QUARTERLY UPDATE CWS CAPITAL PARTNERS LLC



PAN(IC), A LOOMING CREDIT CRUNCH, AND POWELL'S FAVORITE INDICATOR

By Gary Carmell

The word panic comes from the name of the Greek god Pan, who was reputed to cause humans to flee in maddening fear.

Initially, the word described the intensity of a feeling of unjustified, individual, or collective fear similar to the reaction provoked, according to mythology, by the intervention of the god Pan.

His connection with the word stems from people associating panic with fear. This feeling causes humans to act in a way that prevents reason and logical thinking. It is so strong that it can sometimes lead to overwhelming feelings such as anxiety.

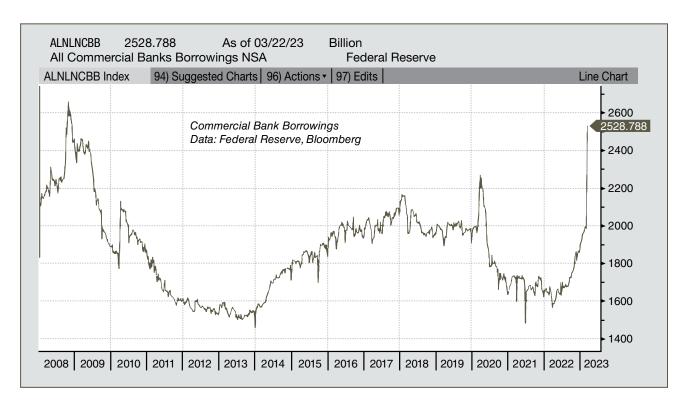
Source: Greekreporter.com

Summary: Panic among uninsured depositors revealed risks to the banking system that were not fully appreciated. This could lead to the Fed pausing after one more rate hike and then reversing course and cutting interest rates later in the year as its policies are putting great pressure on smaller banks and inducing a credit crunch. This could provide for interesting investment opportunities in the apartment sector as well as provide CWS properties with some relief in terms of interest rates averaging less than projected in our 2023 budgets and 2024 rates going even lower.

In early March, Silicon Valley Bank announced that it sold securities at a loss and that it was going to redeploy the proceeds into higher yielding assets while also lining up a capital infusion to help shore up its balance sheet. The bank was unusually exposed to having a run given its huge amount of uninsured deposits. Famed venture capital investor Peter Thiel moved his firm's funds out of the bank and told his portfolio companies to do the same, which unleashed a torrent of money trying to head for the exits all at once. The capital raising fell through, \$42 billion of deposits were withdrawn on March 9th with another \$100 billion requested on March 10th. The bank would have collapsed had the Treasury, Federal Reserve, and FDIC not engineered a bailout of the depositors. The same thing happened to First Republic Bank. Pan's power was unleashed.

The culprit wasn't credit risk but rather purchasing perfectly safe government backed securities with longer maturities and pay rates of interest far lower than what is currently offered in the marketplace. As long as they didn't need to sell these securities, banks holding large quantities of these should have been fine provided their deposits remained steady and growing. Unfortunately, this was not the case and the Federal Reserve and Federal Home Loan Banks had to come in to offer liquidity to banks to cover deposit outflows and to lend against these securities.

This chart shows how bank borrowings exploded to levels last seen during the Great Financial Crisis as banks sought to raise cash to cover the loss of deposits.



The tide may be reversing as banks are now selling securities and cutting back on lending as this table shows. This has allowed them to pay back some of their borrowings and have the Federal Reserve continue on the path of reducing its balance sheet via quantitative tightening as the second table shows.

H.8 ASSETS AND LIABILITIES OF COMMERCIAL BANKS IN THE UNITED STATES

Table 2. Assets and Liabilities of Commercial Banks in the United States

Seasonally adjusted, billions of dollars

	Accounts	2022	2022	2022	2022	2022	2022	2023	2023	Week ending			
Accounts		Feb	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar 08	Mar 15	Mar 22	Mar 29
As	sets	7											
1	Bank Credits	16,674.4	17,324.0	17,338.0	17,349.5	17,392.6	17,514.7	17,562.8	17,585.2	17,551.5	17,604.8	17,470.1	17,293.8
2	Securities in bank credit	5,829.6	5,733.7	5,661.0	5,566.8	5,527.4	5,533.5	5,534.8	5,505.8	5,447.8	5,434.8	5,359.7	5,228.6
3	Treasury and agency securities	4,705.7	4,602.6	4,546.8	4,474.5	4,439.3	4,441.0	4,408.4	4,389.7	4,345.9	4,337.1	4,266.3	4,153.4
4	Mortgage- backed securities (MBS)	2,994.3	2,877.1	2,846.6	2,801.9	2,781.2	2,787.0	2,752.7	2,752.4	2,731.9	2,727.0	2,691.5	2,584.6
5	Non-MBS	1,711.4	1,725.4	1,700.1	1,672.6	1,658.1	1,654.0	1,655.7	1,637.3	1,614.1	1,610.2	1,574.7	1,568.8
6	Other securities	1,123.9	1,131.1	1,114.2	1092.3	1,088.1	1,092.5	1,126.4	1,116.1	1,101.8	1,097.7	1,093.5	1,075.2
7	Mortgage-banking securities (MBS)	110.4	116.0	115.2	114.0	114.0	112.3	112.7	111.3	109.8	110.1	109.5	108.6
8	Non-MBS	1,013.4	1,015.1	999.0	978.3	974.0	980.2	1,013.6	1,004.8	992.0	987.6	983.9	966.5
9	Loans and leases in bank credit	10,844.8	11,590.4	11,677.0	11,782.7	11,865.2	11,981.2	12,028.0	12,079.4	12,103.8	12,170.0	12,110.4	12,065.3
10	Commercial and industial loans	2,490.2	2,718.7	2,741.0	2,770.5	2,795.2	2,808.5	2,812.4	2,799.5	2,803.8	2,824.1	2,773.4	2,756.1
11	Real estate loans	4,844.2	5,123.2	5,164.4	5,204.8	5,245.8	5,340.7	5,368.4	5,408.4	5,425.0	5,445.1	5,428.3	5,410.2
12	Residential real estate loans	2,278.9	2,399.1	2,418.7	2,434.7	2,452.1	2,474.6	2,489.0	2,504.7	2,506.7	2,519.8	2,528.6	2,520.2
13	Revolving home equity loans	247.3	251.5	252.3	253.5	253.6	255.0	255.1	255.3	255.2	255.3	255.6	254.6
14	Closed-end residential loans	2,031.6	2,147.6	2,166.5	2,181.2	2,198.5	2,219.6	2,233.9	2,249.3	2,251.5	2,264.5	2,273.0	2,265.6
15	Commercial real estate loans	2,565.3	2,724.1	2,745.7	2,770.1	2,793.7	2,866.1	2,879.4	2,903.8	2,918.3	2,925.3	2,899.7	2,890.0

This next table shows how the Federal Reserve has shrunk its balance sheet by approximately \$300 billion over the past year and by nearly \$100 billion between March 29th and April 5th. Had the Fed not stepped in to provide funding for banks facing significant deposit outflows, then its balance sheet would have shrunk by over \$600 billion from a year ago. One can see in the table that banks repaid \$31.5 billion of these loans.

FEDERAL RESERVE statistical release

H.4.1

Factors Affecting Reserve Balances of Depository Institutions and Condition Statement of Federal Reserve Banks



1. Factors Affecting Reserve Balances of Depository Institutions

Millions of Dollars

	Ave				
Reserve Bank Credit, related items, and reserve balance of depository institutions at Federal Reserve Banks	Week ended	Change from	Wednesday Apr 5, 2023		
depository institutions at rederal neserve banks	Apr 5, 2023	Mar 29, 2023	Apr 6, 2022	Apr 5, 2023	
Reserve Bank credit	8,599,167	- 96,859	- 300,285	8,595,344	
Securities held outright	7,883,779	- 48,337	- 594,606	7,877,114	
U.S. Treasury securities	5,286,952	- 42,191	- 473,732	5,280,287	
Bills	280,966	- 1,031	- 45,078	280,966	
Notes and bonds nominal	4,524,773	- 41,859	- 439,106	4,517,796	
Notes and bonds inflation-indexed	377,024	0	- 13,816	377,024	
Inflation compensation	104,189	+ 699	+ 24,268	104,500	
Federal agency dept securities	2,347	0	0	2,347	
Mortgage-backed securities	2,594,480	- 6,146	- 120,875	2,594,480	
Unamortized premiums on securities held outright	304,673	- 638	- 39,650	304,395	
Unamortized discounts on securities held outright	-27,483	+ 33	- 5,852	-27,362	
Repurchase agreements	44,286	- 15,001	+ 44,285	40,000	
Foreign Official	44,286	- 15,000	+ 44,285	40,000	
Others	0	- 2	0	0	
Loans	326,350	- 31,564	+ 302,510	332,449	
Primary credit	71,038	- 33,861	+ 70,511	69,705	
Secondary credit	0	0	0	0	
Seasonal credit	0	- 4	0	0	
Paycheck Protection Program Liquidity Facility	9,266	- 1,001	- 14,047	9,115	
Bank Term Funding Program	68,156	+ 5,511	+ 68,156	79,021	
Other credit extensions	177,889	- 2,211	+ 177,889	174,609	
Net portfolio holdings of MS Facilities LLC (Main Street Landing Program)	22,312	+ 27	- 6,556	22,326	
Net portfolio holdings of Municipal Liquidity Facility LLC	5,603	+ 3	- 1,050	5,604	
Net portfolio holdings of TALF II LLC	1,926	- 18	- 585	1,923	
Float	-382	- 152	- 172	-516	
Central bank liquidity swaps	555	- 35	+ 189	478	
Other Federal Reserve assets	37.549	- 1,176	+ 1,203	38,932	
Foreign currency denominated assets	18,898	+ 94	- 583	18,935	
Gold stock	11,041	0	0	11,041	
Special drawing rights certificate account	5,200	0	0	5,200	
Treasury currency outstanding	51,653	+ 14	+ 728	51,653	
nodally during dubtanding	01,000		1 120	31,000	
Total factors supplying reserve funds	8,685,959	- 96,752	- 300,140	8,682,173	

Note: Components may not sum to totals because of rounding.

One can also see that banks are still facing a substantial outflow of deposits.

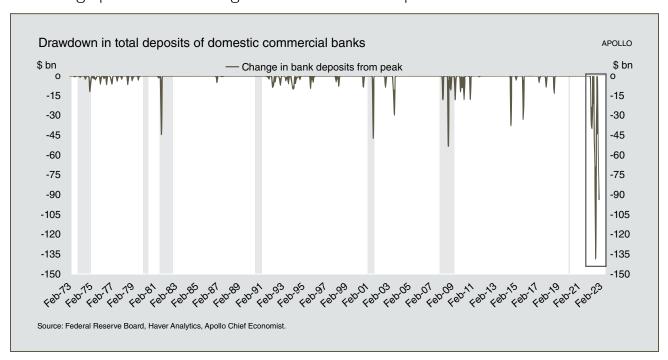
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Accounts	2022 Feb	2022 Aug	2022 Sep	2022 Oct	2022 Nov	2022 Dec	2023 Jan	2023 Feb	Week ending			
Accounts									Mar 08	Mar 15	Mar 22	Mar 29
Liabilities												
34 Deposits	18,085.3	18,013.8	17,920.6	17,787.5	17,754.1	17,808.5	17,774.4	17.689.4	17.602.0	17,427.6	17,255.5	17,190.8
35 Large time deposits	1,405.7	1,548.8	1,572.8	1,549.7	1,601.6	1,668.7	1,718.8	1,781.8	1,840.9	1,819.9	1,837.3	1,843.9
36 Other deposits	16,679.6	16,465.0	16,347.8	16,237.8	16,152.5	16.139.8	16.055.6	15,907.5	15,761.1	15,607.7	15,418.2	15,346.9
37 Borrowing	1,619.4	1,682.6	1,732.0	1,762.7	1,813.2	1,867.2	1,903.3	1,946.2	1,947.3	2,490.7	2,517.4	2,493.4
38 Net due to related foreign offices	54.2	324.9	256.7	301.4	351.1	301.0	391.0	394.1	326.7	402.7	386.1	397.1
39 Other liabilities including trade liabilities	664.6	748.4	765.8	789.4	811.1	799.7	787.6	773.6	781.4	738.8	749.0	790.3
40 Total liabilities	20,423.5	20,769.7	20,675.1	20.640.9	20,729.4	20,776.5	20,856.3	20,803.3	20,657.4	21,059.8	20,907.9	20,871.6
41 Residual (Assets LESS Liabilities)	2,135.2	2,147.3	2,113.6	2,099.1	2,098.4	2,148.9	2,156.0	2,151.5	2,149.0	2,167.0	2,153.5	2,135.6

Here is a graphical view showing the dramatic loss of deposits from commercial banks.



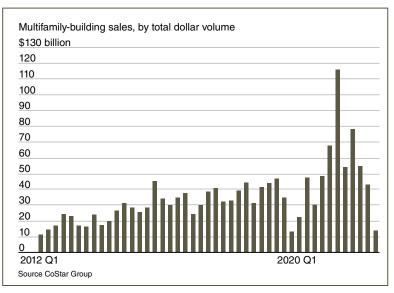
The risk of more deposits leaving will put a damper on bank profitability as smaller regional banks will have to raise rates to compete with money market funds to retain and attract deposits. In addition, they will be more hesitant to make loans and if they do, they will most likely require higher interest rates and lend less money than they would have prior to the panic at Silicon Valley Bank and First Republic Bank.

The negative impact of a potential credit crunch on the economy is compounded by the deposit outflows going to money market funds. Why is this an issue? Because these funds are putting a substantial portion of their inflows into the Federal Reserve's Reverse Repurchase Facility (RRF). When money market funds deposit excess funds into the RRF, money is essentially leaving the financial system as the Fed does not recycle it. This is another economic headwind. Money market funds hold approximately 40% of their \$5.2 trillion in the RRF. Rather than recycling those dollars back into the banking system by lending to banks or buying newly issued securities in which those dollars also end up in the banking system, they are being drained from the system.

With bank profitability under pressure due to the need to raise rates on deposits and the strong prospect of cutting back on lending combined with a meaningful portion of money market inflows going into the RRF, we need to be acutely aware of the impact of this on the economy and curtailing economic growth. There already appears to be some cracks in the economy's armor.

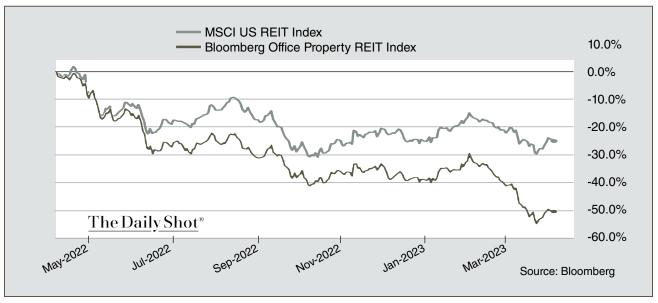
Every time the Fed embarks on a tightening cycle there is something that breaks in the economy that ultimately forces it to reverse course. Very few people thought it would come from seemingly healthy banks that engorged on safe government securities. Monetary policy operates with a lag so it was going to take some time before we would see the negative effects. They are now starting to impact more areas of the economy, particularly real estate, which is very sensitive to interest rates since most transactions involve the use of leverage.

For example, apartment transaction volume has dropped by nearly 75% from the peak as buyers want lower prices to compensate for the higher cost of money and sellers aren't willing to adjust their prices as of yet. In addition, previous large buyers of properties such as Blackstone's REIT along with Starwood and KKR are seeing investors wanting liquidity such that these entities are now losing capital whereas for several years they were huge accumulators of capital. This

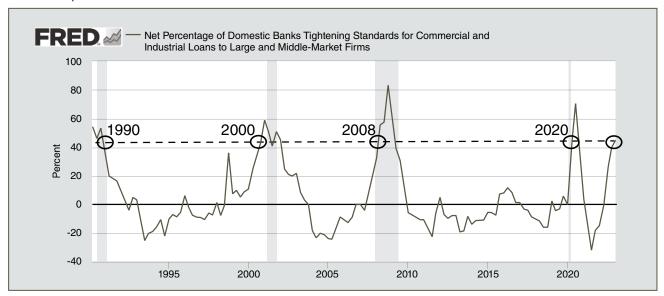


essentially puts them on the sidelines as buyers and makes them large potential sellers of properties, which is a big reversal.

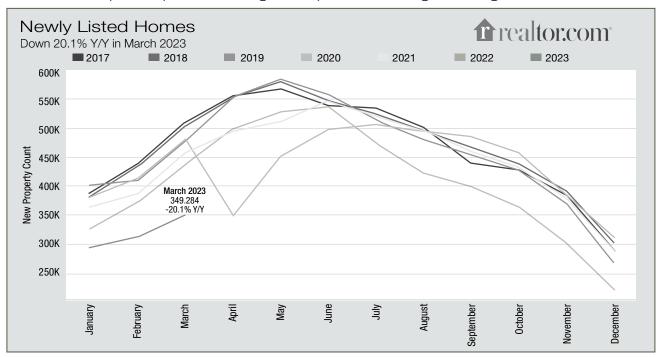
And while interest rates are unquestionably impacting apartment transaction volume, the same isn't necessarily the case for office buildings as this asset class is facing structural and long-lasting deterioration in its earning power. Unfortunately, this is one sector of the economy in which lower interest rates will probably not be a material benefit because the collateral has been so impaired for lenders. One can see from this chart that office building REITs have gotten crushed over the last year, far worse than the overall REIT market.



The Federal Reserve carries out surveys of banks to ascertain whether lending standards are loosening, remaining the same, or tightening. One can see from this chart that the percentage of banks tightening their lending standards has increased substantially and is now approaching levels of previous recessions.

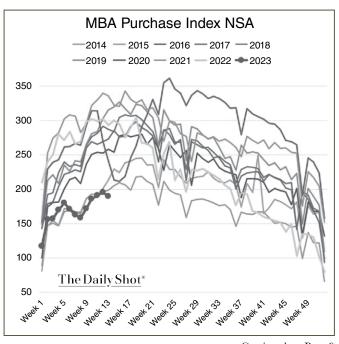


Higher interest rates have had a freezing effect on the housing market as people with mortgages locked into rates that are much lower than those available in the market today, so they have very little incentive to sell. In addition, the cost of purchasing a home has risen materially with home prices still quite elevated which has made the monthly cost of purchasing a home increase significantly. The combination of low embedded mortgages along with a much higher cost to own a home has resulted in people having very little incentive to list their homes for sale. This chart shows how the number of newly listed homes is at very low levels relative to the past six years, resulting in many markets facing a shortage of homes for sale.



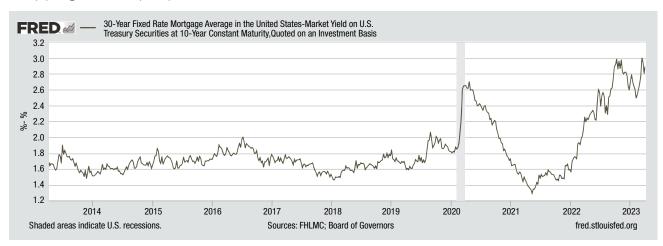
This next chart shows how purchasing activity has also dropped quite materially as compared to the last nine years. This is the Mortgage Bankers Association's Purchase Index which quantifies mortgage activity related to buying homes versus refinancing them. It's not surprising that activity is down because there are fewer homes on the market and interest rates are up quite a bit as compared to the previous years.

Not only are rates higher but the premium required by investors to own mortgages and the securities of which are they comprise is at higher levels than they were during

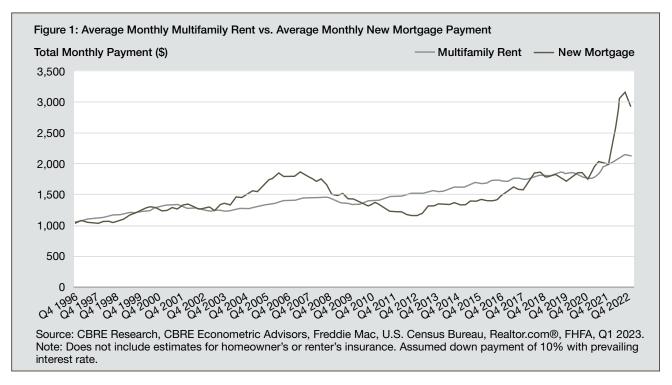


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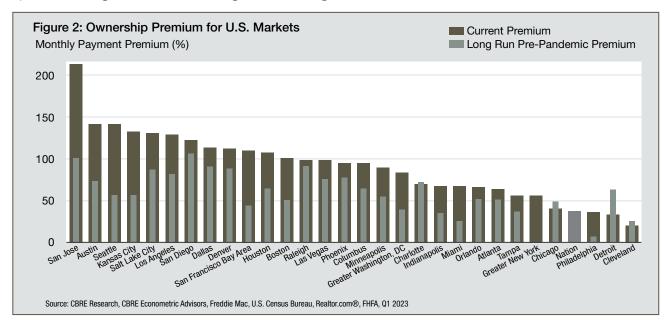
the subprime crisis when mortgage defaults and foreclosures were at extremely high levels. This time we're not only faced with the Federal Reserve no longer buying mortgage-backed securities but also banks that may be sellers of them as well to increase their liquidity to build a buffer against future deposit outflows. If mortgage spreads over 10-year Treasury yields were back down to its more normal 1.8% level, then mortgage rates would be approximately 1.2% lower than they are today. Given the banking system's challenges, I don't see this premium dropping materially anytime soon.



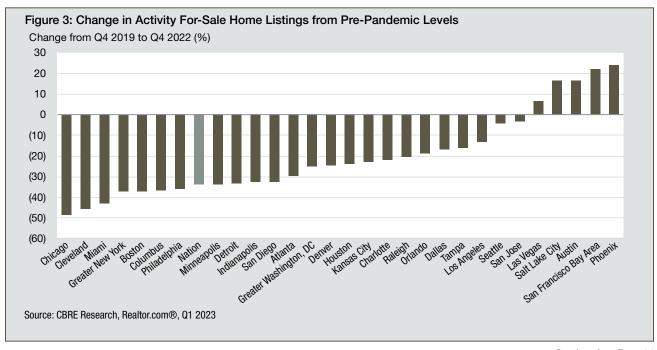
With much higher mortgage rates and low inventory levels this should serve to keep people renting longer than they otherwise would. This chart shows the tremendous premium for the average monthly new mortgage payment versus the average apartment rent. Renting is as well positioned from a cost comparison basis as it has been in a very long time.



This table shows on a metro basis the premium to own currently versus its long run pre-Covid average. One can see that some of CWS' markets, Austin, Seattle, Dallas, Denver, Houston, Phoenix, Raleigh, Charlotte, and Atlanta, are above the US average. Austin and Seattle are also quite a bit higher than their long-term average.

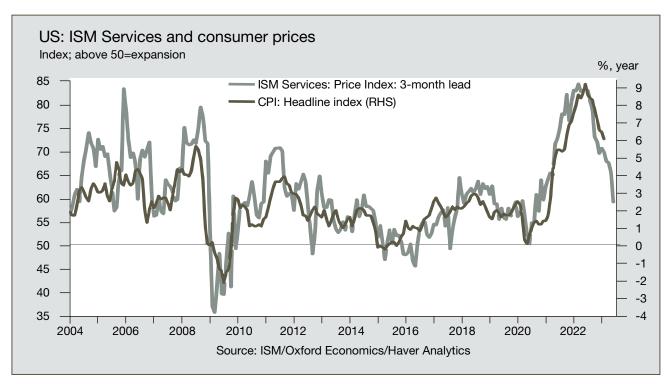


Interestingly, however, despite the national trend of lower inventory levels and the premium to buy versus renting, there are a few markets with inventory levels higher than average. From a CWS perspective these are Austin and Phoenix. It will be interesting to see if we experience more people leaving our apartments in these cities to purchase homes given the higher inventory levels and potentially lower prices.



Given the banking system's challenges with deposit outflows, holding securities that have lost value, a somewhat frozen housing market, and a spotlight on increasingly impaired office building collateral with almost no liquidity for maturing loans to be refinanced or paid off, the Federal Reserve is facing pressure to not only strongly consider pausing raising short-term interest rates, but to also prepare to cut them as well. Lower rates will help banks stem some of their deposit outflows, increase the value of their long-term securities, and stimulate more housing activity. And while lower rates won't do much for office buildings, they presumably can't hurt.

The Fed has understandably been fighting inflation quite aggressively but from this chart it looks like its continued downtrend is probably going to continue. The Federal Reserve is obsessed with not repeating the mistakes of the 1970s when the Fed took its foot off the brake too soon and inflation reappeared even worse than before. The concern now, however, is that by fighting the ghosts of the 1970s it's going to cause far more pain than it needs to by triggering a credit crunch as its policies create a lot of pain for the banking system.



The market is also now screaming to the Fed that it is too tight in its monetary policy and interest rate levels. The Federal Reserve's preferred indicator for ascertaining the market's belief about future monetary policy and economic activity is a bit esoteric but essentially it takes the market's expected three-month Treasury yield 18 months from now (market expectations) minus the current 3-month yield. When the spread is positive the market is expecting stronger economic growth and tighter monetary policy in response. When it's negative the market believes the opposite will occur: weaker economic growth or recession

and looser monetary policy.

A personal mea culpa. It is now clear to me how important this indicator is and was and that I should have been aware of it one year ago as well as its significance because, like many, I was focused on the spread between the 10-year and 2-year Treasury yields as the best indicator of future Fed policy. It had been a very reliable indicator of future economic activity and Fed policy and one that gave me the courage to continue to advocate remaining variable and not fixing our rates in late 2018 and 2019 as it strongly indicated that the Fed would have to reverse course and cut rates.

As this chart shows, the spread between the 10-year and 2-year Treasury yields first went negative on April 1, 2022 which was a warning sign that a recession over the next 6 to 18 months was an increasing probability. I took this to be a signal that the Fed would not raise rates very aggressively because inflation did seem to be transitory at the time.

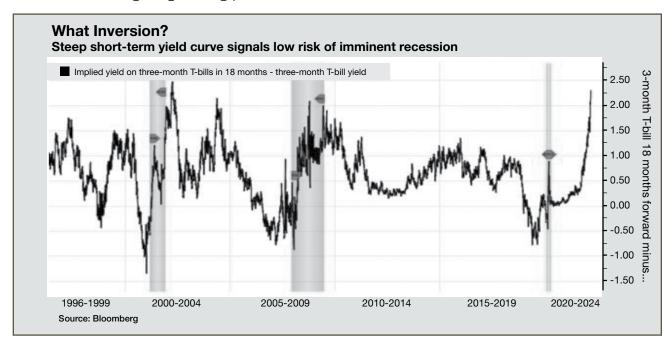


Right around this time, however, Fed Chairman Jay Powell was asked about the rapidly narrowing and soon to be inverting yield curve and this is what he said as cited in a Bloomberg article.

Some investors have been calling attention to a rapidly shrinking spread between 2-year and 10-year Treasury yields to sound the alarm on a looming economic downturn. But Powell preferred a different measure of the yield curve that isn't yet flashing a warning sign.

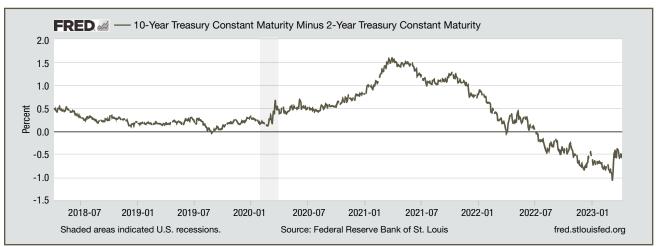
"Frankly, there's good research by staff in the Federal Reserve system that really says to look at the short -- the first 18 months -- of the yield curve," Powell in response to a question at the National Association for Business Economics. "That's really what has 100% of the explanatory power of the yield curve. It makes sense. Because if it's inverted, that means the Fed's going to cut, which means the economy is weak."

And here is the graph that shows why Powell had no intention of keeping monetary policy loose or reversing it tightening path.

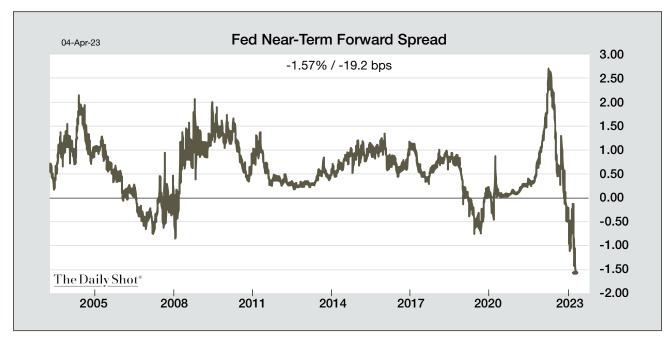


One can see how steep the curve was and the market was expecting faster economic growth and the Fed to remain on an aggressive tightening path which was sending the complete opposite signal of the spread between 10s and 2s. It turned out Powell's indicator was the more accurate one to follow and this was a big miss on my part.

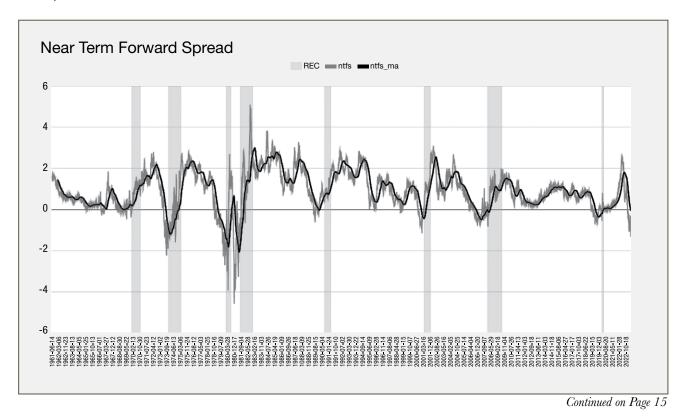
Today, however, we have a different scenario as the yield curve is more inverted with the 2-year Treasury yield higher than the 10-year and Powell's favorite indicator flashing red. This time there is clear corroboration between the two. And while the differential between 10s and 2s has become less negative, this is actually an ominous sign for the economy because it's typical for recessions to ensue after the curve has become less inverted and typically turned positive.



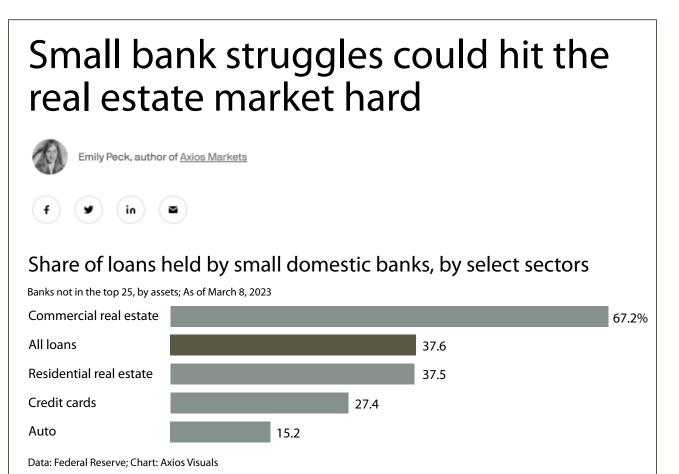
One can see how Powell's indicator has turned sharply negative.



Here is a longer-term chart of this indicator with the dark gray line being the current spread and the black line representing the 90-day moving average. One can see that with only a couple of exceptions in the 1970s and 1980, the spread has never been more negative which is also a concerning sign for the economy as there has been a recession ensuing after this transpired.



To conclude, panic ensued among depositors from an issue that was hiding in plain sight. Namely, banks owning a lot of low yielding Treasuries and mortgage-backed securities that had no credit risk but valuation risk from owning securities with yields far lower than market rates. The movement of funds to larger banks and money market funds away from smaller regional banks will constrain credit for commercial real estate loans as these small banks have dominated lending in this space with approximately 67% of all domestic loans. With apartment lending dominated by Fannie Mae and Freddie Mac, apartments should not be materially impacted with the exception of construction loans. This should be a net positive in the long run as there is a record number of apartments under construction and being delivered so slowing down future supply will be much welcomed.



With the profitability of these banks at risk due to having to raise rates for deposits and preserving liquidity for the potential to continue to lose deposits, it does appear that lending is going to be curtailed in ways that will hurt the economy. Combine this with office buildings that will unquestionably add to their fragility, it seems like smaller to mid-sized banks are going to be under a lot of pressure. Combine this with Jay Powell's favorite indicator flashing red in that the Fed is being too tight, it seems like the stage is finally set for the Fed to reverse course and start cutting rates sometime in 2023 or

early 2024. This should bring some relief to CWS as we can see our interest costs come in lower than anticipated and potentially allow us to convert some of our loans to fixed rates at more compelling rates. In addition, more pressured sellers and tighter credit conditions should set the stage for what could be some very interesting acquisition opportunities for CWS.

When panic is in the air, hopefully one has been positioned to not have exposures that would have one become swept up in it. Although CWS has undoubtedly felt some pain from interest rates that went far higher and faster than we ever expected, fortunately we financed the vast majority of our properties at conservative debt levels such that we are able to service our debt, reserve for interest rate caps, as well as having very few loans coming due this year or next. I do believe that the stage is set for the Fed to start cutting rates and if the economy slows down or contracts more quickly than expected than we can benefit by having our debt service drop significantly while also offering us the potential to take advantage of compelling acquisition opportunities from other owners not as safely positioned as CWS.

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