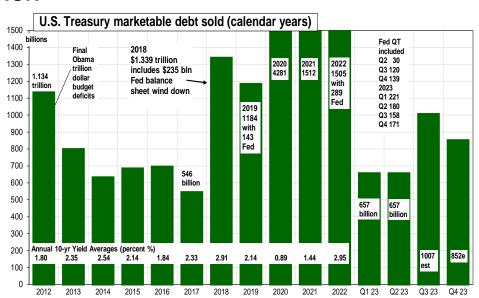
Financial Markets This Week

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BOND MARKET VALUATION

Unlike the stock market that has valuation methods that don't work well, unless maybe when some individual company is a buy because it keeps making 20% more profit than the year before, year, after year, after year; the bond market has three basic pillars for valuation for the benchmark 10-year Treasury notes. (1) Supply/demand: what Treasury auctions, what

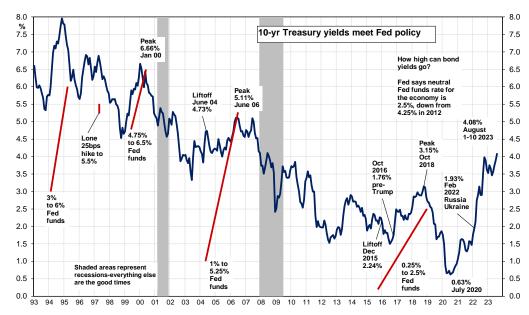


investors buy (including foreigners, after another rating agency downgrade to AA+). (2) Inflation rate, surely bond yields should be above the inflation rate, and (3) the Fed funds rate currently 5.5% which gives the bond yields some backbone. Investor expectations of the three pillars are problematic, how much is being discounted already, but at least there are three facts, actual numbers for supply, current inflation and the current Fed funds rate.

The Treasury announcement Monday, July 31 of its borrowing needs for the quarters ahead, started 10-year yields moving back above 4.00%. The numbers are staggering at close to \$3.2 trillion this calendar year, over double the \$1.5 trillion sold in 2021 and \$1.5 trillion sold in 2022. The Fed winding down its balance sheet holdings this year increases the Treasury's \$3.173 trillion borrowing need: QT is \$60 billion per month or \$720 billion for the year, and we guess Powell won't rethink the QT decision. It makes sense that increased auction supply sends Treasury yields higher, but historically it doesn't always make dollars and cents trying to trade bonds on the news. 10-year yields were still 3.96% on the close of July 31 when the borrowing announcement was made, and were trading around 4.20% before the 187K jobs report on August 4 before falling back to 3.95% on the 0.2% core CPI inflation report this week. There are plenty of examples of greater supply not pushing up bond yields, looking no further than the graph here of a record \$4.281 trillion sold in 2020 at a lower average yield of 0.89%, although the Fed's emergency QE stimulus did purchase \$2.360 trillion of it in 2020.

Economic and Markets Research

The Federal Reserve's policy rate is the backbone of Treasury bond yields holding them higher. The Fed funds rate went to 5.50% on July 26 and the 10-year yield at Friday's close was 4.15% or 135 bps lower. Bonds are waiting for the Fed's 2024 rates forecast where the Fed funds rate comes down from 5.75% to



4.75%. The bond market waiting for the Fed to lower the boom on rates is screwing up our longstanding chart over the years showing how bond yields tend to rise up to the peak Fed funds rate

in every interest cycle.

The final pillar of Treasury bond valuation is inflation where hopefully bond holders get a positive rate of interest after subtracting out inflation. Bonds are 10-year maturities so they often don't react if inflation isn't going to stick at higher levels and inflation often comes back

Fed Policy	Long			
	Term			
Fed funds	5.6	4.6	3.4	2.5
PCE inflation	3.2	2.5	2.1	2.0
Core inflation	3.9	2.6	2.2	
Unemployed	4.1	4.5	4.5	4.0
GDP	1.8			
June 2023 r				

fwd: Bonds

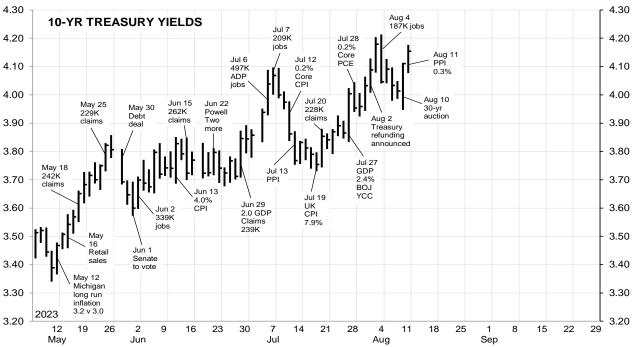
down from the extremes so no need for bonds to reprice at higher yields. CPI inflation was 3.2% in July as reported on Thursday, and the core CPI was 4.7%. Energy prices have brought headline inflation down below the core for now, but core and headline will meet up again at some point. There is another consumer inflation measure, the one the Fed actually targets, and bond yields of 4.15% on Friday, are 5 whole basis points above the June core PCE inflation of 4.1%. While we wait for July core PCE inflation to be released on August 31, going back to the 4.7% core CPI inflation, the last two

months core CPI has risen just 0.2% for June and for July, and 0.2% is a 2.4% annual rate, so bond investors have to weigh whether inflation will continue with these 0.2% monthly changes. It seems reasonable to think monthly changes will average between 0.2 and 0.3 percent over each of the next twelve months unless something really goes wrong.

Fed funds futures call Fed hikes									
Current target: August 11 5.50%									
Rate+0.17 Contract Fed decision dates									
5.525	Oct 2023	Sep 20							
5.565 Jan 2024 Sep 20, Nov 1, Dec 13									
Last trade, not settlement price									

To conclude, the 10-year Treasury yield closed the week on Friday at 4.15%. The cycle high was 4.32% last October when the Fed was still pushing rates up aggressively at a 75 bps per meeting pace. The last 75 bps move the Fed made was at the Nov 1-2 meeting: Yields could stay below the 4.32% peak. The risk for higher yields comes primarily from supply.

INTEREST RATES



fwd: Bonds

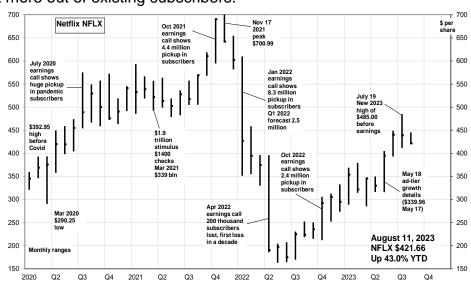
Bond yields fell to the week's low of 3.95% after CPI on Thursday, but it had been close to that level, below 4.00%, helped along by some weak July exports data, down 14.5% was the headline from China. Apparently those yields were too far below the 5.5% Fed target, and yields bounced back to 4.10% later on Thursday after the weak 30-year bond auction results, the last leg of the Treasury's quarterly refunding auctions. PPI inflation on Friday seemed to move yields up further, not sure how logically as producer prices are weak and won't be sending more inflation the consumer's way. The stock market has stalled out the last two weeks, the S&P 500 down as much as 3.5% Friday from the July 27 high for 2023 after that stronger than expected 2.4% GDP first estimate for Q2 2023. Stocks seem to be having some issue with 10-yr Treasury yields moving above 4%.

Netflix NFLX up 43.0% YTD

Netflix stock was as high as \$485.00 on July 19, before earnings were released after the bell, with the stock dropping 8.4% the next day. The company missed on second quarter revenues even if new subscribers are up 8.0% over the next year. It may take longer to grow the ad-based tier, and investors are looking for news on how to get more out of existing subscribers.

Netflix results	(millions)
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	Member	Net
<u>Quarter</u>	ships Paid	<u>Additions</u>
6.30.2023	238.39	5.89
3.31.2023	232.50	1.75
12.31.2022	230.75	7.66
9.30.2022	223.09	2.41
6.30.2022	220.67	-0.97
3.31.2022	221.64	-0.20
12.31.2021	221.84	8.28
9.30.2021	213.56	4.38
6.30.2021	209.18	1.54
3.31.2021	207.64	3.98
12.31.2020	203.66	8.51



FEDERAL RESERVE POLICY

The Fed meets September 19-20, 2023 to consider its monetary policy. The market still refuses to discount the other 25 bps rate hike to 5.75% this year that is in the Fed forecasts that they made at the June 13-14 meeting. Rate hikes? Why? What's not to like? Two straight monthly increases of 0.2% core CPI inflation with the 3.5% unemployment rate remaining a tenth above 3.4% in April 2023: 3.4% the best and lowest seen since the 60s and we all know how good those times were. Economic models turned upside down. Inflation receding without a single labor market casualty.

Selected Fed assets and liabilities											
Fed H.4.1 statistical release						fror					
billions, Wednesday data	9-Aug	2-Aug	26-Jul	19-Jul	3/11/20*	3/11/2					
Factors adding reserves	Ü	Ü				to Aug					
U.S. Treasury securities	5048.370	5048.025	5080.981	5083.036	2523.031	2525.33					
Federal agency debt securities	2.347	2.347	2.347	2.347	2.347	0.00					
Mortgage-backed securities (MBS)	2517.559	2517.559	2517.559	2538.059	1371.846	1145.71					
Repurchase agreements	0.000	0.001	0.001	0.025	242.375	-242.37					
Primary credit (Discount Window)	1.911	1.898	2.249	2.633	0.011	1.90					
Bank Term Funding Program	106.864	105.684	105.078	102.927							
FDIC Loans to banks via Fed	145.407	148.072	152.455	159.640							
Paycheck Protection Facility	6.142	6.401	6.553	6.828							
Main Street Lending Program	19.771	19.752	19.734	19.713							
Municipal Liquidity Facility	5.609	5.607	5.604	5.601							
Term Asset-Backed Facility (TALF II)	1.579	1.577	1.644	1.642							
Central bank liquidity swaps	0.229	0.235	0.255	0.235	0.058	0.17					
Federal Reserve Total Assets	8258.2	8256.6	8293.5	8324.8	4360.0	3898.18					
3-month Libor % SOFR %	5.30	5.30	5.06	5.05	1.15	4.15					
Factors draining reserves											
Currency in circulation	2332.594	2333.186	2333.001	2335.473	1818.957	513.63					
Term Deposit Facility	0.000	0.000	0.000	0.000	0.000	0.00					
U.S. Treasury Account at Fed	432.262	460.926	549.897	726.632	372.337	59.92					
Treasury credit facilities contribution	13.358	13.358	13.358	13.358							
Reverse repurchases w/others	1796.519	1770.186	1749.733	1732.804	1.325	1795.19					
Federal Reserve Liabilities	5029.632	5039.157	5126.707	5104.239	2580.036	2449.59					
Reserve Balances (Net Liquidity)	3228.582	3217.397	3166.767	3220.590	1779.990	1448.59					
Treasuries within 15 days	125.994	130.448	78.359	74.279	21.427	104.56					
Treasuries 16 to 90 days	246.183	236.616	282.668	288.159	221.961	24.22					
Treasuries 91 days to 1 year	624.898	629.989	645.487	646.383	378.403	246.49					
Treasuries over 1-yr to 5 years	1723.880	1723.730	1740.436	1740.319	915.101	808.77					
Treasuries over 5-yrs to 10 years	835.441	835.362	842.230	842.168	327.906	507.53					
Treasuries over 10-years	1491.975	1491.880	1491.801	1491.728	658.232	833.74					
Note: QT starts June 1, 2022	Change	8/9/2023	6/1/2022								
U.S. Treasury securities	-722.409	5048.370	5770.779								
Mortgage-backed securities (MBS)	-189.887	2517.559	2707.446								
**March 11, 2020 start of coronavirus I	ockdown of	country									

While we wait eagerly for PCE inflation on "March 11, 2020 start of coronavirus lockdown of country"

Thursday, August 31, payroll jobs on Friday, September 1, and August CPI inflation on Wednesday, September 13 to help firm up the Fed's September meeting decision on rates, markets can always look

to Fed Chair Powell's Jackson Hole speech which we assume will be on Friday morning August 25. The Kansas City Fed just announced a new president, which we assume the Fed Chair okayed; another bank regulator that the Kansas City Fed Presidents are famous for. The theme of this year's Kansas City Federal Reserve Bank Economic Policy Symposium at Jackson Hole from August 24-26 is "Structural Shifts in the Global Economy." OK, but we just want to know where the Fed funds rate is going.

2022 Fed Rate Hikes											
Dec 14	50 bps	4.50%									
Nov 2	75 bps	4.00%									
Sep 21	75 bps	3.25%									
July 27	75 bps	2.50%									
Jun 15	75 bps	1.75%									
May 4	50 bps	1.00%									
Mar 16	25 bps	0.50%									

fwd: Bonds

Powell gave some stern "I will be brief" remarks last year in Jackson Hole that our stock market portfolio finally recovered from. The S&P 500 was 4,199.12 on Thursday night August 25, 2022 before Powell spoke. Stocks fell 3.4% on Friday after he spoke. What was he thinking? Tighter financial conditions do not require that the stock market falls 27.5% from record highs to the rock-bottom 3,491.58 lows like it eventually did by last October. When he spoke apparently to wake people up last year, the Fed had just gone on to its second 75 bps warp speed meeting with a 75 bps rate hike to 2.5% on July 27, 2022, so maybe he needed to say the gun was still loaded and there was more, much more to come with rates only at 2.5%, not the 5.5% rates of today, but still. Powell's remarks almost from day one of the announcement of his nomination by Trump in November 2017 have triggered more than their fair-share of stock market sell-offs than seem necessary in the conduct of the nation's monetary policy. The driver of these financial conditions models is more short-term interest rate driven than it is the equity markets. We wonder how many baby boom retirees bailed after losing over 20% on their stock holdings last year.

Next up: July PCE inflation report Thursday, August 31															
Monthly	2023						2023	2022							2022
% Changes	<u>Jul</u>	<u>Jun</u>	May	<u>Apr</u>	<u>Mar</u>	<u>Feb</u>	<u>Jan</u>	<u>Dec</u>	Nov	<u>Oct</u>	<u>Sep</u>	<u>Aug</u>	<u>Jul</u>	<u>Jun</u>	<u>May</u>
Core CPI inflation	0.2	0.2	0.4	0.4	0.4	0.5	0.4	0.4	0.3	0.3	0.6	0.6	0.3	0.6	0.6
Core PCE inflation		0.2	0.3	0.4	0.3	0.3	0.5	0.4	0.2	0.3	0.5	0.6	0.1	0.6	0.4
Core PCE YOY		4.1	4.6	4.6	4.6	4.7	4.7	4.6	4.8	5.1	5.2	4.9	4.7	5.0	4.9
Core CPI YOY	4.7	4.8	5.3	5.5	5.6	5.5	5.6	5.7	6.0	6.3	6.6	6.3	5.9	5.9	6.0

OTHER ECONOMIC NEWS

Terms of international trade don't favor the world economy (Tuesday)

Breaking economy news. The trade deficit was \$65.5 billion in June versus \$68.3 billion in May. The trade winds are not blowing favorably for the world economy and this will lead to less growth for exporters and importers alike. U.S. exports of goods to the world are down 8.9% from prior year levels.

U.S. imports of goods from the world are down 9.7% from prior year levels. The U.S. consumer is still spending, still propping up the economy, but importers sure aren't bringing in more consumer goods from overseas for them either. There was some weak trade data for July out from China overnight that led to some selling of U.S. stocks, but the June data this morning from the U.S. show goods imports



fwd: Bonds

from China of \$34.3 billion down 29.3% from last year, a stark number one would probably only expect to see in a recession. For all the talk of trade war between the U.S. and China it is looking like importers are bringing in less because of less demand from the American consumer.

The net exports of goods and services added significantly to real GDP from Q2 2022 to Q1 2023 before subtracting a slight 0.1 percentage point from the second quarter of 2023 2.4% real GDP growth. It looks like the net trade impact on growth will be negligible in the third quarter, although we only have June data to go on.

Net, net, when countries stop trading with one another that is a recipe for disaster for the global economy where there are clearly downside risks despite many on Wall Street no longer betting on a recession. The terms of trade do not favor the world economy or the United States either. Less demand for goods coming in and less demand for goods going out. Stay tuned. Story developing. The terms of international trade don't favor the world economy. Bet on it.

U.S. Imports of Goods from the Rest of the World										
Millions of dollars	Jun 2023	May 2023	2023 YTD	2022 YTD						
Total *	251,257	254,134	1,548,519	1,652,216						
Foods, feeds, beverages	16,232	15,911	99,873	105,005						
Industrial supplies, materials	54,139	56,312	347,971	418,614						
Crude oil	11,731	12,698	78,535	99,603						
Finished metal shapes	3,120	5,200	23,982	27,878						
Capital Goods ex-autos	69,431	71,713	428,387	426,412						
Computers	6,760	8,332	44,291	52,649						
Computer accessories	5,379	5,458	31,877	40,553						
Semiconductors	5,718	5,788	36,852	38,775						
Electric apparatus	7,802	7,771	48,313	42,655						
Telecom equipment	6,356	6,405	39,872	38,221						
Medical equipment	4,738	4,799	28,435	28,307						
Auto vehicles, parts, engines	38,664	37,365	222,576	193,795						
Consumer goods	61,941	61,498	384,557	445,724						
Pharma preparations	16,445	14,005	97,947	93,219						
Cell phones	9,144	9,348	60,509	71,536						
Toys, games, sporting goods	4,221	3,835	24,864	33,939						
Furniture, household goods	3,174	3,162	19,807	28,243						
Household appliances	2,904	3,025	18,659	23,035						
Other goods	10,841	11,335	65,156	62,664						
* Total Imports of goods on Ce	ensus Basis									

Inflation only in the price of a roof over your head (Thursday)

Breaking economy news. CPI inflation and weekly jobless claims. Headline inflation rose 0.2% in July and is 3.2% higher than a year ago. The Fed's policy rate of 5.5% is looking increasingly restrictive in terms of real rates which makes it more costly for companies and consumers to borrow. Core CPI inflation is stickier always but the news here is good with a second consecutive month of a 0.2% monthly increase. The year-on-year core rate nudged down a tenth to 4.7%, but price increases the last two months have cooled more than policy officials had expected given the labor market remains tight as a drum. You have to go back to the start of 2021 before the \$1400 and \$600 stimulus checks were sent out to find inflation this slow.

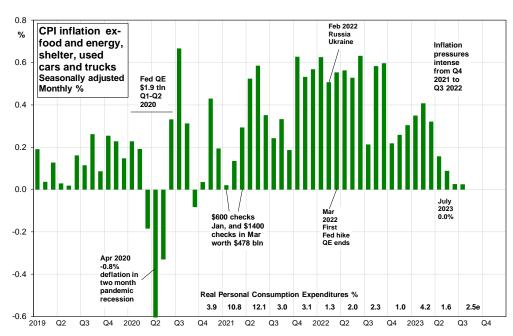
Further evidence that inflation is dying on the vine comes from the extreme core reading on consumer inflation that in addition to food and energy, strips out shelter and used cars and trucks prices: this even more core inflation measure showed no monthly change at all in June and July after slim gains of 0.1% in May and 0.2% in April. Inflation seems to be petering out as the stimulus monies run out. We don't know if inflation is dead or not but it is sure playing possum and hard to get or see.

Dec 22		Monthly	hanges	YOY %						
Weight	CPI inflation	May 2023	Jun 2023	Jul 2023	Jul 2023					
100.0	Total	0.1	0.2	0.2	3.2					
13.531	Food	0.2	0.1	0.2	4.9					
4.803	Food away from home	0.5	0.4	0.2	7.1					
6.921	Energy	-3.6	0.6	0.1	-12.5					
79.548	Ex-food & energy	0.4	0.2	0.2	4.7					
4.313	New vehicles	-0.1	0.0	-0.1	3.5					
2.668	Used cars/trucks	4.4	-0.5	-1.3	-5.6					
2.479	Clothing	0.3	0.3	0.0	3.2					
1.455	Medical care goods	0.6	0.2	0.5	4.1					
34.413	Shelter	0.6	0.4	0.4	7.7					
25.424	Owner equiv. rent	0.5	0.4	0.5	7.7					
5.750	Transportation	0.8	0.1	0.3	9.0					
6.653	Medical care services	-0.1	0.0	-0.4	-1.5					
Special: Where inflation might come back down to										
58.187	Services ex-energy	0.4	0.3	0.4	6.1					
21.261	Commodities (core)	0.6	-0.1	-0.3	0.8					

fwd: Bonds

The only major source of inflation still is the price of a roof over your head. Shelter prices which Fed officials have been counting on coming back down in the second half of the year at least slowed to 0.4% in July. Outside of shelter, inflation seems to have virtually disappeared overnight.

The only negative economic news today was the 21K jump in weekly jobless claims to 248K in the August 5 week, which was a not seasonally adjusted increase of 20K where Ohio rose 5,346, California 2,913, and Texas 2,169. It was a big increase, even if it is still under a recession alert level, and we will see if this level holds in next week's report.



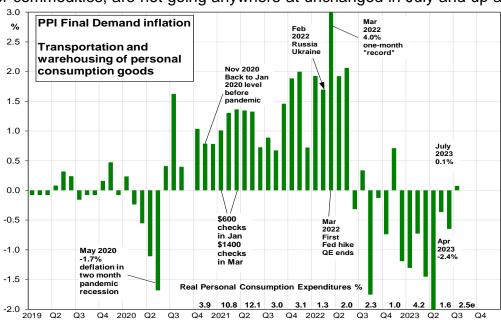
Net, net, inflation is slowly winding back down after exploding during the pandemic shortages and spike in oil prices after Russia invaded Ukraine last February. The inflation appears to be mostly

shortages-based and not the result of stronger economic demand which explains why inflation has been coming down even while the labor market remains tight with very low unemployment of 3.5%. If inflation is largely shortages based then this argues for the Fed to pause for a longer period as pumping the brakes on the economy with more rate hikes is unnecessary. This isn't your father's demand-based inflation from other economic cycles in other decades that you read about in your economic textbooks. The Fed is winning its inflation fight and consumers are finally seeing some relief where at least prices have stopped going up as much as they had. Stay tuned. Story developing.

PPI inflation still dead as a doornail (Friday)

Breaking economy news. Some markets seemed to act like inflation was back after the PPI inflation report. PPI Final demand prices rose 0.3% in July after being unchanged in June and falling 0.3% in May. PPI Final demand prices are only up 0.8% over the last 12 months, so better get your microscopes out. Final demand goods prices less foods and energy, more or less the old way markets used to follow the PPI data for commodities, are not going anywhere at unchanged in July and up a

modest 1.9% over the last 12 months. This inflation measure peaked at 10.2% year-on-year in April 2022. Sometimes we look at PPI inflation for the transportation and warehousing of personal consumption goods to see if there are supply chain disruptions and these prices are still falling 9.5% over the last 12 months, after the pandemic demand surge has faded, even if they are up 0.1% for the month.



fwd: Bonds

Р	PI Final o	demand (goods les	s foods/	energy	Monthly	Percent (Changes	SA			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	0.8	0.8	1.0	1.2	0.7	0.5	0.2	0.2	0.0	0.0	0.3	0.1
2023	0.6	0.3	0.2	0.1	0.1	-0.2	0.0					
P	PI Final o	demand (goods les	ss foods/	energy	Year/Yea	ar Percen	t Change	es NSA			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	9.4	9.7	10.0	10.2	9.8	9.2	8.5	8.1	7.5	6.7	6.1	5.8
2023	5.6	5.1	4.3	3.3	2.6	2.0	1.9					

Economic and Markets Research

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