

THE TREASURY DEPARTMENT

GLOBAL PERSPECTIVES

OCTOBER 2022



BY WILLIAM P. STERLING, PH.D.

Global Strategist

RISING RATES AND SIGNPOSTS OF NORMALIZATION

- ▶ A sharp selloff in financial assets this year has been driven by surging inflation, aggressive central bank rate hikes, and geopolitical shocks.
- ▶ Investors are focused on when the Fed will be done hiking rates since significant stock and bond market rallies have typically followed final Fed hikes, or “Fed pivots.”
- ▶ Signposts of Fed pivots include the Fed’s own forecasts, market expectations, and measures of monetary tightness. On balance, we suspect the pivot will come sooner rather than later.

HIGHLIGHTS

RISING RATES AND SIGNPOSTS OF NORMALIZATION

ARE WE THERE YET?

Periods of Fed rate hikes have historically been challenging for investors, but this year has been an unusually stressful one with few places to hide. Not only have stocks around the world declined sharply, so too have Treasury bonds, municipal bonds, and various categories of corporate bonds, including both investment grade and high yield (**Figure 1**).

FIGURE 1

US Asset Class and Asset Mix Performance

Year to Date, 1-Year, 2-Year, and 3-Years as of 9/30/2022

Asset Class/Asset Mix	YTD (%)	Annualized Performance (%)		
		1 Year	2 Years	3 Years
S&P 500 Index	-23.87	-15.47	4.83	8.16
Bloomberg US Agg Bond Index	-14.61	-14.60	-8.00	-3.26
Bloomberg US Corporate Bond Index	-18.72	-18.53	-8.96	-3.65
Bloomberg US High Yield Bond Index	-14.74	-14.14	-2.25	-0.45
Bloomberg Muni 10-Year Index	-10.59	-10.10	-4.15	-1.32
60/40 S&P 500/US Agg Bond	-22.31	-15.31	2.05	5.63
70/30 S&P 500/US Agg Bond	-22.80	-15.36	2.89	6.39
50/50 S&P 500/US Agg Bond	-21.71	-15.25	1.07	4.75
30/70 S&P 500/US Agg Bond	-20.03	-15.09	-1.48	2.47

As of September 30, 2022
Sources: GW&K Investment Management and Bloomberg

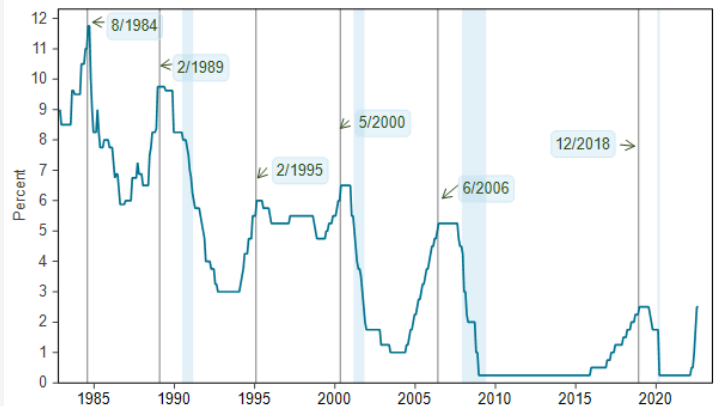
This year has seen the sharpest selloff in financial assets since 2008, with few places to hide. That said, balanced stock/bond allocations have still produced positive returns over the past two and three years.

This year can be viewed as a payback for the “everything rally” of the last several years, driven by extraordinarily loose fiscal and monetary policies triggered by the pandemic. The sharp selloff has also been precipitated by much worse-than-expected inflation, aggressive central bank rate hikes in response, and by geopolitical shocks including Russia’s invasion of Ukraine, its cutoff of natural gas supplies to Europe, as well as China’s rolling Covid lockdowns and deepening property market crisis.

Against this backdrop, there has been much discussion about when the Fed will be done with its aggressive rate-hiking cycle. If we define a Fed pivot as the last rate hike in a Fed tightening cycle, there have been six Fed pivots since 1984 (**Figure 2**).

FIGURE 2

There Have Been Six Fed Pivots Since 1984: Federal Funds Target Rate, Upper Band



Notes: (1) Vertical lines denote dates of last Fed rate hikes in tightening cycles, and (2) shaded areas denote NBER recession periods.

Sources: GW&K Investment Management and Macrobond

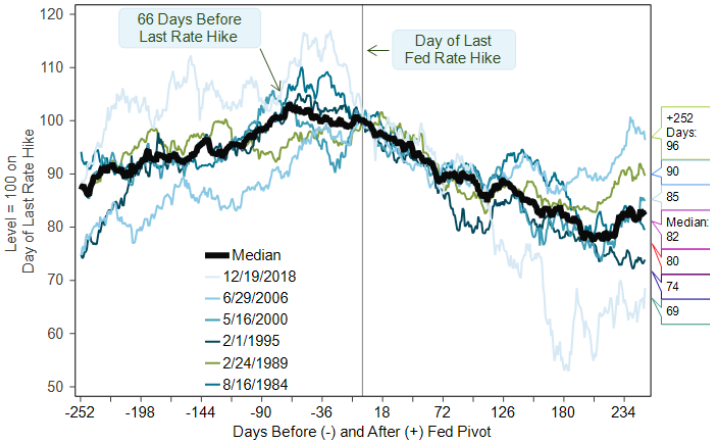
Defining Fed pivots as the date of the last rate hike of each tightening cycle, there have been six Fed pivots since 1984.

Investors care intensely about the potential timing of Fed pivots because they have historically preceded better performance of financial markets.

This has generally been true even though Fed pivots have often preceded recessions by a year or so. In the year following Fed pivots since the mid-1980s, the median drop in 10-year US Treasury yields has been about one-fifth from their starting level, with no episodes of rising yields (**Figure 3**). The median rise in the S&P 500 has been about 17%, with five episodes of double-digit returns and only one episode of a decline during the “tech wreck” following the May 2000 pivot (**Figure 4**).

FIGURE 3

Relative Level of 10-Year UST Yields Before and After the Last 6 Fed Pivots

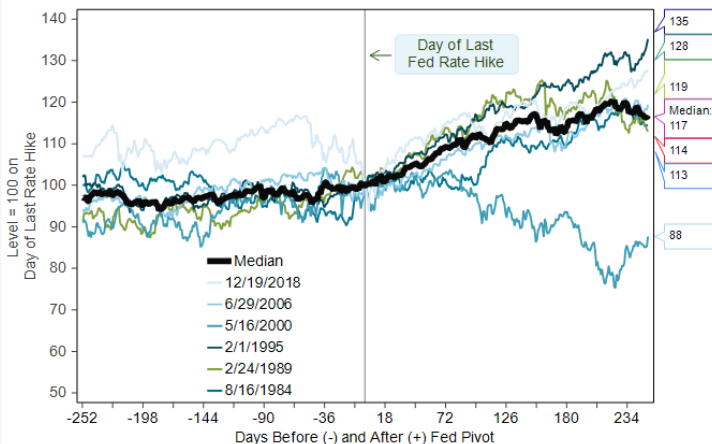


Sources: GW&K Investment Management and Macrobond

10-year US Treasury yields typically have risen in the year ahead of Fed pivots, but then declined significantly in the following year. The median decline in yields following Fed pivots has been 18%.

FIGURE 4

Relative Level of S&P 500 Index Before and After the Last 6 Fed Pivots



Sources: GW&K Investment Management and Macrobond

The S&P 500 Index has typically been flat as rates have risen in the year ahead of Fed pivots but delivered double-digit gains in the following year in five of six episodes.

SIGNPOSTS OF A POTENTIAL FED PIVOT

Due to its laser-focus on curbing inflation, the Fed has been discouraging investors from believing that a Fed pivot is likely anytime soon. That said, despite a highly uncertain environment, there are several signposts that investors can look at to assess the likelihood of the Fed’s rate-hiking cycle coming to an end.

One signpost is the Fed’s own forecasts. The Fed has been clear that it plans to continue to raise rates until it sees “clear and convincing” evidence that inflation pressures are abating, and inflation is coming down. In its most recent forecast, the Fed projected that it would raise the federal funds rate by 125 basis points to a range of 4.25% – 4.50% by the end of 2022 (**Figure 5**). It also projected a further quarter-point rate hike in 2023, followed by roughly three quarter-point rate cuts in 2024. Thus, it has signaled a major slowing in the pace of rate hikes next year — and an eventual easing.

FIGURE 5

Fed Rate Forecasts

Variable	Median				
	2022	2023	2024	2025	Longer Run
Change in real GDP June projection	0.2	1.2	1.7	1.8	1.8
	1.7	1.7	1.9		1.8
Unemployment Rate June projection	3.8	4.4	4.4	4.3	4.0
	3.7	3.9	4.1		4.0
PCE inflation June projection	5.4	2.8	2.3	2.0	2.0
	5.2	2.6	2.2		2.0
Core PCE inflation June projection	4.5	3.1	2.3	2.1	
	4.3	2.7	2.3		
Memo: Projected appropriate policy path					
Federal funds rate June projection	4.4	4.6	3.9	2.9	2.5
	3.4	3.8	3.4		2.5

Source: US Federal Reserve Board, September 21, 2022

At the Federal Open Market Committee Meeting on September 21, 2022, Fed members projected that the federal funds rate would end 2023 at 4.6% amid very soft economic growth and stubbornly persistent inflation in 2023.

The Fed's rate forecasts were contingent on economic projections that see core personal consumption expenditures (PCE) inflation slowing to a 3.1% year-on-year pace by the end of next year, still well above its 2% target. Faster progress on curbing inflation could mean an earlier end to rate hikes. So too could a more rapid rise in the unemployment rate than the Fed has projected. The Fed projects the unemployment rate will rise from its current level of 3.7% to 4.4% by the end of 2023. A faster rise in the unemployment rate could also prompt the Fed to begin to ease policy in response.

Another signpost is market expectations of Fed policy.

Judging from current federal funds futures, the markets see the federal funds rate at the end of this year in the range of 4.0% – 4.25%. They put the peak in the funds rate in the 4.25% – 4.50% range occurring around March 2023, lower than the Fed's year-end projection in the 4.5% – 4.75% range.

The markets show more confidence than the Fed that rates could start coming down in 2023, putting the most likely range for the federal funds rate back down in the 4.0% – 4.25% range at the end of 2023. But they are more guarded than Fed officials regarding the potential for rate cuts in 2024 and 2025, projecting a funds rate in the 4.0% – 4.25% range for most of that time horizon.

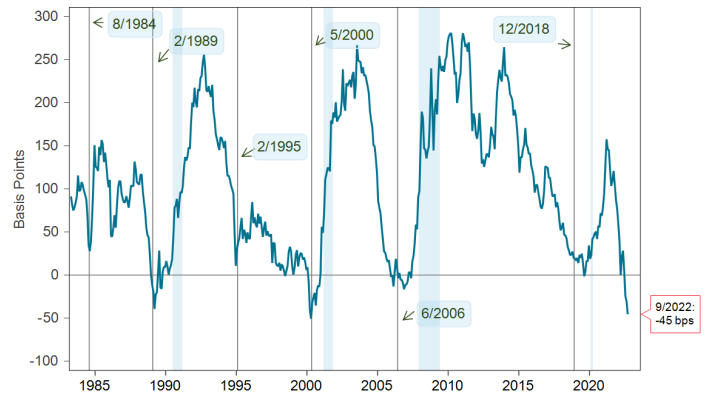
Finally, consider key indicators of the tightness of monetary policy. These include the slope of the yield curve and trends in real interest rates. The yield curve has been inverted since late July, with 2-year US Treasury yields higher than 10-year yields (Figure 6). That has historically been a sign that the Fed's rate hikes are starting to have an impact on the economy. Since 1984, such inversions of the yield curve have preceded Fed pivots by about three months on average.

Similarly, real interest rates have been rising and are now approaching levels that should significantly dampen economic activity. For example, suppose the Fed raises the federal funds rate to 4.5% by early next year, as now seems likely. If core PCE inflation early next year is running at a 3.7% year-on-year rate, as the consensus expects, then the real federal funds rate will be around 0.8% (4.5% – 3.7%). That is about in line with estimates of the so-called neutral real rate ("r-star") that range from 0.5% – 1.0%. Neutral or modestly above-neutral real rates have been consistent with Fed pivots in many cycles since 1984 (Figure 7).¹

¹Figure 7 shows the real federal funds rate relative to a current estimated "neutral" (or "r-star") rate of 0.8%. Estimate of the neutral rate (neither restrictive nor stimulative) have declined over the past few decades reflecting factors such as demographics, technology, and global excess savings.

FIGURE 6

Fed Rates Have Peaked Soon After Inversions of the 10-Year/2-Year Yield Curve

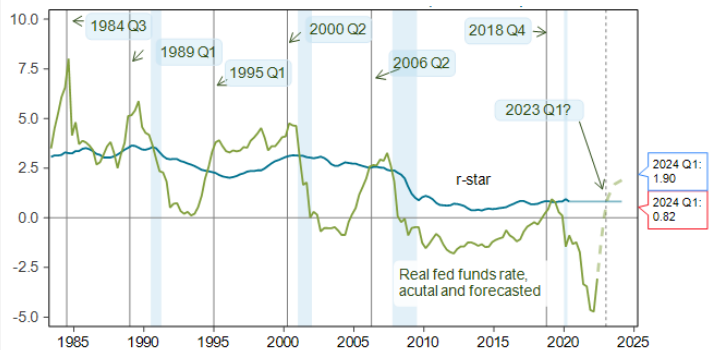


Notes: (1) Vertical lines denote month of peak in Fed tightening cycles; (2) Shaded areas denote NBER recession periods. Sources: GW&K Investment Management and Macrobond

Inversions of the 10-year/2-year yield spread indicate that monetary policy is very tight and should lead to slower growth and lower inflation. Such inversions tend to precede Fed pivots by a few months.

FIGURE 7

Fed Pivots Versus the Real Fed Funds Rate Relative to Neutral ("r-star")



Notes: (1) Real funds rate is federal funds rate upper limit minus year-on-year core PCE inflation with forecasts based on federal funds futures and Bloomberg's economics survey; (2) vertical lines denote month of peak in Fed tightening cycles; r-star based on 4-quarter moving average of New York Fed's Laubach-Williams natural rate of interest estimate extended from 2Q2020, and (3) shaded areas denote NBER recession periods. Sources: GW&K Investment Management, Bloomberg, New York Federal Reserve, and Macrobond

Fed pivots have tended to occur when the real funds rate has moved to at or above its neutral rate, as seems likely by the first quarter of 2023.

Moreover, on current market expectations the real funds rate should soon be more than five full percentage points higher than a year earlier. As shown in **Figure 8**, that would represent a far more extreme change in real rates than seen at the time of any other Fed pivots since 1984. This perspective helps explain the severity of this year's stock and bond market adjustment. In response to worse-than-expected inflation, the Fed will have shifted from ultra-easy monetary policy to very restrictive policy at the fastest pace in recent memory.

widely held forecasts can turn out to be quite mistaken. Consider that a year ago the Fed's projection for the federal funds rate at the end of this year was just 0.30%. (As of September 30 it was 3.08%.) And to be fair to the Fed, private sector forecasts and market expectations generally turned out to be just as far off base.

With that perspective in mind, we were intrigued to read a recent piece by Maurice Obstfeld, the former chief economist of the International Monetary Fund (IMF). Surveying the global monetary policy landscape, he recently warned that with most central banks tightening monetary policy aggressively and simultaneously, they risk overdoing it.

Here is the crux of his argument: "Just as central banks (especially those of the richer countries) misread factors driving inflation when it was rising in 2021, they may be underestimating the speed with which inflation could fall as their economies slow. And, as often is the case, by simultaneously all going in the same direction, they risk reinforcing each other's policy impacts without taking that feedback loop into account. The highly globalized nature of today's world economy amplifies that risk."²

Only time will tell whether the Fed's "higher-for-longer" messages on rates will be correct, or whether Obstfeld's warning will prove to be prescient. But on current evidence, we suspect that the Fed's endgame — i.e., the final tightening of this cycle — may come sooner rather than later.

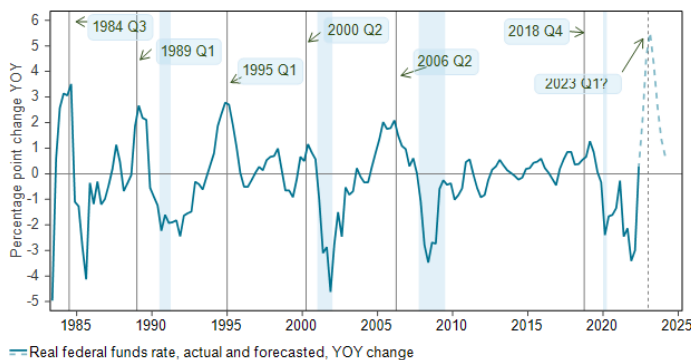
Finally, as challenging as this year has been, the silver lining in any market selloff is the better entry points and improved return potential in its wake.

William P. Sterling

William P. Sterling, Ph.D.
Global Strategist

FIGURE 8

Fed Pivots Versus Changes in the Real Federal Funds Rate from a Year Earlier



Notes: (1) Real funds rate is federal funds rate upper limit minus year-on-year core PCE inflation with forecasts based on federal funds futures and Bloomberg's economics survey, (2) vertical lines denote month of peak in Fed tightening cycles; and (3) shaded areas denote NBER recession periods.
Sources: GW&K Investment Management, Bloomberg, and Macrobond

The one-year rate of change of the real federal funds rate is likely to exceed 5 percentage points by 1Q2023. That would far exceed the rate of change seen around other Fed pivots.

DON'T FIGHT THE FED, BUT...

For investors, this year has been a challenging example of the adage "Don't fight the Fed." But it has also been an example of how rapidly economic circumstances can change and how

²Maurice Obstfeld, "Uncoordinated Monetary Policies Risk a Historic Global Slowdown," Peterson Institute for International Economics, September 12, 2022.

DISCLOSURES:

This represents the views and opinions of GW&K Investment Management. It does not constitute investment advice or an offer or solicitation to purchase or sell any security and is subject to change at any time due to changes in market or economic conditions. The comments should not be construed as a recommendation of individual holdings or market sectors, but as an illustration of broader themes. Data is from what we believe to be reliable sources, but it cannot be guaranteed. GW&K assumes no responsibility for the accuracy of the data provided by outside sources.

© GW&K Investment Management, LLC. All rights reserved.

www.gwkinvest.com

Boston Headquarters
222 Berkeley Street
Boston, Massachusetts 02116
617.236.8900

Other Locations
New York, New York
Winter Park, Florida

