

Bonds and the Fed's rate liftoff

Dr Robert Gay | Fenwick Advisers | 21 July 2015

Sometime this [northern hemisphere] autumn – probably at the FOMC meeting on 16–17 September – the Fed Board will decide to lift its policy rate off the zero lower bound where it has been for the last 6.5 years. This week, Chair of the Federal Reserve Janet Yellen has repeatedly said it is likely and she appears to have the votes in favor. All that is needed is a bit more evidence that Q1 was an aberration and that the US labor market continues to improve. It will be a minor adjustment but a momentous event. Everyone wants to know what will happen to bond prices.

Their intuition follows the logic of bond pricing – yields go up and corresponding bond prices will go down. The problem is that the Fed's policy rate – the Fed funds rate – is a very short-term interest rate with an uncertain and variable relationship to long-term yields. The only thing for certain is the tight and mechanical link between the Fed funds rate and US Treasury Bills up to maturities of two years, which can be arbitrated with futures. Beyond that, however, the evolution of long rates when the Fed raises rates is dependent on market perceptions of the consequences, especially on future inflation.

The other wild card is what happens to credit spreads – so-called spread duration – as the yield on benchmark bonds rise. If the Fed moves to normalise rates sooner and slower than usual, investors should be more wary of spread duration, in my opinion, than pure interest rate duration of benchmark bonds. As Greece can attest, debtors have few options when short rates rise and often suffer lasting pain, whereas creditors have many ways to regain the favor of capital markets.

FED POLICY AND THE SLOPE OF THE YIELD CURVE

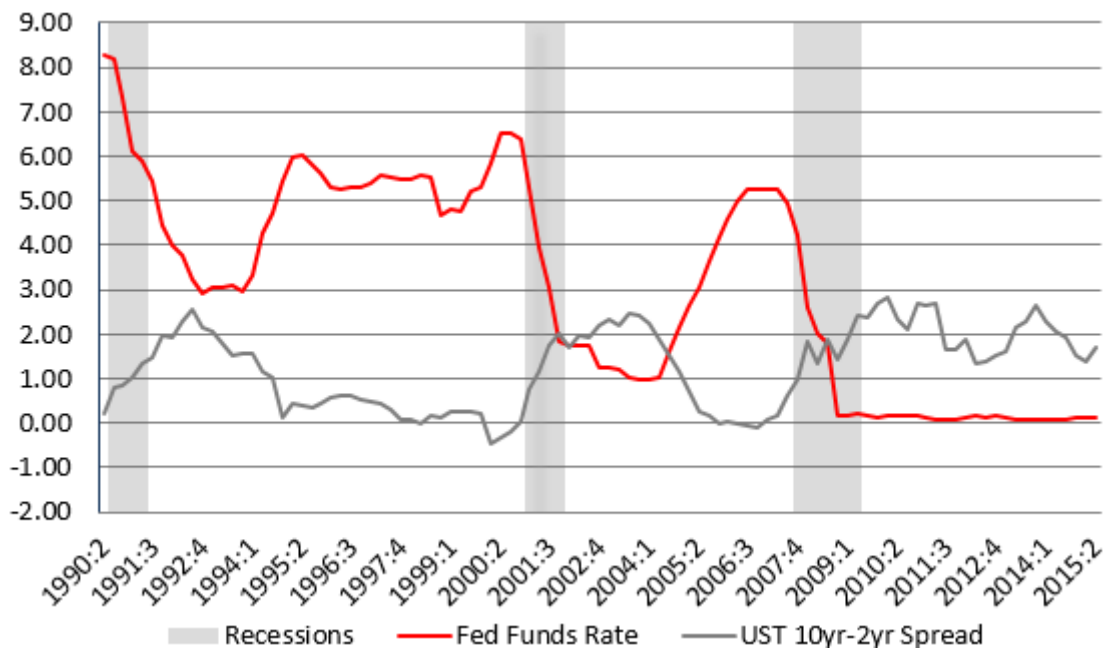
Underlying perceptions that normalisation of the Fed's policy rate will lead to higher long-term yields and lower bond prices is the apparent misconception that there is some direct link between the two. In reality, central banks only can influence long-term interest rates through the term premium – that is, by containing future inflation and with the advent of quantitative easing by buying and holding bonds on the Fed balance sheet.

On the first count, inflation expectations depend critically on whether investors believe the Fed has acted expeditiously to keep inflation at bay or has waited too long and hence is losing its grip. In market lingo, the issue is whether the Fed is perceived to be "ahead of the curve" in containing inflation or has fallen "behind the curve". The former implies the Fed has plenty of time to normalise policy whereas the latter means that policy rates will need to rise

faster and further than otherwise. Once the Fed gets behind the curve, policy rates invariably overshoot – an outcome that leads to another misperception, namely that high short-term rates in themselves squash expansions and precipitate recessions. We will return to that subject in a moment.

Figure 1 shows what has happened to the slope of the yield curve as the Fed has normalised the policy rate over the past 25 years. Critics often castigated the Greenspan Fed for running a "too easy" monetary policy notably in the early 1990s and early 2000s (as well as briefly in late 1997 and 1998, in the aftermath of the Long-Term Capital Management debacle). Despite those alleged policy blunders, financial markets apparently still believed the Fed was sufficiently ahead of the curve on inflation to flatten the yield curve as short-term rates were normalised. In both episodes, yields on 10-year US Treasuries increased less than half as much as those on two-year notes. Once the Fed reached a neutral policy rate (5% in the 1990s and 4% in the 2000s), the yield curve was virtually flat and remained that way. In the long expansion of the 1990s the two-year to 10-year (2s-10s) spread hovered near zero for six years. During the mid-2000s, that steady state lasted two years. Note that in retrospect, these rapid reversals of policy led to significant overshooting of the neutral policy rate in order to maintain the perception of staying ahead of the inflation curve.

Figure 1: Fed Funds Rate and Slope of UST Yield Curve



Sources: Fenwick Advisers

This cycle has begun much like the past two, with the Fed lowering the policy rate to where it is negative in inflation-adjusted terms.

There are significant differences, though. Unlike previous cycles, real short-term rates have been negative for much longer (six years and counting); global inflation has been much lower and deflationary pressures have persisted much longer; and, the Fed has intervened in markets with direct purchases of bonds that have held down yields on 10-year bonds by 115 basis points¹. That means the 2s-10s spread should be tighter than in past cycles by a similar amount – yet it has hovered stubbornly around 200 basis points, similar to past cycles, albeit with greater variance. And yet more curious, the spread has narrowed toward the bottom half of the range as the date of Fed lift-off draws closer.

The implication is that rate normalisations set off a complex market tradeoff. If the Fed is normalising rates in a timely manner, then future inflation is likely to be lower than otherwise and the term premium in interest rates should be lower. Only when the Fed is late (as in 2000) or impotent (as in 2007) and inflation already is rising does the yield curve steepen again. That day of reckoning seems to be still quite distant.

In short, I expect the first 100 basis points of Fed normalisation will have relatively little effect on long-term rates. How much depends on:

1. how quickly the Fed raises its policy rate and hence how quickly that translates into higher 2-year Treasury yields; and,
2. how far the Fed is expected to raise the Fed funds rate, i.e. what is the expected "neutral" rate.

A rough rule of thumb is that the 2-year yield will increase to whatever is perceived to be the neutral rate – say, 3%, for example. If the Fed dawdles too long, that yield may overshoot. However, as long as the Fed does not feel inclined to sell its huge Treasury holdings, long rates should stay at or even below the 2-year rate. If so, bonds benchmarked to long-dated Treasuries will prove to be less worrisome than those linked to the two- to three-year portion of the curve that will bear the full brunt of rate normalisation.

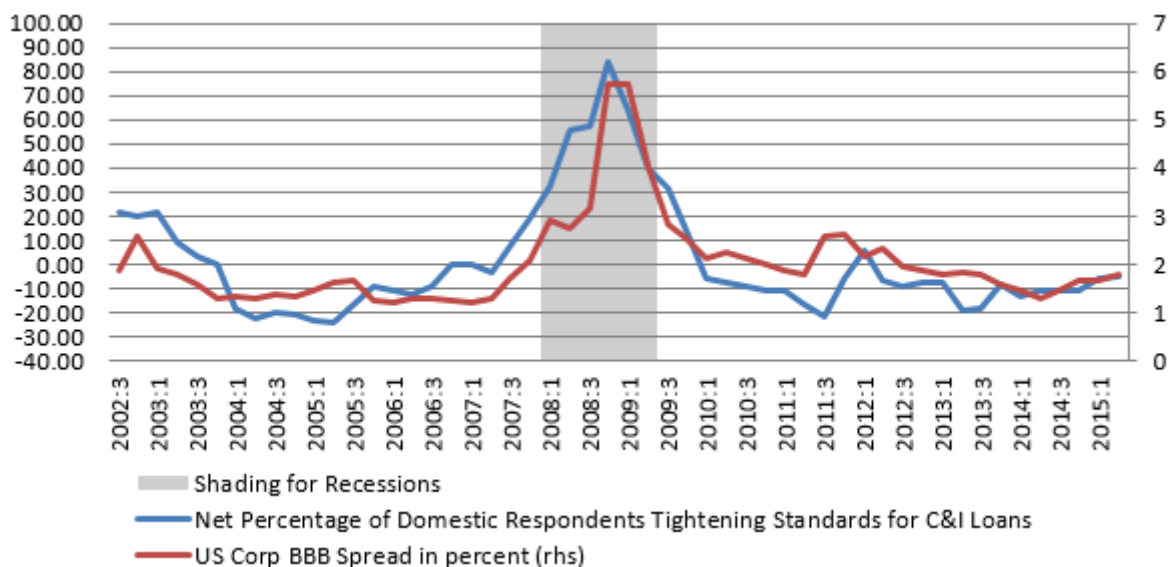
CREDIT CYCLE AND DURATION

There is a critical caveat to this conclusion, however – inflation needs to stay low. Once inflation rises above the Fed's target of 2%, bond mavens will take heed. To compound that conundrum, credit quality takes a decided turn for the worse as the business cycle ages. When these two bond bugaboos occur simultaneously, as is often the case, then credit duration is to be avoided. When everyone else is "stretching for yield", savvy bond investors should be sacrificing some current yield and upgrading the credit quality of their portfolios.

While this advice seems sensible, few market indicators foretell the next downturn in overall credit quality. Credit defaults swaps belatedly signal signs of trouble and even credit spreads do not give much advance notice.

In an ongoing study of lead indicators of financial distress, economists at the New York Fed have found only one such US indicator – namely, bank lending standards as reported in its quarterly survey. Banks lending officers are asked whether they are tightening or relaxing standards for various loans. Figure 2 shows the net percentage of respondents who report their institution is tightening standards for approvals of commercial and industrial loans (the blue line). A value greater than zero means that standards are tightening even if the net percentage is falling, while negative readings indicate that the banking system is easing standards. Note that during recessions, the net percentage of respondents reporting tighter standards is quite high – 60% to 90% – implying loans are only available to banks' best customers. Credit availability becomes very limited at any price. No wonder recessions take root soon thereafter and worsen as more banks restrict access. Second, banks on balance are slow to relax standards (a reading below zero) even after a recovery begins.

Figure 2: Bank Lending Standards and BBB Spreads



Source: New York Federal Reserve

Quite remarkably, these data do anticipate a widening a corporate credit spreads by several quarters and at some point signal sufficiently tighter lending standards to warn of financial distress. Note that credit spreads for those investment-grade companies close to junk status climbed 450 basis points during the recession while US Treasury 10-year bond yields only retreated about 200 basis points. In sum, credit quality poses greater risks to investment returns than interest rate risk associated with benchmark bonds, especially during these times of rising debt burdens and deflationary pressures.

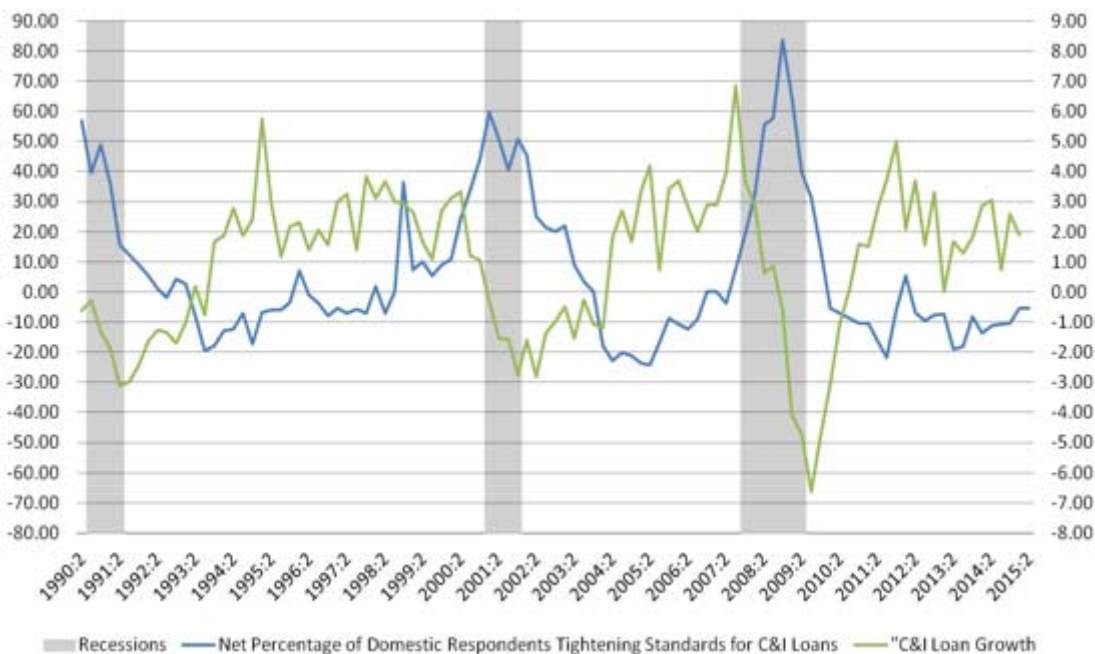
BANK PORTFOLIOS AND LENDING STANDARDS

This evidence raises a perplexing question. If banks are tightening standards prior to recessions, then why are they so ill-prepared to manage the consequences of subsequent downturns?

The answer lies in the reasons banks are tightening standards. It is not because they are more prescient than financial markets, nor do they necessarily have more information than the analysts who follow these companies. Banks do have more timely information on the performance of their own loan books and the risks associated with them. Excessive lending in the past inevitably lowers the quality of the book as lending officers dig deeper to originate new loans.

Figure 3 shows growth in C&I loans along with the results of the bank lending survey. New lending coincides with easing standards as we would expect. Only after years of expanding their loan books do they finally begin to rein in standards, not because opportunities have dried up but rather because the banks have overextended their capital base. The ensued circle of tightening credit availability, slower growth and eventually recession becomes a self-fulfilling downward spiral. The Fed's monetary policy and the level of interest often is the lesser of the economic headwinds.

Figure 3: Growth in C&I loans



Source: Fenwick Advisers

LEVERAGED LOANS

In this environment of low yields, it is not surprising that leveraged products are reemerging. Leveraged loans in particular are relevant in the context of the credit cycle.

Figure 2 indicated that US banks are still easing loan standing and are aggressively soliciting new customers, especially smaller businesses and new mortgagees. I presume that banks are intent on expanding the volume of loans in part because the normalisation of short-term rates will raise their cost of funds. Additional volume will compensate for lower margins.

This pattern is typical mid-cycle behavior but it leads to digging deeper in the credit barrel to originate more loans. Recall that CDOs and CLOs once were high quality products populated with creditworthy obligations. When structured product specialists ran out of good loans, they package ever less worthy ones. No structure, of course, can be divorced from the quality of the underlying assets. And, unfortunately, credit quality, credit spreads, lending standards and recession all are linked at the hip.

ENDNOTES

1. See for example Tao Wu, “Unconventional Monetary Policy and Long term Interest Rates”, IMF Working Paper 14-189, September 2014.

Dr Robert Gay is managing partner of [Fenwick Advisers](#), a financial consultancy serving global investment banks, hedge funds, and other fund managers and financial institutions including fixed income manager, [Stratton Street Capital](#). Prior to forming Fenwick Advisers, Dr Gay served as international economist and global strategist Morgan Stanley, Bankers Trust and Commerzbank AG. He spent eight years as Senior Economist with the Board of Governors of the Federal Reserve System in Washington, DC, primarily during the chairmanship of Paul Volcker.
