FOURTH QUARTER 2016

Forecasters Predict Slightly Lower Growth over the Next Three Years

Growth in the U.S. economy looks slightly weaker now than it did three months ago, according to 42 forecasters surveyed by the Federal Reserve Bank of Philadelphia before the election on November 8. The forecasters expect real GDP to grow at an annual rate of 2.2 percent this quarter and in each of the next four quarters in 2017. On an annual-average over annual-average basis, the forecasters see real GDP growing 1.5 percent in 2016, no change from the estimate in the survey of three months ago. The forecasters predict real GDP will grow 2.2 percent in 2017, 2.1 percent in 2018, and 2.1 percent in 2019. The forecasts for 2017, 2018, and 2019 are slightly weaker than the previous estimates.

The projections for unemployment are little changed from those of the previous survey. The forecasters predict the unemployment rate will average 4.9 percent in 2016, before falling to 4.7 percent in 2017, 4.6 percent in 2018, and 4.7 percent in 2019. The current projections for 2018 and 2019 are unchanged from those of the previous survey.

On the employment front, the forecasters have revised upward marginally their estimates for job gains in 2016 and 2017. The forecasters' projections for the annual-average level of nonfarm payroll employment suggest job gains at a monthly rate of 206,000 in 2016, up slightly from the previous estimate of 204,600, and 173,600 in 2017, up from the previous estimate of 161,100. (These annual-average estimates 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:						
2016:Q4	2.3	2.2	4.7	4.8	169.8	176.9
2017:Q1	2.3	2.2	4.7	4.8	159.9	161.0
2017:Q2	2.3	2.2	4.6	4.7	164.9	179.2
2017:Q3	2.1	2.2	4.6	4.7	159.4	166.2
2017:Q4	N.A.	2.2	N.A.	4.7	N.A.	166.0
Annual data (projections are based on annual-average levels):						
2016	1.5	1.5	4.8	4.9	204.6	206.0
2017	2.3	2.2	4.6	4.7	161.1	173.6
2018	2.2	2.1	4.6	4.6	N.A.	N.A.
2019	2.2	2.1	4.7	4.7	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' previous and current estimates of the probability that growth will fall into each of 11 ranges. For 2016, the panelists are more certain now than they were in the previous survey that growth will be between 1.0 to 1.9 percent. For 2017, 2018, and 2019, the probability estimates for growth are about the same now as they were in the survey of three months ago.
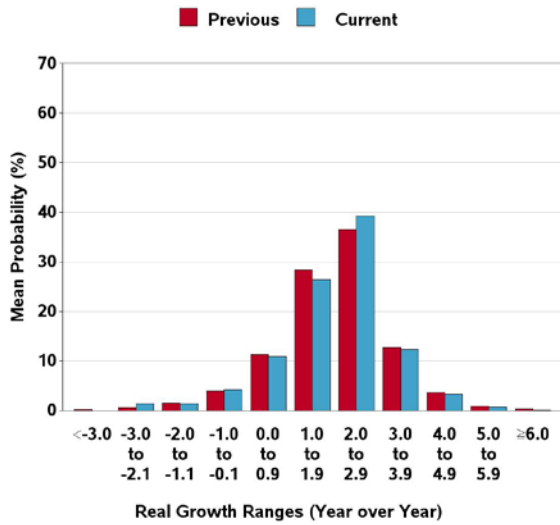
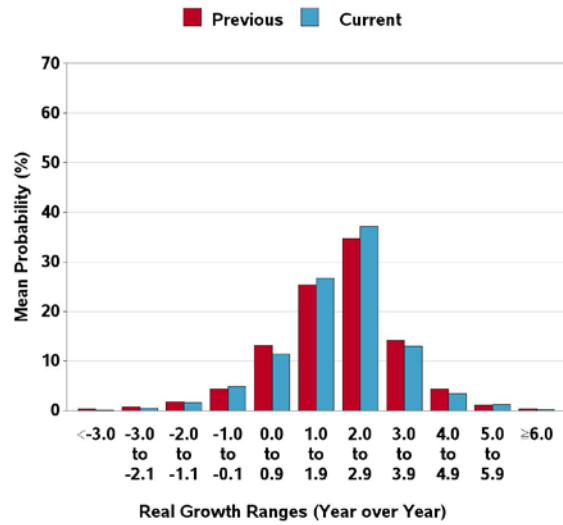### Mean Probabilities for Real GDP Growth in 2016
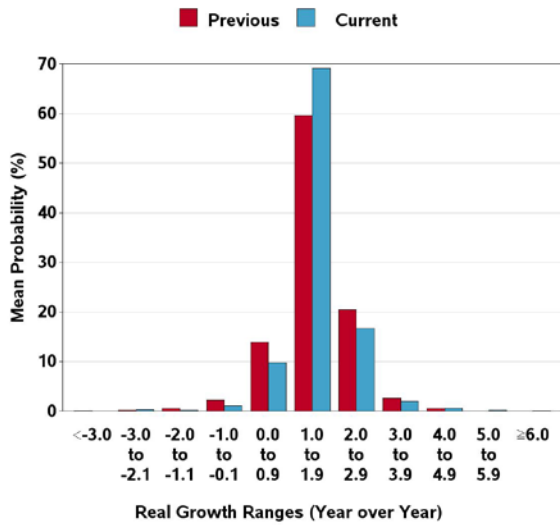
Mean Probabilities for Real GDP Growth in 2017
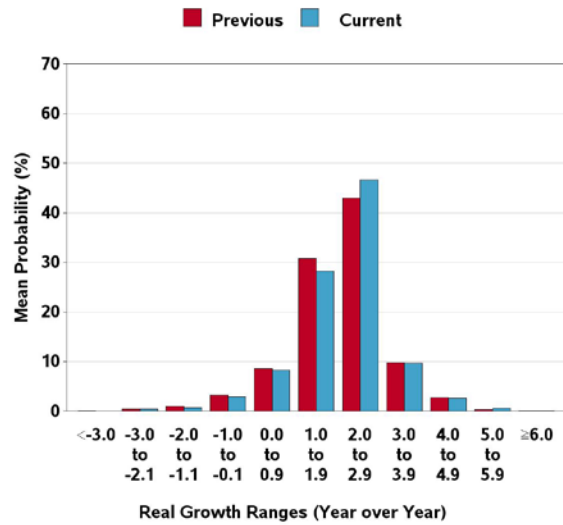
Mean Probabilities for Real GDP Growth in 2018

Mean Probabilities for Real GDP Growth in 2019

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The forecasters' density projections for unemployment, shown below, shed light on their uncertainty about the labor market over the next four years. Each chart presents the forecasters' current estimates of the probability that unemployment will fall into each of 10 ranges. The charts show the probabilities are mostly unchanged compared with the survey of three months ago.

Mean Probabilities for Unemployment Rate in 2016
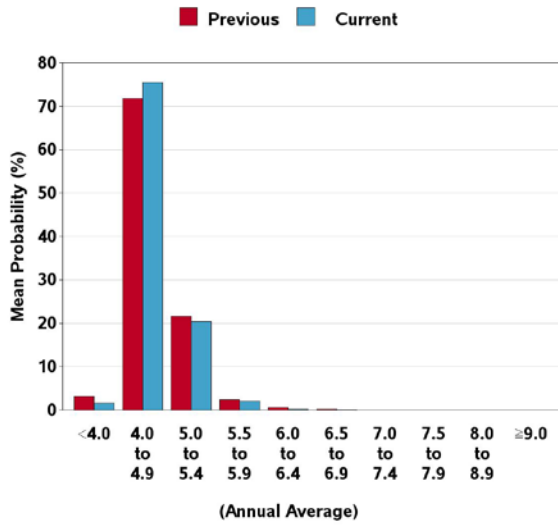
Mean Probabilities for Unemployment Rate in 2017
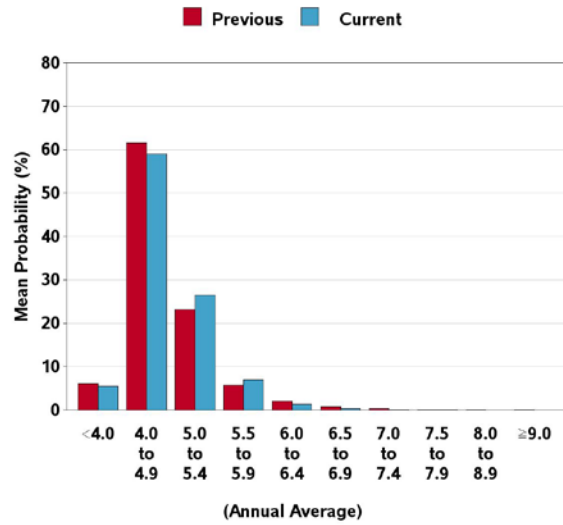
Mean Probabilities for Unemployment Rate in 2018
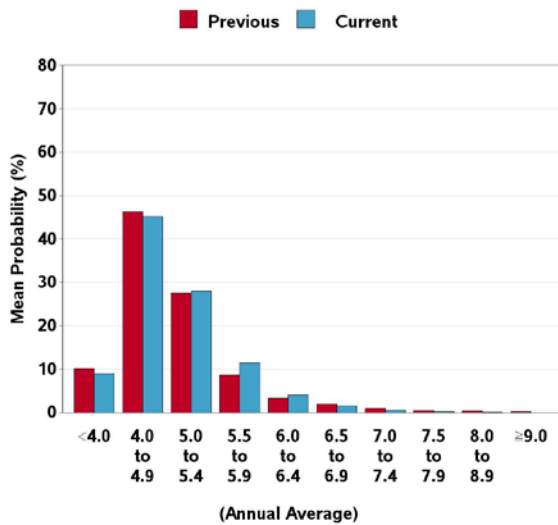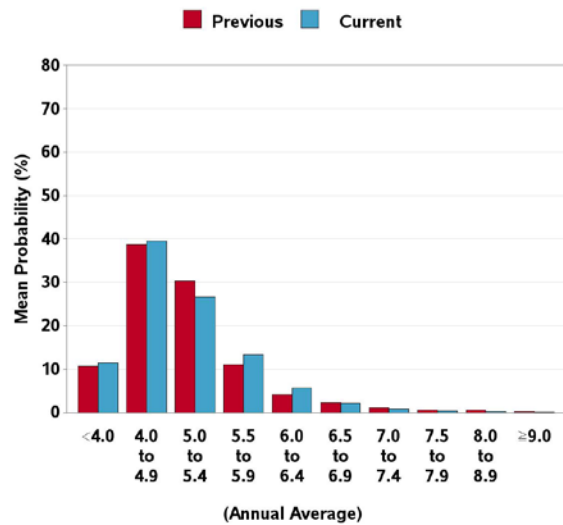

Mean Probabilities for Unemployment Rate in 2019

Inflation Outlook Holds Steady
The forecasters see little change in the outlook for headline CPI inflation compared with their predictions of three months ago. Measured on a fourth-quarter over fourth-quarter basis, headline CPI inflation is expected to average 1.5 percent in 2016, 2.2 percent in 2017, and 2.2 percent in 2018. The projections for headline PCE inflation over the next three years remained unchanged from the survey of three months ago. Measured on a fourth-quarter over fourth-quarter basis, headline PCE inflation is expected to average 1.4 percent in 2016, 1.9 percent in 2017, and 2.0 percent in 2018.

Over the next 10 years, 2016 to 2025, the forecasters expect headline CPI inflation to average 2.22 percent at an annual rate, up slightly from the previous estimate of 2.15 percent. The corresponding estimate for 10-year annual-average PCE inflation is 2.00 percent, which is unchanged from the previous estimate.

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
Quarterly								
2016:Q4	2.2	2.2	2.1	2.1	1.9	1.9	1.6	1.7
2017:Q1	2.2	2.2	2.1	2.2	1.9	1.8	1.8	1.8
2017:Q2	2.2	2.2	2.2	2.2	2.0	1.9	1.8	1.8
2017:Q3	2.3	2.2	2.2	2.2	2.0	1.9	1.9	1.9
2017:Q4	N.A.	2.2	N.A.	2.2	N.A.	2.0	N.A.	1.9
Q4/Q4 Annual Averages								
2016	1.6	1.5	2.2	2.2	1.4	1.4	1.8	1.8
2017	2.3	2.2	2.2	2.2	1.9	1.9	1.9	1.9
2018	2.3	2.2	2.2	2.2	2.0	2.0	2.0	1.9
Long-Term Annual Averages								
2016–2020	2.10	2.13	N.A.	N.A.	1.90	1.90	N.A.	N.A.
2016–2025	2.15	2.22	N.A.	N.A.	2.00	2.00	N.A.	N.A.

The charts below show the median projections (red line) and the associated interquartile ranges (gray areas around the red line) for the projections for 10-year annual-average CPI and PCE inflation. The top panel highlights a marginally higher level of the long-term projection for CPI inflation. The bottom panel depicts an unchanged 10-year forecast for PCE inflation.

Projections for the 10-Year Annual-Average Rate of CPI Inflation
(Median and Interquartile Range)
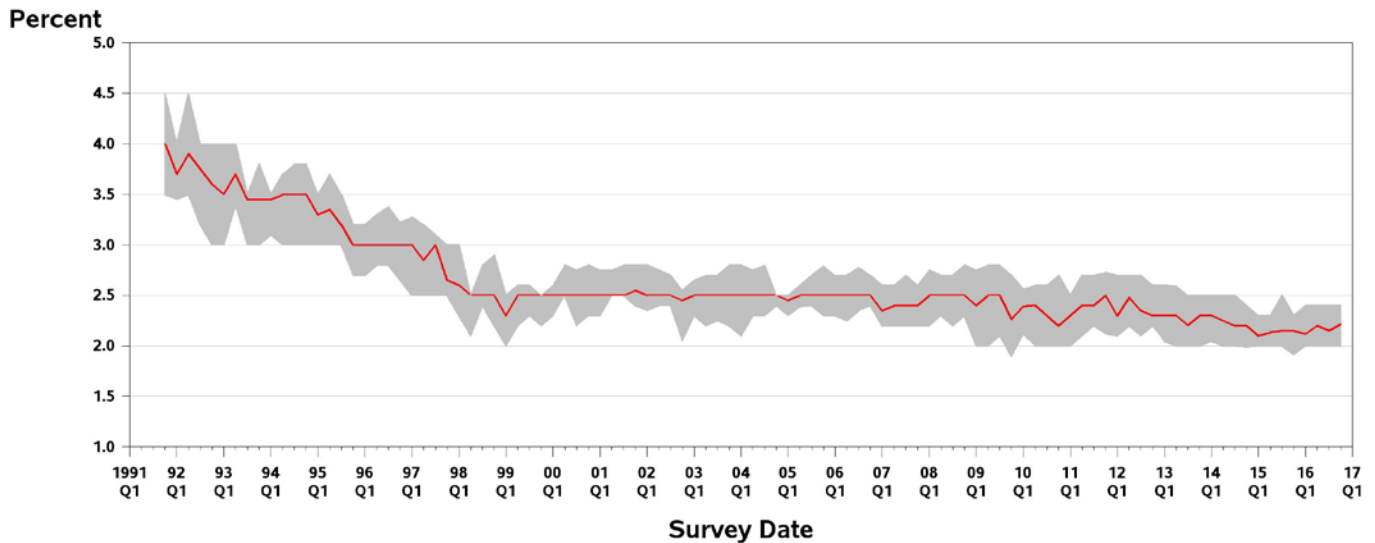
Projections for the 10-Year Annual-Average Rate of PCE Inflation
(Median and Interquartile Range)
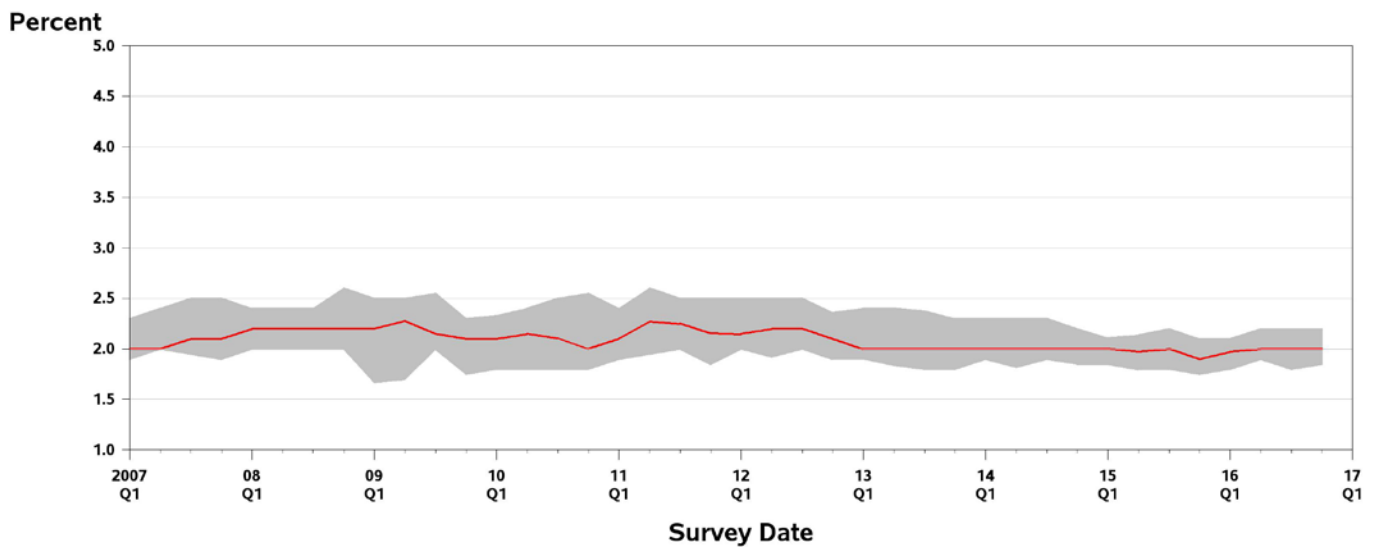
The figures below show the probabilities that the forecasters are assigning to the possibility that fourth-quarter over fourth-quarter core PCE inflation in 2016 and 2017 will fall into each of 10 ranges. For 2017, the forecasters assign a higher chance than they previously predicted that core PCE inflation will be between 1.5 to 2.9 percent.

Mean Probabilities for Core PCE Inflation in 2016
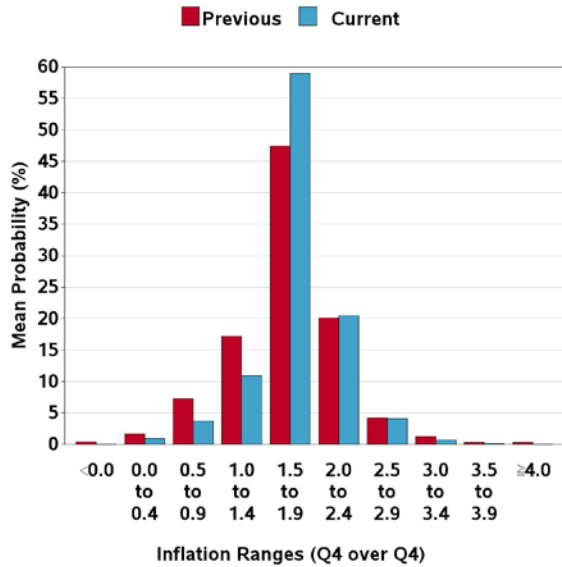
Mean Probabilities for Core PCE Inflation in 2017
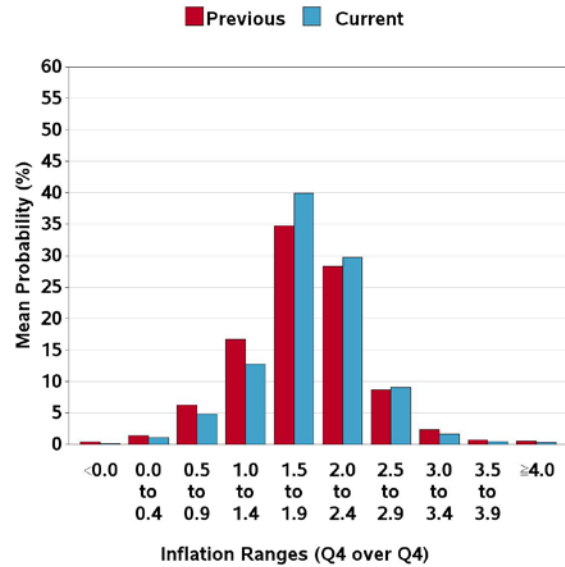
Downward Revisions Characterize the Risk of a Negative Quarter

The forecasters see much less than a one-in-five chance of a contraction in real GDP in any of the next five quarters. For the current quarter, they predict a 9.9 percent chance of negative growth, down from 15.6 percent in the survey of three months ago. The forecasters also see a lower probability of a negative quarter in the first three quarters in 2017 than they estimated three months ago.

Risk of a Negative Quarter (%)
Survey Means

Quarterly data:	Previous	New
2016:Q4	15.6	9.9
2017:Q1	18.5	14.0
2017:Q2	19.0	15.0
2017:Q3	21.0	16.5
2017:Q4	N.A.	18.9

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                        SUMMARY TABLE
              SURVEY OF PROFESSIONAL FORECASTERS
              MAJOR MACROECONOMIC INDICATORS
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	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2016	2017 (YEAR-OVER-YEAR)	2018	2019
PERCENT GROWTH AT ANNUAL RATES									
1. REAL GDP (BILLIONS, CHAIN WEIGHTED)	2.2	2.2	2.2	2.2	2.2	1.5	2.2	2.1	2.1
2. GDP PRICE INDEX (PERCENT CHANGE)	1.8	1.9	2.0	1.9	2.0	1.3	1.9	N.A.	N.A.
3. NOMINAL GDP ($ BILLIONS)	4.1	3.9	4.2	4.1	4.3	2.9	4.1	N.A.	N.A.
4. NONFARM PAYROLL EMPLOYMENT (PERCENT CHANGE)	1.5	1.3	1.5	1.4	1.4	1.7	1.4	N.A.	N.A.
(AVG MONTHLY CHANGE)	176.9	161.0	179.2	166.2	166.0	206.0	173.6	N.A.	N.A.
VARIABLES IN LEVELS									
5. UNEMPLOYMENT RATE (PERCENT)	4.8	4.8	4.7	4.7	4.7	4.9	4.7	4.6	4.7
6. 3-MONTH TREASURY BILL (PERCENT)	0.4	0.6	0.7	0.8	1.0	0.3	0.8	1.5	2.1
7. 10-YEAR TREASURY BOND (PERCENT)	1.8	1.9	2.0	2.2	2.3	1.8	2.1	2.7	3.2

	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2016	2017 (Q4-OVER-Q4)	2018
INFLATION INDICATORS								
8. CPI (ANNUAL RATE)	2.2	2.2	2.2	2.2	2.2	1.5	2.2	2.2
9. CORE CPI (ANNUAL RATE)	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2
10. PCE (ANNUAL RATE)	1.9	1.8	1.9	1.9	2.0	1.4	1.9	2.0
11. CORE PCE (ANNUAL RATE)	1.7	1.8	1.8	1.9	1.9	1.8	1.9	1.9

THE FIGURES ON EACH LINE ARE MEDIANS OF 42 INDIVIDUAL FORECASTERS.

SURVEY OF PROFESSIONAL FORECASTERS

Fourth Quarter 2016

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 October 28, 2016; the tables do not reflect subsequent revisions to the data. All forecasts were received on or before November 8, 2016.

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                              TABLE ONE
                   MAJOR MACROECONOMIC INDICATORS
                   MEDIANS OF FORECASTER PREDICTIONS
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	NUMBER OF FORECASTERS	ACTUAL 2016 Q3	FORECAST 2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4	ACTUAL 2015 ANNUAL	2016 ANNUAL	FORECAST 2017 ANNUAL	2018 ANNUAL	2019 ANNUAL
1. GROSS DOMESTIC PRODUCT (GDP) ($ BILLIONS)	40	18651	18840	19021	19218	19411	19616	18037	18557	19319	N.A.	N.A.
2. GDP PRICE INDEX (2009=100)	40	111.69	112.20	112.72	113.27	113.82	114.38	110.00	111.44	113.55	N.A.	N.A.
3. CORPORATE PROFITS AFTER TAXES ($ BILLIONS)	22	N.A.	1528.5	1547.3	1549.1	1560.8	1569.1	1534.3	1503.1	1550.8	N.A.	N.A.
4. UNEMPLOYMENT RATE (PERCENT)	39	4.9	4.8	4.8	4.7	4.7	4.7	5.3	4.9	4.7	4.6	4.7
5. NONFARM PAYROLL EMPLOYMENT (THOUSANDS)	33	144587	145118	145601	146139	146637	147135	141833	144305	146388	N.A.	N.A.
6. INDUSTRIAL PRODUCTION (2012=100)	36	104.4	104.7	105.2	105.8	106.4	106.9	105.2	104.3	106.1	N.A.	N.A.
7. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	36	1.14	1.17	1.20	1.24	1.25	1.26	1.11	1.16	1.24	N.A.	N.A.
8. 3-MONTH TREASURY BILL RATE (PERCENT)	39	0.30	0.40	0.55	0.70	0.83	0.99	0.05	0.31	0.80	1.46	2.15
9. AAA CORPORATE BOND YIELD (PERCENT)	29	3.34	3.50	3.70	3.79	3.82	4.00	3.89	3.60	3.83	N.A.	N.A.
10. BAA CORPORATE BOND YIELD (PERCENT)	30	4.26	4.46	4.69	4.79	4.92	5.00	5.00	4.68	4.89	N.A.	N.A.
11. 10-YEAR TREASURY BOND YIELD (PERCENT)	41	1.56	1.80	1.91	2.00	2.15	2.30	2.14	1.76	2.10	2.67	3.23
12. REAL GDP (BILLIONS, CHAIN WEIGHTED)	40	16702	16792	16885	16976	17068	17163	16397	16650	17023	17384	17750
13. TOTAL CONSUMPTION EXPENDITURE (BILLIONS, CHAIN WEIGHTED)	38	11545.8	11612.4	11678.6	11750.1	11818.3	11887.0	11214.7	11502.4	11784.5	N.A.	N.A.
14. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	36	2191.2	2205.2	2220.6	2239.2	2258.3	2276.4	2200.2	2190.4	2246.5	N.A.	N.A.
15. RESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	36	579.3	585.0	593.0	601.8	610.3	618.7	564.5	588.4	608.4	N.A.	N.A.
16. FEDERAL GOVERNMENT C & I (BILLIONS, CHAIN WEIGHTED)	37	1124.6	1127.4	1128.7	1130.8	1134.4	1137.3	1113.8	1121.8	1132.8	N.A.	N.A.
17. STATE AND LOCAL GOVT C & I (BILLIONS, CHAIN WEIGHTED)	37	1778.3	1782.7	1788.1	1793.4	1798.5	1804.2	1768.2	1783.8	1796.8	N.A.	N.A.
18. CHANGE IN PRIVATE INVENTORIES (BILLIONS, CHAIN WEIGHTED)	35	12.6	24.3	27.3	33.3	35.0	35.5	84.0	17.0	33.6	N.A.	N.A.
19. NET EXPORTS (BILLIONS, CHAIN WEIGHTED)	37	-522.9	-542.0	-559.8	-571.0	-571.7	-592.4	-540.0	-547.4	-572.5	N.A.	N.A.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA. SURVEY OF PROFESSIONAL FORECASTERS, FOURTH QUARTER 2016.

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                               TABLE TWO
                     MAJOR MACROECONOMIC INDICATORS
                     PERCENTAGE CHANGES AT ANNUAL RATES
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	NUMBER OF FORECASTERS	Q3 2016 TO Q4 2016	Q4 2016 TO Q1 2017	Q1 2017 TO Q2 2017	Q2 2017 TO Q3 2017	Q3 2017 TO Q4 2017	2015 TO 2016	2016 TO 2017	2017 TO 2018	2018 TO 2019
1. GROSS DOMESTIC PRODUCT (GDP) ($ BILLIONS)	40	4.1	3.9	4.2	4.1	4.3	2.9	4.1	N.A.	N.A.
2. GDP PRICE INDEX (2009=100)	40	1.8	1.9	2.0	1.9	2.0	1.3	1.9	N.A.	N.A.
3. CORPORATE PROFITS AFTER TAXES ($ BILLIONS)	22	4.9	5.0	0.5	3.1	2.1	-2.0	3.2	N.A.	N.A.
4. UNEMPLOYMENT RATE (PERCENT)	39	-0.1	-0.1	-0.1	0.0	-0.0	-0.4	-0.2	-0.1	0.1
5. NONFARM PAYROLL EMPLOYMENT (PERCENT CHANGE)	33	1.5	1.3	1.5	1.4	1.4	1.7	1.4	N.A.	N.A.
(AVG MONTHLY CHANGE)	33	176.9	161.0	179.2	166.2	166.0	206.0	173.6	N.A.	N.A.
6. INDUSTRIAL PRODUCTION (2012=100)	36	1.2	1.9	2.1	2.4	1.7	-0.9	1.7	N.A.	N.A.
7. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	36	12.1	10.6	12.5	3.0	3.1	4.2	7.1	N.A.	N.A.
8. 3-MONTH TREASURY BILL RATE (PERCENT)	39	0.10	0.15	0.15	0.13	0.16	0.26	0.49	0.66	0.69
9. AAA CORPORATE BOND YIELD (PERCENT)	29	0.16	0.20	0.09	0.03	0.18	-0.29	0.23	N.A.	N.A.
10. BAA CORPORATE BOND YIELD (PERCENT)	30	0.20	0.23	0.10	0.13	0.08	-0.32	0.21	N.A.	N.A.
11. 10-YEAR TREASURY BOND YIELD (PERCENT)	41	0.24	0.11	0.09	0.15	0.15	-0.38	0.34	0.57	0.57
12. REAL GDP (BILLIONS, CHAIN WEIGHTED)	40	2.2	2.2	2.2	2.2	2.2	1.5	2.2	2.1	2.1
13. TOTAL CONSUMPTION EXPENDITURE (BILLIONS, CHAIN WEIGHTED)	38	2.3	2.3	2.5	2.3	2.3	2.6	2.5	N.A.	N.A.
14. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	36	2.6	2.8	3.4	3.4	3.3	-0.4	2.6	N.A.	N.A.
15. RESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	36	4.0	5.6	6.1	5.8	5.6	4.2	3.4	N.A.	N.A.
16. FEDERAL GOVERNMENT C & I (BILLIONS, CHAIN WEIGHTED)	37	1.0	0.5	0.7	1.3	1.0	0.7	1.0	N.A.	N.A.
17. STATE AND LOCAL GOVT C & I (BILLIONS, CHAIN WEIGHTED)	37	1.0	1.2	1.2	1.1	1.3	0.9	0.7	N.A.	N.A.
18. CHANGE IN PRIVATE INVENTORIES (BILLIONS, CHAIN WEIGHTED)	35	11.7	3.0	6.0	1.7	0.5	-67.0	16.5	N.A.	N.A.
19. NET EXPORTS (BILLIONS, CHAIN WEIGHTED)	37	-19.1	-17.8	-11.2	-0.7	-20.6	-7.4	-25.2	N.A.	N.A.

NOTE: FIGURES FOR UNEMPLOYMENT RATE, TREASURY BILL RATE, AAA CORPORATE BOND YIELD, 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, FOURTH QUARTER 2016.

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                                    TABLE THREE
                              MAJOR PRICE INDICATORS
                          MEDIANS OF FORECASTER PREDICTIONS
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	NUMBER OF FORECASTERS	ACTUAL 2016 Q3	FORECAST(Q/Q)					ACTUAL 2015 ANNUAL	FORECAST(Q4/Q4)		
			2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4		2016 ANNUAL	2017 ANNUAL	2018 ANNUAL
1. CONSUMER PRICE INDEX (ANNUAL RATE)	41	1.6	2.2	2.2	2.2	2.2	2.2	0.4	1.5	2.2	2.2
2. CORE CONSUMER PRICE INDEX (ANNUAL RATE)	38	1.9	2.1	2.2	2.2	2.2	2.2	2.0	2.2	2.2	2.2
3. PCE PRICE INDEX (ANNUAL RATE)	36	1.4	1.9	1.8	1.9	1.9	2.0	0.4	1.4	1.9	2.0
4. CORE PCE PRICE INDEX (ANNUAL RATE)	36	1.7	1.7	1.8	1.8	1.9	1.9	1.4	1.8	1.9	1.9

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA. SURVEY OF PROFESSIONAL FORECASTERS, FOURTH QUARTER 2016.

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                              TABLE FOUR
                ESTIMATED PROBABILITY OF DECLINE IN REAL GDP


ESTIMATED            Q3 2016   Q4 2016   Q1 2017   Q2 2017   Q3 2017
PROBABILITY            TO        TO        TO        TO        TO
(CHANCES IN 100)     Q4 2016   Q1 2017   Q2 2017   Q3 2017   Q4 2017


                              NUMBER OF FORECASTERS

10 OR LESS             25        15        14        11         8
11 TO 20                9        16        15        13        12
21 TO 30                2         5         6        11        15
31 TO 40                0         0         0         0         1
41 TO 50                0         0         0         0         0
51 TO 60                0         0         0         0         0
61 TO 70                0         0         0         0         0
71 TO 80                0         0         0         0         0
81 TO 90                0         0         0         0         0
91 AND OVER             0         0         0         0         0
NOT REPORTING           6         6         7         7         6


MEAN AND MEDIAN

MEDIAN PROBABILITY    10.00     14.50     15.00     15.00     20.00
MEAN PROBABILITY       9.88     13.95     14.99     16.53     18.85



     NOTE:    TOTAL NUMBER OF FORECASTERS REPORTING IS 36.
     SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA.
             SURVEY OF PROFESSIONAL FORECASTERS, FOURTH QUARTER 2016.
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                              TABLE FIVE
                          MEAN PROBABILITIES


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


                        2016        2017        2018        2019
                     _____   _____   _____   _____

     9.0 PERCENT OR MORE   0.00        0.01        0.04        0.09
     8.0 TO 8.9 PERCENT    0.00        0.03        0.09        0.17
     7.5 TO 7.9 PERCENT    0.03        0.09        0.18        0.30
     7.0 TO 7.4 PERCENT    0.03        0.14        0.56        0.74
     6.5 TO 6.9 PERCENT    0.06        0.39        1.52        2.15
     6.0 TO 6.4 PERCENT    0.18        1.34        4.05        5.62
     5.5 TO 5.9 PERCENT    2.12        6.98       11.44       13.41
     5.0 TO 5.4 PERCENT   20.44       26.48       27.99       26.65
     4.0 TO 4.9 PERCENT   75.56       59.03       45.19       39.51
LESS THAN 4.0 PERCENT      1.59        5.51        8.95       11.35


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


                      2015-2016   2016-2017   2017-2018   2018-2019
                     _____   _____   _____   _____

     6.0 OR MORE          0.06        0.07        0.13        0.15
     5.0 TO 5.9           0.25        0.56        0.73        1.17
     4.0 TO 4.9           0.59        2.59        3.29        3.39
     3.0 TO 3.9           2.00        9.66       12.32       13.03
     2.0 TO 2.9          16.60       46.60       39.24       37.08
     1.0 TO 1.9          69.07       28.22       26.39       26.75
     0.0 TO 0.9           9.77        8.23       10.84       11.43
    -1.0 TO -0.1          1.14        2.87        4.23        4.81
    -2.0 TO -1.1          0.24        0.74        1.40        1.60
    -3.0 TO -2.1          0.25        0.42        1.41        0.51
LESS THAN -3.0            0.03        0.03        0.02        0.08


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


                      2015-2016   2016-2017
                     _____   _____

     4.0 OR MORE          0.07        0.09
     3.5 TO 3.9           0.11        0.23
     3.0 TO 3.4           0.23        2.02
     2.5 TO 2.9           1.91        8.34
     2.0 TO 2.4          10.89       29.56
     1.5 TO 1.9          29.54       37.80
     1.0 TO 1.4          49.77       14.97
     0.5 TO 0.9           5.91        5.10
     0.0 TO 0.4           1.31        1.51
     WILL DECLINE         0.25        0.37
```

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

MEAN PROBABILITY ATTACHED TO CORE CPI INFLATION:

	15Q4 TO 16Q4	16Q4 TO 17Q4
4 PERCENT OR MORE	0.07	0.35
3.5 TO 3.9 PERCENT	0.19	0.62
3.0 TO 3.4 PERCENT	0.86	3.97
2.5 TO 2.9 PERCENT	8.49	17.54
2.0 TO 2.4 PERCENT	59.76	43.15
1.5 TO 1.9 PERCENT	20.91	22.98
1.0 TO 1.4 PERCENT	4.72	8.34
0.5 TO 0.9 PERCENT	1.96	2.24
0.0 TO 0.4 PERCENT	1.96	0.65
WILL DECLINE	1.09	0.16

MEAN PROBABILITY ATTACHED TO CORE PCE INFLATION:

	15Q4 TO 16Q4	16Q4 TO 17Q4
4 PERCENT OR MORE	0.09	0.30
3.5 TO 3.9 PERCENT	0.11	0.44
3.0 TO 3.4 PERCENT	0.72	1.69
2.5 TO 2.9 PERCENT	4.13	9.05
2.0 TO 2.4 PERCENT	20.40	29.76
1.5 TO 1.9 PERCENT	58.97	39.91
1.0 TO 1.4 PERCENT	10.85	12.81
0.5 TO 0.9 PERCENT	3.72	4.82
0.0 TO 0.4 PERCENT	0.94	1.08
WILL DECLINE	0.08	0.14

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA.
SURVEY OF PROFESSIONAL FORECASTERS, FOURTH QUARTER 2016.

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                              TABLE SEVEN
                LONG-TERM (5-YEAR AND 10-YEAR) FORECASTS


ANNUAL AVERAGE OVER THE NEXT 5 YEARS: 2016-2020
===============================================

CPI INFLATION RATE                 PCE INFLATION RATE
------------------------            ------------------------
MINIMUM              1.70           MINIMUM              1.40
LOWER QUARTILE       2.00           LOWER QUARTILE       1.80
MEDIAN               2.13           MEDIAN               1.90
UPPER QUARTILE       2.25           UPPER QUARTILE       2.00
MAXIMUM              3.00           MAXIMUM              2.50
MEAN                 2.14           MEAN                 1.94
STD. DEVIATION       0.24           STD. DEVIATION       0.24
N                      36           N                      33
MISSING                 6           MISSING                 9


ANNUAL AVERAGE OVER THE NEXT 10 YEARS: 2016-2025
===============================================

CPI INFLATION RATE                 PCE INFLATION RATE
------------------------            ------------------------
MINIMUM              1.74           MINIMUM              1.66
LOWER QUARTILE       2.00           LOWER QUARTILE       1.85
MEDIAN               2.22           MEDIAN               2.00
UPPER QUARTILE       2.40           UPPER QUARTILE       2.20
MAXIMUM              2.90           MAXIMUM              2.50
MEAN                 2.23           MEAN                 2.02
STD. DEVIATION       0.25           STD. DEVIATION       0.23
N                      34           N                      31
MISSING                 8           MISSING                11
```