

# Minus Inflation and Leverage, a Bear Market Doesn't Add Up

Inflation and leverage are key drivers for the timing and severity of any down cycle.

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## Key Takeaways

- Historically, rising inflation is often what forces the Federal Reserve (Fed) to raise interest rates to the point of inverting the yield curve and eventually causing a recession.
- Once an economic expansion ends, however, the amount of built-up leverage (debt used to buy assets) in the financial system typically helps determine how bad a subsequent downturn might be.
- At this point, with inflation running well below the Fed's 2% target and a lack of widespread leverage, the conditions for a nasty bear market are just not there.

## Inflation + leverage = trouble

In my view, the two key drivers that will signal when the U.S. expansion and bull market are ending—and how bad any subsequent downturn might be—are inflation and leverage.

The typical emergence of inflation in the late stage of an economic cycle is what usually forces the Fed's hand in terms of the speed and magnitude of its rate-tightening cycle. If inflation pressures become bad enough to force an excessive amount of rate hikes, what often follows is an inversion of the yield curve (i.e., short rates rise above long rates). This typically curtails the availability of credit, which eventually (six to 12 months later) causes the economy to contract and a bear market to start.

A lack of inflation can mean an extended Goldilocks environment for stocks, as has been the case for some time now. If this changes, it may mean that the Fed will have to seriously tighten financial conditions. Accommodative liquidity has been one of the two powerful tailwinds (the other being strong earnings growth) propelling equity valuations higher since 2009

and especially since the first quarter of 2016, so a reversal of that tailwind would be a significant development.

If inflation reveals whether an expansion is going to end, the amount of leverage in the system can indicate how bad the subsequent downturn could be. Excessive leverage can lead to forced selling and a liquidity crisis, which is what could turn an ordinary downturn into a crash. It's forced selling that helped create the kind of severe downturn we saw during the 2008 financial crisis.

So, where do these two drivers stand today? Inflation remains very low, so unless it sharply accelerates from here, it's unlikely to turn the ongoing expansion and bull market into a contraction and bear market.

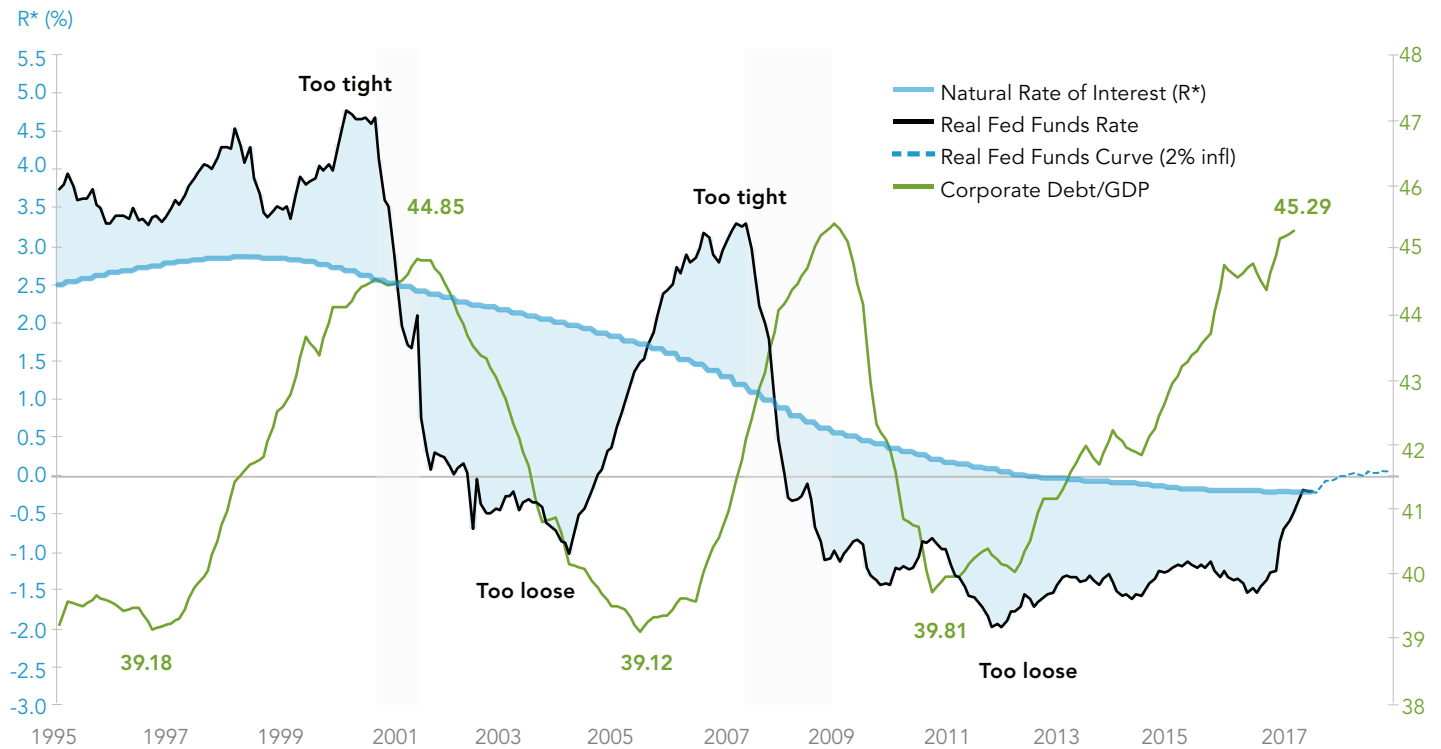
Of course, this also depends on the speed and

magnitude of the Fed cycle. One way to illustrate this is to compare the "real" federal funds target rate (using core PCE, or consumption expenditures prices excluding food and energy) to the so-called natural real rate of interest, or  $R^*$ . "R-Star" is the rate that would keep the economy operating at full employment and stable inflation, and when the demand for capital is in equilibrium with the supply of capital. A Fed easing cycle tends to drive the real funds rate down to well below  $R^*$ , and a tightening cycle tends to produce the opposite effect.

This can be seen in Exhibit 1, where the blue shading shows the difference between the real funds rate (black line) compared with  $R^*$  (blue line). You can see that leading up to the dot-com peak in early 2000, the real

**EXHIBIT 1: Bear markets have often occurred when the real fed funds rate is well above the natural rate ( $R^*$ ).**

Fed Interest-Rate Cycles (1995 to 2017)



Source: Bloomberg Finance L.P., Haver Analytics, Fidelity Investments, as of Nov. 7, 2017.

rate was several hundred basis points above the natural rate. That was enough to invert the yield curve and eventually cause a bear market for stocks. You can see that a corporate deleveraging started soon after rates climbed too far above  $R^*$ . The same thing happened in 2007, leading up to the global financial crisis.

So where are we today? Fortunately, right now the real policy rate is pretty much equal to the natural real rate, leaving the system in balance. If we assume that the market (via the fed funds forward curve) is correct in pricing in a 2% rate over the next two years and that inflation will gradually rise to 2%, then that will still leave us at a 0% real rate in two years, which is where  $R^*$  is right now. So no harm, no foul, if the market is correct.

However, if the Fed's so-called "dot plot" (depicting all

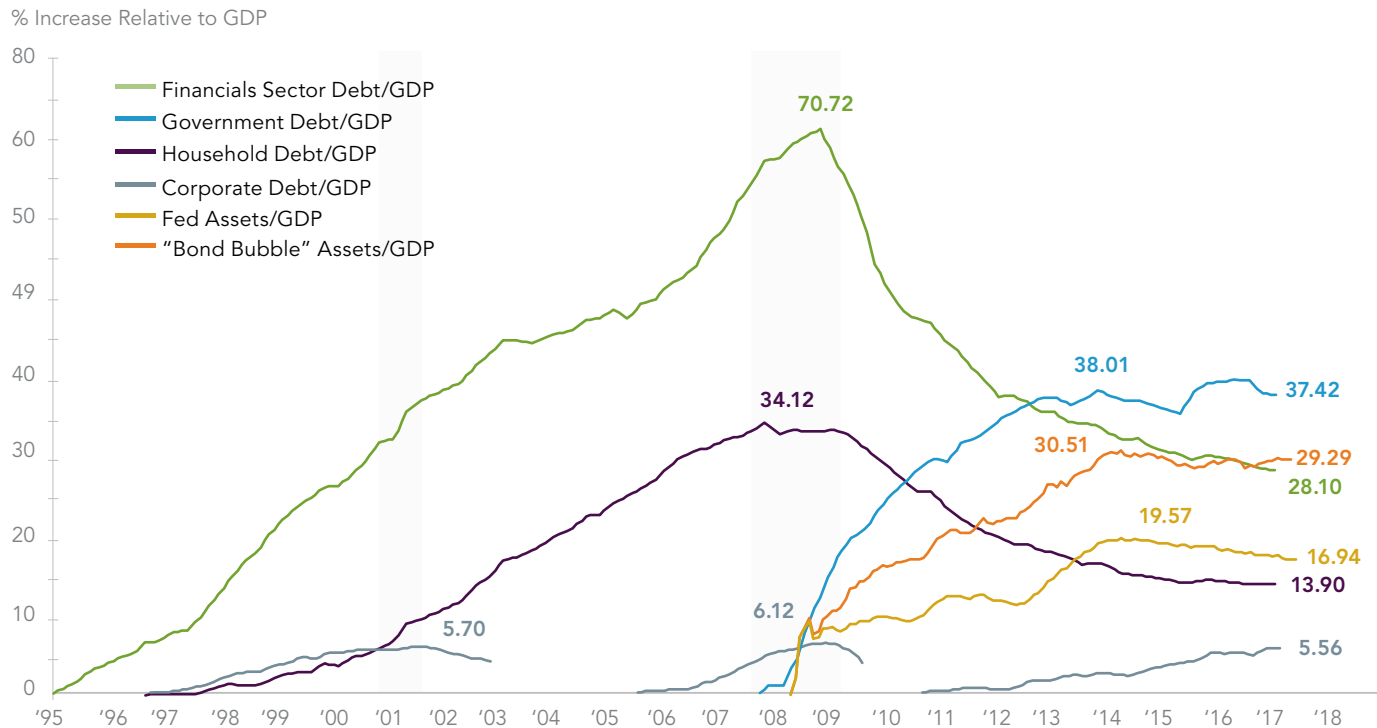
16 Federal Open Market Committee members' individual projections of where the policy rate will be) is accurate in suggesting seven more hikes, plus factoring in the tightening effects of the projected \$1.25 trillion decrease in the Fed's balance sheet over the next three years, then the funds rate could be closer to 4%, which would be +2% in real terms. If  $R^*$  is still at zero then, that could be enough to cause a downturn. However, my view is that the Fed will only go there if  $R^*$  is trending higher. This is how I'm thinking about the whole Fed cycle.

### Leverage

The next chart (Exhibit 2) is an attempt to illustrate where the so-called leverage air pockets or "bubbles" are. It shows the change in leverage or asset concentration over

#### EXHIBIT 2: There doesn't appear to be widespread excess leverage in the financial system.

Cycles of Leveraging and Deleveraging (1995 to 2017)



Source: Bloomberg Finance L.P., Haver Analytics, Fidelity Investments, as of Nov. 7, 2017.

time, expressed as the percentage point increase relative to gross domestic product (GDP). It shows changes in corporate leverage, household leverage, financials sector (banks) leverage, and government debt.

I also show the change in the Fed's balance sheet (as a percentage of GDP), as well U.S. bond mutual funds and ETFs (which added \$1.2 trillion in flows, arguably as a consequence of the Fed's policies). I realize that these are assets and not liabilities, but I'm trying to show the various potential air pockets of forced selling out there. To many pundits, this is where the bubbles are these days.

What can we learn from this chart? A few things.

Leverage in the non-financial corporate sector (gray line in chart) has recently increased from 40% of GDP to its previous cycle highs of 45% in both 2000 and 2007. There is also plenty of leverage in central bank balance sheets ("Fed Assets," +20 percentage points of GDP since 2009), government debt (+37 ppts since 2008), and bond funds (+11 ppts of GDP). However, leverage in both the financials and household sectors has

declined significantly since the financial crisis. Leverage in the financials sector is down roughly 40 ppts, while household leverage is down some 20 ppts.

When I add it all up, I see some pockets of excess leverage or asset concentration but certainly not a widespread excess. Plus, it should be remembered that neither the central bank nor the government will likely be forced to sell anything. Why is this important? Because in 2007, there was a massive buildup of household, financial sector, and corporate leverage that had to unwind during the financial crisis. It was a catastrophic trifecta of deleveraging. We don't have those same conditions presently. We have government debt, corporate debt, and a much larger Fed balance sheet (which some people argue drove bond buying by the public), but those are offset by a significant deleveraging in household and financial sector debt.

The bottom line is that with neither inflation nor widespread leverage present in the system, we do not yet have the recipe for a downturn in the economic cycle.

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