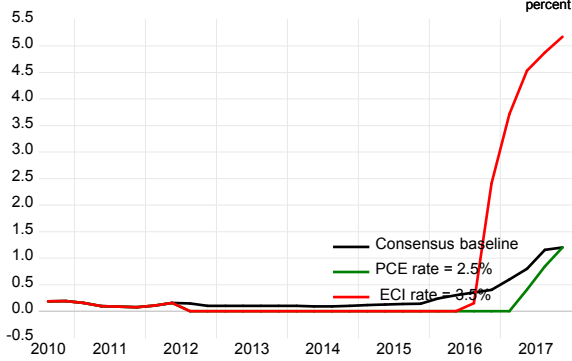
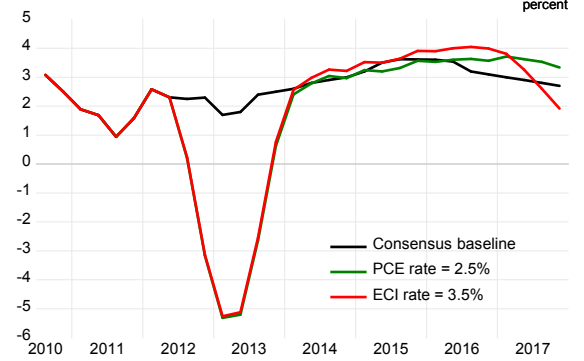


# 1. Macroeconomic Effects of a Negative Aggregate Demand Shock (VAR Expectations; Policy = rffay) (ZLB and Thresholds Imposed)

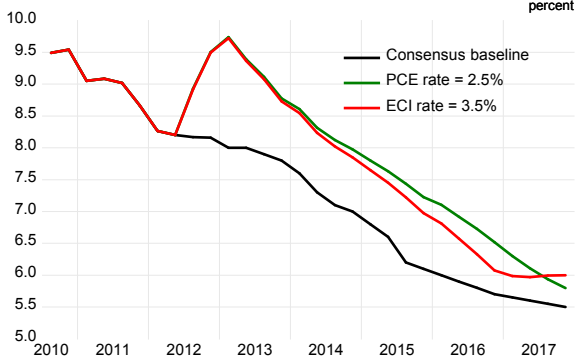
Federal Funds Rate



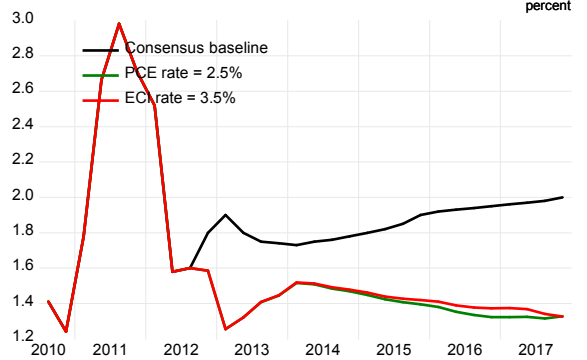
Year to Year % Change in Real GDP



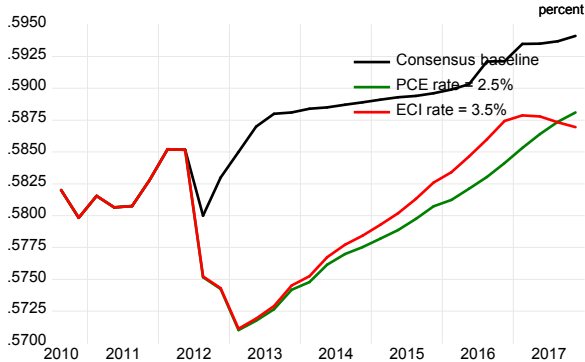
Unemployment Rate



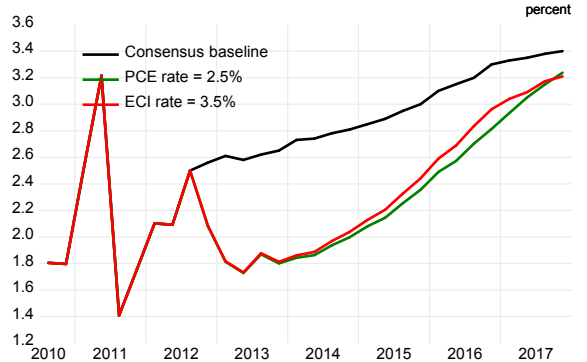
PCE Inflation Rate (4-Quarter)



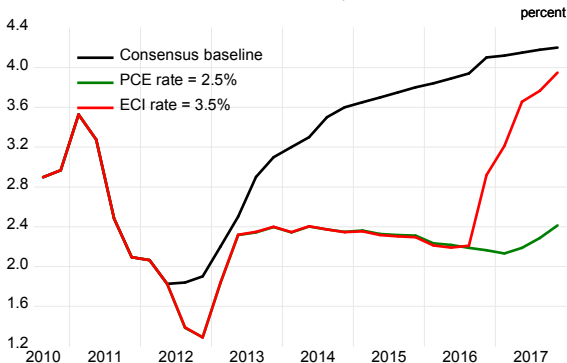
Employment to Population Ratio



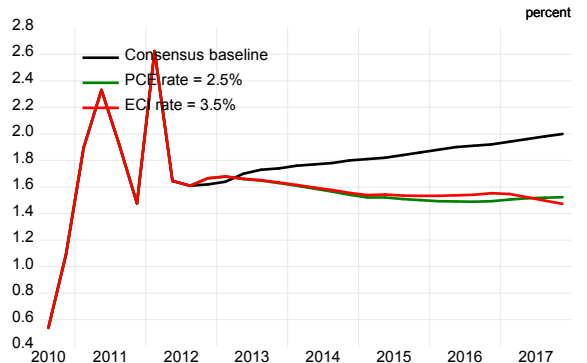
Annualized rate of growth of EI hourly compensation



10-Year Treasury Rate

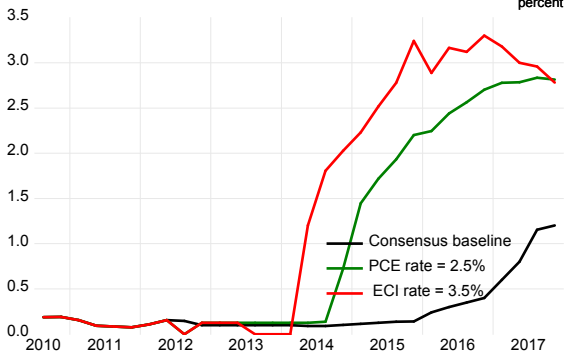


Core PCE Inflation Rate

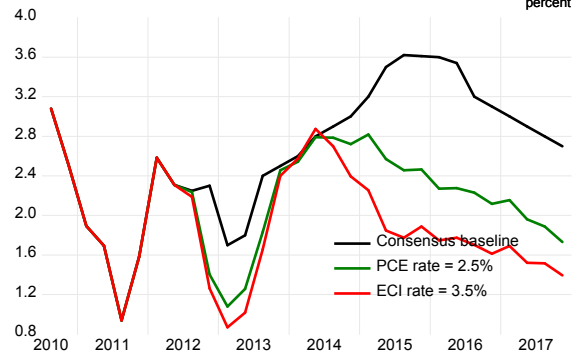


## 2. Macroeconomic Effects of \$20/Barrel Higher Oil Prices (VAR Expectations; Policy = rftay) (ZLB and Thresholds Imposed)

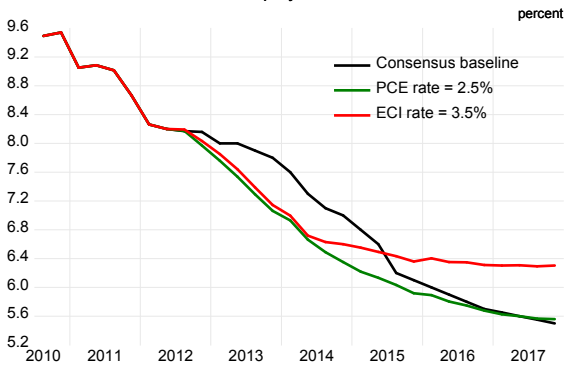
Federal Funds Rate



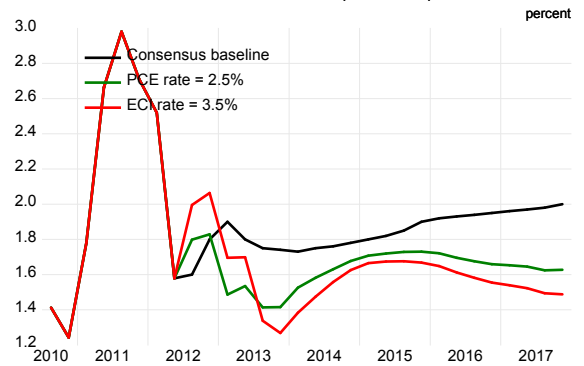
Year to Year % Change in Real GDP



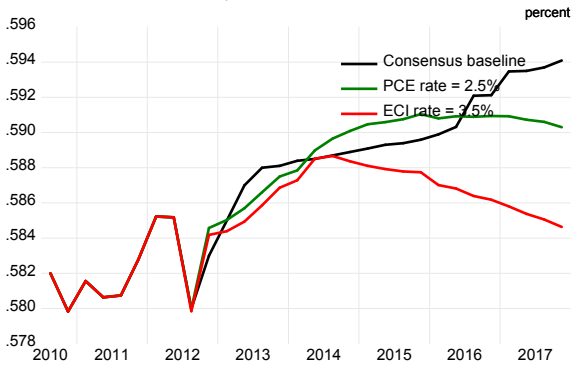
Unemployment Rate



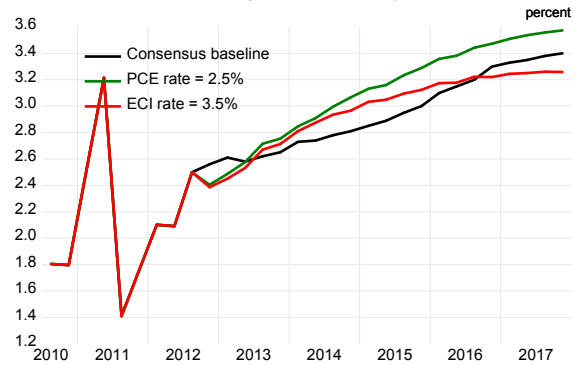
PCE Inflation Rate (4-Quarter)



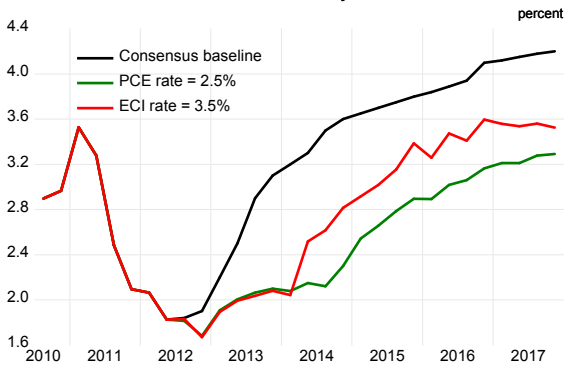
Employment to Population Ratio



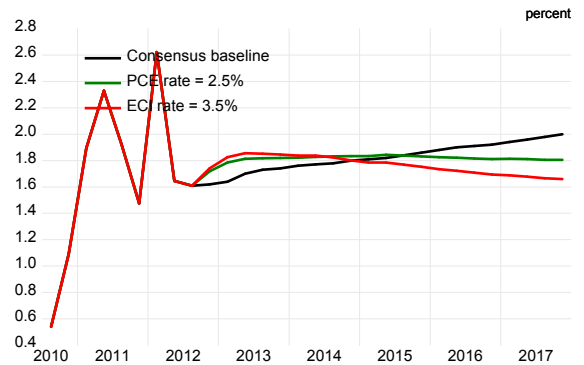
Annualized rate of growth of EI hourly compensation



10-Year Treasury Rate

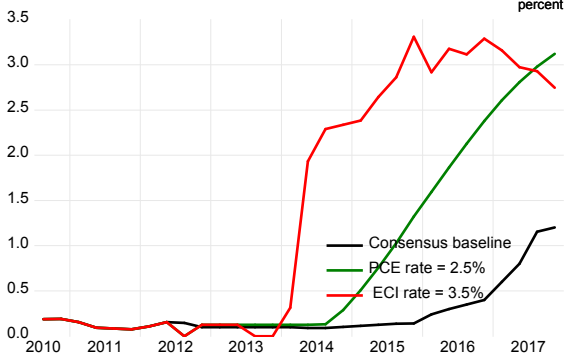


Core PCE Inflation Rate

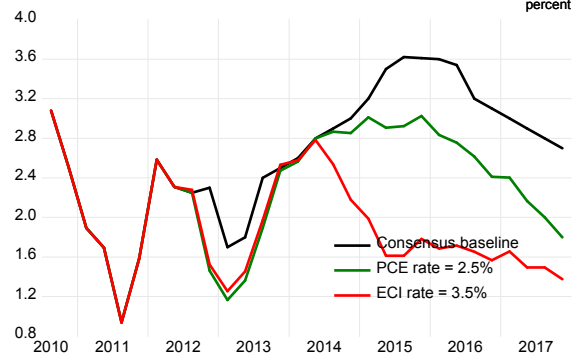


### 3. Macroeconomic Effects of a Lower Labor Force Participation Rate (VAR Expectations; Policy = rfftay) (ZLB and Thresholds Imposed)

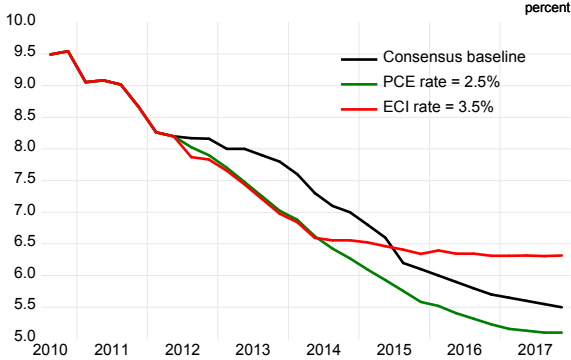
Federal Funds Rate



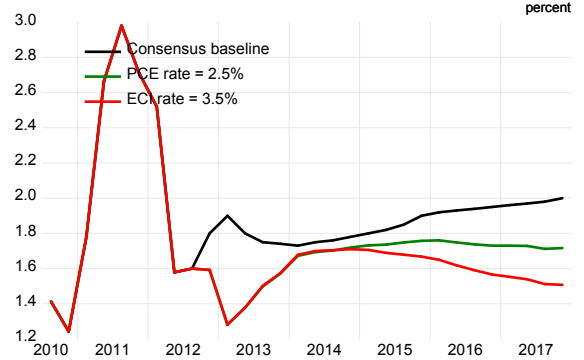
Year to Year % Change in Real GDP



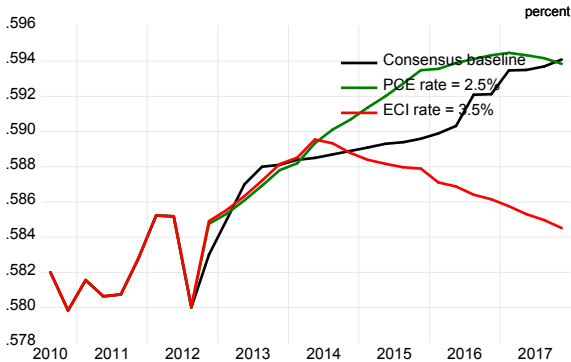
Unemployment Rate



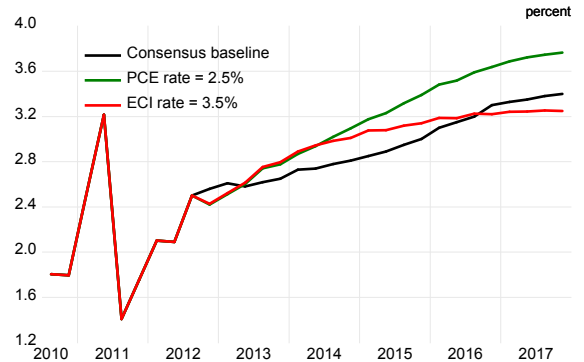
PCE Inflation Rate (4-Quarter)



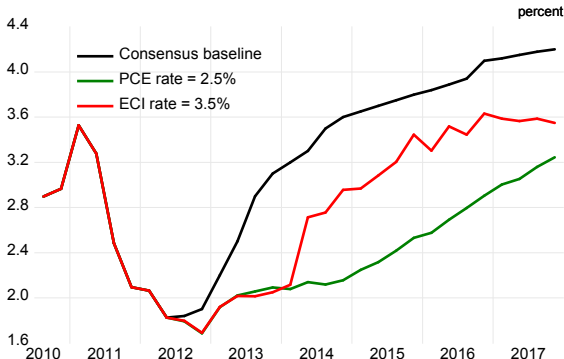
Employment to Population Ratio



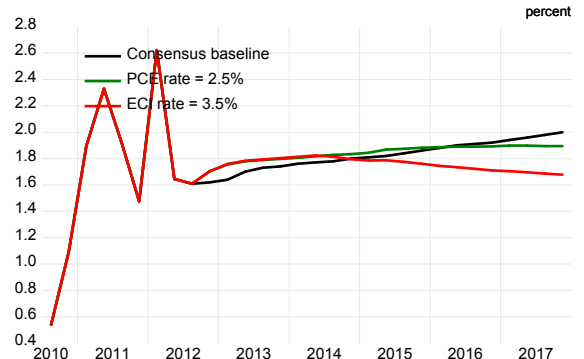
Annualized rate of growth of EI hourly compensation



10-Year Treasury Rate

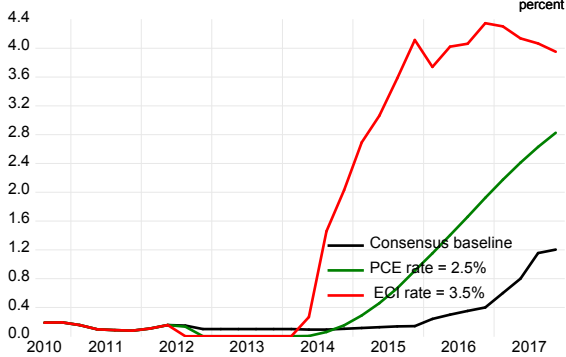


Core PCE Inflation Rate

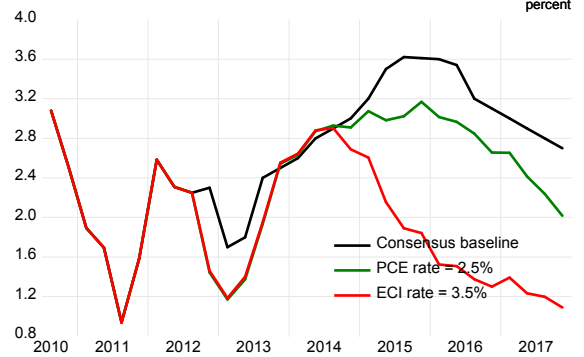


#### 4. Macroeconomic Effects of Unanchored Inflation Expectations (VAR Expectations; Policy = rfftay) (ZLB and Thresholds Imposed)

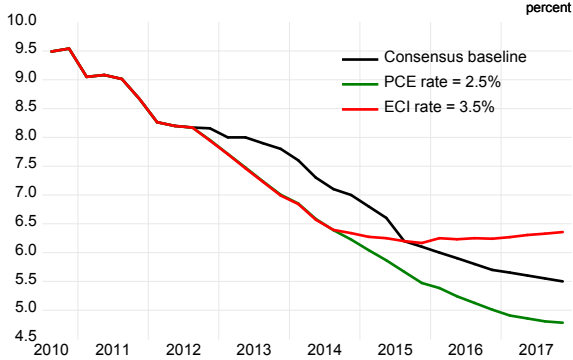
Federal Funds Rate



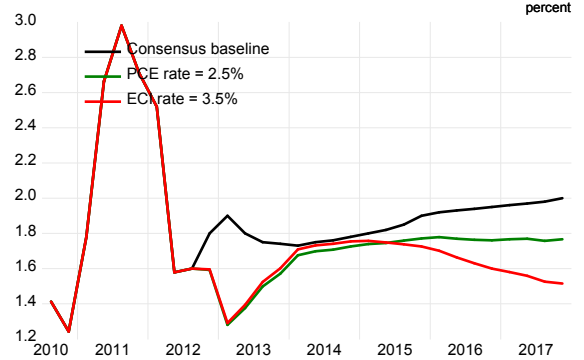
Year to Year % Change in Real GDP



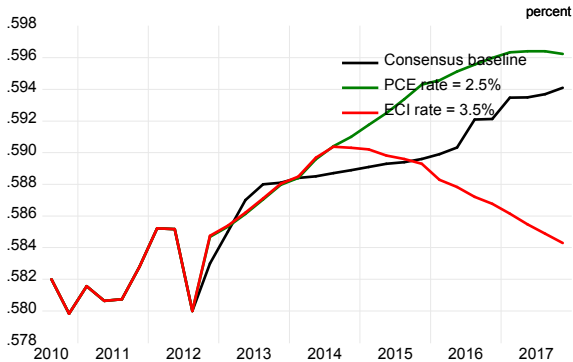
Unemployment Rate



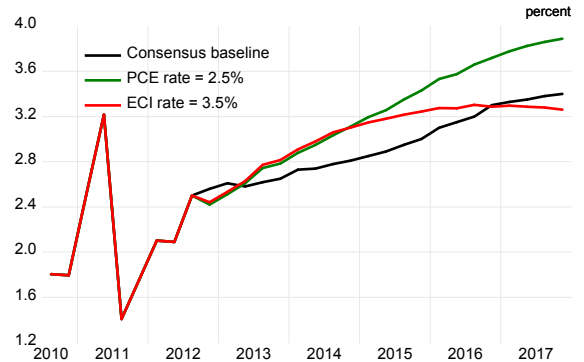
PCE Inflation Rate (4-Quarter)



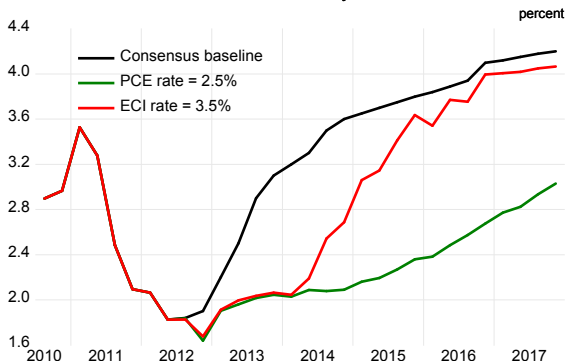
Employment to Population Ratio



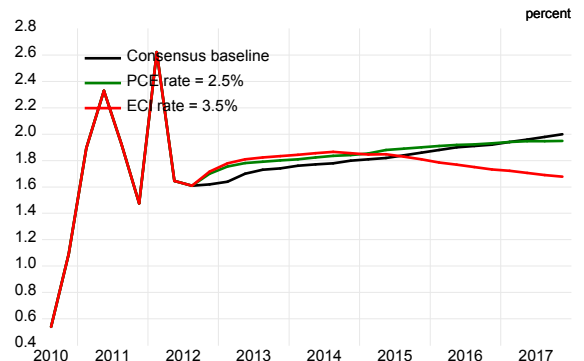
Annualized rate of growth of EI hourly compensation



10-Year Treasury Rate

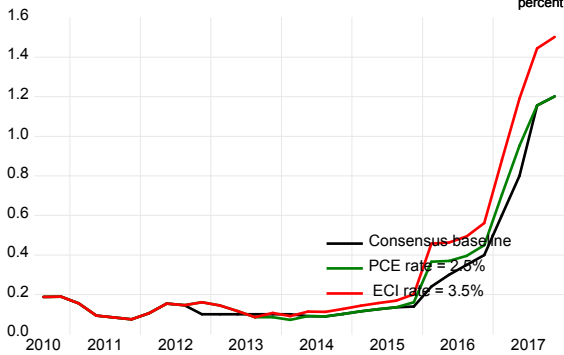


Core PCE Inflation Rate

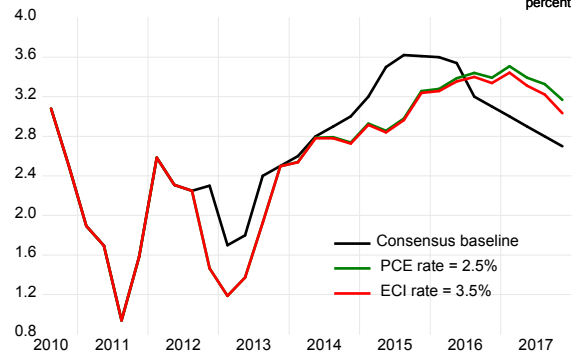


# 5. Macroeconomic Effects of the Taylor Rule with the Unemployment Gap (VAR Expectations; Policy = rfflr) (ZLB and Thresholds Imposed)

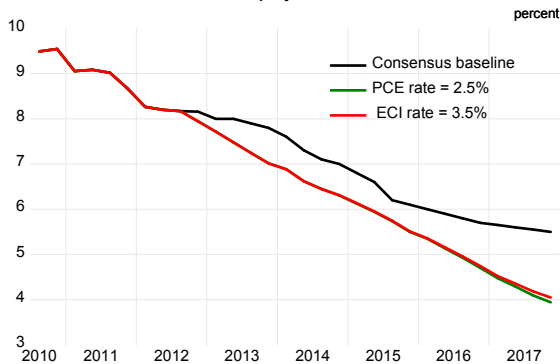
Federal Funds Rate



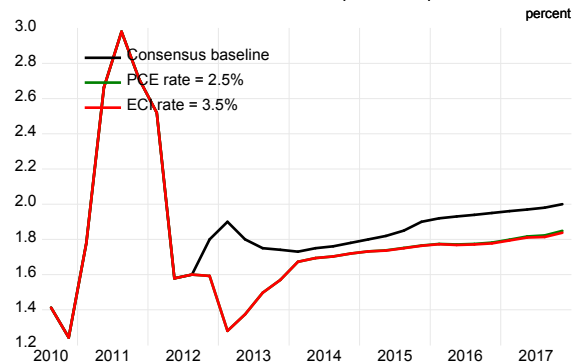
Year to Year % Change in Real GDP



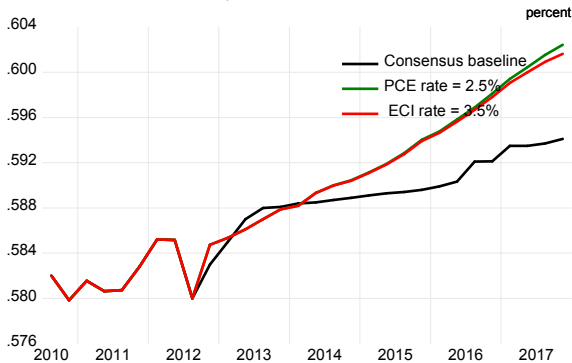
Unemployment Rate



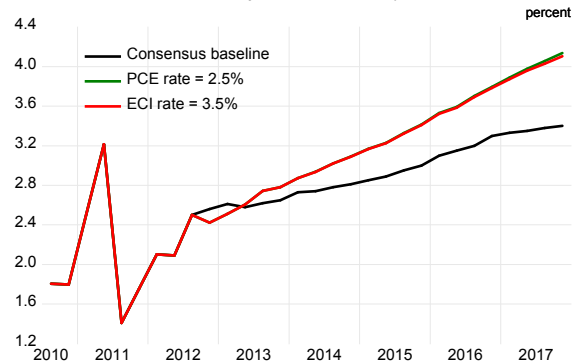
PCE Inflation Rate (4-Quarter)



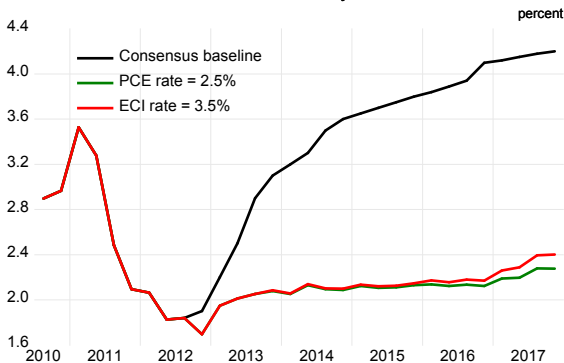
Employment to Population Ratio



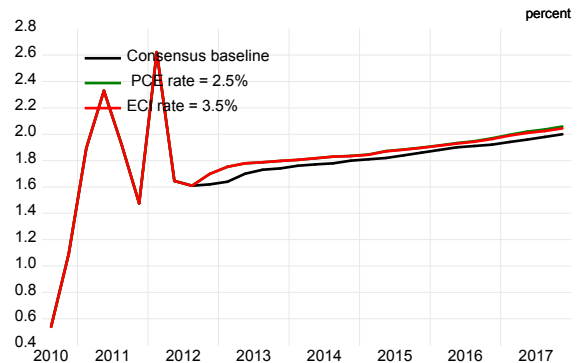
Annualized rate of growth of EI hourly compensation



10-Year Treasury Rate

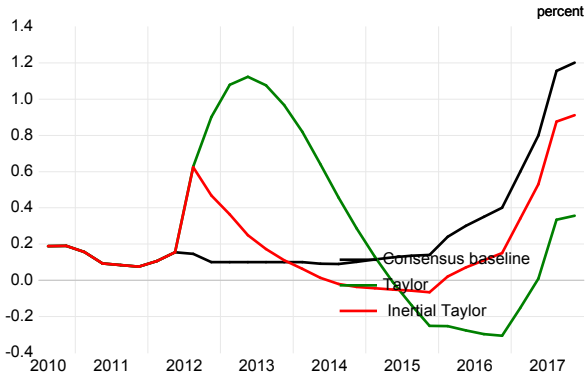


Core PCE Inflation Rate

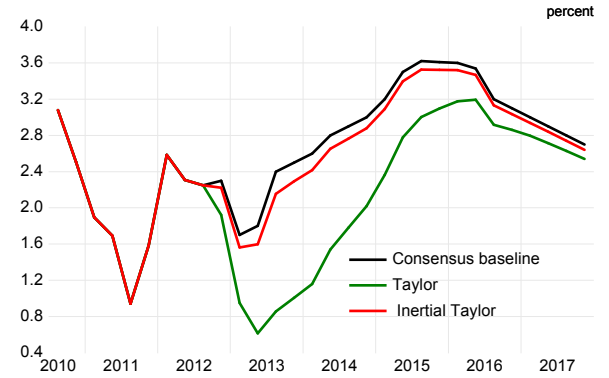


## 6. Macroeconomic Effects of an Upward Federal Funds Rate Shock

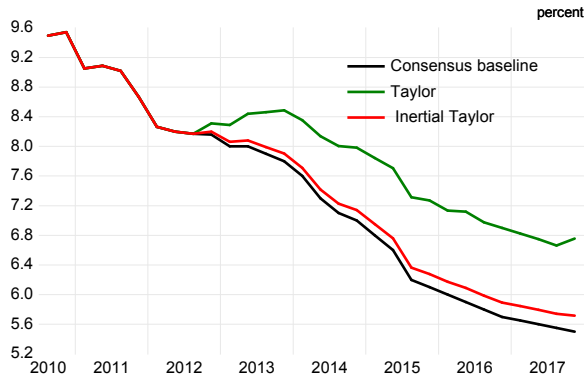
Federal Funds Rate



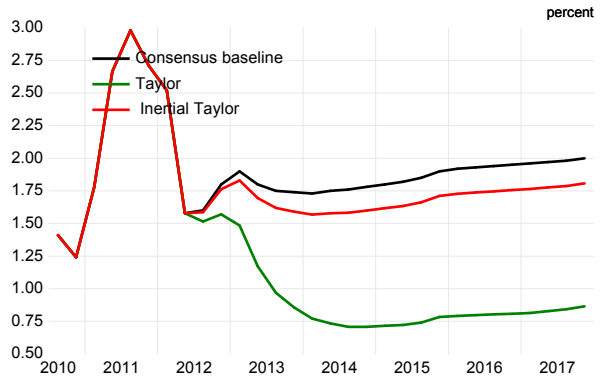
Year to Year % Change in Real GDP



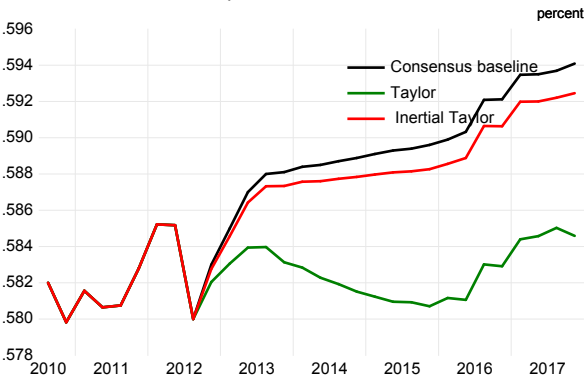
Unemployment Rate



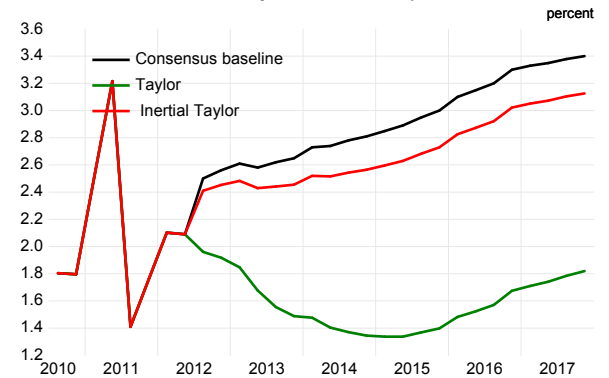
PCE Inflation Rate (4-Quarter)



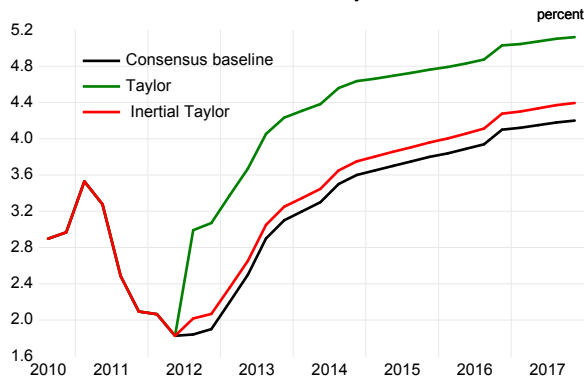
Employment to Population Ratio



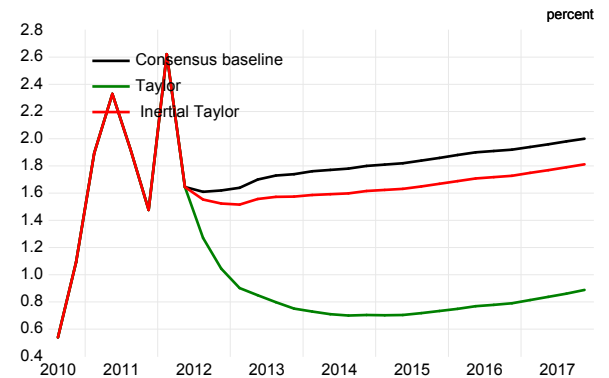
Annualized rate of growth of EI hourly compensation



10-Year Treasury Rate

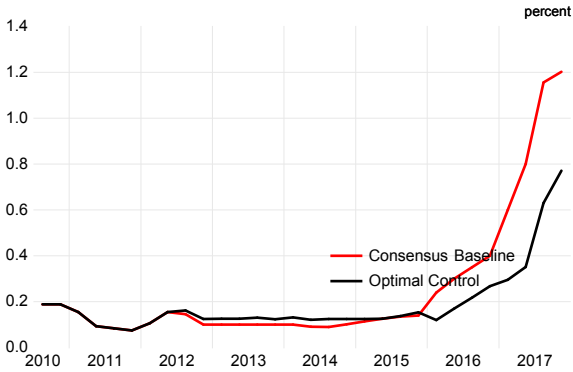


Core PCE Inflation Rate

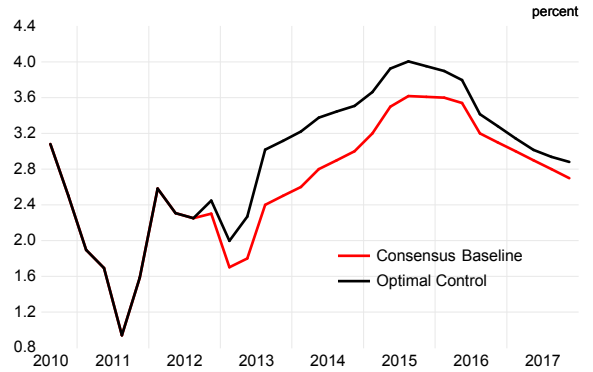


## 7. ZLB Imposed

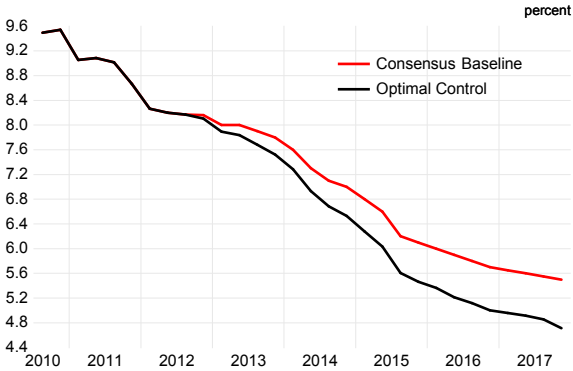
Federal Funds Rate



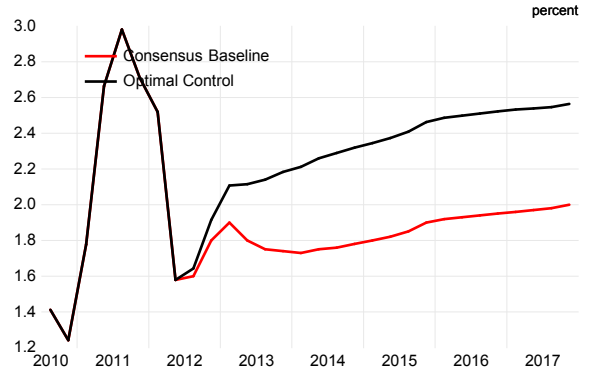
Year to Year % Change in Real GDP



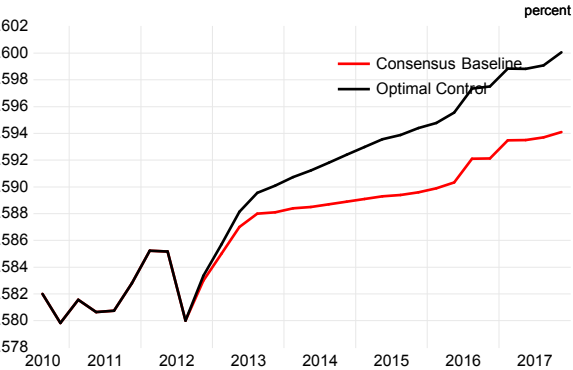
Unemployment Rate



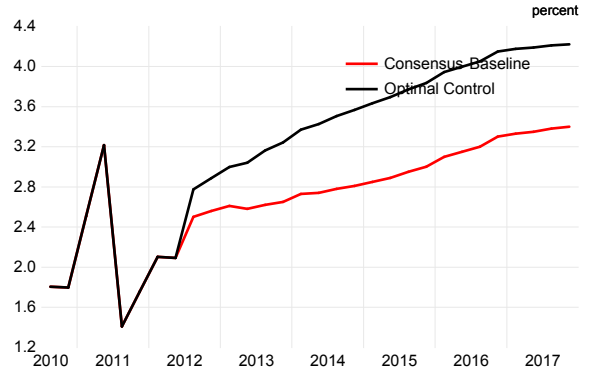
PCE Inflation Rate (4-Quarter)



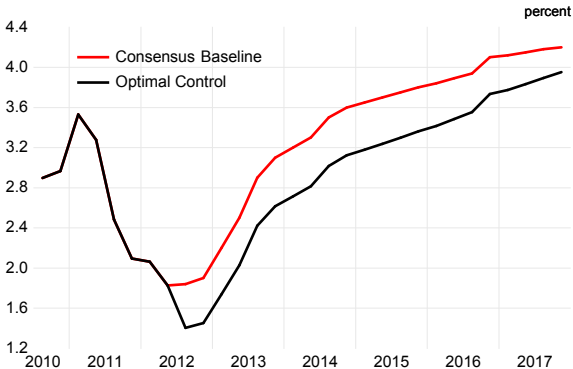
Employment to Population Ratio



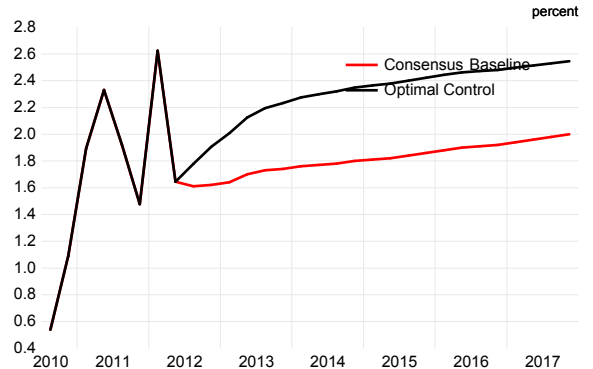
Annual Growth Rate of EI Hourly Compensation



10-Year Treasury Rate

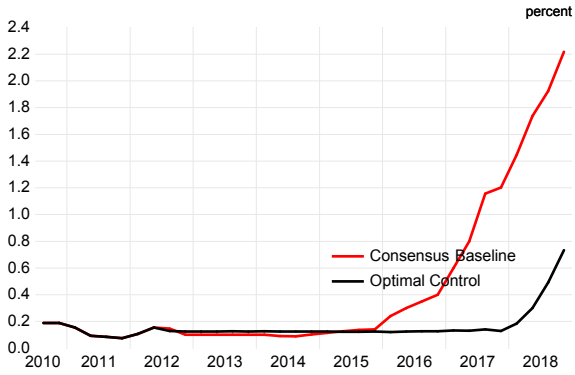


Core PCE Inflation Rate

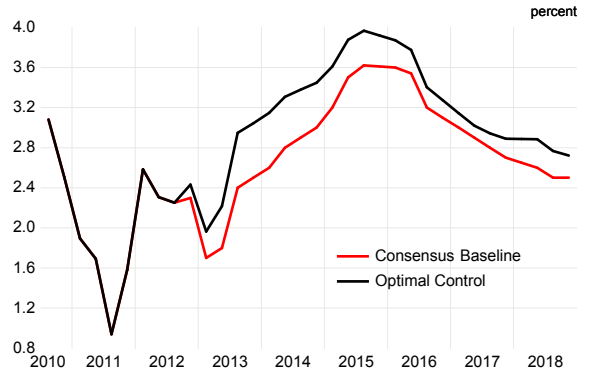


## 8. ZLB Imposed

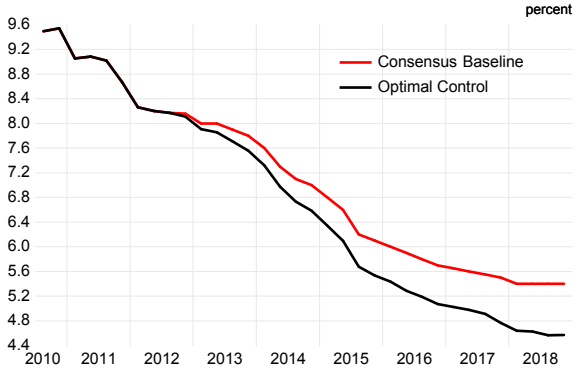
Federal Funds Rate



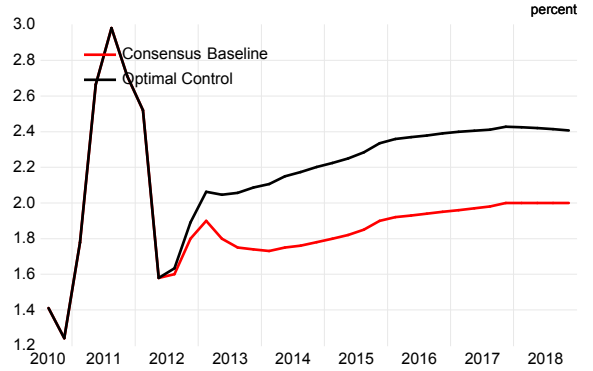
Year to Year % Change in Real GDP



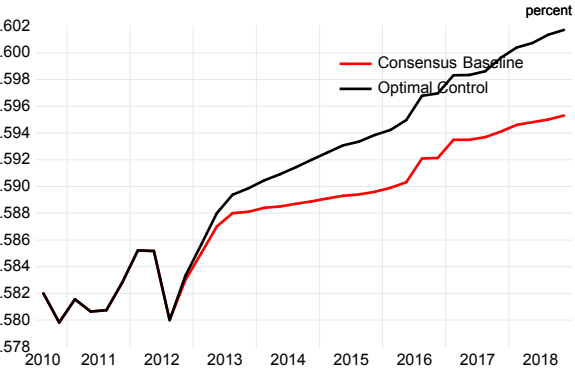
Unemployment Rate



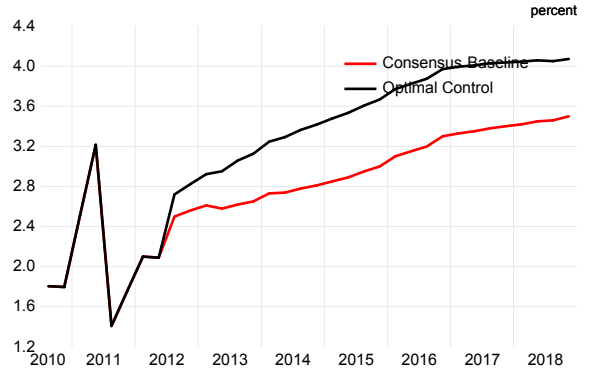
PCE Inflation Rate (4-Quarter)



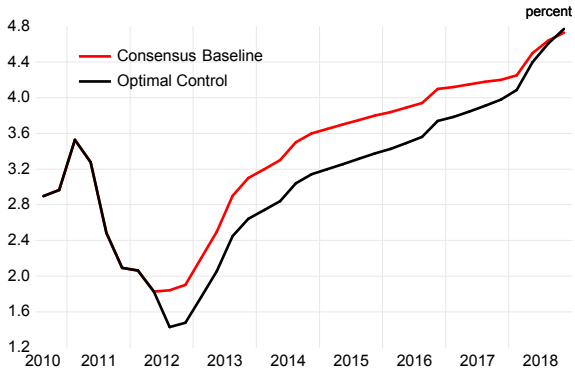
Employment to Population Ratio



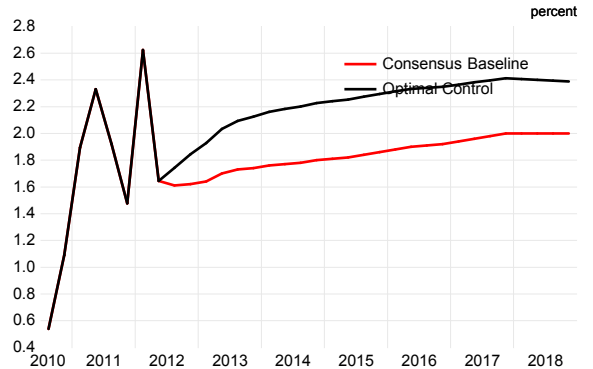
Annual Growth Rate of EI Hourly Compensation



10-Year Treasury Rate

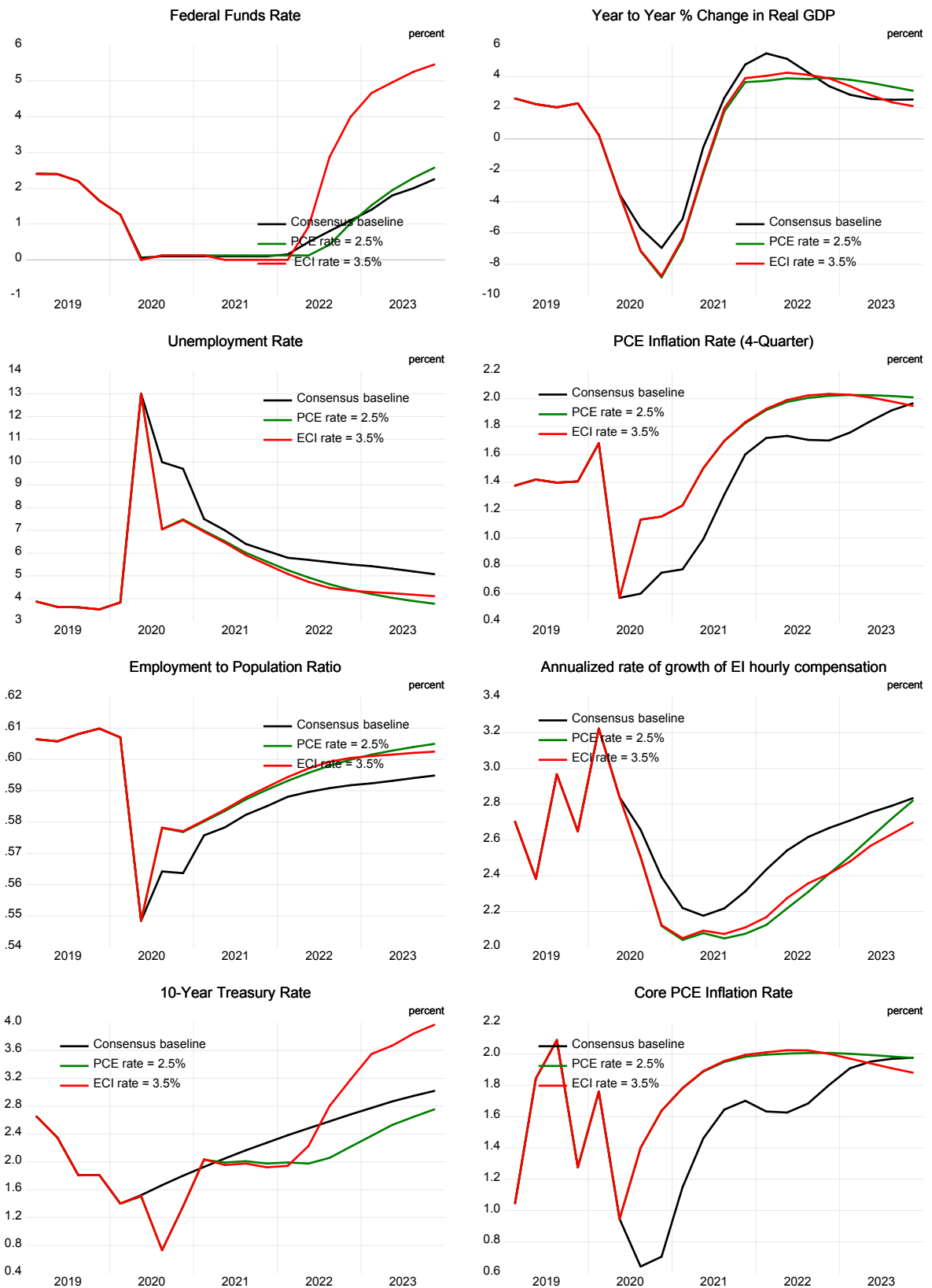


Core PCE Inflation Rate

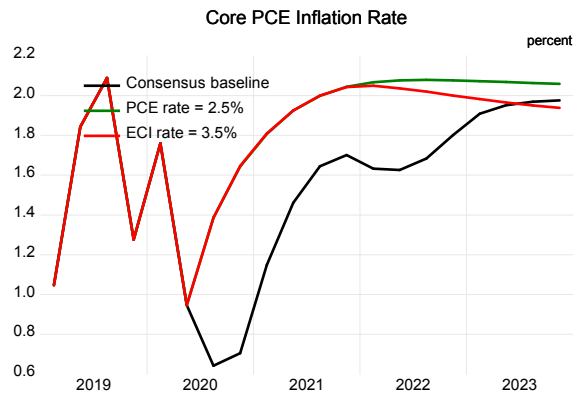
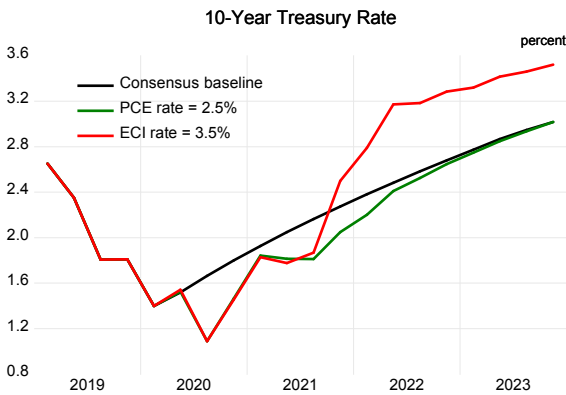
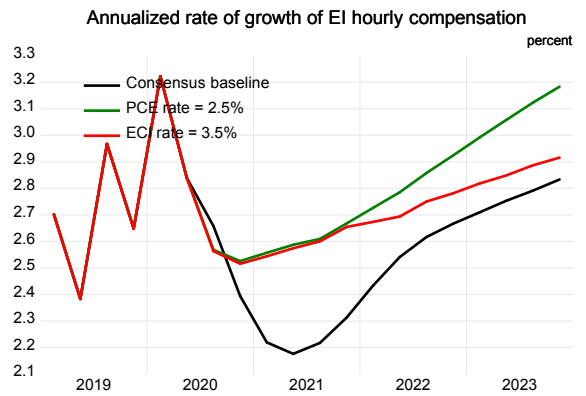
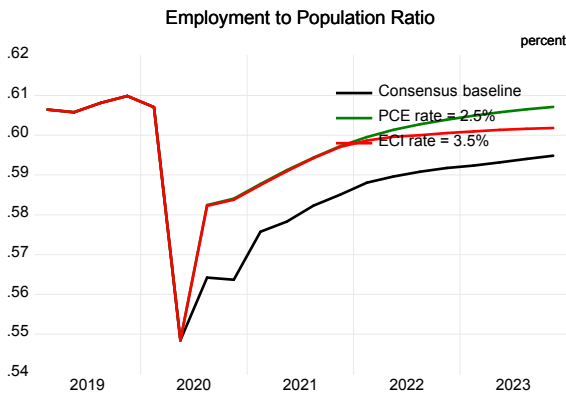
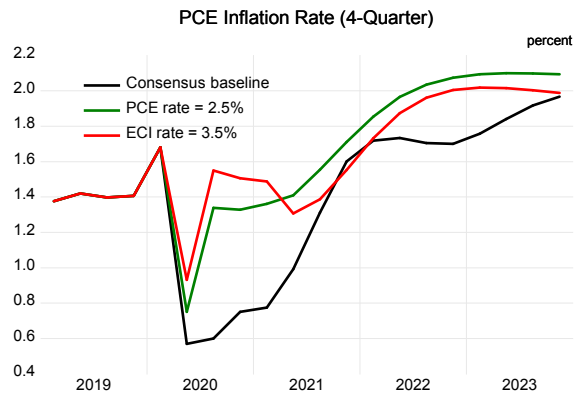
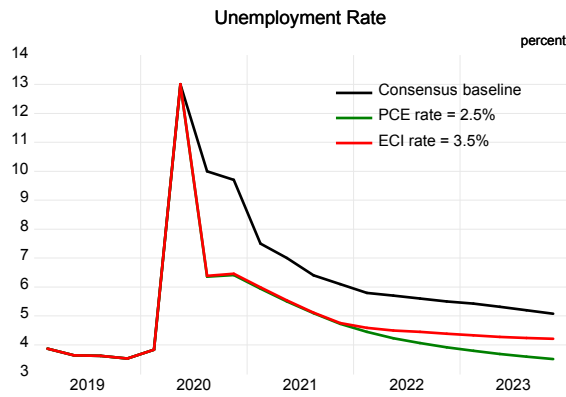
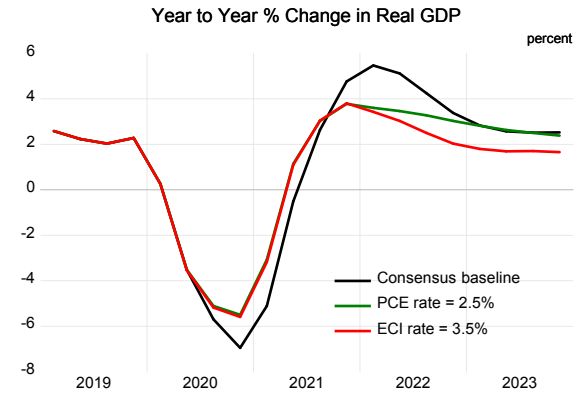
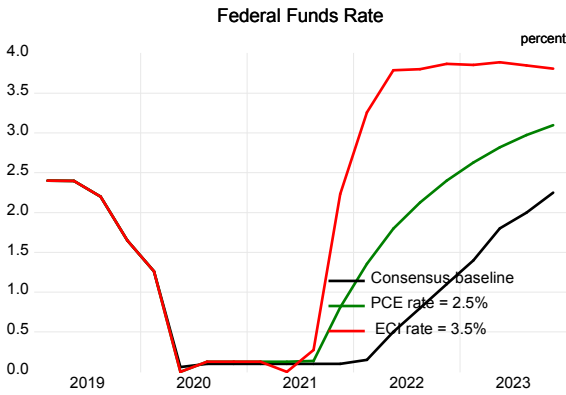




# 9. Macroeconomic Effects of a Negative Aggregate Demand Shock (VAR Expectations; Policy = rfftay) (ZLB and Thresholds Imposed)

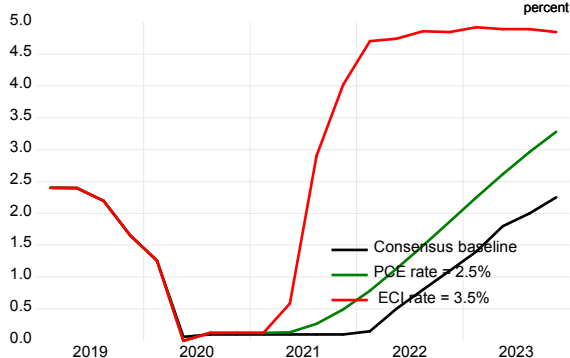


10. Macroeconomic Effects of \$20/Barrel Higher Oil Prices  
(VAR Expectations; Policy = rftay)  
(ZLB and Thresholds Imposed)

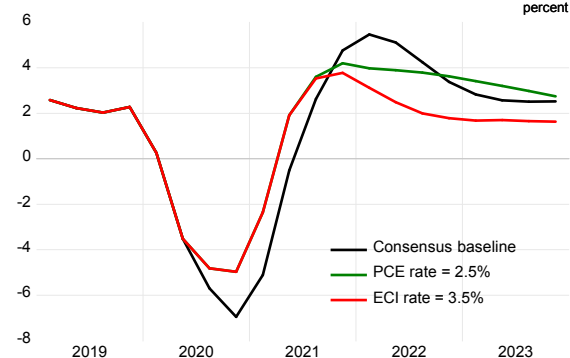


# 11. Macroeconomic Effects of a Lower Labor Force Participation Rate (VAR Expectations; Policy = rftay) (ZLB and Thresholds Imposed)

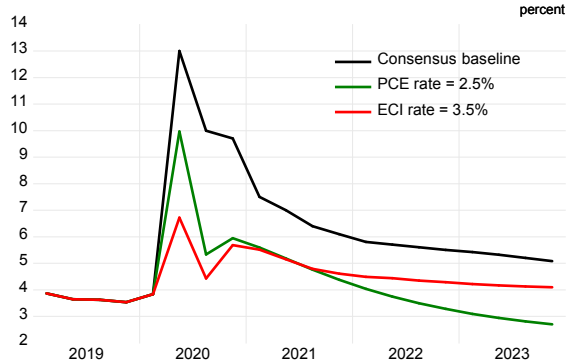
Federal Funds Rate



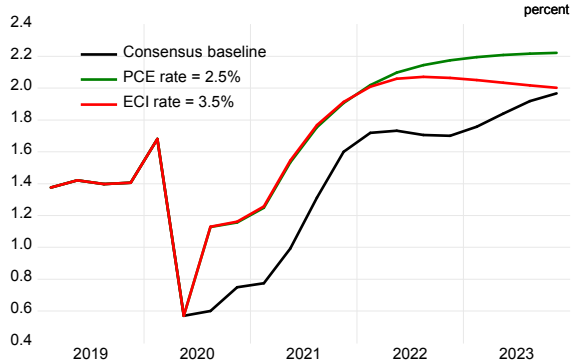
Year to Year % Change in Real GDP



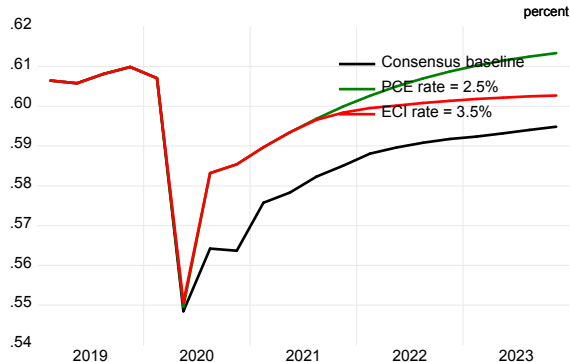
Unemployment Rate



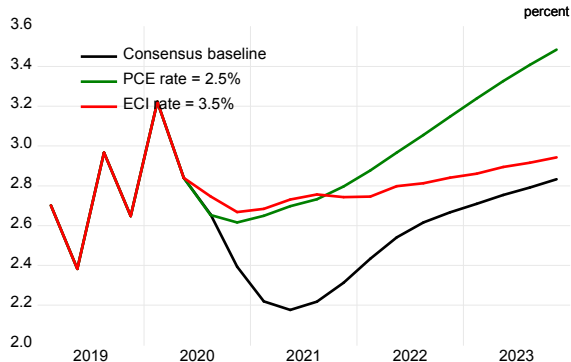
PCE Inflation Rate (4-Quarter)



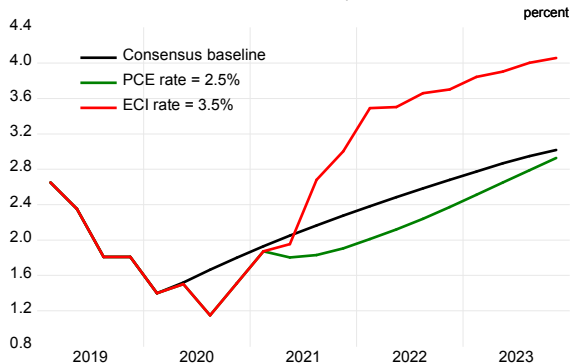
Employment to Population Ratio



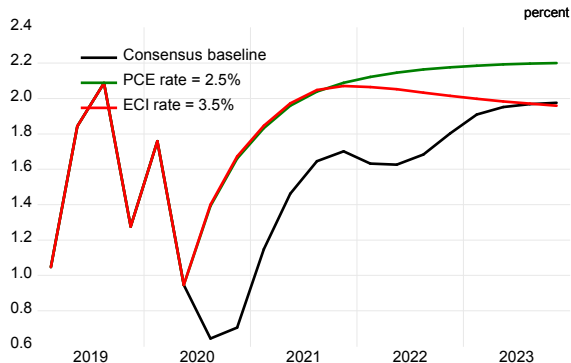
Annualized rate of growth of EI hourly compensation



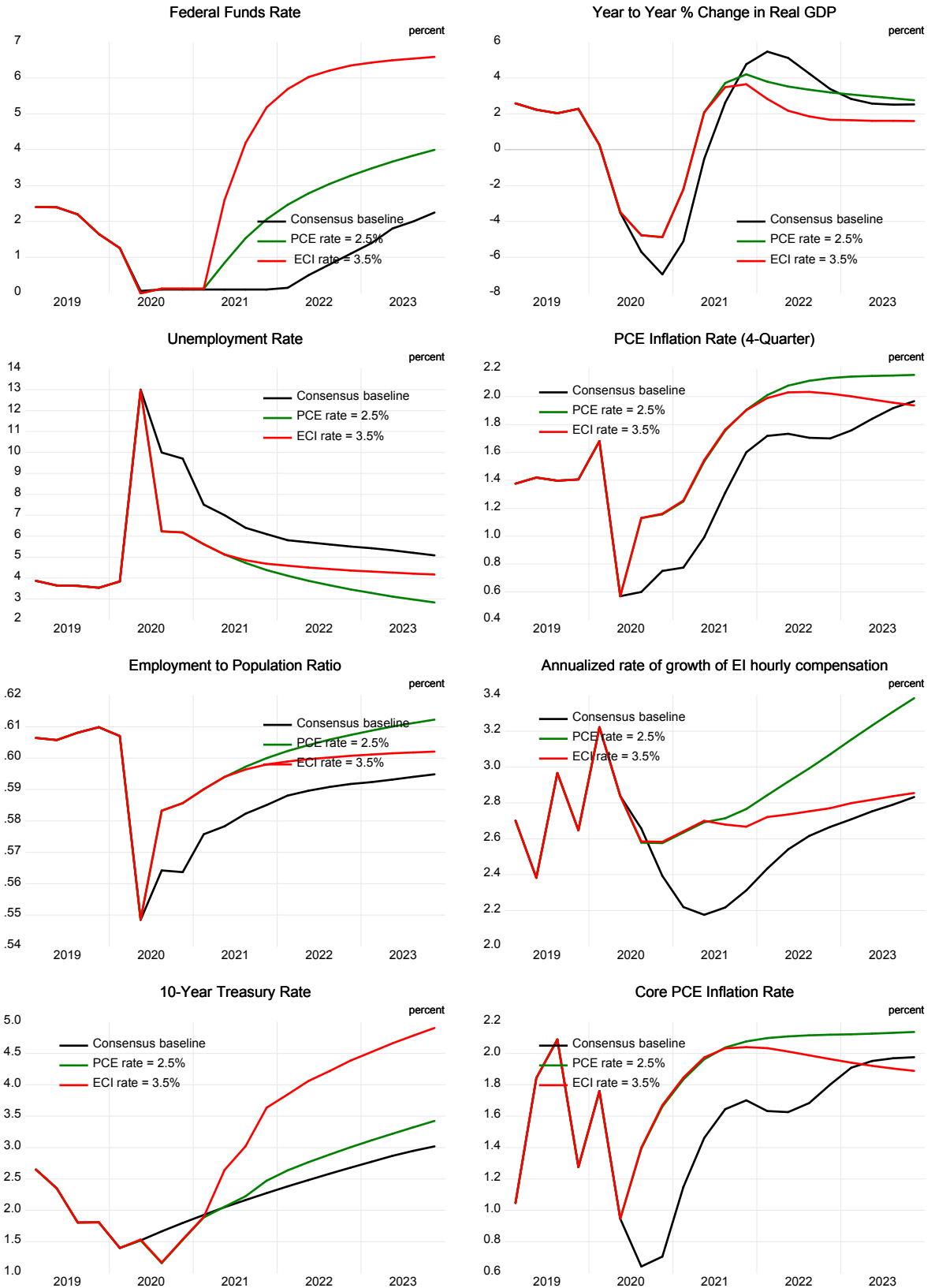
10-Year Treasury Rate



Core PCE Inflation Rate

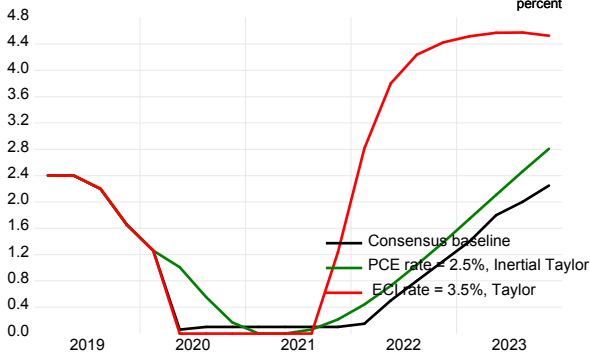


12. Macroeconomic Effects of Unanchored Inflation Expectations  
(VAR Expectations; Policy = rfflr)  
(ZLB and Thresholds Imposed)

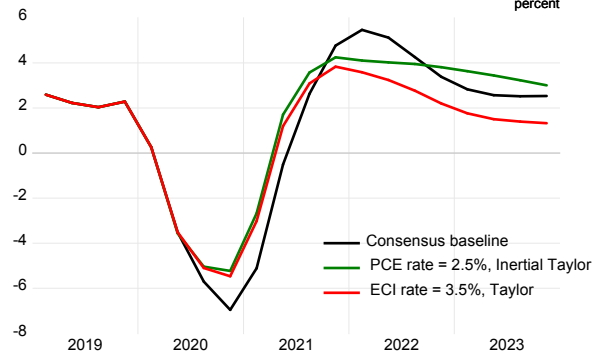


### 13. Macroeconomic Effects of Different Monetary Policy Reaction Functions (VAR Expectations; Policy = rrftay) (ZLB and Thresholds Imposed)

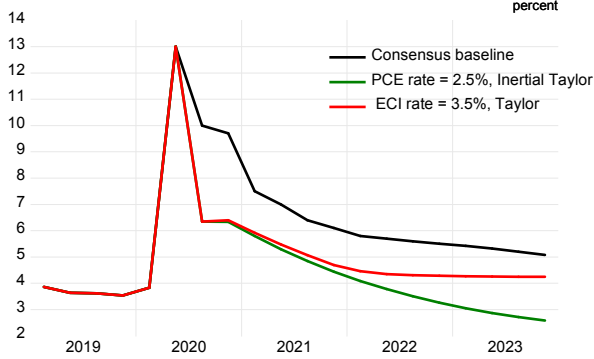
Federal Funds Rate



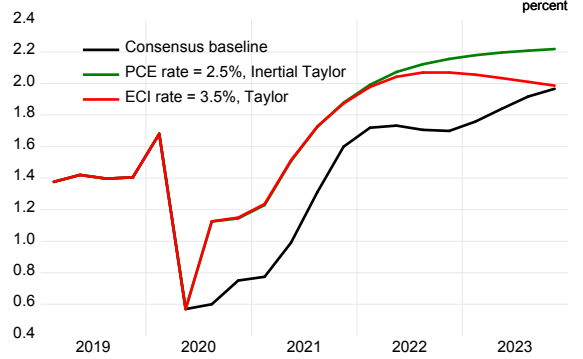
Year to Year % Change in Real GDP



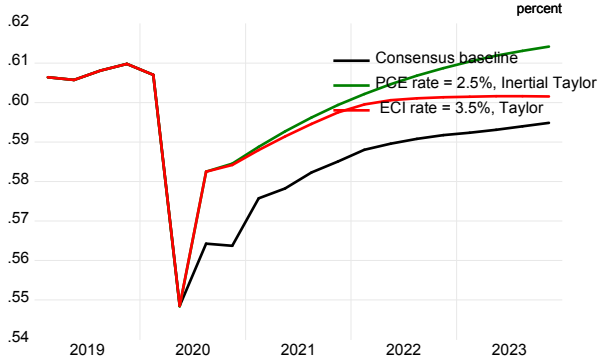
Unemployment Rate



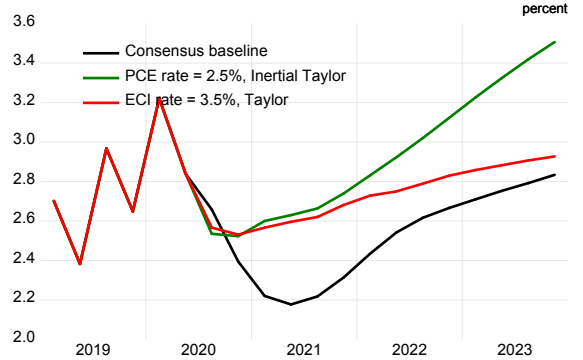
PCE Inflation Rate (4-Quarter)



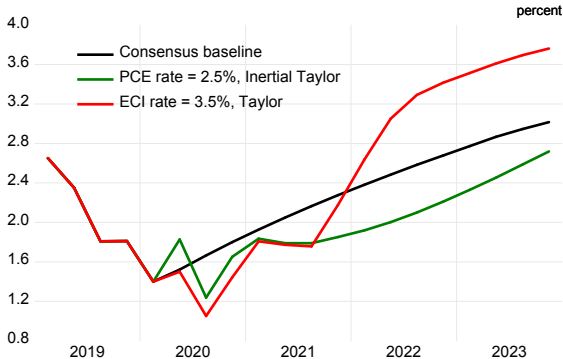
Employment to Population Ratio



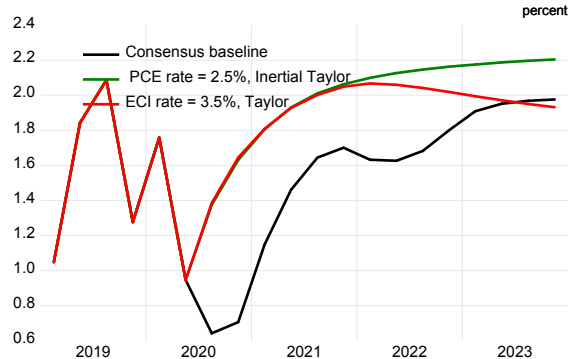
Annualized rate of growth of EI hourly compensation



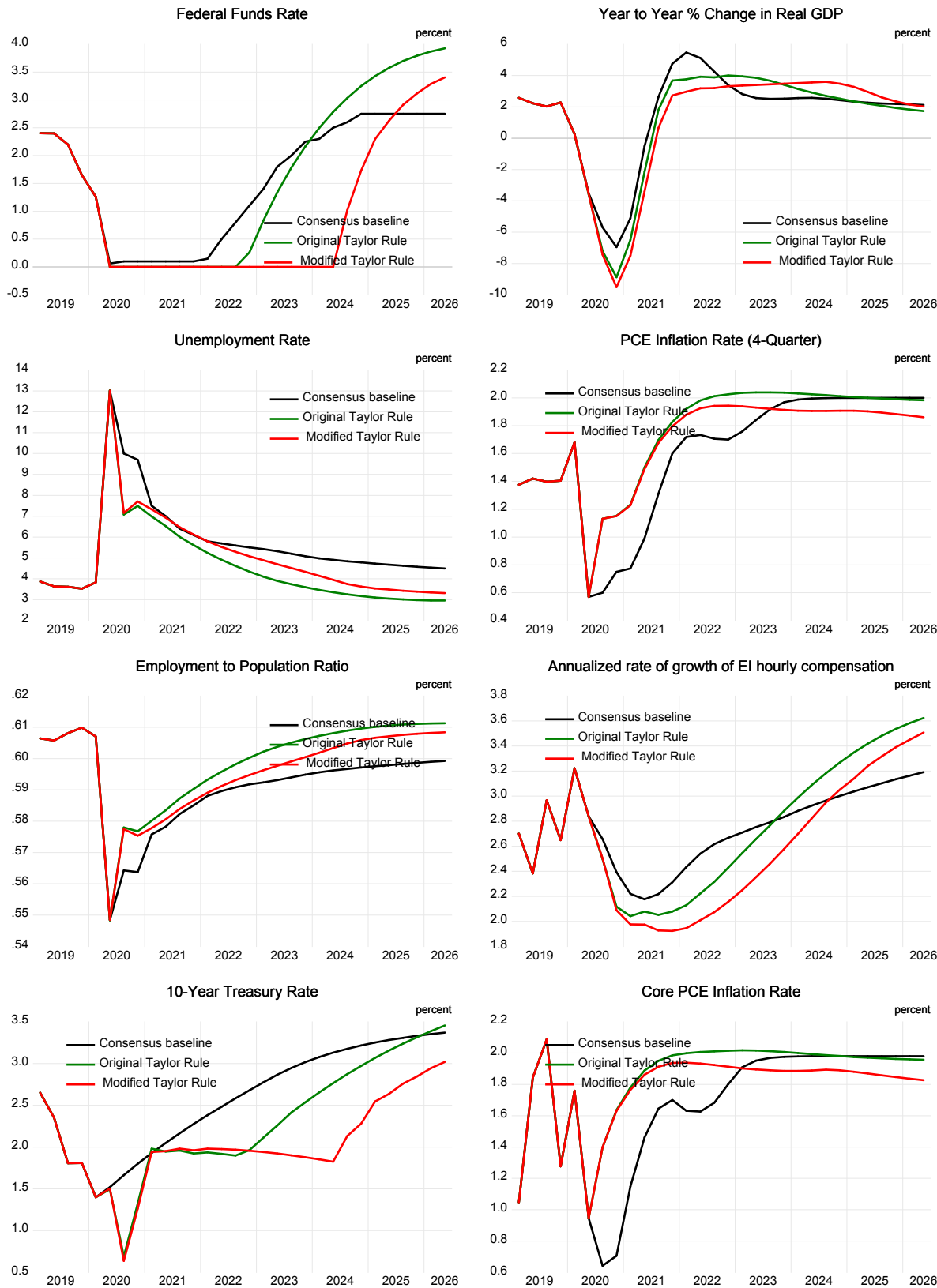
10-Year Treasury Rate



Core PCE Inflation Rate



14. Macroeconomic Effects of a Modified Taylor Rule with a negative AD Shock  
(VAR Expectations; Policy = rrtay)  
(ZLB and Thresholds Imposed)



15. Macroeconomic Effects of a negative AD Shock and Rise in the Federal Government expenditures  
(VAR Expectations; Policy = rrtay)  
(ZLB and Thresholds Imposed)

