



# SURVEY OF PROFESSIONAL FORECASTERS

Release Date: August 9, 2024

## THIRD QUARTER 2024

### *Upward Revisions to Current Year Growth Expectations, but Downward Revisions to Employment*

The outlook for the U.S. economy is more mixed than three months ago, according to 36 forecasters surveyed by the Federal Reserve Bank of Philadelphia. The panelists predict GDP will grow at an annual rate of 1.9 percent this quarter, down from 2.0 percent in the previous survey. However, the panelists revised upward their expectations for GDP growth in the fourth quarter of 2024 from 1.5 percent in the previous survey to 1.7 percent in the current survey. Overall, the forecasters revised upward their expectations for 2024 GDP growth on an annual-average over annual-average basis from 2.5 percent to 2.6 percent.

The forecasters see higher unemployment rates across all horizons compared with the previous survey. On an annual-average basis, the forecasters revised upward their expectations by 0.2 percentage point for both 2024 and 2025 to 4.1 percent and 4.3 percent, respectively. The forecasters expect the unemployment rate to be 4.2 percent in both 2026 and 2027, each up 0.1 percentage point from the last survey.

On the employment front, the panelists have slightly lowered their expectations for the next three quarters compared with the previous survey. The forecasters see job gains at a monthly rate steadily decreasing from 143,900 in the current quarter to 116,200 in the second quarter of 2025. However, in the third quarter of 2025, the forecasters expect monthly job gains to bounce back to 145,800. Overall, annual-average projections for nonfarm payroll employment decreased from a monthly rate of 210,100 in 2024 to 130,000 in 2025, both lower than those in the previous survey. (These annual-average projections are computed as the year-to-year change in the annual-average level of nonfarm payroll employment, converted to a monthly rate.)

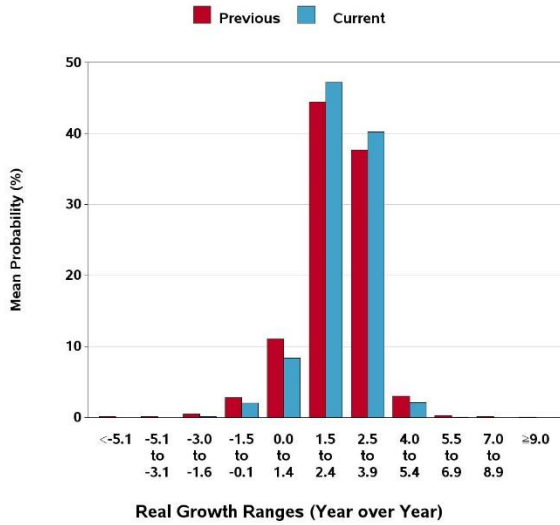
### *Median Forecasts for Selected Variables in the Current and Previous Surveys*

	Real GDP (%)		Unemployment Rate (%)		Payrolls (000s/month)	
	Previous	New	Previous	New	Previous	New
Quarterly data:						
2024:Q3	2.0	1.9	4.0	4.2	147.3	143.9
2024:Q4	1.5	1.7	4.0	4.3	129.7	125.4
2025:Q1	1.8	1.7	4.1	4.3	144.2	128.7
2025:Q2	2.0	1.8	4.1	4.3	108.7	116.2
2025:Q3	N.A.	2.2	N.A.	4.3	N.A.	145.8
Annual data (projections are based on annual-average levels):						
2024	2.5	2.6	3.9	4.1	212.6	210.1
2025	1.9	1.9	4.1	4.3	140.6	130.0
2026	1.9	2.3	4.1	4.2	N.A.	N.A.
2027	2.1	2.0	4.1	4.2	N.A.	N.A.

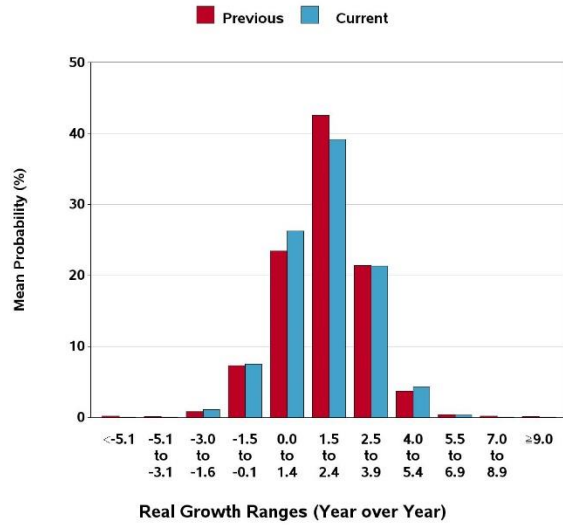
The charts below provide some insight into the degree of uncertainty the forecasters have about their projections for the rate of growth in the annual-average level of real GDP. Each chart presents the forecasters' current and previous estimates of the probability that growth will fall into each of 11 ranges.

The forecasters deem the most likely growth rate in all four years to be in the range of 1.5 percent to 2.4 percent, which matches the expectations of the previous survey.

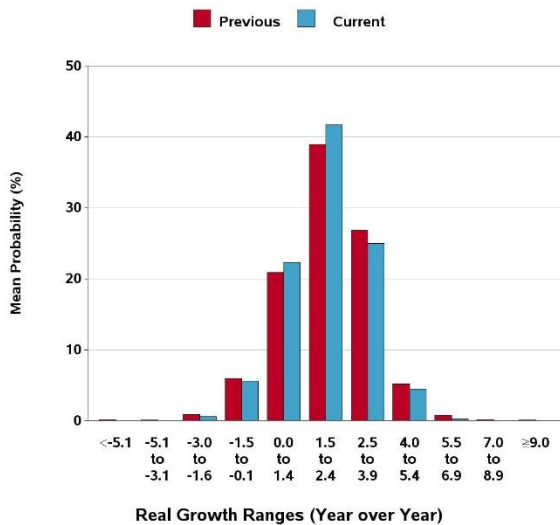
**Mean Probabilities for Real GDP Growth in 2024**



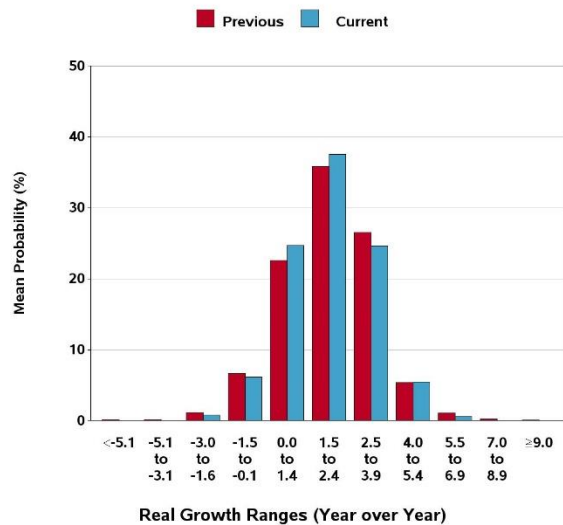
**Mean Probabilities for Real GDP Growth in 2025**



**Mean Probabilities for Real GDP Growth in 2026**



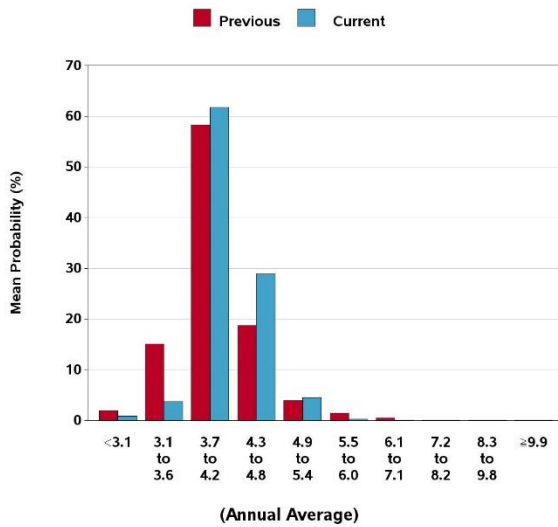
**Mean Probabilities for Real GDP Growth in 2027**



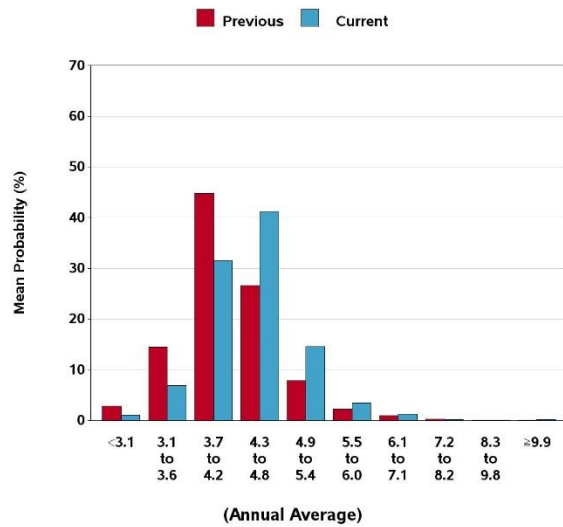
The forecasters' density projections for unemployment, shown below, shed light on uncertainty about the labor market over the next four years. Each chart presents the forecasters' current and previous estimates of the probability that unemployment will fall into each of 10 ranges.

The forecasters predict the unemployment rate will most likely be in the range of 3.7 percent to 4.2 percent for 2024 and 2027, matching the expectations for the highest probability of the previous survey. However, for 2025 and 2026, the forecasters have shifted their highest unemployment rate expectations from a range of 3.7 percent to 4.2 percent in the previous survey to 4.3 percent to 4.8 percent in the current survey.

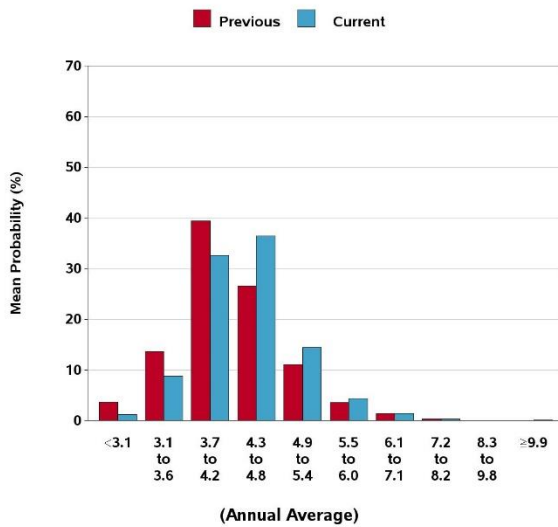
**Mean Probabilities for Unemployment Rate in 2024**



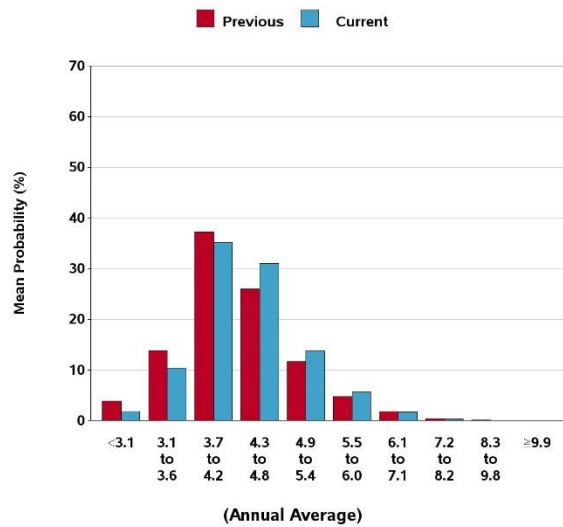
**Mean Probabilities for Unemployment Rate in 2025**



**Mean Probabilities for Unemployment Rate in 2026**



**Mean Probabilities for Unemployment Rate in 2027**



### ***Forecasters Revise Down Inflation Expectations at Most Horizons***

The forecasters have lowered their expectations for all current-quarter measures of inflation. Current-quarter headline CPI and PCE inflation are now expected to be 2.3 percent and 2.1 percent, respectively, down from 2.8 percent and 2.4 percent in the previous survey. Similarly, current-quarter core CPI and PCE inflation expectations were also revised downward to 2.6 percent and 2.4 percent, respectively.

Predictions at all other horizons for both headline and core CPI and PCE inflation have either been revised downward or remain the same when compared with the previous survey. The only two exceptions to this are the second quarter of 2025 projections for headline CPI and PCE inflation, both of which were revised upward by 0.1 percentage point to 2.4 percent and 2.2 percent, respectively.

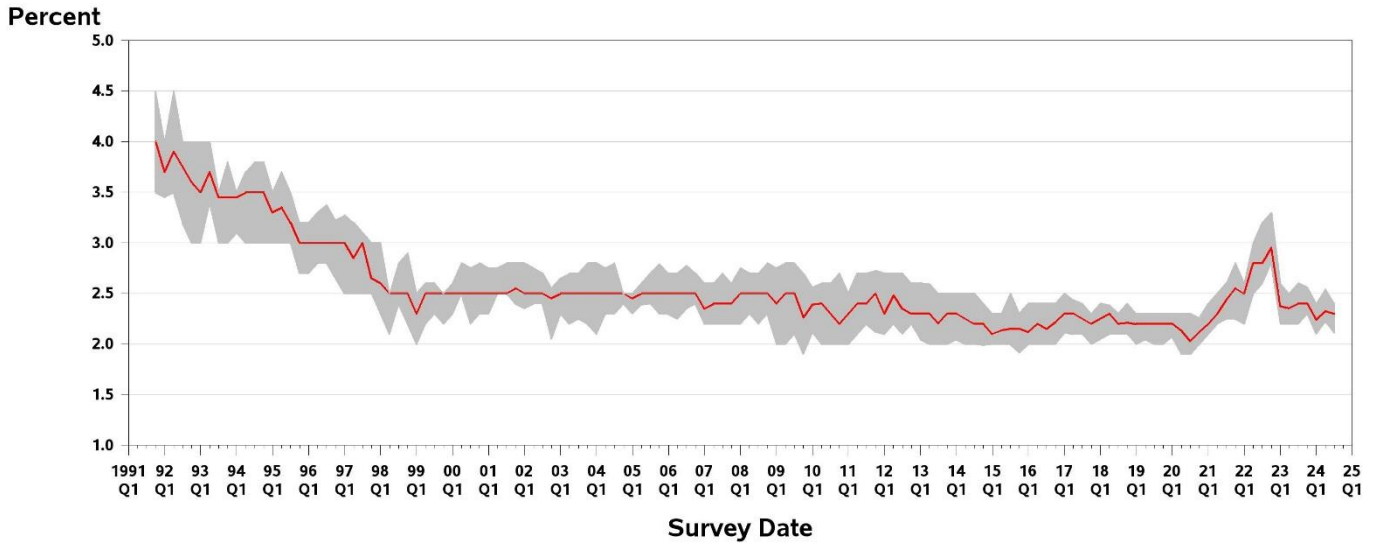
Over the next 10 years, 2024 to 2033, the forecasters predict headline CPI inflation will be an annual-average rate of 2.30 percent, down from 2.33 percent in the previous survey. The corresponding estimate for 10-year annual-average PCE inflation is 2.10 percent, unchanged from the previous survey.

### *Median Short-Run and Long-Run Projections for Inflation (Annualized Percentage Points)*

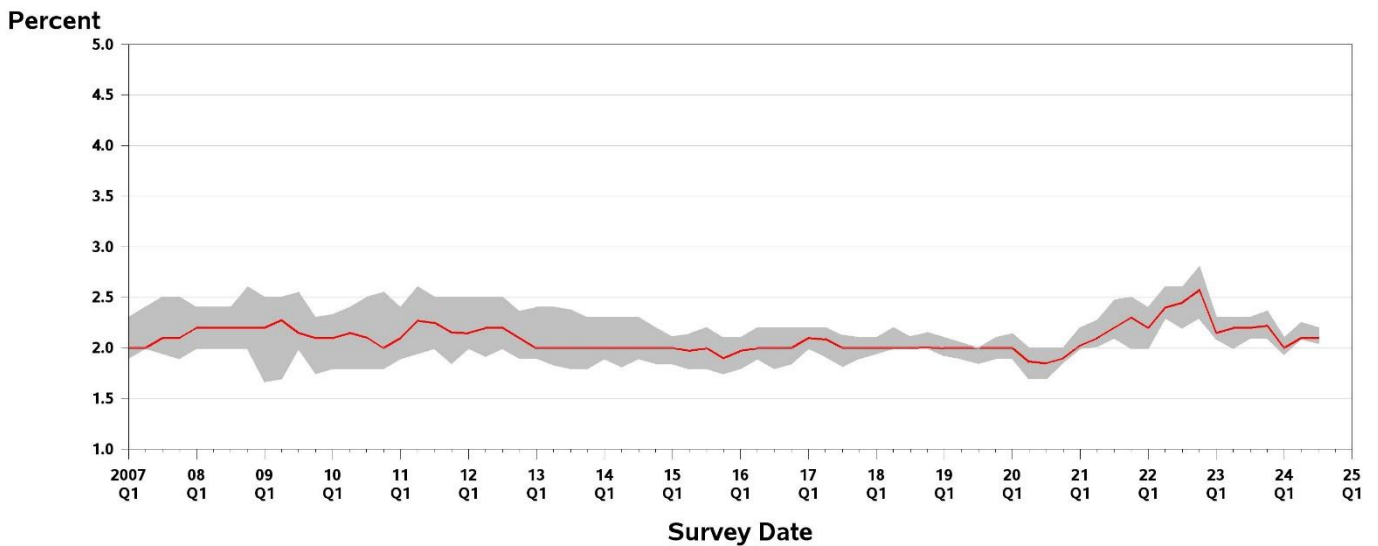
	Headline CPI		Core CPI		Headline PCE		Core PCE	
	Previous	Current	Previous	Current	Previous	Current	Previous	Current
<b>Quarterly</b>								
2024:Q3	2.8	2.3	3.0	2.6	2.4	2.1	2.5	2.4
2024:Q4	2.5	2.5	2.7	2.6	2.2	2.1	2.4	2.3
2025:Q1	2.4	2.4	2.7	2.4	2.2	2.2	2.4	2.3
2025:Q2	2.3	2.4	2.5	2.4	2.1	2.2	2.3	2.2
2025:Q3	N.A.	2.3	N.A.	2.4	N.A.	2.1	N.A.	2.1
<b>Q4/Q4 Annual Averages</b>								
2024	3.1	2.8	3.4	3.2	2.8	2.6	2.9	2.8
2025	2.4	2.3	2.5	2.4	2.2	2.1	2.2	2.2
2026	2.3	2.2	2.4	2.3	2.1	2.1	2.1	2.0
<b>Long-Term Annual Averages</b>								
2024-2028	2.50	2.40	N.A.	N.A.	2.21	2.20	N.A.	N.A.
2024-2033	2.33	2.30	N.A.	N.A.	2.10	2.10	N.A.	N.A.

The charts below show the median projections (the red line) and the associated interquartile ranges (gray areas around the red line) for 10-year annual-average CPI and PCE inflation. The charts provide historical perspective on the 10-year inflation expectations in the current survey.

### Projections for the 10-Year Annual-Average Rate of CPI Inflation (Median and Interquartile Range)

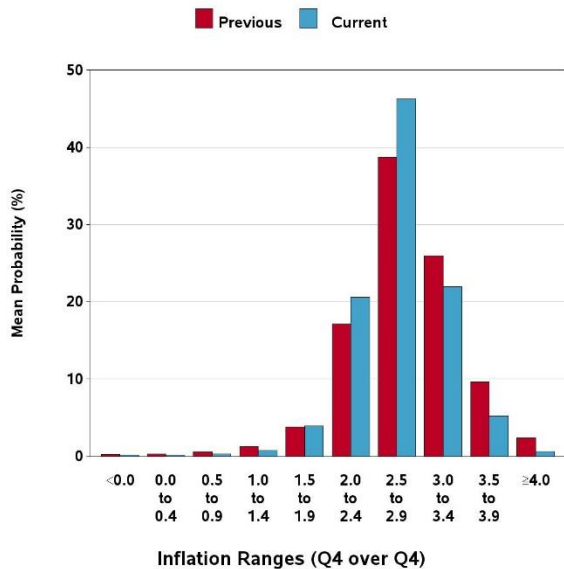


### Projections for the 10-Year Annual-Average Rate of PCE Inflation (Median and Interquartile Range)

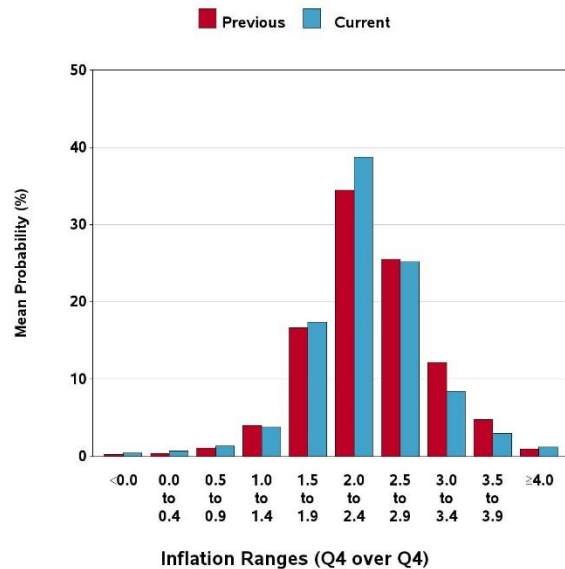


The figures below show the probabilities that the forecasters are assigning to each of 10 possible ranges for fourth-quarter over fourth-quarter core PCE inflation in 2024 and 2025. In 2024, the forecasters expect the most likely range for core PCE inflation to be in the range of 2.5 percent and 2.9 percent. In 2025, the forecasters see the most likely range to be lower than that in 2024, placing expectations in the range of 2.0 percent and 2.4 percent.

**Mean Probabilities for Core PCE Inflation in 2024**



**Mean Probabilities for Core PCE Inflation in 2025**



***Lower Risk of Negative Quarter-over-Quarter Growth in 2024, but Higher Risk in 2025***

The forecasters see a lower risk of a contraction in real GDP for both quarters of 2024 than in the previous survey but have revised upward their risk expectations for 2025. They see the least amount of risk of a contraction in the current quarter, which they estimate to be 16.2 percent, and the highest amount of risk in the second quarter of 2025, which they estimate to be 27.6 percent.

*Risk of a Negative Quarter (%)  
Survey Means*

Quarterly data:	Previous	New
2024:Q3	18.7	16.2
2024:Q4	22.5	21.0
2025:Q1	25.6	27.3
2025:Q2	25.6	27.6
2025:Q3	N.A.	25.0

### ***Natural Rate of Unemployment Estimated at 4.40 Percent***

In third-quarter surveys, we ask the forecasters to provide their estimates of the natural rate of unemployment — the rate of unemployment that occurs when the economy reaches equilibrium. The forecasters estimate this rate at 4.40 percent. The table below shows, for each third-quarter survey since 1996, the percentage of respondents who use the natural rate in their forecasts and, for those who use it, the median estimate and the lowest and highest estimates. Forty-four percent of the 27 forecasters who answered the question report that they use the natural rate in their forecasts. The lowest estimate is 3.50 percent, and the highest estimate is 5.16 percent.

#### *Median Estimates of the Natural Rate of Unemployment*

Survey Date	Percentage Who Use the Natural Rate	Median Estimate (%)	Low (%)	High (%)
1996:Q3	62	5.65	5.00	6.00
1997:Q3	59	5.25	4.50	5.88
1998:Q3	45	5.30	4.50	5.80
1999:Q3	43	5.00	4.13	5.60
2000:Q3	48	4.50	4.00	5.00
2001:Q3	34	4.88	3.50	5.50
2002:Q3	50	5.10	3.80	5.50
2003:Q3	41	5.00	4.31	5.40
2004:Q3	46	5.00	4.00	5.50
2005:Q3	50	5.00	4.25	5.50
2006:Q3	53	4.95	4.00	5.50
2007:Q3	52	4.65	4.20	5.50
2008:Q3	48	5.00	4.00	5.50
2009:Q3	45	5.00	4.00	6.00
2010:Q3	50	5.78	4.50	6.80
2011:Q3	42	6.00	4.75	7.00
2012:Q3	49	6.00	4.75	7.00
2013:Q3	63	6.00	4.75	7.00
2014:Q3	65	5.50	4.50	6.70
2015:Q3	62	5.00	4.25	5.80
2016:Q3	56	4.80	4.50	5.50
2017:Q3	44	4.50	3.50	5.00
2018:Q3	34	4.30	3.80	4.60
2019:Q3	33	4.10	3.88	4.60
2020:Q3	48	4.10	3.50	6.00
2021:Q3	37	3.78	3.00	4.25
2022:Q3	30	4.10	3.50	4.50
2023:Q3	42	4.00	3.75	4.55
2024:Q3	44	4.40	3.50	5.16

### *Technical Notes*

#### **Moody's Aaa and Baa Historical Rates**

The historical values of Moody's Aaa and Baa rates are proprietary and, therefore, not available in the data files on the Bank's website or on the tables that accompany the survey's complete write-up in the PDF.

The Federal Reserve Bank of Philadelphia thanks the following forecasters for their participation in recent surveys:

**William Adams**, Comerica Bank; **Ed Al-Hussainy** and **Alexander Spitz**, Columbia Threadneedle Investments; **Scott Anderson** and **Doug Porter**, BMO Capital Markets; **Robert J. Barbera**, Johns Hopkins University Center for Financial Economics; **Peter Bernstein**, RCF Economic and Financial Consulting, Inc.; **Wayne Best** and **Michael Brown**, Visa, Inc.; **Jay Bryson**, Wells Fargo; **Seth Carpenter**, Morgan Stanley; **Christine Chmura, Ph.D.**, and **Xiaobing Shuai, Ph.D.**, Chmura Economics & Analytics; **Gary Ciminero, CFA**, GLC Financial Economics; **Grant Collins**, AIM Research, LLC; **Rajeev Dhawan**, Georgia State University; **Bill Diviney**, ABN AMRO Bank NV; **Gabriel Ehrlich**, **Daniil Manaenkov**, and **Yinuo Zhang**, RSQE, University of Michigan; **Michael R. Englund**, Action Economics, LLC; **Michael Feroli**, J.P. Morgan; **Tani Fukui** and **Shan Ahmed**, MetLife Investment Management; **Sacha Gelfer**, Bentley University; **James Glassman**, Independent Economist; **Jan Hatzius**, Goldman Sachs; **Steve Kihm**, Citizens Utility Board of Wisconsin; **Yaniv Konchitchki**, University of California, Berkeley; **Thomas Lam**, Independent Economist (Singapore); **Brian Martin**, Australia New Zealand Bank (ANZ); **Robert McNab**, Old Dominion University; **R. Anthony Metz**, Pareto Optimal Economics, LLC; **R. M. Monaco**, TitanRM; **Joel L. Naroff**, Naroff Economics, LLC; **Nomura Securities International**; **Brendon Ogmundson**, BC Real Estate Association; **Perc Pineda, Ph.D.**, Plastics Industry Association; **Joel Prakken** and **Chris Varvares**, S&P Global Market Intelligence; **Jason Prole**, Capital Risk Management; **Michael Roberts**, **Dan Roberts**, and **Jeffrey Baldwin**, Roberts Capital Advisors, LLC; **Parker Ross**, Arch Capital Group; **Philip Rothman**, East Carolina University; **Allen Sinai** and **Lu Yu**, Decision Economics, Inc.; **Sean Snaith**, University of Central Florida; **Stephen Stanley**, Santander US Capital Markets; **Charles Steindel**, Editor, NABE *Business Economics*; **Susan M. Sterne**, Economic Analysis Associates, Inc.; **Edward Sullivan**, Portland Cement Association; **Ryan Sweet**, Oxford Economics USA, Inc.; **Jordan Vickers** and **Maira Trimble**, Eaton Corporation; **Lawrence Werther**, Daiwa Capital Markets America; **Mark Zandi**, Moody's Analytics.

This is a partial list of participants. We also thank those who wish to remain anonymous.



SUMMARY TABLE  
SURVEY OF PROFESSIONAL FORECASTERS  
MAJOR MACROECONOMIC INDICATORS

	2024 Q3	2024 Q4	2025 Q1	2025 Q2	2025 Q3	2024	2025 (YEAR-OVER-YEAR)	2026	2027
PERCENT GROWTH AT ANNUAL RATES									
1. REAL GDP (BILLIONS, CHAIN WEIGHTED)	1.9	1.7	1.7	1.8	2.2	2.6	1.9	2.3	2.0
2. GDP PRICE INDEX (PERCENT CHANGE)	2.2	2.2	2.2	2.1	2.0	2.4	2.1	N.A.	N.A.
3. NOMINAL GDP (\$ BILLIONS)	4.1	4.1	4.1	4.1	4.0	5.1	4.1	N.A.	N.A.
4. NONFARM PAYROLL EMPLOYMENT (PERCENT CHANGE) (AVG MONTHLY CHANGE)	1.1 143.9	1.0 125.4	1.0 128.7	0.9 116.2	1.1 145.8	1.6 210.1	1.0 130.0	N.A. N.A.	N.A. N.A.
VARIABLES IN LEVELS									
5. UNEMPLOYMENT RATE (PERCENT)	4.2	4.3	4.3	4.3	4.3	4.1	4.3	4.2	4.2
6. 3-MONTH TREASURY BILL (PERCENT)	5.1	4.8	4.4	4.1	4.0	5.1	4.1	3.2	2.8
7. 10-YEAR TREASURY BOND (PERCENT)	4.2	4.0	3.9	3.9	3.8	4.2	3.9	3.7	3.7
	2024 Q3	2024 Q4	2025 Q1	2025 Q2	2025 Q3	2024	2025 (Q4-OVER-Q4)	2026	
INFLATION INDICATORS									
8. CPI (ANNUAL RATE)	2.3	2.5	2.4	2.4	2.3	2.8	2.3	2.2	
9. CORE CPI (ANNUAL RATE)	2.6	2.6	2.4	2.4	2.4	3.2	2.4	2.3	
10. PCE (ANNUAL RATE)	2.1	2.1	2.2	2.2	2.1	2.6	2.1	2.1	
11. CORE PCE (ANNUAL RATE)	2.4	2.3	2.3	2.2	2.1	2.8	2.2	2.0	

Note: The figures on each line are medians of 36 forecasters.

Source: Research Department, Federal Reserve Bank of Philadelphia.  
Survey of Professional Forecasters, Third Quarter 2024.

# **SURVEY OF PROFESSIONAL FORECASTERS**

**Third Quarter 2024**

**Tables**

Note: Data in these tables listed as "actual" are the data that were available to the forecasters when they were sent the survey questionnaire on July 25, 2024; the tables do not reflect subsequent revisions to the data. All forecasts were received on or before August 6, 2024.

TABLE ONE  
MAJOR MACROECONOMIC INDICATORS  
MEDIANS OF FORECASTER PREDICTIONS

	NUMBER OF FORECASTERS	ACTUAL		FORECAST			ACTUAL		FORECAST			
		2024 Q2	2024 Q3	2024 Q4	2025 Q1	2025 Q2	2025 Q3	2023 ANNUAL	2024 ANNUAL	2025 ANNUAL	2026 ANNUAL	2027 ANNUAL
1. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	31	28629	28915	29211	29509	29810	30104	27361	28754	29944	N.A.	N.A.
2. GDP PRICE INDEX (2017=100)	31	124.93	125.60	126.30	126.99	127.65	128.30	122.28	125.26	127.91	N.A.	N.A.
3. CORPORATE PROFITS AFTER TAXES (\$ BILLIONS)	16	N.A.	2787.5	2840.9	2850.9	2848.6	2867.9	2672.9	2768.8	2849.8	N.A.	N.A.
4. UNEMPLOYMENT RATE (PERCENT)	35	4.0	4.2	4.3	4.3	4.3	4.3	3.6	4.1	4.3	4.2	4.2
5. NONFARM PAYROLL EMPLOYMENT (THOUSANDS)	26	158428	158860	159236	159622	159971	160408	156066	158587	160148	N.A.	N.A.
6. INDUSTRIAL PRODUCTION (2017=100)	26	103.2	103.6	103.9	104.0	104.3	104.7	102.9	103.2	104.5	N.A.	N.A.
7. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	28	1.35	1.35	1.37	1.40	1.42	1.45	1.42	1.37	1.44	N.A.	N.A.
8. 3-MONTH TREASURY BILL RATE (PERCENT)	32	5.24	5.13	4.75	4.40	4.10	3.98	5.07	5.09	4.10	3.19	2.84
9. MOODY'S AAA CORP BOND YIELD * (PERCENT)	19	N.A.	5.09	5.00	4.90	4.84	4.80	N.A.	5.09	4.81	N.A.	N.A.
10. MOODY'S BAA CORP BOND YIELD * (PERCENT)	18	N.A.	5.81	5.80	5.80	5.78	5.77	N.A.	5.82	5.78	N.A.	N.A.
11. 10-YEAR TREASURY BOND YIELD (PERCENT)	33	4.44	4.15	4.00	3.90	3.88	3.80	3.96	4.20	3.85	3.69	3.73
12. REAL GDP (BILLIONS, CHAIN WEIGHTED)	36	22919	23026	23124	23223	23328	23456	22377	22958	23398	23932	24414
13. TOTAL CONSUMPTION EXPENDITURE (BILLIONS, CHAIN WEIGHTED)	31	15733.1	15818.9	15897.4	15973.0	16044.6	16116.9	15426.2	15773.3	16073.0	N.A.	N.A.
14. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	29	3393.6	3414.8	3436.2	3450.7	3473.0	3501.0	3271.7	3397.6	3490.5	N.A.	N.A.
15. RESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	29	769.5	770.5	771.4	776.2	779.0	785.4	735.3	771.0	783.9	N.A.	N.A.
16. FEDERAL GOVERNMENT C & I (BILLIONS, CHAIN WEIGHTED)	29	1514.4	1520.1	1523.8	1526.5	1531.5	1535.6	1480.8	1514.9	1533.4	N.A.	N.A.
17. STATE AND LOCAL GOVT C & I (BILLIONS, CHAIN WEIGHTED)	29	2419.1	2430.7	2440.7	2451.6	2461.2	2470.3	2339.2	2423.5	2464.1	N.A.	N.A.
18. CHANGE IN PRIVATE INVENTORIES (BILLIONS, CHAIN WEIGHTED)	28	71.3	67.7	66.2	62.5	59.6	56.5	43.7	58.1	58.0	N.A.	N.A.
19. NET EXPORTS (BILLIONS, CHAIN WEIGHTED)	29	-1007.0	-1013.8	-1019.4	-1026.5	-1034.7	-1041.6	-928.1	-1001.2	-1039.2	N.A.	N.A.

\* The historical values of Moody's Aaa and Baa rates are proprietary and therefore not available to the general public.

Source: Research Department, Federal Reserve Bank of Philadelphia. Survey of Professional Forecasters, Third Quarter 2024.

TABLE TWO  
MAJOR MACROECONOMIC INDICATORS  
PERCENTAGE CHANGES AT ANNUAL RATES

	NUMBER OF FORECASTERS	Q2 2024	Q3 2024	Q4 2024	Q1 2025	Q2 2025	2023	2024	2025	2026
		TO Q3 2024	TO Q4 2024	TO Q1 2025	TO Q2 2025	TO Q3 2025	TO 2024	TO 2025	TO 2026	TO 2027
1. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	31	4.1	4.1	4.1	4.1	4.0	5.1	4.1	N.A.	N.A.
2. GDP PRICE INDEX (2017=100)	31	2.2	2.2	2.2	2.1	2.0	2.4	2.1	N.A.	N.A.
3. CORPORATE PROFITS AFTER TAXES (\$ BILLIONS)	16	4.7	7.9	1.4	-0.3	2.7	3.6	2.9	N.A.	N.A.
4. UNEMPLOYMENT RATE (PERCENT)	35	0.2	0.1	0.0	0.0	-0.0	0.5	0.2	-0.1	-0.0
5. NONFARM PAYROLL EMPLOYMENT (PERCENT CHANGE) (AVG MONTHLY CHANGE)	26 26	1.1 143.9	1.0 125.4	1.0 128.7	0.9 116.2	1.1 145.8	1.6 210.1	1.0 130.0	N.A. N.A.	N.A. N.A.
6. INDUSTRIAL PRODUCTION (2017=100)	26	1.5	1.2	0.5	1.0	1.4	0.3	1.3	N.A.	N.A.
7. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	28	1.3	5.2	8.1	7.3	7.1	-3.6	4.9	N.A.	N.A.
8. 3-MONTH TREASURY BILL RATE (PERCENT)	32	-0.11	-0.38	-0.35	-0.30	-0.12	0.02	-0.99	-0.91	-0.34
9. MOODY'S AAA CORP BOND YIELD * (PERCENT)	19	N.A.	-0.09	-0.10	-0.06	-0.04	N.A.	-0.28	N.A.	N.A.
10. MOODY'S BAA CORP BOND YIELD * (PERCENT)	18	N.A.	-0.01	0.01	-0.03	-0.01	N.A.	-0.03	N.A.	N.A.
11. 10-YEAR TREASURY BOND YIELD (PERCENT)	33	-0.29	-0.15	-0.10	-0.02	-0.08	0.24	-0.35	-0.16	0.04
12. REAL GDP (BILLIONS, CHAIN WEIGHTED)	36	1.9	1.7	1.7	1.8	2.2	2.6	1.9	2.3	2.0
13. TOTAL CONSUMPTION EXPENDITURE (BILLIONS, CHAIN WEIGHTED)	31	2.2	2.0	1.9	1.8	1.8	2.3	1.9	N.A.	N.A.
14. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	29	2.5	2.5	1.7	2.6	3.3	3.8	2.7	N.A.	N.A.
15. RESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	29	0.5	0.5	2.5	1.4	3.3	4.9	1.7	N.A.	N.A.
16. FEDERAL GOVERNMENT C & I (BILLIONS, CHAIN WEIGHTED)	29	1.5	1.0	0.7	1.3	1.1	2.3	1.2	N.A.	N.A.
17. STATE AND LOCAL GOVT C & I (BILLIONS, CHAIN WEIGHTED)	29	1.9	1.7	1.8	1.6	1.5	3.6	1.7	N.A.	N.A.
18. CHANGE IN PRIVATE INVENTORIES (BILLIONS, CHAIN WEIGHTED)	28	-3.6	-1.5	-3.7	-2.8	-3.1	14.4	-0.1	N.A.	N.A.
19. NET EXPORTS (BILLIONS, CHAIN WEIGHTED)	29	-6.8	-5.6	-7.2	-8.1	-7.0	-73.1	-38.0	N.A.	N.A.

\* The historical values of Moody's Aaa and Baa rates are proprietary and therefore not available to the general public.

Note: Figures for unemployment rate, 3-month Treasury bill rate, Moody's Aaa corporate bond yield, Moody's Baa corporate bond yield, and 10-year Treasury bond yield are changes in these rates, in percentage points. Figures for change in private inventories and net exports are changes in billions of chain-weighted dollars. All others are percentage changes at annual rates.

Source: Research Department, Federal Reserve Bank of Philadelphia. Survey of Professional Forecasters, Third Quarter 2024.

TABLE THREE  
 MAJOR PRICE INDICATORS  
 MEDIANS OF FORECASTER PREDICTIONS

	NUMBER OF FORECASTERS	ACTUAL	FORECAST (Q/Q)					ACTUAL	FORECAST (Q4/Q4)		
		2024 Q2	2024 Q3	2024 Q4	2025 Q1	2025 Q2	2025 Q3	2023 ANNUAL	2024 ANNUAL	2025 ANNUAL	2026 ANNUAL
1. CONSUMER PRICE INDEX (ANNUAL RATE)	34	2.8	2.3	2.5	2.4	2.4	2.3	3.2	2.8	2.3	2.2
2. CORE CONSUMER PRICE INDEX (ANNUAL RATE)	34	3.2	2.6	2.6	2.4	2.4	2.4	4.0	3.2	2.4	2.3
3. PCE PRICE INDEX (ANNUAL RATE)	34	2.6	2.1	2.1	2.2	2.2	2.1	2.8	2.6	2.1	2.1
4. CORE PCE PRICE INDEX (ANNUAL RATE)	34	2.9	2.4	2.3	2.3	2.2	2.1	3.2	2.8	2.2	2.0

Source: Research Department, Federal Reserve Bank of Philadelphia. Survey of Professional Forecasters, Third Quarter 2024.

TABLE FOUR  
YIELD SPREADS  
MEDIAN OF FORECASTER PREDICTIONS

	NUMBER OF FORECASTERS	ACTUAL	FORECAST					ACTUAL	FORECAST				
		2024 Q2	2024 Q3	2024 Q4	2025 Q1	2025 Q2	2025 Q3	2023 ANNUAL	2024 ANNUAL	2025 ANNUAL	2026 ANNUAL	2027 ANNUAL	
1. TBOND MINUS TBILL (PERCENTAGE POINTS)	30	-0.80	-1.02	-0.79	-0.56	-0.35	-0.08	-1.11	-0.93	-0.19	0.57	0.95	
2. AAA MINUS TBOND (PERCENTAGE POINTS)	19	N.A.	0.87	0.94	0.97	1.02	1.00	N.A.	0.88	1.01	N.A.	N.A.	
3. BAA MINUS TBOND (PERCENTAGE POINTS)	18	N.A.	1.62	1.77	1.84	1.91	1.91	N.A.	1.60	1.91	N.A.	N.A.	
4. BAA MINUS AAA (PERCENTAGE POINTS)	18	N.A.	0.73	0.74	0.80	0.85	0.85	N.A.	0.73	0.83	N.A.	N.A.	

Notes:

TBOND is the rate on 10-year Treasury bonds.  
TBILL is the rate on 3-month Treasury bills.  
AAA is the rate on Moody's Aaa corporate bonds.  
BAA is the rate on Moody's Baa corporate bonds.

The historical values for interest rate spreads for Moody's Aaa and Baa rates are proprietary and therefore not available to the general public.

Each interest rate spread is computed as the median value of the forecasters' spreads. These median values may differ from those computed as the difference between the median values of each interest rate in the spread.

Source: Research Department, Federal Reserve Bank of Philadelphia. Survey of Professional Forecasters, Third Quarter 2024.

TABLE FIVE  
ESTIMATED PROBABILITY OF DECLINE IN REAL GDP

ESTIMATED PROBABILITY (CHANCES IN 100)	Q2 2024	Q3 2024	Q4 2024	Q1 2025	Q2 2025
	TO Q3 2024	TO Q4 2024	TO Q1 2025	TO Q2 2025	TO Q3 2025
NUMBER OF FORECASTERS					
10 OR LESS	14	6	2	1	2
11 TO 20	5	14	8	8	10
21 TO 30	6	2	10	10	11
31 TO 40	1	4	4	6	2
41 TO 50	0	0	0	0	2
51 TO 60	0	0	3	2	0
61 TO 70	0	0	0	0	0
71 TO 80	0	0	0	0	0
81 TO 90	1	1	0	0	0
91 AND OVER	0	0	0	0	0
NOT REPORTING	9	9	9	9	9
MEAN AND MEDIAN					
MEDIAN PROBABILITY	10.00	19.00	25.00	25.00	25.00
MEAN PROBABILITY	16.16	21.01	27.28	27.64	24.99

Note: Total number of forecasters reporting is 27.

Source: Research Department, Federal Reserve Bank of Philadelphia.  
Survey of Professional Forecasters, Third Quarter 2024.

TABLE SIX  
MEAN PROBABILITIES

MEAN PROBABILITY ATTACHED TO POSSIBLE  
CIVILIAN UNEMPLOYMENT RATES:  
(ANNUAL AVERAGE)

	2024	2025	2026	2027
9.9 PERCENT OR MORE	0.04	0.10	0.11	0.00
8.3 TO 9.8 PERCENT	0.04	0.04	0.08	0.03
7.2 TO 8.2 PERCENT	0.06	0.19	0.36	0.36
6.1 TO 7.1 PERCENT	0.06	1.20	1.39	1.68
5.5 TO 6.0 PERCENT	0.23	3.38	4.39	5.71
4.9 TO 5.4 PERCENT	4.49	14.51	14.44	13.72
4.3 TO 4.8 PERCENT	28.85	41.19	36.51	31.05
3.7 TO 4.2 PERCENT	61.71	31.53	32.65	35.15
3.1 TO 3.6 PERCENT	3.67	6.83	8.86	10.45
LESS THAN 3.1 PERCENT	0.87	1.03	1.21	1.85

MEAN PROBABILITY ATTACHED TO POSSIBLE  
PERCENT CHANGES IN REAL GDP:  
(ANNUAL-AVERAGE OVER ANNUAL-AVERAGE)

	2023-2024	2024-2025	2025-2026	2026-2027
9.0 PERCENT OR MORE	0.00	0.00	0.00	0.00
7.0 TO 8.9 PERCENT	0.00	0.05	0.04	0.04
5.5 TO 6.9 PERCENT	0.04	0.29	0.26	0.63
4.0 TO 5.4 PERCENT	2.10	4.29	4.46	5.48
2.5 TO 3.9 PERCENT	40.20	21.32	24.99	24.61
1.5 TO 2.4 PERCENT	47.17	39.15	41.67	37.55
0.0 TO 1.4 PERCENT	8.35	26.23	22.32	24.68
-1.5 TO -0.1 PERCENT	2.03	7.51	5.62	6.18
-3.0 TO -1.6 PERCENT	0.12	1.12	0.59	0.84
-5.1 TO -3.1 PERCENT	0.00	0.03	0.02	0.00
LESS THAN -5.1 PERCENT	0.00	0.02	0.02	0.00

MEAN PROBABILITY ATTACHED TO POSSIBLE  
PERCENT CHANGES IN GDP PRICE INDEX:  
(ANNUAL-AVERAGE OVER ANNUAL-AVERAGE)

	2023-2024	2024-2025
4.0 PERCENT OR MORE	0.41	1.22
3.5 TO 3.9 PERCENT	1.30	2.15
3.0 TO 3.4 PERCENT	10.15	7.67
2.5 TO 2.9 PERCENT	38.52	22.97
2.0 TO 2.4 PERCENT	37.24	31.68
1.5 TO 1.9 PERCENT	9.05	24.25
1.0 TO 1.4 PERCENT	2.01	6.49
0.5 TO 0.9 PERCENT	0.96	2.12
0.0 TO 0.4 PERCENT	0.20	0.65
LESS THAN 0.0 PERCENT	0.15	0.81

Source: Research Department, Federal Reserve Bank of Philadelphia.  
Survey of Professional Forecasters, Third Quarter 2024.



TABLE SEVEN  
 MEAN PROBABILITY OF CORE CPI AND CORE PCE INFLATION (Q4/Q4)

MEAN PROBABILITY ATTACHED TO CORE CPI INFLATION:

	23Q4 TO 24Q4	24Q4 TO 25Q4
4.0 PERCENT OR MORE	2.81	2.52
3.5 TO 3.9 PERCENT	11.29	4.14
3.0 TO 3.4 PERCENT	43.58	11.19
2.5 TO 2.9 PERCENT	26.74	31.13
2.0 TO 2.4 PERCENT	11.51	31.94
1.5 TO 1.9 PERCENT	2.92	14.18
1.0 TO 1.4 PERCENT	0.61	2.57
0.5 TO 0.9 PERCENT	0.24	1.14
0.0 TO 0.4 PERCENT	0.17	0.64
LESS THAN 0.0 PERCENT	0.13	0.54

MEAN PROBABILITY ATTACHED TO CORE PCE INFLATION:

	23Q4 TO 24Q4	24Q4 TO 25Q4
4.0 PERCENT OR MORE	0.61	1.17
3.5 TO 3.9 PERCENT	5.20	2.92
3.0 TO 3.4 PERCENT	21.98	8.40
2.5 TO 2.9 PERCENT	46.29	25.19
2.0 TO 2.4 PERCENT	20.59	38.75
1.5 TO 1.9 PERCENT	3.92	17.35
1.0 TO 1.4 PERCENT	0.73	3.80
0.5 TO 0.9 PERCENT	0.31	1.31
0.0 TO 0.4 PERCENT	0.19	0.66
LESS THAN 0.0 PERCENT	0.19	0.44

Source: Research Department, Federal Reserve Bank of Philadelphia.  
 Survey of Professional Forecasters, Third Quarter 2024.

TABLE EIGHT  
LONG-TERM (5-YEAR AND 10-YEAR) INFLATION FORECASTS

ANNUAL AVERAGE OVER THE NEXT 5 YEARS: 2024-2028  
=====

CPI INFLATION RATE		PCE INFLATION RATE	
-----		-----	
MINIMUM	1.87	MINIMUM	1.59
LOWER QUARTILE	2.30	LOWER QUARTILE	2.10
MEDIAN	2.40	MEDIAN	2.20
UPPER QUARTILE	2.50	UPPER QUARTILE	2.25
MAXIMUM	2.80	MAXIMUM	2.50
MEAN	2.39	MEAN	2.18
STD. DEVIATION	0.21	STD. DEVIATION	0.17
N	27	N	27
MISSING	9	MISSING	9

ANNUAL AVERAGE OVER THE FOLLOWING 5 YEARS: 2029-2033  
=====

CPI INFLATION RATE		PCE INFLATION RATE	
-----		-----	
MINIMUM	1.70	MINIMUM	1.60
LOWER QUARTILE	2.00	LOWER QUARTILE	1.90
MEDIAN	2.20	MEDIAN	2.00
UPPER QUARTILE	2.36	UPPER QUARTILE	2.20
MAXIMUM	2.63	MAXIMUM	2.39
MEAN	2.19	MEAN	2.04
STD. DEVIATION	0.25	STD. DEVIATION	0.19
N	27	N	27
MISSING	9	MISSING	9

ANNUAL AVERAGE OVER THE NEXT 10 YEARS: 2024-2033  
=====

CPI INFLATION RATE		PCE INFLATION RATE	
-----		-----	
MINIMUM	1.86	MINIMUM	1.72
LOWER QUARTILE	2.11	LOWER QUARTILE	2.05
MEDIAN	2.30	MEDIAN	2.10
UPPER QUARTILE	2.40	UPPER QUARTILE	2.20
MAXIMUM	2.70	MAXIMUM	2.40
MEAN	2.29	MEAN	2.11
STD. DEVIATION	0.21	STD. DEVIATION	0.16
N	27	N	27
MISSING	9	MISSING	9

Note: The summary statistics for each forecast horizon are computed on a sample of panelists that may differ from one horizon to the next. The usual identity linking the 10-year horizon to the two underlying five-year horizons may not hold in the results.

Source: Research Department, Federal Reserve Bank of Philadelphia. Survey of Professional Forecasters, Third Quarter 2024.