



EMBARGOED UNTIL FRIDAY, MARCH 23, 2018 AT 7:00 P.M.; OR UPON DELIVERY

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

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Monetary Policy  
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[bostonfed.org](http://bostonfed.org)



## Introduction

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- ▶ 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
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## Financial Stability Tools

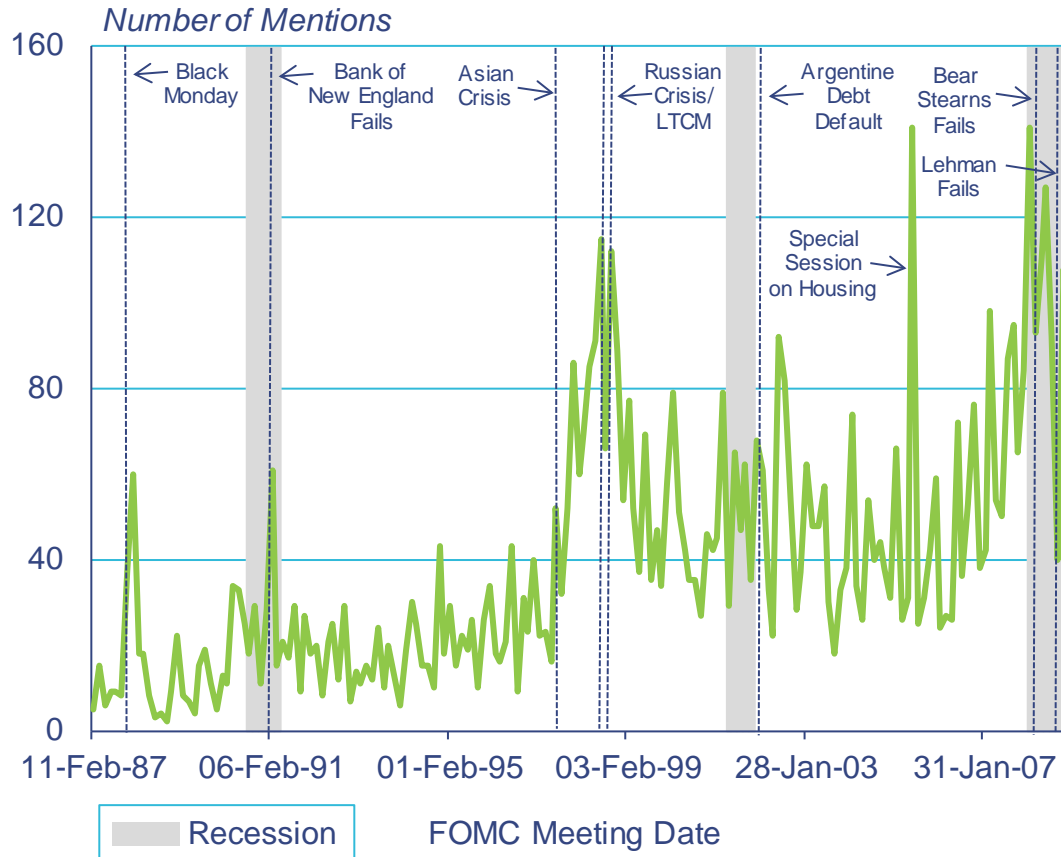
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- ▶ Generally associated with regulatory and supervisory measures
  - ▶ Often viewed as independent from the stance of monetary and fiscal policy
  - ▶ I view financial stability tools more holistically
    - ▶ Integrally related to the ability to 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
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# Figure 1: Mentions of Financial Instability in FOMC Meetings and Periods of Instability

February 11, 1987 - December 15, 2008





## Response to Adverse Shocks

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

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- ▶ 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
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## Calibration of Financial Stability Tools

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- ▶ 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
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## Good Current Conditions in U.S., But are we Ready for Hypothetical Adverse Shocks?

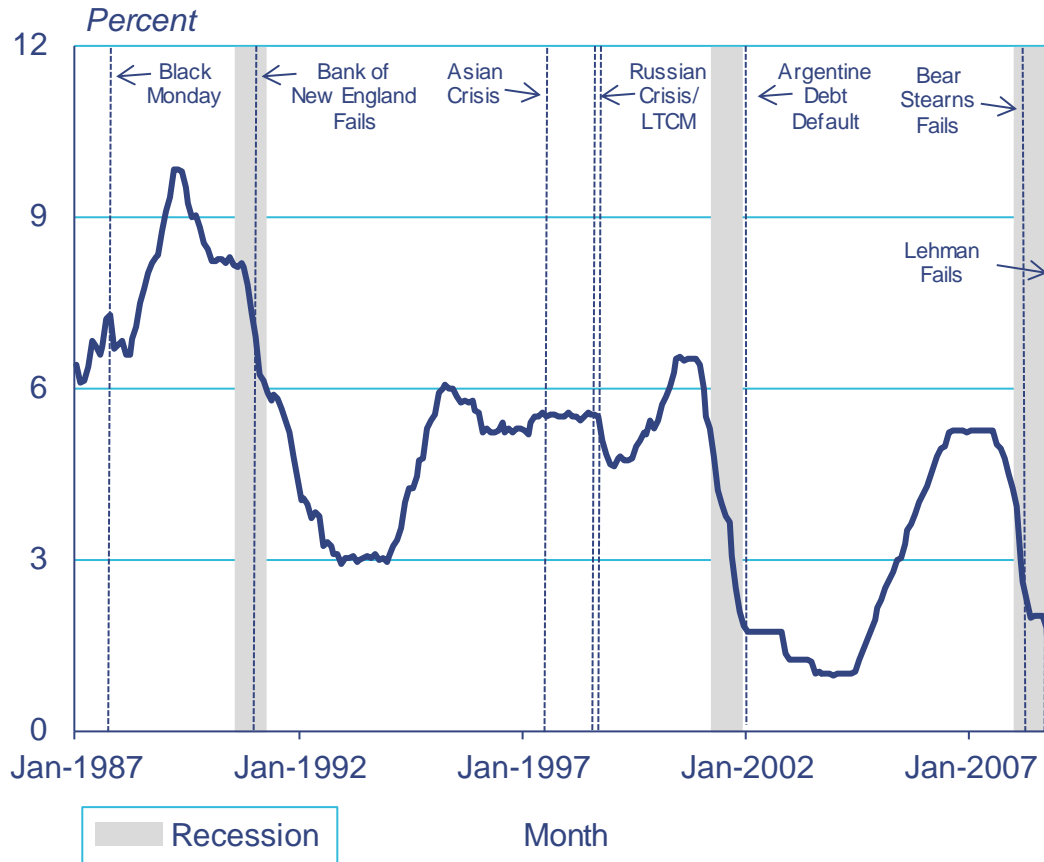
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- ▶ U.S. has actually seen a reduction in the capacity of these so-called “buffers” across the policy tools
  - ▶ There are implications if fiscal and monetary policy tools are likely to be limited
  - ▶ Need to create greater capacity and flexibility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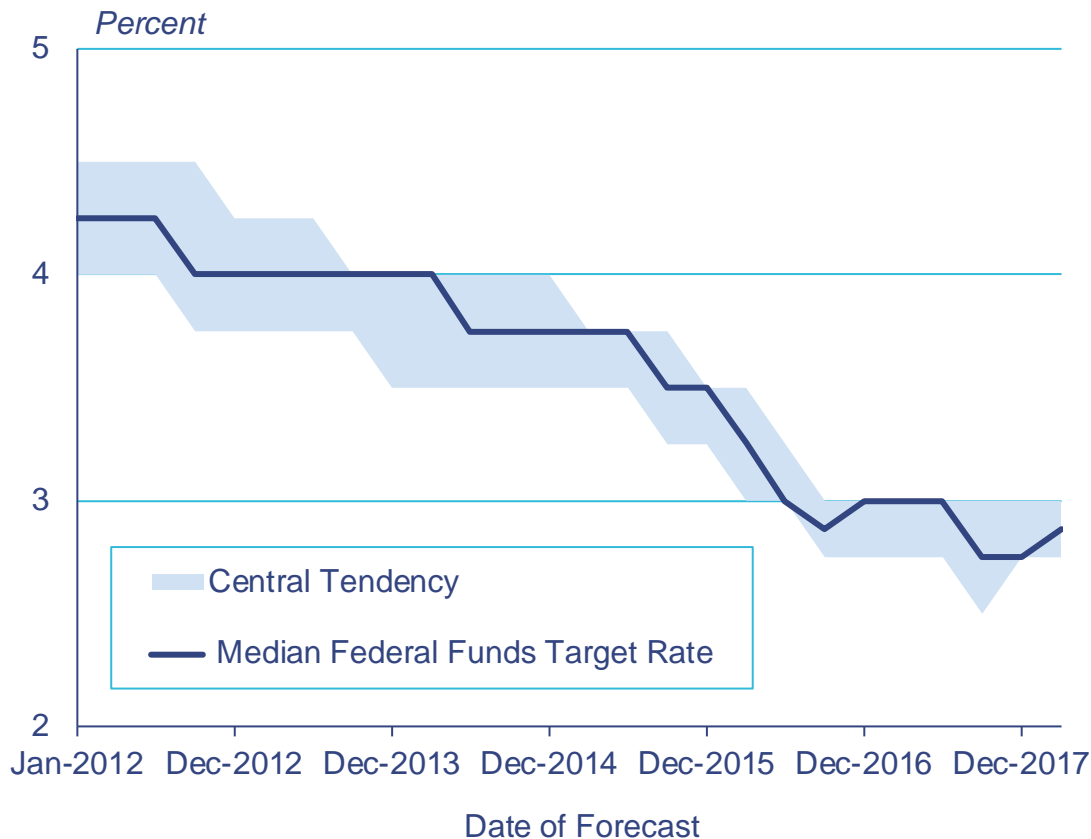


Figure 2: Federal Funds Rate  
January 1987 - December 2008





# Figure 3: Forecasts for the Longer-Run Federal Funds Rate from the Summary of Economic Projections January 2012 - March 2018



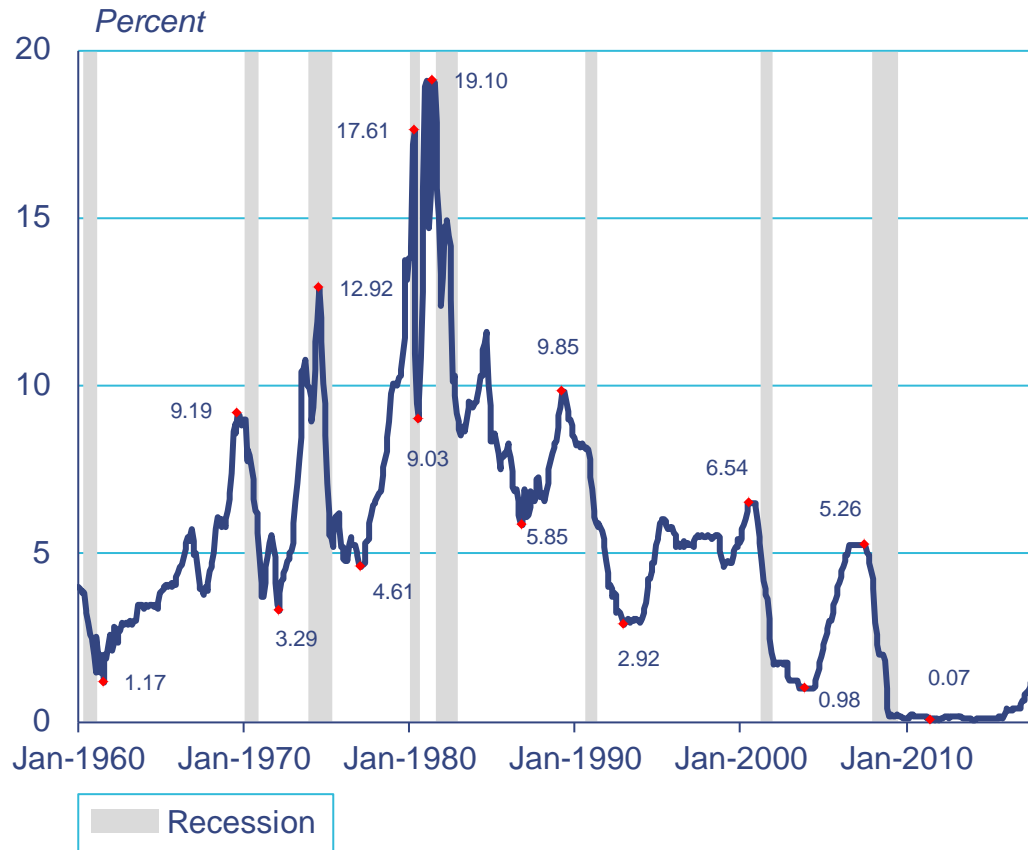
Note: The central tendency excludes the three highest and three lowest observations.

Source: FOMC, Summary of Economic Projections (SEP)



# Figure 4: Federal Funds Rate, Noting Peaks and Troughs

January 1960 - February 2018





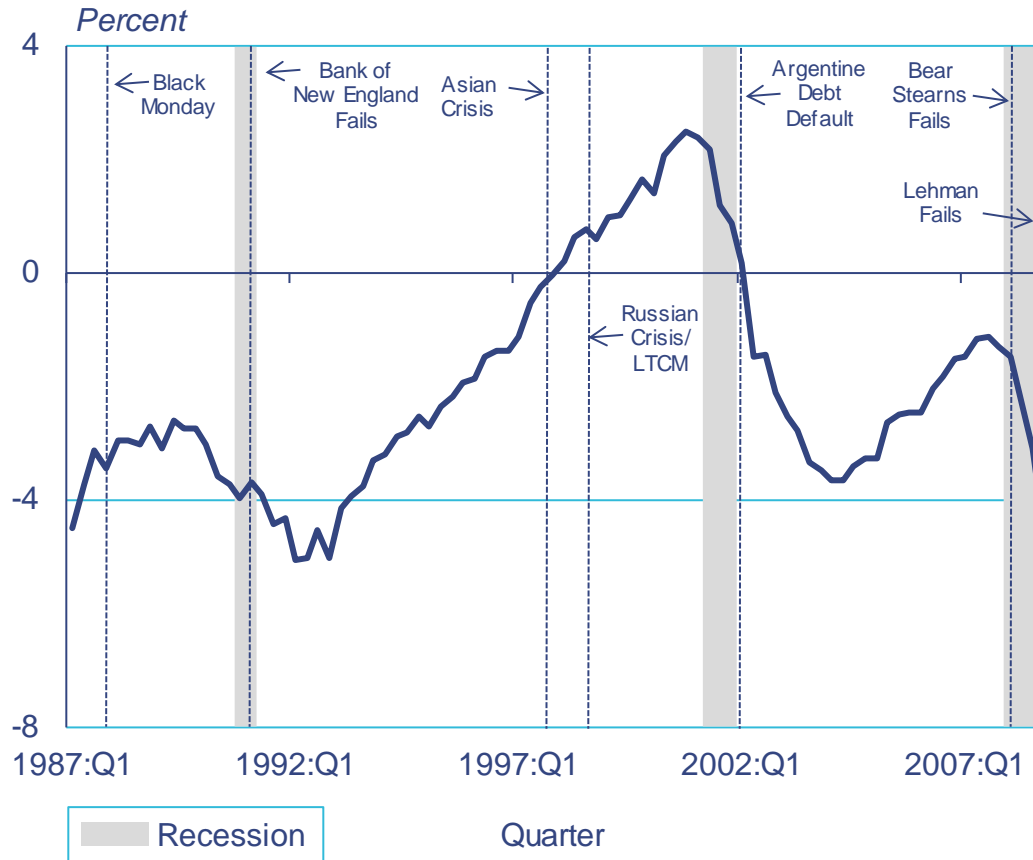
## Alternative Monetary Policy Framework

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- ▶ 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
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# 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

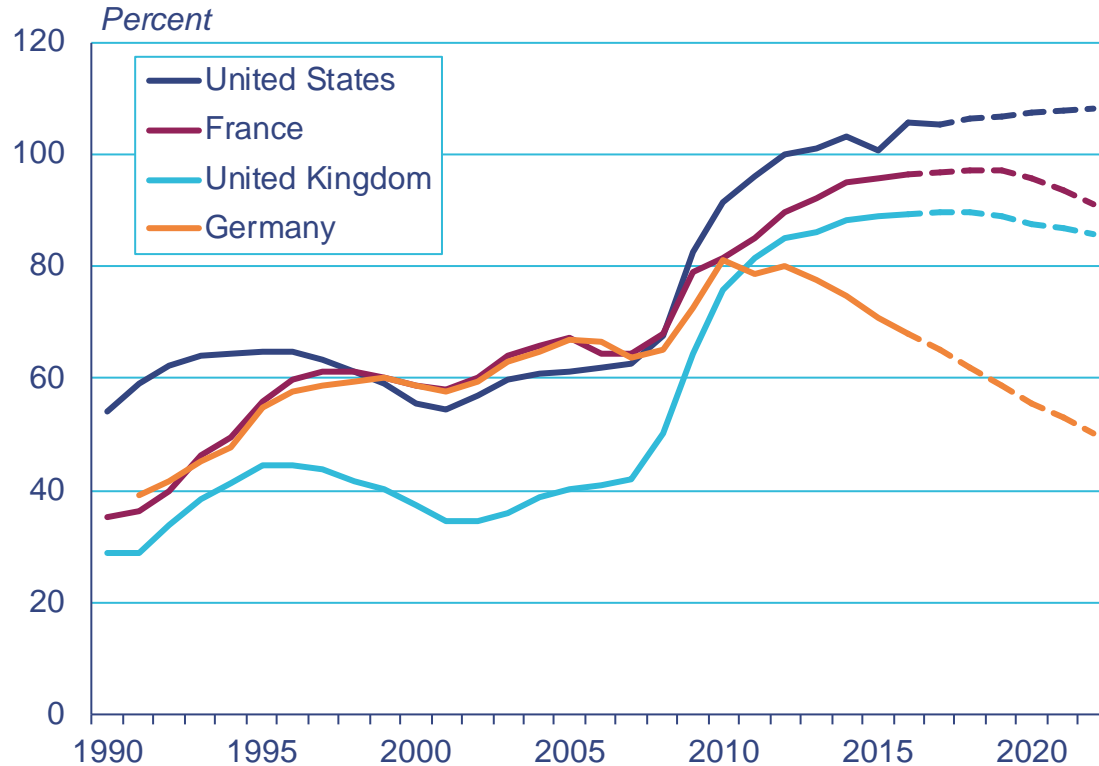
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- ▶ Impact the choices that policymakers have to utilize potential financial stability tools
  - ▶ In the last crisis the U.S. provided direct capital infusions into the financial system
    - ▶ Arguably limited the severity of credit crunches
    - ▶ 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
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# Figure 6: General Government Gross Debt as a Percentage of GDP

1990 - 2022



Note: Actual are through 2017 for the U.S. and 2016 for all other countries. CBO projections for the U.S. (2018 – 2022) do not 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

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- ▶ 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
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## Financial Stability Tools in the U.S. are Limited

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- ▶ 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
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## Bank Stress Tests

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- ▶ 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
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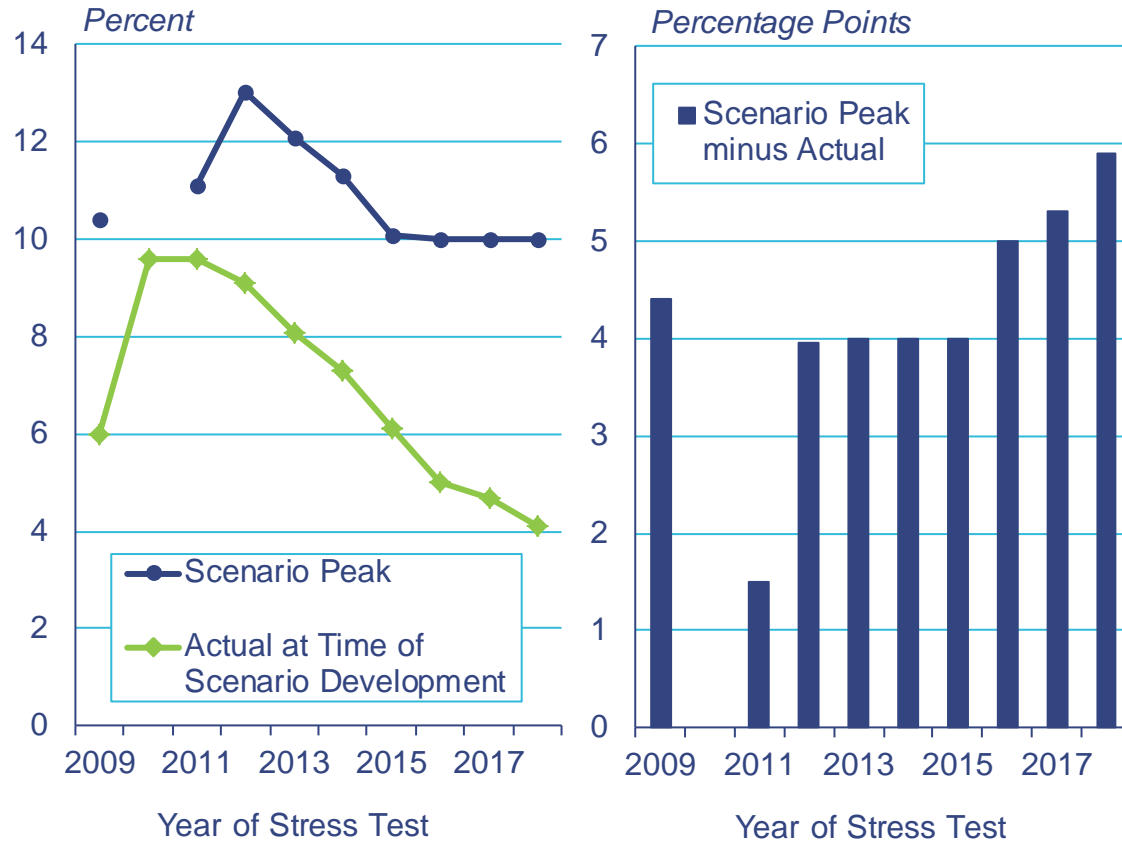
## Countercyclical Capital Buffer

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- ▶ 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
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# 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

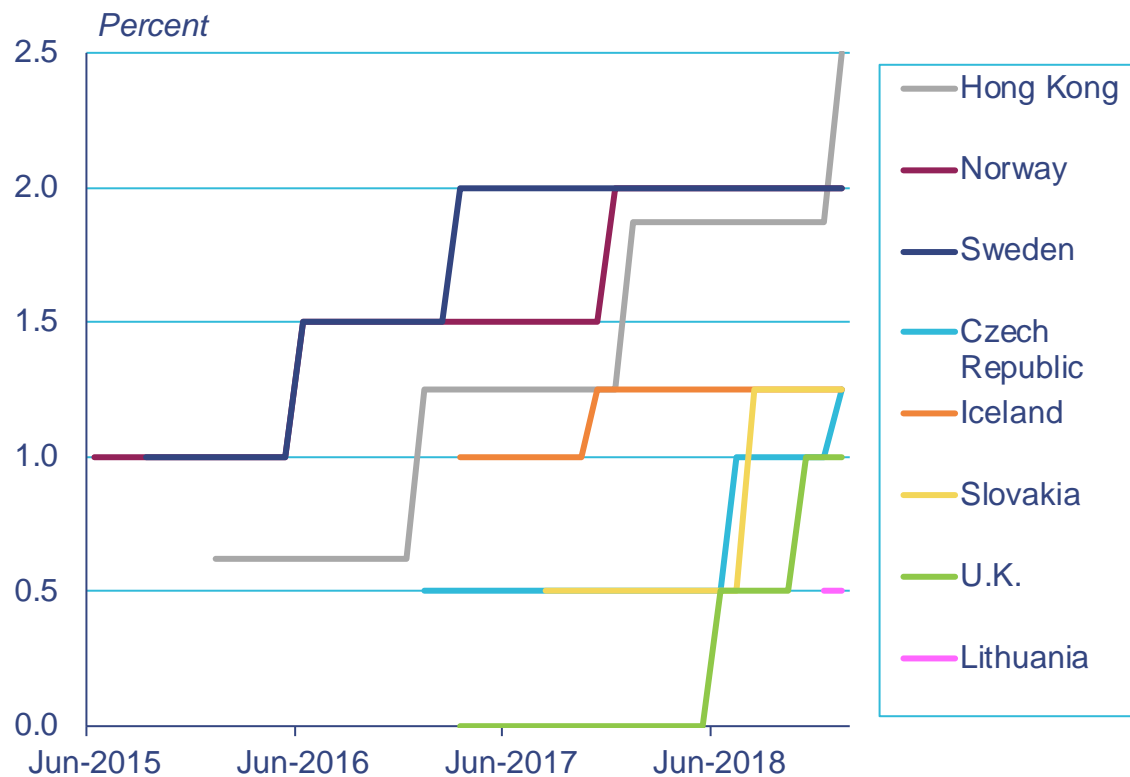
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- ▶ Stress tests as currently utilized may not effectively release capital in a crisis
  - ▶ Could encourage banks to reduce credit availability to shrink assets to satisfy binding capital constraints
  - ▶ Examine the possibility of unintended consequences 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
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## Figure 8: Countercyclical Capital Buffers by Jurisdiction

June 2015 - January 2019

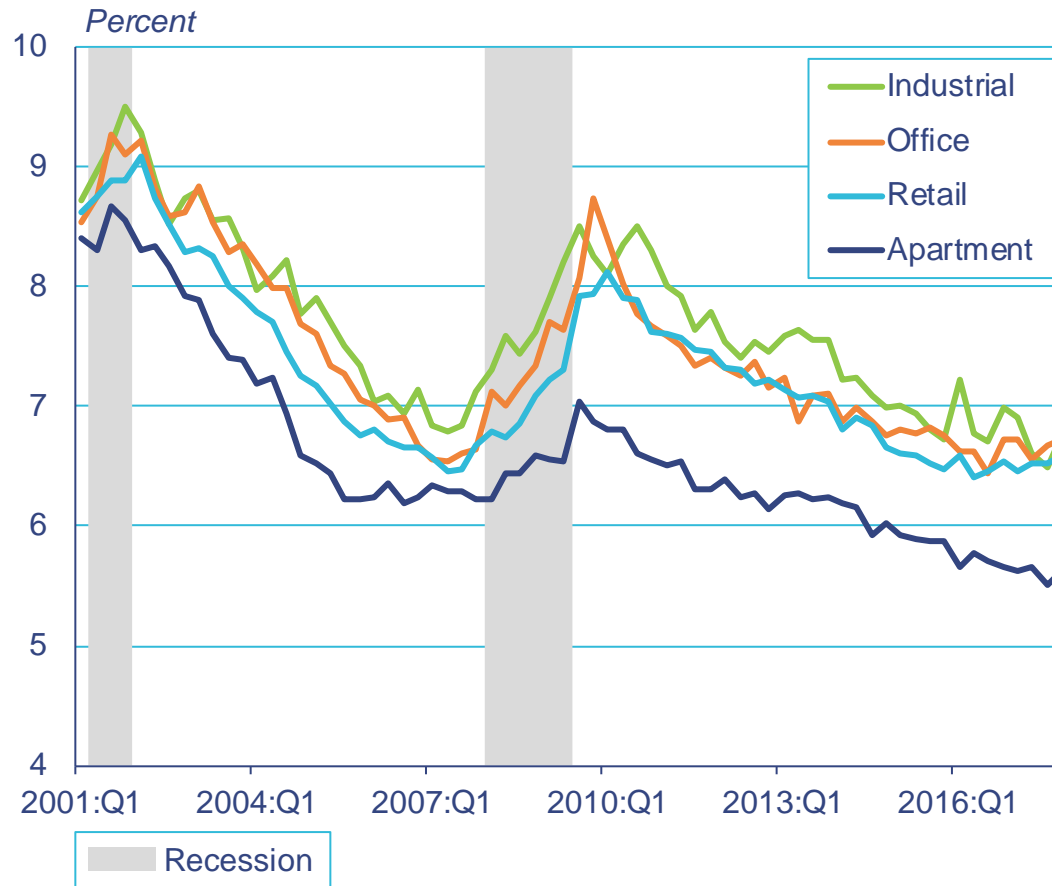


Note: Based on implementation date, which is generally twelve months after announcement. The U.K. initially announced a CCyB of 0.5% in March 2016, with an implementation date of March 2017, however in July 2016 the CCyB was lowered to 0%.

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



# Figure 9: Capitalization Rates by Property Type 2001:Q1 - 2017:Q4



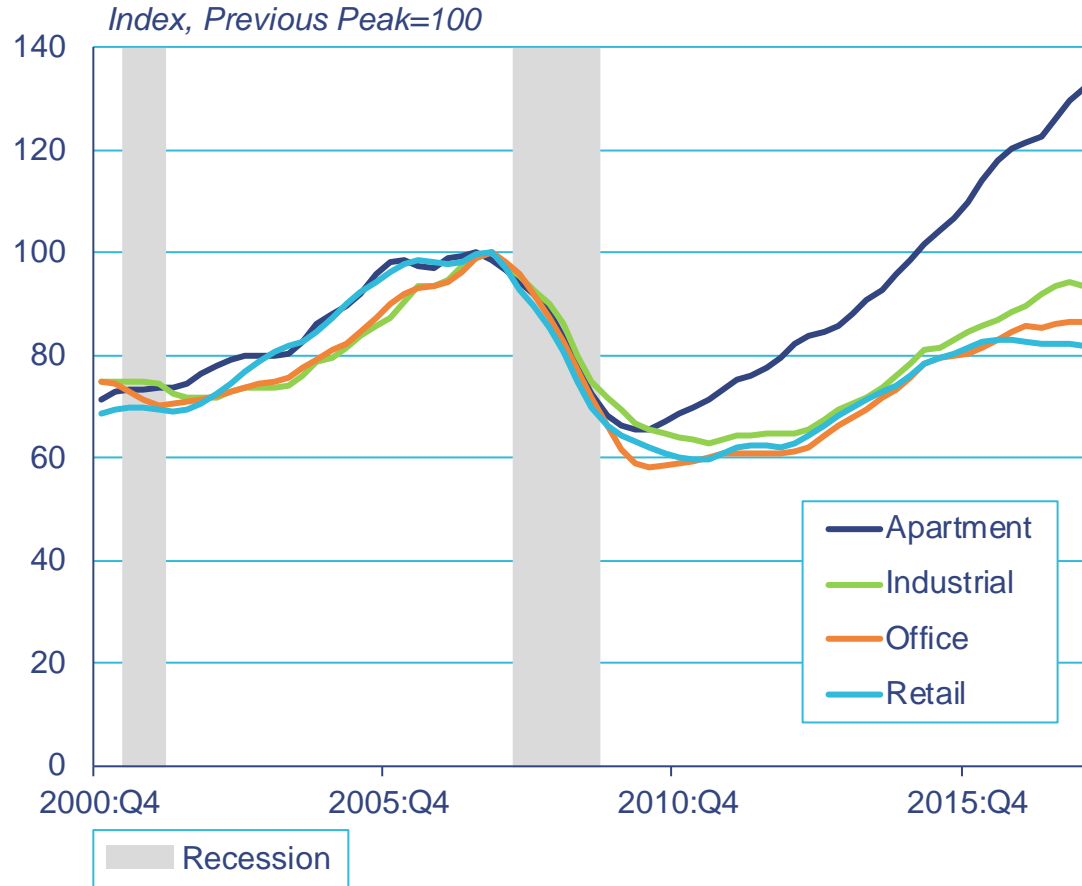
Note: The capitalization or “cap” rate is the ratio of net operating income produced by a property to the price paid, calculated at the time of a transaction. Based on properties of \$2.5 million or more.

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.

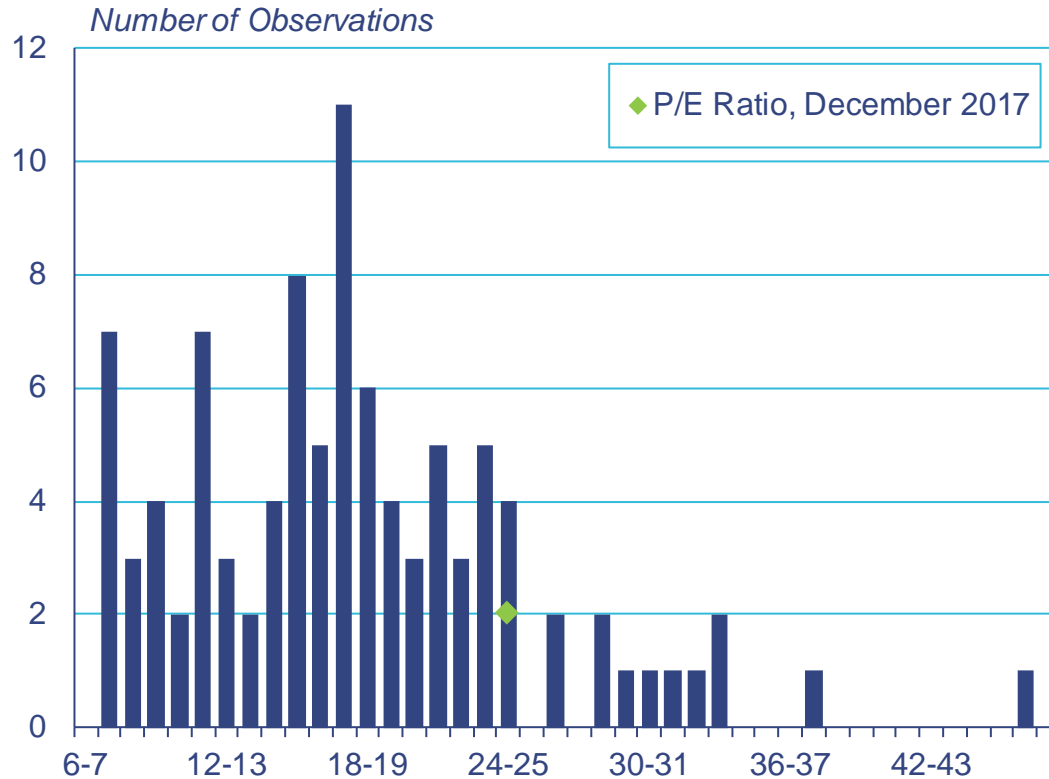
Source: Real Capital Analytics, BEA, NBER, Haver Analytics





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

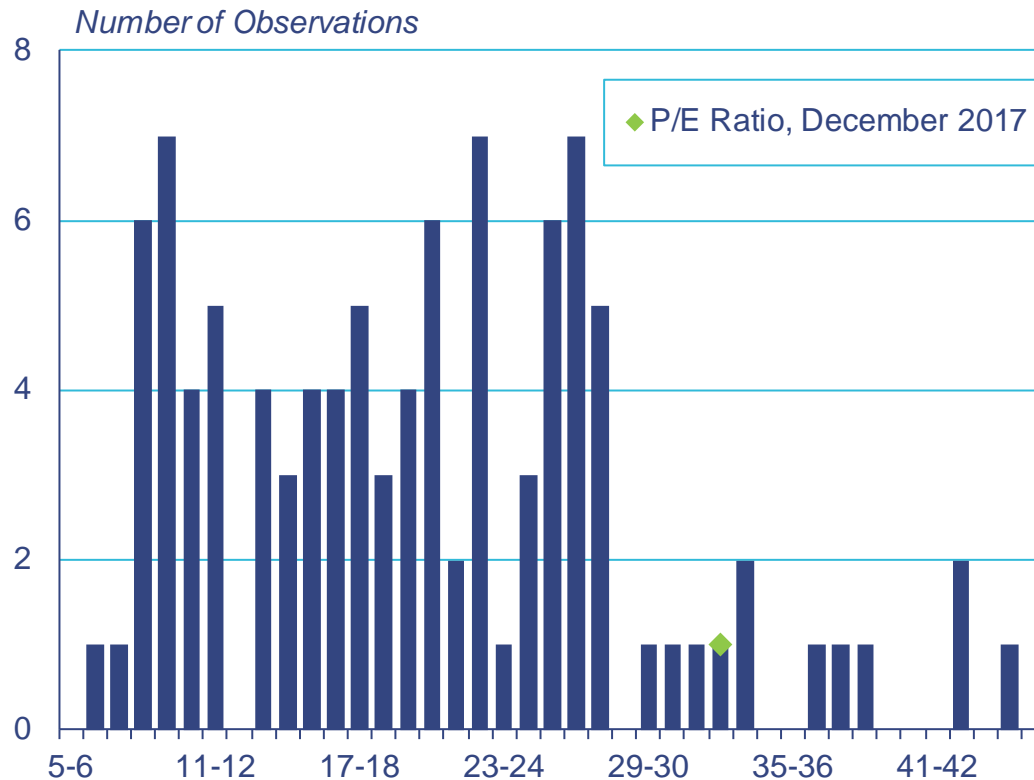
June and December, 1968 - 2017



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



Figure 12: Distribution of Shiller Cyclically-Adjusted S&P 500 Composite Price to Earnings Ratios  
June and December, 1968 - 2017





## Concluding Observations

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- ▶ 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
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## Conclusion (continued)

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- ▶ Many countries are not well equipped to address an adverse financial stability shock
  - ▶ In the United States, 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
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