FEDERAL RESERVE BANK of NEW YORK

CCAR 2012: Overview and Stress Scenario Results

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The views expressed in this presentation are those of the presenter and not necessarily those of the Federal Reserve Bank of New York or the Federal Reserve System

Comprehensive Capital Analysis and Review (CCAR)

- Forward-looking assessment of large, complex bank holding company (BHC) capital adequacy processes
- Central mechanism in Federal Reserve's supervisory approach to capital adequacy
- First implemented in 2011
- After adoption of the "capital plans rule" in November 2011, now an annual process
  - All U.S.-domiciled BHCs with assets of at least $50 billion
  - CCAR 2012 focused on 19 of these BHCs
    - The SCAP/CCAR 2011 BHCs
    - Others covered by a separate review

Annual Capital Plans

- BHCs submit annual capital plans to the Federal Reserve:
  - Description of BHC's process for assessing capital adequacy
  - Planned capital actions (dividends, share repurchases, issuance)
  - BHC's capital policy governing capital distribution and issuance
  - Projections of sources and uses of capital over 9-quarter forward horizon under expected and stressed economic conditions
    - "Stress scenario projections" ➔ stressed capital ratios

Federal Reserve's Assessment of the Capital Plans

- Comprehensiveness of the plan, including extent to which the plan captures all risks facing the BHC under expected and stressed economic conditions
- Reasonableness of the BHC's assumptions and robustness of its capital adequacy process
- The BHC's capital policy governing distributions to shareholders
- The BHC's ability to maintain capital ratios above regulatory minimums and a tier 1 common ratio above 5% under expected and stressful economic conditions
  - Stress scenario results (Basel I basis)
- BHC must also demonstrate its ability to comply with pending Basel III capital rules as they come into force in the U.S. over time

Results of the CCAR

- The Federal Reserve objects or does not object to each BHC's capital plan
  - If the Federal Reserve objects, BHCs may make only those capital distributions explicitly not objected to by the Federal Reserve

- BHCs are required to re-submit capital plans if the Federal Reserve objects to the plan or if the BHC experiences a material change in risk exposure

- Objection or non-objection based on capital plan in its entirety
  - Some elements could be strong, but the plan could be objected to if other elements are weak
  - Stressed capital ratios may exceed regulatory minimums and capital plan could be objected to for other reasons

Stress Scenario Projections Disclosure

- As part of the capital plan assessment, the Federal Reserve calculated its own stress scenario projections

- A critical part of CCAR, but not the only critical part

- The Federal Reserve disclosed the results of its own stress scenario projections on March 13, 2012
  - Distinct perspective on the capital strength of the 19 BHCs
    - Extensive information about the individual BHCs
    - Cross-firm perspective
    - Consistent approach and models
  - Generate feedback on approach and methodology

Stress Scenario Projections Process

- Federal Reserve developed a stressed economic and financial market scenario (“Supervisory Stress Scenario”) in November, 2011
  - For CCAR 2012, a deep recession and sharp fall in asset prices
    - U.S. and international variables
  - Trading and counterparty positions at largest BHCs also subject to global market shock comparable to H2 2008, with additional stresses related to on-going situation in Europe
- Stress scenario horizon runs from Q4 2011 to Q4 2013 (nine quarters)
- BHCs provide extensive data on their loan, securities, and trading portfolios; business activities; revenue and expenses
  - FR 14-Q and FR 14-A regulatory reports
- The Federal Reserve uses data as inputs to models developed or selected to project losses, revenues, expenses, and capital

Analytical Framework of the Stress Scenario Projections

- Project net income for each BHC under stressed economic conditions
  - Losses on loans, securities, trading and counterparty (derivatives) positions, and other losses (e.g., operational risk)
  - Revenues and expenses (“pre-provision net revenue”)
  - Appropriate level of the allowance for loan and lease losses

- Follow accounting treatment in determining losses and income
  - Accrual loan portfolio is “cash flow” losses, leading to provisions
  - Securities portfolio is other-than-temporary impairment
  - Trading and counterparty are mark-to-market

- Net income and planned capital distributions determine change in equity and regulatory capital
  - Apply filters and deductions that apply to intangible assets

Projecting Net Income and Capital

Net Interest Income + Non-interest Income - Non-interest Expense
= **Pre-provision Net Revenue (PPNR)**
Note: PPNR includes Losses from Operational Risk Events, Mortgage Put-back Losses, and OREO Costs

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PPNR + Other Revenue - Provisions - AFS/HTM Securities Losses - Trading and Counterparty Losses - Other Losses (Gains)
= **Pre-tax Net Income**
Note: Change in the Allowance for Loan and Lease Losses + Net Charge-offs = *Provisions*

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Pre-tax Net Income - Taxes + Extraordinary Items Net of Taxes
= **After-tax Net Income**

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After-tax Net Income - Net Distributions to Common and Preferred Shareholders and Other Net Reductions to Shareholder's Equity
= **Change in Equity Capital**

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Change in Equity Capital - Deductions from Regulatory Capital + Other Additions to Regulatory Capital
= **Change in Regulatory Capital**

Key Conceptual Points

- The Federal Reserve's ***stress scenario*** projections include capital actions proposed by the BHCs in their annual capital plans ***under a baseline scenario***
  - Stringent test of BHCs' ability to maintain capital strength under adverse conditions without cutting distributions
  - Dividend and repurchase behavior is not endogenous in the projections
  - Not necessarily a depiction of the way BHCs would behave in these circumstances

- To illustrate impact of the stress scenario alone, also calculated stressed capital ratios excluding capital actions after Q1 2012

- The Federal Reserve's projections are derived from models that capture typical BHC behavior
  - No firm-specific adjustments, just firm-specific input data
  - Consistent and conservative assumptions
  - Results will therefore vary, perhaps significantly, from what the BHCs themselves would project

Interpreting the Results

- Projections <u>are not</u> forecasts or predictions of likely future outcomes for these BHCs

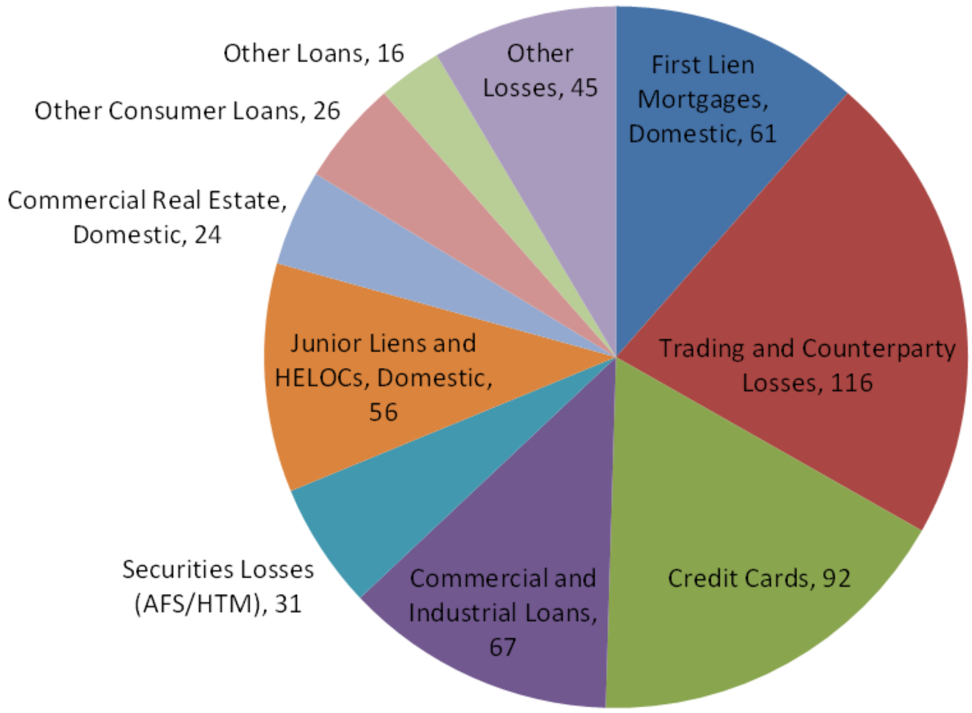
- Projections are estimates based on a hypothetical, severely adverse economic environment
  - Conservative assumptions about capital actions
  - Conservative modeling assumptions
  - Severely adverse economic scenario

Stress Scenario Results: Overview

- Aggregate projected losses of $534 billion
- Aggregate projected pre-provision net revenue of $294 billion
- Aggregate projected pre-tax net income of -$222 billion
- Aggregate projected fall in tier 1 common equity of $300 billion, including regulatory deductions, tax effects, and planned capital distributions
- Four BHCs have at least one stressed capital ratio (including planned capital actions) falling below regulatory minimum levels at some point during the nine quarters
- **All under the assumptions of the Supervisory Stress Scenario**

Loss Projections Total $534 Billion

Figure 9: Projected Losses in the Supervisory Stress Scenario ($B)



Source: Federal Reserve estimates in the Supervisory Stress scenario.

Loss Projection Detail

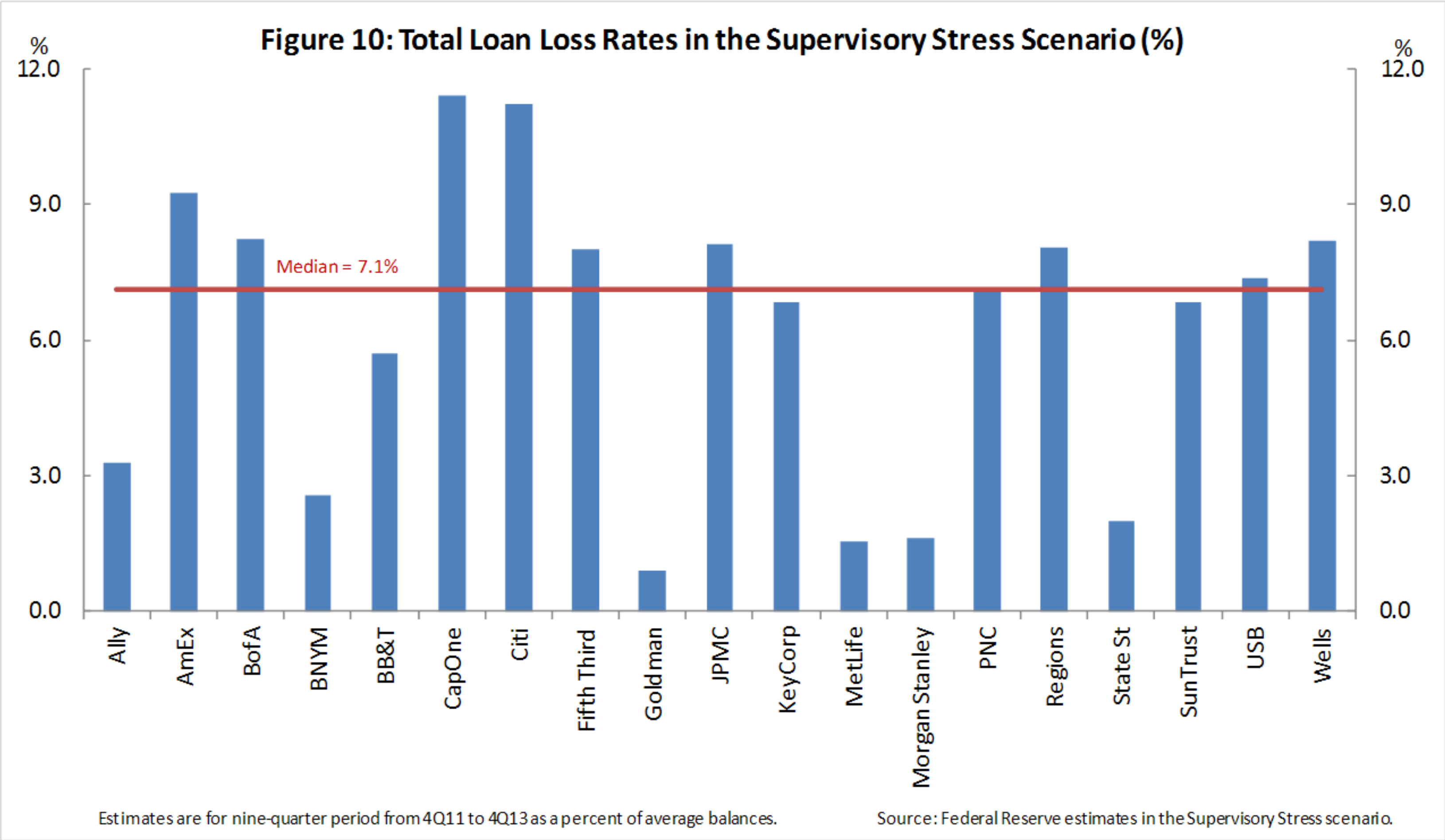
- Biggest contributors to $534 billion total projected losses are losses on accrual loan portfolio and trading and counterparty
  - Projected accrual loan portfolio losses of $341 billion
    - Total loan loss rate of 8.1%, higher than any recession since the 1930s
  - Projected trading and counterparty losses of $116 billion

- Projected accrual loan portfolio losses dominated by losses on consumer-related loans
  - Projected residential mortgage losses of $117 billion
  - Projected credit card losses of $92 billion
  - Projected other consumer loan losses of $26 billion

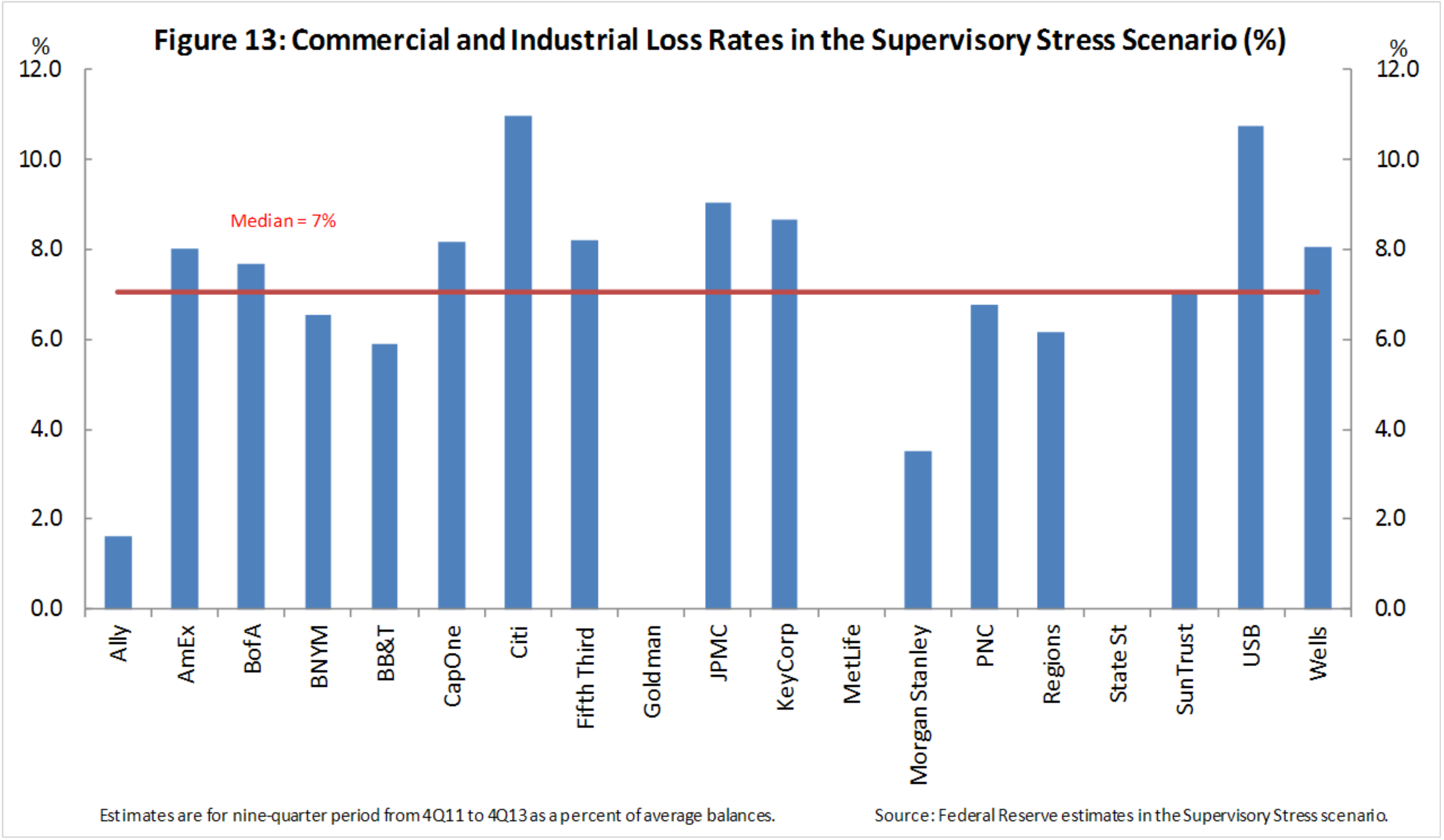
Differentiation Across BHCs

- Results differ substantially across the 19 BHCs
- Differences reflect differences in portfolio composition and business focus
  - Some loan categories tend to have higher loss rates than others
  - Some business lines generate higher or lower amounts of revenue
- Differences also reflect variation in risk characteristics for the same type of activity
  - Portfolio composition matters – customer risk characteristics, loan terms, loan structure
  - This information collected systematically for the 19 BHCs on regulatory reports

Projected Total Loan Loss Rate for 19 BHCs



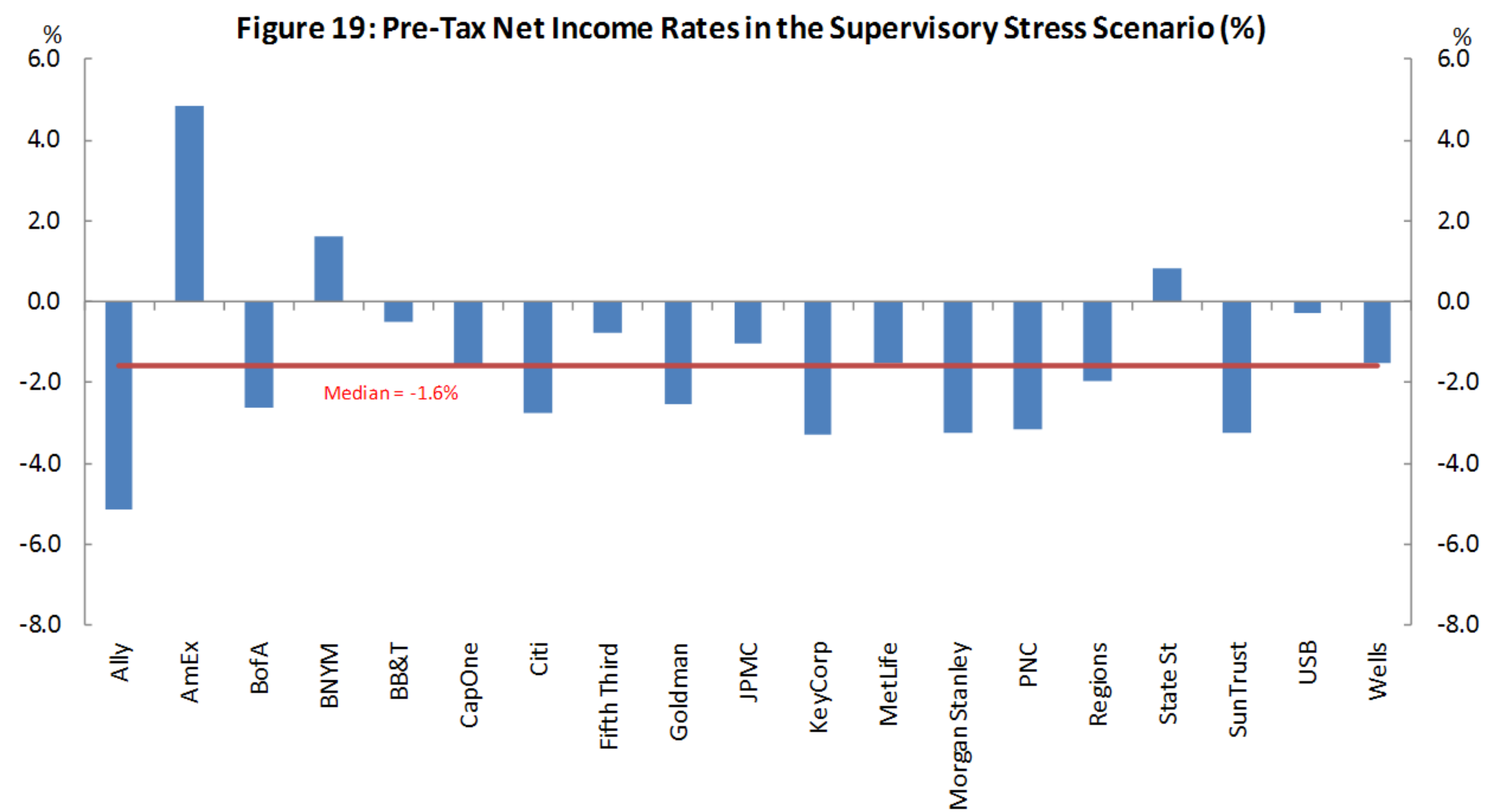
Projected Commercial and Industrial Loan Loss Rates for 19 BHCs



Stress Scenario Impact: Net Income

- Projected aggregate pre-tax net income (loss) of -$222 billion under Supervisory Stress Scenario
    - Extremely large losses relative to historical experience
- Projected net income over the nine quarters is negative (a net loss) for all but 3 of the BHCs
- Like rest of the results, considerable differentiation across BHCs

Projected Pre-tax Net Income for 19 BHCs

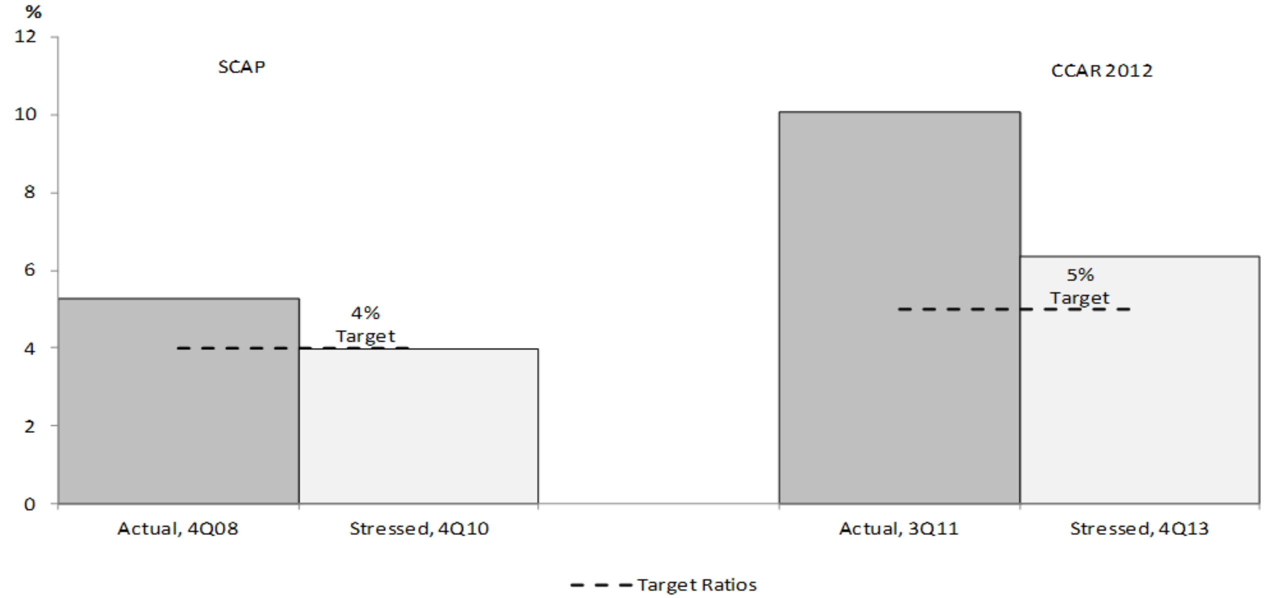


Estimates are for nine-quarter period from 4Q11 to 4Q13 as a percent of average balances. Source: Federal Reserve estimates in the Supervisory Stress scenario.

Impact on Capital Ratios

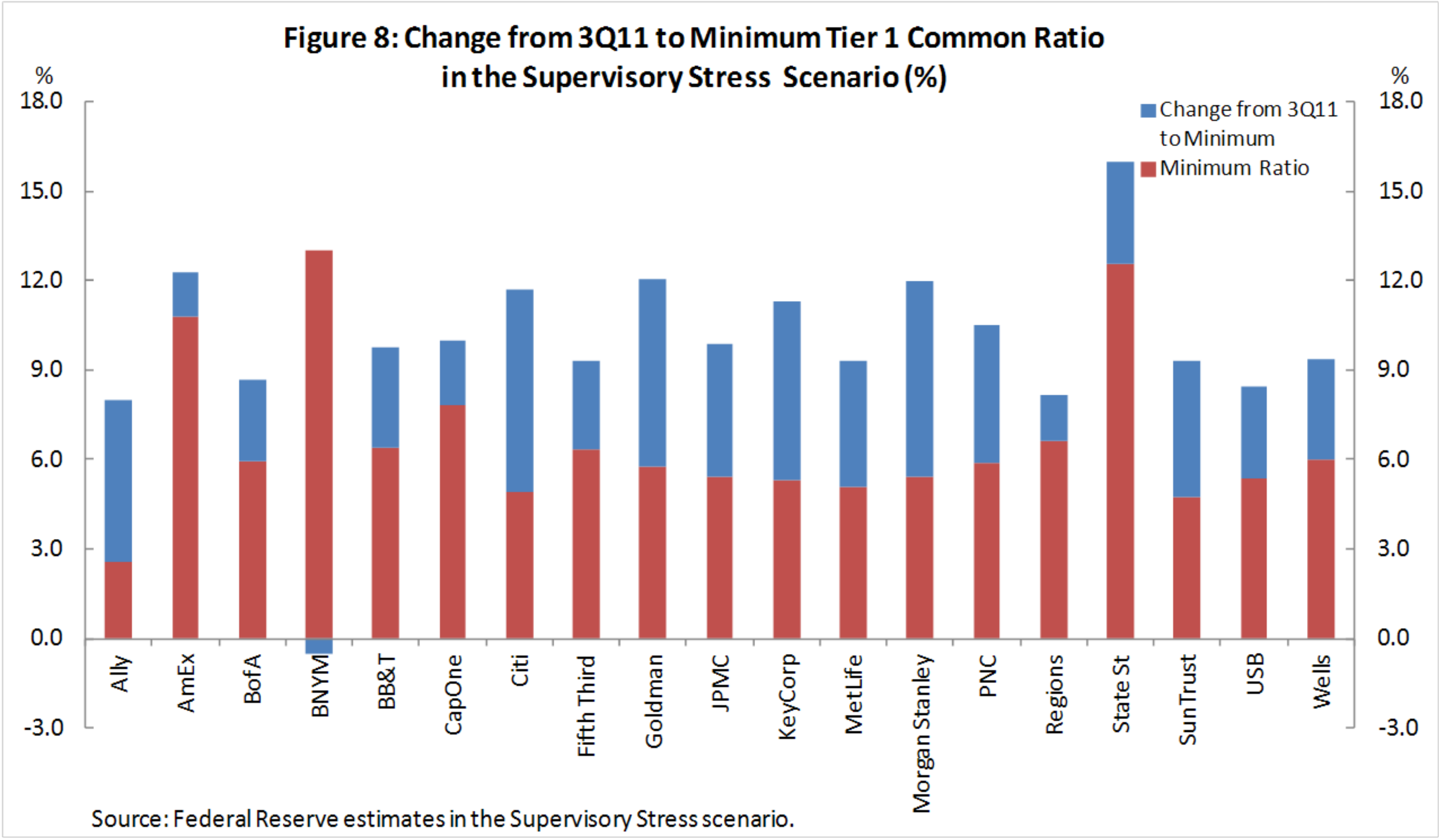
- Projected decline in aggregate tier 1 common ratio from 10.1% to 6.3% at end of the stress scenario horizon (Q4 2013)
  - Bigger impact than in 2009 SCAP, but ending at higher level
  - Reflects higher starting capital ratio levels

Figure 1: Initial and Stressed Tier 1 Common Capital Ratios



Note: Aggregate ratios for 19 participating bank holding companies. Post-stress estimates are supervisory estimates.
Source: Federal Reserve. "The Supervisory Capital Assessment Program: Overview of Results," May 7, 2009.

Stressed Capital Ratios Decline for 18 of 19 BHCs



More on CCAR and Stress Scenario Projections

- CCAR 2012 stress scenario projections (2012):
  http://www.federalreserve.gov/newsevents/press/bcreg/bcreg20120313a1.pdf
- Overview of CCAR (2011):
  http://www.federalreserve.gov/newsevents/press/bcreg/bcreg20110318a1.pdf
- SCAP Methodology (2009):
  http://www.federalreserve.gov/newsevents/press/bcreg/bcreg20090424a1.pdf
- SCAP Results (2009):
  http://www.federalreserve.gov/newsevents/press/bcreg/bcreg20090507a1.pdf