HEALTHIER BUT CONSTRAINED: ARE POST-CRISIS PRUDENTIAL REGULATIONS HOLDING BACK CAPITAL MARKETS?

SIFMA INSIGHTS

MARCH 2018

Executive Summary

With the global financial crisis nearly a decade behind us, the U.S. financial system is stronger and more resilient. The largest U.S. banks, as identified by the Federal Reserve Board of Governors in its annual Comprehensive Capital Analysis and Review (CCAR) exam, are well capitalized and post healthy balance sheets.

The U.S. economy has also recovered well since the crisis. **Yet, with the banking system having absorbed hundreds of new regulations, we wonder how much stronger the economy could be if banks had the flexibility to release more liquidity into the system.** For example, the U.S. global systemically important banks (G-SIBs) are held to requirements above international standards, as U.S. regulators gold-plated SLR and LCR levels, among other requirements. CCAR banks have built up excess capital and liquidity to meet these new regulations.

This is liquidity that could otherwise be released into the economy, for example, to spur stagnant loan growth and improve lending to small businesses. Liquidity – defined as (cash + deposits at banks) / total assets – was 13.7% as of FY17 for the CCAR banks, up from only 3.9% in 2007. This is exaggerated for the G-SIBs, those exposed to a longer list of regulations given their size and importance to the global economy. This group's liquidity was 15.4% as of FY17, up from 3.7% in 2007.

While the U.S. already had an extensive financial services regulatory structure built up over a century, post-crisis regulations added to the number of regulations, increasing complexity and compliance costs for banks of all sizes. **The industry remains focused on establishing smart regulations, ensuring economic incentives and costs are calculatable, and enabling capital markets to run efficiently.** The goal is not to start the regulatory process over, but rather to recalibrate those regulations which may have had unintended consequences. This objective is in line with many regulatory jurisdictions which are undertaking reviews, such as the "call for evidence" in Europe; Project KISS at the CFTC; President Trump's executive order on regulating the U.S. financial system; and the expected review of the SLR (and other bank regulations) by the Fed.

HIGHER CAPITAL LEVELS

Setting the Scene

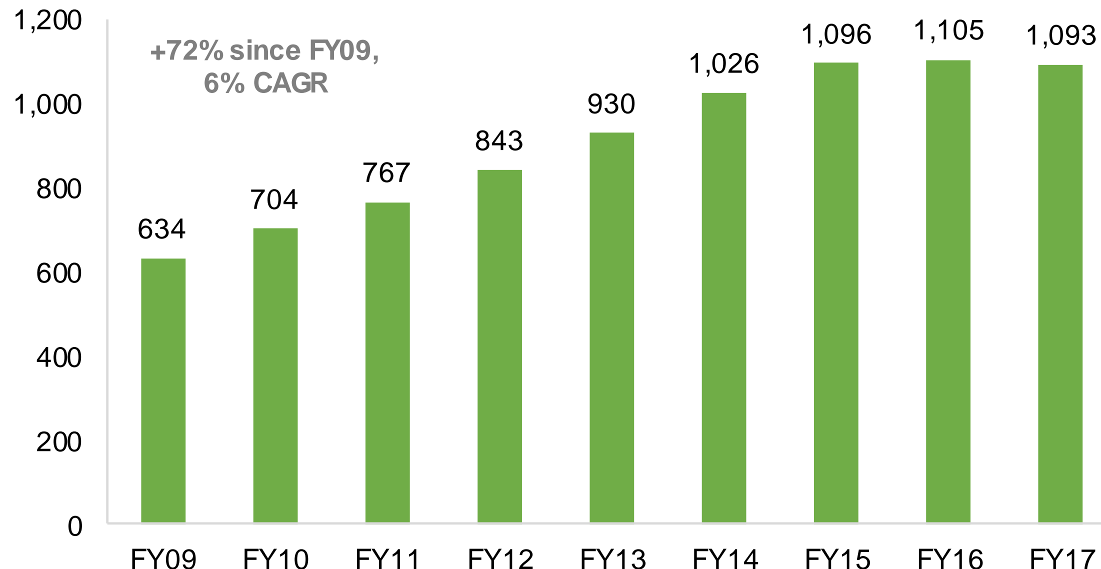
When analyzing the slides in this section – showing the growth in capital levels and ratios since the crisis – please note the following:

- There are 34 CCAR banks* (please see the Appendix), but only 8 G-SIBs
  - The 26 non G-SIBs are only held to a 7% minimum Basel III CET1 requirement
  - Yet, we compare the weighted average CET1 ratios for CCAR firms and non G-SIBs to the 9.5% maximum G-SIB requirement
  - **This is to emphasize the excess capital held by these smaller, less complex banks to meet all of the new regulations**
- It is important to note our time series goes back to 2009, but the FSB/BCBS did not publish the G-SIB methodology until November 2011
  - **In other words, firms were not "below" requirements, the requirements did not exist**
  - There has been substantial growth in capital ratios across all categories of banks

*The Senate recently passed the bipartisan Economic Growth, Regulatory Relief, and Consumer Protection Act (commonly referred to as the Crapo bill), which would increase the threshold for enhanced supervision, such as CCAR exams, to $250 billion from $50 billion. This will change the groupings we have analyzed in this report. The House has not yet voted on the bill.

CCAR CET1 Capital up 72% Since the Crisis

- Regulators require banks to hold capital to absorb unexpected losses that might arise, and CET1 (consisting predominantly of common stock) is considered the most absorbent of capital types
- Aggregate CET1 for the CCAR firms is up 72% since the crisis, growing at a 6% CAGR since 2009



Source: Bloomberg, company reports, SIFMA estimates
Note: Some firms experienced one-time declines in CET1 in 4Q17 due to the tax reform bill. CET1 includes common stock, stock surpluses from the issue of common shares, retained earnings, common shares issued by subsidiaries and held by third parties, and accumulated other comprehensive income.

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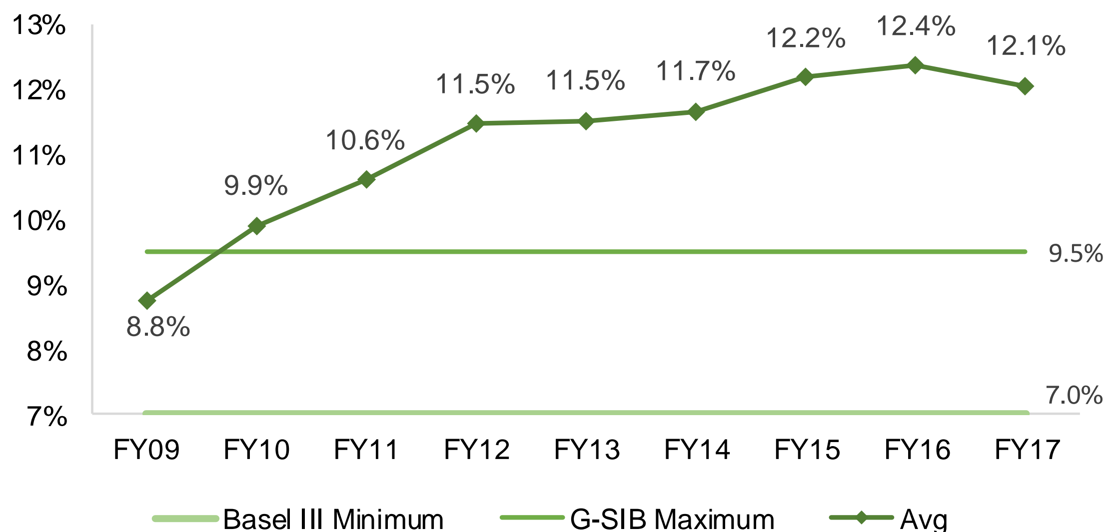
CCAR CET1 Above Highest Requirements

On average, CCAR firms' CET1 was 12.1% as of FY17

- +510 bps (+72%) above the minimum Basel III CET1 requirement (7.0%)
- +260 bps (+27%) above the maximum regulatory requirement inclusive of G-SIB surcharges (9.5%)



Source: Bloomberg, company reports, SIFMA estimates
Note: Some firms experienced one-time declines in CET1 in 4Q17 due to the tax reform bill. 7.0% (= 4.5% minimum + 2.5% capital conservation buffer). Please see Appendix for G-SIB surcharges by bank.

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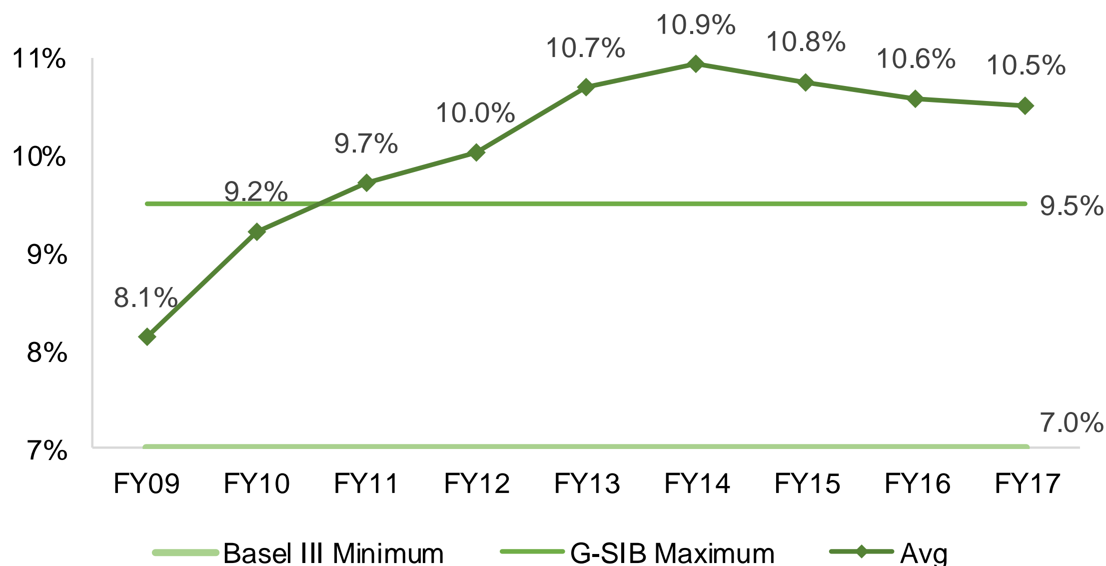
Non G-SIBs Above Highest Requirements

On average, non G-SIBs' CET1 was 10.5% as of FY17

- +350 bps (+50%) above the minimum Basel III CET1 requirement (7.0%)
- +100 bps (+11%) above the maximum regulatory requirement inclusive of G-SIB surcharges (9.5%)
- Even these smaller, less complex and non-global banks are holding capital stores at levels above the requirements for the globally systemic firms



Source: Bloomberg, company reports, SIFMA estimates
Note: Some firms experienced one-time declines in CET1 in 4Q17 due to the tax reform bill. 7.0% (= 4.5% minimum + 2.5% capital conservation buffer). Please see Appendix for G-SIB surcharges by bank.

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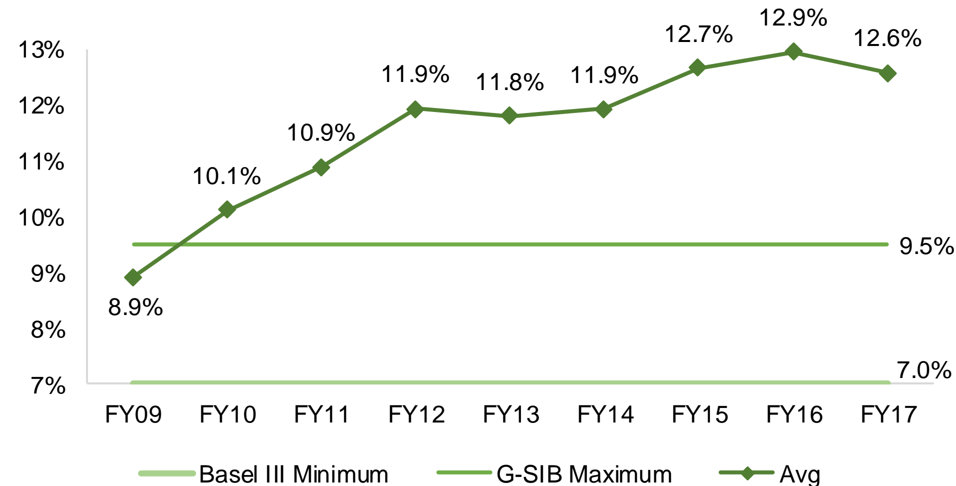
G-SIB Capital Levels Well Above Requirements

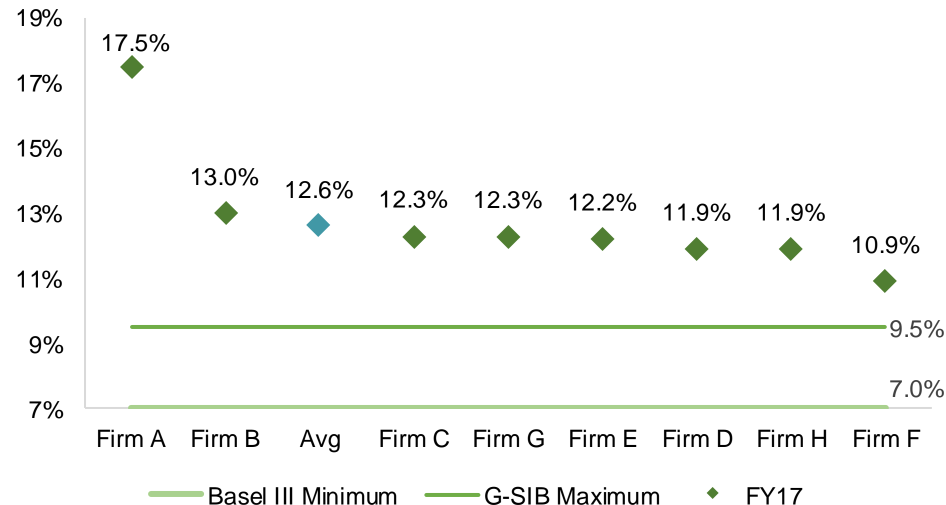
On average, G-SIBs CET1 was 12.6% as of FY17

- +560 bps (+80%) above the minimum Basel III CET1 requirement (7.0%)
- +310 bps (+32%) above the maximum regulatory requirement inclusive of G-SIB surcharges (9.5%)



Every G-SIB was above the maximum requirement – by group, average CET1 as of FY17 was

- Group 4: 270 bps > 9.5% requirement
- Group 3: 340 bps > 9.0% requirement
- Group 2: 310 bps > 8.5% requirement
- Group 1: 590 bps > 8.0% requirement



Source: Bloomberg, company reports, SIFMA estimates

Note: Some firms experienced one-time declines in CET1 in 4Q17 due to the tax reform bill. 7.0% (= 4.5% minimum + 2.5% capital conservation buffer). Please see Appendix for G-SIB surcharges by bank.

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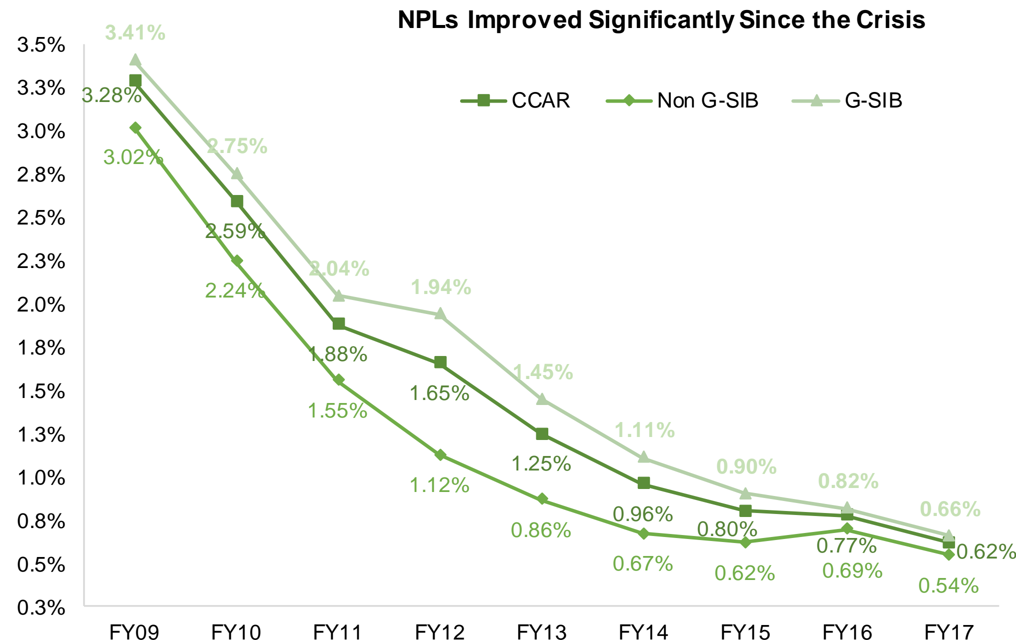
STRONGER BALANCE SHEETS

CCAR NPLs Down 75% Since the Crisis

Non Performing Loans (NPLs) – loans either in default or close to being in default – have declined significantly since crisis peaks; -75% since 2009, a -14% CAGR

As of FY17; Since FY09

- CCAR firms 0.62%; -267 bps
- Non G-SIB firms 0.54%; -247 bps
- G-SIB firms 0.66%; -275 bps



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Source: Bloomberg, company reports, SIFMA estimates
Note: Ratio = non-performing loans (NPLs) / total loans.

CCAR NCOs Also Down Significantly

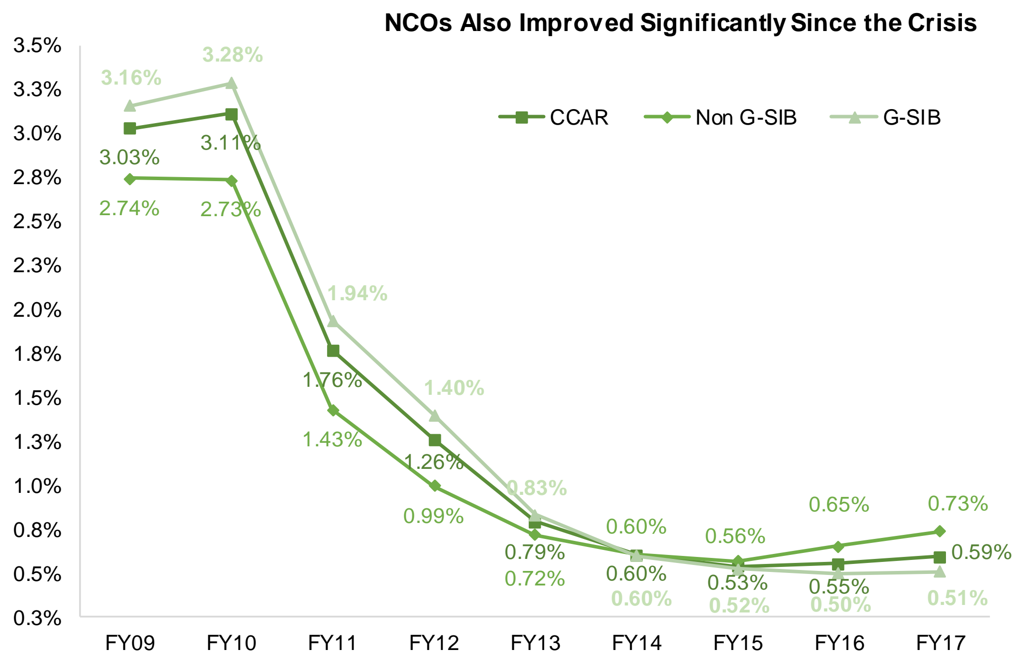
Net charge-offs (NCOs) – the percent of debt unlikely to be recovered – have also declined significantly since crisis peaks

As of FY17; Since FY10

- CCAR firms 0.59%; -252 bps
- G-SIB firms 0.51%; -278 bps

As of FY17; Since FY09

- Non G-SIB firms 0.73%; -201 bps



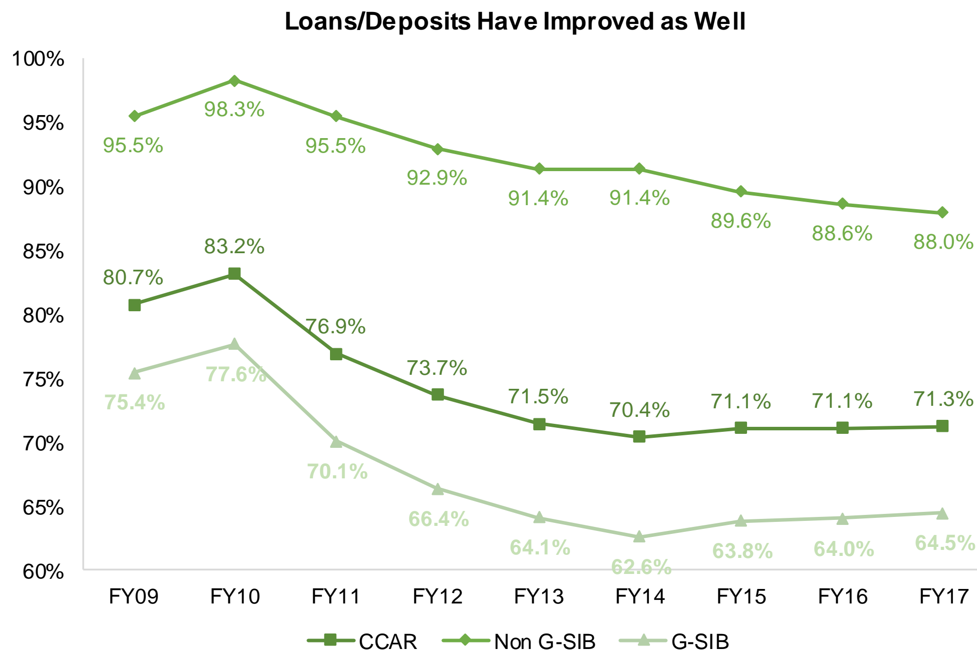
Source: Bloomberg, company reports, SIFMA estimates
Note: NCO = net charge-off rate.

While Loans/Deposits Have Improved

Total Loans/Deposits* – often used to assess a bank's liquidity – have improved since the crisis

As of FY17; Since FY09

- CCAR firms 71.3%, -9.5%
- Non G-SIB firms 88.0%, -7.5%
- G-SIB firms 64.5%, -11.0%

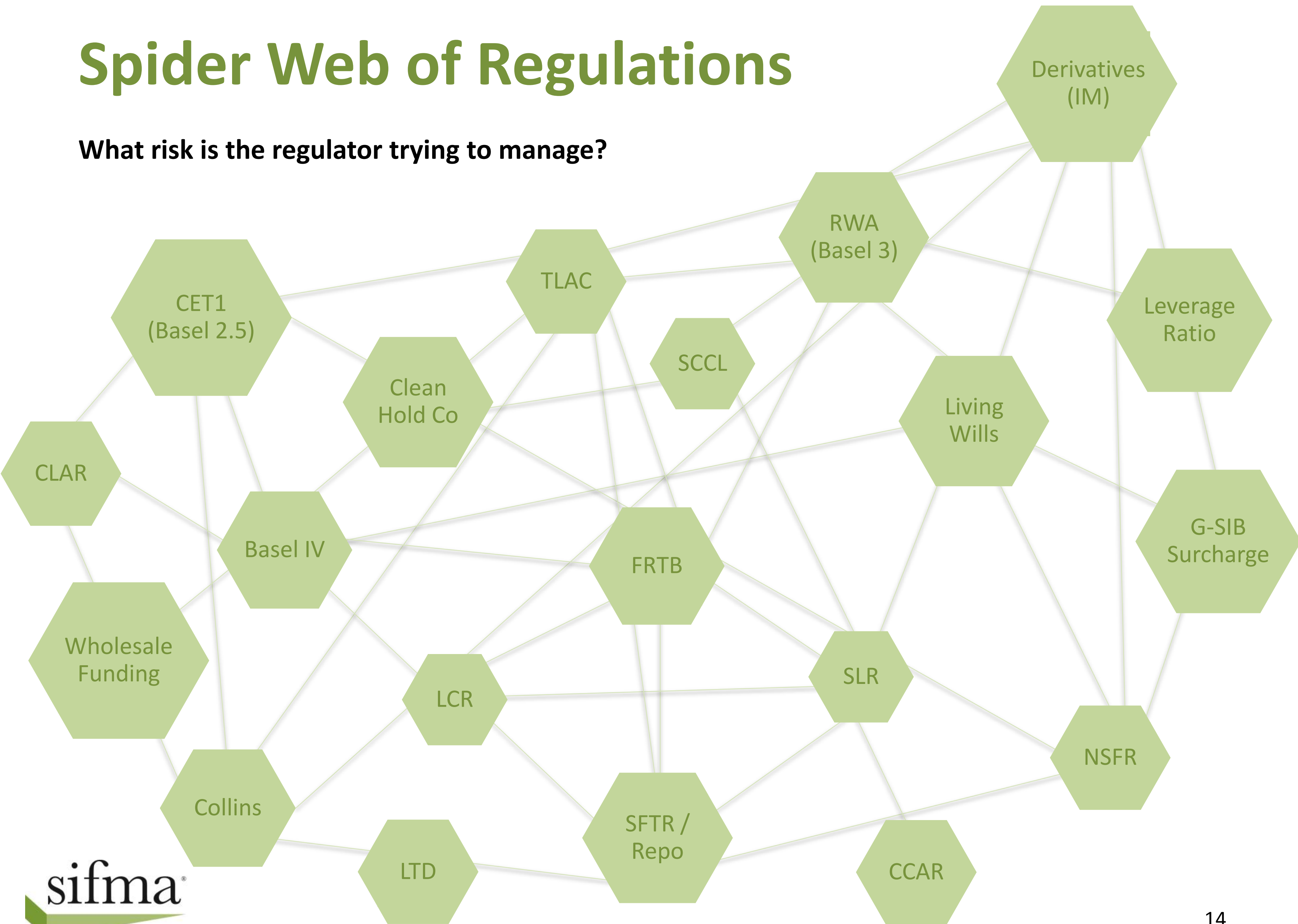


Source: Bloomberg, company reports, SIFMA estimates
Note: *Loans = assets, Deposits = liabilities. Too high of a ratio could indicate insufficient liquidity to cover unforeseen funding requirements.

HOLDING BACK CAPITAL MARKETS

Spider Web of Regulations

What risk is the regulator trying to manage?



Note: While we have highlighted a few of the capital-focused requirements, other provisions are impacting the banks, such as the Volcker Rule and other areas of Title VII.

Oh, What a Web We Weave

While healthier, G-SIBs now have to navigate a spider web of regulations

- Many of which are duplicative – why should a firm hold multiple buffers against the same risk?
- Some are contradictory – how can a firm be required to hold HQLA for LCR purposes, yet get hit with gold-plated capital requirements on those holdings via the SLR?

The financial system has absorbed hundreds of new regulations since the financial crisis, and they are not without cost

- The U.S. has gold-plated international standards…
- …so financial institutions have built up excess capital and liquidity…
- …limiting their capacity to lend, particularly to small- and medium-sized businesses..
- …and some of these regulations could potentially cause other unintended consequences in the future…

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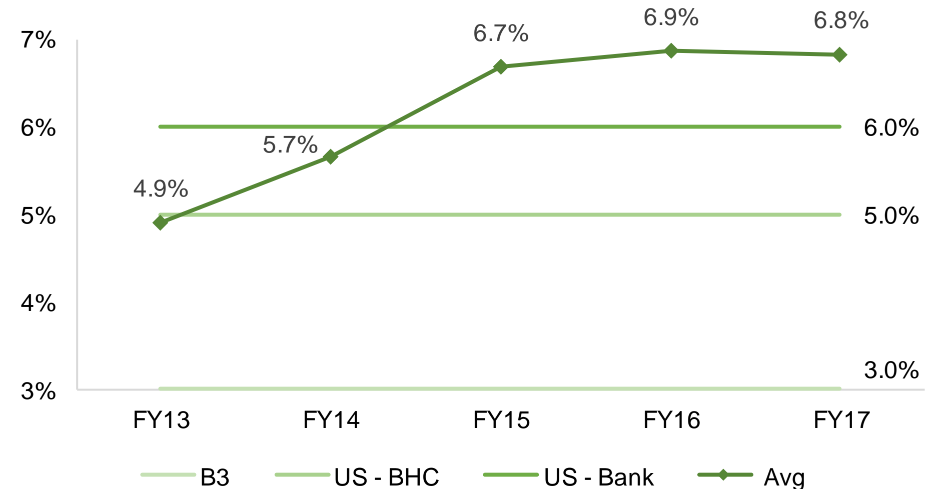
U.S. G-SIB SLRs Above International Standards

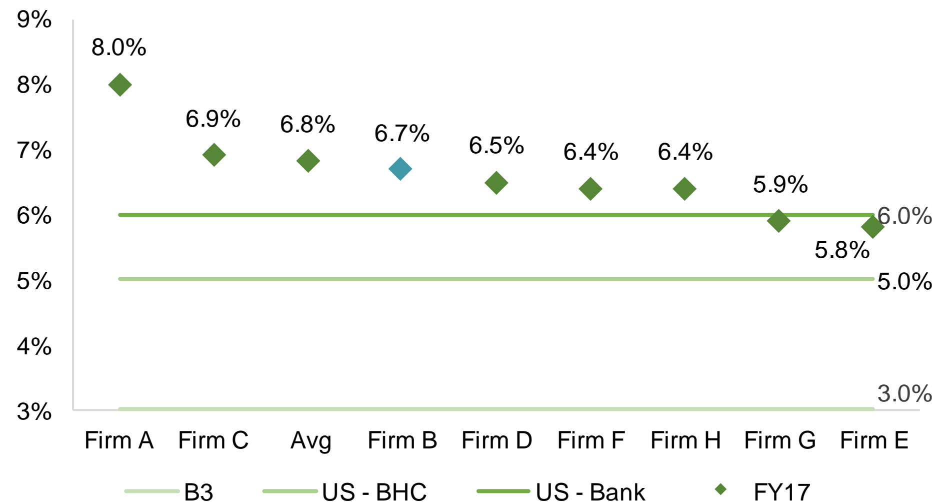
On average, G-SIB BHC Supplemental Leverage Ratios (SLRs) are 6.8%

- 380 bps above or +127% over the international standard of 3.0%
- 80 bps above the higher of the gold-plated U.S. requirements
  - +180 bps > BHC requirement
  - +80 bps > bank-level requirement



Each G-SIB's BHC SLR now meets the gold-plated U.S. requirement

- All G-SIB's BHC SLR ratios are over the U.S. BHC 5% requirement
- Ranging from 8 bps to 300 bps above



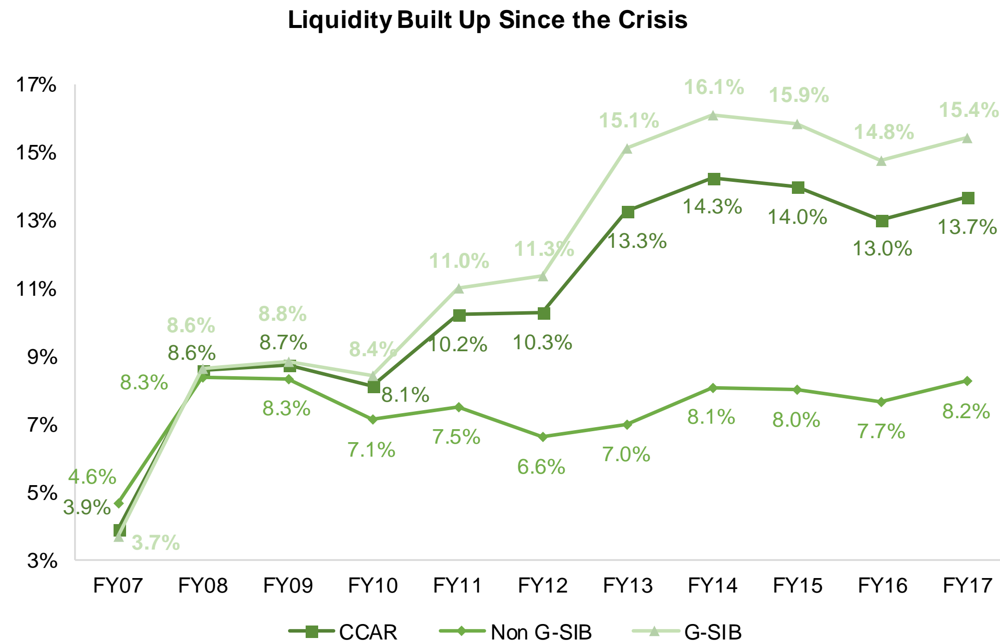
Source: Bloomberg, company reports, SIFMA estimates
Note: BHC = bank holding company.

Excess Liquidity Remains Trapped in the System

The side effect of all the new regulatory requirements is banks now must maintain excess liquidity buffers, substantially higher than before the crisis, which reduces lending capacity on balance sheets

As of FY17 versus FY07

- CCAR average 13.7% versus 3.9%, +9.8%
- Non G-SIB average 8.2% versus 4.6%, +3.6%
- G-SIB average 15.4% versus 3.7%, +11.8% - Exaggerated by extra regulations & U.S. gold-plating of international standards



Source: Bloomberg, company reports, SIFMA estimates

Note: Liquidity = (cash + deposits at banks) / total assets

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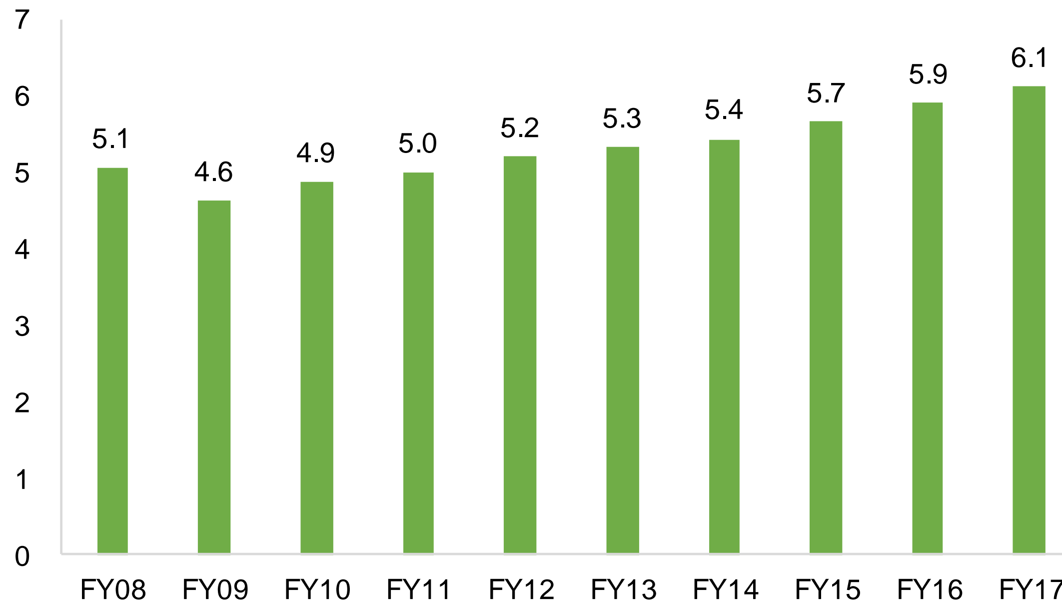
Yes, Loans Have Grown Since the Crisis…

Yet, U.S. loan growth not uniform since 2008, benefitting larger companies over small businesses

- CCAR loans +21%, only a 1.9% CAGR
- FDIC Loans > $1B +30%, a 2.7% CAGR
- FDIC Loans < $1B -21%, a -2.4% CAGR



Source: Bloomberg, FDIC, company reports, SIFMA estimates

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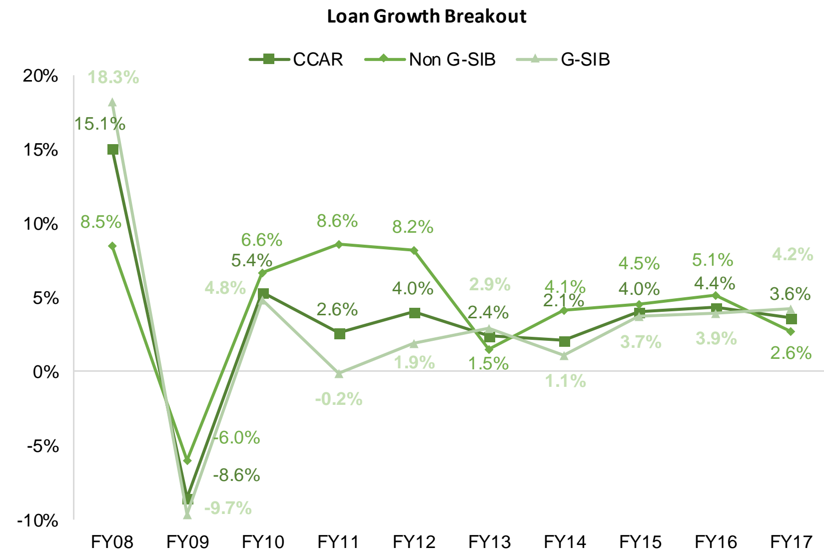
…But Loan Growth Atypically < GDP Growth

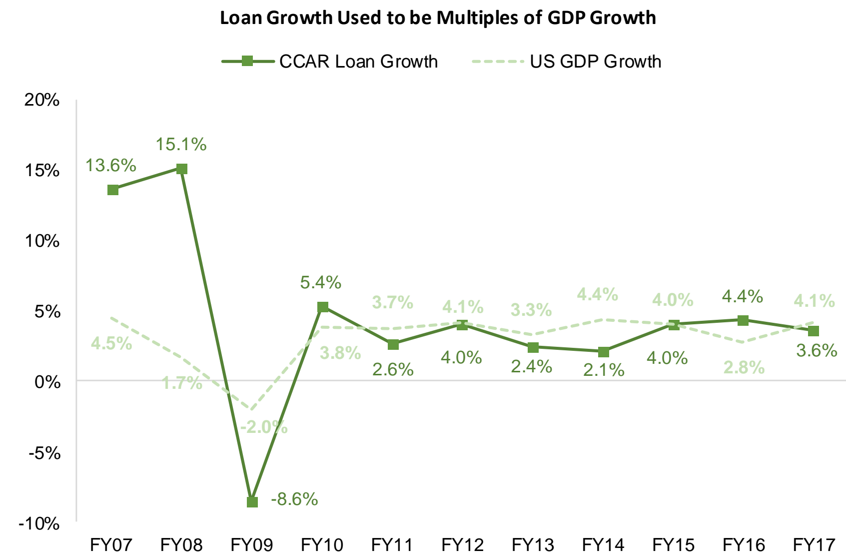
Total CCAR loans +21% since 2008

- CCAR firms +1.8% CAGR
- Non G-SIB firms +3.4% CAGR
- G-SIB firms +1.0% CAGR
- The more heavily regulated G-SIBs are more restricted on loans



Loan growth not keeping up with U.S. GDP

- Loan growth used to be ~3x the pace of GDP growth
- Now subdued since 2007, coming in < U.S. GDP growth for most years
- Lower growth rates than coming out of previous recessions



Source: Bloomberg, Bureau of Economic Analysis, company reports, FDIC, SIFMA estimates

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APPENDIX

Terms to Know

BHC	Bank Holding Company
G-SIB	Global Systemically Important Bank

CET1	Common Equity Tier 1
TLAC	Total Loss-Absorbing Capacity
RWA	Risk-Weighted Assets
LCR	Liquidity Coverage Ratio
NSFR	Net Stable Funding Ratio
SLR	Supplemental Leverage Ratio
FRTB	Fundamental Review of the Trading Book
SFTR	Securities Financing Transactions Regulation
HQLA	High-Quality Liquid Assets

BCBS	Basel Committee on Banking Supervision
BIS	Bank for International Settlements
FDIC	Federal Deposit Insurance Corporation
Fed	Federal Reserve System
FSB	Financial Stability Board

B3	Basel III
CCAR	Comprehensive Capital Analysis and Review

NCO	Net Charge-Offs
NPL	Non Performing Loans

2017 CCAR Firm List

Ally Financial, Inc.	HSBC North America Holdings, Inc.
American Express Company	Huntington Bancshares, Inc.
BancWest Corporation	**JP Morgan Chase & Co.**
Bank of America Corporation	Keycorp
The Bank of New York Mellon Corporation	M&T Bank Corporation
BB&T Corporation	**Morgan Stanley**
BBVA Compass Bancshares, Inc.	MUFG Americas Holdings Corporation
BMO Financial Corp.	Northern Trust Corp.
Capital One Financial Corporation	The PNC Financial Services Group, Inc.
CIT Group Inc.	Regions Financial Corporation
Citigroup, Inc.	Santander Holdings USA, Inc.
Citizens Financial Group	**State Street Corporation**
Comerica Incorporated	SunTrust Banks, Inc.
Deutsche Bank Trust Corporation	TD Group US Holdings LLC
Discover Financial Services	U.S. Bancorp
Fifth Third Bancorp	**Wells Fargo & Company**
Goldman Sachs Group, Inc.	Zions Bancorporation

Source: Federal Reserve Board of Governors, https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20170203a4.pdf
Note: Bold = G-SIBs; gray = the U.S. division of a larger holding company. This report is based on the 2017 CCAR list of firms. While this group has changed over time, we feel it is representative of the U.S. financial system.

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2017 G-SIB List

- Final CET1 ratio requirement = (Minimum Common Equity Capital Ratio + Capital Conservation Buffer) + G-SIB surcharge

Group 4 example: CET1 requirement = (4.5% + 2.5%) + 2.5% = 9.5%

Group 1 (+1.0%)	Group 2 (+1.5%)	Group 3 (+2.0%)	Group 4 (+2.5%)
Agricultural Bank of China	Bank of China	**Bank of America**	**JP Morgan Chase**
Bank of New York Mellon	Barclays	**Citigroup**	
Credit Suisse	BNP Paribas	Deutsche Bank	
Groupe Crédit Agricole	China Construction Bank	HSBC	
ING Bank	**Goldman Sachs**		
Mizuho FG	Industrial & Commercial Bank of China		
Morgan Stanley	Mitsubishi UFJ FG		
Nordea	**Wells Fargo**		
Royal Bank of Canada			
Royal Bank of Scotland			
Santander			
Société Générale			
Standard Chartered			
State Street			
Sumitomo Mitsui FG			
UBS			
Unicredit Group			

Note: Bold = U.S. G-SIBs

Source: FSB as of November 2017, http://www.fsb.org/wp-content/uploads/P211117-1.pdf

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Basel III Transition Timeline

Basel III phase-in arrangements

(All dates are as of 1 January)

Basel Committee on Banking Supervision

BANK FOR INTERNATIONAL SETTLEMENTS

	Phases	2013	2014	2015	2016	2017	2018	2019
Capital	Leverage Ratio		Parallel run 1 Jan 2013 – 1 Jan 2017 Disclosure starts 1 Jan 2015				Migration to Pillar 1	
	Minimum Common Equity Capital Ratio	3.5%	4.0%	4.5%				**4.5%**
	Capital Conservation Buffer				0.625%	1.25%	1.875%	**2.5%**
	Minimum common equity plus capital conservation buffer	3.5%	4.0%	4.5%	5.125%	5.75%	6.375%	**7.0%**
	Phase-in of deductions from CET1*		20%	40%	60%	80%	100%	**100%**
	Minimum Tier 1 Capital	4.5%	5.5%	6.0%				**6.0%**
	Minimum Total Capital		8.0%					**8.0%**
	Minimum Total Capital plus conservation buffer		8.0%		8.625%	9.25%	9.875%	**10.5%**
	Capital instruments that no longer qualify as non-core Tier 1 capital or Tier 2 capital		Phased out over 10 year horizon beginning 2013					
Liquidity	Liquidity coverage ratio – minimum requirement			60%	70%	80%	90%	**100%**
	Net stable funding ratio						Introduce minimum standard	

* Including amounts exceeding the limit for deferred tax assets (DTAs), mortgage servicing rights (MSRs) and financials.

-- transition periods

Source: Bank for International Settlements, https://www.bis.org/bcbs/basel3/basel3_phase_in_arrangements.pdf

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