More
Wealth Destruction Ahead
Part Two

Macro Watch
Fourth Quarter 2022

http://www.richardduncaneconomics.com

Part Two

- In the previous Macro Watch video, we saw that the Fed is tightened Monetary Policy much more aggressively in the current tightening cycle than during the previous one.
- But, despite this, asset prices have fallen less that would have been expected. Home prices are only 3% below their peak. The S&P 500 index was down only 15% when that video was published and down just 20% now.
- This video will explain why Monetary Policy is likely to tighten significantly more during the first half of next year, and perhaps beyond the first half.
- It will also show why investors should expect substantially more Wealth to be destroyed before this tightening cycle ends.

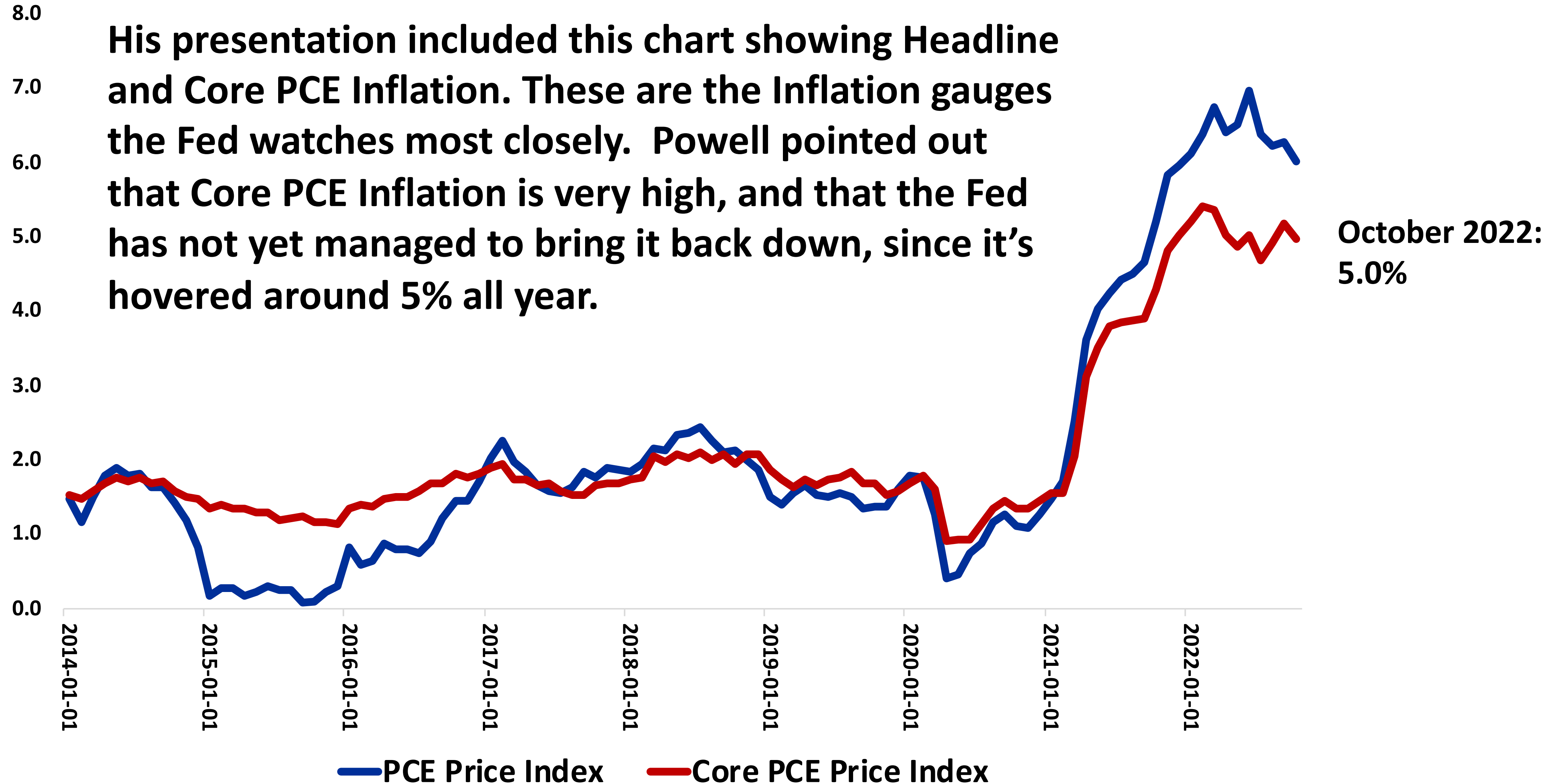
Inflation And The Labor Market

- On November 30th, Fed Chair Jerome Powell gave a speech at the Brookings Institution, entitled "Inflation and the Labor Market".
- It clearly explains the Fed's thinking about the forces driving Inflation and the Fed's planned approach to bring Inflation back down to its 2.0% Inflation Target.
- Everyone should watch it.
- Here's the link:

https://www.brookings.edu/events/federal-reserve-chair-jerome-powell-the-economic-outlook-and-the-labor-market/

Market Pops On Old News

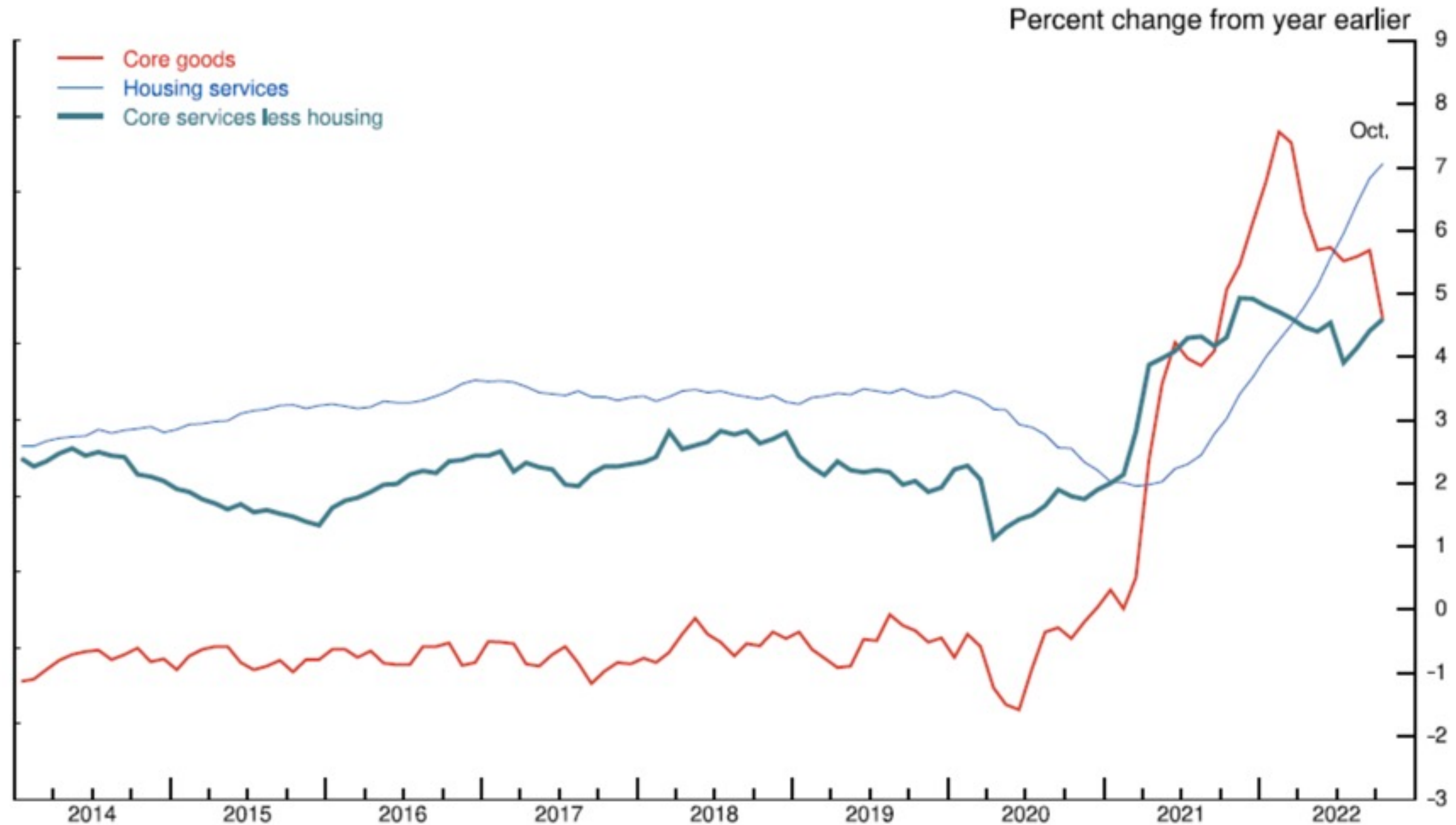
- Powell indicated that the Fed was likely to slow the pace of rate hikes to 50-basis points at its then upcoming FOMC meeting on Dec. 13th-14th (which it subsequently did).
- Other than that, however, his message was generally hawkish.


PCE and Core PCE Price Indices
Annual % Change, 2014 to October 2022
His presentation included this chart showing Headline and Core PCE Inflation. These are the Inflation gauges the Fed watches most closely. Powell pointed out that Core PCE Inflation is very high, and that the Fed has not yet managed to bring it back down, since it's hovered around 5% all year.
October 2022: 5.0%
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
2014-01-01
2015-01-01
2016-01-01
2017-01-01
2018-01-01
2019-01-01
2020-01-01
2021-01-01
2022-01-01
PCE Price Index
Core PCE Price Index
Source: St Louis Fed

His presentation also included this chart. It shows Core Goods Inflation in red, Housing Services Inflation in light blue and Core Services Inflation less Housing in green.

He pointed out that Core Goods Inflation had come down significantly from its peak as supply chain bottlenecks had begun to clear.

But he pointed out that Housing Services Inflation is rising sharply and said that it was unlikely to come down until the second half of next year.

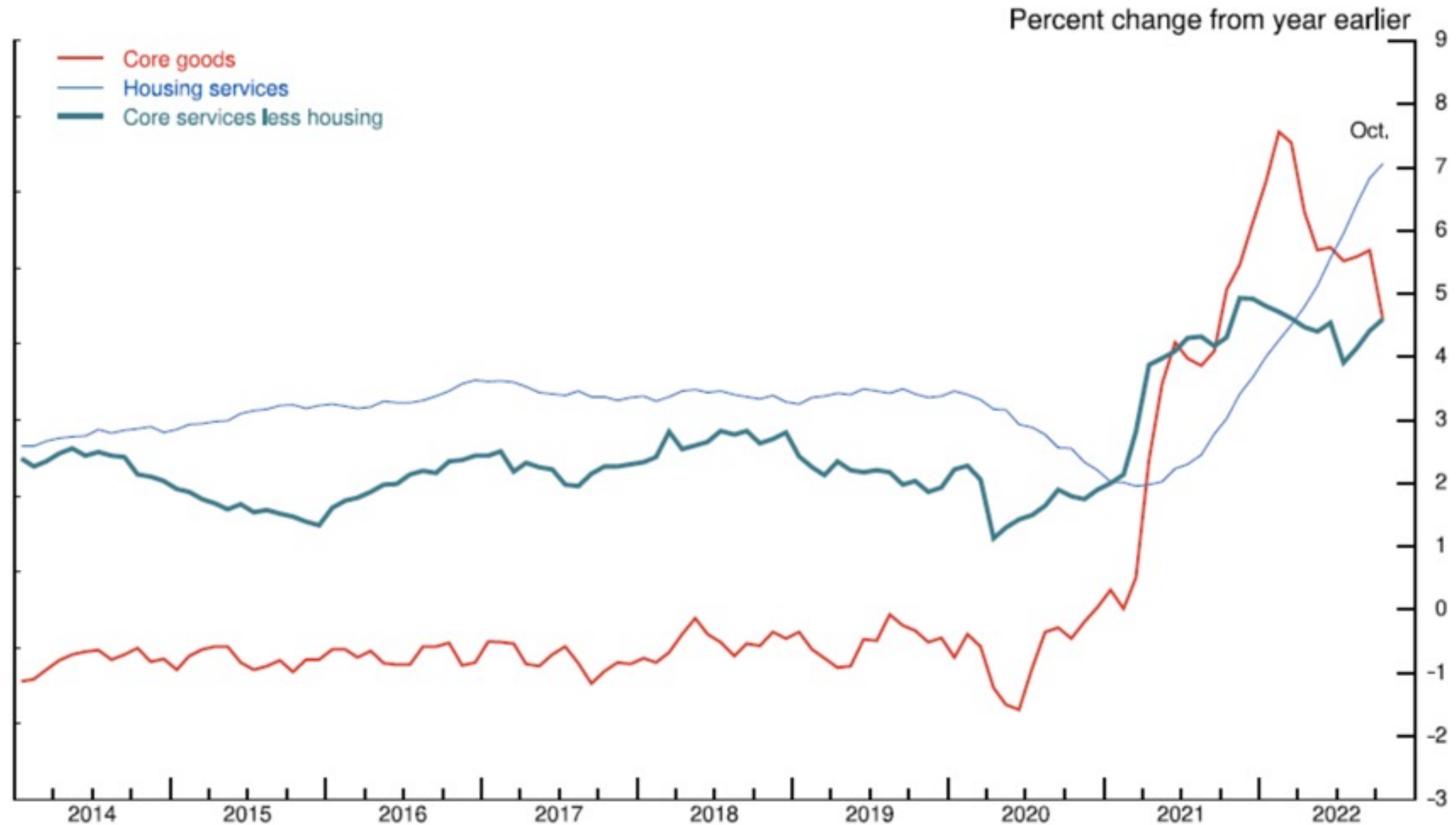


Note: October data are estimates based on October data from the consumer price index and the producer price index.

Source: Bureau of Economic Analysis; Bureau of Labor Statistics; staff estimates.

He then discussed Core Services Inflation less Housing (in Green), which he said accounted for half of the Core PCE Price Index.

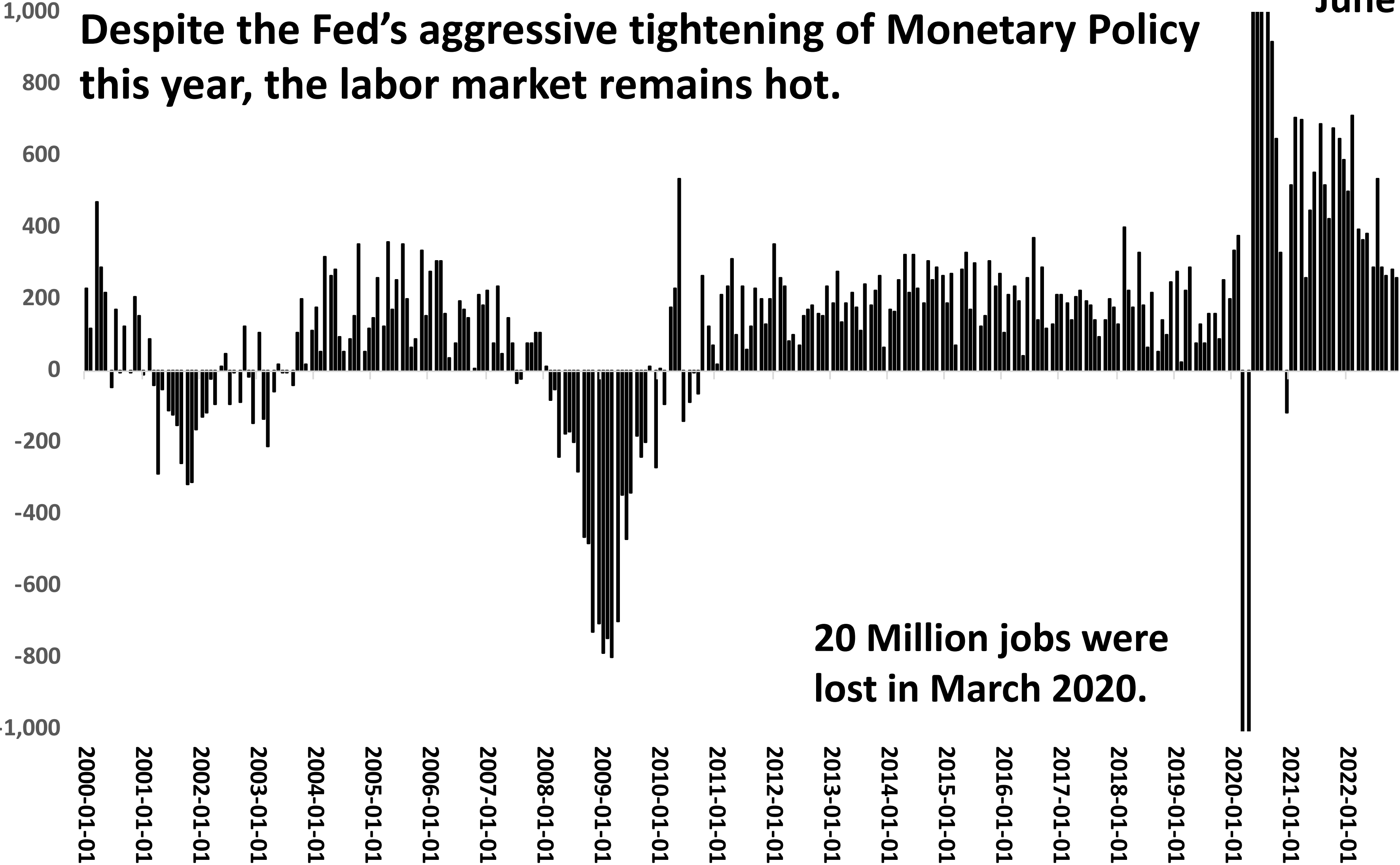
What happens next here, he said, will depend on the labor market, which he said is now so strong that it's inconsistent with the Fed's 2% Inflation Target.



All Employess (Nonfarm), Monthly Change

Thousands of Persons, 2000 to November 2022

This charts is capped at plus One Million

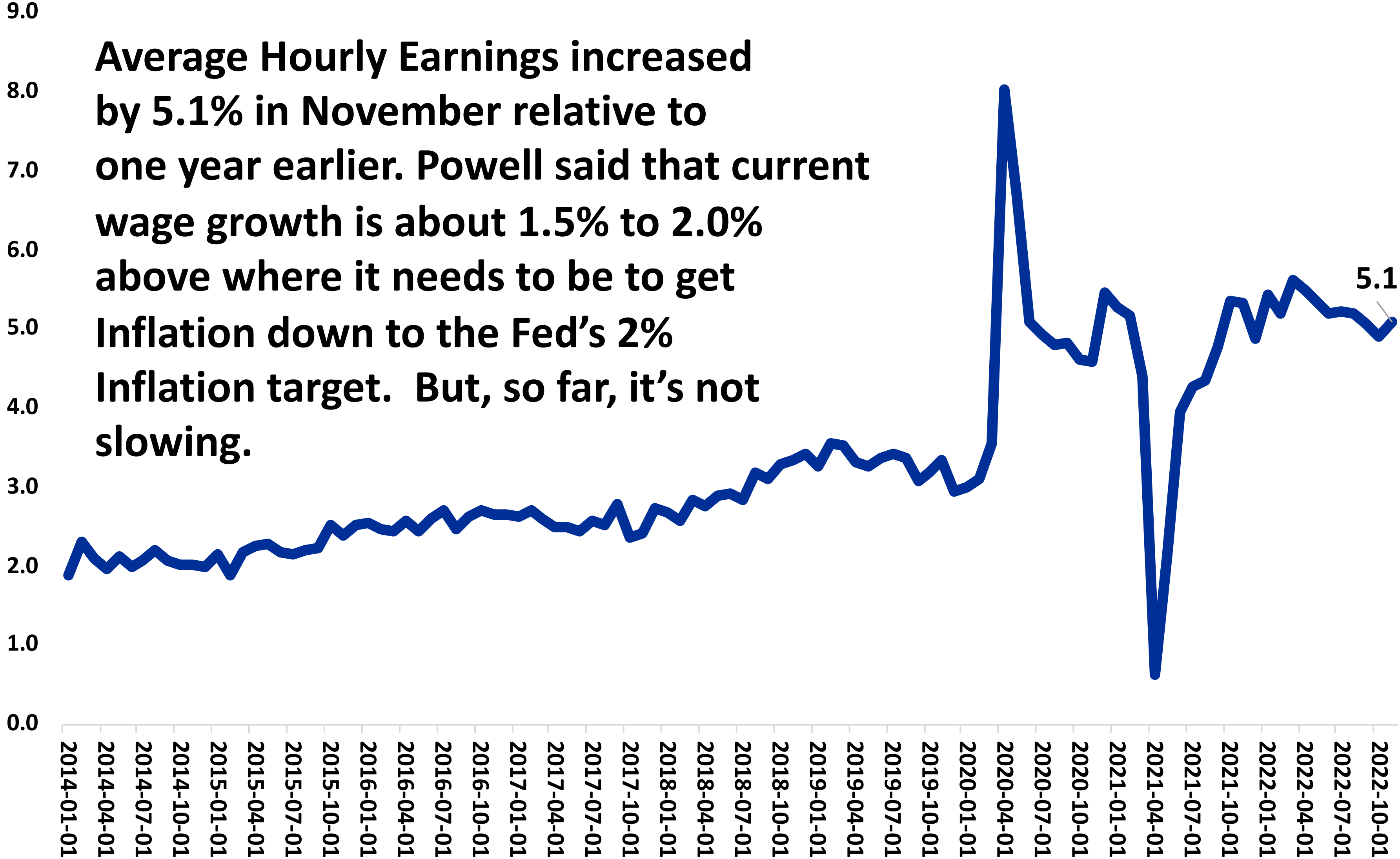


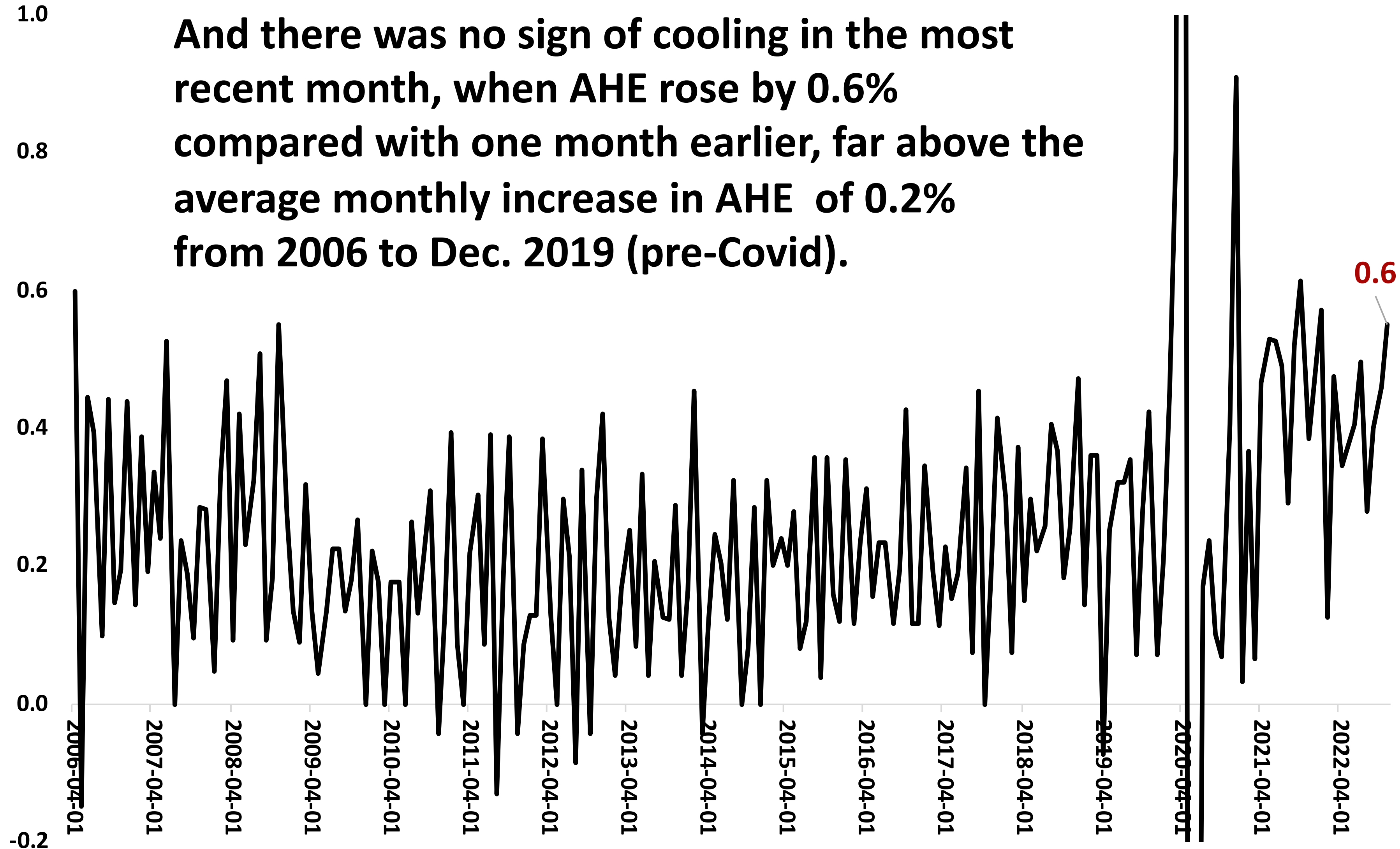
and minus One Million.

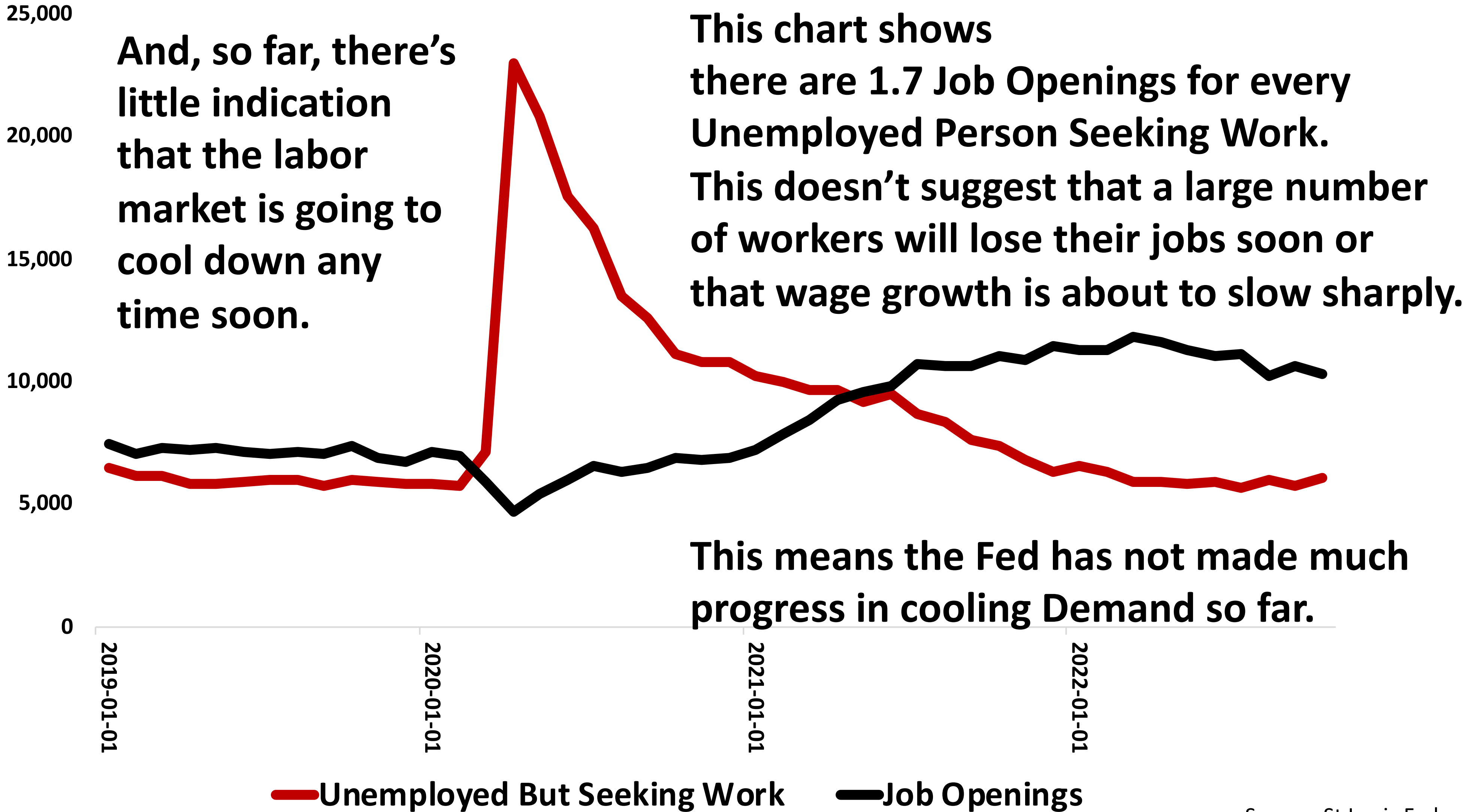
4.5 Million jobs were gained in June 2020.

As shown here. 263,000 jobs were created in Nov. 2022.

Source: St Louis Fed

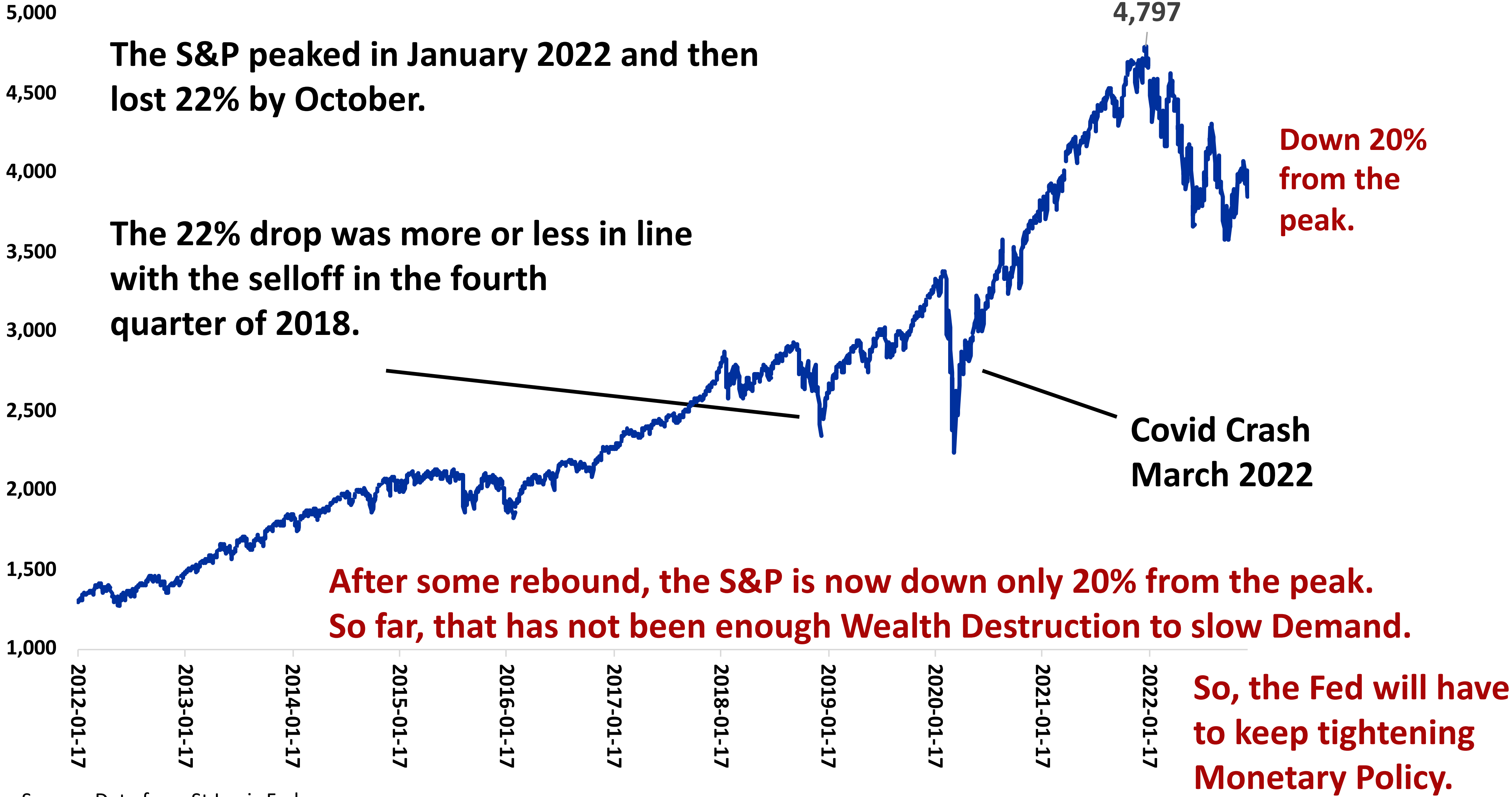

Average Hourly Earnings
Annual % Change, 2014 to November 2022
Average Hourly Earnings increased by 5.1% in November relative to one year earlier. Powell said that current wage growth is about 1.5% to 2.0% above where it needs to be to get Inflation down to the Fed's 2% Inflation target. But, so far, it's not slowing.
5.1
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
2014-01-01
2014-04-01
2014-07-01
2014-10-01
2015-01-01
2015-04-01
2015-07-01
2015-10-01
2016-01-01
2016-04-01
2016-07-01
2016-10-01
2017-01-01
2017-04-01
2017-07-01
2017-10-01
2018-01-01
2018-04-01
2018-07-01
2018-10-01
2019-01-01
2019-04-01
2019-07-01
2019-10-01
2020-01-01
2020-04-01
2020-07-01
2020-10-01
2021-01-01
2021-04-01
2021-07-01
2021-10-01
2022-01-01
2022-04-01
2022-07-01
2022-10-01
Source: St Louis Fed


Average Hourly Earnings, Monthly % Change
2006 to November 2022
Scale
Capped
at 1.0%
And
at -0.2%
And there was no sign of cooling in the most recent month, when AHE rose by 0.6% compared with one month earlier, far above the average monthly increase in AHE of 0.2% from 2006 to Dec. 2019 (pre-Covid).
1.0
0.8
0.6
0.4
0.2
0.0
-0.2
0.6
2006-04-01
2007-04-01
2008-04-01
2009-04-01
2010-04-01
2011-04-01
2012-04-01
2013-04-01
2014-04-01
2015-04-01
2016-04-01
2017-04-01
2018-04-01
2019-04-01
2020-04-01
2021-04-01
2022-04-01
Source: St Louis Fed


Job Openings vs. Unemployed Seekng Work
Thousands of Persons, 2019 to October 2022
25,000
20,000
15,000
10,000
5,000
0
And, so far, there's little indication that the labor market is going to cool down any time soon.
This chart shows there are 1.7 Job Openings for every Unemployed Person Seeking Work. This doesn't suggest that a large number of workers will lose their jobs soon or that wage growth is about to slow sharply.
This means the Fed has not made much progress in cooling Demand so far.
2019-01-01
2020-01-01
2021-01-01
2022-01-01
Unemployed But Seeking Work
Job Openings
Source: St Louis Fed

Inflation: When Demand Exceeds Supply

- Inflation occurs when Demand exceeds Supply.
- The Fed has no control over Supply.
- So, it must fight Inflation by reducing Demand.
- To reduce Demand, the Fed increases interest rates and destroys Money through Quantitative Tightening in order to throw Americans out of work and to drive down asset prices to destroy Wealth.
- Fewer jobs and less Wealth reduce Demand.
- So far, the Fed has not succeeded in reducing the number of jobs or in slowing wage growth.



S&P 500 Index
January 2012 to December 16, 2022
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
4,797
The S&P peaked in January 2022 and then lost 22% by October.
The 22% drop was more or less in line with the selloff in the fourth quarter of 2018.
Down 20% from the peak.
Covid Crash March 2022
After some rebound, the S&P is now down only 20% from the peak.
So far, that has not been enough Wealth Destruction to slow Demand.
2012-01-17
2013-01-17
2014-01-17
2015-01-17
2016-01-17
2017-01-17
2018-01-17
2019-01-17
2020-01-17
2021-01-17
2022-01-17
So, the Fed will have to keep tightening Monetary Policy.
Source: Data from St Louis Fed

Household Net Worth

US$ Millions, 1990 to Q3 2022

Asset prices have begun to fall, but they haven't yet fallen very much relative to how much they surged since the Crisis of 2008.

Peak
Q4 2021
$150 Trillion

Q3 2022:
$143 Trillion

Q4 2007:
$70 Trillion

Household Sector Wealth more than doubled between 2007 and 2021. It peaked at $150 Trillion at the end of last year and is now down to $143 Trillion.

160,000,000
140,000,000
120,000,000
100,000,000
80,000,000
60,000,000
40,000,000
20,000,000
0

1990Q1 1991Q1 1992Q1 1993Q1 1994Q1 1995Q1 1996Q1 1997Q1 1998Q1 1999Q1 2000Q1 2001Q1 2002Q1 2003Q1 2004Q1 2005Q1 2006Q1 2007Q1 2008Q1 2009Q1 2010Q1 2011Q1 2012Q1 2013Q1 2014Q1 2015Q1 2016Q1 2017Q1 2018Q1 2019Q1 2020Q1 2021Q1 2022Q1

Source: Federal Reserve

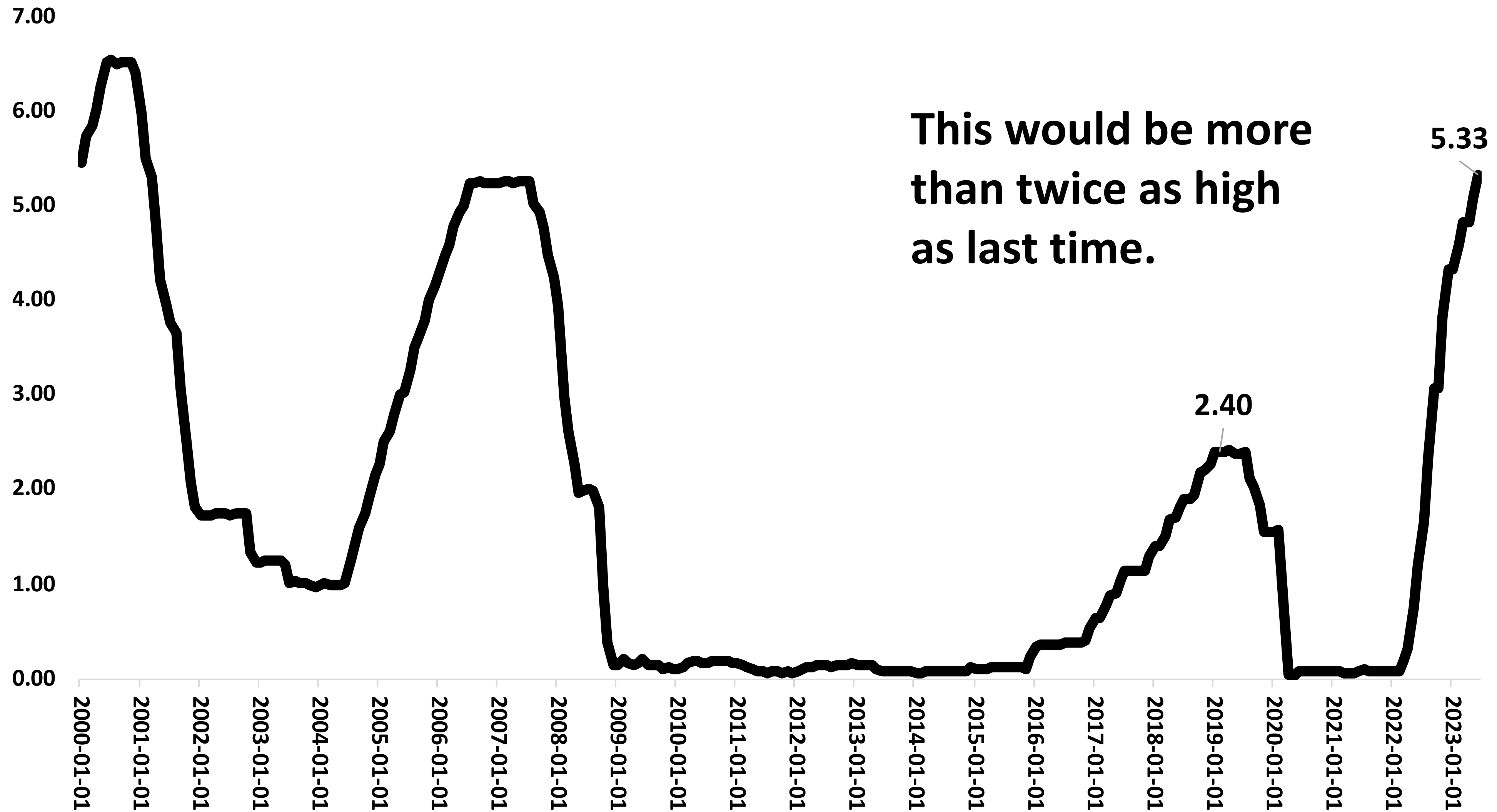
What’s Next?

- What’s next?
- More Rate Hikes
- And More Quantitative Tightening

More Rate Hikes

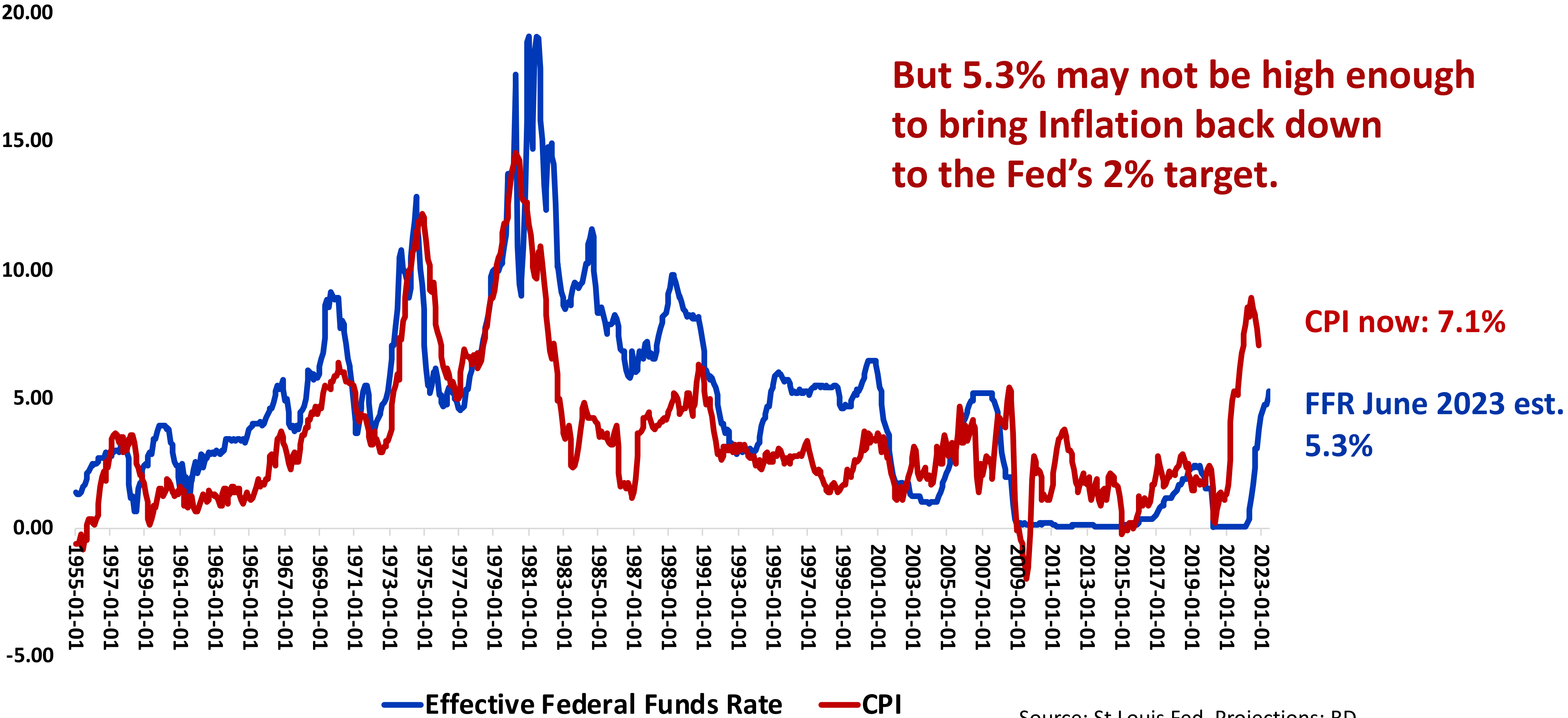
FOMC Meeting Dates	Assumed Rate Hike	The Effective Federal Funds Rate
September 21st	0.75%	3.08%
November 2nd	0.75%	3.83%
December 14th	0.50%	4.33%
February 1st	0.25%	4.58%
March 22nd	0.25%	4.83%
May 3rd	0.25%	5.08%
June 14th	0.25%	5.33%

Projections: RD



Source: St Louis Fed. Projections: RD

Inflation vs. The Effective Federal Funds Rate
%, 1955 to June 2023 est.
Estimates for the Effective Federal Funds Rate Only



Source: St Louis Fed. Projections: RD

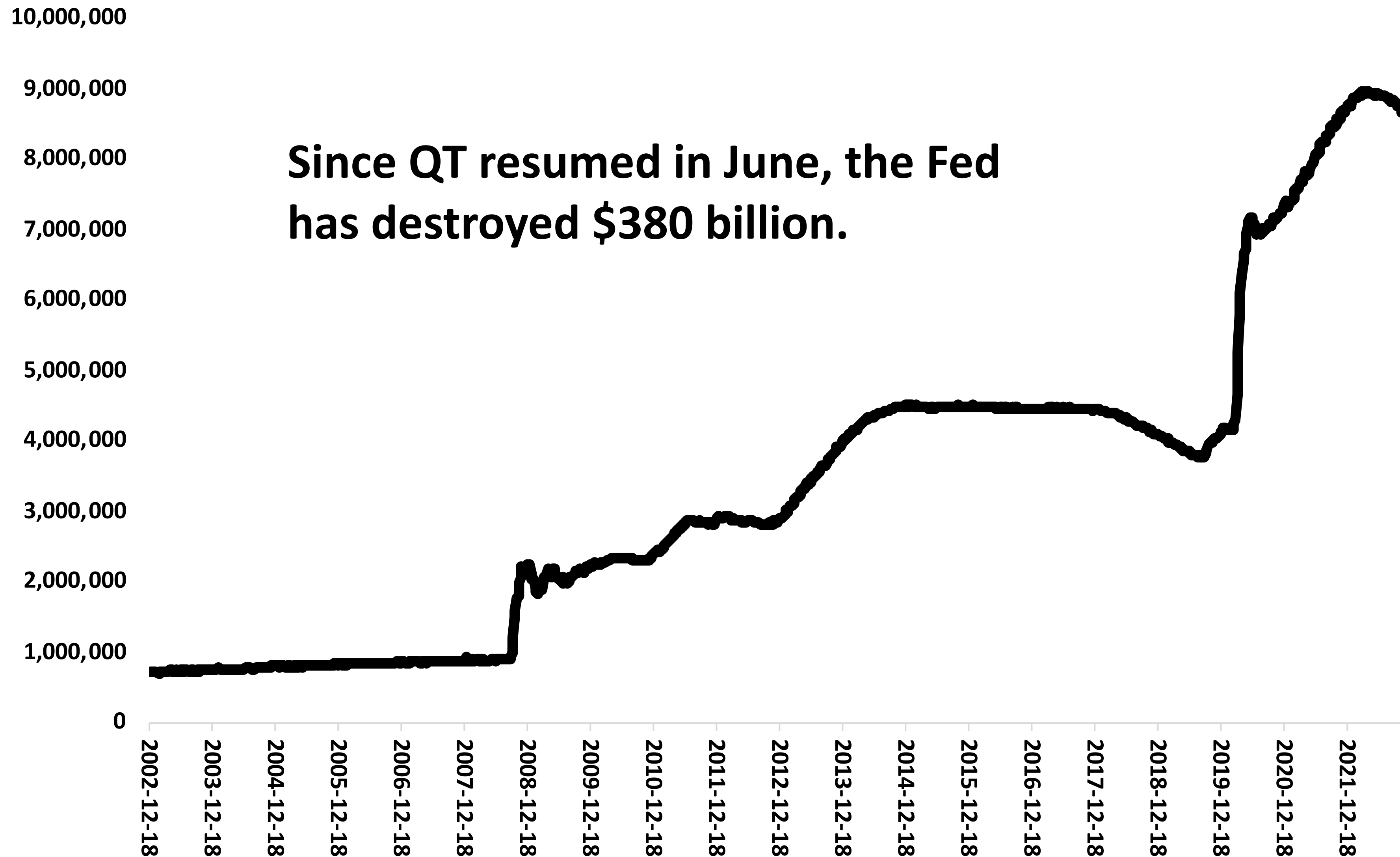
And More Quantitative Tightening

Quantitative Tightening

- Hiking interest rates is one way the Fed tightens Monetary Policy.
- Destroying Dollars through Quantitative Tightening is the other way.
- By destroying Dollars, QT causes Liquidity in the financial markets to contract.
- When Liquidity contracts, asset prices tend to fall.
- The Fed is now destroying $95 billion a month through QT.
- The longer QT continues, the more asset prices are likely to fall.
- So, how long will QT continue?

The Fed's Total Assets

US$ Millions, 2002 to December 14, 2022



Source: Federal Reserve

Here's How QT Works

- When the Fed reduces its holdings of Government Bonds, the government has to refinance those bonds.
- In other words, the government has to find someone else to buy them (in order to refinance its existing debt).
- When someone from the private sector buys the government bonds that the Fed has sold* that reduces the amount of Liquidity remaining in the private sector.

*Please note, the Fed is not actually selling government bonds out of its portfolio. It is simply taking payment on those bonds when they mature (rather than rolling them over by purchasing more government bonds, as it did before QT began). The result is the same as if the Fed had sold the bonds. Liquidity in the financial markets is reduced.

How QT Works

- The reduction in the amount of Liquidity remaining in the private sector tends to put upward pressure on Interest Rates.
- It also means there’s less money remaining in the private sector available to be invested in stocks, property and other asset classes.
- Higher interest rates and less Liquidity tend to cause asset prices to fall.
- So, as long as QT continues, it should exert downward pressure on asset prices.

How Long Will QT Continue?

- In the Q&A session following his November 30th speech, Chair Powell was asked how long the Fed would continue reducing the size of the Fed's balance sheet through Quantitative Tightening.
- His answer provided the clearest indication thus far about how long QT may continue.
- He said, "We would allow Bank Reserves to decline until we are somewhat above the level that we think is consistent with scarcity."
- Note: QT causes Bank Reserves to decline on the liabilities side of the Fed's balance sheet as the Fed's holdings of Treasury Securities and Mortgage-Backed Securities decline on the asset side of its balance sheet.

Bank Reserves: “A Public Benefit”

- He continued, “We are not looking to go back into proving that they (Reserves) are scarce because… the demand for Reserves is not stable. They move up and down very substantially. We want to stop at a place that is safe.”
- He said, “Having a lot of Reserves in the system is really a good thing. It’s really a public benefit to have plenty of Reserves, plenty of Liquidity in the markets and in the banking system and in the financial system generally.”

How Far Will Bank Reserves Shrink?

- So, let’s look at Bank Reserves.
- How much did the Fed shrink Bank Reserves the last time it carried out Quantitative Tightening between October 2017 and July 2019?
- And how far is the Fed likely to shrink them this time?
- Or, put differently, how long will the Fed continue destroying Dollars through Quantitative Tightening?

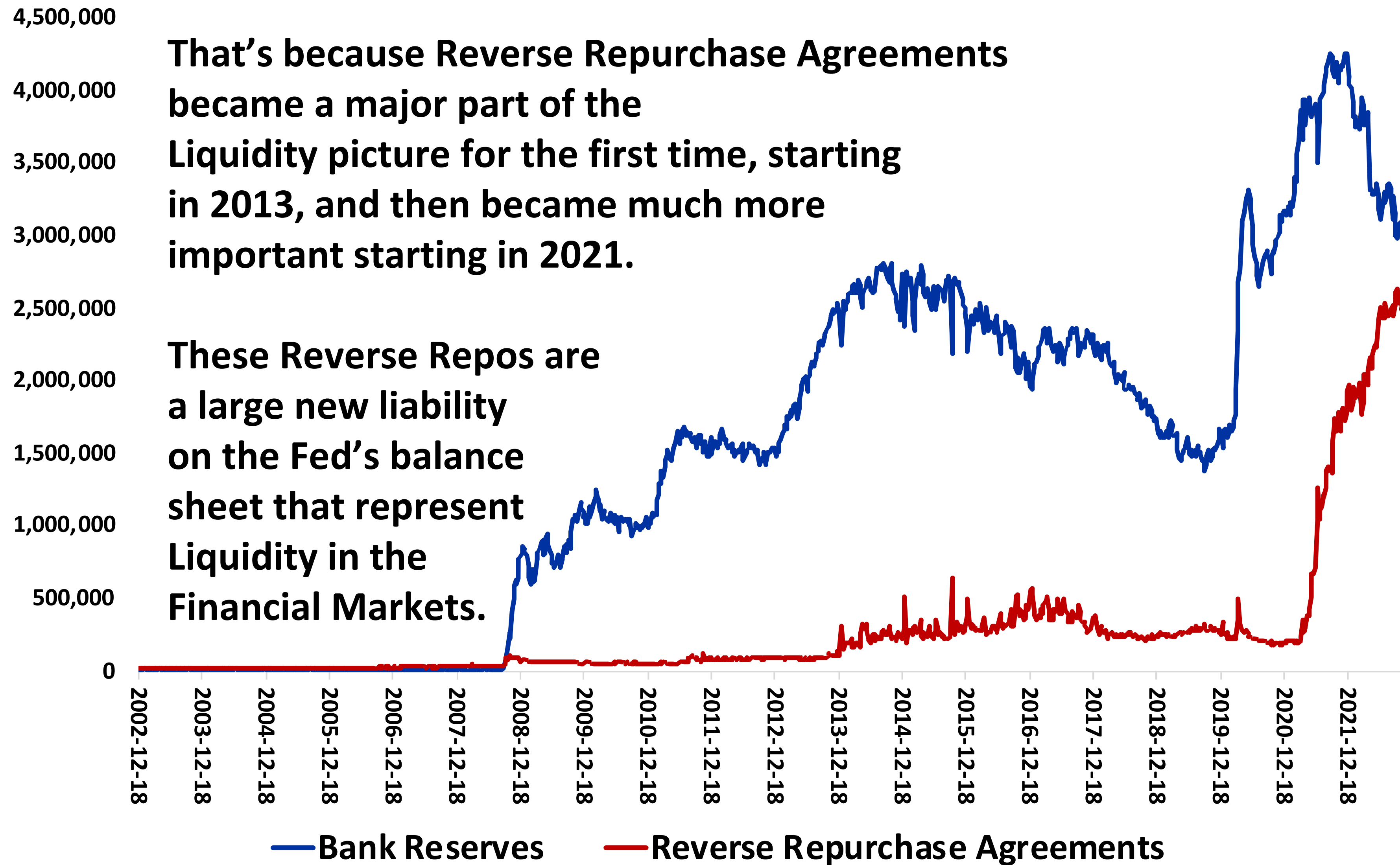
Bank Reserves

US$ Millions, 2002 to November 30, 2022

But we must pause here because Bank Reserves don't tell the whole story. Now, we must also consider Reverse Repurchase Agreements.

***Bank Reserves increase during QE because the Fed pays for the bonds it acquires by making deposits into the Reserve Accounts that banks hold at the Fed. The process is reversed during QT.**

Source: Federal Reserve

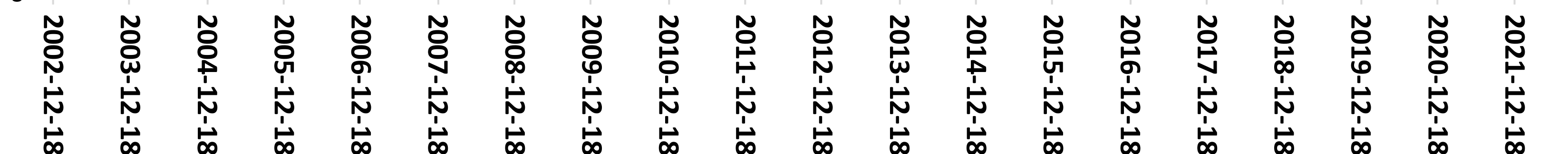


As RRAs expanded, they absorbed Bank Reserves. Had they not expanded, Bank Reserves would now be nearly twice as large as they are. RRAs represent Liquidity belonging primarily to Money Market Funds, whereas Bank Reserves represent Liquidity belonging to the Banks.

Bank Reserves plus Reverse Repurchase Agreements
US$ Millions, 2002 to November 30, 2022

So, to get a more accurate picture of Total Liquidity we must add Bank Reserves and Reverse Repurchase Agreements together, as shown in this chart.

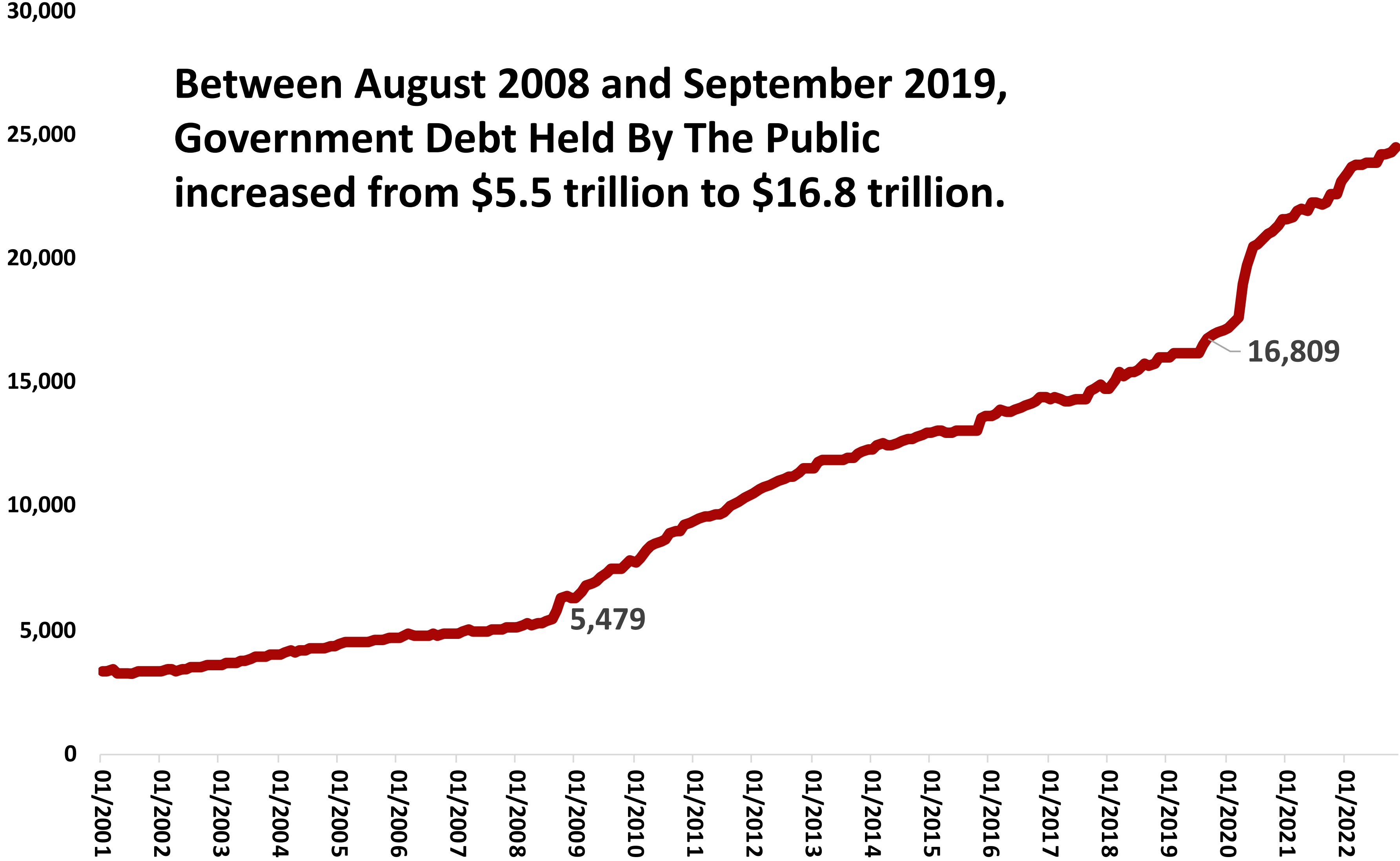
Combined, these increased from $48 billion in Aug. 2008 to $3 trillion in Oct. 2014. They then fell back down to $1.7 trillion in Sept. 2019 due to QT (and some other factors).



Source: Data from the Federal Reserve

Why Too "Scarce"?

- But why was Total Liquidity, at $1.7 trillion in September 2019, too "scarce"?
- There had not been any problem of "scarce" Liquidity back in August 2008, when Total Liquidity was only $48 billion.
- So, what had changed?
- A: Government Debt had changed.

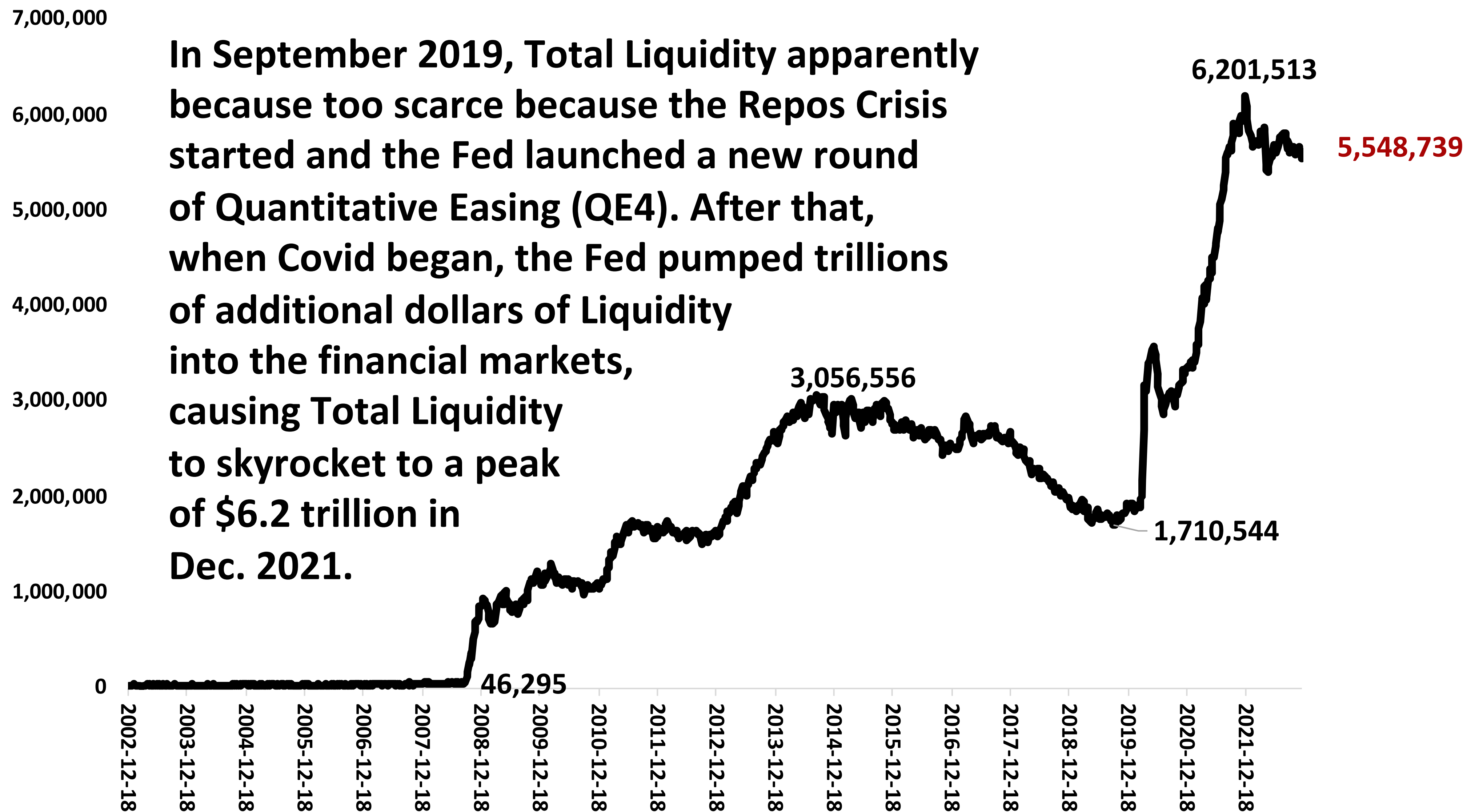

Federal Government Debt Held By The Public
US$ Billions, 2001 to November 2022
Between August 2008 and September 2019, Government Debt Held By The Public increased from $5.5 trillion to $16.8 trillion.
30,000
25,000
20,000
15,000
10,000
5,000
0
5,479
16,809
01/2001
01/2002
01/2003
01/2004
01/2005
01/2006
01/2007
01/2008
01/2009
01/2010
01/2011
01/2012
01/2013
01/2014
01/2015
01/2016
01/2017
01/2018
01/2019
01/2020
01/2021
01/2022
Source: St Louis Fed

Fed Financing Of Government Debt

- Why does the amount of Government Debt matter?
- It matters because one of the Fed’s most important functions throughout its history has been to help finance the government’s debt at low interest rates (although the Fed tries to hide its role in financing Government Debt).
- That’s why, when government debt soared after the Crisis of 2008, the Fed created approximately $3.6 trillion between late 2008 and October 2014, when the third round of Quantitative Easing came to an end.
- This Money creation by the Fed was necessary to finance the surge in Government Debt at low interest rates.

Then What Happened?

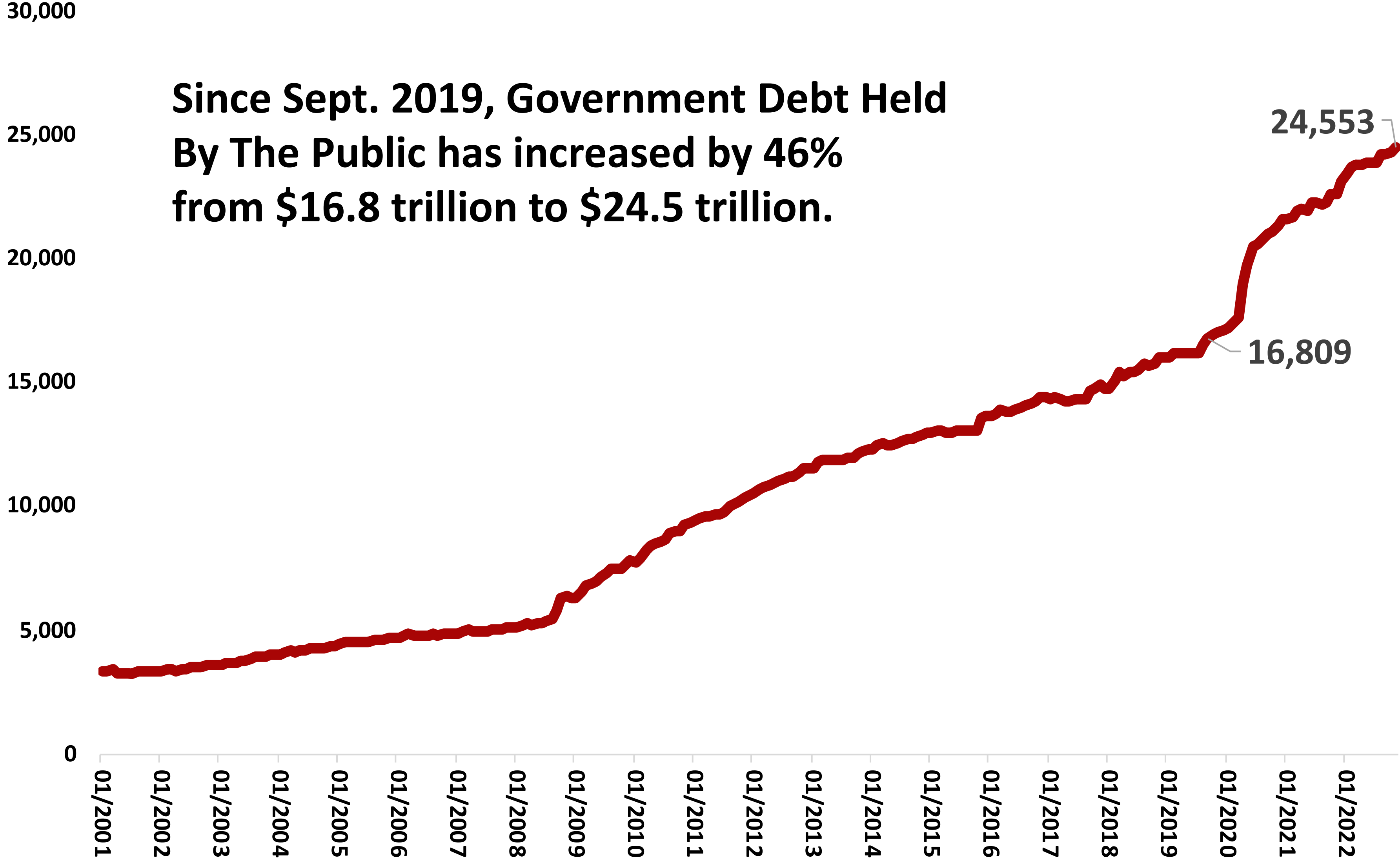
- Some time later, the Fed decided to begin tightening Monetary Policy.
- As we saw in the previous video, it began hiking the Federal Funds Rate in December 2015.
- Nearly two years after that, it began destroying Money through Quantitative Tightening in October 2017.
- The Fed ended QT in July 2019.
- But, by then, the Fed had over done it. Liquidity had become too “scarce”.
- As a result, in September, interest rates in the overnight Repo Market spiked to four times the level the Fed expected.
- The ensuing crisis forced the Fed to launch a new round of Quantitative Easing (QE4) only two months after it had ended Quantitative Tightening.



Bank Reserves plus Reverse Repurchase Agreements
US$ Millions, 2002 to November 30, 2022
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
In September 2019, Total Liquidity apparently because too scarce because the Repos Crisis started and the Fed launched a new round of Quantitative Easing (QE4). After that, when Covid began, the Fed pumped trillions of additional dollars of Liquidity into the financial markets, causing Total Liquidity to skyrocket to a peak of $6.2 trillion in Dec. 2021.
6,201,513
5,548,739
3,056,556
1,710,544
46,295
2002-12-18
2003-12-18
2004-12-18
2005-12-18
2006-12-18
2007-12-18
2008-12-18
2009-12-18
2010-12-18
2011-12-18
2012-12-18
2013-12-18
2014-12-18
2015-12-18
2016-12-18
2017-12-18
2018-12-18
2019-12-18
2020-12-18
2021-12-18
Source: Data from the Federal Reserve

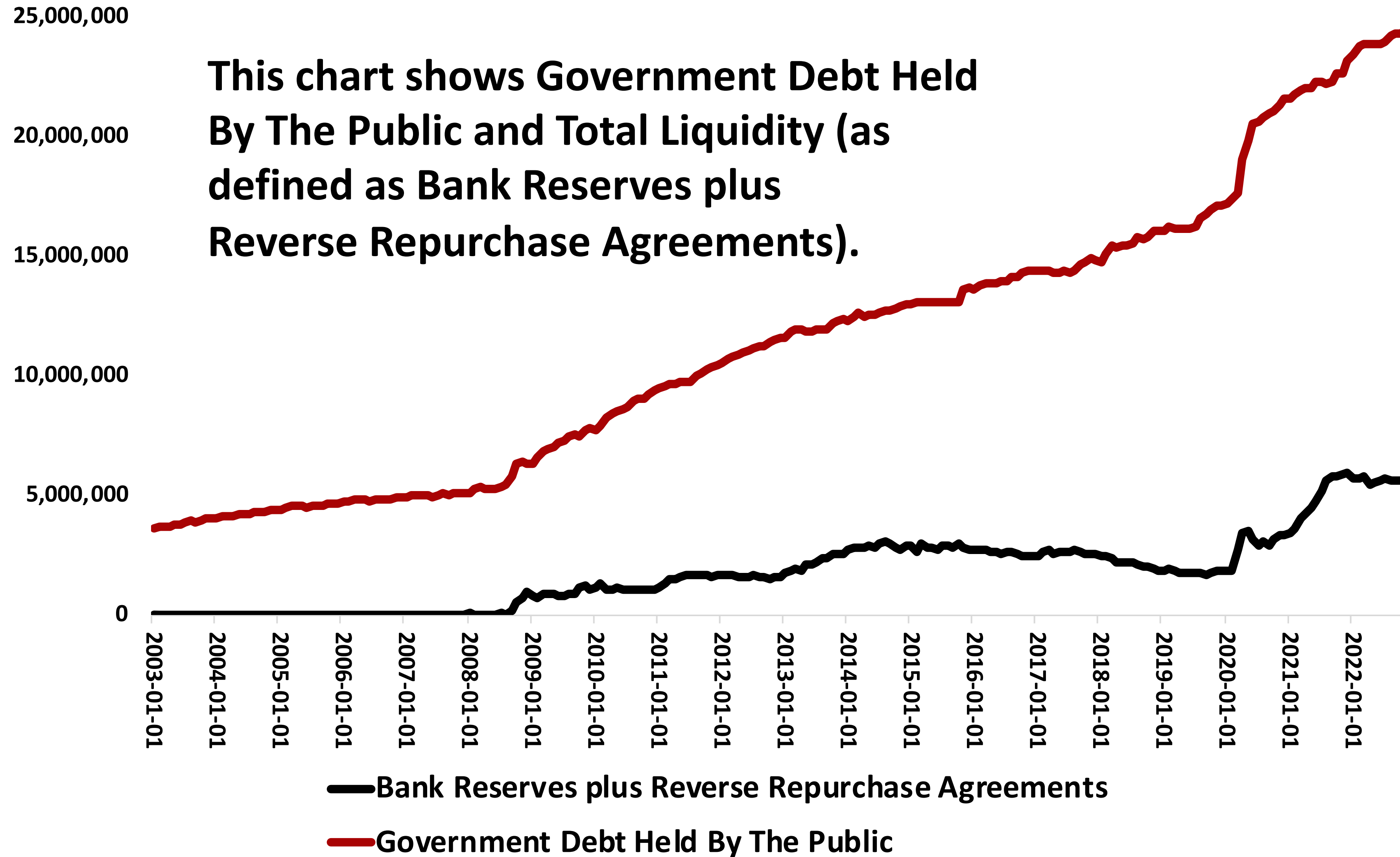
How Much QT Will Be Too Much?

- So, when considering how long Quantitative Tightening will continue this time, we have to ask how much Money will the Fed destroy before the amount of Money remaining is too "scarce" to finance the Government's Debt at interest rates that the Treasury Department and the Fed view as reasonable.
- Last time, the Fed shrank Total Liquidity to $1.7 trillion before it became too "scarce" (in September 2019).
- But this time it won't be possible for the Fed to shrink Total Liquidity to anywhere near that level because there is so much more Government Debt to finance now than there was in September 2019.

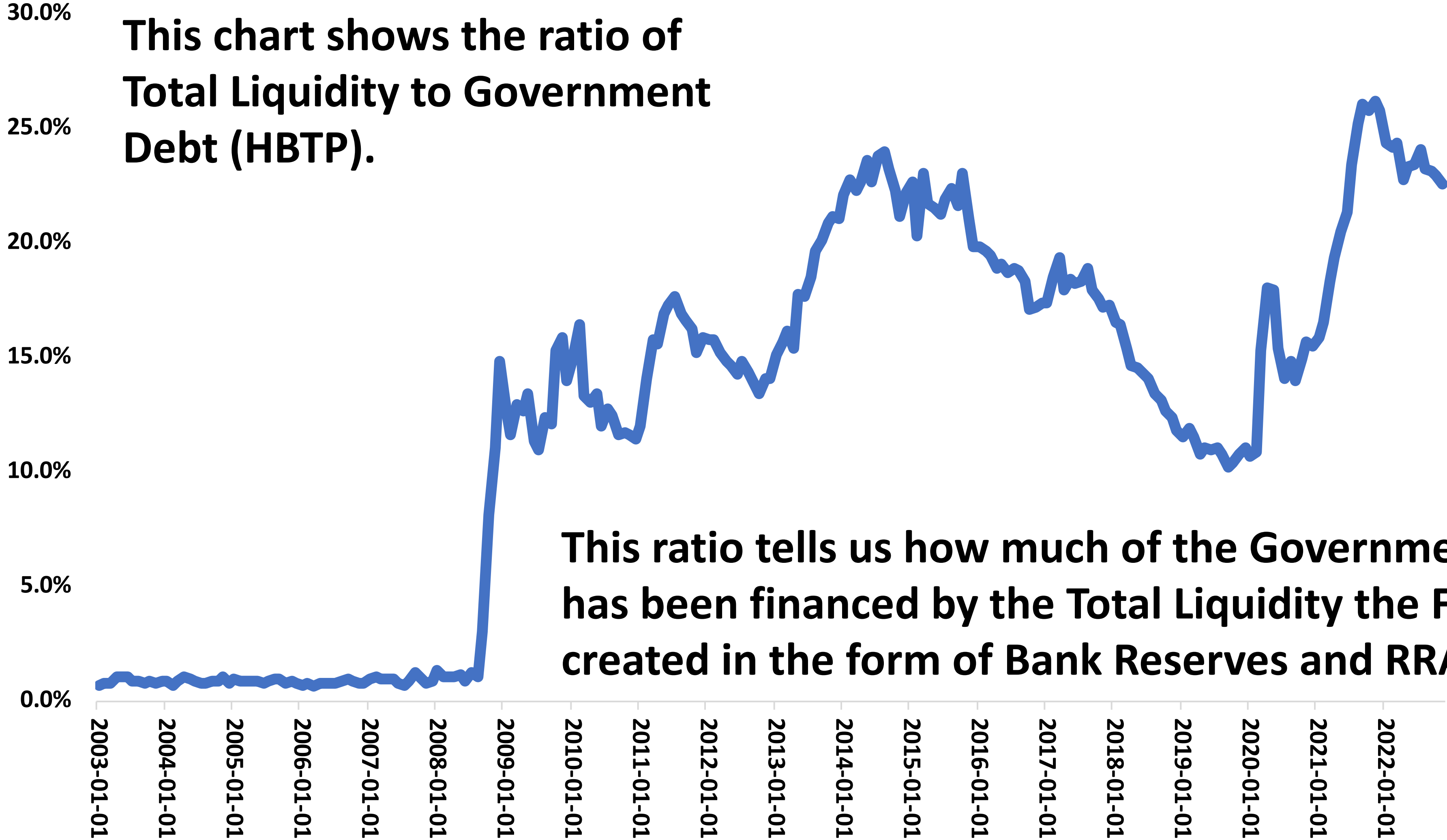

Federal Government Debt Held By The Public
US$ Billions, 2001 to November 2022
Since Sept. 2019, Government Debt Held By The Public has increased by 46% from $16.8 trillion to $24.5 trillion.
30,000
25,000
20,000
15,000
10,000
5,000
0
24,553
16,809
01/2001
01/2002
01/2003
01/2004
01/2005
01/2006
01/2007
01/2008
01/2009
01/2010
01/2011
01/2012
01/2013
01/2014
01/2015
01/2016
01/2017
01/2018
01/2019
01/2020
01/2021
01/2022
Source: St Louis Fed

Government Debt vs. Total Liquidity

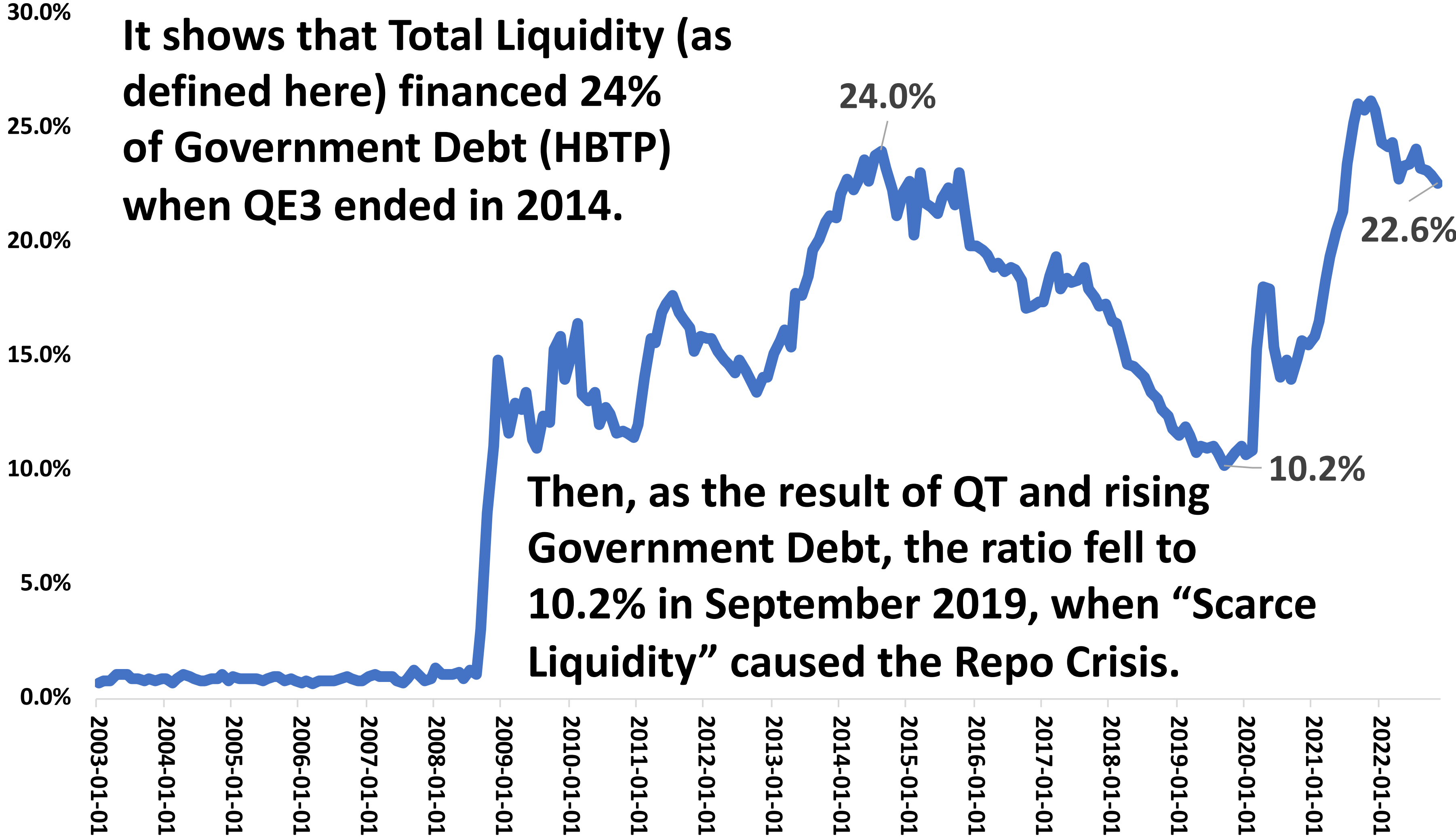
US$ Millions, 2003 to November 2022



Source: St Louis Fed, Liquidity data from the Federal Reserve


Total Liquidity as a % of
Government Debt Held By The Public
2003 to November 2022
This chart shows the ratio of
Total Liquidity to Government
Debt (HBTP).
This ratio tells us how much of the Government's Debt
has been financed by the Total Liquidity the Fed has
created in the form of Bank Reserves and RRAs.
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
2003-01-01
2004-01-01
2005-01-01
2006-01-01
2007-01-01
2008-01-01
2009-01-01
2010-01-01
2011-01-01
2012-01-01
2013-01-01
2014-01-01
2015-01-01
2016-01-01
2017-01-01
2018-01-01
2019-01-01
2020-01-01
2021-01-01
2022-01-01
Source: Data from St Louis Fed and the Federal Reserve

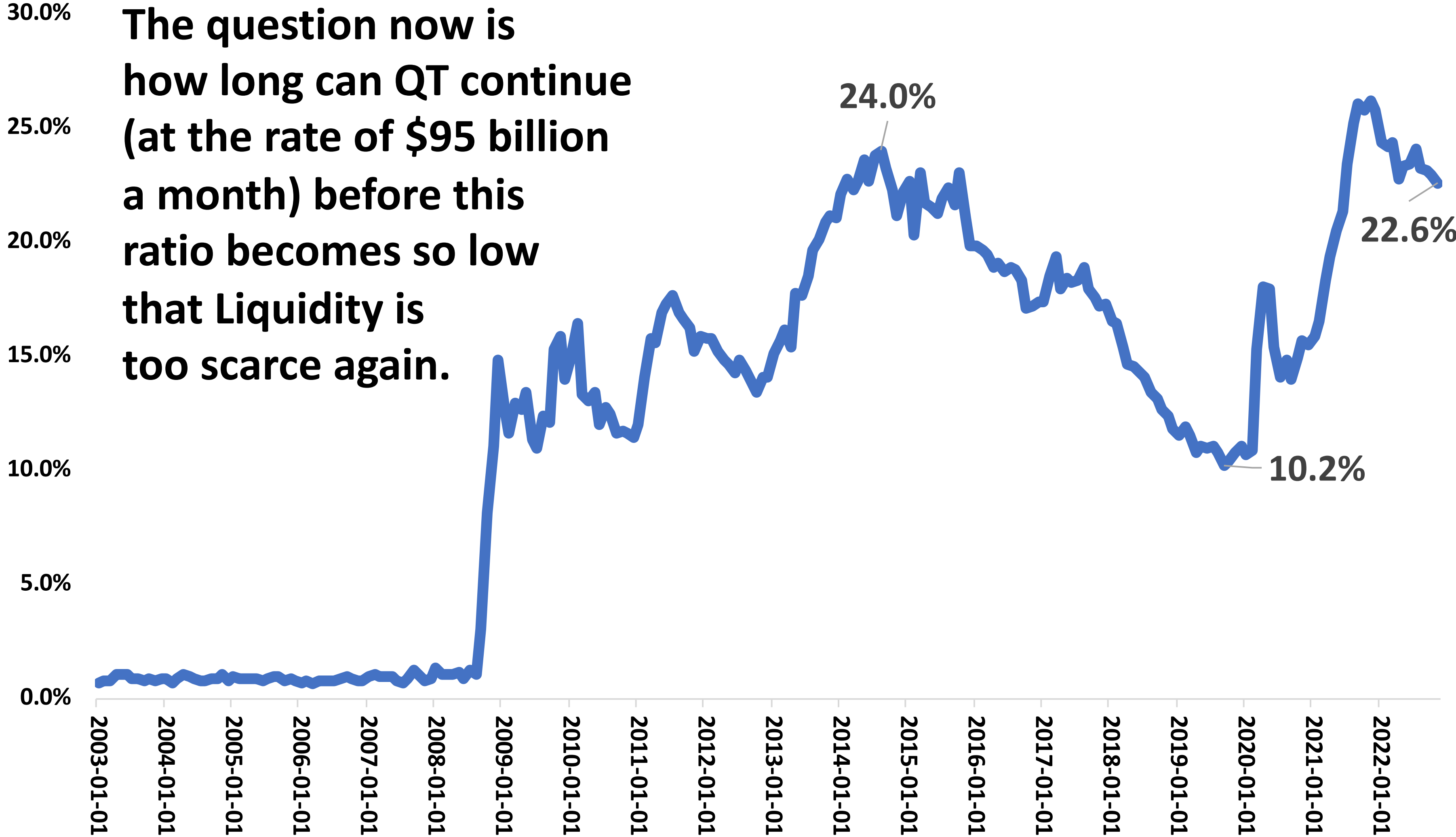
Total Liquidity as a % of Government Debt Held By The Public 2003 to November 2022



It's now back up to 22.6% due to all the Money the Fed created to finance the increase in the Govt.'s Debt during the Covid pandemic.

Source: Data from St Louis Fed and the Federal Reserve

Total Liquidity as a % of Government Debt Held By The Public 2003 to November 2022

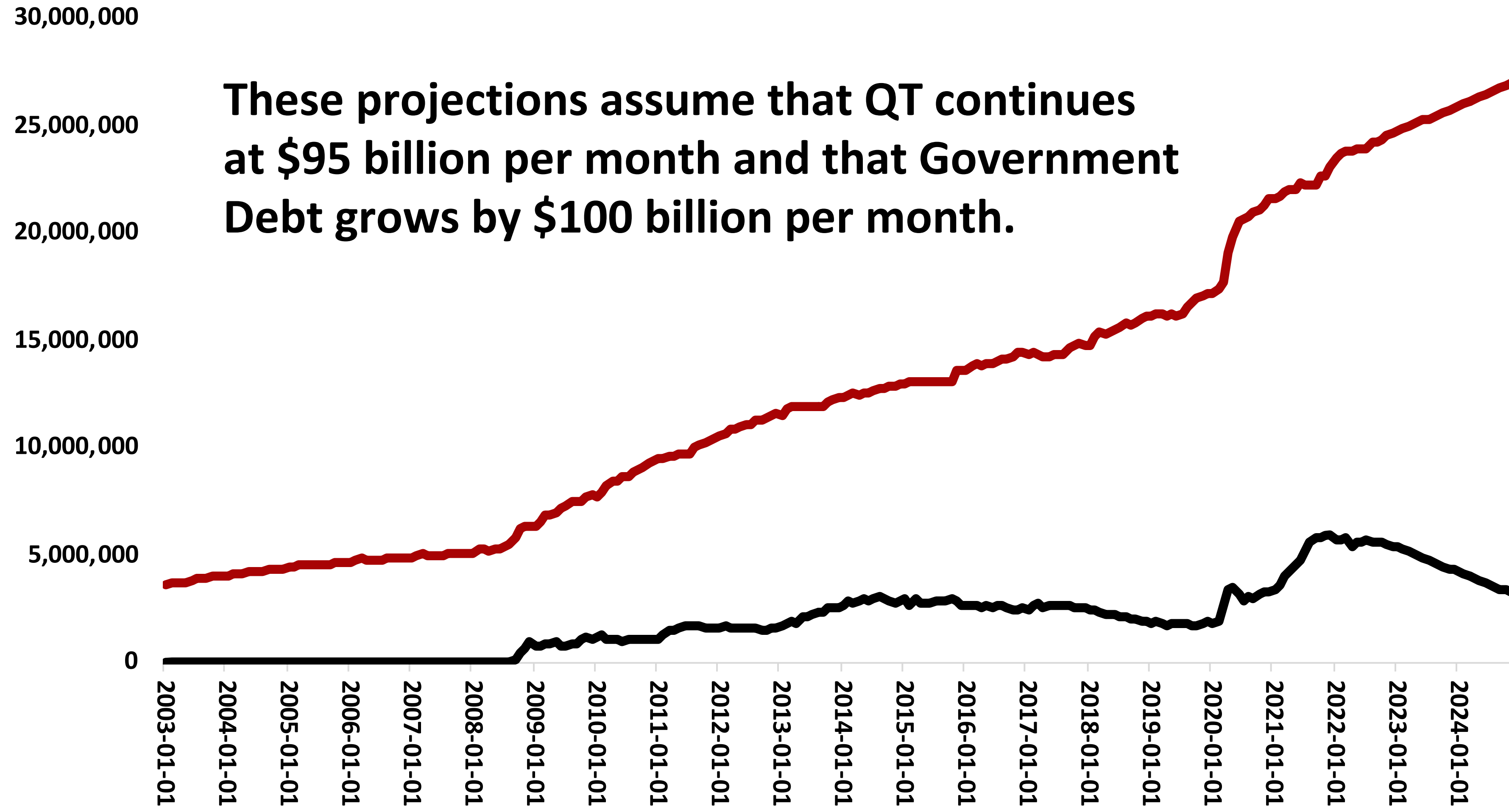


Source: Data from St Louis Fed and the Federal Reserve

Two Variables To Consider

- There are two main variables to consider:

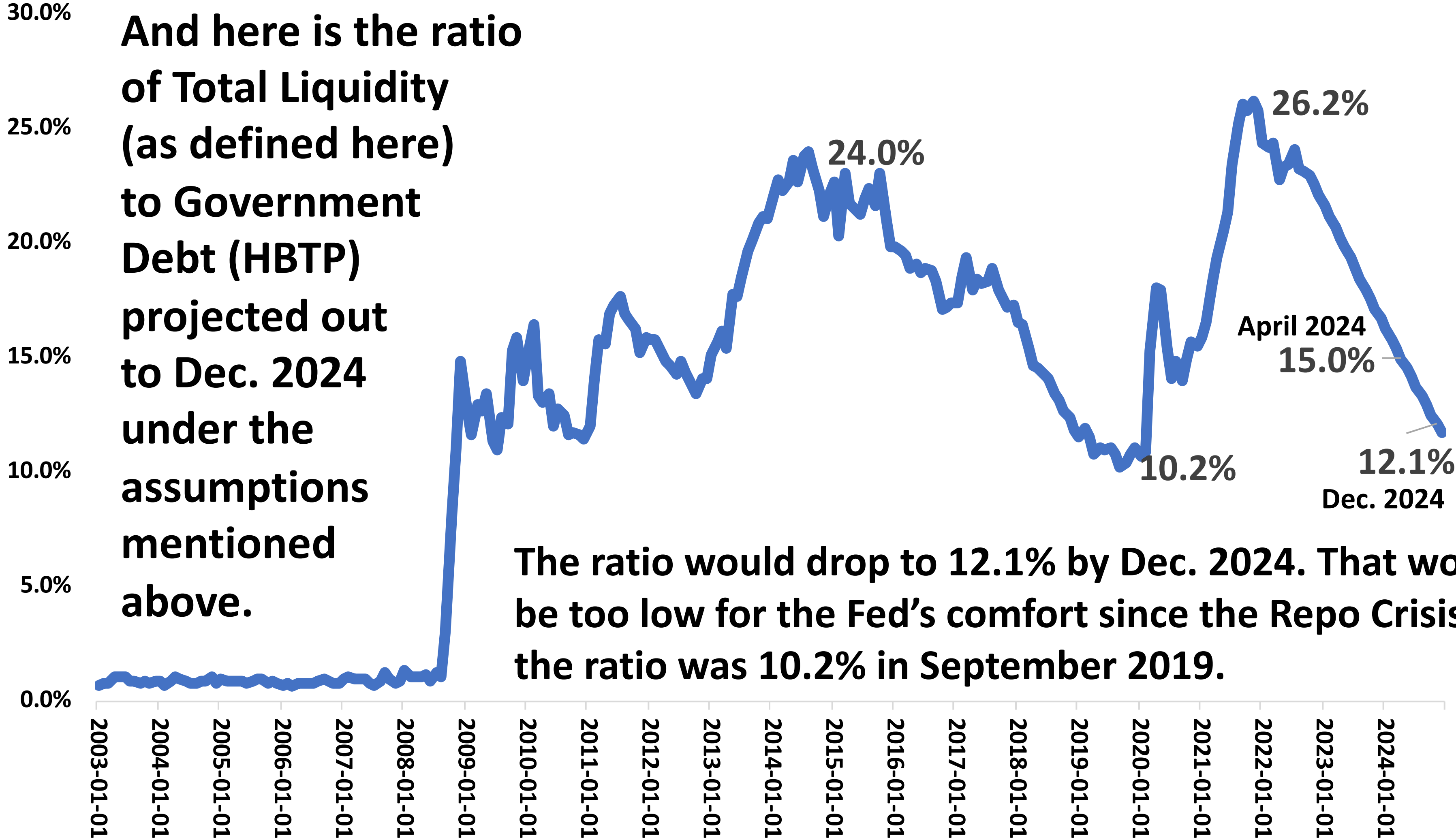
1. The amount of Total Liquidity as it shrinks due to QT, and
2. The amount of Government Debt (HBTP) as it expands roughly in line with the Government's budget deficits.



Source: Data from St Louis Fed and the Federal Reserve. Estimates: RD

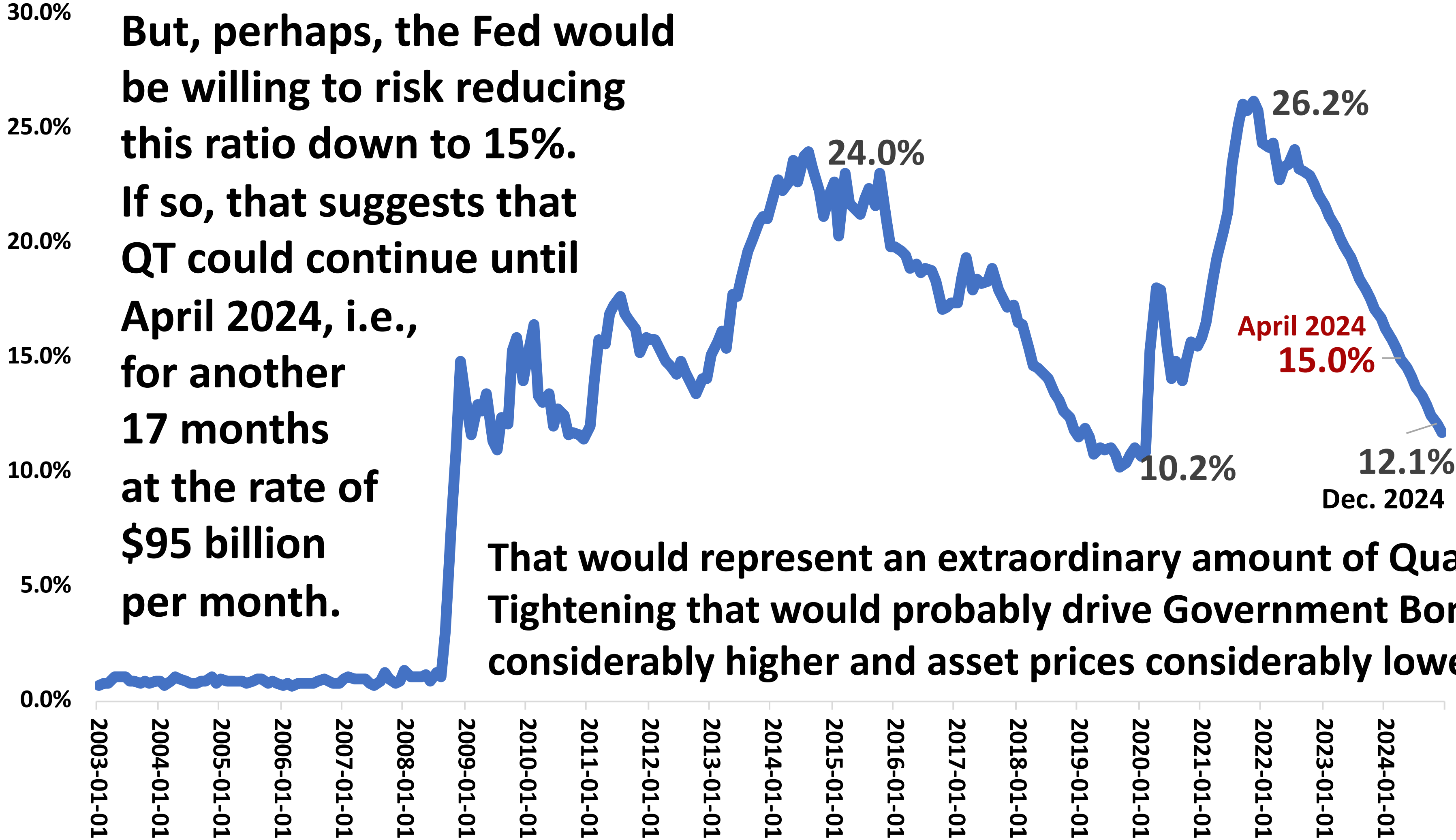
Total Liquidity as a % of Government Debt Held By The Public

2003 to December 2024 estimates

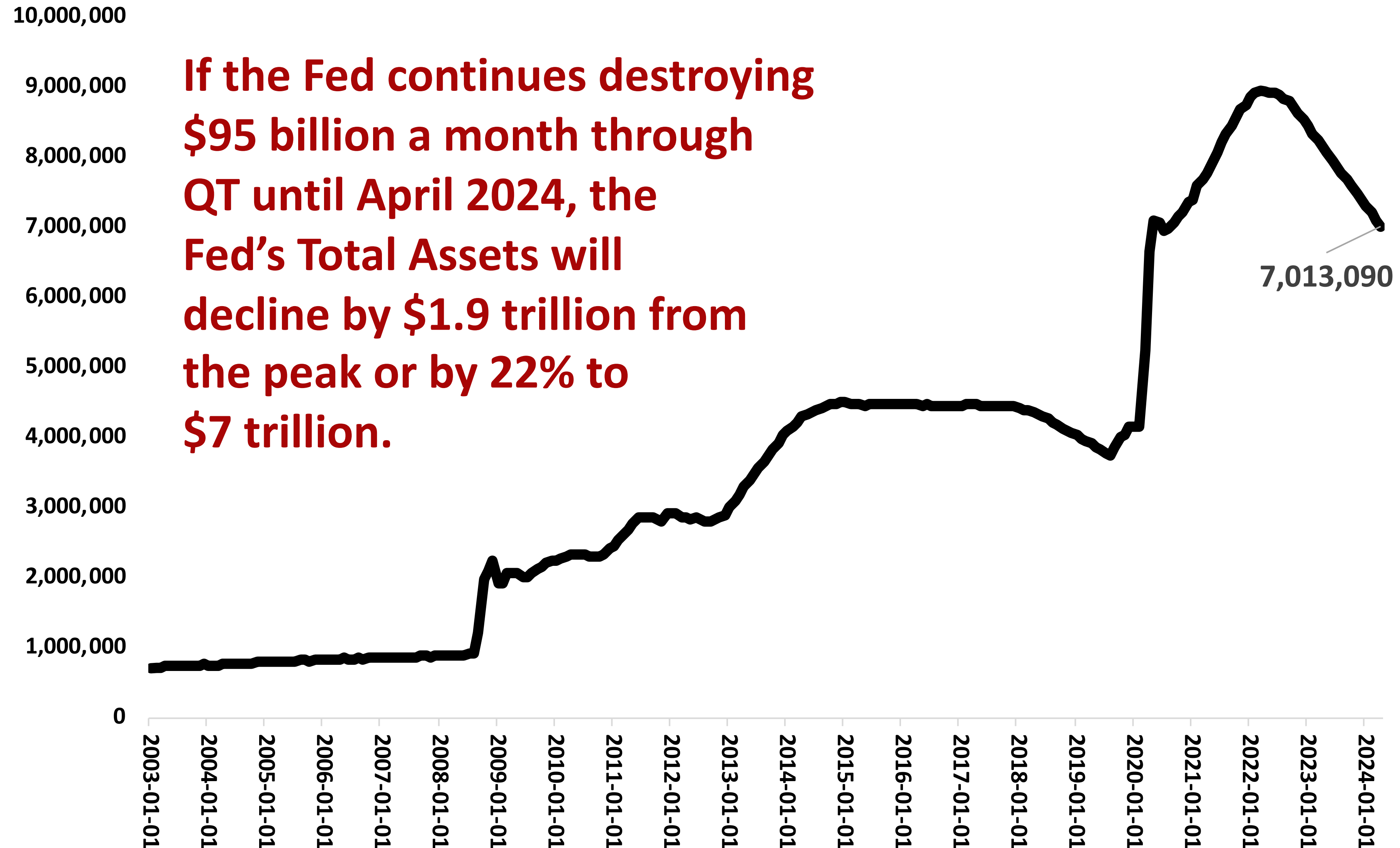


Source: Data from St Louis Fed and the Federal Reserve. Estimates: RD

Total Liquidity as a % of Government Debt Held By The Public
2003 to December 2024 estimates



Source: Data from St Louis Fed and the Federal Reserve. Estimates: RD



Fed's Total Assets
US$ Millions, 2003 to April 2024 Estimates
If the Fed continues destroying $95 billion a month through QT until April 2024, the Fed's Total Assets will decline by $1.9 trillion from the peak or by 22% to $7 trillion.
7,013,090
10,000,000
9,000,000
8,000,000
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
2003-01-01
2004-01-01
2005-01-01
2006-01-01
2007-01-01
2008-01-01
2009-01-01
2010-01-01
2011-01-01
2012-01-01
2013-01-01
2014-01-01
2015-01-01
2016-01-01
2017-01-01
2018-01-01
2019-01-01
2020-01-01
2021-01-01
2022-01-01
2023-01-01
2024-01-01
Source: The Federal Reserve. Estimates: RD

Very Rough Estimates Only

- These are very rough estimates.
- They are only intended to give some idea of what could happen.
- But, as rough as they are, they still suggest that Quantitative Tightening is not going to end any time soon (barring some unexpected new disaster).

Reserves Are Very Expensive

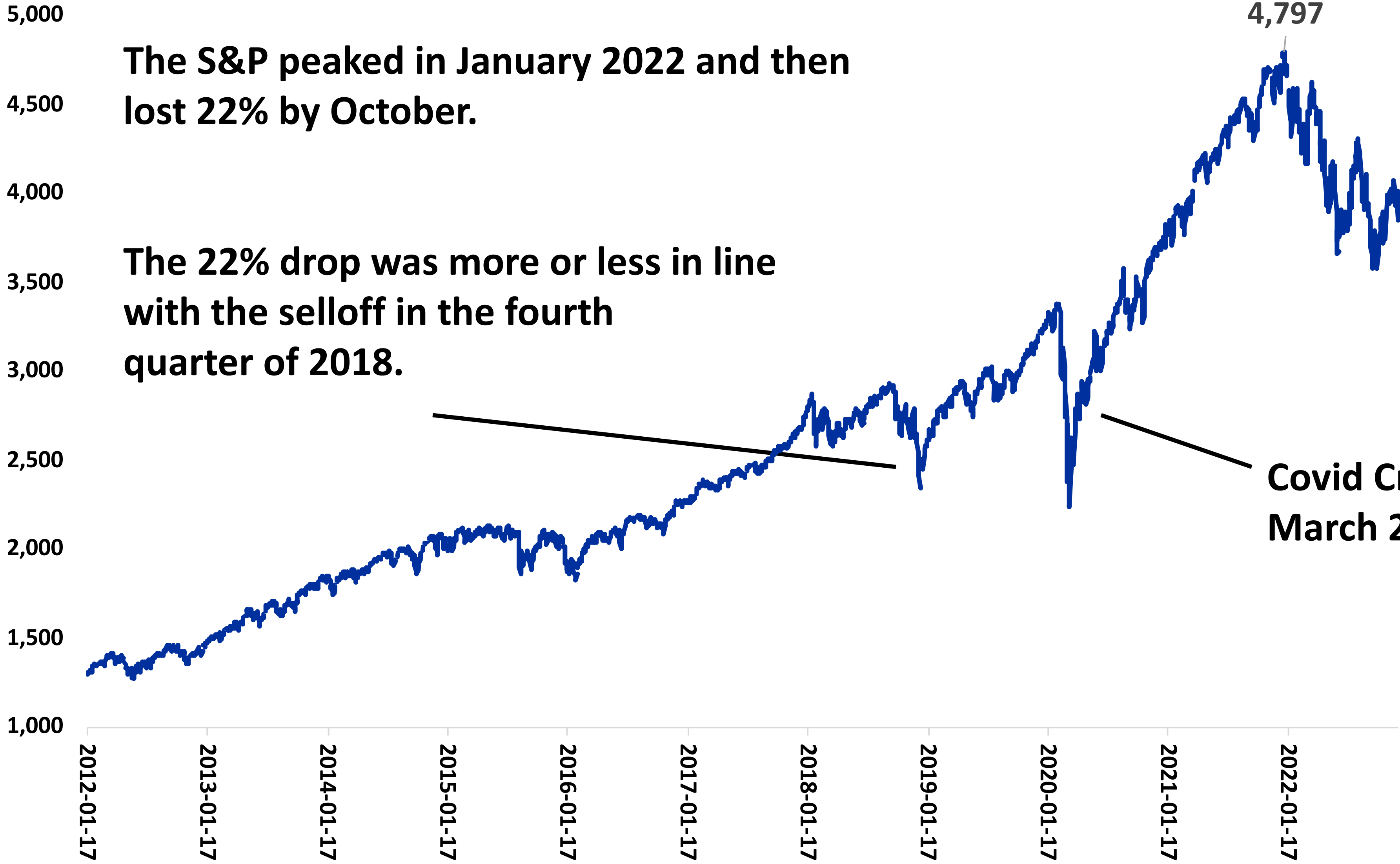
- The Fed would love to shrink the size of the Bank Reserves and the Reverse Repurchase Agreements on the liabilities side of its balance sheet because, among other reasons, the Fed now has to pay interest on those two liabilities in order to control the Federal Funds Rate.
- At their current combined amount of $5.5 trillion, and with an effective Federal Funds Rate of 4.33%, that would amount to $238 billion in interest expense per year, which would cause the Fed to incur large losses.
- But the outlook is even worse than that since the Effective Federal Funds Rate is likely to move above 5% early next year.
- The banks, on the other hand, would like for Bank Reserves to remain very large because the Fed pays interest on Bank Reserves to the banks, thereby boosting their profitability.

Asset Prices Likely To Fall Further

- Thus far, Asset Prices have not fallen as much as would have been expected given how aggressively the Fed is tightening.

S&P 500 Index

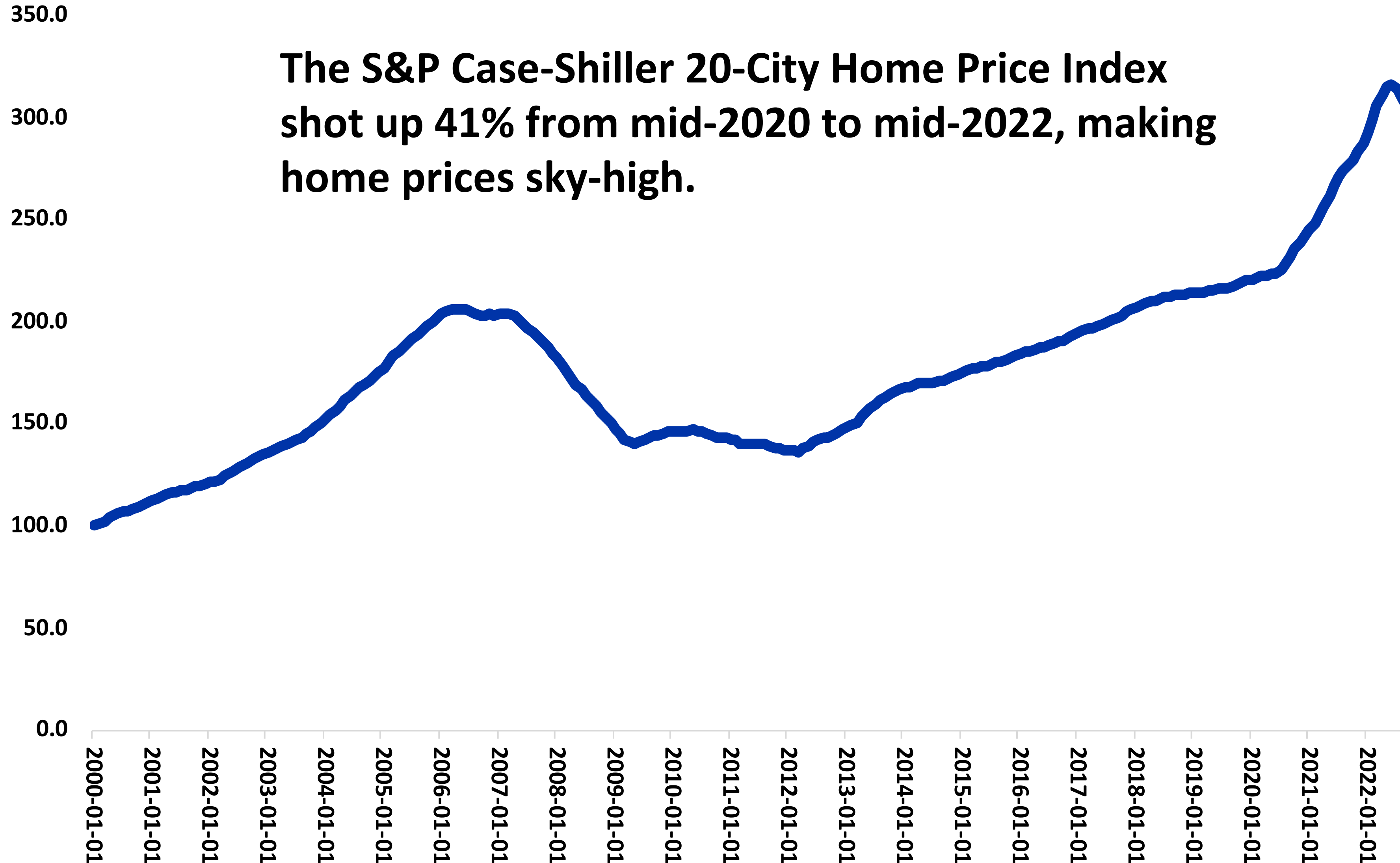
January 2012 to December 16, 2022



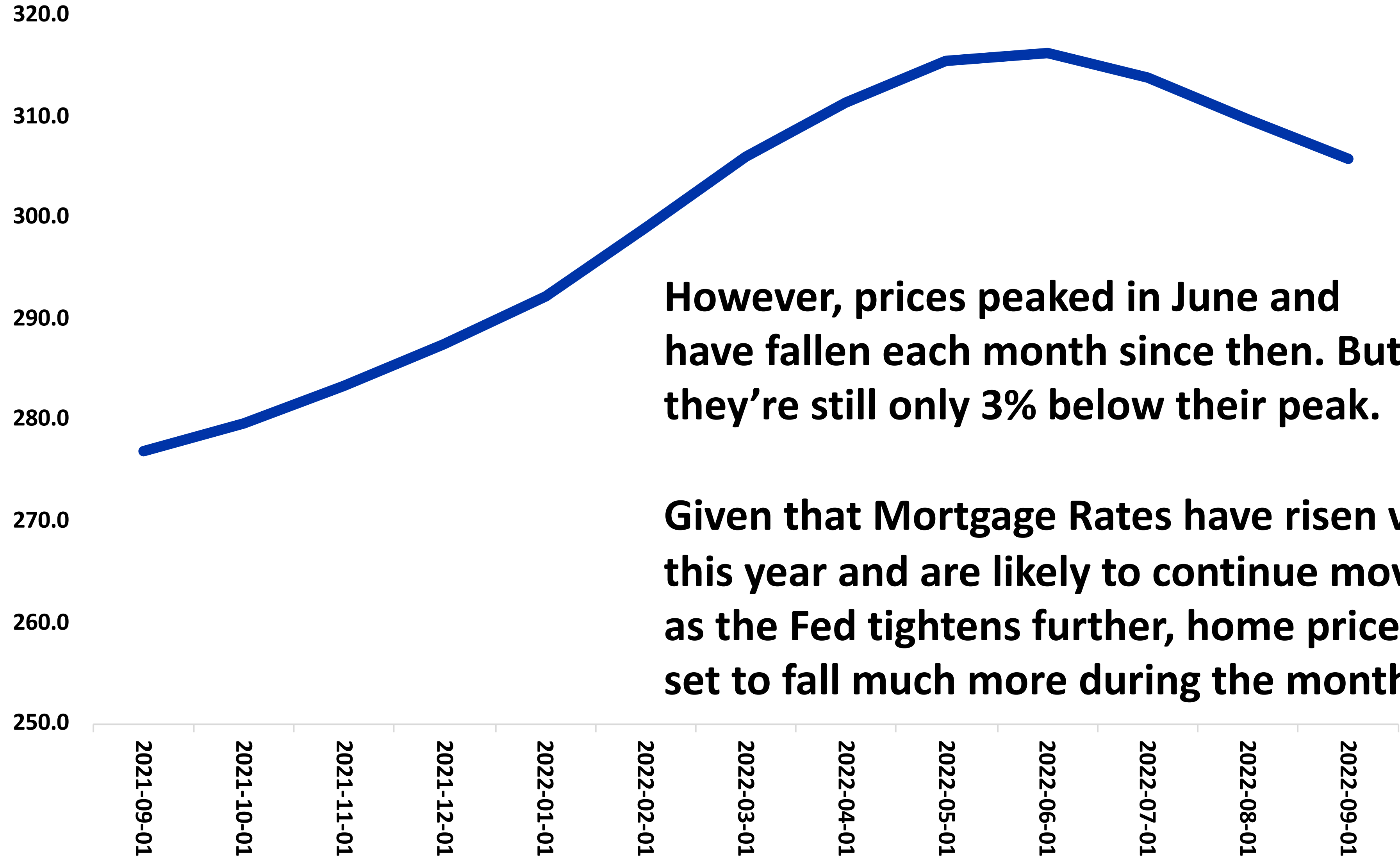
Source: Data from St Louis Fed

S&P Case-Shiller 20-City Home Price Index

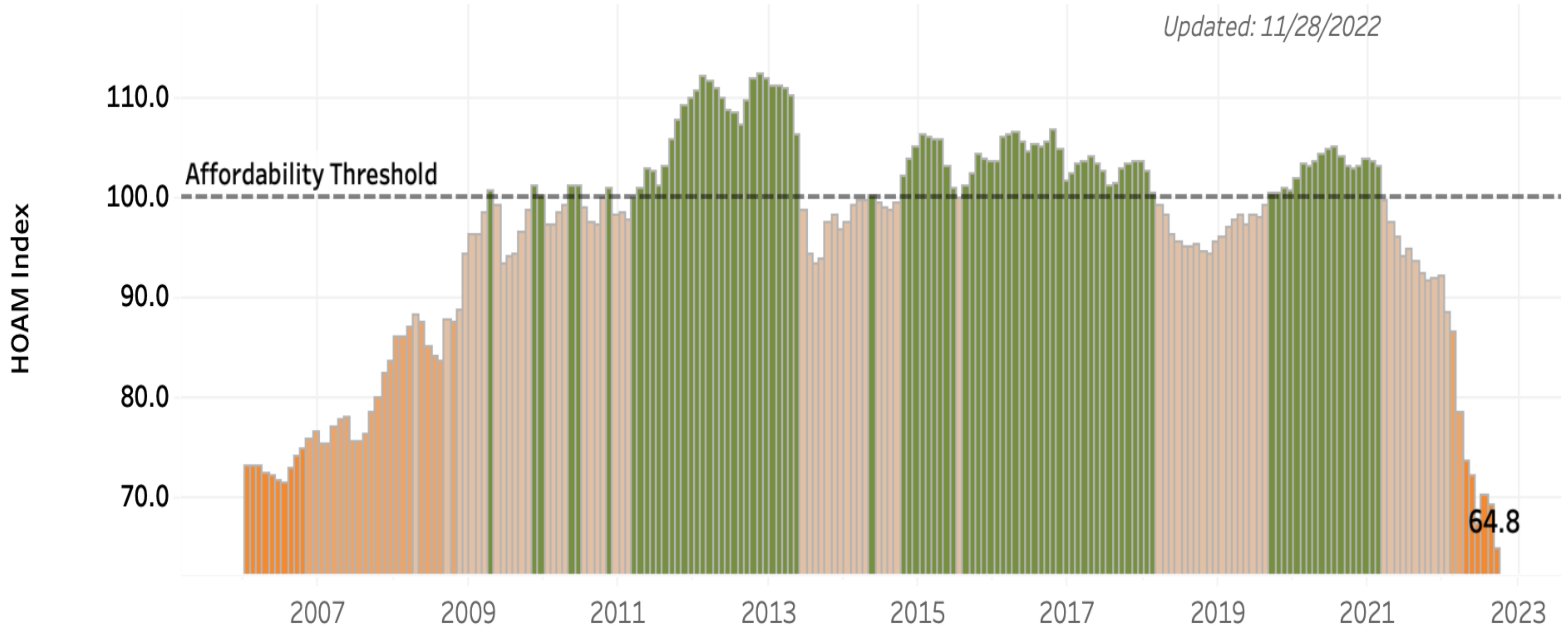
January 2000 = 100; 2000 to September 2022



Source: St Louis Fed


S&P Case-Shiller 20-City Home Price Index
January 2000 = 100; Sept. 2021 to Sept. 2022
320.0
310.0
300.0
290.0
280.0
270.0
260.0
250.0
2021-09-01
2021-10-01
2021-11-01
2021-12-01
2022-01-01
2022-02-01
2022-03-01
2022-04-01
2022-05-01
2022-06-01
2022-07-01
2022-08-01
2022-09-01
However, prices peaked in June and have fallen each month since then. But they're still only 3% below their peak.
Given that Mortgage Rates have risen very sharply this year and are likely to continue moving higher as the Fed tightens further, home prices seem set to fall much more during the months ahead.
Source: St Louis Fed

Home ownership is no longer affordable to the average American family. Therefore, home prices most probably have much further to fall.



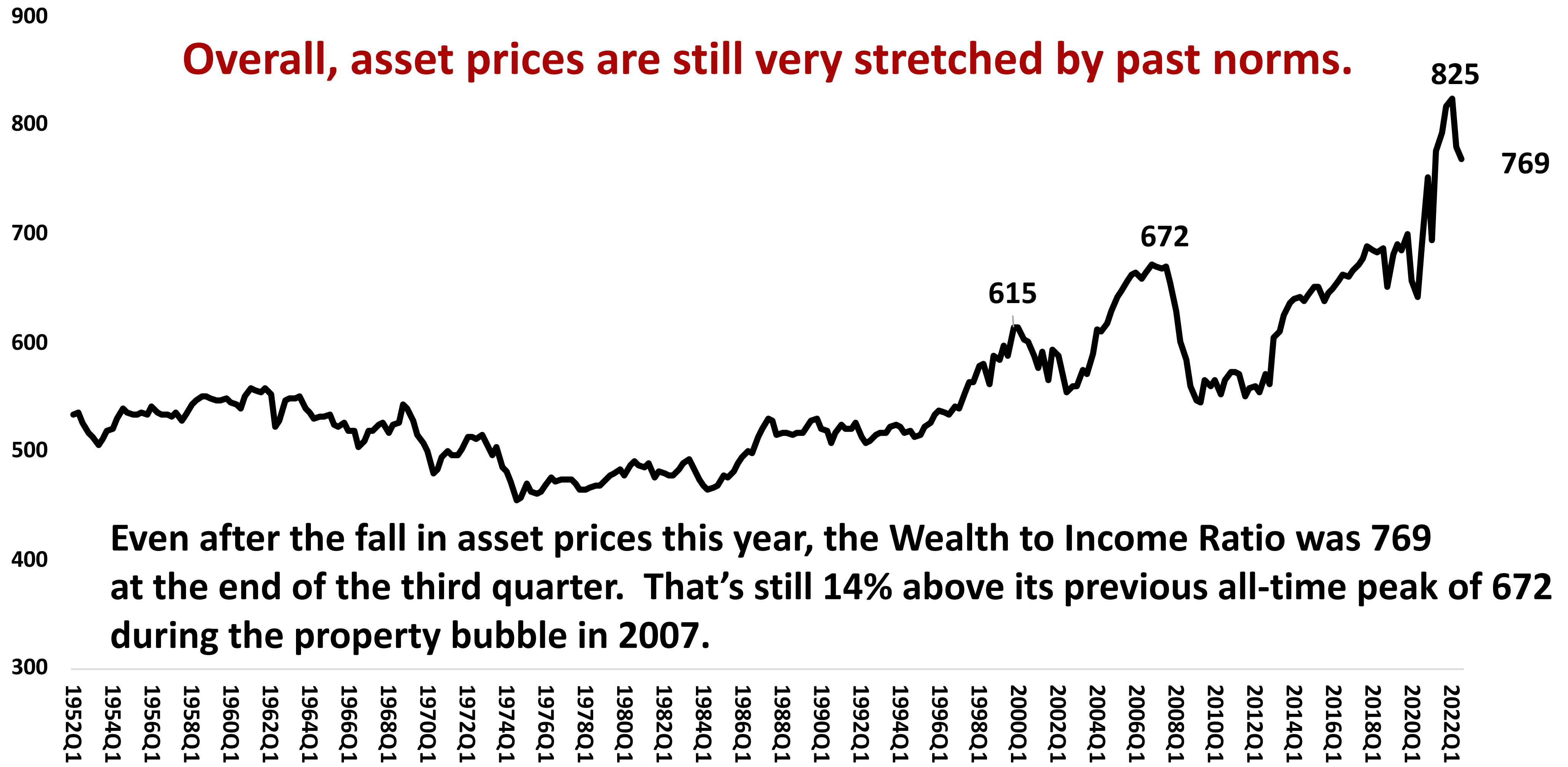
The Home Ownership Affordability Monitor Index measures the ability of a median-income household to absorb the estimated annual costs associated with owning a median-priced home. Source: The Atlanta Fed

Source: The Fed

The Wealth To Income Ratio

Household Net Worth as a Percentage of Disposable Personal Income

1952 to Q3 2022



This means that asset prices are still very expensive and at risk of further steep falls as the Fed tightens more.

Conclusion

- In conclusion:
- Powell reinforced his November 30th message during his FOMC press conference on December 14th.
- He emphasized that the Fed has more work to do to bring Inflation back down.
- That means:
- There are more Rate Hikes to come.
- And more Quantitative Tightening ahead.

Conclusion

- Given that Asset Prices are still very expensive by past norms, additional Monetary Policy Tightening is likely to result in significantly more Wealth Destruction before this tightening cycle comes to an end.

- Finally…

See These MW Videos

- To learn much more about Bank Reserves, Reverse Repurchase Agreements and Fed Policy, watch these earlier Macro Watch videos:
- What Are Bank Reserves? May 23, 2019
- The Repo Crisis and The Fed: Parts 1 to 4. November 2019
- The Fed Is Preventing Negative Interest Rates Using Reverse Repos. June 11, 2021
- The Fed May Lose $50 Billion in 2023. November 15, 2022
- More Wealth Destruction Ahead: Part One. December 2, 2022