



Using Economic Data to Understand the Economy

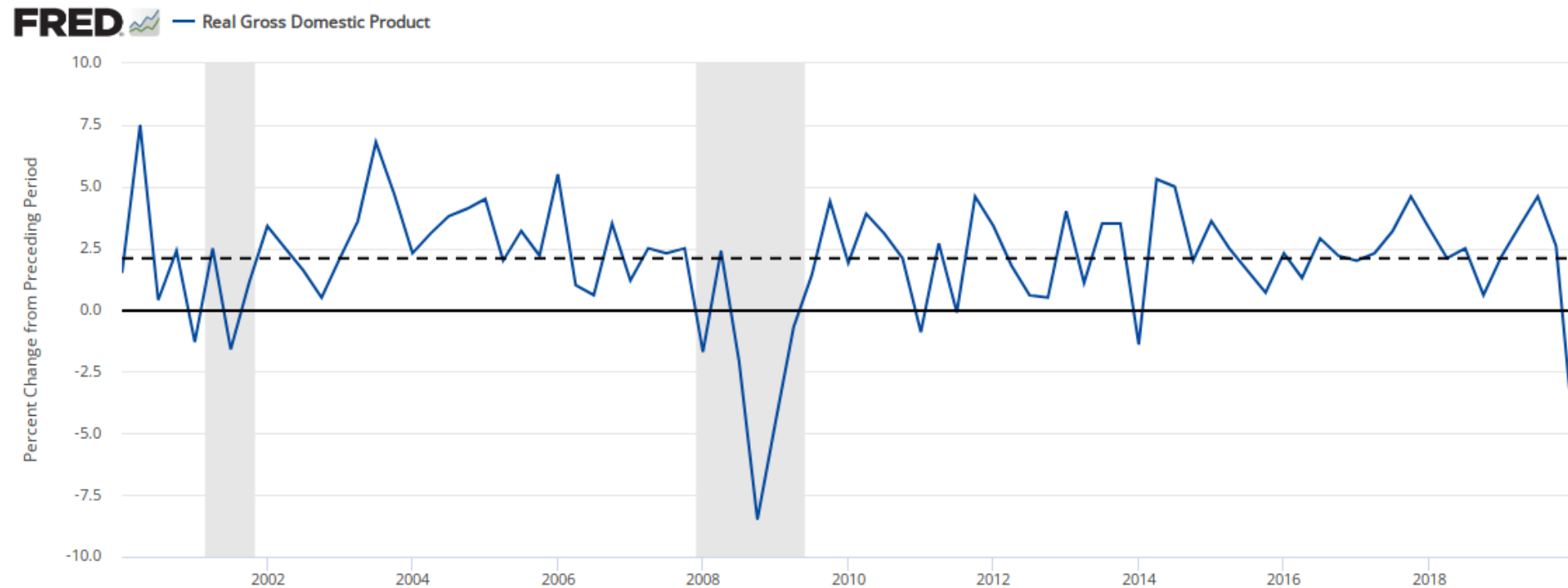
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Member

Board of Governors of the Federal Reserve System

Beyond the Numbers
at the
Federal Reserve Bank of St. Louis
November 7, 2023

The views expressed here are my own and do not reflect those of the Board of Governors or
the Federal Open Market Committee.

1. Real Gross Domestic Product

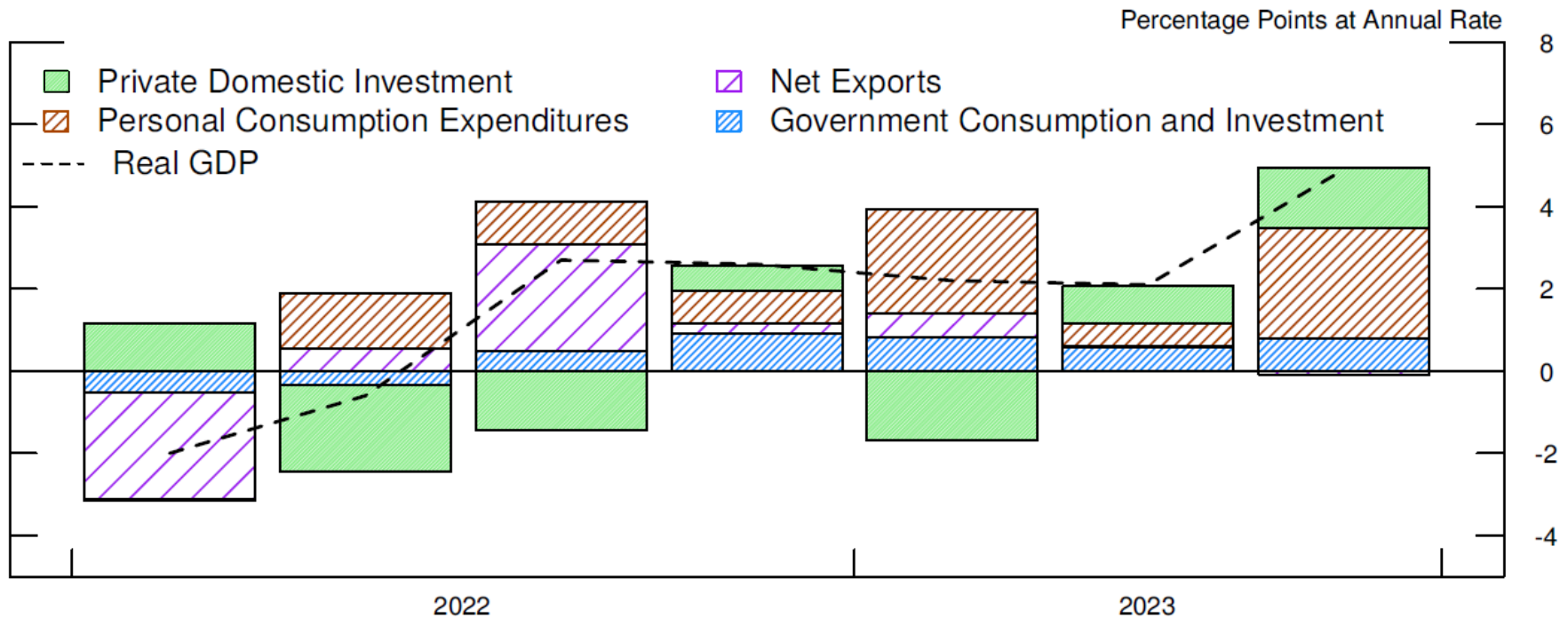


Note: Dashed line of 2.1 percent is the average growth rate of real GDP between 2000:Q1 and 2019:Q4 St. Louis Fed (2023), “Real Gross Domestic Product” (see note 1 on slide 13).

2. Contributions to Real GDP

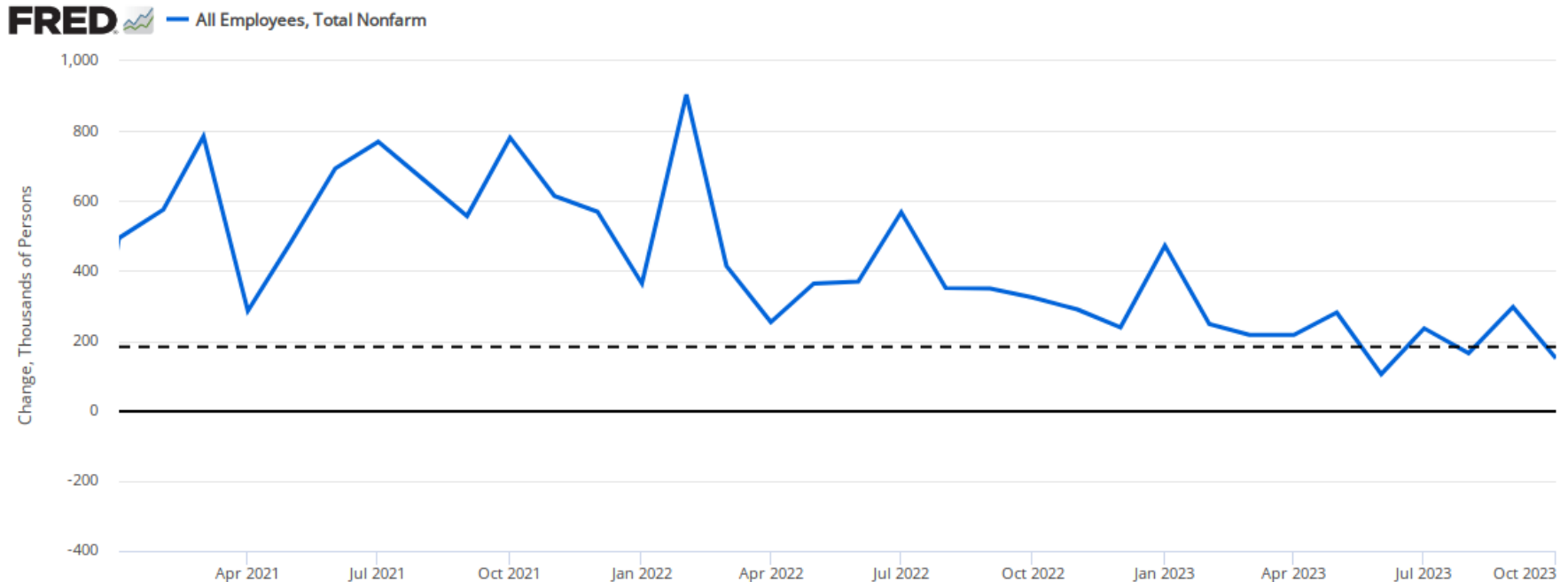
2022-present

Contributions to Real GDP Growth



St. Louis Fed (2023), "Contributions to Percent Change" (see note 2 on slide 13).

3. Change in Payroll Employment 2021-present



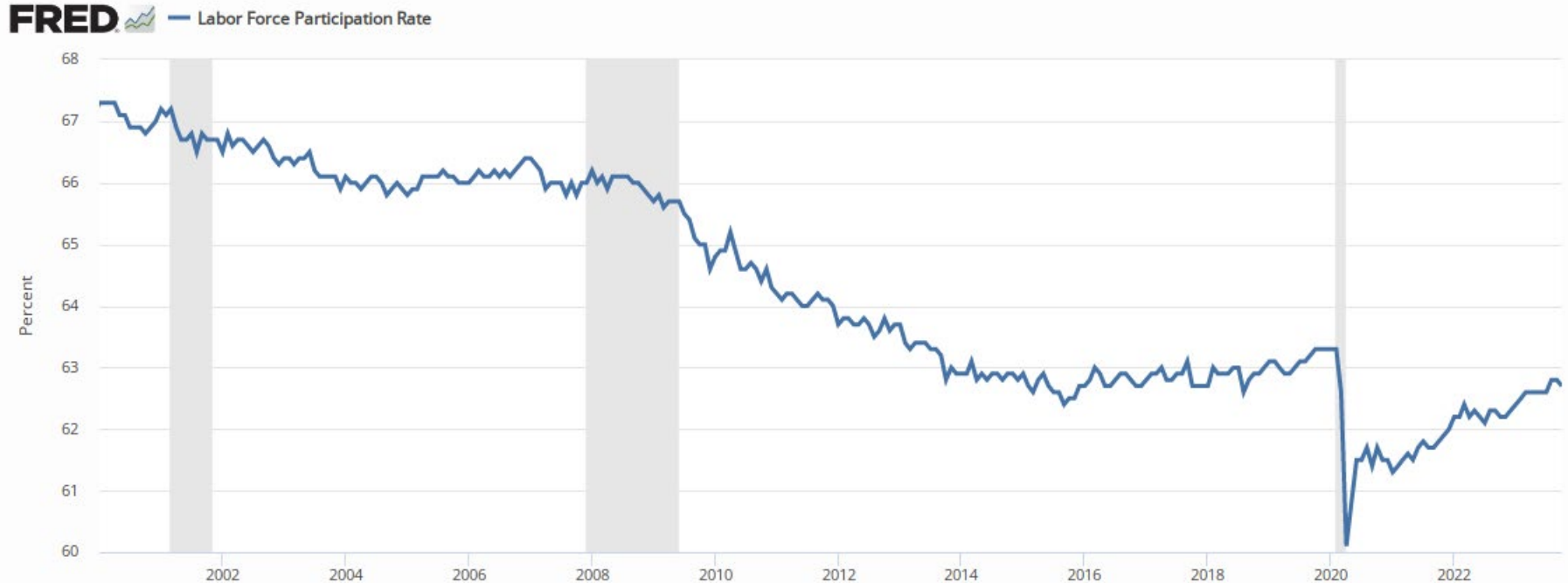
Note: Dashed line of 183,000 is the average change in payroll employment between January 2010 and December 2019. St. Louis Fed (2023), “Contributions to Percent Change” (see note 3 on slide 13).

4. Vacancy-to-Unemployment Ratio



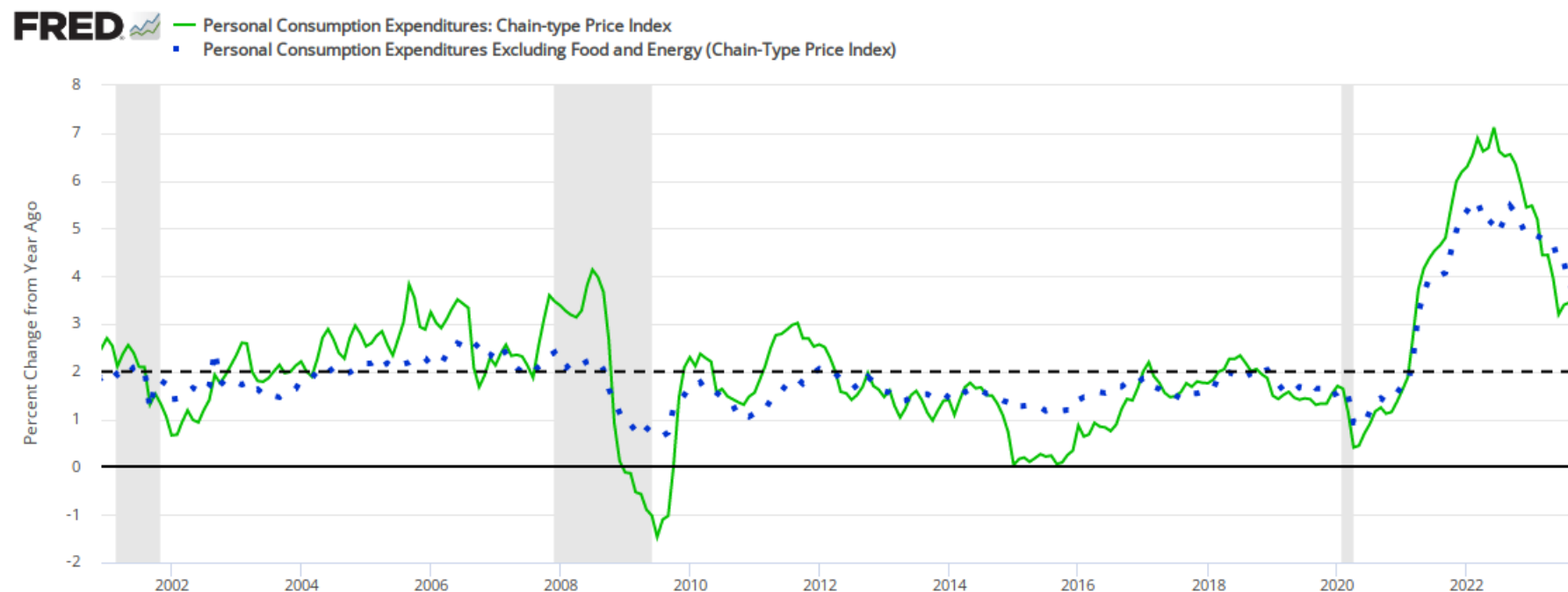
St. Louis Fed (2023), "Job Openings" (see note 4 on slide 13).

5. Labor Force Participation Rate



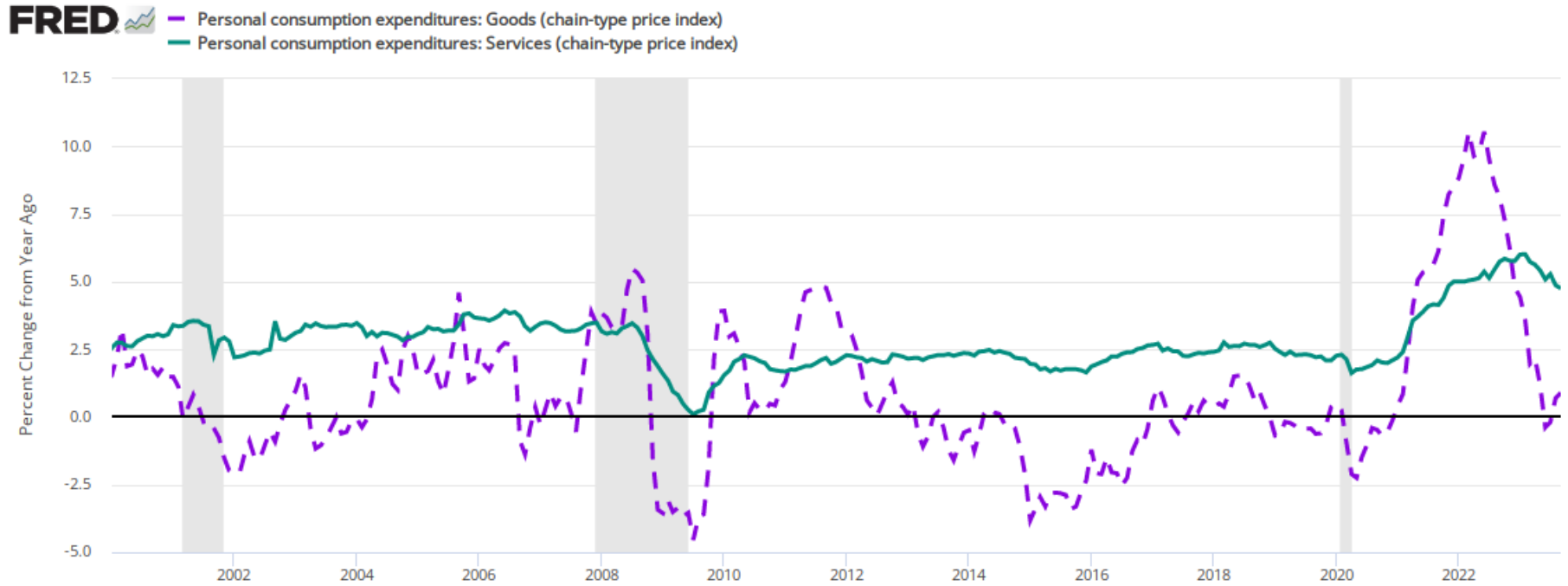
St. Louis Fed (2023), “Labor Force” (see note 5 on slide 13).

6. Personal Consumption Expenditures Inflation



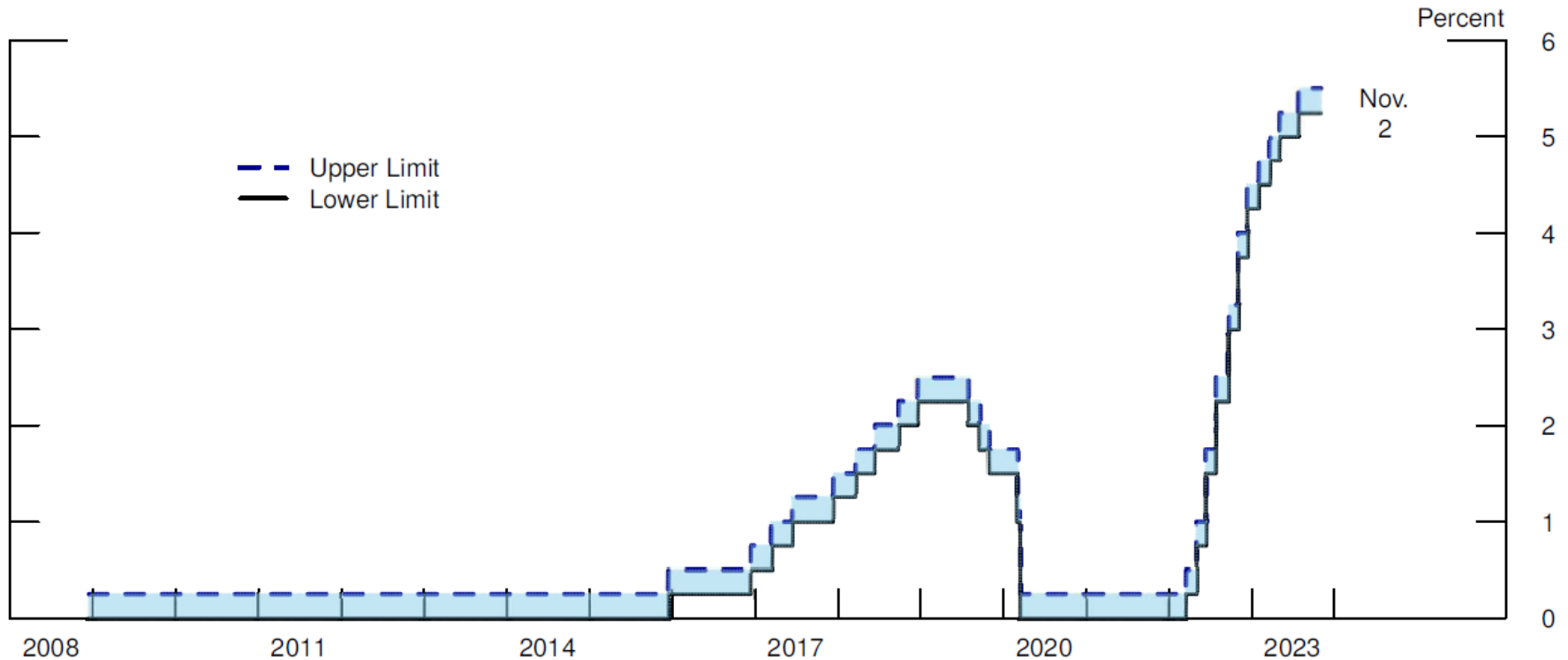
Note: Dashed black line is the Federal Open Market Committee's longer-run inflation objective of 2 percent.
St. Louis Fed (2023), "Personal Consumption Expenditures" (see note 6 on slide 13).

7. Personal Consumption Expenditures Core Inflation



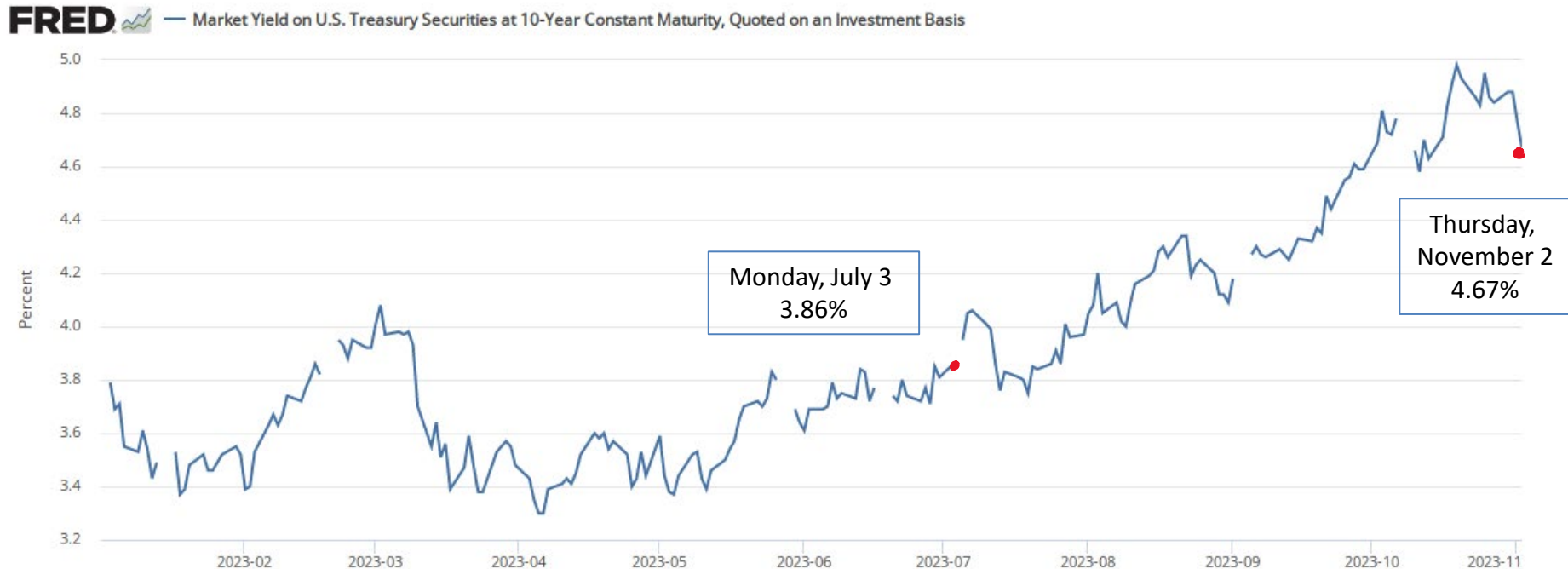
St. Louis Fed (2023), “Personal Consumption Expenditures: Goods” (see note 7 on slide 14).

8. Federal Funds Target Range



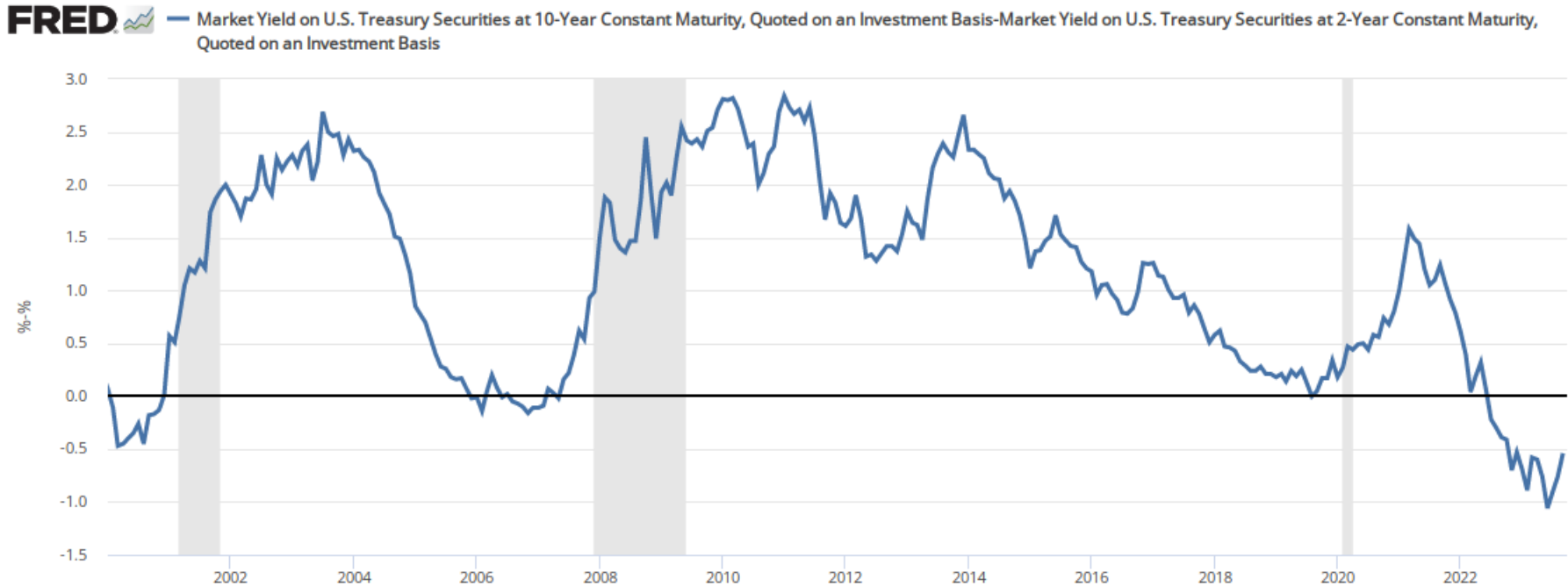
St. Louis Fed (2023), "Federal Funds" (see note 8 on slide 14).

9. 10-year Treasury Yield



St. Louis Fed (2023), “Longer-Term Yields” (see note 9 on slide 14).

10. Treasury Yield Spread (10 Year to 2 Year)



St. Louis Fed (2023), “Market Yield” (see note 10 on slide 14).

11. Payroll Revisions

2021	Initial Report	Current Estimate	Revision
August	235	663	428
September	194	557	363
October	531	781	250
November	210	614	404
December	199	569	370
Total	1369	3184	1815

"U.S. Department of Labor" (see note 11 on slide 14).



12. Consumer Price Index Inflation Revisions

2022	Before Revision	After revision	Change
June	1.42	1.28	-0.14
July	-0.02	-0.04	-0.02
August	0.13	0.25	0.13
September	0.42	0.44	0.03
October	0.47	0.52	0.05
November	0.10	0.22	0.12
December	-0.08	0.14	0.22

"U.S. Department of Labor" (see note 12 on slide 14).



Figure Notes and Sources

1. Real Gross Domestic Product

Source: Federal Reserve Bank of St. Louis (2023), “Real Gross Domestic Product and Average Real Domestic Product ,” FRED Economic Data (accessed November 03, 2023), <https://fred.stlouisfed.org/graph/?g=1b1M6>; U.S. Bureau of Economic Analysis.

2. Contributions to Real GDP

Source: Federal Reserve Bank of St. Louis (2023), “Contributions to Percent Change in Real Gross Domestic Product: Personal Consumption Expenditures, Gross Private Domestic Investment, Net Exports of Goods and Services, and Government Consumption Expenditures and Gross Investment,” FRED Economic Data (accessed October 27, 2023), <https://fred.stlouisfed.org/graph/?g=1aj0j>; Federal Reserve Bank of St. Louis (2023), “Real Gross Domestic Product,” FRED Economic Data (accessed October 27, 2023), <https://fred.stlouisfed.org/graph/?g=1aj0r>; U.S. Bureau of Economic Analysis.

3. Change in Payroll Employment: 2021–Present

Source: Federal Reserve Bank of St. Louis (2023), “All Employees, Total Nonfarm, and Average All Employees, Total Nonfarm from January 2010 to December 2019,” FRED Economic Data (accessed November 1, 2023), <https://fred.stlouisfed.org/graph/?g=1b1N3>; U.S. Bureau of Labor Statistics.

4. Vacancy-to-Unemployment Ratio

Note: The shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research: March 2001–November 2001, December 2007–June 2009, and February 2020–April 2020.

Source: Federal Reserve Bank of St. Louis (2023), “Job Openings: Total Nonfarm/Unemployment Level,” FRED Economic Data (accessed October 27, 2023), <https://fred.stlouisfed.org/graph/?g=18bAy>; U.S. Bureau of Labor Statistics.

5. Labor Force Participation Rate

Note: The shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research: March 2001–November 2001, December 2007–June 2009, and February 2020–April 2020.

Source: Federal Reserve Bank of St. Louis (2023), “Labor Force Participation Rate,” FRED Economic Data (accessed October 27, 2023), <https://fred.stlouisfed.org/graph/?g=1aj8i>; U.S. Bureau of Labor Statistics.

6. Personal Consumption Expenditures Inflation

Note: The shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research: March 2001–November 2001, December 2007–June 2009, and February 2020–April 2020.

Source: Federal Reserve Bank of St. Louis (2023), “Personal Consumption Expenditures: Chain-Type Price Index and Personal Consumption Expenditures Excluding Food and Energy (Chain-Type Price Index),” FRED Economic Data (accessed October 27, 2023), <https://fred.stlouisfed.org/graph/?g=18ePw>; U.S. Bureau of Economic Analysis.



Figure Notes and Sources

7. Personal Consumption Expenditures Core Inflation

Note: The shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research: March 2001–November 2001, December 2007–June 2009, and February 2020–April 2020.

Source: Federal Reserve Bank of St. Louis (2023), “Personal Consumption Expenditures: Goods (Chain-Type Price Index) and Services (Chain-Type Price Index),” FRED Economic Data (accessed October 27, 2023), <https://fred.stlouisfed.org/graph/?g=18dJs>; U.S. Bureau of Economic Analysis.

8. Federal Funds Target Range

Source: Federal Reserve Bank of St. Louis (2023), “Federal Funds Target Range - Upper Limit and Lower Limit,” FRED Economic Data (accessed November 2, 2023), <https://fred.stlouisfed.org/graph/?g=187To>; Board of Governors of the Federal Reserve System.

9. 10-year Treasury Yield

Source: Federal Reserve Bank of St. Louis (2023), “Market Yield on U.S. Treasury Securities at 10-Year Constant Maturity, Quoted on an Investment Basis,” FRED Economic Data (accessed October 27, 2023), <https://fred.stlouisfed.org/graph/?g=1aj76>; Board of Governors of the Federal Reserve System.

10. Treasury Yield Spread (10 Year to 2 Year)

Note: The shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research: March 2001–November 2001, December 2007–June 2009, and February 2020–April 2020.

Source: Federal Reserve Bank of St. Louis (2023), “Market Yield on U.S. Treasury Securities at 10-Year Constant Maturity, Quoted on an Investment Basis-Market Yield on U.S. Treasury Securities at 2-Year Constant Maturity, Quoted on an Investment Basis,” FRED Economic Data (accessed October 27, 2023), <https://fred.stlouisfed.org/graph/?g=18dIL>; Board of Governors of the Federal Reserve System.

11. Payroll Revisions

Source: U.S. Department of Labor; Bureau of Labor Statistics.

12. Consumer Price Index Inflation Revisions

Source: U.S. Department of Labor; Bureau of Labor Statistics.



Thank You

Questions?