



# Illuminate

ANALYSIS THAT REVEALS

OCTOBER 2018

## **ECONOMIC OUTLOOK:**

*Powell Fed Will Ensure Cash Does Not Become King*

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THE CARLYLE GROUP

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GLOBAL ALTERNATIVE ASSET MANAGEMENT

# Powell Fed Will Ensure Cash Does Not Become King

By Jason M. Thomas

History suggests there is an inertial quality to Fed policymaking. An object in motion tends to stay in motion unless acted upon by an outside force. With the U.S. economy growing at the fastest pace in 13 years, unemployment at 50-year lows, and the full effect of the 2017 tax cut not scheduled to hit the economy until next year's tax-filing season, what will stop the Fed from continuing to hike at the current 100bp annual rate well into 2020?

This thought upended financial markets at the start of October. Longer-duration bonds fell in value by over 4% in a single week,<sup>1</sup> and many "yield products," such as high-dividend stocks, REITs, and BDCs fared even worse in the days that followed. After being suppressed for years by forward guidance and quantitative easing (QE), interest rate risk has made a sudden return.

In the current environment, cash suddenly looks surprisingly attractive. Three-month AA commercial paper already yields 2.35%. The five additional rate hikes forecast by the median FOMC member will push short-term rates near 3.75% by 2020.<sup>2</sup> Why accept the duration or market risks necessary to eke out 4% returns when cash yields are heading above 3.5%? Some portfolio rebalancing away from risk was inevitable, as bonds reprice relative to cash and stocks reprice relative to bonds.

But short-term interest rates may already be much closer to "neutral" than many suspect. After nine years of modest growth, demand still isn't outstripping productive capacity. If a late-cycle investment boom (and corresponding price pressures) does not materialize in 2019, neither should the three-to-four Fed rate hikes many investors now fear.

## Where is Neutral for the Fed?

As a concept, the "neutral rate" serves as the breakpoint between "accommodative" and "restrictive" monetary policy.<sup>3</sup> Interest rates below this level encourage more spending and borrowing than can be sustained indefinitely, while rates above it result in more savings and slower demand growth. With the economy effectively at the Fed's dual objectives of full employment and 2% inflation, policy is moving towards neutral at a 100bp annual rate.

But where is neutral and when will the Fed stop hiking? Since the neutral rate cannot be observed, it must be estimated, or inferred, from the data. At the Fed, these estimates come from complex macroeconomic models that iterate on the difference between actual spending in the economy and a counterfactual trend (potential GDP). These models have their detractors, most notably the Fed Chair himself, who famously likened their estimates of the neutral rate – dubbed "r star" – to astrology.<sup>4</sup>

As Powell explains, contemporary quantitative methods for policy analysis rely too heavily on hypotheticals, which serve as the baseline from which actual conditions are measured. Estimates for these hypotheticals depend on the precise specification of relationships across variables that change through time in response to shifts in demographics, technology, trade flows, capital mobility, and (most notably) expectations.

(Consider the questions a changing economy raises for traditional policy analysis. What is the capacity utilization of Facebook? Why should the capex of firms in the technology and pharmaceutical sectors respond to changes in interest rates when many of these businesses generate several times more cash flow from operations each year than they could possibly reinvest? Are we certain that lower interest rates will always spur more household spending even as a larger share of the population moves into retirement and depends on interest income for its consumption?)

Separating structural change from cyclical fluctuation is very difficult in real-time. Analysts relying on the Fed's 2011 estimate of the "natural rate of unemployment," for instance, would anticipate wage growth today that's 200bp per year faster than we're witnessing (Figure 1). Unemployment rapidly broke through "full employment" thresholds without any corresponding pick-up in inflation. While it is tempting to theorize that this is because the GDP generated per additional worker has been so modest, slowdowns in productivity growth are actually supposed to *spur inflation* by imposing supply constraints on the economy.<sup>5</sup> Macroeconomic theory has been forced to confront many confounding developments over the past several years.

<sup>1</sup> 20-year Treasury Bond Data obtained from Bloomberg, October 2018.

<sup>2</sup> Summary of Economic Projections, September 2018.

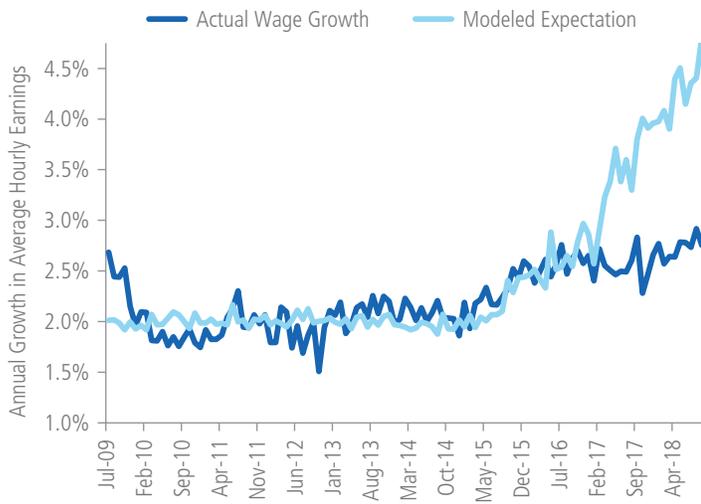
<sup>3</sup> Defined as the real short-term interest rate consistent with output equaling its natural rate and constant inflation. Neutral is also commonly referred to as the "natural rate" or "equilibrium rate," although those rates can incorporate short-term correctives to deviations from the central bank's inflation or output targets.

<sup>4</sup> Powell, J. (2018), "Monetary Policy in a Changing Economy," Federal Reserve Bank of Kansas City Symposium, August 24, 2018.

<sup>5</sup> Tambalotti (2003), "Inflation, Productivity and Monetary Policy: from the Great Stagflation to the New Economy," Federal Reserve Bank of New York.

**FIGURE 1**

**Wages Less Sensitive to Decline in Unemployment Rate<sup>6</sup>**



**Powell’s Purely Empirical Approach**

The real problem may be that “r-star” is not some timeless constant but the ever-changing product of countless moving forces in a dynamic economy. This “neutral rate” is too abstract. A better way to conceive of “neutral” is as the price that, in today’s economic conditions, ensures that the supply of savings equals the demand.

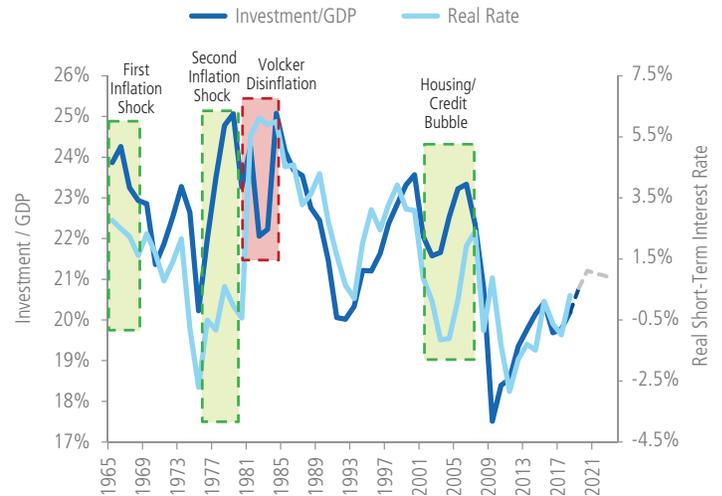
As originally specified (in 1898), the neutral or natural rate is the real interest rate that equates economy-wide savings with investment.<sup>7</sup> The real short-term interest rate – U.S. Treasury bill yield net of inflation – captures the real return savers earn on a risk-free basis. Its level should vary through time to ensure that savings<sup>8</sup> adjusts to accommodate investment demand – total, economy-wide purchases of real property, plant, equipment, infrastructure, defense hardware, and intellectual property. As investment rises as a share of national income, savings<sup>9</sup> becomes relatively scarce, which causes the neutral rate to rise as marginal investments offer higher expected returns. Likewise, when investment declines, the bargaining position of savers deteriorates, which causes the neutral rate to fall to encourage more spending.

Not surprisingly, the real short-term interest rate has tracked investment demand quite closely over the past 50 years (Figure 2). What’s more interesting, however, is that any deviations from the “neutral rate” implied by investment demand have resulted

in sharp and substantial changes in inflation trends. Periods of accelerating inflation or instability can be traced directly to the Fed’s failure to move rates as necessary to equate (desired) savings to investment.

**FIGURE 2**

**Investment Demand & Real Short-Term Interest Rates, 1965-2018<sup>10</sup>**



According to this simple framework, real rates were persistently too low in the 1970s, which led to predictable bouts of inflation as total spending outstripped real capacity. The Volcker disinflation (1980-1984) then took rates “too high” in a successful effort to wring inflation from the system. After the “Great Moderation” of 1985-2002, when rates were set close to target, real rates failed to keep pace with the housing-led investment boom (2003-2006). In each case, the deviation from neutral explains the observed change in inflation (Figures 3 and 4).

What real interest rate is required to ensure total spending does not grow beyond real resource constraints today? With investment demand slightly in excess of 20% of GDP, today’s neutral rate looks to be close to 0.4%, or a nominal short-term rate of 2.4% when accounting for inflation. That is precisely where the fed funds rate will be after December’s rate hike. While another hike in March (to 2.65% on fed funds and likely 3% on one-year T-bills) is not likely to matter, each additional hike after that would make cash yields harder and harder to resist. The real return on risk-free saving would rise to levels that not only deter consumption, but also make cash unusually attractive relative to other financial assets and foreign currencies. A 3.5% cash rate would be substantially in excess of the average 30-year yield in the rest of the G10, raising the risk of destabilizing dollar appreciation.

<sup>6</sup> Carlyle Analysis, BLS and BEA, October 2018.

<sup>7</sup> Of course, this is a standard implication of all macro models. Wicksell (1898) also described the natural rate as the marginal product of capital and the rate of interest consistent with price stability. C.f. D’Amato (2005), “The Role of the Natural Rate of Interest in Monetary Policy,” BIS Working Paper, No. 171.

<sup>8</sup> Desired or ex ante savings, more precisely.

<sup>9</sup> As emphasized by Borio, C. and P. Disyatat (2011), “savings” in this context means deferred consumption or, more precisely, output not consumed. BIS Working Paper, No. 346.

<sup>10</sup> Carlyle; Organization for Economic Co-Operation and Development; U.S. Bureau of Labor Statistics; U.S. Bureau of Economic Analysis; IMF WEO Database, April 2018.

FIGURE 3

Deviations from Neutral Lead to Shifts in Inflation<sup>11</sup>

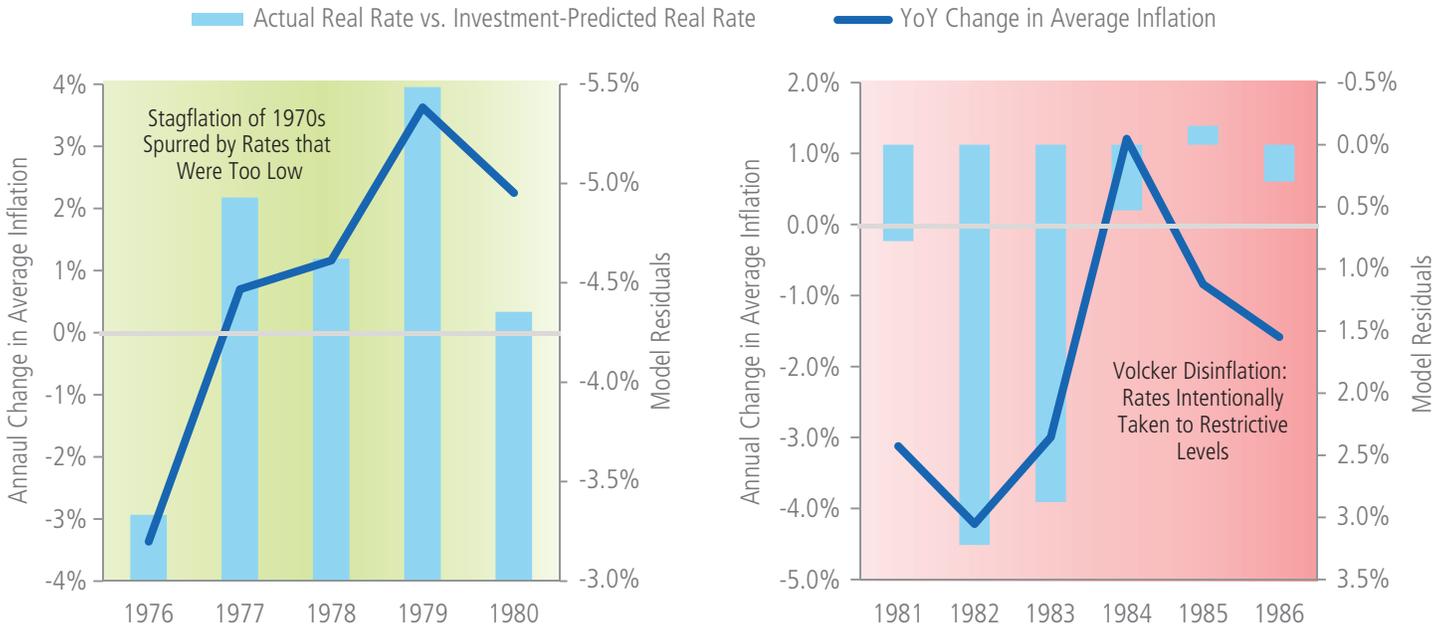
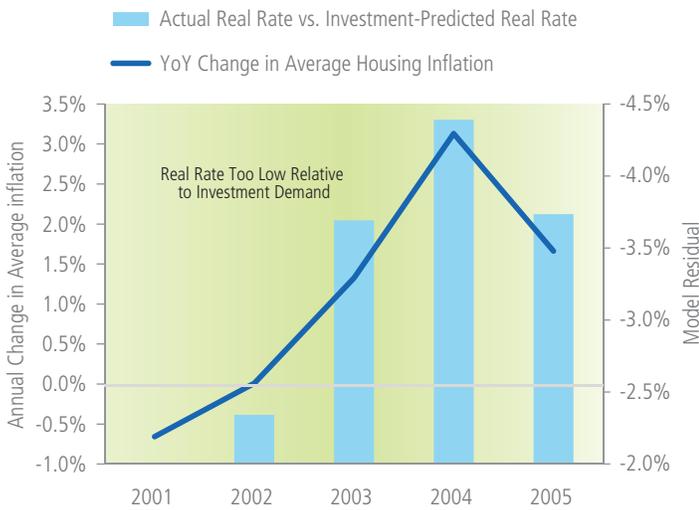


FIGURE 4

Inflation Rises as Rates Too Low During Housing Boom<sup>12</sup>



Pay Close Attention to Corporate Margins

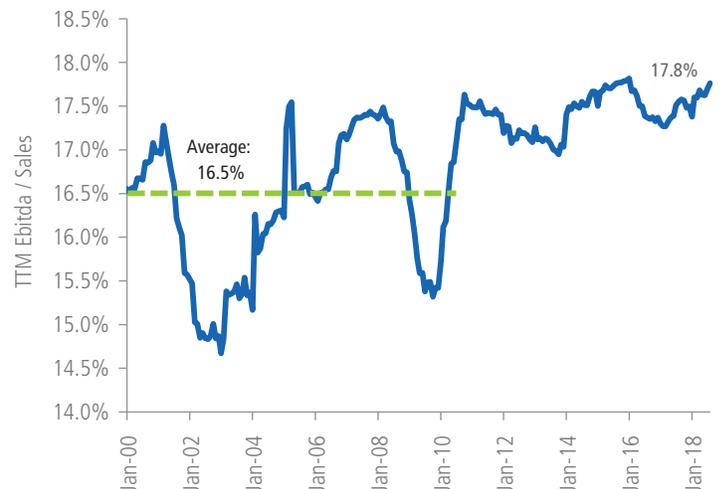
Those additional hikes are not likely under the Powell Fed because policymakers will focus on *actual data* rather than counterfactuals.

Is total spending really at levels that seem to be taxing societal resource constraints? Cost pressures are evident across most businesses, with large increases in the prices of fuel, raw materials, and imported components

that have been aggravated by tariffs. Wage pressures are also visible across a much wider swath of the economy. But with corporate operating margins close to record highs (Figure 5), these cost increases are more likely to dent corporate profits than result in accelerating consumer price inflation. Powell should only be concerned if businesses shrug off these cost increases and ramp up investment spending from current levels. Any such pick-up in corporate investment – and corresponding acceleration in GDP – would be evident in the data well in advance of the June and September FOMC meetings.

FIGURE 5

Operating Margins Remain Robust<sup>13</sup>



<sup>11</sup> Carlyle; Organization for Economic Co-Operation and Development; U.S. Bureau of Labor Statistics; U.S. Bureau of Economic Analysis; IMF WEO Database, April 2018.

<sup>12</sup> Carlyle; Organization for Economic Co-Operation and Development; U.S. Bureau of Labor Statistics; U.S. Bureau of Economic Analysis; IMF WEO Database, April 2018; S&P Dow Jones Indices, October 2018.

<sup>13</sup> Carlyle Analysis of S&P Capital IQ Data, September 2018.

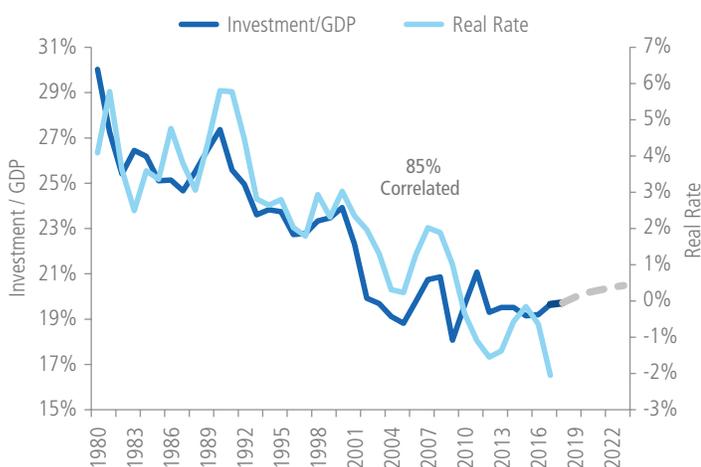
## Conclusion

The era of accommodative monetary policy is over. The Fed is moving to neutral as fast as the economy can tolerate. But the fed funds rate at the end of normalization may be a lot closer to current levels than many observers anticipate.

Powell values data and experience over models and theory. The real return on cash does not need to rise substantially from here. There's no looming inflationary inferno to snuff out. Corporations, as a whole, continue to generate more operating cash flow than they invest,<sup>14</sup> with years of earnings-per-share growth engineered by cost reductions, share repurchases, and now tax relief. It may seem hard for the Powell Fed to pause in June 2019 if the economy continues to perform well, but that is exactly what it is likely to do.

## APPENDIX

### German Real Rates More Closely Match Levels Implied by Investment Demand (85% Correlation)<sup>15</sup>



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<sup>14</sup> Federal Reserve, F. 103, September 2018.

<sup>15</sup> Carlyle; Organization for Economic Co-Operation and Development; IMF WEO Database, April 2018.

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