



An Overview of Stress Tests from a Supervisory Perspective

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Disclaimer

The views expressed here are the presenter's and not necessarily those of the Federal Reserve Bank of Atlanta, or the Federal Reserve System.

Introduction

Federal Reserve Board last week

- Issued the final rule requiring top-tier BHCs with assets greater than \$50 billion to submit annual capital plan for review
 - Including stress tests
- Issued instructions for the 2012 review
- Set due date for responses of January 9, 2012
- Set possible responses if the Fed objects to a plan,
 - “restricted from some or all capital distributions, and
 - may be required to take actions to improve its capital adequacy.”

Outline

1. Capital adequacy measurement
2. Recent history of stress tests
3. Longer run future of stress tests
4. 2012 CCAR and Capital Plan Review
5. Conclusion

Capital adequacy measurement

Alternative risk measures

- Leverage / Basel I
- Internal models of Basel II / III
- Stress tests

Dimensions along which they differ

- Loan level differences
 - NINJA mortgage loans
 - Loan to a AAA company – Microsoft
- Other differences
 - Correlation assumptions
 - Embedded losses
 - Future earnings

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Recent history of stress tests

- Supervisory Capital Assessment Program (SCAP) in 2009
- Comprehensive Capital Analysis and Review (CCAR) in 2011
- European Stress tests

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Future of stress tests

Dodd-Frank Act

- Annual stress test conducted by the Federal Reserve
 - Goal is to evaluate whether companies “whether such companies have the capital, on a total consolidated basis, necessary to absorb losses as a result of adverse economic conditions.”
 - Must include at least three scenarios: baseline, adverse and severely adverse
 - Must publish results
- Semiannual stress test by companies

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2012 CCAR and Capital Plan Review

- CCAR Standards for 19 largest BHCs
 - All 19 had previously participated in 2009 SCAP and 2011 CCAR
 - Includes Goldman Sachs, MetLife and Morgan Stanley
- Additional requirements for 6 BHCs with large trading operations
 - Required to run a global market shock
- Capital Plan Review (CapPR 2012) Standards for all other BHCs subject to stress testing
 - Applies to the remaining BHCs with assets greater than \$50 billion

CCAR and Capital Plan Review

- More than simply a stress tests. Fed also evaluates BHC's
 - Capital policy
 - Comprehensive capital plan
 - Reasonableness of assumptions and analysis underlying the capital plan
- Reasonableness of results will be informed by supervisory estimates of BHC estimates
- Federal Reserve will disclose its pro forma estimates including its estimate of the post-stress capital ratio of each of the 19 BHCs

CCAR and Capital Plan Review Stress tests for 19 largest BHCs

- At least four scenarios
 - BHC Baseline
 - Supervisory Baseline
 - At least one BHC Stress
 - Supervisory Stress
- Supervisory scenarios
 - Run from 2011 Q4 to 2014 Q4
 - Incorporate
 - Five measures of economic activity and prices
 - Four aggregate measures of asset prices and financial conditions
 - Four measures of interest rates
- BHC stress scenario should reflect its “unique vulnerabilities”

CCAR and Capital Plan Review Stress tests for 19 largest BHCs

- **Neither supervisory forecast represents the Federal Reserve's forecast**
 - Baseline broadly follows consensus of private forecasters as of mid-November
 - Stress scenario is that US experiences as deep recession
- Stress scenario includes
 - Real US GDP falls for 4 quarters starting 2011 Q4 at annualized rates of -4.84, -7.98, -4.23, -3.51,
 - Unemployment rate goes to 13.05 in 2013 Q2,
 - US housing price index falls from 136.86 in 2011 Q3 to 108.8 in 2014 Q1.
 - Dow drop to 5,668 in 2012 Q4
 - VIX spikes up to 90 in 2012 Q2

CCAR and Capital Plan Review

Additional stresses for 6 BHCs

- Supervisory scenarios include
 - Those developed for the 19 largest BHCs
 - Plus Three variables for four country blocks
- Four countries/country blocks
 - Euro area
 - United Kingdom
 - Developing Asia
 - Japan
- Three variables for each block
 - Percentage change in real GDP
 - Percentage change in CPI or equivalent
 - U.S./foreign exchange rate

CCAR and Capital Plan Review

Other BHCs with assets greater than \$50 billion

- Same Fed supplied scenarios as for 19 largest banks
- Fed says it will understand that these BHCs may be slower about producing the data
- It will also understand that these BHCs may need additional assistance as they work through the process
- These BHCs can undertake capital distribution before receiving approval but must seek permission to increase the distribution

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Conclusion

- Stress tests became an important supervisory tool with SCAP in 2009
- Stress tests partially address weaknesses in other capital adequacy measures
- Stress tests provide ability to make horizontal comparisons across banks
- Dodd-Frank requires that stress tests remain an annual requirement for large BHCs
- 2012 CCAR stress test set environment of “severe recession”
 - <http://www.federalreserve.gov/newsevents/press/bcreg/20111122a.htm>

Further discussion

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