

## Navigating normalisation

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Dr Robert Gay | Fenwick Advisers | 01 March 2017

The Federal Reserve's slow but steady march toward normalisation of US monetary policy seems to be one of the few more predictable outcomes of 2017. Granted, a host of potential political machinations might derail even the best laid plans of the world's premier central bank. On pure fundamentals, though, the case for a reversion to neutrality is quite compelling.<sup>1</sup> Labor markets have tightened considerably over the past year to the point that many employers complain about difficulties in finding qualified workers. Workers finally are receiving pay adjustments, however meager, that exceed inflation as well as the anemic trend in productivity. Fed officials can ill-afford to ignore these warning signs, especially given the slow workings of the monetary gears. Few observers have held much hope the Fed could exit its extraordinary seven-year experiment with quantitative easing without some bumps and bruises. Yet investors still seem to have an almost irrational fear of what is coming, even though history indicates a reasonably graceful exit from ultra-low interest rates is possible – and investors can weather the storm with the right strategy.

Let us review what the evidence tells us, so we can sort out which risks are worth worrying about and what ones are not.

### BENCHMARK INTEREST RATES

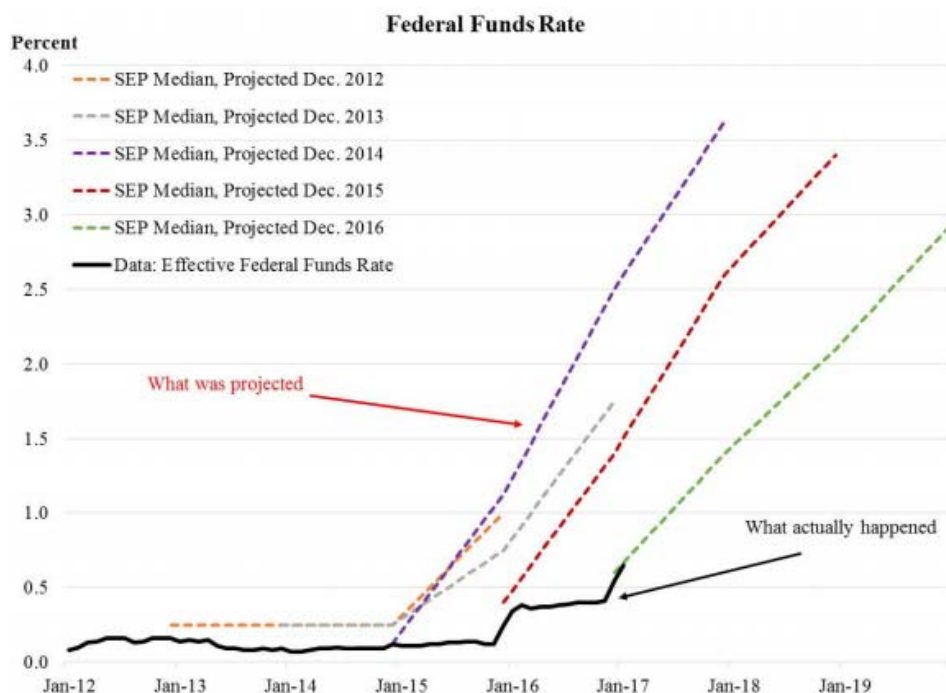
At least four major central banks are likely to raise their benchmark policy rates in 2017 – the Fed, BOE, PBOC and ECB – albeit for very different reasons.<sup>2</sup> With world growth at a subpar 3% per annum, none of these policy adjustments is expected to be dramatic.

As gatekeeper to the world's foremost reserve currency, the Fed's action will carry the most weight. Moreover, the Fed's predicament seems to be the most compelling – once the domestic economy reaches full employment, negative real interest rates simply are no longer appropriate. What we also know is that Fed officials no longer believe the old norms for the policy rates are relevant. Staff research puts the new 'neutral' real rate at about 0.5%, compared with the historic inflation-adjusted norm of 2%.<sup>3</sup> That translates into a nominal funds rate of about 2.5% given the Fed's 2% inflation target. The staff research attributes the changing norm to the shift in savings patterns of an aging US population but the cause could just as well be the savings glut that has grown out of Asia's industrialisation. In either case, the root cause of low real interest rates is structural and will not disappear anytime soon. In simple terms, aging populations everywhere will have an ongoing need for income-generating assets that will suppress real yields for decades.

While this long view of low real interest rates is becoming increasingly accepted, the short view remains fuzzy. Namely, how can central banks get back to positive real interest rates and normal balance sheets with the least disruption to financial markets?

Part of the problem has been the Fed's poor track record in forecasting its own policy rate. Figure 1 shows the published forecasts of FOMC participants at the end of each of the past five years. Since 2015, these projections have consistently depicted an immediate and fairly abrupt reversion of the fed funds rate toward a neutral stance, when in reality the FOMC has only managed two adjustments of 25 basis points. To be fair, the views of FOMC members are conditioned by staff projections that in turn are based on standard Taylor models. Because those models do not capture the secular trend to lower real rates, they persist in projecting an immediate reversion to neutral as the US economy approaches the targets on full employment and 2% core inflation. Not surprisingly, financial markets have become increasingly incredulous about these projections and even today, when the Fed is close to meeting both its employment and inflation targets, futures markets continue to expect much less tightening than FOMC members do.

**Figure 1: Missing the mark**  
The FOMC policy rate projections versus reality



Source: James Bullard, President, St Louis Federal Reserve Bank, presentation to Forecasters; Club.

## AN ALTERNATIVE METHOD

If we are to navigate through the murky waters of normalising policy rates without a nasty surprise, central banks will need to improve the credibility of their forward guidance. A better model for projecting the policy rate would help.

Here is a framework that I have used for the past 15 years with remarkable success. Namely, I have augmented the standard Taylor model with another priority that can override the Fed's mandates of full employment and price stability during times of stress. In simple terms, the Fed's first priority is the safety and soundness of the financial system as was its founding purpose stated in the Federal Reserve Act of 1913. In effect, I have added a variable to reflect possible presence of systemic risk, which allows the Fed to do whatever it takes to remedy that risk. Although this variable may sound something akin to Greenspan's so-called 'put', it is supposed to mimic the conditions the Fed faced during the Great Financial Crisis when markets became dysfunctional, counterparty risk soared and lending seized up. I stress the conditionality of this priority – only the FOMC can decide when to use this 'ace in the hole' and they can get it wrong, as I believe Chairman Greenspan did on several occasions.

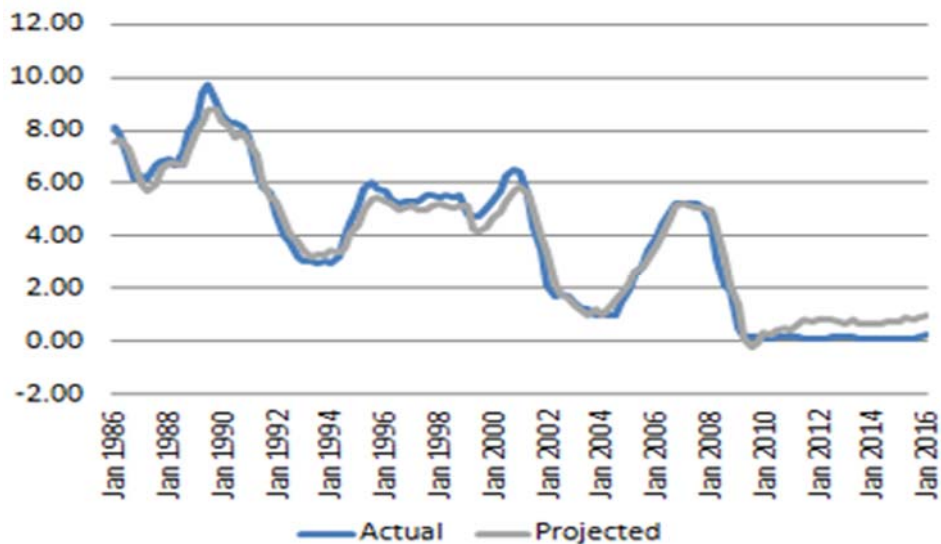
The challenge is to define a variable that reflects the possibility of systemic risk. I have chosen Moody's ratio of corporate credit rating upgrades to downgrades. Similar to the other variables in the Taylor model, this ratio is defined as the gap from a normal or sustainable level, which in this case should be unity (i.e. upgrades should be balanced by downgrades in a steady state).<sup>4</sup> This proxy seems reasonable given that credit downgrades soar for both banks and companies when financial markets seize up and firms no longer can rollover their short-term debt. This sequence of events transforms recessions into banking crises and depressions, which is ample reason for the Fed to undertake extraordinary measures.

The simulated results are shown in Figure 2. Note that this model picks up all three of the sharp deviations from the 30-year downward trend in the funds rate:

1. in the early 1990s in the wake of the savings and loan crisis;
2. during the deflation scare of the early 2000s; and,
3. the Great Financial Crisis of 2008 to 2010.

It even picks up the misguided easing after the Long Term Capital debacle and subsequent Russian default on Soviet debt in 1998. What the model also seems to capture is the secular decline in real yields as well as the gradual trajectory for the Fed's reversion to a new neutral rate. By now the funds rate supposedly should be 1% and drifting higher to 2% over the next few years. The model's steady state is about 2%. Although the model does a much better job than conventional Taylor models in simulating the recent reality, I caution that there is no guarantee that the predicted values are in some sense the 'correct' policy setting. Only time will tell if it remains a robust projection tool. The bottom line for now, though, would be that we have some catching up to do and probably should shoot for a funds rate of at least 1% to 1.25% by year end 2017.

Figure 2: An alternative model for the Fed's policy rate  
Fed Funds Effective Rate



Source: Fenwick Advisers' proprietary model, and the US Federal Reserve.

## DURATION AND INFLATION

Higher policy rates do not necessarily translate into higher long-term rates. It depends in large part on whether the central bank is on the right track or the wrong one. When the economy is well short of full employment, the central bank can err on the side of ease with relatively few adverse consequences. Once the economy reaches full employment, however, the risks tilt such that the central bank can ill-afford to get behind the curve.

Figure 2 suggests that the Fed was beginning to fall behind in normalising interest rates during the latter half of 2016, and the prospect of fiscal stimulus under the new Republican administration quickly was translated into expectations of accelerated rate hikes and higher inflation. That combination already caused yields on long-dated US Treasuries to climb about 100 basis points in a matter of weeks post-election. Expectations about what will happen to the price level during the term of the bond, not the policy rate *per se* are one of the key factors shaping of the yield curve.

I would judge that this latest backup in yields reflect a cyclical perspective on inflation – namely, an economy at full employment tends to experience cost pressures especially if aided by too much monetary and fiscal stimulus, and inflation once unleashed tends to have an inertia that is difficult to suppress. Certainly, that was the US story from the mid-1960s well into the 1980s (Figure 3). The economy reached full employment around 1964 and remained overheated for almost two decades despite several recessions.

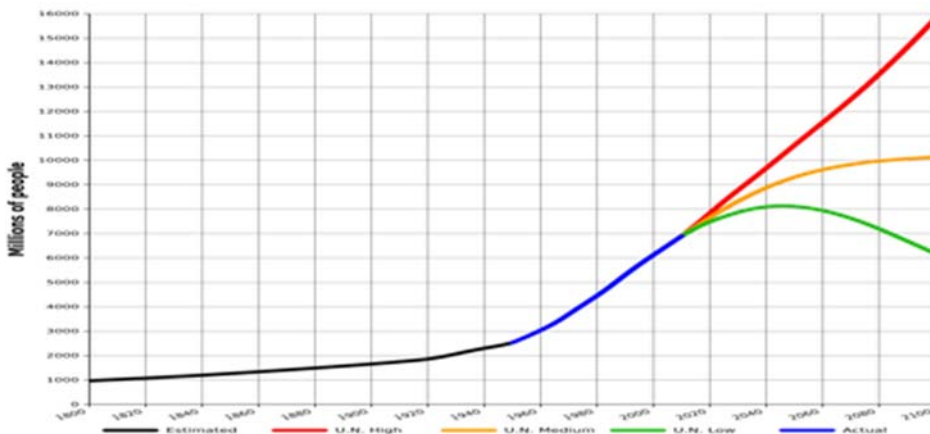
**Figure 3: The great price wave of the 1970s and 1980s...**  
US Inflation rate



Source: [www.tradingeconomics.com](http://www.tradingeconomics.com) | U.S. Bureau of Labor Statistics.

Although that long price wave was abetted by bad policies – both excessive fiscal stimulus and an exceptionally lax Federal Reserve – the root cause was an unprecedented demand shock whose origins were explosive growth in population. Between 1950 and 2010, world population expanded exponentially from 2.5 billion to 7 billion, shown as the blue portion of the curve in Figure 4.

**Figure 4: ... whose root cause was an unprecedented population-driven demand shock**



Source: Fenwick Advisers

Even the most prescient policies could not have thwarted the resultant explosive growth in the demand for goods and especially commodities. In that context, the historic spike in bond

yields that peaked in 1980 in the US (Figure 5) was not an aberration from fundamentals – they reflected high and rising inflation that was expected to persist indefinitely.

Figure 5: Soaring bond yields were abnormal but not an ‘aberration’



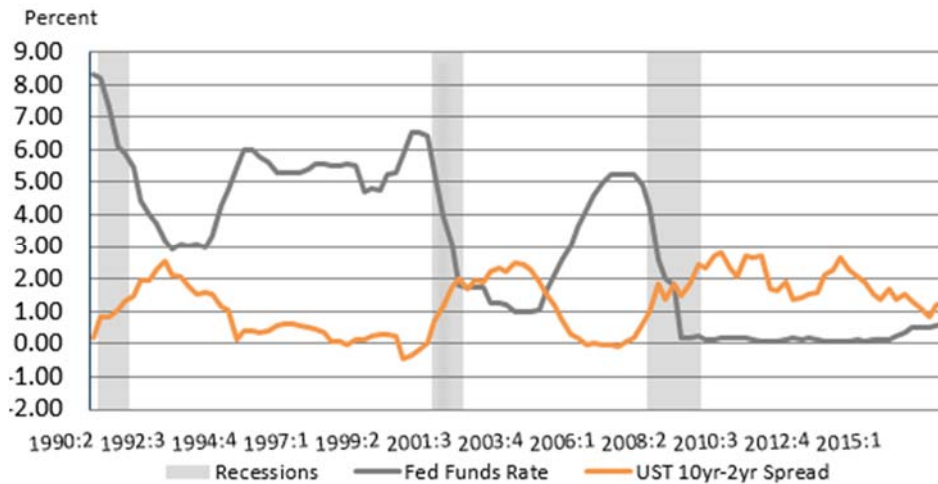
Source: Bank of England, U.S. Treasury, Global Financial Data, PIMCO as of 31 December 2014.

Contrary to circumstances of the last 20th century, population growth has now slowed to a crawl in most developed nations. The United Nations projects world population to peak at 10 billion in 2100 (the 'medium' projection in Figure 4). The wild cards are Africa and India. For now, though, the great demand shock of the past 50 years is ebbing. Working age populations actually have peaked in Japan and China, and Europe is not far behind. In short, we may face the possibility of cyclical policy blunders, especially from the new crowd of so-called populist politicians, but we do not have the more potent, secular price pressures coming from explosive global demand.<sup>5</sup>

## STAYING AHEAD OF THE CURVE

If this assessment is correct, central bankers do not need to embrace the draconian policies of the Fed under Chairman Volcker to keep a lid on inflation. They just need to stay ahead of the inflation curve on two fronts – normalising the fed funds rate and letting its portfolio run off. As long as economic growth is 2% per annum or better, that means the FOMC must pick up the pace on normalising the policy rate to 2%. At least two, preferably three, rate adjustments of 25 basis points this year will keep the Fed on pace. Their dawdling in 2016 was not good enough to preclude the sudden re-pricing of bond yields last fall. I would expect the US yield curve to flatten under those circumstances as it usually does in the late stages of business cycles (Figure 6).

Figure 6: Fed funds rate and slope of UST yield curve

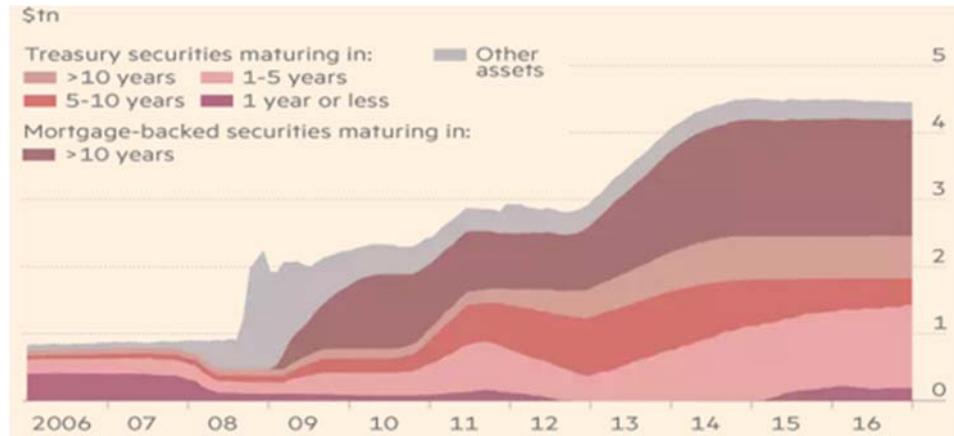


Source: Fenwick Advisers

On the balance sheet, there is less need for immediate action – 2018 will be soon enough. Some FOMC participants have cited US\$1.5 trillion as the new target level of holdings. The Fed's only possible graceful exit will be first, to announce that they will no longer reinvest interest from the portfolio; and, second, to allow bonds to mature without replacement. Outright bond sales are not an option. Rosengren, Harker and Bullard already are openly discussing the 'new normal' balance sheet, although not the timing of any change in current reinvestment policy. When that announcement comes, there is a risk of a bond selloff as carry traders exit in mass. But I expect the US bond market will stabilise as long as the Fed is clear about its intentions and stays the course.

The unwinding should take about almost 10 years. As can be seen in Figure 7, a large portion of the Fed's holdings are short-term Treasury securities that easily can be allowed to mature in due course, about \$1.2 trillion have maturities between one and five years, and Morgan Stanley estimates that about \$600 billion would roll off within a two-year timeframe. Only \$600 billion of the Treasuries have maturities of 10 years or more. Mortgages account for \$1.7 trillion of the Fed's holdings and would require a longer holding period. In my opinion, the runoff in the portfolio will prove to be much trickier for markets than normalisation of the policy rate which markets already presume is a given.

Figure 7: Federal Reserve balance sheet composition



Source: Federal Reserve Board; Haver Analytics.

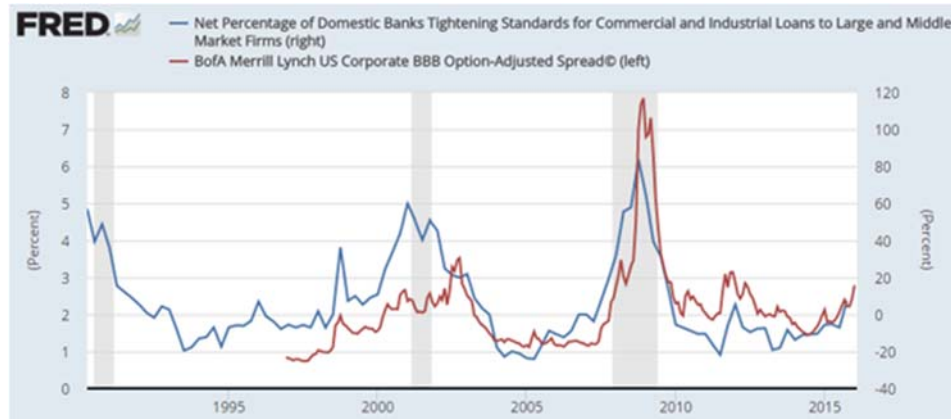
## THE REAL RISKS

Rising policy rates, especially when gradual, rarely disrupt financial markets. Indeed, equities often thrive along with some other risk assets because the central bank is responding to a healthy economy – just a bit too healthy.

The real problems arise with credit quality. Governments feel little pressure to cut spending as long as debt service remains manageable thanks in large part to low interest rates. Similarly, companies with weak balance sheets continue to rely heavily on debt financing as long as they can easily roll over their debt. A crisis only ensues when banks decide not to roll over loans, usually because they are experiencing a worsening in non-performing loans. The availability of credit, not its cost *per se*, is the tipping point. We have not reached that point yet (Figure 8). When the credit crunch comes, as it inevitably will, there will be no place to hide except debt securities with the least probability of default.



Figure 8: Tighter bank lending standards are a harbinger of recessions



Source: St Louis Federal Reserve Bank.

## ENDNOTES

1. See Robert S Gay, "The Inevitability of Tighter Monetary Conditions", Fenwick Advisers, January 27, 2017.
2. The BOE and PBOC are likely to raise rates to defend their currencies and to thwart capital flight while the ECB may need a symbolic move to acknowledge the mild revival of Europe's growth and fading fears of deflation.
3. See "Understanding the New Normal: The Role of Demographics", Etienne Gagnon, Benjamin K. Johannsen and David Lopez-Salido, Federal Reserve Board, October 3, 2016.
4. Likewise, I include my estimates of the output gap (the level of real GDP relative to potential) and the core inflation gap (actual inflation relative to its 2% target), both of whose steady states are defined as zero.
5. In analytical terms, globalization of production (a supply shock) and now the ebbing of the great population-demand shock have worked to reduce the responsiveness of prices to a negative output gap, i.e. when actual output exceeds potential.



*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.*