

Philadelphia Research Intertemporal Stochastic Model (PRISM-II) Forecast

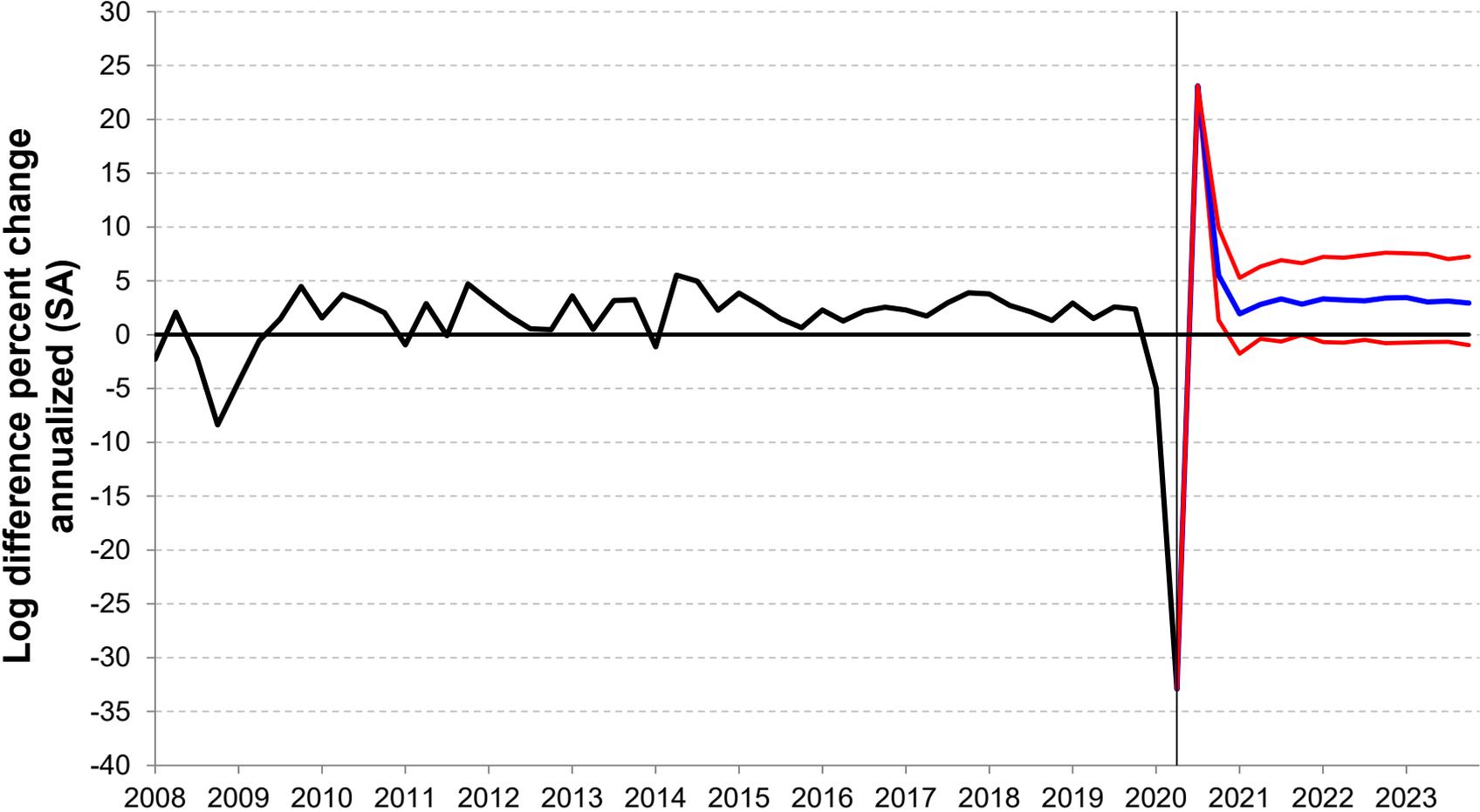
September 20, 2020

Federal Reserve Bank of Philadelphia
Real-Time Data Research Center



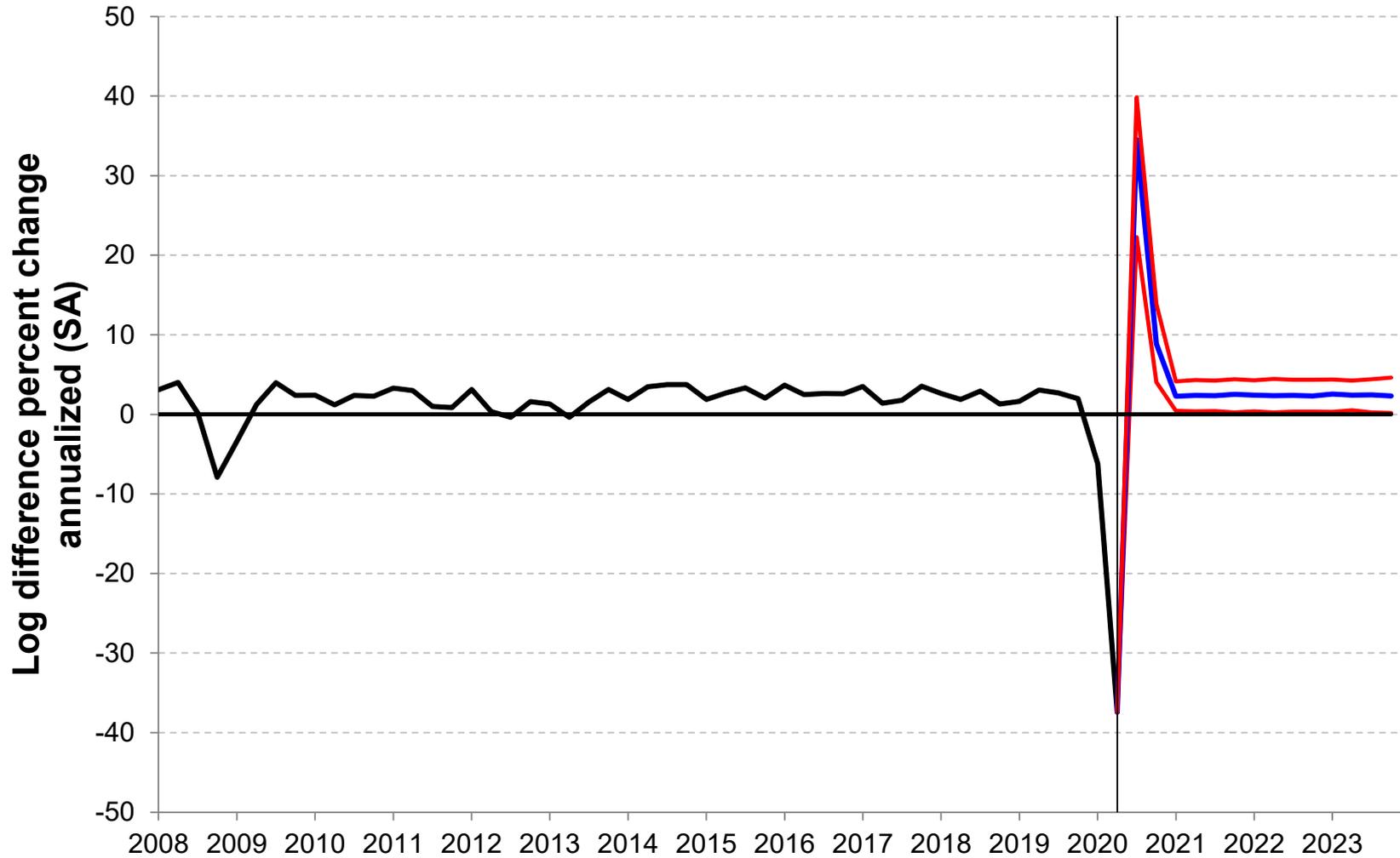
FEDERAL RESERVE BANK
OF PHILADELPHIA

Real GDP Growth



Red lines show 68% probability coverage intervals. Blue lines are forecast. Black lines are history.

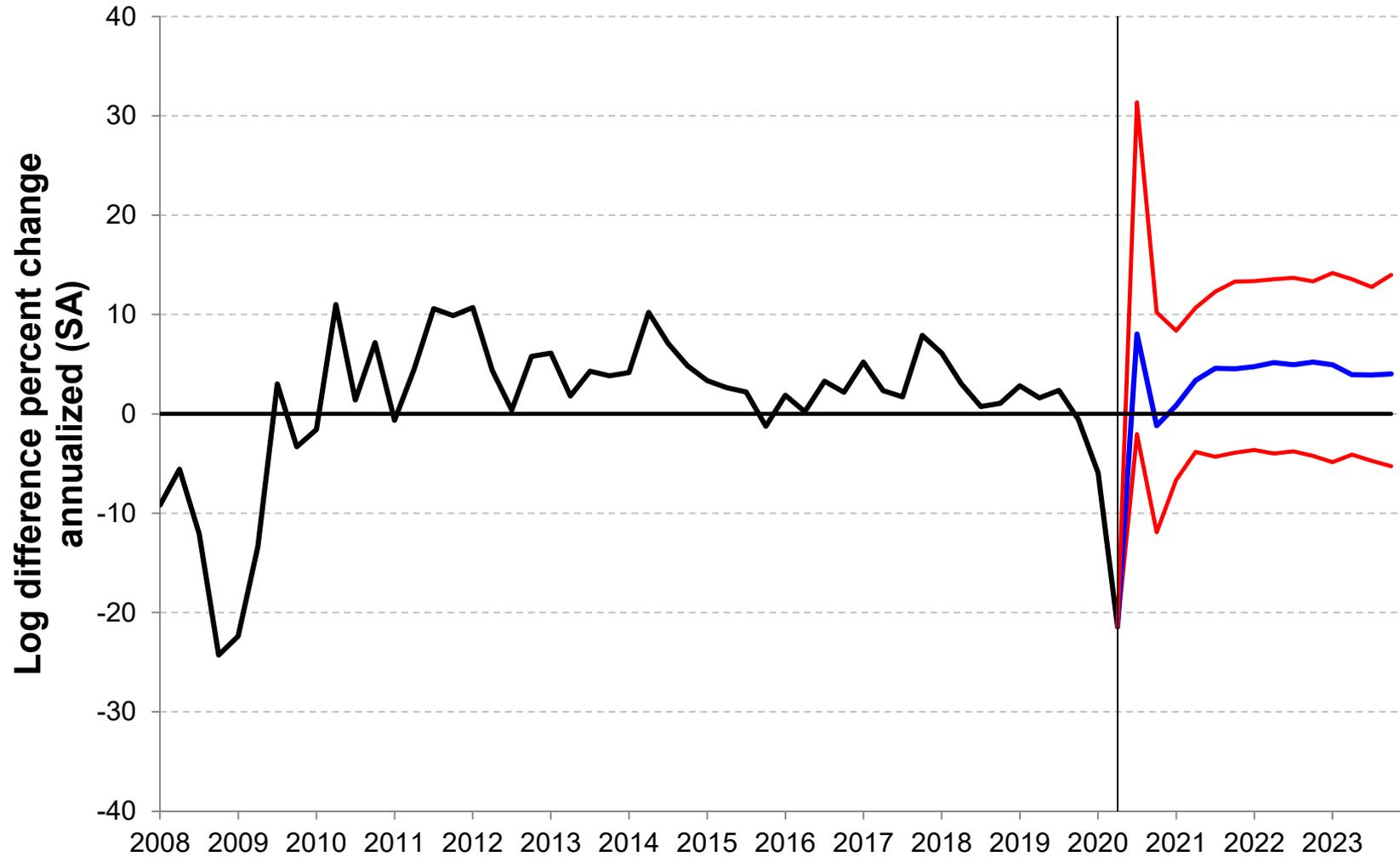
Real Consumption Growth*



*Consumption of Nondurables and Services

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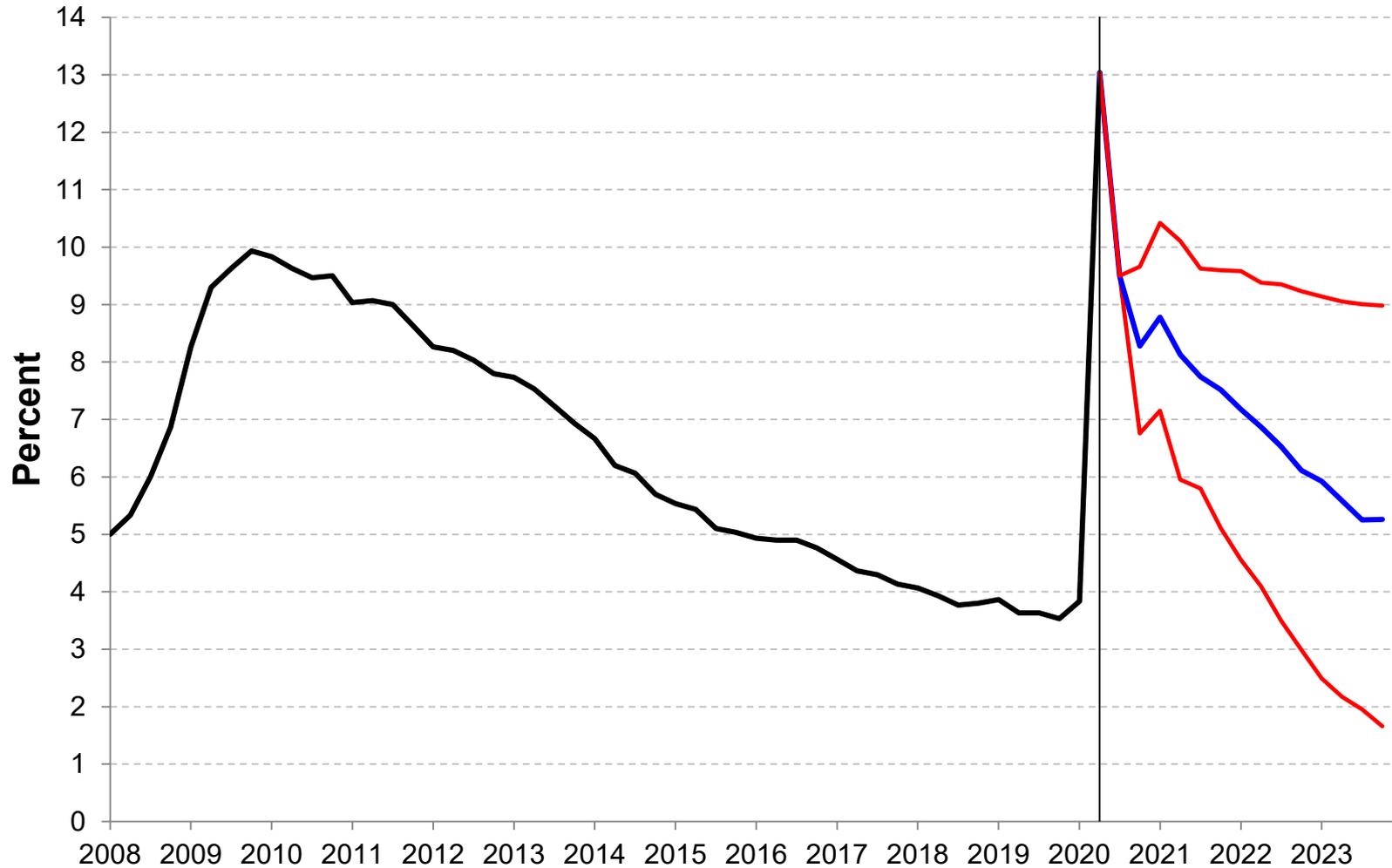
Real Investment Growth*



*Gross Private Domestic Investment and Durables

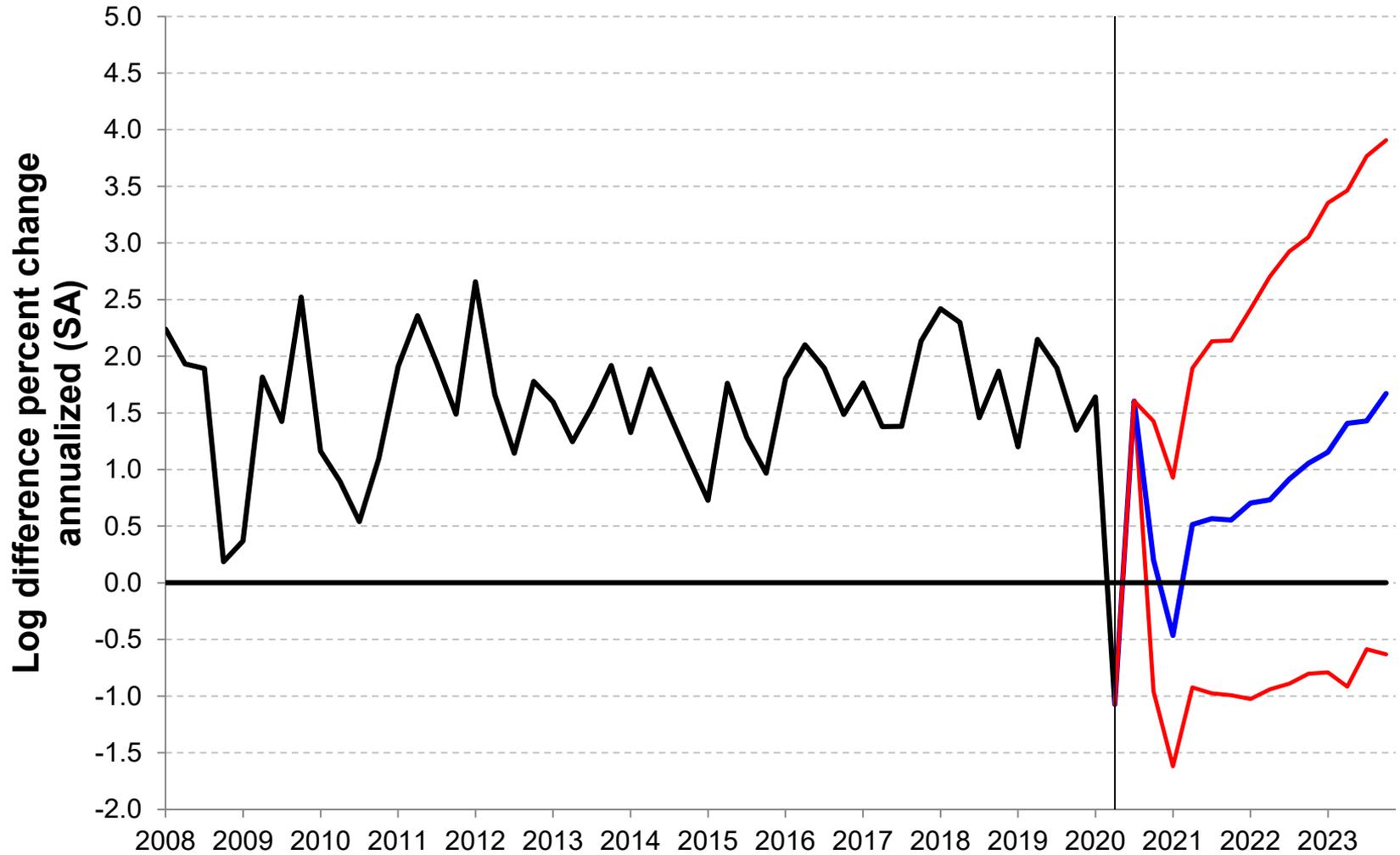
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Unemployment Rates



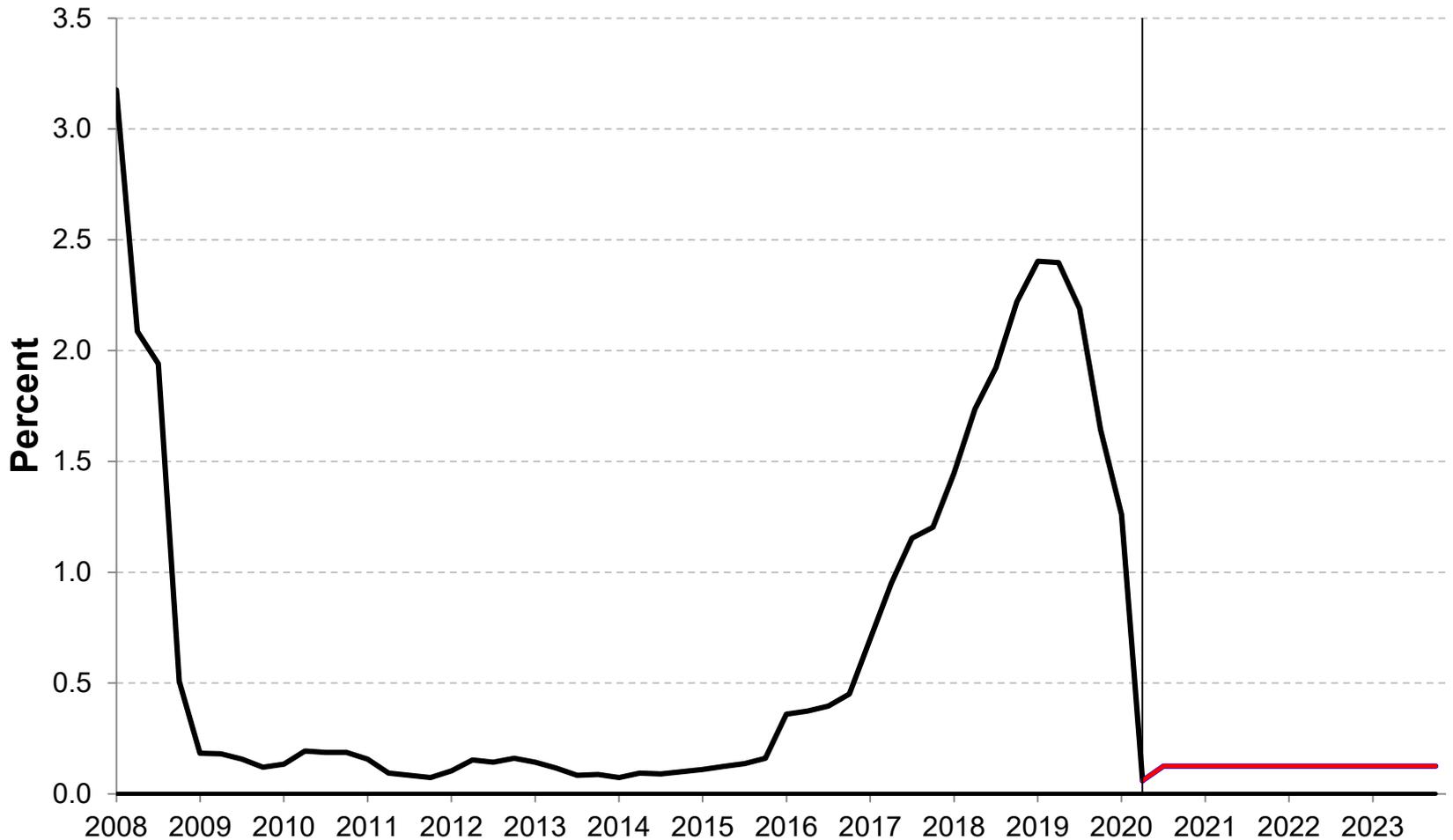
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Core PCE Inflation



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Federal Funds Rate*



*The federal funds rate forecast is based on a weighted average of professional forecasts, fed funds futures, and the modelers' judgment. It is not adjusted in any way to reflect the Philadelphia Fed's or Federal Reserve System's views about the likely path of monetary policy.

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PRISM-II Forecasts

The PRISM-II charts show forecasts of key variables from the latest run of PRISM-II. Each figure shows the forecasted growth rate of the macroeconomic variable as well as the upper and lower bounds of the 68 percent probability intervals for the forecast. The vertical dotted line shows the forecast kickoff point. Given the unusual circumstances associated with the COVID-19 crisis, the modelers took several measures in order to bring the model projections in line with their assessment regarding the evolution of the economy over the next few quarters. The conditional forecasts do not reflect the uncertainty surrounding these adjustments, nor the heightened uncertainty about other features of the economic environment. Consequently, the 68 percent probability bands likely understate the true uncertainty about the forecast. Moreover, they are largely symmetric by construction and do not account for the potentially asymmetric nature of risk in the current environment.

The forecasted variables shown are real GDP growth, real consumption growth (measured as consumption of services plus nondurables), real investment growth (measured as gross private domestic investment plus consumption of durable goods), the unemployment rate, and core PCE inflation. The short-term interest rate is fixed throughout the forecast horizon.

Underlying Assumptions

For the third quarter of 2020, the Philadelphia Fed staff has imposed a value for GDP growth based on the IHS nowcast in mid-August, a value for government consumption and investment based on the August IHS forecast, and values of unemployment and core PCE inflation in line with staff judgment based on July measurements. The federal funds rate is at the effective lower bound (ELB) until the end of 2023, and the two-year Treasury rate is at the ELB until the first quarter of 2021 to bring it in line with our assumption on the federal funds rate.