Economic Outlook:

Solid Recovery Inflation, Policy Risks Remain

November 2021



Lindsey M. Piegza, Ph.D.Chief Economist

For Institutional Use Only

Objectives

- 1. Macro-economic trends including the health of the consumer, and manufacturing sector
- 2. Fed policy effects and initiatives
- 3. U.S. growth and rate outlook

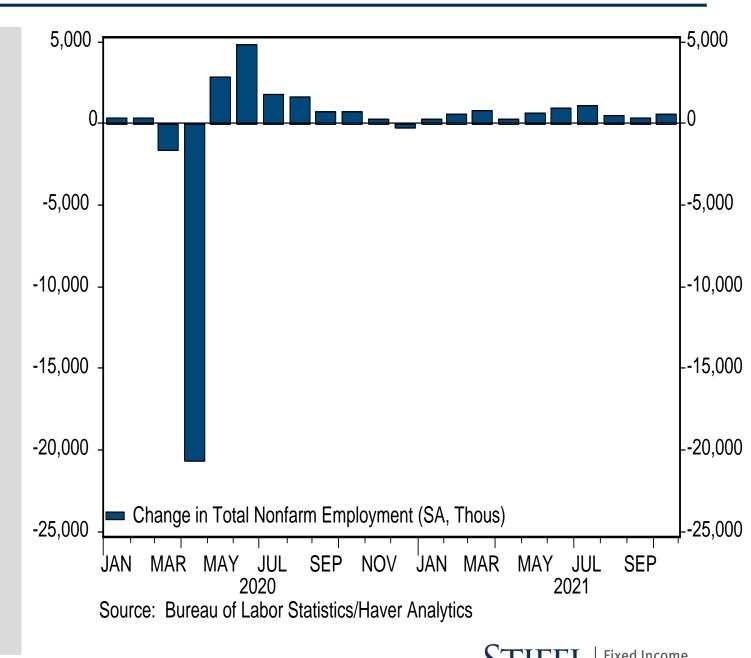


531k Payrolls Added in October

Nonfarm payrolls fell 1.7M in March and 20.7M in April of last year, the largest monthly decline on record

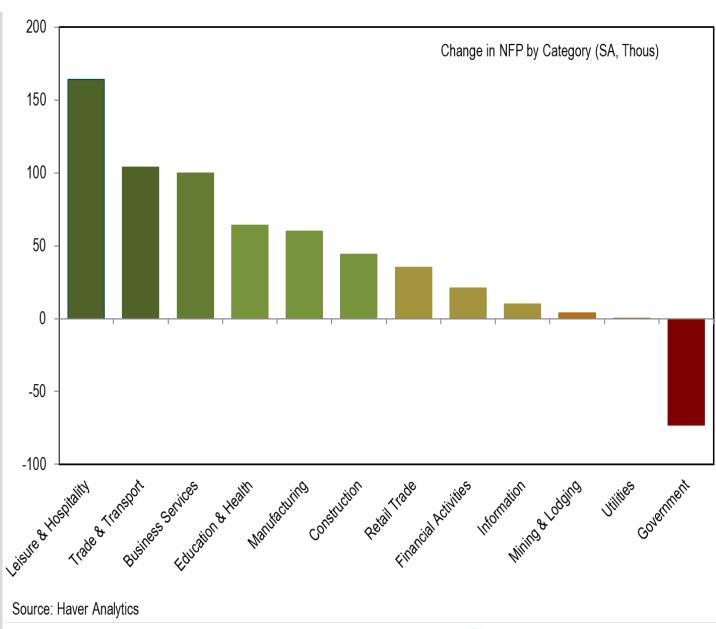
Nonfarm payrolls rose 531k in October, a three-month high

For the full year, payrolls dropped by 9.3M in 2020, the largest decline on record, and more than the combined decline in 2008 and 2009



Payrolls by Category

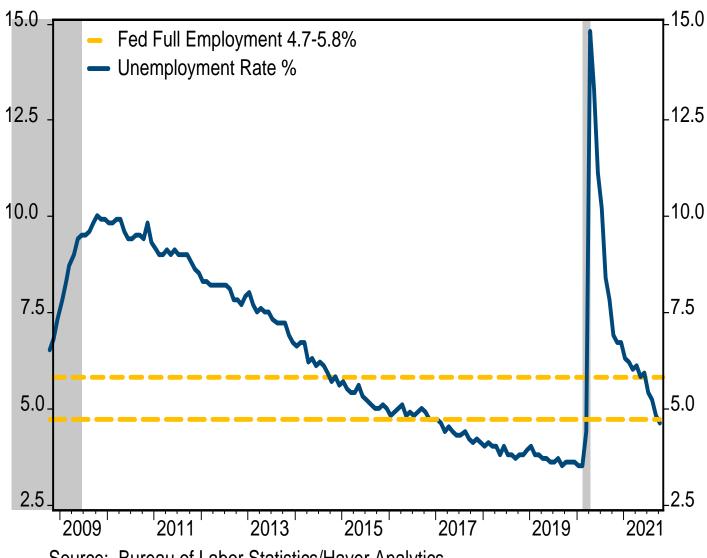
Leisure and hospitality lead the gain in payrolls in October with 164k, followed by trade and transport with 104k, while government payrolls dropped 73k in October



4.6% Unemployment Rate

The unemployment rate dropped from 4.8% to 4.6% in October, the lowest since March 2020

While still elevated from the 3.5% jobless rate at the start of 2020, last month's rate stands in stark contrast to a near 15% peak in April



Source: Bureau of Labor Statistics/Haver Analytics

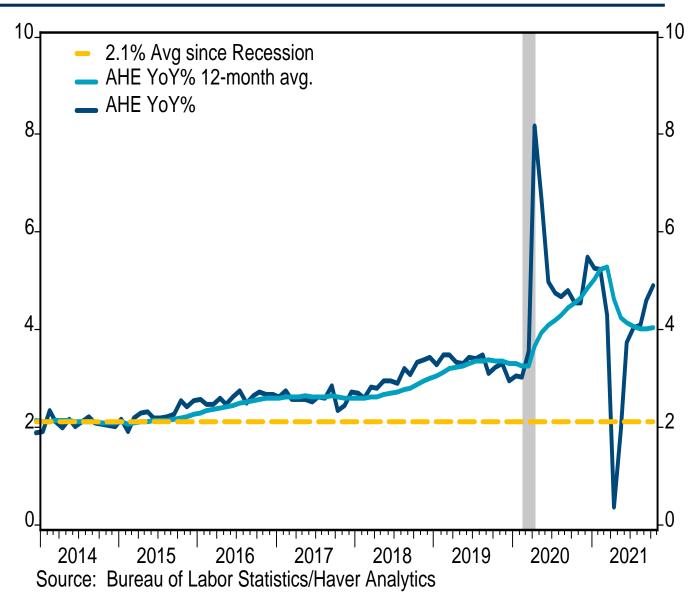


Average Hourly Earnings Accelerate

Average hourly earnings rose **0.4%** in October, following a 0.6% increase in September

Year-over-year, wages rose 4.9% in October, an eight-month high, but below a recent peak of 8.2% in April 2020

Average earnings increased early on during the pandemic as lower-wage workers dropped out of the workforce



^{*}Does not include government assistance



Polling Question #1

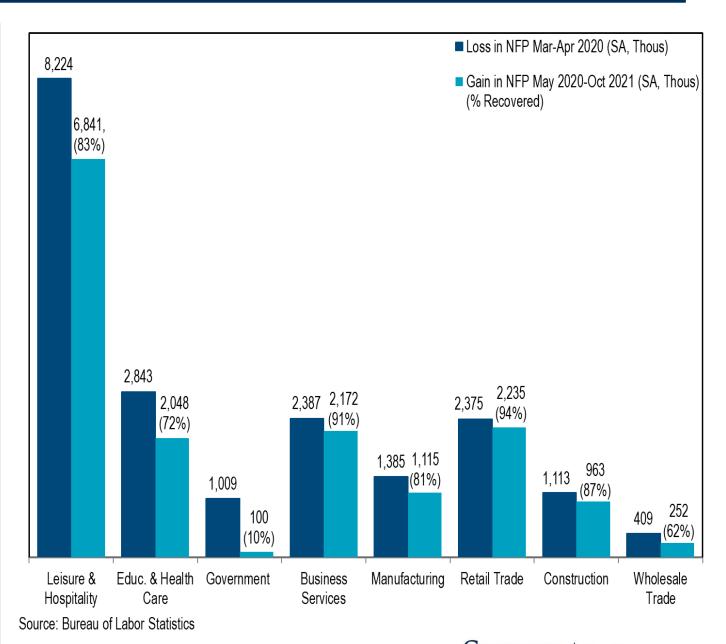
Where are we in term of recapturing lost jobs since the start of the pandemic?

- A) 4M shy of the pre-pandemic peak
- B) 2M shy of the pre-pandemic peak
- C) Less than 1M shy of the pre-pandemic peak
- D) Just about there

Hardest Hit Industries Recapture Jobs

The leisure and hospitality industry lost over 8M jobs during the pandemic but has since recaptured more than 6M or 83%

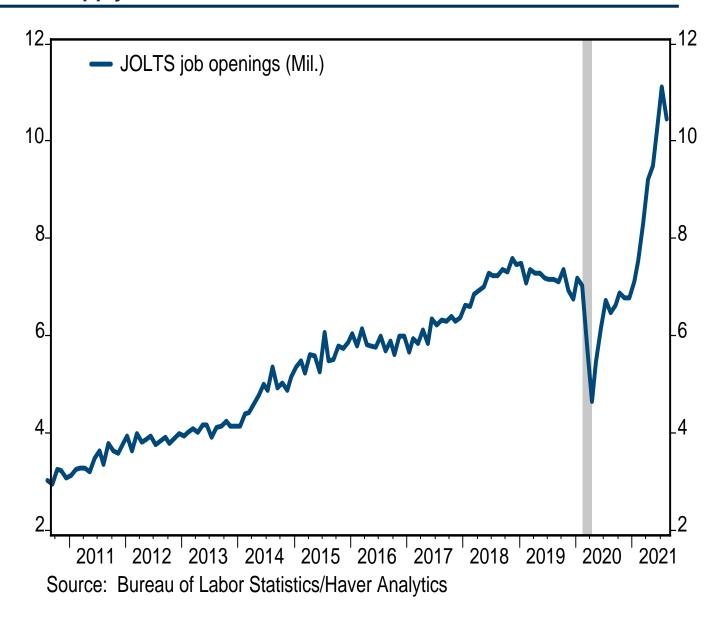
The hardest hit sectors have recaptured roughly 70% of lost jobs



STIFEL | Fixed Income Capital Markets

Labor Demand Outpaces Labor Supply

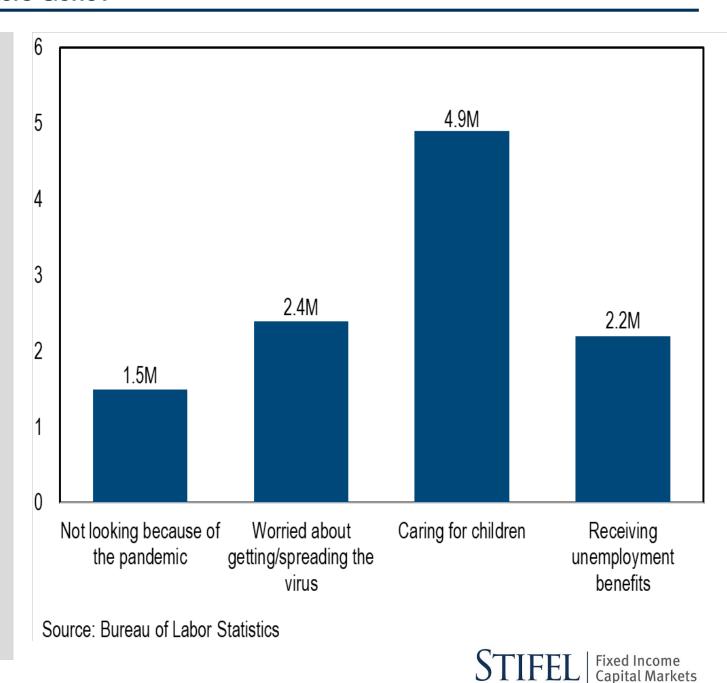
The number of job openings, according to JOLTS - the Job Openings and Labor Turnover Survey - fell from 11.1M to 10.4M in August, still near a record high, suggesting producers remain desperate for workers to increase output and meet a still-heightened level of demand for goods and services



Where Have All the Workers Gone?

According to the Bureau of Labor Statistics, as of October, 1.5M Americans report they are prevented from looking for work due to the pandemic with over 2M reporting they remained sidelined due to "worries about getting or spreading the virus"

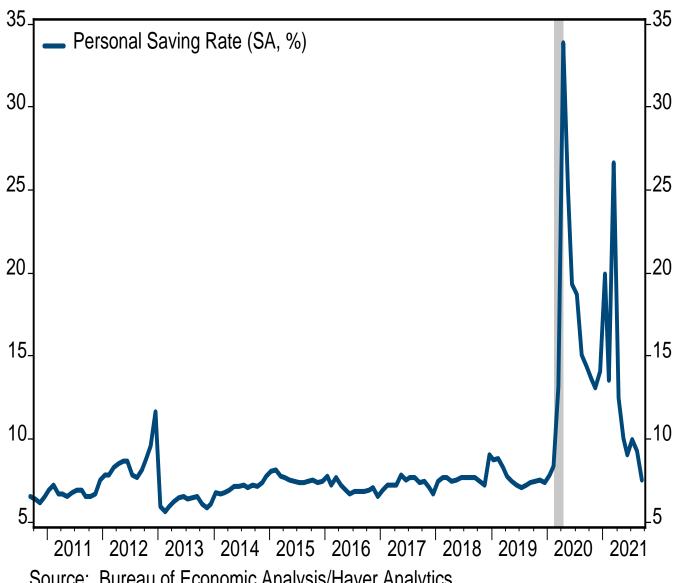
The Census Bureau reports nearly 5M people are out of work because they were "caring for children not in school or daycare"



\$1.3T in Accumulated Savings

The U.S. consumer remains solid with \$1.3T in savings and a savings rate of 7.5% as of September

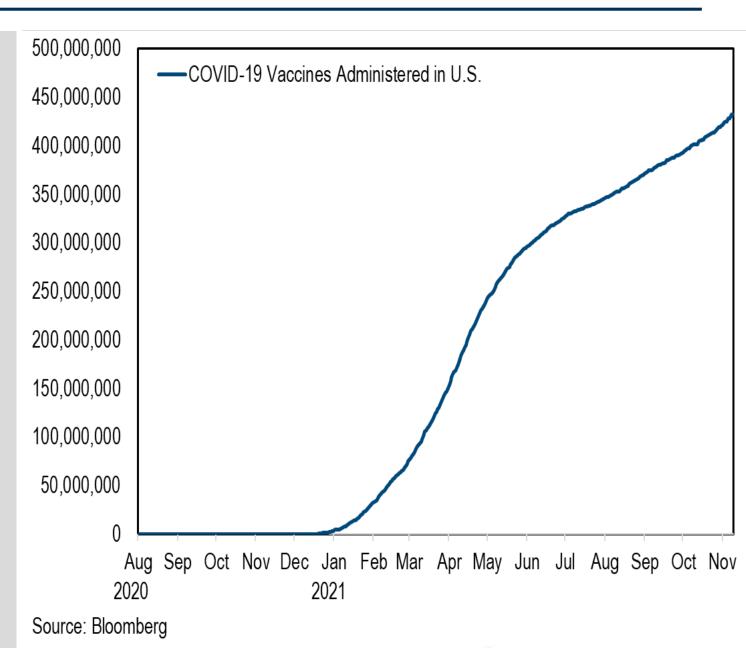
Additional savings, higher wages and additional federal spending will help supplement the consumer and mitigate the fiscal cliff resulting from an end of pandemic stimulus



Source: Bureau of Economic Analysis/Haver Analytics

Pace of Vaccinations Slows

The pace of vaccinations in the U.S. has slowed from 3M a day in the spring to around 809k a day

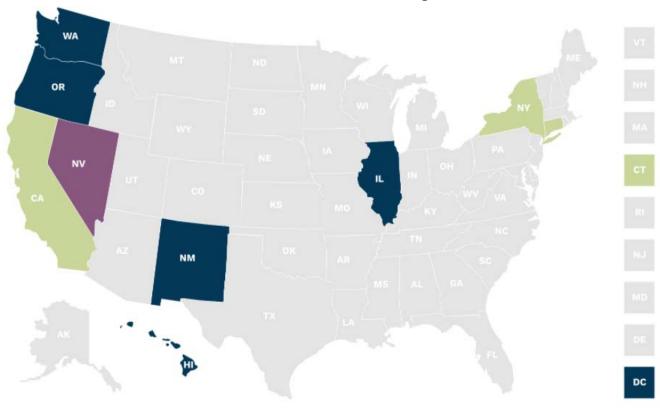


STIFEL | Fixed Income Capital Markets

COVID-19 Safety Protocols by State

As of November 5, 9 states and Washington, D.C. have mask requirements in place, with 3 states excluding vaccinated individuals

Statewide Mask and Face Covering Mandates



Blue: Mask mandate includes vaccinated individuals

Green: Mask mandate excludes vaccinated

individuals

Purple: Mask mandate includes vaccinated individuals

Fixed Income

Capital Markets

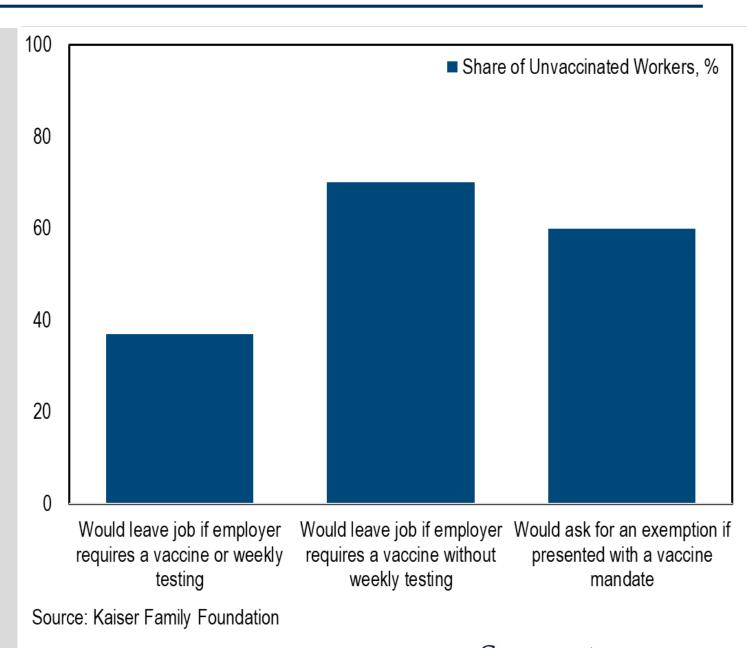
in areas (counties) of high transmission only

Source: Multistate, Data as of 11/5/20 Grey: No statewide mask mandate

COVID-19 Vaccine Mandate

More than a third (37%) of unvaccinated workers (roughly 13M of adults overall) say they would leave their job if their employer required them to get a vaccine or get tested weekly, a share that rises to seven in ten unvaccinated workers (roughly 23M of all adults) if weekly testing is not an option

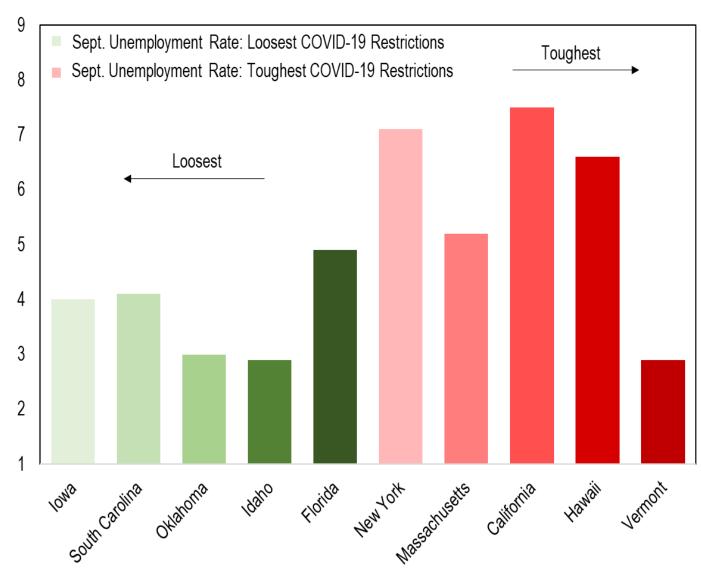
Six in ten workers (roughly 20M of all adults) say they would ask for an exemption if presented with such a mandate



STIFEL | Fixed Income Capital Markets

Unemployment Rate by State

States such as California and New York continue to face high unemployment rates at 7.5% and 7.1%, respectively, while states like Florida and South Carolina have unemployment rates under 5.0%



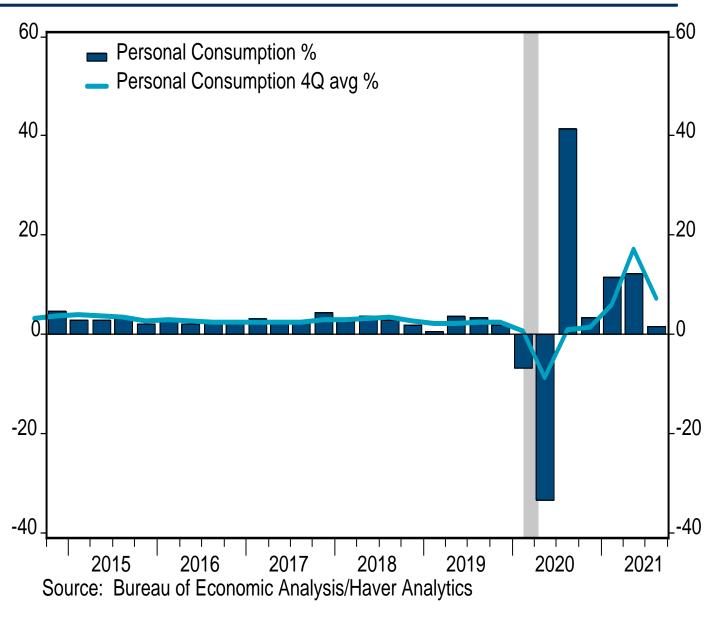
Source: U.S. Bureau of Labor Statistics



Stimulus Boosts Consumption

Personal consumption expenditures rose 1.6% in Q3, down from the 12% pace the quarter prior, and a five-quarter low

On a four-quarter average basis, consumption rose 7.1%, down from the record 17.1% pace the quarter prior



STIFEL | Fixed Income Capital Markets

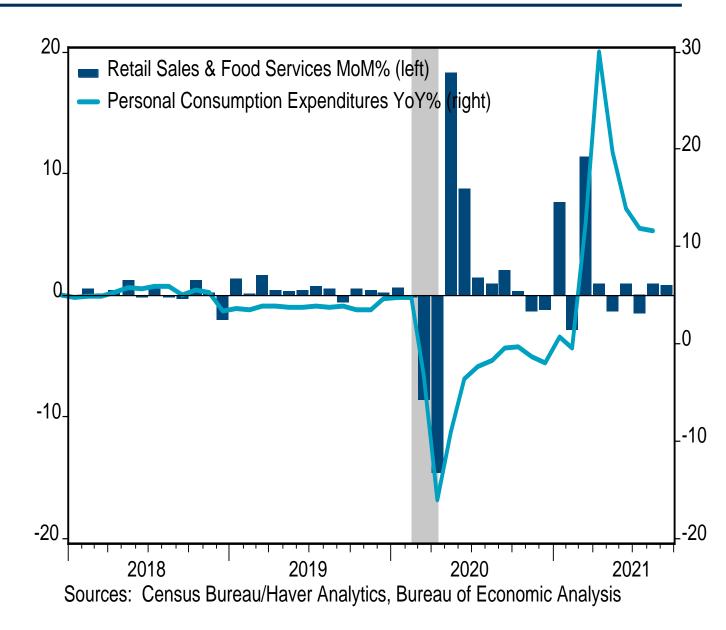
Retail Sales Rise in September

Retail sales fell 8.2% in March and 14.7% in April 2020

Sales rose 0.7% in September, following a 0.9% increase in August, although below the 18.3% peak in May 2020

Over the past six months, sales have averaged 0.1%

Year-over-year, retail sales rose 13.9% in September, following a 15.4% gain in August



STIFEL | Fixed Income Capital Markets

Polling Question #2

What do you think will be the biggest barrier to consumers going forward?

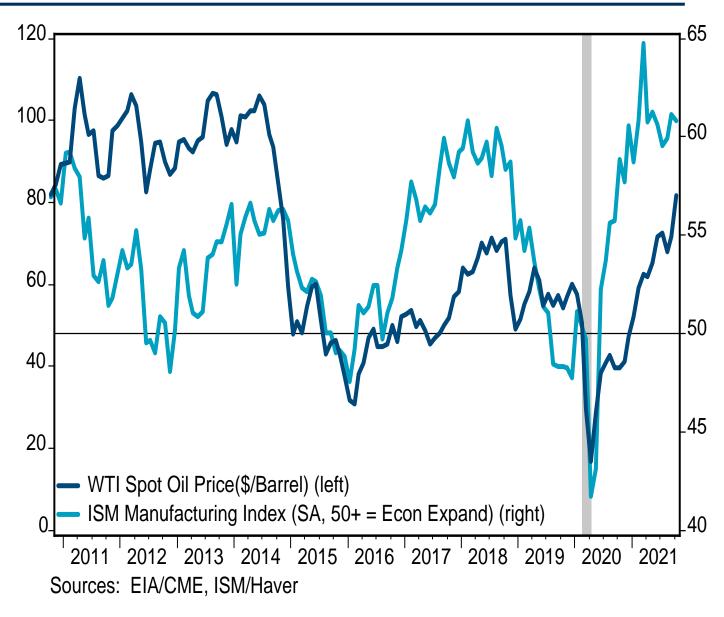
- A) Rising gas prices/food prices/inflation
- B) Lack of fiscal support/no further government stimulus
- C) A lack of real wage growth
- D) The virus/rising caseload through the winter flu season
- E) Correction in the equity market
- F) Ongoing global supply chain disruptions and limitations

Manufacturing Activity Solid

The ISM manufacturing Index dropped from 50.3 in February 2020 to a low of 41.7 in April 2020, but has since rebounded to 60.8 as of October, a two-month low

Oil prices declined 21% in 2020, after dropping an unprecedented 300% to -\$37 on April 20th

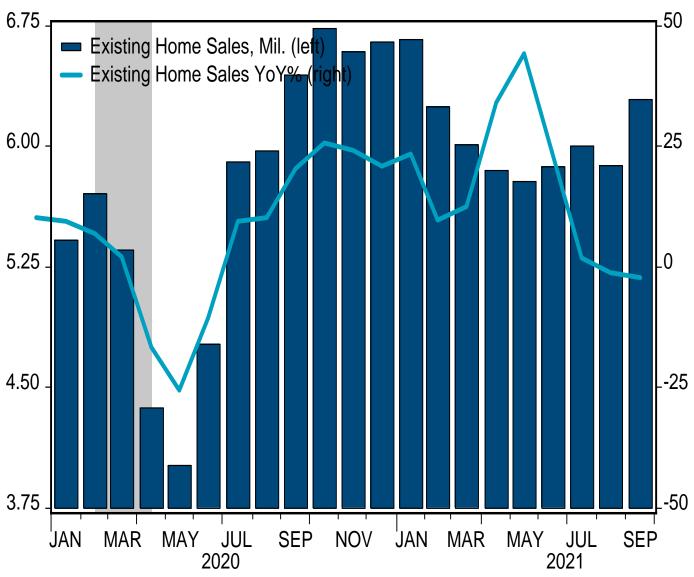
Crude prices have been trading in a \$79 to \$86 range for the past four weeks



STIFEL | Fixed Income Capital Markets

Increased Demand for Housing

Existing home sales rose 7% in September to a 6.29m unit pace, up more than 55% since the May 2020 low



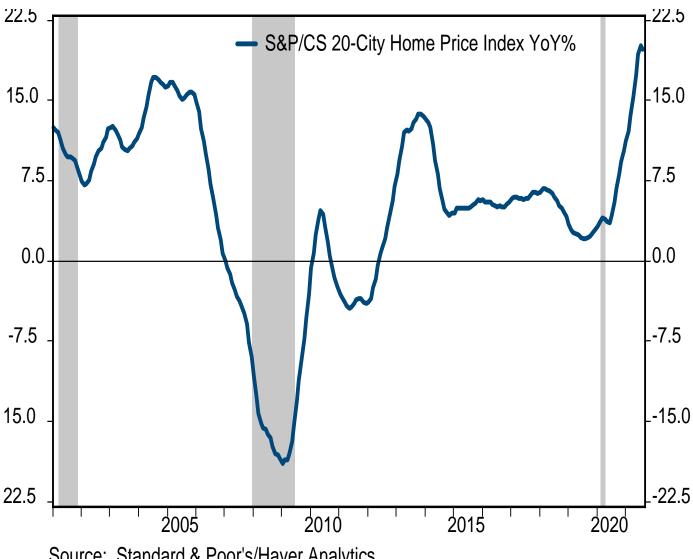
Source: National Association of Realtors/Haver Analytics



Home Prices on the Rise

Year-over-year, the 20-city home price index rose 19.7%, down slightly from the record 20.0% increase reported in July

Nationally, home prices rose 19.8% on an annual basis in August, following a similar increase in July and the largest annual gain in the history of the index dating back to 1987



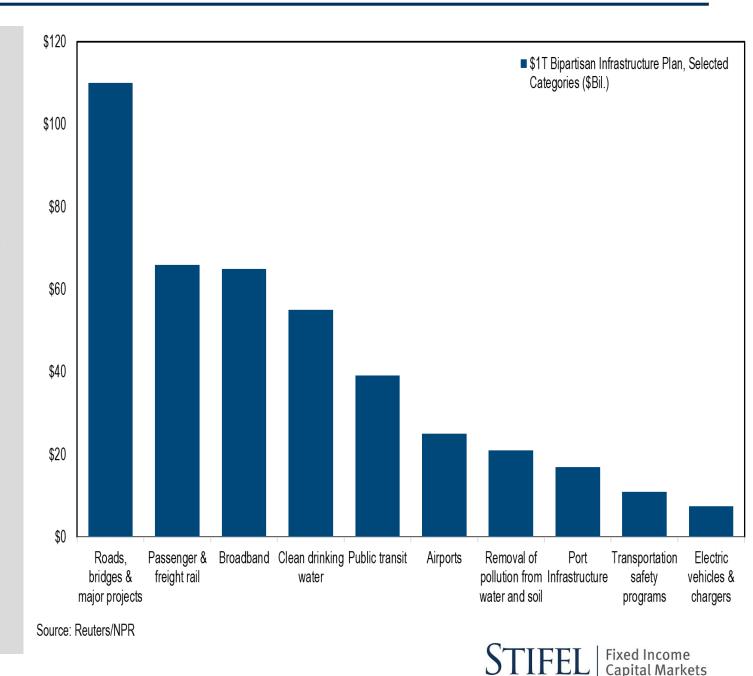
Source: Standard & Poor's/Haver Analytics



\$1T Infrastructure Plan

After months of negotiations and a standoff between progressive and moderate Democrats, the \$1T package of road, broadband, and other "hard" infrastructure improvements passed the U.S. House of Representatives on November 6 with a 228-to-206 vote

Key items include: \$110B for roads & bridges \$66B for passenger & freight rail \$55B for clean drinking water

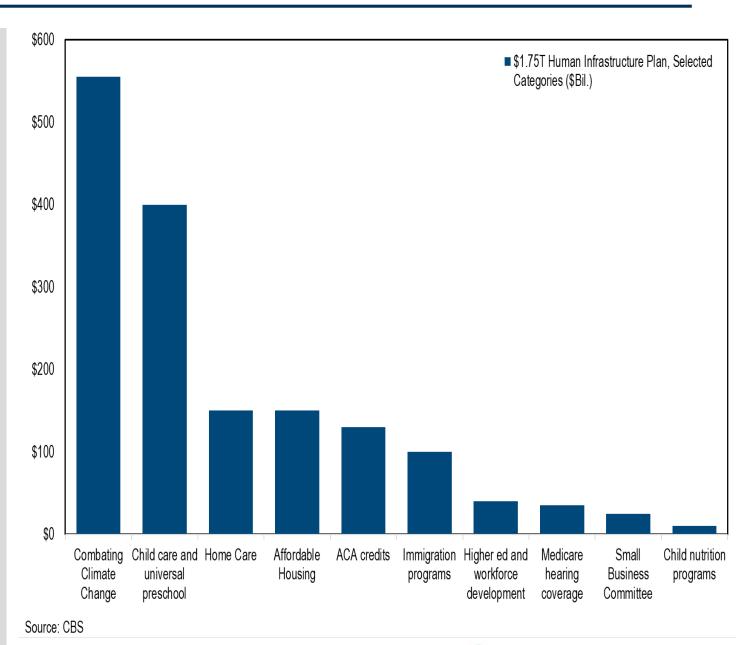


\$1.75T Human Infrastructure Plan

The White House rolled out a revamped framework that aims to expand the nation's social safety net and combat climate change

The cost of the package has been reduced down from its original \$3.5T price tag to \$1.75T over a decade

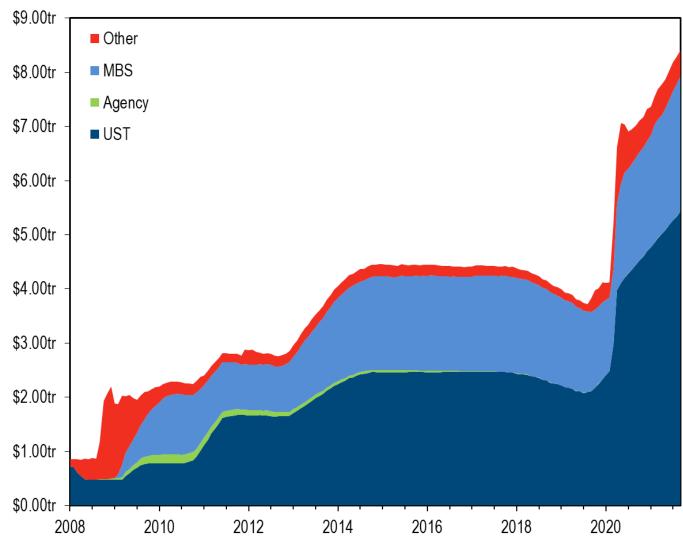
Key items include: \$550B to combat climate change \$400B for child care & universal pre-K \$150B for home care & \$150B for affordable housing programs



Fed Balance Sheet Tops \$8T

During the 2007-2008
Financial Crisis and
subsequent recession, the
Federal Reserve's balance
sheet increased
significantly from \$870B in
August 2007 to \$4.5T in
early 2015, including \$1.7T
in MBS and \$1.7T in UST
purchases

Since the start of the coronavirus pandemic, the Fed's balance sheet has increased from \$4.2T in February 2020 to \$8.4T as of September 2021, with holdings of MBS growing more than \$1T and UST purchases rising \$3T



Source: Federal Reserve/Haver Analytics

*Other includes discount window lending; lending to other institutions; assets of limited liability companies (LLCs) that have been consolidated onto the Federal Reserve's balance sheet, and foreign currency holdings associated with reciprocal currency arrangements with other central banks (foreign central bank liquidity swaps).



Fed Consensus to Begin Taper

The pathway discussed at the September FOMC meeting and confirmed in November is a monthly reduction of \$15 billion - \$5 billion in MBS and \$10 billion UST

Reductions will start in November at the \$15 billion pace, meaning the Fed's asset purchase program could be concluded by mid-2022

At that point, the Committee will presumably move on to the second phase of its policy adjustment, liftoff

Federal Reserve Potential Taper Outline:		
	Monthly Purchases of UST (Bil. \$)	Monthly Purchases of MBS (Bil. \$)
Oct-21	\$80	\$40
Nov-21	\$70	\$35
Dec-21	\$60	\$30
Jan-22	\$50	\$25
Feb-22	\$40	\$20
Mar-22	\$30	\$15
Apr-22	\$20	\$10
May-22	\$10	\$5
Jun-22	\$0	\$0

Source: Federal Reserve Board/Stifel



Fed Projects Continued Low Rates

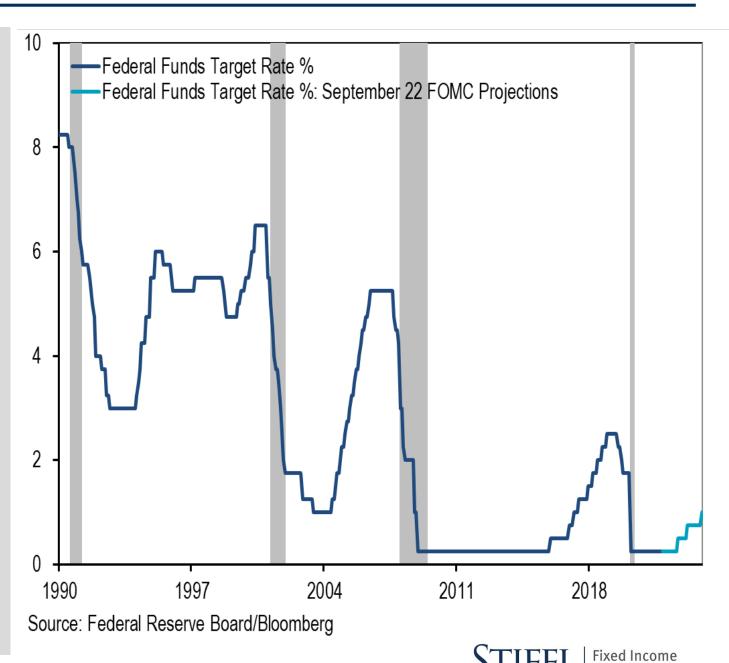
"In light of the substantial further progress the economy has made toward the Committee's goals since last December, the Committee decided to begin reducing the monthly pace of its net asset purchases."

-Nov. 3 FOMC Statement

"The purpose of that [statement] language is to put notice out there that could come as soon as the next meeting."

-Fed Chairman Powell Sept. 22 Press Conference

The latest dot plot shows officials split over a rate hike next year with half expecting to raise rates once by the end of 2022



Polling Question #3

When do you think the Fed will raise rates?

- A) 2022
- B) 2023
- C) Later than 2023

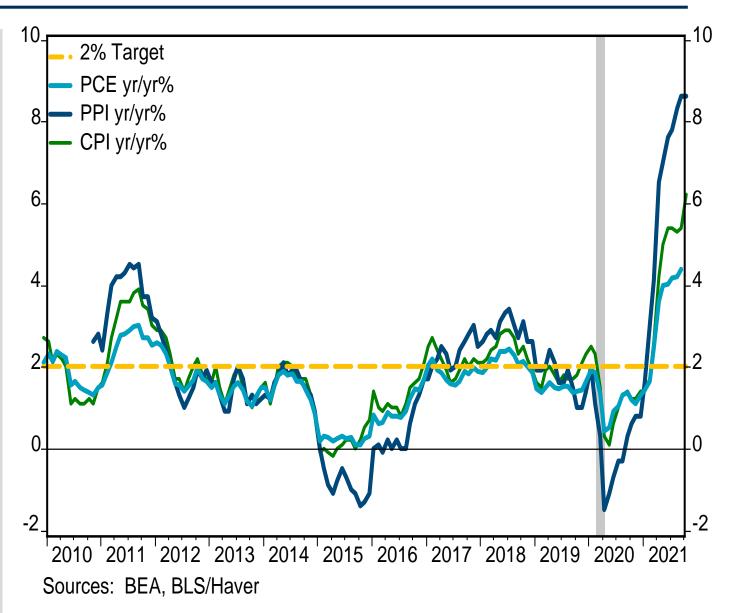
"Transitory" Rise in Inflation

"With inflation having run persistently below this longer-run goal, the Committee will aim to achieve inflation moderately above 2% for some time so that inflation averages 2%..."

-Nov. 3 FOMC Statement

The PCE rose 0.3% in Sept. and rose 4.4% YoY, the most since January 1991. The core PCE rose 0.2% in Sept. and rose 3.6% YoY for the fourth consecutive month, the most since December 1991. Inflation has fallen short of the Fed's 2% target for nearly a decade

Inflation has been averaging 1.3% over the past five years, allowing a potential for inflation to run near 3% for the next five without exceeding a longer-tem average of 2%



STIFEL | Fixed Income Capital Markets

Inflation by Category

The cost of gasoline continues to rise, up 50% over the past 12 months, with other housing materials such as lumber and heating equipment up 46% and 16% over the past 12 months, respectively

The cost of animal feed and certain foods has also increased with animal feeds up nearly 15%, eggs up 12%, and pork prices up 14% from a year ago in October







Gasoline: 49.6% YoY

Used Cars & Trucks: 26.4% YoY% Asphalt: 68.7% YoY







Hardwood Lumber: 45.6% YoY Heating Equip.: 15.5% YoY







Eggs: 11.6% Pork: 14.1% YoY



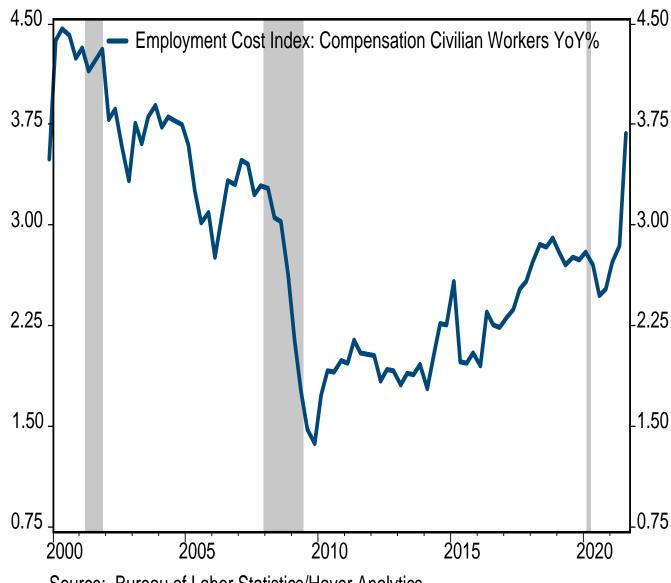
Animal Feeds: 14.8% YoY



Employment Costs on the Rise

The Employment Cost Index rose 1.3% in Q3 and 3.7% over the past 12 months, the most since Q4 2004

*The Employment Cost Index includes both direct costs (such as wages, bonuses or in kind benefits) as well as indirect costs (such as social security contributions, training costs, medical benefits, taxes, etc.)



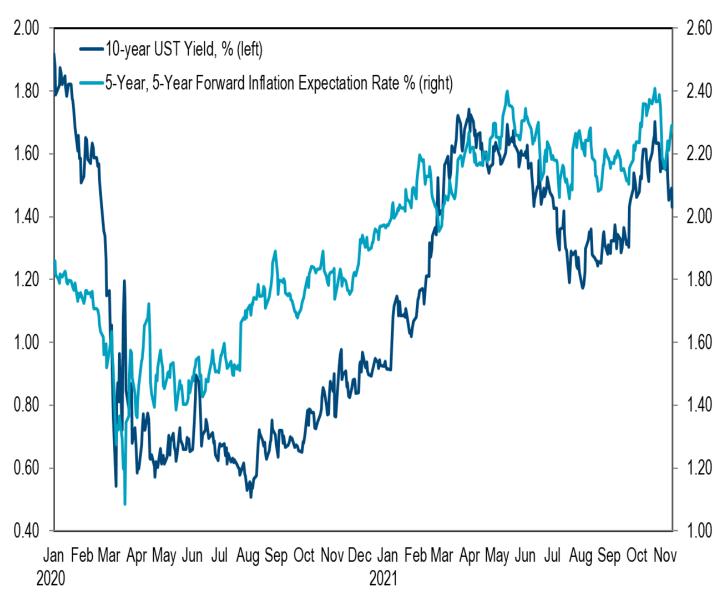
Source: Bureau of Labor Statistics/Haver Analytics



Concerns of Inflation Abating?

The 10-year has risen 50bps since the start of 2021, to 1.43% as of November 9, down, however, from a recent peak of 1.74% on March 31

Inflation expectations, meanwhile, continue to drift higher with the 5yr 5yr Forward Inflation Rate at 2.3% as of November 9, up from 2.0% at the start of the year



Source: Bloomberg

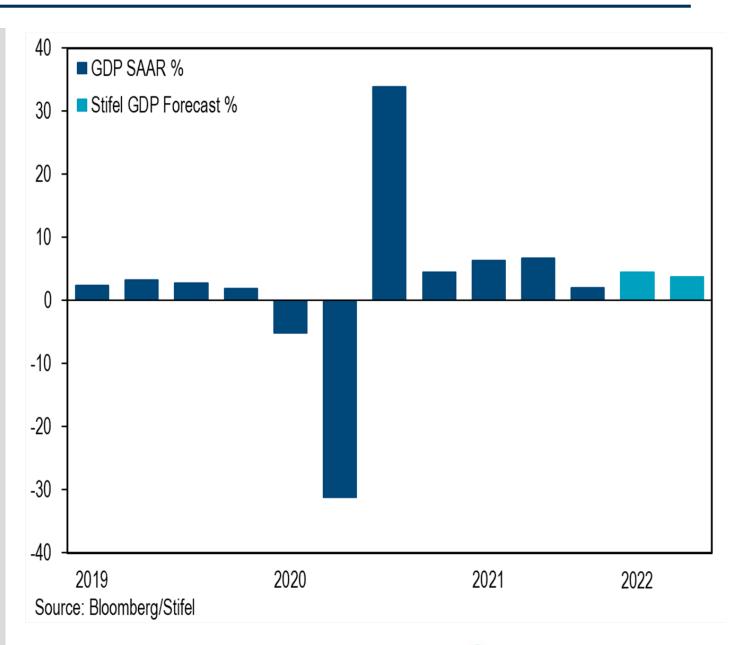


A Solid GDP Profile

After a record 31.4% drop in Q2 2020, growth rebounded a record 33.4% in Q3 and rose 4.3% in Q4 2020

GDP rose **2.0%** in Q3 2021, a five-quarter low

Growth is likely to remain restrained throughout 2021





Disclosure and Disclaimer

The Fixed Income Capital Markets trading area of Stifel, Nicolaus & Company, Incorporated may own debt securities of the borrower or borrowers mentioned in this report and may make a market in the aforementioned securities as of the date of issuance of this research report. Please visit the Research Page at www.stifel.com for the current research disclosures applicable to the companies mentioned in this publication that are within Stifel's coverage universe.

The information contained herein has been prepared from sources believed reliable but is not guaranteed by Stifel and is not a complete summary or statement of all available data, nor is it to be construed as an offer to buy or sell any securities referred to herein. Opinions expressed are subject to change without notice and do not take into account the particular investment objectives, financial situation or needs of investors. Employees of Stifel or its affiliates may, at times, release written or oral commentary, technical analysis or trading strategies that differ from the opinions expressed within. No investments or services mentioned are available to "private customers" in the European Economic Area or to anyone in Canada other than a "Designated Institution". The employees involved in the preparation or the issuance of this communication may have positions in the securities or options of the issuer/s discussed or recommended herein.

Stifel is a multi-disciplined financial services firm that regularly seeks investment banking assignments and compensation from issuers for services including, but not limited to, acting as an underwriter in an offering or financial advisor in a merger or acquisition, or serving as a placement agent in private transactions. Moreover, Stifel and its affiliates and their respective shareholders, directors, officers and/or employees, may from time to time have long or short positions in such securities or in options or other derivative instruments based thereon.

Stifel Fixed Income Capital Markets research and strategy analysts ("FICM Analysts") are not compensated directly or indirectly based on specific investment banking services transactions with the borrower or borrowers mentioned in this report or on FICM Analyst specific recommendations or views (whether or not contained in this or any other Stifel report), nor are FICM Analysts supervised by Stifel investment banking personnel; FICM Analysts receive compensation, however, based on the profitability of both Stifel (which includes investment banking) and Stifel FICM. The views, if any, expressed by FICM Analysts herein accurately reflect their personal professional views about subject securities and borrowers. For additional information on investment risks (including, but not limited to, market risks, credit ratings and specific securities provisions), contact your Stifel financial advisor or salesperson.

Our investment rating system is three-tiered, defined as follows:

Outperform - For credit specific recommendations we expect the identified credit to outperform its sector specific peers over the next six months.

Market perform - For credit specific recommendations we expect the identified credit to perform approximately in line with its sector specific peers over the next six months.

Underperform - For credit specific recommendations we expect the identified credit to underperform its sector specific peers over the next six months.

Additional Information Is Available Upon Request

I, Lindsey Piegza, certify that the views expressed in this research report accurately reflect my personal views about the subject securities or issuers; and I certify that no part of my compensation was, is, or will be directly or indirectly related to the specific recommendations or views contained in this research report.

STIFEL | Fixed Income Capital Markets

© 2021 Stifel, Nicolaus & Company, Incorporated, One South Street, Baltimore, MD 21202. All rights reserved.

