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CAMBRIDGE ASSOCIATES LLC

U.S. MARKET COMMENT

U.S. TIPS: LOOK BEFORE YOU LEAP

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TIPS: Look Before You Leap

As of May 31, 2005, ten-year U.S. Treasury Inflation-Protected Securities (TIPS) yielded a paltry 1.6% real, suggesting that TIPS are overvalued in absolute terms and simply too costly of an inflation hedge relative to spending requirements. Moving up and down the maturity curve, investors will find similarly unattractive rates, with the 30-year TIPS issue yielding 1.7% real and the five-year TIPS issue offering a real yield of 1.3%. TIPS do offer better relative value than nominal Treasuries if inflation exceeds 2.3% to 2.6% per year, depending on the maturity (Table A).[1] However, TIPS and nominal Treasuries serve entirely different portfolio functions, making their relative valuations of little consequence to investors using these securities primarily to support spending during periods of unexpected inflation and deflation.[2] In short, U.S. TIPS are overvalued and investors adding them as part of a diversified inflation hedge might consider pausing and/or building a laddered portfolio of global inflation-linked bonds.

Today's Valuations Relative to History

From 1997 through 2000, the average real yield on ten-year TIPS was 3.8%, which relative to average nominal Treasury yields of 5.8%, priced in inflation expectations of 2.0%. TIPS were significantly undervalued in both absolute and relative terms. Today, ten-year TIPS yield 1.6% real and nominal Treasuries, 4.0%, resulting in inflation expectations of 2.4%. TIPS are overvalued in absolute terms, but slightly undervalued relative to historical inflation (Table B) and recent inflationary trends (annual inflation has averaged 3.1% since May 2004; low of 2.5% and high of 3.5%).

The yield on ten-year TIPS is as low today as it was during the spring of 2003, when the economy was emerging from recession and fighting off deflation. However, now that the economy is growing at a rate in line with the long-term historical average, investors should be earning comparatively higher real returns. In fact, with more than 40% of Treasury bonds held by foreign investors, secular dollar weakness, and still negative real short-interest rates, the Federal Reserve faces significant pressure to "engineer" higher real interest rates. This may run counter to recent chatter of an economic soft patch and calls to pause raising rates, but interest rate policy remains highly stimulative—the current gap between real GDP growth and short-term rates is the widest it has been since the 1970s (Table C).

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[1] As of May 31, five-, ten-, and 30-year nominal Treasuries yielded 3.6%, 4.0%, and 4.3%, respectively.
[2] TIPS holders are guaranteed a return of par value if the bond is held to maturity. However, TIPS with significant inflation accruals would suffer significant short-term losses in the event of deflation, while nominal bonds would be expected to appreciate as yields fell. Thus, TIPS are best held as an inflation hedge, while nominal Treasuries are the best insurance against deflation.

Given the short history of TIPS[3] and the perils inherent in predicting inflation, investors should seek a real yield that reduces the opportunity cost of holding TIPS when inflation is generally contained. One proxy for determining a "fair value" yield is the arithmetic average real return earned on ten-year nominal Treasury bonds over a long history. Based on the average of annual real returns on ten-year nominal Treasuries since 1913 and 1950, this would suggest a fair value real yield of 2.2% or 2.7%. Monetary policy was highly experimental in the first half of the twentieth century and 1970s inflation was an historical outlier, thus suggesting that the midpoint of these series, or 2.5% real, might serve as an appropriate fair value proxy.

Global Picture

Beyond the United States, few countries offer extremely compelling real yields, with most at or below 2.0% real. The one exception is Australia, where real yields of 2.7% offer the best relative returns in the global inflation-linked bond market. The difference between nominal and real yields in the United States, United Kingdom, Canada, and Australia imply very similar break-even inflation rates of 2.7% to 2.9%, while break-even inflation levels in Euroland, Sweden, and France are generally closer to 2.0% and in line with their relatively slower growing economies. Despite similarly low real yields in most countries, a global as opposed to U.S.-centric inflation-linked bond portfolio provides diversification by economy, sources of inflation, and currency.

Conclusion

We consider TIPS to be a useful component of a diversified inflation-hedging program (adding a low volatility, high liquidity component). However, investors should wait for more attractive real yields to build a U.S. allocation, invest globally, and ladder[4] the portfolio to the greatest extent possible.

[3] U.S. TIPS were incepted in 1997, leaving investors with no historical performance during periods of high inflation. U.K. linkers, which are the oldest inflation-linked bonds, have a 24-year history, but also cover a period that was generally characterized by disinflation.

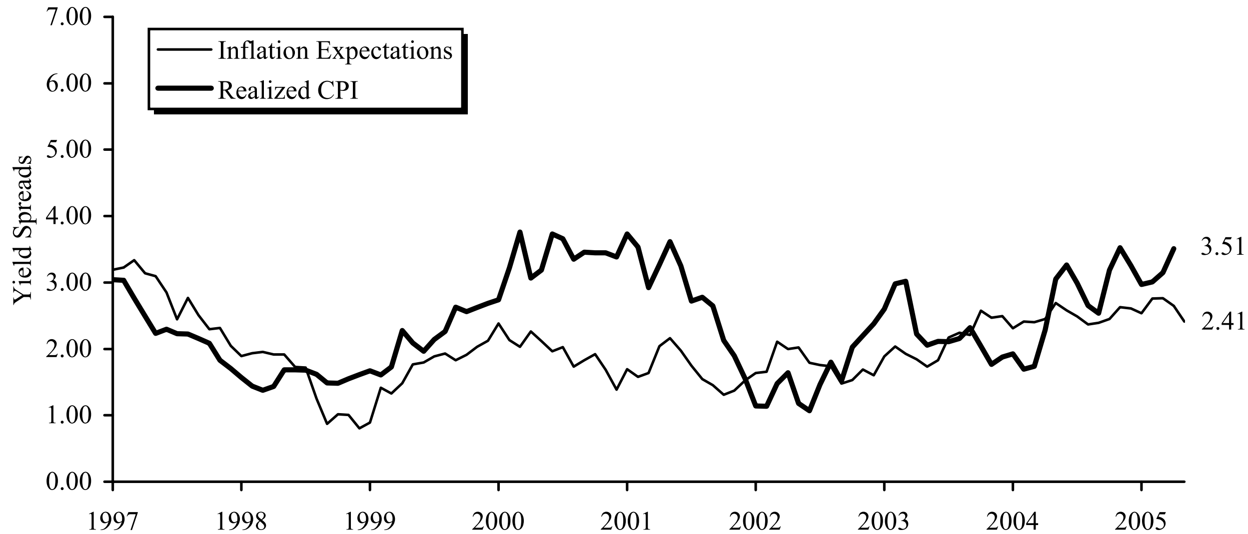
[4] Laddering a TIPS portfolio (i.e., building a portfolio of bonds with varying maturities) may allow investors to reinvest cash flows in higher-yielding securities as the bonds mature.

Table A

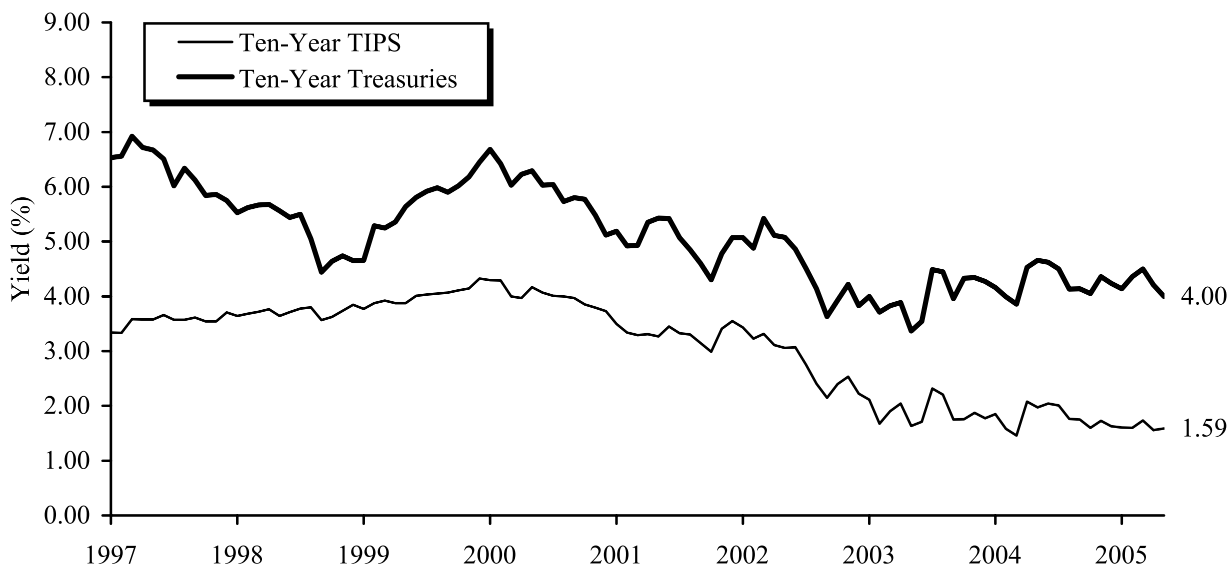
INFLATION EXPECTATIONS AND TEN-YEAR TREASURY YIELDS

January 31, 1997 - May 31, 2005

Inflation Expectations and Realized CPI



Ten-Year Treasury Inflation-Protection Securities (TIPS) and Ten-Year Treasuries



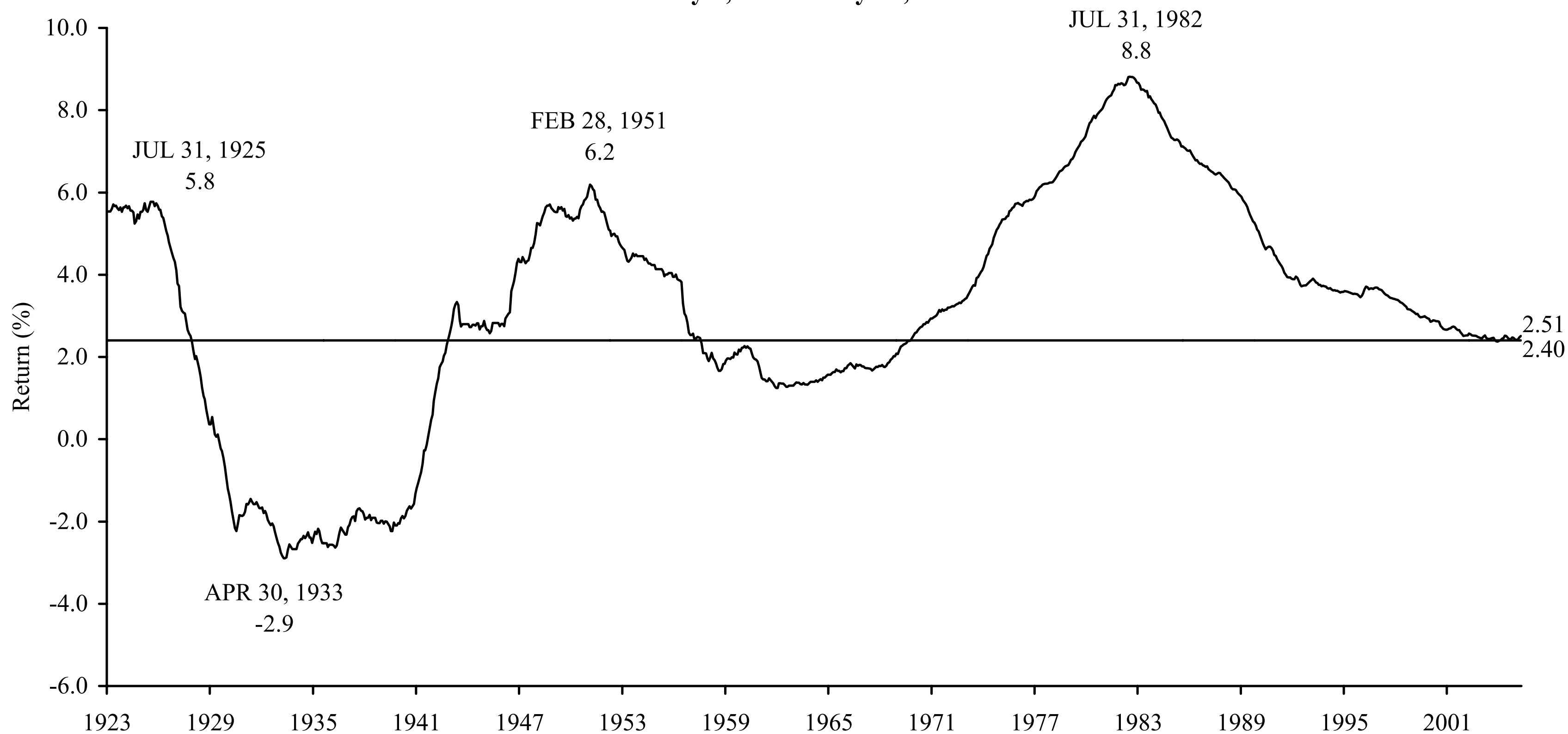
Sources: The Bloomberg, Bureau of Labor Statistics, and Thomson Datastream.

Notes: Inflation expectations are based on the yield spreads between ten-year Treasuries and TIPS. Realized CPI data are based on rolling 12-month CPI-U price returns and are through April 30.

Table B

ROLLING TEN-YEAR CPI-U AVERAGE ANNUALIZED COMPOUND RETURNS

January 1, 1913 - May 31, 2005



33.2% of the rolling 10-year AACRs for CPI-U were under 2.4% since January 1923.
23.3% of the rolling 10-year AACRs for CPI-U were under 2.4% since January 1940.
22.4% of the rolling 10-year AACRs for CPI-U were under 2.4% since January 1950.

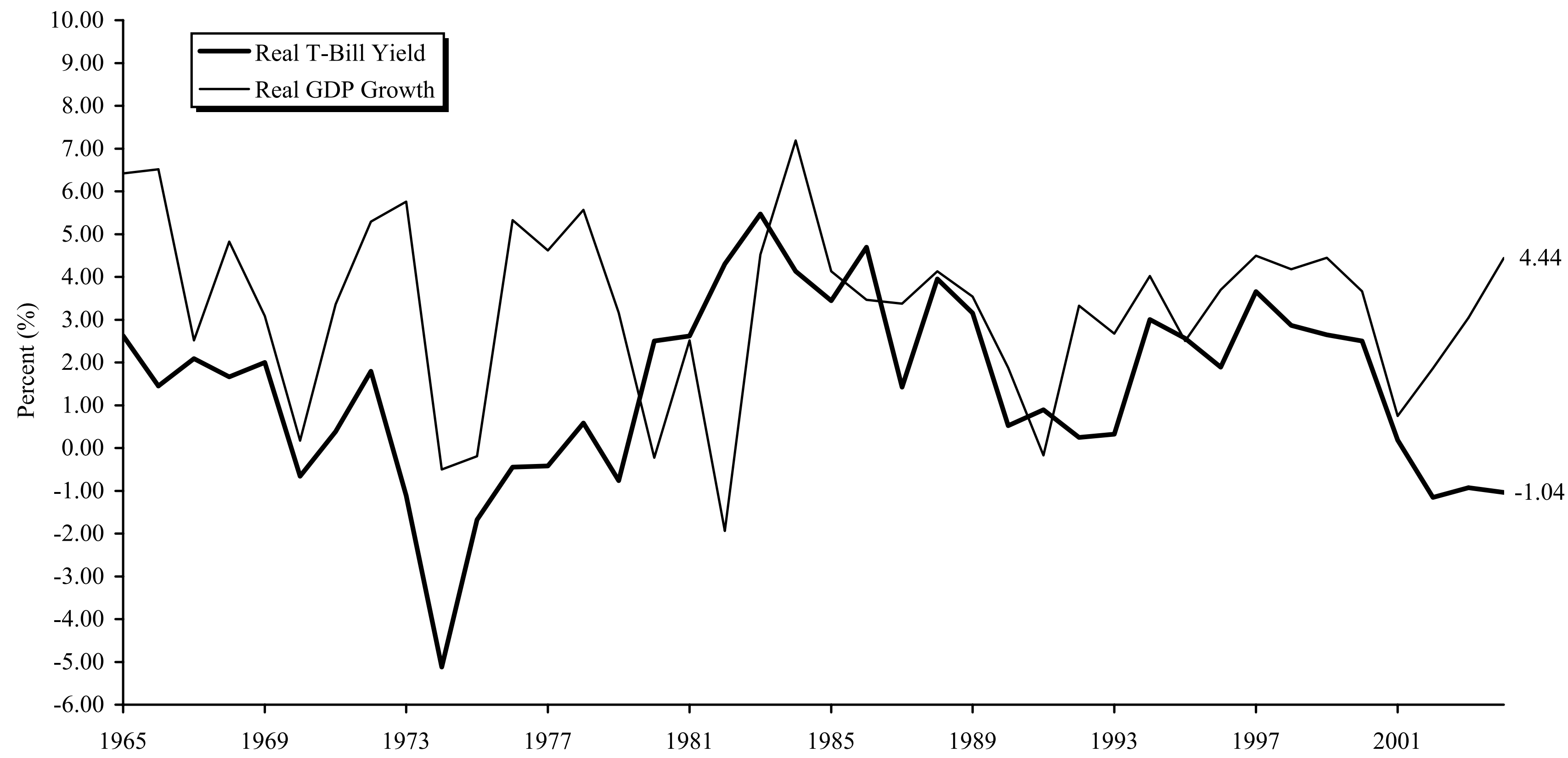
Source: Bureau of Labor Statistics.

Notes: Chart based on monthly data; 2.4% is the current inflation expectation priced in ten-year TIPS based on TIPS minus nominal Treasury yields. The rolling ten-year CPI-U Returns are through April 30.

Table C

REAL ANNUAL TREASURY-BILL YIELD AND GDP GROWTH

1965-2004

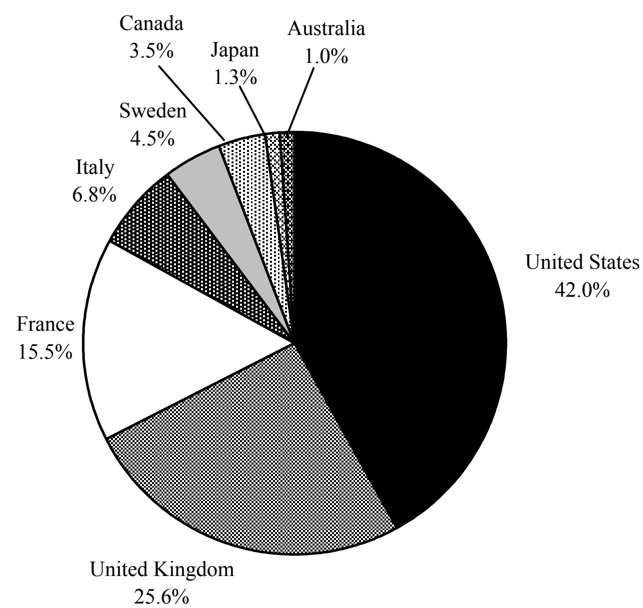


Sources: Bureau of Labor Statistics, Federal Reserve, Thomson Datastream, and *The Wall Street Journal.*

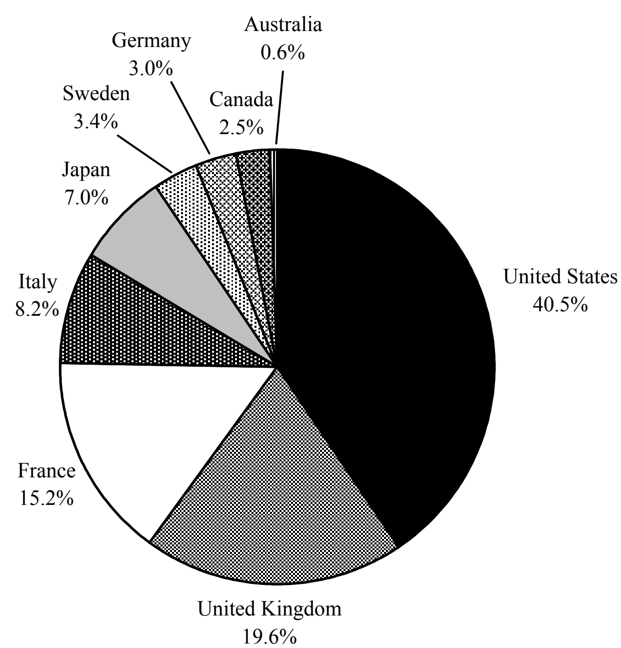
Table D

ACTUAL AND ESTIMATED GLOBAL INFLATION-INDEXED BOND MARKET

Global Inflation-Indexed Bond Market
March 2005



Estimated Global Inflation-Indexed Bond Market
December 2006



Sources: Barclays Capital and Bridgewater Estimate.