

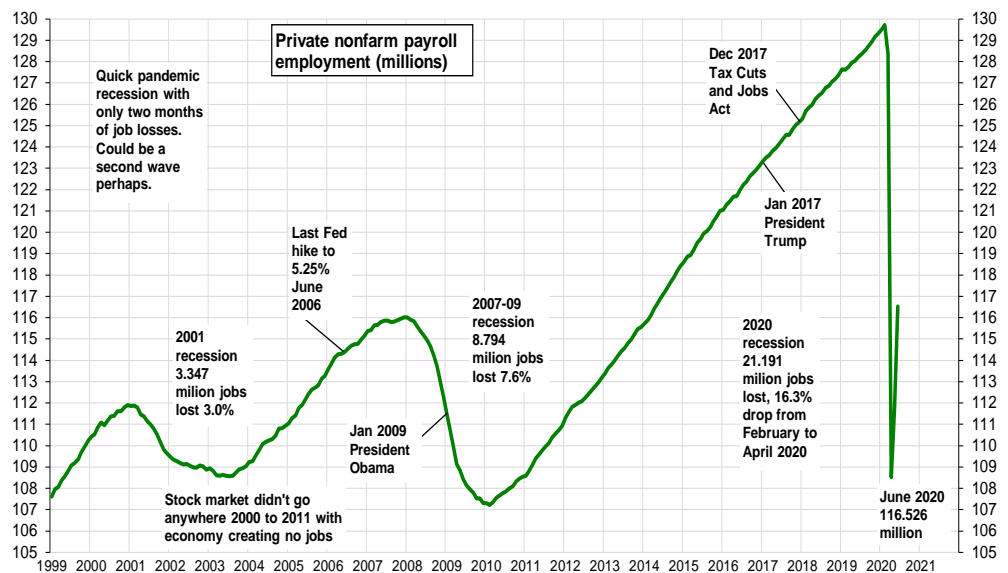
MUFG UNION BANK, N.A.
ECONOMIC RESEARCH (NEW YORK)
CHRISTOPHER S. RUPKEY, CFA
MANAGING DIRECTOR
CHIEF FINANCIAL ECONOMIST
(212) 782-5702
crupkey@us.mufg.jp

3 JULY 2020

MUFG Bank, Ltd.
 A member of MUFG, a global financial group

PAYROLL EMPLOYMENT JUMPS A SECOND MONTH ON THE LONG ROAD TO RECOVERY

The Bureau of Labor Statistics shot off some fireworks today, but the jury is out on just how good business conditions really are out there in the country. 4.8 million payroll jobs in June beat market expectations even though forecasts shouldn't be relied on in these uncertain times. At the same time, 1.4 million more people lost their jobs last week and applied for unemployment benefits so there is a question mark about how the labor market is progressing even before the second wave of the coronavirus threatens to roll back the reopenings in many states.



The unemployment rate fell to 11.1 percent in June from 13.3 percent in May. And this puzzle on job losses remains where the Bureau of Labor Statistics survey says there are 17.750 million unemployed in June behind that 11.1% rate, and the Department of Labor says there are over 30 million collecting unemployment benefits in the June 13 week. Which one are we supposed to believe? The 11.1% unemployment rate also doesn't count the more than 5 million workers who dropped out of the labor market since February when that best economy in 50 years unemployment rate was 3.5%.

	Jun	May	Apr	Mar	Feb	Jan
Payroll jobs (000s)	4800	2699	-20787	-1373	251	214
Unemployment rate %	11.1	13.3	14.7	4.4	3.5	3.6
Unemployment (3 decimal)	11.098	13.263	14.748	4.383	3.517	3.579
Participation rate %	61.5	60.8	60.2	62.7	63.4	63.4
Not in labor force (mln)	100.273	101.820	103.415	96.845	95.082	94.896
Average hourly earnings	\$29.37	\$29.72	\$30.03	\$28.69	\$28.52	\$28.43
MTM % Chg	-1.2	-1.0	4.7	0.6	0.3	0.2
YOY % Chg	5.0	6.6	8.0	3.4	3.0	3.1
Production Worker earnings	\$24.74	\$24.97	\$25.12	\$24.10	\$23.96	\$23.88
MTM % Chg	-0.9	-0.6	4.2	0.6	0.3	0.2
YOY % Chg	5.4	6.6	7.7	3.5	3.3	3.3

This is the fastest recovery from recession in history except for jobs, where the glass has returned to only one-third full versus the best economy in 50 years back in February. Payroll employment dropped 1.373 million in March and 20.787 million in April, but rose back 2.699 million in May and 4.800 million in June which means jobs have rallied 33.8 percent back from the worst recession since the Great Depression. The hole is so deep now and the economy is so wounded that we are uncertain when the labor market and the overall economy will start to resemble what the economy looked like at the start of the year before the coronavirus struck.

The shortest recession for the labor market in U.S. history will be followed by what is looking like the longest recovery in jobs for workers in history. Payroll employment fell just two months in this

recession. In the 2001 recession payroll jobs fell for 30 months and in the 2007-09 recession the economy lost jobs for 25 months. The economy wins in one way with the job losses coming all up front, which gets the sky-is-falling bad news out of the way for stock market investors, but it loses in another way when unemployed Americans cannot find work because many areas of the country have shut back down with the second wave of the coronavirus pandemic.

In conclusion, today's report of 4.8 million jobs coming back online in June may be the calm before the storm because upwards of two-thirds of the states were shutting back down at the end of the month after the second wave spread of the coronavirus pandemic threatened to overwhelm their healthcare systems and flatten their economies. The case for continued strong employment gains in the July payroll jobs report isn't looking as optimistic as we had penciled into our surging third quarter GDP forecasts. The bottom line from today's employment report is we cannot be sure the labor market recovery will continue at a speed that is sufficient to put the millions and millions of Americans made jobless in this recession back to work.

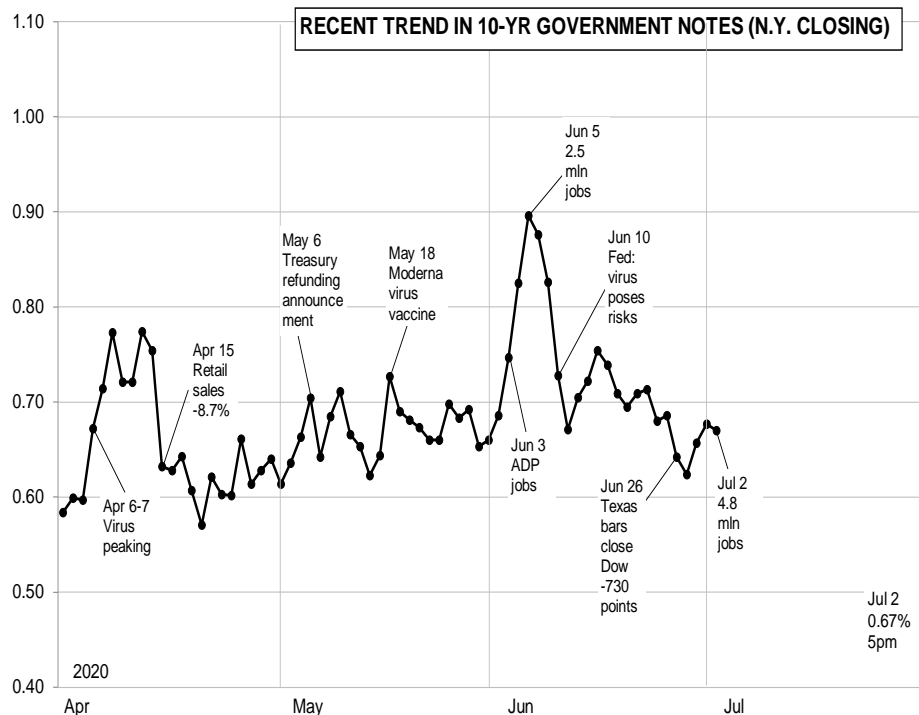
Payroll jobs fall in March as recession begins

Dec. 2019		Jun 20	May 20	Apr 20	6 months Dec 19 to Jun 20	12 months Dec 18 to Dec 19
Totals	millions					
151.998	Nonfarm Payroll Employment	4800	2699	-20787	-14196	2133
129.319	Total Private (ex-Govt)	4767	3232	-19835	-12793	1949
21.136	Goods-producing	504	684	-2388	-1250	188
0.661	Mining	-10	-21	-48	-89	-31
12.866	Manufacturing	356	250	-1317	-771	61
0.998	Motor Vehicles & parts	196	43	-355	-120	-13
7.555	Construction	158	453	-1018	-388	153
108.183	Private Service-providing	4263	2548	-17447	-11543	1741
27.809	Trade, transportation, utilities	903	354	-3248	-2077	143
15.672	Retail stores	740	372	-2299	-1273	-32
3.061	General Merchandise	108	84	-186	1	-19
3.088	Food & Beverage stores	32	48	-31	39	16
5.656	Transportation/warehousing	99	-28	-560	-477	118
1.526	Truck transport	8	2	-92	-86	4
0.508	Air transportation	-4	-50	-79	-129	10
0.846	Couriers/messengers	21	23	11	58	76
1.192	Warehousing and storage	61	13	-95	2	25
0.548	Utilities	-3	-2	-4	-10	-4
2.883	Information	9	-39	-279	-304	29
8.814	Financial	32	10	-261	-206	149
2.808	Insurance	6	-8	-5	-1	52
2.349	Real Estate	23	13	-219	-190	66
1.393	Commercial Banking	0	1	-8	-7	4
0.969	Securities/investments	2	3	-5	3	9
21.503	Professional/business	306	160	-2202	-1783	375
2.950	Temp help services	149	47	-841	-706	-43
2.448	Management of companies	5	-12	-90	-99	47
1.530	Architectural/engineering	12	4	-78	-54	37
2.239	Computer systems/services	-20	-7	-77	-94	85
1.156	Legal services	8	7	-68	-50	14
1.037	Accounting/bookkeeping	18	34	-78	-21	28
24.465	Education and health	568	399	-2603	-1693	621
5.242	Hospitals	7	-35	-126	-130	85
3.810	Educational services	93	29	-467	-370	92
16.784	Leisure and hospitality	2088	1403	-7575	-4744	369
2.100	Hotel/motels	239	-113	-855	-795	48
12.203	Eating & drinking places	1483	1462	-5443	-3031	250
22.679	Government	33	-533	-952	-1403	184
2.244	Federal ex-Post Office	0	-9	4	37	43
5.184	State government	-25	-53	-169	-269	11
2.481	State Govt Education	-19	-39	-161	-249	-8
14.648	Local government	57	-471	-790	-1172	135
8.039	Local Govt Education	70	-292	-446	-664	68

MARKETS OUTLOOK

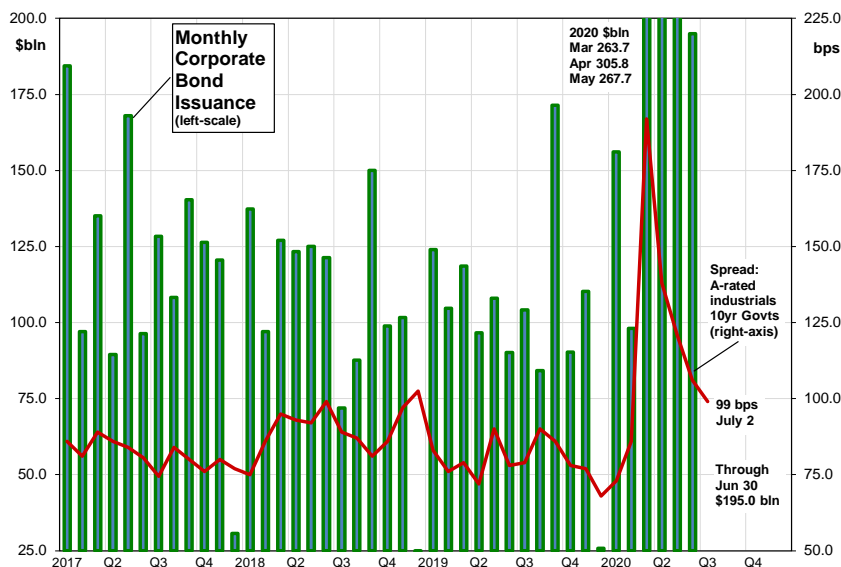
	28-Jun 2019	30-Sep 2019	31-Dec 2019	31-Mar 2020	30-Jun 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021
30-Yr Treasury	2.53	2.11	2.39	1.32	1.41	1.40	1.40	1.50	1.60	1.70
10-Yr Note	2.01	1.67	1.92	0.67	0.66	0.70	0.70	0.80	0.90	1.00
5-Yr Note	1.77	1.55	1.69	0.38	0.29	0.30	0.30	0.40	0.50	0.60
2-Yr Note	1.76	1.62	1.57	0.25	0.15	0.20	0.20	0.20	0.30	0.30
3-month Libor	2.32	2.09	1.90	1.45	0.30	0.30	0.30	0.20	0.20	0.20
Fed Funds Rate	2.50	2.00	1.75	0.25	0.25	0.25	0.25	0.25	0.25	0.25
2s/10s spread	25	5	35	42	51	50	50	60	60	70

10-yr year yields 0.64% 0.67% this week after closing 0.69% 0.64% last week. The economy regained more jobs than expected Thursday before the holiday weekend and bond yields moved higher with stocks. 10-yr yields were just short of 0.68% at 830am ET Thursday and moved as high as 0.71% by 9am before closing lower despite the good news. The market in its wisdom thinks the second wave of coronavirus cases since the June 12 paycheck survey period for the 4.8 million payroll jobs report will keep a lid on jobs creation in the future. Dow stock futures were up 250 points before the jobs news and ended the day at up 180 points. We pushed the interest rate forecast out another quarter. Fed minutes hint they might want to cap short-end yields like the Reserve Bank of Australia does for their 3-year yields.



CORPORATES: TAKEDA PHARMACEUTICAL, MONDELEZ, AEP, AIG, WEIBO

Corporate bond offerings were \$17.0 billion in the July 3 week versus \$25.0 billion in the June 26 week. On Tuesday, Mondelez International priced a \$1.0 billion 0.625% 2-yr (m-w +10bp) at 48 bps (Baa1/BBB). The food and beverage company (Cadbury, Oreo, Triscuit, Trident gum) will use the proceeds for general corporate purposes including repayment of commercial paper borrowings. Corporate bond yields (10-yr Industrials rated A2) were 99 bps above 10-yr Treasuries Thursday versus 109 bps last Friday.



FEDERAL RESERVE POLICY

The Fed meets July 28-29, 2020 to consider its monetary policy. The June 9-10 meeting minutes were released Wednesday at 2pm. The bond market didn't react. They started off immediately with a staff presentation and a committee discussion of Forward Guidance, Asset Purchases, and Yield Curve Caps or Targets (YCT). Must have been difficult to sit through on a full stomach right after breakfast unless you are sitting on the couch at home watching on Zoom. Day one of the FOMC meeting started at 10am ET. The staff had a model saying forward guidance and large-scale asset purchases can help the labor market recovery and return inflation to the 2% target. Not sure what is in the model. After the last recession they left rates at zero for seven years, maybe they thought that policy worked. The staff reviewed the YCT policies done by the U.S. during WWII to keep Treasury borrowing costs low and stable, and discussed what the Bank of Japan and Reserve Bank of Australia are doing. The staff said YCT policies could control bond yields although the central bank might have to buy "very sizable" amounts of government debt, echoing the experience in the 1940s, which might put the Fed's policy in conflict with public debt management goals and pose a risk for central bank independence. It doesn't sound like they are getting ready to help the Treasury finance its ballooning deficits. Not yet. Bond yields would have to go up a lot first to test what the Fed might do. They did think Australia was the most relevant for the U.S. where the Reserve Bank has targeted the 3-year yield which is "intended to reinforce the bank's forward guidance for its policy rate and to influence funding rates across much of the Australian economy." All this discussion tells us is that there aren't many tools in the Fed's toolkit now that rates are at zero and bond yields brought low as well.

Finally, was there any negative rates discussion? Not a lot of "negative" mentions in the minutes. It was just noted that while fed funds futures in 2021 went negative recently, the dealer survey respondents "attached very little probability to the possibility of negative policy rates." That settles it then. Whew.

Selected Fed assets and liabilities					Sep 10
Fed H.4.1 statistical release					2008**
billions, Wednesday data	1-Jul	24-Jun	17-Jun	10-Jun	pre-LEH
Factors adding reserves					
U.S. Treasury securities	4213.220	4197.404	4169.340	4150.409	479.782
Federal agency debt securities	2.347	2.347	2.347	2.347	0.000
Mortgage-backed securities (MBS)	1911.381	1943.441	1918.741	1835.595	0.000
Repurchase agreements	61.201	70.201	79.053	167.300	126.750
Primary credit (Discount Window)	5.860	6.237	7.479	8.427	23.455
MMLF	20.637	22.889	24.680	26.977	
PDCF	2.486	3.624	5.306	5.829	
Commerical Paper Funding Facility	12.799	12.798	12.797	12.796	
Paycheck Protection Facility	68.133	62.597	57.552	56.983	
Corporate Credit Facility (CCF)	41.940	40.617	38.916	37.374	
Municipal Liquidity Facility	16.081	16.080	16.079	16.077	
Main Street Lending Program	37.502	37.502	31.876	31.875	
Term Asset-Backed Facility (TALF II)	8.753	8.500			
Central bank liquidity swaps					
Federal Reserve Assets	225.414	274.963	352.470	444.520	62.000
3-month Libor %	7057.2	7131.0	7143.4	7217.6	961.7
	0.30	0.28	0.32	0.32	2.82
Factors draining reserves					
Currency in circulation	1971.855	1963.978	1959.750	1955.861	834.477
Term Deposit Facility	0.000	0.000	0.000	0.000	0.000
Treasury credit facilities contribution	114.000	114.000	104.000	104.000	
Reverse repurchases w/others	0.002	0.001	0.001	0.012	0.000
Reserve Balances (Net Liquidity)					
Treasuries within 15 days	2863.196	2937.657	3069.439	3190.654	24.964
Treasuries 16 to 90 days	64.471	64.328	70.365	42.873	14.955
Treasuries 91 days to 1 year	250.820	274.008	276.151	292.827	31.549
Treasuries over 1-yr to 5 years	635.460	605.122	587.886	586.718	69.272
Treasuries over 5-yrs to 10 years	1597.928	1592.447	1581.775	1581.035	170.807
Treasuries over 10-years	732.150	735.883	729.159	725.316	91.863
	932.391	925.617	924.006	921.640	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	Jun	Jul	Total
	FY 2020										
Fed QE	67.808	73.007	80.364	80.246	64.952	504.312	993.047	138.093	87.892	15.816	2,105.5
New Cash	166.8	112.5	50.9	38.5	199.8	238.7	1368.6	699.2	685.2	94.4	3,654.6
Bills	79.1	59.0	-98.2	-12.5	160.3	92.8	1344.3	628.2	449.7	54.8	2,757.4
Coupons	87.6	53.4	149.2	51.1	39.5	145.8	24.2	71.0	235.5	39.6	897.0
Federal Reserve's 11 Lending Facilities (month-end outstanding)					0	58.352	94.641	136.343	204.607	208.331	
Central bank liquidity swaps (month-end outstanding)					0.044	206.051	438.953	448.946	274.963	225.414	

OTHER ECONOMIC NEWS THIS WEEK

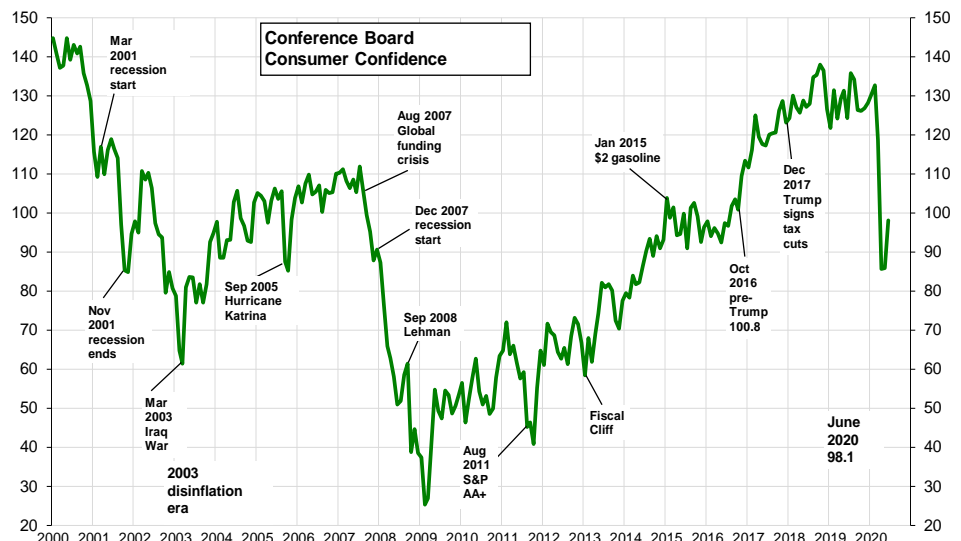
Many consumers still cautious and keeping their savings in lockdown mode (Tuesday)

Breaking economy news. Buy stocks. Consumer confidence jumped to a survey reading of 98.1 in June from 85.9 in May where expectations were for a more modest improvement to 91.5. The "biggest increase in confidence since 2011" headlines aren't fooling anyone but millennials trading (buying) stocks on their smart phones. Despite this beat today far too many consumers are still exhibiting a cautious attitude and are keeping their savings in lockdown mode. Data earlier this month on retail sales and consumer expenditures show consumers are still making fewer trips to the shopping malls than they were at the start of the year. Retail sales were down 22.1 percent from January at the worst point of the shortest, deepest recession in history and now retail sales are in recovery but still down 8.3% from January.

Consumers are a little more confident maybe but many still have their heads down and know the economy is not going anywhere fast. The bounce in confidence today masks how worried consumers are about the long road ahead and just how far the economy has to go before getting back to normal where it was before the coronavirus lockdown in March. This survey which says 20.8 percent say jobs are easy to get is incredible as in simply not credible. Thirty million are still receiving unemployment benefits today versus only 2 million back in March assuming the tally can be made accurately at all given the huge numbers that have to be counted by overworked bureaucrats.

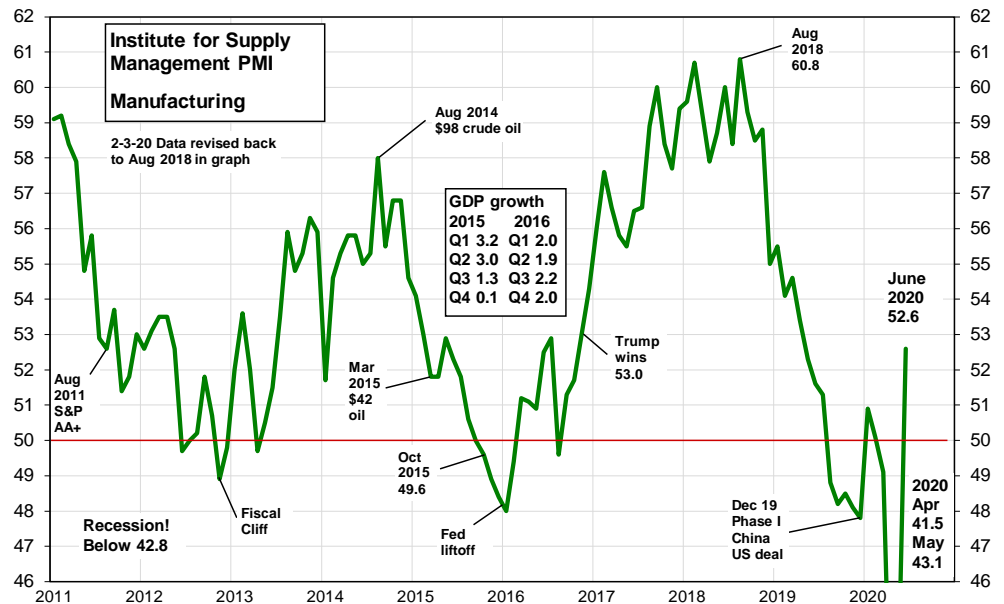
Net, net, the good news is consumer confidence beat market expectations in June, the bad news is that consumers are not anywhere near as confident about their future as they were at the start of the year. The long road to normalcy is miles and miles away and the journey is a hazardous one as already a second wave of the pandemic virus has made some states backtrack on their reopening plans.

Consumer confidence is not returning to pre-crisis levels as quickly as we had hoped and this means the recovery in the economy will be delayed until cautious consumers open up their wallets and purses to spend more of their savings to help make the economy grow.



Manufacturing is expanding again in June for the first time since February (Wednesday)

Breaking economy news. Purchasing managers at manufacturing firms are clearly jumping for joy today as the recession is over according to the latest survey in June which means this was the quickest recession in the nation's history. Thirteen manufacturing industries are up and running again in this month's survey and only four are in decline. The



four reporting contraction are (1) transportation equipment, (2) primary metals, (3) fabricated metal products, and (4) machinery. The index jumped from 43.1 in May to 52.6 in June where a survey reading above 50.0 means the manufacturing sector is growing. This would be good news if it is true. We just hope the opening of the states where everyone is able to venture outside again hasn't made purchasing managers delirious. The Fed's own industrial production index is down in May over 15 percent from last year's level which is a pretty deep hole, and it seems doubtful that actual production activity will jump as high as purchasing managers are saying in June. The June industrial production data are released Wednesday, July 15, 2020. Can't wait for that. Mark your calendars.

Net, net, America's factories are not only back on line, the manufacturing sector is not even in a recession anymore. Manufacturing executives were positively giddy in June saying all their coronavirus pandemic shutdown problems with production and output are behind them. Sky's the limit. Manufacturing output is expanding again in June for the first time since February and is yet another tea leaf reading saying this recession is over. The Institute of Supply Management maintains that as long as the index is above 42.8 then the broader economy isn't in a recession either and this means the recession only lasted one month. April had an index reading of 41.5 the only month this year the index was below 42.8.

We are hopeful that purchasing managers have got this right and manufacturing is expanding again. The only bad news is that factory executives say employees are still being let go with the employment

ISM manufacturing index						
	Jun 20	May 20	Apr 20	Mar 20	Feb 20	Jan 20
PMI index	52.6	43.1	41.5	49.1	50.1	50.9
Prices	51.3	40.8	35.3	37.4	45.9	53.3
Production	57.3	33.2	27.5	47.7	50.3	54.3
New orders	56.4	31.8	27.1	42.2	49.8	52.0
Supplier deliveries	56.9	68.0	76.0	65.0	57.3	52.9
Employment	42.1	32.1	27.5	43.8	46.9	46.6
Export orders	47.6	39.5	35.3	46.6	51.2	53.3

component of the survey down below 50 at 42.1 in June. More output with fewer workers means the long running productivity trend continues. Stay tuned. Story developing.

Analyst Certification

The views expressed in this report accurately reflect the personal views of **Christopher S. Rupkey**, the primary analyst responsible for this report, about the subject securities or issuers referred to herein, and no part of such analyst's compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed herein.

The information herein is provided for information purposes only, and is not to be used or considered as an offer or the solicitation of an offer to sell or to buy or subscribe for securities or other financial instruments. Neither this nor any other communication prepared by MUFG Bank, Ltd. (collectively with its various offices and affiliates, "MUFG Bank") or should be construed as investment advice, a recommendation to enter into a particular transaction or pursue a particular strategy, or any statement as to the likelihood that a particular transaction or strategy will be effective in light of your business objectives or operations. Before entering into any particular transaction, you are advised to obtain such independent financial, legal, accounting and other advice as may be appropriate under the circumstances. In any event, any decision to enter into a transaction will be yours alone, not based on information prepared or provided by MUFG Bank. MUFG Bank hereby disclaims any responsibility to you concerning the characterization or identification of terms, conditions, and legal or accounting or other issues or risks that may arise in connection with any particular transaction or business strategy. While MUFG Bank believes that any relevant factual statements herein and any assumptions on which information herein are based, are in each case accurate, MUFG Bank makes no representation or warranty regarding such accuracy and shall not be responsible for any inaccuracy in such statements or assumptions. Note that MUFG Bank may have issued, and may in the future issue, other reports that are inconsistent with or that reach conclusions different from the information set forth herein. Such other reports, if any, reflect the different assumptions, views and/or analytical methods of the analysts who prepared them, and MUFG Bank is under no obligation to ensure that such other reports are brought to your attention.

Copyright 2020 MUFG All Rights Reserved

The articles and opinions in this publication are for general information only, are subject to change, and are not intended to provide specific investment, legal, tax or other advice or recommendations. The information contained herein reflects the thoughts and opinions of the noted authors only, and such information does not necessarily reflect the thoughts and opinions of MUFG or its management team. We are not offering or soliciting any transaction based on this information. We suggest that you consult your attorney, accountant or tax or financial advisor with regard to your situation. Although information has been obtained from sources we believe to be reliable, neither the authors nor MUFG vouch for its accuracy, and such information may be incomplete or condensed. Neither the authors nor MUFG shall be liable for any typographical errors or incorrect data obtained from reliable sources or factual information.

About Mitsubishi UFJ Financial Group, Inc.'s U.S. Operations including MUFG Americas Holdings Corporation

The U.S. operations of Mitsubishi UFJ Financial Group, Inc. (MUFG), one of the world's leading financial groups, has total assets of \$341.4 billion at December 31, 2019. As part of that total, MUFG Americas Holdings Corporation (MUAH), a bank holding company and intermediate holding company, has total assets of \$170.8 billion at December 31, 2019. MUAH's main subsidiaries are MUFG Union Bank, N.A. and MUFG Securities Americas Inc. MUFG Union Bank, N.A. provides a wide range of financial services to consumers, small businesses, middle-market companies, and major corporations. As of December 31, 2019, MUFG Union Bank, N.A. operated 349 branches, consisting primarily of retail banking branches in the West Coast states, along with commercial branches in Texas, Illinois, New York and Georgia. MUFG Securities Americas Inc. is a registered securities broker-dealer which engages in capital markets origination transactions, private placements, collateralized financings, securities borrowing and lending transactions, and domestic and foreign debt and equities securities transactions. MUAH is owned by MUFG Bank, Ltd. and Mitsubishi UFJ Financial Group, Inc. MUFG Bank, Ltd., a wholly owned subsidiary of Mitsubishi UFJ Financial Group, Inc., has offices in Argentina, Brazil, Chile, Colombia, Peru and Canada as well as branches, agencies and representative offices in the U.S. Visit <https://www.unionbank.com/> or <https://www.mufgamericas.com/> for more information.

About MUFG

Mitsubishi UFJ Financial Group, Inc. (MUFG) is one of the world's leading financial groups. Headquartered in Tokyo and with over 360 years of history, MUFG has a global network with over 3,000 locations in more than 50 countries. The Group has over 180,000 employees and offers services including commercial banking, trust banking, securities, credit cards, consumer finance, asset management, and leasing. The Group aims to "be the world's most trusted financial group" through close collaboration among our operating companies and flexibly respond to all of the financial needs of our customers, serving society, and fostering shared and sustainable growth for a better world. MUFG's shares trade on the Tokyo, Nagoya, and New York stock exchanges. For more information, visit <https://www.mufg.jp/english>.