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Monetary, Fiscal, and Financial Stability Policy Tools: Are We Equipped for the Next Recession?

Eric S. Rosengren
President & CEO
Federal Reserve Bank of Boston

April 18, 2018

2018 Economics Department Grossman Lecture
Colby College
Waterville, Maine

bostonfed.org

Jan Hogendorn – First Grossman Professor

- 1978 Inaugural Grossman Lecture
- 1978 - 2001 Jan gave this lecture
  - 1979 “Economics of War”
  - 1986 “The Economics of Health Care – a Prescription”
  - 1987 “The False Promise of Protectionism”
  - 1996 “Our Banks Are Changing and We Must Be Sure that They Are Safe”
  - 2001 “175 Years of Economics at Colby”

Introduction

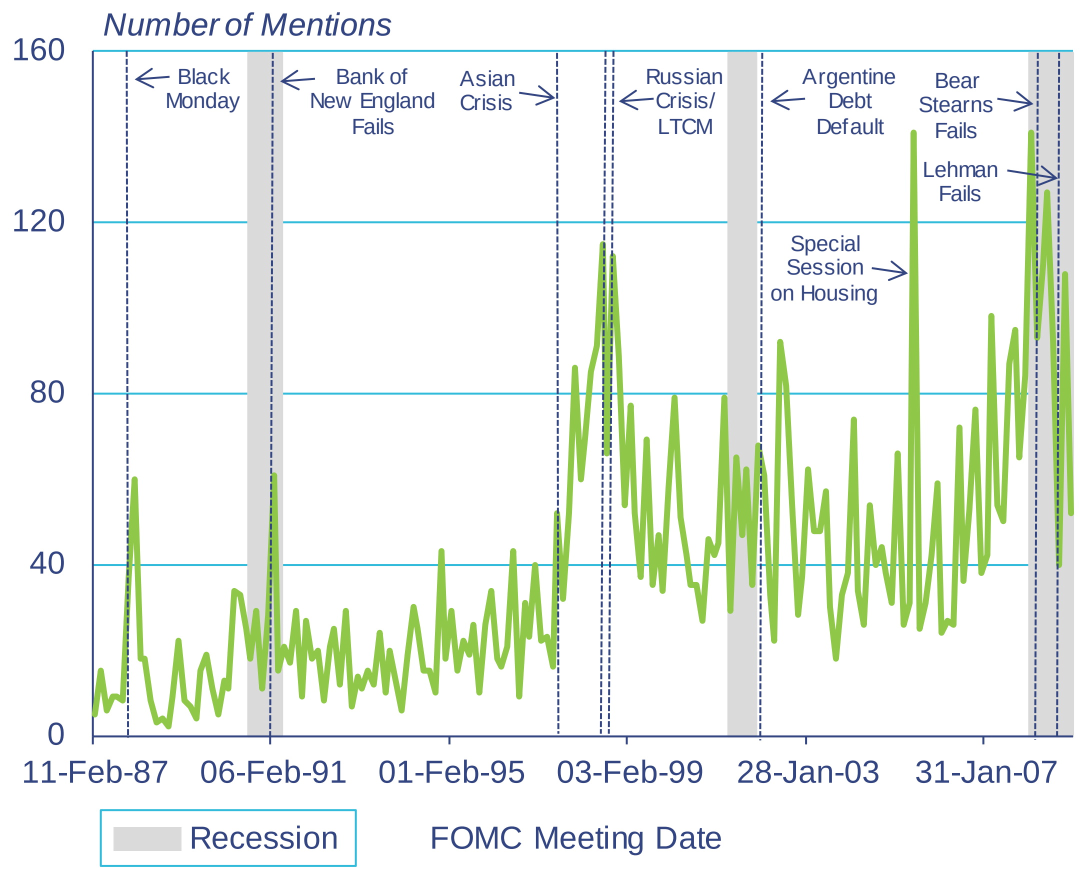
- Much of my own research has focused on the ways that problems in the financial system can ripple through to the real economy
- Certainly the last financial crisis – and the ensuing Great Recession and very slow recovery – underlined the role that financial instability can play in disrupting the economy and in slowing its recovery
- Emphasized the need for policy tools that can be deployed to attempt to *prevent* financial instability, as well as *minimize* the effects of instability when it does emerge

Financial Stability Tools

- Generally associated with regulatory and supervisory measures
- Often viewed as independent from the stance of monetary and fiscal policy
- I view financial stability tools more holistically
  - Integrally related to the ability to fully utilize fiscal and monetary tools to respond to adverse shocks
  - If other tools are limited (fiscal and monetary), need greater financial stability policy buffers

Figure 1: Mentions of Financial Instability in FOMC Meetings and Periods of Instability

February 11, 1987 - December 15, 2008



Source: Peek, Rosengren and Tootell. (2016) "Does Fed Policy Reveal a Ternary Mandate?" Federal Reserve Bank of Boston Working Paper 16-11

Response to Adverse Shocks

- Prevention of financial stability problems is critically important but not the focus of my talk tonight
- Focus tonight is on tools that are available to policymakers once a significant adverse financial shock occurs (that is, crisis *response*)
  - Fiscal, monetary, and financial tools can all play a role in offsetting the economic fallout
  - If monetary and fiscal policy have limited capacity to respond to such shocks – then need greater buffers from financial stability tools

Responses to Large Adverse Financial Shocks Require a Broad Set of Tools

- Fiscal tools – cutting taxes and increasing government spending
- Monetary policy tools – reducing interest rates and expanding the central bank’s balance sheet
- Financial stability tools that provide sufficient buffers

Calibration of Financial Stability Tools

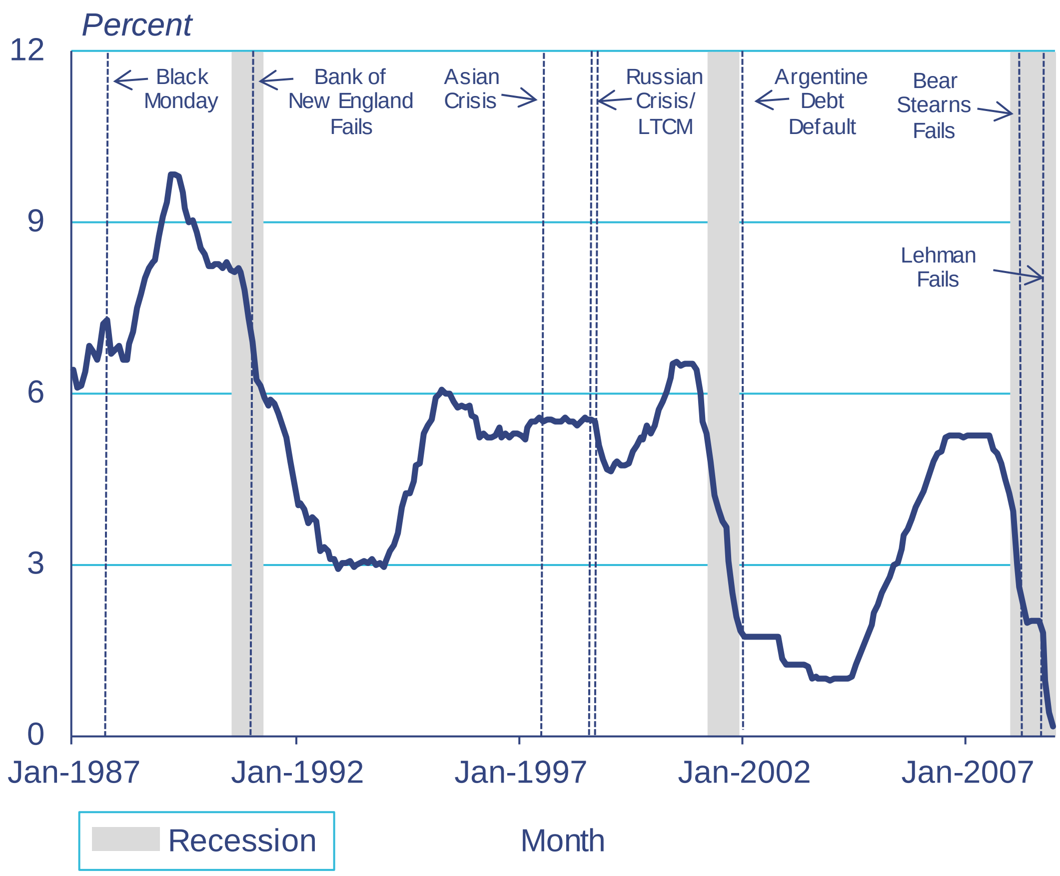
- Normally calibrated to the severity of likely economic stresses
- But important to take into account, how equipped fiscal and monetary policy are to respond
  - If government-debt-to-GDP ratio is high – limits the ability or willingness to use fiscal tools to offset financial and other shocks
  - If interest rates are already at or near the effective lower bound, and the country is unable or unwilling to use less-conventional monetary tools – limits capacity of monetary policy to respond

Good Current Conditions in U.S., But are We Ready for Hypothetical Adverse Shocks?

- U.S. has actually seen a reduction in the capacity of these so-called “buffers” across the policy tools
- There are implications if fiscal and monetary policy tools are likely to be limited
- Need to create greater capacity and flexibility within the tools currently available, including those most directly related to financial stability

Figure 2: Federal Funds Rate

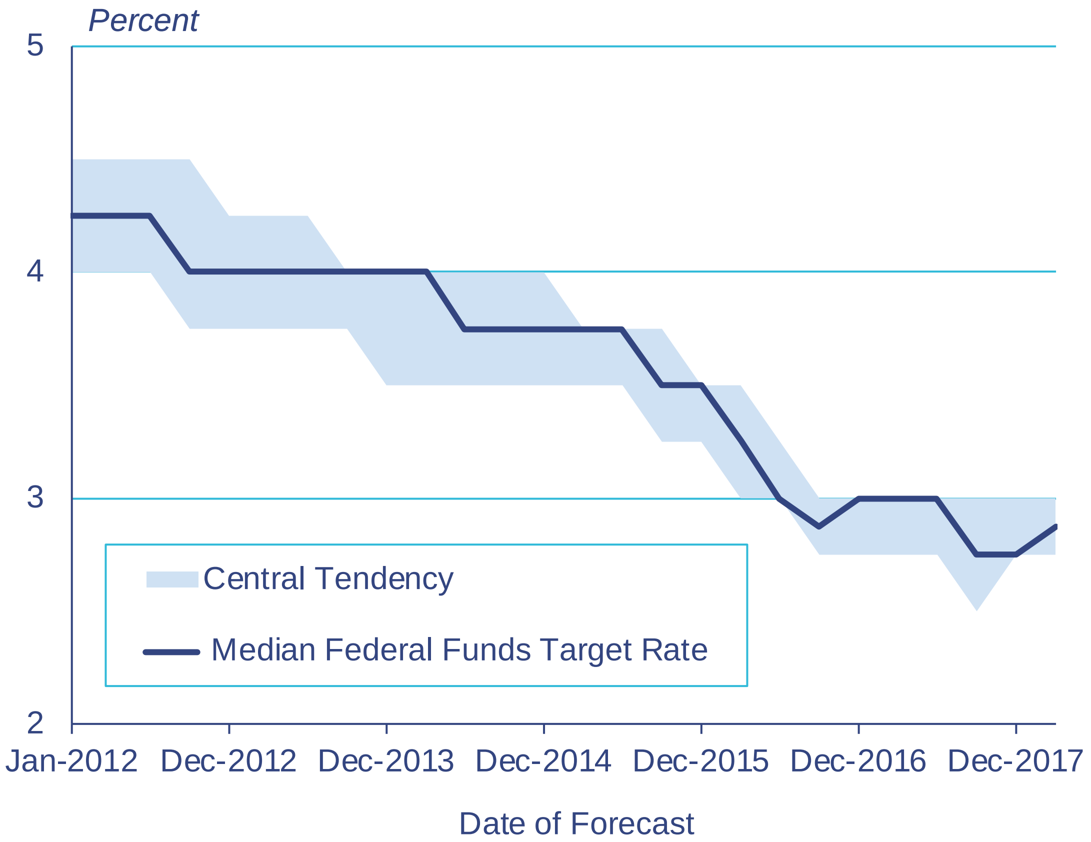
January 1987 - December 2008



Source: Federal Reserve Board, NBER, Haver Analytics

Figure 3: Forecasts for the Longer-Run Federal Funds Rate from the Summary of Economic Projections

January 2012 - March 2018

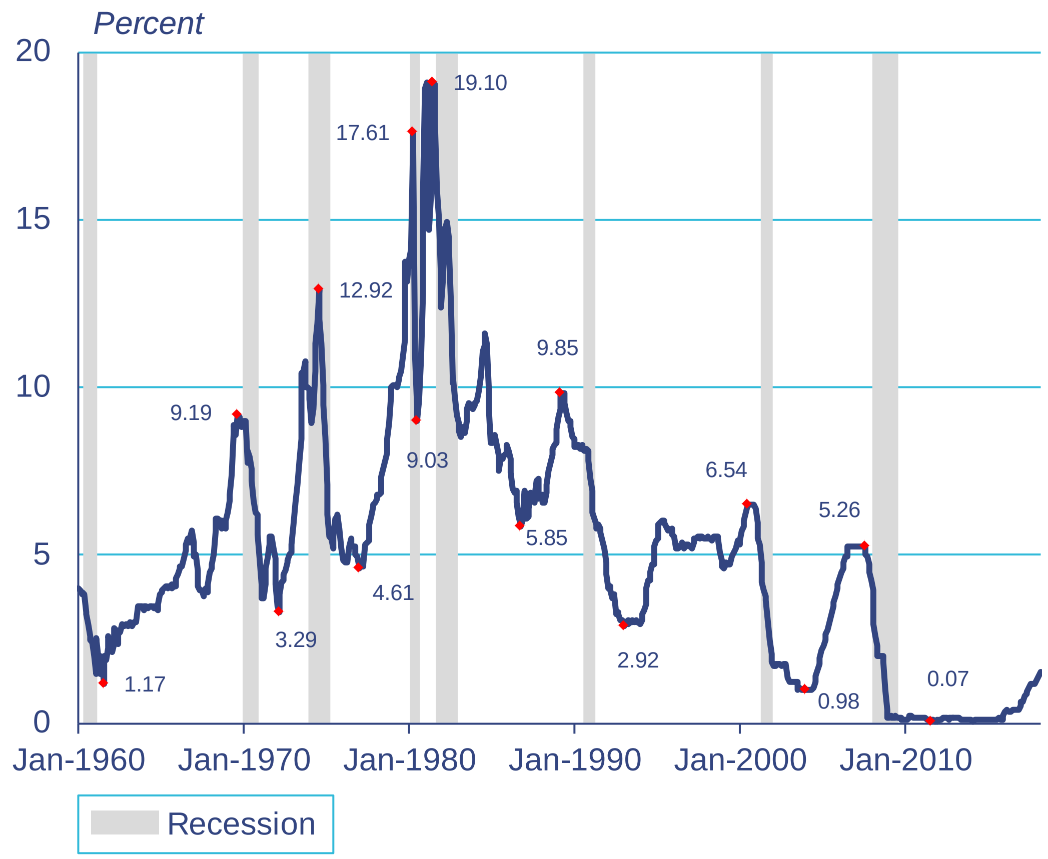


Note: The central tendency excludes the three highest and three lowest observations.

Source: FOMC, Summary of Economic Projections (SEP)

Figure 4: Federal Funds Rate, Noting Peaks and Troughs

January 1960 - March 2018



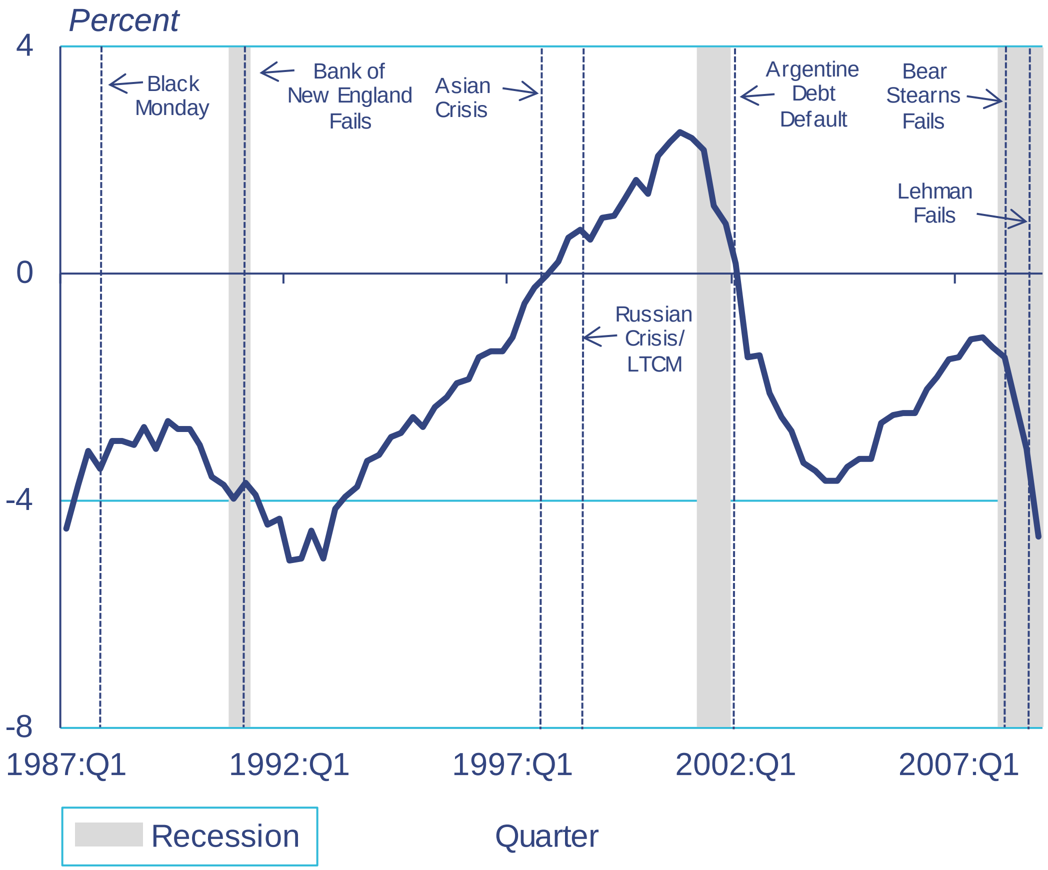
Source: Federal Reserve Board, NBER, Haver Analytics

Alternative Monetary Policy Framework

- Given low prevailing rates, could reduce likelihood of hitting effective lower bound, particularly if unconventional policy has limits
- Other monetary policy frameworks may reduce likelihood of hitting effective lower bound
- Alternatively, if monetary policy may be limited may want greater fiscal or financial stability buffers

Figure 5: Federal Government Surplus or Deficit as a Percentage of GDP

1987:Q1 - 2008:Q4



Note: Figures are four-quarter moving averages.

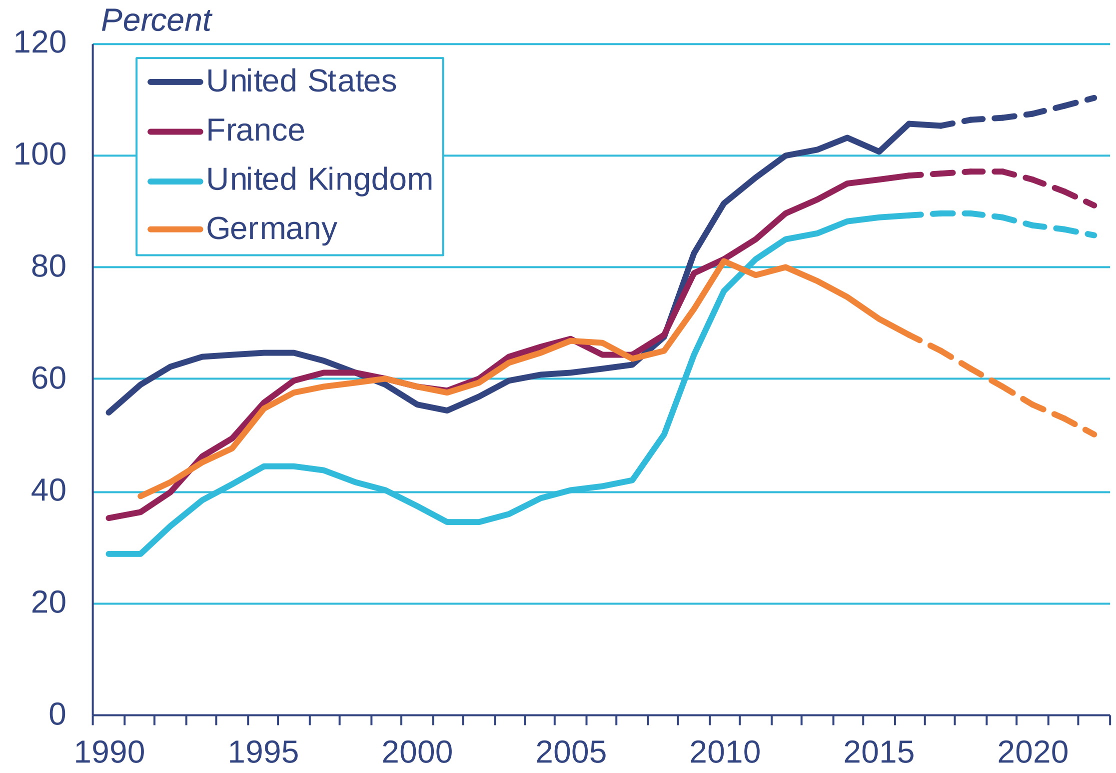
Source: BEA, U.S. Treasury, NBER, Haver Analytics

Fiscal Limitations

- Impact the choices that policymakers have to utilize potential financial stability tools
- In the last crisis the U.S. provided direct capital infusions into the financial system
  - Arguably limited the severity of credit crunches
  - Promoted a quicker recovery in the financial sector in the U.S. relative to Europe
- Such actions require a fiscal buffer making it possible to finance the effort

Figure 6: General Government Gross Debt as a Percentage of GDP

1990 - 2022



Note: Actuals are through 2017 for the U.S. and 2016 for all other countries. CBO projections for the U.S. (2018 - 2022) were released on April 9, 2018 and include the recent tax changes and increases in the federal budget.

Source: OMB (U.S.), CBO (U.S.), IMF (France, Germany, U.K.), Haver Analytics

European Challenges in the Last Recession

- Southern European countries experienced serious fiscal problems in addition to serious banking problems
- Those countries in Europe with less severe banking problems but substantial fiscal capacity, did not want to use their fiscal capacity to resolve banking problems in other European countries
- As a result, the banking problems could not be easily resolved with capital infusions
- Fiscal capacity problems caused difficulties in resolving financial stability problems, making both worse

Financial Stability Tools in the U.S. are Limited

- The two primary financial stability tools available to the Federal Reserve
  - Altering the scenarios used in the bank stress tests that are applied to the largest banks
  - Setting of the countercyclical capital buffer
- Other countries have much larger set of tools and more flexibility to use them

Bank Stress Tests

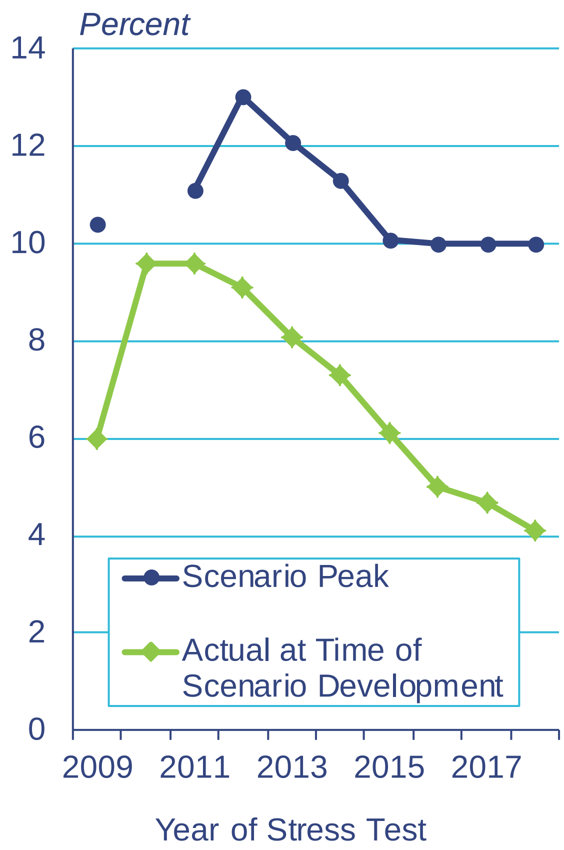
- The stress test is primarily a microprudential tool
  - Designed to ensure sufficient capital for banks in the event of a large financial shock
  - By “stressing” particular assets, the test alters the cost of capital for that asset class
- Firms’ post-stress capital may decrease (or increase) relative to reported capital by varying magnitudes, depending on the mix of assets and hence the mix of risks

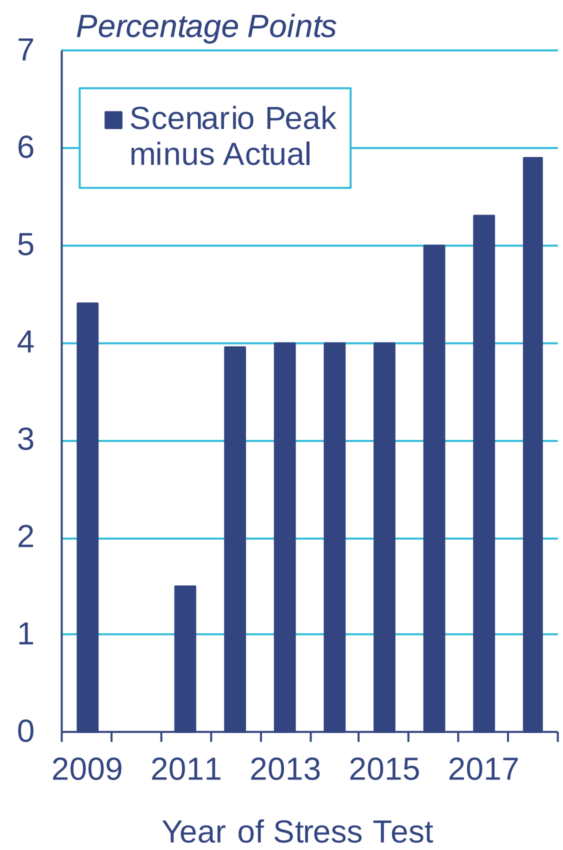
Countercyclical Capital Buffer

- The countercyclical capital buffer is intended to be a macroprudential tool
- The buffer increases capital for all financial firms it applies to during periods of financial excess, but is intended to release capital during stressful periods
- Because it is not related to particular stress scenarios, it does not alter the cost of capital for specific assets

Figure 7: Unemployment Rates and Stress Tests: Actual and Severely Adverse Scenario Peak

2009 - 2018





Note: There was no stress test in 2010.

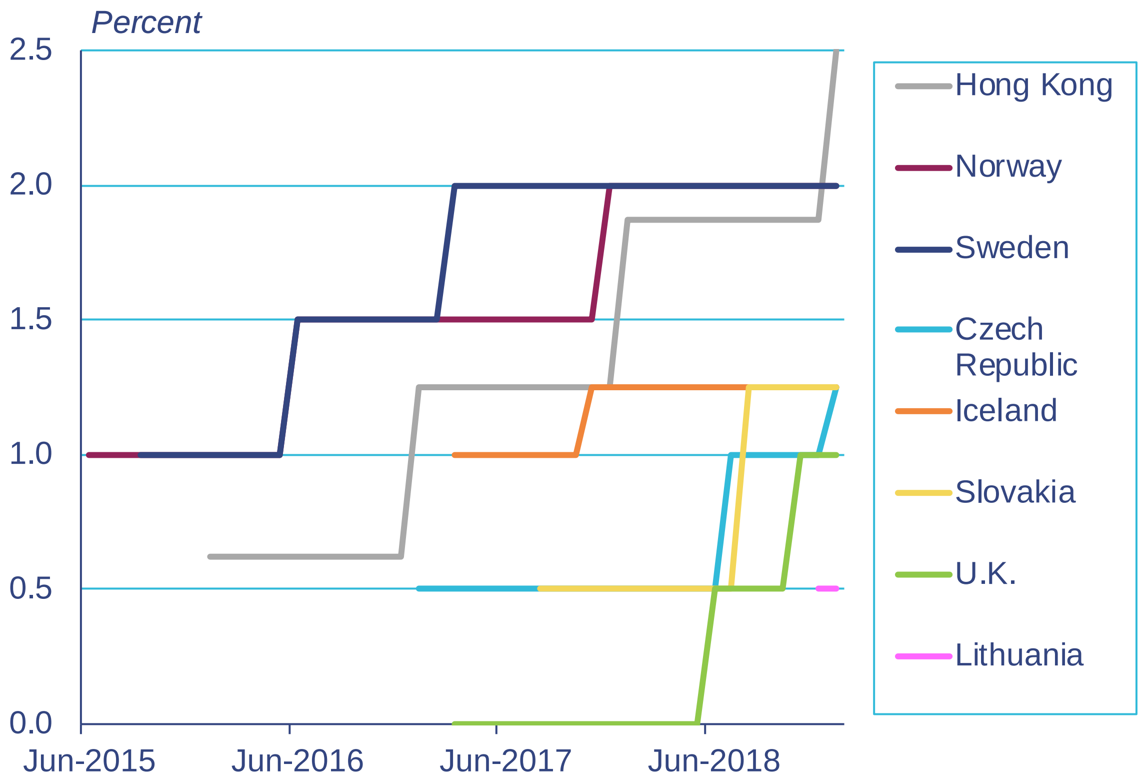
Source: Federal Reserve Board

Stress Tests and Credit Availability

- Stress tests as currently utilized may not effectively release capital in a crisis
- Could encourage banks to reduce credit availability to shrink assets to satisfy binding capital constraints
- Examine the possibility of unintended consequences and assess whether stress tests may work at cross purposes to other tools designed to speed the recovery from a negative financial shock
- Other tools may be better designed to release capital to avoid reductions in credit availability

Figure 8: Countercyclical Capital Buffers by Jurisdiction

June 2015 - January 2019

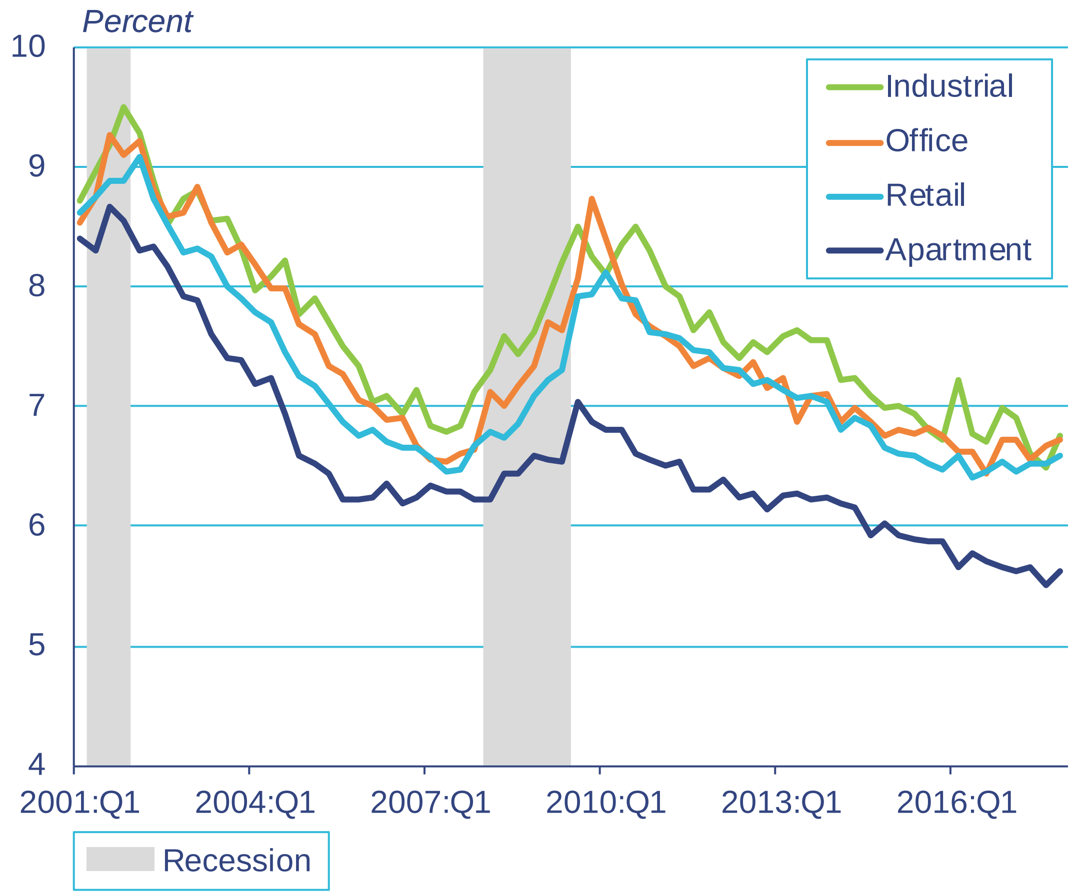


Note: Based on implementation date, which is generally twelve months after announcement. The U.K. initially announced a CCyB of 0.5% in March 2016, with an implementation date of March 2017, however in July 2016 the CCyB was lowered to 0%.

Source: European Systemic Risk Board, Bank of England, Hong Kong Monetary Authority

Figure 9: Capitalization Rates by Property Type

2001:Q1 - 2017:Q4

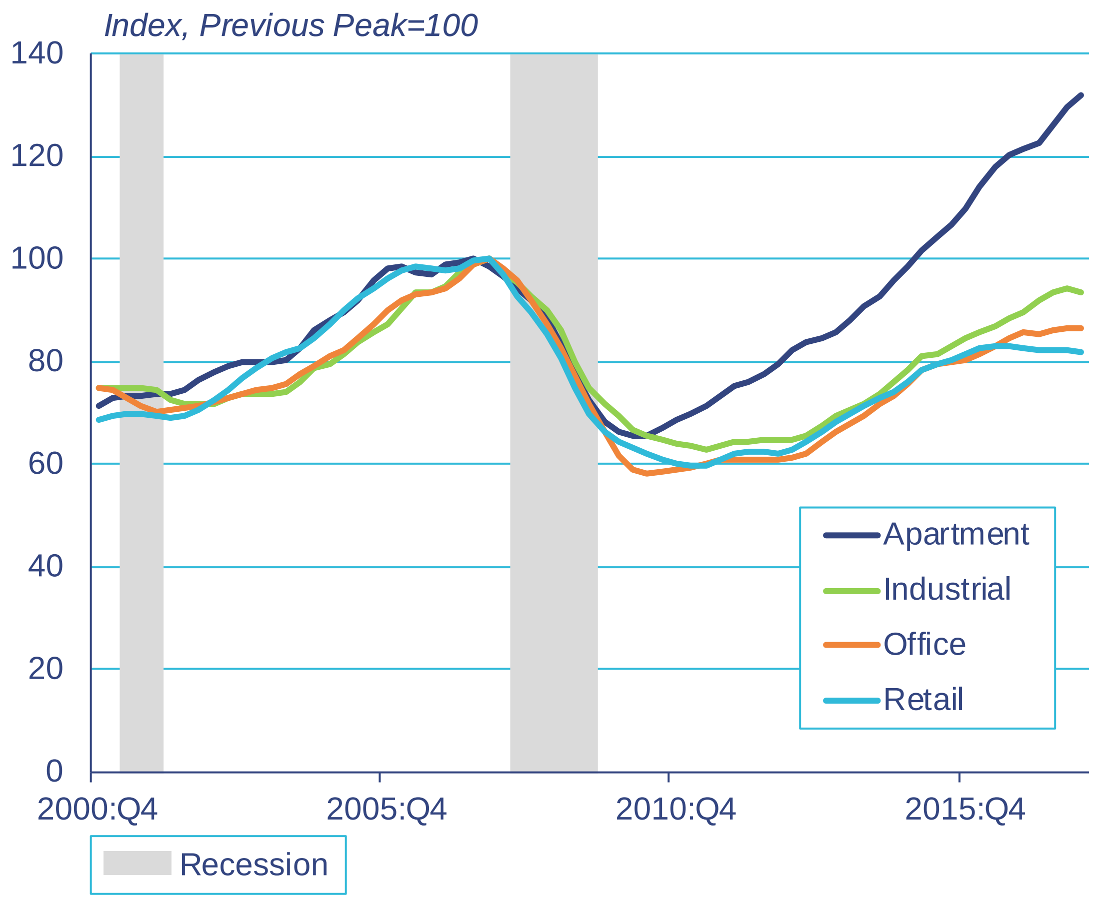


Note: The capitalization or "cap" rate is the ratio of net operating income produced by a property to the price paid, calculated at the time of a transaction. Based on properties of $2.5 million or more.

Source: Real Capital Analytics, NBER, Haver Analytics

Figure 10: Real Commercial Property Price Indices by Property Type

2000:Q4 - 2017:Q4

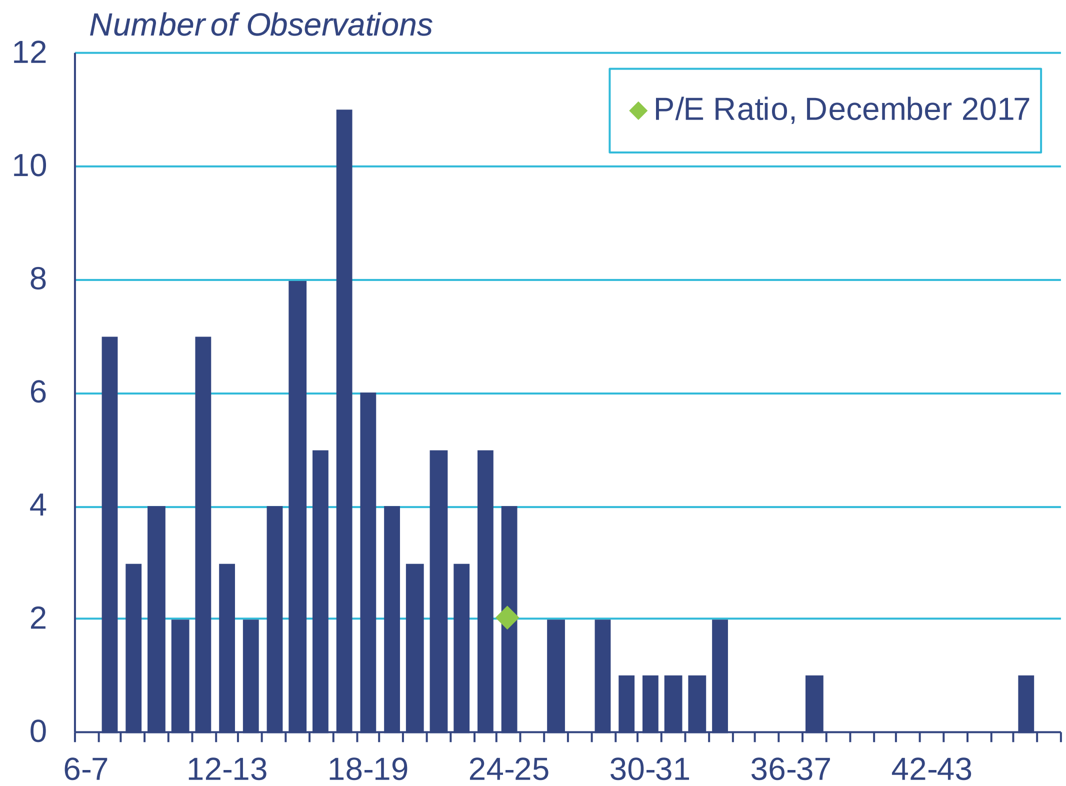


Note: Indices are adjusted for inflation using the GDP deflator. Indices are repeat-sales based and include properties of $2.5 million or more.

Source: Real Capital Analytics, BEA, NBER, Haver Analytics

Figure 11: Distribution of S&P 500 Composite Price to Earnings Ratios

June and December, 1968 - 2017

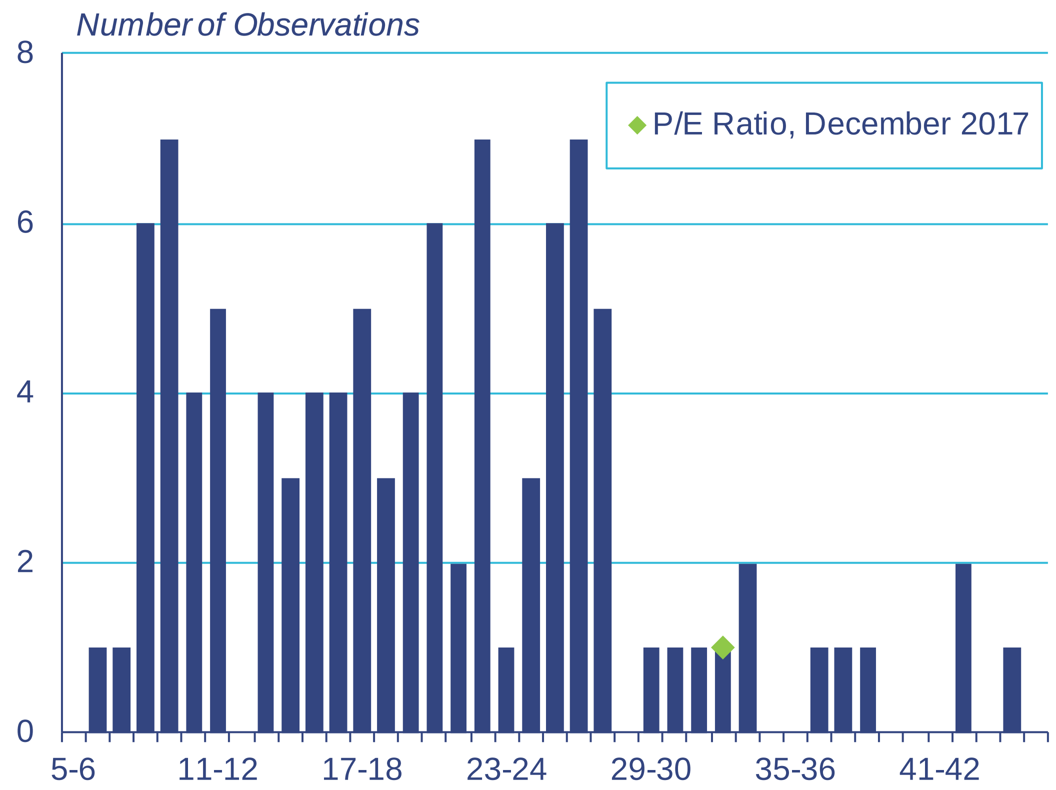


Note: Excludes 2 outliers -- Dec 2008 (60.7) and Jun 2009 (122.4)

Source: S&P, Haver Analytics

Figure 12: Distribution of Shiller Cyclically-Adjusted S&P 500 Composite Price to Earnings Ratios

June and December, 1968 - 2017



Source: Robert Shiller, Haver Analytics

Concluding Observations

- Now is the time to assess and strengthen the various policy tools – yet the tools have actually been diminishing
  - Monetary policy buffer has essentially been depleted as the nominal equilibrium interest rate has fallen
  - Government-debt-to-GDP ratio is high by historical standards in many countries, but we see that it is rising in the U.S., potentially constraining flexibility to respond to a shock
  - Countercyclical capital buffer, which was designed to be released in response to a large adverse financial shock, is currently set at zero

Concluding Observations (Continued)

- Many countries are not well equipped to address an adverse financial stability shock
- In the U.S., one can see that monetary, fiscal, and macroprudential buffers are modest, and in many cases are being drawn down further
- Now should be the time that policymakers assess which tools could provide more potent buffers to draw upon should a large adverse financial shock occur