



THE

# LIVINGSTON SURVEY

Release Date: June 18, 2021

## JUNE 2021

### **Forecasters Strengthen Their Forecasts for Real GDP Growth and the Unemployment Rate**

The 19 participants in the June *Livingston Survey* predict sharply higher output growth for the first half of 2021 than they predicted in the December 2020 survey. The forecasters, who are surveyed by the Federal Reserve Bank of Philadelphia twice a year, now project that the economy's output (real GDP) will grow at an annual rate of 7.8 percent during the first half of 2021. The economic rebound is expected to continue in the second half of 2021 when growth is expected to be at an annual rate of 6.7 percent. Both projections represent sharp upward revisions from those of the December 2020 survey. Growth will average an annual rate of 3.7 percent in the first half of 2022.

The forecasters see a lower unemployment rate in the first half of 2021 than they predicted previously, with continued recovery in the second half of 2021. The forecasters predict that the unemployment rate will be 5.7 percent in June 2021 and 4.7 percent in December 2021. The unemployment rate is expected to fall to 4.4 percent in June 2022.

	<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>					
2020 Q4 to 2021 Q2	2.9	7.8	June 2021	6.1	5.7
2021 Q2 to 2021 Q4	3.7	6.7	December 2021	5.5	4.7
2021 Q4 to 2022 Q2	N.A.	3.7	June 2022	N.A.	4.4

### **Forecasters Hike Their Projections for Inflation in 2021 and 2022**

On an annual-average over annual-average basis, CPI inflation is expected to be 3.3 percent in 2021 and 2.5 percent in 2022. Both projections are revised upward from the forecasts in the December 2020 survey. PPI inflation for finished goods is expected to be 6.0 percent this year, a notable upward revision from 2.4 percent in the previous survey. The forecasters predict PPI inflation will average 2.8 percent in 2022.

	<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>				
2020 to 2021	2.1	3.3	2.4	6.0
2021 to 2022	2.1	2.5	2.7	2.8

**RESEARCH DEPARTMENT** FEDERAL RESERVE BANK OF PHILADELPHIA

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***Lower Projections for Short-Term Interest Rates but Higher Projections for Long-Term Interest Rates***

The panelists lowered their forecasts for interest rates on three-month Treasury bills compared with the forecasts of six months ago. The interest rate on three-month Treasury bills is now predicted to be 0.03 percent at the end of June 2021. The forecasters predict the three-month rate will be 0.07 percent at the end of December 2021. The forecasters see the three-month rate at 0.08 percent at the end of June 2022, and they expect it to increase a bit to 0.10 percent at the end of December 2022.

Upward revisions to the forecasts for the 10-year Treasury rate accompany the downward revisions to the forecasts for the three-month rate. The interest rate on 10-year Treasury bonds is predicted to be 1.70 percent at the end of June 2021, up from 1.00 percent in the December survey. The forecasters predict the 10-year rate will rise to 1.90 percent at the end of December 2021 and 2.00 percent at the end of June 2022. The 10-year Treasury bond interest rate is expected to reach 2.20 percent at the end of December 2022.

	<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 30, 2021	0.10	0.03	1.00	1.70
Dec. 31, 2021	0.10	0.07	1.20	1.90
June 30, 2022	N.A.	0.08	N.A.	2.00
Dec. 31, 2022	0.13	0.10	1.45	2.20

***Notable Upward Revisions to Long-Term Inflation but Unchanged Outlook for Long-Term Growth***

The forecasters now predict that inflation (measured by the CPI) will be 2.50 percent annually over the next 10 years, marking an upward revision from 2.23 percent in the December 2020 survey. The forecasters see real GDP growing 2.20 percent annually over the next 10 years, the same rate they predicted previously.

***Forecasters Predict Higher and Increasing Stock Prices***

The panelists predict the S&P 500 index will finish the first half of 2021 at a level of 4212.9. Stock prices are expected to rise to 4292.2 at the end of 2021 and continue to rise to 4382.8 at the end of June 2022. The index is predicted to reach 4474.3 by the end of 2022. All forecasts for stock prices mark upward revisions from those of the December 2020 survey.

	<i>Stock Prices S&amp;P 500 Index</i>	
	<i>Previous</i>	<i>New</i>
June 30, 2021	3650.0	4212.9
Dec. 31, 2021	3745.0	4292.2
June 30, 2022	N.A.	4382.8
Dec. 31, 2022	3899.2	4474.3

### **Technical Notes**

This survey release reports the median value across the 19 forecasters on the survey's panel. On May 28, 2021, the Board of Governors released its usual annual revision to industrial production and capacity utilization. This revision included a change to the base year of industrial production from 2012 to 2017. Many panelists reported on the old base year (2012), and a few reported on the new base year (2017). For this report, all projections for the level of industrial production have been rescaled to the 2012 base year.

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**

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Livingston Survey Summary Table  
MAJOR MACROECONOMIC INDICATORS, 2021-2022

QUARTERLY INDICATORS (percentage changes at annual rates)	Q4 2020 TO Q2 2021	Q2 2021 TO Q4 2021	Q4 2021 TO Q2 2022	2020 TO 2021	2021 TO 2022
Real Gross Domestic Product	7.8	6.7	3.7	6.7	4.6
Nominal Gross Domestic Product	12.2	8.7	5.6	9.6	6.9
Nonresidential Fixed Investment	9.2	7.7	6.5	8.5	6.5
Corporate Profits After Taxes	13.8	7.8	5.5	17.4	4.0
MONTHLY INDICATORS (percentage changes at annual rates)	DEC 2020 TO JUN 2021	JUN 2021 TO DEC 2021	DEC 2021 TO JUN 2022	2020 TO 2021	2021 TO 2022
Industrial Production	3.3	6.3	4.6	5.9	5.1
Producer Prices - Finished Goods	9.9	1.4	0.9	6.0	2.8
Consumer Price Index (CPI-U)	4.8	2.1	2.3	3.3	2.5
Average Weekly Earnings in Mfg.	2.0	6.2	-0.1	5.9	3.7
Retail Trade	33.2	-2.2	3.0	17.6	3.5
(levels of variables)	JUN 2021	DEC 2021	JUN 2022	2021	2022
Total Private Housing Starts (annual rate, millions)	1.628	1.583	1.578	1.615	1.583
Unemployment Rate (percent)	5.7	4.7	4.4	5.4	4.3
Automobile Sales (incl. foreign) (annual rate, millions)	4.1	4.1	4.1	4.0	4.1
FINANCIAL INDICATORS (levels of variables at end of month)	JUN 2021	DEC 2021	JUN 2022	DEC 2022	
Prime Interest Rate	3.25	3.25	3.25	3.25	
10-Year Treasury Note Yield	1.70	1.90	2.00	2.20	
3-Month Treasury Bill Rate	0.03	0.07	0.08	0.10	
Stock Prices (S&P500)	4212.9	4292.2	4382.8	4474.3	
LONG-TERM OUTLOOK					
Average Annual Growth Rate for the Next Ten Years					
Real GDP	2.20				
Consumer Price Index	2.50				

Source: Research Department, Federal Reserve Bank of Philadelphia, Livingston Survey, June 2021.

# **LIVINGSTON SURVEY**

**June 2021**

**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 18; the tables do not reflect subsequent revisions to the data. All forecasts were received on or before June 3.**

TABLE ONE  
MAJOR MACROECONOMIC INDICATORS, 2021-2022  
MEDIANS OF FORECASTER PREDICTIONS

QUARTERLY INDICATORS	NUMBER OF FORECASTERS	ACTUAL	FORECAST			ACTUAL	FORECAST	
		2020 Q4	2021 Q2	2021 Q4	2022 Q2	2020 ANNUAL	2021 ANNUAL	2022 ANNUAL
1. Real Gross Domestic Product (billions, chain weighted)	19	18794.4	19517.1	20159.0	20532.0	18426.1	19663.3	20573.3
2. Nominal Gross Domestic Product (\$ billions)	19	21494.7	22765.3	23734.3	24395.0	20936.6	22944.2	24516.9
3. Nonresidential Fixed Investment (billions, chain weighted)	17	2742.0	2865.0	2973.0	3068.0	2665.1	2892.2	3080.1
4. Corporate Profits After Taxes (\$ billions)	14	1951.4	2082.0	2161.4	2220.3	1834.7	2154.4	2239.7
MONTHLY INDICATORS		2020 Dec	2021 Jun	2021 Dec	2022 Jun	2020 ANNUAL	2021 ANNUAL	2022 ANNUAL
5. Industrial Production (2012=100)	14	105.9	107.7	111.0	113.5	102.2	108.2	113.7
6. Total Private Housing Starts (annual rate, millions)	16	1.661	1.628	1.583	1.578	1.397	1.615	1.583
7. Producer Prices - Finished Goods (index level)	11	205.6	215.5	217.0	218.0	203.0	215.1	221.1
8. Consumer Price Index (CPI-U) (index level)	18	261.6	267.8	270.6	273.7	258.8	267.5	274.2
9. Unemployment Rate (percent)	18	6.7	5.7	4.7	4.4	8.1	5.4	4.3
10. Average Weekly Earnings in Mfg. (\$)	6	973.3	983.0	1012.9	1012.6	927.7	982.3	1019.1
11. Retail Trade (\$ billions)	10	536.0	618.6	611.7	620.9	517.1	608.0	629.4
12. Automobile Sales (incl. foreign) (annual rate, millions)	12	3.6	4.1	4.1	4.1	3.4	4.0	4.1
INTEREST RATES & STOCK PRICES (end of period)		2020 Dec	2021 Jun	2021 Dec	2022 Jun	2022 Dec		
13. Prime Interest Rate (percent)	16	3.25	3.25	3.25	3.25	3.25		
14. 10-Year Treasury Note Yield (percent)	17	0.93	1.70	1.90	2.00	2.20		
15. 3-Month Treasury Bill Rate (percent)	17	0.09	0.03	0.07	0.08	0.10		
16. Stock Prices (S&P500) (index level)	12	3756.1	4212.9	4292.2	4382.8	4474.3		

Source: Research Department, Federal Reserve Bank of Philadelphia, Livingston Survey, June 2021.

TABLE TWO  
 MAJOR MACROECONOMIC INDICATORS, 2021-2022  
 PERCENTAGE CHANGES AT ANNUAL RATES

QUARTERLY INDICATORS	NUMBER OF FORECASTERS	Q4 2020 TO Q2 2021	Q2 2021 TO Q4 2021	Q4 2021 TO Q2 2022	2020 TO 2021	2021 TO 2022
1. Real Gross Domestic Product	19	7.8	6.7	3.7	6.7	4.6
2. Nominal Gross Domestic Product	19	12.2	8.7	5.6	9.6	6.9
3. Nonresidential Fixed Investment	17	9.2	7.7	6.5	8.5	6.5
4. Corporate Profits After Taxes	14	13.8	7.8	5.5	17.4	4.0
MONTHLY INDICATORS		DEC 2020 TO JUN 2021	JUN 2021 TO DEC 2021	DEC 2021 TO JUN 2022	2020 TO 2021	2021 TO 2022
5. Industrial Production	14	3.3	6.3	4.6	5.9	5.1
6. Total Private Housing Starts	16	-0.033	-0.045	-0.005	0.219	-0.032
7. Producer Prices - Finished Goods	11	9.9	1.4	0.9	6.0	2.8
8. Consumer Price Index (CPI-U)	18	4.8	2.1	2.3	3.3	2.5
9. Unemployment Rate	18	-1.0	-1.0	-0.3	-2.7	-1.1
10. Average Weekly Earnings in Mfg.	6	2.0	6.2	-0.1	5.9	3.7
11. Retail Trade	10	33.2	-2.2	3.0	17.6	3.5
12. Automobile Sales (incl. foreign)	12	0.5	-0.0	0.0	0.5	0.1
INTEREST RATES & STOCK PRICES		DEC 2020 TO JUN 2021	JUN 2021 TO DEC 2021	DEC 2021 TO JUN 2022	JUN 2022 TO DEC 2022	
13. Prime Interest Rate	16	0.00	0.00	0.00	0.00	
14. 10-Year Treasury Note Yield	17	0.77	0.20	0.10	0.20	
15. 3-Month Treasury Bill Rate	17	-0.06	0.04	0.01	0.02	
16. Stock Prices (S&P500)	12	25.8	3.8	4.3	4.2	

Note: Figures for housing starts, unemployment rate, auto sales, prime interest rate, 10-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 2021.

TABLE THREE  
LONG-TERM (10 YEAR) FORECASTS

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SERIES: Real GDP

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Statistic	
Minimum	1.70
Lower Quartile	1.90
Median	2.20
Upper Quartile	2.50
Maximum	2.83
Mean	2.23
Std. Deviation	0.38
N	17
Missing	2

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SERIES: CPI Inflation Rate

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Statistic	
Minimum	1.90
Lower Quartile	2.20
Median	2.50
Upper Quartile	2.60
Maximum	3.00
Mean	2.44
Std. Deviation	0.31
N	17
Missing	2

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Source: Research Department, Federal Reserve Bank of Philadelphia, Livingston Survey, June 2021.