Capital planning

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Prudential regulation has substantially improved safety and soundness

Post-crisis regulations have lowered the probability of default for large banks through higher shock absorbers…

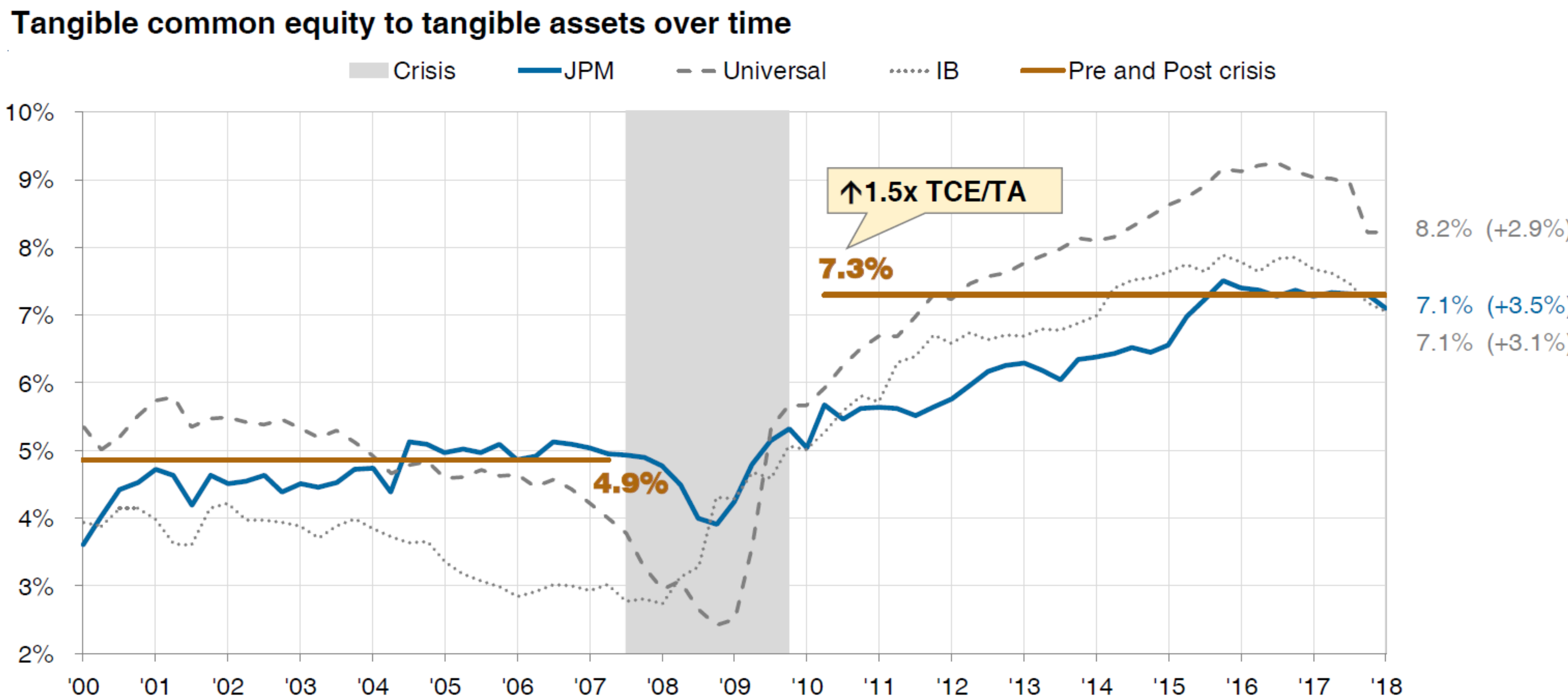
Capital requirements	▪ Total capital requirement increased from 8% up to 17.5% (with buffers) ▪ Higher quality capital
Liquidity requirements	▪ LCR and NSFR require banks to maintain short- and medium-term liquidity funding (HQLA balances have increased to ~20% of total assets at the largest firms)[1]
Stress testing	▪ CCAR to ensure capital adequacy under stress ▪ CLAR provides a horizontal liquidity review of U.S. G-SIBs

…and established frameworks to keep critical operations open

New resolution powers	▪ Granted to regulators through Dodd-Frank (Title II) in U.S. and BRRD in Europe
Resolution playbooks	▪ Provided through Title I plans. Further, recovery stress testing requires firms to demonstrate an ability to recover from extreme liquidity scenarios
Prevention of runs	▪ ISDA Protocol contractually prevents G-18 derivative counterparties from terminating early
Adequate resources for recapitalization	▪ TLAC ensures firms have adequate resources should they require resolution ▪ Global TLAC standard finalized; FRB has finalized an external TLAC standard for U.S. G-SIBs

[1] FSOC 2016 Annual Report

Stress testing exists to ensure robust capitalization of the financial industry



Source: SNL Financial
Note: Universal is BAC and C, IB is MS and GS, Commercial is USB and WFC

JPMorgan Chase has developed a Fortress Balance Sheet

	2008	Change	2017	
CET1	7.0%[3]	+570 bps	12.7%[4]	17.5% excluding operational risk RWA
TCE/ Total assets[1]	4.0%	+340 bps	7.4%	
Tangible common equity	$84B	+$99B	$183B	
Total assets	$2.2T	+$300B	$2.5T	
RWA	$1.2T[3]	+$200B	$1.4T[4]	
Operational risk RWA	$0	+$400B	$400B[5]	
Liquidity	~$300B	+~$256B	$556B[6]	
Fed funds purchased and securities loaned or sold under repurchase agreements	$193B	-$34B	$159B	
Long-term debt and preferred stock[2]	$303B	+$7B	$310B	$186B eligible for TLAC

[1] Excludes goodwill and intangible assets.
[2] Includes trust preferred securities.
[3] Reflects Basel I measure; CET1 reflects Tier 1 common.
[4] Reflects Basel III Advanced Fully Phased-In measure.
[5] Operational risk RWA is a component of RWA.
[6] Represents the amount of high quality liquid assets (HQLA) included in the liquidity coverage ratio.

B = Billions
T = Trillions
bps = basis points

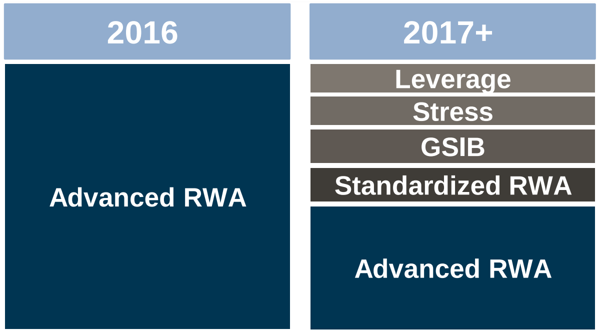
Source: JPM 2017 Annual Report

Each LOB is measured on a stand-alone basis with the capital allocation framework considering multiple constraints

Capital allocation ($B)

	Average retained equity[1]		
	2016	2017	2018
Consumer & Community Banking	$51.0	$51.0	$51.0
Corporate & Investment Bank	64.0	70.0	70.0
Commercial Banking	16.0	20.0	20.0
Asset & Wealth Management	9.0	9.0	9.0
Total LOBs	**$140.0**	**$150.0**	**$150.0**
Corporate[2]	40.0	35.0	35.0
Total Firm[3]	**~$180.0**	**~$185.0**	**~$185.0**

Allocation methodology[4]



Capital allocations and methodology enhanced to further reflect multiple constraints of the Firm

Source: JPM public filings and presentations, including 2016, 2017 and 2018 Investor Day

Note: For illustrative purposes we are referencing materials from 2016, 2017, and 2018 Investor Day presentations, that were published at the time and not refreshed for purposes of this presentation

[1] 2017 Allocations changed from common equity to tangible common equity, resulting in LOB equity being more in line with peers

[2] Primarily reflects equity held for property, premises and equipment ("PP&E") and retained operational risk as well as unallocated equity

[3] 2016 reflects data shown at 2016 Investor Day based on analyst estimates of TCE; 2017 reflects data shown at 2017 Investor Day based on an average of analyst estimates; 2018 reflects average CET1 capital. Total Firm based on analyst estimates

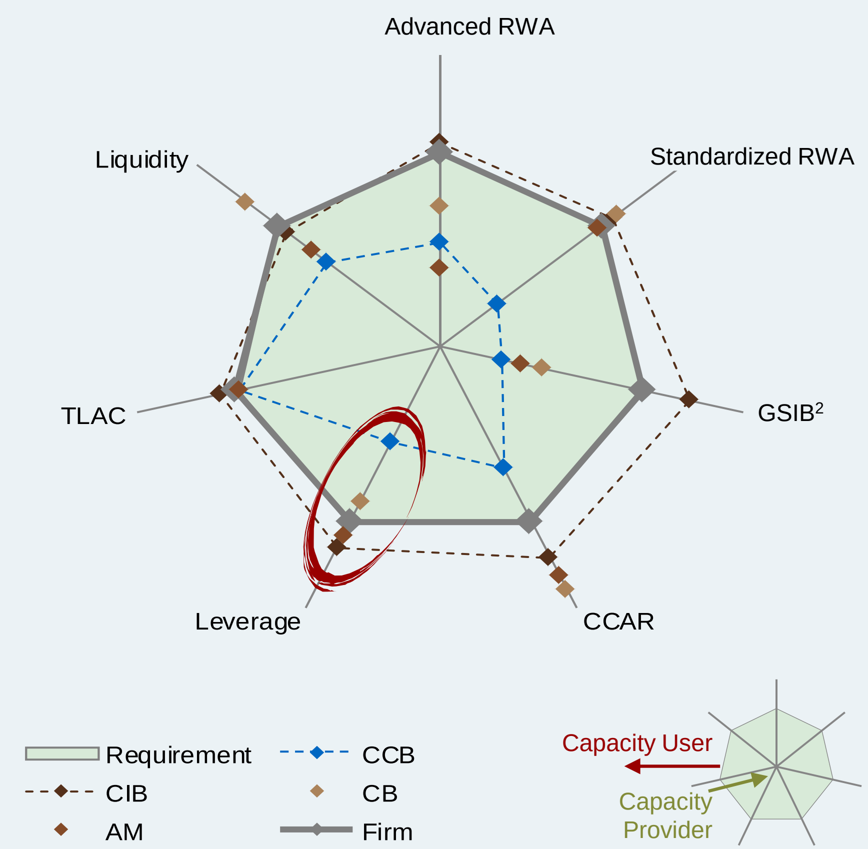
[4] Data shown at 2017 Investor Day and not refreshed for purposes of this presentation. Tabular presentation not representative of the scale

Capital planning optimization has become a more dynamic process

Key highlights

- JPMorgan Chase has over 20 capital and liquidity related constraints
- Long-term approach to capital management and optimization
- Each LOB is allocated capital considering the various constraints of the firm and the evolving state of the business
- LOB capital allocations are based on multi-variable framework
- Firm has ROE targets for each business segment to measure performance based on multi-variable capital allocations

Select constraints – illustrative[1]



Source: JPM public filings and presentations, including 2016, 2017 and 2018 Investor Day

Note: For illustrative purposes we are referencing materials from 2016, 2017, and 2018 Investor Day presentations, that were published at the time and not refreshed for purposes of this presentation

[1] Illustrative based on data shown at 2016 Investor Day and not refreshed for purposes of this presentation. Estimated net capacity provider or user for each constraint, expressed in ratio form

[2] GSIB points divided by leverage assets by LOB