



Assessing Economic Conditions and Risks to Financial Stability

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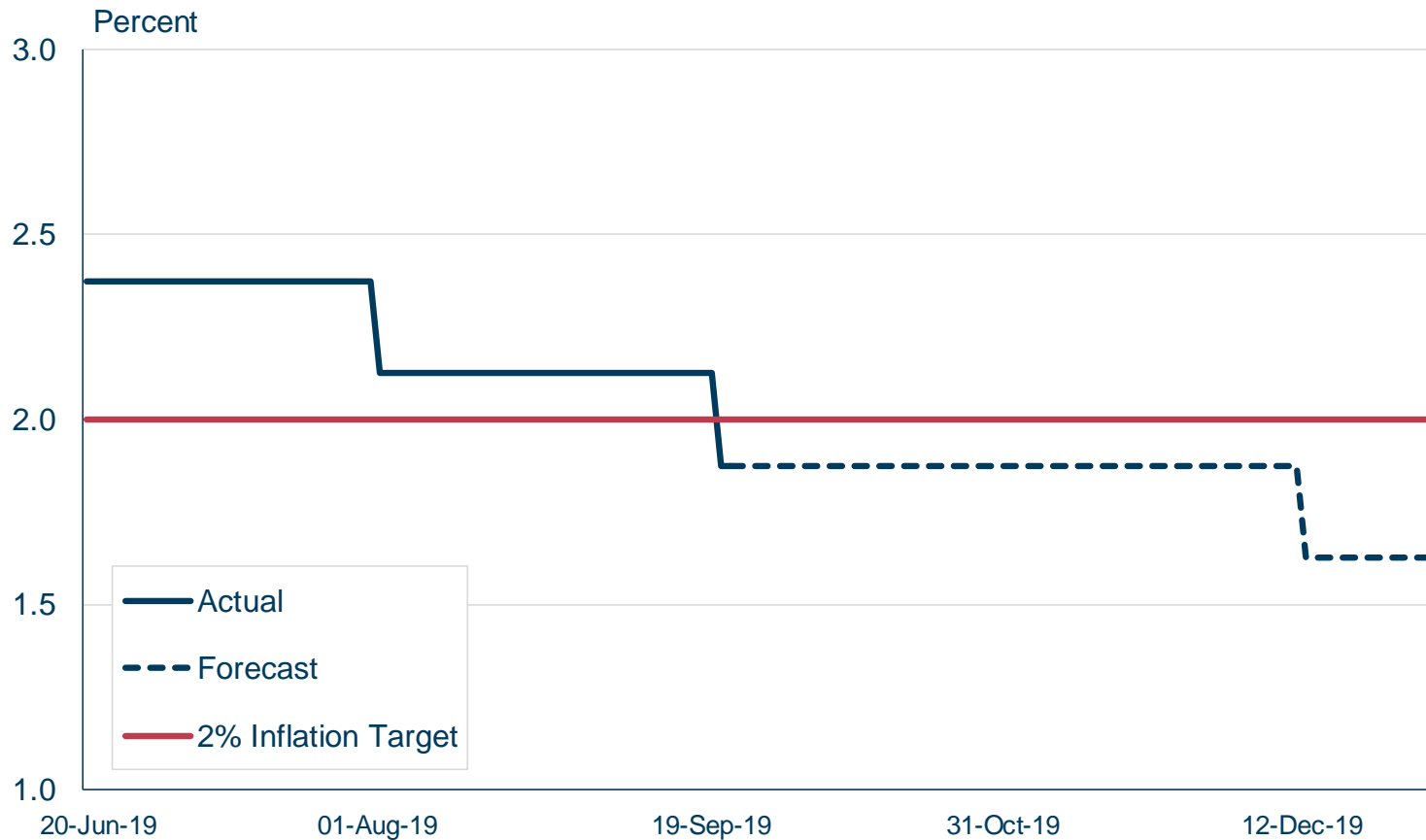


Figure 1: Recent Data and Blue Chip Forecasts

Actual	May 2019	June 2019	July 2019	Aug 2019
Unemployment Rate (%)	3.6	3.7	3.7	3.7
Inflation Rate (% Change from Year Earlier)				
CPI	1.8	1.6	1.8	1.7
Core CPI	2.0	2.1	2.2	2.4
S&P 500				
Monthly Average	2,854.71	2,890.17	2,996.11	2,897.50
Month-end Close	2,752.06	2,941.76	2,980.38	2,926.46
Consensus Forecast for 2019 as of:	June 10, 2019		September 10, 2019	
Real GDP (% Change, Full Year over Prior Year)	2.5		2.3	
Unemployment Rate (% , Fourth Quarter)	3.6		3.6	
CPI (% Change, Full Year over Prior Year)	1.9		1.8	

Figure 2: Federal Funds Target Rate: Actual and Forecast

June 20, 2019 - December 31, 2019

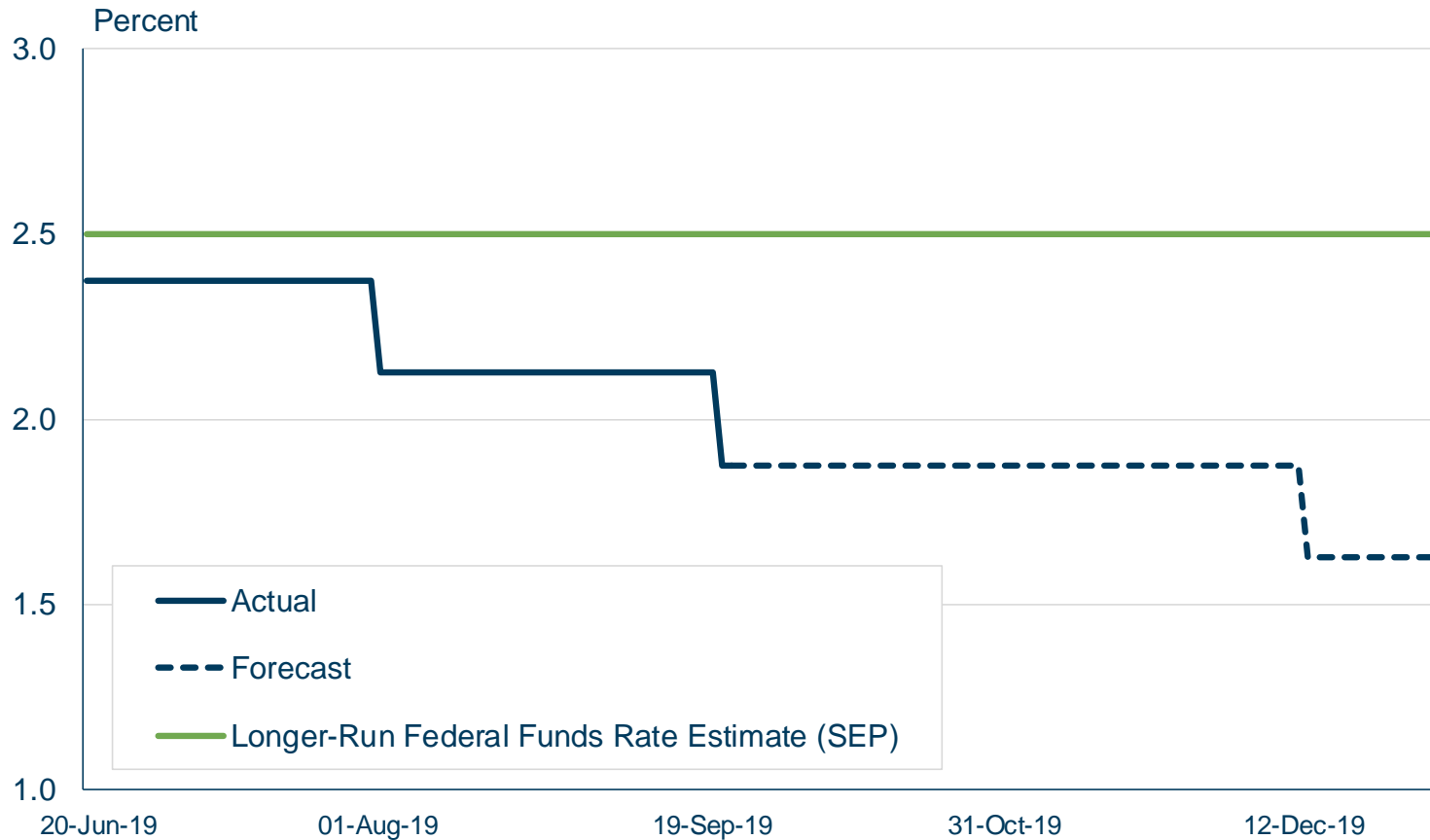


Note: The forecast for the federal funds target rate is calculated using the CME Group probability for the most likely outcome for the target range. Pictured above is the midpoint of the actual and forecast target ranges.

Source: Federal Reserve Board, CME Group, Haver Analytics

Figure 3: Federal Funds Target Rate: Actual and Forecast

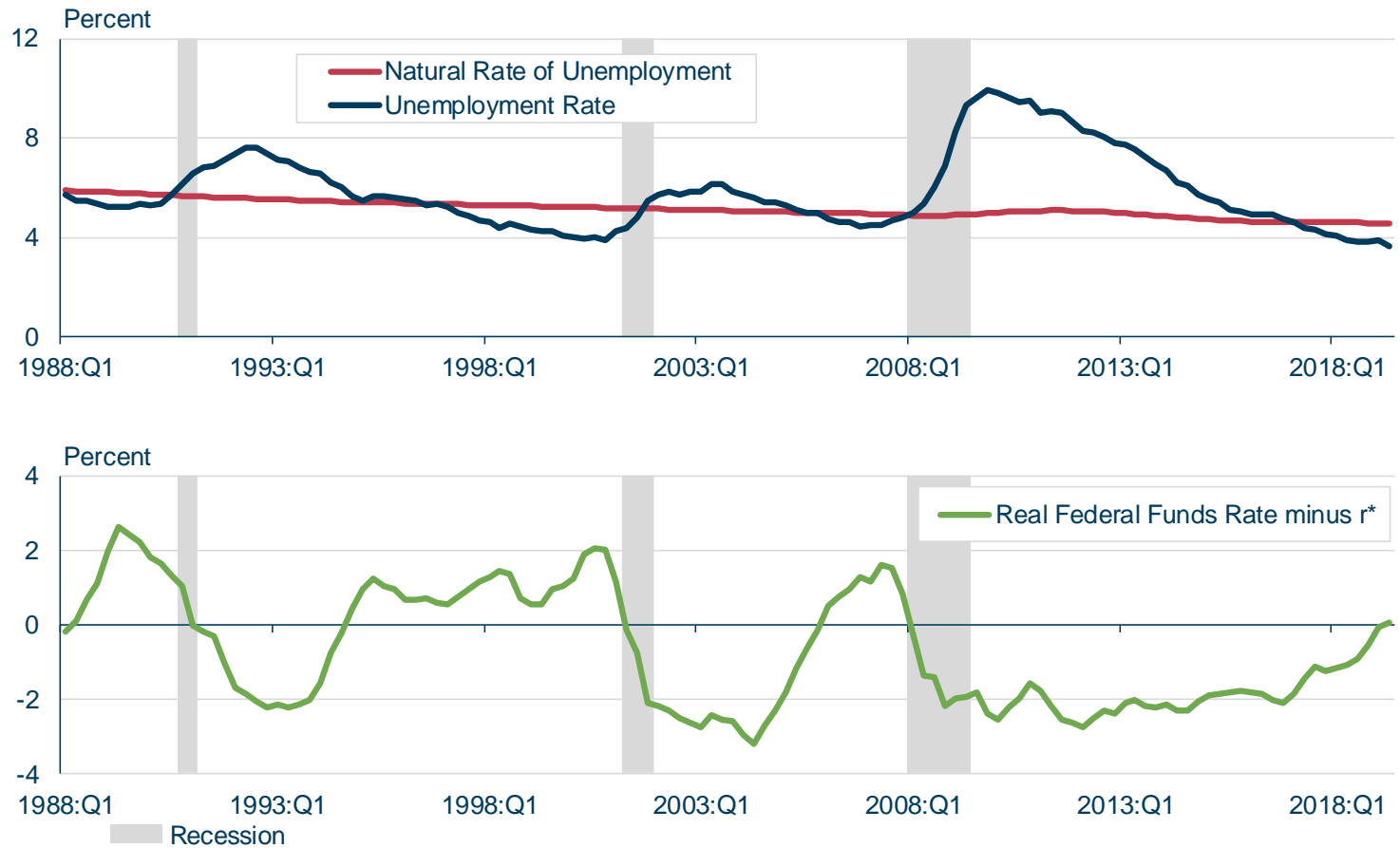
June 20, 2019 - December 31, 2019



Note: The forecast for the federal funds target rate is calculated using the CME Group probability for the most likely outcome for the target range. Pictured above is the midpoint of the actual and forecast target ranges. The longer-run federal funds rate estimate is the median of the SEP estimates for the federal funds rate in the longer run.

Source: Federal Reserve Board; FOMC, Summary of Economic Projections; CME Group; Haver Analytics

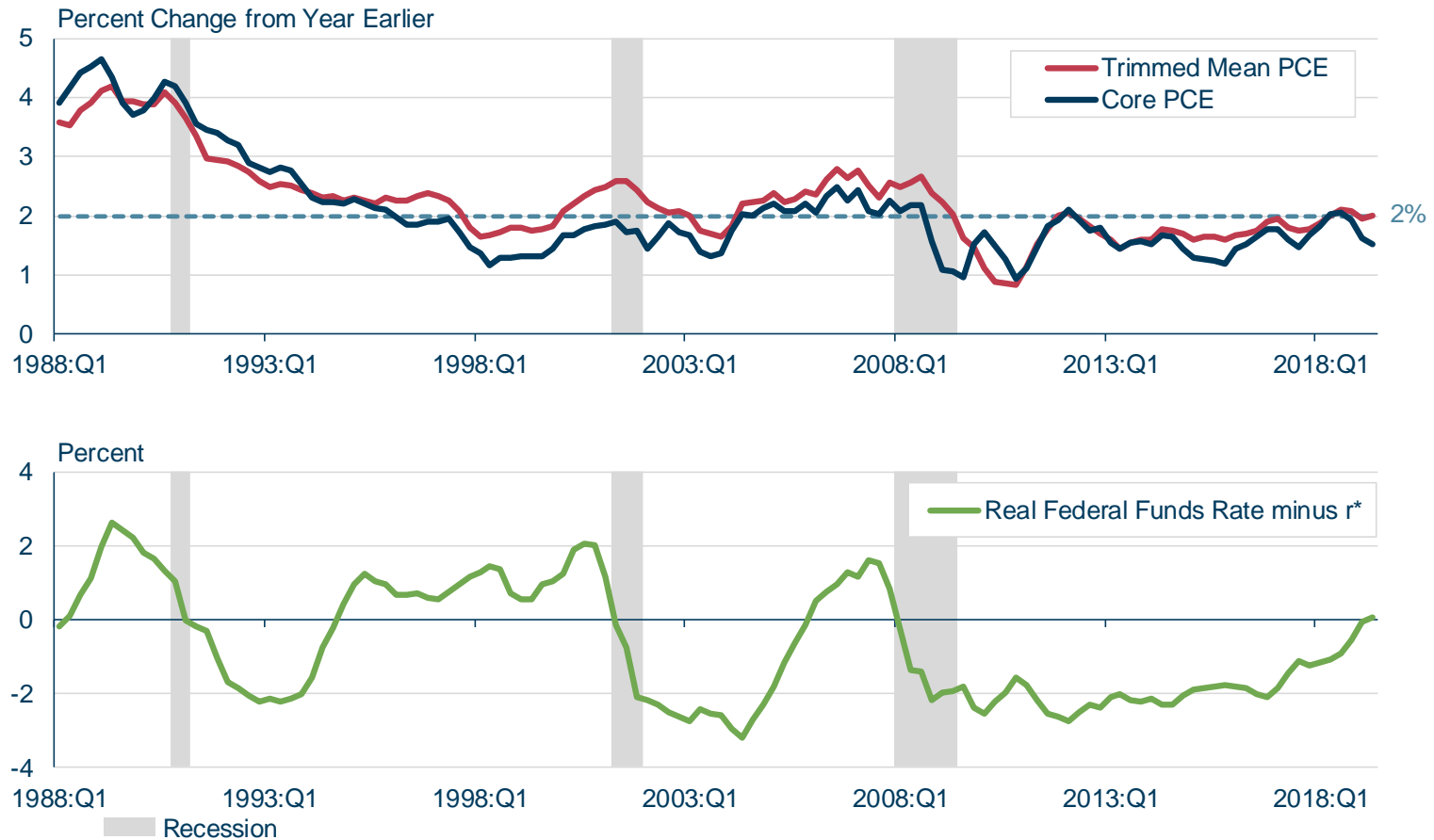
Figure 4: Unemployment Rates and Real Interest Rates 1988:Q1 - 2019:Q2



Note: Laubach and Williams define r^* as the real short-term interest rate expected to prevail when an economy is at full strength and inflation is stable.
 Source: Federal Reserve Bank of New York, Measuring the Natural Rate of Interest, <https://www.newyorkfed.org/research/policy/rstar/overview>; BLS; CBO; Federal Reserve Board; NBER; Haver Analytics

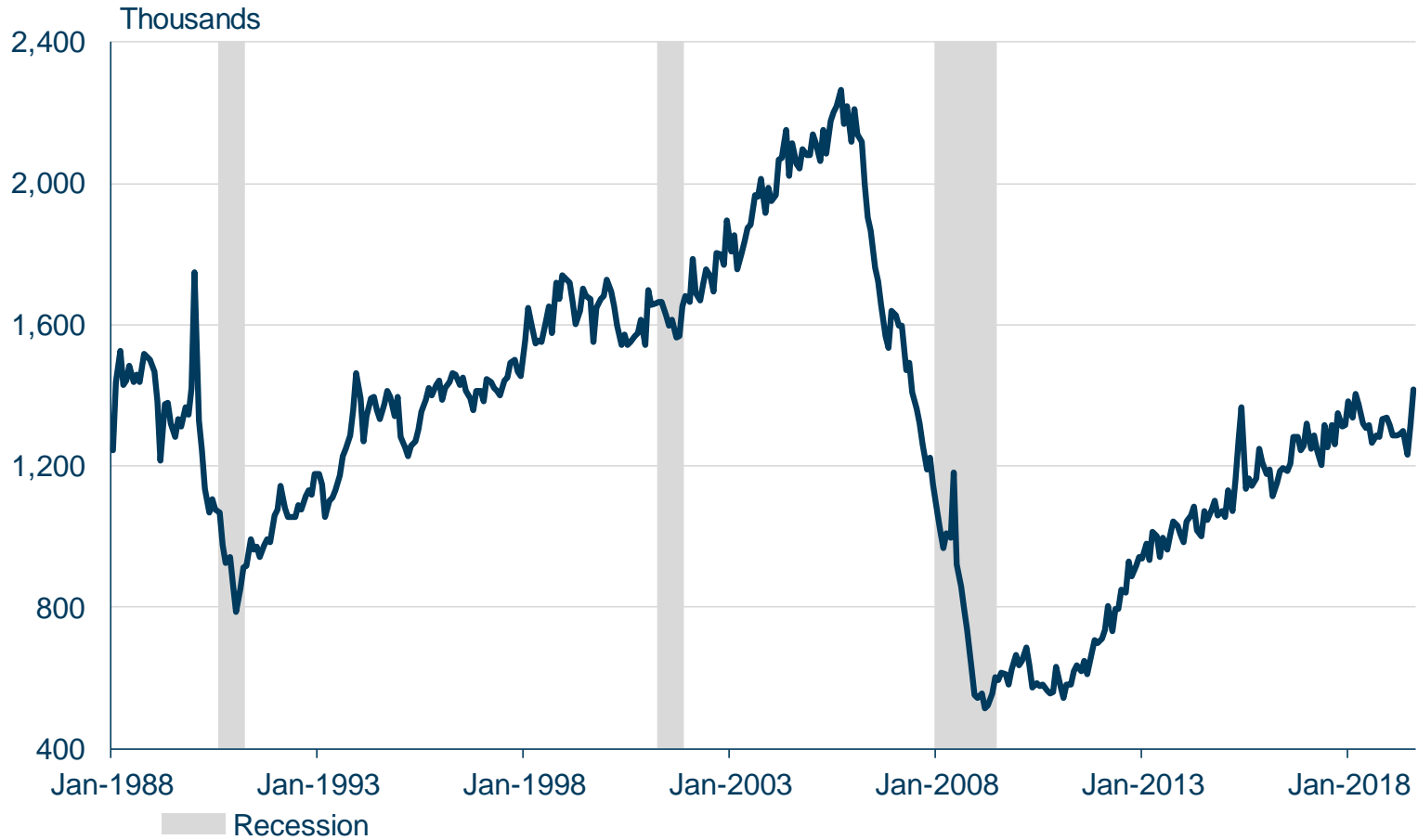
Figure 5: Inflation Rates and Real Interest Rates

1988:Q1 - 2019:Q2



Note: Laubach and Williams define r^* as the real short-term interest rate expected to prevail when an economy is at full strength and inflation is stable.
 Source: Federal Reserve Bank of New York, Measuring the Natural Rate of Interest, <https://www.newyorkfed.org/research/policy/rstar/overview>; BEA; Federal Reserve Bank of Dallas; Federal Reserve Board; NBER; Haver Analytics

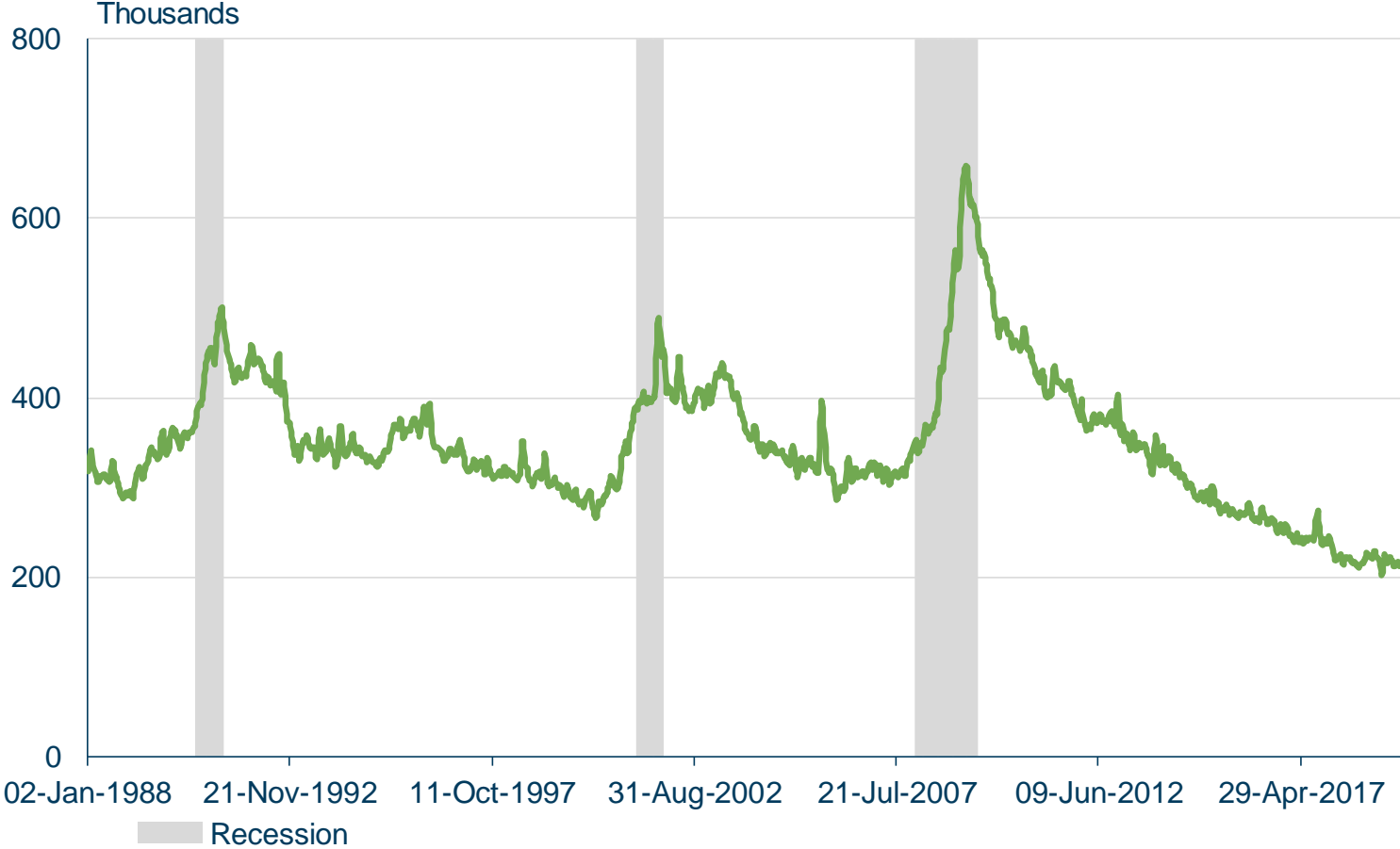
Figure 6: Building Permits for New Privately Owned Housing Units January 1988 - August 2019



Source: Census Bureau, NBER, Haver Analytics

Figure 7: Initial Claims for Unemployment Insurance

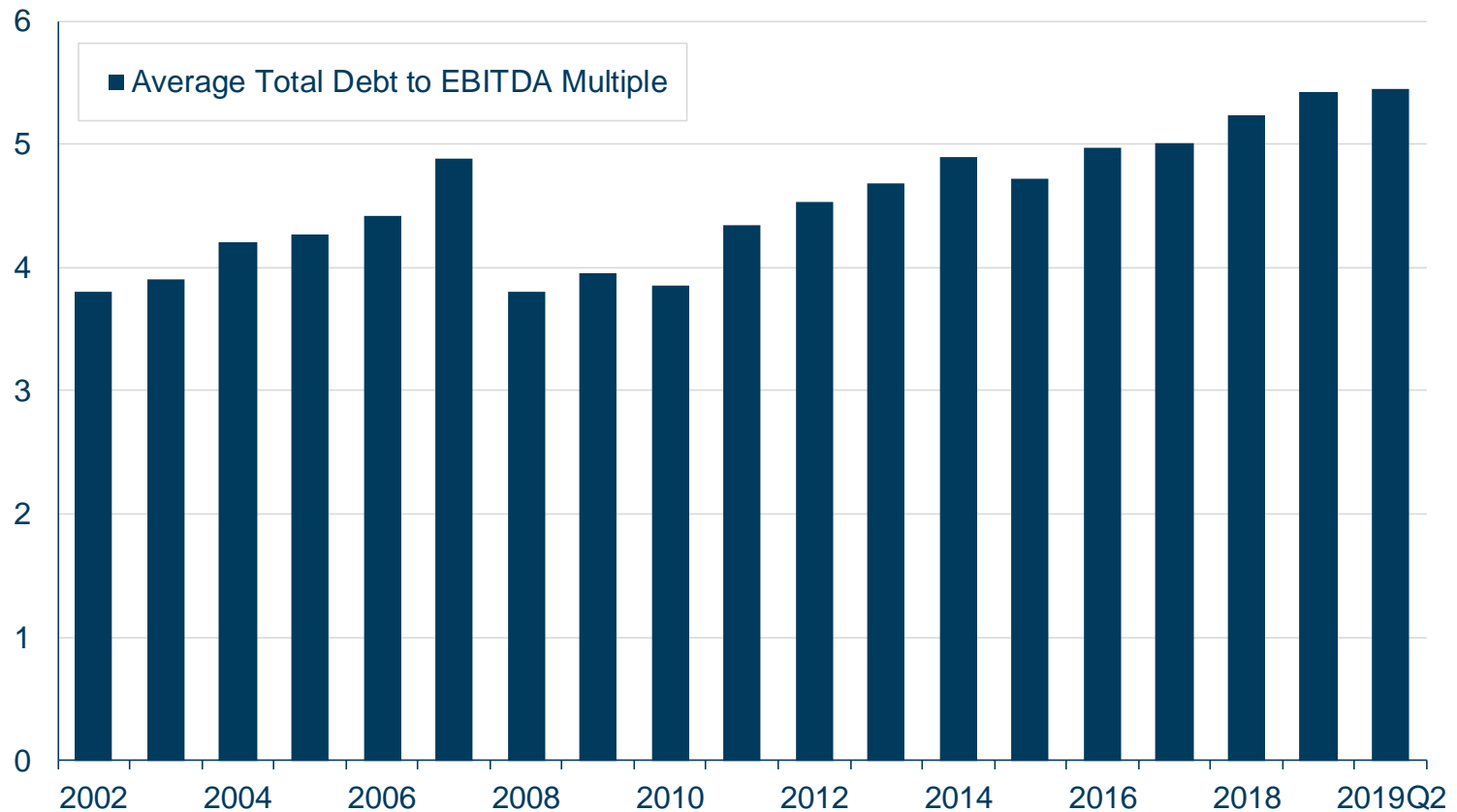
January 2, 1988 - September 14, 2019



Note: Four-week moving average

Source: U.S. Department of Labor, NBER, Haver Analytics

Figure 8: Average Debt Multiples of Highly Leveraged Loans 2002 - 2019:Q2

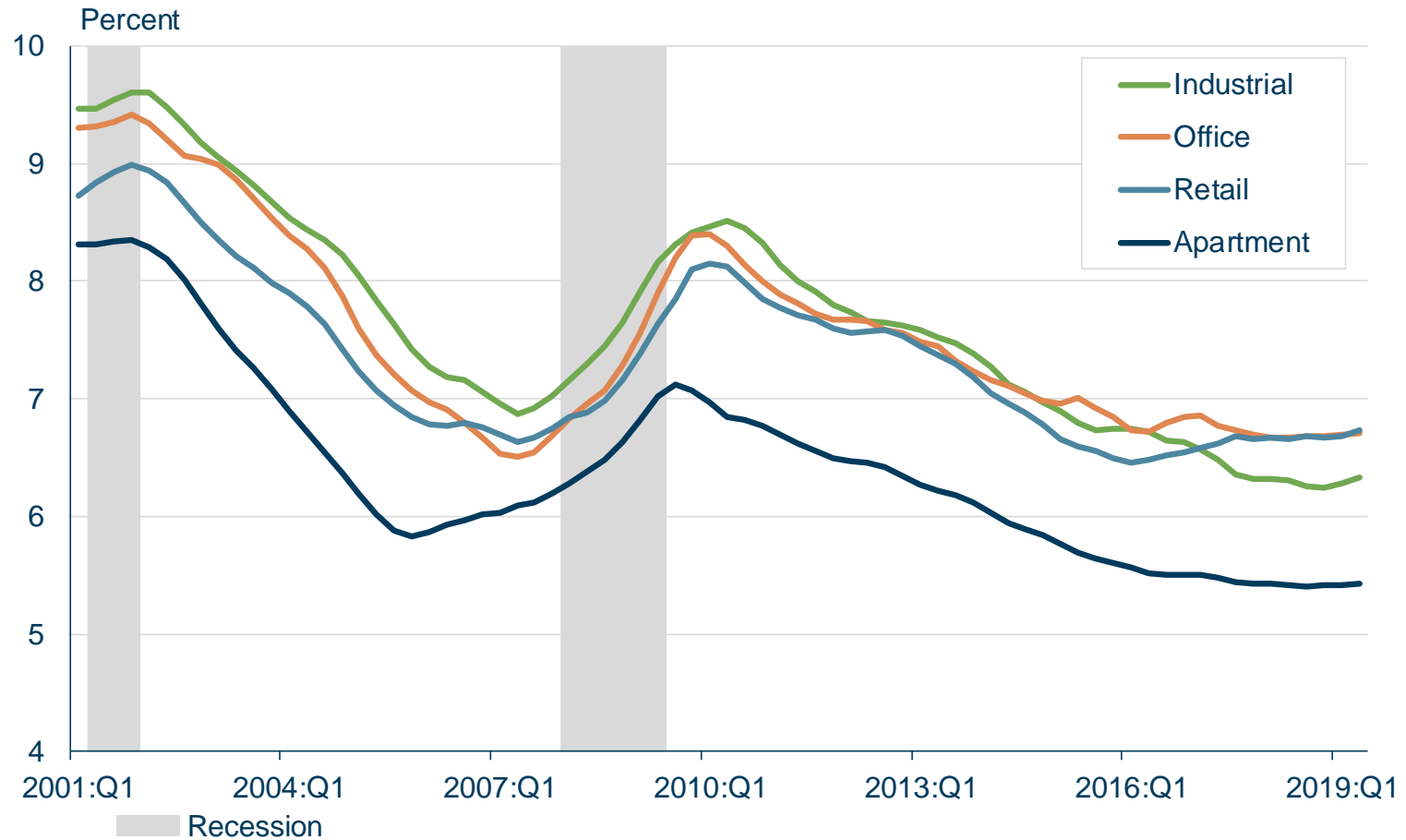


Note: Includes loan deals that are syndicated in the U.S. market. Includes transactions with loans priced at Libor+225 and higher. Total debt includes loans and bonds. Excludes the media and telecom industry deals prior to 2011. EBITDA is earnings before interest, taxes, depreciation and amortization.

Source: LCD, S&P Global Market Intelligence

Figure 9: Capitalization Rates by Property Type

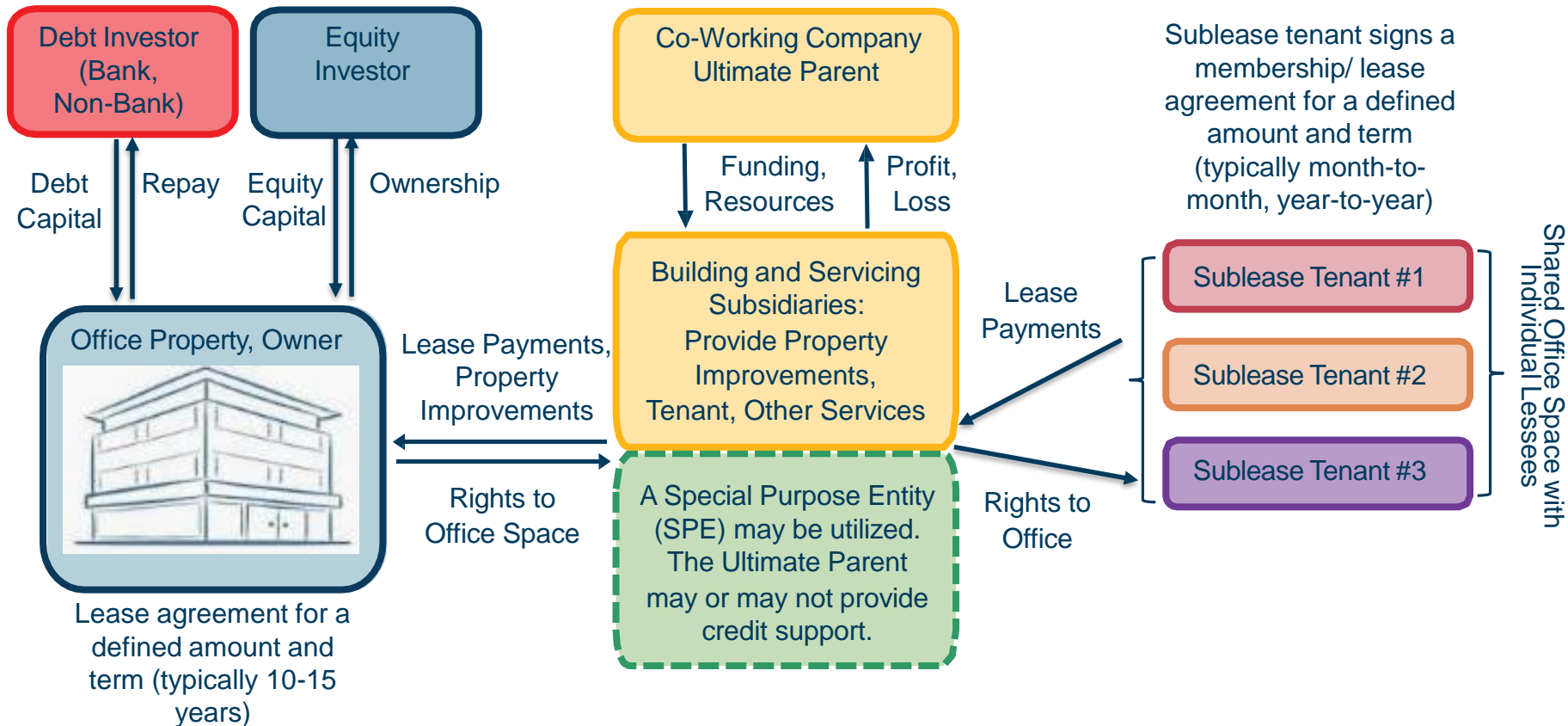
2001:Q1- 2019:Q2



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: Simplified Co-Working Business Model*



*Co-working companies' business models may utilize different structures