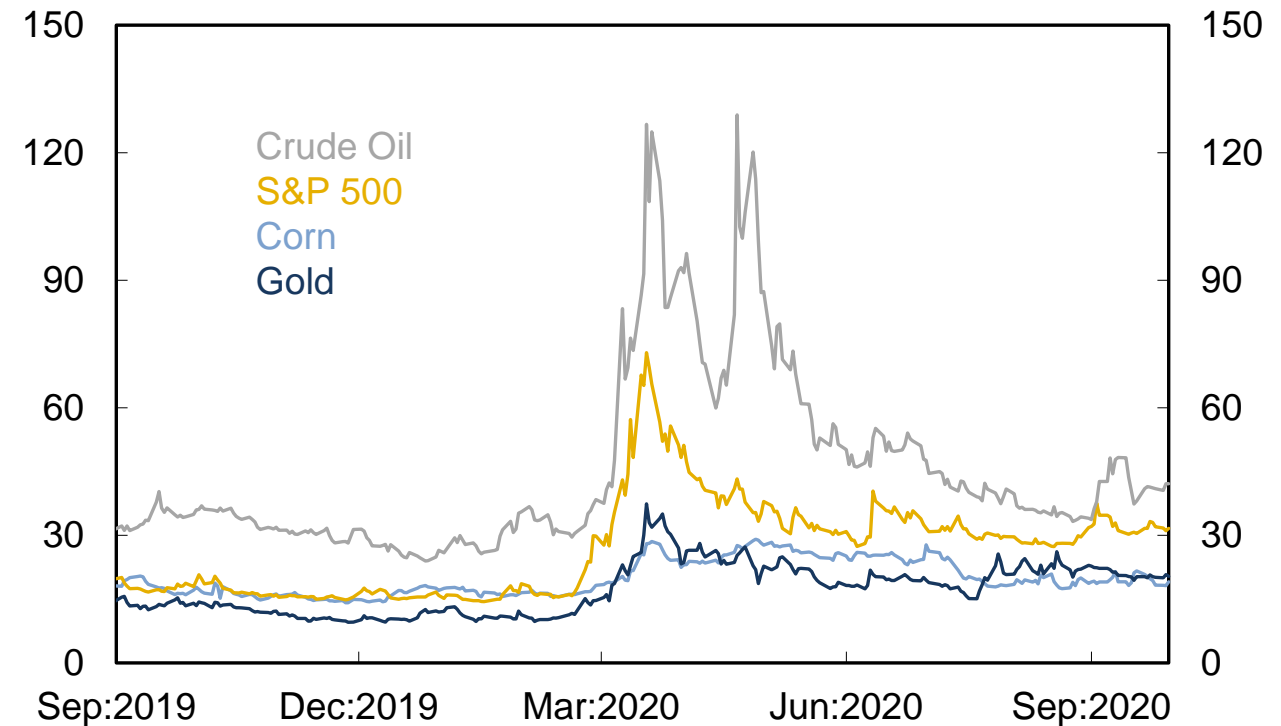
Note: 2020 volume annualized.

### 3.4.3.2 3-Month Implied Volatility

Percent

As Of: 30-Sep-2020

Percent



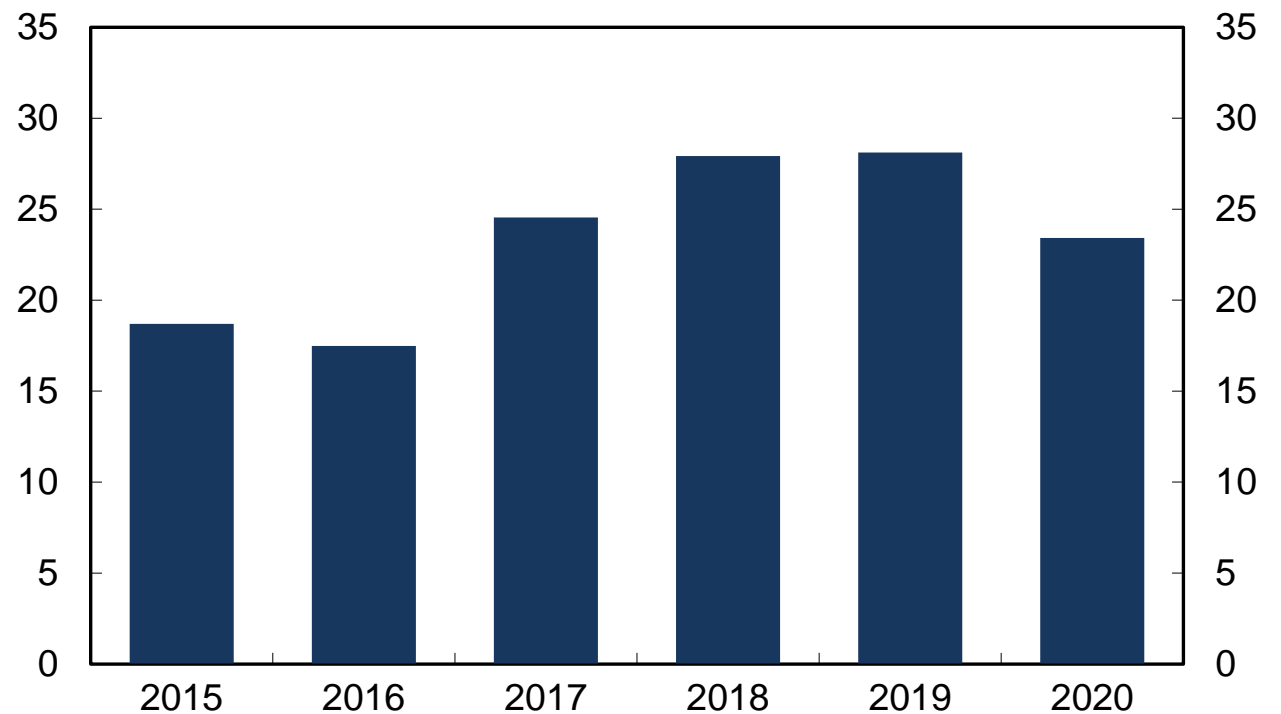
Source: Bloomberg, L.P., CFTC

### 3.4.3.3 U.S. Futures Markets Open Interest

Trillions of US\$

As Of: Jun-2020

Trillions of US\$



Source: CFTC

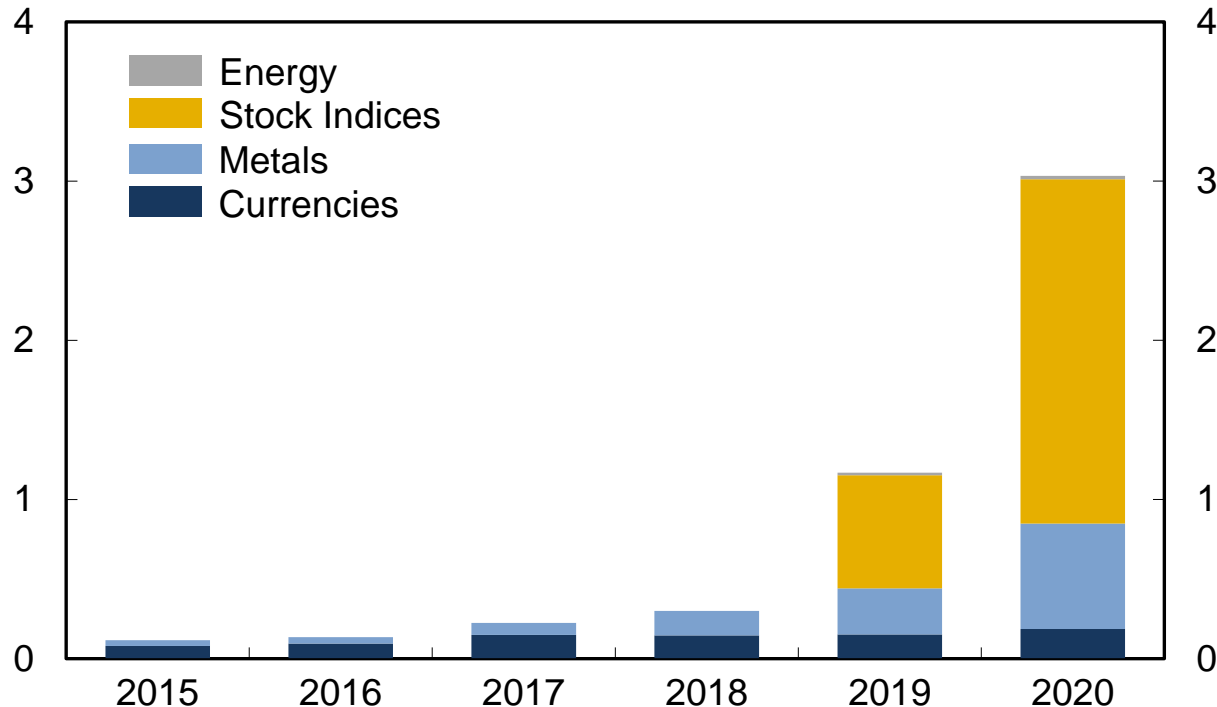
Note: Futures contracts are dollarized using prices from contract definitions and other relevant data.

### 3.4.3.4 Micro Futures Open Interest

Billions of US\$

As Of: Jun-2020

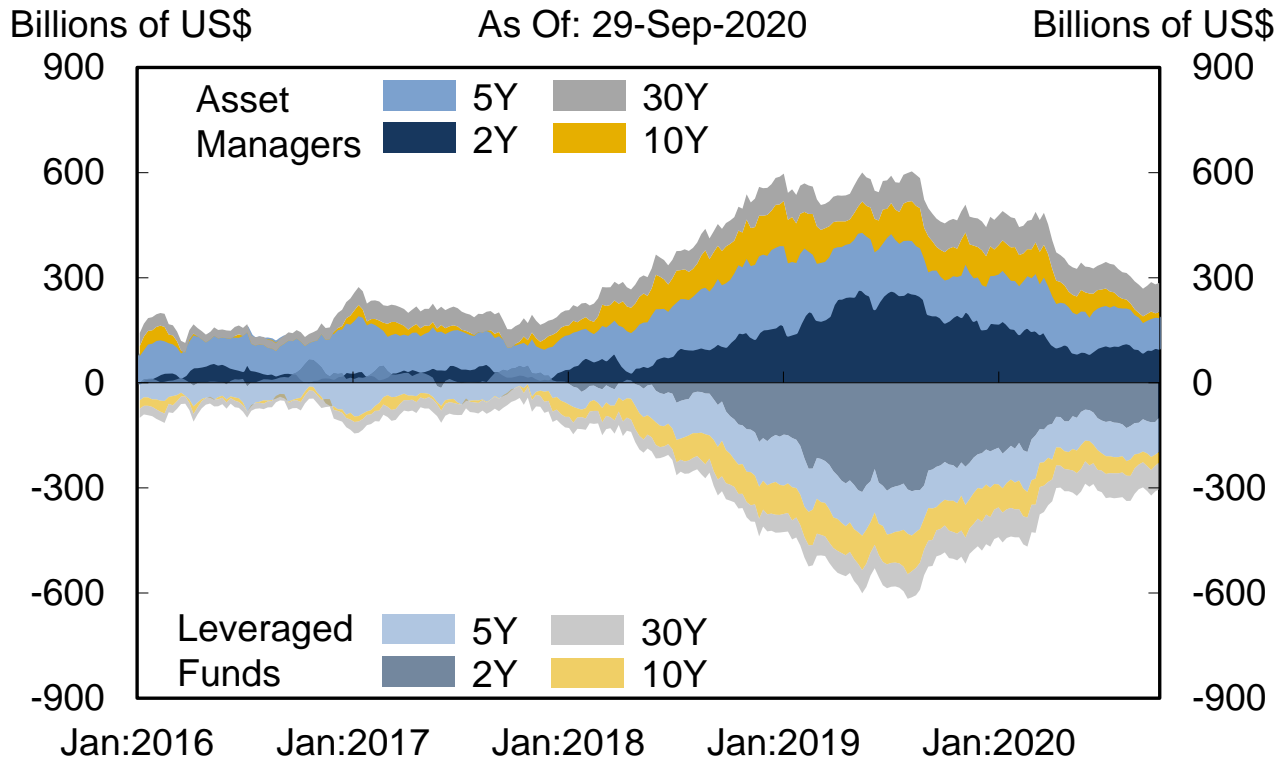
Billions of US\$



Source: CFTC

Note: Futures contracts are dollarized using prices from contract definitions and other relevant data.

### 3.4.3.5 U.S Treasury Futures Open Interest



Note: Net notional amount of open interest by trader type. 10Y includes 10Y and 10Y Ultra Treasury Note Futures; 30Y includes Treasury Bond and Ultra Treasury Bond Futures.

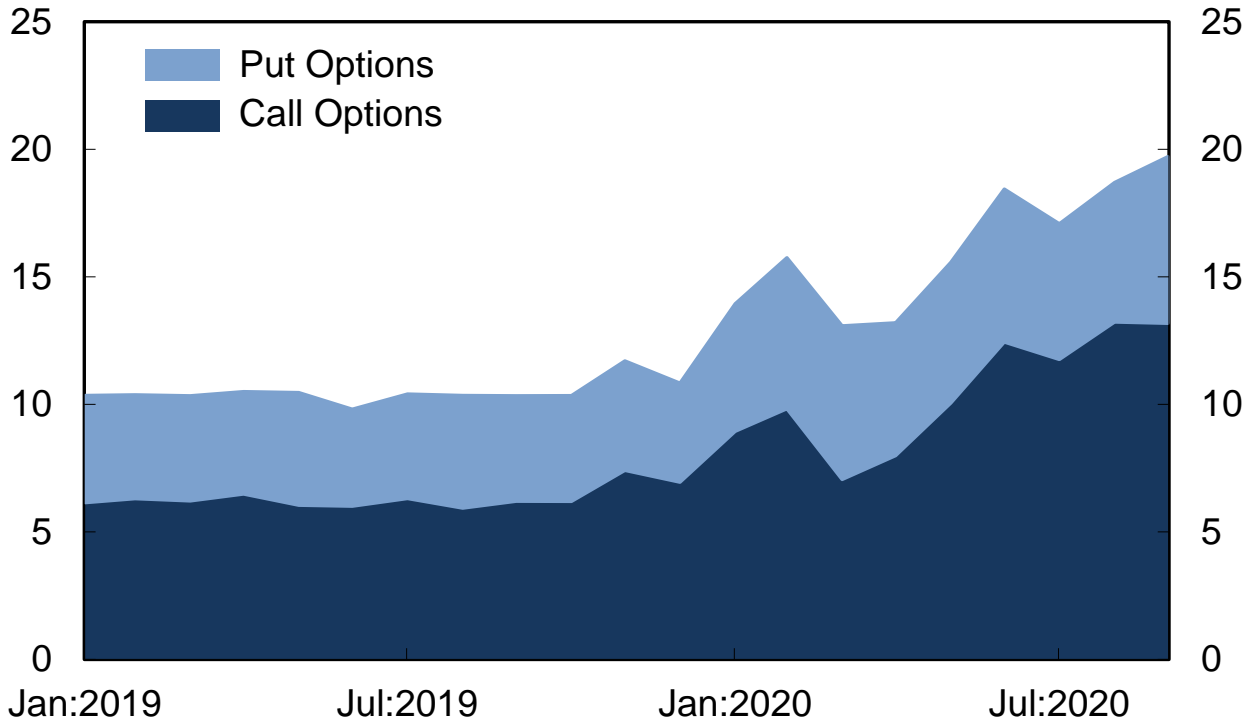
Source: CFTC

### 3.4.3.6 Exchange-Traded Equity Option Volume

Millions of Contracts

As Of: Sep-2020

Millions of Contracts



Note: Average daily volume. Excludes index and ETF options.

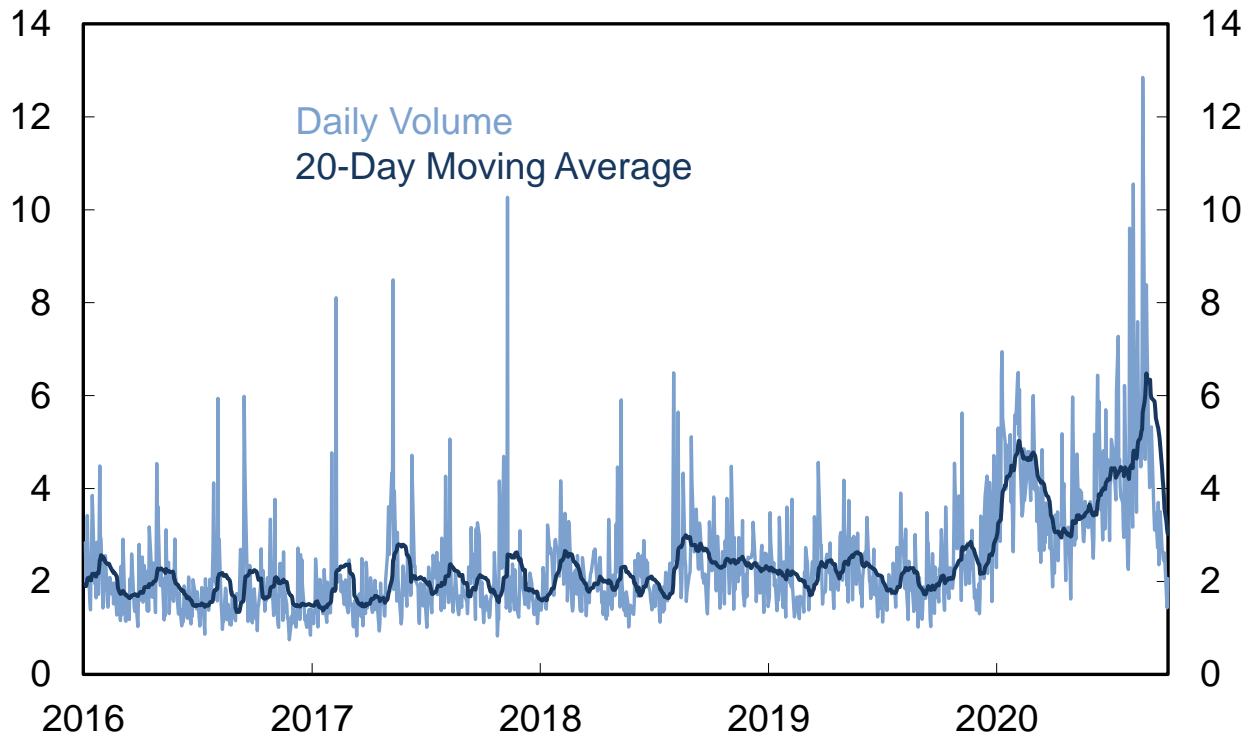
Source: The OCC

### 3.4.3.7 Call Option Volume for Select Technology Stocks

Millions of Contracts

As Of: 30-Sep-2020

Millions of Contracts



Note: Includes daily call option volume for TSLA, AAPL, NFLX, GOOG, FB, and MSFT.

Source: Bloomberg, L.P.

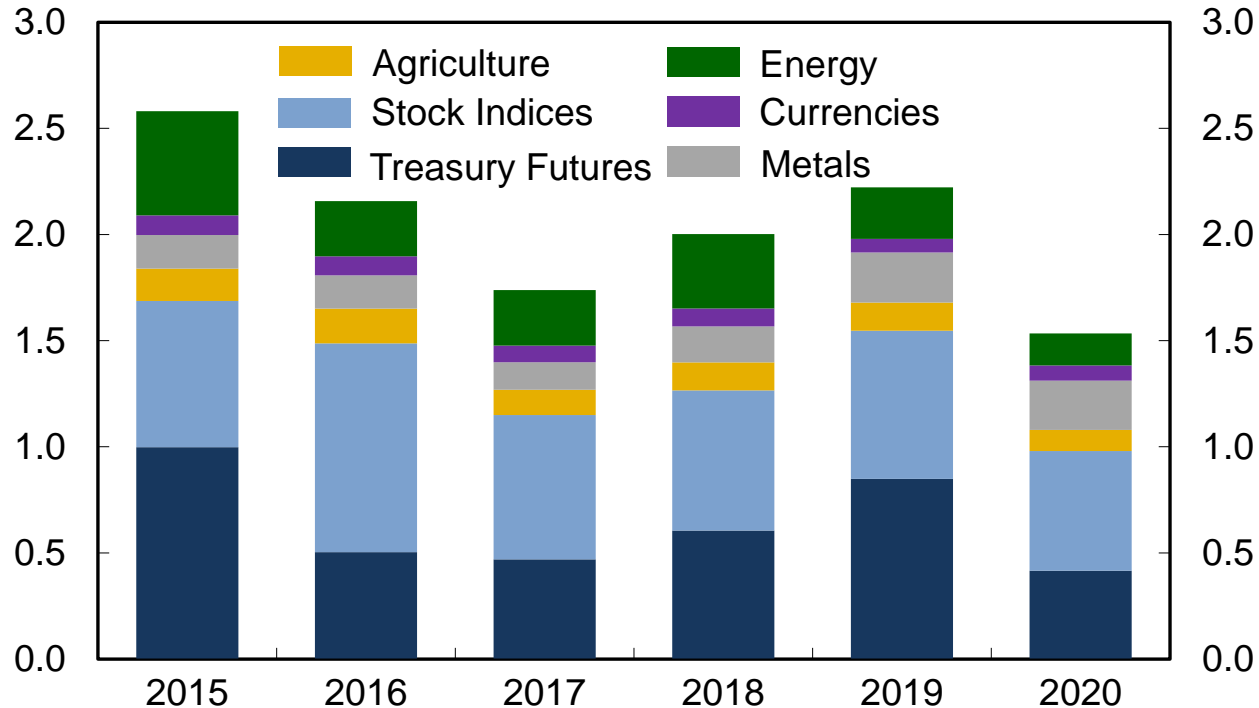


### 3.4.3.8 Options on Futures: Open Interest

Trillions of US\$

As Of: Jun-2020

Trillions of US\$



Source: CFTC

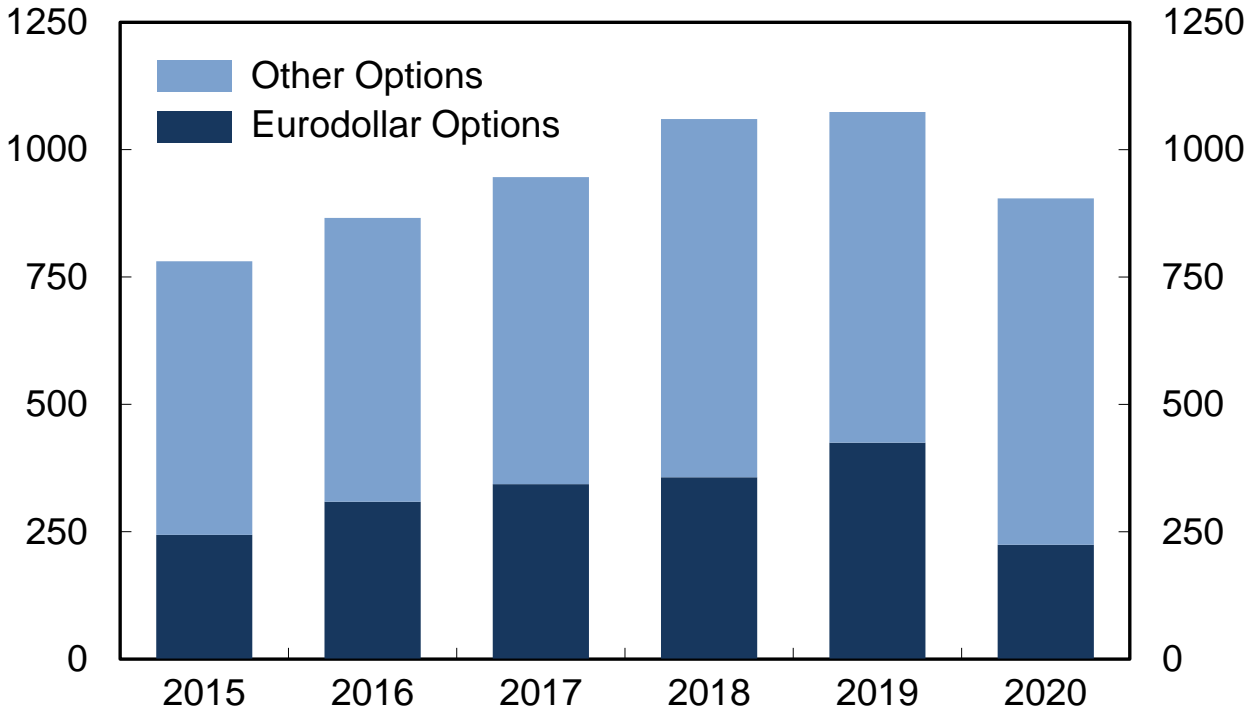
Note: Excludes Eurodollar futures on options.

# 3.4.3.9 Options on Futures: Volume

Millions of Contracts

As Of: Jun-2020

Millions of Contracts



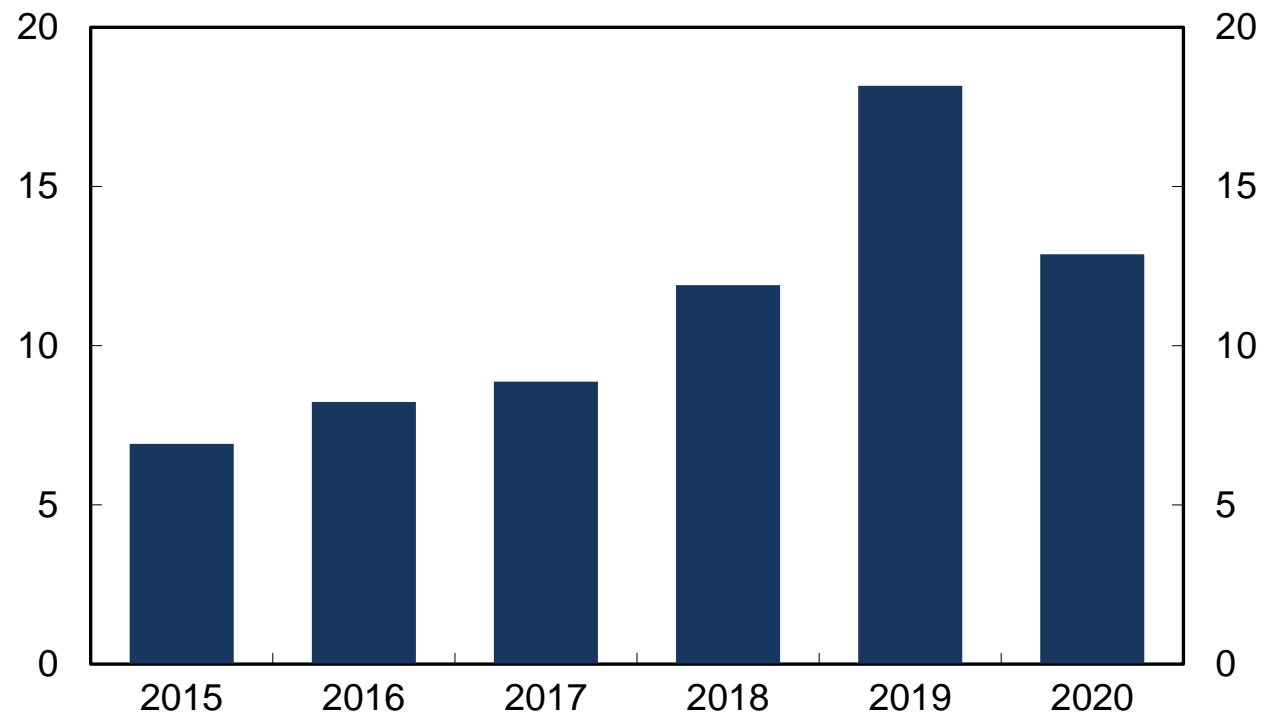
Source: CFTC

### 3.4.3.10 Options on Futures: Delta Adjusted Open Interest

Trillions of US\$

As Of: Jun-2020

Trillions of US\$

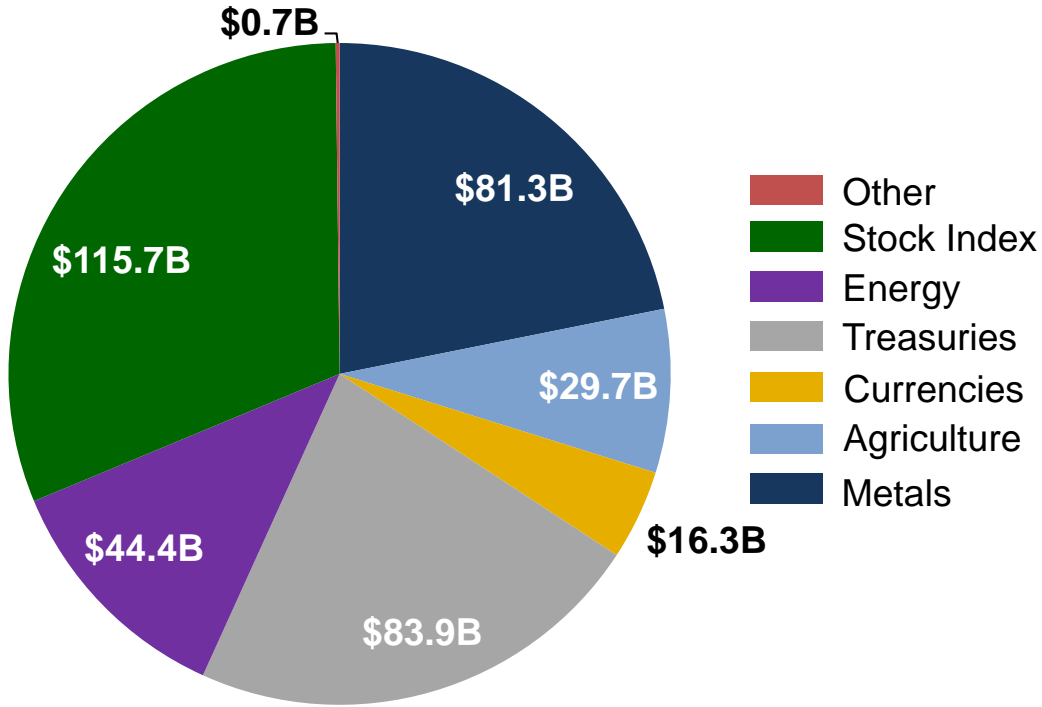


Source: CFTC

Note: Delta adjusted open interest as of June 30 of each year. Includes Eurodollar futures on options.

### 3.4.3.11 Delta Adjusted Options on Futures by Asset Class

As Of: Jul-2020



Source: CFTC

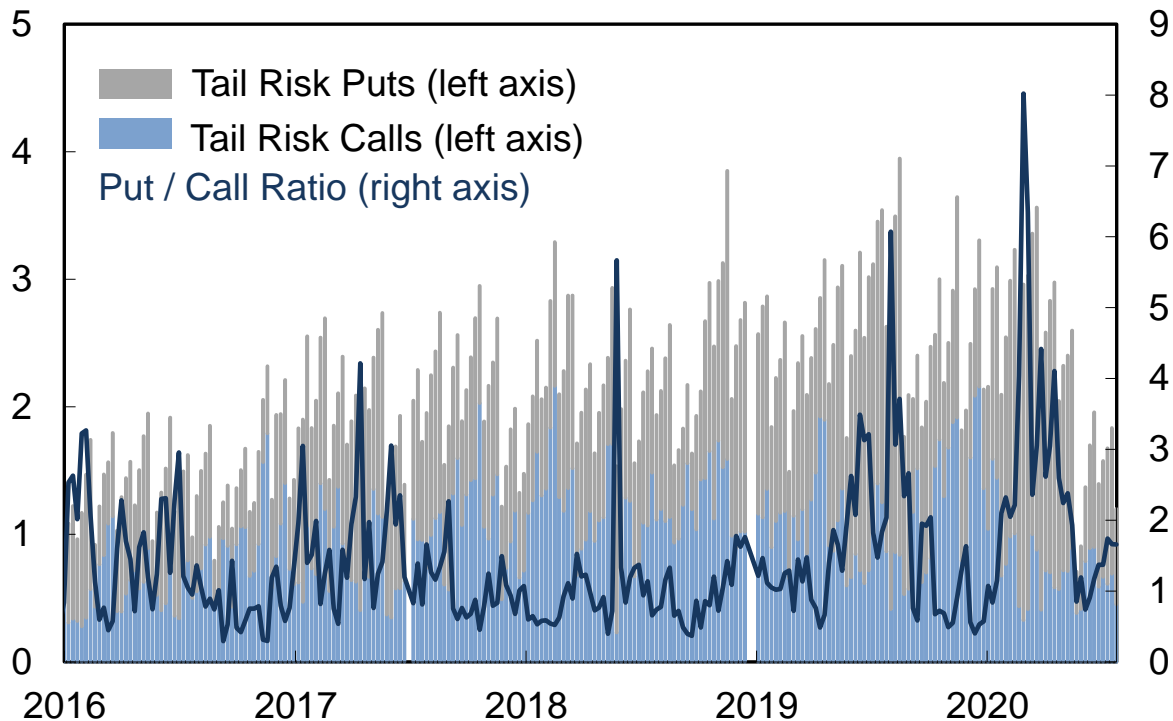
Note: Delta adjusted open interest.  
Excludes Eurodollar options.

### 3.4.3.12 Options on 10-Year Treasury Futures

Millions of Contracts

As Of: 28-Jul-2020

Ratio



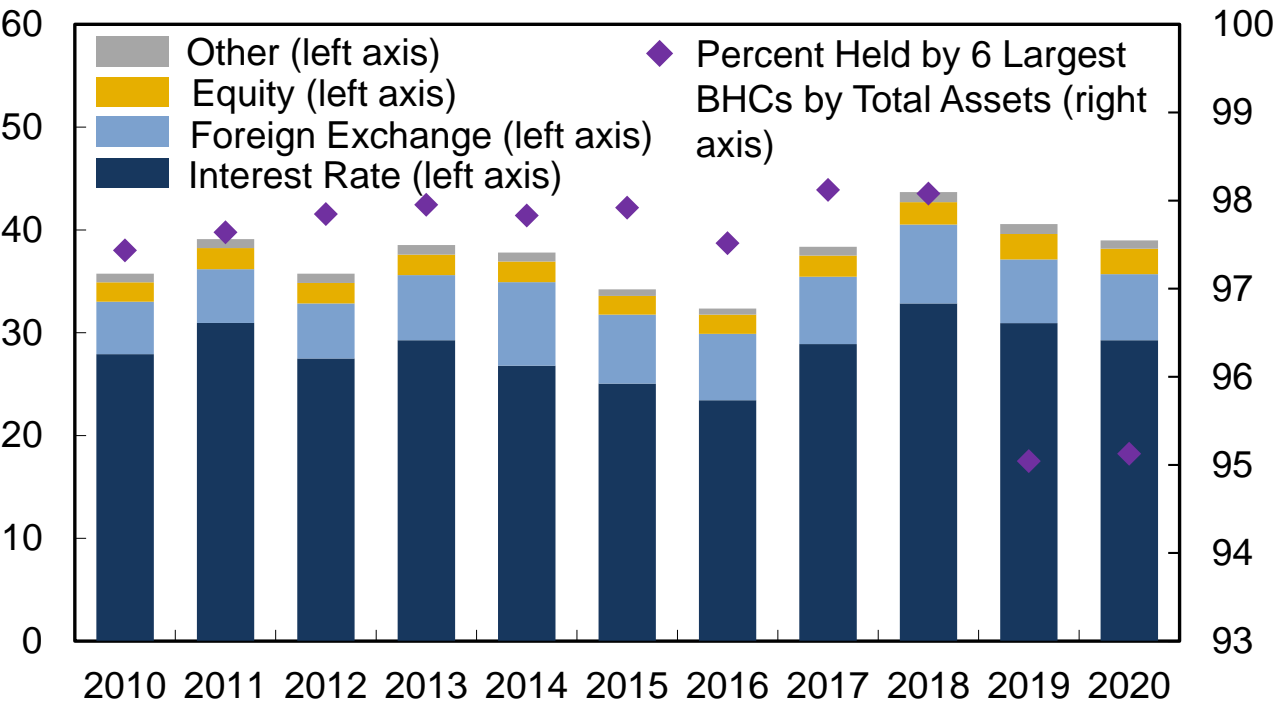
Source: CFTC

### 3.4.3.13 OTC Options: BHC Gross Notional Outstanding

Trillions of US\$

As Of: 2020 Q2

Percent



Source: FR Y-9C, Staff Calculations

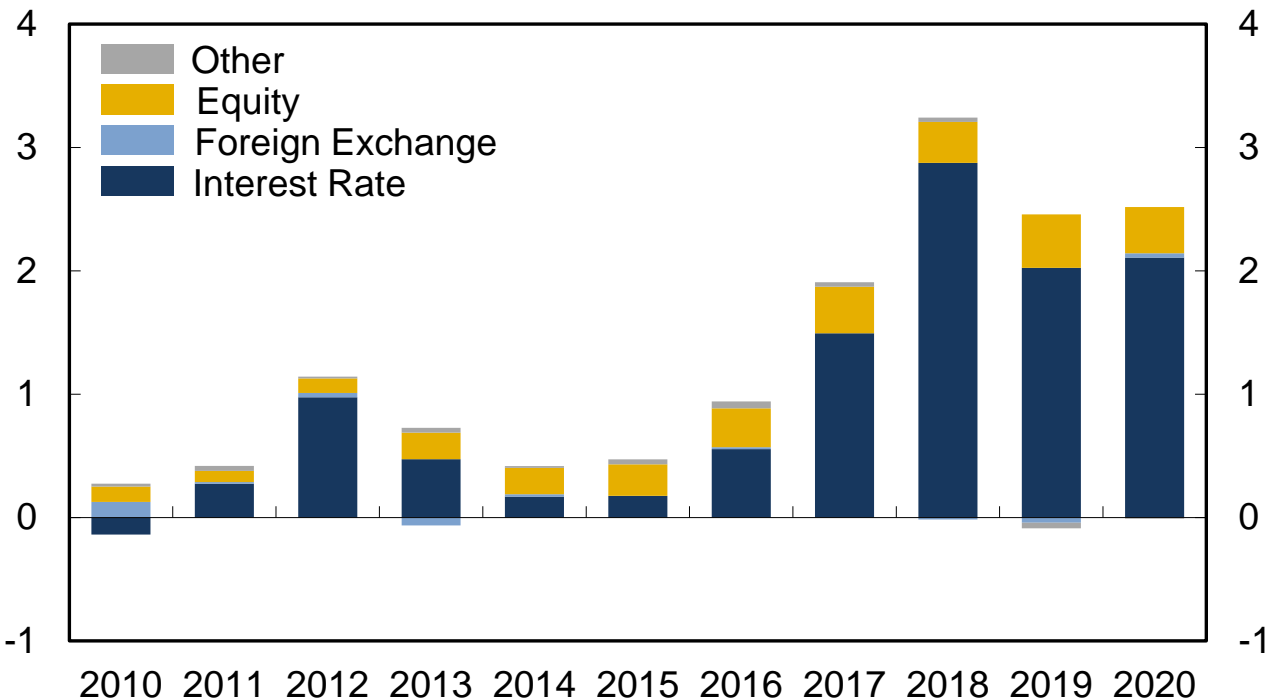
Note: Other includes credit, commodity, and other OTC options.

### 3.4.3.14 OTC Options: BHC Net Notional Outstanding

Trillions of US\$

As Of: 2020 Q2

Trillions of US\$



Source: FR Y-9C, Staff Calculations

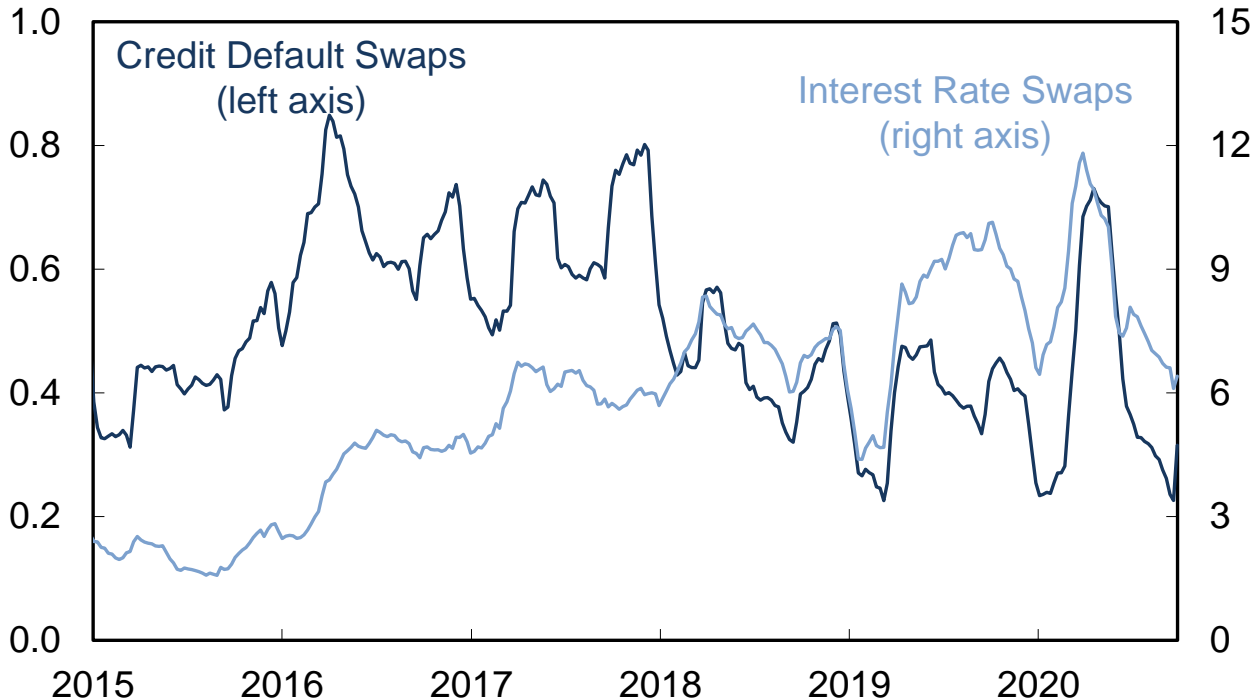
Note: Other includes credit, commodity, and other OTC options.

### 3.4.3.15 Derivatives Notional Volume

Trillions of US\$

As Of: 25-Sep-2020

Trillions of US\$



Note: 12-week moving-averages.  
Excludes security-based swaps.

Source: CFTC

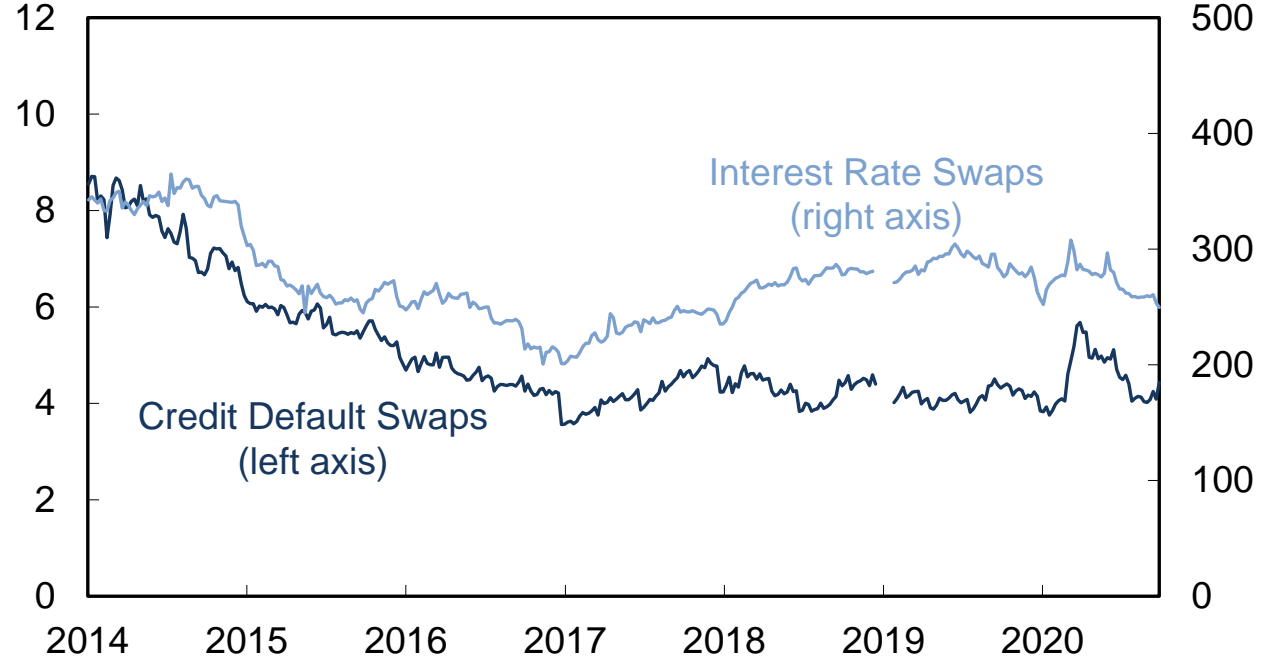


### 3.4.3.16 Derivatives Notional Amount Outstanding

Trillions of US\$

As Of: 25-Sep-2020

Trillions of US\$



Note: Weekly Swaps Report not issued between Dec. 22, 2018 and Jan. 26, 2019 due to a lapse in government funding. Excludes security-based swaps.

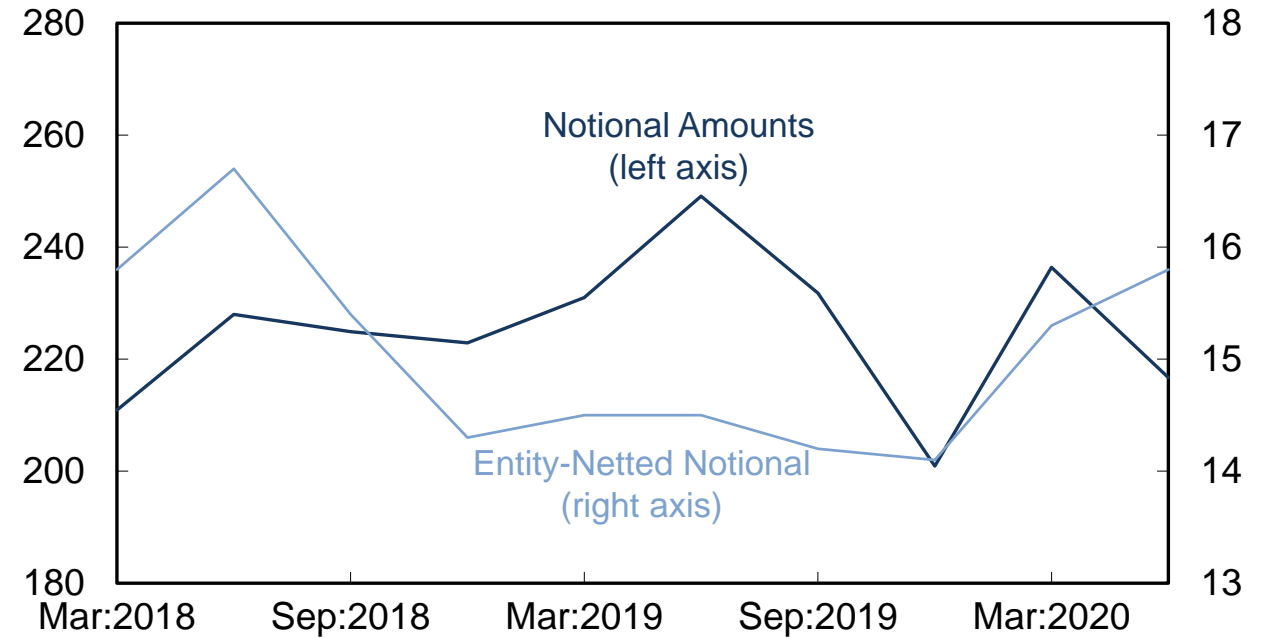
Source: CFTC

### 3.4.3.17 Size of Interest Rate Swap Market

Trillions of US\$

As Of: 2020 Q2

Trillions of US\$



Source: CFTC Office of Chief Economist

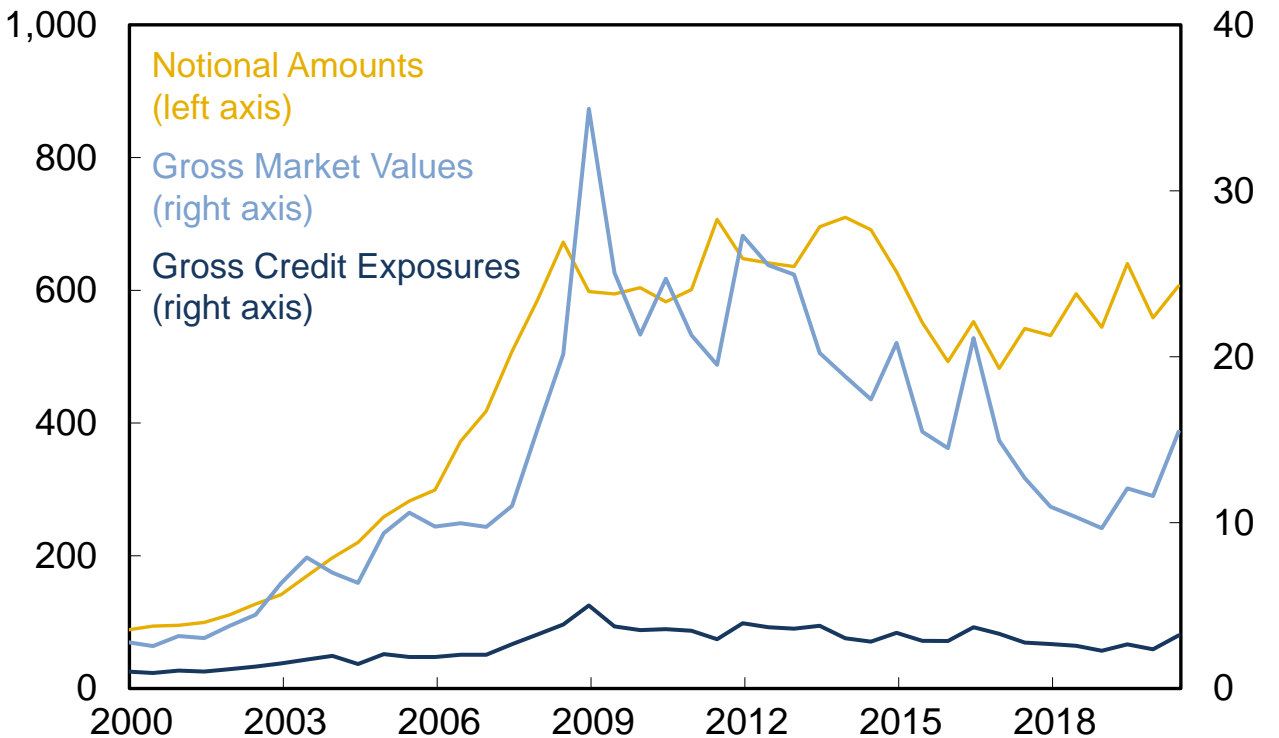
Note: Total notional amount and entity-netted notional amount as reported in “Introducing ENNs: A Measure of the Size of Interest Rate Swap Markets.”

### 3.4.3.18 Global OTC Positions

Trillions of US\$

As Of: 2020 Q2

Trillions of US\$



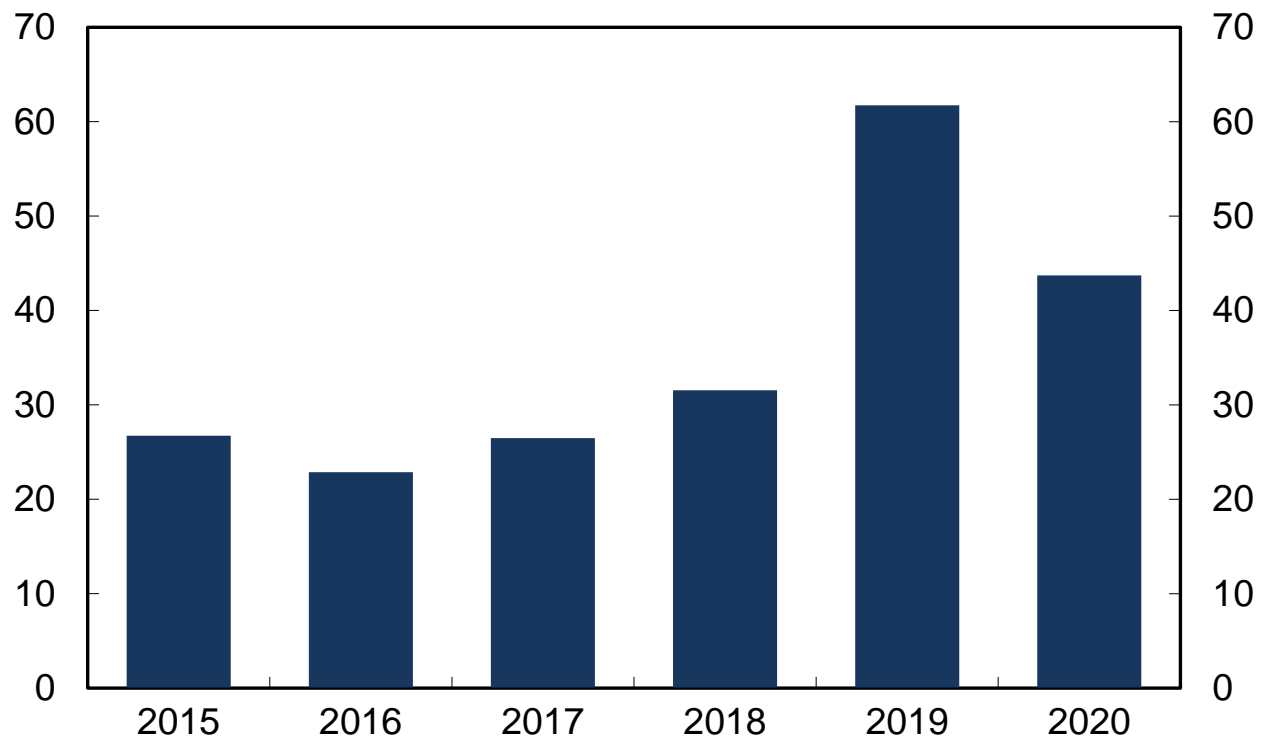
Source: BIS, Haver Analytics

### 3.4.3.19 Commodity Index Swaps: Annual Open Interest

Billions of US\$

As Of: Jun-2020

Billions of US\$



Source: CFTC

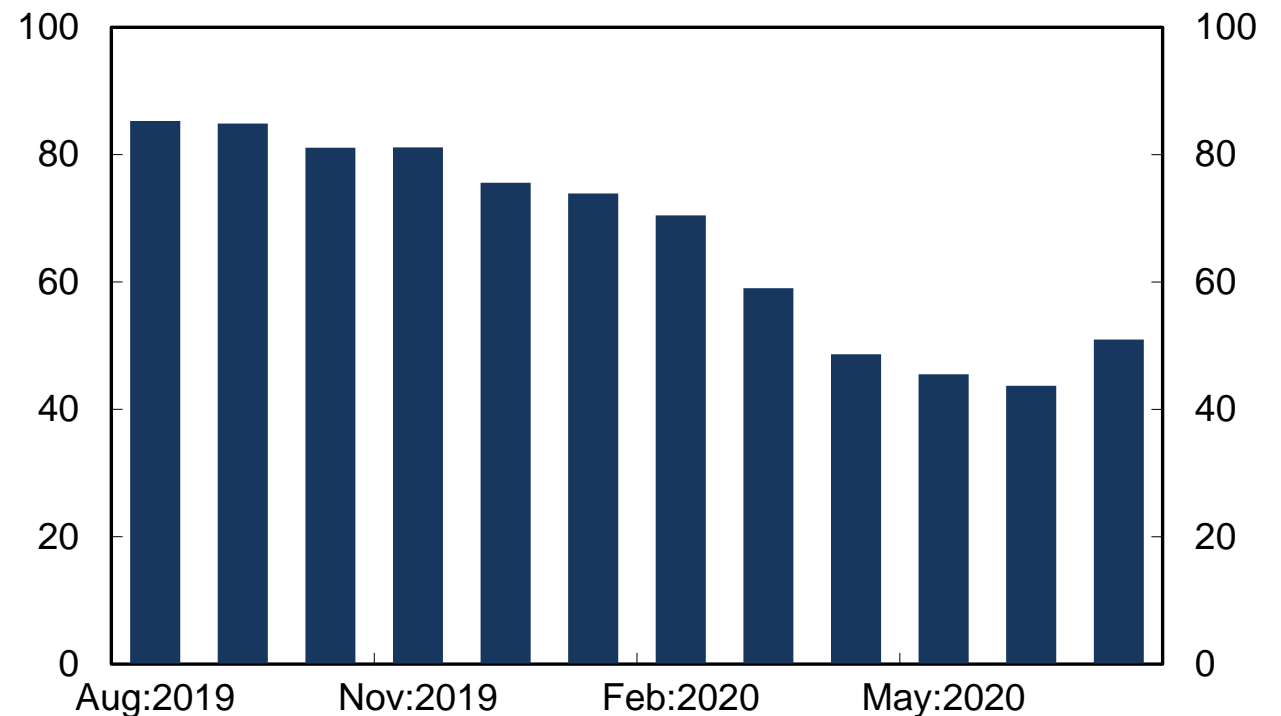
Note: Notional exposure of commodity index swaps.

### 3.4.3.20 Commodity Index Swaps: Monthly Open Interest

Billions of US\$

As Of: Jul-2020

Billions of US\$



Source: CFTC

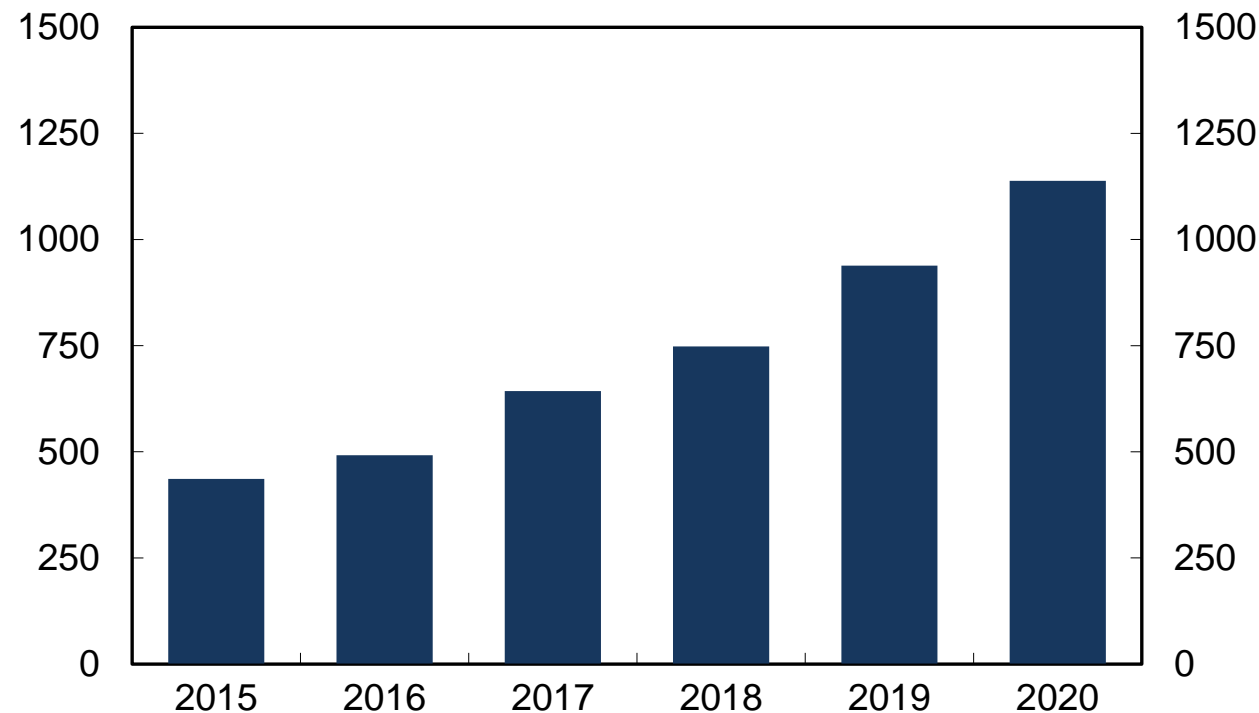
Note: Month-end notional exposure of commodity index swaps.

### 3.4.3.21 Commodity Swaps: Open Interest

Billions of US\$

As Of: Jun-2020

Billions of US\$

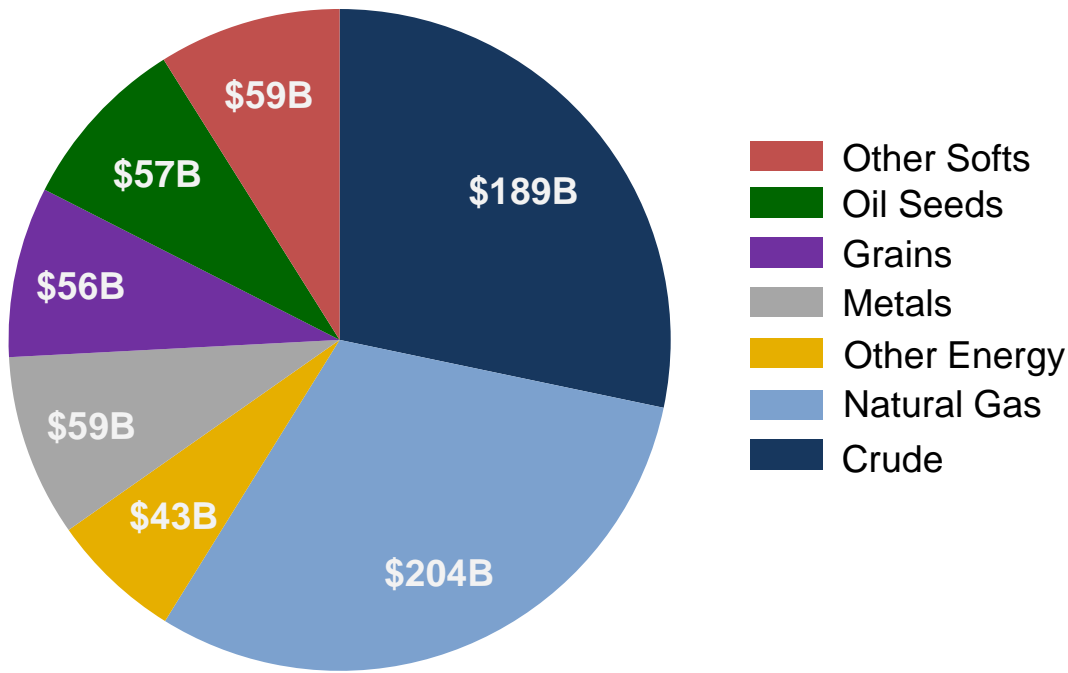


Source: CFTC

Note: Average month-end notional exposure across 25 key contracts.

# 3.4.3.22 Commodity Swaps by Asset Class

As Of: Jul-2020



Source: CFTC

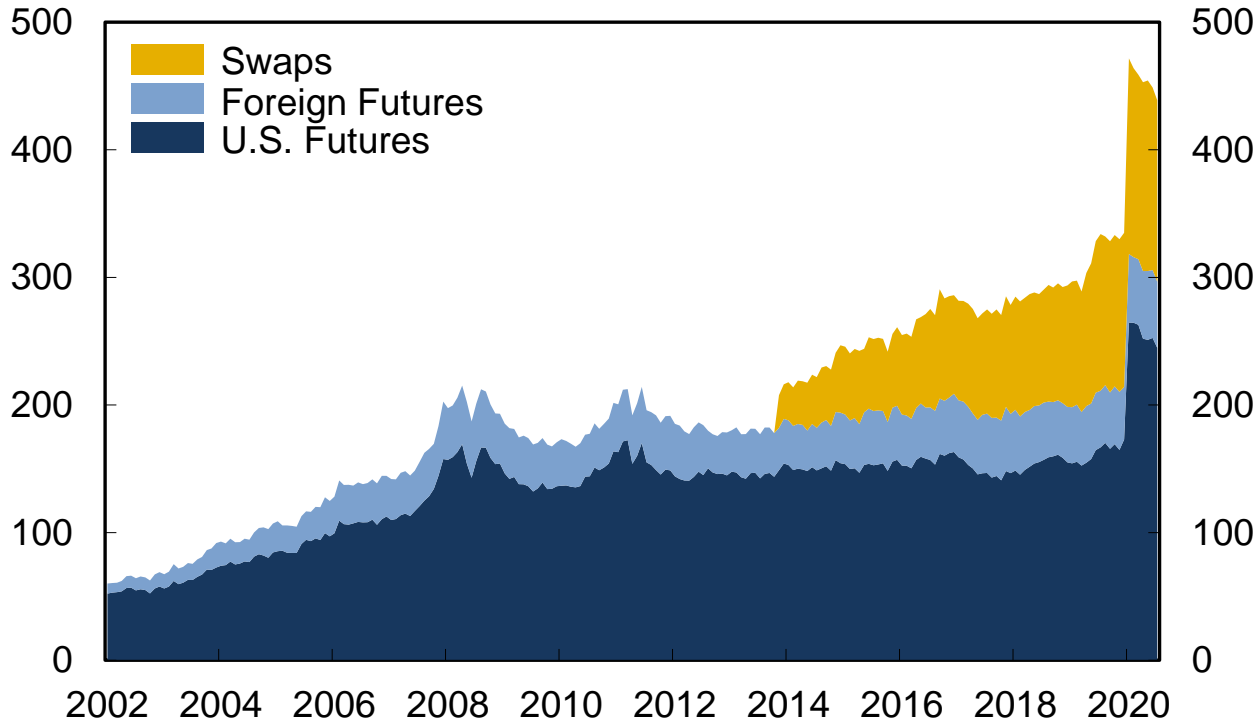
Note: 5-year average notional contribution of the major commodity categories.

# 3.4.3.23 Margin Funds Held at CFTC Registered FCMs

Billions of US\$

As Of: Sep-2020

Billions of US\$



Source: CFTC

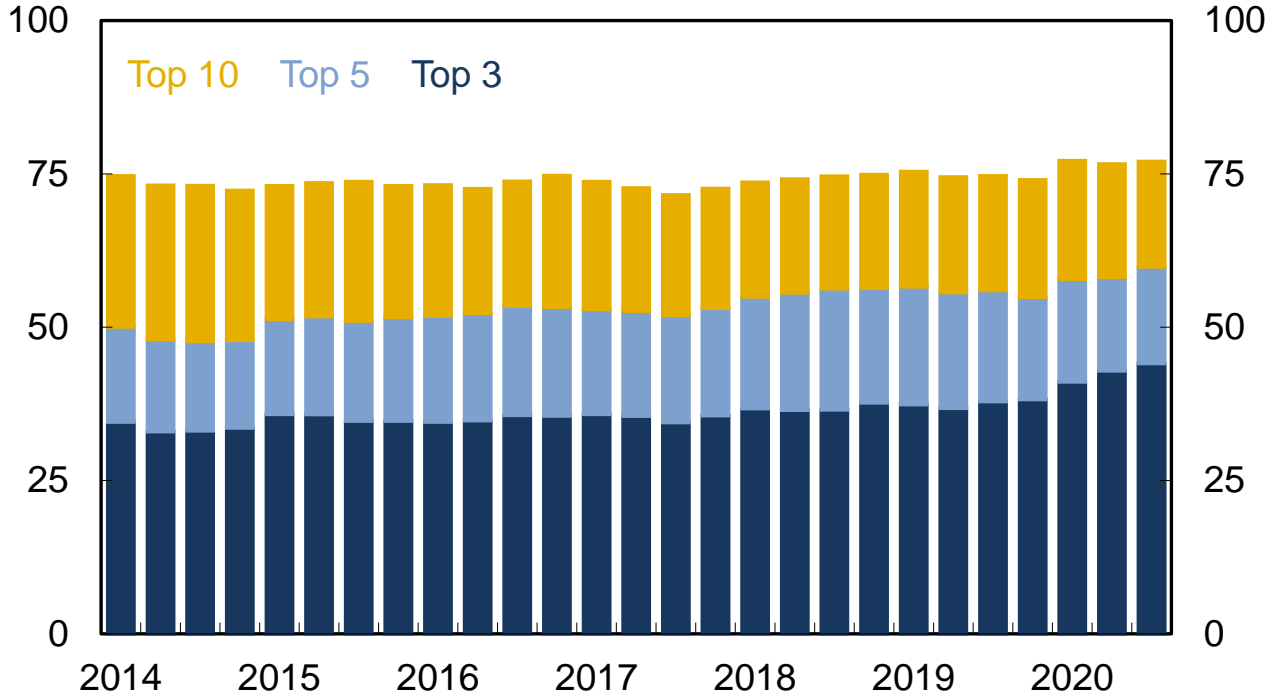


### 3.4.3.24 FCM Concentration: Customer Futures Balances

Percent

As Of: 2020 Q3

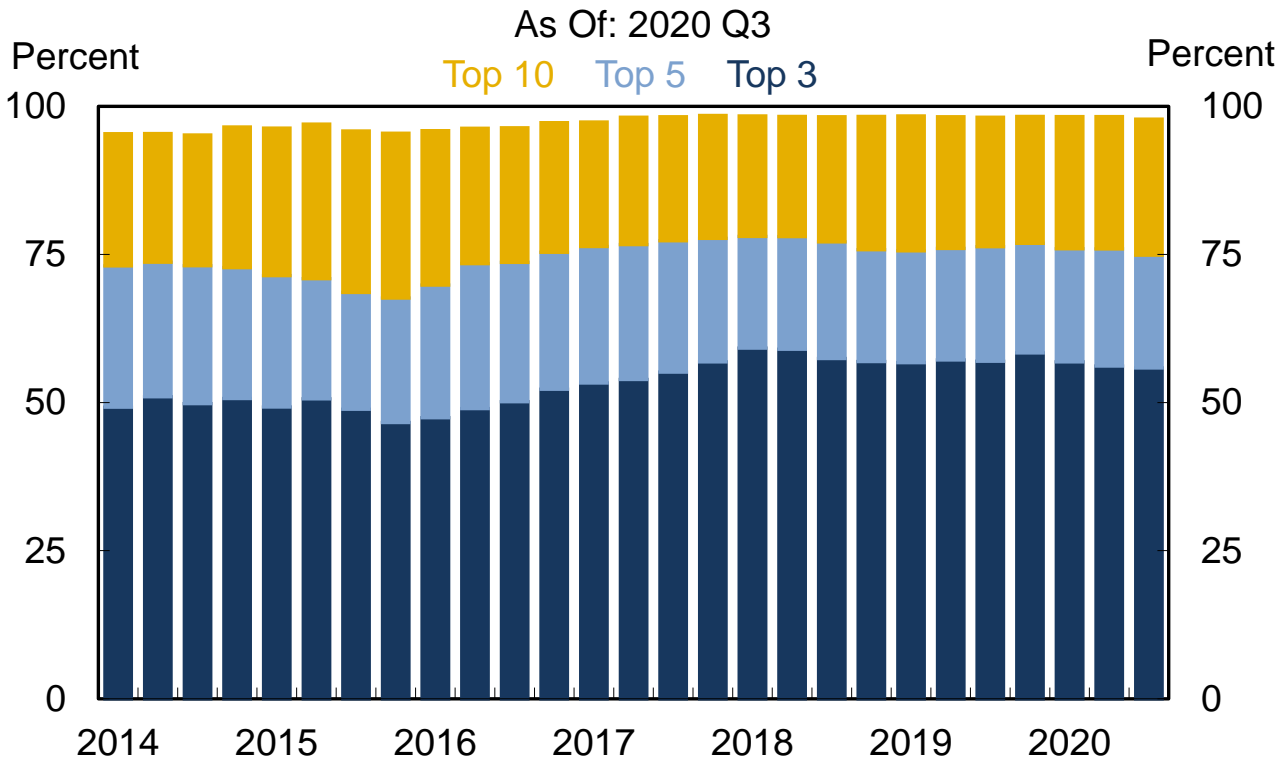
Percent



Note: Represents total amount of funds that an FCM is required to segregate on behalf of customers who are trading futures and options on futures at US exchanges.

Source: CFTC

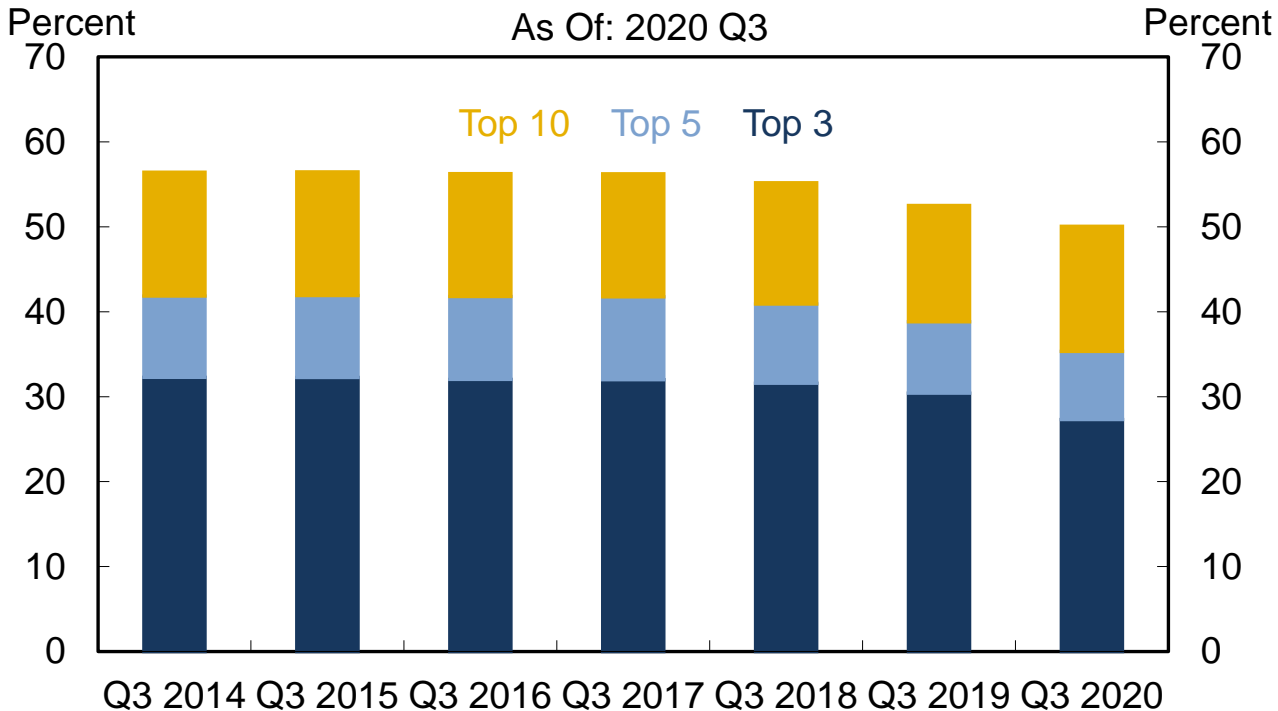
### 3.4.3.25 FCM Concentration: Customer Swap Balances



Note: Represents the amount of funds an FCM is required to segregate for customers who trade cleared swaps.

Source: CFTC

### 3.4.3.26 Concentration of Swap Positions for Registered SDs



Note: Positions between two Swap Dealers (SDs) in the same category (e.g., Top 3 or Top 5) are double-counted (i.e., a trade between the #1 SD and #3 SD would be counted twice).

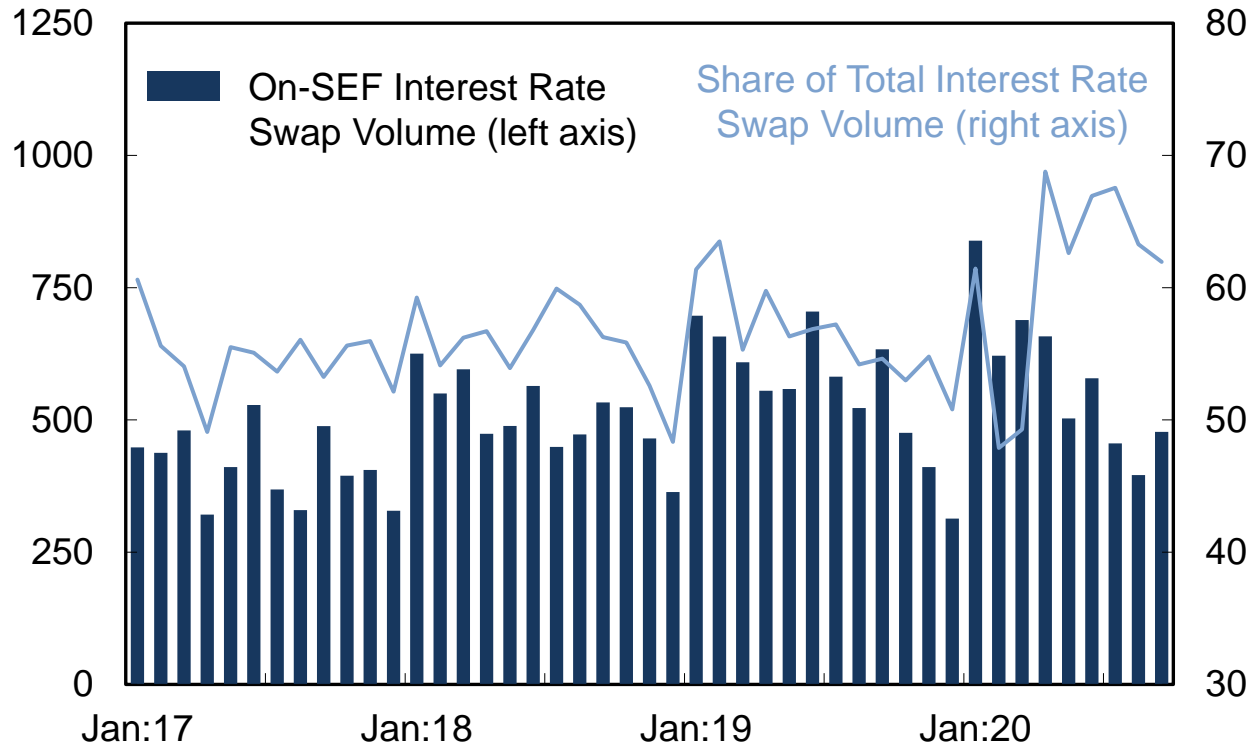
Source: CFTC

### 3.4.3.27 Interest Rate Swap SEF Trading Volumes

Billions of US\$

As Of: Sep-2020

Percent



Source: CFTC

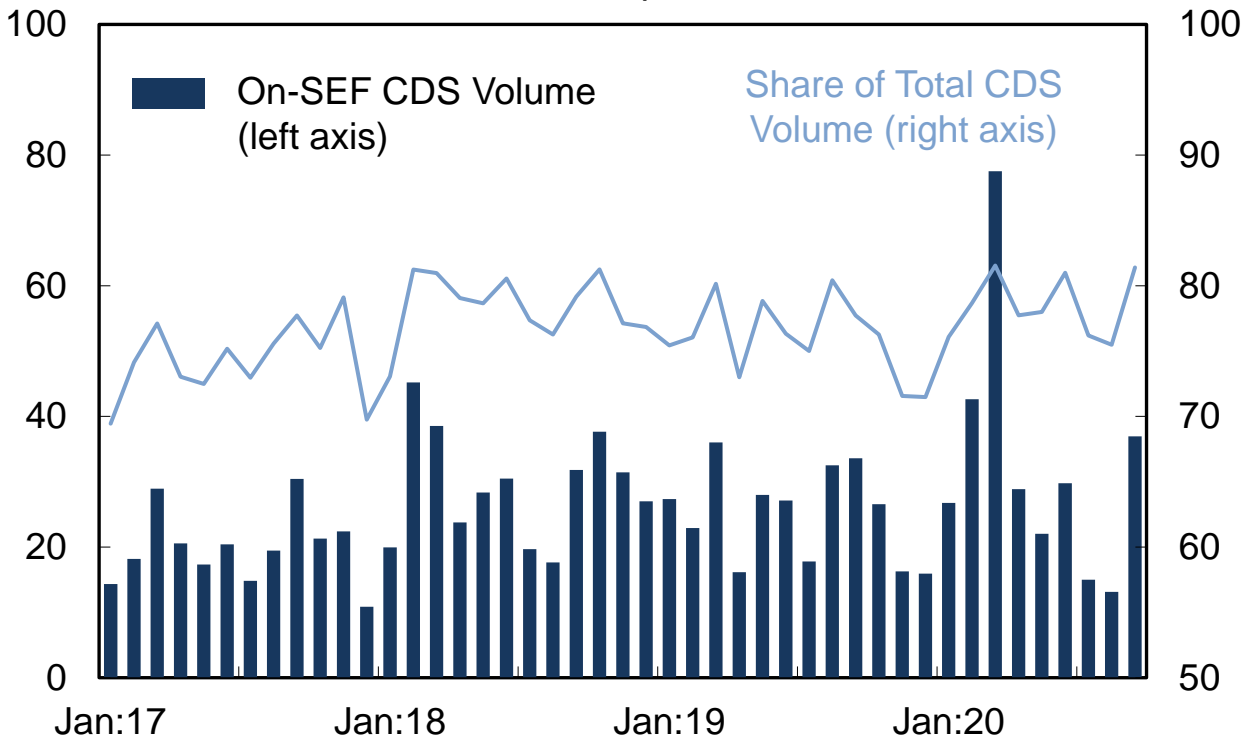
Note: Average daily notional volume.

### 3.4.3.28 Credit Default Swap SEF Trading Volumes

Billions of US\$

As Of: Sep-2020

Percent



Source: CFTC

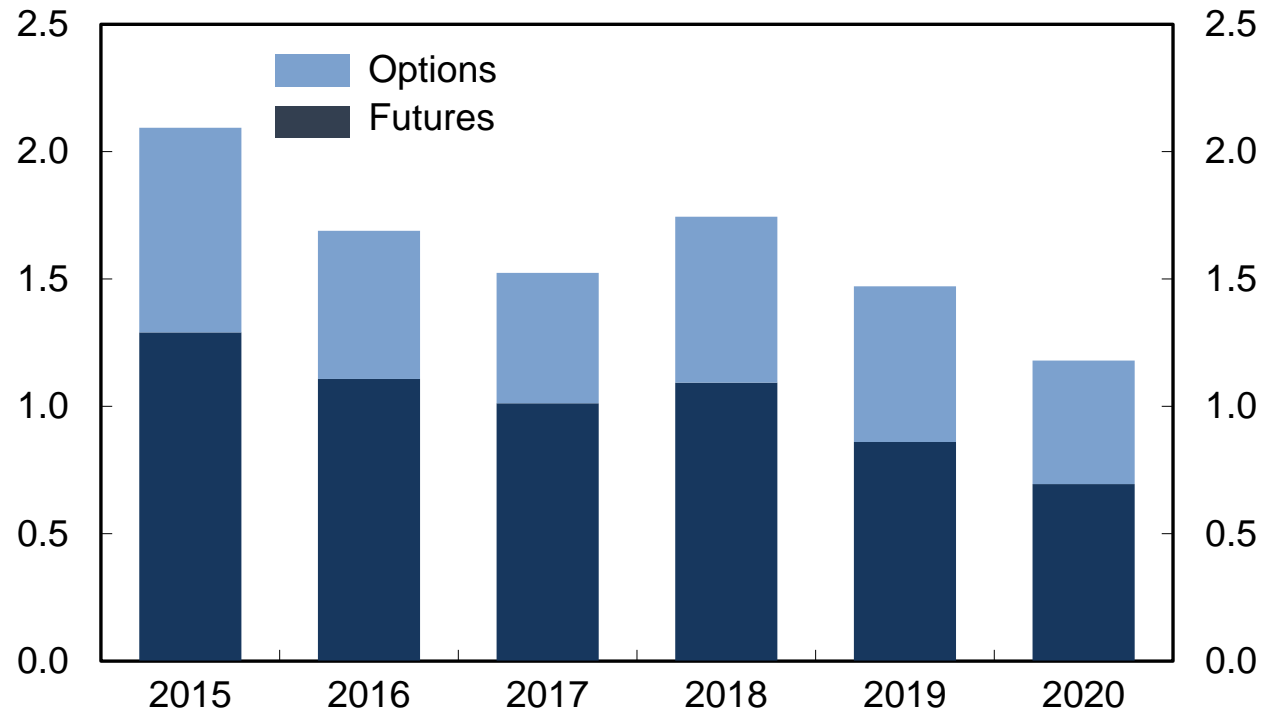
Note: Average daily notional volume. Excludes security-based swaps.

### 3.4.4.1 Commodities Futures & Options: Open Interest

Trillions of US\$

As Of: Jul-2020

Trillions of US\$



Note: Notional amount outstanding. Options are not delta-adjusted

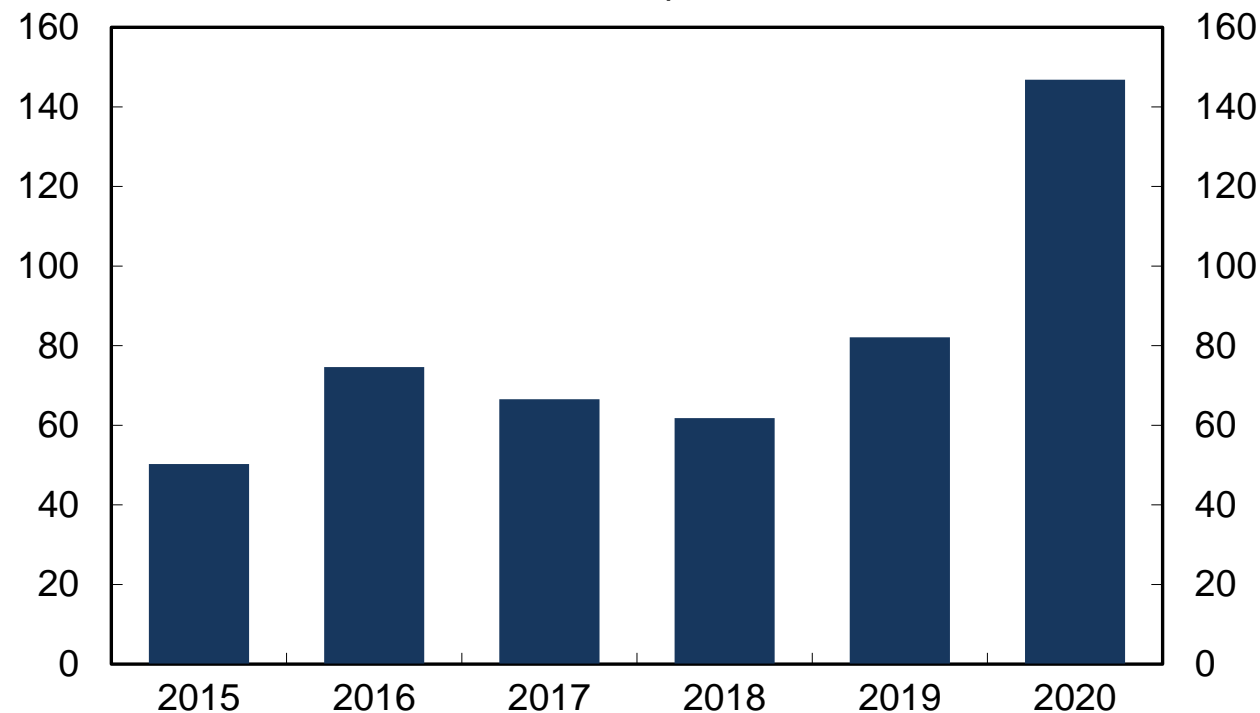
Source: CFTC

### 3.4.4.2 Total Net Asset Value: Commodity ETFs

Billions of US\$

As Of: Sep-2020

Billions of US\$



Note: Data are as of end of September in each given year.

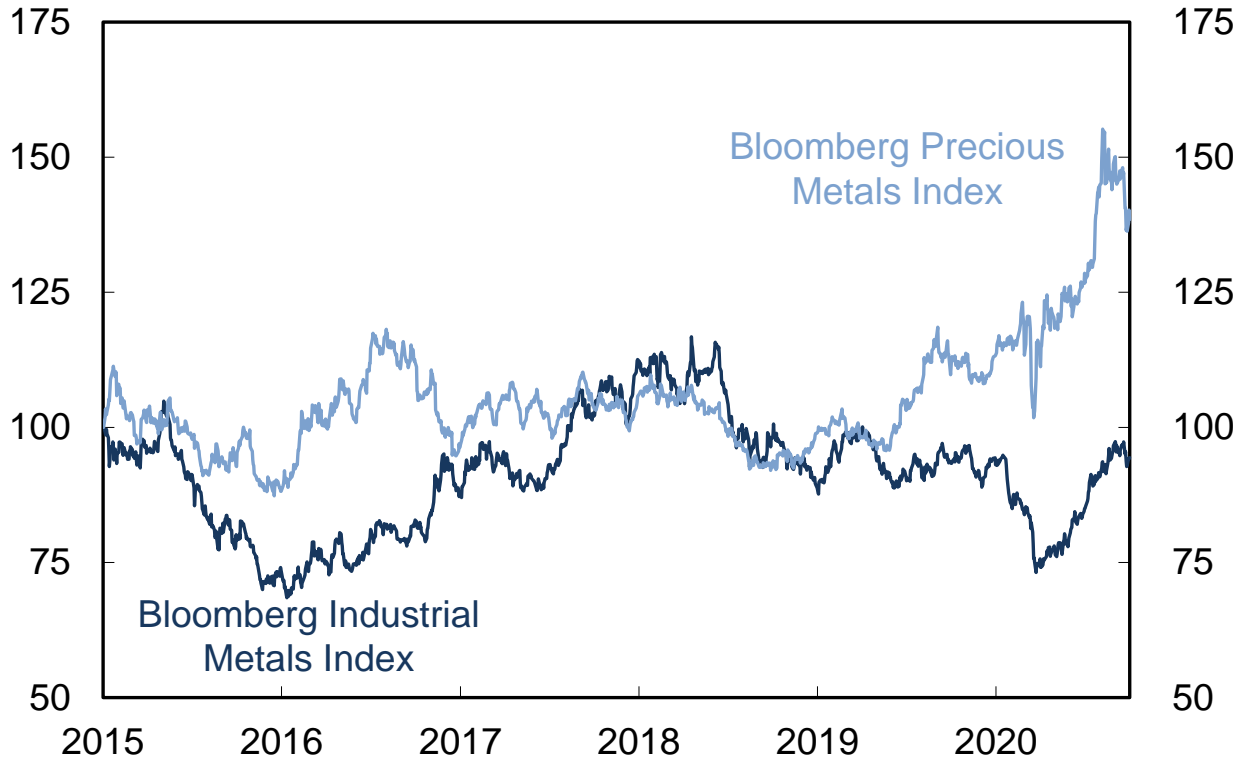
Source: Morningstar, Inc.

### 3.4.4.3 Metals Indices

Index

As Of: 30-Sep-2020

Index



Source: Bloomberg, L.P.

Note: Indexed to 01-Jan-2015.

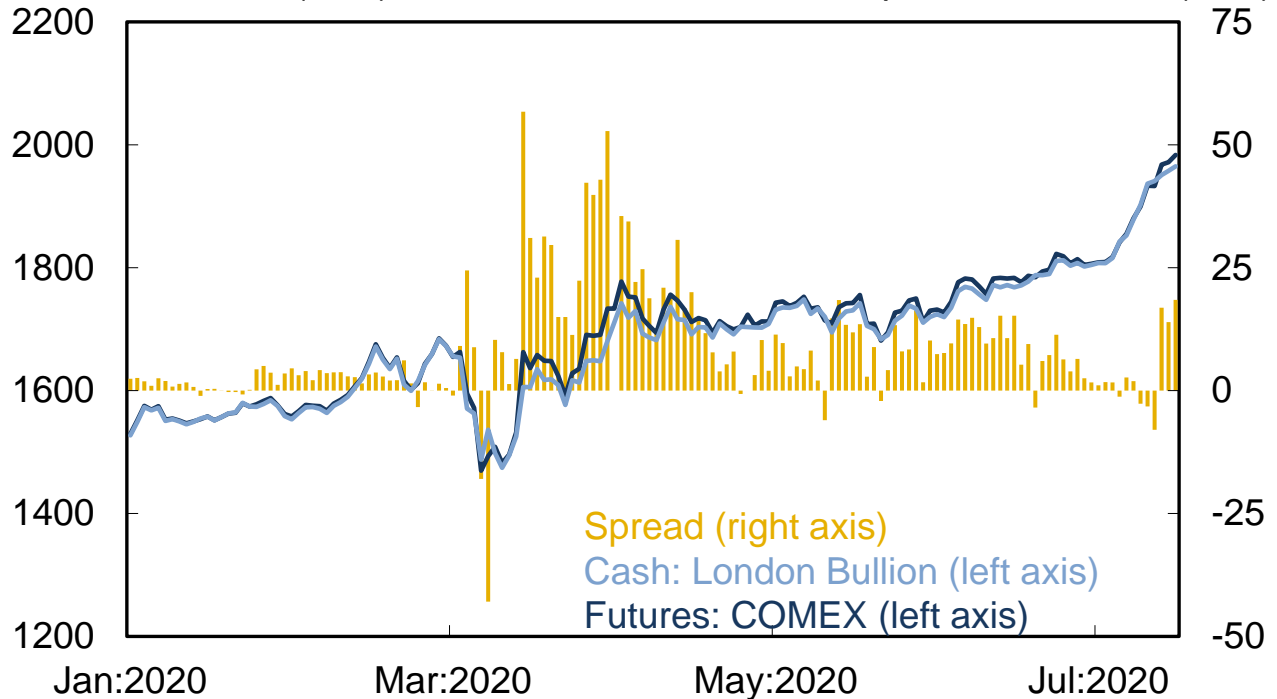


### 3.4.4.4 Cash-Futures Spread: Gold

Price Per Ounce (US\$)

As Of: 31-Jul-2020

Spread Per Ounce (US\$)



Source: Bloomberg, L.P., CFTC

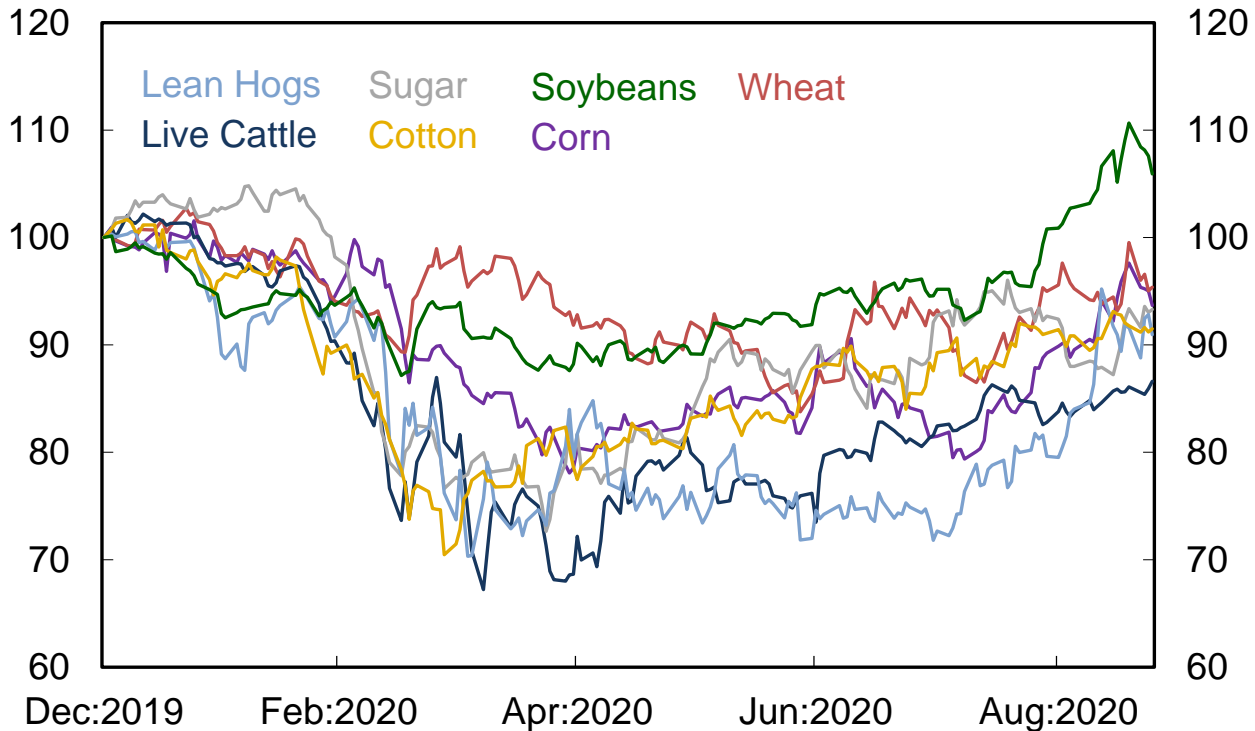
Note: London 4:00pm fix minus COMEX 10:00am volume weighted average price.

### 3.4.4.5 Agriculture Prices

Index

As Of: 24-Sep-2020

Index



Source: Bloomberg, L.P., CFTC

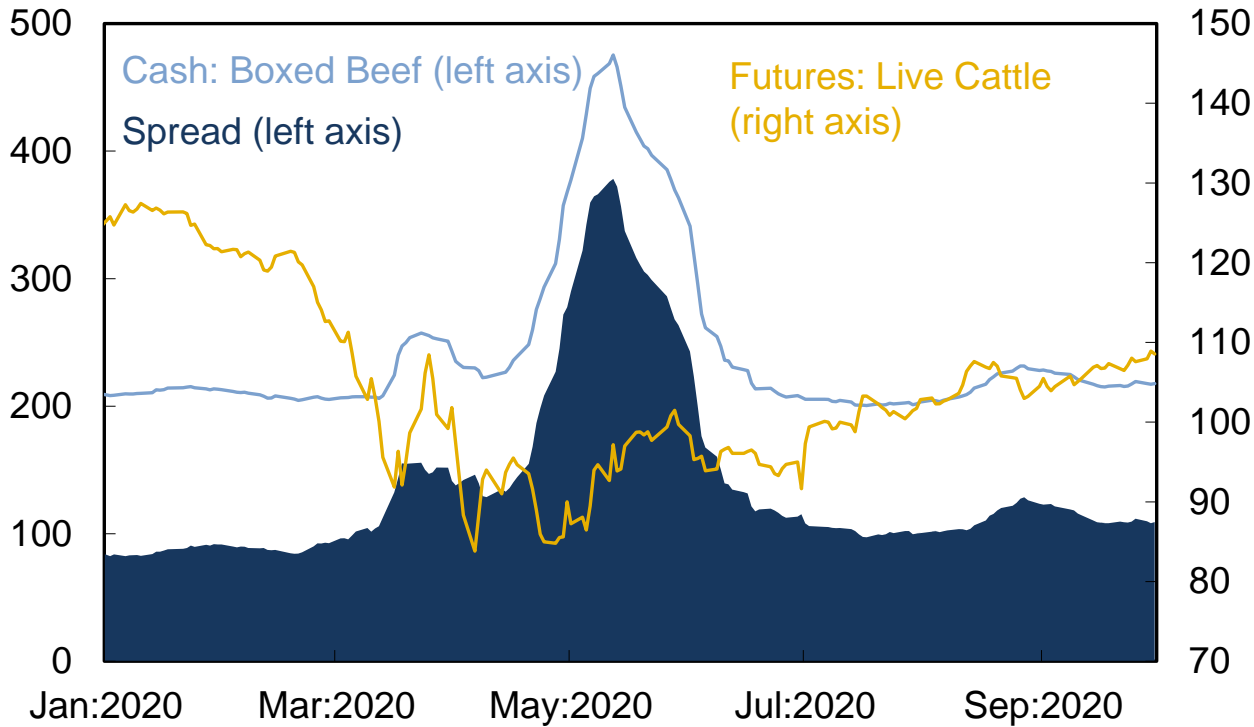
Note: Indexed to year-end 2019.

### 3.4.4.6 Cash-Futures Spread: Cattle

Price Per 100lbs

As Of: 30-Sep-2020

Price Per 100lbs



Source: Bloomberg, L.P., CFTC

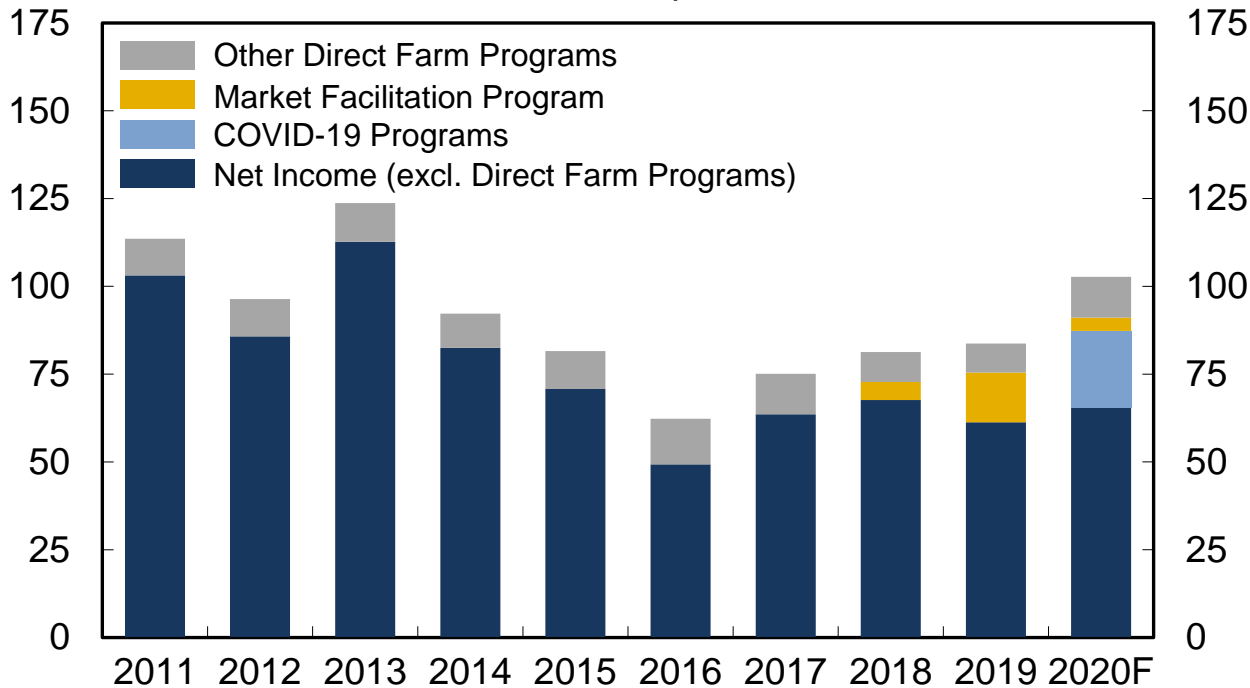
Note: Box beef choice cut prices minus live cattle front month contract

### 3.4.4.7 Net Farm Income

Billions of US\$

As Of: 2-Sep-2020

Billions of US\$



Note: The Market Facilitation Program provides direct payments to help producers who have been directly impacted by illegal retaliatory tariffs. COVID-19 Programs include \$16 billion in Coronavirus Food Assistance Program payments and \$5.8 billion in PPP payments.

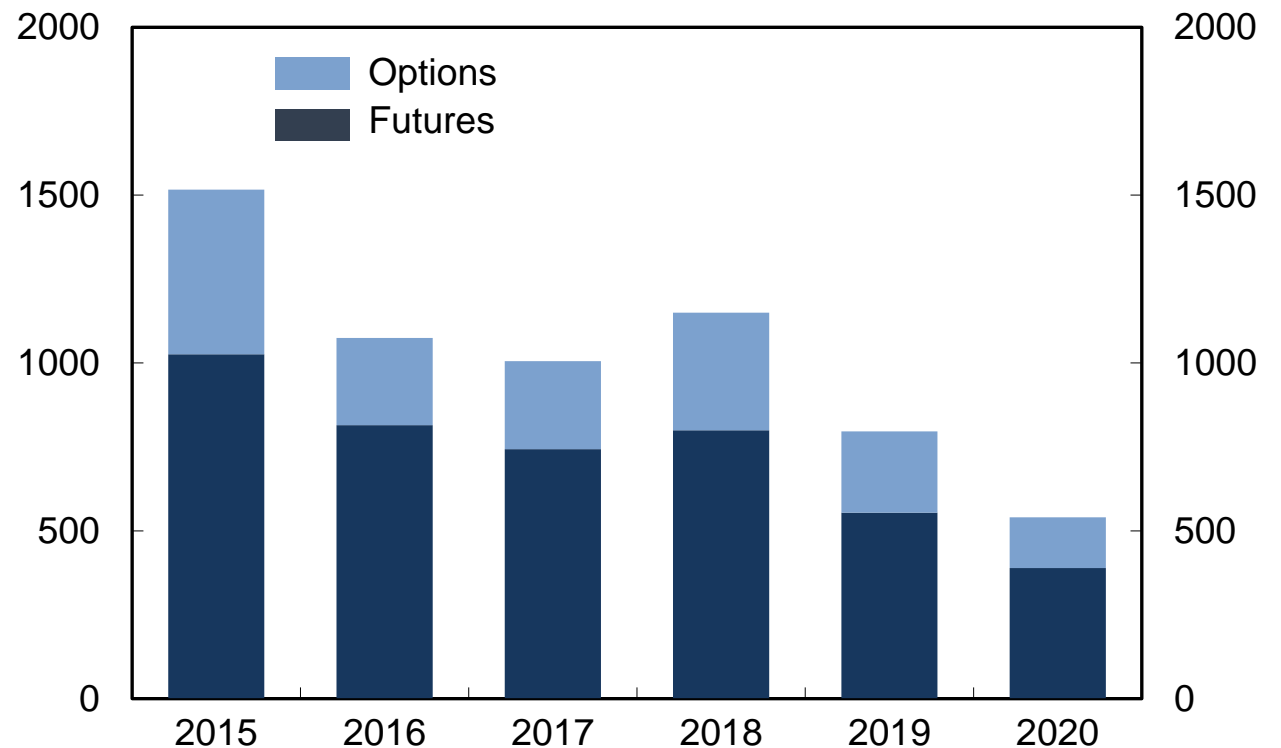
Source: USDA

### 3.4.4.8 Energy Futures & Options: Open Interest

Billions of US\$

As Of: Jul-2020

Billions of US\$



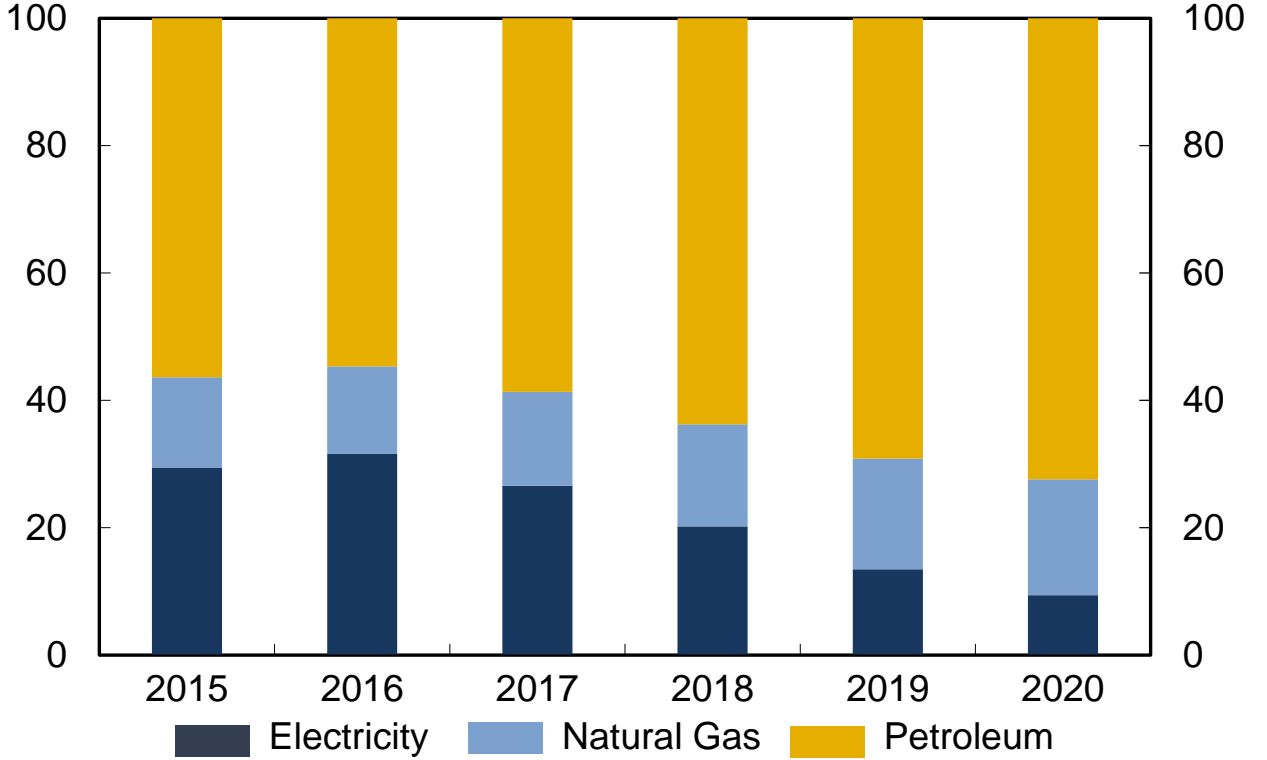
Source: CFTC

# 3.4.4.9 Energy Futures & Options by Product

Percent

As Of: Jul-2020

Percent



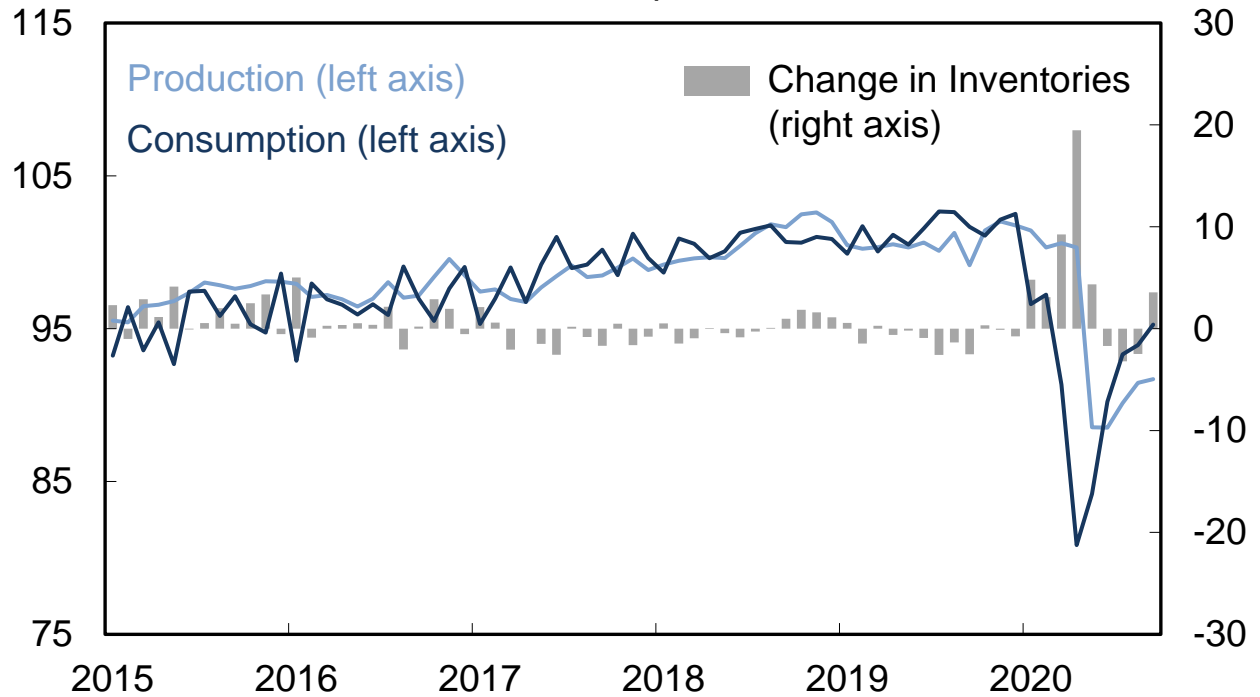
Source: CFTC

# 3.4.4.10 Global Petroleum Consumption and Production

Millions of Barrels

As Of: Sep-2020

Millions of Barrels



Source: U.S. Energy Information Administration

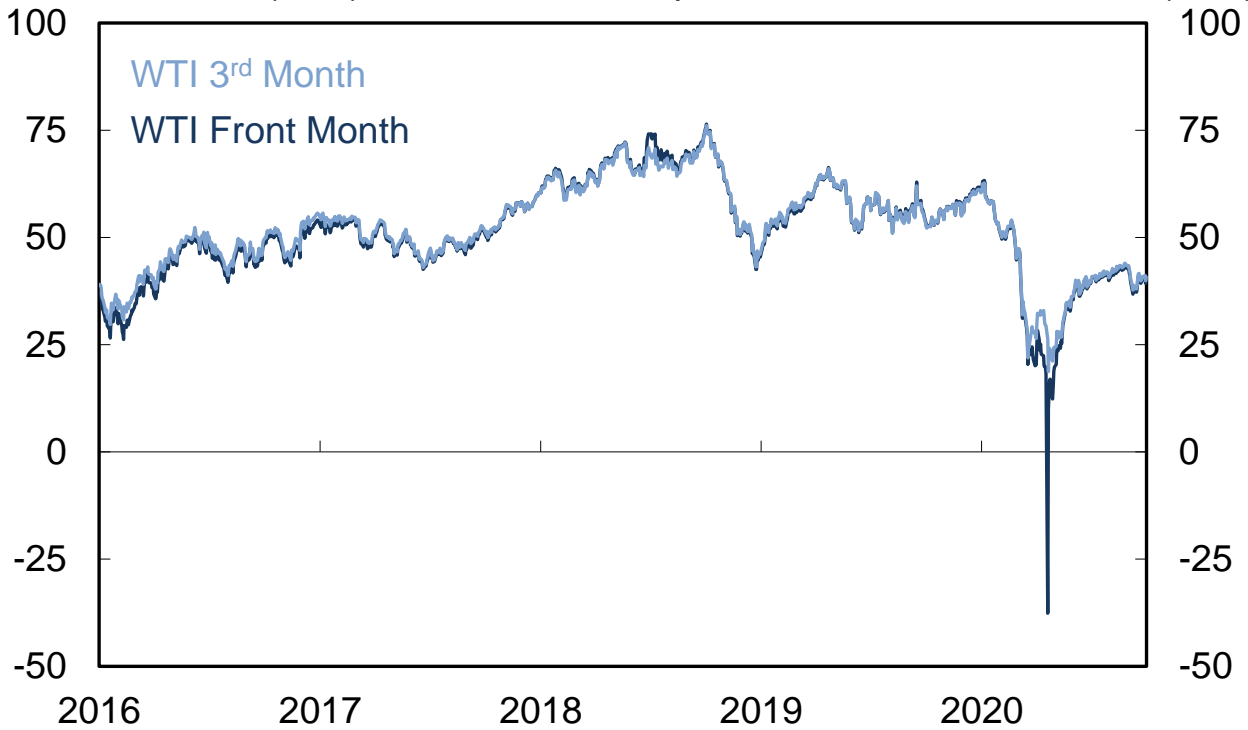
Note: Millions of barrels per day. Change in inventories represents the difference between production and consumption.

### 3.4.4.11 WTI Crude Oil Futures

Price Per Barrel (US\$)

As Of: 30-Sep-2020

Price Per Barrel (US\$)



Source: U.S. Energy Information Administration

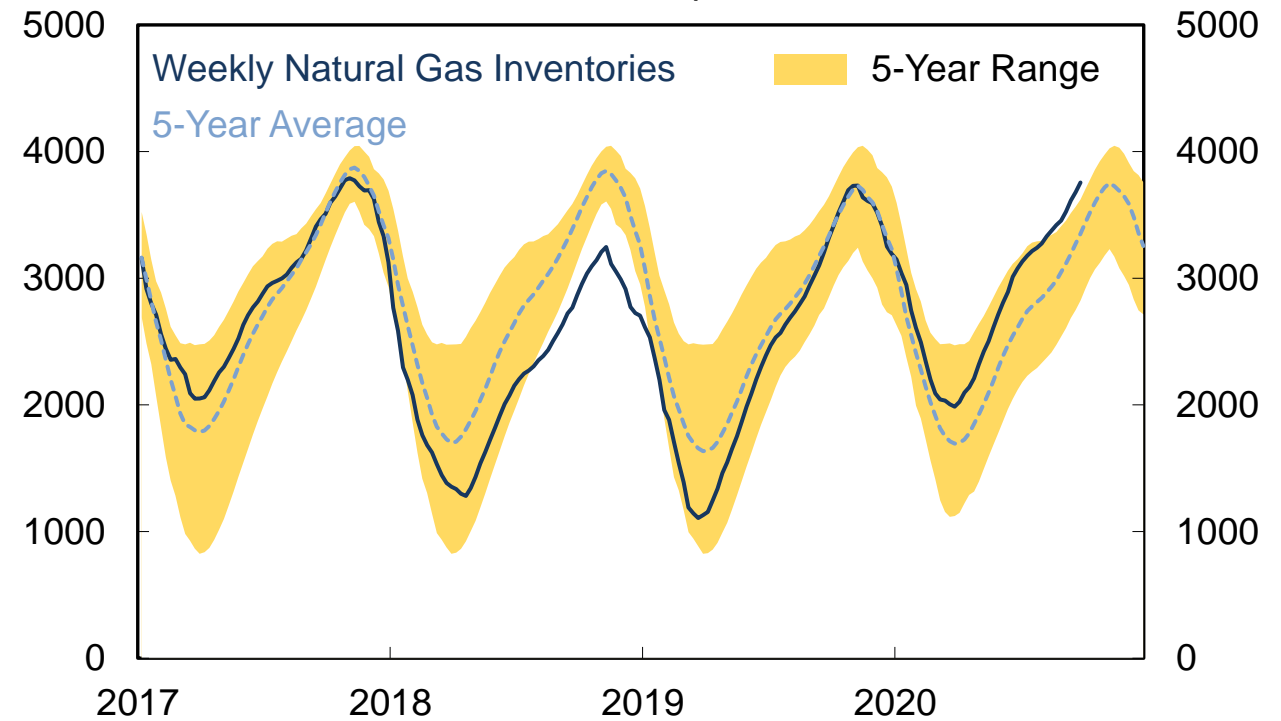


### 3.4.4.12 Natural Gas Inventories

Billions of Cubic Feet

As Of: 25-Sep-2020

Billions of Cubic Feet



Source: U.S. Energy Information Administration

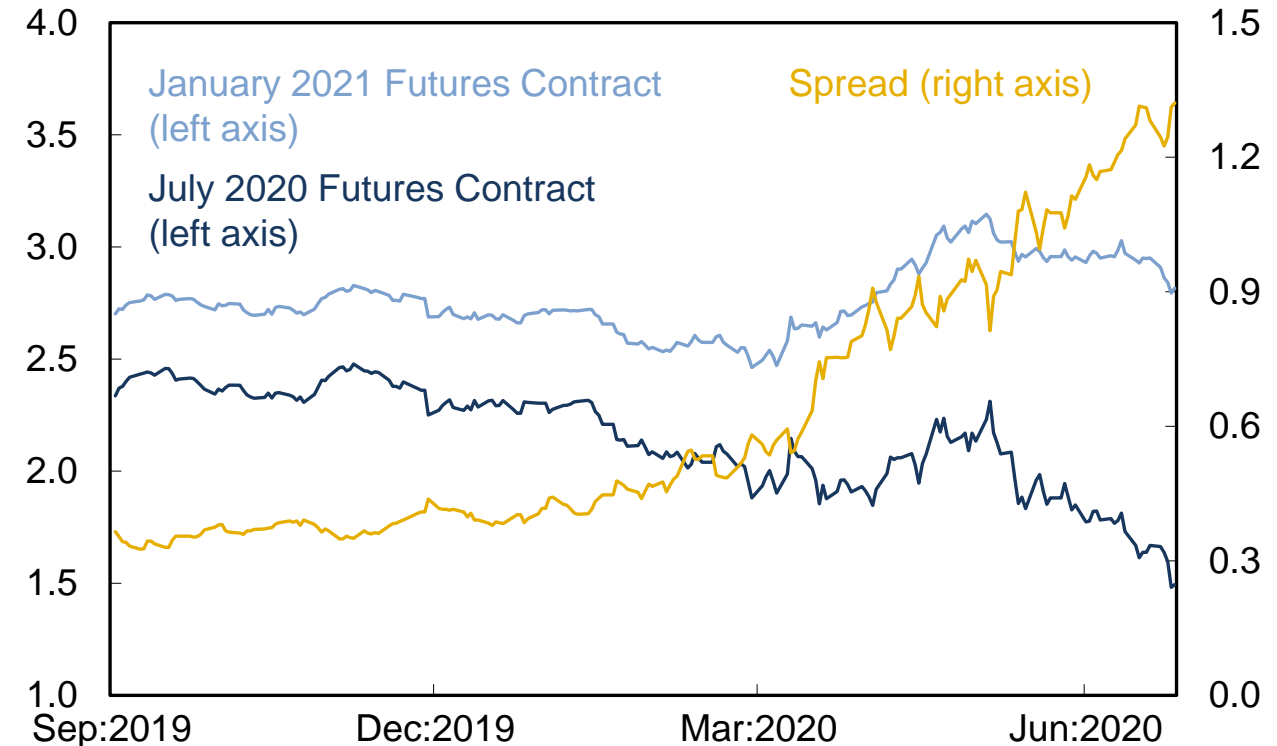
Note: The shaded area and dotted line indicate the rolling 5-year range and average.

### 3.4.4.13 Natural Gas Forward Curves

Price Per MMBtu (US\$)

As Of: 26-Jun-2020

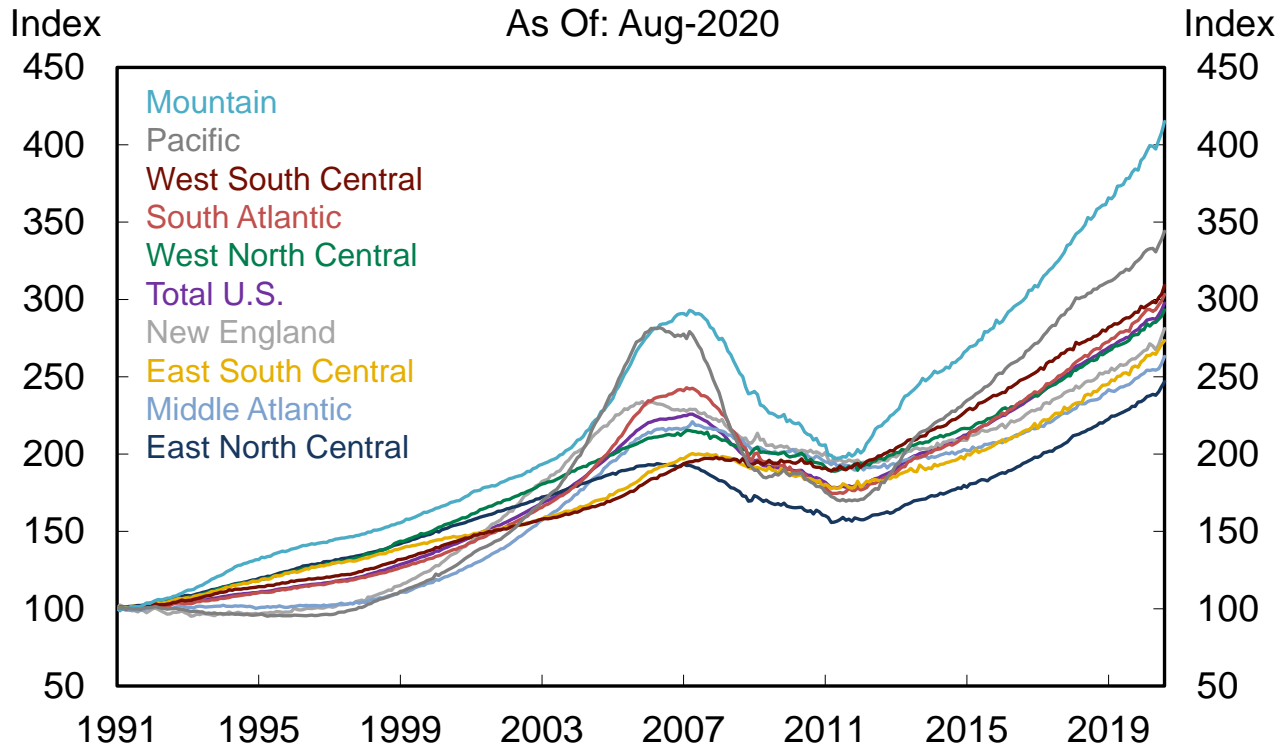
Spread per MMBtu (US\$)



Source: Bloomberg, L.P.

### 3.4.5.1 House Prices by Census Division

As Of: Aug-2020



Source: Federal Housing Finance Agency

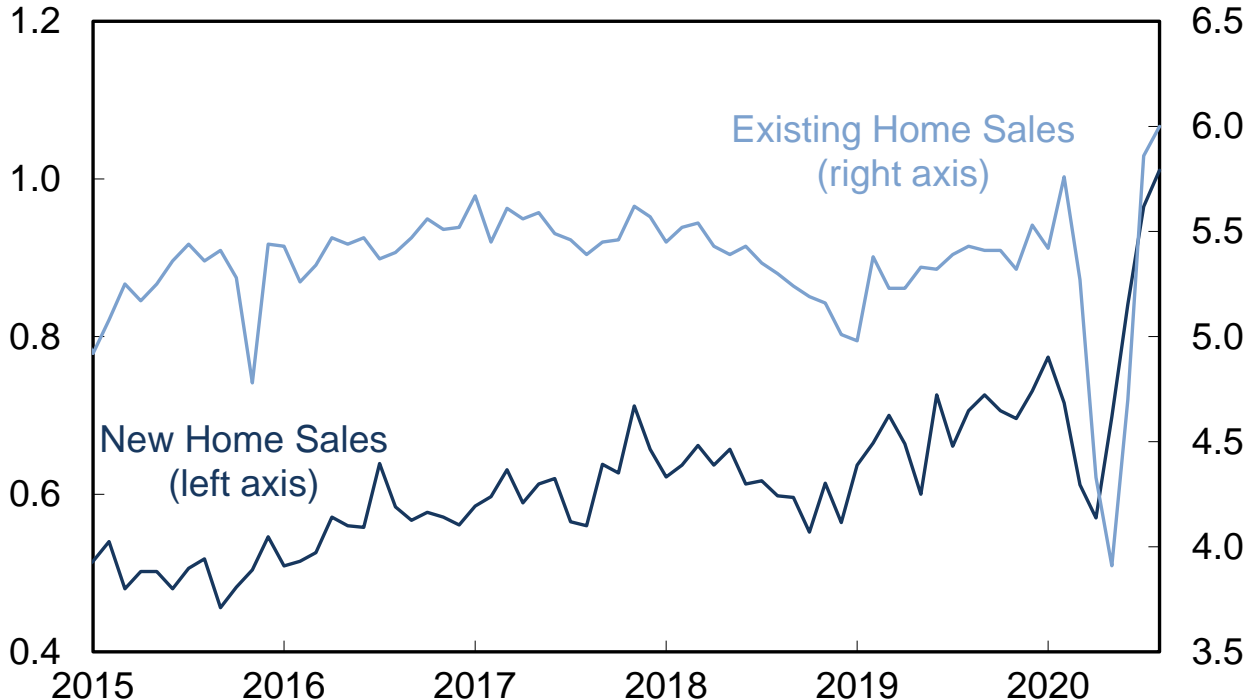
Note: Purchase-only, seasonally adjusted, nominal, constant-quality price index. January 1991 = 100.

# 3.4.5.2 Home Sales

Millions of Sales

As Of: Aug-2020

Millions of Sales



Source: NAR, Census Bureau, HUD

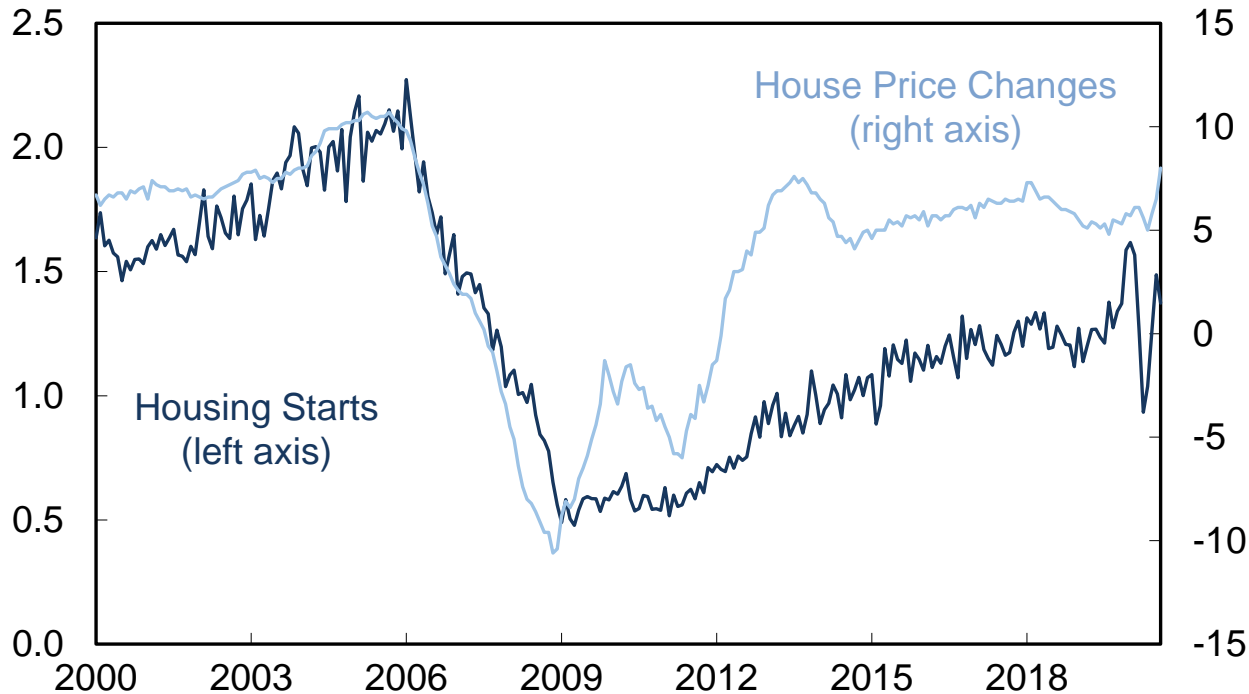
Note: Series are seasonally adjusted annual rates and are expressed in millions of single-family housing units.

### 3.4.5.3 New Housing Starts and Price Changes

Millions of Housing Units

As Of: Aug-2020

Percentage Change



Source: U.S. Census Bureau, FHFA, HUD

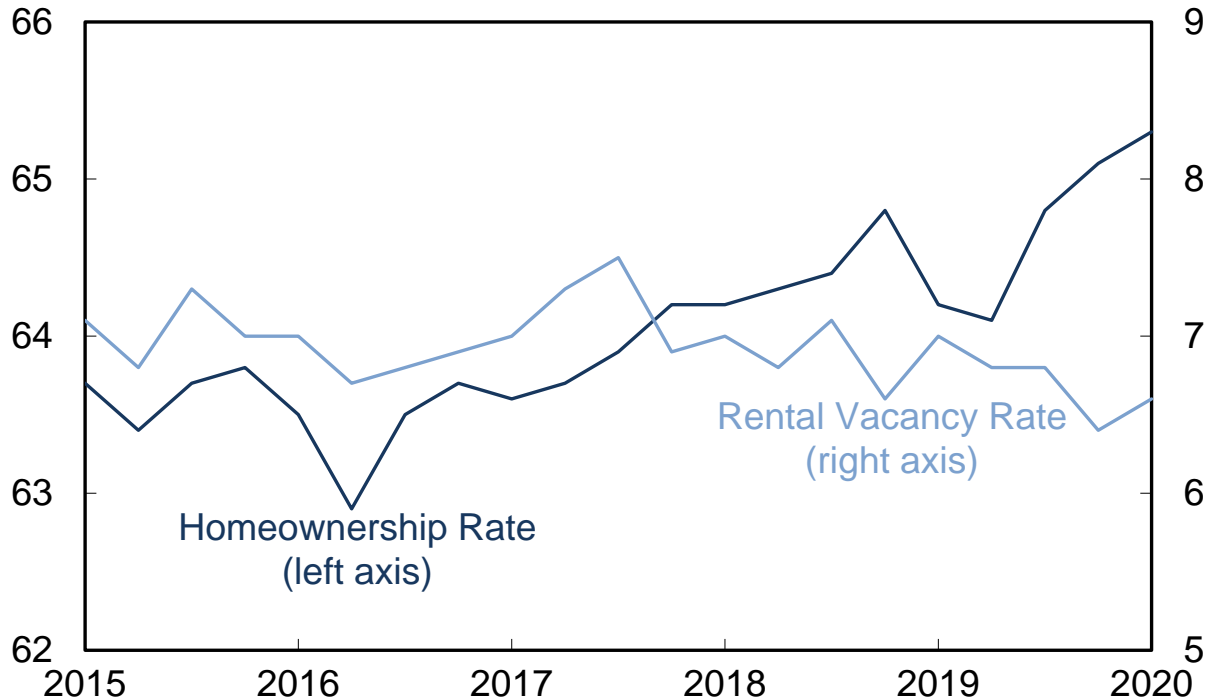
Note: Data are seasonally adjusted annual rates. House Price Changes series is the year-over-year percentage change of the FHFA National House Price Index.

# 3.4.5.4 Homeownership and Vacancy Rates

Percent

As Of: 2020 Q1

Percent



Source: U.S. Census Bureau, Current Population Survey/Housing Vacancy Survey

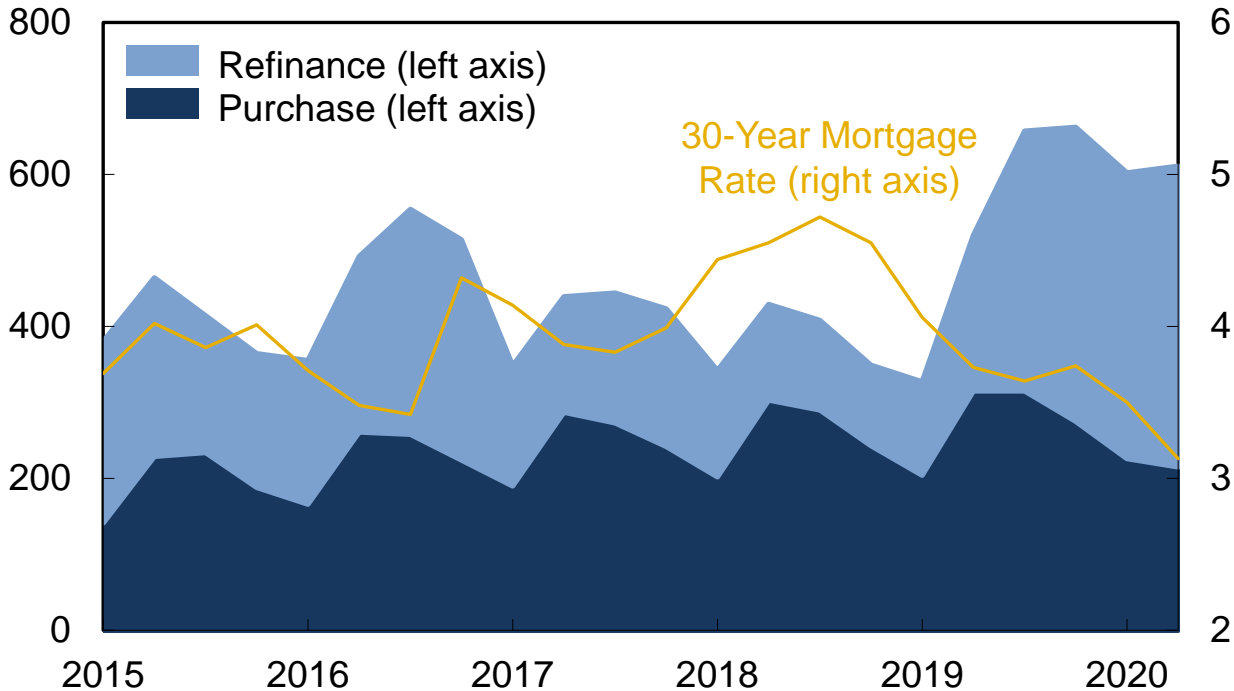
Note: Data are non-seasonally adjusted quarterly percentages.

# 3.4.5.5 Mortgage Originations and Rates

Billions of US\$

As Of: 2020 Q2

Percent



Source: NMDB®, Freddie Mac Primary Mortgage Market Survey®

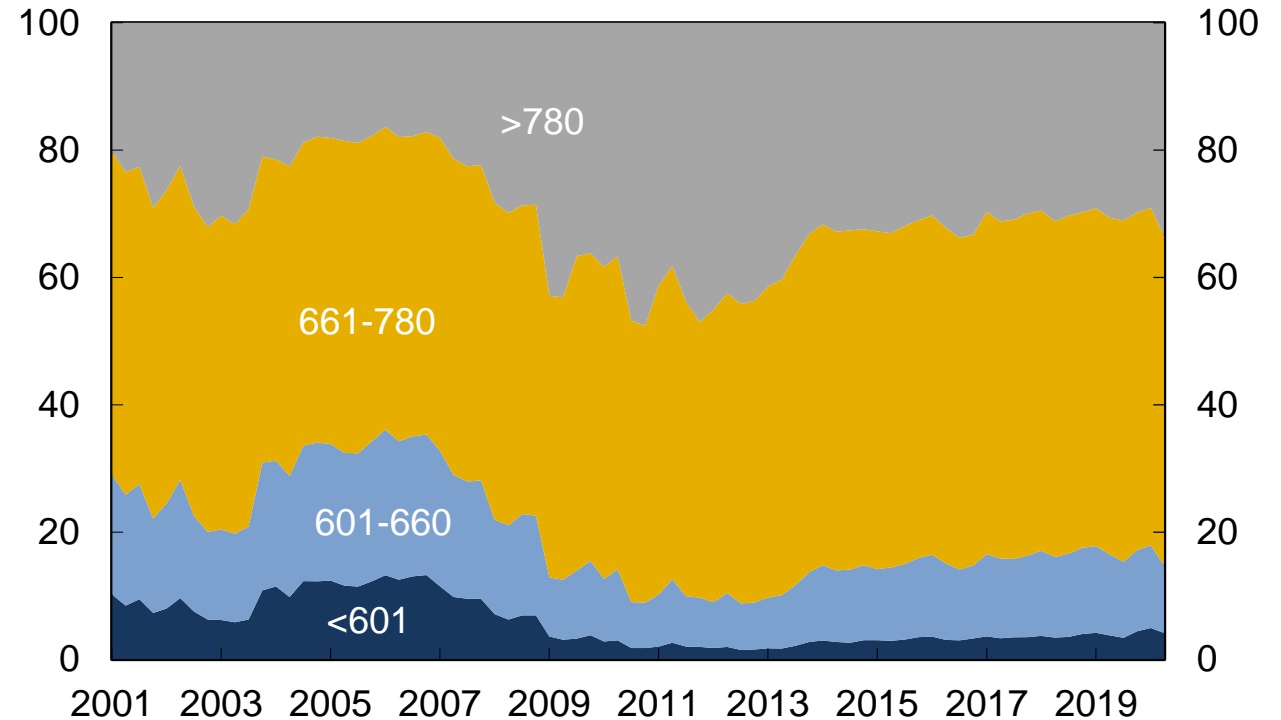
Note: Quarterly originations represent all 1-4 family homes with first-lien, closed-end residential mortgages.

# 3.4.5.6 Purchase Origination Volume by Credit Score

Percent of Originations

As Of: 2020 Q2

Percent of Originations



Source: NMDB®

Note: Based on first-borrower VantageScore 3.0 for first-lien, closed-end residential purchase mortgages.

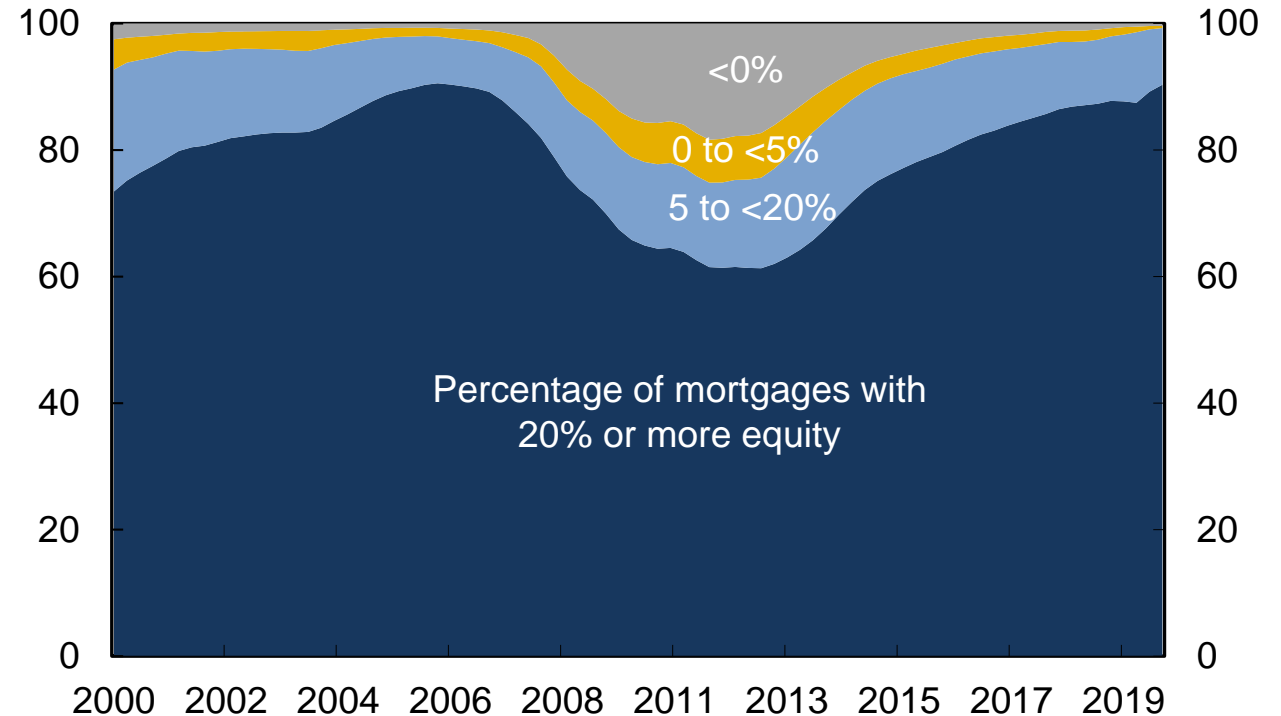


# 3.4.5.7 Shares of Mortgages by Equity Percentage

Percent

As Of: 2020 Q2

Percent



Source: NMDB®

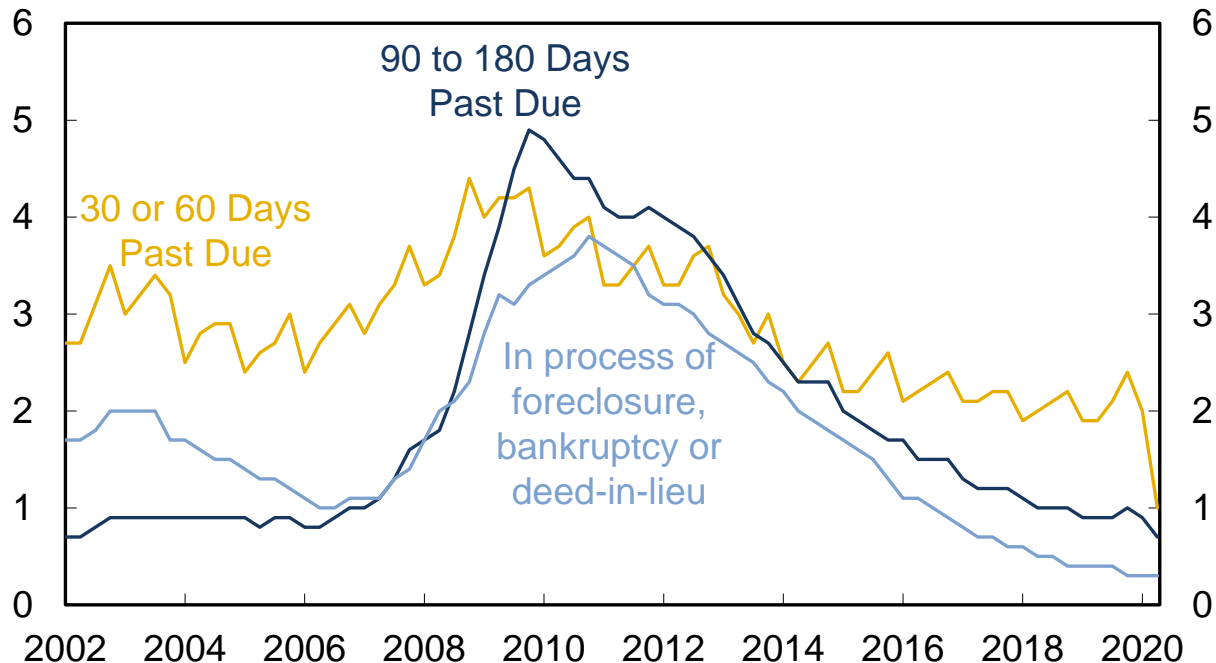
Note: Quarterly percentage of all mortgage loans that are not closed or terminated.

### 3.4.5.8 Mortgage Delinquency

Percent

As Of: 2020 Q2

Percent



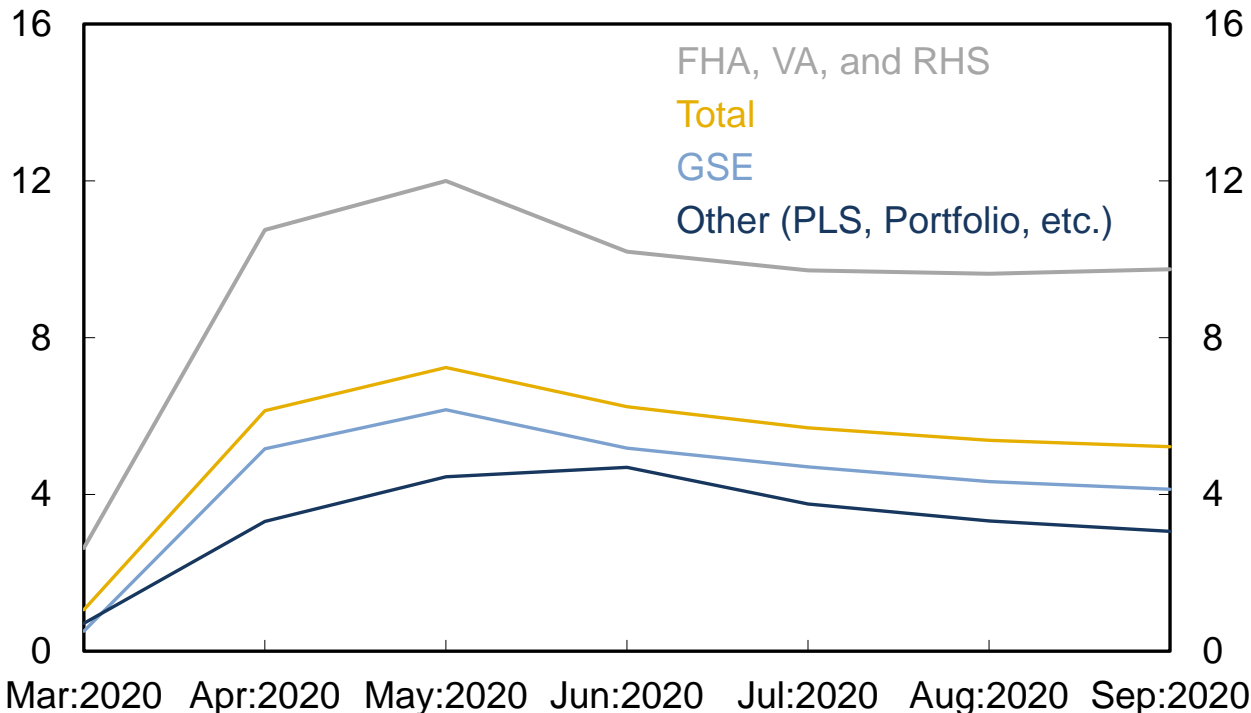
Note: Quarterly percentage of all mortgage loans that are not closed or terminated.

### 3.4.5.9 Forbearance Rates by Investor Type

Percent

As Of: Sep-2020

Percent



Note: Rates are the weekly percentage of servicing portfolio volume in forbearance by investor type over time.

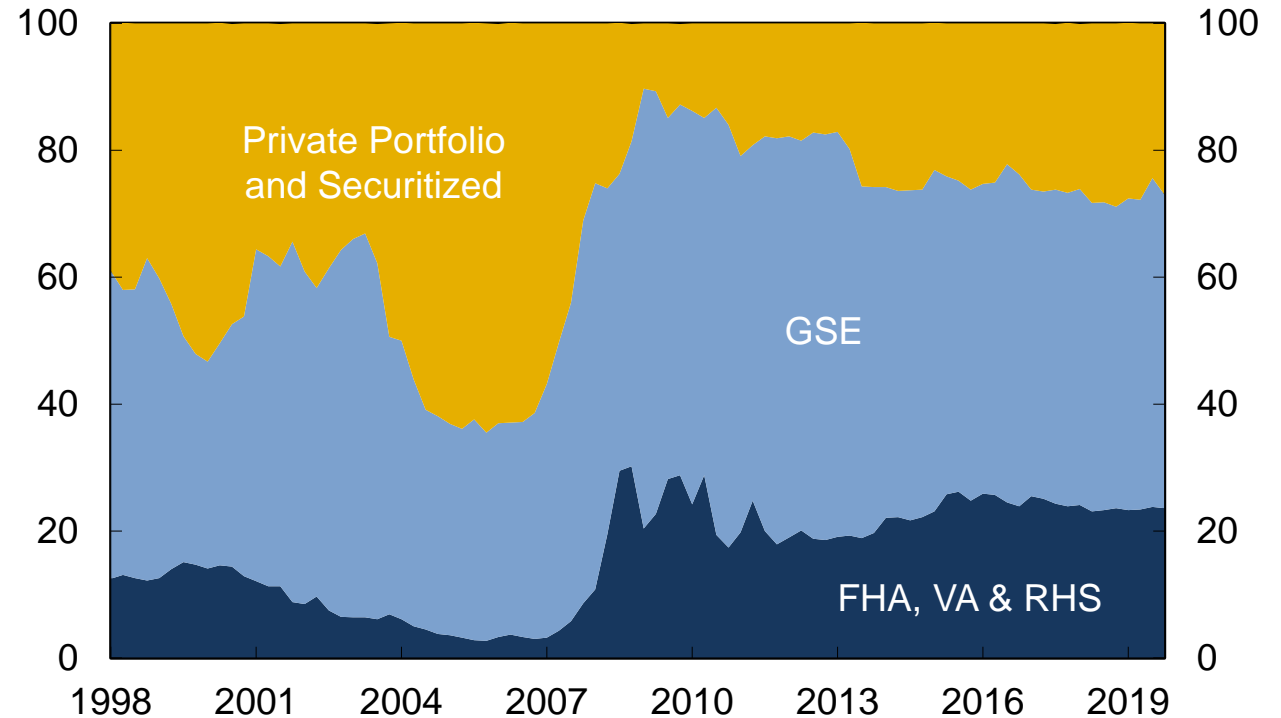
Source: NMDB®

# 3.4.5.10 Mortgage Originations by Product

Percent of Originations

As Of: 2019 Q4

Percent of Originations



Note: Quarterly data for first-lien, closed-end residential mortgages.

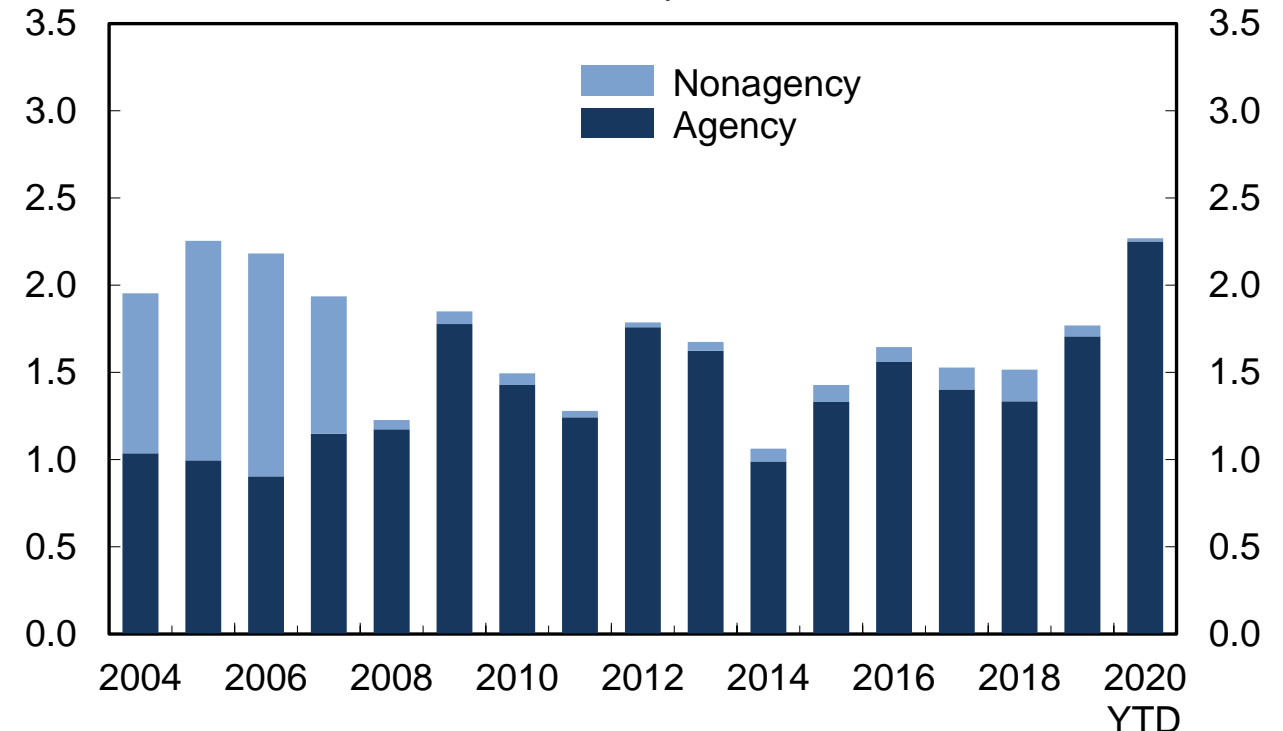
Source: NMDB®

# 3.4.5.11 RMBS Issuance

Trillions of US\$

As Of: Sep-2020

Trillions of US\$



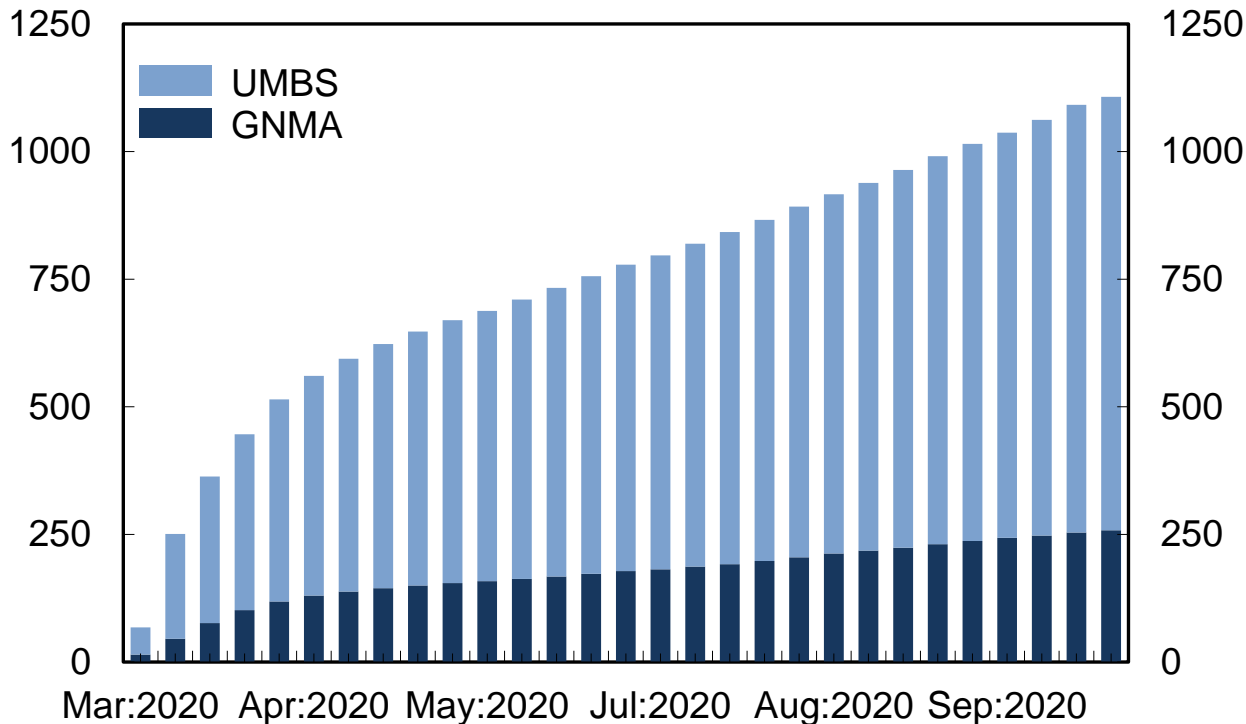
Source: FHLMC, FNMA, GNMA, NCUA, FDIC, Bloomberg, L.P., Dealogic, Thomson Reuters, SIFMA

### 3.4.5.12 Cumulative MBS Purchases by the Federal Reserve

Billions of US\$

As Of: 30-Sep-2020

Billions of US\$



Source: FRBNY

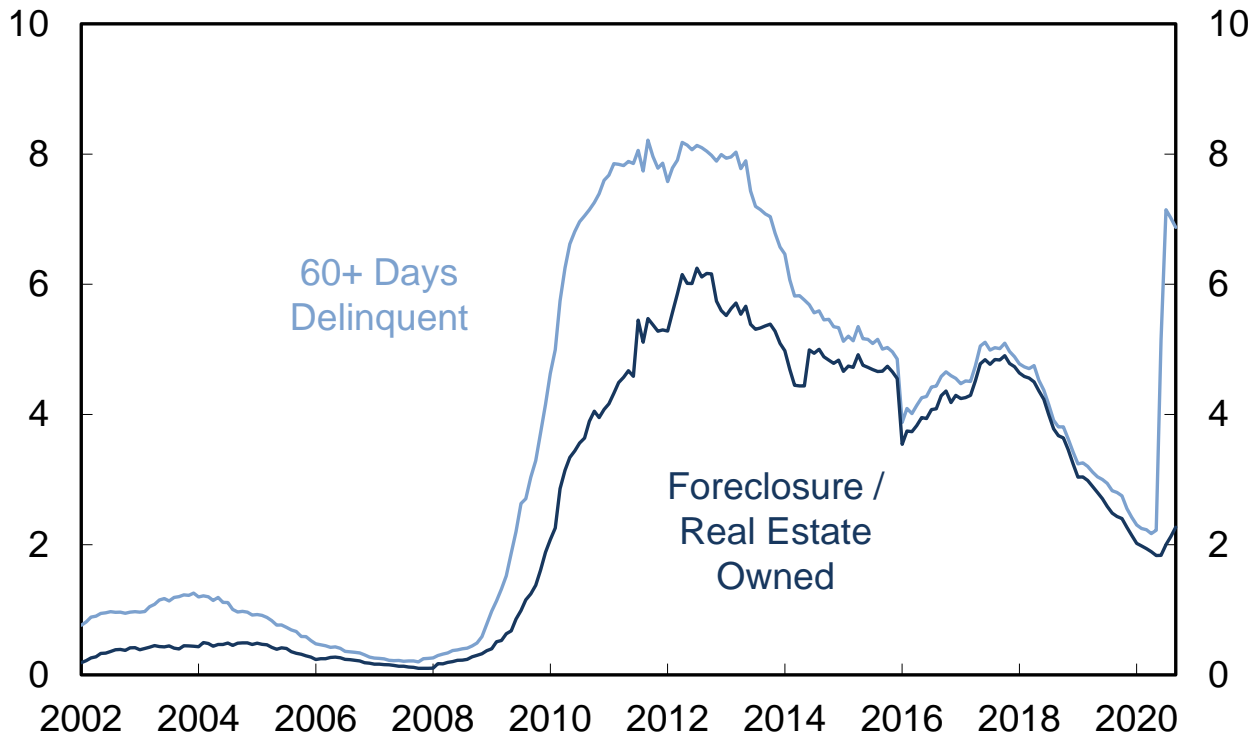
Note: Cumulative 2020 purchases. Weekly series are aggregated from daily Agency MBS operations in the TBA pool.

### 3.4.6.1 Conduit CMBS Delinquency and Foreclosure Rate

Percent

As Of: Sep-2020

Percent



Source: JPMorgan, Trepp

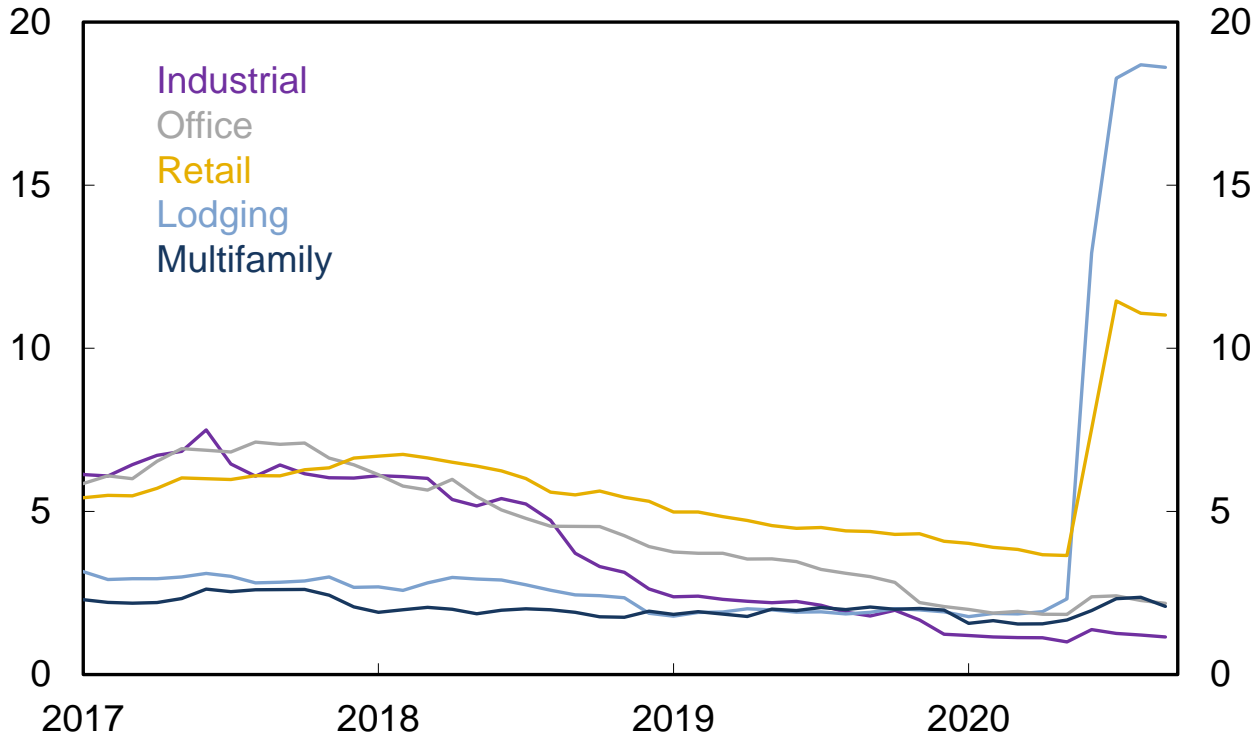
Note: Delinquency rate includes FC/REO.

### 3.4.6.2 Conduit CMBS Delinquency Rates by Industry

Percent

As Of: Sep-2020

Percent



Source: JPMorgan, Trepp

Note: 60+ delinquency rate; includes FC/REO.

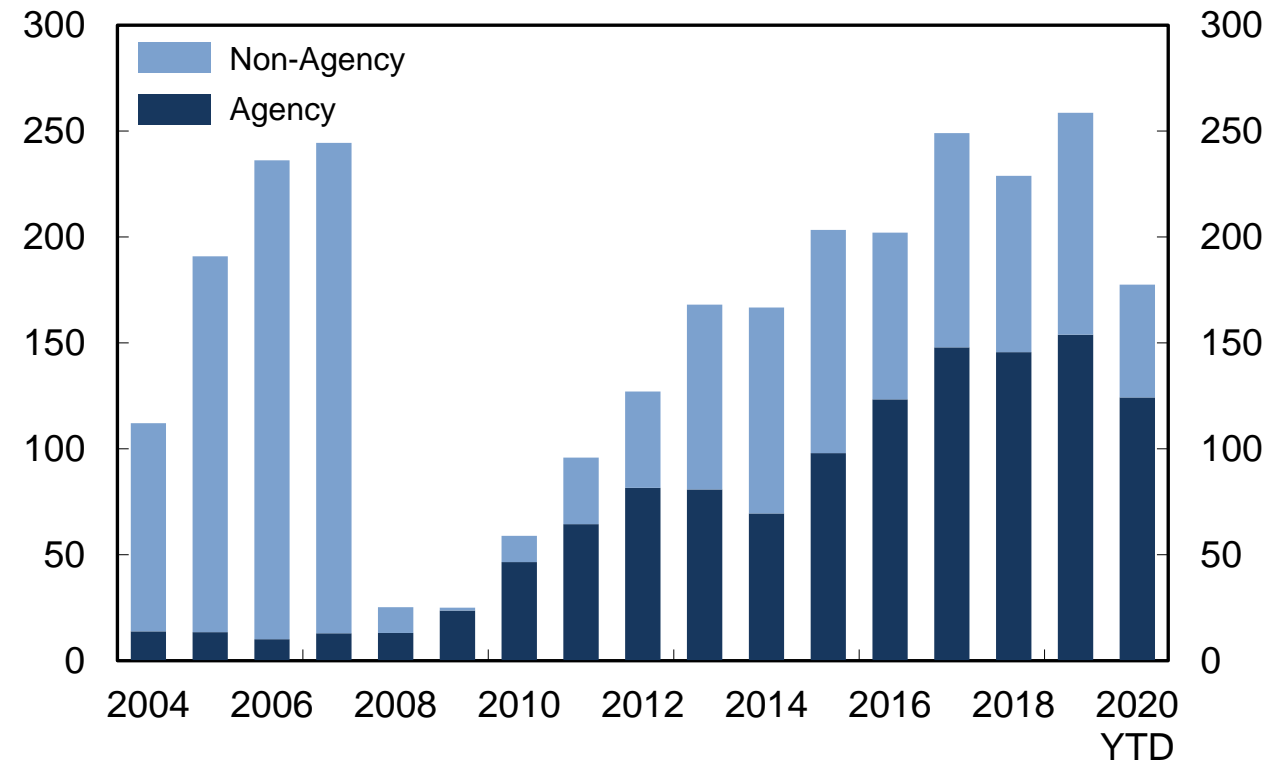


### 3.4.6.3 CMBS Issuance

Billions of US\$

As Of: 2020 Q3

Billions of US\$



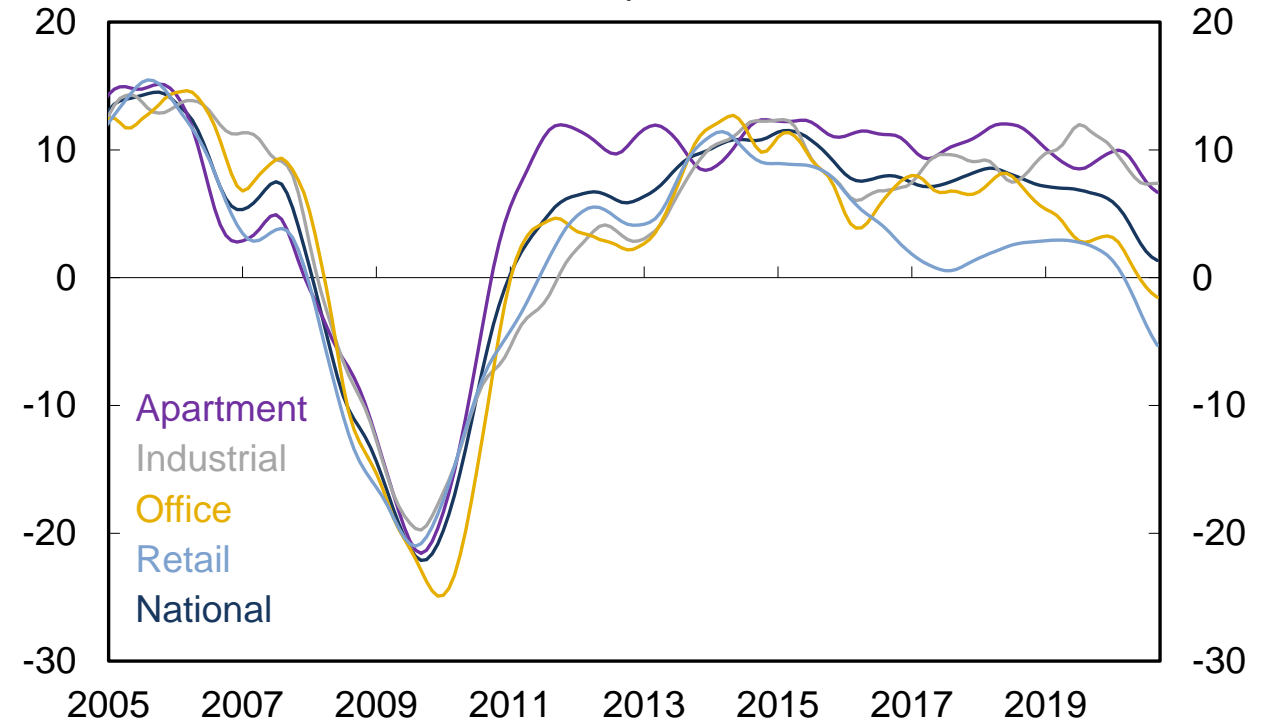
Source: Inside Mortgage Finance

### 3.4.6.4 Commercial Property Price Growth

Percent

As Of: Sep-2020

Percent



Source: Real Capital Analytics, Bloomberg, L.P.

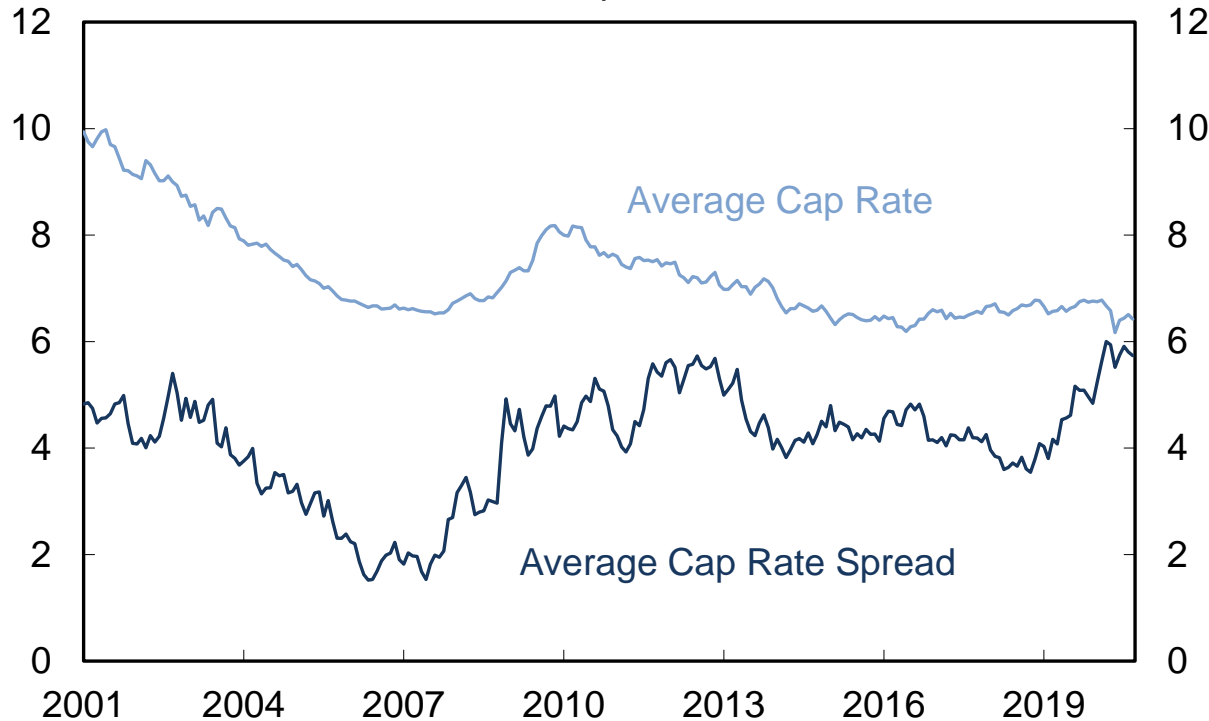
Note: Year-over-year price change.

### 3.4.6.5 Capitalization Rates and Spreads

Percent

As Of: Sep-2020

Percent



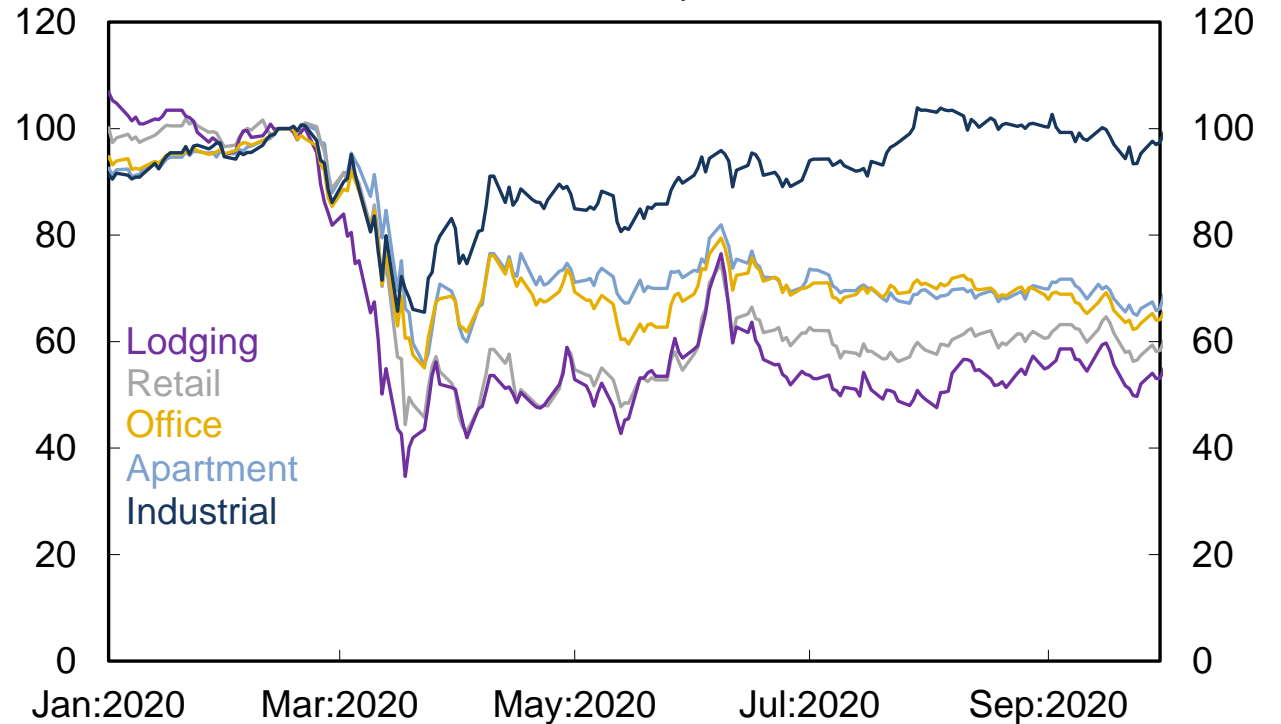
Source: Real Capital Analytics,  
Bloomberg, L.P.

# E.1 Sector Equity REIT Indices

Percent

As Of: 30-Sep-2020

Percent



Source: NAREIT, Bloomberg, L.P.

Note: Indexed to February 14, 2020.

# 3.5.1.1 Categorization of Large U.S. BHCs

Description	U.S. Domestic Banking Org.										
<p align="center"><b>Category I</b> (U.S. G-SIBs)</p>	<table border="0"> <tr> <td>Bank of America</td> <td>JPMorgan Chase</td> </tr> <tr> <td>Bank of New York Mellon</td> <td>Morgan Stanley</td> </tr> <tr> <td>Citigroup</td> <td>State Street</td> </tr> <tr> <td>Goldman Sachs</td> <td>Wells Fargo</td> </tr> </table>	Bank of America	JPMorgan Chase	Bank of New York Mellon	Morgan Stanley	Citigroup	State Street	Goldman Sachs	Wells Fargo		
Bank of America	JPMorgan Chase										
Bank of New York Mellon	Morgan Stanley										
Citigroup	State Street										
Goldman Sachs	Wells Fargo										
<p align="center"><b>Category II</b> (Large complex, ≥\$700b Total assets, or ≥ \$75b in Cross-Jurisdictional Activity)</p>	<p align="center">Northern Trust</p>										
<p align="center"><b>Category III</b> (Large complex, ≥\$250b Total assets or ≥ \$75b in NBA, wSTWF, or Off-balance sheet exposure)</p>	<table border="0"> <tr> <td>Capital One</td> <td>Truist Financial</td> </tr> <tr> <td>Charles Schwab</td> <td>U.S. Bancorp</td> </tr> <tr> <td>PNC Financial</td> <td></td> </tr> </table>	Capital One	Truist Financial	Charles Schwab	U.S. Bancorp	PNC Financial					
Capital One	Truist Financial										
Charles Schwab	U.S. Bancorp										
PNC Financial											
<p align="center"><b>Category IV</b> (Large noncomplex, other firms with \$100b to \$250b Total assets)</p>	<table border="0"> <tr> <td>Ally Financial</td> <td>Huntington</td> </tr> <tr> <td>American Express</td> <td>KeyCorp</td> </tr> <tr> <td>Citizens Financial</td> <td>M&amp;T Bank</td> </tr> <tr> <td>Discover</td> <td>Regions Financial</td> </tr> <tr> <td>Fifth Third</td> <td>Synchrony Financial</td> </tr> </table>	Ally Financial	Huntington	American Express	KeyCorp	Citizens Financial	M&T Bank	Discover	Regions Financial	Fifth Third	Synchrony Financial
Ally Financial	Huntington										
American Express	KeyCorp										
Citizens Financial	M&T Bank										
Discover	Regions Financial										
Fifth Third	Synchrony Financial										

Source: Federal Reserve

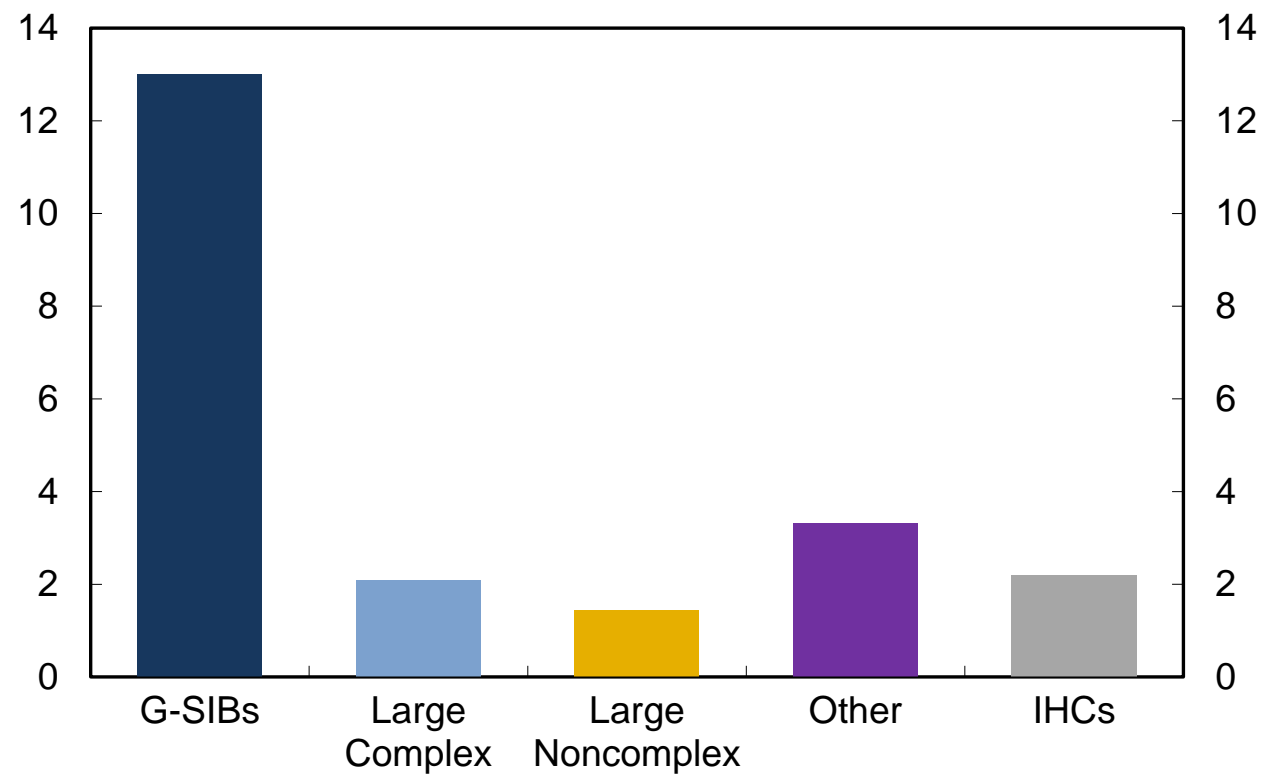
Note: Northern Trust is in Category II due to its cross-jurisdictional activity.

### 3.5.1.2 Total Assets by BHC Type

Trillions of US\$

As Of: 2020 Q2

Trillions of US\$



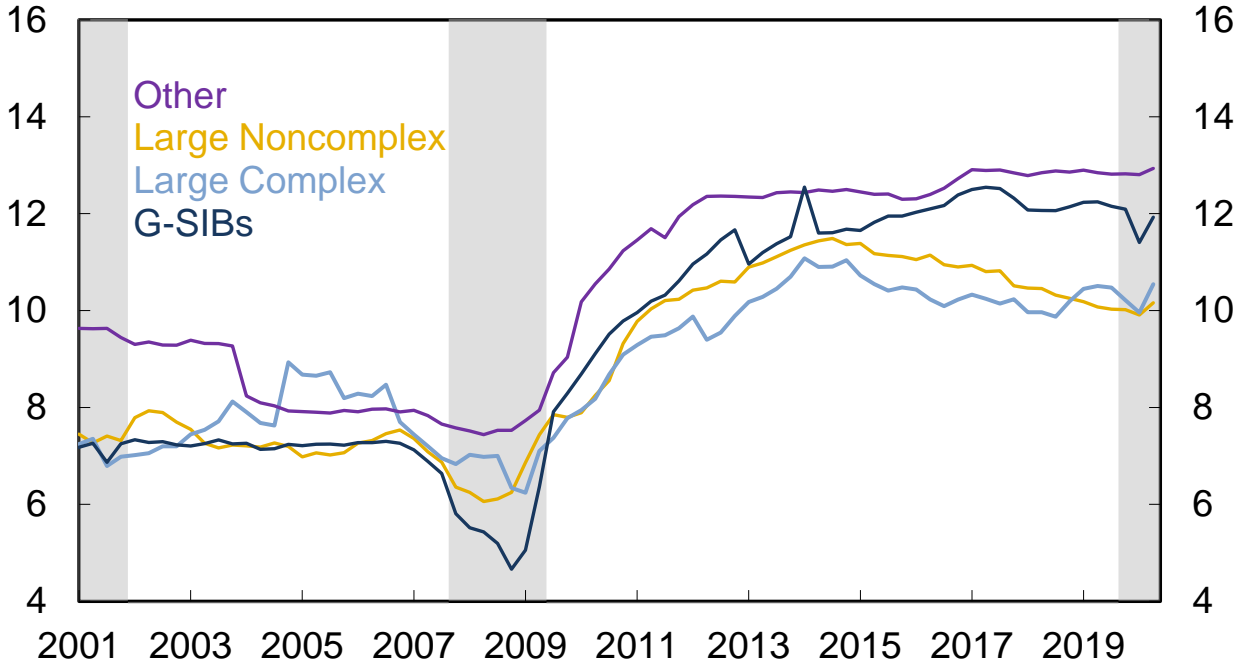
Source: FR Y-9C

# 3.5.1.3 Common Equity Tier 1 Ratios

Percent of RWA

As Of: 2020 Q2

Percent of RWA



Note: Tier 1 common capital is used as the numerator of the CET1 ratio prior to 2014:Q1 for G-SIBs and large complex BHCs, and prior to 2015:Q1 for large noncomplex and other BHCs. The denominator is risk-weighted assets (RWA). Shaded areas indicate NBER recessions.

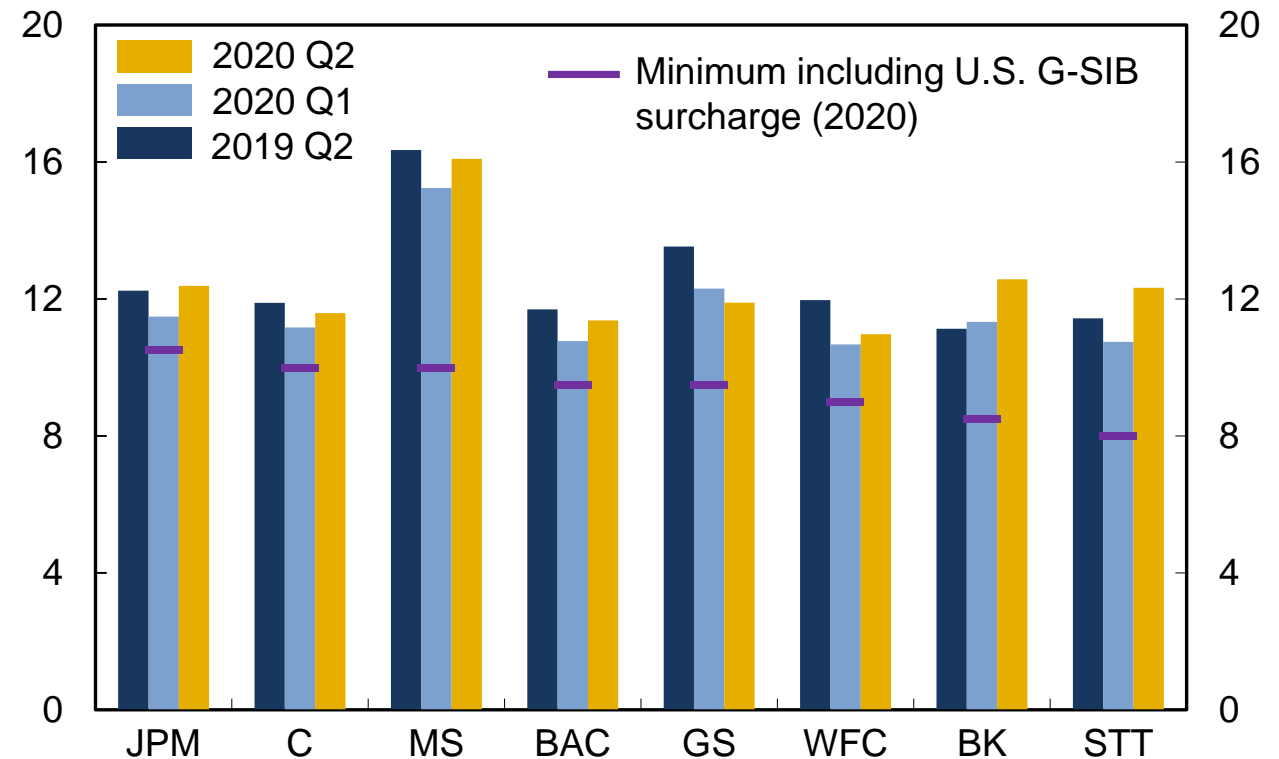
Source: FR Y-9C, Haver Analytics

### 3.5.1.4 Common Equity Tier 1 Ratios at U.S. G-SIBs

Percent of RWA

As Of: 2020 Q2

Percent of RWA



Source: FR-Y9C

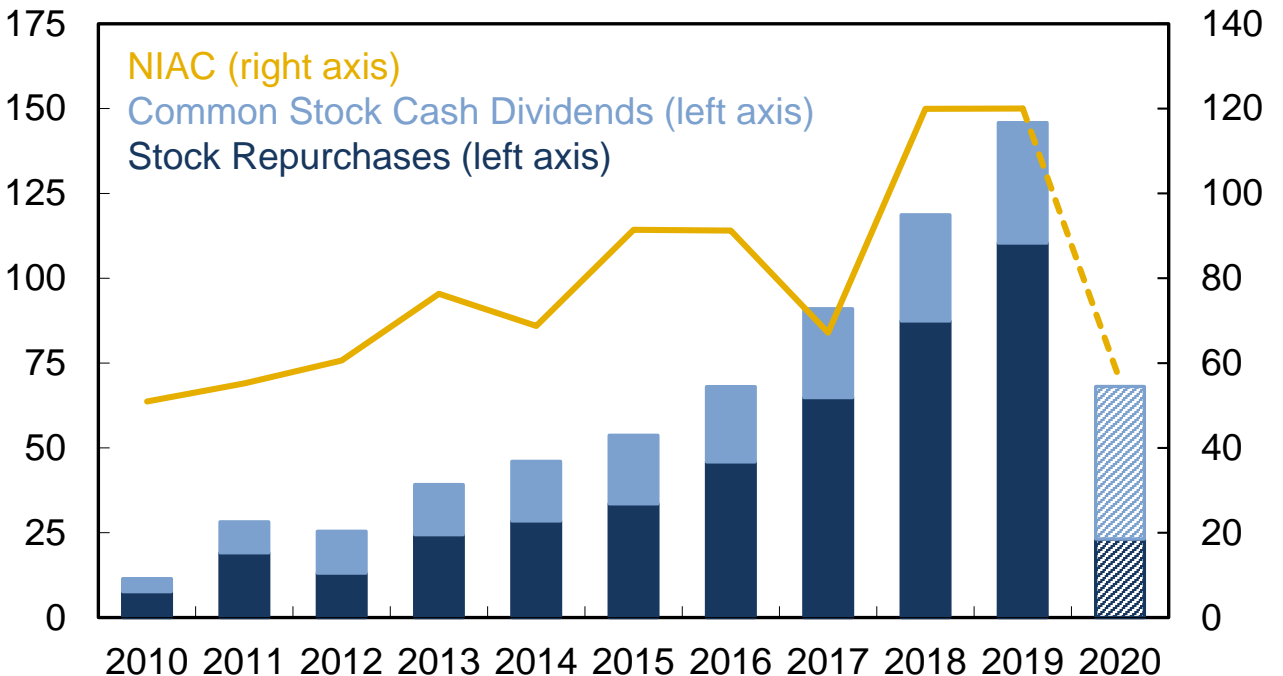


### 3.5.1.5 Payout Rates at U.S. G-SIBs

Percent of NIAC

As Of: 2020 Q2

Billions of US\$



Note: Payout rates are the ratios of stock repurchases plus cash dividends to net income available to common shareholders (NIAC). NIAC is net income minus preferred dividends. 2020 data represents YTD data through Q2.

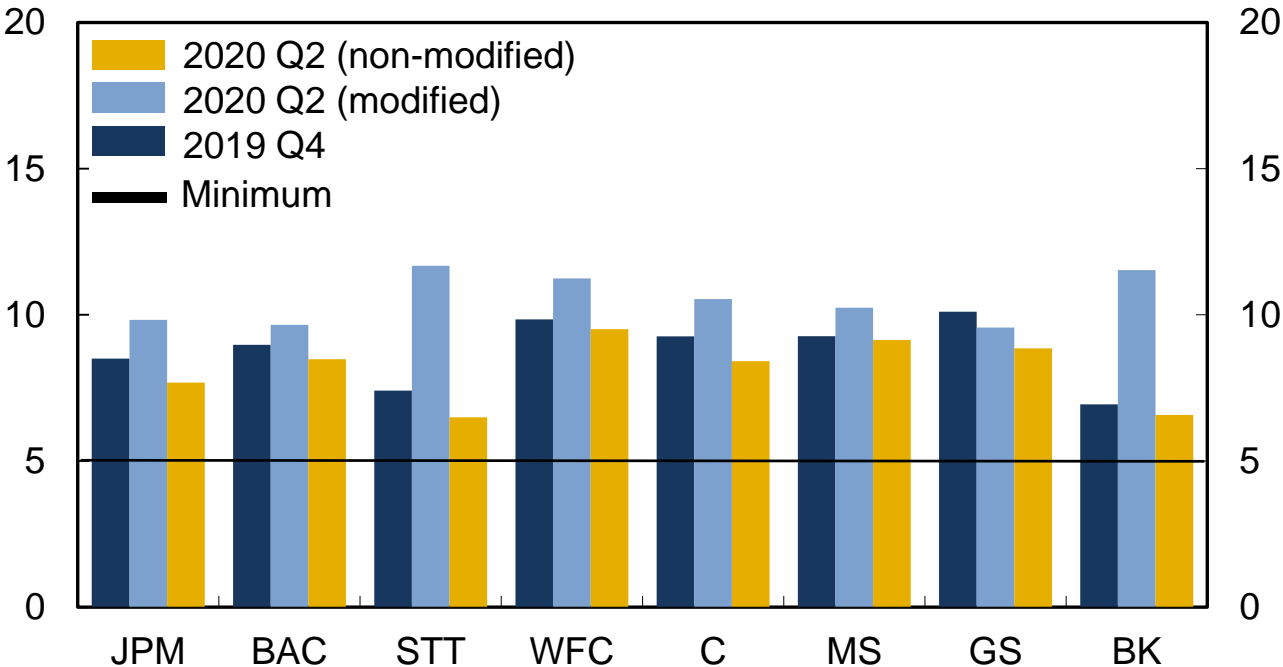
Source: FR Y-9C

### 3.5.1.6 Supplementary Leverage Ratios at U.S. G-SIBs

Percent

As Of: 2020 Q2

Percent



Note: Enhanced supplementary leverage ratio is only required for the G-SIBs. The ratio for 2019 Q4 is equal to tier 1 capital divided by total assets plus off-balance sheet exposures. The modified ratio for 2020 Q2 is equal to tier 1 capital divided by total assets minus Treasury securities and reserves.

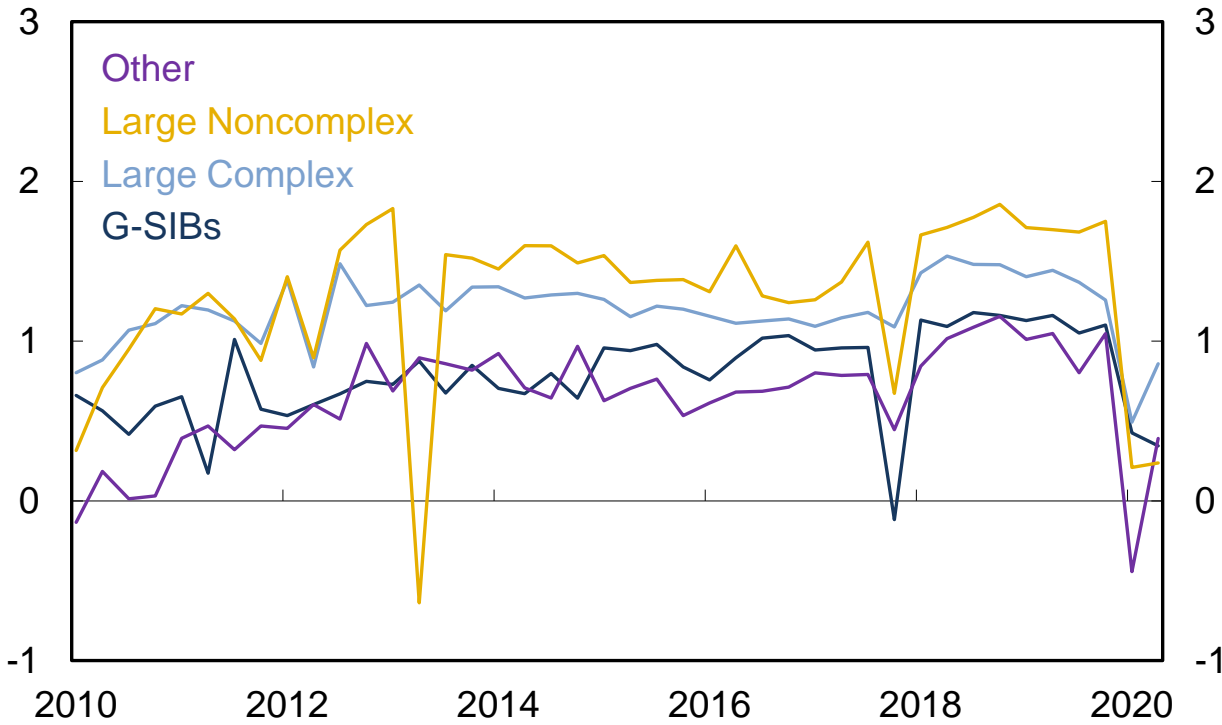
Source: FR Y-9C,  
Call Report

# 3.5.1.7 Return on Assets

Percent

As Of: 2020 Q2

Percent

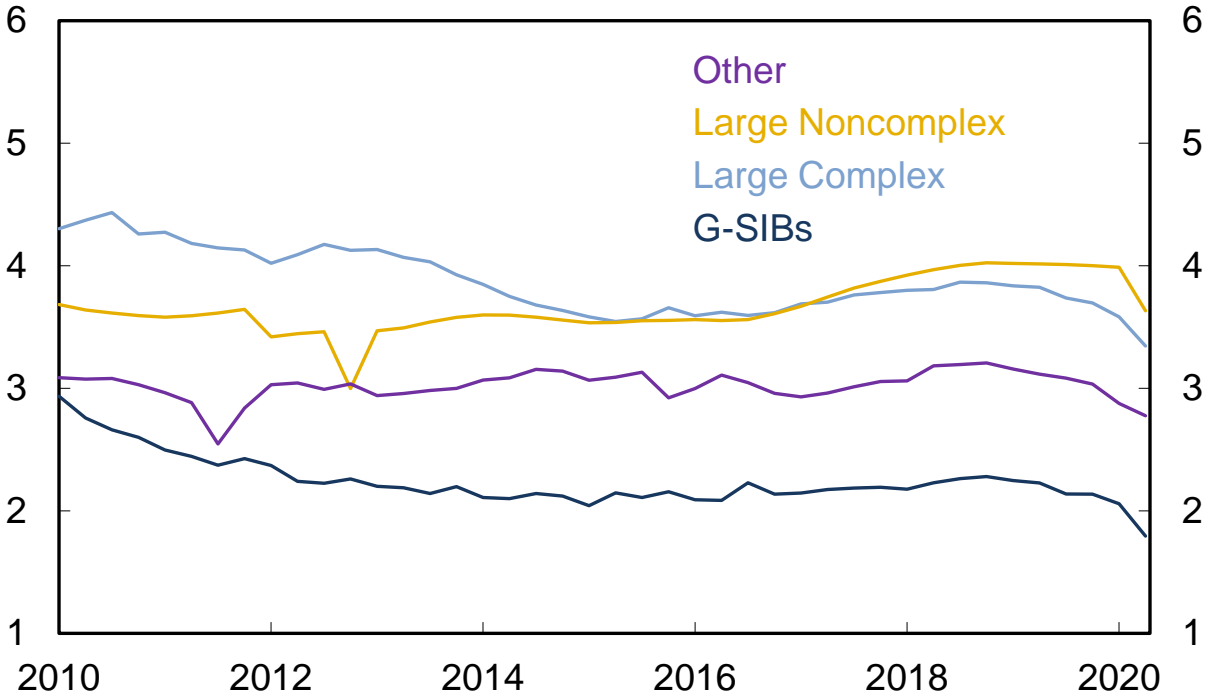


Source: FR Y-9C

Note: Quarterly, seasonally-adjusted annual rate. Return on assets is equal to net income divided by average assets.

# 3.5.1.8 Net Interest Margins

Percent As Of: 2020 Q2 Percent



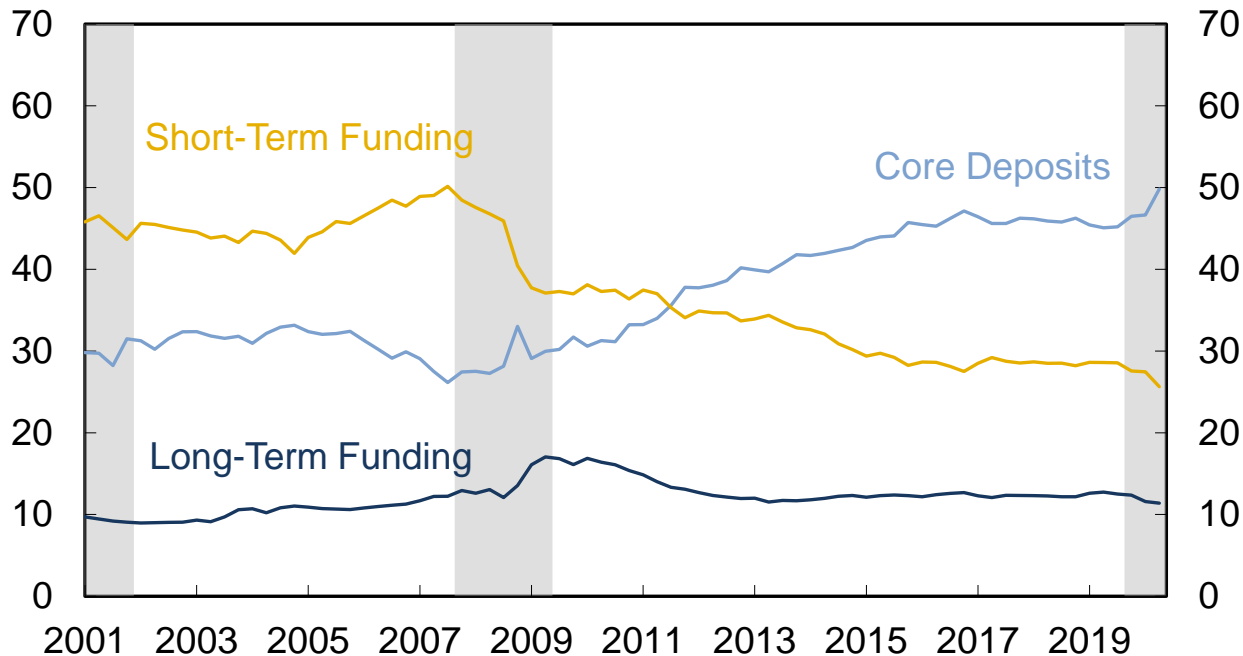
Note: Quarterly, seasonally-adjusted annual rate. Net interest margin is equal to net interest income divided by the quarterly average of interest-earning assets.

### 3.5.1.9 Sources of Funding at G-SIBs and Large-Complex

Percent of Total Liabilities

As Of: 2020 Q2

Percent of Total Liabilities



Source:  
FR Y-9C

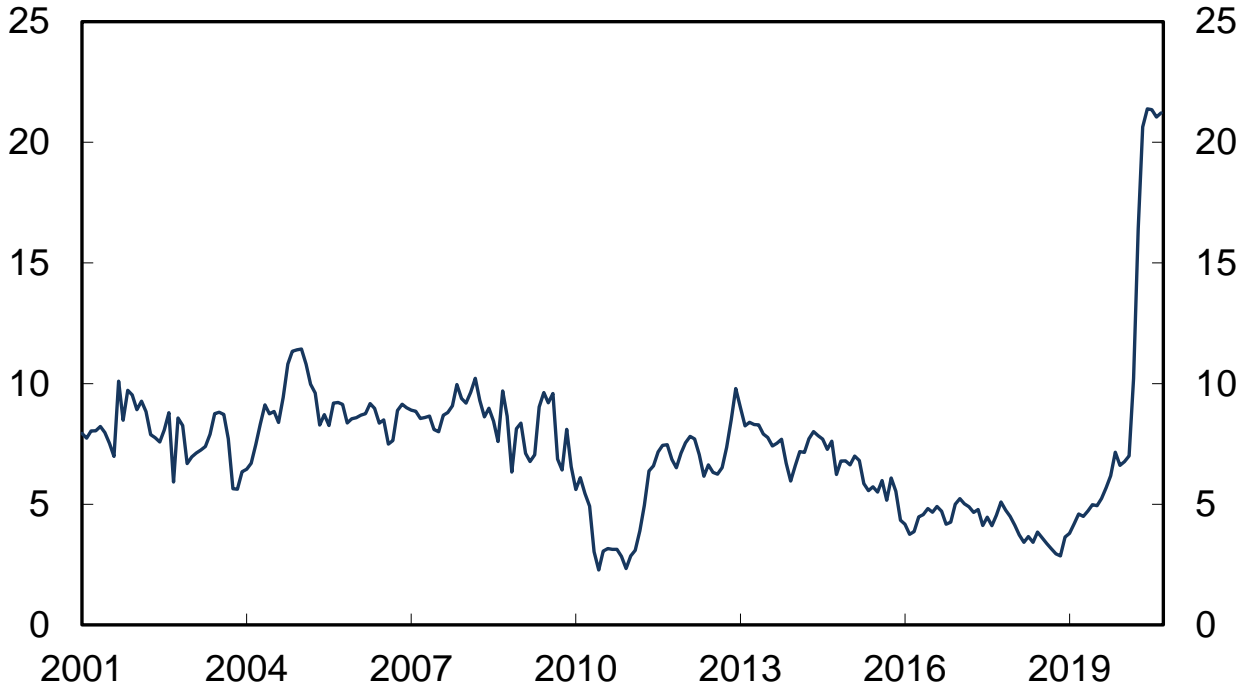
Note: ST funding: liabilities with maturities  $\leq 1$  yr, trading liabilities, repos, CP, and foreign deposits. LT funding: other borrowed money, subordinated notes and large time deposits with maturities  $> 1$  yr. Core deposits: demand deposits, noninterest-bearing balances, transaction accounts, money market deposits and time deposits  $< \$250,000$ . Gray bars signify NBER recessions.

# 3.5.1.10 Deposit Growth, All Commercial Banks

Percent

As Of: Sep-2020

Percent

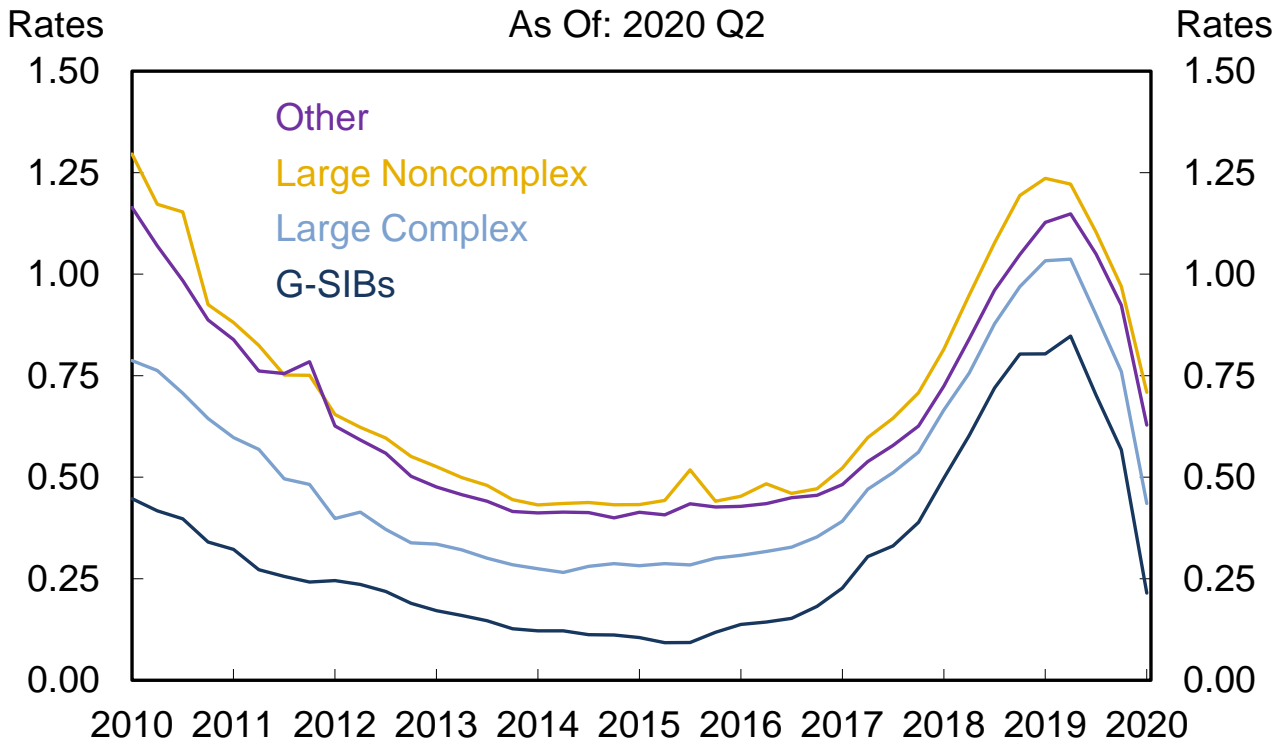


Source: Federal Reserve,  
Haver Analytics

Note: Statistical Release H.8, "Assets and Liabilities of Commercial Banks in the United States." Seasonally adjusted values. Year-over-year percentage change.

### 3.5.1.11 Effective Deposit Rates by BHC Category

As Of: 2020 Q2



Note: Effective deposit rates are defined as the ratio of the annualized quarterly-average interest expense on deposits and the one-quarter lag of the quarterly-average deposit balances.

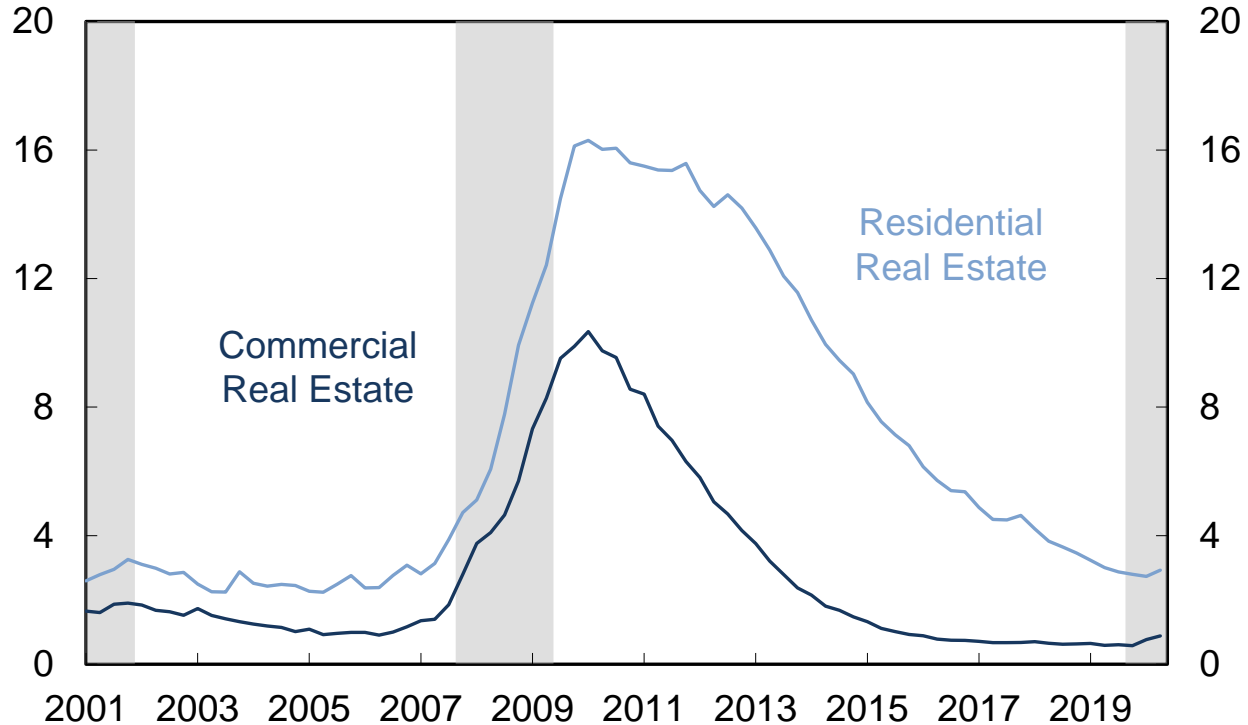
Source: Call Report

# 3.5.1.12 Delinquency Rates on Real Estate Loans

Percent

As Of: 2020 Q2

Percent



Source: FR Y-9C

Note: Includes all loans in domestic and foreign offices. Gray bars signify NBER recessions.

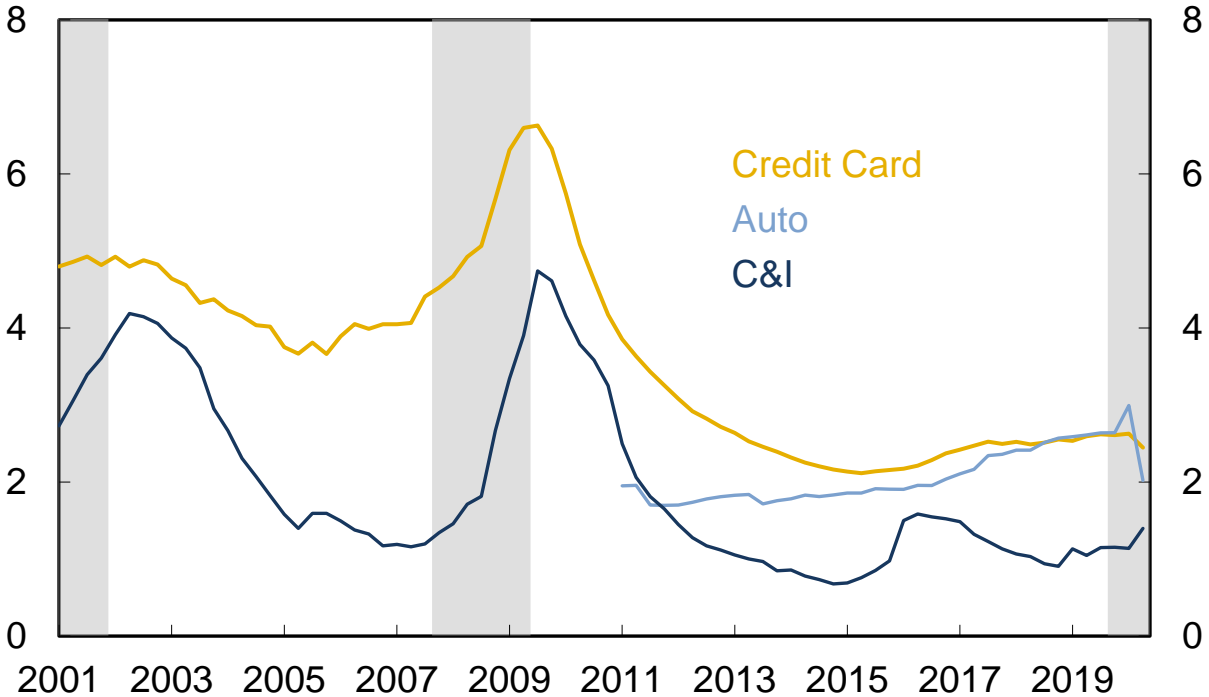


# 3.5.1.13 Delinquency Rates on Selected Loans

Percent

As Of: 2020 Q2

Percent



Source: FRY-9C,  
Call Report

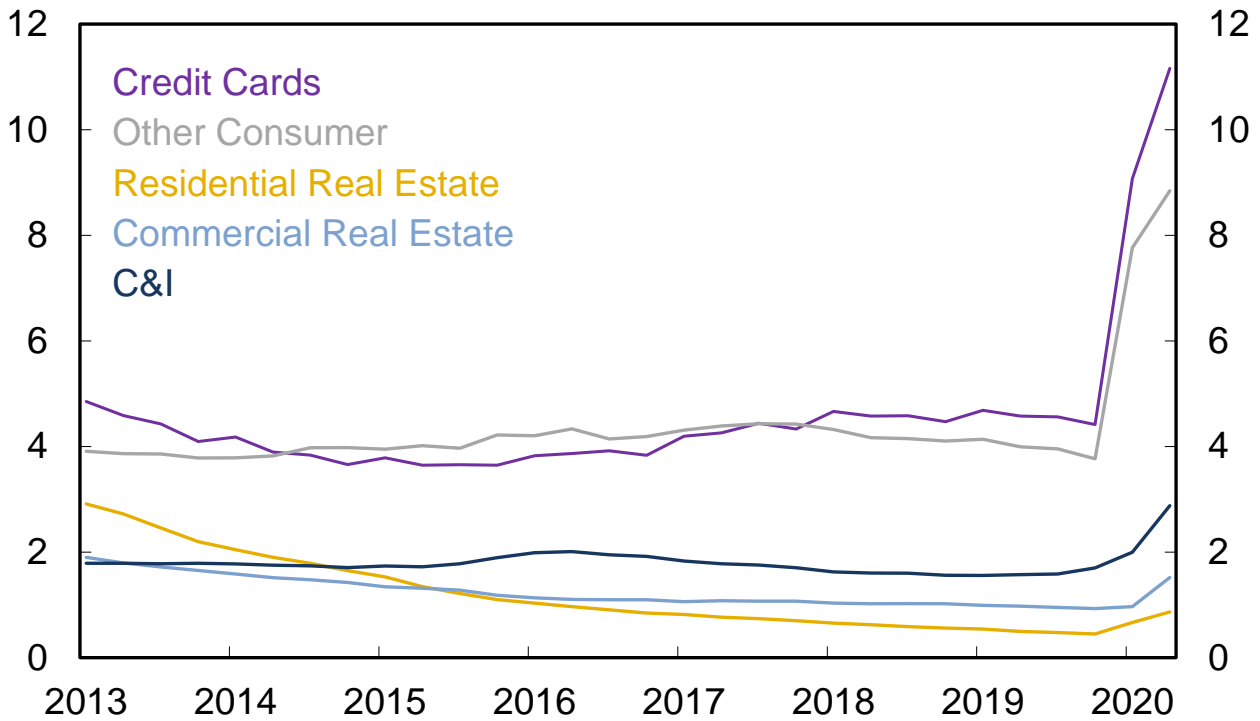
Note: Seasonally adjusted. Includes all loans in domestic and foreign offices. Auto loans became available in 2011 Q1. Gray bars signify NBER recessions.

# 3.5.1.14 Provisions to Loans Ratios at BHCs

Percent

As Of: 2020 Q2

Percent



Source: FR Y-9C

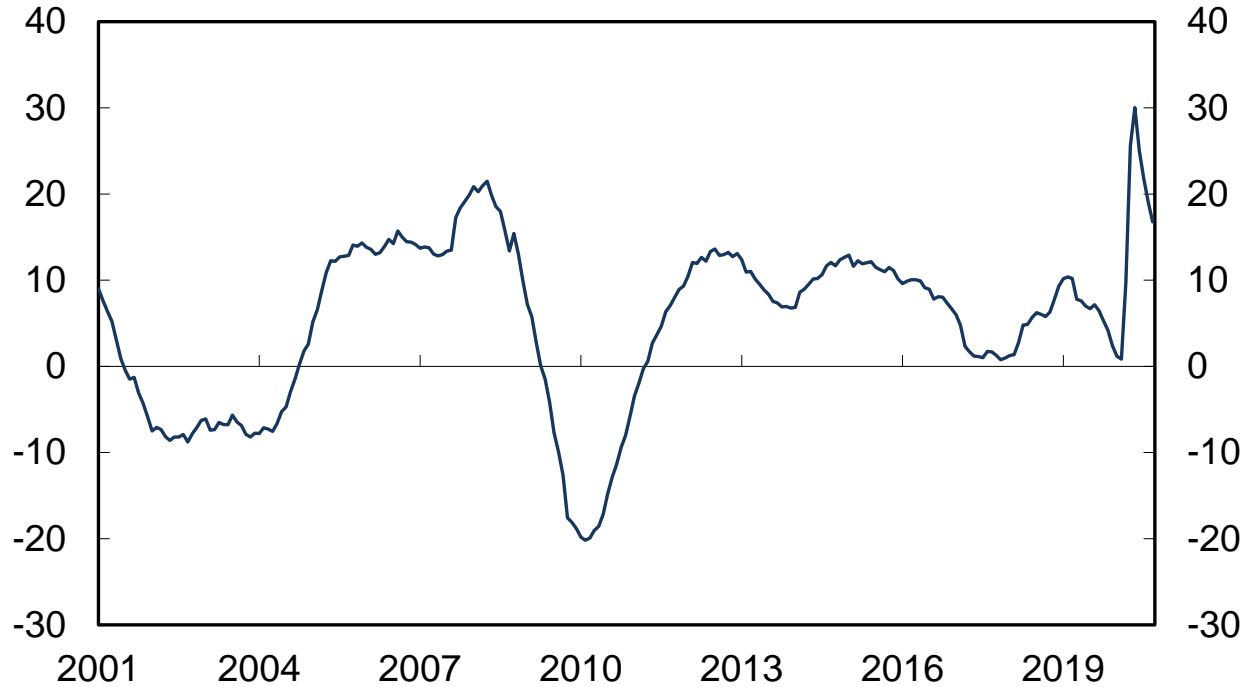
Note: Excludes Barclays, Credit Suisse, DB, and UBS.

# 3.5.1.15 C&I Loan Growth, All Commercial Banks

Percent

As Of: Sep-2020

Percent



Source: Federal Reserve, Haver Analytics

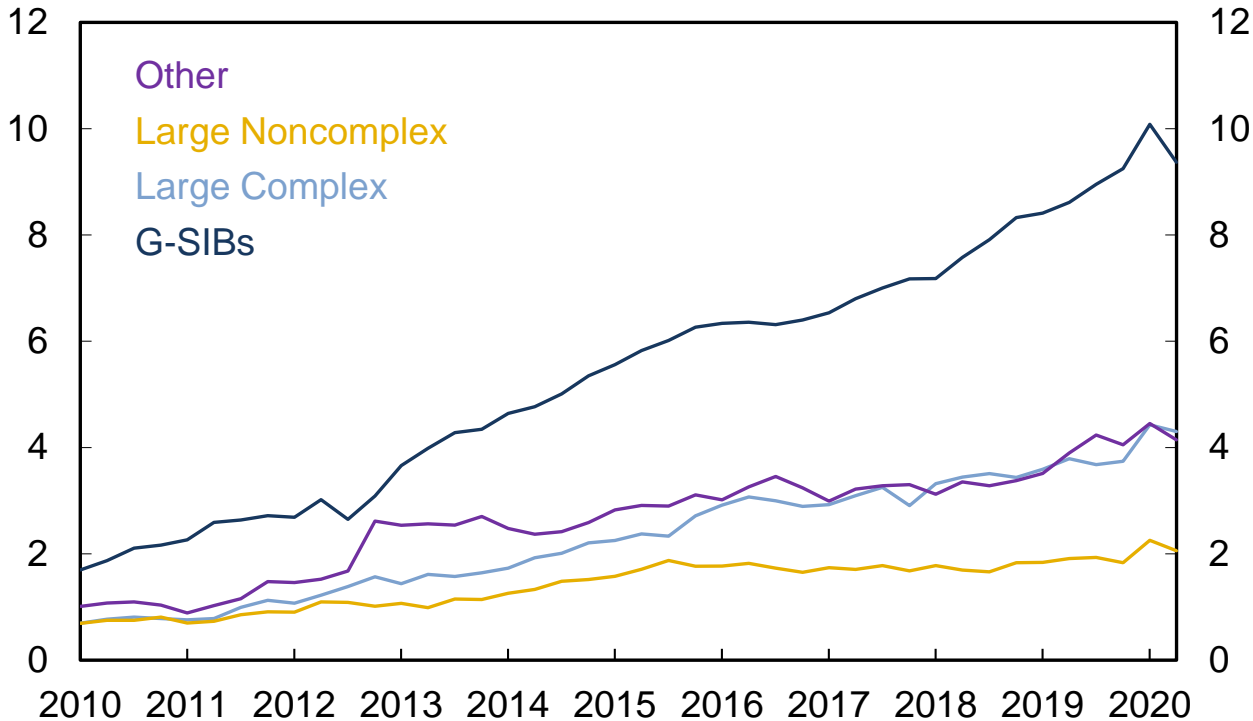
Note: Statistical Release H.8, "Assets and Liabilities of Commercial Banks in the United States." Year-over-year percentage change.

# 3.5.1.16 Loans to Nondepository Financial Institutions

Percent of Total Loans

As Of: 2020 Q2

Percent of Total Loans



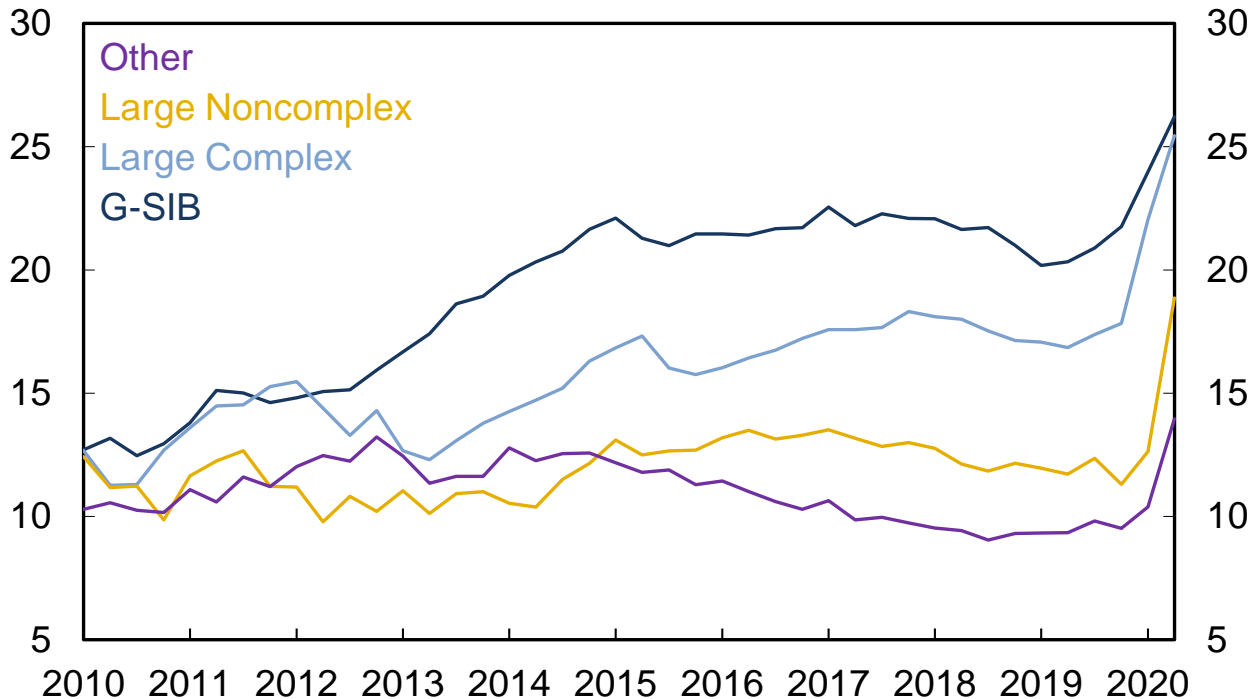
Source: FR Y-9C

### 3.5.1.17 High-Quality Liquid Assets by BHC Type

Percent of Assets

As Of: 2020 Q2

Percent of Assets



Note: HQLA is estimated by adding excess reserves to an estimate of securities that qualify for HQLA. Haircuts and level 2 asset limitations are incorporated into the estimate.

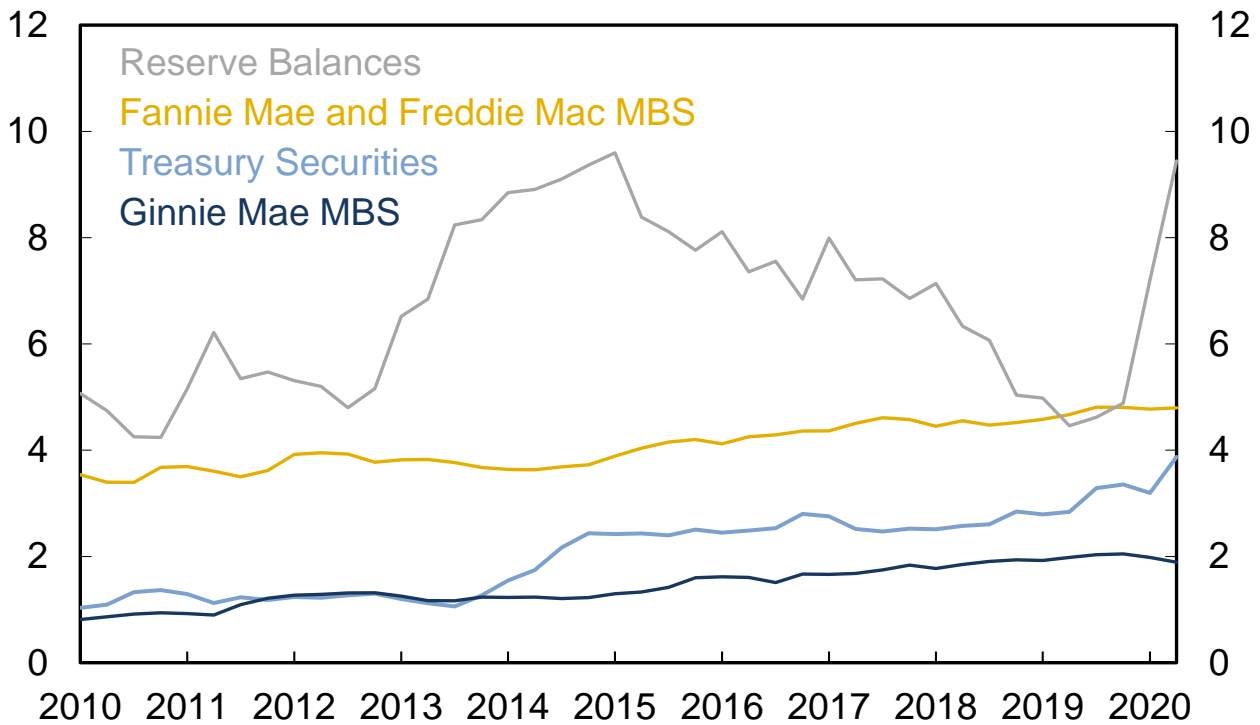
Source: FR Y-9C

# 3.5.1.18 Selected Liquid Assets at All BHCs

Percent of Assets

As Of: 2020 Q2

Percent of Assets



Source: FR Y-9C, FR 2900

Note: Quarterly, NSA.

### 3.5.1.19 Liquidity Coverage Ratios at U.S. G-SIBs

Percent

As Of: 2020 Q2

Percent

200

200

150

150

100

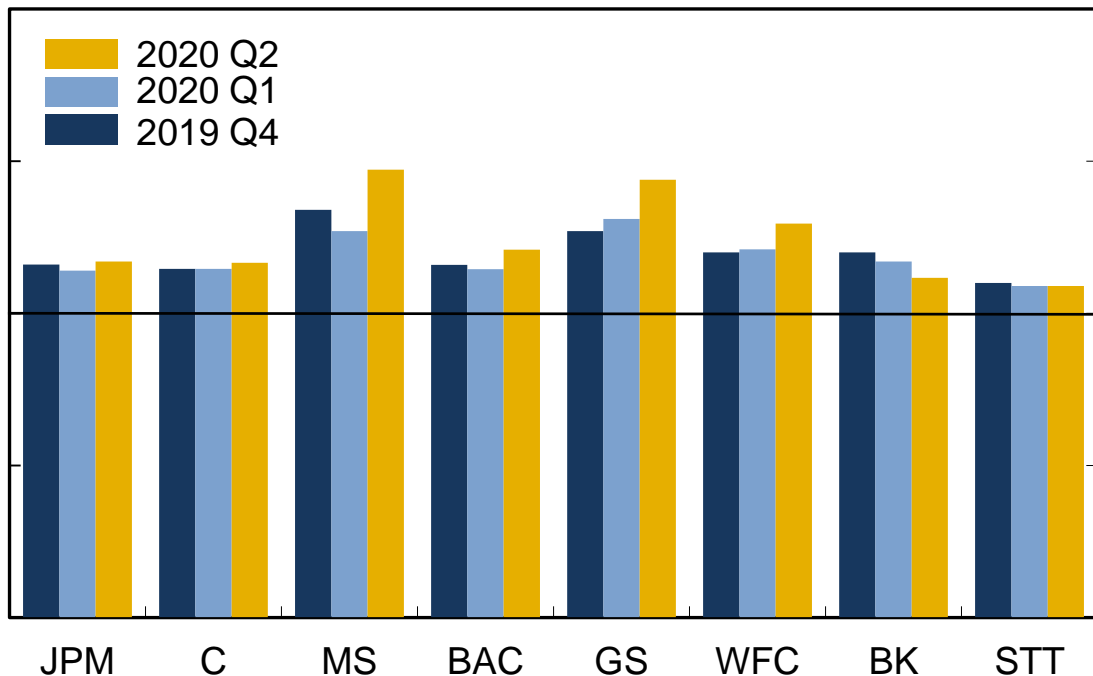
100

50

50

0

0



Source: LCR Disclosures from each banks' websites

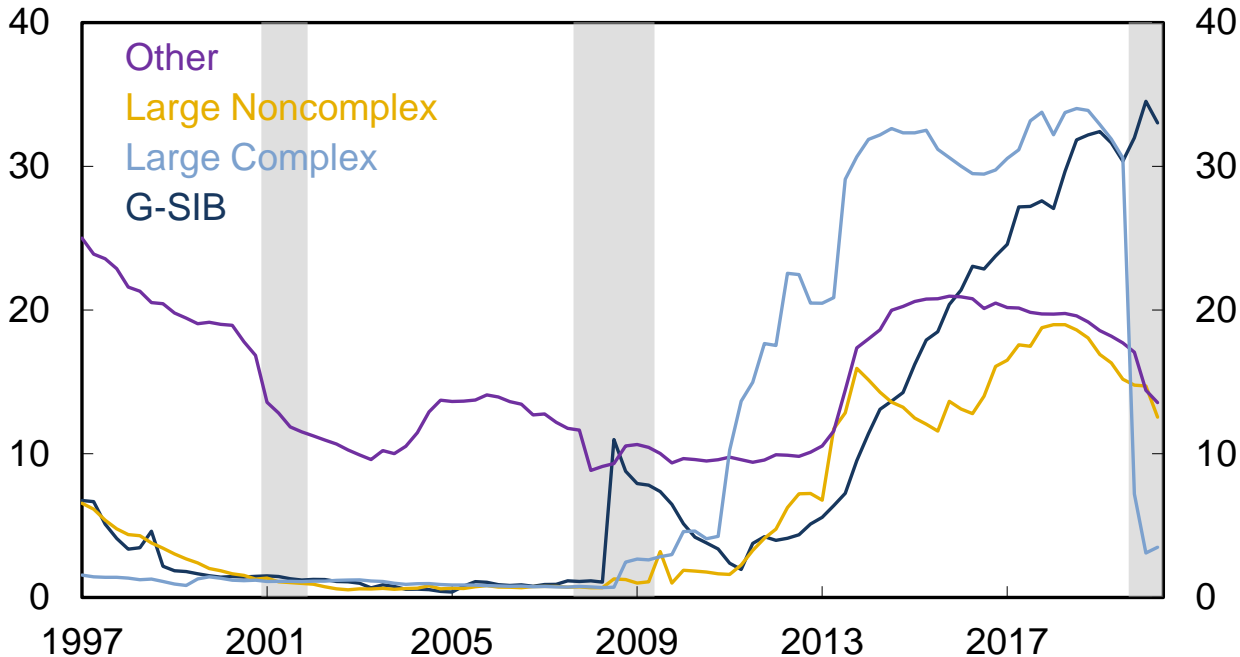
Note: The solid line represents the regulatory minimum.

# 3.5.1.20 Held-to-Maturity Securities

Percent of Investment Securities

As Of: 2020 Q2

Percent of Investment Securities

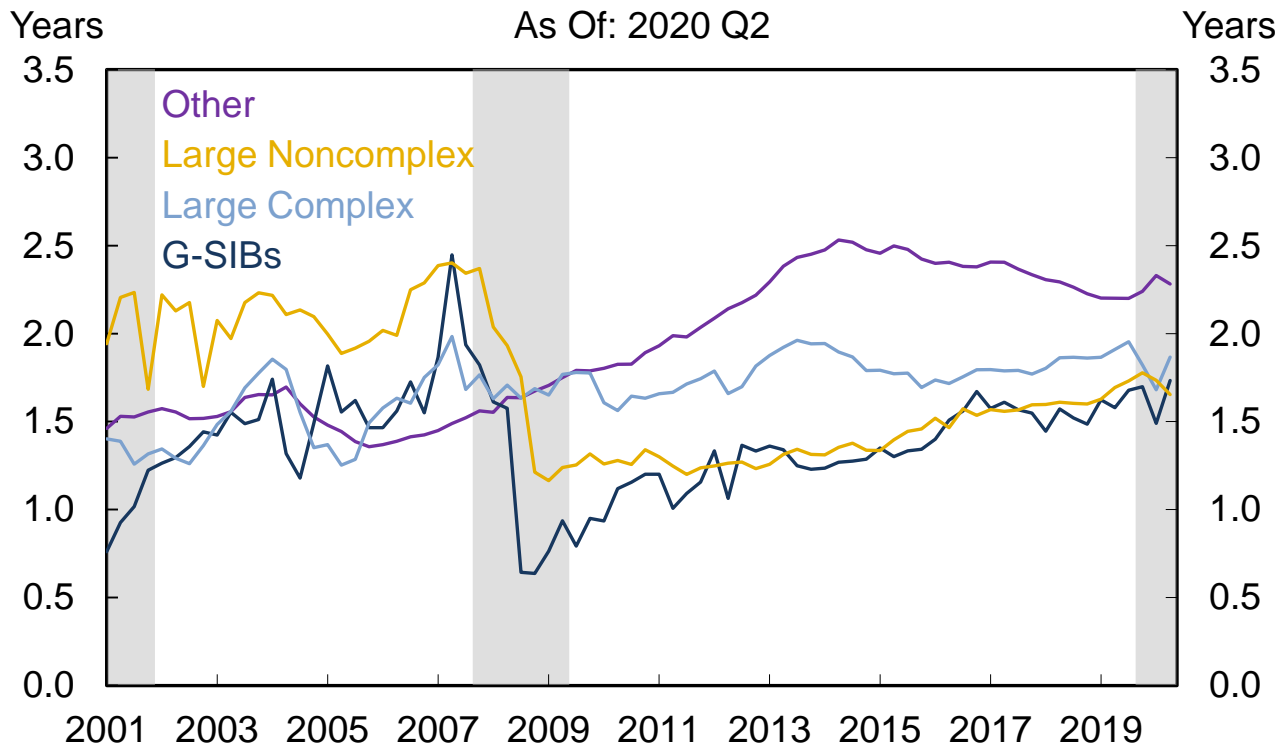


Source: Call Report,  
Haver Analytics

Note: Investment securities are held-to-maturity securities plus available-for-sale securities. Gray bars signify NBER recessions.



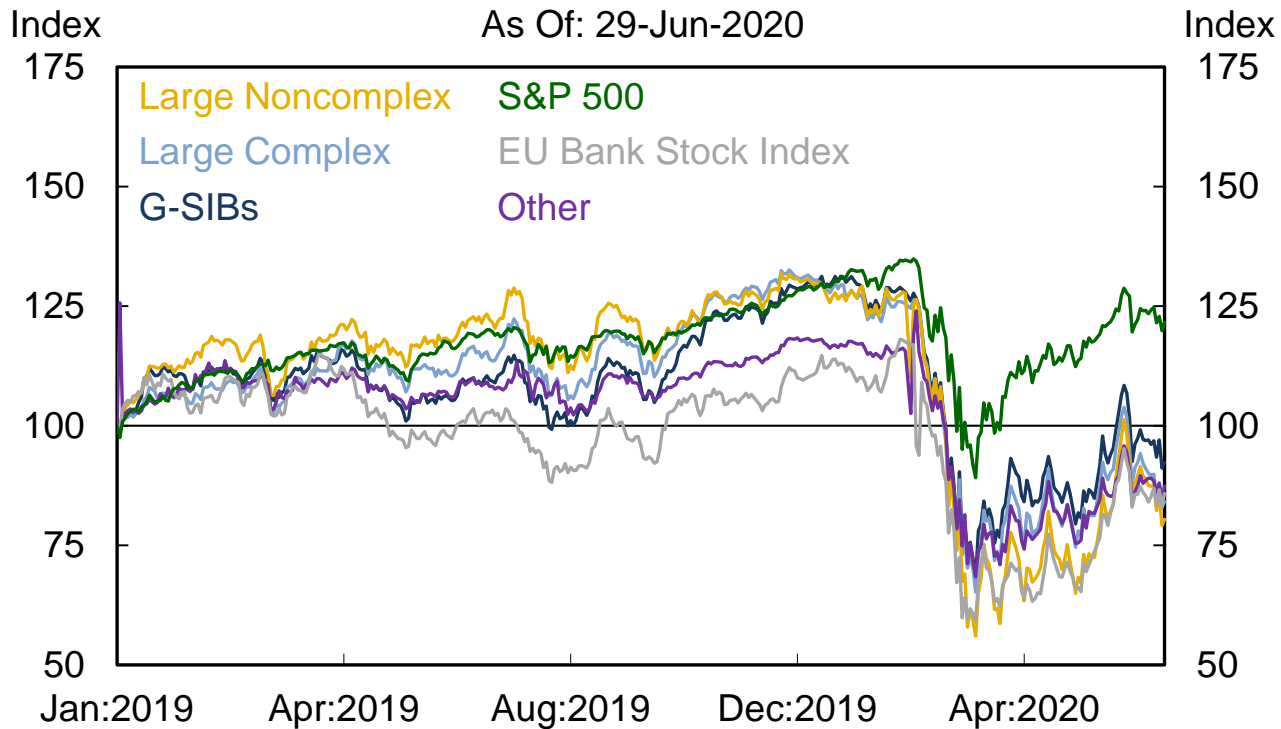
### 3.5.1.21 Duration Gap



Source: Call Report,  
Haver Analytics

Note: Duration gap is the approximate weighted-average time of cash inflows less the approximate weighted-average time of cash outflows. Gray bars signify NBER recessions.

### 3.5.1.22 Bank Stock Performance



Source: Yahoo Finance!,  
Bloomberg, L.P.

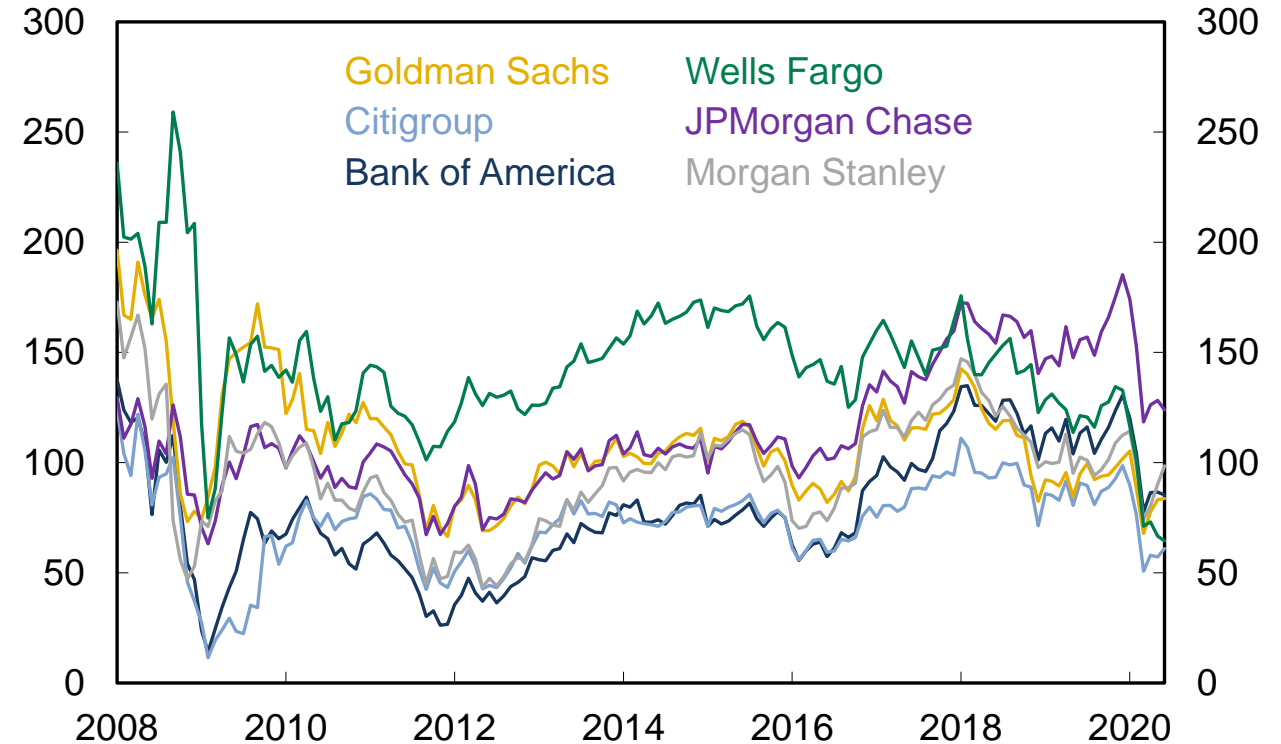
Note: January 2, 2019 = 100. EU Bank Stock Index created from stock prices for the following banks: BCS, BNPQY, CS, ACA, DB, SAN, UBS. All indexes are created by equally weighting banks.

### 3.5.1.23 Price-to-Book for Select U.S. G-SIBs

Percent

As Of: Jun-2020

Percent



Source: SNL

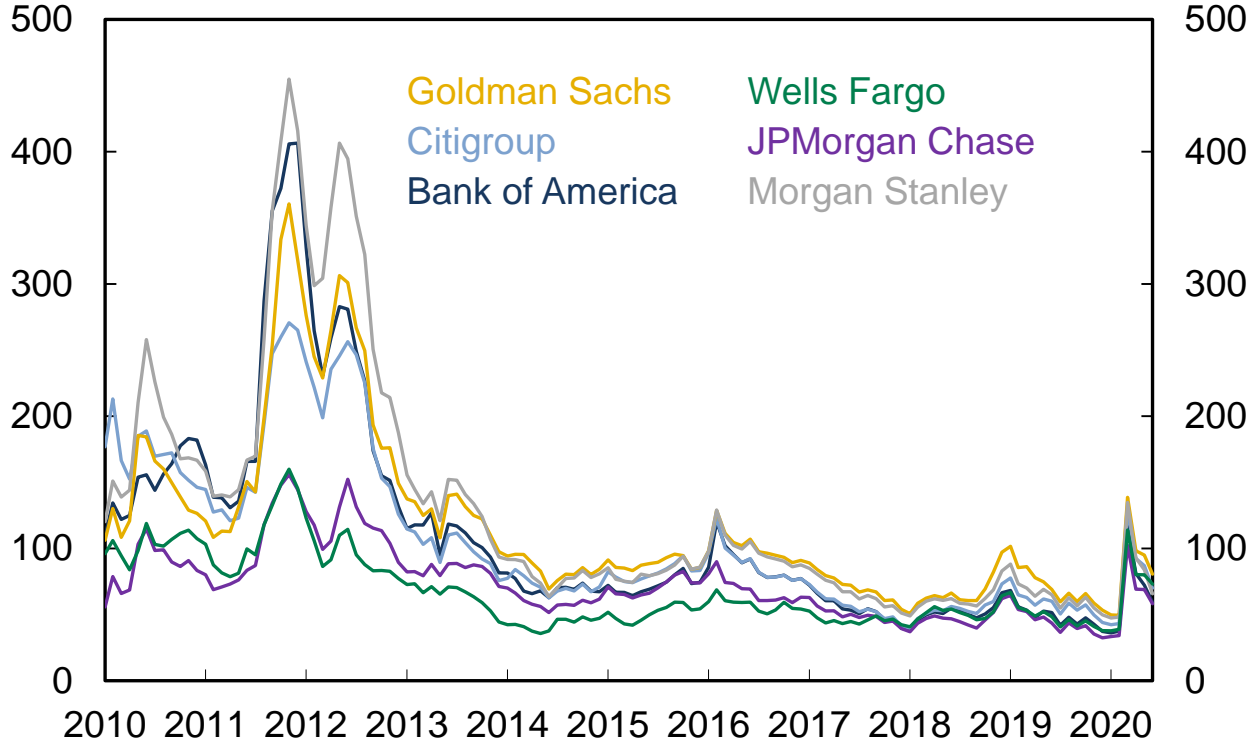
Note: Month-end values.

# 3.5.1.24 5-Year CDS Premiums Select U.S. G-SIBs

Basis Points

As Of: Jun-2020

Basis Points



Source: Markit

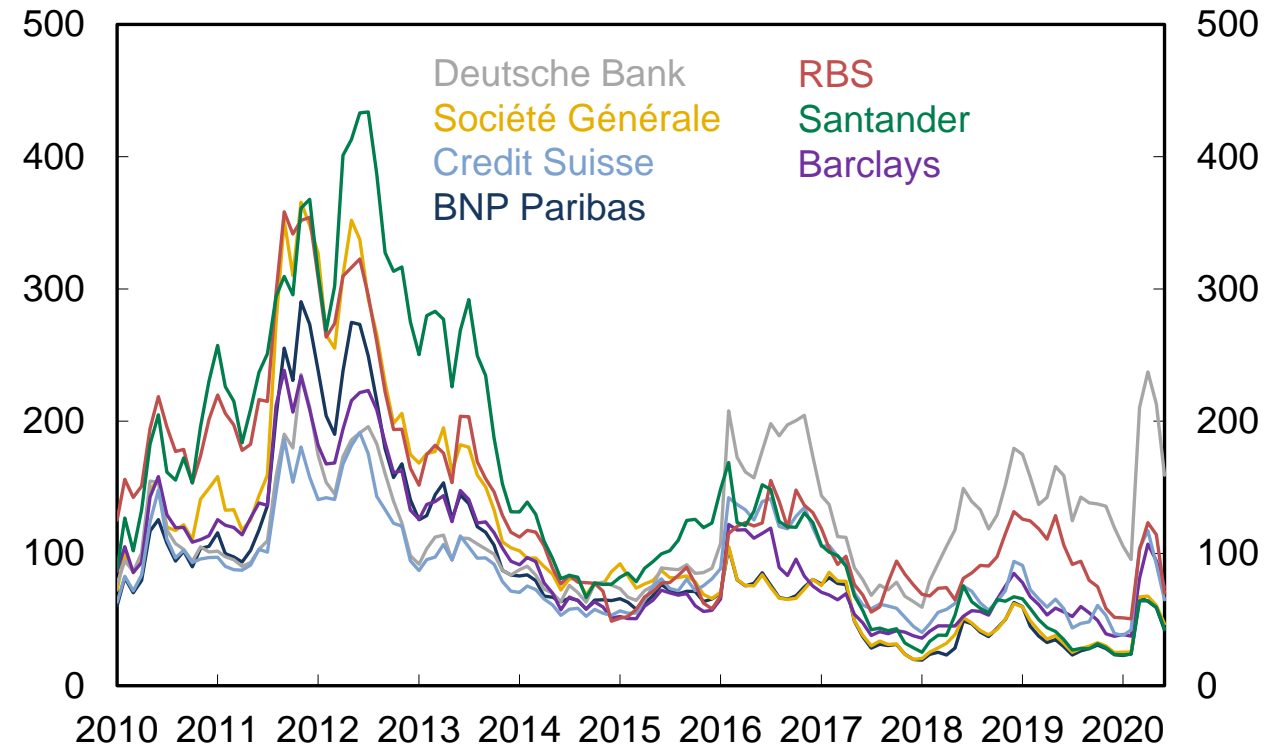
Note: Monthly averages.

# 3.5.1.25 5-Year CDS Premiums Select Foreign Banks

Basis Points

As Of: Jun-2020

Basis Points



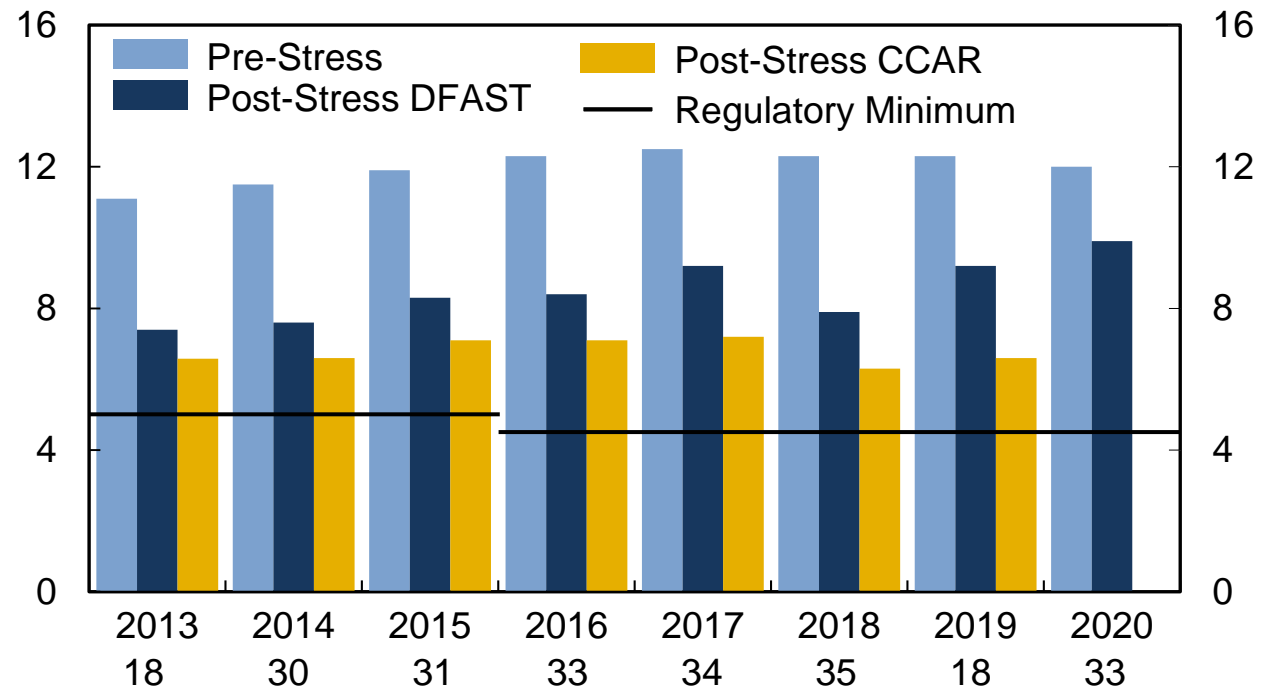
Source: Markit

Note: Monthly averages.

### 3.5.1.26 Initial and Stressed Capital Ratios

Percent of RWA

Percent of RWA



Source: Federal Reserve

Note: Regulatory minimum is 5% pre-2016 and 4.5% from 2016 onwards. For DFAST 2013-2015, bars show Tier 1 Common Capital Ratio. DFAST 2016-2020 bars show Common Equity Tier 1 Ratio. The x-axis labels represent the number of banks tested within a given year.

### 3.5.1.27 Minimum CET1 Capital Ratios in the Severely Adverse and Alternative Downside Scenarios

Scenario	Minimum CET1 Capital Ratio		
	25th Percentile	75th Percentile	Aggregate
<b>Stress Test</b>			
Severely Adverse	8	12.3	9.9
<b>Sensitivity Analysis</b>			
V-shaped	7.5	11.3	9.5
U-shaped	5.5	10.8	8.1
W-shaped	4.8	10.5	7.7

Source: Federal Reserve

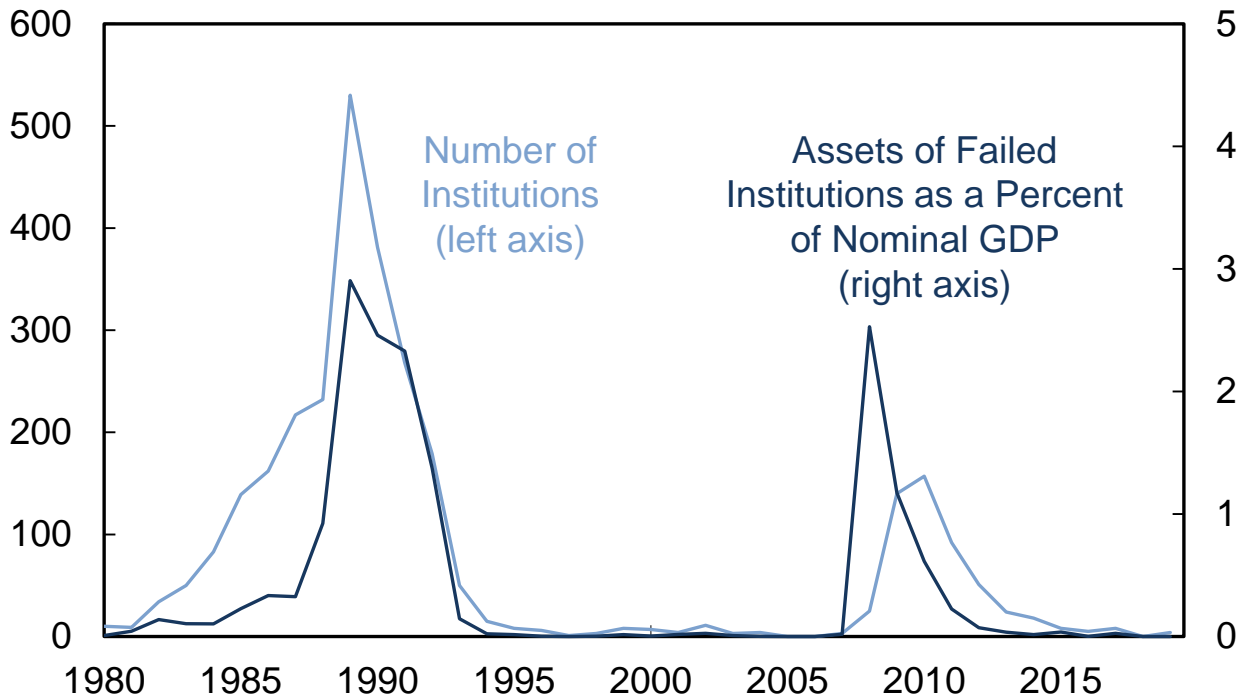
Note: Excludes common distributions. Sample consists of the 33 firms participating in DFAST 2020.

### 3.5.1.28 FDIC-Insured Failed Institutions

Number of Institutions

As Of: 2019

Percent



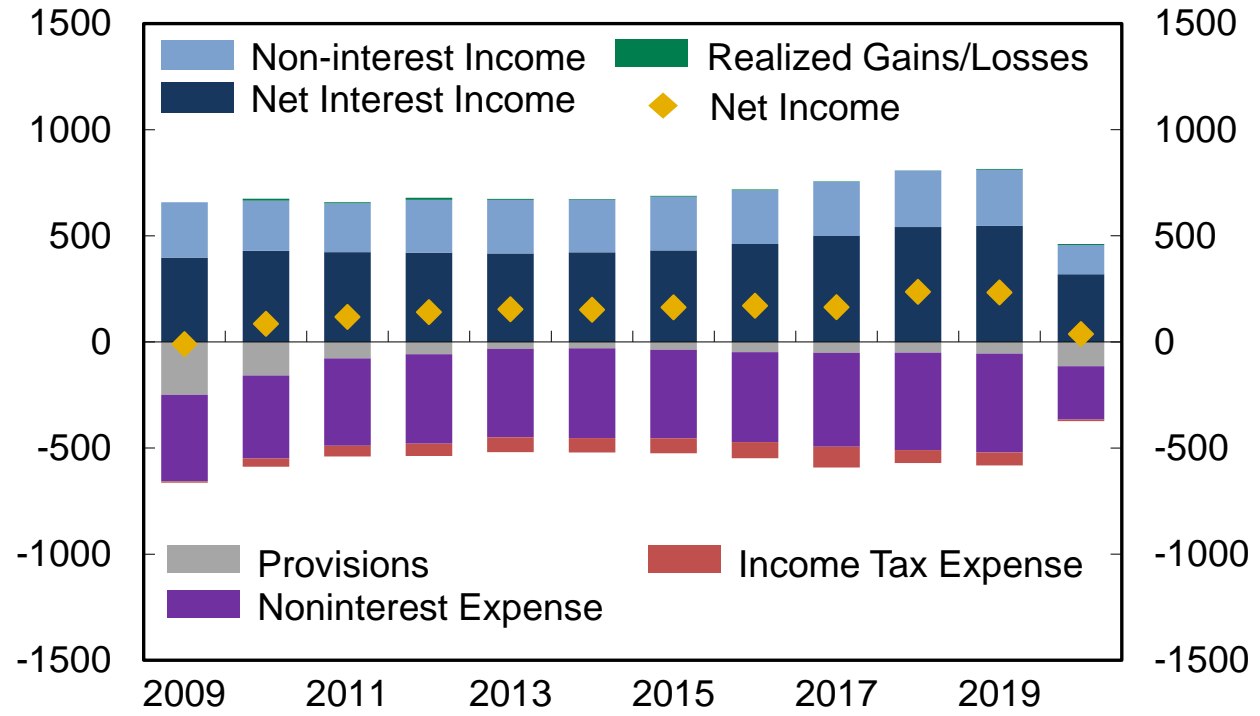
Source: BEA, FDIC, Haver Analytics

Note: No FDIC-insured institutions failed during 2005, 2006, and 2018.



# 3.5.1.29 Commercial Bank and Thrift Net Income

Billions of US\$ As Of: 2020 Q2 Billions of US\$



Note: Includes all FDIC-insured commercial banks and thrifts. Values are annualized.

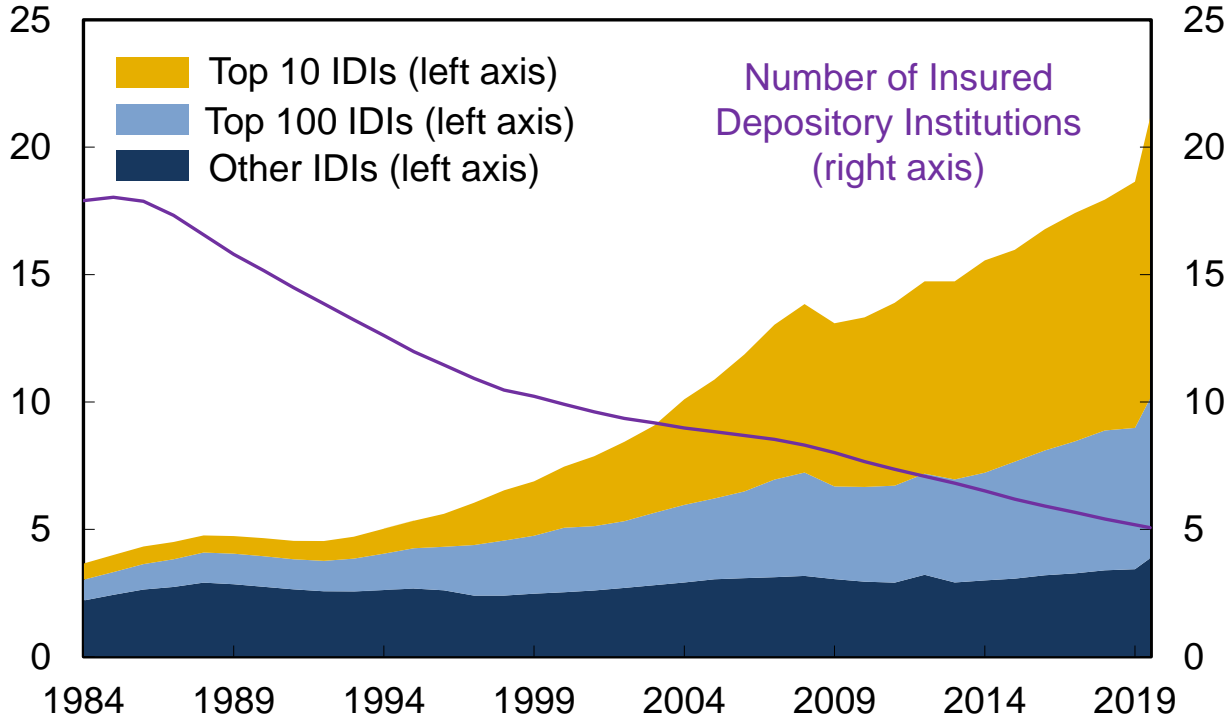
Source: FDIC

### 3.5.1.30 Total Assets of Largest Insured Depository Institutions

Trillions of US\$

As Of: 2020 Q2

Count ('000s)



Source: FFIEC Call Report

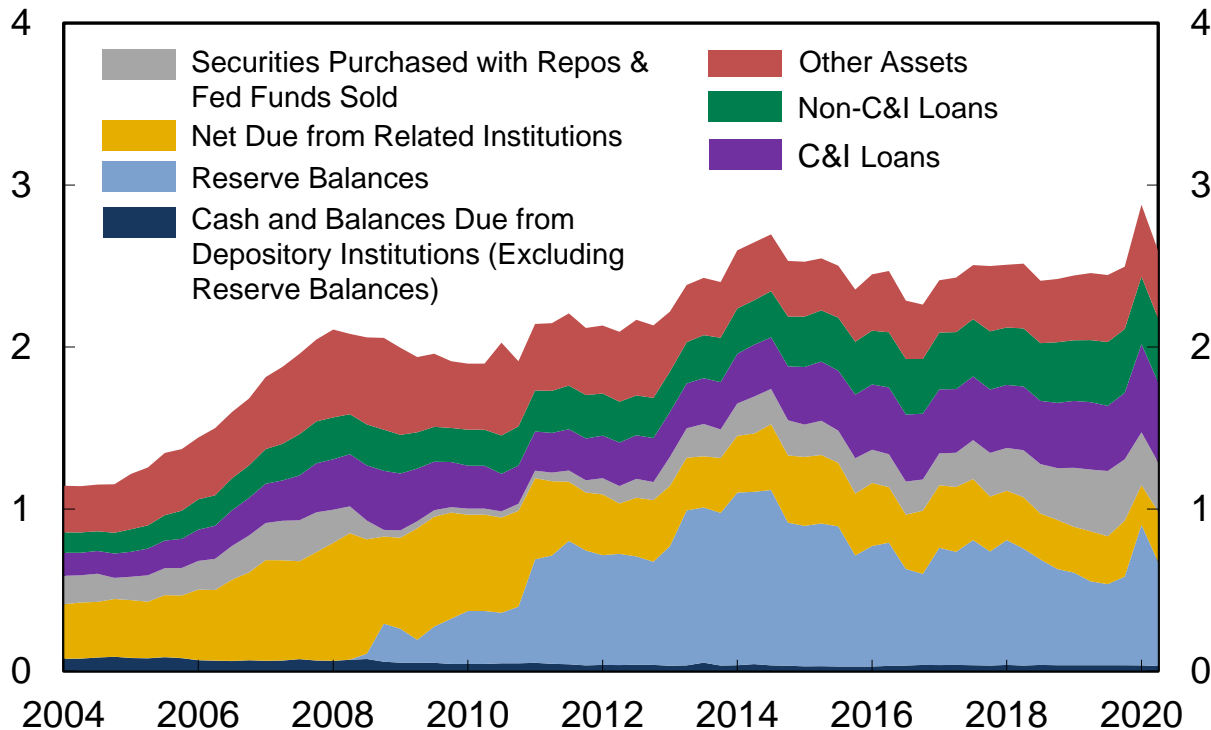
Note: Fourth quarter data was used for years 1984 - 2019 and second quarter data was used for 2020.

### 3.5.1.31 U.S. Branches and Agencies of Foreign Banks: Assets

Trillions of US\$

As Of: 2020 Q2

Trillions of US\$



Source: Federal Reserve, Haver Analytics

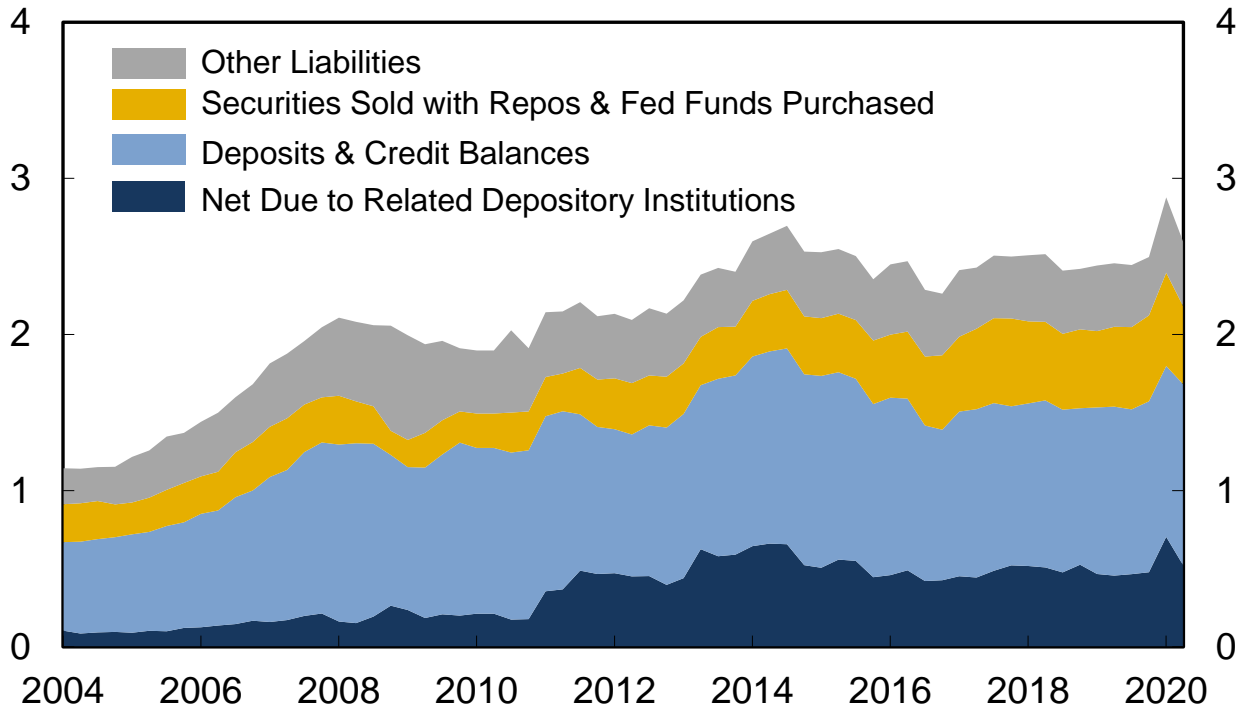
Note: Other assets includes government securities, ABS, and other trading assets.

### 3.5.1.32 U.S. Branches and Agencies of Foreign Banks: Liabilities

Trillions of US\$

As Of: 2020 Q2

Trillions of US\$



Source: Federal Reserve, Haver Analytics

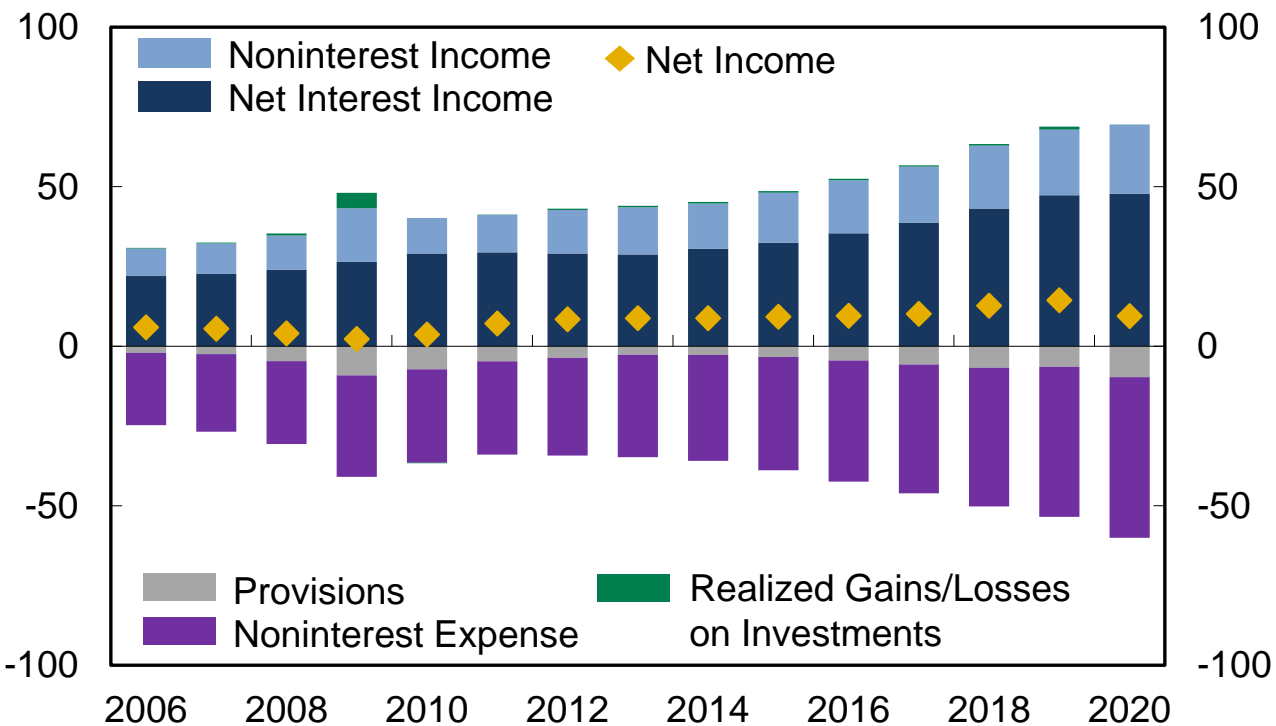
Note: Other liabilities includes transaction accounts, non-transaction accounts, and other borrowed money.

### 3.5.1.33 Credit Union Income

Billions of US\$

As Of: 2020 Q2

Billions of US\$



Source: NCUA

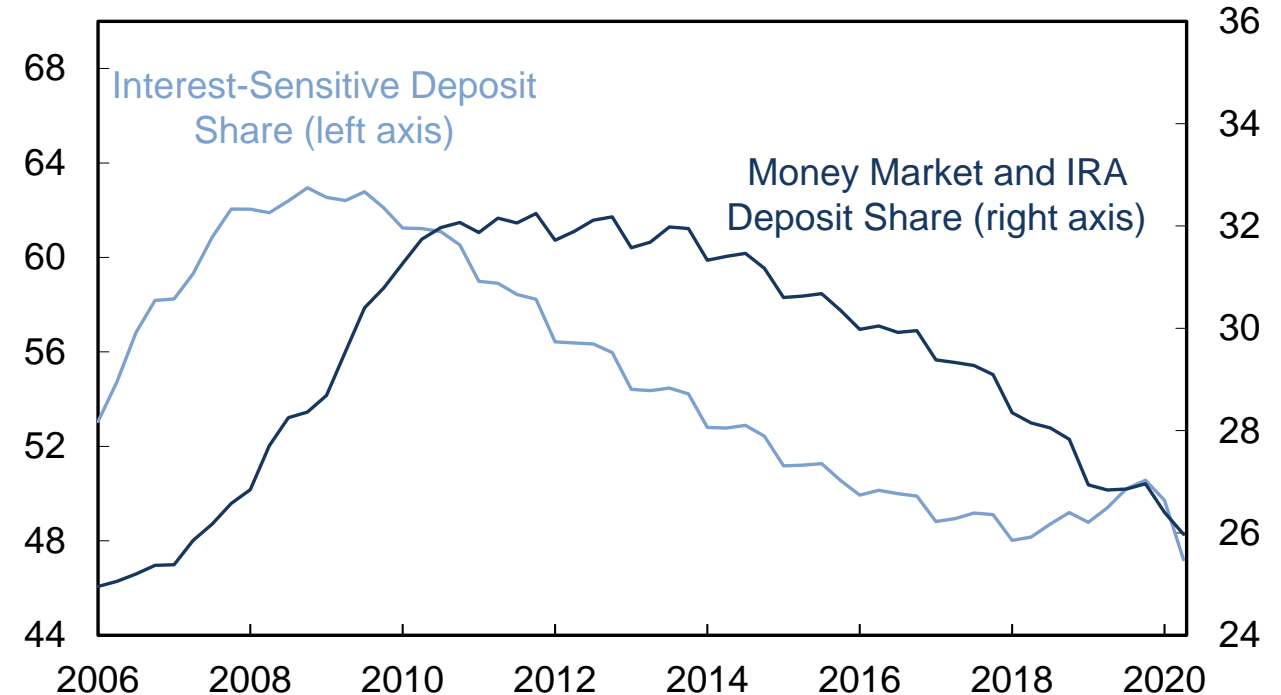
Note: Federally-insured credit unions.  
Values are annualized.

### 3.5.1.34 Credit Union Deposits

Percent

As Of: 2020 Q2

Percent



Note: Federally-insured credit unions. Interest-sensitive deposit share includes money market and IRA deposit share, share certificates, and certain other deposits.

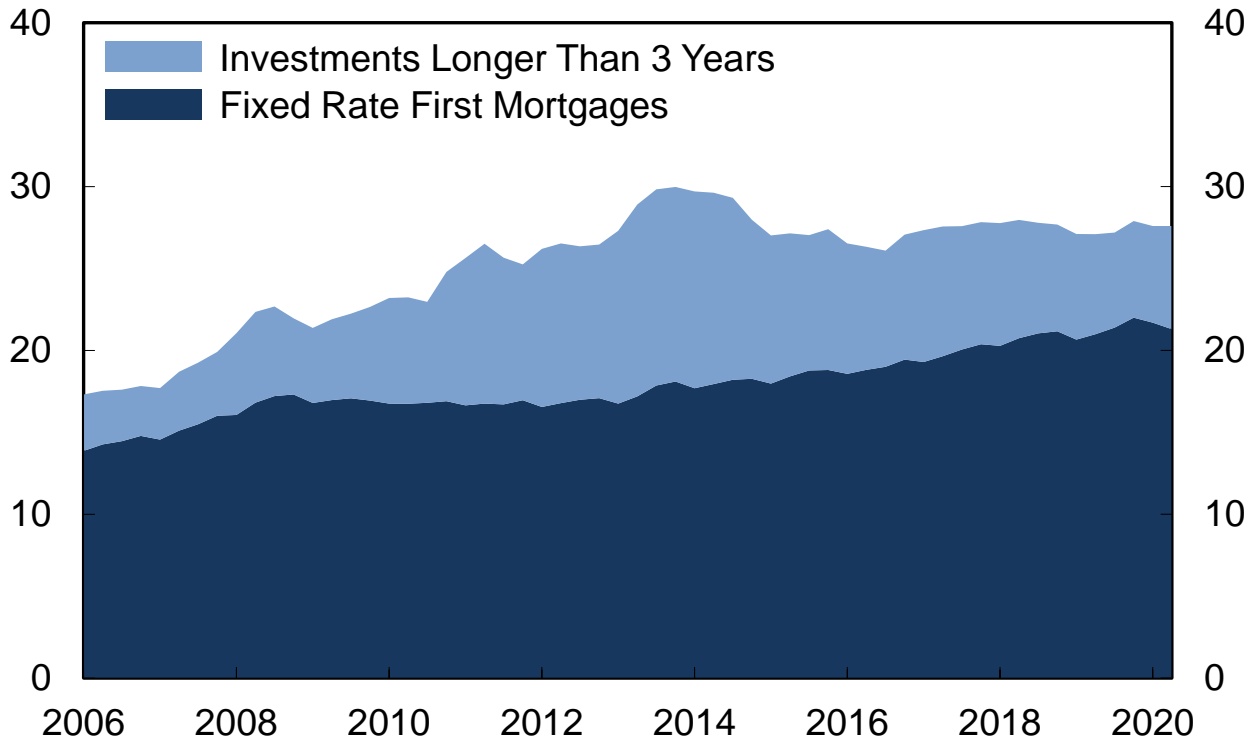
Source: NCUA

### 3.5.1.35 Credit Union Net Long-Term Assets

Percent of Total Assets

As Of: 2020 Q2

Percent of Total Assets



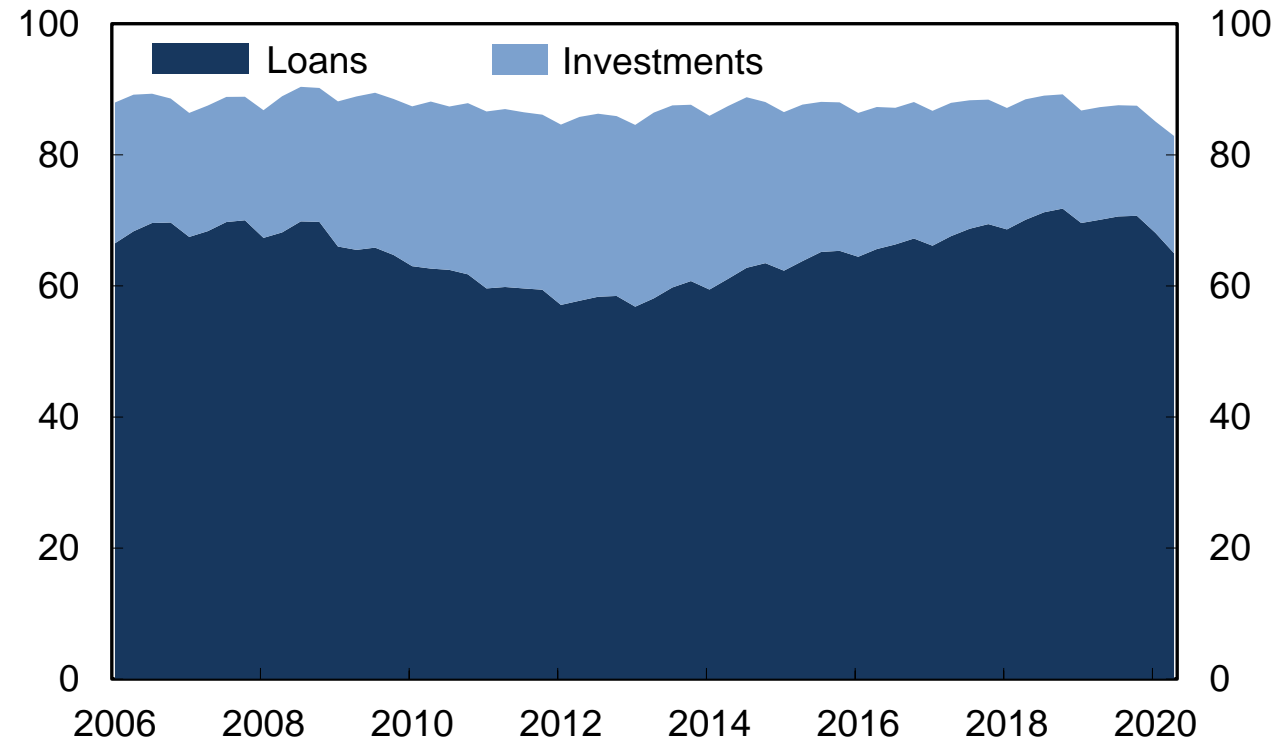
Source: NCUA

### 3.5.1.36 Credit Union Composition of Assets

Percent of Total Assets

As Of: 2020 Q2

Percent of Total Assets



Source: NCUA

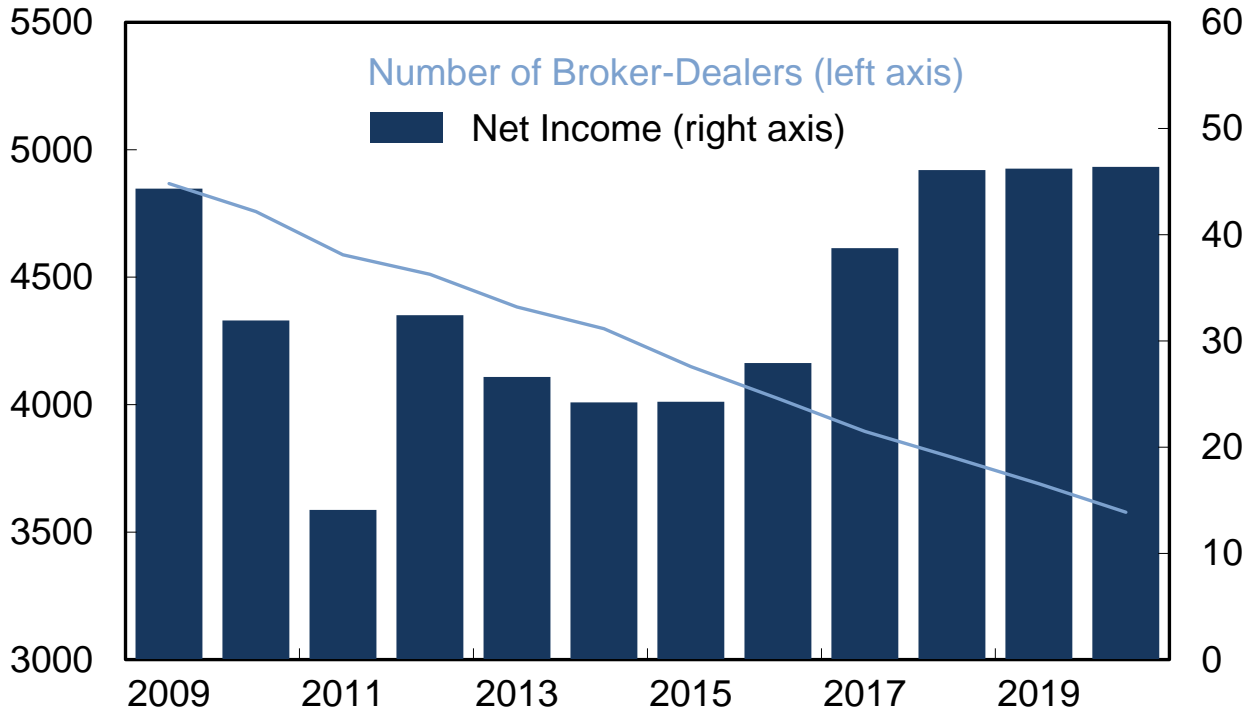


### 3.5.2.1 Number of Broker-Dealers and Industry Net Income

Number of Firms

As Of: 2020 Q2

Billions of US\$



Note: 2009 – 2019 data as of Q4 and 2020 net income is YTD through Q2.

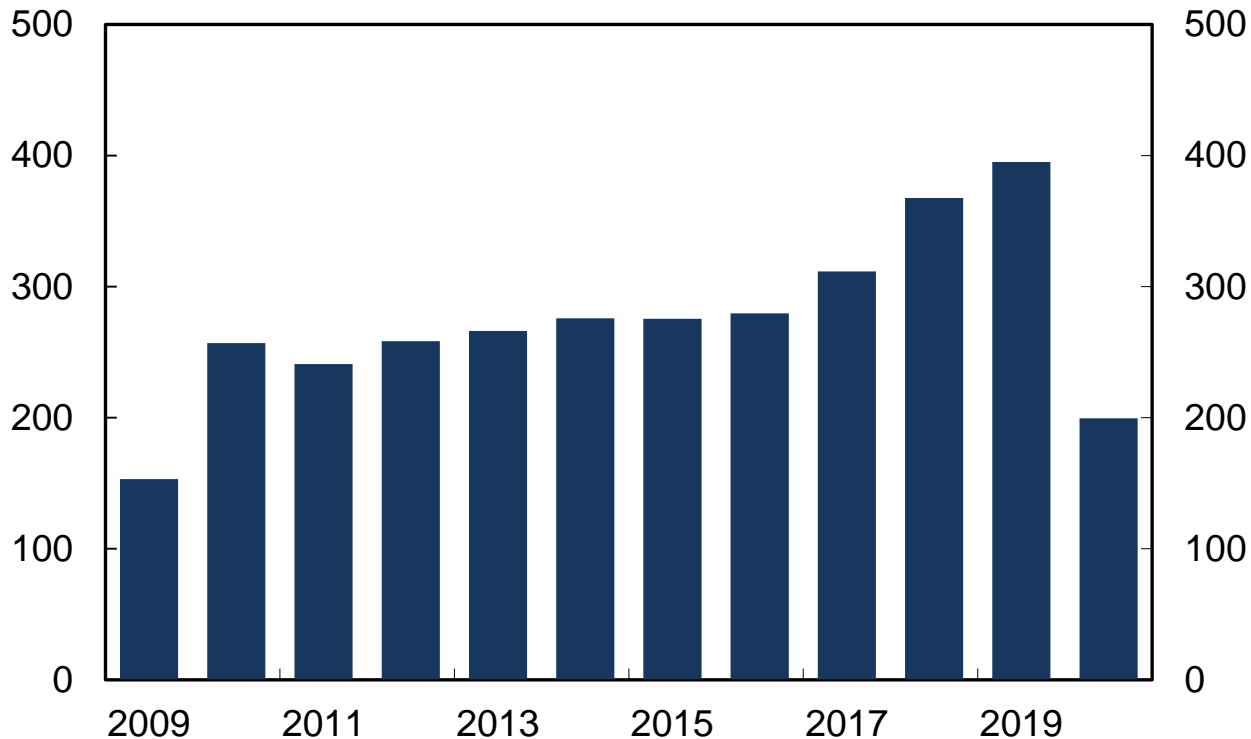
Source: FINRA

## 3.5.2.2 Broker-Dealer Revenues

Billions of US\$

As Of: 2020 Q2

Billions of US\$



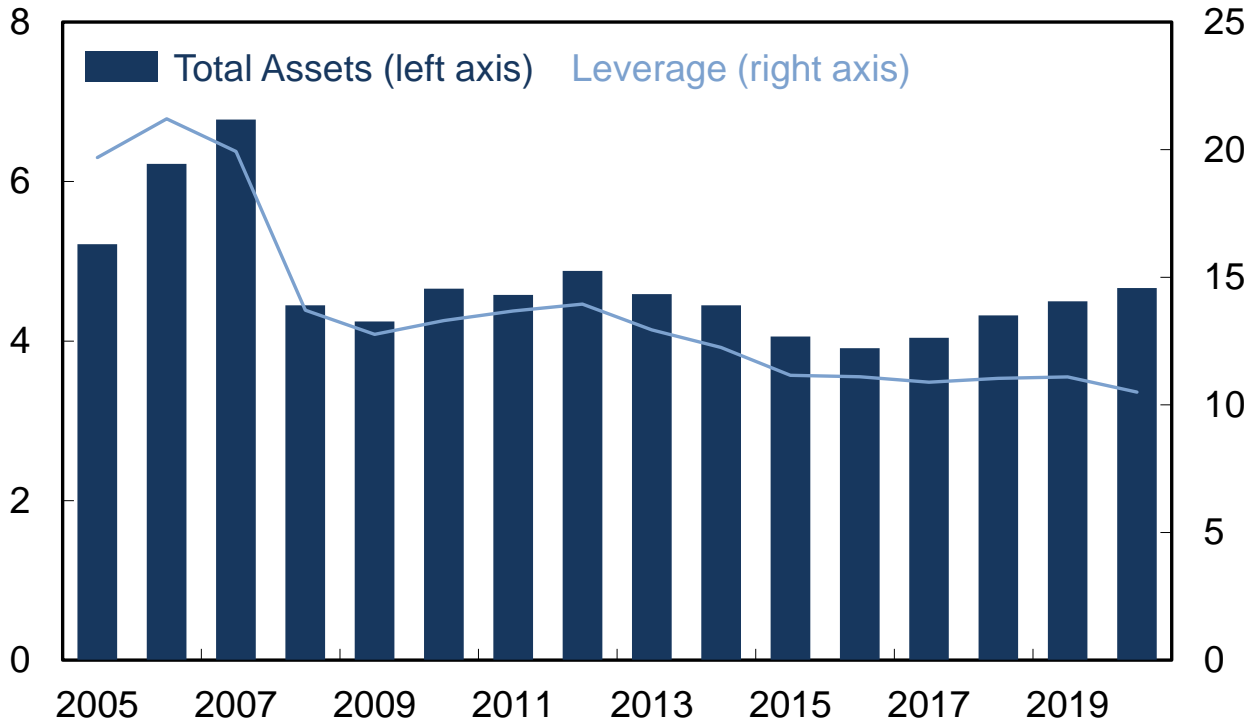
Source: FINRA

### 3.5.2.3 Broker-Dealer Assets and Leverage

Trillions of US\$

As Of: 2020 Q2

Ratio



Source: FINRA

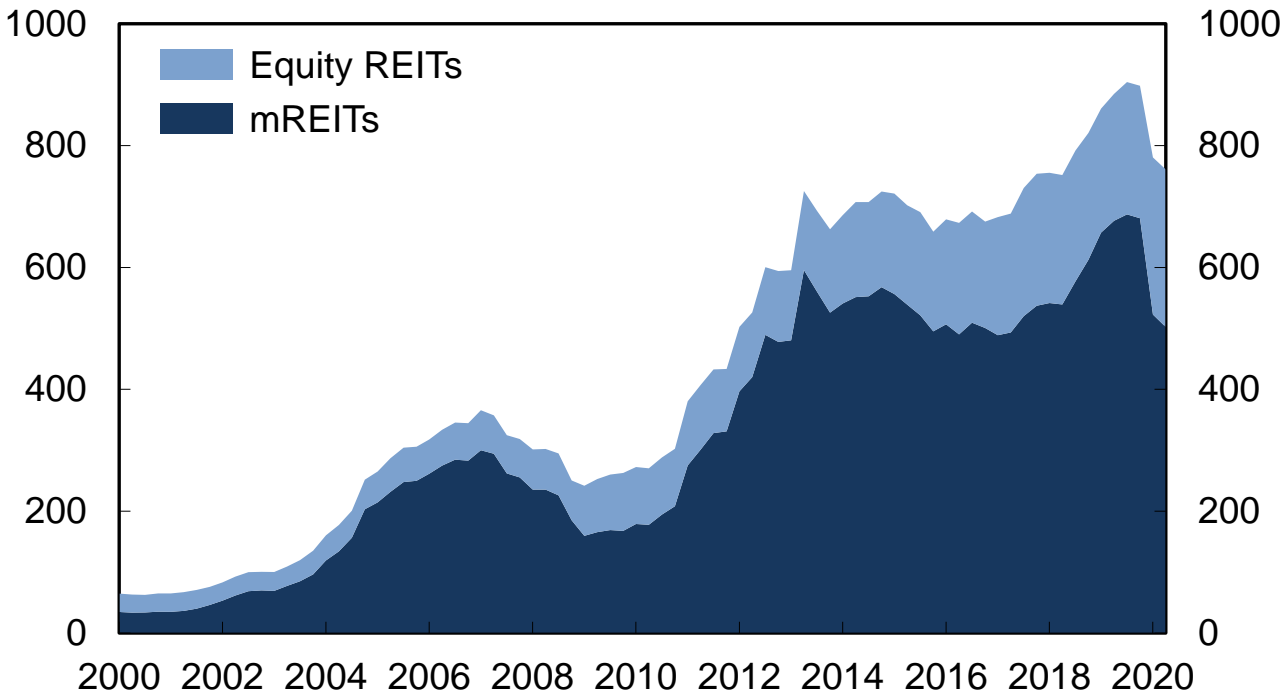
Note: Leverage is the ratio of total assets to total regulatory capital. 2005 – 2019 data as of Q4 and 2020 data as of Q2.

### 3.5.2.4 REITs Total Assets

Billions of US\$

As Of: 2020 Q2

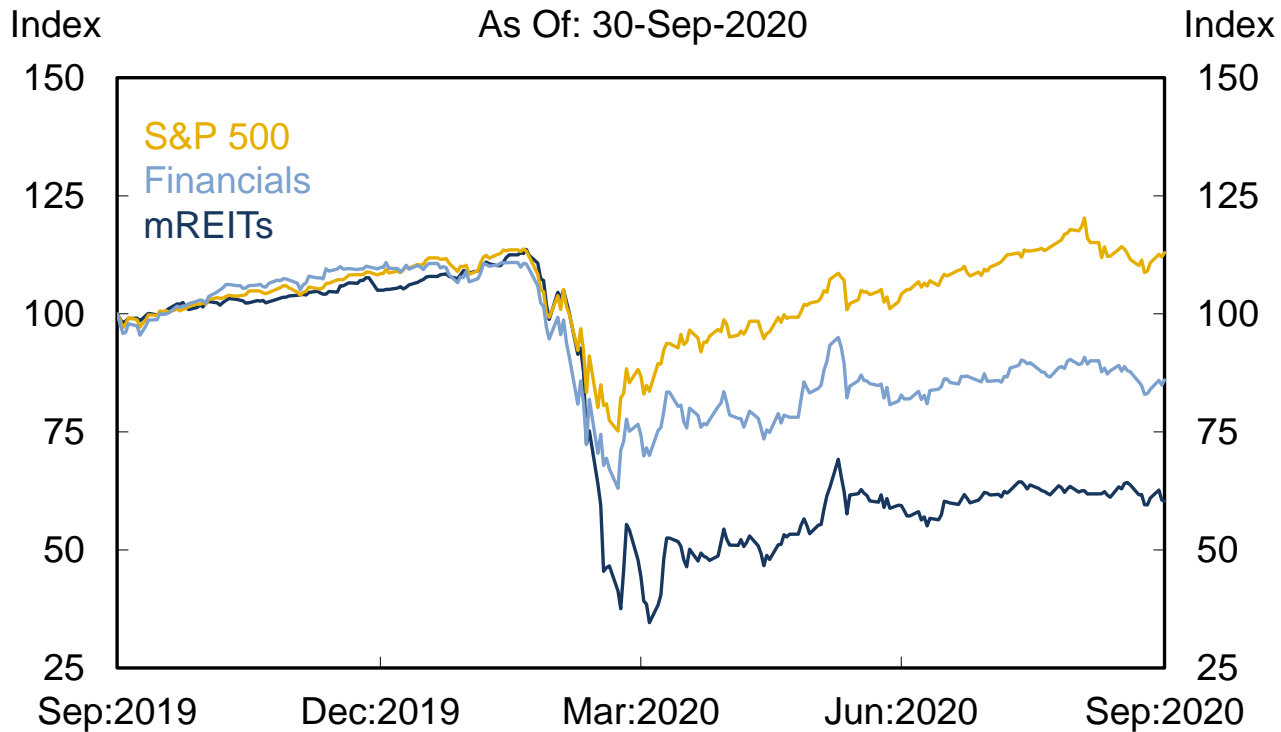
Billions of US\$



Source: Federal Reserve, Haver Analytics

Note: Statistical Release Z.1, "Financial Accounts of the United States."

### 3.5.2.5 mREIT Stock Performance



Note: Indexed to 100 as of 9/30/2019; mREITs represents the BREIT Mortgage Index; Financials represents the S&P 500 Financials Subindex.

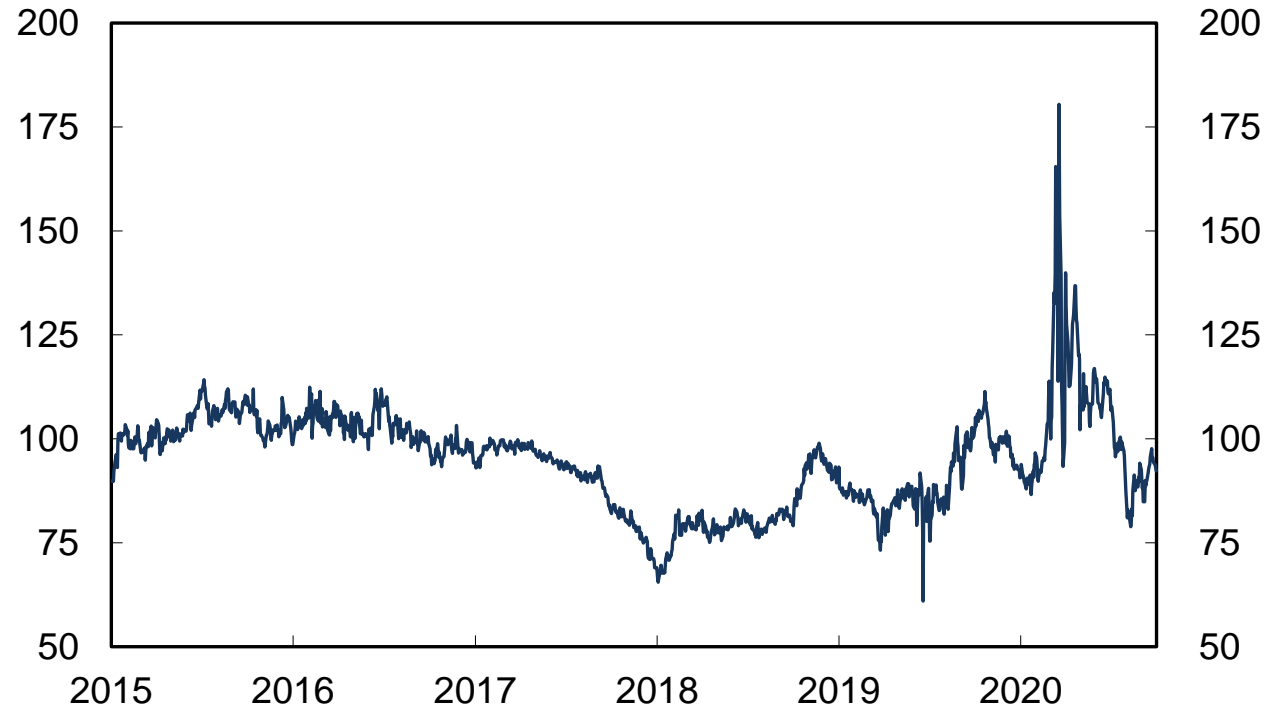
Source: Bloomberg, L.P.

### 3.5.2.6 Agency MBS Spread to Treasuries

Basis Points

As Of: 30-Sep-2020

Basis Points



Source: Bloomberg, L.P.

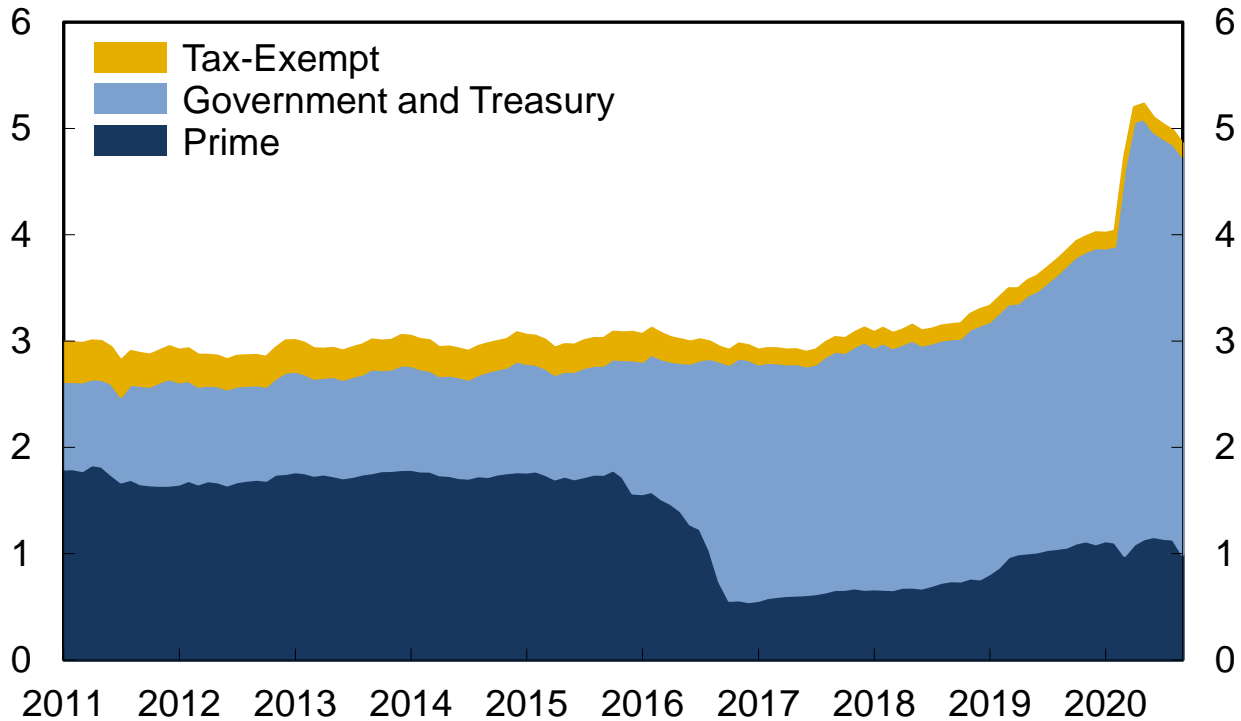
Note: Fannie Mae 30-year current-coupon spread to the 5/10-year Treasury blend.

### 3.5.2.7 MMF Assets by Fund Type

Trillions of US\$

As Of: Sep-2020

Trillions of US\$



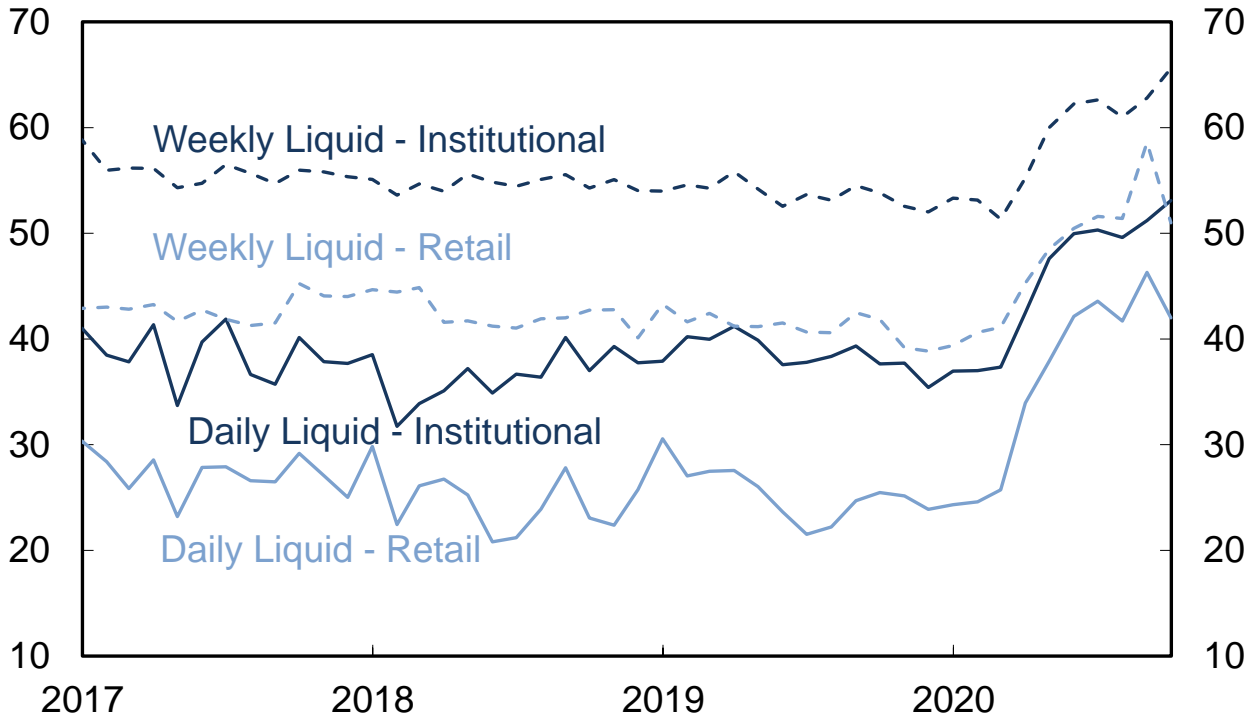
Source: SEC

### 3.5.2.8 Liquid Asset Shares of Prime MMFs

Percent of Total Assets

As Of: Sep-2020

Percent of Total Assets



Source: SEC

Note: Weighted by fund size.

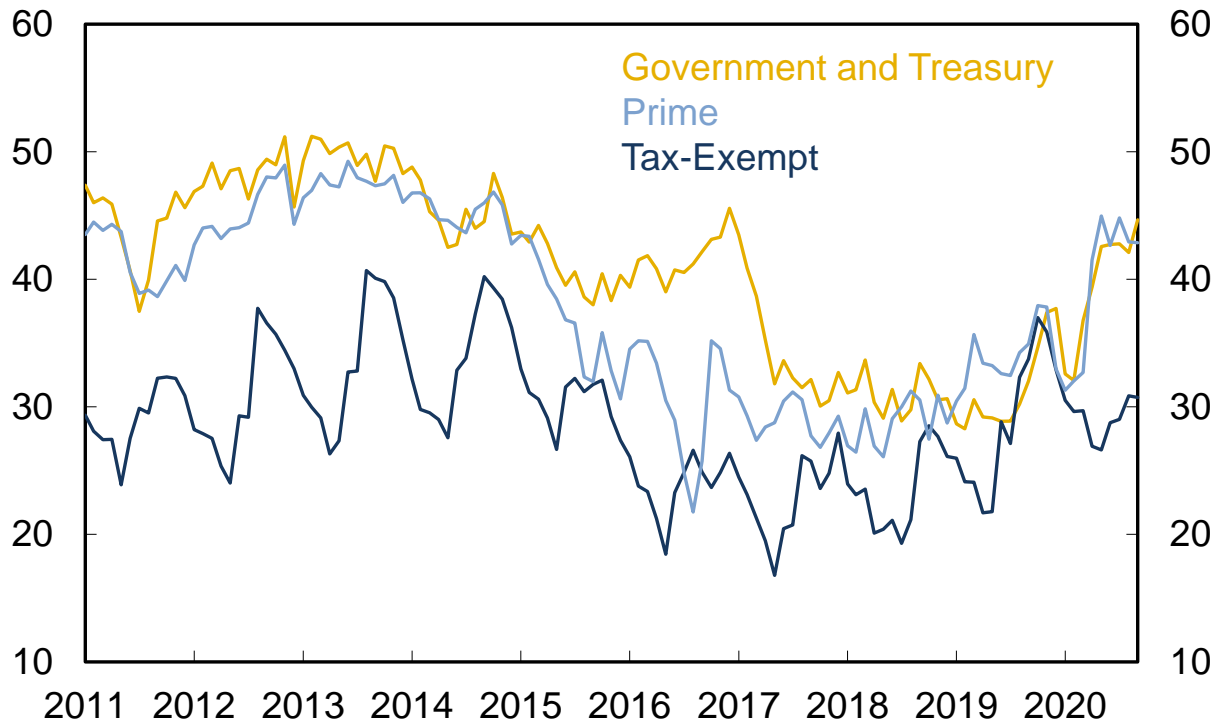


### 3.5.2.9 Weighted Average Maturities by Fund Type

Days

As Of: Sep-2020

Days



Source: SEC

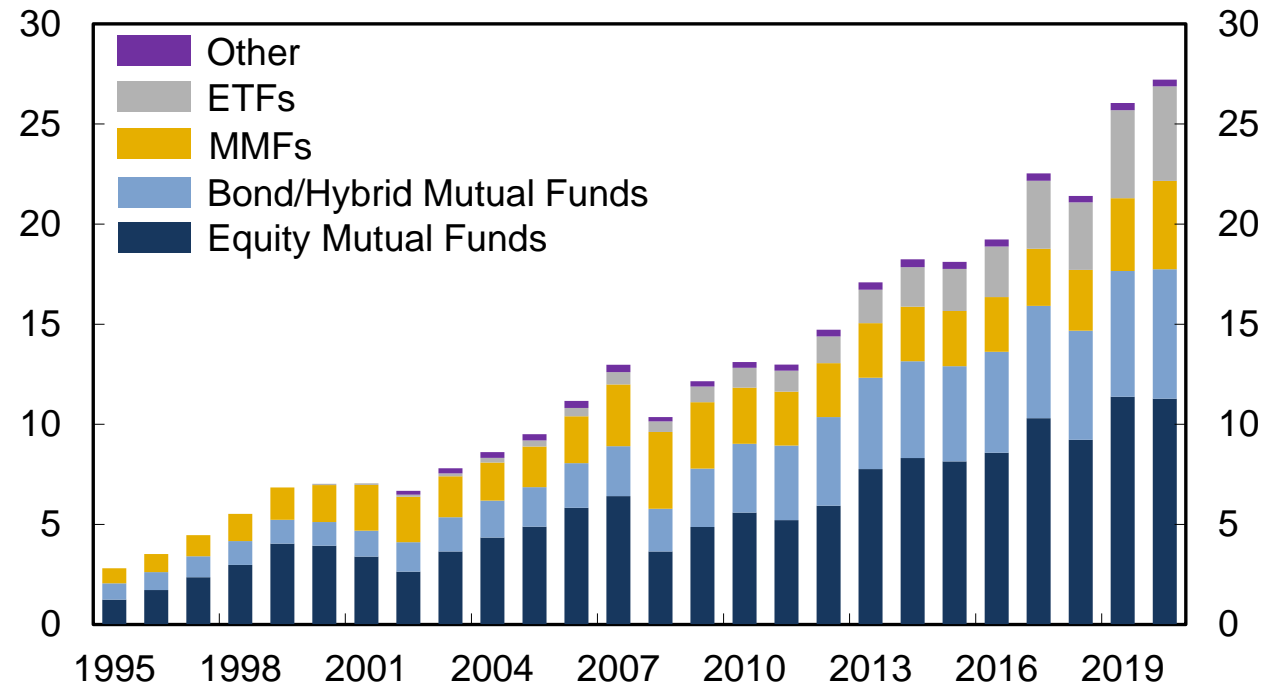
Note: Weighted by fund size.

### 3.5.2.10 Net Assets of the Investment Company Industry

Trillions of US\$

As Of: 2020 Q3

Trillions of US\$



Source: ICI, Haver Analytics

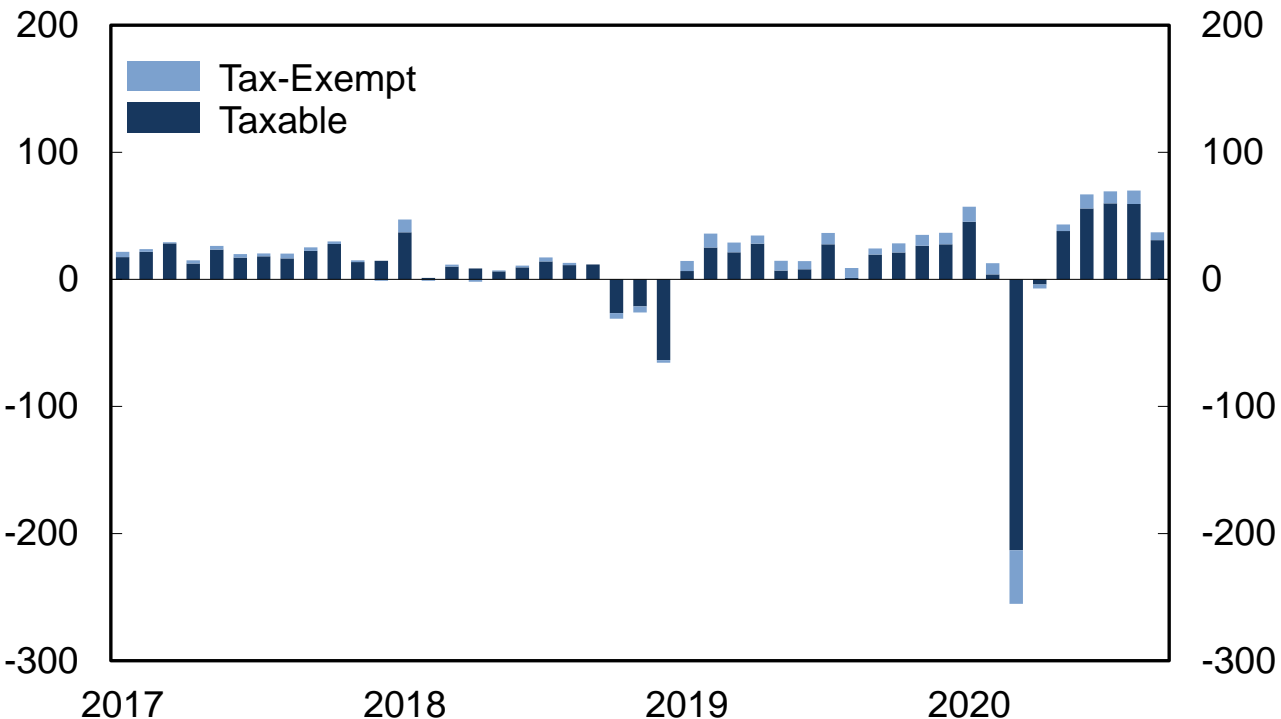
Note: Other is composed of unit investment trusts (UIT) and closed-end funds. Q3 2020 figures include 2019 UIT data, which are reported annually and Q2 2020 closed-end fund data, which are reported on a lag.

### 3.5.2.11 Monthly Bond Mutual Fund Flows

Billions of US\$

As Of: Sep-2020

Billions of US\$



Source: ICI, Haver Analytics

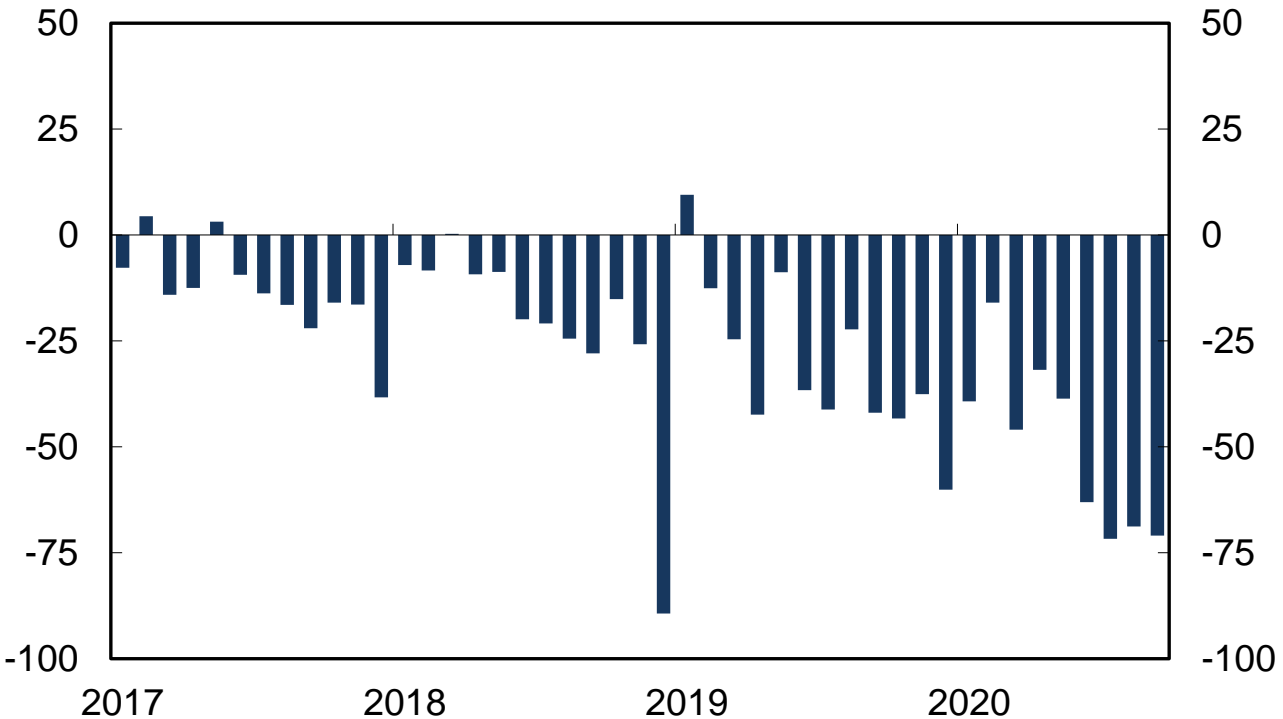
Note: Net fund flows.

### 3.5.2.12 Monthly Equity Mutual Fund Flows

Billions of US\$

As Of: Sep-2020

Billions of US\$



Source: ICI, Haver Analytics

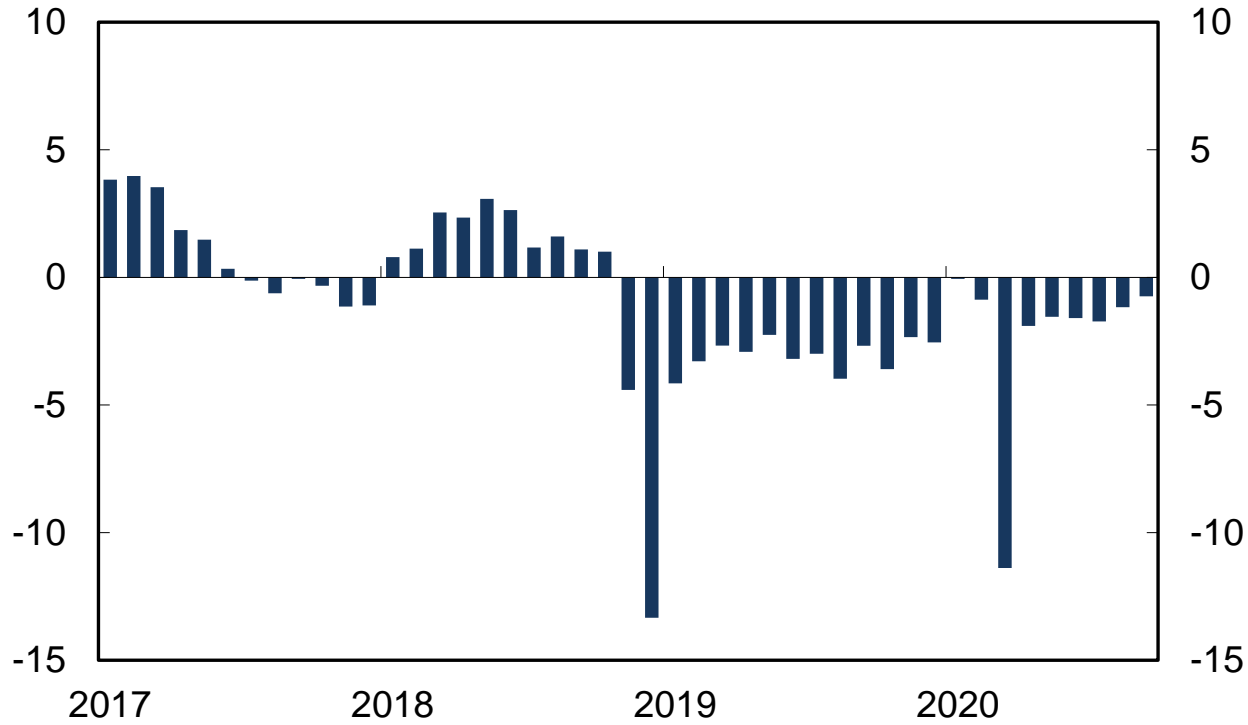
Note: Net fund flows.

# 3.5.2.13 Monthly Bank Loan Mutual Fund Flows

Billions of US\$

As Of: Sep-2020

Billions of US\$



Source: Morningstar, Inc.

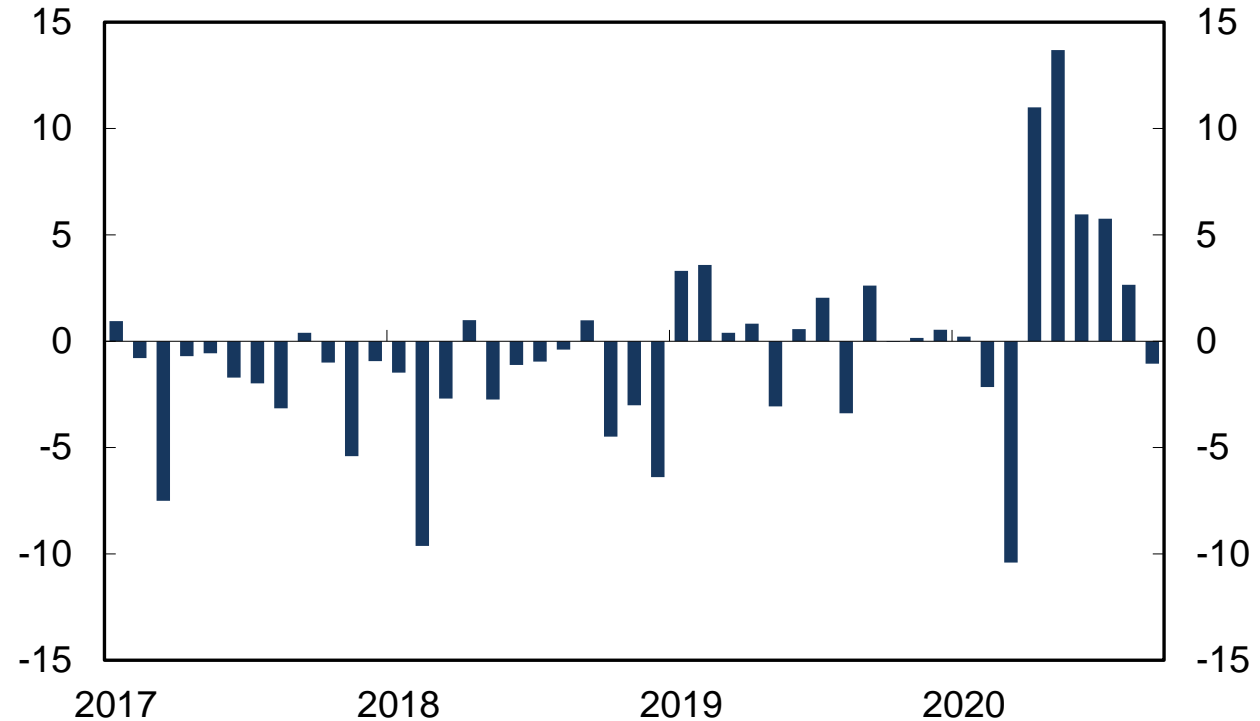
Note: Net fund flows.

# 3.5.2.14 Monthly High-Yield Mutual Fund Flows

Billions of US\$

As Of: Sep-2020

Billions of US\$



Source: Morningstar, Inc.

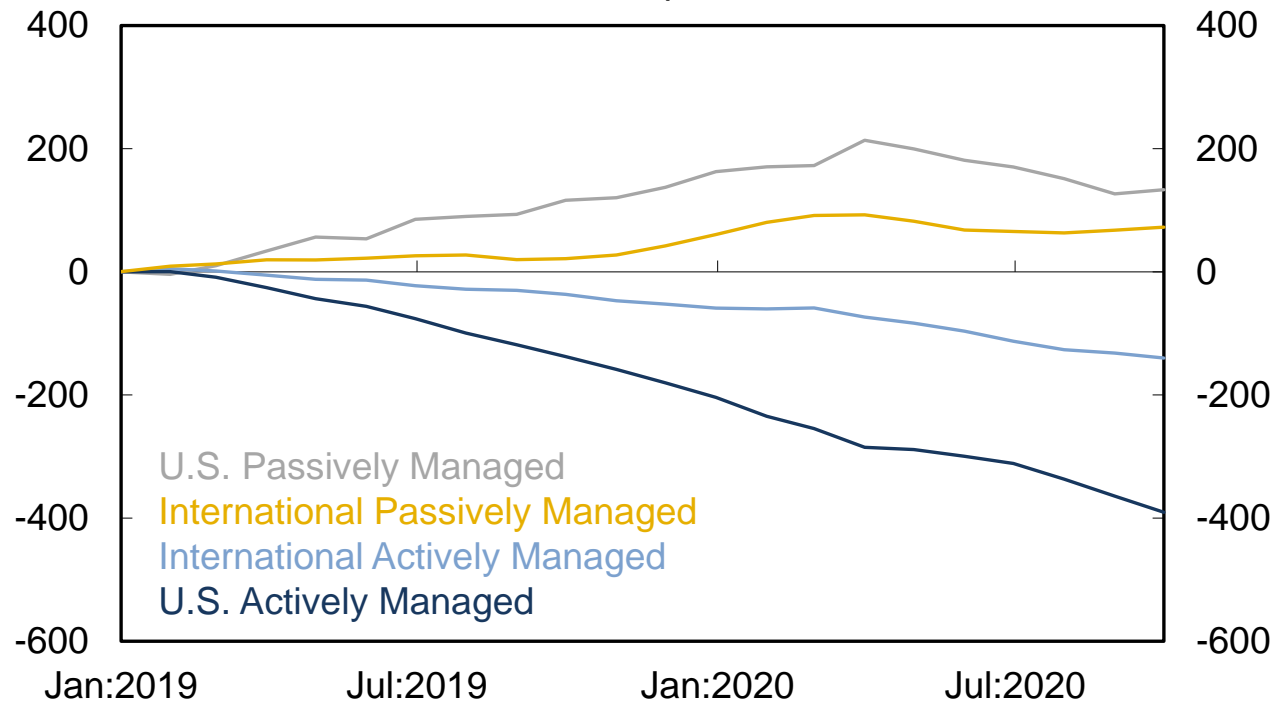
Note: Net fund flows.

### 3.5.2.15 Cumulative Equity Fund Flows

Billions of US\$

As Of: Sep-2020

Billions of US\$



U.S. Passively Managed  
International Passively Managed  
International Actively Managed  
U.S. Actively Managed

Note: Includes ETFs and mutual funds. Cumulative net fund flows.

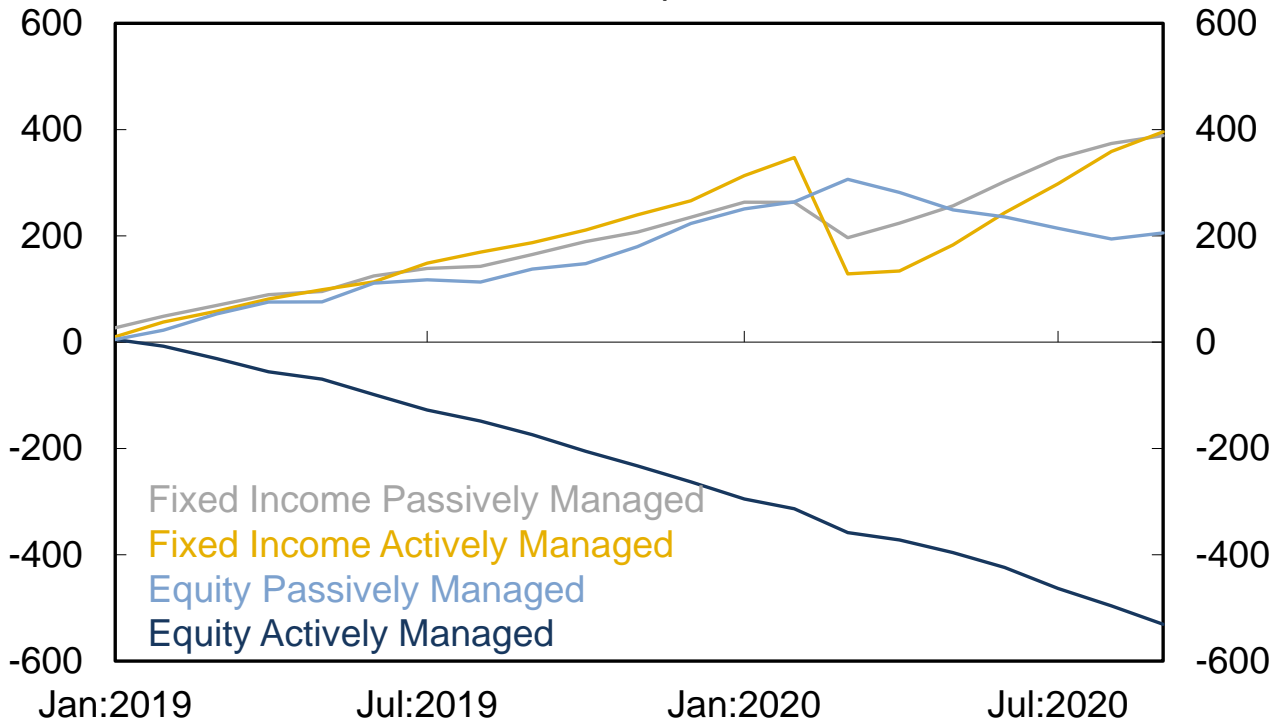
Source: Morningstar, Inc.

### 3.5.2.16 Cumulative Equity and Fixed Income Fund Flows

Billions of US\$

As Of: Sep-2020

Billions of US\$



Fixed Income Passively Managed

Fixed Income Actively Managed

Equity Passively Managed

Equity Actively Managed

Note: Includes ETFs and mutual funds. Cumulative net fund flows.

Source: Morningstar, Inc.

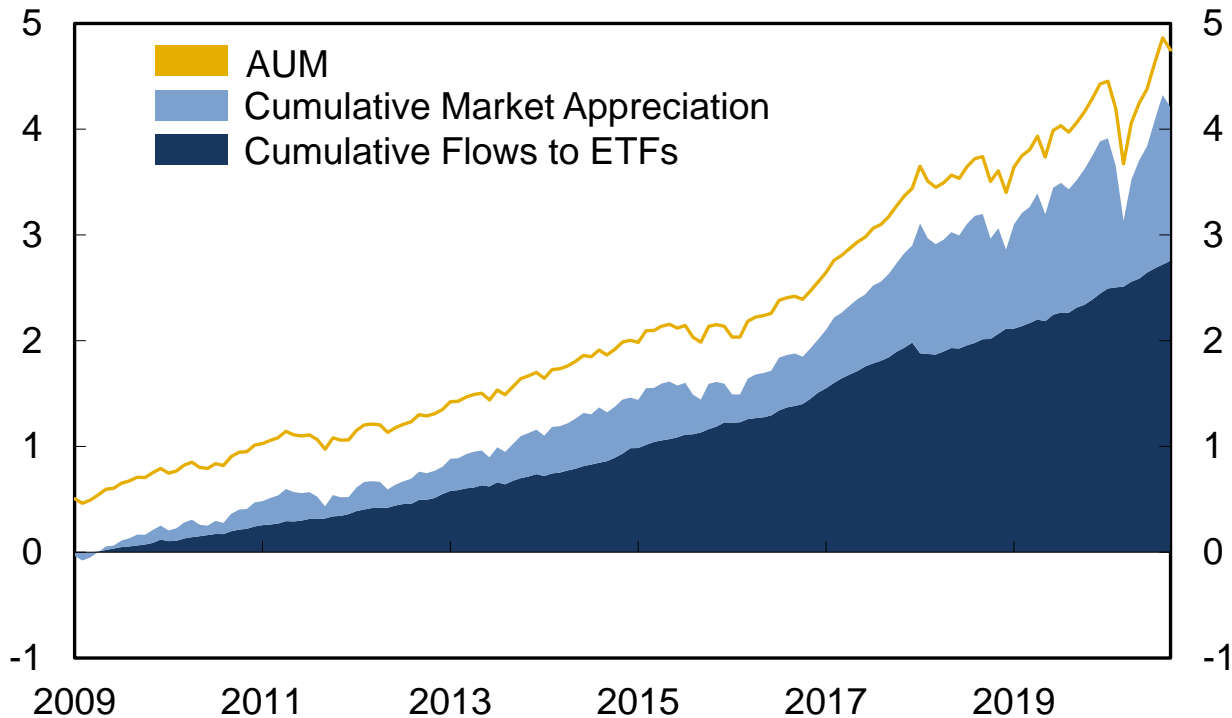


# 3.5.2.17 U.S.-Listed ETF AUM

Trillions of US\$

As Of: Sep-2020

Trillions of US\$



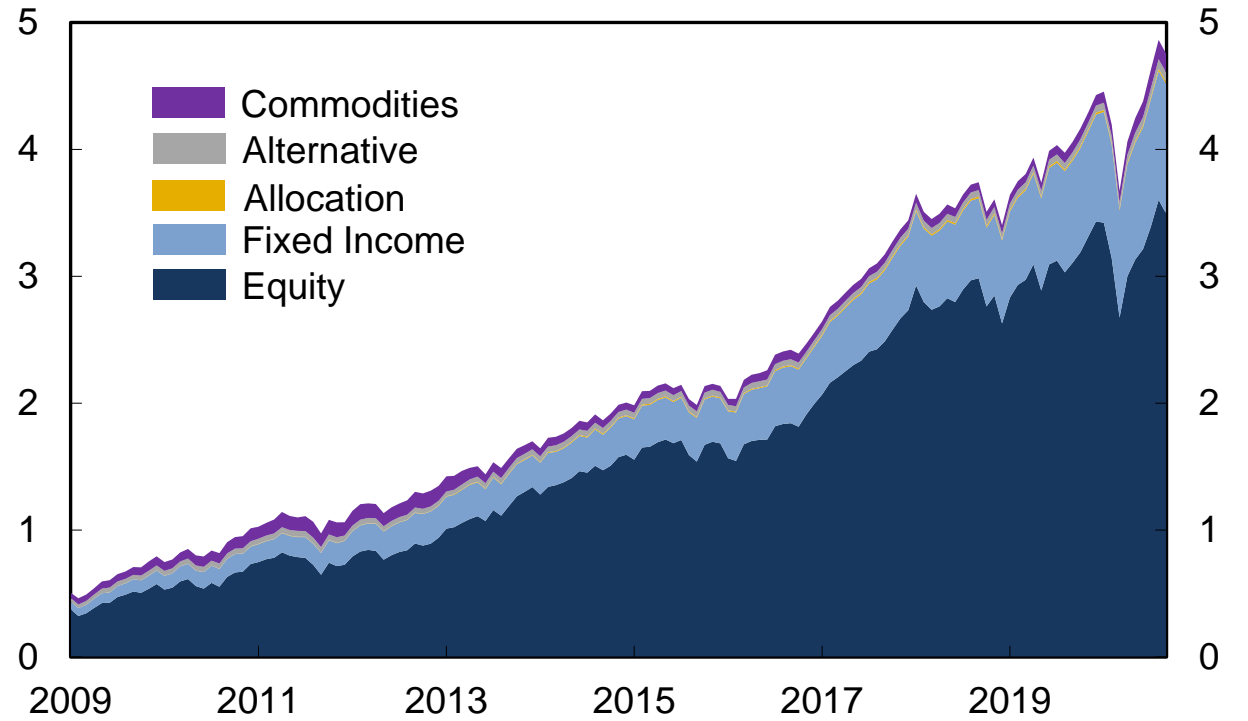
Source: Morningstar, Inc.

# 3.5.2.18 ETF Assets by Category of Investment

Trillions of US\$

As Of: Sep-2020

Trillions of US\$



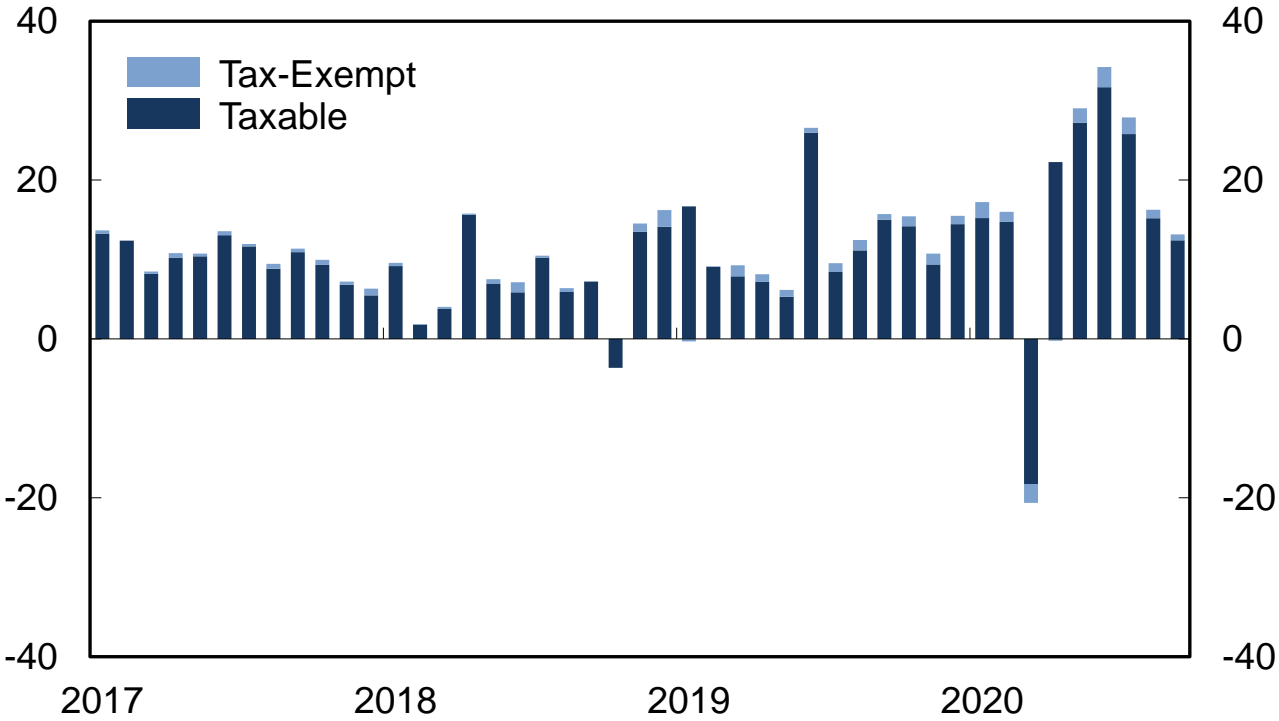
Source: Morningstar, Inc.

# 3.5.2.19 Monthly ETF Flows: Fixed Income Funds

Billions of US\$

As Of: Sep-2020

Billions of US\$



Source: Morningstar Direct

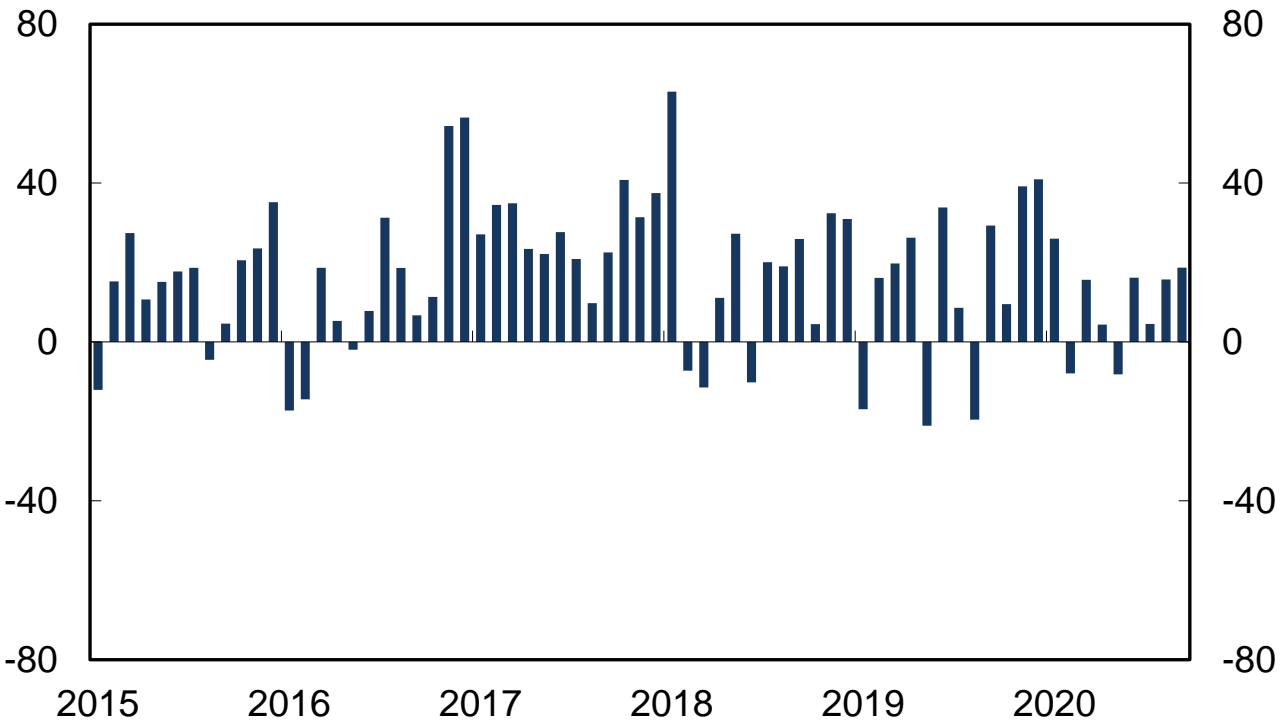
Note: Net fund flows.

# 3.5.2.20 Monthly ETF Flows: Equity Funds

Billions of US\$

As Of: Sep-2020

Billions of US\$



Source: Morningstar Direct

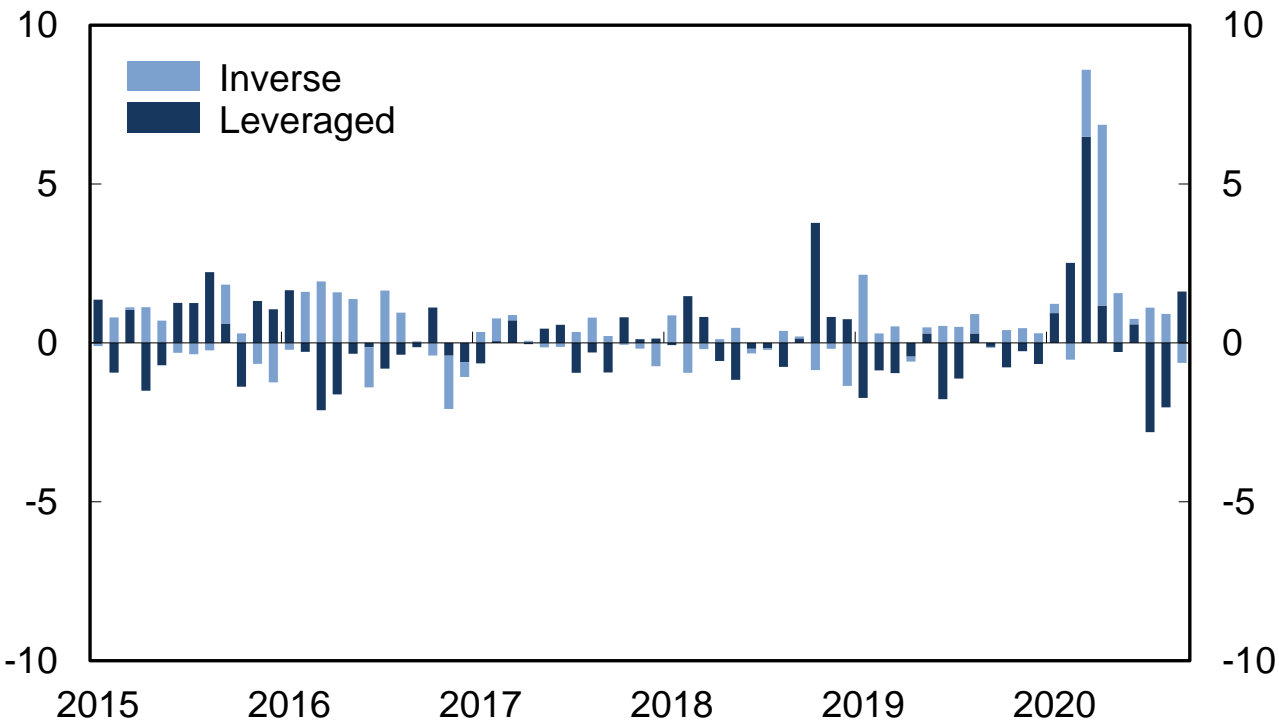
Note: Net fund flows.

# 3.5.2.21 Monthly Inverse and Leveraged ETF Flows

Billions of US\$

As Of: Sep-2020

Billions of US\$



Source: Morningstar Direct

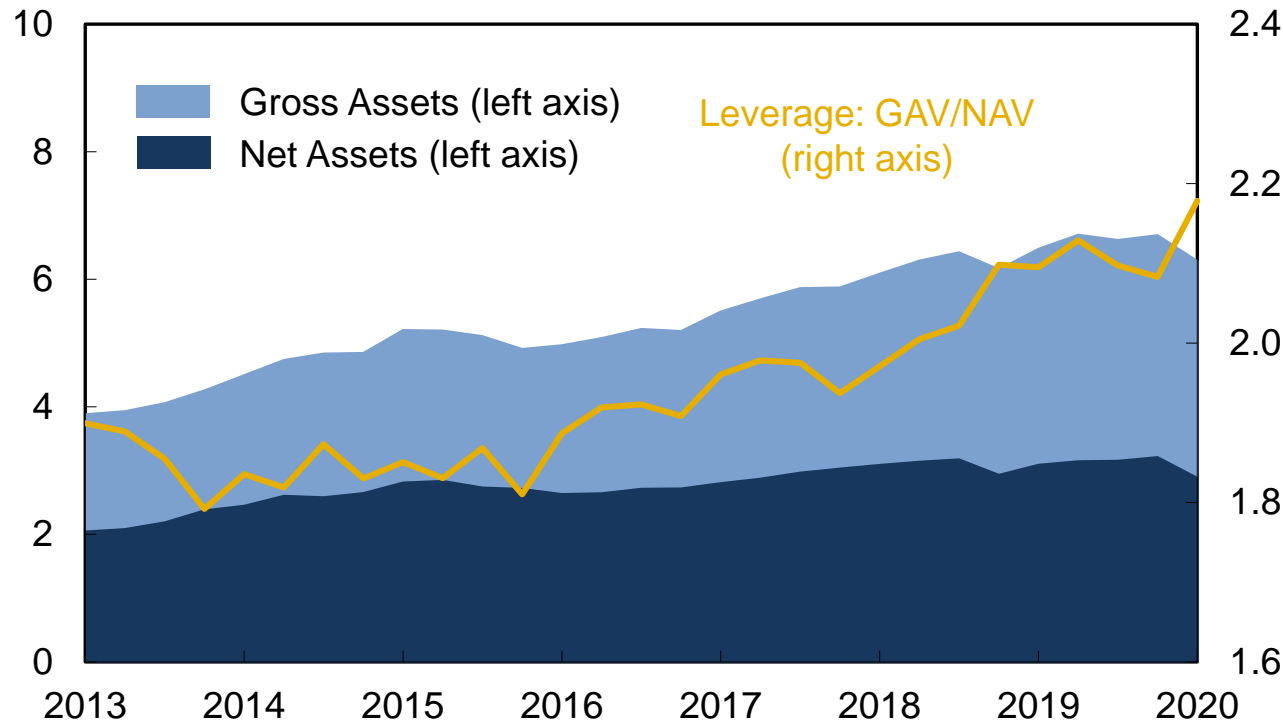
Note: Net fund flows.

# 3.5.2.22 Hedge Fund Gross and Net Assets

Trillions of US\$

As Of: 2020 Q1

Leverage



Source: SEC Form PF, OFR

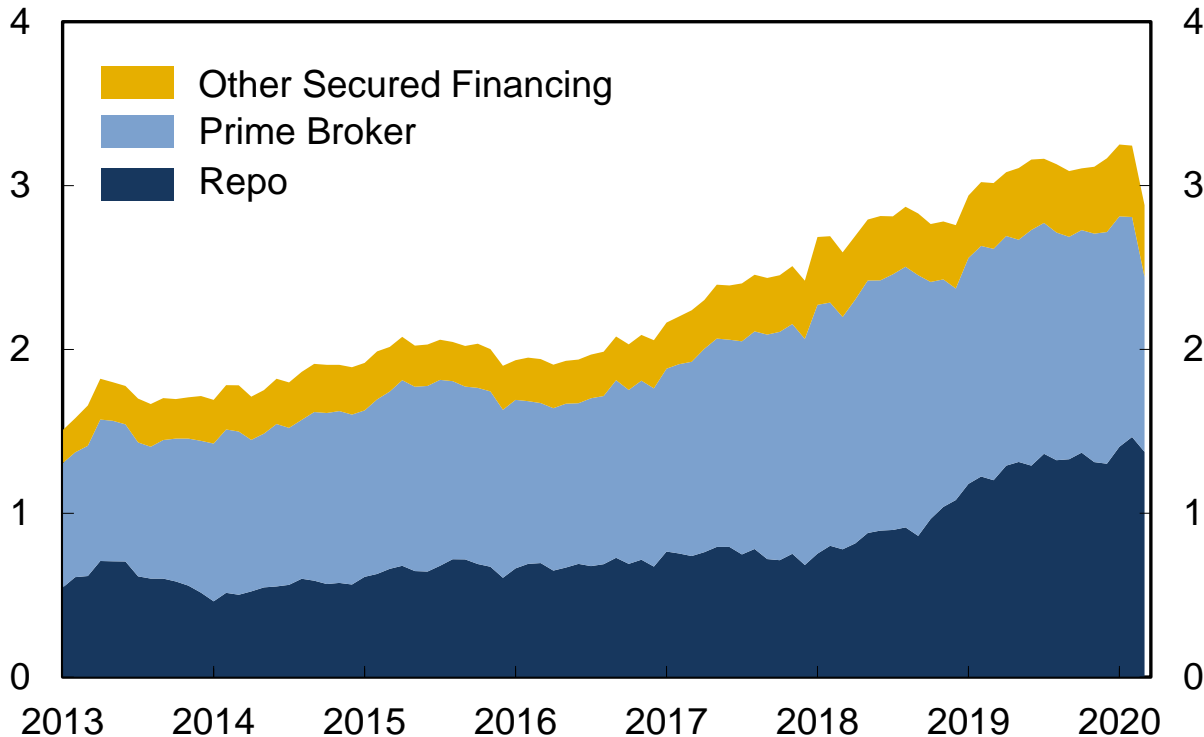
Note: QHF gross and net assets as reported on Form PF Questions 8 and 9.

### 3.5.2.23 Hedge Fund Secured Financing

Trillions of US\$

As Of: Mar-2020

Trillions of US\$



Source: SEC Form PF, OFR

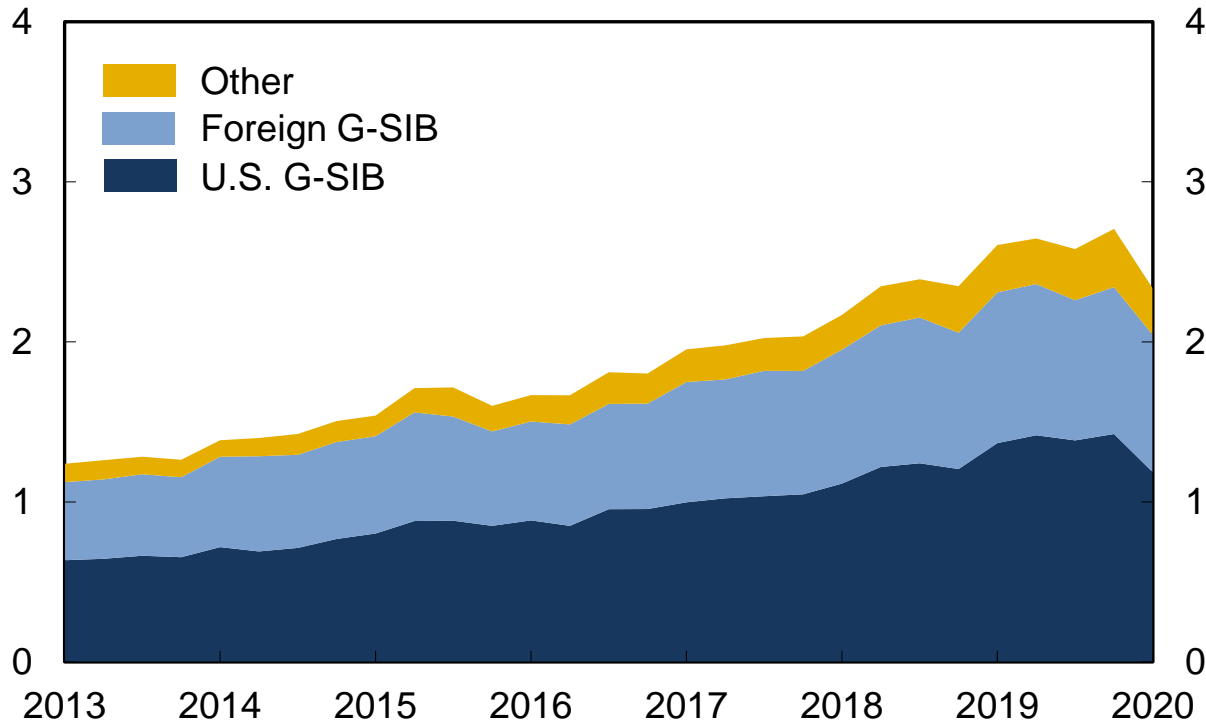
Note: QHF secured borrowing as reported on Form PF Question 43.

### 3.5.2.24 Hedge Fund Borrowing: Composition of Creditors

Trillions of US\$

As Of: 2020 Q1

Trillions of US\$



Note: QHF creditors as reported Form PF Question 47.

Source: SEC Form PF, OFR

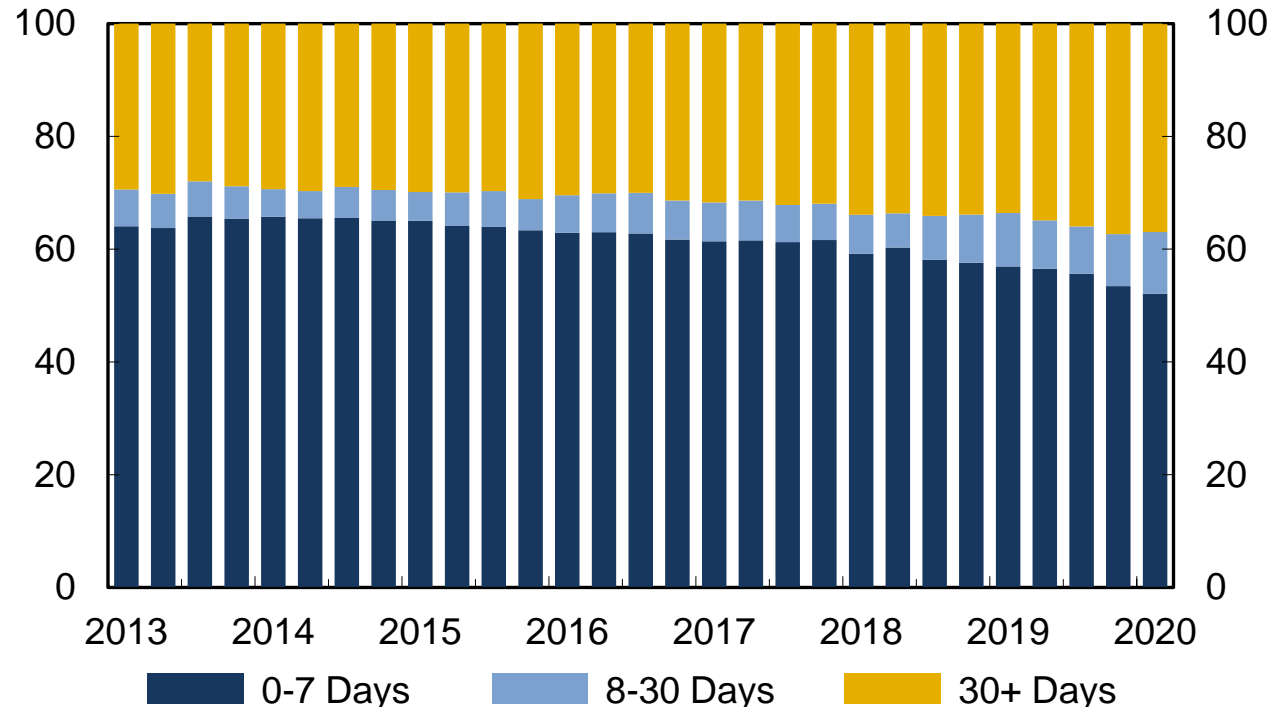


### 3.5.2.25 Hedge Fund Financing Liquidity

Percent

As Of: 2020 Q1

Percent

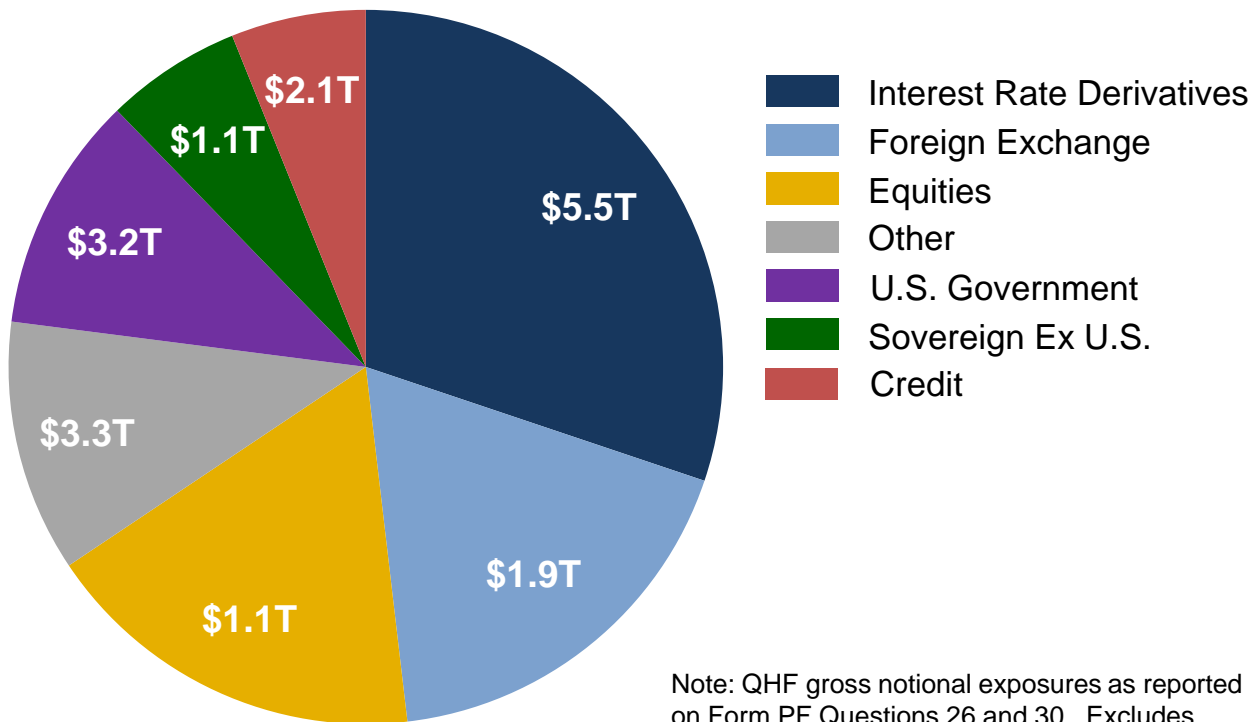


Source: SEC Form PF, OFR

Note: QHF financing liquidity as reported on Form PF Question 46.

### 3.5.2.26 Hedge Fund Gross Exposures by Asset Class

As Of: 2020 Q1



Note: QHF gross notional exposures as reported on Form PF Questions 26 and 30. Excludes repurchase agreements. Options reported as delta adjusted notional value. Interest rate derivatives reported as 10-year bond-equivalents.

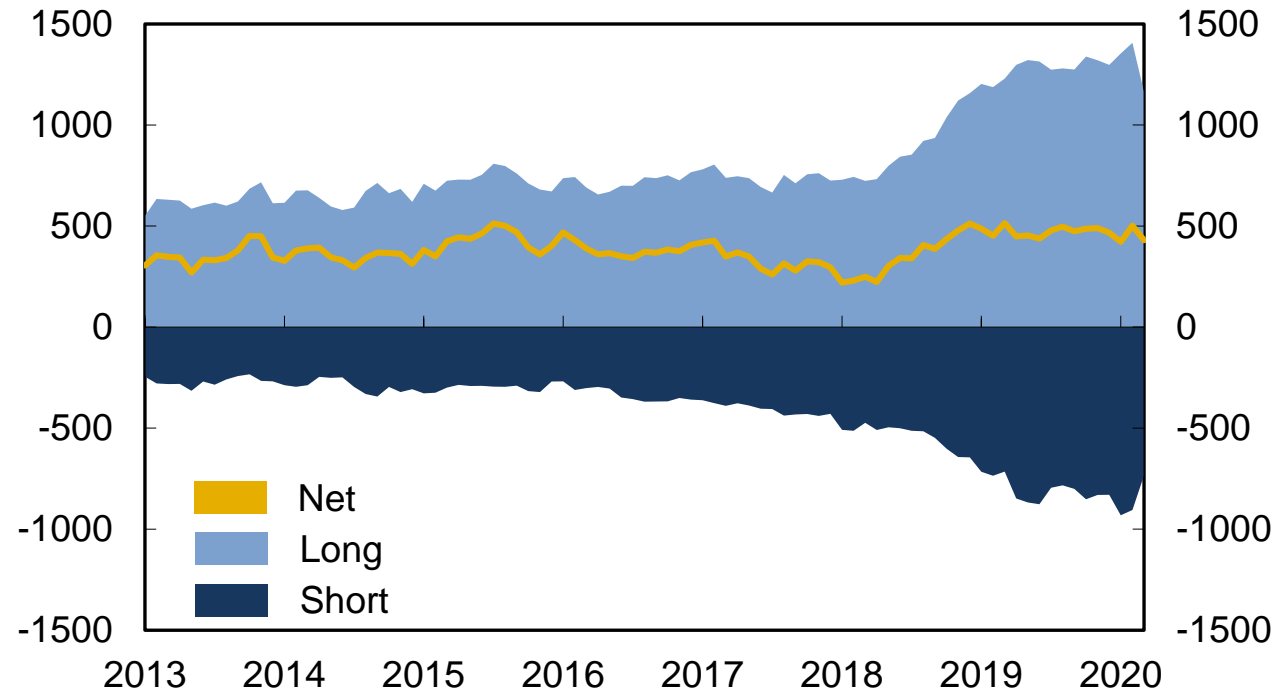
Source: SEC Form PF, OFR

### 3.5.2.27 Hedge Fund Treasury Exposures

Billions of US\$

As Of: Mar-2020

Billions of US\$



Source: SEC Form PF, OFR

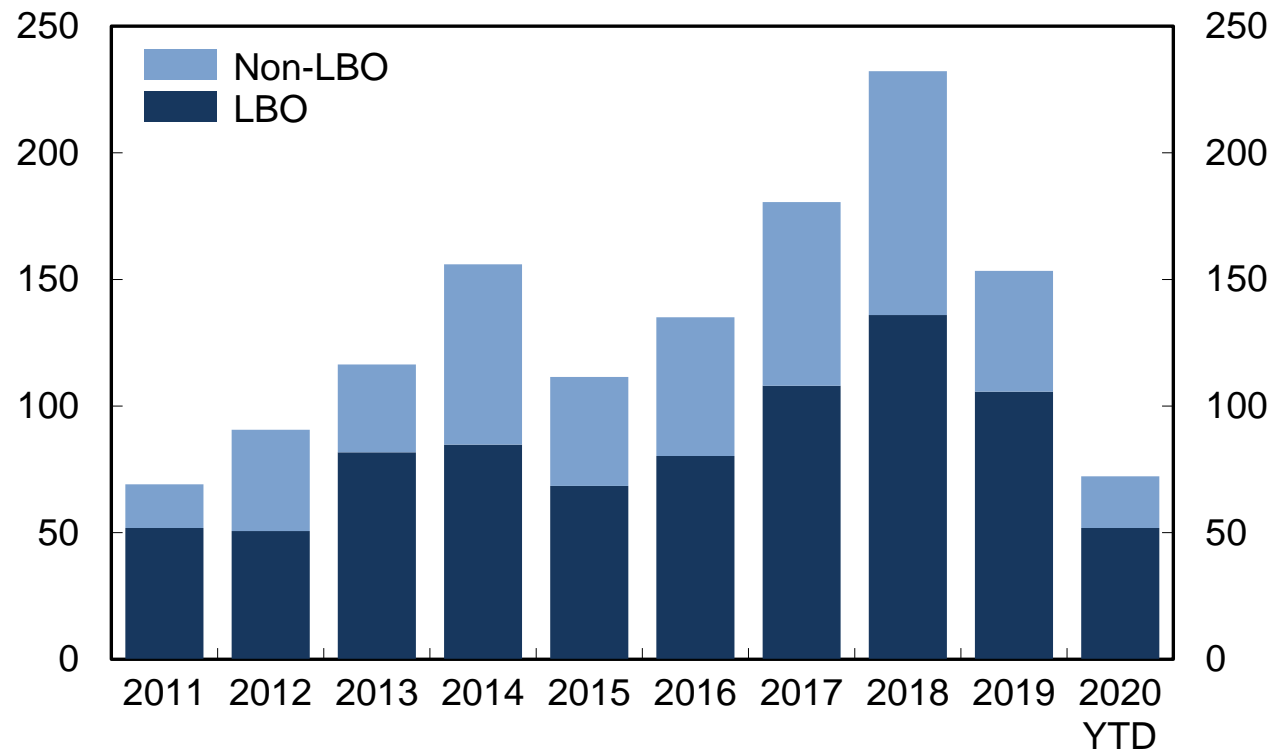
Note: QHF Treasury exposures as reported on Form PF Questions 26 and 30.

### 3.5.2.28 M&A Loan Volume for Private Equity-Backed Issuers

Billions of US\$

As Of: 30-Sep-2020

Billions of US\$



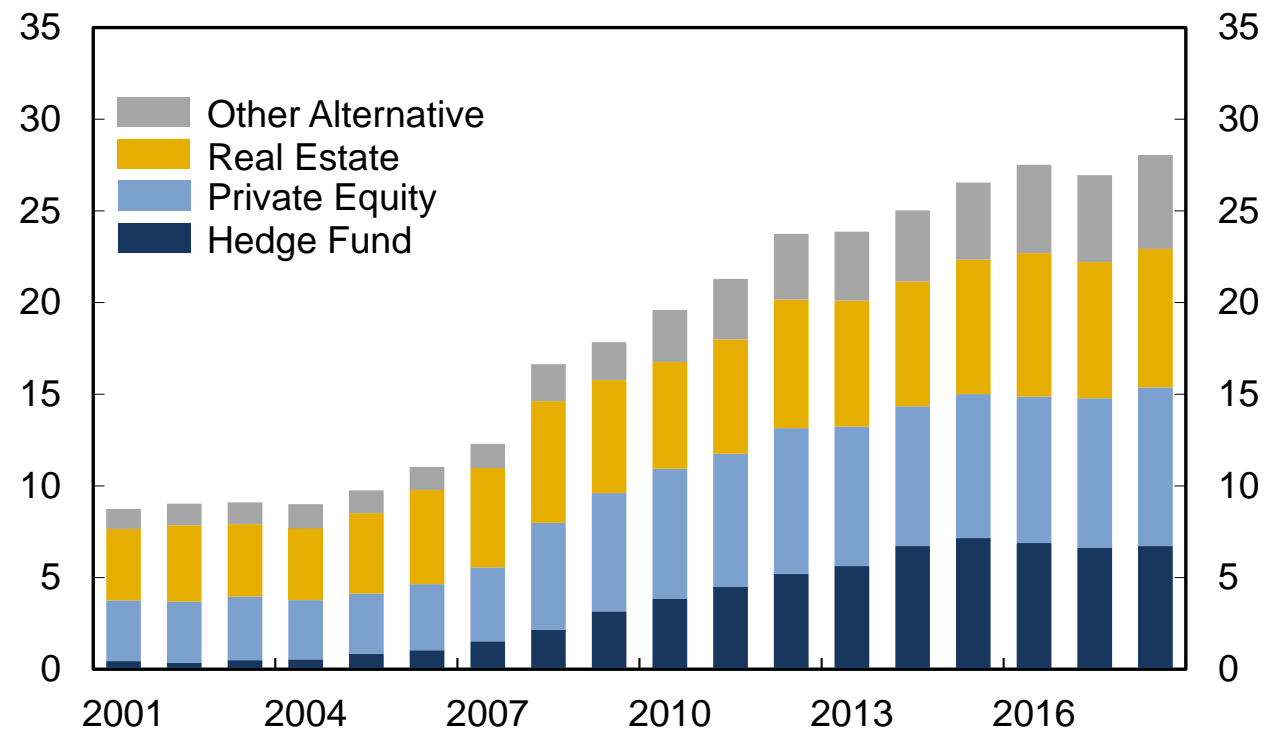
Source: S&P LCD

# 3.5.2.29 Public Plan Allocation to Alternative Assets

Percent

As Of: 2018

Percent



Source: [publicplansdata.org](http://publicplansdata.org)

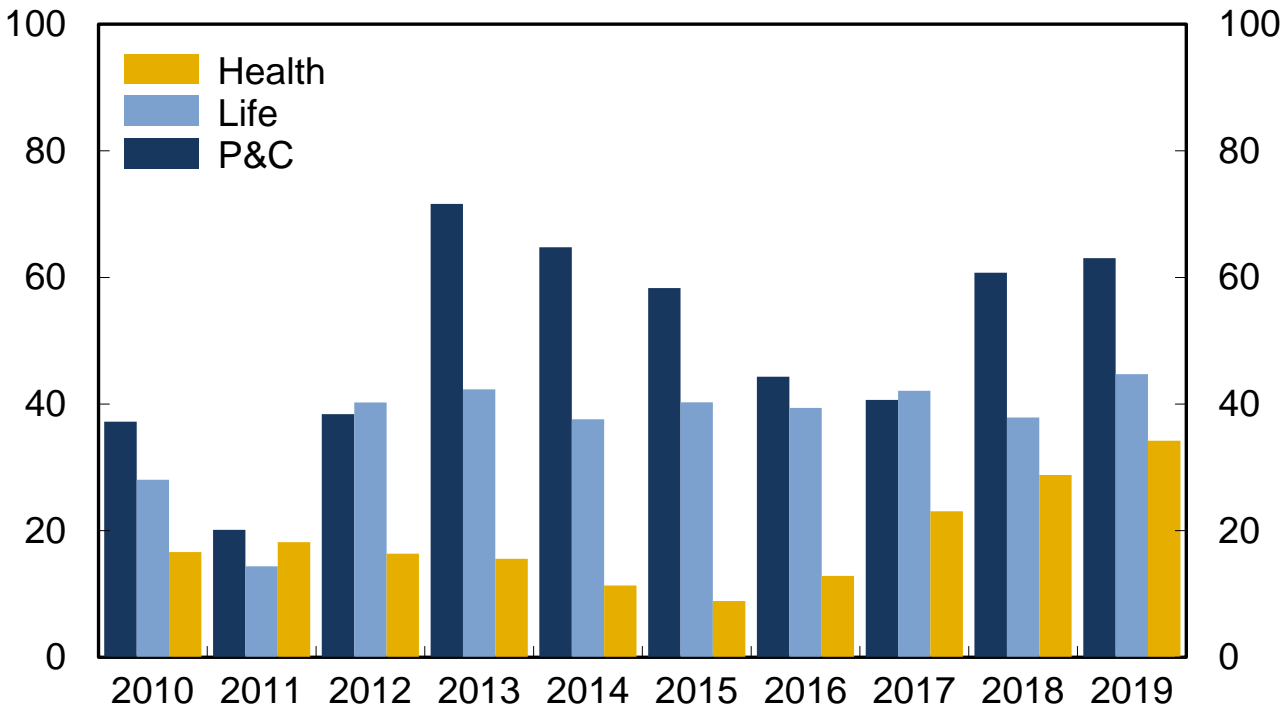
Note: Includes public plans that reported investment allocations from 2001-2018. Simple average.

### 3.5.2.30 Insurance Industry Net Income

Billions of US\$

As Of: 2019

Billions of US\$

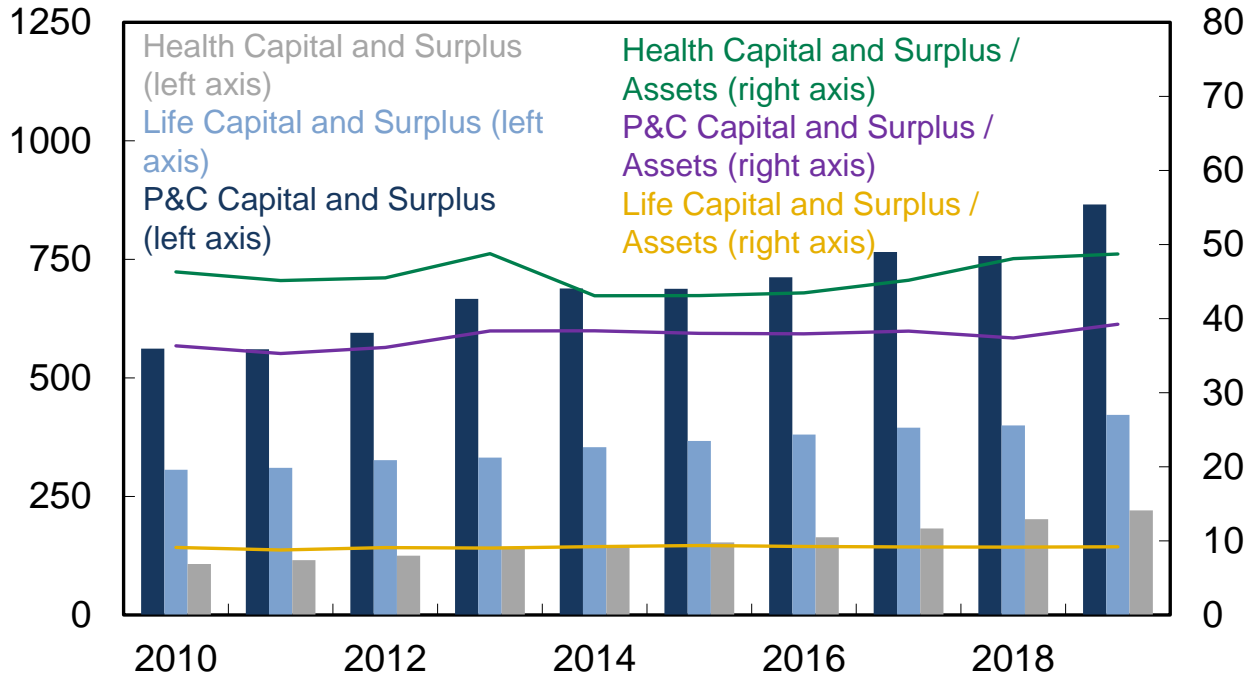


Source: NAIC

Note: Life includes accident and health.

# 3.5.2.31 Insurance Industry Capital and Surplus

Billions of US\$ As Of: 2019 Percent of Total Assets



Note: C&S/Assets is calculated as capital and surplus as a percent of net admitted assets less net admitted separate account assets. Life includes accident and health.

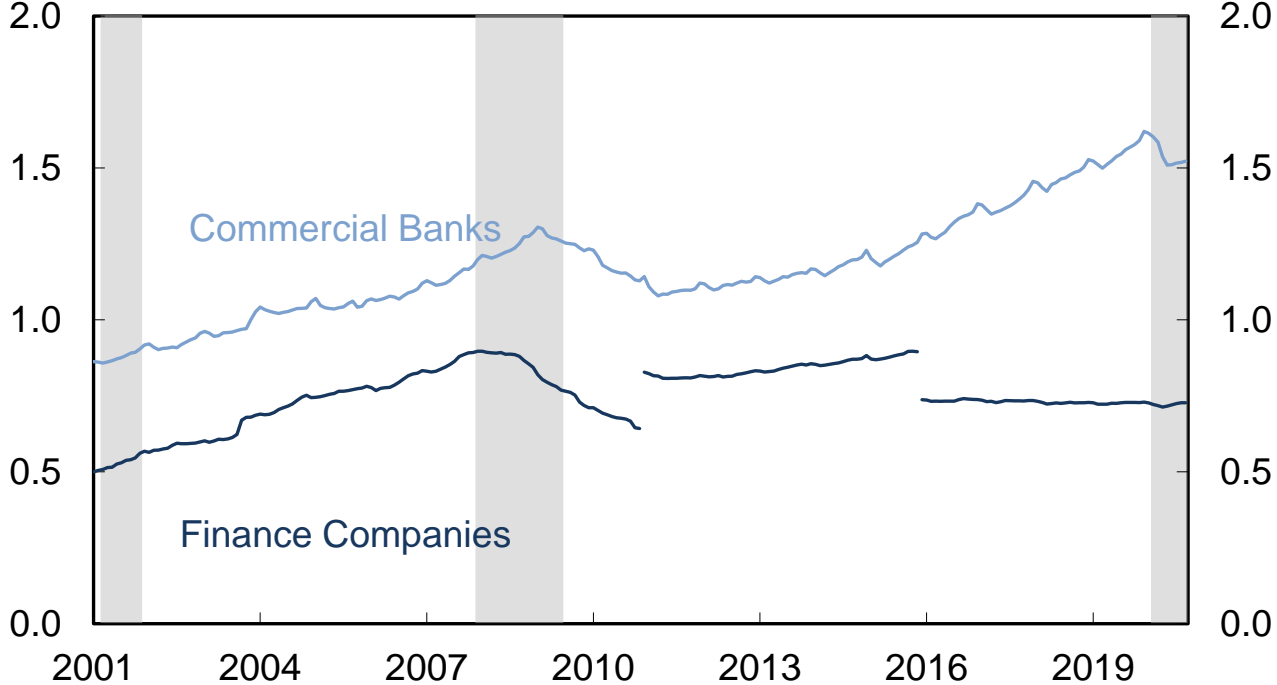
Source: NAIC

### 3.5.2.32 Consumer Loans and Leases Outstanding

Trillions of US\$

As Of: Sep-2020

Trillions of US\$



Source: Federal Reserve,  
Haver Analytics

Note: Loans and leases owned and securitized. Series breaks in December 2010 and December 2015 due to change in data collection methodology. Gray bars signify NBER recessions.

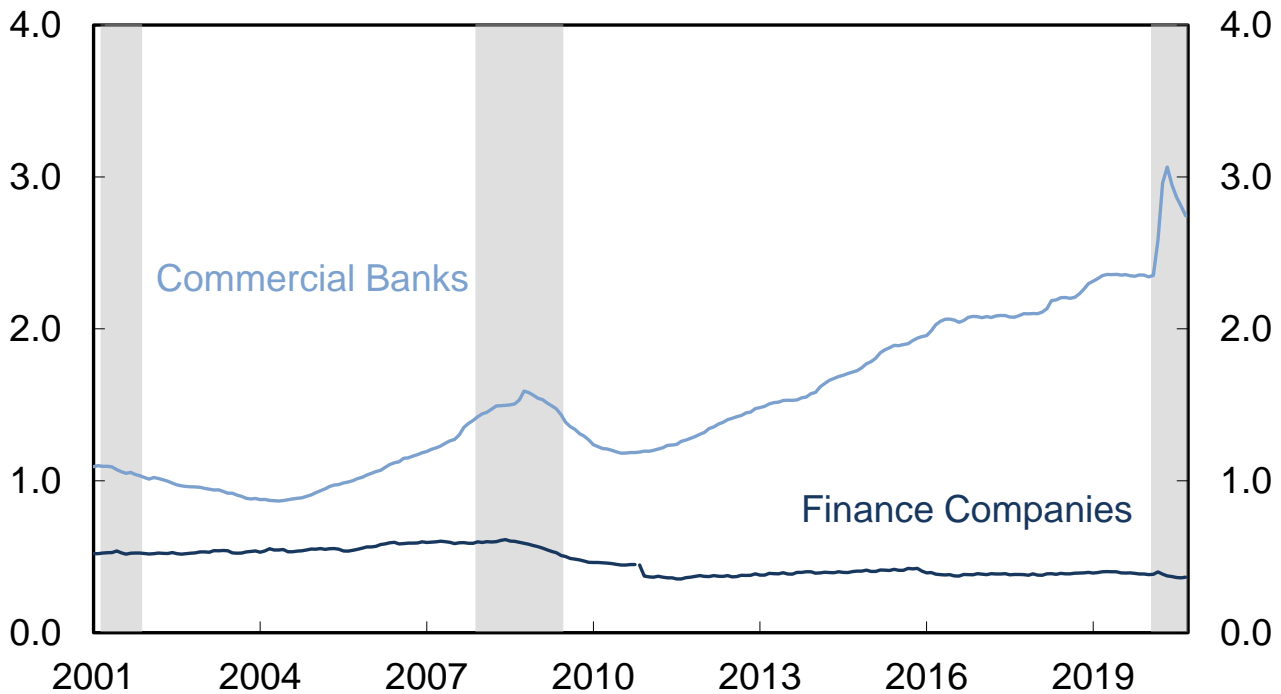


### 3.5.2.33 Business Loans and Leases Outstanding

Trillions of US\$

As Of: Sep-2020

Trillions of US\$



Source: Federal Reserve, Haver Analytics

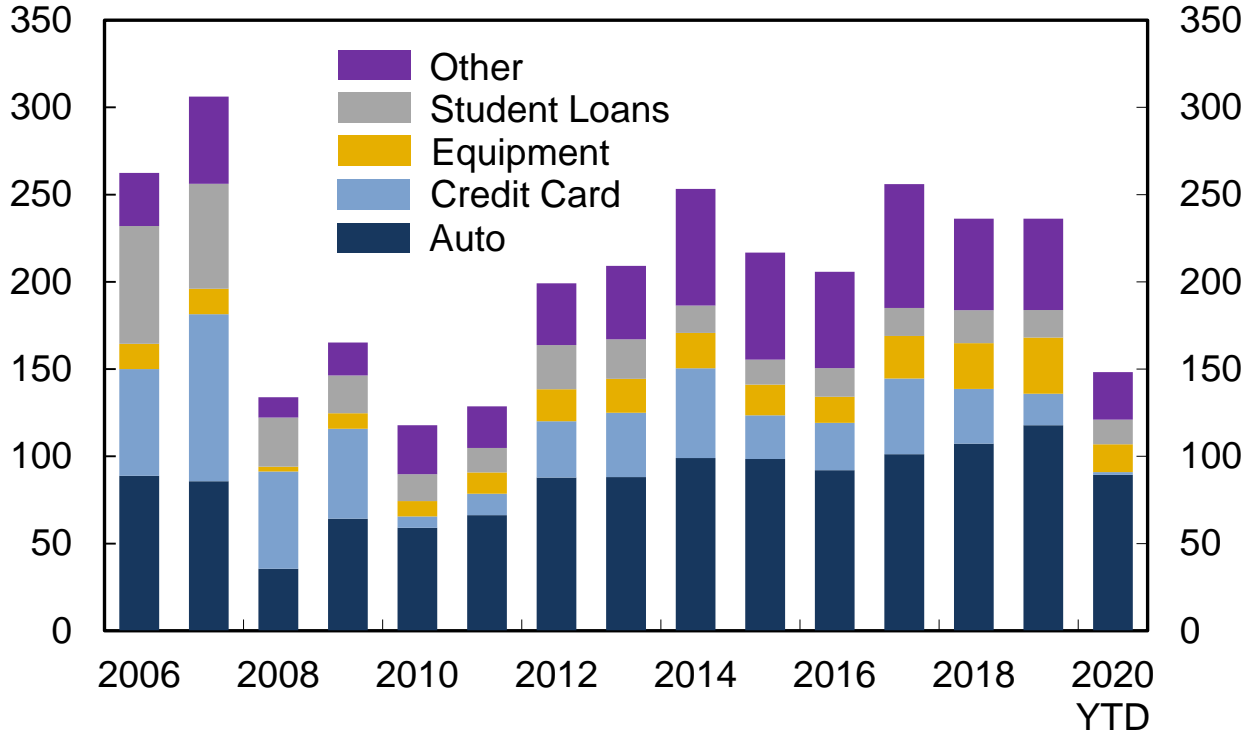
Note: Loans and leases owned and securitized. Series break in December 2010 due to change in data collection methodology. Gray bars signify NBER recessions.

# 3.5.2.34 ABS Issuance

Billions of US\$

As Of: Sep-2020

Billions of US\$



Source: Thomson Reuters, SIFMA

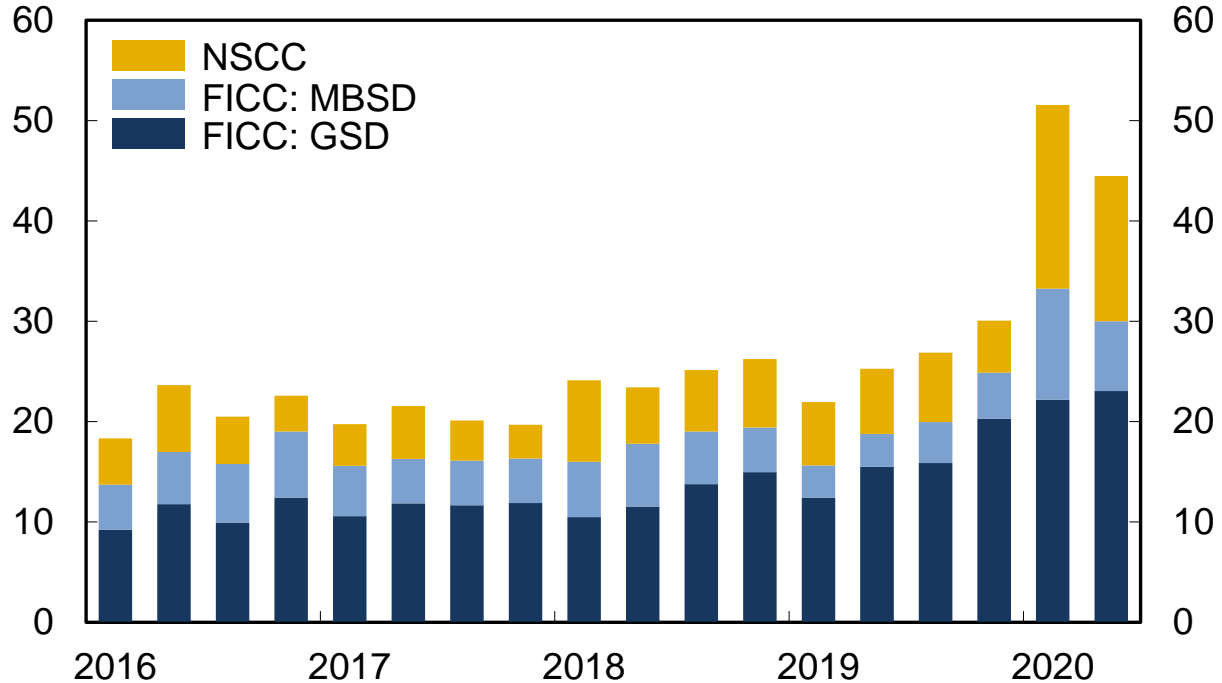
Note: Figures are as of year end through 2019. 2020 figures are through September.

# 3.6.1.1 Initial Margin Requirements: DTCC

Billions of US\$

As Of: 2020 Q2

Billions of US\$



Source: ClarusFT, PFMI Quantitative Disclosures

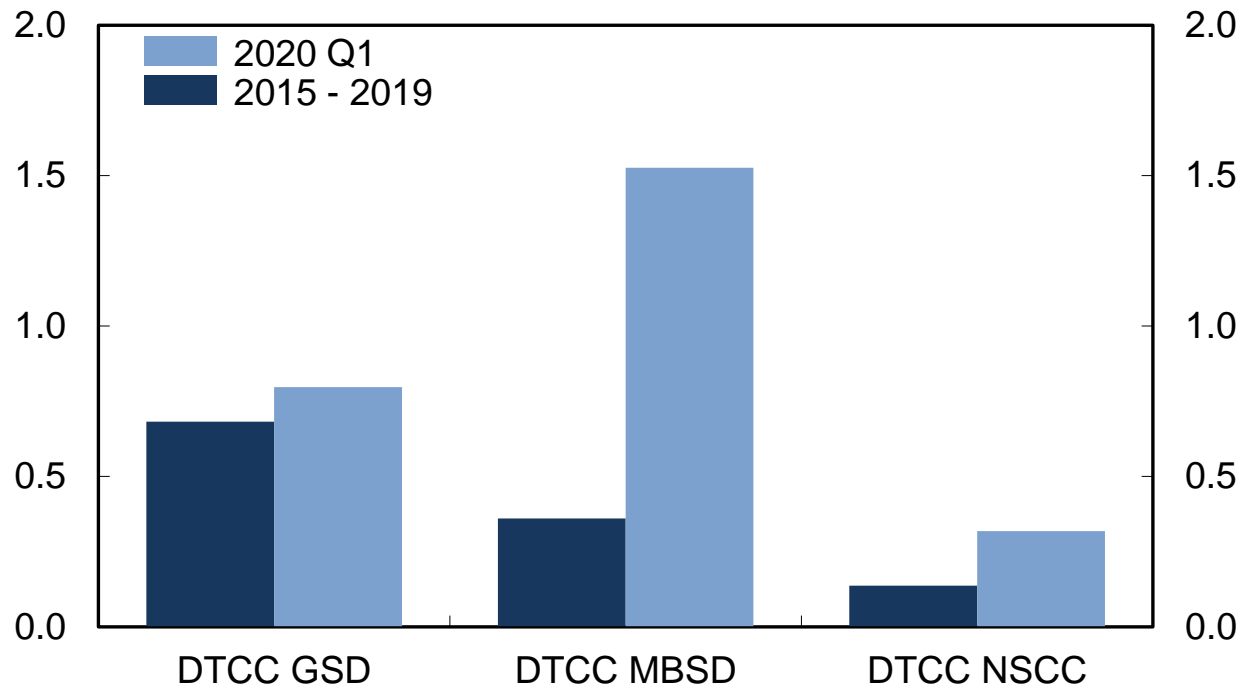
Note: Total initial margin required as reported in PFMI quantitative disclosures; includes house and client accounts.

### 3.6.1.2 Maximum Uncovered Exposure for DTCC

Billions of US\$

As Of: 2020 Q1

Billions of US\$

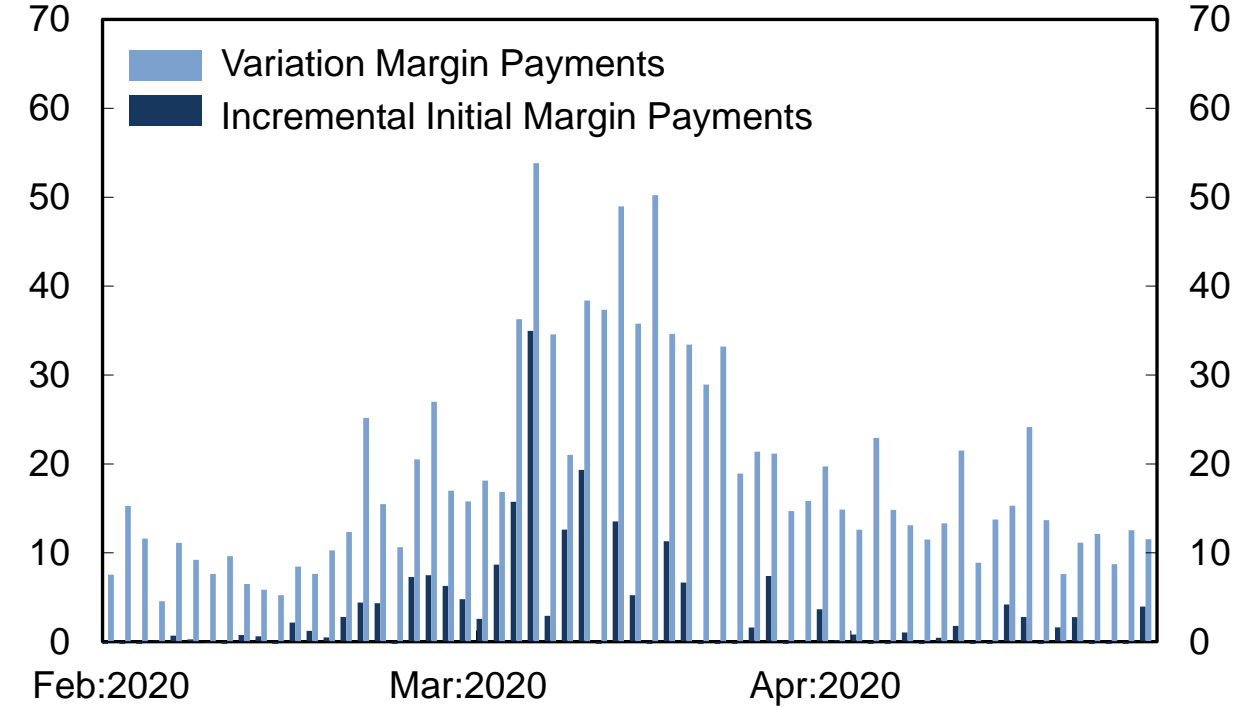


Source: DTCC PFMI  
Quantitative Disclosures

Note: Peak uncovered exposure between Q3 2015 and Q4 2019 and Q1 2020 as reported on question 6.5.4.

### 3.6.1.3 Liquidity Demand at Derivatives Clearing Organizations

Billions of US\$ As Of: 30-Apr-2020 Billions of US\$



Source: CFTC

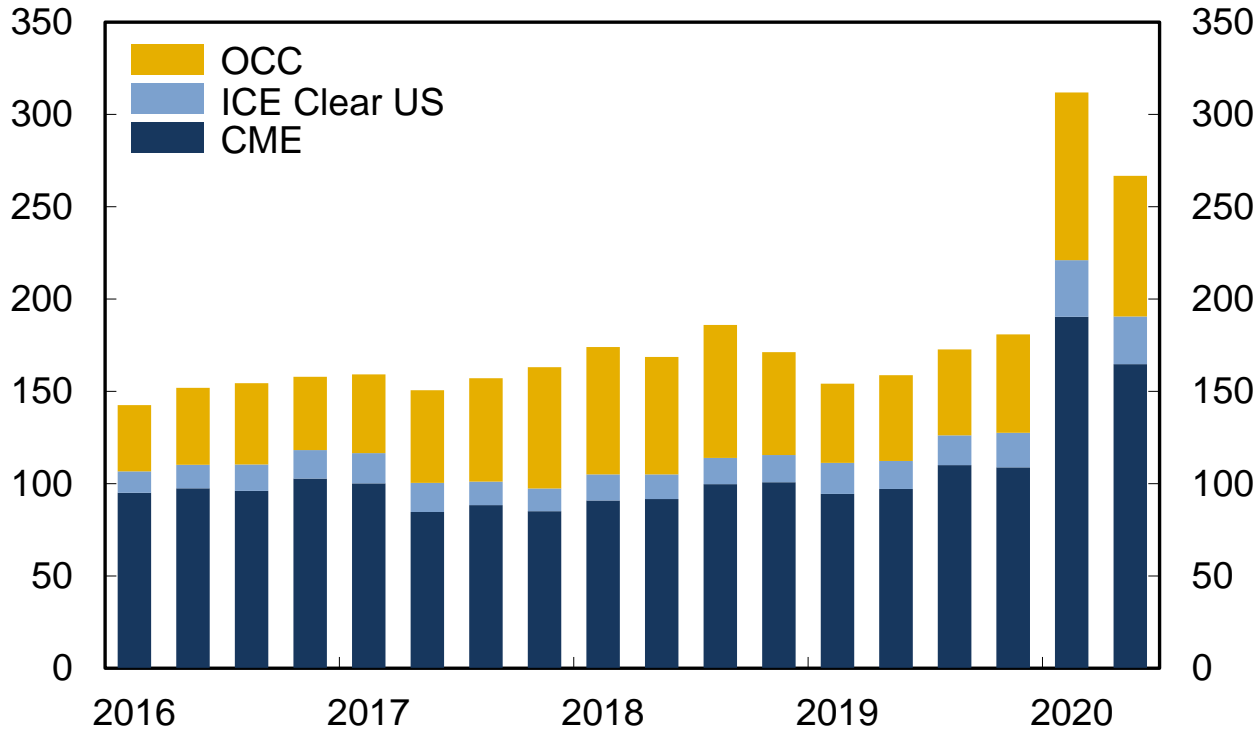
Note: Light blue represents aggregate variation margin payments and dark blue represents net initial margin payments. Series covers February 3, 2020 through April 30, 2020. Excludes OCC.

# 3.6.1.4 Initial Margin: U.S. Exchange Traded Derivatives

Billions of US\$

As Of: 2020 Q2

Billions of US\$



Source: ClarusFT, PFMI Quantitative Disclosures

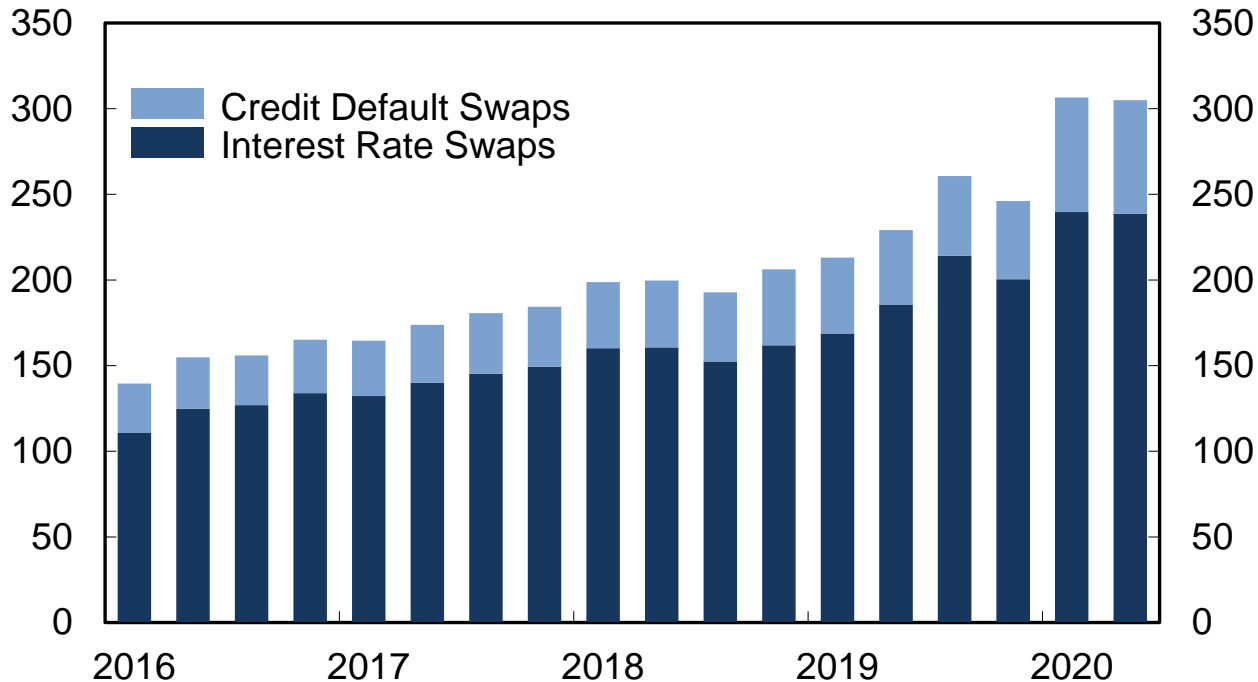
Note: Total initial margin required as reported in PFMI quantitative disclosures; includes house and client accounts.

### 3.6.1.5 Initial Margin: OTC Derivatives

Billions of US\$

As Of: 2020 Q2

Billions of US\$



Source: ClarusFT, PFMI  
Quantitative Disclosures

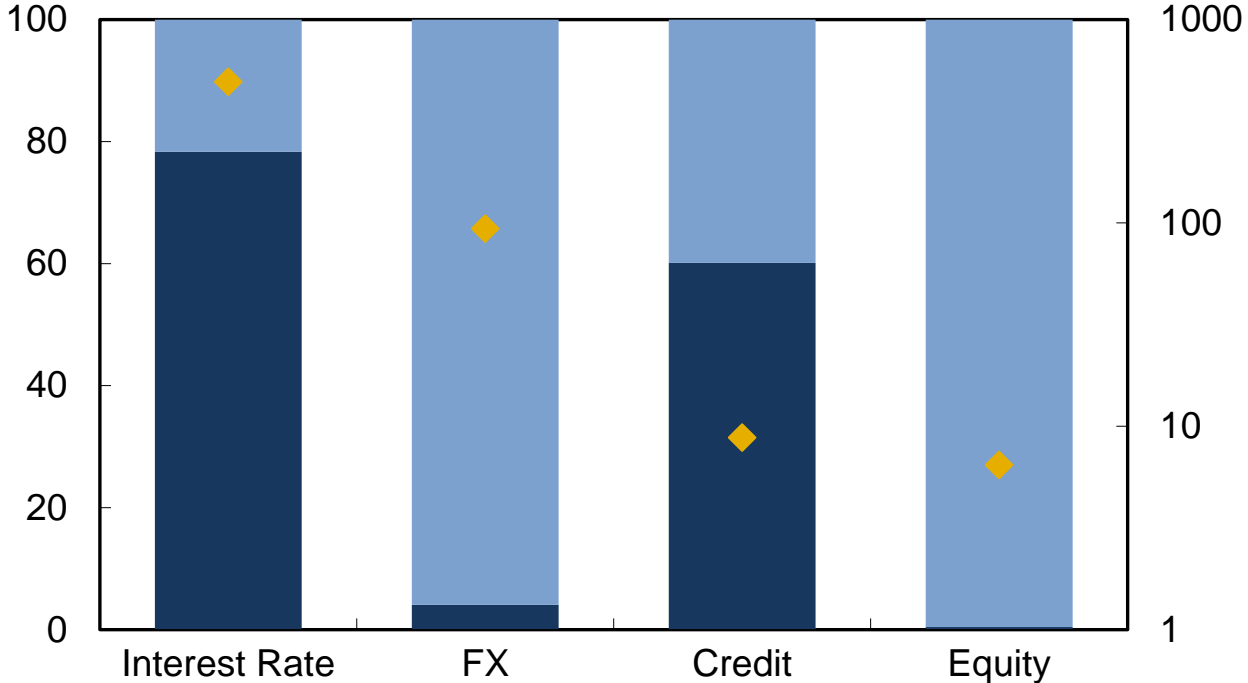
Note: Total initial margin required as reported in PFMI quantitative disclosures; includes house and client accounts. Interest rate swaps margin includes LCH Ltd. and CME. Credit default swaps margin include CME, ICC, ICEU, and LCH SA). CME ceased clearing credit default swaps in Mar. 2018.

# 3.6.1.6 Global OTC Central Clearing Market Share

Percent

As Of: 2020 Q2

Trillions of US\$ (Log)



Source: BIS

Not Cleared (left axis)
  Cleared (left axis)
  Total Notional Outstanding (right axis)

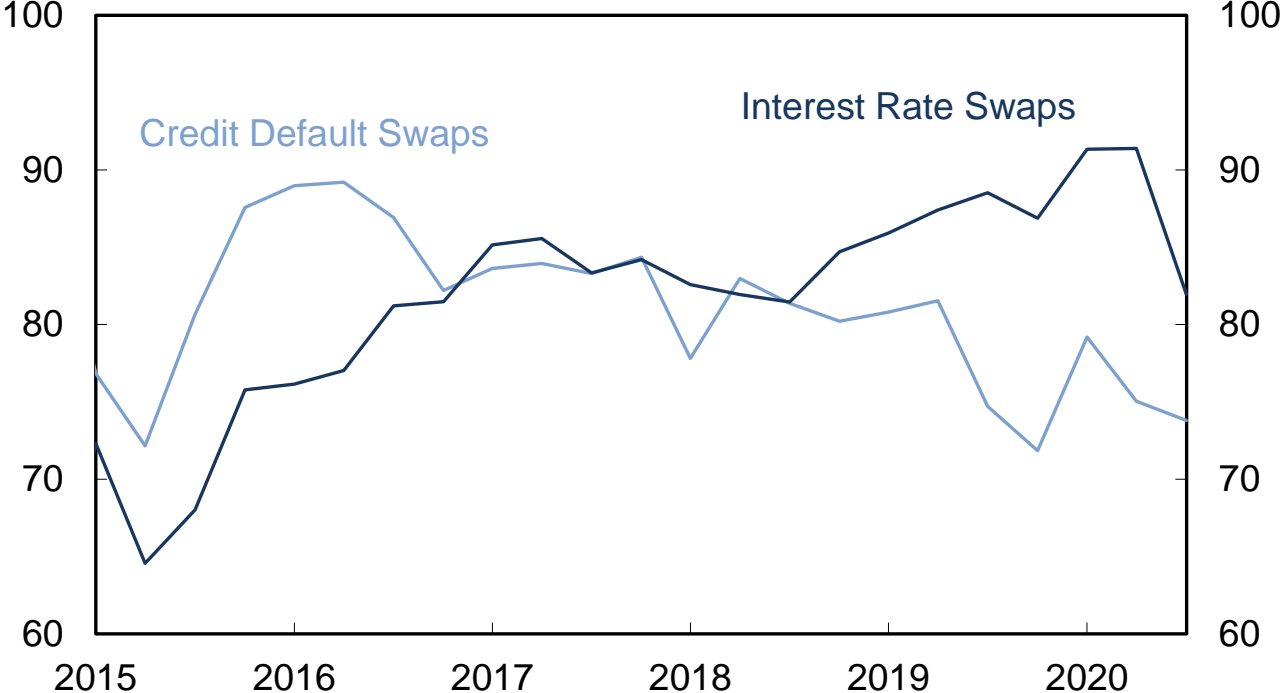


### 3.6.1.7 Average Clearing Rates for OTC Trading

Percent

As Of: 2020 Q3

Percent



Source: CFTC

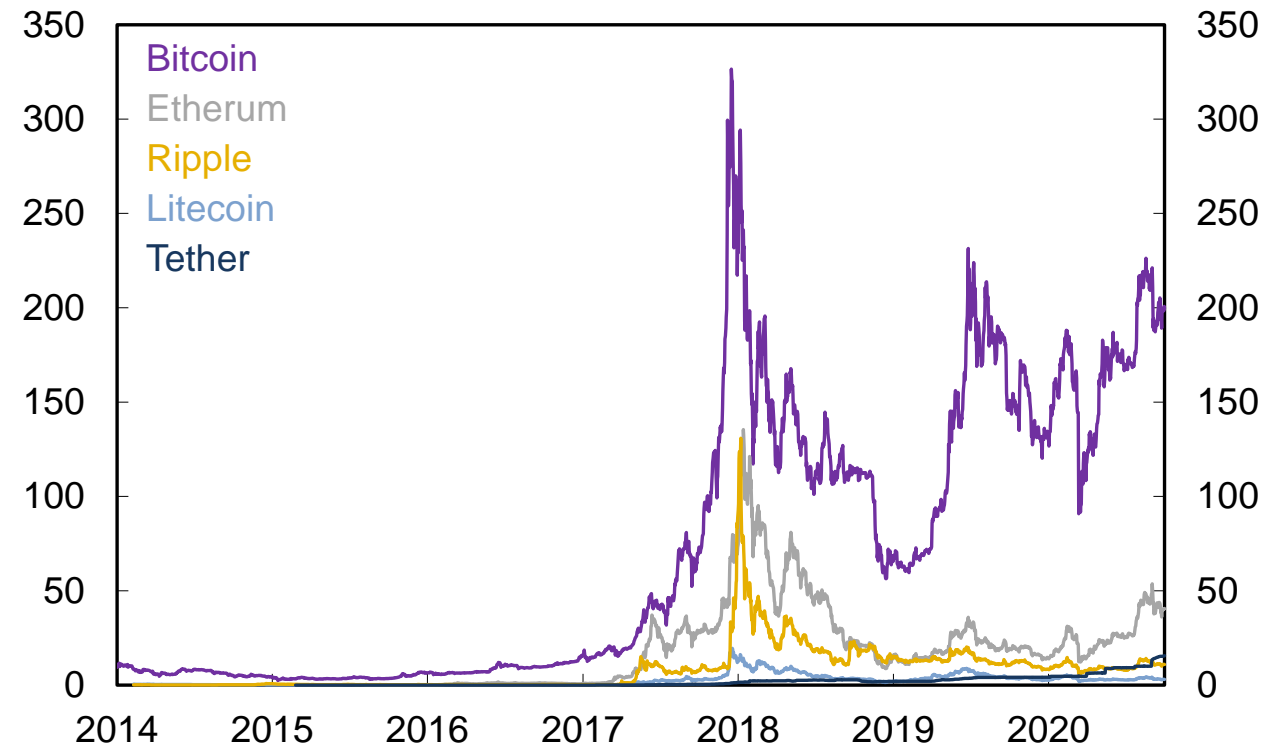
Note: Gross notional of new transactions.  
Excludes security-based swaps.

### 3.6.3.1 Market Capitalization of Certain Blockchain-Based Digital Assets

Billions of US\$

As Of: 30-Sep-2020

Billions of US\$



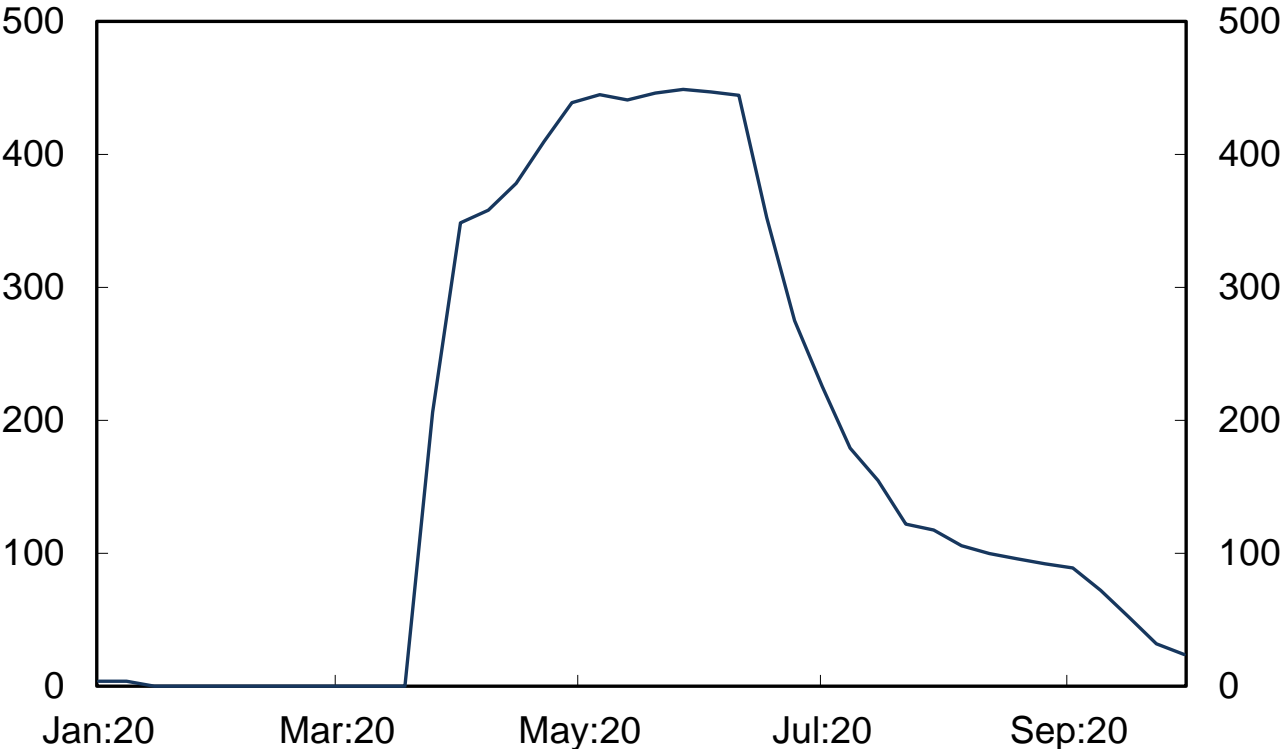
Source: Coinmarketcap.com; OFR

### 3.7.1.1 Federal Reserve Swap Lines

Billions of US\$

As Of: 30-Sep-2020

Billions of US\$



Source: Federal Reserve

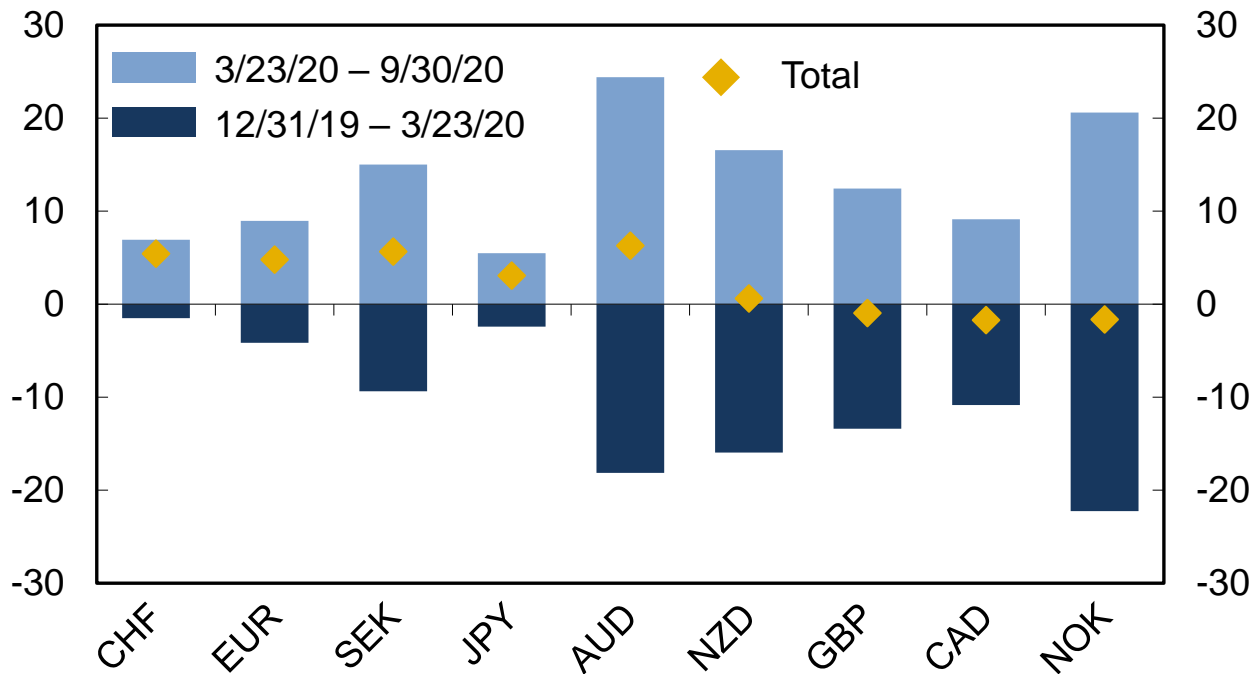
Note: Wednesday levels.

### 3.7.1.2 Change in USD Exchange Rates, Advanced Economies

Percent

As Of: 30-Sep-2020

Percent



Source: Federal Reserve,  
Haver Analytics

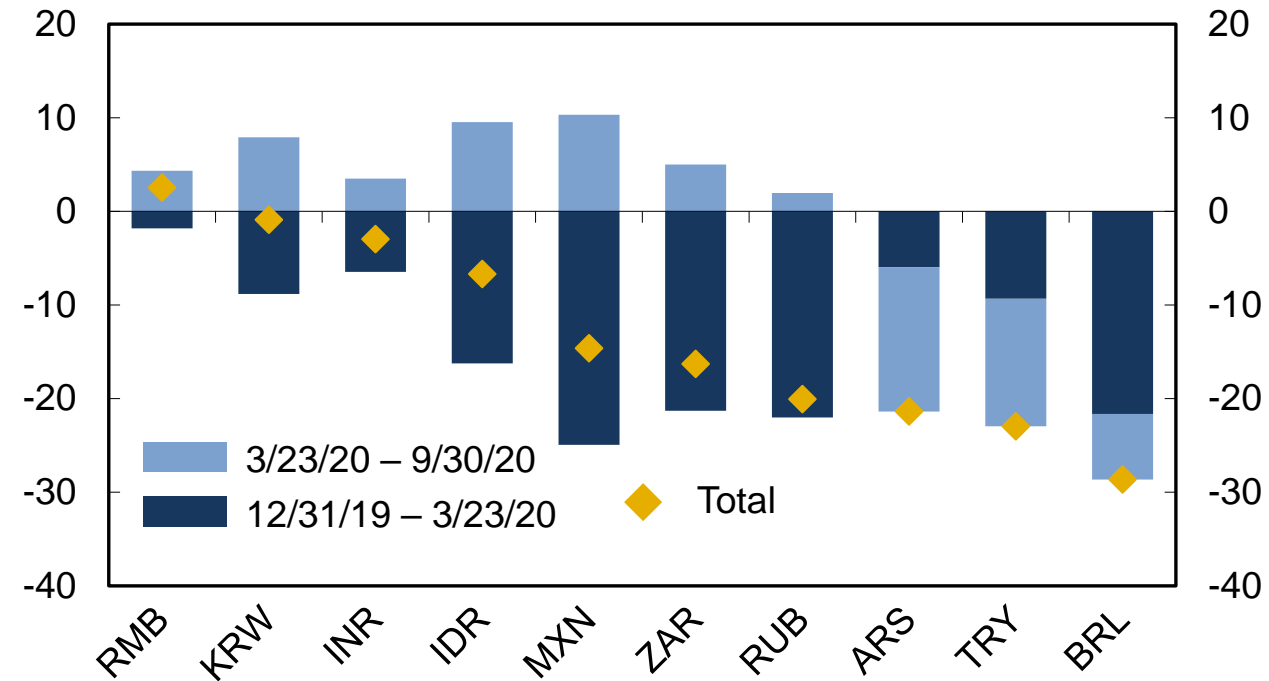
Note: Percent change relative to end-2019. Positive indicates appreciation of listed currency. Swiss Franc (CHF), Euro (EUR), Swedish Krona (SEK), Japanese Yen (JPY), Australian Dollar, (AUD) New Zealand Dollar (NZD), British Pound (GBP), Canadian Dollar (CAD), and Norwegian Krone (NOK).

### 3.7.1.3 Change in USD Exchange Rates, EMEs

Percent

As Of: 30-Sep-2020

Percent



Source: Federal Reserve, Wall Street Journal, Haver Analytics

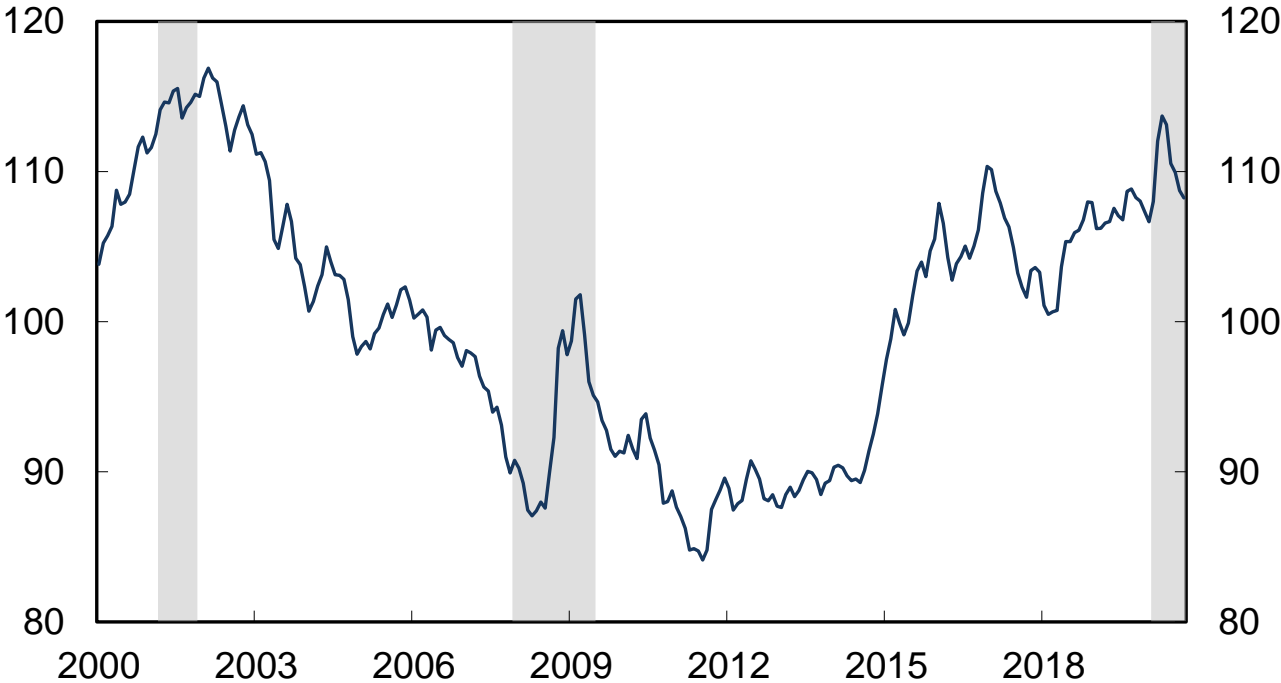
Note: Percent change relative to end-2019. Chinese renminbi (RMB), Korean won (KRW), Indian rupee (INR), Indonesian rupiah (IDR), Mexican peso (MXN), South African rand (ZAR), Russian ruble (RUB), Argentine peso (ARS), Turkish lira (TRY), Brazilian real (BRL). Positive indicates appreciation of listed currency.

# 3.7.1.4 Real U.S. Dollar Trade-Weighted Index

Index

As Of: Sep-2020

Index



Source: Federal Reserve,  
Haver Analytics

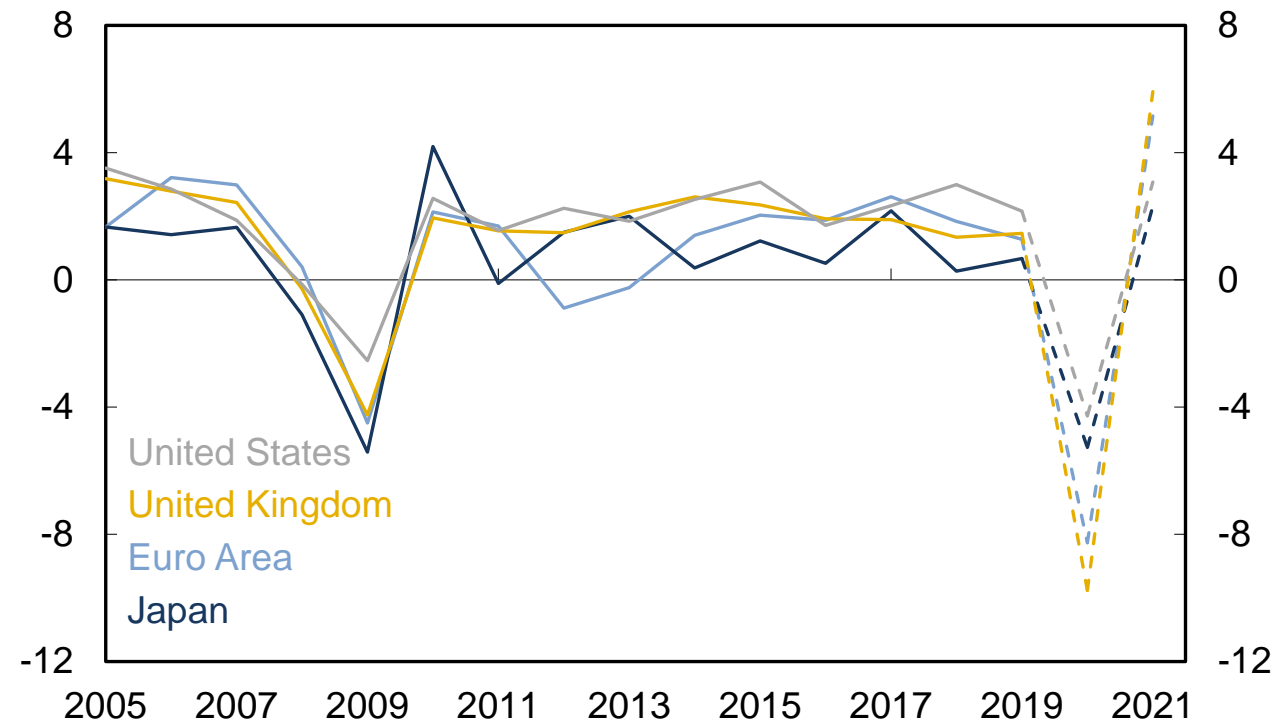
Note: Index shown as a share of its 20-year average. Real USD Trade-Weighted Index is a weighted average of the FX value of the USD against the currencies of a broad group of major U.S. trading partners. Gray bars signify NBER recessions.

### 3.7.2.1 Advanced Economies Real GDP Growth

Percent

As Of: Oct-2020

Percent



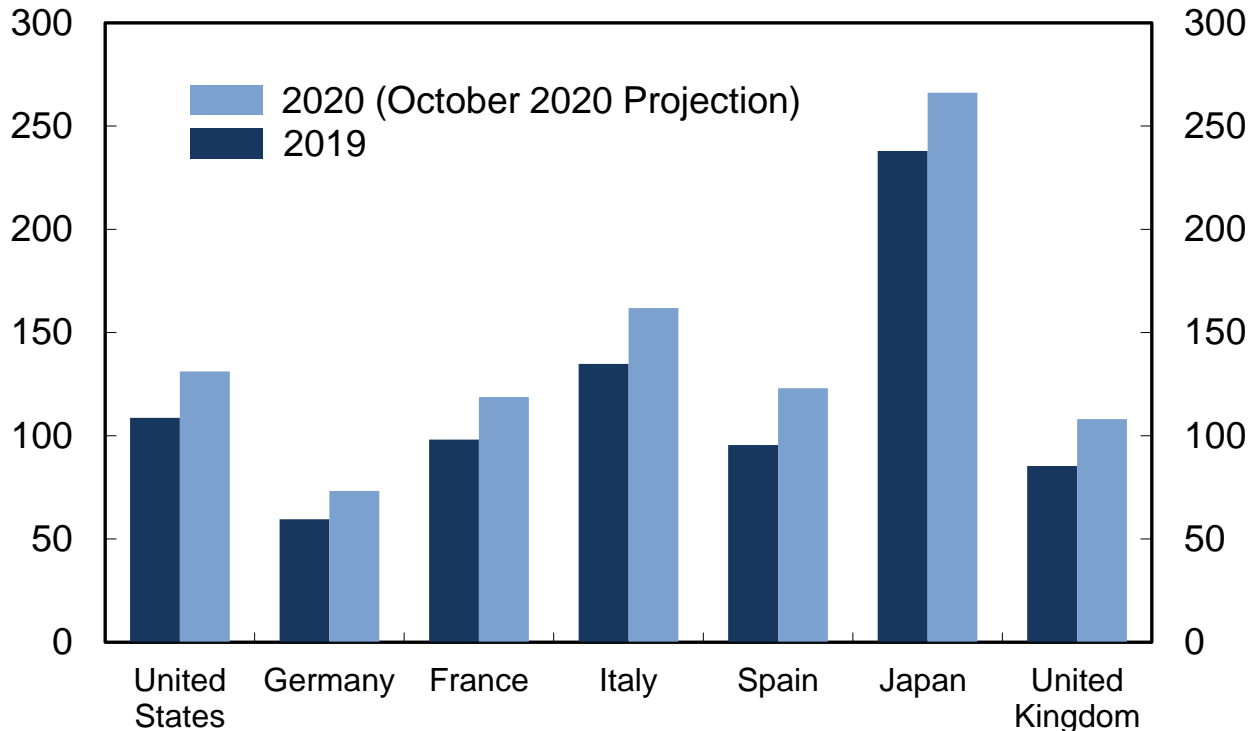
Source: IMF WEO,  
Haver Analytics

Note: Annual change in GDP, constant prices. Dotted lines represent the IMF's most recent projections for 2020 and 2021.

### 3.7.2.2 General Government Gross Debt to GDP

Percent

Percent



Source: IMF WEO

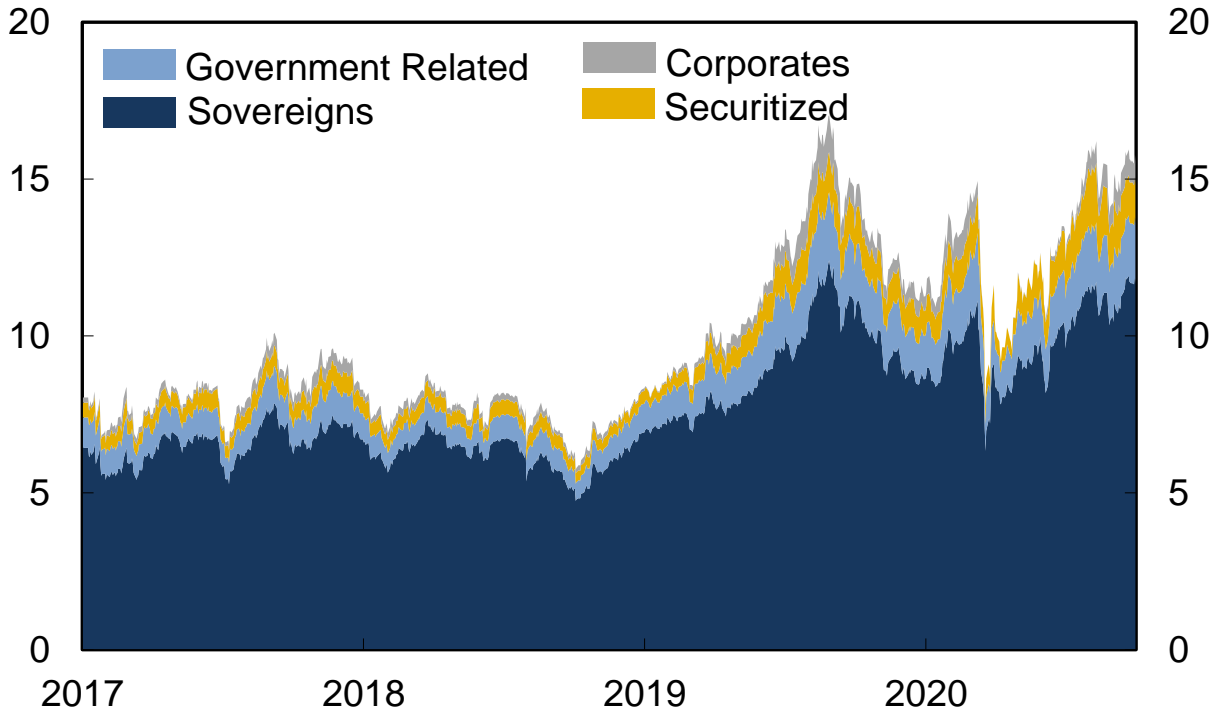


### 3.7.2.3 Outstanding Negative Yielding Debt

Trillions of US\$

As Of: 30-Sep-2020

Trillions of US\$



Note: Market value of Bloomberg Barclays Global Aggregate Negative Yielding Debt Index, which is a sub-index of the Bloomberg Barclays Aggregate Index. In 2017, SIFMA estimated that the aggregate index covers approximately half of the value of global bonds outstanding.

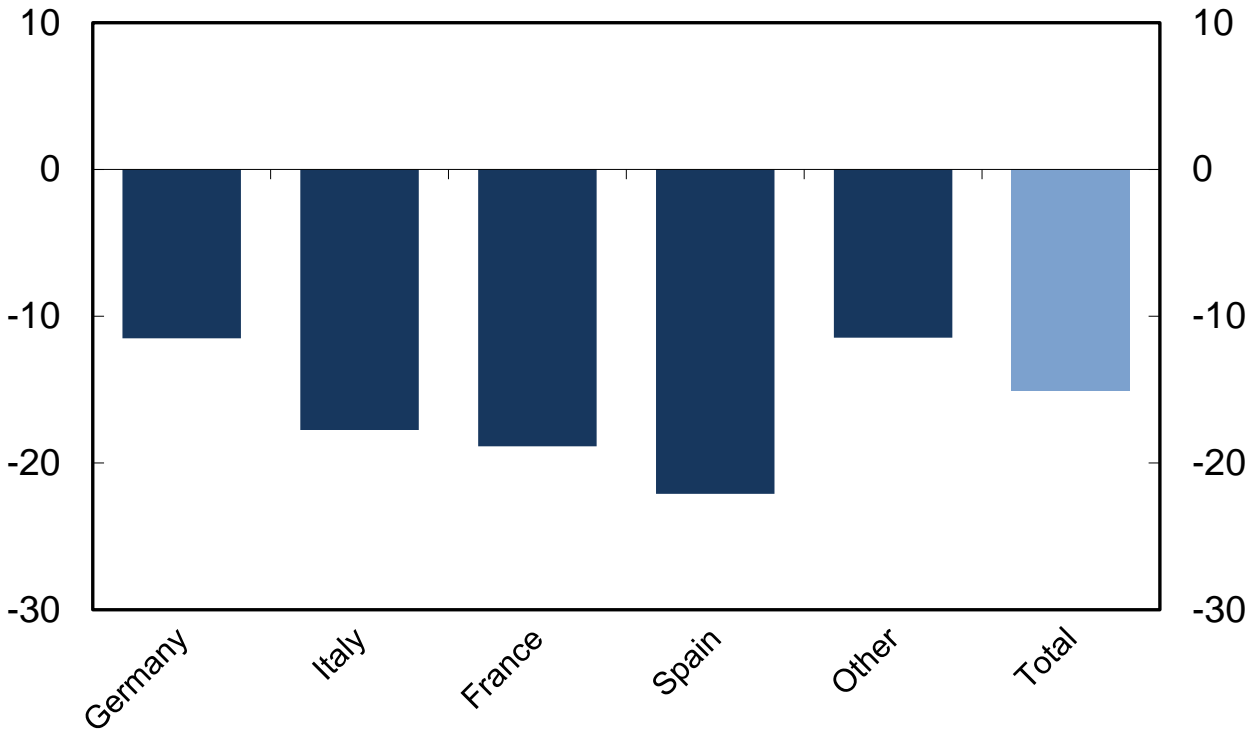
Source: Bloomberg, L.P.

### 3.7.2.4 Euro Area H1 2020 Real GDP

Percent

As Of: 2020 Q2

Percent



Note: Percentage change in real GDP Q2 2020 compared with Q4 2019. Seasonally adjusted.

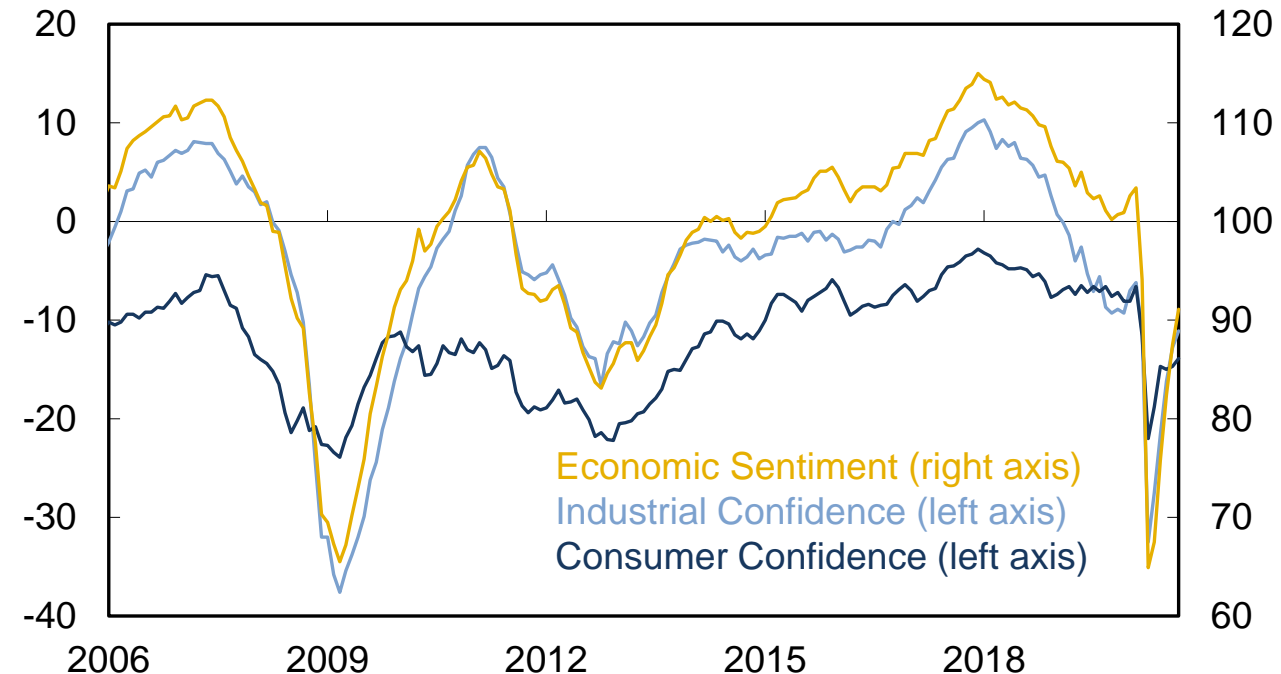
Source: Eurostat, Haver Analytics

### 3.7.2.5 Euro Area Business and Consumer Surveys

Percent

As Of: Sep-2020

Index



Economic Sentiment (right axis)  
Industrial Confidence (left axis)  
Consumer Confidence (left axis)

Source: European Commission,  
Haver Analytics

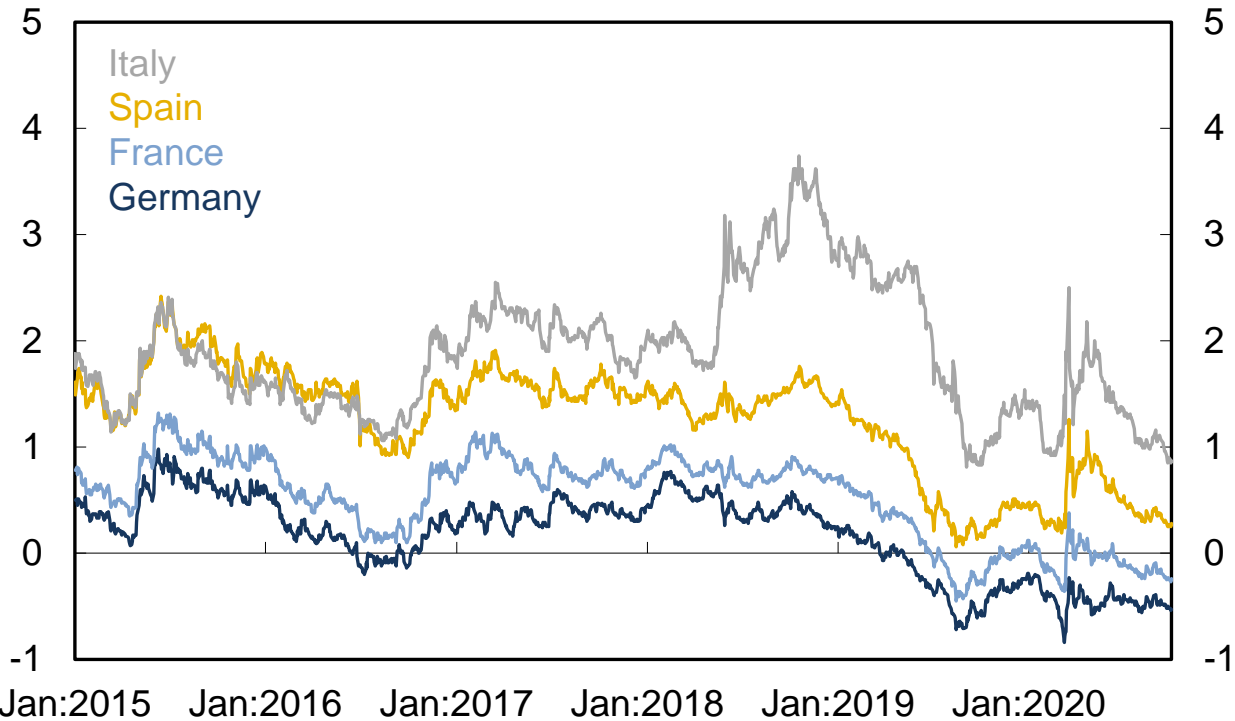
Note: Confidence surveys calculated by subtracting the percentage of negative responses from the percentage of favorable responses. For economic sentiment index, 100 = long-term average.

### 3.7.2.6 Euro Area 10-Year Sovereign Yields

Percent

As Of: 30-Sep-2020

Percent



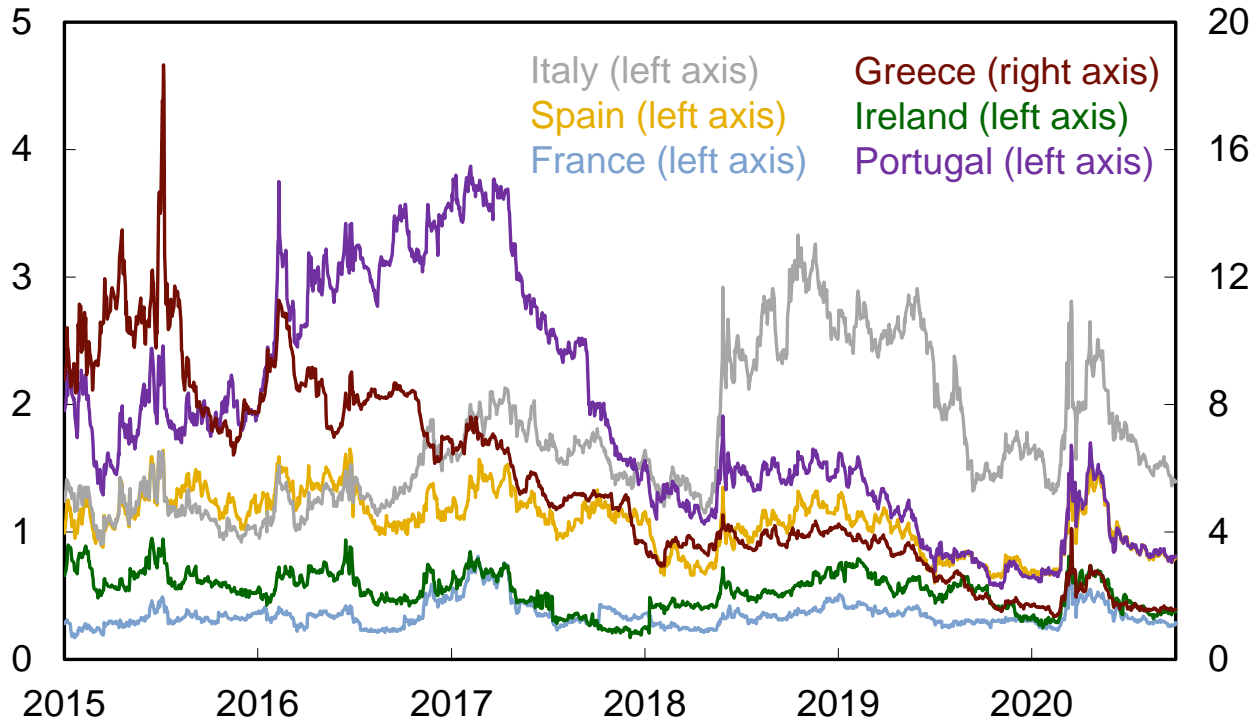
Source: Reuters, Haver Analytics

# 3.7.2.7 Euro Area 10-Year Spreads

Percent

As Of: 30-Sep-2020

Percent



Source: Reuters, Haver Analytics

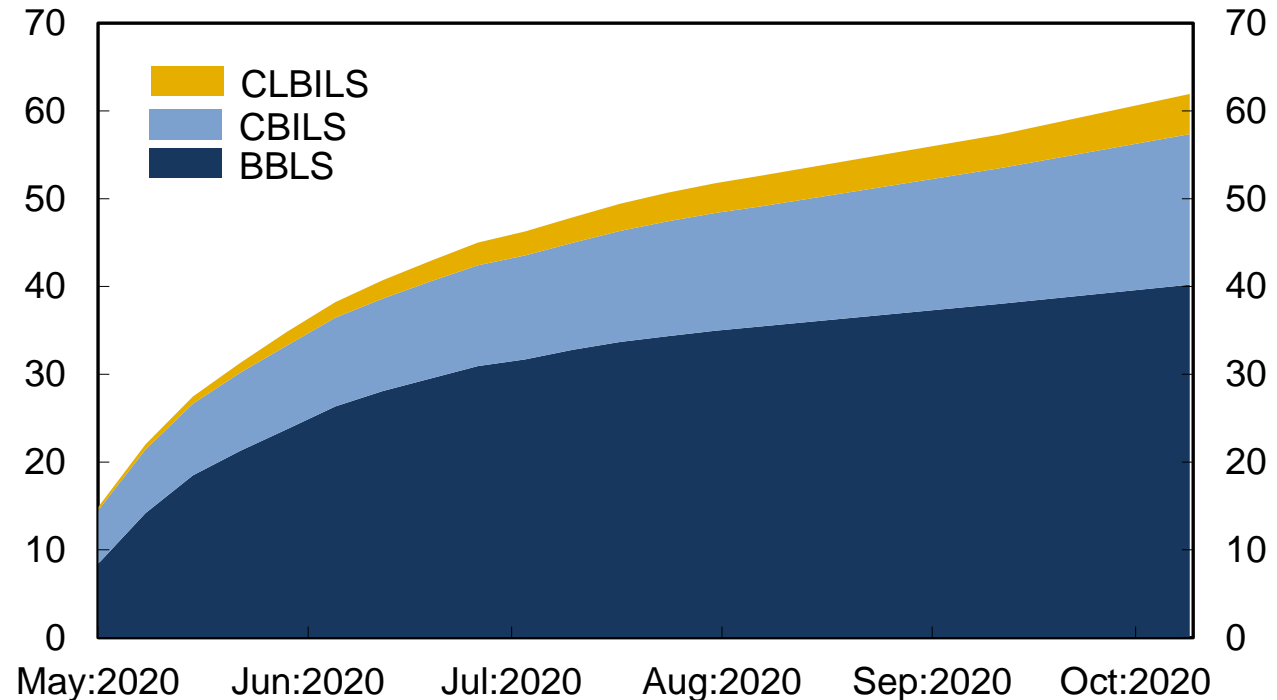
Note: Calculated as the weekly average spread between local 10Y and German 10Y.

# 3.7.2.8 UK COVID-19 Business Loan Schemes

Billions of GBP

As Of: 18-Oct-2020

Billions of GBP



Note: Bounce Back Loan Scheme (BBLs), Coronavirus Large Business Interruption Loan Scheme (CLBILs), Coronavirus Business Interruption Loan Scheme (CBILs). Data reported monthly instead of weekly after August 16, 2020.

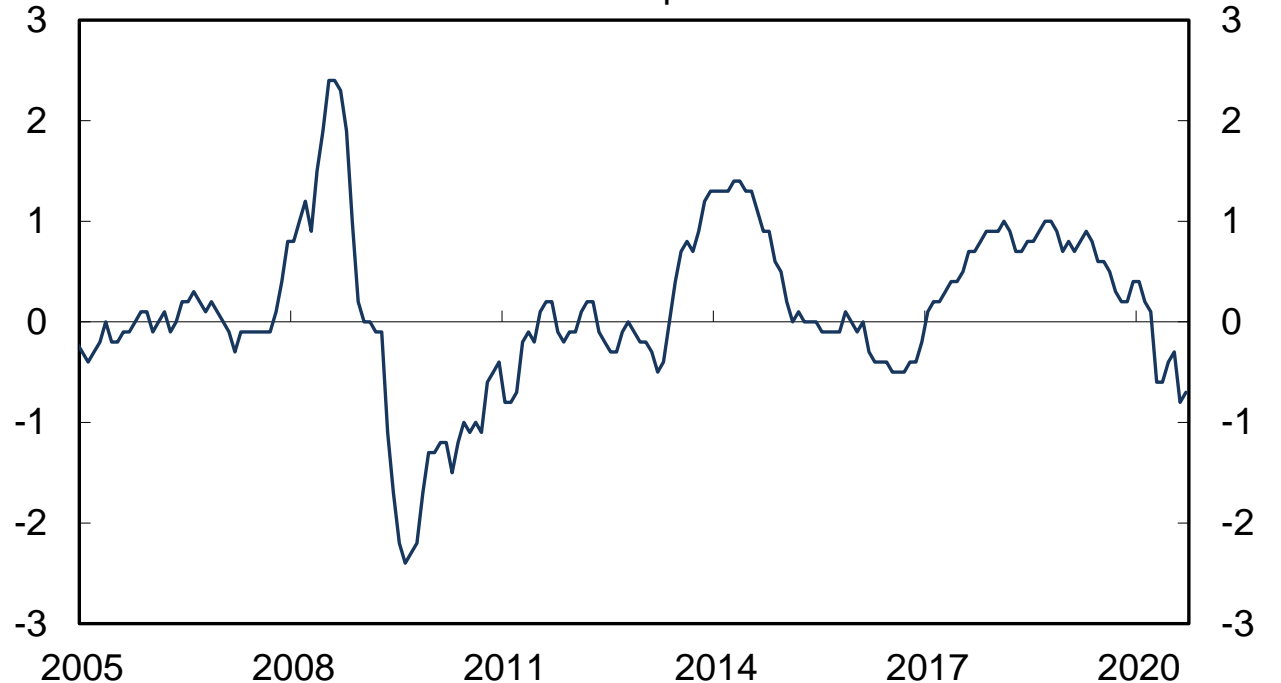
Source: HM Treasury

### 3.7.2.9 Japanese Consumer Price Inflation

Percent

As Of: Sep-2020

Percent



Source: Bank of Japan,  
Haver Analytics

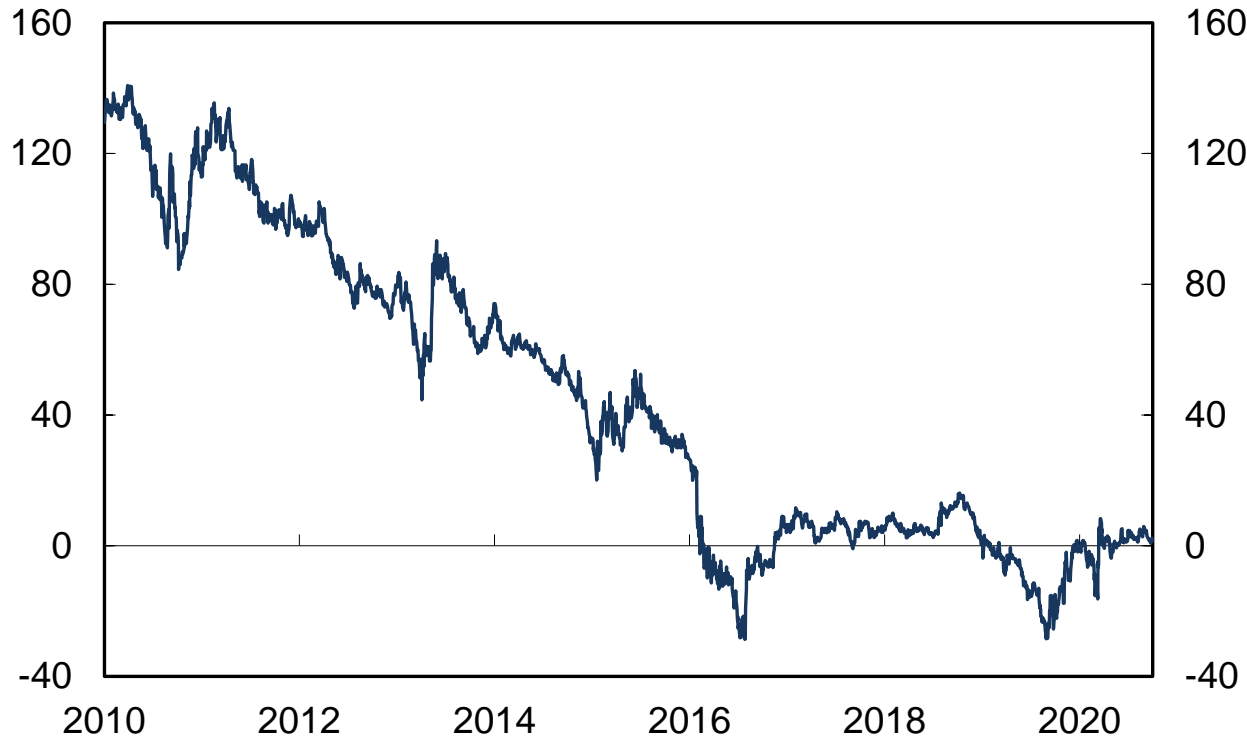
Note: Data represents year-over-year percentage change. CPI excludes fresh food and is adjusted for the consumption tax increase that took effect in April 2014.

# 3.7.2.10 Japan 10-Year Government Bond Yield

Basis Points

As Of: 30-Sep-2020

Basis Points



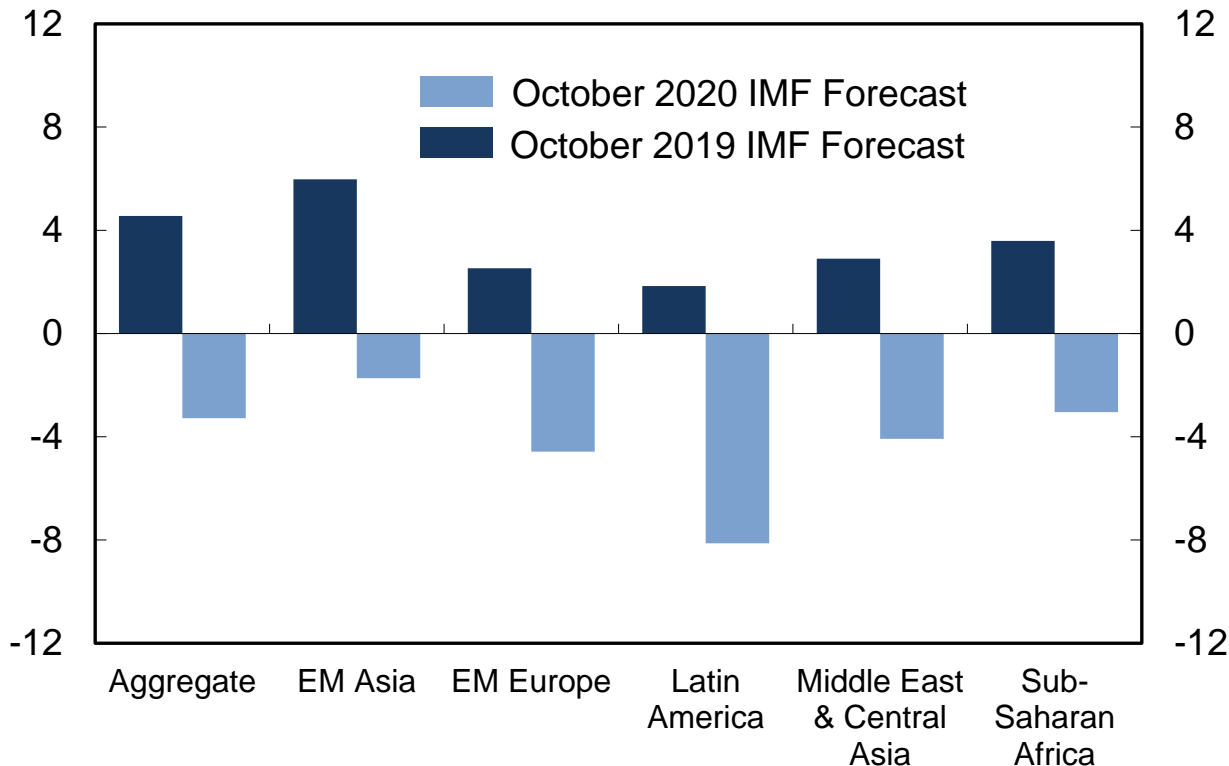
Source: Bloomberg, L.P.



### 3.7.3.1 2020 Real GDP Revisions for Developing Economies

Percent

Percent

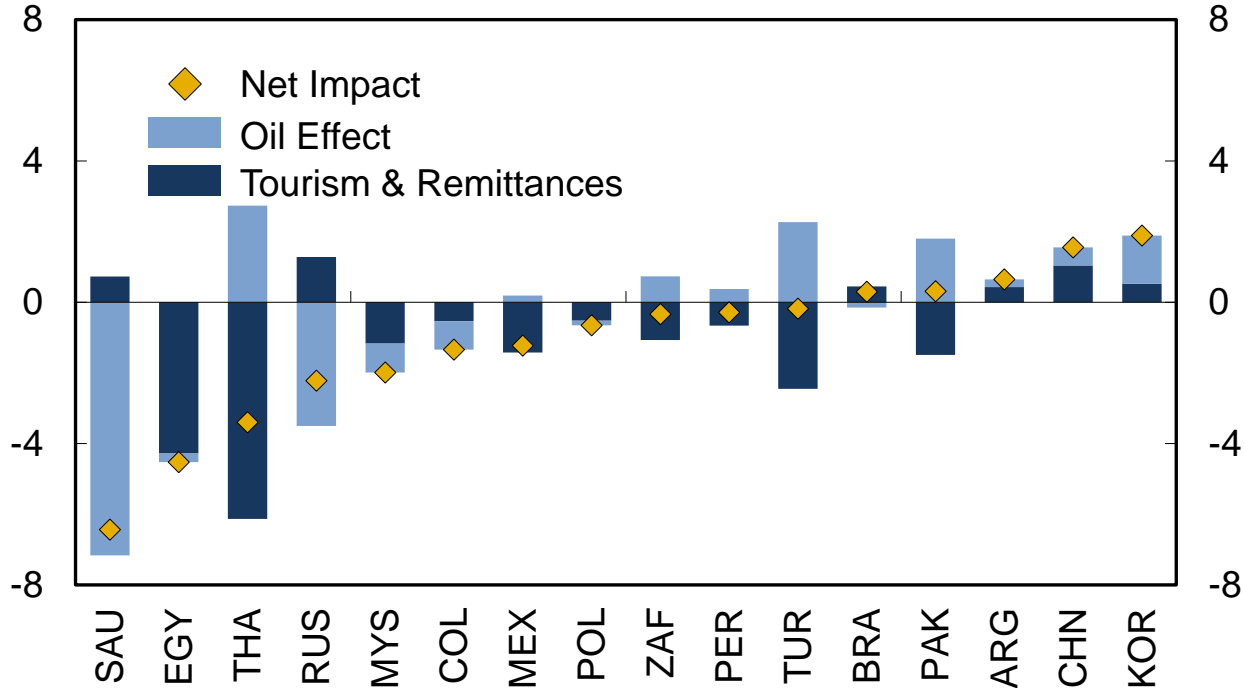


Source: IMF WEO

### 3.7.3.2 COVID-19 Impact on 2020 Current Account Balances

Percent of GDP

Percent of GDP



Source: IMF July 2020  
External Sector Report

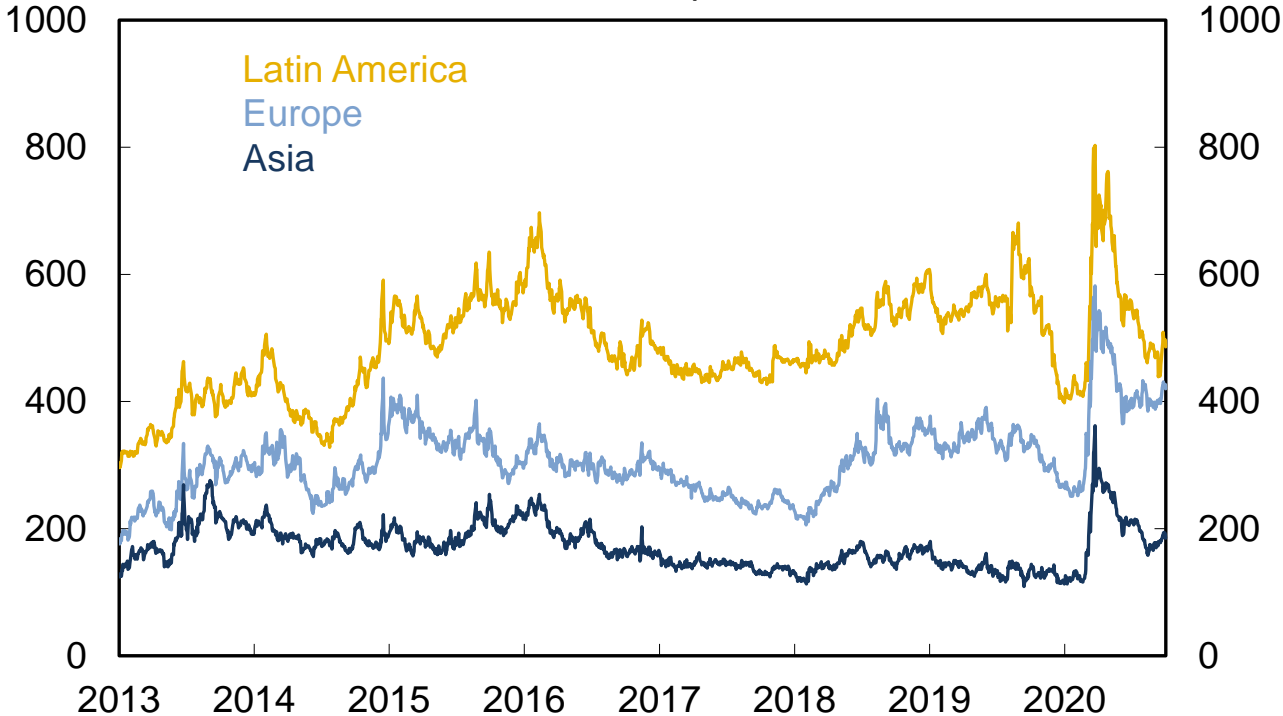
Note: Estimated net direct impact of specific factors on current account balances for select EMEs.

### 3.7.3.3 Emerging Market Sovereign Bond Spreads

Basis Points

As Of: 30-Sep-2020

Basis Points



Note: JP Morgan EMBI+ Sovereign Spreads indices for each region.

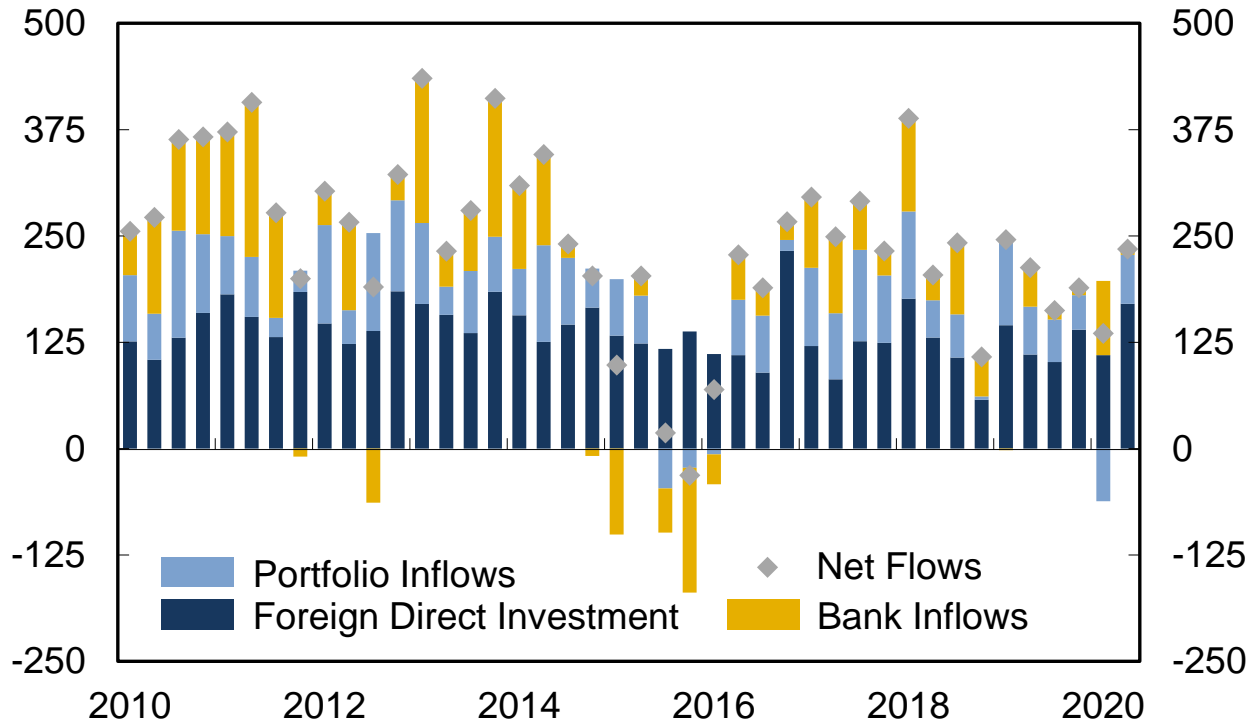
Source: JP Morgan, Haver Analytics

### 3.7.3.4 Foreign Investor Capital Inflows to EMEs

Billions of US\$

As Of: 2020 Q2

Billions of US\$



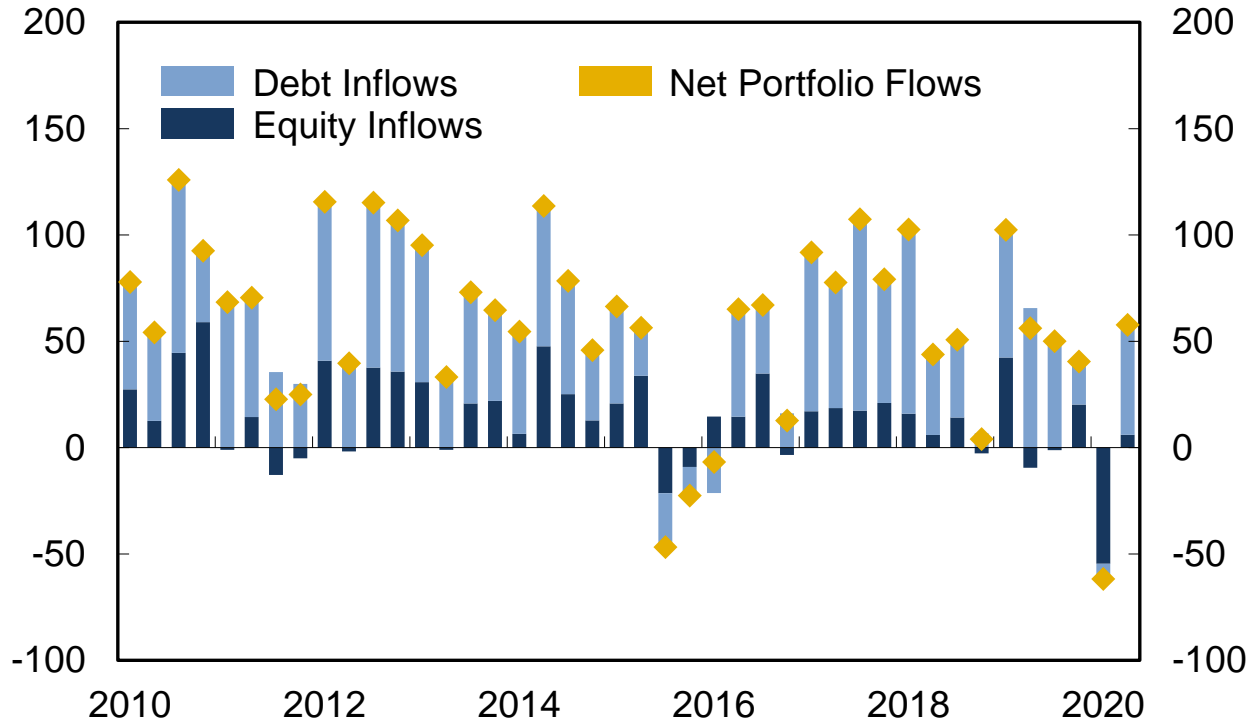
Source: IMF, Haver Analytics

### 3.7.3.5 Foreign Investor Portfolio Inflows to EMEs

Billions of US\$

As Of: 2020 Q2

Billions of US\$



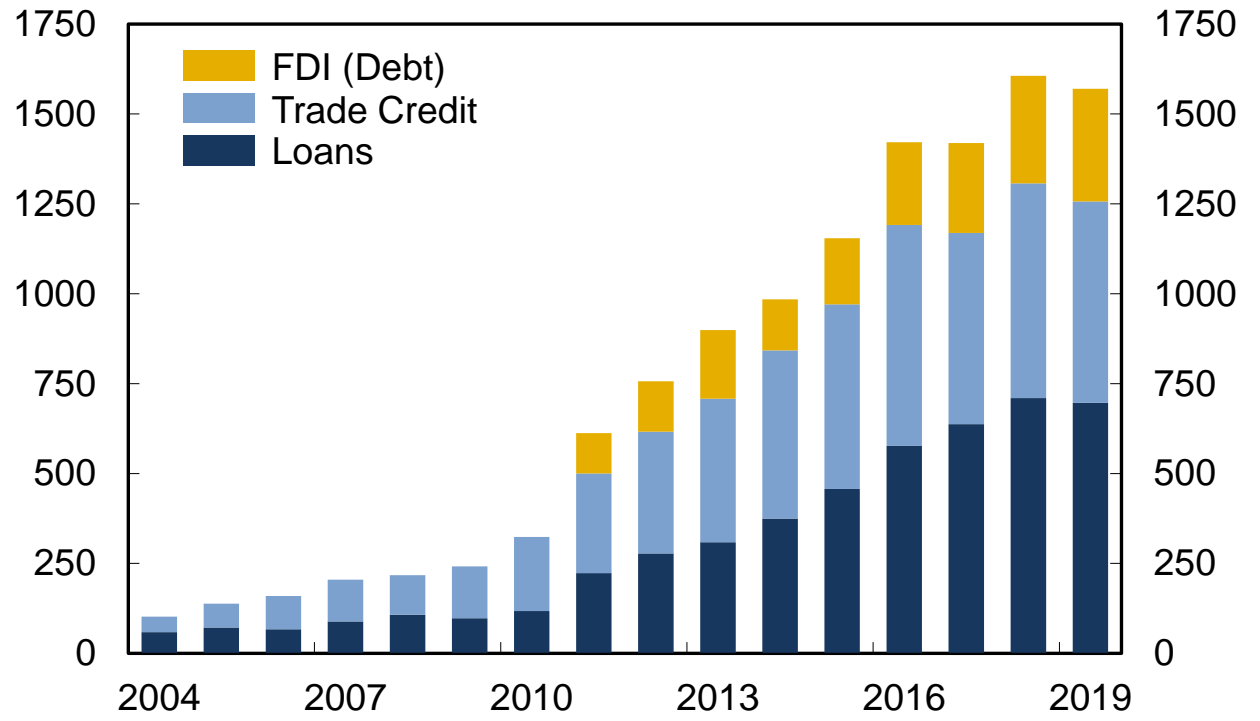
Source: IMF, Haver Analytics

# 3.7.3.6 Chinese Overseas Lending

Billions of US\$

As Of: 2019

Billions of US\$



Source: State Administration of Foreign Exchange, Haver Analytics

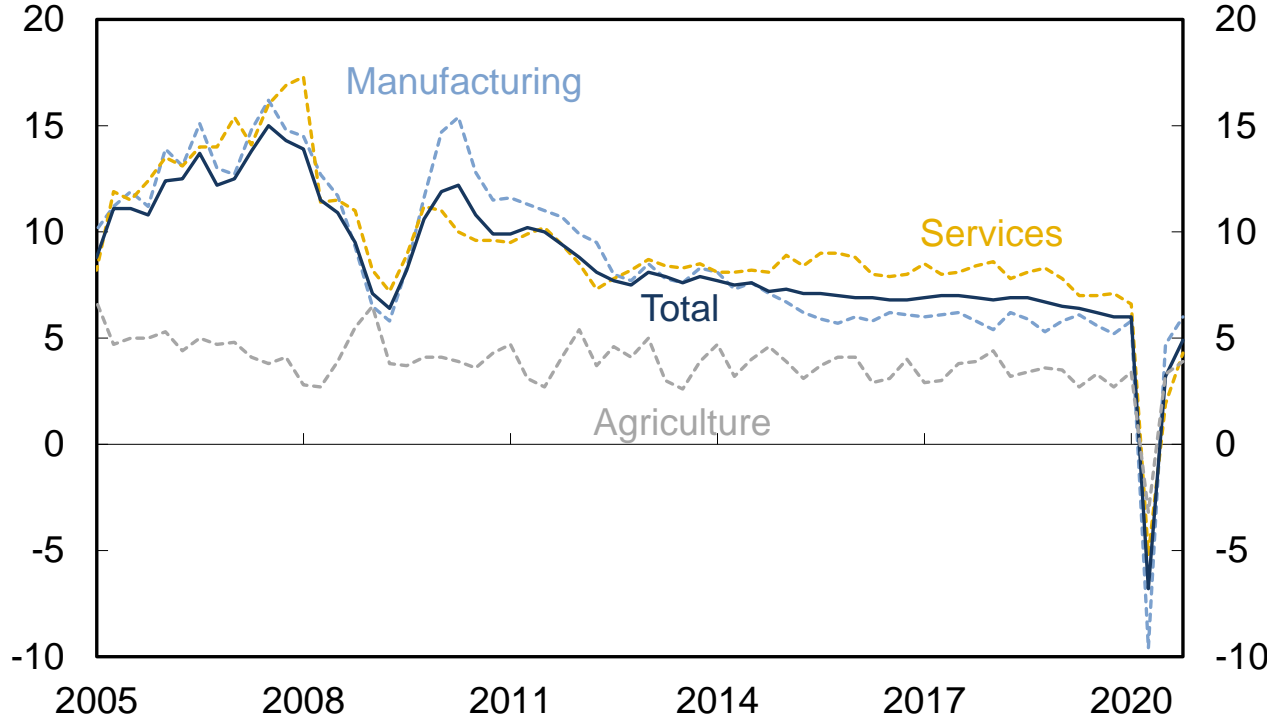
Note: FDI (Debt) reported from 2011 onwards.

### 3.7.3.7 Chinese Real GDP Growth and its Components

Percent

As Of: 2020 Q3

Percent



Source: China National Bureau of Statistics, Haver Analytics

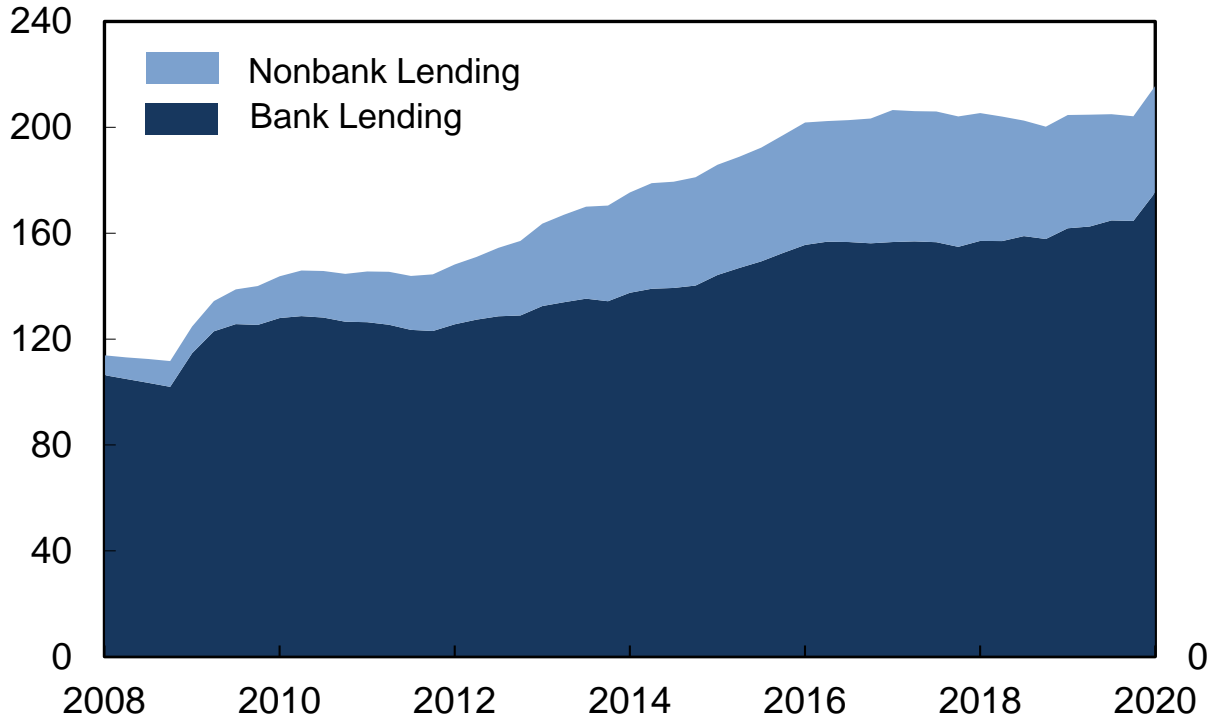
Note: Year-over-year percentage change.

### 3.7.3.8 Credit to the Chinese Nonfinancial Private Sector

Percent of GDP

As Of: 2020 Q1

Percent of GDP



Source: China National Bureau of Statistics, BIS, Haver Analytics

Note: Rolling 4-quarter sum of GDP.

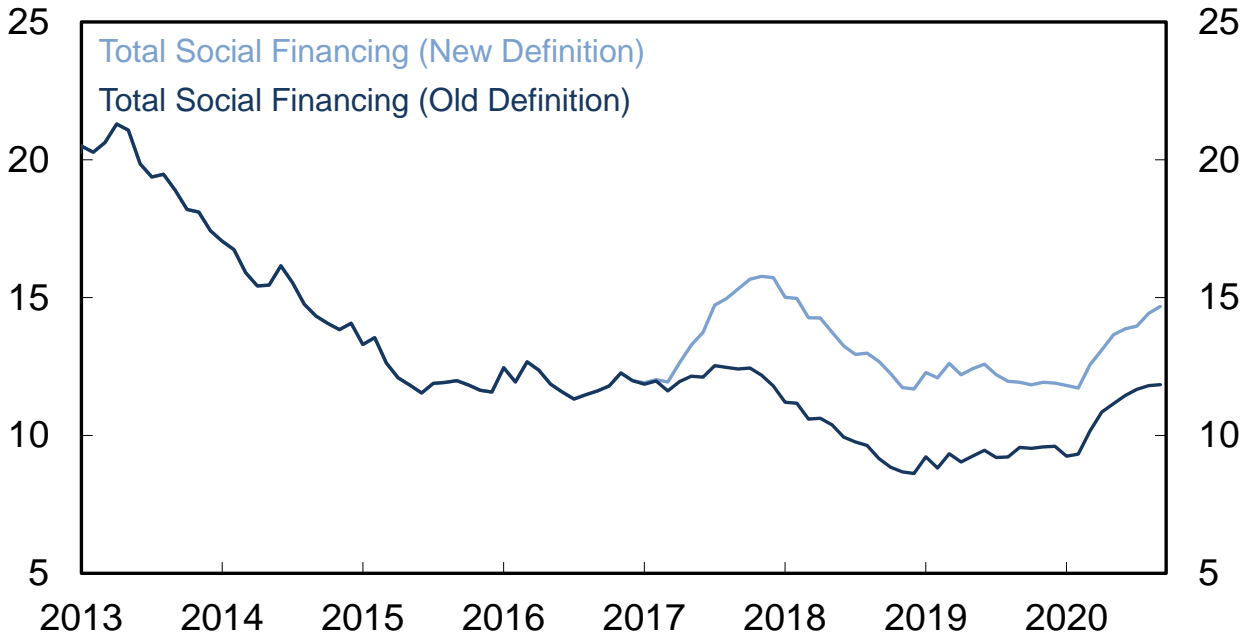


### 3.7.3.9 Chinese Credit Growth

Percent

As Of: Sep-2020

Percent



Source: PBOC, CCDC,  
Haver Analytics, Staff  
Calculations

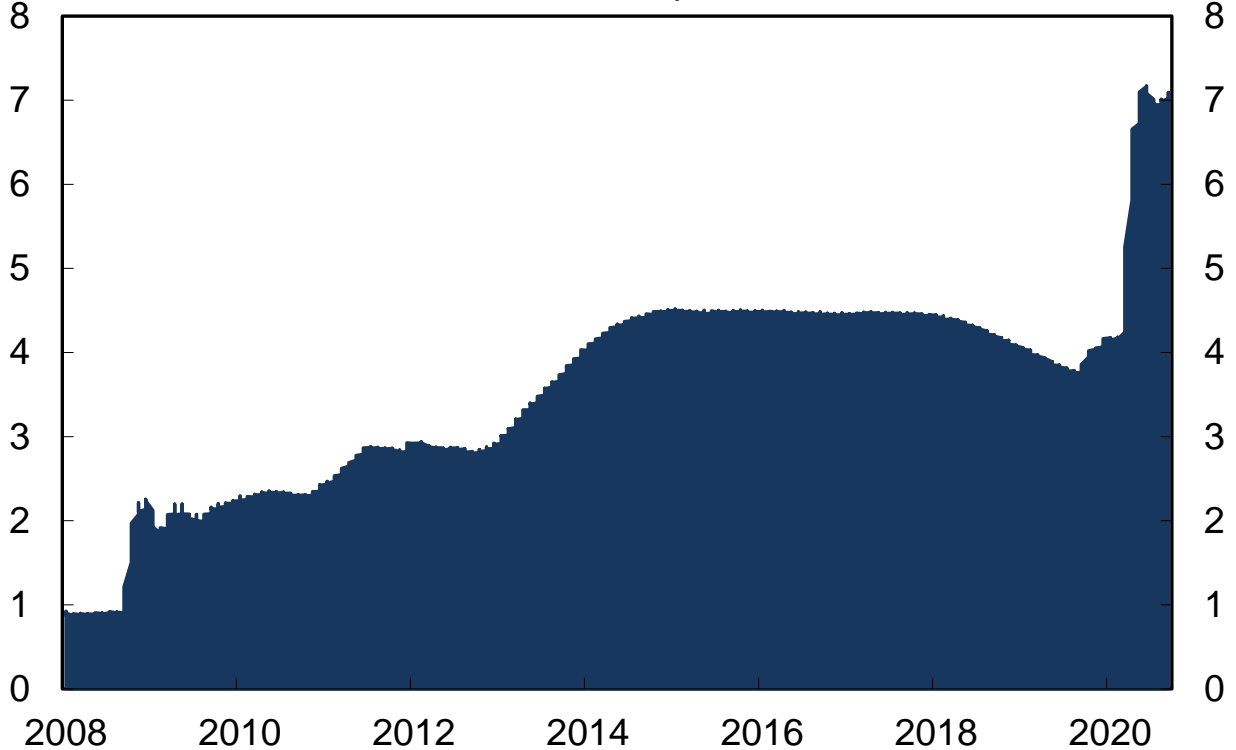
Note: Calculated as the year-over-year percentage change in total social financing (TSF) flows since 2002. TSF refers to the total volume of financing provided by the financial system to the real economy. TSF (old definition) excludes loan write-offs, ABS of depository institutions, and local government special bonds.

# 4.1.1 Total Assets of the Federal Reserve

Trillions of US\$

As Of: 30-Sep-2020

Trillions of US\$



Source: Federal Reserve, FRED

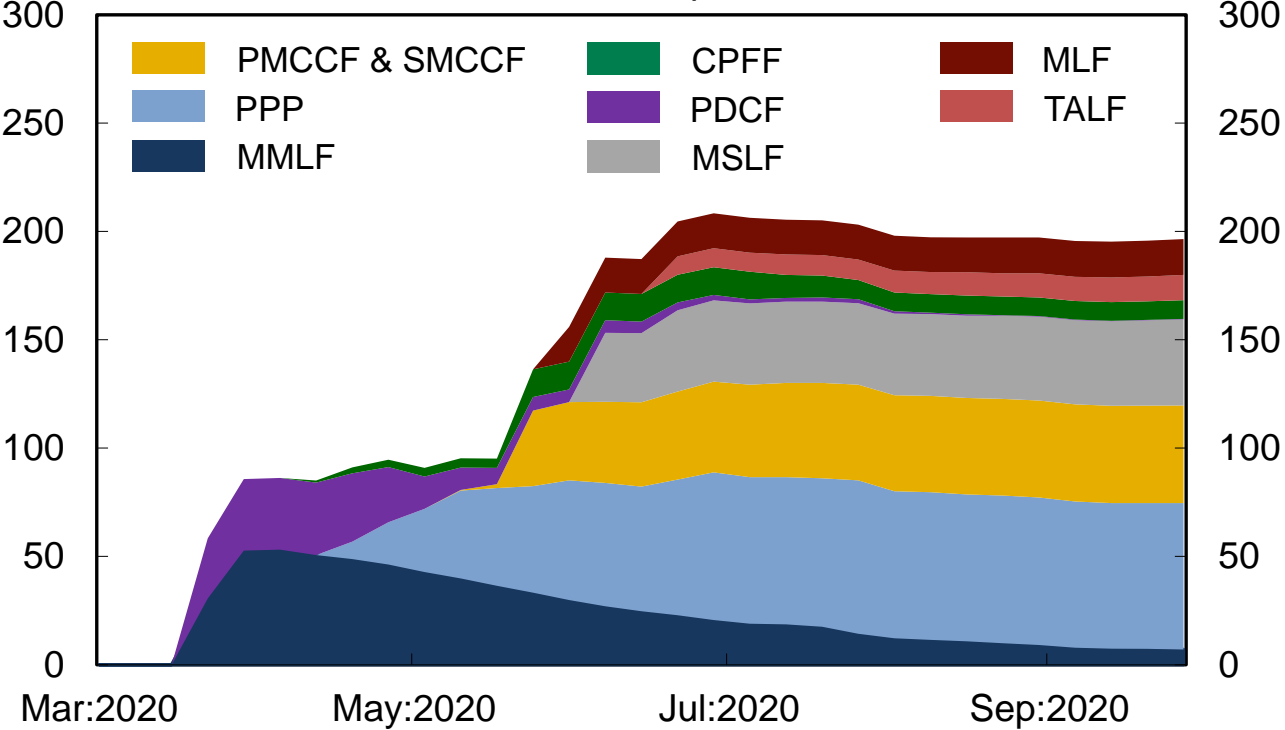
Note: Wednesday level.

# 4.1.2 Net Portfolio Holdings of 13(3) Facilities

Billions of US\$

As Of: 30-Sep-2020

Billions of US\$



Source: Federal Reserve, Haver Analytics

Note: Wednesday level.