

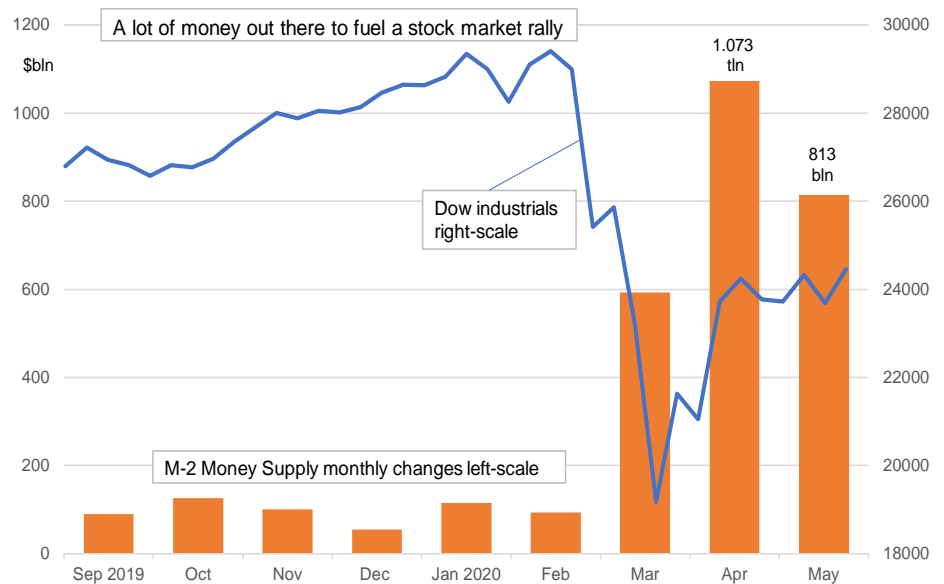
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**MUFG Bank, Ltd.**  
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## STOCK MARKET VALUATION

You read everywhere that stocks are divorced from a very grim economic reality. How can investors have already discounted a second Great Depression with a 25% unemployment rate? We don't want to go too far with this because Dow stocks are still down 14.2% on the year even if the handful of market leaders Microsoft, Apple, Amazon, Alphabet, Facebook are at or near all-time highs. It's not just

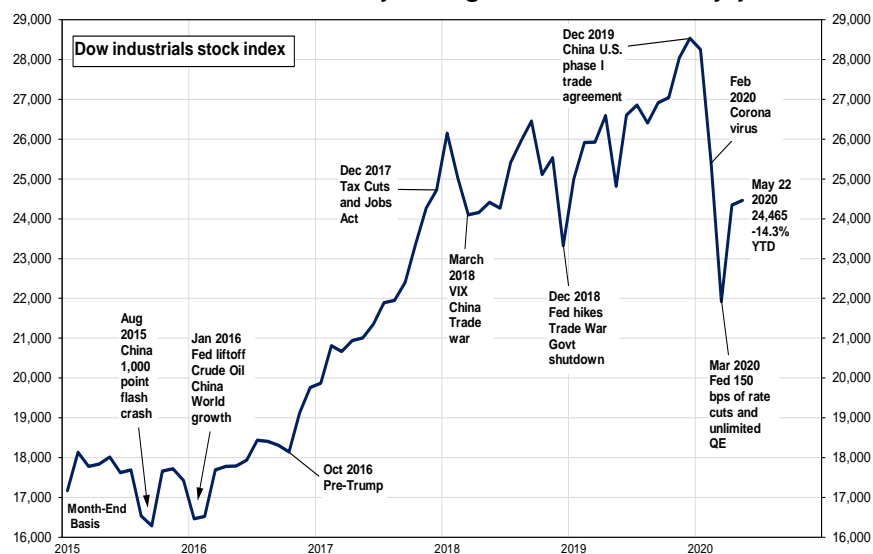


economists saying this, others are puzzled as well. We remember the 1990-91 recession which also had the savings and loan crisis and commercial real estate loan delinquency rates at banks over 12% at one point, and yet, stocks bottomed in October 1990 before the recession ended, and just kept rallying higher; the Dow industrials up 20.3% in 1991 and 4.1% in 1992 and 13.7% in 1993. Stocks kept going in the early 1990s and beyond, the explanations for this were not very satisfactory at the time, and the stock market didn't need the Fed as much: the Fed pushed rates down from 10% to 3%, but there was no QE. Currently, the stock market feels the Fed is the game-changer by doing unlimited QE and having its nine emergency lending facilities. The Fed's final monetary stimulus push came late in the 2007-09 recession, and this time around, monetary policy went all-in in March 2020 the first month of the coronavirus recession this year. We aren't sure why the stock market is so hopeful the Federal Reserve will turn things around just like they did in the last recession, but then we are an economist (although the CFA certainly helps our analysis). Maybe the Fed got

Tale of Two Markets This Year			
Percent Changes		2019	
Year-to-date 2020		%	
May 22	Mar 23		
-8.5	-30.7	28.9	S&P 500
31.9	3.0	23.0	Amazon
5.5	-21.3	28.2	Alphabet
14.5	-27.8	56.6	Facebook
16.4	-13.8	55.3	Microsoft
8.6	-23.6	86.2	Apple
-14.3	-34.9	22.3	Dow industrials

some bang for the buck in its emergency response in 2020 by bringing down bond yields to record lows as well with the 10-year Treasury yield below 1% and expected to stay there. Lower bond yields will encourage companies to borrow more to invest in the country's bright future certainly just as the economics textbooks say.

Is the stock market rally really just about liquidity? One thing is for certain and that is the Fed's QE this recession is massive, meaning we have never been here before: just take a look at its U.S. government securities purchases. It is staggering. The addition of high-powered Fed money worked as M-2 money supply is soaring, up \$2.2 trillion since the March 16, 2020



“America virus shutdown” week, and if just some of those deposits get shifted over into the stock market, maybe that is the reason stock prices are going higher. The money doesn't need to be actually shifting from deposits to stocks; all that is needed for higher stock prices is that investors think it is bullish for stocks to keep rallying. It couldn't be easier the market's analysis. Dow industrials fell 38.4% from the high of the year in 2020 as the new coronavirus cases starting accelerating and the country shut down, and now the country is opening up, so the stock market can go back up.

We are a little worried though about corporate earnings as in will there be any. Ever again. First quarter earnings only had a couple of weeks of the coronavirus lockdown effect from mid-March on. The financial losses will be big. Revenues collapsed and companies plugged the hole with borrowing and loans to stay afloat. How will they ever pay it back? Looking back at the 2007-09 recession, corporate profits from current operations as presented in the GDP accounts fell in 2007 and never made it back to 2006 levels

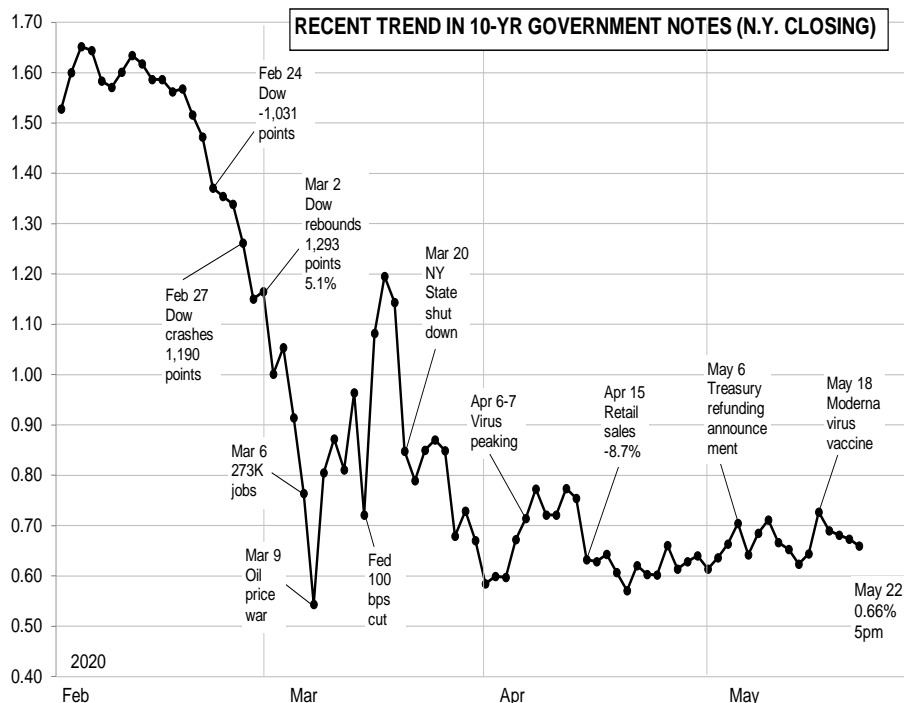
GDP measure of profits from current operations-selected industries					
\$ Billions	2006	2007	2008	2009	2010
<b>Domestic industries</b>	1,604.4	1,414.1	989.1	1,118.7	1,448.2
Change billions	164.9	-190.2	-425.0	129.6	329.4
Change %	11.5	-11.9	-30.1	13.1	29.5
<b>Domestic - Finance</b>	1,353.7	1,248.3	1,033.7	904.3	1,228.5
Change billions	162.4	-105.2	-214.6	-129.3	324.1
Change %	13.6	-7.8	-17.2	-12.5	35.8
Mining, oil and gas	35.1	34.4	33.7	11.8	15.6
Utilities	54.2	49.8	30.6	23.2	30.5
Construction	82.9	61.3	38.1	25.4	26.8
Manufacturing	369.7	338.5	258.7	159.2	299.2
Motor vehicles	-6.3	-15.7	-39.1	-55.6	-10.2
Retail trade	136.1	126.6	87.8	110.7	125.5
Finance/insurance	250.7	165.7	-44.6	214.3	219.6
Real Estate	23.4	18.3	6.1	7.4	13.5
Legal services	11.6	11.5	13.7	15.1	15.4
Health care	57.9	57.4	61.1	73.0	78.0
Food & drink places	17.7	16.7	12.4	17.5	20.6

until 2012. Financial firm profitability was volatile back then and profits from nonfinancial domestic industries were actually still falling in 2009. Many companies will experience catastrophic financial losses never seen before and this dismal outlook doesn't include the possibility that the biggest corporate tax cut in history may go away in the coming year. The Tax Cuts and Jobs Act signed by President Trump in December 2017 may have added roughly 20 percentage points to the rise in the S&P 500 index before the coronavirus sell-off in stocks earlier this year. The stock market can keep rising, but at some point companies need to make money. Profits were little changed in 2019. Earnings will collapse in 2020. The ability to generate significant V-shaped profits in 2021 looks challenging at this point. Stocks can rally through recession but only if companies are expected to make huge profits. Stay tuned. Story developing. It's all uphill from here.

## MARKETS OUTLOOK

	29-Mar 2019	28-Jun 2019	30-Sep 2019	31-Dec 2019	31-Mar 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021
30-Yr Treasury	2.81	2.53	2.11	2.39	1.32	1.30	1.30	1.40	1.50	1.60
10-Yr Note	2.41	2.01	1.67	1.92	0.67	0.70	0.70	0.80	0.90	1.00
5-Yr Note	2.23	1.77	1.55	1.69	0.38	0.30	0.40	0.60	0.70	0.80
2-Yr Note	2.26	1.76	1.62	1.57	0.25	0.20	0.30	0.30	0.40	0.40
3-month Libor	2.60	2.32	2.09	1.90	1.45	0.40	0.30	0.20	0.20	0.20
Fed Funds Rate	2.50	2.50	2.00	1.75	0.25	0.25	0.25	0.25	0.25	0.25
2s/10s spread	15	25	5	35	42	50	40	50	50	60

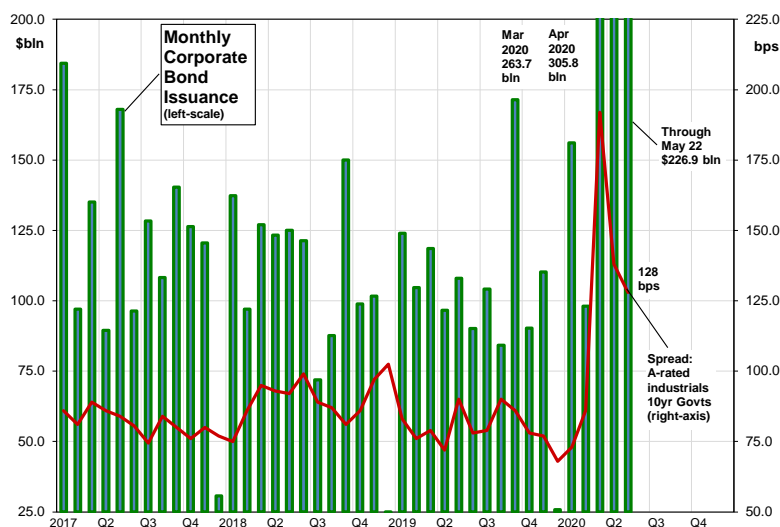
10-year Treasury yields moved higher with the stock market on Monday. Moderna announced positive results from a virus vaccine at 730am ET Monday morning. Dow stock futures were up about 400 points at that time and ended the day up almost 1,000 points. The 10-year Treasury yield high was 0.74%. There is a new addition to the yield curve with the first auction of 20-year Treasury bonds on Wednesday: \$20 billion with a coupon of 1.125%. Bond yields aren't moving higher yet with the U.S. Treasury's extraordinary



demands and that's good because the Fed is cutting next week's QE Treasury purchases to \$5 billion per day from \$6 billion per day this week and from \$7 billion daily the week before that. Tapering in the extreme without a market tantrum. Bernanke would be proud.

## CORPORATES: AT&T, COMCAST, PFIZER, TOYOTA, NUCOR, AUTONATION

Corporate bond offerings were \$51.0 billion in the May 22 week versus \$69.9 billion in the May 15 week. On Wednesday, Comcast sold \$4.0 billion 10s/20s/30s. It priced a \$1.5 billion 1.95% 10-yr (m-w +20bp) at 130 bps (A3/A-). The media company (Pay-TV, broadband internet, NBCUniversal, Sky) will use the proceeds to refinance debt, including 1.625% notes due Jan 2022 and 4.05% notes due Aug 2046. Corporate bond yields (10-yr Industrials rated A2) were 128 bps above 10-yr Treasuries Friday versus 148 bps last Friday.



## FEDERAL RESERVE POLICY

The Fed meets June 9-10, 2020 to consider its monetary policy. The Fed meeting minutes from the April 28-29 meeting were released Wednesday at 2pm ET and they seem to say the Fed has nothing left to give the markets but guidance. They already threw everything at the economy but the kitchen sink in the month of March because of the risks to the economy from the coronavirus pandemic. The stock market took what the Fed gave them hook, line and sinker and the selling of shares turned into the buying of shares in large part due to the Fed's heroic actions.

The Fed is not one to rest on their laurels and they examined what further steps can be taken. Guidance is what they have to give us. Guidance on what they can do with the Fed funds rate. Not sure what this is worth as the last time they pushed the Fed funds rate to zero, they kept it there for seven years. Markets think they know the score here.

Nevertheless, Fed officials discussed whether to go with outcome-based forward guidance like they will keep the Fed funds rate at zero until the unemployment rate falls back to 5 percent or something like that. They also examined date-based forward guidance which means they tell us they will keep rates down there at zero forever or until hell freezes over, whichever comes first.

At least they didn't consider negative rates. The only mention of negative policy rates was the findings of the Open Market Desk survey of dealers where dealers attached almost no probability to the Fed cutting rates below zero. Dealers aren't that dumb, negative rates will really put an end to the bond market as we know it.

Finally, a few and or several participants talked about the need to clarify how long the Fed's QE securities purchases will take place. Bingo. Exactly what we want to know. Several participants actually said the purchases could be used to keep longer-term yields low. Exactly our thinking. They have nothing else left in the toolkit. A few participants also said they could use the Fed's balance sheet to reinforce the Fed's forward guidance on the path of the Fed funds rate by buying enough Treasuries to keep short to medium maturity Treasuries capped at specific yield levels for a period of time. Here we go. Money printing done hand in hand with the Treasury Department and Congress. Congress votes for deficit spending, the Treasury auctions bonds, and the Fed buys them and sticks them on their balance sheet. Stay tuned. Story developing.

Selected Fed assets and liabilities					Sep 10
billions, Wednesday data					2008**
	20-May	13-May	6-May	29-Apr	pre-LEH
<b>Factors adding reserves</b>					
U.S. Treasury securities	4089.331	4057.268	4020.191	3971.419	479.782
Federal agency debt securities	2.347	2.347	2.347	2.347	0.000
Mortgage-backed securities (MBS)	1862.841	1783.761	1605.380	1604.720	0.000
Repurchase agreements	157.351	157.354	172.700	158.202	126.750
Primary credit (Discount Window)	19.535	24.239	26.494	31.759	23.455
MMLF	36.449	39.820	42.763	46.277	
PDCF	7.501	10.288	14.903	25.504	
Commerical Paper Funding Facility	4.293	4.292	3.988	3.372	
Paycheck Protection Facility	45.090	40.580	29.181	19.488	
Corporate Credit Facility	1.801	0.305			
<b>Central bank liquidity swaps</b>	446.103	440.934	444.885	438.953	62.000
Federal Reserve Assets	7085.8	6982.7	6769.9	6703.2	961.7
3-month Libor %	0.36	0.39	0.45	0.69	2.82
<b>Factors draining reserves</b>					
Currency in circulation	1938.599	1929.840	1921.765	1910.511	834.477
Term Deposit Facility	0.000	0.000	0.000	0.000	0.000
Treasury credit facilities contribution	49.000	47.500			
Reverse repurchases w/others	9.726	13.825	1.175	1.450	0.000
<b>Reserve Balances (Net Liquidity)</b>	<b>3304.221</b>	<b>3263.431</b>	<b>3165.605</b>	<b>3539.660</b>	<b>24.964</b>
Treasuries within 15 days	66.859	102.681	104.760	55.294	14.955
Treasuries 16 to 90 days	274.175	217.461	213.636	249.856	31.549
Treasuries 91 days to 1 year	557.843	561.643	558.517	535.821	69.272
Treasuries over 1-yr to 5 years	1568.066	1584.494	1568.584	1572.472	170.807
Treasuries over 5-yrs to 10 years	711.258	686.628	675.810	665.596	91.863
Treasuries over 10-years	911.130	904.361	898.885	892.381	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)					

U.S. Treasury New Cash Needs and Fed Treasury Purchases (QE)									
Monthly Changes (\$ billions)									
Fiscal Year (FY) Ending September 2020									
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Total
	FY 2020								
Fed QE	67.808	73.007	80.364	80.246	64.952	504.312	993.047	117.912	1,981.6
New Cash	166.8	112.5	50.9	38.5	199.8	238.7	1368.6	699.2	2,875.0
Bills	79.1	59.0	-98.2	-12.5	160.3	92.8	1344.3	628.2	2,253.0
Coupons	87.6	53.4	149.2	51.1	39.5	145.8	24.2	71.0	621.8

## OTHER ECONOMIC NEWS THIS WEEK

### April economic data will be bleak and housing construction doesn't disappoint (Tuesday)

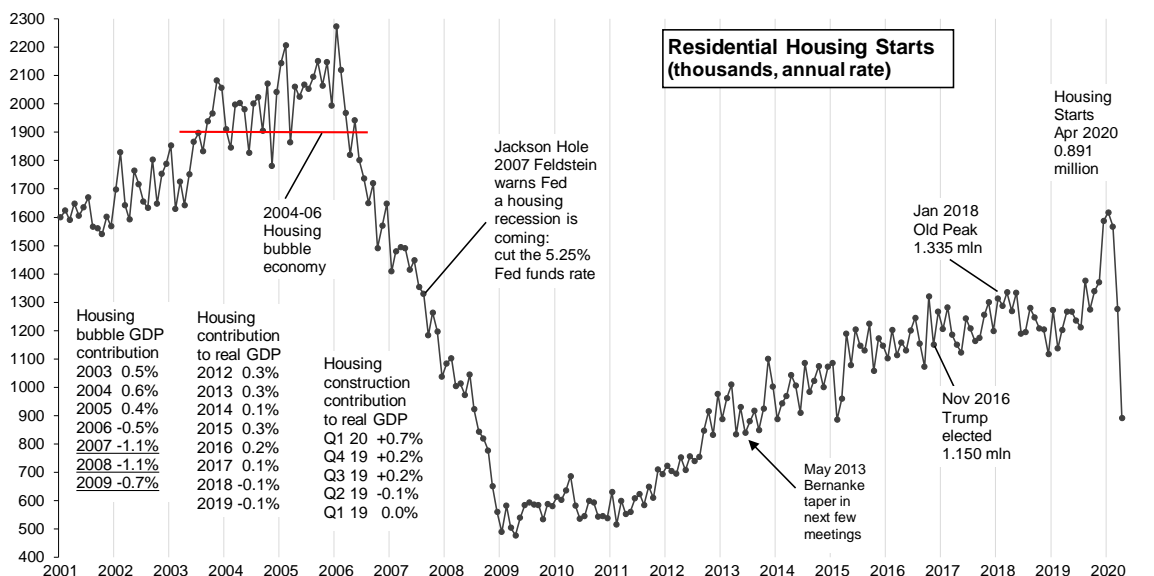
Breaking economy news. Housing starts fell 30.2% to 891 thousand in April. New permits for construction fell 20.8% to 1.074 million in April. The April economic data were known ahead of time to all be recessionary and in this regard, residential housing construction isn't disappointing. The markets are overlooking the dismal economic news today because of hopes for a virus vaccine from Moderna which will be a game-changer for the economic outlook... sorry, that was Monday morning's news. We aren't sure why the stock market is ignoring the dismal economic news.

Net, net, housing starts were hit hardest in the areas of the country where stricter social-distancing measures to fight the spread of the deadly coronavirus brought residential housing construction to a virtual halt. Single family home construction in the Northeast and out

Housing Starts Total, Single-Family, Multi-Family											
	United States			Northeast		Midwest		South		West	
000s	Total	1 unit	Multi	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
Apr 20	891	650	234	44	18	131	98	532	391	184	143
Mar 20	1276	871	392	78	53	154	113	719	460	325	245
Apr 19	1267	864	381	131	66	164	119	648	451	324	228
% Chgs											
Apr/Mar	-30.2	-25.4	...	-43.6	-66.0	-14.9	-13.3	-26.0	-15.0	-43.4	-41.6
Apr/Apr	-29.7	-24.8	...	-66.4	-72.7	-20.1	-17.6	-17.9	-13.3	-43.2	-37.3

West fell spectacularly with the building of new homes down 66.0 and 41.6 percent, respectively. Single family home construction fell just 13.3 percent in the Midwest and 15.0 percent in the South. As the states open back up, the recovery in housing construction is likely to lag in the hardest hit Covid-19 states like California and especially in the Northeast states of New York and New Jersey.

Home builders are growing more optimistic now that the stay at home orders are being lifted, but there is still a recession out there with tens of millions of unemployed which could put a damper on the demand for the new homes they are building. This is an unprecedented recession in that it happened over just two months and this is making it harder for companies and consumers to get their bearings and figure out what to do next. This isn't a normal recession so guessing at what comes next is more challenging. It may be the best time for consumers to buy the biggest, big-ticket purchase of their lives and it might not be. Stay tuned. Story developing.



## States are opening up, but the new jobs are not opening up (Thursday)

Breaking economy news. 2.438 million applied for unemployment benefits in the May 16 week. A dizzying array of jobless data from the Department of Labor. All of it bad. 25.073 million receiving benefits in the May 9 week under the regular state programs. This got a boost from seasonal factors that probably no longer make sense, and not seasonally adjusted so-called continuing claims were lower at 22.942 million in the May 9 week. Also not seasonally adjusted, add in another 6.121 million gig workers in their own program getting benefits in the May 2 week. The states are opening up, but the new jobs are nowhere to be found.

The stock market didn't bat an eye. 2.438 million new applications for unemployment benefits in the May 16 week when many of the states were reopening. The magnitude of the job losses as they continue is simply staggering. 2.438 million applied in the latest week where the worst week of the Great Recession a decade ago was merely 665 thousand applying because their employers let them go. Almost four times worse than a decade ago which sounds about right.

In the 5 weeks since the last 14.7% unemployment rate for April, there have been 16.6 million more applying for unemployment benefits. If these all show up in the May employment report due out on Friday, June 5, the unemployment rate will go up to 25.4% with a staggering 39.7 million unemployed which are Great Depression magnitude job losses.

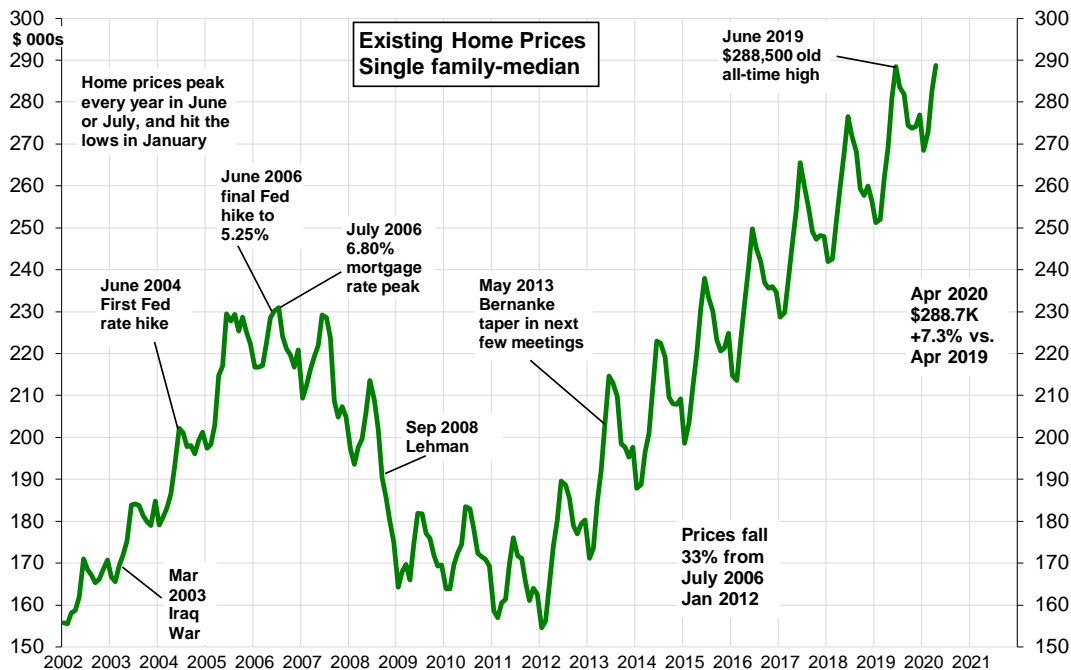
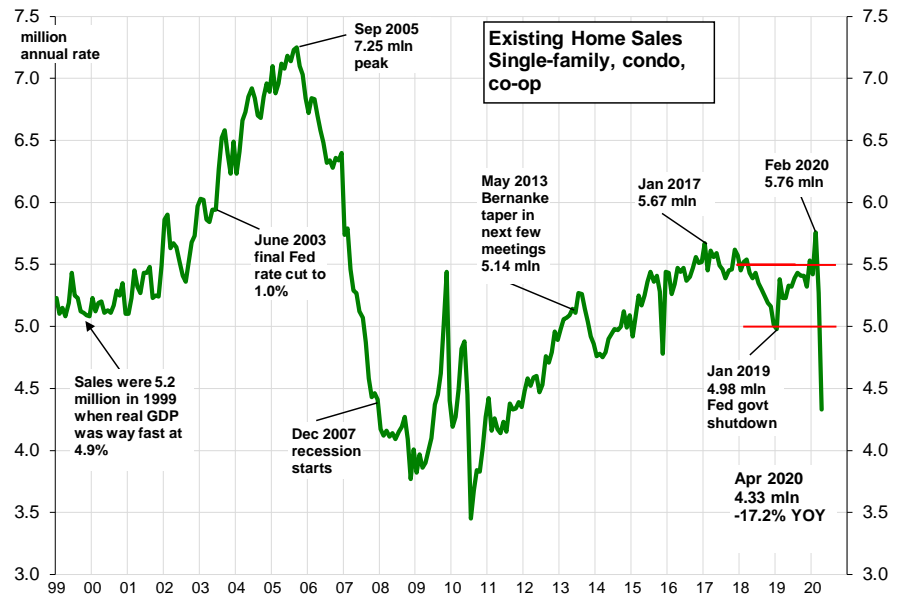
Net, net, the states may be opening back up, but the labor market is still closed for millions across America and the loss of the income and spending of those without jobs will be a considerable headwind for this economic recovery. The economy has to reinvent itself after this coronavirus pandemic in a hurry and find new employment opportunities for millions in new businesses and service industries because right now there simply are not enough jobs to go around. Congress can vote in some temporary paycheck protection for workers, but the question remains, when the money from Washington runs out will you still have a job? The economy is going to recover for sure, but will growth be fast enough to put the millions who lost their jobs in this health crisis back to work. Stay tuned.



## Home sales down while home prices rise (Thursday)

Breaking economy news. Existing home sales collapsed 17.8% in April to 4.33 million at an annual rate. The surprise is that home sales activity didn't contract even more given most of America could only see properties through their Zoom app over the Internet. Every region of the country was down with sales in the West hit the hardest. The mismatch between home prices and home sales can be seen in the Northeast with sales falling 16.9% to 540 thousand at an annual rate, while median home prices were up 8.7% the last year to \$312,500. You can't have a Great Depression II while home prices are still going up.

Net, net, existing home sales collapsed in April as stay-at-home orders during the health crisis kept buyers from going out to kick the tires on a new home. For the moment, home prices are still climbing and that may be due to the lack of supply, but at some point, the Great Depression magnitude job losses have got to put more homes on the market from the unemployed who can no longer afford to pay their mortgages. Falling home sales and rising home prices can't last for long if Americans don't find new jobs in a hurry. Massive job losses and rising home prices don't happen very often looking back over the last several decades. Stay tuned. Story developing.



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