



THE

LIVINGSTON SURVEY

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JUNE 2019

Forecasters Predict Declining Growth and Steady Unemployment

The participants in the June *Livingston Survey* predict slightly higher output growth for the first half of 2019 than they did in the December survey. The forecasters, who are surveyed by the Federal Reserve Bank of Philadelphia twice a year, project that the economy's output (real GDP) will rise at an annual rate of 2.5 percent during the first half of 2019, an upward revision from the prediction of 2.4 percent in the December 2018 survey. Growth in the second half of 2019 is expected to fall to an annual rate of 2.3 percent, unchanged from the previous survey. Growth will fall further to an annual rate of 1.9 percent in the first half of 2020.

The forecasters see the unemployment rate holding nearly steady over the next year, but their projections have been revised upward from those of the December 2018 survey. The forecasters predict that the unemployment rate will be 3.6 percent in June 2019 and in December 2019. The unemployment rate is expected to be 3.5 percent in June 2020.

	<i>Growth Rate of Real GDP (%)</i>			<i>Unemployment Rate (%)</i>	
	<i>Previous</i>	<i>New</i>		<i>Previous</i>	<i>New</i>
<i>Half-year data:</i>					
2018 Q4 to 2019 Q2	2.4	2.5	June 2019	3.5	3.6
2019 Q2 to 2019 Q4	2.3	2.3	December 2019	3.5	3.6
2019 Q4 to 2020 Q2	N.A.	1.9	June 2020	N.A.	3.5

Forecasters Cut Their Projections for Inflation in 2019

On an annual-average over annual-average basis, CPI inflation is expected to be 1.9 percent in 2019 and 2.0 percent in 2020. Both projections were downwardly revised from the forecasts in the December 2018 Survey. PPI inflation for finished goods is expected to be 1.3 percent this year, a notable downward revision from 2.5 percent in the previous survey. The forecasters predict PPI inflation will rise to 2.2 percent for 2020.

	<i>CPI Inflation (%)</i>		<i>PPI Inflation (%)</i>	
	<i>Previous</i>	<i>New</i>	<i>Previous</i>	<i>New</i>
<i>Annual-average data:</i>				
2018 to 2019	2.3	1.9	2.5	1.3
2019 to 2020	2.2	2.0	2.1	2.2

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Lower but Steady Projections for Short- and Long-Term Interest Rates

The panelists lowered their forecasts for interest rates on three-month Treasury bills over those of six months ago. At the end of June 2019, the interest rate on three-month Treasury bills is predicted to be 2.38 percent. The forecasters predict that the three-month rate will be 2.40 percent at the end of December 2019 and hold steady through December 2020.

Accompanying the downward revisions to the rate on three-month Treasury bills, the forecasts for the 10-year rate were also lower. The interest rate on 10-year Treasury bonds is predicted to reach 2.48 percent at the end of June 2019. The forecasters predict the 10-year rate will rise to 2.69 percent at the end of December 2019 and continue to rise to 2.74 percent at the end of June 2020. The 10-year Treasury bond interest rate is expected to reach 2.75 percent at the end of December 2020.

	<i>3-Month Treasury Bill Interest Rate</i>		<i>10-Year Treasury Bond Interest Rate</i>	
	<i>Previous</i>	<i>New</i>	<i>Previous</i>	<i>New</i>
June 28, 2019	2.80	2.38	3.42	2.48
Dec. 31, 2019	3.01	2.40	3.51	2.69
June 30, 2020	N.A.	2.40	N.A.	2.74
Dec. 31, 2020	3.00	2.40	3.55	2.75

Nearly Unchanged Long-Term Outlook

The forecasters predict that real GDP will grow at an annual average rate of 2.07 percent over the next 10 years, unchanged from the survey six months ago. The forecasters now predict that inflation (measured by the CPI) will be 2.26 percent annually over the next 10 years, nearly the same rate predicted (2.23 percent) in the December 2018 survey.

Forecasters Continue to See Rising Stock Prices This Year and Next

The panelists predict the S&P 500 index will finish the first half of 2019 at a level of 2860.0. Stock prices are expected to rise to 2900.0 at the end of 2019 and continue to rise to 2950.0 at the end of June 2020. The index is forecasted to reach 3042.7 by the end of 2020.

	<i>Stock Prices S&P 500 Index</i>	
	<i>Previous</i>	<i>New</i>
June 28, 2019	2829.9	2860.0
Dec. 31, 2019	2900.0	2900.0
June 30, 2020	N.A.	2950.0
Dec. 31, 2020	3000.0	3042.7

Technical Notes

This survey release reports the median value across the 21 forecasters on the survey's panel.

The Philadelphia Fed's *Livingston Survey* is the oldest survey of economists' expectations. The survey was started in 1946 by the late columnist Joseph A. Livingston. It summarizes the forecast of economists from industry, government, banking and academia. It is published twice a year, in June and December.

To subscribe to the survey, go to <https://www.philadelphiafed.org/notifications>.

Livingston Survey Participants

S. Anderson	Bank of the West	S. Kahan	Kahan Consulting Ltd.
B. Bovino/S. Panday	Standard & Poor's	D. Knop	Independent Economist
M. Brown/W. West	Visa	T. Lam	Sim Kee Boon Institute, Singapore
J. Bryson	Wells Fargo Securities, LLC	D. Manaenkov	RSQE (University of Michigan)
J. Butkiewicz	University of Delaware	G. Mokrzan	Huntington National Bank
R. Chase	Economic & Policy Resources, Inc.	M. Moran	Daiwa Capital Markets America
C. Chrappa	Independent Equipment Company	F. Nothaft	CoreLogic
R. Dhawan	Georgia State University	C. Rupkey	MUFG Union Bank, N.A.
R. Dietz	National Association of Home Builders	B. Schaitkin	Conference Board
D. Dinas	Regional Market Research Strategies LLC	J. Smith	Parsec Financial Management, Inc.
M. Englund	Action Economics, LLC	S. Stanley	Amherst Pierpont Securities
J. Foster	U.S. Chamber of Commerce	B. Wesbury/R. Stein	First Trust Advisors, L.P.
P. Hooper	Deutsche Bank Securities	M. Zandi	Moody's Analytics
B. Horrigan	Loomis, Sayles & Co.		

LIVINGSTON SURVEY
MAJOR MACROECONOMIC INDICATORS, 2019-2020

QUARTERLY INDICATORS (percentage changes at annual rates)	Q4 2018 TO Q2 2019	Q2 2019 TO Q4 2019	Q4 2019 TO Q2 2020	2018 TO 2019	2019 TO 2020
Real Gross Domestic Product	2.5	2.3	1.9	2.6	2.1
Nominal Gross Domestic Product	4.0	4.2	4.2	4.4	4.2
Nonresidential Fixed Investment	3.3	3.2	3.3	3.9	3.5
Corporate Profits After Taxes	3.1	2.6	0.3	4.1	1.5
MONTHLY INDICATORS (percentage changes at annual rates)	DEC 2018 TO JUN 2019	JUN 2019 TO DEC 2019	DEC 2019 TO JUN 2020	2018 TO 2019	2019 TO 2020
Industrial Production	-1.2	2.0	0.9	1.6	1.2
Producer Prices - Finished Goods	3.1	1.8	2.1	1.3	2.2
Consumer Price Index (CPI-U)	2.3	2.0	1.7	1.9	2.0
Average Weekly Earnings in Mfg.	-3.6	3.3	3.0	1.8	3.2
Retail Trade	6.8	4.2	4.1	3.5	4.3
(levels of variables)	JUN 2019	DEC 2019	JUN 2020	2019	2020
Total Private Housing Starts (annual rate, millions)	1.245	1.275	1.288	1.246	1.287
Unemployment Rate (percent)	3.6	3.6	3.5	3.7	3.6
Automobile Sales (incl. foreign) (annual rate, millions)	4.9	4.9	4.9	4.9	4.8
FINANCIAL INDICATORS (levels of variables at end of month)	JUN 2019	DEC 2019	JUN 2020	DEC 2020	
Prime Interest Rate	5.50	5.50	5.50	5.50	
10-Year Treasury Note Yield	2.48	2.69	2.74	2.75	
3-Month Treasury Bill Rate	2.38	2.40	2.40	2.40	
Stock Prices (S&P500)	2860.0	2900.0	2950.0	3042.7	

LONG-TERM OUTLOOK
Average Annual Growth Rate for the Next Ten Years

Real GDP	2.07
Consumer Price Index	2.26

Source: Research Department, Federal Reserve Bank of Philadelphia, Livingston Survey, June 2019

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June 2019

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 May 16; the tables do not reflect subsequent revisions to the data. All forecasts were received on or before May 31.

TABLE ONE
MAJOR MACROECONOMIC INDICATORS, 2019-2020
MEDIAN OF FORECASTER PREDICTIONS

QUARTERLY INDICATORS	NUMBER OF FORE- CASTERS	ACTUAL	FORECASTS		ACTUAL	FORECASTS		
		2018 Q4	2019 Q2	2019 Q4	2020 Q2	2018	2019	2020
1. Real Gross Domestic Product (billions, chain weighted)	21	18765.3	18999.9	19214.0	19396.4	18566.5	19056.5	19447.8
2. Nominal Gross Domestic Product (\$ billions)	21	20865.1	21280.0	21718.9	22168.7	20494.1	21395.4	22290.0
3. Nonresidential Fixed Investment (billions, chain weighted)	20	2763.3	2809.2	2854.3	2901.1	2713.6	2818.3	2917.8
4. Corporate Profits After Taxes (\$ billions)	15	2076.2	2107.9	2134.9	2138.0	2031.4	2115.4	2147.8
MONTHLY INDICATORS		ACTUAL DEC 2018	FORECASTS		ACTUAL 2018	FORECASTS		
			JUN 2019	DEC 2019	JUN 2020		2019	2020
5. Industrial Production (2012=100)	19	110.6	109.9	111.0	111.5	108.6	110.4	111.7
6. Total Private Housing Starts (annual rate, millions)	20	1.142	1.245	1.275	1.288	1.250	1.246	1.287
7. Producer Prices - Finished Goods (index level)	15	203.9	207.0	208.8	211.0	204.1	206.7	211.3
8. Consumer Price Index (CPI-U) (index level)	21	252.7	255.6	258.2	260.4	251.1	256.0	261.1
9. Unemployment Rate (percent)	21	3.9	3.6	3.6	3.5	3.9	3.7	3.6
10. Average Weekly Earnings in Mfg. (\$)	7	936.8	920.0	935.1	949.0	908.0	924.5	954.4
11. Retail Trade (\$ billions)	12	503.3	520.1	530.9	541.8	503.4	521.0	543.2
12. Automobile Sales (incl. foreign) (annual rate, millions)	13	5.2	4.9	4.9	4.9	5.3	4.9	4.8

TABLE ONE (CONTINUED)

INTEREST RATES & STOCK PRICES (end of period)		ACTUAL	FORECASTS			
		DEC 2018	JUN 2019	DEC 2019	JUN 2020	DEC 2020
13. Prime Interest Rate (percent)	19	5.50	5.50	5.50	5.50	5.50
14. 10-Year Treasury Note Yield (percent)	20	2.69	2.48	2.69	2.74	2.75
15. 3-Month Treasury Bill Rate (percent)	21	2.40	2.38	2.40	2.40	2.40
16. Stock Prices (S&P500) (index level)	11	2506.9	2860.0	2900.0	2950.0	3042.7

Source: Research Department, Federal Reserve Bank of Philadelphia, Livingston Survey, June 2019

TABLE TWO
 MAJOR MACROECONOMIC INDICATORS, 2019-2020
 PERCENTAGE CHANGES AT ANNUAL RATES

QUARTERLY INDICATORS	NUMBER OF FORE- CASTERS	Q4 2018	Q2 2019	Q4 2019	2018	2019
		TO Q2 2019	TO Q4 2019	TO Q2 2020	TO 2019	TO 2020
1. Real Gross Domestic Product	21	2.5	2.3	1.9	2.6	2.1
2. Nominal Gross Domestic Product	21	4.0	4.2	4.2	4.4	4.2
3. Nonresidential Fixed Investment	20	3.3	3.2	3.3	3.9	3.5
4. Corporate Profits After Taxes	15	3.1	2.6	0.3	4.1	1.5
MONTHLY INDICATORS		DEC 2018	JUN 2019	DEC 2019	2018	2019
		TO JUN 2019	TO DEC 2019	TO JUN 2020	TO 2019	TO 2020
5. Industrial Production	19	-1.2	2.0	0.9	1.6	1.2
6. Total Private Housing Starts	20	0.103	0.030	0.013	-0.004	0.041
7. Producer Prices - Finished Goods	15	3.1	1.8	2.1	1.3	2.2
8. Consumer Price Index (CPI-U)	21	2.3	2.0	1.7	1.9	2.0
9. Unemployment Rate	21	-0.3	0.0	-0.1	-0.2	-0.1
10. Average Weekly Earnings in Mfg.	7	-3.6	3.3	3.0	1.8	3.2
11. Retail Trade	12	6.8	4.2	4.1	3.5	4.3
12. Automobile Sales (incl. foreign)	13	-0.3	0.0	0.0	-0.4	-0.1

		DEC 2018	JUN 2019	DEC 2019	JUN 2020
		TO	TO	TO	TO
INTEREST RATES & STOCK PRICES		JUN 2019	DEC 2019	JUN 2020	DEC 2020
13. Prime Interest Rate	19	0.00	0.00	0.00	0.00
14. 10-Year Treasury Note Yield	20	-0.21	0.21	0.06	0.01
15. 3-Month Treasury Bill Rate	21	-0.02	0.02	0.00	0.00
16. Stock Prices (S&P500)	11	30.2	2.8	3.5	6.4

Note: Figures for housing starts, unemployment rate, auto sales, prime interest rate, 30-year Treasury bond, and 90-day Treasury bill are changes in levels. All others are percentage changes at annual rates.

Source: Research Department, Federal Reserve Bank of Philadelphia, Livingston Survey, June 2019

TABLE THREE
LONG-TERM (10 YEAR) FORECASTS

SERIES: CPI Inflation Rate

STATISTIC	
Minimum	1.90
Lower Quartile	2.10
Median	2.26
Upper Quartile	2.36
Maximum	2.60
Mean	2.22
Std. Deviation	0.20
N	18
Missing	3

SERIES: Real GDP

STATISTIC	
Minimum	1.60
Lower Quartile	1.80
Median	2.07
Upper Quartile	2.20
Maximum	2.80
Mean	2.06
Std. Deviation	0.28
N	18
Missing	3
