



# Historic Boundary Breached: 30-Year US Treasury Yield Lowest Ever (2.39%); Asset Allocators Should Be Strategically Cautious on Debt Asset Class

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**Multi-century records are rare in every field, particularly for capital markets.**

**On January 14, 2015, the US Bond market crossed a rare multi-century threshold.**

In the nearly quarter millennium of America's existence, canal builders, railroad barons, public utility founders, industrial behemoths, highway constructors, financial institution consolidators, and government financiers have never paid less in the long-maturity debt markets to fund their operations. This has been true through the aftermath of revolutionary war, civil war, two world wars, and numerous smaller conflicts. This has been true through inflationary and deflationary times, through depressions, recessions and expansions, and through periods of dollar weakness and strength.

The capital market chronicles will record that during the second week of January 2015, the 30-year US Treasury yield fell to a record intraday low of just 2.39%. This is a most welcome development for the US Treasury, taxpayers, agencies, and corporations. But bondholders should be wary.

This rather paltry recompense for the pleasure of holding a long-dated US government bond ranks dead last since 1800. As shown in our accompanying chart of long US interest rates over the past 215 years from 1800 through January 14, 2015, this miniscule yield neighborhood was only visited at the conclusion of World War II and in 2012.<sup>1</sup>

Compared to the average yield of 5.20% during the past 215 years, the current low yield trails by 2.81%, equivalent to 1.5 standard deviations below the long-term mean.

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<sup>1</sup> Note: series uses month-end yields; previous trough in February 1947 (2.45%) also reached in July 2012 using daily closing yields



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As usual in capital markets, this valuation outcome has many parents. On a macro basis, the dearness of US Treasury debt can be traced to a cumulative, multi-decade process started in 1979 by Fed Chairman Paul Volcker to wring inflation out of the financial system. This heightened central-bank vigilance has been abetted by accelerating technological changes that vastly improve market efficiencies across nearly all goods and services. And in response to the Great Recession, a vast sea of liquidity has been created by central banks to stimulate advanced economies. The resulting surplus of financial capital inherently bids down the price of debt borrowing.

These macro currents have been reinforced by the strengthening US dollar, which boosts international demand for dollar assets, admittedly growing deflation anxiety, and some doubts about global economic growth as confirmed by the World Bank's downward revision of its 2015 forecast from 3.4% to 3.0% on January 13, 2014.

While noteworthy, this breach of a historic boundary hardly surprises. Major yield curves have been venturing into uncharted territory since the "official" conclusion of the Great Recession in 2009. This trend has accelerated since the beginning of 2014.

Presumably confirmed by softening commodity prices, particularly energy, deflationary forces have been sighted - since August 2014, the market's expectation<sup>2</sup> of inflation over the next 30-years (difference between nominal Treasury and TIPs yields) plunged 61 bp to 1.74% currently, mirroring about 68% of the nominal yield decline.

Based on these powerful currents, the attainment of further historic yield troughs over the course of 2015 would not stun. Still, rather few capital market trends can be categorized as perpetual. Eventually, the portfolio utility of subscribing to such low income and return vehicles will be called into question.

In round numbers, a 30-year bond with 2.50% coupon would provide, before interest-on-interest, a coupon return of only 75% of the principal over the life of the bond (30 years x 2.50% = 75%). For cumulative interest payments to match the principal loaned, a 30-year bond must bear a coupon of approximately 3.33%.

Unprecedented susceptibility to interest-rate risk also restrains investment enthusiasm. The duration of a new 30-year US Treasury is almost 21 years. If bond bulls prove prescient and the long end of the US yield curve dips another 50 bp-100 bp into the realm of 1% handles, then long bond prices would climb approximately 10% to 21%.

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2 Note: Difference between nominal Treasury and TIPs yields does not represent pure expectations.

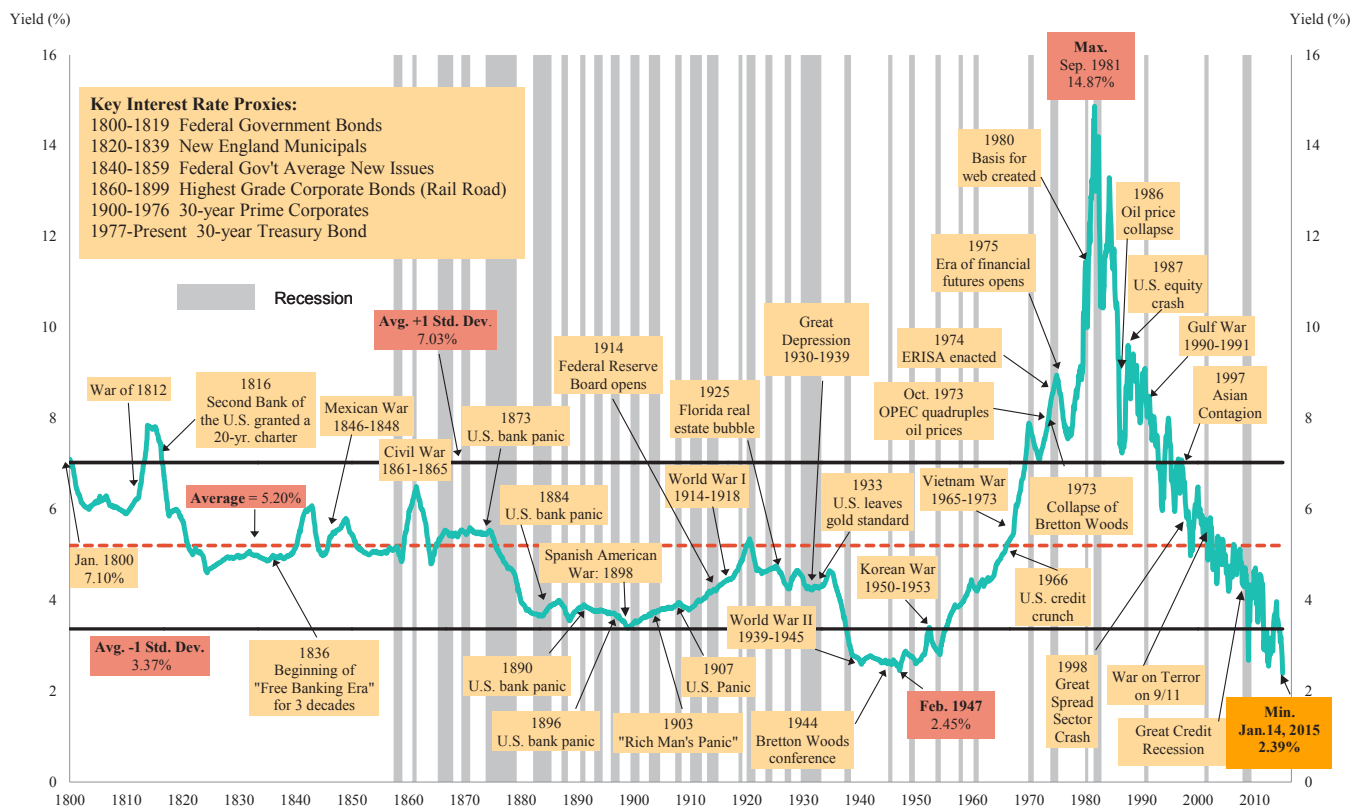
By the same token, the eventual normalization of US monetary policy would translate into a 21% to 42% loss in principal value if long US interest rates rise by a mere 1% to 2%. And a return to the long-term yield average of 5.20% (from 2.39%) would imply a mark-to-market reduction in value of 59%.

Low yields, which admittedly can go lower, introduce exceptional vulnerability to rising interest-rate risk. In our view, the potential risk/return trade-off has never been more asymmetric. Asset allocators should be strategically cautious about the fixed-income asset class, especially at the long end of the yield curve.

Hopefully, the demanders of debt capital will use this abnormal interlude advantageously to fortify corporate, housing, and government infrastructure needs. And in so doing, capital users will be following the script authored by economic policymakers to stimulate growth.

This snapshot of the price of long-term capital hardly presages additional endogenous tests for the global financial system in our opinion. Rather, the cheapness of debt capital in the mid-Teens may herald exceptional economic growth and corporate profitability in the Twenties. And we daresay, future capital market practitioners and academics in decades hence will look back with some wonder at this hyper-low yield environment of the still early 21st century.

**Figure 1. A History of Long-Term US Interest Rates, US Recessions, and World Military Conflicts: 1800 to January 14, 2015**



Monthly data; Source: BNY Mellon using data from Bloomberg, Global Financial Data, Lehman Brothers Fixed Income Research, and NBER

- **Last time > 5.20% average:** May 2006 – 5.23%
- **Percentage of months below 5.20% average:** 62.11%
- **Peak (14.87%) to trough (2.39%) range:** 12.48%
- **Percentage of months below average less 1 standard deviation:** 9.34%
  - Longest consecutive streak of months below average less 1 standard deviation
    - September 1937 to April 1955 (212 months)<sup>3</sup>
    - September 2011 to May 2013 (21 months)
    - May 2014 to January 2015 (9 months)
  - Longest consecutive streak of months between average and average less 1 standard deviation (52.77% of total months)<sup>4</sup>
    - December 1820 to March 1840 (232 months)
    - October 1850 to March 1859 (102 months)
    - June 1875 to December 1919 (535 months)
    - November 1920 to August 1937 (202 months)
    - May 1955 to February 1966 (130 months)
    - August 2004 to August 2011 (85 months)<sup>5</sup>
- **Percentage of months above average plus 1 standard deviation:** 13.17%
  - Longest consecutive streak of months above average plus 1 standard deviation
    - March 1813 to May 1816 (39 months)
    - June 1969 to December 1992 (283 months)
  - Longest consecutive streak of months between average and average plus 1 standard deviation (24.72% of total months)<sup>6</sup>
    - March 1800 to February 1813 (156 months)
    - April 1865 to May 1875 (122 months)

Source: BNY Mellon using data from Bloomberg, Global Financial Data, and Lehman Brothers Fixed Income Research

**Figure 2. Interest Rate Sensitivity of a Hypothetical Par 30-Year US Treasury Bond**

	COUPON	DURATION (in years)
LONG-TERM AVG.	5.20%	16
+100 BP	3.50%	19
+50 BP	3.00%	20
CURRENT	2.50%	21
-50 BP	2.00%	23
-100 BP	1.50%	24
ZERO COUPON	0.00%	30

Source: BNY Mellon

<sup>3</sup> Note: yield above average less 1 standard deviation in May to June 1952

<sup>4</sup> Only included if streak greater than 5 years

<sup>5</sup> Note: yield fell below average less 1 standard deviation in December 2008 and rose above average in May 2006

<sup>6</sup> Only included if streak greater than 5 years

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