Principles in Practice: Alternative Approaches to OTTI

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Disclaimer

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What is OTTI?

• “Other than Temporary Impairment” charges on investment securities are recognized in earnings

• An impairment occurs when the fair value of a security falls below its amortized cost

• OTTI may be recognized if there is a non-temporary decline in present value of cash flow below amortized cost (i.e., a “credit loss”)

• OTTI may also reflect the potential that a security may be sold before recovering amortized cost
Historical OTTI Write-downs
(Pct. of Amortized Cost)

Source: Life insurance statutory filings
CUSIPs without prior OTTI
Overview

• Simplifying the OTTI models is one way in which supervisors are putting model development principles into practice

• The Federal Reserve applies several models to specific types of securities to project OTTI

• Certain models may have limited materiality; most securities are US government-backed bonds not at risk of credit impairment
DFAST Securities Exposure

Percent of amortized cost as of December 31, 2016
DFAST Securities Portfolio Aggregate Amortized Cost ($1000B)

Source: FR Y-9C
DFAST Firms as of 2017
Current models employ deterministic methods to calculate OTTI

- Econometric components project path of underlying risk variables on each credit
  - Examples: PD, CDS spread

- Deterministic methods determine whether there is a credit loss requiring an OTTI write-down
  - Direct calculation of present value shortfall
  - Rating triggers

- Current approaches require a number of assumptions, including appropriate thresholds
The Federal Reserve is exploring a more direct approach for projecting OTTI

• Simple econometric model:
  • OTTI as percent of amortized cost (book) is positively related to current and future impairment
  • Relationship can be estimated for broad array of securities
  • Would reflect empirical security-level OTTI outcomes

• Data: bank historical OTTI data plus security-level data from insurance companies from 2004-2016

• Key input: changes in fair value, which are already projected under the stress test
Such an approach may enhance consistency and simplicity while also meeting other objectives

• Consistency and comparability
  • Common approach for all debt securities
  • Ease of comparing losses across security types
  • Ease of comparing losses on very different portfolios

• Simplicity and transparency
  • Simple functional form can be used
  • Less information required relative to other models
  • Easy to identify model sensitivities and vet results
  • No dependence on deterministic methods
Ongoing model testing helps to ensure that we meet current performance objectives

• Benchmarking
  • The alternative model is currently used as a benchmark model.

• Back-testing

• Sensitivity Analysis