The Linneman Letter

Volume 21, Issue 4 | Published since 2001 | Winter 2021-22

The following is an excerpt from the Winter 2021-22 edition of The Linneman Letter.

The Butterfly Recovery is Finally Over, or is it?

Visit https://www.linnemanassociates.com/covid-19-update for all of our webcasts.

As vaccinations continued, the Delta variant receded, and the federal unemployment insurance top-up ended, it appeared that the Butterfly Recovery had ended, only to be followed by an emerging Omicron variant. Early indications suggest that Omicron is a fast spreading but mild strain, but many questions remain including whether existing vaccines will be effective against it. If Omicron is as impactful as Delta, the economy will continue to grow but slower than the 4.5% otherwise expected pace. However, if Omicron does not gain traction (i.e., does not defeat vaccination progress), it is difficult to paint a scenario where 2022 fails to see real GDP growth of at least 4.5%. Individuals (and firms) have built up savings (reserves) and paid off debt, waiting for the opportunity to purchase the experiences and investments they desire.

Bank deposits are 72% higher than at year-end 2019 due to involuntary savings and generous government transfer payments. This pent-up demand centers around travel, leisure, and entertainment, but also includes items like new clothes and personal care products and services. Resurgent demand will push employment upwards, as people once again must work to afford their lifestyles. Hiring was slowed by 3-4 million jobs due to Federal unemployment insurance payouts, which left about half of the unemployed with higher incomes than if they had worked.

A broad cross-section of sectors is experiencing growth. Banks are generally performing well and have massive reserve cushions, which allowed loans outstanding to fall only 1.7% in 2020 despite enormous borrower stress. Meanwhile, airlines are hiring, and U.S. air traveler volume over the Thanksgiving weekend was up to 82% of 2019 levels (from a low of 4%). Restaurants added an estimated 4.8 million jobs between the April 2020 low and November 2021, but the sector is still 4.2% below the pre-pandemic employment level.

According to the Robin Return to Office Report, the average U.S. office capacity was 25% in October 2021, the highest since the start of the pandemic. The U.S. saw a 19% increase in workers returning to the office in October, with Boston (34%) and New York (22%) seeing above average increases. In the U.S., the share of people in the office varies by city but most are averaging 25-35% of pre-pandemic levels. This will rise in 2022 though will depend on how the impact of Omicron unfolds.

Walmart was one of the first major companies to mandate vaccines for employees at its headquarters, requiring them to be vaccinated by October 4, 2021. In late July, both Google and Facebook announced that their workers also must be vaccinated. The Biden administration has passed emergency regulations requiring people to be vaccinated if they are employed

A sample of articles available in the complete version of *The Linneman Letter*. To subscribe to *The Linneman Letter*, contact Doug Linneman at dlinneman@linnemanassociates.com.

Table of Contents

On The Road To Recovery - Climbing Out

	Pre-COVID Best	Current*	Difference from Trend	% Change Needed to Achieve Trend	Std. Dev. from Trend	Versus Trend
Real GDP ($ billions)	$21,649.4	$21,950.5	-$4,167.5	19.0	-1.14	lagging
Real Per Capita GDP	$65,706.6	$65,917.9	-$2,617.7	4.0	-0.28	lagging
Real Retail Sales ($ millions)	$461,358.9	$525,427.1	$46,414.3	0.0	0.78	**beating**
Real Median Home Price Index (FHFA)	274.4	346.9	74.7	0.0	1.30	**beating**
Durable Industrial Output Index	101.3	102.7	-10.6	10.3	-0.40	lagging
Non-Durable Industrial Output Index	98.1	99.7	-8.7	8.8	-0.83	lagging
Real Per Capita HH Net Worth	$356,612.9	$414,892.2	$75,402.4	0.0	1.12	**beating**
Payroll Employment (000s)	152,523.0	148,611.0	-18,432.4	12.4	-0.86	lagging
Unemployment Rate (%)	3.5	4.2	-1.2	0.0	-0.71	**beating**
Conference Board Consumer Confidence Index	132.6	109.5	10.3	0.0	0.41	**beating**
Median Weeks Unemployed	9.0	12.7	-1.3	0.0	-0.32	**beating**
Capacity Utilization Index	76.5	76.8	0.9	0.0	0.62	**beating**
SA Auto & Light Truck Sales (Thousands)	1,464.4	1,072.0	-303.4	28.3	-1.59	lagging
Median Home Price-to-Per Capita DPI	6.3	7.2	0.9	0.0	1.42	**beating**
Profits After-Tax ($ billions)	$2,097.2	$2,410.6	$330.5	0.0	0.60	**beating**
Percent of Industries Adding Workers (LTM Avg)	57.5	70.8	4.9	0.0	0.47	**beating**
Multifamily Starts (SAAR 000s)	588.0	491.0	208.4	0.0	1.72	**beating**
Single-Family Starts (SAAR 000s)	1,012.0	1,173.0	281.7	0.0	0.88	**beating**
Real Home Prices ($) (Census)	$329,639.8	$378,302.2	$43,947.3	0.0	0.94	**beating**

**Quarterly data through 3Q21; latest monthly varies, Sept-Nov 2021. SAAR = seasonally-adjusted annual rate.*
***GDP and employment trend lines based on 1969-2007. All others based on historical data 1980-present. All dollars use 2020 base year.*

figure 1

by the federal government (including members of the armed services), federal contractors, healthcare providers in the Medicare and Medicaid programs, and companies with 100 or more workers. However, several courts and legislatures issued blocks counteracting these regulations. Most recently, the 6th U.S. Circuit Court of Appeals in Cincinnati ruled on December 17 that vaccine mandates for larger private employers could move forward, overturning an earlier ruling by another court that had blocked the mandates. Stay tuned for more legal wrangling.

We continue to update our analysis of key economic indicators versus their respective historical trends. Real median home prices from both the Federal Housing Finance Agency (FHFA) and the Census, real retail sales, real per capita household net worth, the unemployment rate, consumer confidence, median weeks unemployed, capacity utilization, median home price-to-per capita DPI, after-tax profits, the percent of industries adding workers, and both multifamily and single-family housing starts are at or above their respective trends. In November 2021, multifamily home starts were 1.7 standard deviations above trend, amplified by a long-term declining trend. Strong production in November also kept single-family home starts above trend by 0.9 standard deviations. In the third quarter of 2021, real home

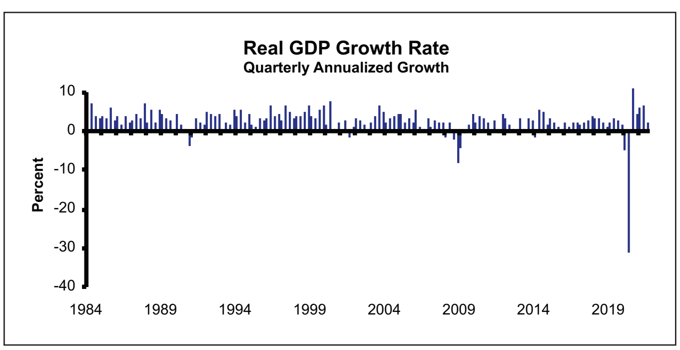

figure 2

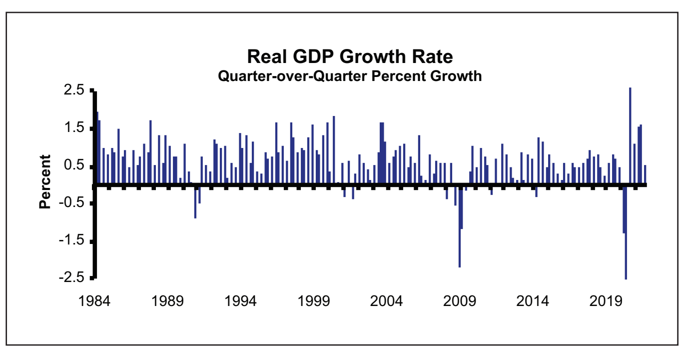

figure 3

On the Road to Recovery: Pre-COVID vs. Now

	Pre-Pandemic High	Latest*	% Change
Real GDP ($ billions)	$21,649.4	$21,950.5	1.4
Real Per Capita GDP	$65,706.6	$65,917.9	0.3
Real Retail Sales ($ millions)	$461,358.9	$525,427.1	13.9
Real Median Home Price Index (FHFA)	274.4	346.9	26.4
Durable Industrial Output Index	101.3	102.7	1.4
Non-Durable Industrial Output Index	98.1	99.7	1.7
Real Per Capita HH Net Worth	$356,612.9	$414,892.2	16.3
Payroll Employment (000s)	152,523.0	148,611.0	-2.6
Unemployment Rate (%)	3.5	4.2	20.0
Conference Board Consumer Confidence Index	132.6	109.5	-17.4
Median Weeks Unemployed	9.0	12.7	41.1
Capacity Utilization Index	76.5	76.8	0.4
SA Auto & Light Truck Sales (Thousands)	1,464.4	1,072.0	-26.8
Median Home Price-to-Per Capita DPI	6.3	7.2	15.3
Profits After-Tax ($ billions)	$2,097.2	$2,410.6	14.9
Percent of Industries Adding Workers (LTM Avg)	57.5	70.8	23.2
Multifamily Starts (SAAR 000s)	588.0	491.0	-16.5
Single-Family Starts (SAAR 000s)	1,012.0	1,173.0	15.9
Real Home Prices ($) (Census)	$329,639.8	$378,302.2	14.8
Real REIT Value Index	200.5	216.1	7.8
Real Private Real Estate Value Index	431.4	437.9	1.5
Real Average Office Rent PSF	$33.27	$33.77	1.5
Office Vacancy (%)	9.8	13.1	34.1
Real Median Multifamily Rent (Census)	$1,019.1	$1,126.2	10.5
Apartment Vacancy (%)	6.2	5.1	-16.6
Hotel Occupancy (%)	66.1	54.9	-16.9
Real RevPAR	$86.90	$61.42	-29.3
Real Average Industrial Rent PSF	$6.53	$6.80	4.1
Industrial Vacancy (%)	3.3	2.5	-24.5

**Quarterly data through 3Q21; latest monthly varies, Sept-Nov 2021*
SAAR indicates seasonally-adjusted annual rates.
All dollars in real 2020 dollars.

figure 4

prices based on Census and FHFA data were above trend by 0.9 and 1.3 standard deviations, respectively. The latest consumer confidence and ratio of median home prices-to-per capita disposable personal income indices were also above trend, by 0.4 and 1.4 standard deviations, respectively. After-tax corporate profits were above trend by 0.6 standard deviations in the third quarter of 2021. Other key economic metrics remain below their long-term norms, with October 2021 auto and light truck sales and employment lagging trend by 1.6 and 0.9 standard deviations, respectively.

At nearly $22 trillion in the third quarter of 2021, real GDP (2020 dollars) surpassed the year-end 2019 level by 1.4% ($301 billion). In comparison, real GDP per capita was $65,920 in the third quarter of 2021 and stood 0.3% ($210) above the fourth-quarter 2019 level. These figures are notably improved from the economic lows in the second quarter of 2020, when real GDP and real GDP per capita were 10.1% and 10.2% below pre-pandemic levels, respectively. Real GDP grew by 0.5% in the third quarter of 2021 and by a robust 4.9% year-over-year, marking three consecutive quarters of positive year-over-year growth.

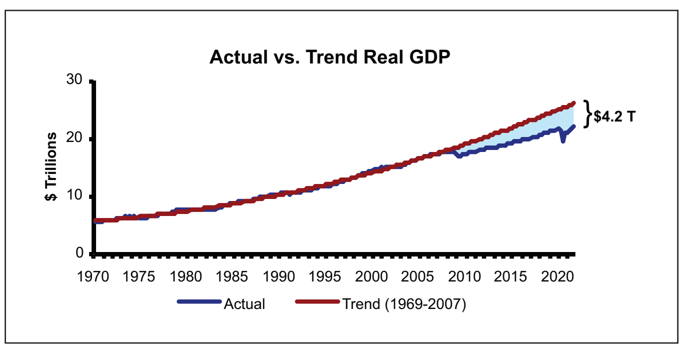

figure 5

Real GDP and real GDP per capita are 1.1 and 0.3 standard deviations below trend, respectively. About 48% of the gap relates to the under-production of single-family housing over the past decade. Robust year-over-year real GDP growth of 12.2% and 4.9% in the second and third quarters of 2021, respectively, was a heartening increase over the first-quarter year-over-year growth of 0.5%. That said, real GDP is still about 4% below where it would have been absent COVID, assuming the economy would have otherwise grown by 2.5% per year. Meanwhile, 3.9 million net jobs were officially lost between February 2020 and November 2021, a 2.6% decrease. This compares to the 22.8 million jobs recovered after the Financial Crisis.We expect solid real GDP in 2022 due to significant pent-up demand across a broad range of sectors, with the U.S. economy making up lost ground in overall growth, jobs, housing starts, and auto production. The economy will not go back to full speed overnight but look for robust growth over the next three years. Expect 2022 GDP to grow the "normal" 2.5% plus half of the 4% shortfall, or about 4.5% in aggregate. Capacity shortfalls will keep annual growth from achieving the 6% required to fully catch up in 2022. We expect another 4.5% of GDP growth in 2023.

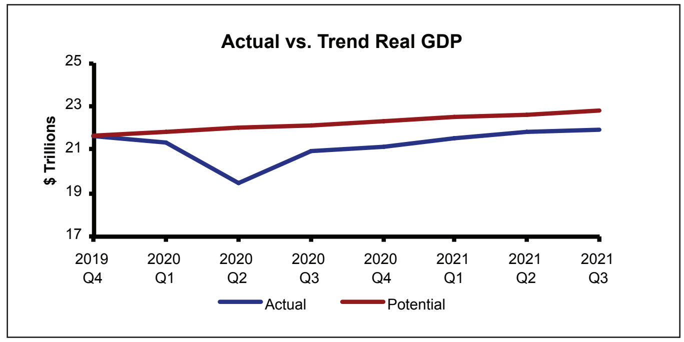

figure 6

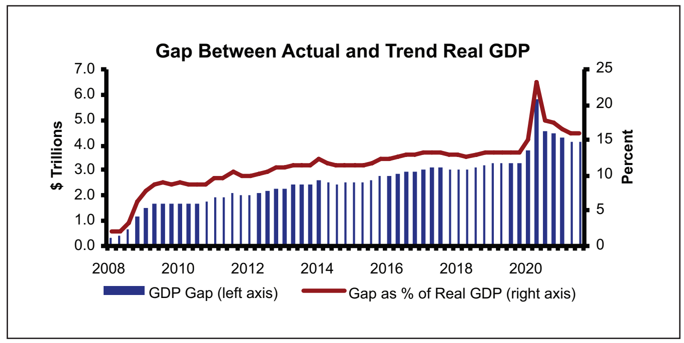

figure 7

About Dr. Peter Linneman

Dr. Linneman, who holds both Masters and Doctorate degrees in economics from the University of Chicago, is the Principal of Linneman Associates. For nearly four decades, he has provided strategic and financial advice to leading corporations. Through Linneman Associates, he provides strategic and M&A analysis, market studies, and feasibility analysis to a number of leading U.S. and international companies. In addition, he serves as an advisor to and a board member of several public and private firms.

Dr. Linneman is the author of the leading real estate finance textbook, *Real Estate Finance and Investments: Risks and Opportunities*, now in its fifth edition. His teaching and research focuses on real estate and investment strategies, mergers and acquisitions, and international markets. He has published over 100 articles during his career. He is widely recognized as one of the leading strategic thinkers in the real estate industry.

He also served as the Albert Sussman Professor of Real Estate, Finance, and Business and Public Policy at the Wharton School of Business at the University of Pennsylvania until his retirement in 2011. A member of Wharton's faculty since 1979, he served as the founding chairman of Wharton's Real Estate Department and the Director of Wharton's Zell-Lurie Real Estate Center for 13 years. He is the founding co-editor of *The Wharton Real Estate Review*.

Follow us on Twitter:

@P_Linneman

For more information about a subscription to *The Linneman Letter*, contact Doug Linneman at dlinneman@linnemanassociates.com.