

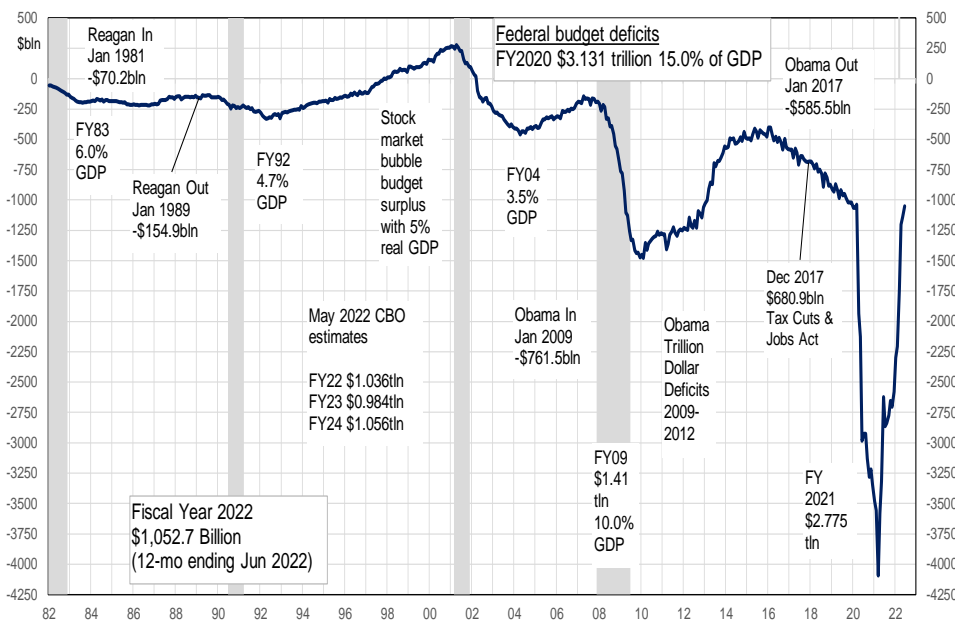
Financial Markets This Week

15 JULY 2022

Christopher S. Rupkey, CFA
Chief Economist
crupkey@fwdbonds.com

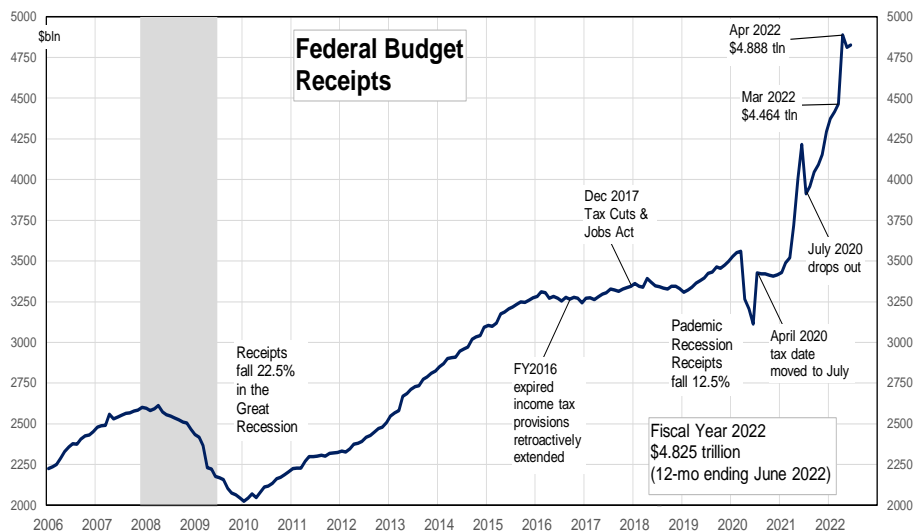
FY2023 FEDERAL BUDGET DEFICIT ONE PIECE OF THE PUZZLE ON INTEREST RATES

Puzzle indeed. Okay, we used this title three months ago in our last Federal budget deficit update: emphasis on update, where are we now. 10-year yields closed at 2.83% on Thursday, April 14 in the Good Friday week of our newsletter three months ago on the Federal budget deficit and closed this week at 2.92%. Supply isn't the issue for



interest rates with the Federal budget deficit declining. The Congressional Budget Office (CBO) earlier this year in May estimated the deficit in fiscal year (FY) 2022 ending in September would be \$1.0 trillion. The June budget deficit was released this week and the deficit in the first 9 months of the current fiscal year is \$515 billion so it is unlikely to make it all the way to \$1.0 trillion in the final three months of the year. Keep in mind, the Fed's QT wind down just started on June 1 and at \$60 billion per month, the Treasury's financing demand will be boosted by \$720 billion a year, which must be

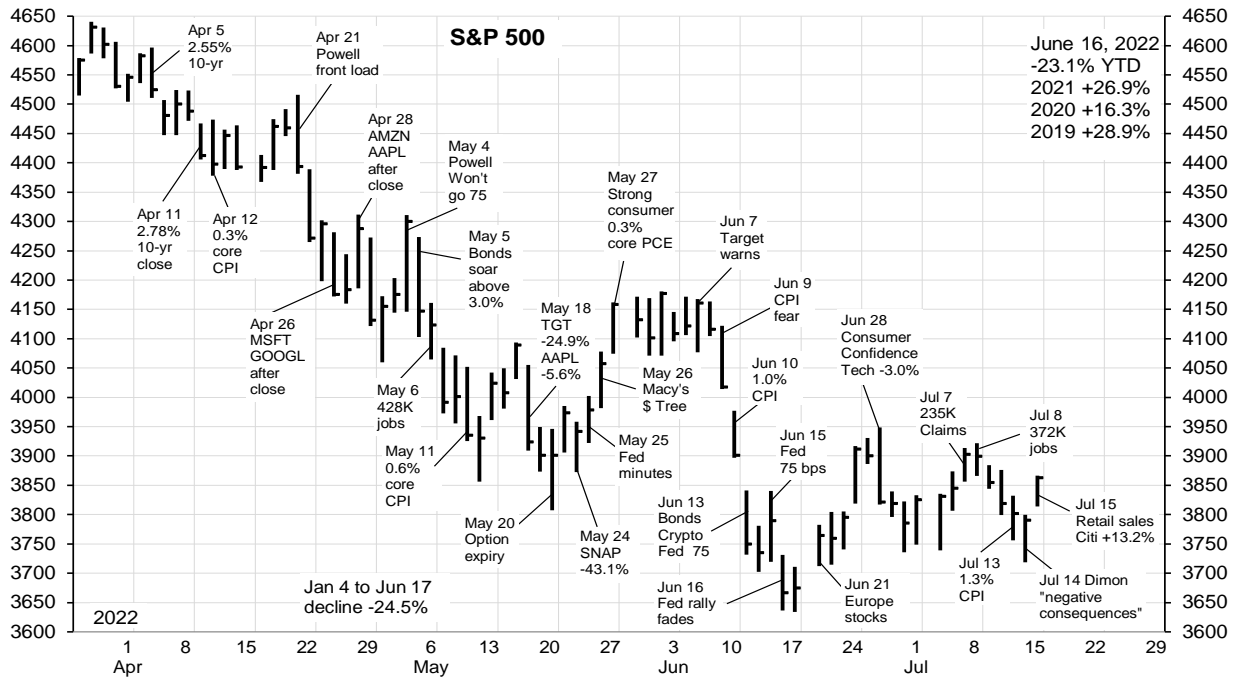
added to whatever the Federal budget deficit is. It's early yet, but CBO estimates FY 2023 will have another \$1 trillion budget deficit, so the Treasury would have to auction \$1.720 trillion including the Fed's QT. It is unclear whether the market can absorb this amount of new supply without bond yields moving higher.



Tax collections were flat from 2016 through 2018: part of it was the Tax Cuts & Jobs Act signed in December 2017. The trend of Federal budget revenues was hard to read initially during the pandemic. Receipts fell 22.5% in the Great Recession and fell 12.5% in the pandemic recession, at least on paper. The decline was partly technical with the April 15 due date for taxes moved to July. Nothing complicated about revenues lately with April 2022 receipts jumping to 4.888 trillion on a 12-month trailing sum basis. The economy is strong, the earnings of high income earners is strong. Much of the tax payments this April are from the incomes earned in calendar year 2021 with payroll employment of 149.240 million in December 2021, up 6.743 million or 4.7% from the year before. CPI inflation was 7.0% year-year in December 2021, and the Dow industrials lifted 18.7% in 2021, so more dividends from mutual funds. It looks like the Fed might have its hands full trying to slow growth down. At the moment, only the U.S. Treasury is enjoying the benefits of higher inflation as it is moving the country's citizens up into higher tax brackets.

Federal Government Spending (\$bln) Where to cut?	3 Qtrs FY22	3 Qtrs FY21	Fiscal	Fiscal	Full Year
	Q4 21-Q2 22	Q4 20-Q2 21	Year	Year	
			Changes	% chg	
TOTAL BUDGET OUTLAYS	4,350.457	5,294.027	-943.570	-17.8	6,821.554
Legislative	4.280	3.998	0.282	7.1	5.263
Judicial	6.368	6.296	0.072	1.1	8.310
Agriculture	191.049	177.897	13.152	7.4	235.193
Commodity Credit Corporation	7.062	10.864	-3.802	-35.0	10.548
Food Stamps	112.946	92.193	20.753	22.5	134.527
Child Nutrition	31.752	20.447	11.305	55.3	25.798
Commerce	9.260	10.841	-1.581	-14.6	13.134
Defense	531.079	541.534	-10.455	-1.9	717.585
Military Personnel	134.581	133.142	1.439	1.1	172.580
Operation Maintenance	211.371	211.525	-0.154	-0.1	286.181
Procurement	100.453	106.809	-6.356	-6.0	141.446
Research Development	77.019	80.485	-3.466	-4.3	105.665
Military Construction	7.172	6.942	0.230	3.3	9.147
Education	150.532	125.366	25.166	20.1	260.452
Office of Federal Student Aid	78.419	63.256	15.163	24.0	170.400
Energy	19.902	25.307	-5.405	-21.4	33.694
Health Human Services	1191.470	1085.468	106.002	9.8	1466.673
Medicare	690.302	643.277	47.025	7.3	875.361
Medicaid States Grants	437.660	382.827	54.833	14.3	520.588
Homeland Security	61.391	69.830	-8.439	-12.1	91.069
Housing Urban Development	17.653	32.216	-14.563	-45.2	35.083
Interior	10.101	11.484	-1.383	-12.0	15.788
Justice	29.406	29.194	0.212	0.7	39.261
Labor	43.570	329.307	-285.737	-86.8	404.771
State Unemployment Benefits	21.437	185.773	-164.336	-88.5	222.335
Fed Additional Unemployment	3.502	129.330	-125.828	-97.3	162.697
State	22.538	23.249	-0.711	-3.1	35.814
Transportation	81.136	73.703	7.433	10.1	104.936
FAA	17.123	30.795	-13.672	-44.4	37.022
Federal Highway Admin.	150.233	46.009	104.224	226.5	61.218
Treasury	944.194	1391.171	-446.977	-32.1	1633.747
TARP	0.148	0.356	-0.208	-58.4	0.370
Coronavirus Relief Fund	89.504	196.480	-106.976	--	243.460
IRS	228.998	588.344	-359.346	--	817.462
Earned Income Credit	61.961	51.710	10.251	19.8	60.757
Child Tax Credit	127.752	28.232	99.520	--	78.959
Economic Impact Payments	12.000	560.000	-548.000	--	570.000
Interest on Public Debt	520.955	419.173	101.782	24.3	562.388
Veterans Affairs	194.646	173.632	21.014	12.1	233.781
Corps of Engineers	6.044	6.475	-0.431	-6.7	7.936
Other Defense Civil Programs	40.072	46.038	-5.966	-13.0	58.085
Environmental Protection	6.877	6.323	0.554	8.8	8.309
Exec. Office of President	0.334	0.317	0.017	5.4	0.427
International Assistance	23.477	16.804	6.673	39.7	20.047
NASA	16.832	16.718	0.114	0.7	22.249
National Science Foundation	5.481	4.992	0.489	9.8	7.354
Personnel Management	84.852	80.223	4.629	5.8	108.552
Small Business Admin.	22.177	324.843	-302.666	--	322.721
Social Security Admin.	952.222	892.938	59.284	6.6	1192.453
Retirement Benefits	791.032	733.655	57.377	7.8	982.673
Federal Disability Payments	108.802	108.005	0.797	0.7	140.774
Other Independent Agencies	20.421	8.448	11.973	141.7	13.554

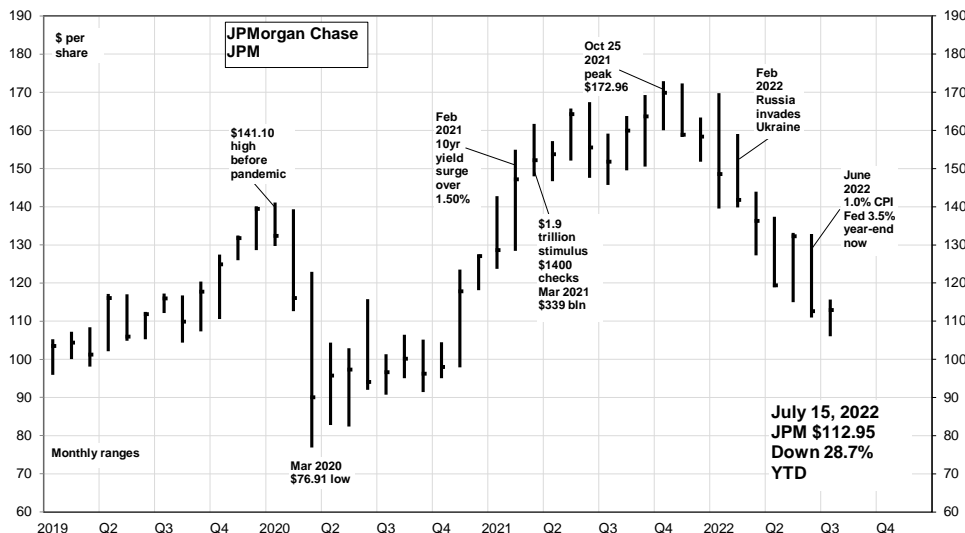
INTEREST RATES



June CPI was the economic report of the week and the 9.1% year-year figure sent 10-year yields to their 3.07% eco news high for the week on Wednesday, before Friday's 2.92% close. The bond market has recession on the brain, and more inflation means more Fed rate hikes that could bring on recession. The yield curve flattened dramatically a couple hours after CPI: 2s/10s closing -22 bps Wednesday from -7 bps on Tuesday. If the yield curve remains negative on average for July, the earliest a recession would occur would be 13 months later which means August 2023 based on our proprietary model. The S&P 500 keeps finding support at 3750 for some reason, no matter what the news. Stocks appeared to welcome Fed Governor Waller's no 100-bps comment on Thursday morning, and lifted further after retail sales rose 1.0% Friday, forgetting it's not real after 1.3% CPI.

JPMorgan dropped Thursday after earnings, 15th largest company in S&P 500

JPMorgan Chase dropped 3.5% Thursday after its early morning earnings release. Dimon's "negative consequences" possible for the global economy comment was talked about by the broader market and may have helped send stocks to the low for the week. The sun came out again Friday after Citigroup earnings, Citi rose 13.2% Friday, and Chase rallied back 4.6%.



FEDERAL RESERVE POLICY

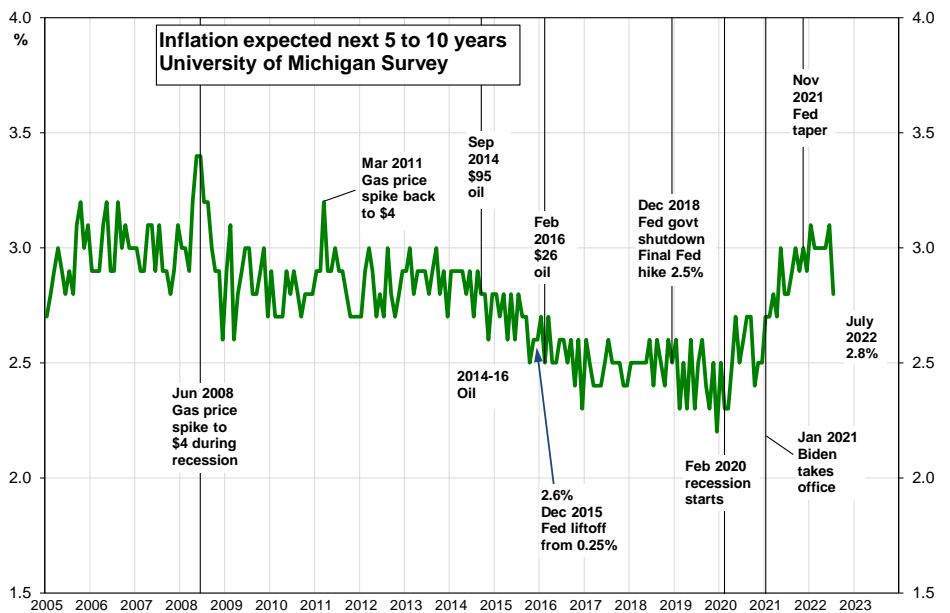
The Fed meets on July 26-27, 2022 to consider its monetary policy. Powell said at the press conference on June 15 they could move 50 or 75 bps. At Wednesday's close after CPI, Fed funds futures were arguing for a 100 bps rate hike (adjusted closing yield was 2.67%, 8 bps away from a 100 bps Fed hike). The wind came out of the market's sails on Thursday, when Fed Governor Waller said he was still a 75er. August Fed funds closed back down at an adjusted 2.545% on Friday. 75 not 100.

Inflation is looking more entrenched after this week's CPI report leading to forecasts the Fed will go with a 100 bps hike to 2.75% on July 27. More entrenched in terms of this inflation isn't just a supply chain problem with goods that are floating on boats off Long Beach or in warehouses awaiting truck delivery to store shelves. "In transit" is what some retailers are saying about why they have more inventories. It's not just volatile goods prices, inflation has spread to services with monthly changes for CPI services ex-energy up 0.7% in April, 0.6% in May, and 0.7% in July: these services prices are up 5.5% the last year, does that mean the Fed funds rate needs to go to 5.5% to be restrictive? Just waiting to see if job layoffs keep rising, more and more, higher and higher each week to confirm a recession that would stop the go-go Fed front-loaded rate hikes.

P.S. The final word on "mixed" economic data Friday was the University of Michigan sentiment survey of consumers. The data looks to be quite unstable, unreliable, whatever you want to call it. Powell said the reason for his sudden shift at the June meeting for a 75 bps rate hike rather than 50 bps was the May CPI inflation report and, and long-term expectations of consumers that inflation would be moving significantly higher. "We take these things quite seriously," he said, talking up the long-term expected inflation data. Wonder what Powell thinks now with long-term expectations for inflation plummeting. Maybe giving himself a pat on the back, with the decline signaling the public is confident the Fed will bring inflation under control. Unstable data is what we would call it. Anyway, the public's long-term inflation expectations were 3.1% when Powell forwarded his 75 bps rate jump, and now 2.8% expected inflation rules out a 100 bps move following his logic.

Selected Fed assets and liabilities						Change from
Fed H.4.1 statistical release						3/11/20
billions, Wednesday data						3/11/20 to Jul 13
Factors adding reserves						
U.S. Treasury securities	5745.528	5744.344	5763.933	5763.344	2523.031	3222.497
Federal agency debt securities	2.347	2.347	2.347	2.347	2.347	0.000
Mortgage-backed securities (MBS)	2709.337	2709.336	2709.328	2728.815	1371.846	1337.491
Repurchase agreements	0.002	0.000	0.001	0.000	242.375	-242.373
Primary credit (Discount Window)	2.570	1.765	3.604	3.147	0.011	2.559
Paycheck Protection Facility	17.201	17.628	18.082	18.621		
Main Street Lending Program	26.414	26.401	26.387	26.374		
Municipal Liquidity Facility	5.544	5.543	5.541	5.540		
Term Asset-Backed Facility (TALF II)	2.180	2.179	2.198	2.197		
Central bank liquidity swaps	0.185	0.347	0.184	0.197	0.058	0.127
Federal Reserve Total Assets	8945.6	8941.5	8962.2	8984.0	4360.0	4585.560
3-month Libor %	1.53	1.54	1.51	1.45	1.15	0.380
Factors draining reserves						
Currency in circulation	2279.838	2284.935	2281.158	2278.628	1818.957	460.881
Term Deposit Facility	0.000	0.000	0.000	0.000	0.000	0.000
U.S. Treasury Account at Fed	618.740	687.943	759.845	745.052	372.337	246.403
Treasury credit facilities contribution	17.940	17.940	17.940	17.940		
Reverse repurchases w/others	2155.290	2168.026	2226.976	2259.458	1.325	2153.965
Federal Reserve Liabilities	5639.069	5718.575	5843.636	5868.397	2580.036	3059.033
Reserve Balances (Net Liquidity)	3306.518	3222.930	3118.611	3115.589	1779.990	1526.528
Treasuries within 15 days	81.810	82.799	93.370	80.281	21.427	60.383
Treasuries 16 to 90 days	342.128	335.528	325.023	338.185	221.961	120.167
Treasuries 91 days to 1 year	808.230	813.570	810.874	810.763	378.403	429.827
Treasuries over 1-yr to 5 years	2057.281	2056.844	2084.018	2074.295	915.101	1142.180
Treasuries over 5-yr to 10 years	1023.618	1023.242	1019.834	1029.136	327.906	695.712
Treasuries over 10-years	1432.461	1432.162	1430.814	1430.684	658.232	774.229
Note: QT starts June 1	Change	13-Jul	1-Jun			
U.S. Treasury securities	-25.251	5745.528	5770.779			
Mortgage-backed securities (MBS)	1.891	2709.337	2707.446			

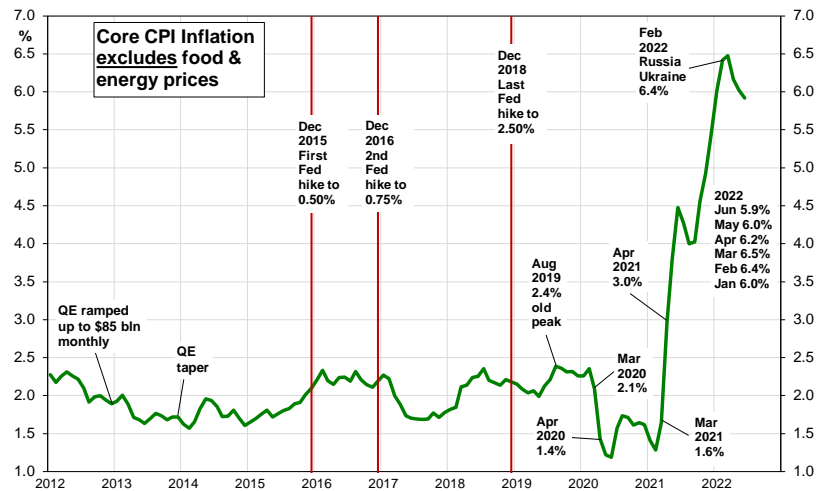
**March 11, 2020 start of coronavirus lockdown of country



OTHER ECONOMIC NEWS

Inflation isn't dead yet (Wednesday)

Breaking economy news. The June CPI report today shows the inflation fire is only 20% contained and the Fed will have to bring interest rates up even higher to put out the rapid spread of price increases which is entrenched everywhere in each and every one of all the goods and services consumers buy. The only thing falling is airline fares, but the 1.8% drop in June does little to reverse the huge monthly increases of 18.6% in April, and 12.6% in May.



The Fed is even further behind the curve after today's sizzling report of headline CPI in June up 1.3% to a new high of 9.1% year-to-year. Even knowing gasoline prices have dropped 35 cents from mid-June is not enough to say inflation has peaked. If inflation has peaked, it is also growing more entrenched making it even harder to slow down let alone unwind it. No Federal Reserve has wrung inflation that is this pervasive and this shockingly high out of the economy without a recession and right now it looks like the Fed's current 1.75% Fed funds rate target is woefully short of restrictive levels. The Fed says they are data dependent, and Powell pointed to last month's CPI report as a reason for changing gears at the last minute to push through a jumbo 75 bps rate hike. Certainly, another 75 bps rate hike has been discounted at the July meeting in a couple of weeks for some time now, but with today's worsening of the inflation outlook, it is possible the Fed goes rogue again and presses for a third 75 bps super-sized rate hike at its meeting in September.

Net, net, despite the Federal Reserve's best intentions, the economy looks to be moving into a higher inflation regime. The fake CPI report of 10.2% that tanked stocks in the last hour of trading yesterday was dead wrong, but it set the right tone for what a truly bad inflation report this was today. Core inflation was 5.9% year-year and may have peaked at 6.5% year-year in March this year, but that is just a statistical trick that is unlikely to convince Fed officials after core CPI rose 0.7% in June, the biggest

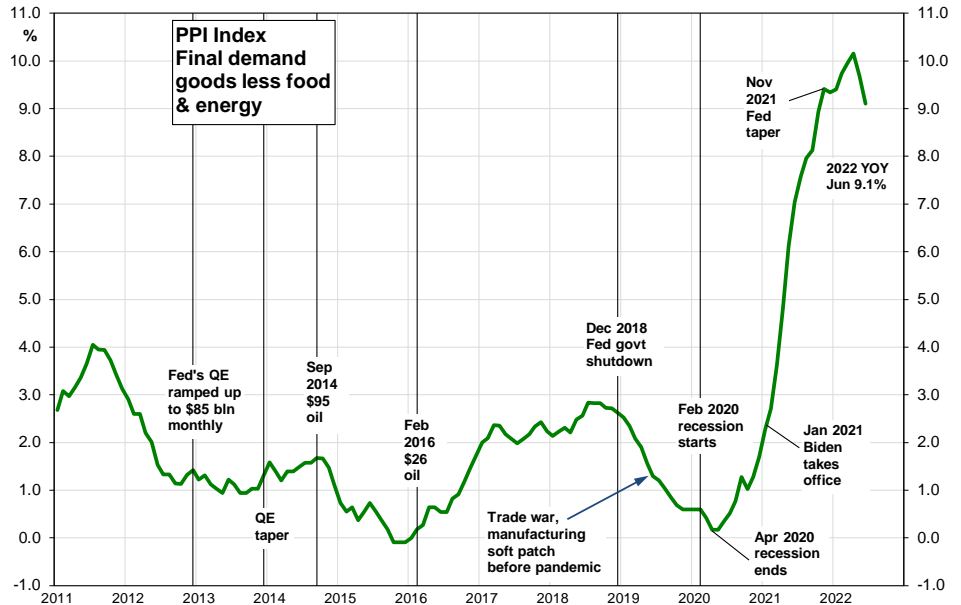
Apr 22 Weight	CPI inflation	Monthly Percent Changes			YOY %
		Apr 2022	May 2022	Jun 2022	Jun 2022
100.0	Total	0.3	1.0	1.3	9.1
13.421	Food	0.9	1.2	1.0	10.4
5.117	Food away from home	0.6	0.7	0.9	7.7
8.255	Energy	-2.7	3.9	7.5	41.6
78.324	Ex-food & energy	0.6	0.6	0.7	5.9
4.031	New vehicles	1.1	1.0	0.7	11.4
3.992	Used cars/trucks	-0.4	1.8	1.6	7.1
2.489	Clothing	-0.8	0.7	0.8	5.2
1.492	Medical care goods	0.1	0.3	0.4	3.2
32.437	Shelter	0.5	0.6	0.6	5.6
23.782	Owner equiv. rent	0.5	0.6	0.7	5.5
5.829	Transportation	3.1	1.3	2.1	8.8
6.869	Medical care services	0.5	0.4	0.7	4.8
Special: Where inflation might come back down to					
56.921	Services ex-energy	0.7	0.6	0.7	5.5

monthly increase since June 2021. Inflation isn't slowing, it's spreading like wildfire which will make for an angry electorate ahead of the November elections this year. The Administration tried to get out in front of the bad economic news, and tell us the inflation report was going to be ugly this month, but it was even worse than markets imagined in their wildest dreams. The inflation outbreak isn't fake, it is very, very real, and Fed officials have yet to address this mortal risk to the economy's consumers and businesses. Washington let down their guard on their management of the economy and let down the entire country with Americans at all-income levels having to pay the price.

More layoffs, more inflation, more rate hikes (Thursday)

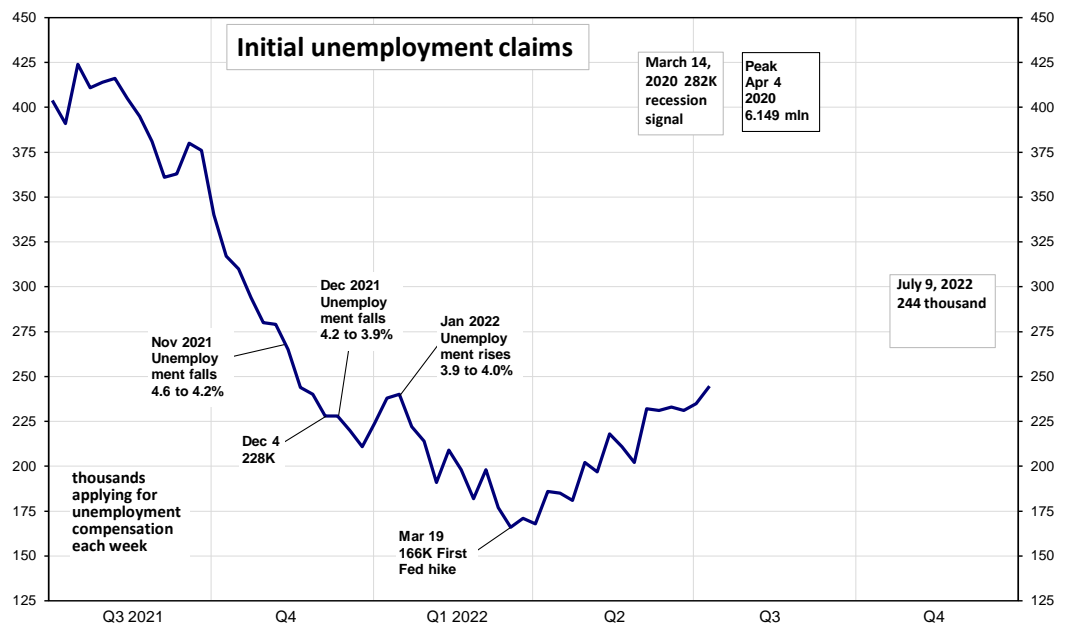
Breaking economy news. Weekly jobless claims and PPI inflation. Weekly jobless claims lifted nearly high enough to set off some recession alarm bells if the numbers stick. Job layoffs were at a new high of 244K in the July 9 week, 9 thousand higher than 235K the week before. There is traditionally some volatility in the claims numbers at the start of the third quarter. The not seasonally adjusted increase was 21,384 to 241,314 for the July 9 week, but half of the rise (10,209) was all from New York state. The week before this New York said there were more layoffs in the transportation and warehousing and health care and social assistance industries.

Meanwhile, factories continue to generate inflation heat that will eventually be felt by consumers shopping at the mall. The Producer Price Index for final demand jumped 1.1% in June and is 11.3% higher than a year ago. 11.3% is just short of the 11.6% year-year record set in March this year. Goods prices are up 2.4% in June, 90% of the increase was energy, and services are up 0.4%. The pipeline is filled with inflation that will eventually move up to the consumer level. The Fed needs to fight the inflation war on two fronts at the producer level and consumer level.



The Fed needs to fight the inflation war on two fronts at the producer level and consumer level.

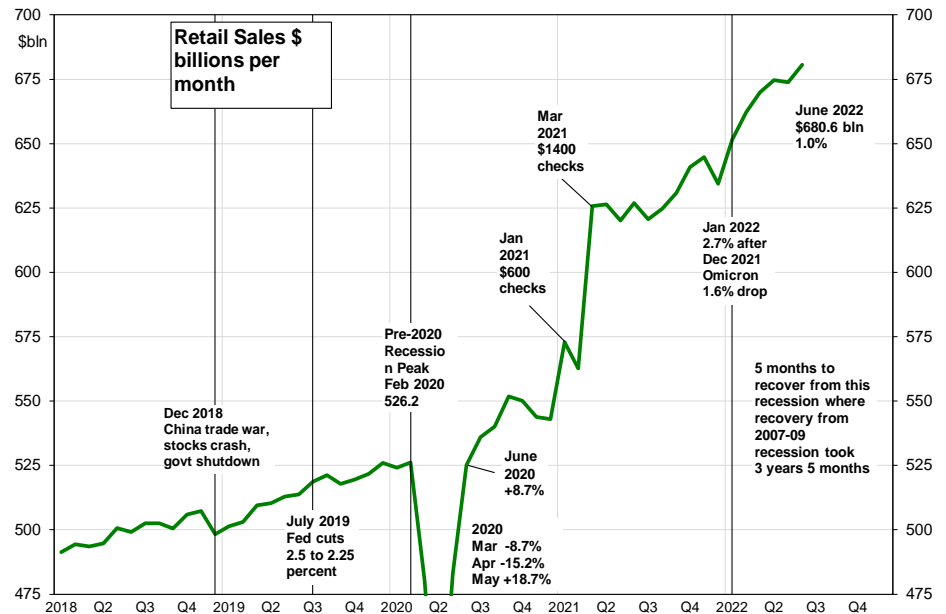
Net, net, although the data don't look 100% complete or verifiable yet, more layoffs and more inflation at the factory level mean more Federal Reserve rate hikes are on the way. The Fed's blunt policy tool needs to go much further up to stomp out the inflation fire. The Fed is already forecasting a doubling of the current 1.75% Fed funds rate to 3.5% at the end of the



year and market yields are prepared for this, even if some investors are hedging their bets that the economy will fall into recession first. Stay tuned. Story developing. The Fed has not won its inflation fight yet. Bet on it.

Retail sales say no recession, industrial production says maybe (Friday)

Breaking economy news. Store chains are warning they have the wrong goods on the floor and inventories are building, but consumers were out in force anyway at the start of summer. Retail sales were strong in June recording a 1.0% increase which means those in the markets hoping for recession are unlikely to get their wish at least for today. This isn't a weak economy report, spending is robust and Fed officials could yet decide to bring forth a super-sized 1.0% rate hike to slow spending that fans the fire of inflation. There is no so-called demand destruction anywhere in this report. Economic analysis may have the cart before the horse



because the major reason that consumers stop spending in recessions is because they have lost their jobs and don't have a paycheck. Joblessness and unemployment goes up and then consumer spending goes down. So far, job losses have been minimal although the weekly jobless claims data are starting to rise in early July.

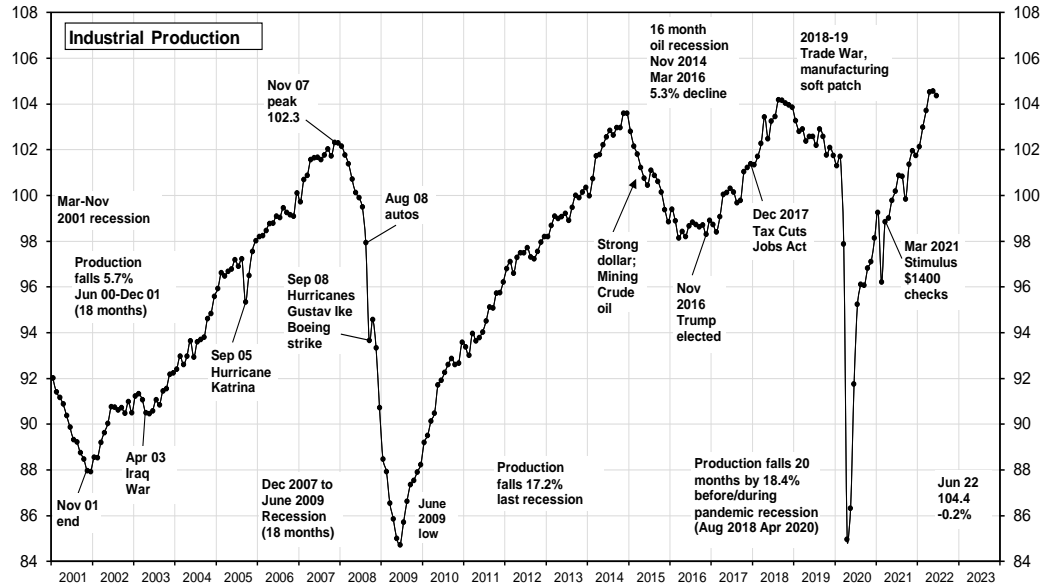
Good news on the inflation front today as well, if not for the corporate profits of multinationals. The strong dollar has led nonfuel import prices to decline for a second straight month, 0.5% in June and 0.3% in May. Nonfuel import prices are up 4.6% in the 12 months ending June 2022 which is slower than the 6.5% increase in the 12 months ending the year before in June 2021. The aggressive Fed rate hikes are rallying the dollar which is one way to lower inflation in the U.S. economy that is dependent on imports of so many consumer goods.

Net, net, consumers are still spending their hearts out which keeps the recession from becoming a reality. The old rule of thumb from the 80s is that three consecutive months of declining retail sales meant the economy had fallen off the cliff and into the recession abyss. May's 0.3% decline in retail sales was revised to a drop of just 0.1% and with June's big 1.0% increase, the economy hasn't even entered the danger zone that warns recession is imminent.

	Retail spending, actual dollars, each month				
	\$million	% to Total	Percent Changes %		
	Jun 2022		Jun	May	Year/year
Total Retail Sales	680,591	100.0	1.0	-0.1	8.4
Motor vehicles/parts	127,922	18.8	0.8	-3.0	0.0
Furniture/furnishings	12,382	1.8	1.4	-0.6	4.6
Electronics/appliances	7,703	1.1	0.4	-1.6	-9.1
Building materials/garden	41,705	6.1	-0.9	-0.2	6.4
Food & beverage	78,333	11.5	0.4	1.0	7.1
Health/personal care	32,659	4.8	-0.1	-0.8	-0.6
Gasoline stations	69,870	10.3	3.6	5.6	49.1
Clothing/accessories	25,764	3.8	-0.4	-1.1	-0.2
Sporting goods, books	9,178	1.3	0.8	0.4	2.7
General merchandise	68,044	10.0	-0.2	0.2	1.5
Department stores	11,229	1.6	-2.6	0.9	-2.9
Miscellaneous retailers	15,713	2.3	1.4	-2.3	15.1
Nonstore retailers (internet)	105,226	15.5	2.2	-1.0	9.6
Eating & drinking places	86,092	12.6	1.0	0.9	13.4

That was our story at 830am ET this morning, but the industrial production report at 915am ET shows some economic distress for manufacturing. Manufacturing industrial production fell 0.5% in June after a downward revised 0.5% in May (was -0.2%). It isn't often that industrial production gets the recession call wrong, although there was a considerable drop in factory output from late 2014 to early 2016 which was blamed on the oil price crash and the manufacturing recession didn't spread to the broader economy. Stay tuned. Story developing.

The skies are darkening for the manufacturing sector, but the sun is out and shining for consumers who were out buying in force last month, even if a lot of the increase is due to the higher inflationary costs of store bought goods. CPI inflation was up 9.1% in June 2022 year-over-year, and retail sales are up 8.4% over the same



period. Who knows, maybe consumers are out shopping trying to beat the price increases that just keep on coming. About the only thing we can say for sure after the three reports today is that there is still a cost-of-living crisis in America, and the Federal Reserve is still likely to bring on another 75 bps rate hike in a couple of weeks. Bet on it.

Percent changes		Industrial Production June 2022		
Apr	May	Jun	YOY	Weight
0.8	0.0	-0.2	<u>4.2</u> <u>Total Index</u>	<u>100.0</u>
0.6	-0.5	-0.5	3.6 Manufacturing	74.5
0.0	1.2	1.7	8.2 Mining	13.7
3.6	1.9	-1.4	1.4 Utilities	11.8
		Manufacturing payroll jobs 12.8 million +509K YOY 9.9% of Private Payroll Jobs		

Analyst Certification

The views expressed in this report accurately reflect the personal views of the research staff at FWDBONDS LLC, the primary analysts responsible for this report, about the subject securities or issuers referred to herein, and no part of such analysts' 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 FWDBONDS LLC 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 FWDBONDS LLC. FWDBONDS LLC 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 FWDBONDS LLC believes that any relevant factual statements herein and any assumptions on which information herein are based, are in each case accurate, FWDBONDS LLC makes no representation or warranty regarding such accuracy and shall not be responsible for any inaccuracy in such statements or assumptions. Note that FWDBONDS LLC 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 FWDBONDS LLC is under no obligation to ensure that such other reports are brought to your attention.

Copyright 2022 FWDBONDS LLC 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. 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 FWDBONDS LLC vouch for its accuracy, and such information may be incomplete or condensed. Neither the authors nor FWDBONDS LLC shall be liable for any typographical errors or incorrect data obtained from reliable sources or factual information.

Opinions, estimates, forecasts, and other views contained in this document are those of the FWDBONDS LLC research group, and does not necessarily represent the views of FWDBONDS LLC or its management. Although the Financial Markets This Week newsletter attempts to provide reliable, useful information, it does not guarantee that the information or other content in this document is accurate, current or suitable for any particular purpose. All content is subject to change without notice. All content is provided on an "as is" basis, with no warranties of any kind whatsoever. Information from this document may be used with proper attribution. Alteration of this document or its content is strictly prohibited. ©2022 by FWDBONDS LLC.

By the way, in the way of the usual disclaimers, this is a final legal reminder that there is no investment advice offered or given anywhere in this newsletter or on the fwdbonds.com website. These are just the things we would like to see before we save, invest, spend, and otherwise plan for the future, which of course is always uncertain.