What It's Worth

ECONOMIC OUTLOOK UPDATE

QUARTERLY

2Q 2022

TABLE OF CONTENTS

TABLE OF EXHIBITS

About the Analysis in this Report

A well-prepared business valuation contains a thorough and relevant economic section. Revenue Ruling 59-60 requires consideration of “the economic outlook in general and the condition and outlook of the specific industry in particular.” Understanding the economic outlook is fundamental to developing reasonable expectations about a subject company’s future prospects. In any business valuation, the general economic outlook as of the appraisal date should be considered, since the national economic outlook is often the basis of how investors perceive alternative investment opportunities at any given time. Appraisers and analysts should integrate the information presented in the *Economic Outlook Update* with their valuation assignment and discuss how the economic information impacts their valuation assumptions and conclusions.

In this analysis, we examine the general economic climate that existed at the end of the second quarter of 2022. This summary provides an overview of some selected economic factors that prevailed at that time as well as a discussion of the factors that are crucial over an extended time period. Topics addressed include general economic conditions, gross domestic product, consumer prices and inflation rates, energy prices, interest rates, unemployment, consumer spending, the stock and bond markets, construction, manufacturing, real estate markets, and the future economic outlook.

ECONOMIC OUTLOOK UPDATE QUARTERLY 2Q 2022

The U.S. economy—as indicated by GDP—contracted by 0.9% in the second quarter of 2022, showing that the U.S. economy slowed but at a lesser rate, 1.6%, than in the first quarter of 2022. The rate for the second quarter of 2022 reflected decreases in private investment and federal government spending, while net exports and consumer spending increased.

Total government spending contracted at a rate of 1.9% in the second quarter of 2022 after decreasing 2.9% in the prior quarter. The figures for government spending for the second quarter of 2022 subtracted 0.33 percentage point from the GDP. In 2021, government spending rose 0.5%. The trade deficit narrowed in the second quarter of 2022 when compared to the first quarter of 2022; the second-quarter deficit was $251.2 billion compared with $283.7 billion in the first quarter of 2022. The trade deficit shrank to $79.6 billion in June 2022 after shrinking slightly in May, to $84.9 billion (revised).

The Conference Board's Leading Economic Index (LEI) decreased by 0.8% in June following a decrease of 0.6% in May. The index now stands at 117.1 points. The June decrease was predominantly due to a lowering of consumer expectations, a falling stock market, and weaker new orders for manufacturing. The LEI was down 1.8% over the first half of 2022; this is a downturn from its 3.3% growth in the second half of 2021. The Conference Board is now forecasting that a recession is likely in the fourth quarter of 2022 and/or the first quarter of 2023, spurred by high inflation and tightening monetary policies.

The Chicago Fed's National Activity Index (CFNAI) remained unchanged in June, at -0.19 point. The figure for May was adjusted downward, from +0.01 to -0.19. The score received negative contributions from two of the four broad categories of indicators used to construct the index, and two categories deteriorated from May.

In June, nonfarm payrolls continued their robust rate of growth, adding 372,000 jobs to the economy. The report in June also included revised figures for the prior two months, which reported 74,000 fewer jobs gained.

Following the strong job numbers, the unemployment rate held at 3.6%, its lowest rate since the onset of the pandemic. The U6 unemployment rate improved 0.4 percentage point in June, to 6.7%.

Publication Information

Priscilla Kisling Economic and Data Editor

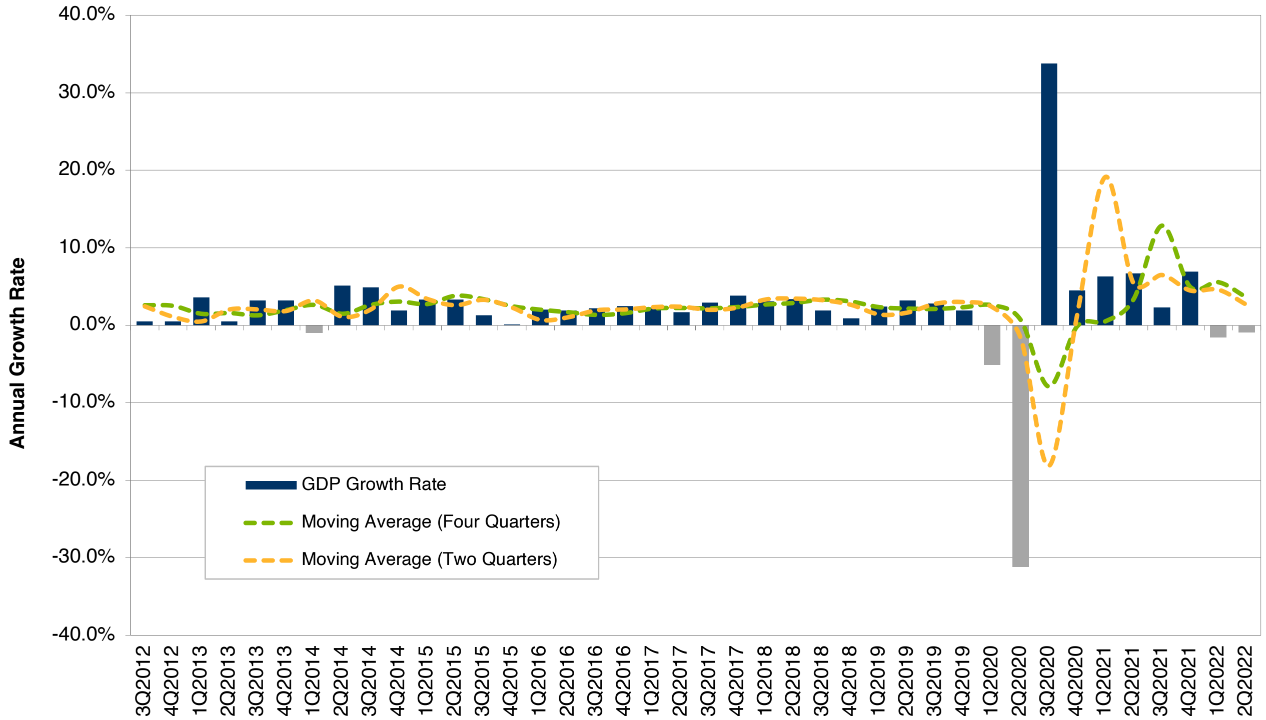
Adam Manson Director, Valuation Data

David Foster CEO

Lucretia Lyons President

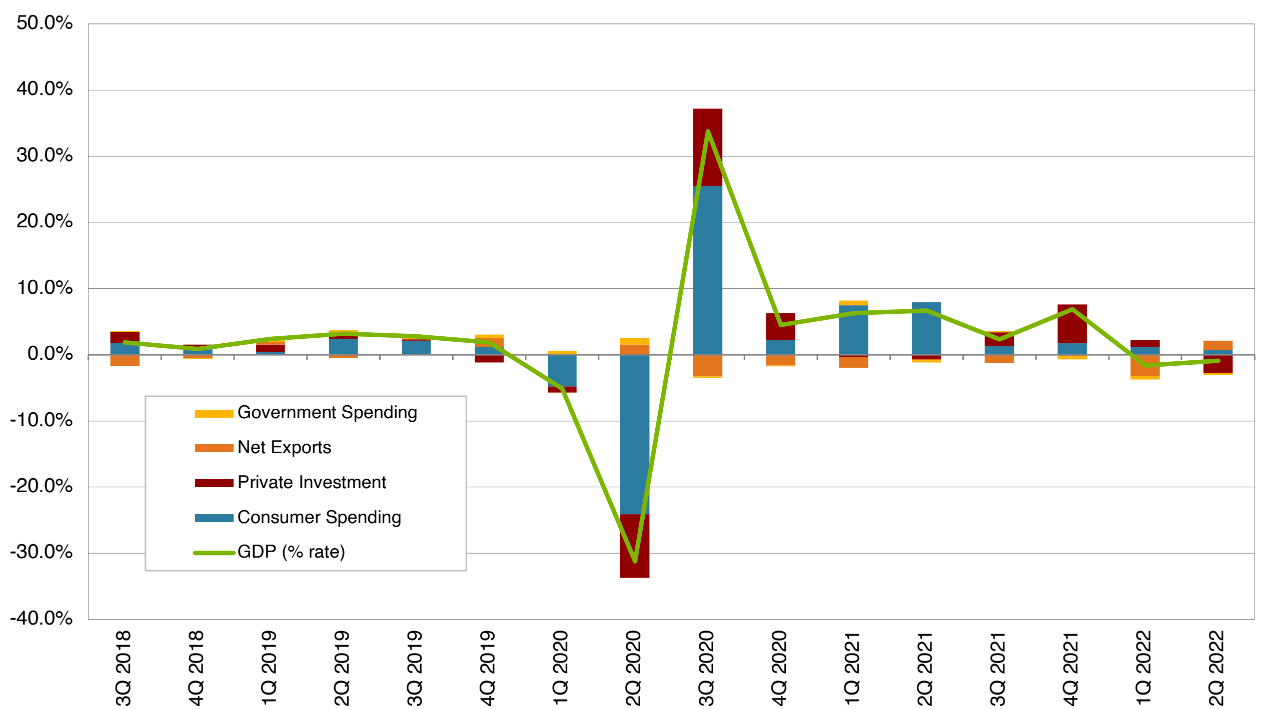
The *Economic Outlook Update* (ISSN 1558-4062) is published monthly and quarterly by Business Valuation Resources, LLC, 111 SW Columbia Street, Suite 750, Portland, OR 97201-5814. The annual subscription price for the *Economic Outlook Update (EOU)* is $369 as per January 2019 *EOU*. Site licenses are available for those who wish to distribute *EOU* throughout their firms. Contact sales@bvresources.com or 503-479-8200 ext. 2 for details. Please also visit www.BVResources.com.

EXHIBIT 1A: Real Gross Domestic Product and Moving Averages



Source of data: U.S. Department of Commerce.
Note: Figures are seasonally adjusted at annual rates. As the U.S. Department of Commerce issues revised data, some historically reported figures may change.

EXHIBIT 1B: GDP Components—Contribution to GDP Rate



The four-week average of initial claims for unemployment insurance in the last week of June totaled 231,000. The four-week moving average was 231,750. Initial claims remain low when compared with long-term historical claims.

Wages increased 10 cents in June, to $32.08, and remain higher by $1.56, or 5.1%, over the past 12 months. Average hourly earnings for private-sector production and nonsupervisory employees increased 13 cents in June, to $27.45.

In the second quarter of 2022, the Federal Open Market Committee (FOMC) met twice. In the first meeting in May, the FOMC voted to raise the federal funds rate to between 0.75% and 1.00%.

During the meeting held in June, the FOMC decided to raise the federal funds rate to between 1.50% and 1.75%. The committee also announced it will continue to reduce its holdings of Treasury securities and agency debt and agency mortgage-backed securities.

EXHIBIT 2A: Historical Economic Data 2009-2021 and Forecasts 2022-2032

	HISTORICAL DATA													CONSENSUS FORECASTS**						
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028-2032
Real GDP*	-2.5	2.6	1.6	2.2	1.8	2.5	3.1	1.7	2.3	2.9	2.3	-3.4	5.7	2.6	1.8	1.8	2.2	2.0	1.9	1.9
Industrial production*	-11.5	5.5	2.9	2.8	2.0	3.1	-1.0	-2.0	1.3	3.2	-0.8	-7.2	5.5	5.2	1.8	1.6	2.2	2.0	1.7	1.7
Consumer spending*	-1.3	1.7	1.9	1.5	1.5	3.0	3.8	2.8	2.4	2.9	2.2	-3.8	7.9	3.2	1.8	1.8	2.1	2.1	2.0	2.0
Real disposable personal income*	-0.4	1.0	2.5	3.1	-1.4	4.0	4.1	1.8	2.8	3.4	2.3	6.2	2.2	-4.7	2.1	2.6	2.3	2.1	2.1	2.1
Business investment*	-14.5	4.5	8.7	9.5	4.1	6.9	1.8	0.7	4.1	6.4	4.3	-5.3	7.4	5.4	3.1	3.0	3.1	2.9	2.9	2.7
Nominal pretax corp. profits*	8.4	25.0	4.0	10.0	1.7	5.4	-2.8	-2.4	4.5	8.3	2.7	-5.2	25.0	4.5	2.3	2.4	6.0	4.7	4.2	4.0
Total government spending*	3.5	0.0	-3.1	-2.1	-2.4	-0.9	1.8	1.8	0.5	1.4	2.2	2.5	0.5	-0.8	1.1	NA	NA	NA	NA	NA
Consumer price inflation*	-0.4	1.6	3.2	2.1	1.5	1.6	0.1	1.3	2.1	2.4	1.8	1.2	4.7	7.7	3.6	2.4	2.4	2.5	2.4	2.3
Core PCE*						1.6	1.2	1.6	1.7	2.0	1.7	1.4	3.3	4.9	3.4	NA	NA	NA	NA	NA
3-month Treasury bill rate	0.2	0.1	0.1	0.1	0.1	0.0	0.2	0.5	1.4	2.4	1.5	0.1	0.1	2.2	3.1	2.5	2.6	2.6	2.5	2.5
10-year Treasury bond yield	3.3	3.2	2.8	1.8	2.4	2.5	2.2	2.5	2.8	2.7	1.9	0.9	1.6	3.1	3.2	3.2	3.4	3.4	3.3	3.3
Unemployment rate	9.3	9.6	8.9	8.1	7.4	6.2	5.3	4.9	4.4	3.9	3.7	8.1	5.4	3.6	3.8	NA	NA	NA	NA	NA
Housing starts (millions)	0.6	0.6	0.6	0.8	0.9	1.0	1.1	1.2	1.2	1.3	1.3	1.4	1.6	1.7	1.6	NA	NA	NA	NA	NA

Source of historical data: U.S. Department of Commerce, U.S. Department of Labor, U.S. Census Bureau and The Federal Reserve Board.
Source of forecasts: *Consensus Forecasts - USA*, June 2022.
Notes:

*Numbers are based on percent change from preceding period.

Historic consumer price inflation, unemployment rate, 3-month Treasury rate, and 10-year Treasury yield are the annual averages.

**Forecast numbers are based on percent change from preceding period (excludes unemployment rate, housing starts, 3-month Treasury rate, and 10-year Treasury yield). Consumer price inflation information is annual averages. The 2021 through 2026 forecasts for the 3-month Treasury rate and 10-year Treasury yield are for the end of each period. Forecasts for 2027-2031 signify the average for that period.

Consumer spending, also known as personal consumption expenditures, includes spending on services, durable, and nondurable goods. Business investment is also referred to as nonresidential fixed investment. Total government spending includes federal, state, and local government spending.

Every month, Consensus Economics surveys a panel of 30 prominent United States economic and financial forecasters for their predictions on a range of variables including future growth, inflation, current account and budget balances, and interest rates.

The statement issued after the second meeting held mid-June indicated overall economic activity appears to have picked up and that job gains were robust and unemployment low in recent months. Inflation remains elevated due to pandemic-related supply-and-demand imbalances, higher energy prices, and broad price pressures. The invasion of Ukraine by Russia has created additional upward pressure on inflation. COVID-19-related lockdowns in China further disrupted the supply chains.

The Consumer Confidence Index dropped by 4.5 points, from a revised May figure of 103.2 to 98.7 in June. It is at its lowest level since February 2021. The decline can be attributed to consumers' continued concerns about the impact of inflation on gasoline and food prices. The report mentioned that consumers' purchasing intentions for big-ticket items such as automobiles and major appliances remain steady but future plans for these items have cooled. Rising prices have adversely affected consumers' plans for vacations this summer. The June report states that, while the Present Situation Index remained relatively unchanged, the Expectations Index fell to its lowest level in nearly a decade "suggesting weaker growth in the second half of 2022" and the increased risk of recession by December.

EXHIBIT 2B: Historical Energy Data 2009-2021 and Forecasts 2022-2023

	HISTORICAL DATA													EIA FORECASTS		% CHANGE	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2022	2023
Brent crude oil spot price*	61.8	79.6	111.3	111.7	108.6	98.9	52.3	43.7	54.2	71.2	64.3	41.7	70.9	104.1	93.8	46.8%	-9.9%
West Texas intermediate crude oil price*	62.0	79.5	94.9	94.1	98.0	93.2	48.7	43.3	50.8	65.1	57.0	39.2	68.2	98.8	89.8	44.8%	-9.2%
Heating oil retail price**	252.4	297.1	365.7	378.6	378.3	371.4	264.9	210.3	250.7	301.2	299.9	244.3	300.0	447.0	389.0	49.0%	-13.0%
Gasoline regular grade retail price**	234.9	278.1	352.6	362.7	350.6	336.4	242.8	214.9	241.7	272.7	260.4	218.4	302.0	405.0	357.0	34.1%	-11.9%
Electricity residential retail price***	11.5	11.5	11.7	11.9	12.1	12.5	12.7	12.6	12.9	12.9	13.0	13.2	13.7	14.5	14.7	5.3%	1.5%
Electricity commercial retail price***	10.2	10.2	10.2	10.1	10.3	10.7	10.6	10.4	10.7	10.7	10.7	10.6	11.3	11.9	11.9	5.2%	0.5%
Electricity industrial retail price***	6.8	6.8	6.8	6.7	6.9	7.1	6.9	6.8	6.9	6.9	6.8	6.7	7.3	7.6	7.5	4.7%	-2.0%
Natural gas Henry Hub spot price****	4.0	4.4	4.0	2.8	3.7	4.4	2.6	2.5	3.0	3.2	2.6	2.0	3.9	6.0	4.8	54.0%	-20.9%
Airline Ticket Price Index	258.0	278.2	304.0	305.0	312.7	307.7	292.2	282.6	275.8	264.9	265.4	217.6	217.5	288.1	289.5	32.5%	0.5%
Producer Price Index: Petroleum	1.8	2.3	3.0	3.1	3.0	2.8	1.8	1.4	1.7	2.1	1.9	1.4	2.4	3.4	2.8	39.8%	-16.6%
Producer Price Index: all commodities	1.7	1.9	2.0	2.0	2.0	2.1	1.9	1.9	1.9	2.0	2.0	1.9	2.3	2.6	2.4	13.7%	-5.4%

Source of historical and forecast data: U.S. Energy Information Administration.
Notes:
*Dollars per barrel
**Cents per gallon, U.S. average
***Cents per kilowatt-hour, U.S. average
****Dollars per million Btu

MetLife and the U.S. Chamber of Commerce published their second-quarter 2022 survey in May. It climbed to its highest level since the start of the pandemic. The second-quarter score rose 2.7 points, to 66.8 points. Despite the rise, the score remains below prepandemic levels, such as when it was 71.7 points in the first quarter of 2020.

The survey highlighted three key findings for the quarter:

1. Two-thirds of small-business decision-makers say that their business is in good health. This is a five-point increase from the prior quarter and puts this metric on par with the last prepandemic reading.

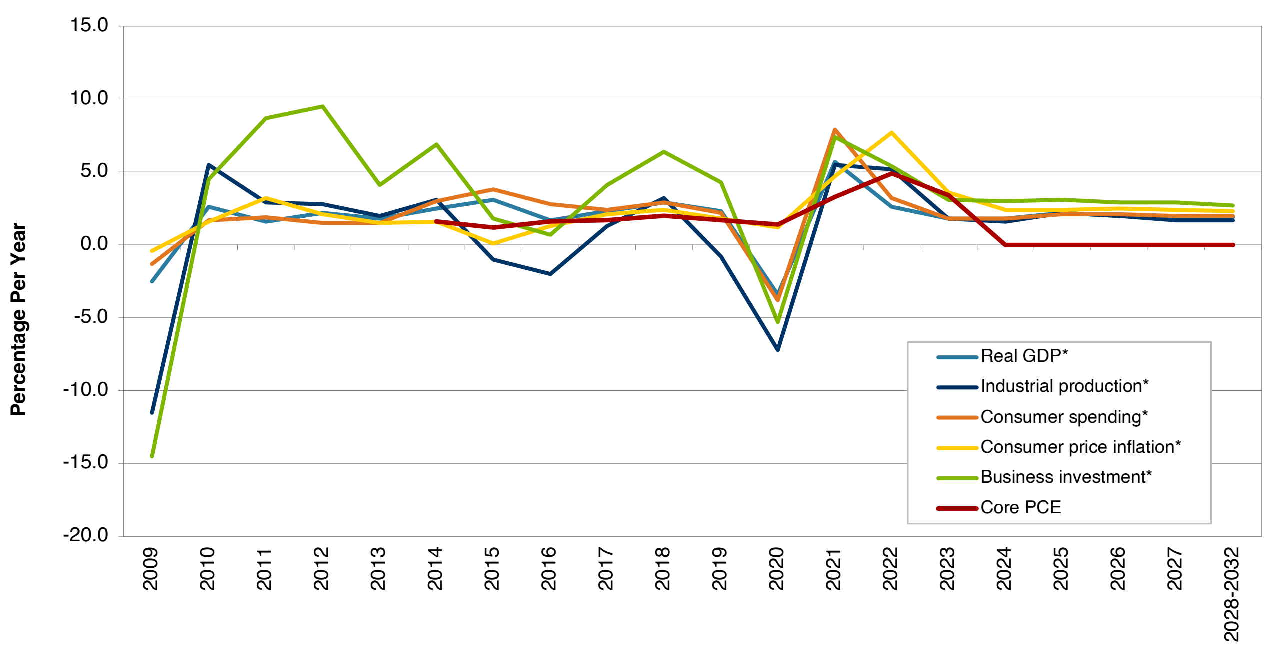
2. Eighty-eight percent of respondents are concerned about the impact inflation may have on their business, and 44% consider inflation to be their biggest challenge; and

3. Approximately one-half of small-business owners are reportedly working more hours now than they were a year ago. This is a 20% increase over 2017 when this question was first posed and is a reflection of the complexity of issues small-business owners face in recent times.

The RSM U.S. Middle Market Business Index, published in May, reversed direction and rose 4.3 points in the second quarter, to 130.6 points, and is only three months removed from its record-high 143.7 in the third quarter of 2021. Despite inflationary pressures exacerbated by continued supply-chain disruptions and labor shortages, RSM reports strong demand and productivity.

The manufacturing index (PMI) fell 3.1 percentage points, to 53.0%, and is the lowest score since June 2020, when the PMI was 52.4%, as reported by the Institute for Supply Management (ISM). This score indicates expansion

EXHIBIT 3: Key Economic Variables Actual 2009-2021 and Forecast 2022-2032



Source of historical data: U.S. Department of Commerce, U.S. Department of Labor and The Federal Reserve Board.
Source of forecasts: Consensus Forecasts.

*Numbers are based on percent change from preceding period. Consumer price inflation information is annual averages.

in the overall economy for the 25th consecutive month. A reading above 50.0% indicates that the manufacturing economy is generally expanding.

The Federal Reserve reported that total industrial production fell 0.2% in June after revisions held May at essentially the same level as April. In the second quarter of 2022, industrial production increased at an annual rate of 6.1%. At 104.4% of its 2017 average, total industrial production was 4.2% higher than it was one year ago. Capacity utilization for the industrial sector was at 77.7%, a rate that is 1.1 percentage points above its long-run (1972-to-2020) average.

The Institute for Supply Management's Services PMI index, formerly referred to as NMI, declined 0.6 percentage point in June, to 55.3%, its lowest point since May 2020. Despite a decline in the June index, growth continued for the services sector, which has expanded for all but two of the last 149 months. A Services PMI reading above 50.0% indicates that the services sector of the economy is generally expanding, whereas a reading below 50.0% indicates that the services sector is generally contracting.

All the equity and fixed income markets continued to slide in the second quarter of 2022 as Russia's invasion of Ukraine and supply-chain woes compounded interest rates and inflation fears. As a result, all the major equity indexes continued to fall into correction territory. In the second quarter, the Dow Jones Industrial Average fell 10.8%, the S&P 500 Index lost 16.1%, and the Nasdaq Composite dropped 22.4%. The S&P MidCap 400 declined 15.9%, and the Russell 2000 lost 17.2%. Volatility, as measured by the Chicago Board Options Exchange Volatility Index, remained elevated in the second quarter of 2022, at 35.0.

During the second quarter of 2022, the yield on the benchmark 10-year U.S. Treasury bond started the quarter at 2.39% and rose to 2.98% by the end of the quarter.

Housing starts decreased 2.0%, to 1.559 million, in June. They are 6.3% below the June 2021 rate. Single-family housing starts were at 982,000, 8.1% below May. The multifamily sector added 568,000 buildings in June 2022, compared with 494,000 in May and 488,000 in June 2021. The multifamily-home sector, which consists of buildings with five units or more, tends to be more volatile than the single-family-home sector.

Building permit authorizations for privately owned housing units, considered a leading indicator of demand for new homes, decreased 0.6% in June, coming in at a seasonally adjusted rate of 1,685,000. On a year-over-year basis, the figure is up a modest 1.4%. Building permits for multifamily housing units rose 666,000 in June, an increase of 13.1% from May, and 27.8% more than a year ago.

Existing-home sales fell for a fifth month, declining 5.4% in June, precipitated by the challenging environment for buyers caused by rising mortgage rates and rising home prices. Homes continue to sell rapidly when priced right, and home price gains remain in the double digits. The number of existing-home sales in June was at an annual pace of 5.12 million, which is down 14.2%. Three of the four regions saw a decline in sales in June. The number of distressed home sales, which include both foreclosures and short sales, were less than 1.0%, which is unchanged from last month and from one year ago.

In June, the NAHB/Wells Fargo Housing Market Index decreased 2.0 points, to 67.0 points, the lowest point since June 2020 and the sixth consecutive month of declines. The report noted the housing market's continued slide is due to affordability challenges caused by rising interest rates and home prices. An HMI reading above 50.0 indicates that more builders view sales conditions as good, rather than poor.

The National Association of Realtors' most recent "Commercial Market Insights," which analyzed the commercial real estate market through May, reported that the combination of high inflation and higher interest rates is causing mixed results in commercial real estate demand.

All commercial sectors experienced net positive absorption in the preceding four months including May. Supply in the multifamily sector outpaced demand, thus increasing the vacancy rate to 5.3% from 5.2%. In the office sector, the vacancy rate rose, to 12.2% from 9.7%, and, in the industrial market, the vacancy rate for core property markets continued at 4.0%. In the retail property market, the vacancy rate sits at 4.4%, which is below the 4.7% vacancy rate in 2020.

1. GROSS DOMESTIC PRODUCT

The Bureau of Economic Analysis (BEA) reported that the nation's economy—as indicated by GDP—contracted by 0.9% in the second quarter of 2022, showing that the U.S. economy slowed but at a lesser rate than in the first quarter of 2022, when it contracted by 1.6%. The rate for the second quarter of 2022 reflected decreases in private investment and federal government spending, while net exports and consumer spending increased. Following revisions, GDP expanded by 5.7% in 2021.

Final sales of domestic product increased at a rate of 1.1% in the second quarter of 2022, after falling by 1.2% in the first quarter of 2022. Final sales of domestic product are GDP minus the influence of private inventory investment, which tends to be volatile from quarter to quarter. In 2021, final sales of domestic product expanded at a rate of 5.3%. Final sales to domestic purchasers, or GDP excluding trade and inventories, fell at a rate of 0.3% in the second quarter of 2022, after rising 2.0% in the prior quarter.

(See Exhibits 1A, 1B, 2A, and 4 for historic and forecasted GDP figures.)

1.1 CONSUMER SPENDING

Consumer spending increased 0.7% in the second quarter of 2022, after rising 1.2% in the prior quarter. Consumer spending slowed in the second quarter of 2022 despite higher fuel and food prices and buying patterns shifted from durables to necessities. In 2021, consumer spending expanded at a rate of 7.9%. Consumer spending, also referred to as "personal consumption," accounts for approximately 70% of the U.S. GDP.

(See Exhibits 2A and 4 for historic and forecasted consumer spending figures.)

Consumer spending on durable goods—items meant to last three years or more, such as computers, cars, and machinery—fell after two quarters of strong growth, dropping 2.6% in the second quarter of 2022, which followed an increase of 5.9% in the first quarter of 2022. Consumer spending on durable goods grew 18.1% in 2021. Overall, consumer spending on durable goods subtracted 0.22 point from the GDP for the second quarter of 2022. Consumer spending on nondurable goods—items such as food and gasoline—decreased in the second quarter of 2022 by 5.5% after decreasing 3.7% in the first quarter of 2022. Overall, consumer spending on nondurable goods subtracted 0.85 percentage point from the GDP. Consumer spending on nondurable goods was at 9.1% in 2021. Service expenditures increased 4.1% in the second quarter of 2022 after rising 3.0% in the first quarter of 2022. In 2021, service expenditures grew by 5.8%.

EXHIBIT 4: Economic Indicators Historical Data

	MONTHLY DATA											
	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22	6/22
Real GDP			2.3			6.9			-1.6			-0.9
Consumer spending			2.0			2.5			1.8			1.0
Business investment			1.7			2.9			10.0			-0.1
Total government spending			0.9			-2.6			-2.9			-1.9
Exports			-5.3			22.4			-4.8			18.0
Imports			4.7			17.9			18.9			3.1
CPI (one-month % change)	0.5	0.3	0.4	0.9	0.7	0.6	0.6	0.8	1.2	0.3	1.0	1.3
Unemployment rate	5.4	5.2	4.8	4.6	4.2	3.9	4.0	3.8	3.6	3.6	3.6	3.6
PMI	59.9	59.7	60.5	60.8	60.6	58.8	57.6	58.6	57.1	55.4	56.1	53.0
Services PMI	64.1	62.2	62.6	66.7	68.4	62.3	59.9	56.5	58.3	57.1	55.9	55.3
HMI	80.0	75.0	76.0	80.0	83.0	84.0	83.0	81.0	79.0	77.0	69.0	67.0
Housing starts (millions)	1.6	1.6	1.6	1.6	1.7	1.8	1.7	1.8	1.7	1.8	1.6	1.6
Building permits (millions)	1.7	1.8	1.6	1.7	1.7	1.9	1.8	1.9	1.9	1.8	1.7	1.7

Notes: Real GDP and subcomponents data only available on a quarterly basis and therefore, are quarterly figures. GDP and its subcomponents, along with housing starts and building permits, are seasonally adjusted at annual rates. PMI is the Institute of Supply Management's Manufacturing Index—any reading above 50.0% suggests growth in the manufacturing economy, whereas a reading below 50.0% indicates contraction. Services PMI is the Institute of Supply Management's Non-Manufacturing Index, which measures the strength of the services sector—any reading above 50.0% suggests growth, whereas a reading below 50.0% indicates contraction. HMI is the National Association of Home Builders/Wells Fargo Housing Market Index—any reading over 50 indicates that more builders view sales conditions as good than poor.

	QUARTERLY DATA											
	3Q 18	4Q 18	1Q 19	2Q 19	3Q 19	4Q 19	1Q 20	2Q 20	3Q 20	4Q 20	1Q 21	2Q 21
Real GDP	1.9	0.9	2.4	3.2	2.8	1.9	-5.1	-31.2	33.8	4.5	6.3	6.7
Consumer spending	2.7	1.7	0.6	3.6	3.2	1.7	-6.9	-33.4	41.4	3.4	11.4	12.0
Business investment	2.8	4.8	4.7	6.7	2.9	-1.7	-8.1	-30.3	18.7	12.5	12.9	9.2
Total government spending	1.0	-0.8	2.7	5.0	2.1	3.0	3.7	3.9	-2.1	-0.5	4.2	-2.0
Exports	-6.1	0.5	3.1	-2.2	-0.8	1.2	-16.3	-59.9	54.5	22.5	-2.9	7.6
Imports	5.9	3.9	0.0	1.7	-1.1	-8.5	-13.1	-53.1	89.2	31.3	9.3	7.1
CPI (3-month % change)	0.2	-0.5	1.2	0.8	0.2	0.1	0.4	-0.1	1.0	0.1	1.7	2.6
Unemployment rate	3.7	3.9	3.8	3.7	3.5	3.5	4.4	11.1	7.9	4.2	6.0	5.9
PMI	59.5	54.3	54.6	51.6	48.2	47.8	49.7	52.2	55.7	60.5	64.7	60.9
Services PMI	60.8	58.0	56.3	55.4	53.5	54.9	53.6	56.5	57.2	57.7	63.7	60.7
HMI	67.0	56.0	62.0	64.0	68.0	76.0	72.0	58.0	83.0	86.0	82.0	81.0
Housing starts (millions)	1.2	1.1	1.2	1.2	1.3	1.6	1.3	1.3	1.4	1.7	1.7	1.7
Building permits (millions)	1.3	1.3	1.3	1.3	1.4	1.5	1.4	1.3	1.6	1.8	1.8	1.6

Notes: Unemployment rate, housing starts, building permits, PMI, Services PMI, and HMI are readings from the last month of the quarter. GDP and its subcomponents, along with housing starts and building permits, are seasonally adjusted at annual rates.

	YEARLY DATA											
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Real GDP	2.6	1.6	2.2	1.8	2.3	2.7	1.7	2.3	2.9	2.3	-3.4	5.7
Consumer spending	1.7	1.9	1.5	1.5	2.7	3.3	2.5	2.4	2.9	2.2	-3.8	7.9
Business investment	4.5	8.7	9.5	4.1	7.2	2.3	0.9	4.1	6.4	4.3	-5.3	7.4
Total government spending	0.0	-3.1	-2.1	-2.4	-0.9	1.8	2.0	0.5	1.4	2.2	2.5	0.5
Exports	12.1	7.1	3.4	3.0	3.9	0.3	0.4	4.1	2.8	-0.1	-13.6	4.5
Imports	13.1	5.6	2.7	1.2	5.2	5.2	1.5	4.4	4.1	1.2	-8.9	14.0
Consumer Price Index	1.6	3.2	2.1	1.5	1.6	0.1	1.3	2.1	1.9	2.3	0.1	0.6
Unemployment rate	9.6	8.9	8.1	7.4	6.2	5.3	4.9	4.4	3.9	3.7	8.1	5.4
Housing starts (millions)	0.6	0.6	0.8	0.9	1.0	1.1	1.2	1.2	1.2	1.3	1.4	1.6
Building permits (millions)	0.6	0.6	0.8	1.0	1.1	1.2	1.2	1.3	1.3	1.4	1.5	1.7

Notes: Yearly Consumer Price Index rates and yearly unemployment rates are the annual average rates.
Personal consumption includes spending on services and durable and nondurable goods. Government spending includes federal, state, and local government spending. As the government issues revised data, some historical reported figures may have changed.

Source of data: U.S. Department of Commerce, U.S. Department of Labor, U.S. Census Bureau, The Federal Reserve Board, the Institute of Supply Management, and the National Association of Home Builders.

Consumer spending continued at historically high levels, and growth picked up from the prior month as total retail sales rose 1.0% in June with advance estimates of total retail sales at $680.6 billion, which is 8.4% higher than June 2021. The report noted retail trade sales also rose by 1.0% from May 2022 and are 7.7% more than a year ago. Economists view retail sales as a key economic indicator since consumer spending accounts for nearly two-thirds of the U.S. economy.

Nine of the 13 major categories in the "Advance Monthly Retail Trade Report," which highlights sales figures across most retail categories, had higher sales. Of note, sales at gasoline stations rose by 3.6%, at nonstore retailers by 2.2%, at miscellaneous store retailers by 1.4%, at furniture and home furnishing stores also by 1.4%, and at food services and drinking places by 1.0%. Sales for building materials and garden equipment fell by 0.9%.

Retail sales figures including food services over the past 12 months increased 8.4%. Nine of the 13 retail categories had an increase in sales, with sales at gasoline stations up 49.1%; sales at food services and drinking places rising 13.4%; and sales at miscellaneous store retailers growing 15.1%.

Core retail sales increased 0.7% in June. The core retail sales figure excludes sales of automobiles, gasoline, building materials, and food services and corresponds most closely with the consumer-spending component of gross domestic product. Over the past 12 months, core retail sales have risen 6.6%.

(See Exhibit 6 for total retail and food service sales figures.)

1.2 GOVERNMENT SPENDING

Total government spending contracted at a rate of 1.9% in the second quarter of 2022 after decreasing 2.9% in the prior quarter. The figures for government spending for the second quarter of 2022 subtracted 0.33 percentage point from the GDP. In 2021, government spending rose 0.5%.

(See Exhibits 2A and 4 for historic and forecasted government spending figures.)

Federal government spending decreased 3.2% in the second quarter of 2022 after decreasing 6.8% in first quarter of 2022. In 2021, federal government spending increased by 0.6%. Federal government spending subtracted 0.20 percentage point from the GDP rate for the second quarter of 2022.

National defense spending increased 2.5% in the second quarter of 2022, after a decline of 9.9% in the prior quarter. National defense spending contracted 0.9% in 2021. Federal nondefense spending decreased 10.5% in the second quarter of 2022.

State and local government spending decreased 1.2% in the second quarter of 2022. In 2021, state and local government spending increased by 0.4%.

(See Exhibits 2A and 4 for historic and forecasted government spending figures.)

1.3 FIXED INVESTMENT

Business investment, also referred to as "nonresidential fixed investment," fell 0.1% in the second quarter of 2022 after rising 10.0% in first quarter of 2022. The decrease in business investment subtracted 0.01 percentage point from the GDP for the second quarter of 2022. In 2021, nonresidential fixed investment increased 7.4%.

EXHIBIT 5A: National Activity Index—Past 24 Months

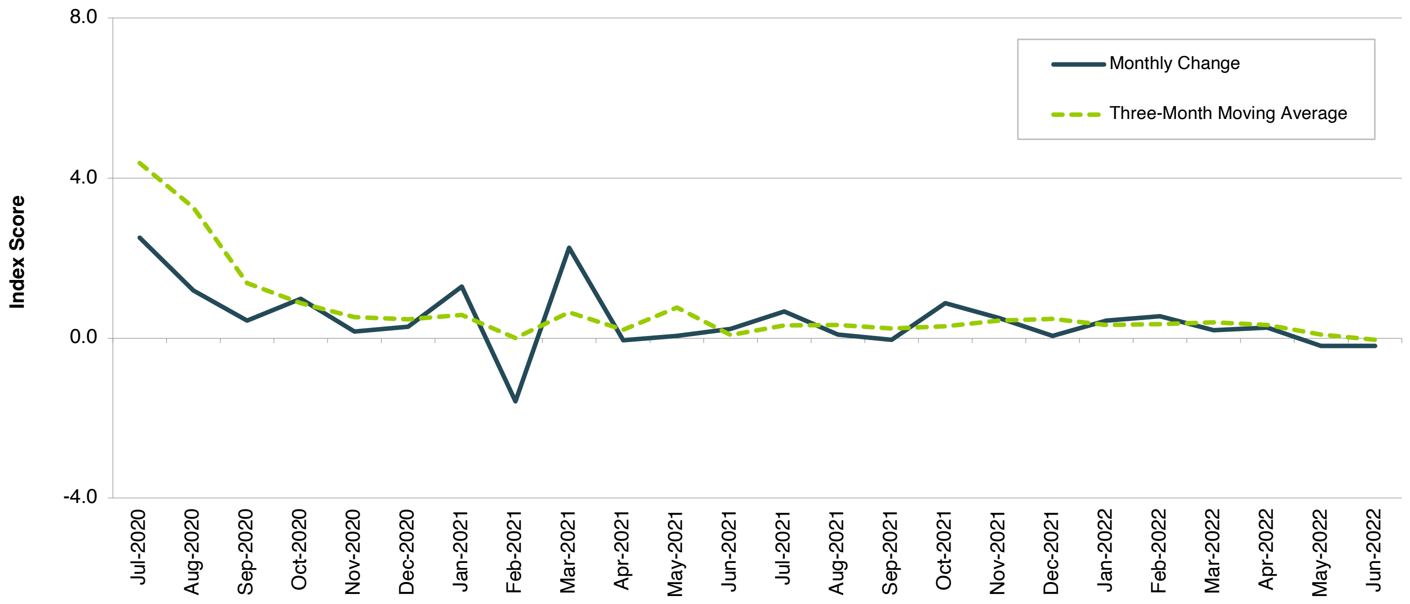


EXHIBIT 5B: National Activity Index—Monthly Change for the Last 10 Years

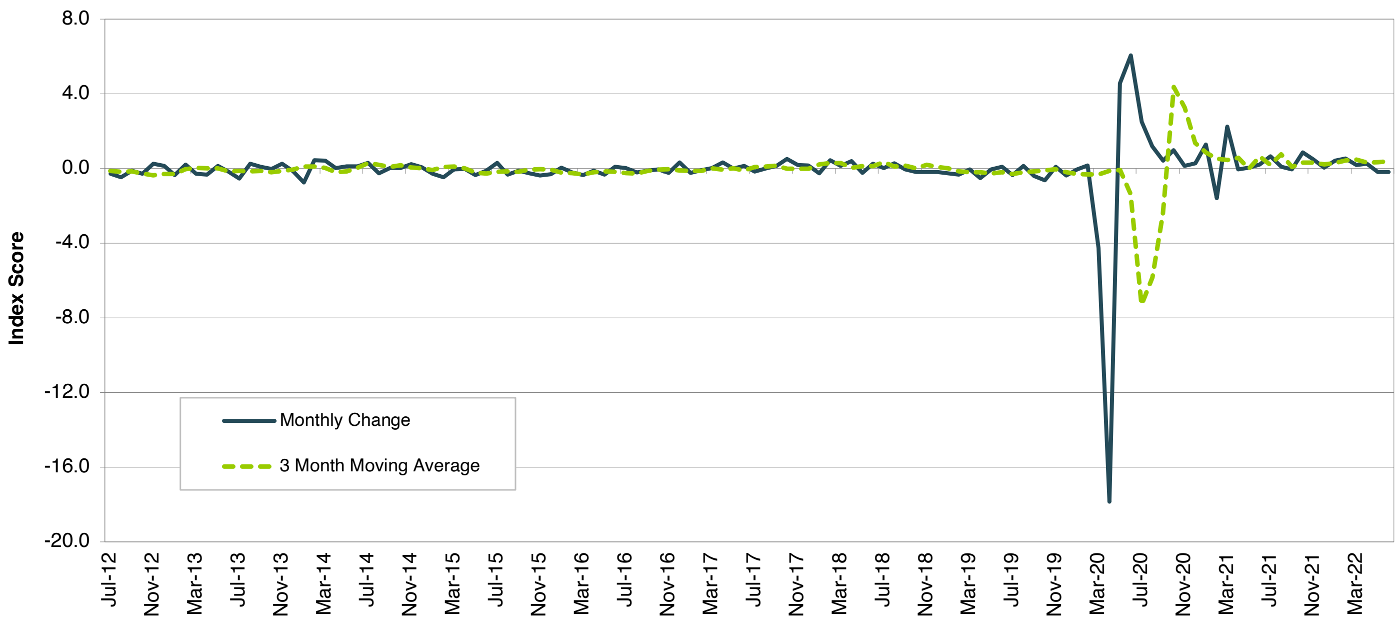


EXHIBIT 6A: Total U.S. Retail Sales—Past 24 Months

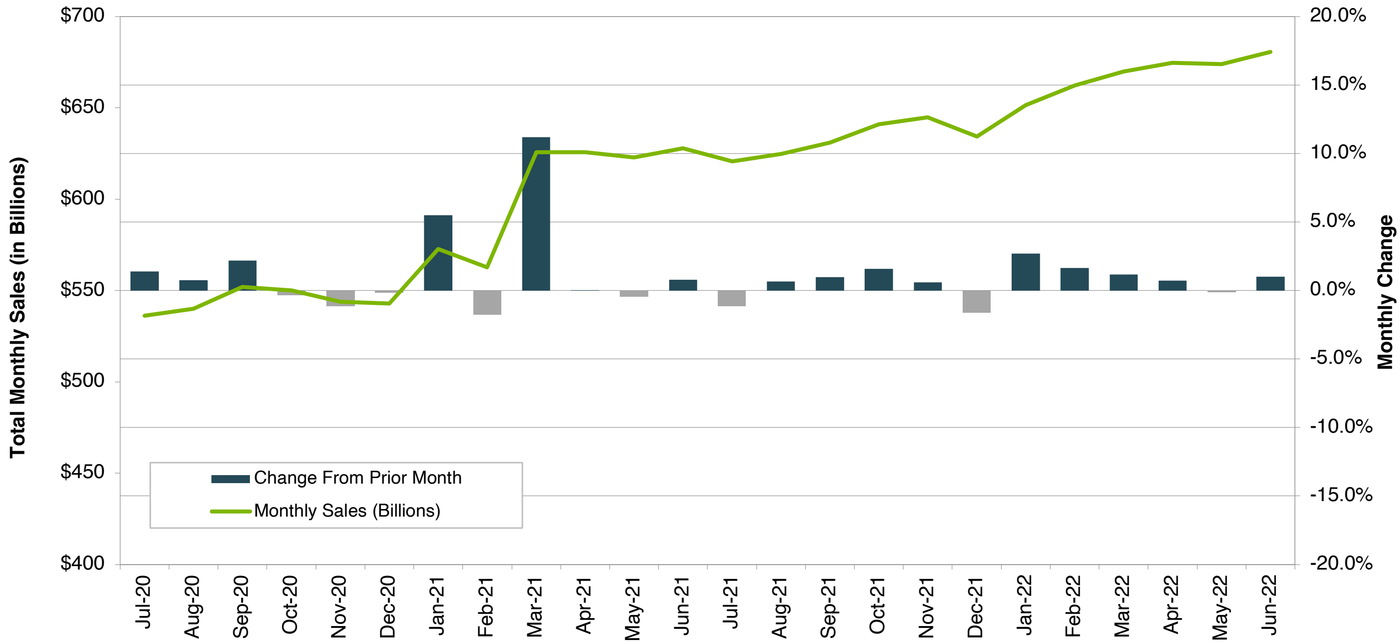
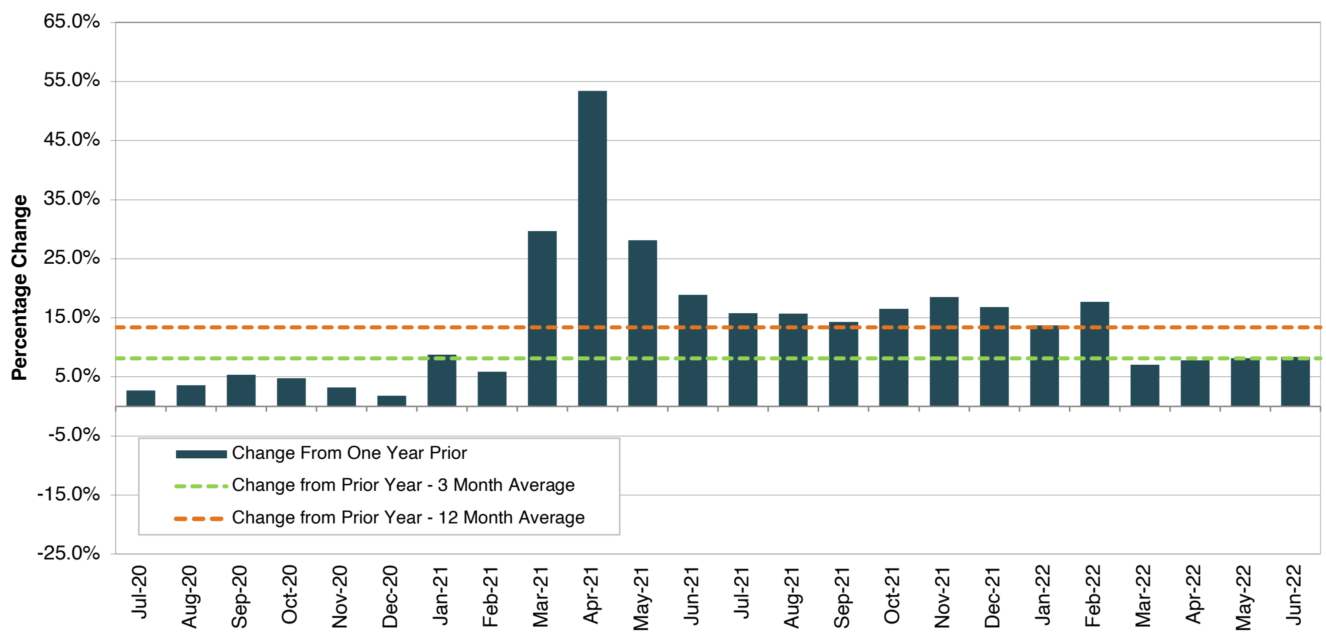


EXHIBIT 6B: Total U.S. Retail Sales Change From One Year Prior—Past 24 Months With Averages



Source of data: U.S. Department of Commerce.
Notes: Monthly retail and food services sale are seasonally adjusted.

EXHIBIT 6C: Total Retail Sales Over 10 Years—Monthly Change

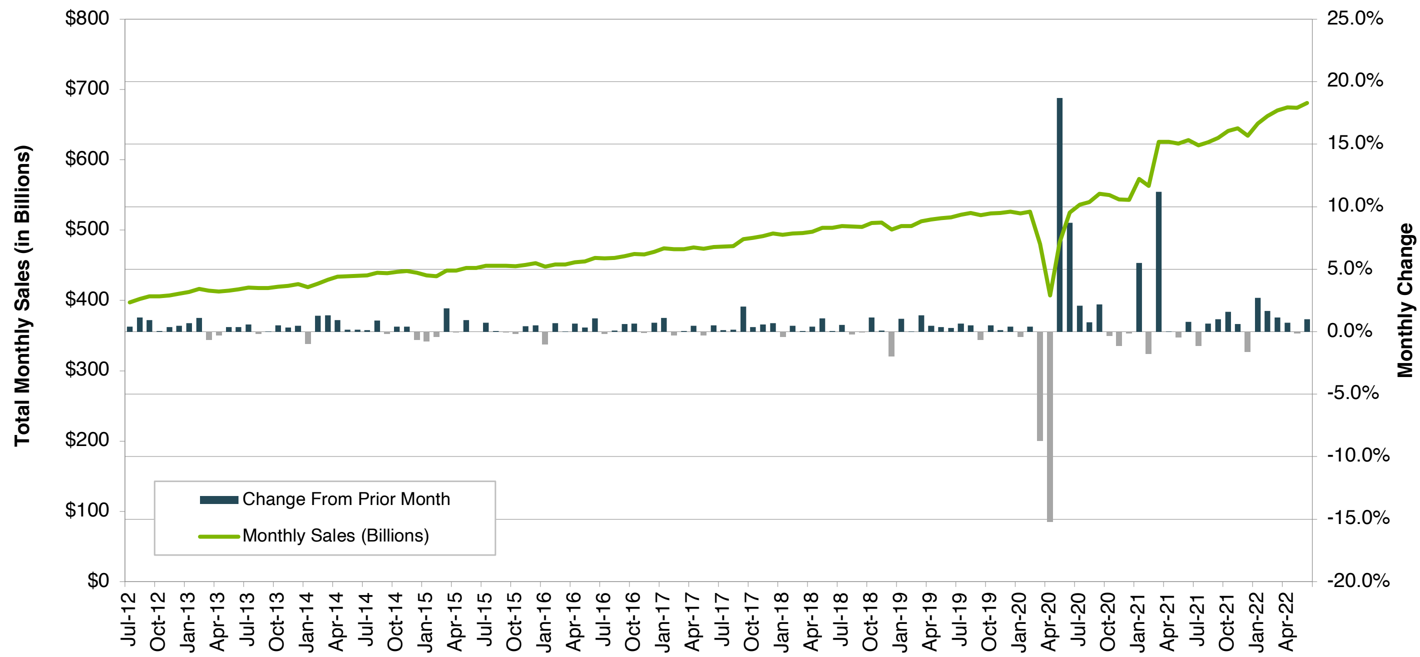
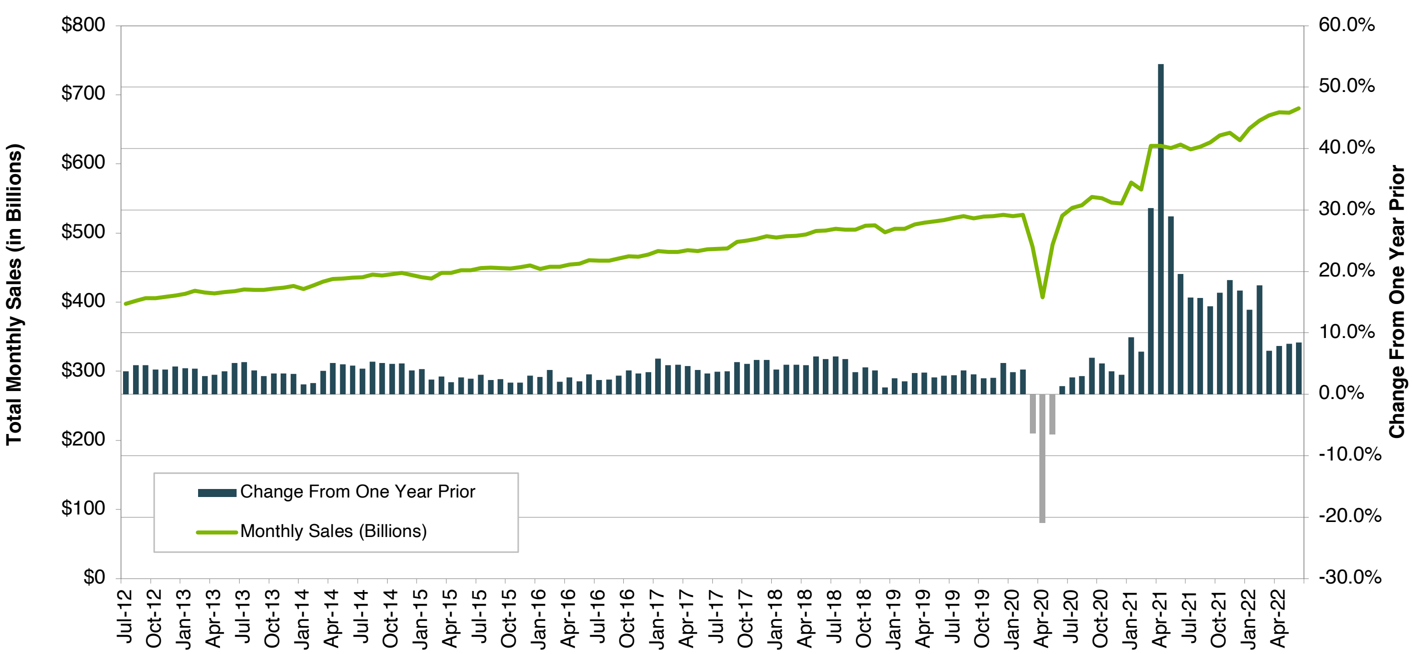


EXHIBIT 6D: Total Retail Sales Over 10 Years—Percent Change From One Year Prior



Source of data: U.S. Department of Commerce.
Notes: Monthly retail and food services sale are seasonally adjusted.

(See Exhibits 2A and 4 for historic and forecasted business spending figures.)

Business spending on structures decreased at an annual rate of 11.7% in the second quarter of 2022, after decreasing 0.9% in the first quarter of 2022. Business spending on equipment decreased 2.7%, after increasing 14.1% in the first quarter of 2022. Business spending on intellectual property products rose 9.2% in the second quarter of 2022.

Residential fixed investment, often considered a proxy for the housing market, decreased 14.0% in the second quarter of 2022. The figure in residential fixed investment for the second quarter of 2022 subtracted 0.71 point from the GDP for the second quarter of 2022.

1.4 BUSINESS INVENTORIES

Businesses' inventory investments decreased in the second quarter of 2022, subtracting 1.96 percentage points following a drop of 0.26 percentage point from the GDP in the first quarter of 2022. Business inventory investment added 0.37 percentage point to the GDP in 2021.

1.5 EXPORTS AND IMPORTS

The GDP report showed that America's trade deficit narrowed in the second quarter of 2022 when compared to the first quarter of 2022; the second quarter deficit was $251.2 billion compared with $283.7 billion in the first quarter of 2022. The trade deficit shrank to $79.6 billion in June 2022 after shrinking slightly in May to $84.9 billion (revised). Year-to-date, the deficit increased 33.4% or $134.1 billion from the same period in 2021.

Exports increased by 9.3% in the second quarter of 2022, after increasing 2.7% in the first quarter of 2022. Exported goods increased by 10.5% in the second quarter of 2022 after an increase of 2.9% in the first quarter of 2022.

Imports, which are subtracted in the calculation of GDP, increased 3.3% in the second quarter of 2022, after rising 8.4% in the first quarter of 2022. Imported goods decreased at a rate of 2.5% in the second quarter of 2022, while imported services rose 7.8%.

Net exports (the value of exports minus the value of imports) added 1.43 percentage points to the GDP for second quarter of 2022, after subtracting 3.23 percentage points in the first quarter of 2022. Net exports subtracted 1.40 percentage points in 2021.

(See Exhibit 4 for historic export and import figures.)

2. CONSUMER PRICES AND INFLATION RATES

According to the Bureau of Economic Analysis, the "advance" price index estimates for gross domestic purchases increased 8.2% in the second quarter of 2022, compared with the increase of 8.0% in the first quarter of 2022. The index for gross domestic purchases measures prices U.S. residents pay for goods and services. It grew by 3.9% in 2021. The "core" (less food and energy prices) personal consumption expenditures index increased 4.4% in the second quarter of 2022 after a rise of 5.2% in the first quarter of 2022. The core personal consumption expenditures index measures the prices consumers pay for goods and services without the volatility caused by movements in food and energy prices to reveal underlying inflation trends.

Consumer prices, as measured by the Consumer Price Index (CPI), rose 1.3% in June, compared with a 1.0% rise in May. Following the monthly increase, the annual rate rose 9.1%, which is the largest annual increase since 1981. Increases were broad-based, and the indexes for shelter, food, and gasoline were the largest contributors to the seasonally adjusted all-items increase. The energy index continued its upward trend in June, rising 7.5%. Prices of gasoline increased sharply, by 11.2%, over May. The energy index has risen 41.6% over the last year, which is the largest 12-month increase in this index since April 1980.

The CPI is a measure of a basket of products and services—including housing, electricity, food, and transportation—and is used as a measure of inflation. The CPI is comprised of three main indexes: the food index, the energy index, and the all-items less food and energy index (also known as “Core CPI”). The Core CPI is a measure of inflation that excludes volatile food and energy costs. The Core CPI rose 0.7% in June, 0.1% higher than May. The Core CPI has risen 5.9% over the past 12 months.

The Chained Consumer Price Index for all urban consumers rose 1.2% in June, after a rise of 1.0% in May. Over the past 12 months, the index is up 8.4%. The Chained Consumer Price Index was designed to be a closer approximation of a cost-of-living index in that it, in its final form, accounts for any substitution that consumers make across item categories in response to changes in relative prices.

The Producer Price Index (PPI) rose 1.1% in June, after it rose 0.9% in May and 0.4% in April. The PPI for final demand is comprised of two main indexes: final demand services and final demand goods. The rise in June reflects a 2.4% advance in prices for final demand goods and 0.4% increase for final demand services. Over the past 12 months, the PPI has grown at an annual rate of 11.3%.

The index for final demand less foods, energy, and trade services, or Core PPI, increased 0.5% in June, after rising 0.6% in May and 1.1% in April. Over the past 12 months, prices for final demand less foods, energy, and trade services rose 6.4%.

(See Exhibit 7 for historic PPI figures.)

3. ENERGY PRICES

The Energy Information Administration (EIA) predicts that the West Texas Intermediate crude oil spot price will average approximately $98.79 per barrel in 2022, down from $102.47 per barrel in the previous forecast, and fall to $89.75 per barrel in 2023, down from $93.24 per barrel in May. The average price for West Texas Intermediate crude in 2021 was $68.21 per barrel. The EIA expects retail prices for regular-grade gas to average $4.05 per gallon in 2022 and $3.57 per gallon in 2023, compared with $3.02 per gallon in 2021.

The EIA believes the Henry Hub natural gas spot price will average $6.02 per million Btu (MMBtu) in 2022 down from $7.40 per MMBtu in the previous forecast and drop to $4.76 per MMBtu in 2023, a two-cent increase over the May forecast. The average Henry Hub natural gas spot price was $3.91 per MMBtu in 2021.

The cost of coal delivered to electricity-generating plants, which averaged $1.98 per MMBtu in 2021, is expected to average $2.10 per MMBtu in 2022 and $1.99 per MMBtu in 2023. Residential electricity prices, which averaged 13.72 cents per kilowatt-hour (kWh) in 2021, are expected to average 14.45 cents per kWh in 2022 then rise to 14.66 cents per kWh in 2023.

(See Exhibit 2B for historic and forecasted energy price figures.)

EXHIBIT 7A: U.S. Consumer Price Index—Past 24 Months

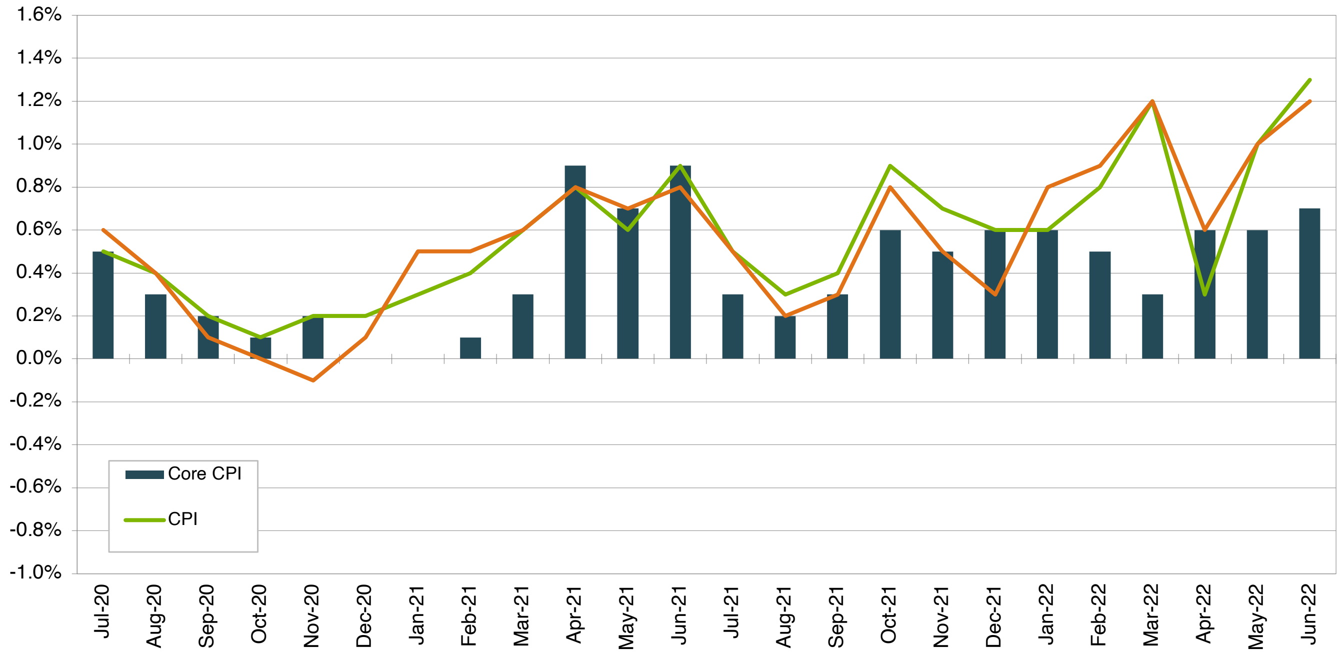
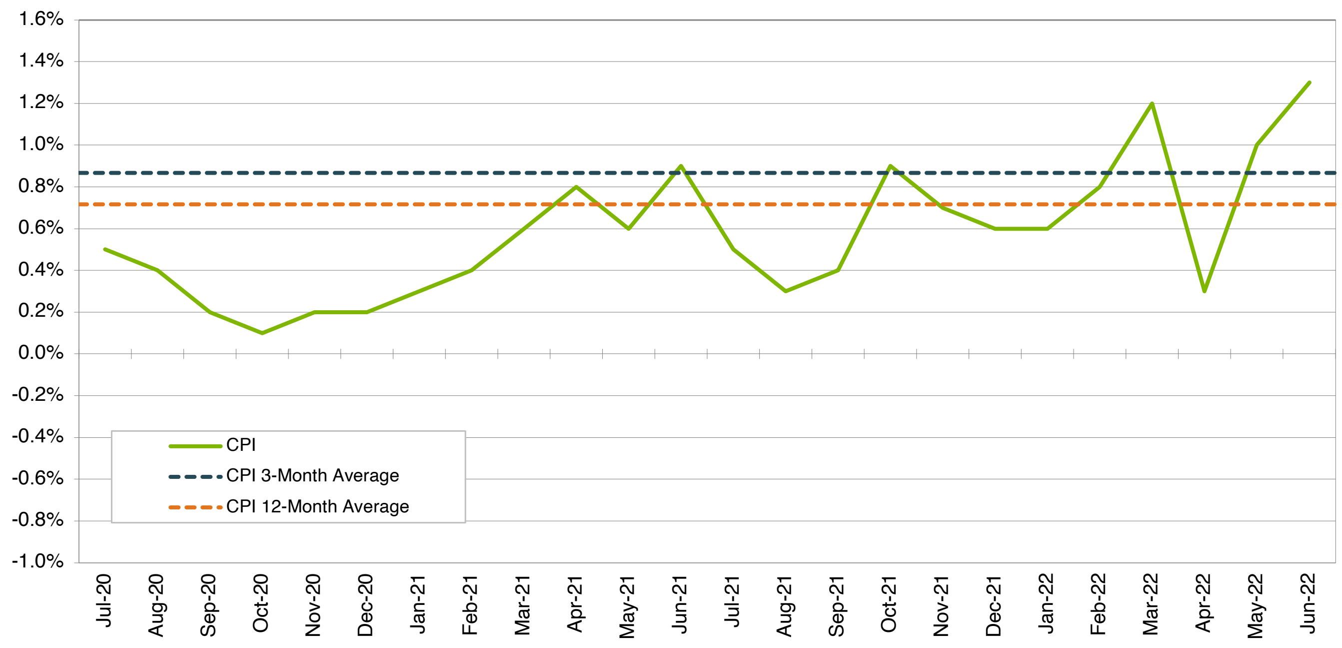


EXHIBIT 7B: U.S. Consumer Price Index—Past 24 Months With Averages



Source of data: U.S. Department of Labor.
Note: Data are seasonally adjusted change from the prior month. Core CPI is the All Items Less Food and Energy Index. Core PPI is the Final Demand Goods Less Foods and Energy Index.

EXHIBIT 7C: U.S. Producer Price Index—Past 24 Months

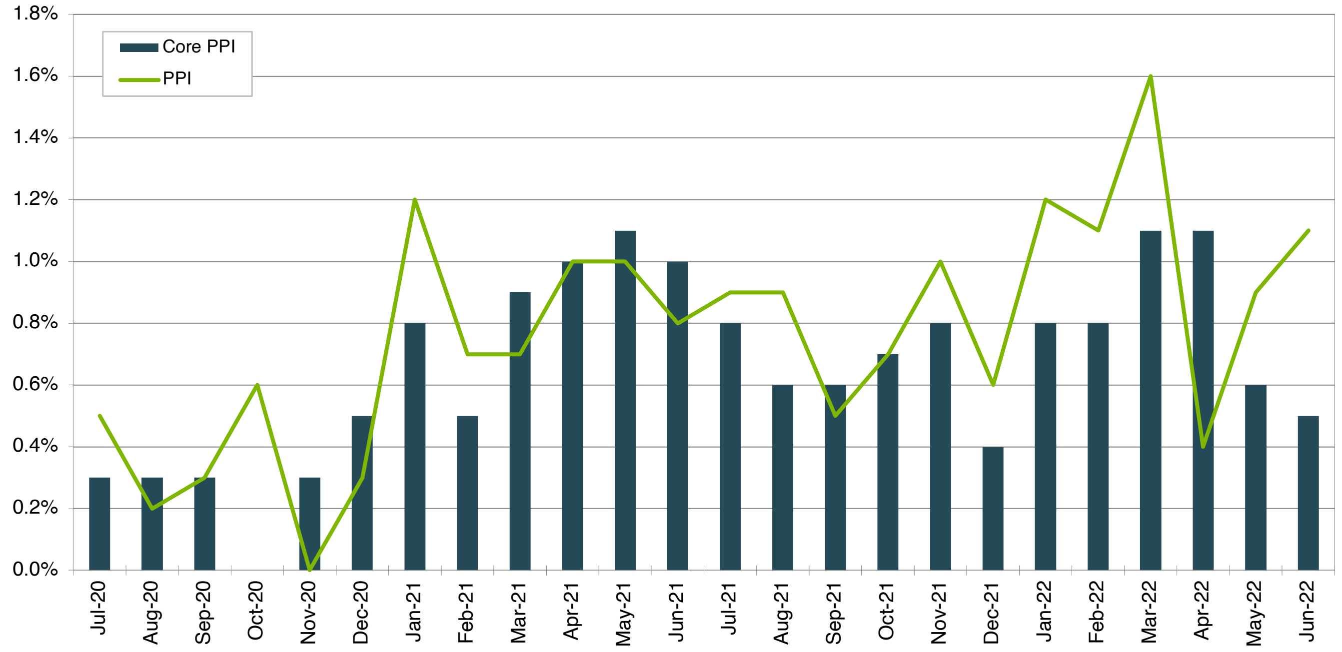
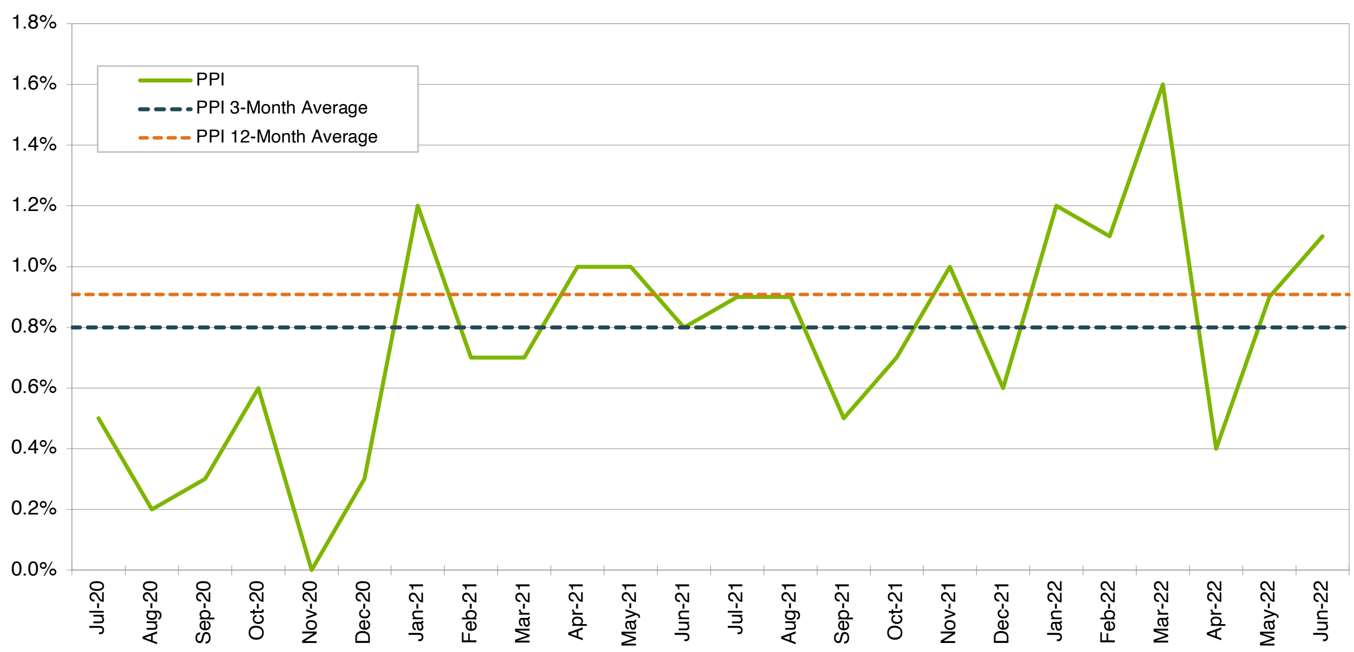


EXHIBIT 7D: U.S. Producer Price Index—Past 24 Months With Averages



Source of data: U.S. Department of Labor.
Note: Data are seasonally adjusted change from the prior month. Core CPI is the All Items Less Food and Energy Index. Core PPI is the Final Demand Goods Less Foods and Energy Index.

4. INTEREST RATES

The Federal Open Market Committee (FOMC) met twice during the second quarter of 2022, issuing a statement from each meeting. The statement issued after the second meeting held mid-June indicated overall economic activity appears to have picked up and that job gains were robust and unemployment low in recent months. Inflation remains elevated due to pandemic-related supply-and-demand imbalances, higher energy prices, and broad price pressures. The invasion of Ukraine by Russia has created additional upward pressure on inflation. COVID-19-related lockdowns in China further disrupted the supply chains.

The FOMC maintained the federal funds rate at between 0.0% and 0.25% since the onset of the coronavirus pandemic in 2020 until recently voting to increase the rates. During the meeting in May, the FOMC raised the target range for the federal funds rate to between 0.75% and 1.00% and anticipates ongoing increases in the target range will be appropriate to achieve its maximum employment and price stability goals. The committee also decided to begin reducing its holdings of Treasury securities and agency debt and agency-backed securities as of June 1.

During the meeting held in June, the FOMC voted to raise the federal funds rate to between 1.50% and 1.75%. The committee also announced it will continue to reduce its holdings of Treasury securities and agency debt and agency mortgage-backed securities.

The federal funds rate is the interest rate at which a commercial bank lends immediately available funds in balances at the Federal Reserve to another commercial bank.

The FOMC will continue to monitor the implications of incoming information for the economic outlook and assess information related to public health, as well as global developments and inflation pressures, and will use its tools and act as appropriate to support the economy and return inflation to the committee's 2.0% objective.

5. UNEMPLOYMENT AND PERSONAL INCOME

The U.S. economy added 372,000 jobs to the labor market, besting gains of 250,000 forecast by Dow Jones, according to a CNBC report citing Bureau of Labor Statistics' data. Gains in leisure and hospitality, professional and business services, and healthcare led job growth, followed by gains in transportation and warehousing, manufacturing, and information sectors. In addition, the report contained revisions to job figures from the prior two months, with gains in April of 368,000 jobs and gains in May of 384,000, a total of 74,000 fewer jobs.

In June, the share of employed persons who teleworked because of the coronavirus pandemic declined 0.3 percentage points, to 7.1%. These data refer to employed persons who teleworked or worked at home for pay at some point in the last four weeks specifically because of the pandemic. In June, 2.1 million persons reported that they had been unable to work because their employer closed or lost business due to the pandemic—that is, they did not work at all or worked fewer hours at some point in the last four weeks due to the pandemic, which is up from 1.8 million persons in May.

Among those who reported in June that they were unable to work because of pandemic-related closures or lost business, 24.8% received at least some pay from their employer for the hours not worked, which is up from 19.9% in the prior month. Among those not in the labor force in June, 610,000 persons were prevented from looking for work due to the pandemic. This figure is up from 455,000 in May.

Among the unemployed, the number of permanent job losers remained at 1.3 million in June. The number of persons on temporary layoff increased on the month, to 827,000, which is 17,000 higher than May.

Employment in the leisure and hospitality sector increased by 67,000 jobs but remains 1.3 million jobs lower than it was in February 2020. Employment in the professional and business services sector continued its upward trend, adding 74,000 jobs, and is higher than it was in February 2020 by 880,000 jobs. Employment in the retail trade sector added 15,400 jobs and is higher than it was in February 2020 by 191,700 jobs. The manufacturing sector added 29,000 jobs in June, reaching its February 2020 level. Transportation and warehousing gained 36,000 jobs and continues to be significantly above its February 2020 level. Construction added 13,000 jobs in June and is 51,000 jobs higher than the prepandemic levels in February 2020.

The report found that labor-force participation fell slightly, by 0.1 percentage point, in June, to 62.2%, and is 1.2 percentage point lower than its 63.4% rate in February 2020. The employment-population ratio, which is the share of the working-age population with a job, also fell slightly, by 0.2 percentage point, in June, to 59.9%, but is 1.3 percentage points below its 61.2% level from February 2020.

The number of long-term unemployed (those jobless for 27 weeks or more) declined slightly, to 1.3 million, and represents 22.6% of all unemployed persons in June. The figure is 215,000 higher than the figure from February 2020.

The U3 unemployment rate stayed at 3.6% from May to June for the fourth consecutive month and is the lowest since the start of the coronavirus pandemic.

The broadest measure of labor underutilization, the U6 unemployment rate, improved by 0.4 percentage point in June, to a seasonally adjusted 6.7%. This is the lowest rate recorded since the beginning of the pandemic. The U6 unemployment rate had continually improved after hitting the highest level on record, at 22.8%, in April 2020, until it hit 6.9% in March 2022. U6 unemployment is broader than U3 and includes "marginally attached workers" and people who are looking for and want full-time work but have settled for part-time employment. Marginally attached workers are people who are not actively looking for work but have indicated they want a job and have looked for work (without success) sometime in the past 12 months. This class also includes "discouraged workers," those who have completely given up on finding a job because they feel they would be unable to do so.

In the most recent jobs report published by ADP in May, private-sector employment increased by 128,000 jobs. The report showed gains across the three business sizes, with large-sized businesses adding 122,000 jobs, small businesses losing 91,000 jobs, and midsized businesses adding 97,000 jobs. The number of service-sector jobs increased by 104,000, and the number of goods-producing jobs increased by 24,000. Within the small-sized-business segment, the services sector saw losses of 71,000 and the goods-producing sector subtracted 20,000 jobs.

(See Exhibits 2A, 4, and 8 for historic and forecasted unemployment figures.)

Wages increased 10 cents in June, to $32.08, and remain higher by $1.56, or 5.1%, over the past 12 months. Average hourly earnings for private-sector production and nonsupervisory employees increased 13 cents in June, to $27.45. Over the last 12 months, average hourly earnings for private-sector production and nonsupervisory employees have increased $1.64, or 6.4%.

Compensation costs for civilian workers for the three-month period ending June 2022, as measured by the Employment Cost Index, increased 1.3% as wages and salaries (which comprise 70% of compensation costs) increased 1.4% and benefit costs (which make up the remaining 30%) increased 1.2%. Over the past 12 months,

EXHIBIT 8A: U.S. Employment—Past 24 Months

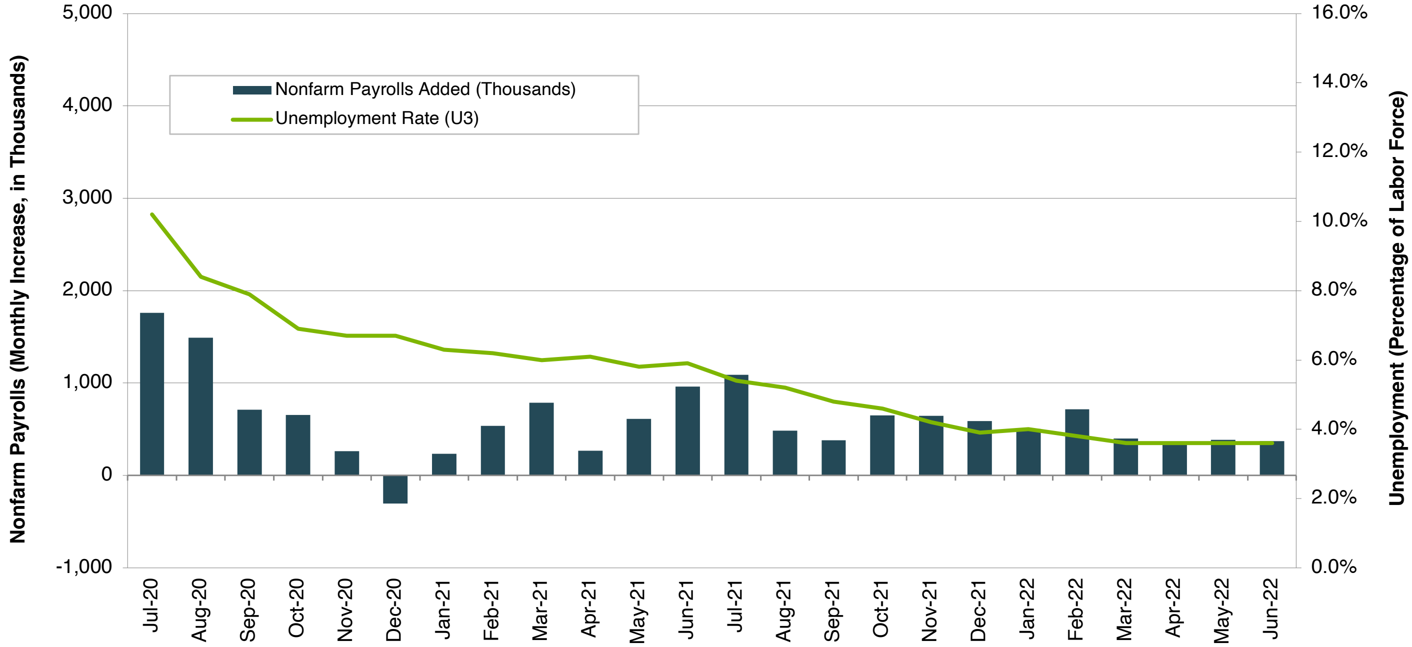
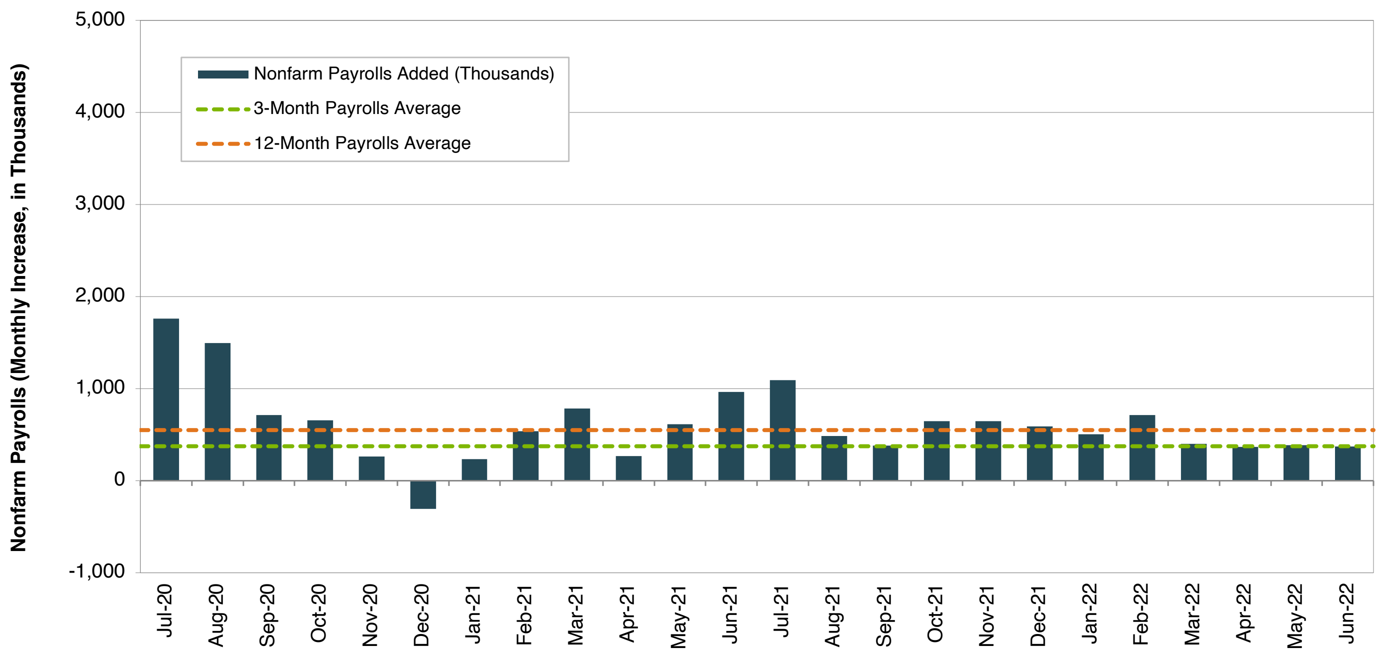


EXHIBIT 8B: U.S. Employment—Past 24 Months With Averages



Source of data: U.S. Department of Labor.

Notes: U3 is the official unemployment rate per the International Labour Organization definition and occurs when people are without jobs and they have actively looked for work within the past four weeks. U6 unemployment is broader than U3 to include "marginally attached workers" and people who are looking for and want full-time work but have to settle on part-time employment. "Marginally attached workers" are people who are not actively looking for work, but who have indicated that they want a job and have looked for work (without success) sometime in the past 12 months. This class also includes "discouraged workers" who have completely given up on finding a job because they feel that they just won't find one.

EXHIBIT 8C: U.S. Employment—10 Years

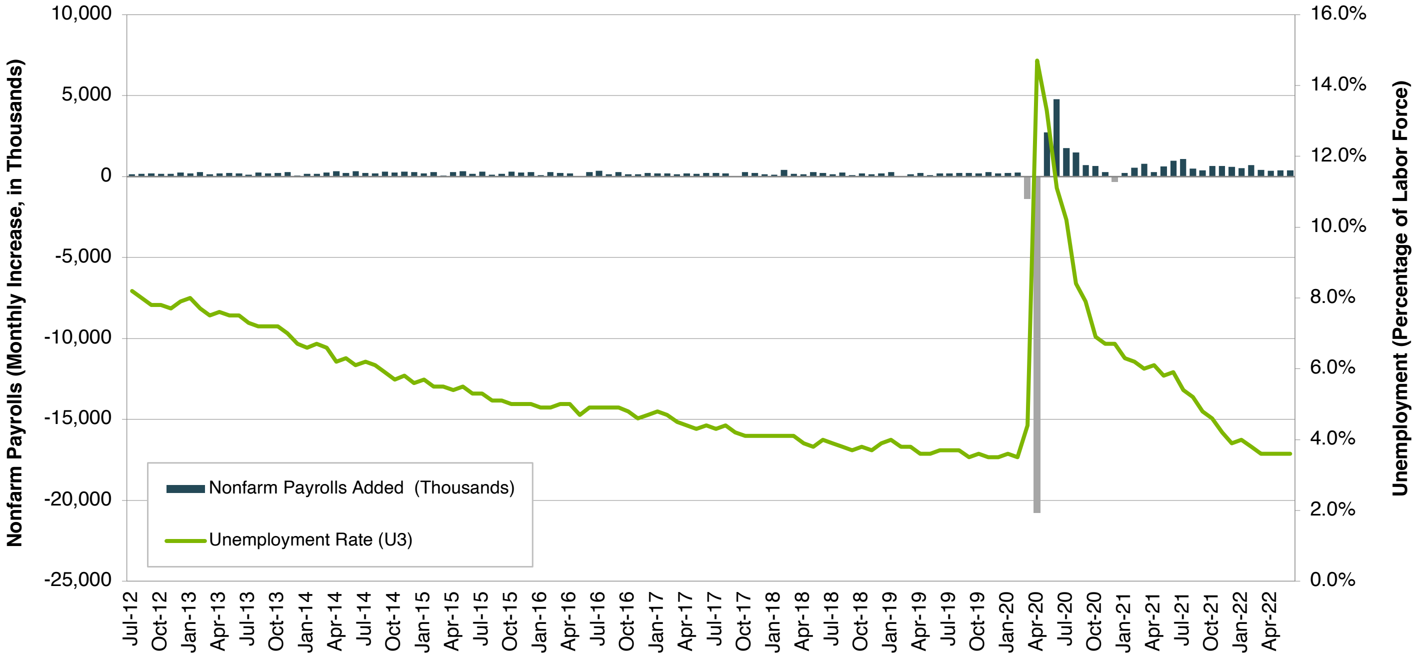
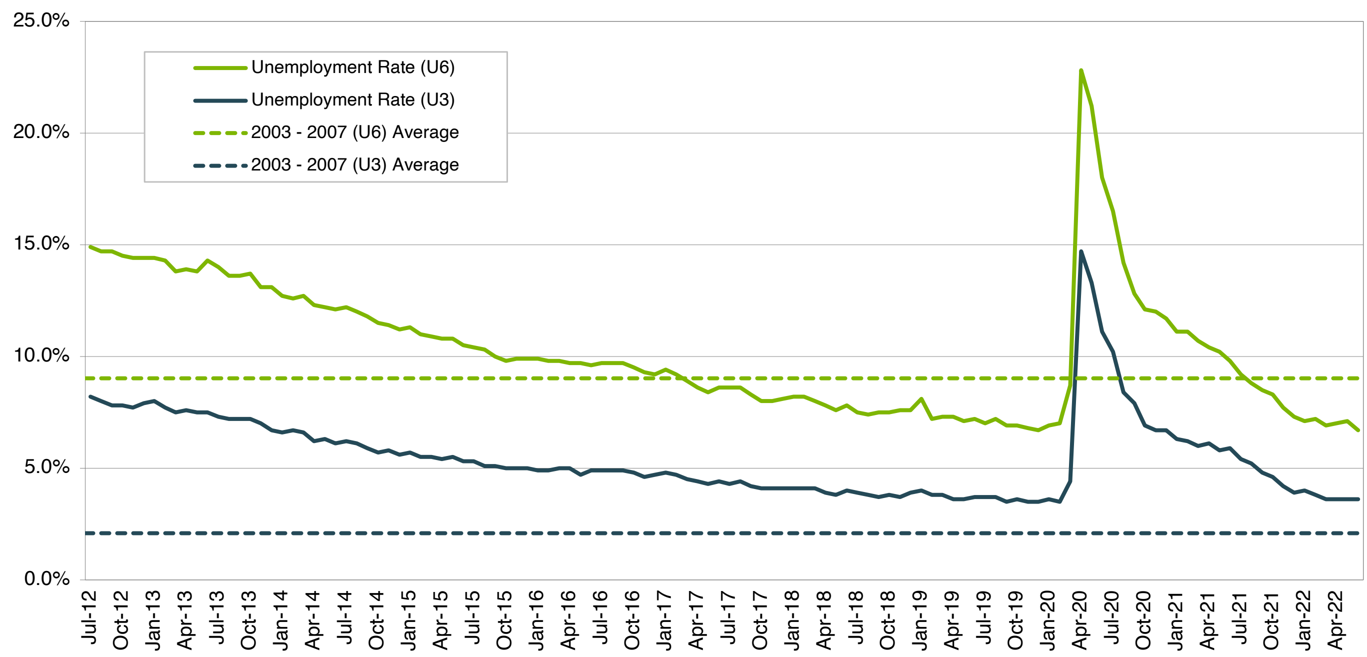


EXHIBIT 8D: U3 Unemployment Compared With U6 Unemployment—10 Years



Source of data: U.S. Department of Labor.

Notes: U3 is the official unemployment rate per the International Labour Organization definition and occurs when people are without jobs and they have actively looked for work within the past four weeks. U6 unemployment is broader than U3 to include "marginally attached workers" and people who are looking for and want full-time work but have to settle on part-time employment. "Marginally attached workers" are people who are not actively looking for work, but who have indicated that they want a job and have looked for work (without success) sometime in the past 12 months. This class also includes "discouraged workers" who have completely given up on finding a job because they feel that they just won't find one.

compensation costs for civilian workers increased 5.1%, which is 0.6 percentage point higher than the first-quarter 2022 percentage and 2.2 percentage points higher than the figure from one year ago.

Compensation for private-industry workers increased 5.5% over the past year, compared to 3.1% in June 2021. Wages and salaries increased 5.7% for the 12-month period ending June 2022 and increased 3.5% in June 2021. However, when adjusted for inflation, wages and salaries declined 3.1% for the 12-month period ending June 2022. Employer costs of benefits increased 5.3% for the 12-month period ending June 2022 but declined 3.5% when adjusted for inflation. Employer (unadjusted) costs for healthcare benefits increased 4.6% for the 12-month period ending June 2022.

The Employment Cost Index is published quarterly by the Bureau of Labor Statistics and draws from a sample of 25,300 observations from 6,200 private businesses as well as 7,800 observations from 1,400 government offices.

The average workweek for all private workers held steady in June, at 34.5 hours, and is down 0.3 hour from one year ago. The manufacturing workweek decreased 0.1 hour in June, to 40.3 hours, and the number of manufacturing overtime hours held at 3.2 hours. The average workweek for production and nonsupervisory employees remained at 34.0 hours in June, which is 0.3 hour less than one year ago.

The Bureau of Economic Analysis reported that current-dollar personal income increased $353.8 billion in the second quarter of 2022, compared with an increase of $247.2 billion in the first quarter of 2022. The increase primarily reflected increases in compensation, proprietors' income, personal income receipts on assets, and rental income. Within compensation, the increase reflected increases in private wages and salaries. The increase in proprietors' income was in both farm and nonfarm income. Personal interest income had the highest increase in personal income receipts on assets.

Disposable personal income increased $291.4 billion, or 6.6%, in the second quarter of 2022, compared with a decrease of $58.8 billion, or -1.3%, in the first quarter of 2022. Real disposable personal income dropped 0.5%, in the second quarter of 2022, compared with a decrease of 7.8%, in the first quarter of 2022.

Personal saving—disposable personal income less personal outlays—was $968.4 billion in the second quarter of 2022, compared with $1.02 trillion in the first quarter of 2022. The personal saving rate—saving as a percentage of disposable personal income—was 5.2% in the second quarter of 2022, less than the 5.6% rate in the first quarter of 2022.

6. INDEX OF LEADING INDICATORS

The Conference Board's Leading Economic Index (LEI) decreased by 0.8% in June following a decrease of 0.6% in May. The index now stands at 117.1 points. The June decrease was predominantly due to a lowering of consumer expectations, a falling stock market, and weaker new orders for manufacturing. The LEI was down 1.8% over the first half of 2022; this is a downturn from its 3.3% growth in the second half of 2021. The Conference Board is now forecasting that a recession is likely in the fourth quarter of 2022 and/or the first quarter of 2023 spurred by high inflation and tightening monetary policies. The labor market is "moderating."

The board's coincident index, designed to reflect current economic conditions, increased 0.2% in June, to 108.6, following a 0.2% increase in May. The lagging index rose 0.8% in June, to 113.9.

The LEI is a leading American economic indicator intended to forecast future activity. The Conference Board, a nongovernmental organization, calculates the index from the values of 10 key variables:

- Average weekly hours, manufacturing;
- Average weekly initial claims for unemployment insurance;
- Manufacturers' new orders, consumer goods and materials;
- Institute for Supply Management's Index of New Orders;
- Manufacturers' new orders, nondefense capital goods excluding aircraft orders;
- Building permits, new private housing units;
- Stock prices, 500 common stocks;
- Leading Credit Index;
- Interest rate spread, 10-year Treasury bonds less federal funds; and
- Average consumer expectations for business conditions.

The Chicago Fed's National Activity Index (CFNAI) remained unchanged in June, at -0.19 point. The figure for May was adjusted downward, from +0.01 to -0.19. The score received negative contributions from two of the four broad categories of indicators used to construct the index, and two categories deteriorated from May.

The CFNAI Diffusion Index, which is also a three-month moving average, dropped to -0.04 in June from +0.09 in May (adjusted downward from +0.39). Forty-one of the 85 individual indicators made positive contributions to the CFNAI in June, while 44 made negative contributions. Forty-one indicators improved from May to June, while 42 indicators deteriorated, and two were unchanged. Of the indicators that improved, 17 made negative contributions.

Production-related indicators contributed -0.20 to the CFNAI in June, down from -0.17 in May. Industrial production decreased 0.2%. The contribution of the sales, orders, and inventories category to the CFNAI moved up to +0.03 in June from -0.01 in May.

Employment-related indicators contributed +0.05 to the CFNAI in June, a slight decrease from the +0.06 contribution in May. Nonfarm payrolls increased by 372,000 in June after rising by 384,000 in May, and the unemployment rate held steady for the fourth consecutive month, at 3.6% in June. The contribution of the personal consumption and housing category to the CFNAI rose slightly, to -0.06 in June from an adjusted -0.08 in May.

The CFNAI was constructed using data available as of July 21, 2022. At that time, June data for 51 of the 85 indicators had been published. For all missing data, estimates were used in constructing the index. The May monthly index value was revised to -0.19 from an initial estimate of +0.01, and the April monthly index value was revised to +0.26 from last month's estimate of +0.40. Revisions to the monthly index can be attributed to two main factors: revisions in previously published data and differences between the estimates of previously unavailable data and subsequently published data. The revisions to both May and April monthly index values were primarily due to the former.

The National Activity Index is designed to gauge overall economic activity and related inflationary pressure and includes 85 economic indicators that are drawn from four broad categories of data: production and income; employment, unemployment, and hours; personal consumption and housing; and sales, orders, and inventories. Each of these data series measures some aspect of overall macroeconomic activity. The derived index provides a single, summary measure of a factor common to these national economic data. In the history of the data series, the lowest score, -17.85, was recorded in April 2020 and the highest score, 6.06, was recorded in June 2020.

(See Exhibits 5A and 5B.)

7. CONSUMER CONFIDENCE

The Consumer Confidence Index dropped by 4.5 points, from a revised May figure of 103.2 to 98.7 in June. It is at its lowest level since February 2021. The decline can be attributed to consumers' continued concerns about the impact of inflation on gasoline and food prices. The report mentioned that consumers' purchasing intentions for big-ticket items such as automobiles and major appliances remain steady but future plans for these items have cooled. Rising prices have adversely affected consumers' plans for vacations this summer. The June report states that, while the Present Situation Index remained relatively unchanged, the Expectations Index fell to its lowest level in nearly a decade "suggesting weaker growth in the second half of 2022" and the increased risk of recession by December.

Consumers' appraisal of business conditions deteriorated somewhat in June while their perception of the labor market was mixed as indicated by the Conference Board's Present Situation Index, which fell slightly in June, moving down 0.3 point, to 147.1 points in June. The index measures consumers' confidence in the present and near-term future economy. The percentage saying business conditions are "good" decreased, from 19.8% to 19.6%, and the percentage of those saying business conditions are "bad" increased, from 21.7% to 23.0%. Consumers' assessment of the labor market was mixed in June, as the percentage of consumers stating jobs are "plentiful" declined, from 51.9% to 51.3%, and the percentage of those claiming jobs are "hard to get" fell to 11.6% in June from 12.4% in May.

Consumers' optimism about the short-term outlook dropped significantly in June, as the Expectations Index fell 7.3 points, to 66.4, from the revised May figure of 73.7. The survey results showed the percentage of consumers expecting business conditions to improve over the next six months was down, from an adjusted 16.4% to 14.7%, while the percentage of those expecting business conditions to worsen rose, from an adjusted 26.4% to 29.5%. Consumers' outlook for the labor market was more pessimistic, as the percentage of those expecting more jobs in the months ahead decreased, from 17.5% to 16.3%, while those expecting fewer jobs in the months ahead rose, from 19.5% to 22.0%. The percentage of consumers expecting an improvement in their incomes fell, from 17.9% to 15.9%, while the percentage expecting a decrease rose slightly, from 14.5% to 15.2%.

The Consumer Confidence Index is an indicator designed to measure the degree of optimism about the state of the economy that consumers express through their savings and spending. A decreasing month-over-month trend in the Consumer Confidence Index suggests that consumers have a negative outlook about their ability to secure and retain good jobs, whereas a rising trend in consumer confidence indicates improvements in consumer buying patterns. Opinions on current conditions make up 40% of the index (the Present Situation Index), while expectations of future conditions comprise the remaining 60% (the Expectations Index).

(See Exhibit 9 for consumer confidence and consumer sentiment figures.)

8. SMALL-BUSINESS OPTIMISM

The National Federation of Independent Business's (NFIB) Small Business Optimism Index remained below its historical average of 98.0 points for the sixth consecutive month after the score fell by 3.6 points in June, to 89.5 points. Small-business owners continue to face ongoing concerns over rampant inflation, supply-chain issues, and challenges associated with hiring.

In June, all 10 components that make up the Small Business Optimism Index worsened.

The component that measures the frequency of reports of positive profit trends dropped to a net -25%. Among owners reporting lower profits, 16% blamed weaker sales, 30% cited a rise in the cost of materials, 14% cited labor costs, another 14% reported lower prices, and 7% cited seasonal change. For owners reporting higher profits, 51% credited sales volumes, 17% cited usual seasonal change, and 19% cited higher prices.

The report continues to highlight the struggles that small businesses are having to fill open positions and points to a tight job market overall in June. Overall, 50% reported job openings they were unable to fill in June, one percentage point lower than in May as well as the 48-year record set in September. Owners have plans to fill open positions, with a seasonally adjusted net 19% planning to create new jobs in the next three months, down seven points from May. Finding qualified employees remains a problem, as 60% of owners reported few or no "qualified" applicants for the positions they were trying to fill in June, a one-percentage-point decrease from the prior month. Where there are open positions, labor quality remains a problem. Thirty-three percent of owners reported few qualified applicants for their open positions, and 27% reported none. The report states "the current level of openings is over 20 percentage points higher than the historical average." Difficulty in filling open positions is the greatest in the construction, manufacturing, services, and retail sectors.

In June, the percentage of owners that made capital outlays in the last six months fell two percentage points, to 51%. Of those making expenditures, 37% spent on new equipment, 23% acquired vehicles, and 14% improved or expanded facilities. Five percent of owners acquired new buildings or land for expansion, and 13% spent money on new fixtures and furniture. Twenty-three percent of owners plan capital outlays in the next few months, which is down two percentage points from May. More investment will be needed to enhance productivity but unlikely given business owners' current pessimistic outlook on future business conditions.

Seasonally adjusted, a net -2% of all owners reported higher nominal sales in the past three months, which is down three percentage points from May. The net percentage of owners expecting higher real sales volumes decreased by 13.0 percentage points, to -28%. Thirty-nine percent of owners report supply-chain disruptions have had a significant impact on their business, the same as in May. Another 30% report a moderate impact, 23% report a mild impact, while 6% experienced no impact from recent supply-chain disruptions.

The net percentage of owners reporting inventory increases fell three percentage points, to a net -4.0%. Owners viewing current inventory stocks as "too low" dropped three percentage points in June, to a net 5%. A net -2% of owners plan inventory investment in the coming months, which is down three percentage points from May.

The net percentage of owners raising average selling prices fell three percentage points, to a net 69%, and 4% reported lower selling prices. Price hikes were the most frequently reported in retail trades, at 80%, closely followed by transportation, at 78%; construction, at 75%; and wholesale, at 69%. Seasonally adjusted, a net 44% plan price hikes, down three percentage points from the prior month.

EXHIBIT 9A: Consumer Confidence and Small Business Optimism—One Year

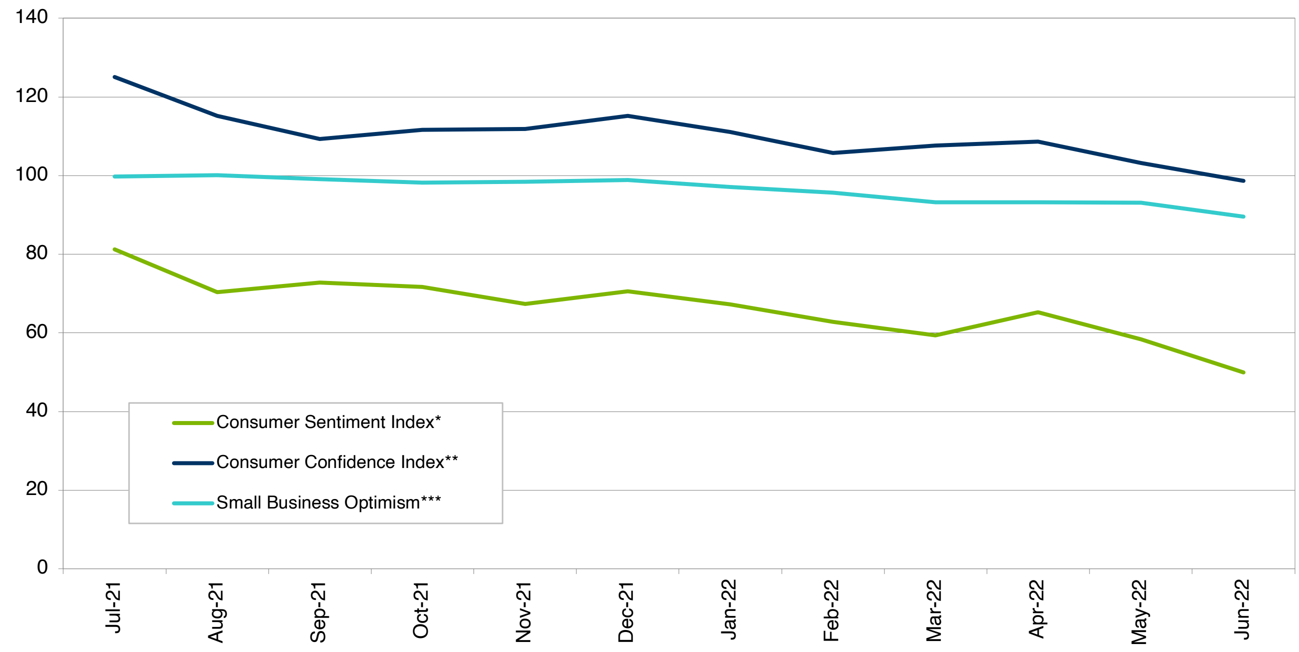
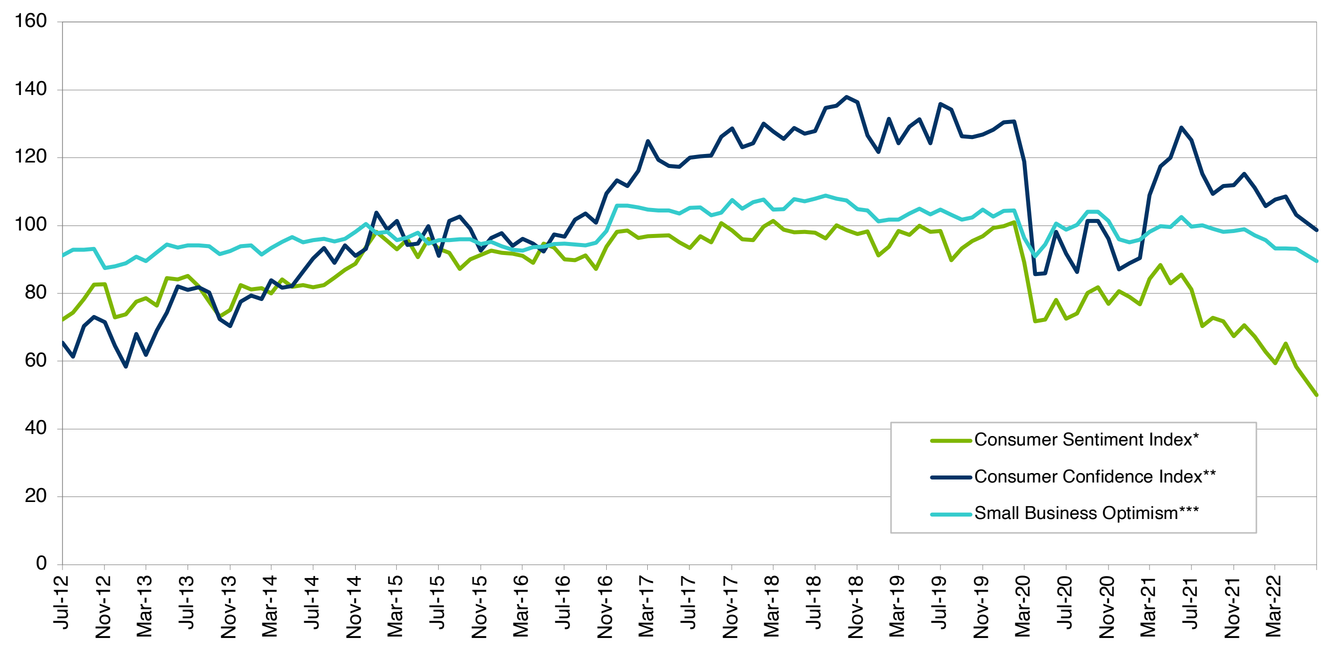
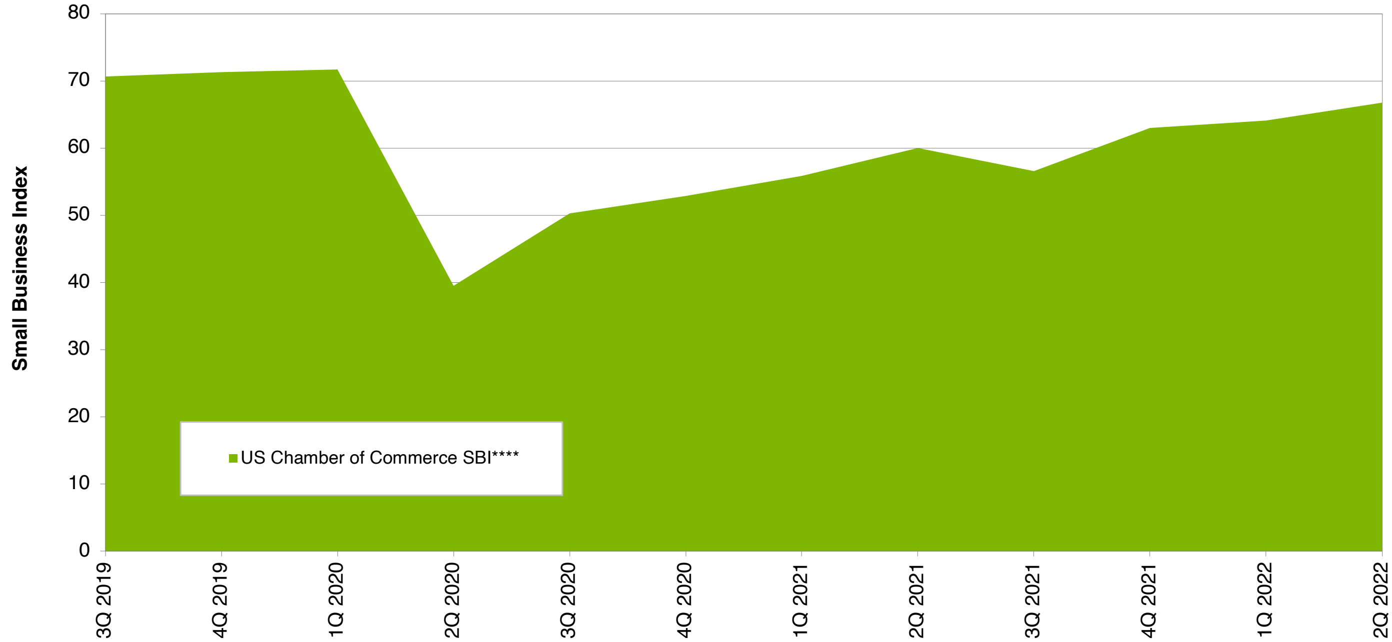


EXHIBIT 9B: Consumer Confidence and Small Business Optimism—10 Years



Source of data: The Conference Board, Thomson Reuters/University of Michigan, National Federation of Independent Business.
Notes:
* Thomson Reuters/University of Michigan Index of Consumer Sentiment
** The Conference Board Consumer Confidence Index®
*** National Federation of Independent Business Small Business Optimism Index
**** MetLife and U.S. Chamber of Commerce Small Business Index

EXHIBIT 9C: MetLife and U.S. Chamber of Commerce Small Business Index—Prior 12 Quarters



Source of data: The Conference Board, Thomson Reuters/University of Michigan, National Federation of Independent Business.
Notes:
* Thomson Reuters/University of Michigan Index of Consumer Sentiment
** The Conference Board Consumer Confidence Index®
*** National Federation of Independent Business Small Business Optimism Index
**** MetLife and U.S. Chamber of Commerce Small Business Index

A net 48% of owners reported raising compensation, which is one percentage point lower than in May. A net 28% plan to do so in the coming months, three percentage points higher than in May. Eight percent of owners cited labor costs as their top business problem, down four points from May, and 23% said that labor quality was their top business problem (unchanged).

Only 1% of owners reported that all their borrowing needs were not satisfied, which is one point lower than reported in May. Twenty-seven percent reported all credit needs met, up 5%, and 61% said they were not interested in a loan, down 4% from last month. A net 3% of owners reported their last loan was harder to get than in previous attempts, one percentage point less than in May. One percent reported that financing was their top business problem. A net 16% of owners reported higher interest rates, an increase of two percentage points over May.

The Small Business Optimism Index is compiled from a survey of the NFIB's 350,000 members that is conducted each month. NFIB, founded in 1943, began conducting its survey quarterly in 1974, transitioning to a monthly survey in 1986. The index is a composite of 10 seasonally adjusted components based on questions about the following: plans to increase employment, plans to make capital outlays, plans to increase inventories, whether members expect the economy to improve, whether they expect real sales will be higher, current inventory, current job openings, expected credit conditions, whether now is a good time to expand, and earnings trends. Analysts watch the index because small businesses are responsible for most of the new job creation and the NFIB focuses on this sector of the economy.

MetLife and the U.S. Chamber of Commerce published their second-quarter 2022 Small Business Index in May, which reported its highest score since the start of the pandemic, after rising 2.7 points. The second-quarter 2022 index stands at 66.8 and is significantly higher than it was when the coronavirus outbreak began, at 39.5%, but remains lower than its prepandemic levels. The second-quarter survey listed the underlying challenges for the upcoming quarter as inflation and supply-chain issues. Sixty-eight percent of respondents are still concerned about the impact of COVID-19 on their businesses, but its impact is ranked third behind concerns over inflation and the supply chain.

When asked about inflationary matters, 44% of small-business owners cite inflation costs as the primary concern facing the small-business community, an 11-percentage-point increase from last quarter. Almost 90% of respondents indicated they are concerned about the impact of inflation on their business, while almost half said they are very concerned, up from 44% in the first quarter of 2022.

Overall, small-business owners remain optimistic about their day-to-day operations, bolstered by future expectations for the economy and business environment. Optimism around cash flow has softened, however, fueled by concerns related to rising interest rates. There are some indications of anxiety even though small businesses are doing well.

Fifty percent of small-business owners report they are working more hours now than a year ago. This is a 20% increase over five years ago when this question was first included in the survey and indicative of the complexities facing small-business owners today.

The RSM U.S. Middle Market Business Index (MMBI) reversed direction and rose 4.3 points, to 130.6, in the second quarter of 2022. Despite inflationary pressures, RSM reports strong demand and productivity, both of which enhanced business investment and augmented the real economy.

The second-quarter report, issued in June and reported on in the May *EOU,* continues to indicate that businesses and employers are primarily concerned with inflationary pressures that continued supply-chain disruptions and difficulties resolving labor shortages exacerbated. As a result, only 32% of respondents believed that the economy has improved in the current quarter, while 41% said that the economy had deteriorated. Looking forward, however, 42% of those surveyed expect the economy to improve over the next six months, better than the 37% who expect it to worsen over the same period.

Forty-four percent of respondents stated that gross revenues were improving compared to 22% who said they did not. Going forward, 58% of middle-market executives expect their revenues to improve over the next six months and 10% expect them to decline. When asked about net earnings performance, 41% reported increases in the current quarter and 56% expect earnings to increase going forward compared with 16% who expect declines in net earnings. Despite the increase in revenues and earnings, 74% of firms reported paying a higher price for their goods and 78% expect this trend to continue in the coming quarters. Sixty-six percent of middle-market businesses passed along their higher costs to their customers, and 75% plan to do so in the next six months.

When asked about matters regarding capital expenditures, 42% of respondents indicated an increase in their capital expenditures and 51% expect an increase going forward. Among the items middle-market businesses are spending on, 39% reported an increase in inventories and 47% expect to do so in the coming quarters. Additionally, 47% reported an increase in hiring and 62% reported an increase in compensation. Going forward, 61% have plans to hire in the coming months and 67% will increase pay to attract labor.

The special question in this quarter's survey focused on supply-chain disruptions. Unexpected disruptions in supplies from upstream suppliers negatively impacted the organizations of 48% of the respondents to the survey. Sixty-four percent of businesses with $10 million to $50 million in revenue felt the impacts more acutely, as compared with 36% of businesses with revenues up to $1 billion. It is noteworthy that 70% of respondents who felt the negative effects of unexpected supply-chain disruptions found other sources within the US during the last 12 months.

The RSM U.S. Middle Market Business Index (MMBI) is based on quarterly survey data RSM U.S. LLP and Nielsen N.V. collected and is developed in partnership with Moody's Analytics. The MMBI survey and data began in the first quarter of 2015, and the survey panel consists of 1,500 middle-market executives. An MMBI reading above 100 generally indicates that the middle market is expanding, and a reading below 100 generally indicates that the middle market is contracting. The most recent survey results are based on responses 404 survey participants provided.

(See Exhibit 9 for business optimism figures.)

9. STOCK MARKETS AND VOLATILITY

All the equity and fixed income markets continued to slide in the second quarter of 2022 as Russia's invasion of Ukraine and supply-chain woes compounded interest rates and inflation fears. As a result, all the major equity indexes continued to fall into correction territory.

The large-cap-focused Dow Jones Industrial Average ended lower by 10.8% on the quarter, after losing 4.6% in the first quarter of 2022. The Dow is an index of 30 of the largest and most widely held public companies in the U.S. and is considered the most-watched index in the world.

The Nasdaq Composite fell further into correction territory during the quarter with a decline of 22.4% in the second quarter of 2022. The Nasdaq Composite Index consists mainly of high-tech stocks.

The Standard & Poor's 500 Index decreased 16.1% in the second quarter of 2022. The S&P 500 consists of a representative sample of 500 leading companies of the U.S. economy and is one of the most commonly used benchmarks for the overall U.S. stock market.

The small-cap Russell 2000 Index decreased 17.2% in the second quarter of 2022 after falling 7.8% in the first quarter of 2022. The S&P MidCap 400 index fell 15.9% in the second quarter of 2022 after losing 5.2% in the first quarter of 2022. The S&P MidCap 400, which is distinct from the large-cap S&P 500, measures the performance of midsized companies and is the most widely followed midcap index.

(See Exhibit 10 for stock price figures.)

Volatility dipped slightly in April but resumed elevated levels through June with the Chicago Board Options Exchange Volatility Index continuing its heightened levels from earlier 2022. In June, the index ranged from 23.7 to 35.0, for a monthly average of 28.1, higher than the annual average of 26.4. The VIX represents the implied volatility of 30-day options on the Standard & Poor's 500 stocks and has been termed by analysts and investors as the "fear gauge." Accordingly, the VIX represents the expected volatility of the market, as represented by the Standard & Poor's 500 index. Stock market professionals use the VIX to gauge investor sentiment. Values greater than 30 are generally associated with a large amount of volatility because of investor fear or uncertainty, while values below 20 generally correspond to less stressful, even complacent, times in the markets.

(See Exhibit 10 for VIX figures.)

10. BOND MARKETS

The Treasury yield curve rose throughout the quarter for most maturity Treasury yields (three-year maturity and less). The 10-year Treasury yield started the quarter at 2.39% and finished at 2.98%, while the 20-year Treasury yield started the quarter at 2.60% and finished at 3.38%.

The 30-day T-bill rate was at 0.15% at the beginning of the second quarter of 2022 and closed the quarter at 1.28%. The five-year Treasury started the second quarter of 2022 with a yield of 2.55% and closed the quarter at 3.01%.

The prime lending rate rose one-quarter basis point in the second quarter of 2022, starting at 3.50% and rising to 4.75%. The discount window (primary credit) started the quarter at 0.50% and rose to 1.75% by the end of the quarter.

The Moody's Corporate Aaa started the quarter at 3.32% and closed the quarter higher, at 4.19%. The Moody's Corporate Baa yield started the quarter at 4.20% and closed the quarter at 5.29%.

(See Exhibits 2A, 11, 12, and 13 for historic and forecasted Treasury, bond, and federal funds rate figures.)

EXHIBIT 10: Stock Market Historical Data

	QUARTERLY PRICE RETURNS											
(%)	3Q 19	4Q 19	1Q 20	2Q 20	3Q 20	4Q 20	1Q 21	2Q 21	3Q 21	4Q 21	1Q 22	2Q 22
DJIA	1.2	6.0	-23.2	17.8	7.6	10.2	7.8	4.6	-1.9	7.4	-4.6	-10.8
Nasdaq Composite	-0.1	12.2	-14.2	30.6	11.0	15.4	2.8	9.5	-0.4	8.3	-9.1	-22.4
S&P 500	1.2	8.5	-20.0	20.0	8.5	11.7	5.8	8.2	0.2	10.6	-4.9	-16.1
S&P MidCap 400	-0.5	6.6	-30.0	23.5	4.4	23.9	13.1	3.3	-2.1	7.6	-5.2	-15.9
Russell 2000	-2.9	9.5	-30.9	25.0	4.6	31.0	12.4	4.1	-4.6	1.9	-7.8	-17.2

	YEARLY PRICE RETURNS									
(%)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
DJIA	7.3	26.5	7.5	-2.2	16.5	25.1	-5.6	22.3	7.2	18.7
Nasdaq Composite	15.9	38.3	13.4	5.7	7.5	26.8	-3.9	35.2	43.6	21.4
S&P 500	13.4	29.6	11.4	-0.7	12.0	19.4	-6.2	28.9	16.3	26.9
S&P MidCap 400	16.1	31.6	8.2	-3.7	20.7	14.5	-12.5	24.1	11.8	23.2
Russell 2000	14.6	37.0	3.5	-5.7	21.3	13.1	-12.2	23.7	18.4	13.7

	MONTHLY DATA											
	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22	6/22
DJIA	34,935.5	35,360.7	33,843.9	35,819.6	34,483.7	36,338.3	35,131.9	33,892.6	34,678.4	32,977.2	32,990.1	30,775.4
Nasdaq Composite	14,672.7	15,259.2	14,448.6	15,498.4	15,537.7	15,645.0	14,239.9	13,751.4	14,220.5	12,334.6	12,081.4	11,028.7
S&P 500	4,395.3	4,522.7	4,307.5	4,605.4	4,567.0	4,766.2	4,515.6	4,373.9	4,530.4	4,131.9	4,132.2	3,785.4
S&P MidCap 400	2,703.7	2,753.2	2,640.5	2,794.1	2,708.7	2,842.0	2,635.4	2,661.5	2,693.7	2,500.3	2,514.8	2,268.9
Russell 2000	2,226.3	2,273.8	2,204.4	2,297.2	2,198.9	2,245.3	2,028.5	2,048.1	2,070.1	1,864.1	1,864.0	1,708.0
VIX*	25.1	24.7	28.8	24.9	29.0	35.3	38.9	37.8	37.5	33.5	36.6	35.0

	QUARTERLY DATA											
	3Q 18	4Q 18	1Q 19	2Q 19	3Q 19	4Q 19	1Q 20	2Q 20	3Q 20	4Q 20	1Q 21	2Q 21
DJIA	26,458.3	23,327.5	25,928.7	26,599.9	26,916.8	28,538.4	21,917.2	25,812.9	27,781.7	30,606.5	32,981.6	34,502.5
Nasdaq Composite	8,046.4	6,635.3	7,729.3	8,006.2	7,999.3	8,972.6	7,700.1	10,058.8	11,167.5	12,888.3	13,246.9	14,504.0
S&P 500	2,914.0	2,506.9	2,834.4	2,941.8	2,976.7	3,230.8	2,584.6	3,100.3	3,363.0	3,756.1	3,972.9	4,297.5
S&P MidCap 400	2,019.6	1,663.0	1,896.3	1,945.5	1,935.5	2,063.0	1,443.4	1,783.2	1,861.3	2,306.6	2,609.2	2,696.1
Russell 2000	1,696.6	1,348.6	1,539.7	1,566.6	1,523.4	1,668.5	1,153.1	1,441.1	1,507.7	1,974.9	2,220.5	2,310.6
VIX*	18.1	36.2	28.5	23.4	24.8	18.0	85.5	60.6	38.3	41.2	37.5	21.8

	YEARLY DATA									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
DJIA	13,104.1	16,576.7	17,823.1	17,425.0	19,762.6	24,719.2	23,327.5	28,538.4	30,606.5	36,338.3
Nasdaq Composite	3,019.5	4,176.6	4,736.1	5,007.4	5,383.1	6,903.4	6,635.3	8,972.6	12,888.3	15,645.0
S&P 500	1,426.2	1,848.4	2,058.9	2,043.9	2,238.8	2,673.6	2,506.9	3,230.8	3,756.1	4,766.2
S&P MidCap 400	1,020.4	1,342.5	1,452.4	1,398.6	1,660.6	1,900.6	1,663.0	2,063.0	2,306.6	2,842.0
Russell 2000	849.4	1,163.6	1,204.7	1,135.9	1,357.1	1,535.5	1,348.6	1,668.5	1,974.9	2,245.3
VIX*	26.7	20.5	25.3	40.7	28.1	17.3	36.2	28.5	85.5	37.5

Source of data: Yahoo! Finance
Index Tickers: ^DJI, ^IXIC, ^GSPC, ^MID, ^RUT, ^VIX
Notes: Quotes are closing prices on the last day of trade for the month.
*VIX values reported are the highest value of the respective time period. VIX is a popular volatility measure; higher values correspond to greater volatility.

EXHIBIT 11: Bond Market Historical Data

	PERIODIC DATA								
	4/22			5/22			6/22		
(%)	BM	MM	EM	BM	MM	EM	BM	MM	EM
30-day Treasury bill[1]	0.2	0.4	0.4	0.4	0.6	0.7	0.8	1.2	1.3
5-year Treasury note[1]	2.6	2.8	2.9	3.0	2.8	2.8	2.9	3.4	3.0
10-year Treasury bond[1]	2.4	2.9	2.9	3.0	2.9	2.9	2.9	3.3	3.0
20-year Treasury bond[1]	2.6	3.1	3.1	3.3	3.3	3.3	3.3	3.6	3.4
Prime lending rate	3.5	3.5	3.5	3.5	4.0	4.0	4.0	4.8	4.8
Federal funds rate	0.3	0.3	0.3	0.3	0.8	0.8	0.8	1.6	1.6
Discount window primary credit rate	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.8	1.8
Corporate Bonds Moody's Seasoned Aaa	3.3	3.9	4.0	4.2	4.2	4.0	4.0	4.4	4.2
Corporate Bonds Moody's Seasoned Baa	4.2	4.8	4.9	5.1	5.2	5.0	5.0	5.4	5.3

Notes: BM = beginning of month, MM = mid-month, EM = end of month

	MONTHLY DATA								
(%)	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22
30-day Treasury bill[1]	0.0	0.0	0.1	0.1	0.1	0.4	0.0	0.1	0.2
5-year Treasury note[1]	0.8	0.8	0.9	1.1	1.2	1.2	1.6	1.7	2.4
10-year Treasury bond[1]	1.3	1.3	1.4	1.6	1.6	1.5	1.8	1.8	2.3
20-year Treasury bond[1]	1.9	1.8	1.9	2.0	2.0	1.9	2.2	2.3	2.6
Prime lending rate[2]	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.4
Federal funds rate[2]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Discount window primary credit rate[2]	0.25	0.25	0.25	0.25	0.25	0.25	0.3	0.3	0.4
Corporate Bonds Moody's Seasoned Aaa	2.6	2.6	2.5	2.6	2.5	2.4	2.9	3.3	3.4
Corporate Bonds Moody's Seasoned Baa	3.2	3.2	3.2	3.2	3.1	3.0	3.6	4.0	4.3

	YEARLY DATA									
(%)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
30-day Treasury bill[1]	0.1	0.1	0.0	0.0	0.3	0.9	1.8	2.1	0.4	0.0
5-year Treasury note[1]	0.8	1.2	1.6	1.5	1.3	1.9	2.8	2.0	0.5	0.9
10-year Treasury bond[1]	1.8	2.4	2.5	2.1	1.8	2.3	2.9	2.1	0.9	1.4
20-year Treasury bond[1]	2.5	3.1	3.1	2.6	2.2	2.7	3.0	2.4	1.4	2.0
Prime lending rate[3]	3.3	3.3	3.3	3.3	3.5	4.1	4.9	5.3	3.5	3.3
Federal funds rate[3]	0.1	0.1	0.1	0.1	0.4	1.0	1.8	2.2	0.4	0.1
Discount window primary credit rate[3]	0.8	0.8	0.8	0.8	1.0	1.6	2.4	2.8	0.6	0.3
Corporate Bonds Moody's Seasoned Aaa[4]	3.7	4.2	4.2	3.9	3.7	3.7	3.9	3.4	2.4	2.7
Corporate Bonds Moody's Seasoned Baa[4]	4.9	5.1	4.9	5.0	4.7	4.4	4.8	4.4	3.5	3.4

Source of data: The Federal Reserve Board, Federal Reserve Bank of St. Louis.
Notes:
(1) Yields on actively traded non-inflation-indexed issues adjusted to constant maturities
(2) Monthly figures are averages of each calendar day in the month
(3) Annualized figures use a 360-day year or bank interest
(4) Average yield to maturity on selected long-term bonds

EXHIBIT 12: Treasury Historical Data—Average Yields

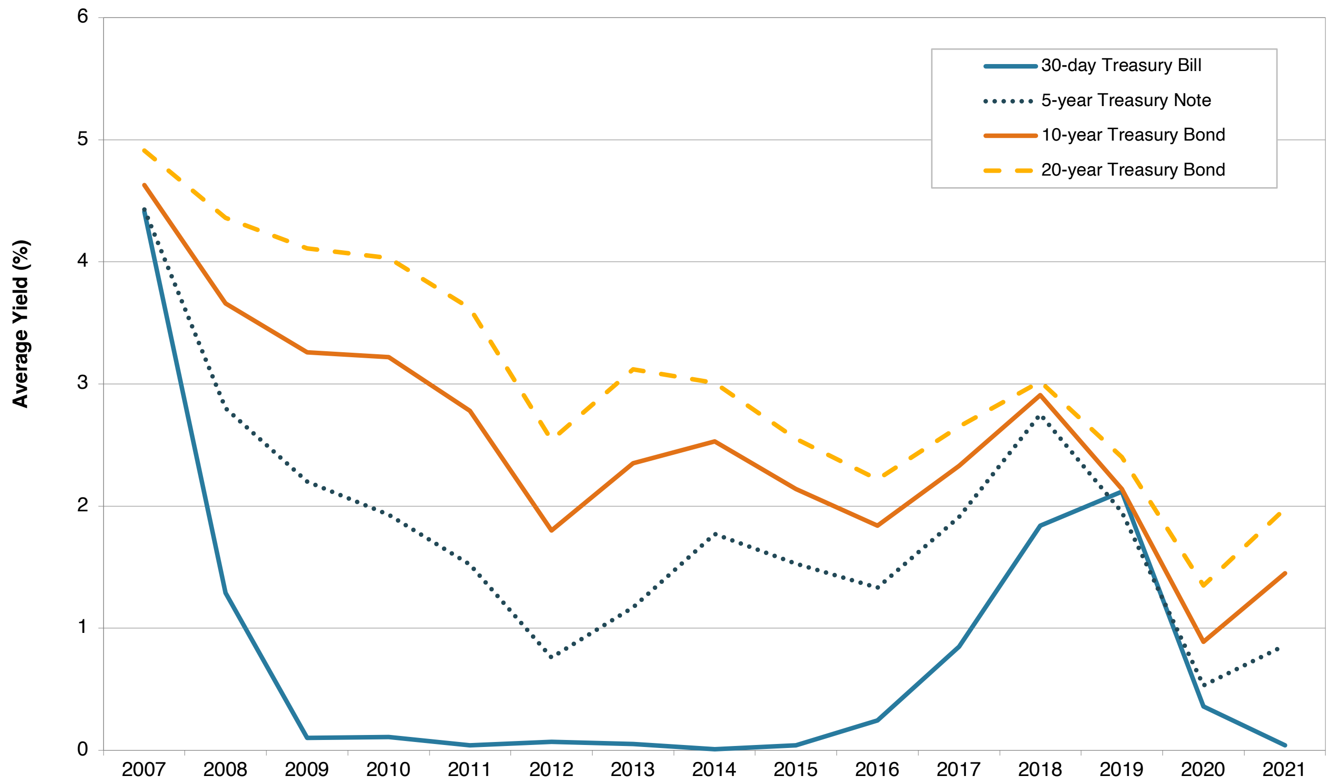
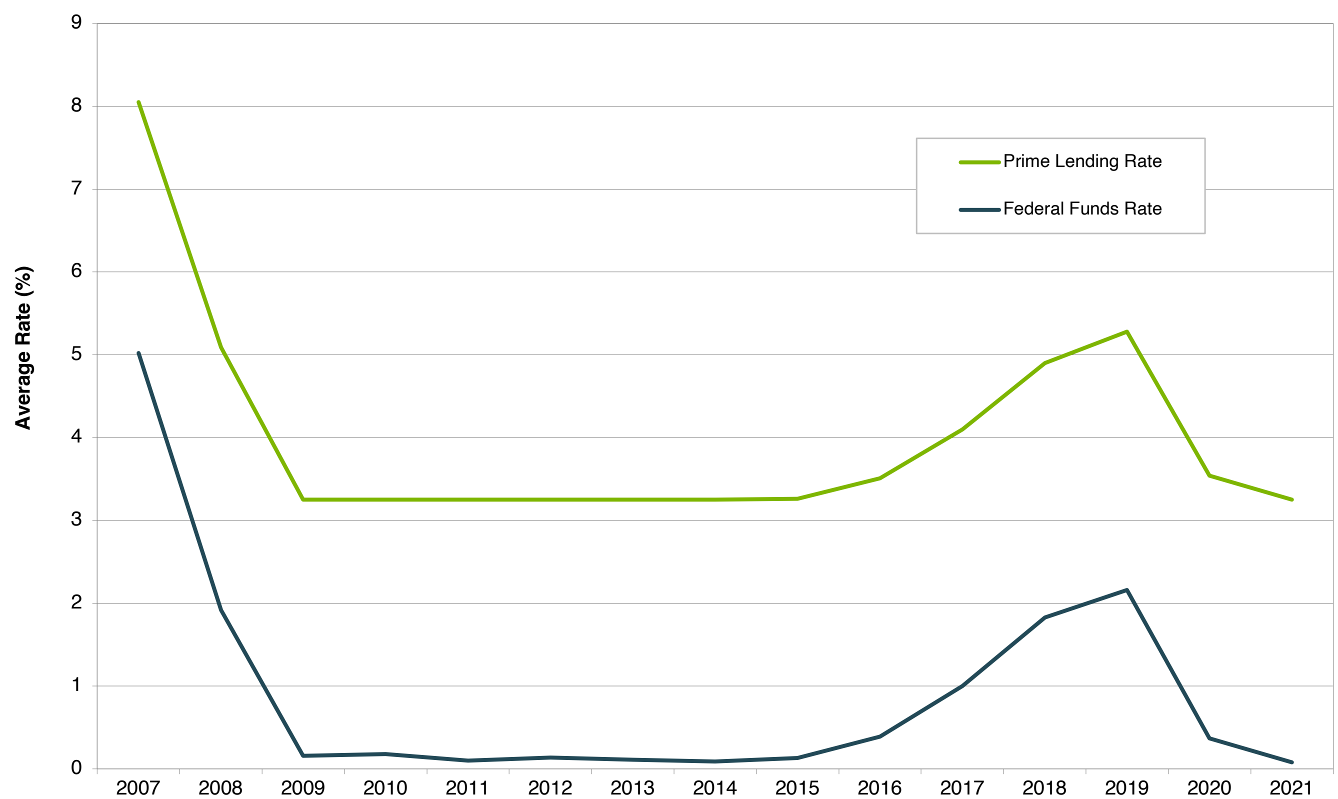


EXHIBIT 13: Prime Lending and Federal Funds Historical Data



11. CONSTRUCTION

Housing starts decreased 2.0%, to 1.559 million, in June. They are 6.3% below the June 2021 rate. Single-family housing starts were at 982,000, 8.1% below May. The multifamily sector added 568,000 buildings in June 2022, compared with 494,000 in May and 488,000 in June 2021. The multifamily-home sector, which consists of buildings with five units or more, tends to be more volatile than the single-family-home sector.

An unadjusted 1,601,000 housing units were started in 2021. This is 16.0% above the 2020 figure of 1,379,600.

(See Exhibits 2A and 4 for historic and forecasted housing starts figures.)

Building permit authorizations for privately owned housing units, considered a leading indicator of demand for new homes, decreased 0.6% in June, coming in at a seasonally adjusted rate of 1,685,000. On a year-over-year basis, the figure is up a modest 1.4%. Building permits for single-family housing units fell 8.0% compared to May. Building permits for multifamily housing units rose 666,000 in June, an increase of 13.1% from May, and 27.8% more than a year ago.

An unadjusted 1,737,000 housing units were authorized by building permits in 2021. This is 18.1% above the 2020 figure of 1,471,100.

(See Exhibit 4 for building permit authorization figures.)

Housing completions were at a seasonally adjusted rate of 1,365,000 in June, which is 4.6% below the adjusted rate for May and 4.6% above the rate from one year ago. Single-family housing completions in June were at a rate of 996,000, which is 4.1% less than the revised rate for May. The rate for multifamily housing completions was 366,000 in June, which is 5.4% less than completions in May and 3.7% less than June 2021.

An unadjusted 1,341,000 housing units were completed in 2021. This is 4.2% higher the 2020 figure of 1,286,900.

The U.S. Census Bureau reported that overall spending on construction was at a seasonally adjusted annual rate of $1,762.3 billion in June. This figure was 1.1% below the revised May rate of $1,781.9 billion and 8.2% above the $1,628.0 billion rate from one year ago. During the first six months of 2022, total construction spending amounted to $848.2 billion, or 10.7% above the rate from one year ago.

Spending on all private construction was at a seasonally adjusted annual rate of $1,416.4 billion in June, 1.3% below the revised May rate of $1,434.4 billion and 10.4% above the rate from one year ago. Private residential construction spending was at a seasonally adjusted annual rate of $923.7 billion in June, 1.6% below the revised rate of $939.2 billion in May, but 15.6% above the June 2021 rate of $799.3 billion. Private nonresidential construction was at a seasonally adjusted annual rate of $492.7 billion in June, 0.5% below the rate from May, at $495.3 billion, but 1.7% higher than one year ago.

The seasonally adjusted annual rate of total public construction spending was $345.9 billion in June, 0.5% below the revised rate in May, at $347.5 billion, but 0.4% higher than the rate one year ago of $344.4 billion. Educational construction was at a seasonally adjusted annual rate of $77.5 billion in June, 0.7% below the May rate of $78.1 billion and 4.8% less than June 2021. Highway and street construction was at a seasonally adjusted annual rate of $97.4 billion in June, 2.7% below the revised May rate of $100.1 billion, and 1.1% lower than the June 2021 rate of $98.5 billion.

12. MANUFACTURING

The manufacturing index (PMI) fell 3.1 percentage points, to 53.0%, and is the lowest score since June 2020, when the PMI was 52.4%, as reported by the Institute for Supply Management (ISM). This score indicates expansion in the overall economy for the 25th consecutive month. The report noted continued progress toward solving the labor shortage problems at all tiers of the supply chain in June. Panelists reported slightly lower rates of quits and early retirements compared to previous months. In addition, there was continued easing of price expansion, despite instability in global energy markets. Panel sentiment remained strongly optimistic regarding demand, with three positive growth comments for every cautious comment, a degradation in the ratio from May, when it was at 5-to-1. Supply-chain and pricing concerns rank high with the panelists.

The breakdown of the components in June are as follows: Demand contracted, with the New Orders Index contracting; the Customers' Inventories Index remained at very low levels; and the Backlog of Orders Index decreased but remained in growth territory. Consumption (measured by the Production and Employment indexes) was reportedly mixed in the period, subtracting 1.6 percentage points from the Manufacturing PMI calculation. The Employment Index shrunk in June for a second month after eight consecutive months of expansion, with some indication that hiring improved in June. Inputs, which are expressed as supplier deliveries, inventories, and imports, continued to constrain production expansion. The Prices Index continued to increase for the 25th consecutive month but at a slower rate than in the prior month.

A reading above 50.0% indicates that the manufacturing economy is generally expanding. Therefore, the June Manufacturing PMI, at 53.0%, indicates the 25th month of expansion in the manufacturing economy. A Manufacturing PMI more than 42.9%, over a period, generally indicates an expansion of the overall economy.

Fifteen of the 18 manufacturing sectors surveyed in June reported growth, with three reporting a decrease.

The component for new orders decreased 5.9 percentage points in June, to 49.2%, ending 24 consecutive months of expansion. A New Orders Index above 52.8%, over time, is generally consistent with an increase in the Census Bureau's series on manufacturing orders (in constant 2000 dollars). Eight of 18 industries reported growth in new orders in June.

The component for production increased 0.7 percentage point in June, to 54.9%, continuing at a level indicating growth for the 25th consecutive month. An index above 52.4%, over time, is generally consistent with an increase in the Federal Reserve Board's industrial production figures. Panelists indicated that demand is strong, and labor and material availability continue to improve, but factories are still struggling to hit optimum output rates. Ten of the 18 industries reported growth in production during the month of June.

Employment in the manufacturing sector continued to shrink in June, by 2.3 percentage points, to 47.3%, which is the lowest reading since August 2020. Employment in the manufacturing sector has contracted two consecutive months. An Employment Index above 50.6%, over time, is generally consistent with an increase in the Bureau of Labor Statistics' data on manufacturing employment. An overwhelming majority of panelists again indicate their companies are increasing headcounts or attempting to. Forty-two percent of respondents indicated difficulty hiring, up from 30% in May, and turnover rates remain elevated though lower than in May. Nine of the 18 industries reported employment growth in June.

The delivery performance score of suppliers to manufacturing organizations was lower in June, as the Supplier Deliveries Index registered 57.3%, an 8.4-percentage-point decline from the May score. The rate of deliveries slowed more when compared to the previous month. The index continues to reflect suppliers' difficulties in meeting demand from panelists' companies, but there are signs of easing. Supplier labor issues are continuing to stymie deliveries, according to panelists' comments. Transportation networks showed some improvement over May. Fourteen of the 18 industries reported slower deliveries on the month.

The component that measures prices dropped 3.7 percentage points in June, to 78.5%. The score in June indicates raw material prices rose for the 25th consecutive month, but at a slower rate. Increased prices were primarily driven by oil and fuel, which affected transportation expenses, food ingredients, petroleum-derived products, and petrochemicals. A small percentage (8.3%) of respondents cited lower prices in June, indicative of a steady (if not slow) move toward a softening in prices. A Prices Index reading above 52.7%, over time, is generally consistent with an increase in the Bureau of Labor Statistics' Index of Manufacturers Prices. Seventeen of 18 industries reported paying higher prices for raw materials in June.

In June, order backlogs decreased 5.5 percentage points, to 53.2%. This level indicates expansion for the 24th consecutive month. Nine of the 18 industries reported growth in order backlogs in June.

The new export orders index fell by 2.2 percentage points in June, to 50.7%. COVID-19 in China and the war in Ukraine have adversely affected demand from overseas for the fourth consecutive month. The index remains at a level indicating growth for the 24th consecutive month. Five of the 18 industries reported growth on the month, and five reported lower backlogs.

The imports index increased 2.0 percentage points in June, to 50.7%, resuming a growth mode interrupted in May. Back-to-school and holiday imports propped up this index causing it to grow marginally in June. Twelve of the 18 industries grew in June, while three industries reported lower volumes.

The index that tracks the average commitment lead time for capital expenditures increased by eight days in June, to 186 days, an all-time high. The average lead time for maintenance, repair, and operating supplies decreased four days, to 44 days, and the average lead time for production materials increased by one day, to 100 days.

The Institute for Supply Management published its most recent "Semiannual Economic Forecast" in May, and the report forecasts that manufacturing sector expectations for 2022 remain similar to the last report published in February "despite continued inflation and geopolitical unrest." Overall, 63% of the respondents expect revenues to grow in 2022 when compared to 2021, projecting a 15.5% net increase in overall revenues for 2022, compared to a 14.1% increase reported for 2021. Sixteen of the 18 manufacturing industries expect revenue improvement in 2022.

Executives and purchasing managers within the manufacturing sector expect the recovery in the manufacturing sector will continue the rest of 2022. Expectations are for business to continue to expand through the second half, albeit at slightly lower rates. The manufacturing sector experienced 24 consecutive months of growth from June 2020 through May 2022, with the Manufacturing PMI registering a score above 60.0 points in four of the last 12 months. Respondents expect that inflationary pressures will continue to cause raw materials pricing to increase in 2022 but expect to see improved profit margins through the second half of 2022.

In the manufacturing sector, respondents report operating at 87.2% of their normal capacity, which is 1.5 percentage points below the 88.7% reported in December 2021. Purchasing and supply executives predict that capital expenditures will increase by 7.4% in 2022 over 2021, compared to the 12.1% increase reported for 2021 over 2020. Manufacturers expect employment in the sector to grow by 3.2% in 2022 relative to December 2021 levels.

The panel predicts that prices paid for raw materials will increase 11.1% through the end of 2022. This compares to a reported 14.5% increase in raw materials prices between the end of 2020 and March 2021.

ISM's Manufacturing Business Survey asked respondents some questions specifically related to the economy. When asked about difficulties pertaining to hiring, 89% reported having difficulties in hiring. As a result, 56% had to raise wages to attract employees, while 28% were unable to hire as many employees as planned. When asked about supply-chain concerns, 17% of the respondents expected the situation to be better by the third quarter of 2022 and 30% expected an improvement by the fourth quarter of 2022. Despite the current supply-chain issues, 86% of the respondents were more likely to pass along the cost to consumers. Fifty-one percent of the respondents blamed domestic policies for the supply-chain issues, while 49% cited foreign causes. When specifically asked, 60% respondents reported that the Ukraine war is disrupting their supply chain to some degree.

The highlights of the semiannual survey are:

- Operating rate is currently at 87.2% of normal capacity;
- Production capacity increased 3.5% in 2021 and is expected to increase by 5.8% in 2022;
- Capital expenditures increased 12.1% in 2021 and are expected to increase by 7.4% in 2022;
- Prices paid increased 14.5% in 2021 and are expected to increase by 11.1% in 2022;
- Manufacturing employment is expected to increase by 3.2% in 2022;
- Manufacturing revenue increased 14.1% in 2021 and is expected to increase by 6.5% in 2022; and
- The manufacturing sector is expected to continue to grow through the second half of 2022.

(See Exhibits 4 and 14 for historical PMI figures.)

13. SERVICES PMI

The Services PMI, formerly the nonmanufacturing index (NMI), declined 0.6 percentage point in June, to 55.3%, its lowest point since May 2020. Despite a decline in the June index, growth continued for the services sector, which has expanded for all but two of the last 149 months.

A Services PMI reading above 50.0% indicates that the services sector of the economy is generally expanding, whereas a reading below 50.0% indicates that the services sector is generally contracting. A Services PMI in excess of 49.0%, over time, generally indicates an expansion in the overall economy. Therefore, the 55.3% score in June indicates growth in the overall economy and the services economy for the 25th consecutive month.

All 18 nonmanufacturing sectors surveyed in June reported growth during the month.

The component that measures business activity increased 1.6 percentage points in June, to 56.1%. The June reading indicates expansion for the 25th consecutive month. Panelists commented on evidence of continued business recovery, in spite of increased demand, inflation, and higher interest rates. Fifteen of the 18 industries in the index reported growth in business activity for the month.

The new orders component of the index decreased 2.0 percentage points in May, to 55.6%. The index is at a level that indicates growth for the 25th consecutive month. Thirteen of the 18 industries in this index reported an increase in new orders for the month.

Employment activity in the nonmanufacturing sector contracted in June for the third time in five months, losing 2.8 percentage points, which brought the index to 47.4%. Seven of the 18 industries reported an increase in employment, while five reported a decrease, and six industries reported no change in June.

The supplier deliveries component declined slightly in June, moving up by 0.6 percentage point, to 61.9%. A reading above 50% indicates slower deliveries, while a reading below 50% indicates faster deliveries. Panelists' comments cited continued product shortages, freight issues, and rising costs. Sixteen of the 18 industries reported slower deliveries on the month.

Prices nonmanufacturing organizations paid for purchased materials and services decreased two percentage points, to 80.1%. Prices have increased for 61 consecutive months. All 18 industries reported an increase in prices paid in May.

Orders and requests for services and other nonmanufacturing activities domestically based companies provide outside of the U.S. grew for the fifth consecutive month in June. The index decreased by 3.4 percentage points, to 57.5%. Six of the 18 industries reported an increase in new export orders in the month of June.

The inventory index decreased 3.5 percentage points in June, to 47.5%, representing a contraction for the first month after four consecutive months of growth. This reading indicates that respondents feel their inventories are too low when correlated to business activity levels. Respondent comments include frustration with the longer lead times and unreliable delivery performance. Eight industries reported an increase in inventory levels, while seven industries reported a decrease in inventories in June.

The Institute for Supply Management published its most recent "Semiannual Economic Forecast" in May, with the report noting that 48% of services supply management executives expect their 2022 revenues to be greater than they were in 2021. They expect a 4.9% net increase in overall revenues for 2022, compared to a 4.8% increase from 2021. All 18 industries are forecasting increased revenues in 2022.

Nonmanufacturing purchasing and supply executives report that their organizations are currently operating at 91.0% of normal capacity, which is 1.6% higher than December 2021. They forecast that their capacity to produce products and provide services will rise by 1.2% through the end of 2022 and capital expenditures will increase by 6.2%. Services panel members also predict their overall employment will increase by 2.5% by the end of 2022.

In May 2022, services supply executives report prices paid increased by 8.7%. This is 0.2% less than the 8.9% increase they predicted in December 2021. Seventy-six percent of respondents report price increases averaging 11.5%. Less than 1% indicate decreased prices, with an average reduction of 2.5%, and 24% of respondents did not experience price changes this year.

Nonmanufacturing supply managers predict their purchases through the end of 2022 will cost an average of 9.6% more than at the end of 2021. This is slightly more than the increase reported for calendar-year 2021, which was +9.2%. Seventy-six percent of services respondents predict the prices they pay will increase an average of 12.8% by the end of 2022. Almost no respondents expect price decreases averaging 50%. The remaining 24% predict no change in prices through the end of 2022.

Services purchasing and supply executives expect a 2.5% increase in labor and benefit costs in 2022. Thirty-four percent of respondents expect such costs to increase by an average of 10.3%. Another 9% of respondents expect labor and benefit costs to shrink by an average of 11.2%, and 57% believe costs will remain stable during 2022.

ISM's Services Business Survey asked respondents some questions specifically related to the economy. Eighty-seven percent reported having difficulties in hiring. As a result, 57% had to raise wages to attract employees while 28% were unable to hire as many employees as planned. When asked about supply-chain concerns, 15% of the respondents expected the situation to be better by the third quarter of 2022 and 32% expected an improvement by the fourth quarter of 2022. Despite the current supply-chain issues, 66% of the respondents were more likely to pass along the cost to consumers. Fifty-two percent of the respondents cited domestic-sourced supply-chain issues, while 48% cited foreign causes. About half (49%) of the respondents considered the war in Ukraine to be adversely affecting their supply chain.

(See Exhibits 4 and 14 for historical services PMI figures.)

14. HOSPITAL PMI

Economic activity in the hospital subsector continued to improve in June, with an increase of 1.1 percentage points to the index, which brought the score to 58.0%. Panelists consistently commented on the reduction of COVID-19 patients in their hospitals, which are getting backfilled with elective procedures in some but not all facilities. Hospitals continued to report supply shortages exacerbated by higher costs and fuel surcharges and a higher incidence of product substitution and difficulties obtaining product from suppliers. Increased costs of supplies and labor are squeezing hospital margins. The Employment Index declined slightly in June, while Case Mix dropped to 48.5% from 53.0% in May.

The Hospital PMI is based on data compiled from hospital purchasing and supply executives nationwide. A Hospital PMI index reading above 50% indicates that the hospital subsector is generally expanding; a reading below 50% indicates that it is generally declining. For the subindexes, except Supplier Deliveries, an index reading above 50% indicates that the subindex is generally expanding; a reading below 50% indicates that it is generally contracting. A Supplier Deliveries Index above 50% indicates slower deliveries, and a reading below 50% indicates faster deliveries. Therefore, the index score, 58.0%, represents growth to the industry for the 25th consecutive month.

The Days Payable Outstanding Index increased 5.5 percentage points, to 49.5%. The Technology Spend Index decreased 0.5 percentage point, to 53.5%.

The Institute for Supply Management (ISM) launched its first Hospital PMI, which assesses domestic hospital supply chains and is the first vertical ISM Report on Business, in collaboration with the Association for Health Care Resource and Materials Management and Strategic Marketplace Initiatives.

(See Exhibits 4 and 14 for historical Hospital PMI figures.)

EXHIBIT 14A: Manufacturing, Services, and Housing Indicators—Past 24 Months

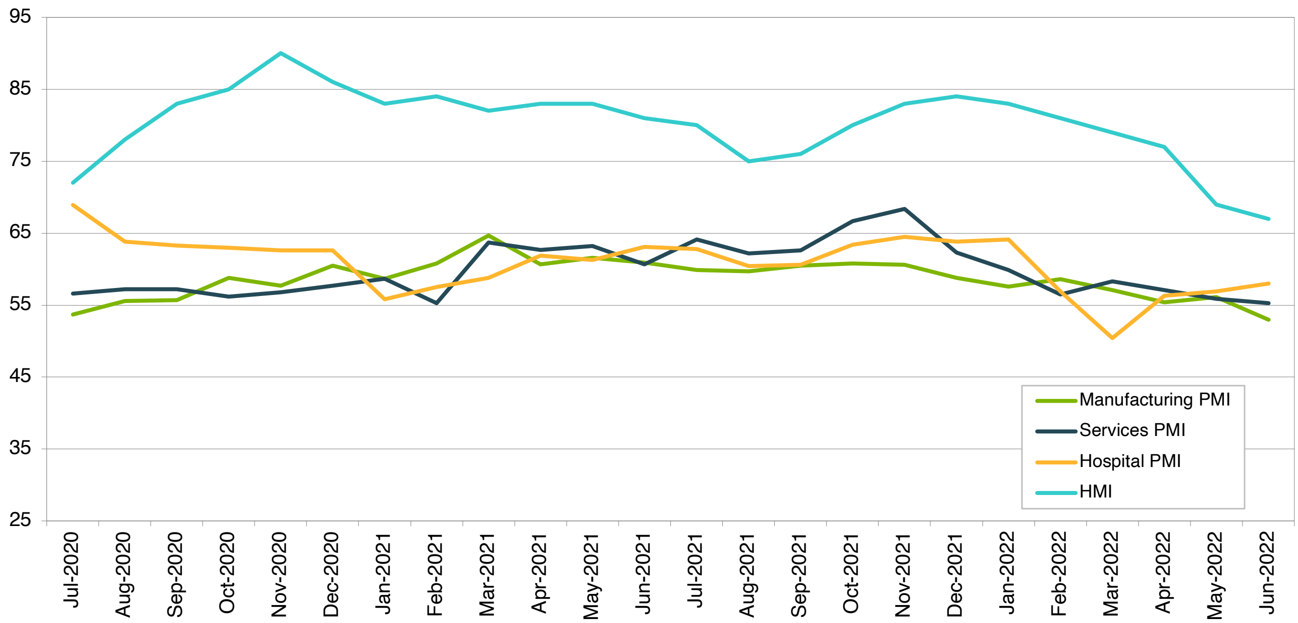
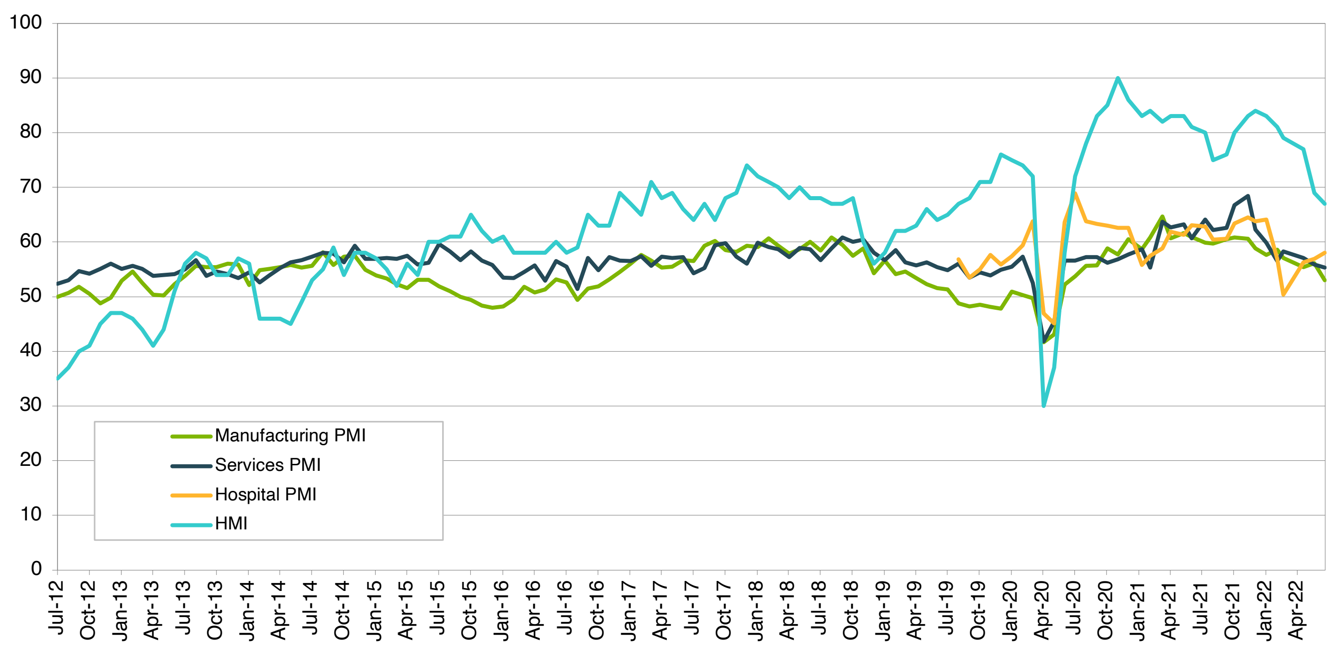


EXHIBIT 14B: Manufacturing, Services, and Housing Indicators—10 Years



Source of data: Institute for Supply Management and the National Association of Home Builders.
Notes: Manufacturing PMI is the Institute of Supply Management's Manufacturing Index—any reading above 50.0% suggests growth in the manufacturing economy, whereas a reading below 50.0% indicates contraction. Services PMI measures the strength of the services sector—any reading above 50.0% suggests growth, whereas a reading below 50.0% indicates contraction. Hospital PMI is the Institute of Supply Management's Hospital Index - any reading above 50.0% suggests growth, whereas a reading below 50.0% indicates contraction. HMI is the National Association of Home Builders/Wells Fargo Housing Market Index—any reading over 50 indicates that more builders view sales conditions as good than poor.

15. REAL ESTATE

NATIONAL ASSOCIATION OF HOME BUILDERS

Builder confidence declined in June as the National Association of Home Builders (NAHB)/Wells Fargo Housing Market Index (HMI) fell by 2.0 points, to 67.0 points, the lowest point since June 2020 and the sixth consecutive month of declines. The report noted the housing market's continued slide is due to affordability challenges caused by rising interest rates and home prices. An HMI reading above 50.0 indicates that more builders view sales conditions as good, rather than poor.

All three HMI components declined in June. The component measuring current sales conditions moved down 2.0 points, to 76.0. The component gauging sales conditions over the next six months declined 2.0 points, to 61.0, and the component that measures buyer traffic fell 5.0 points, to 48.0.

Looking at the three-month moving averages for the regional HMI indexes, the Northeast fell one point, to 71.0; the Midwest fell six points, to 56.0; the West fell nine points, to 74.0; and the South dropped 2.0 points, to 78.0.

(See Exhibit 14 for historical HMI figures.)

NATIONAL ASSOCIATION OF REALTORS (NAR)

Existing-home sales fell for a fifth month, declining 5.4% in June, precipitated by the challenging environment for buyers caused by rising mortgage rates and rising home prices. Homes continue to sell rapidly when priced right, and home price gains remain in double digits.

The number of existing-home sales in June was at an annual pace of 5.12 million, which is down 14.2%. Three of the four regions saw a decline in sales in June.

All-cash sales were 25% of transactions in June, which is the same as in May and is up 2.0 percentage points from one year ago. Individual investors, or second-home buyers, who account for many cash sales, purchased 16% of homes in June, which is the same as in May and 2.0% higher from one year ago. First-time buyers accounted for 30% of sales in June, which is 3.0 percentage points higher than May but down 1.0 percentage point from one year ago.

Shares of distressed home sales, which include both foreclosures and short sales, were less than 1.0%, which is unchanged from last month and from one year ago.

The report showed decreases in the number of home sales in three of the four major regions in June. Prices continued to increase over one year ago in all regions. Home sales in the Northeast were unchanged, at an annual rate of 670,000, but are down by 11.8% from a year ago. The median price increased by 10.1% over a year ago, to $453,300. Sales in the Midwest fell by 1.6% in June and are down by 9.6% from one year ago. Prices are higher by 10.2% than a year ago, at $306,900. Sales in the South fell 6.2% in June and are down 14.1% from one year ago. Median prices increased 16.8%, to $374,900. Sales in the West dropped in June by 11.1% and are down 21.3% from one year ago. The average price was $624,000, which is 9.6% higher than June 2021.

The national median existing-home price for all housing types was $416,000 in June, which is up 13.4% from a year ago. The June 2022 price increase marked the 124th consecutive month of year-over-year price gains.

The median time on the market for all homes sold in June was 14 days, which is two days less than in May and three days less than one year ago. Eighty-eight percent of homes sold in May were on the market for less than a month.

The latest quarterly report published by Redfin indicated that 51% of U.S. homeowners with mortgages have a mortgage rate under 4%, which is substantially below the current rate of 5.52%. About one-third of all homeowners, including those without mortgages, have a mortgage rate under 4%. The rise in rates has prompted a slowdown in home listings, with the primary reason being that existing homeowners are not looking to move and take on a higher mortgage. This report covers roughly 80 million owner-occupied U.S. households, of which about two-thirds (62%) have an outstanding mortgage.

Also, according to the National Association of Realtors (NAR), total housing inventory rose to 1.26 million existing homes for sale in June, up 9.6% from May and up 2.4% from one year ago. Unsold inventory was at a 3.0-month supply at the current sales pace in June, which is higher than the 2.6-months' supply in May and 0.5 higher than one year ago. Six months of inventory is considered a balanced market that equally benefits buyers and sellers.

The Federal Housing Finance Agency (FHFA) published its House Price Index, which showed U.S. housing prices increasing 1.4% in May when compared to the prior month. When compared to the period from one year ago, home prices increased 18.3%. Prices for homes rose in all nine census divisions when comparing May 2022 to April 2022. The New England division experienced the highest increase, at 2.0%, and the Pacific division the lowest, at 0.2%. The 12-month changes ranged from 13.9% in the Middle Atlantic region to 23.8% in the South Atlantic region.

According to Freddie Mac, the national average commitment rate for a 30-year, conventional, fixed-rate mortgage increased in May, to 5.52%, which is up from 5.23% in May. The average 30-year rate in 2021 was 2.96%.

In May, the NAR's Realtors Confidence Index Survey reported that 11% of respondents expect an increase in buyer traffic in the next three months, down from 16% in May and 39% in June 2021. Fifteen percent of respondents believe seller traffic will increase, down from 21% in May and 32% one year ago. The report noted 85% of buyers purchased a property in a suburban, small-town, rural, or resort area, 2% lower than the rate from one year ago, of 87%. The share of first-time buyers rose in June, to 30% from 27% in the prior month, and was down from 31% one year ago. The share of nonprimary residence buyers stayed at 16% and is two percentage points higher than one year ago. The number of vacation homebuyers held at 5%. The RCI is a key indicator of housing market strength based on a monthly survey of over 50,000 real estate practitioners.

NAR, in its most recent quarterly U.S. economic outlook, projects existing-home sales in 2022 to be 5.31 million (-13.2%) and expects them drop further, to 5.29 million (-0.4%), in 2023. It believes that new single-family home sales will be 640,000 (-17.0%) in 2022, before increasing to 720,000 (+12.5%) in 2023. NAR believes the median existing-home price will be $390,900 (+11.5%) in 2022, before increasing to $399,300 (+2.1%) in 2023. NAR believes the median new-home price will be $431,500 (+8.7%) in 2022, before dropping to $430,000 (-0.3%) in 2023. It expects housing starts to increase to 1.608 million (+0.4%) in 2022, then to 1.710 million (+6.3%) in 2023. NAR believes the 30-year fixed mortgage rate will average 5.2% in 2022 and rise to 6.0% in 2023 and the 5-1 hybrid adjustable-rate mortgage will average 4.0% in 2022 and 4.8% in 2023.

Pending home sales, as measured by the Pending Home Sales Index (PHSI), fell 8.6% in June, moving the index lower, to 91.0 points. The decline in sales was due to sudden large gains in mortgage rates, which have reduced the pool of eligible home buyers. When compared to one year ago, pending home sales fell by 20.0%.

Pending home sales fell across all four regions in June. The PHSI in the Northeast closed the first quarter at 80.9 points, which is down 6.7% from last month and down 17.6% from one year ago. The South decreased 8.9% on the month, to 108.3, and is down 19.2% from one year ago. The Midwest dropped to 93.7, a 3.8% change from May, and 13.4% less than one year ago. The West declined 15.9%, to 68.7, and is down 30.9% from one year ago.

The PHSI is a forward-looking indicator for the housing sector, based on pending sales of existing homes. A sale is listed as pending when the contract has been signed but the transaction has not closed, though the sale usually is finalized within one or two months of signing. There is a closer relationship between annual index changes (from the same month a year earlier) and year-ago changes in sales performance than there is with month-to-month comparisons. An index of 100 is equal to the average level of contract activity during 2001, which was the first year to be examined, as well as the first of five consecutive record years for existing-home sales.

NAR's most recent "Commercial Markets Insight" analyzed the trends in the commercial market through May and reported that the combination of high inflation and higher interest rates is causing mixed results in commercial real estate demand.

Through May, the vacancy rate in the apartment market rose slightly, to 5.3%. With vacancy rates remaining low, asking rents were up 9.7% year over year on average. The office space has continued to improve since the third quarter of 2021, and, as of May, asking rents are up on average by 1.0% year over year. The industrial sector has the lowest vacancy rate among the core property markets, at 4.0%, which is driving up rent growth to 11.8% year over year. In the retail property market, the average vacancy rate is low, at 4.4%, with asking rents up 4.1% year over year. While the hotel property market has improved compared to one year ago, the emergence of the omicron variant in November stalled the hotel property market's recovery. Hotel occupancy was just at 65.1% in May, which is above the occupancy rate of 56.9% before the pandemic in February 2020.

All commercial sectors experienced net positive absorption in the preceding four months including May. Supply in the multifamily sector outpaced demand, thus increasing the vacancy rate to 5.3% from 5.2%. In the office sector, the vacancy rate rose, to 12.2% from 9.7%, and, in the industrial market, the vacancy rate for core property markets continued at 4.0%. In the retail property market, the vacancy rate sits at 4.4%, below the 4.7% vacancy rate in 2020.

Higher interest rates have resulted in heightened risk aversion. Thus, investor acquisitions slowed somewhat in the 12-month period ending in May 2022. Acquisitions declined across asset classes, to $582 billion, for the 12-month period ending May 2022, a 7% drop from the 12-month period ending May 2021.

(See Exhibit 15 for forecasted figures from NAR.)

The U.S. Census Bureau found that the homeownership rate was 65.8% in the second quarter of 2022, which is statistically indifferent from the rate of 65.4% in the first quarter of 2022 and indifferent from the rate one year ago, which was 65.4%. The national vacancy rate for rental housing was 5.6% in the second quarter of 2022, which is 0.2 percentage point lower than the rate in the first quarter of 2022 and 0.6 percentage point lower from the rate one year ago. The national vacancy rate for homeowners was 0.8% in the second quarter of 2022, which was unchanged from the first quarter of 2022 and 0.1 percentage point lower than it was one year ago.

MORTGAGE BANKERS ASSOCIATION

The Mortgage Bankers Association (MBA) finance commentary report stated it believes refinance origination volume for 2022 will be $730 billion, a 30.3% share of all mortgage originations and will fall to $546 million in 2023, or

24.1% of all mortgage originations, compared to $2,345 million in 2021, or 58.8% of all mortgage originations. The MBA projects the 30-year mortgage rate will fall to 4.8% by the third quarter of 2022 and fall to 4.8% by the fourth quarter of 2022. The MBA believes purchase originations will total $1.681 trillion in 2022 and rise to $1.720 trillion in 2023 and $1.806 trillion in 2024. The MBA expects overall origination volume to total $2.411 trillion in 2022, fall to $2.266 trillion in 2023, and rise to $2.501 trillion in 2023.

(See Exhibit 16 for forecasted figures from MBA.)

NATIONAL ASSOCIATION OF REAL ESTATE INVESTMENT TRUSTS

Investment returns for properties, as measured by the National Association of Real Estate Investment Trusts (NAREIT), fell 7.1% in June. All 12 sectors posted losses on the month, with the lodging/resorts sector posting the greatest loss in June 2022, at 19.7%, followed by the office sector, at 15.0%, and then timber, at 14.7%. The commercial real estate market is in a state of transition as evidenced by increased investor pessimism in the face of a slowing economy. Returns through mid-year were disappointing, at -19.2%, despite strong operational performance in most sectors. It is believed that REITs are positioned to perform well during the current period of moderate to high inflation thanks to the strength of their balance sheets.

(See Exhibit 17 for more REIT return figures from NAREIT.)

NATIONAL COUNCIL OF REAL ESTATE INVESTMENT FIDUCIARIES

Property index returns, as measured by the National Council of Real Estate Investment Fiduciaries (NCREIF), returned 3.2% in the second quarter of 2022 after rising 5.3% in the first quarter of 2022. Of the property-type indexes, the industrial segment returned 5.9%, followed by the apartment segment, at 3.9%; the hotel segment, at 1.8%; the retail segment, at 1.7%; and the office segment, at 0.6%. All of the regional indexes rose in the second quarter of 2022, with the West rising by 3.9%, the South by 3.6%, the East by 2.4%, and the Midwest by 1.9%.

The NCREIF Property Index (NPI) is a quarterly time series composite total rate of return measure of investment performance of a very large pool of individual commercial real estate properties acquired in the private market for investment purposes only. All properties in the NPI have been acquired, at least in part, on behalf of tax-exempt institutional investors—the great majority being pension funds. As such, all properties are held in a fiduciary environment.

(See Exhibit 18 for more property index returns from NCREIF.)

At the national level, housing affordability worsened in the second quarter, with the index score dropping each month of the quarter. June is at 98.5 points, which is down 49.9 points from one year ago, as reported by the NAR Housing Affordability Index. The report noted that mortgage rates were higher in June, at 5.6%, than they were in March 2022, at 4.24%, and higher from one year ago, when they were 3.03%. The median sale price for single-family homes in June was $423,300, which is up 13.3% from one year ago.

The payment as a percentage of income was 25.4% in June and is higher by 5.1 percentage points from the end of the first quarter of 2022 and 7.9 percentage points from one year ago. The first-time buyer index decreased 19.2 percentage points in the second quarter of 2022, to 68.0.

The Housing Affordability Index, published by NAR, measures whether a typical family earns enough income to qualify for a mortgage loan on a typical home at the national and regional levels based on the most recent price and income data.

(See Exhibit 19 for more property affordability index returns from NAR.)

16. ECONOMIC OUTLOOK

Consensus Economics Inc., publisher of *Consensus Forecasts—USA,* reports that the consensus of U.S. forecasters believe that real GDP will rise at a seasonally adjusted annual rate of 2.4% in the third quarter of 2022 and increase by 2.0% in the fourth quarter of 2022. Every month, Consensus Economics surveys a panel of 30 prominent U.S. economic and financial forecasters for their predictions on a range of variables, including future growth, inflation, current account and budget balances, and interest rates. The forecasters expect GDP to increase 2.6% in 2022 and 1.8% in 2023.

They forecast that consumer spending will increase at a rate of 2.2% in the third quarter of 2022 and rise 1.9% in the fourth quarter of 2022. They expect consumer spending to increase 3.2% in 2022 and 1.8% in 2023.

The forecasters believe unemployment will average 3.5% in the third quarter of 2022 and average 3.6% in the fourth quarter of 2022. They predict that unemployment will average 3.6% in 2022 and 3.8% in 2023.

The forecasters believe that the three-month Treasury bill rate will be 2.1% in the third quarter of 2022 and rise to 2.6% in the fourth quarter of 2022. They predict the 10-year Treasury bond yield will be 3.2% in the third and fourth quarters of 2022.

They also believe consumer prices will rise at a rate of 6.2% in the third quarter of 2022 and rise 3.9% in the fourth quarter of 2022. They expect consumer prices to increase 7.7% in 2022 and 3.6% in 2023. They expect producer prices to increase 7.1% in the third quarter of 2022 and rise 5.3% in the fourth quarter of 2022. The forecasters anticipate producer prices will rise 12.0% in 2022 and 3.8% in 2023.

The forecasters believe real disposable personal income will increase 0.8% in the third quarter of 2022 and increase by 1.8% in the fourth quarter of 2022. They believe real disposable personal income will decrease 4.7% in 2022 but rise 2.1% in 2023.

The forecasters expect industrial production to increase 3.0% in the third quarter of 2022 and rise 2.0% in the fourth quarter of 2022. They forecast that industrial production will increase 5.2% in 2022 and rise 1.8% in 2023.

Nominal pretax corporate profits are expected to increase 4.5% in 2022 and 2.3% in 2023. The forecasters also project housing starts will be 1,650,000 in 2022 and 1,550,000 in 2023.

The most recent release of The Livingston Survey (the Survey) predicts GDP growth of 2.1% for the second half of 2022, which is a downward revision from the previously forecasted rate of 3.5% in the prior survey. The Survey, conducted by the Federal Reserve Bank of Philadelphia, is the oldest continuous survey of economists' expectations. It summarizes the forecasts of economists from industry, government, banking, and academia. The survey forecasts GDP growth of 2.3% in the first half of 2023. The forecasters predict a lower unemployment rate compared with their prior expectations. In June 2022, they forecast the unemployment rate will drop to 3.4% in December 2022 from the current rate of 3.6%, then rise to 3.5% by June 2023. The forecasters believe CPI Inflation will be 7.6% for 2022 and 3.8% for 2023 while PPI Inflation will be 13.2% for 2022 but drop significantly to 4.2% for 2023.

The Congressional Budget Office (CBO) provided its baseline economic forecast that is used as the basis for updating its budget projections for 2022 to 2032. In the report, the CBO projects that, if current laws governing

EXHIBIT 15: National Association of Realtors® Market Forecast

	3Q 2022	4Q 2022	2022	2023
Housing measures (thousands)				
Housing starts	1,510	1,550	1,608	1,710
Single-family	940	950	1,038	1,120
Multifamily	570	600	570	590
Home sales				
Total existing homes	4,930	4,900	5,310	5,290
New homes	550	620	640	720
Home prices (median)				
Existing homes	$402.4	$380.9	$390.9	$399.3
New homes	$430.0	$430.0	$431.5	$430.0
Mortgage Rates				
30-year fixed rate	5.8%	6.0%	5.2%	6.0%
5/1-year hybrid adjustable	4.5%	4.7%	4.0%	4.8%

Source of data: National Association of Realtors®
Notes:
Figures are in thousands, except for rates. Quarterly housing starts and home sales are seasonally adjusted at annual rate. Total existing home sales include single-family homes, condos, and co-ops.

EXHIBIT 16: Mortgage Bankers Association® Market Forecast

	3Q 2022	4Q 2022	2022	2023	2024
Housing measures (thousands)					
Housing starts	1,711	1,709	1,725	1,776	1,706
Single-family	1,221	1,238	1,216	1,317	1,269
Multifamily	490	471	509	459	438
Home sales					
Total existing homes	5,974	5,964	5,934	6,057	6,282
New homes	816	827	808	849	882
Home prices (median)					
Existing homes	$378.6	$376.0	$373.0	$392.7	$408.6
New homes	$426.5	$424.0	$426.7	$436.8	$442.2
Interest Rates					
30-year fixed rate mortgage	5.1%	5.0%	5.0%	4.8%	4.4%
10-Year Treasury yield	2.9%	2.9%	2.9%	2.8%	2.6%

Source of data: Mortgage Bankers Association®.
Notes:
Figures are in thousands, except for rates. Quarterly housing starts and home sales are seasonally adjusted at annual rate.
Total existing home sales include single-family homes, condos, and co-ops.

federal taxes and spending generally remain in place, the economy will grow modestly for the rest of the year. Real (inflation-adjusted) gross domestic product (GDP) is expected to grow at a 3.1% by the fourth quarter of 2022 over the fourth quarter of 2021 and by 2.2% by the fourth quarter of 2023. The unemployment rate is projected to average 3.7% in 2022 and fall to 3.6% in 2023.

The CBO assumes in its forecast that many of the current disruptions in the supply chain, as well as many of the effects of pandemic-related demand for goods and services, will cause inflation to remain high through midyear 2022 and those effects will start to fade through 2023, staying above 2%, however, into 2024. The impact of price increases of food, energy, and motor vehicles are expected taper off in 2023.

The Federal Reserve published its summary of economic projections, which is released with the FOMC meeting minutes in June. For 2022, the Federal Reserve forecasts real GDP to increase by 1.7%, which is less than its prior forecast for growth of 2.8%. Real GDP is forecasted to grow by 1.7% in 2023 and by 1.9% in 2024. The unemployment rate is projected to be 3.7% for 2022, which is more than its earlier projection of 3.5%. Unemployment is expected to be at 3.9% in 2023 and 4.1% in 2024. The Federal Reserve forecasts PCE to be at 5.2% in 2022, higher than the previously projected rate of 4.3%, but it is expected to moderate to 2.6% in 2023 and 2.2% in 2024. Core PCE is forecasted to be 4.3%, more than the originally projected rate of 4.1% in 2022, before falling to 2.6% in 2023 and 2.3% in 2024.

The Energy Information Administration (EIA) predicts that the West Texas Intermediate crude oil spot price will average approximately $98.79 per barrel in 2022, down from $102.47 per barrel in the previous forecast, and fall to $89.75 per barrel in 2023, down from $93.24 per barrel in May. The average price for West Texas Intermediate crude in 2021 was $68.21 per barrel. The EIA expects retail prices for regular-grade gas to average $4.05 per gallon in 2022 and $3.57 per gallon in 2023, compared with $3.02 per gallon in 2021.

The EIA believes the Henry Hub natural gas spot price will average $6.02 per million Btu (MMBtu) in 2022 down from $7.40 per MMBtu in the previous forecast and drop to $4.76 per MMBtu in 2023, a two-cent increase over the May forecast. The average Henry Hub natural gas spot price was $3.91 per MMBtu in 2021.

The cost of coal delivered to electricity-generating plants, which averaged $1.98 per MMBtu in 2021, is expected to average $2.10 per MMBtu in 2022 and $1.99 per MMBtu in 2023. Residential electricity prices, which averaged 13.72 cents per kilowatt-hour (kWh) in 2021, are expected to average 14.45 cents per kWh in 2022 then rise to 14.66 cents per kWh in 2023.

The most recent three-year outlook from the Urban Land Institute (ULI) and Ernst & Young (EY) found that real estate economists and analysts believe the economy, which was severely impacted in 2020, will continue to improve through 2024 but at a slower rate than it did in 2021. The forecast also projects full recovery from the 9.4 million jobs lost in 2020 by adding 4.10 million jobs in 2022 to the 6.74 million jobs added in 2021. The forecast further projects job growth to continue by 1.87 million and 1.15 million jobs in 2023 and 2024, respectively. The *ULI/EY Real Estate Consensus Forecast,* a semiannual publication, is based on a survey of 43 of the industry's top economists and analysts representing 37 of the country's leading real estate investment, advisory, and research firms and organizations. The forecast for each indicator is the median forecast from the 43 survey respondents. The key findings from the *Real Estate Consensus Forecast* include:

- U.S. commercial real estate transaction volumes totaled $846 billion in 2021, a historic high, and are forecast to be $800 billion in 2022, $725 billion in 2023, and $750 billion in 2024, all well above the actual pandemic-year low of $431 billion in 2020.

EXHIBIT 17: REIT Returns Historical Data

	MONTHLY DATA											
(%)	7/21	8/21	9/21	10/21	11/21	12/21	1/22	2/22	3/22	4/22	5/22	6/22
All Equity REITs*	4.4	2.1	-5.9	7.1	-1.0	9.6	-7.9	-3.9	7.1	-3.7	-4.7	-7.1
Industrial**	6.9	3.4	-7.3	14.8	3.9	11.4	-8.4	-6.5	9.6	-2.5	-15.6	-5.0
Office**	3.1	-2.0	-2.9	3.6	-3.1	7.6	-6.3	3.7	5.7	-10.5	-7.2	-15.0
Retail**	1.8	3.2	-5.3	7.9	-0.5	7.0	-5.2	-4.3	2.9	-3.7	-2.2	-9.5
Residential**	10.9	0.8	-4.4	7.7	-0.7	8.6	-6.8	-2.8	4.3	-4.2	-7.4	-5.1
Diversified**	4.2	-0.1	-5.7	5.9	-2.5	7.2	-6.5	-1.2	4.7	-4.1	0.7	-4.3
Lodging/Resorts**	-5.9	2.7	1.3	0.9	-8.2	11.2	-2.0	3.6	5.3	2.0	-4.3	-19.7
Health Care**	5.1	-2.7	-4.7	1.7	-4.2	8.0	0.2	-6.0	11.9	-8.2	1.3	-8.3
Self Storage**	5.5	5.3	-8.2	14.3	-0.8	13.8	-8.2	-3.1	10.2	-6.1	-9.4	-4.2
Timber**	-1.0	4.6	-0.8	1.7	4.4	10.6	-3.8	1.0	-1.2	7.8	-3.8	-14.7
Infrastructure**	3.1	2.9	-9.1	5.4	-3.5	13.4	-13.9	-8.8	11.5	-1.6	3.3	-4.3
Data Center **	2.1	4.6	-7.4	6.9	2.2	4.4	-13.6	-4.5	4.6	-0.8	-4.2	-5.0
Specialty **	1.6	3.9	-5.0	3.0	-4.1	11.8	-8.4	1.8	7.4	-2.3	-0.9	-5.5
Mortgage REITs	-2.6	2.9	-2.3	3.9	-5.6	0.9	-1.8	-6.1	3.2	-9.4	3.8	-10.4
Home Financing	-4.7	3.5	-0.9	2.2	-5.1	0.5	-0.6	-10.7	4.2	-10.1	5.0	-10.2
Commercial Financing	0.9	2.0	-4.4	6.4	-6.4	1.3	-3.5	0.8	1.8	-8.5	2.1	-10.7

	YEARLY DATA											
(%)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
All Equity REITs*	28.0	8.3	19.7	2.9	28.0	2.8	8.6	8.7	-4.0	28.7	-5.1	41.3
Industrial**	18.9	-5.2	31.3	7.4	21.0	2.6	30.7	20.6	-2.5	48.7	12.2	62.0
Office**	18.4	-0.8	14.2	5.6	25.9	0.3	13.2	5.3	-14.5	31.4	-18.4	22.0
Retail**	33.4	12.2	26.7	1.9	27.6	4.6	1.0	-4.8	-5.0	10.7	-25.2	51.9
Residential**	46.0	15.4	6.9	-5.4	40.0	17.1	4.5	6.6	3.1	30.9	-10.7	58.3
Diversified**	23.8	2.8	12.2	4.3	27.2	-0.5	10.3	-0.1	-12.5	24.1	-21.8	29.3
Lodging/Resorts**	42.8	-14.3	12.5	27.2	32.5	-24.4	24.3	7.2	-12.8	15.7	-23.6	18.2
Health Care**	19.2	13.6	20.4	-7.1	33.3	-7.2	6.4	0.9	7.6	21.2	-9.9	16.3
Self Storage**	29.3	35.2	19.9	9.5	31.4	40.6	-8.1	3.7	2.9	13.7	12.9	79.4
Timber**	NA	7.7	37.0	7.9	8.6	-7.0	8.3	21.9	-32.0	42.0	10.3	28.8
Infrastructure**	NA	NA	29.9	4.8	20.2	3.7	10.0	35.4	7.0	42.0	7.3	34.4
Data Center **	NA	NA	NA	NA	NA	1.5	26.4	28.4	-14.1	44.2	21.0	25.5
Specialty **	NA	NA	NA	NA	NA	1.7	19.9	13.2	-6.7	27.4	-8.2	41.7
Mortgage REITs	22.6	-2.4	19.9	-2.0	17.9	-8.9	22.9	19.8	-2.5	21.3	-18.8	15.6
Home Financing	21.0	-0.9	16.4	-12.7	19.4	-9.8	25.9	23.3	-4.7	17.2	22.6	11.5
Commercial Financing	-41.0	42.0	-11.3	43.0	41.8	14.5	-6.0	14.3	9.1	3.5	-10.7	22.5

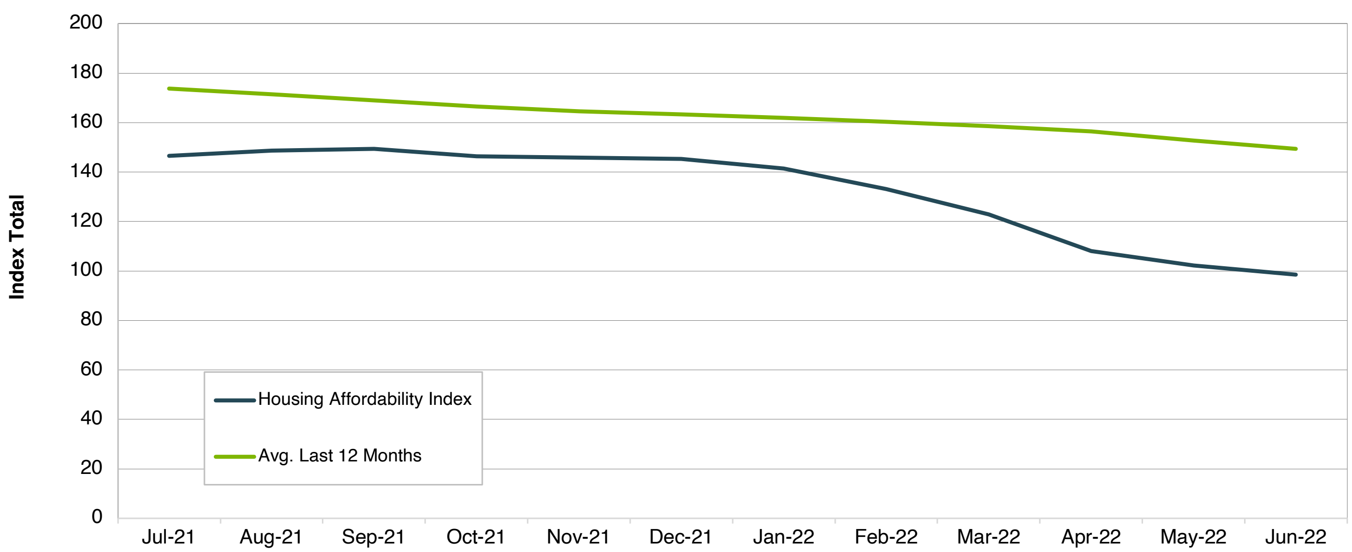
Source of data: National Association of Real Estate Investment Trusts (NAREIT).
Notes:
* FTSE NAREIT All Equity REIT Index. Does not include Mortgage REITS.
** Components of the FTSE NAREIT All Equity REIT Index.

EXHIBIT 18: Property Index Returns Historical Data

	QUARTERLY DATA											
(%)	3Q 19	4Q 19	1Q 20	2Q 20	3Q 20	4Q 20	1Q 21	2Q 21	3Q 21	4Q 21	1Q 22	2Q 22
National*	1.4	1.6	0.7	-1.0	0.7	1.2	1.7	3.6	5.2	6.2	5.3	3.2
East region*	0.9	1.3	0.6	-0.9	0.5	1.2	1.3	2.7	4.0	4.7	3.6	2.4
West region*	1.9	2.0	1.1	-0.8	0.9	1.3	2.2	4.3	6.1	7.2	6.5	3.9
South region*	1.5	1.4	0.5	-1.2	0.8	1.2	1.7	3.8	6.0	7.0	6.3	3.6
Midwest region*	0.9	0.5	-0.3	-1.8	0.5	0.3	1.1	3.0	3.7	3.9	3.5	1.9
Hotel*	1.8	0.2	-3.7	-16.6	-4.2	-3.3	-1.6	0.6	1.8	4.6	1.8	1.8
Apartment*	1.2	1.5	1.0	-0.6	0.5	1.0	1.7	3.6	6.5	6.8	5.3	3.9
Retail*	0.2	0.1	-2.1	-3.9	-0.5	-1.2	-0.5	0.9	1.6	2.2	2.3	1.7
Industrial*	3.2	3.2	2.6	1.0	3.0	4.7	4.7	8.9	10.9	13.3	11.0	5.9
Office*	1.5	1.7	1.3	-0.5	0.3	0.5	1.0	1.4	1.9	1.7	1.6	0.6

Source of data: National Council of Real Estate Investment Fiduciaries (NCREIF).
Notes:
* NCREIF Property Index.
The NCREIF Property Index is a quarterly time series composite total rate of return measure of investment performance of a very large pool of individual commercial real estate properties acquired in the private market for investment purposes only. All properties in the NPI have been acquired, at least in part, on behalf of tax-exempt institutional investors, the great majority being pension funds. As such, all properties are held in a fiduciary environment.

EXHIBIT 19: Housing Affordability Index



Source of data: National Association of Realtors®.

Notes:

The Monthly Housing Affordability Index measures whether or not a typical family earns enough income to qualify for a mortgage loan on a typical home at the national and regional levels based on the most recent monthly price and income data.

- Commercial property prices rose by 19.5% in 2021 and are projected to rise by 10.0% in 2022, then 6.0% in 2023, and 5.9% in 2024. The index rose by 5.2% in 2020.
- Office vacancy rates are predicted to rise to 16.6% in 2021, following a weak 2020. Vacancy rates will continue at an elevated level through 2024.
- Single-family housing starts are projected to be 1.2 million in 2022, consistent with expected units just six months ago. In 2023 and 2024, it is estimated there will be 1.25 million and 1.1 million new starts, respectively.
- National Council of Real Estate Investment Fiduciaries (NCREIF) total returns, which were positive for 11 consecutive years, finished at a strong 17.7% in 2021, up from the 4.5% predicted six months ago. Total returns are predicted to be 10.0% in 2022, 8.0% in 2023, and 7.0% in 2024. The 2022 total returns forecast range by property type; the range was from industrial, at 20.0%, to retail, at 5.4%.
- In 2021, the vacancy/availability rates for apartments dropped to 2.5% in 2021. Vacancy rates are expected to remain very low in 2022, at 2.5%, then increase slightly, to 2.7% in 2023 and 2.9% in 2024.
- Commercial property rent growth differs widely by property type. In 2022, industrial is predicted to lead all property types in rent growth over the forecast period, averaging 5.5%, then dropping slightly in 2023 and 2024. Apartment rent growth will average 5.3% in 2022, then also moderate in the forecast years 2023-24. Annual retail rent growth will average 2.0% over the forecast years, while rent for office space will grow 1.4% on average. For hotels—which track revenue per available room (RevPAR), combining rental rates and occupancy—growth will average 19.4% in 2022, 10.0% in 2023, and 5.0% in 2024. This follows a stellar positive growth rate of 58.4% in 2021, bouncing back from a 47.4% decline in 2020.

(See Exhibits 2A, 2B, 3, 15, and 16 for more forecasted figures.)

ECONOMIC OUTLOOK UPDATE DATA SOURCES

Bureau of Economic Analysis, U.S. Department of Commerce. Available from www.bea.gov.

Bureau of Labor Statistics, U.S. Department of Labor. Available from www.bls.gov.

Conference Board. Available from www.conference-board.org.

Congressional Budget Office. Available from www.cbo.gov.

Consensus Economics Inc., *Consensus Forecasts—USA.* Available from www.consensuseconomics.com.

Core Logic. Available from www.corelogic.com.

Council of Economic Advisers, The White House. Available from www.whitehouse.gov/cea.

Dow Jones Industrial Average. Available from www.spglobal.com.

Energy Information Administration. Available from www.eia.gov.

Federal Housing Finance Agency. Available from www.fhfa.gov.

Federal Reserve Bank of Chicago. Available from www.chicagofed.org/cfnai.

Federal Reserve Bank of Philadelphia. Available from www.phil.frb.org.

Federal Reserve Bank of St. Louis. Available from www.stlouisfed.org.

Federal Reserve Board Press Release. Available from www.federalreserve.gov.

Federal Reserve Board, The. Available from www.federalreserve.gov.

Freddie Mac. Available from www.freddiemac.com.

Institute for Supply Management. Available from www.ism.ws.

MarketWatch. Available from www.marketwatch.com.

Mortgage Bankers Association. Available from www.mba.org.

National Association of Homebuilders. Available from www.nahb.org.

National Association of Real Estate Investment Trusts. Available from www.reit.com.

National Association of Realtors. Available from www.realtor.org.

National Council of Real Estate Investment Fiduciaries, NCREIF Property Index Returns. Available from www.ncreif.com.

National Federation of Independent Business. Available from www.nfib.com.

Redfin. Available from www.redfin.com.

RSM US. Available from www.rsmus.com.

Russell US Indexes. Available from www.ftserussell.com.

STR Benchmarking. Available from www.str.com.

T. Rowe Price. Available from www.troweprice.com.

U.S. Census Bureau, U.S. Department of Commerce. Available from www.census.gov.

U.S. Chamber of Commerce. Available from www.uschamber.com.

U.S. Department of Labor. Available from www.dol.gov

The University of Michigan. Available from www.lsr.umich.edu.

Urban Land Institute. Available from www.uli.org.

Yahoo! Finance. Available from www.finance.yahoo.com.

DISCLAIMER AND PERMISSION STATEMENT

This Economic Outlook Update™ (EOU) *reflects the general economic conditions at the end of the second quarter of 2022. No statement in this report is to be construed as advice for a valuation engagement. It is the responsibility of the individual appraiser or analyst to relate the information contained herein to the valuation engagement. The editors and Business Valuation Resources, LLC, while considering the contents to be accurate as of the date of publication of this report, take no responsibility for the information contained herein.*

As long as the individual subscriber to the EOU *is in compliance with the Single User License Agreement, he or she may quote portions of the* EOU *or the entire* EOU *in a valuation report, provided the following attribution and disclaimer are included as a footnote:*

"Part/All [choose one] of the contents of the economic outlook section of this valuation report are quoted from the Economic Outlook Update™ 2Q 2022 published by Business Valuation Resources, LLC, © 2022 reprinted with permission. The editors and Business Valuation Resources, LLC, while considering the contents to be accurate as of the date of publication of the EOU, take no responsibility for the information contained therein. Relation of this information to this valuation engagement is the sole responsibility of the author of this valuation report."