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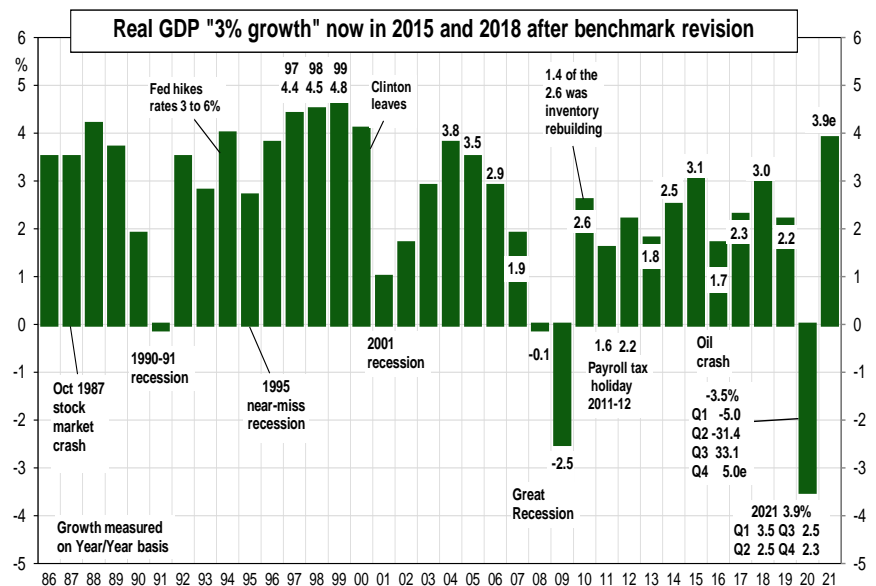
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## 2021 U.S. ECONOMIC OUTLOOK

Not sure this strictly qualifies as a year-end outlook, but here are our thoughts on the state of the U.S. economy.

Economy is short of full recovery. Not back to February 2020 before the pandemic lock down. GDP took three and a half years to get back to the peak before the recession in the last recession over a decade ago, the 2007-09 recession, also known as the Great Recession as Yellen liked to call it, the worst downturn since the Great Depression. For the record, real GDP fell 10.1% this year at the worst point where the Great Recession decline was 4.0%. The economy has recovered but in the third quarter this year GDP is still down 3.5%.



Our current estimate is we will be back to Q4 2019 real GDP levels by the end of 2021. Two years this time. Three and a half years last time. That is one milestone on the road to recovery not sure how important it is in guessing at the pace of jobs creation where workers find employment and get paychecks again. Economists and policymakers, not one in the same always, often say an economic expansion is not sustainable unless it is creating jobs.

This is a lopsided recovery where not every sector of the economy is short of full recovery. Just looking at the third quarter this year, relative to the fourth quarter of 2019 before the recession, in terms of

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consumer spending, car sales are 11.9% higher, household furnishings up 9.2%, food at home up 6.5%. On the other hand, clothing down 3.2%, health care despite the pandemic down 7.0%, bars, restaurants, hotels/motels down 19.5%, sporting events, movies, Disneyland are down 32.4%.

Don't think additional stimulus from Washington is required. Not sure a vaccine is required as virus might breakup on its own after two years. Both would be nice to have, stimulus and vaccine, but economic recovery is progressing with actual growth and the economy should continue to recover back to February levels.

This is an economy of Haves and Have Nots, and the Haves have more money and jobs than they did in prior recessions. This is why you don't want to be too pessimistic about the outlook. Wages of out of work restaurants and bar workers are \$30,000 per year, but those still employed are mostly high earners like financial workers at \$61,000 per year, and information workers, data processing, telecommunications and such, \$75,000 per year.

As far as Federal Reserve policy, KISS, Keep It Simple Stupid, we are probably looking at seven years of zero rates out until 2027 just like the seven years of zero rates under Bernanke and Yellen after the last recession over a decade ago. It's not just our forecast, Wall Street dealers see the Fed funds rate averaging 1.25% over the next ten years.

This could change as Powell's four year term in office is up in February 2022 and there will likely be a new leader. But they have taken a long time crafting a new monetary policy framework and this will be unlikely to change for some time.

Fed forecasts still see short term rates in the longer run at 2.5%, but it could be quite a longer run before we get there. Two things need to change in the economy before they raise interest rates very far or perhaps even start.

Inflation and 3.5% unemployment. Inflation is 1.5% today short of the 2% Fed target. They are going to allow inflation to go above target to balance the years of below target in the new framework before raising interest rates to restrictive levels. The exact language is until "inflation has risen to 2 percent and is on track to moderately exceed 2 percent for some time."

More important is the maximum employment goal which has gotten an upgrade where they are trying to improve the lives of those at the fringes of the labor market by keeping interest rates lower for longer. Unemployment is 6.9% today with 11 million people out of work. Powell would like to see the labor markets improve back to the pre-Covid days of February 2020 when the unemployment rate was 3.5% with 5.7 million out of work. He saw low unemployment for two years and yet no inflation, so he has no worries of waiting to return interest rates to normal. Low rates don't lead to inflation. Fine for him but low interest rates make it hard for pension funds to meet future obligations and the 10,000 baby boomers retiring every day have no safe harbor for their savings that will generate a return.

By the way, the 6.9% unemployment rate with 11 million out of work isn't completely reality. Nothing to cheer. We haven't won. You need to add to the jobless the 5.0 million who gave up and dropped out of the labor force since February. You need to add to the jobless the 2.4 million who can only get

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part-time work because of the weak economy since February. The true unemployment rate is closer to 11.5 percent with almost 18 million out of work as defined here. The population of the U.S. was smaller but in the last recession the peak number of jobless workers was just over 15 million at the worst point. The current joblessness will slow the recovery, slow economic growth, but we still are forecasting quarterly real GDPs with 3 percent and 2 percent handles in 2021.

Quantitative easing (QE) is a new element in the Fed's toolkit this recession at least in terms of magnitude. Bernanke was criticized for buying \$300 billion government securities in 2009 and \$600 billion in 2010, where Powell has bought \$2.2 trillion so far in calendar year 2020. Not one critical word from Congress. No complaints about Fed money-printing that can cause the inflation fires to burn out of control. One element of potential instability is if 10-yr Treasury yields rise, and I guess it is possible the Fed could increase their current pace of Treasury securities, \$80 billion a month or \$960 billion per year, if this were to happen. The problem in terms of monetary stimulus is if 10-year yields rise, then 2.8% mortgage yields rise, and then this could slow down the housing sector of the economy.

Worried what will happen with the stock market. S&P 500 up 28% in 2019, and 10% more this year. Very high PE ratio. 27.7 similar to stock market bubble valuations in the late 1990s. 20% of index dominated by the 5 big tech stocks that benefited from a stay-at-home Covid economy. What happens when the virus goes away? Also, Washington will not be as pro-business. Trump's economic policy loosely defined four years ago was his plan to cut taxes, reduce regulation, increase oil, gas and clean coal production, and eliminate America's trade deficit by increasing exports and reducing imports, which would all work together to boost economic growth significantly. And that is going away in the new administration. On the other hand, the drop in Treasury yields under 1% the first time is very supportive of the stock market. You can guess yourselves how long that will continue.

Risks ahead. Economy fell into such a deep hole and so quickly, it is early to assess the financial soundness of many small and medium-sized companies. More bankruptcies and thus job losses could be coming early in 2021.

Lockdowns in Europe could hurt U.S. exports, where factory production in America is highly dependent on export markets when it comes to selling their goods.

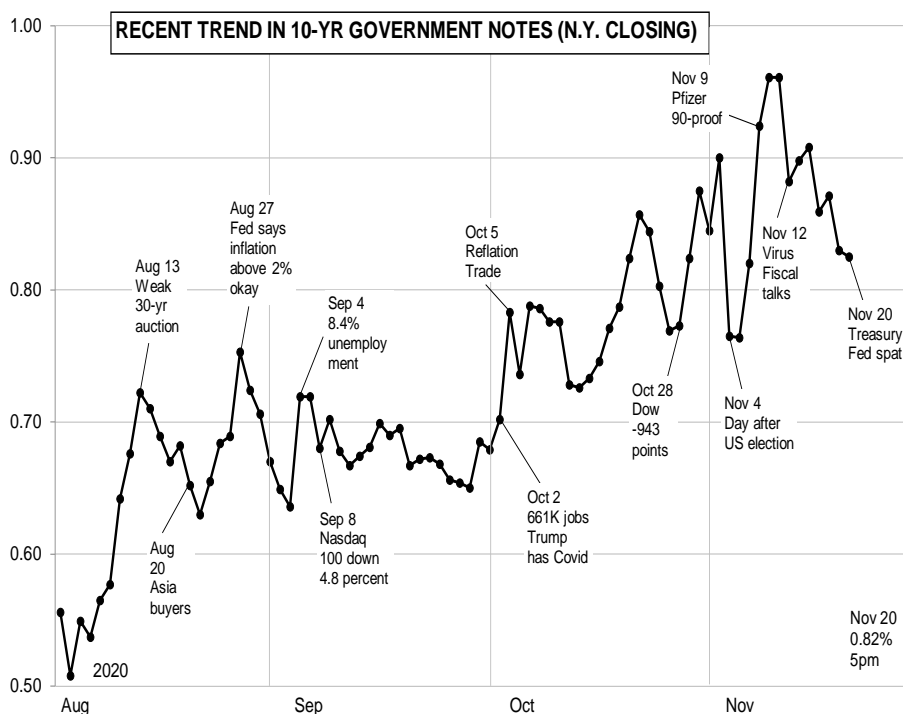
Another risk: Bitcoin could drop from \$18,000 instead of going to \$300,000 and hurt public confidence. Just kidding. Economists still wonder what Bitcoin means for the economy. Always will. Among other risks are home prices that are looking like they are entering the bubble zone and a pullback in home prices would hurt confidence just like it did in the recession over a decade back.

Final risk is political instability. What if our elected officials in Washington can't get along.

## MARKETS OUTLOOK

	30-Sep 2019	31-Dec 2019	31-Mar 2020	30-Jun 2020	30-Sep 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021
30-Yr Treasury	2.11	2.39	1.32	1.41	1.46	1.40	1.40	1.50	1.60	1.70
10-Yr Note	1.67	1.92	0.67	0.66	0.69	0.70	0.70	0.80	0.90	1.00
5-Yr Note	1.55	1.69	0.38	0.29	0.28	0.30	0.30	0.40	0.50	0.60
2-Yr Note	1.62	1.57	0.25	0.15	0.13	0.20	0.20	0.20	0.30	0.30
3-month Libor	2.09	1.90	1.45	0.30	0.23	0.20	0.20	0.20	0.20	0.20
Fed Funds Rate	2.00	1.75	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
2s/10s spread	5	35	42	51	56	50	50	60	60	70

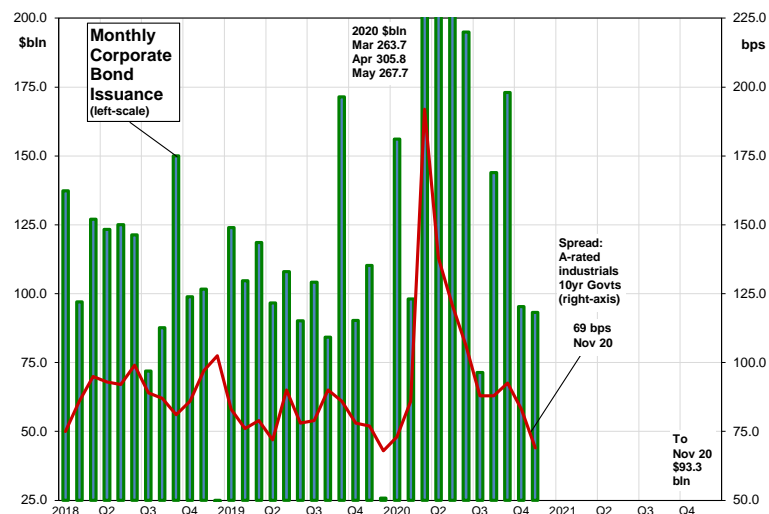
Bond yields closed 0.82% this week after 0.90% last week. Downward slippery slope for yields all week. The yield high of the week at 0.93% on Monday started with the Moderna vaccine 94.5% results just before 7am ET, and the Dow industrials closed at record highs, up 4.9% YTD. That was it for stocks and for bond yields. Yields fell further on Tuesday perhaps starting with virus curbs news, retail sales were weak at 0.3% (0.7% after revisions) and the continued hopes at least from several dealers the Fed will increase the



average maturity of their \$80 billion monthly Treasury security purchases at the December Fed meeting. Yields came down Friday on the Treasury-Fed spat over returning some of the unused lending facilities money after a letter was released from Mnuchin late on Thursday.

## CORPORATES: SAUDI ARAMCO, VOLKSWAGEN, AMERICAN TOWER

Corporate bond offerings were \$48.1 billion in the November 20 week versus \$43.8 billion in the November 13 week. On Thursday, Charter Communications sold \$3.0 billion 11s/30s/40s. It priced a \$1.0 billion 2.3% 11-yr (m-w +25bp) at 147 bps (Ba1/BBB-). The cable telecommunications company will use the proceeds for general corporate purposes including stock buybacks and to repay certain indebtedness. Corporate bond yields (10-yr Industrials rated A2) were 69 bps above 10-yr Treasuries Friday versus 71 bps last week.



## FEDERAL RESERVE POLICY

The Fed meets December 15-16, 2020 to consider its monetary policy. We wouldn't think there is that much to do unless they fiddle with the \$80 billion monthly pace of Government securities purchases, saying they will buy more longer-term securities like the "several dealers" are asking for. We wouldn't think an alteration in the program would be advisable unless for instance 10-year Treasury yields were trading above 1.0% and on their way to 1.25%. Fed Chair Powell spoke on Tuesday. "We're not going back to the same economy. We're going back to a different economy." He commented on the Fed's special lending facilities. When the time comes we will put those tools away he said. And that time is not yet and won't be soon he added. Oops, check that, maybe sooner than you think.

Selected Fed assets and liabilities					Sep 10
Fed H.4.1 statistical release					2008**
billions, Wednesday data					pre-LEH
<b>Factors adding reserves</b>					
U.S. Treasury securities	4584.423	4552.731	4538.087	4527.186	479.782
Federal agency debt securities	2.347	2.347	2.347	2.347	0.000
Mortgage-backed securities (MBS)	2051.176	2000.368	2000.324	2000.305	0.000
Repurchase agreements	1.000	1.000	1.000	1.000	126.750
Primary credit (Discount Window)	2.167	2.317	2.372	2.790	23.455
<b>Factors draining reserves</b>					
MMLF	5.242	5.496	5.504	5.530	
PDCF	0.255	0.263	0.263	0.243	
Commerical Paper Funding Facility	8.557	8.559	8.559	8.576	
Paycheck Protection Facility	57.523	60.102	61.522	63.899	
Corporate Credit Facility (CCF)	45.838	45.692	45.663	45.477	
Municipal Liquidity Facility	16.554	16.553	16.552	16.551	
Main Street Lending Program	42.894	42.337	41.683	41.273	
Term Asset-Backed Facility (TALF II)	12.293	12.266	12.266	11.763	
Central bank liquidity swaps	7.141	8.036	7.248	6.799	62.000
Federal Reserve Assets	7291.9	7224.2	7206.3	7194.5	961.7
3-month Labor %	0.22	0.22	0.23	0.21	2.82
<b>Factors adding reserves</b>					
Currency in circulation	2060.288	2058.082	2050.037	2044.990	834.477
Term Deposit Facility	0.000	0.000	0.000	0.000	0.000
Treasury credit facilities contribution	114.000	114.000	114.000	114.000	
Reverse repurchases w/others	0.103	0.000	0.000	0.005	0.000
<b>Reserve Balances (Net Liquidity)</b>					
Treasuries within 15 days	84.836	71.475	92.517	76.703	14.955
Treasuries 16 to 90 days	284.427	285.323	272.111	269.340	31.549
Treasuries 91 days to 1 year	664.873	642.675	633.540	654.840	69.272
Treasuries over 1-yr to 5 years	1700.839	1725.831	1714.301	1710.201	170.807
Treasuries over 5-yr to 10 years	824.797	812.450	812.404	809.323	91.863
Treasuries over 10-years	1024.651	1014.977	1013.214	1006.780	101.337
**September 10, 2008 is pre-Lehman bankruptcy of 9-15-08					
MMLF: Money Market Mutual Fund Liquidity Facility: loans secured by assets bought by banks from money market funds					
PDCF: Primary Dealer Credit Facility: o/n and term funding with maturities to 90 days					
CCF: Corporate credit facility: Primary market (PMCCF) and Secondary Market (SMCCF)					

There was a Treasury-Fed spat this week over the lending facilities after a letter from Treasury Secretary Mnuchin to Fed Chair Powell was revealed late on Thursday afternoon after the stock market closed. The stock market seemed to go down on this story. The Treasury wants \$455 billion back so it can be used elsewhere. The Fed initially resisted, but then replied yes in their own letter revealed late Friday afternoon. The CARES Act only granted the facilities authority to make new loans or purchases through December 31. It's not as if the \$455 billion is going to tear a hole in the Fed's balance sheet when it goes away, and most of the programs have remained relatively unused for months now. The

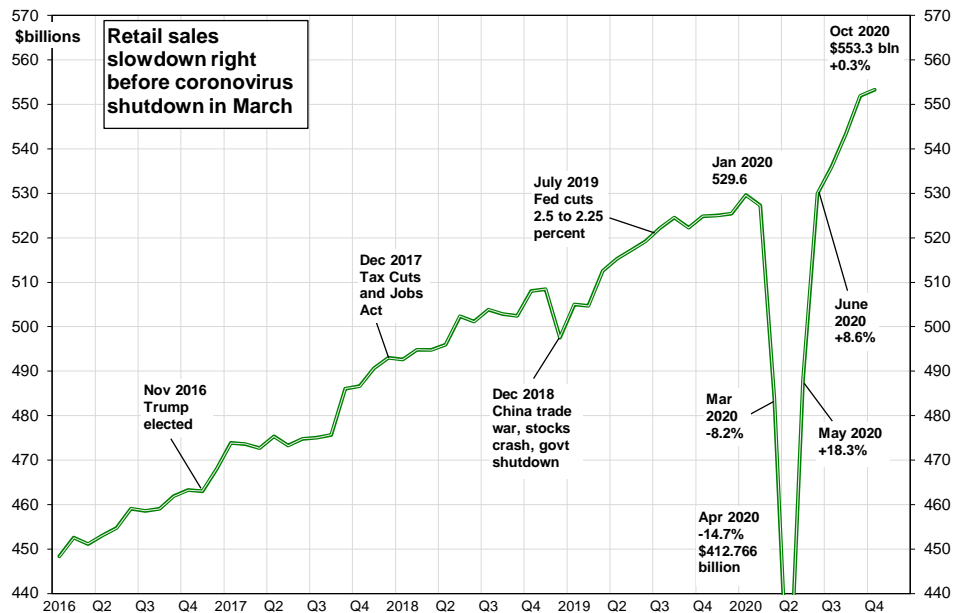
U.S. Treasury New Cash Needs and Fed Treasury Purchases (QE)														
Monthly Changes (\$ billions)														
Fiscal Year (FY) Ending September 2020														
	Q4 2019	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total FY 2020	FY 2021	Total FY 2021	
												Oct	Nov	
Fed QE	221.179	80.246	64.952	504.312	993.047	138.093	87.892	96.159	64.996	86.918	2,337.8	81.709	57.237	138.9
New Cash	330.2	38.5	199.8	238.7	1368.6	699.2	685.2	102.2	175.4	176.5	4,014.3	62.5	247.6	310.1
Bills	39.9	-12.5	160.3	92.8	1344.3	628.2	449.7	-0.7	-2.2	-47.8	2,651.9	-43.6	-41.7	-85.3
Coupons	290.2	51.1	39.5	145.8	24.2	71.0	235.5	102.9	177.6	224.3	1,362.1	106.1	289.3	395.3
Federal Reserve's 11 Lending Facilities			0	58.352	94.641	136.343	204.607	203.100	197.237	196.505		193.312	181.456	
Central bank liquidity swaps			0.044	206.051	438.953	448.946	274.963	117.473	92.140	23.895		6.799	7.141	

issue quickly became politicized in the remaining days of the administration, and Fed officials wanted to keep the programs. They have said the programs were an important pillar of their monetary policy because it gives markets and the public confidence that they can do more to support the economy if needed. Much of the Fed's policy has always relied on smoke and mirrors where it is public perception that counts often more than any dollar and cents reality. Not for nothing but just the announcement the Fed would "buy corporate bonds" back in March was a factor in turning the stock market around. Well, several of the lending facilities are going away and cannot be increased further after December 31: in the table above this week, the two Corporate Credit facilities have \$45.838 billion, Main Street lending has \$42.894 billion, Municipal Liquidity has \$16.554 billion, and TALF (don't ask) has \$12.293 billion. The monies involved are not great enough to meaningfully change the outlook for the economic recovery... unless the markets think it does. Stay tuned. The lending facilities also provided a backstop that encourages private sector lenders to make loans. We will see if this changes for corporates, Main Street, and municipals.

## OTHER ECONOMIC NEWS THIS WEEK

### Pandemic locks down the consumer with retail sales slumping (Tuesday)

Breaking economy news. Retail sales in October are already showing signs of slowing in a second major pandemic lock down even before the surge in deadly virus cases made many states issue a wave of new restrictions in the first weeks of November. Retail sales are already floundering in October, so watch out next month when even more shoppers are likely to shy away from making in-store purchases. Retail sales



rose just 0.3% in October following September's 1.6% increase. The coronavirus is back and it is making consumers think twice about making those shopping trips to the mall. Hopes for a reopened economy have been dashed as the virus cases continue to soar. The markets have gotten too far out in front of themselves on betting that vaccines will lead to a more vibrant economy because it will take months before the population can be vaccinated enough to calm the public's fear of going out to sporting events, movies theaters, shopping malls, or amusement parks.

Net, net, the second wave of the coronavirus is already locking the consumer back down as they clearly took fewer trips to the shops and malls in October. The social distancing measures meant Internet retail sales got a boost, but little else rose. Consumers were too sick with worry to even eat apparently as grocery store sales fell 0.4% in October even if they are 9.2% above year ago levels. If consumers are stuck indoors they aren't buying earlier pandemic lockdown staples because sales at sporting goods, hobby, music, and book stores fell a sharp 4.2% in October. No need to dress for success at work on Zoom calls and clothing store sales also fell 4.2% in October.

Stores like Walmart were very concerned once the supercharged \$600 weekly unemployment benefit checks went away in July, and it looks like they were right to worry as store sales skidded almost to a halt in October. Stay tuned. The pandemic has created both tailwinds and headwinds for many retail stores, but lately it looks like consumer spending is increasingly turning into a headwind for this recovery from the worst economic downturn since the Great Depression. Fed officials are saying they might have to do more and today's data may turn that thinking into a reality. The outlook depends on the course of the virus and right now, despite new vaccines on the way, the virus is sending the consumer back to their homes and making them more cautious about the economy by the day.

#### Retail spending, actual dollars, each month

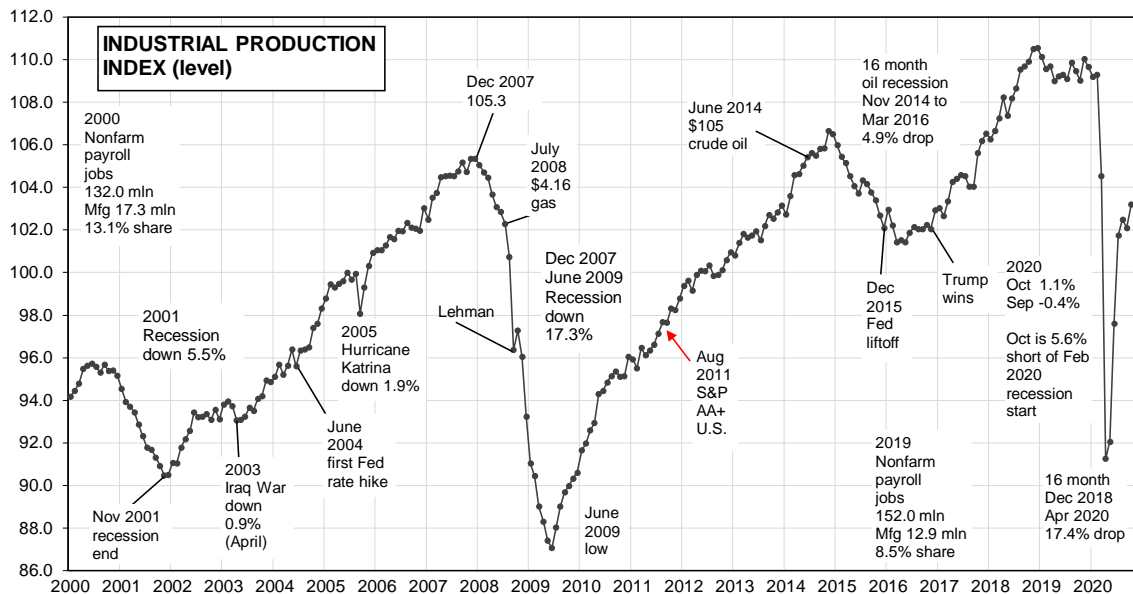
	Million	% to Total	Percent Changes %		
			Oct	Sep	Year/year
Total Retail Sales	553,329	100.0	0.3	1.6	5.7
Motor vehicles/parts	114,915	20.8	0.4	2.9	10.7
Furniture/furnishings	10,408	1.9	-0.4	0.6	5.2
Electronics/appliances	7,755	1.4	1.2	-1.1	-3.9
Building materials/garden	38,139	6.9	0.9	0.4	19.5
Food & beverage	70,737	12.8	-0.2	0.2	10.3
Health/personal care	31,415	5.7	-0.1	1.3	3.8
Gasoline stations	36,238	6.5	0.4	2.0	-14.0
Clothing/accessories	19,361	3.5	-4.2	13.6	-12.6
Sporting goods, books	7,590	1.4	-4.2	8.0	12.4
General merchandise	61,249	11.1	-1.1	1.7	2.5
Department stores	9,809	1.8	-4.6	9.4	-11.9
Miscellaneous retailers	11,724	2.1	-0.9	1.1	1.7
Nonstore retailers (internet)	88,164	15.9	3.1	-1.7	29.1
Eating & drinking places	55,634	10.1	-0.1	2.4	-14.2

## Production jumps in October as factories go back online, but for how long? (Tuesday)

Breaking economy news. Industrial production is back in the plus-column after taking a breather last month. Production rose 1.1% in October, after falling 0.4% in September, but remains 5.6% below the pre-pandemic level in February. Manufacturing industrial production jumped 1.0% in October and September's 0.3% decline was revised to a gain of 0.1%. Manufacturing production remains about 5.0% below its pre-pandemic level in February. Production has clearly jumped in October as factories go back on line, but how long will the lights stay on if consumer and export demand for factory goods starts to dim on the second wave of the coronavirus. Manufacturing of durable goods was strong for aerospace and some transportation equipment even as small declines occurred in furniture (do we make furniture in America anymore?), fabricated metal products and motor vehicles and parts. Output of nondurable goods was even stronger with a gain of 1.2% for most categories.

Net, net, factory output is newly invigorated in October and on the mend, but one wonders for how long with export demand from Europe likely to falter in the months ahead as their economies re-enter lockdowns and the spread of the virus cases in the U.S. is making consumers more cautious and may lessen the demand for factory goods in the months ahead. Stay tuned. Story developing.

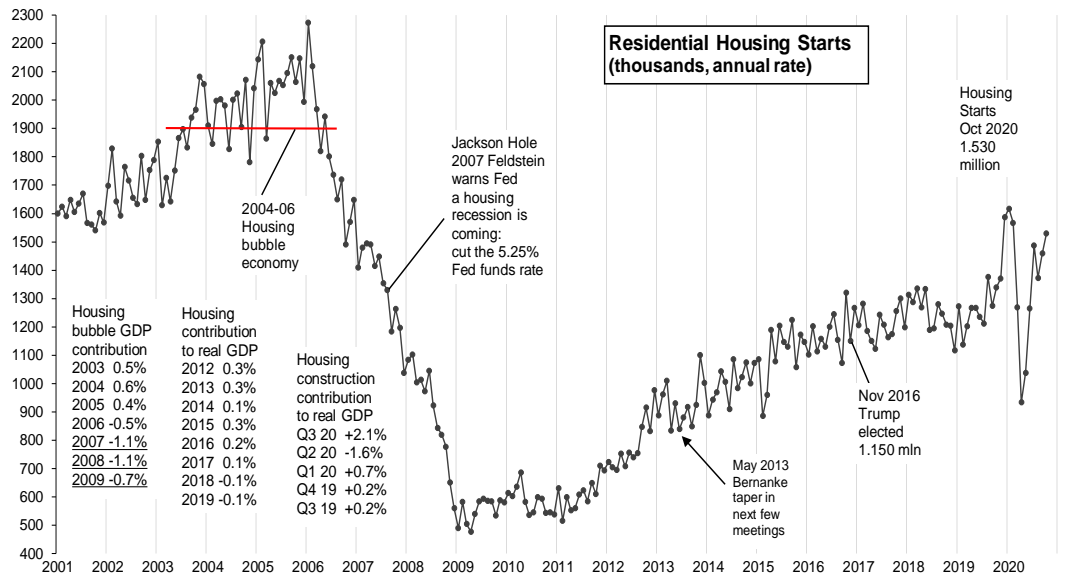
Percent changes			Industrial Production	
Aug	Sep	Oct	October 2020	
0.7	-0.4	1.1	YOY	Weight
1.4	0.1	1.0	<b>-5.3 Total Index</b>	<b>100.0</b>
-1.2	1.2	-0.6	-3.9 Manufacturing	75.3
-1.7	-5.2	3.9	-14.4 Mining	14.2
			-3.0 Utilities	10.4
			Manufacturing payroll jobs	
			12.2 million -617 YOY	
			10.1% of Private Payroll Jobs	



## Housing construction continues to recover closer to pre-Covid highs (Wednesday)

Breaking economy news. Housing starts jumped higher than market expectations in October sending bond yields soaring. Wouldn't that be great. Make the markets great again. No. Sadly Treasury 10-year yields are just sitting there dead in the water at 0.85% after today's housing starts number.

Housing starts rose 4.9% in October to 1.530 million at an annual rate and September was revised from 1.415 million to 1.459 million. Housing is recovering back to the pre-Covid highs earlier this year which were quite high by the way after a burst of building never really explained which took starts higher to 1.587 million in December, 1.617 million in January, and 1.567 million in February. Those lofty levels at the turn of the year were in multi-family units construction.



Most of the housing construction in October took place in the biggest market down South with total starts rising 12.9% to 859 thousand. The 859 thousand starts in the South are 56 percent of all construction nationwide. The West saw housing starts increase 4.2% to 374 thousand, and another small gain for the Midwest. Meanwhile, starts in the Northeast tumbled 38.6%.

Net, net, the economy is slowly returning to normal judging by the strength in residential housing construction that has been bolstered by the lowest mortgage rates in history and steady if slow increases in employment as workers reenter the workplace. The million dollar

Housing Starts Total, Single-Family, Multi-Family											
000s	United States			Northeast		Midwest		South		West	
	Total	1 unit	Multi	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
Oct 20	1530	1179	334	78	55	219	155	859	682	374	287
Sep 20	1459	1108	345	127	67	212	127	761	639	359	275
Oct 19	1340	911	417	116	39	178	116	691	532	355	224
% Chgs											
Oct/Sep	4.9	6.4	...	-38.6	-17.9	3.3	22.0	12.9	6.7	4.2	4.4
Oct/Oct	14.2	29.4	...	-32.8	41.0	23.0	33.6	24.3	28.2	5.4	28.1

question remains how long the recovery in housing can continue as the shocking number of new coronavirus cases is paralyzing commerce in many parts of the country and leading to new restrictions and lockdowns. You can't get up on the roof and pound nails if you can't go outside. The new vaccines count as good news but it will be many months before enough of the population can get the treatment and fully immunize the economy that has been brought down by an unprecedented health crisis. Washington stimulus can help but it is still going to take time for the economy to fully heal from this virus.

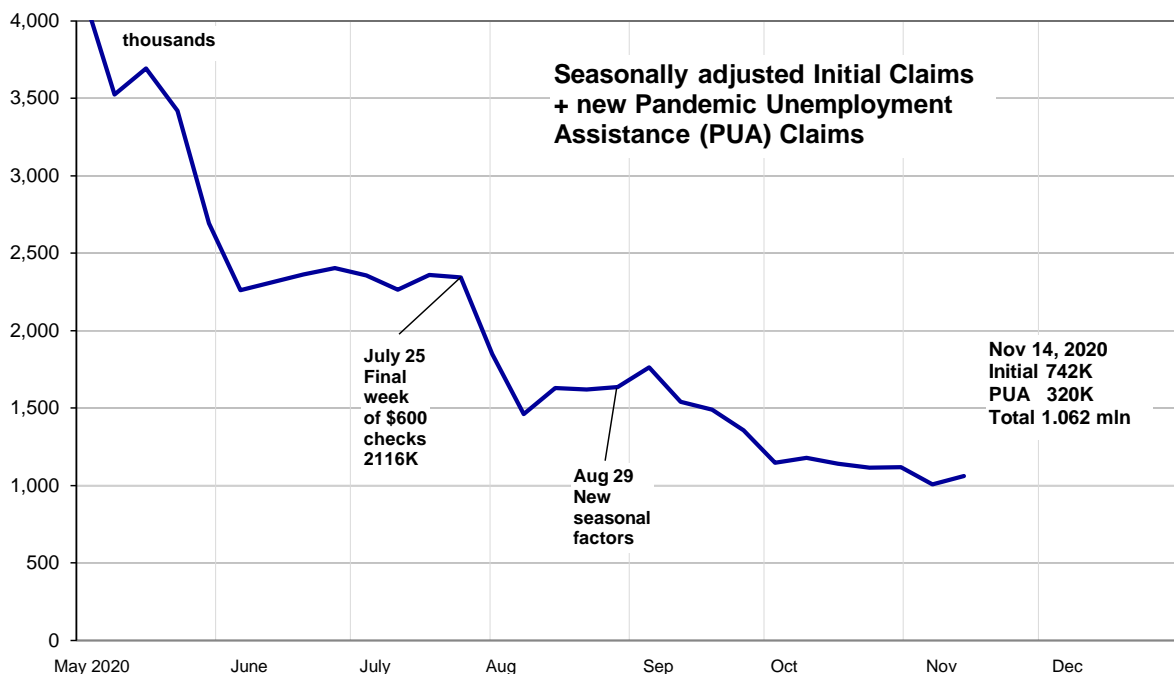


## Stunning reversal of fortune for labor market with more jobless claims this week (Thursday)

Breaking economy news. When will it ever end this rising tide of joblessness that is not only braking the economy's advance, but also has the power to bring on another quarter of negative growth if the jobless count doesn't stop going up. It's hard to believe the recession is over if workers keep losing their jobs at this rate. There were 742 thousand first-time applications for unemployment benefits in the November 14 week which is a 31 thousand increase from the week before. Gig workers have their own benefits plan, Pandemic Unemployment Assistance, and applications there rose 23 thousand to 320 thousand in the November 14 week. Over a million people filed for compensation because they were sacked last week, what on Earth is going on?

The high level of joblessness throughout the country along with the dramatic spread of the virus continue to rain on the recovery's parade. There's nothing to applaud in today's weekly jobless claims. The labor market's woes paint a dark picture for the US economy and elevates the risks for sustainable growth to the downside.

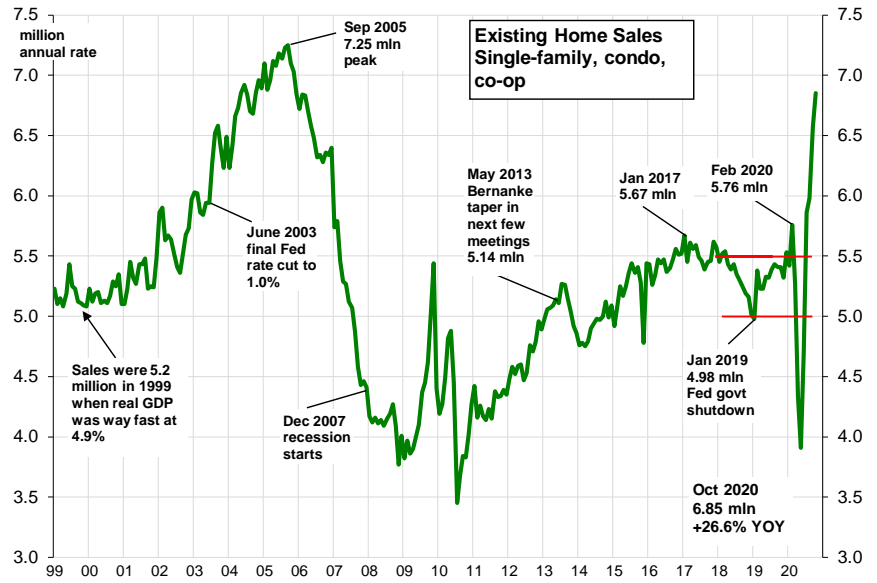
You don't have to warn the jobless that momentum is fading and the risks are high, they are living it every day without a paycheck and with employment opportunities in increasingly short supply. The \$600 weekly checks are gone and now the \$300 weekly checks are gone as well. The blame falls squarely on Washington where there is no attempt fight the virus in a coordinated manner or to fight the recession by renewing and extending the unemployment benefits to the millions of jobless workers in the country. There may be some double-counting, but the numbers have been uncorrected and remain sky-high for months now with over 20 million receiving unemployment benefits in the October 31 week. The economy is growing now but for how long is the question as it needs to pull along a staggering number of jobless Americans who have limited means to spend the money that helps make the economy go. Winter is coming and it is bleak and getting bleaker if you can't find a job.



## Covid and Fed rate cuts fuel home buying frenzy (Thursday)

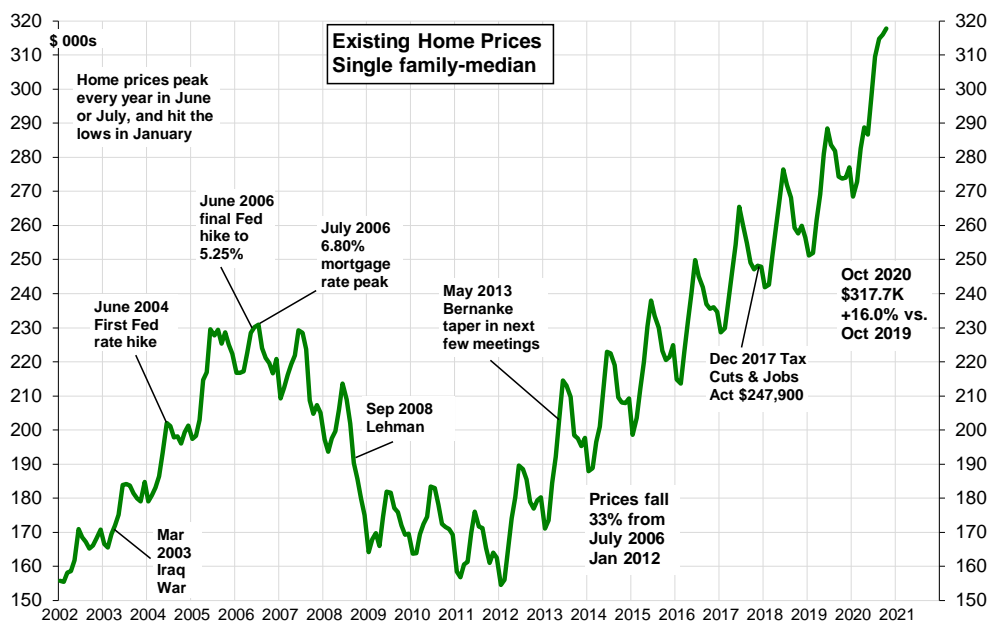
Breaking economy news. Existing home sales rose 4.3% to 6.85 million at an annual rate in October. The frenzied sales turnover rate represents a new high for this pandemic and is back very close to the housing bubble peak over a decade ago. The peak in existing home sales was 7.25 million in September 2005 before the bubble burst and the average annual record was 7.08 million in 2005.

It is clear that the spread of Covid-19, and the Fed's rate cuts response to the pandemic pushing mortgage yields to record lows, has fueled a home buying frenzy that is starting to rival the housing bubble over a decade ago. That ended badly. And now the Fed has blown it again as single-family home prices nationwide have shot up 16.0% the last year to \$317,700. Fed officials' focus on inflation and maximum employment has set off a new housing bubble with prices rising to unaffordable levels that are so far up in the stratosphere that there is little



upside left and prices could collapse when demand falls away. There is a new risk to the economy as if it needed one and that is it looks like a dangerous new housing bubble may be emerging. And like the virus, it's spreading everywhere, Northeast single-family home prices up 21.7%, Midwest up 17.2%, South up 16.0%, and West up 15.4%.

Net, net, one area of the economy that is benefiting from the pandemic is the housing market where home resales have skyrocketed as workers reassess their housing needs as the stay-at-home economy seems to be growing more permanent by the day. Stay tuned. Story developing. If you were thinking of buying a new home, you're too late. The bargains are gone.



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