Figures for
“An Update on the Economy and Monetary Policy”

Loretta J. Mester*
President and Chief Executive Officer
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2023 UC San Diego Economics Roundtable
San Diego, CA
(via videoconference)

July 10, 2023

* The views expressed here are my own and not necessarily those of the Federal Reserve System or my colleagues on the Federal Open Market Committee.
Figure 1. The FOMC has raised the fed funds rate target by 500 basis points since March 2022 and banks are tightening credit standards.

Fed Funds Rate Target

Senior Loan Officer Opinion Survey:
Net % of banks tightening standards for C&I loans to:
- large firms
- small firms

Source: Federal Open Market Committee via Haver Analytics
Monthly data, end of period, midpoint of target range starting in Dec 2008: Last obs. June 2023

Source: Federal Reserve Board via Haver Analytics
Quarterly data: Last obs. 2023 Q2
Figure 2. Output growth has slowed but less than anticipated

Percentage change, SAAR
2021 Q1 to 2023 Q1

-30 -25 -20 -15 -10 -5 0 5 10 15 Percent

Real GDP

Residential investment

Final sales to private domestic purchasers

Consumer spending

Equipment spending

Source: Bureau of Economic Analysis via Haver Analytics
Quarterly data: Last obs. 2023 Q1
Figure 3. Real goods spending is still above trend and real services spending is still below trend

Source: Bureau of Economic Analysis via Haver Analytics
Monthly data: Last obs. May 2023
Figure 4. Housing activity slowed as mortgage rates rose last year but it has picked up more recently

Thousands, 3-mo mov avg

Source: Census Bureau for housing starts and new single-family home sales, and National Association of Realtors for existing home sales, via Haver Analytics

Monthly data: Last obs. May 2023
Figure 5. Employment growth has moderated but labor markets remain tight

Monthly change in payroll employment and 3-month average change

Thousands of jobs

Unemployment rate

Source: Bureau of Labor Statistics via Haver Analytics
Monthly data: Last obs. June 2023
Figure 6. Labor force participation rates have been rising and the rate of prime-age participation is now above its pre-pandemic level

Labor force participation rates:
Prime-age (ages 25-54) (left scale)
Ages 16 and older (right scale)

Source: Bureau of Labor Statistics via Haver Analytics
Monthly data: Last obs. June 2023
Figure 7. Compensation growth is down from its peak but is well above the level consistent with price stability

Avg hourly earnings, private industry: yr-over-yr % chg and qrt chg, ann
Employment cost index: comp, private wkers: yr-over-yr % chg and qrt chg, ann

Source: Bureau of Labor Statistics via Haver Analytics
Quarterly data: Last obs. 2023 Q1 for ECI and 2023 Q2 for AHE
Figure 8. PCE inflation is down from its peak, reflecting sharp drops in energy prices and deceleration in food prices.

Source: Cleveland Fed for median PCE, Dallas Fed for trimmed-mean PCE, Bureau of Economic Analysis for others, via Haver Analytics.
Figure 9. Core goods inflation has fallen and housing services inflation is expected to decline this year. Inflation in core services excluding housing has shown little improvement over time.

Year-over-year percentage change

Source: Bureau of Economic Analysis via Haver Analytics
Monthly data: Last obs. May 2023
Figure 10. The median fed funds rate path in the June SEP shows rates rising somewhat further this year.

- Median of projections
- Individual projections
- 70% confidence interval around median of projections using historical projection errors

Source: FOMC’s Summary of Economic Projections (SEP), June 2023.
Fan chart based on historical forecast errors from Table 2 of SEP, based on D. Reifschneider and P. Tulip, Board of Governors FEDS Working Paper 2017-020 (Feb. 24, 2017).
Figure 11. The real fed funds rate is relatively low compared to several other tightening cycles

Real federal funds rate = effective ff rate minus yr/yr PCE inflation
Avg yr/yr PCE inflation over the tightening cycle in parentheses

1999-2000 (PCE infl = 2.1%)
1983-1984 (PCE infl = 4.1%)
1988-1989 (PCE infl = 4.3%)
1994-1995 (PCE infl = 2.1%)
2004-2006 (PCE infl = 2.9%)
2015-2018 (PCE infl = 1.6%)
2022-current (PCE infl = 5.7%)

Source: Federal Reserve Board for federal funds rate and Bureau of Economic Analysis for PCE inflation via Haver Analytics, tightening cycles from Fed Res Bk of St. Louis Monthly data
Figure 12. Inflation forecasts have been revised up over time

FOMC SEP Median PCE Inflation Projections

Q4-over-Q4 percentage change

Source: FOMC Summary of Economic Projections (SEP)
Figure 13. Medium- and longer-term inflation expectations are reasonably well anchored. Near-term inflation expectations have moved with inflation.

Source: Federal Reserve Board, Federal Reserve Banks of Atlanta, Cleveland, Philadelphia, and New York, University of Michigan via Haver Analytics
Quarterly data for medium- and longer-term measures (last month of qtr for NY Fed, U Mich, and Infl Comp):
last obs. 2023Q1 for BOG, 2023Q2 for others
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