Investing in a Low Return Environment

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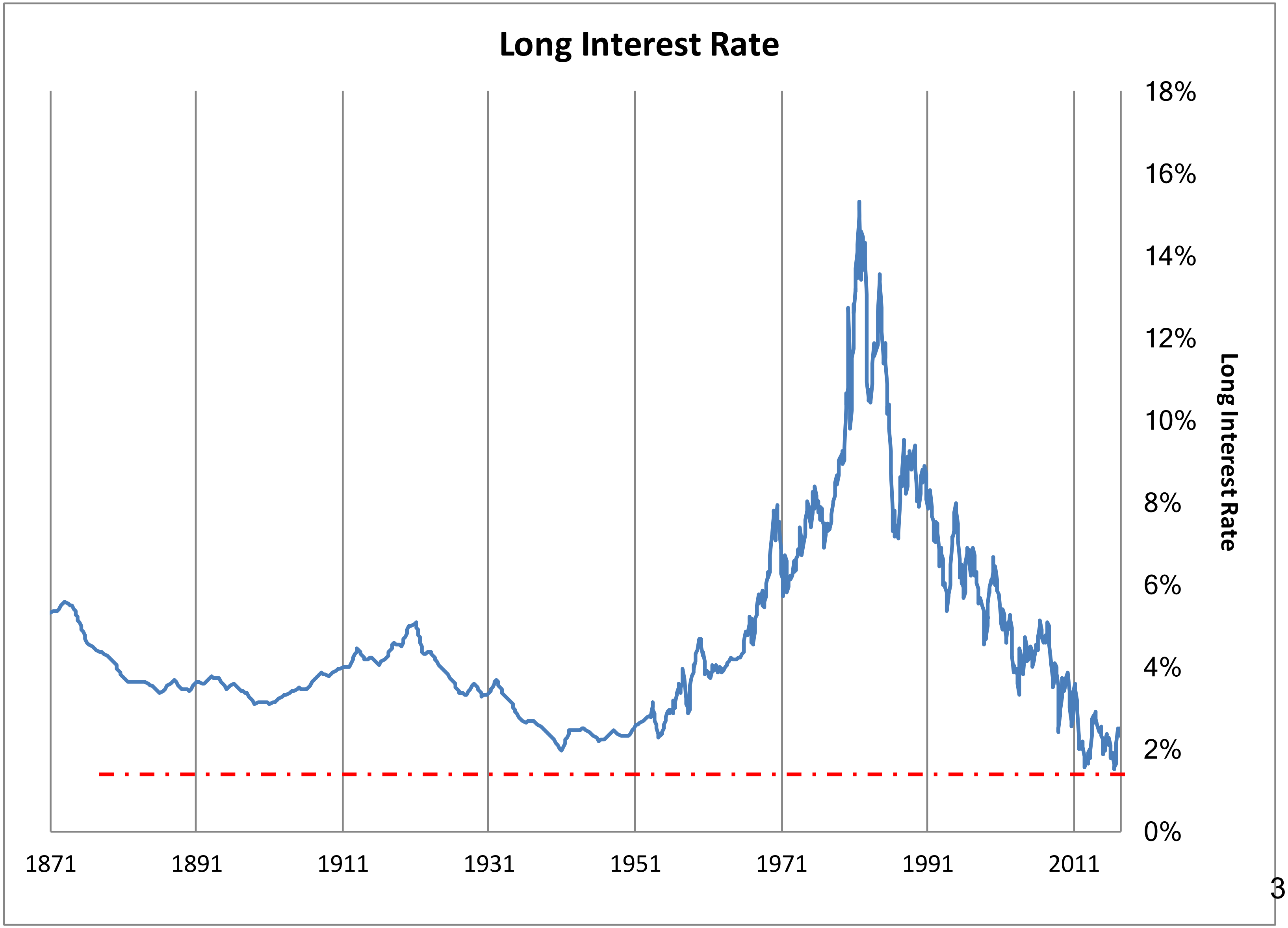
Investors' Dilemma Today

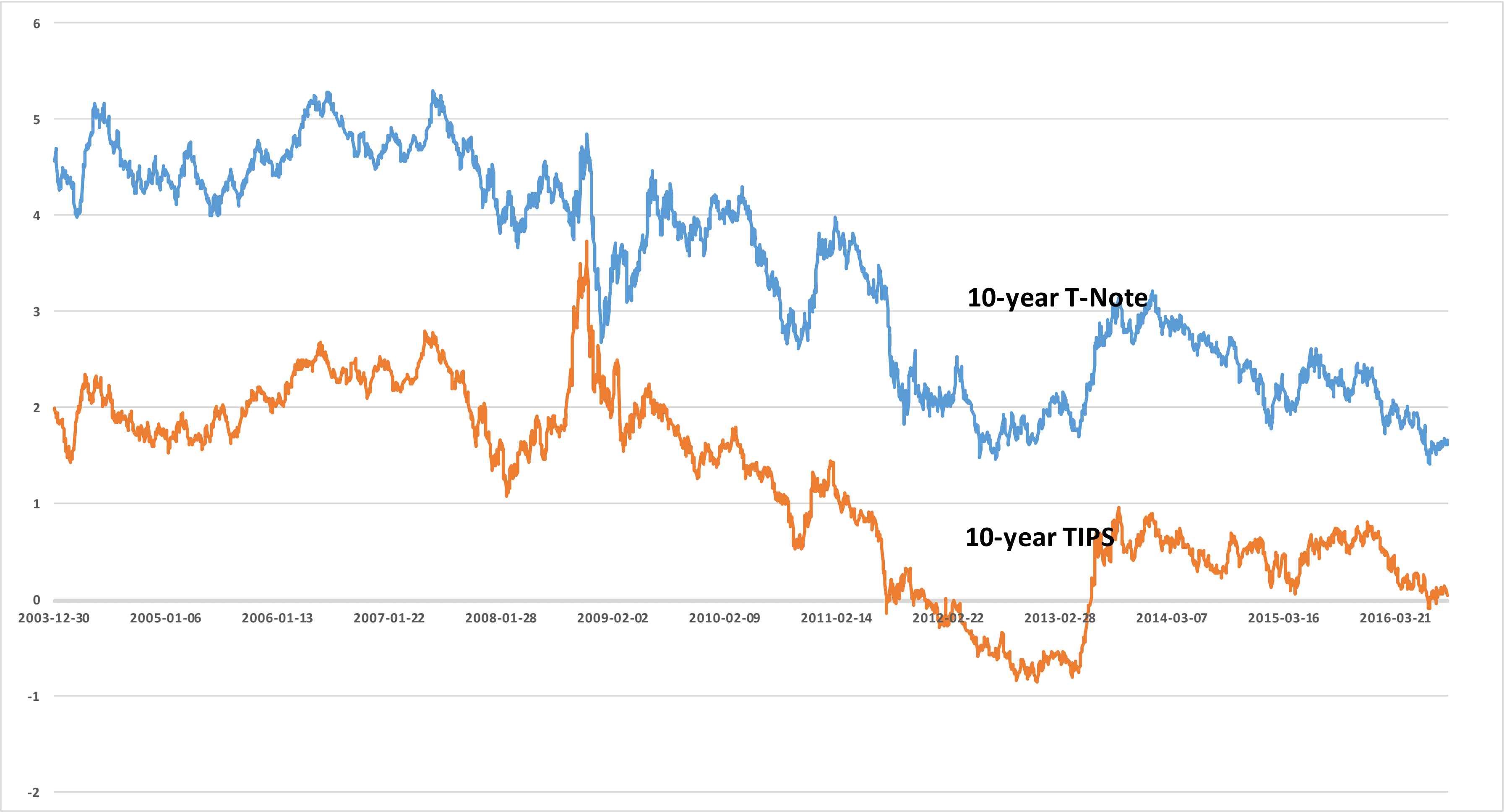
- Expected long-term returns on equities and especially bonds appear to be low by historical standards.

- Arguably, today's capital markets present long-term investors with one of the toughest investment environments in recent decades.

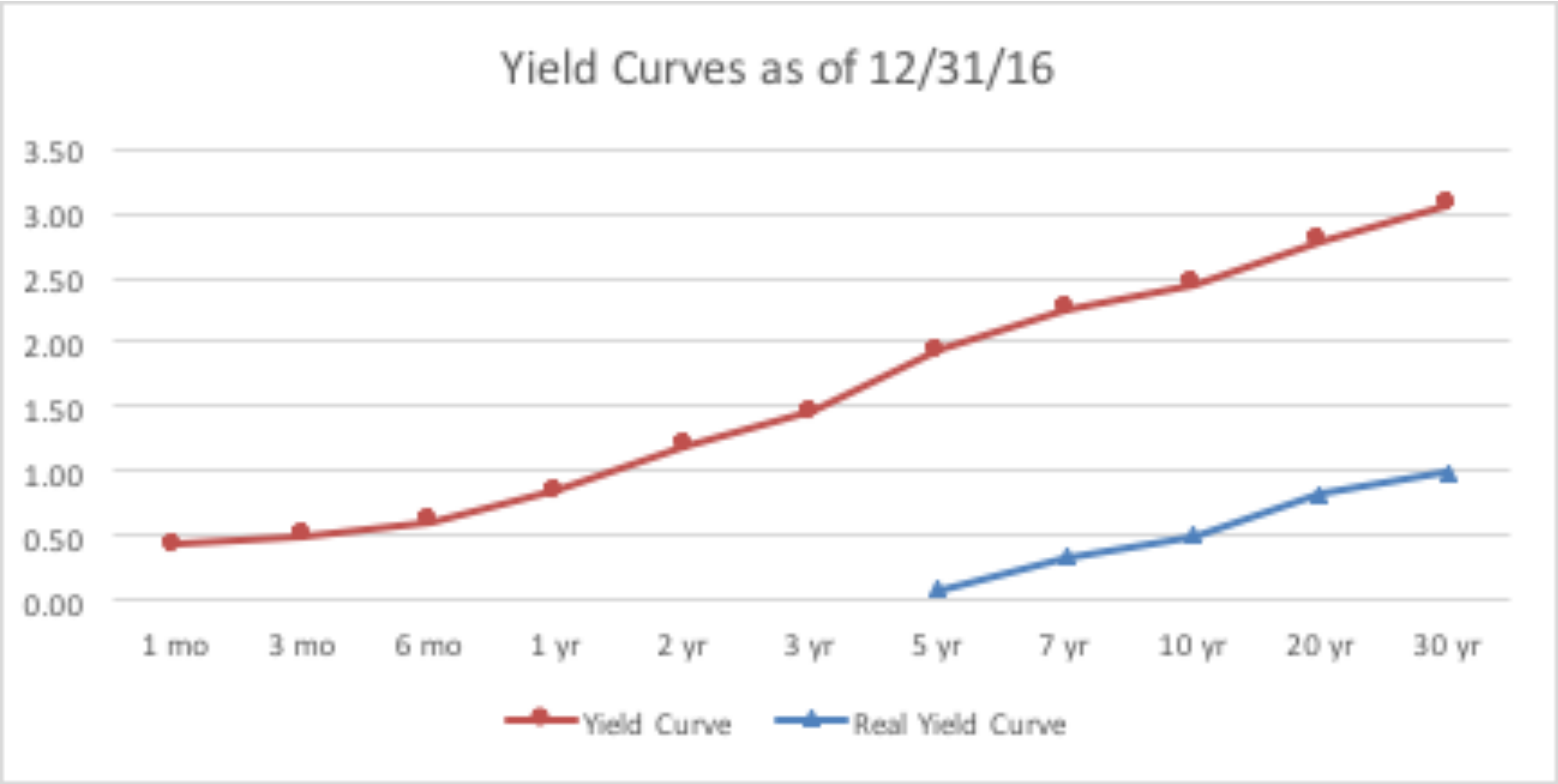
Secular Decline in Nominal Rates



Real Rates and Breakeven Inflation



Expensive Bonds



SPF expected inflation (2017-2021) = 2.3%

Source: US Treasury

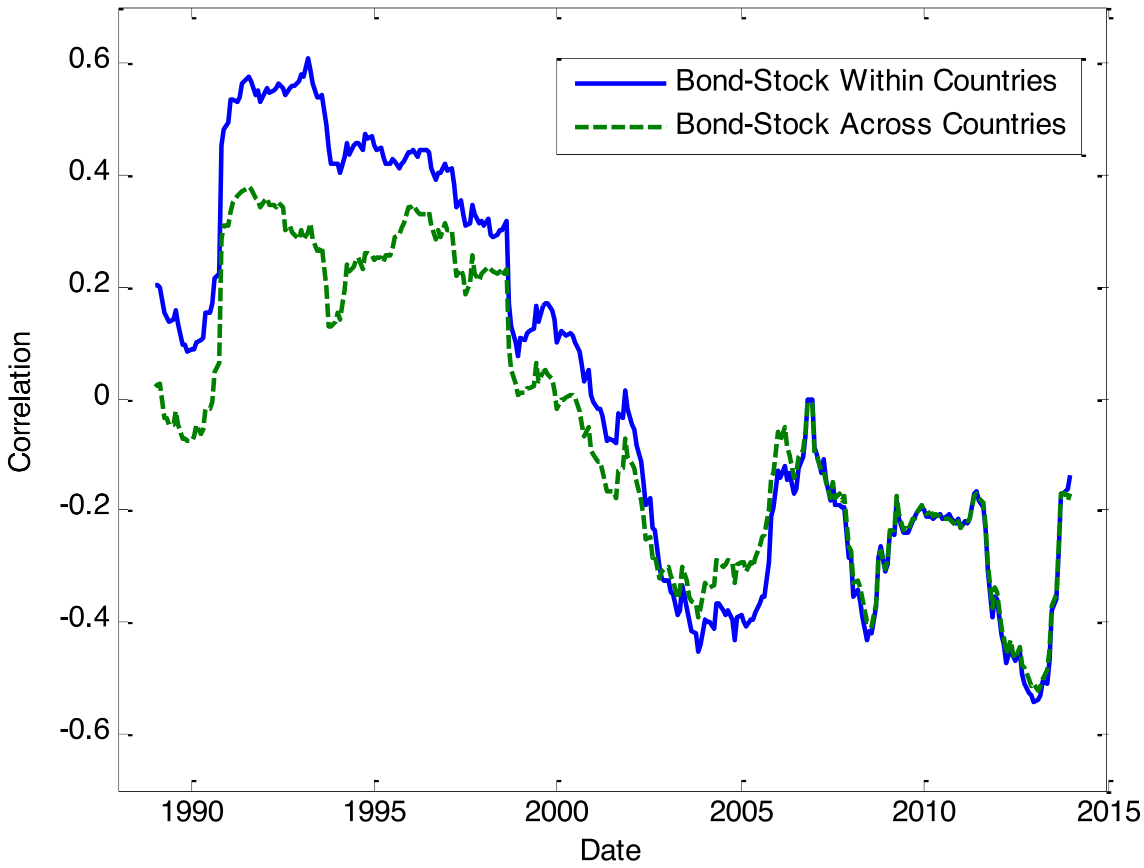
Why Are Rates So Low?

- Real Rate:
  - Secular stagnation (Summers, 2015)
  - Slowdown in productivity gains as a result of a slowdown in innovation (Gordon 2016)
  - Large global demand for safe assets (Caballero, Farhi, and Gourinchas, 2008, 2015)

- Nominal rates:
  - Expected Inflation is also low
  - SPF expected inflation (2017-2021) = 2.3%
  - 10-Year Breakeven inflation (05/18/17) = 1.8%

- Bond risk premia are negative

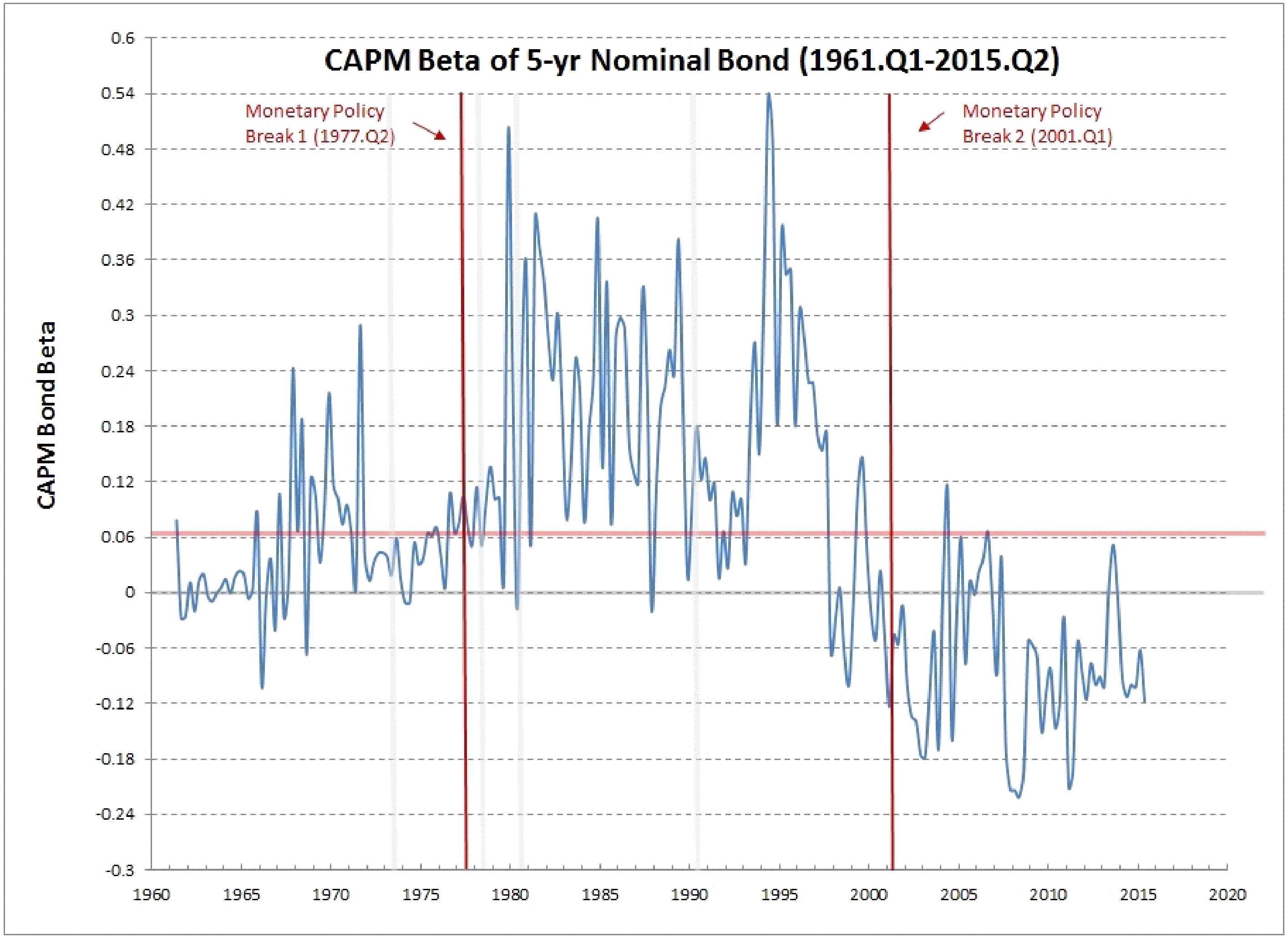
Long-Term Bonds are Hedgers



Average bond-stock correlations across countries and within countries. Monthly averages are computed using pairwise 3-year return correlations within and across seven different countries (Australia, Canada, France, Germany, Japan, United Kingdom, and United States). Returns are in U.S. Dollar currency-hedged terms in excess of the one-month U.S. Treasury bill rate.

Source: Viceira, Zhu, Wang (2017)

Long-Term Bonds Are Hedgers



Source: Campbell, Sunderam, and Viceira (2017)

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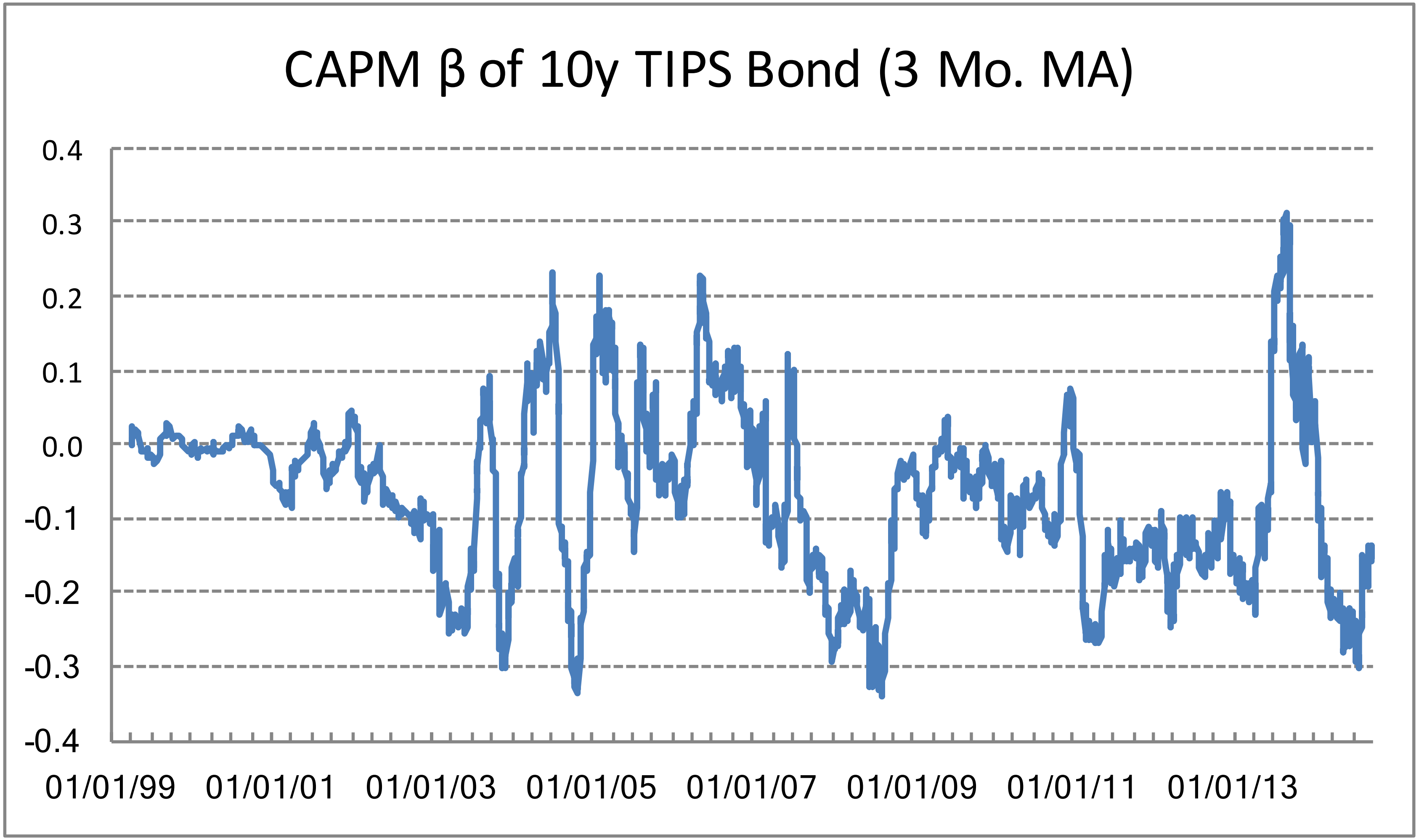

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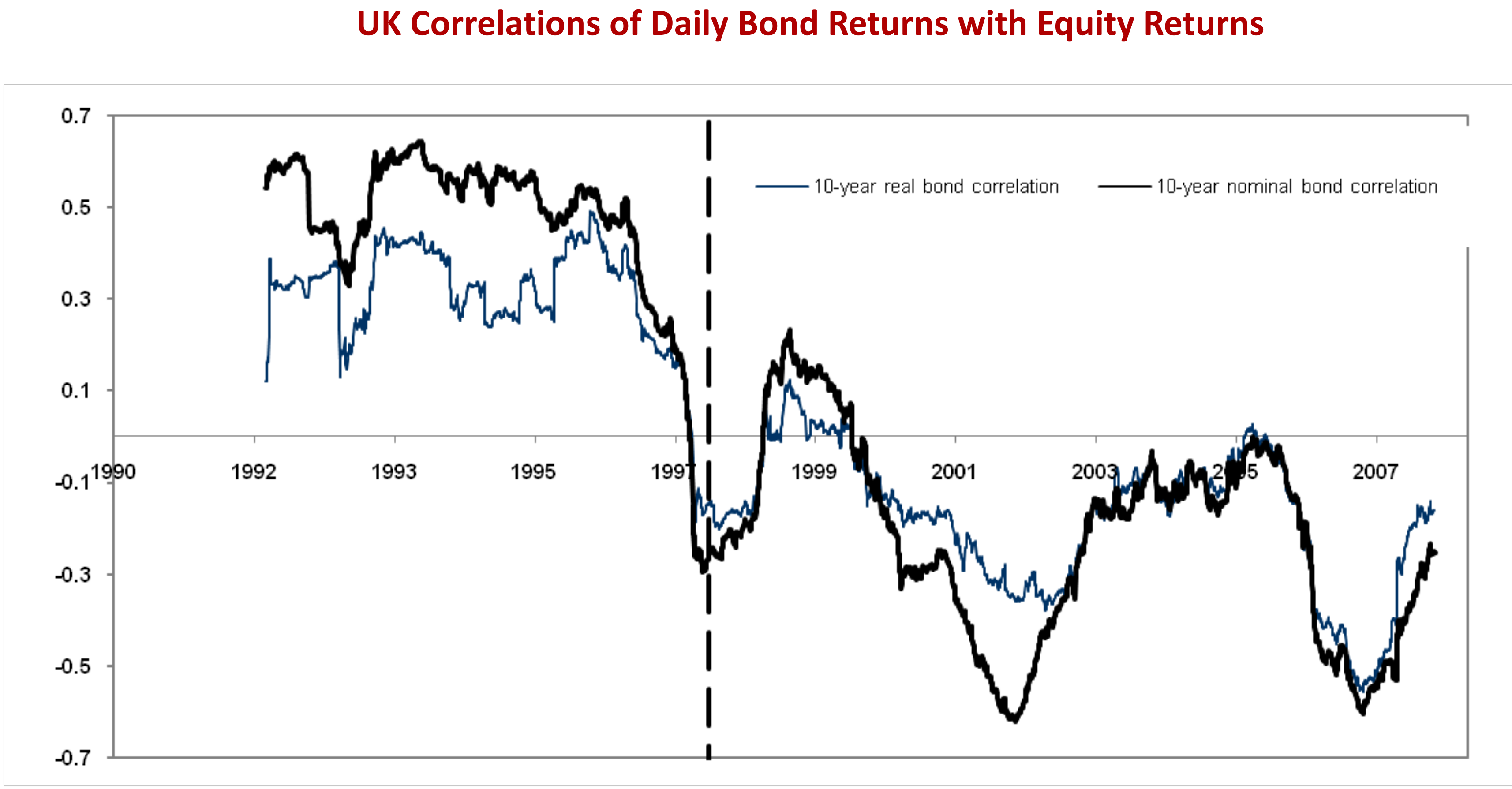
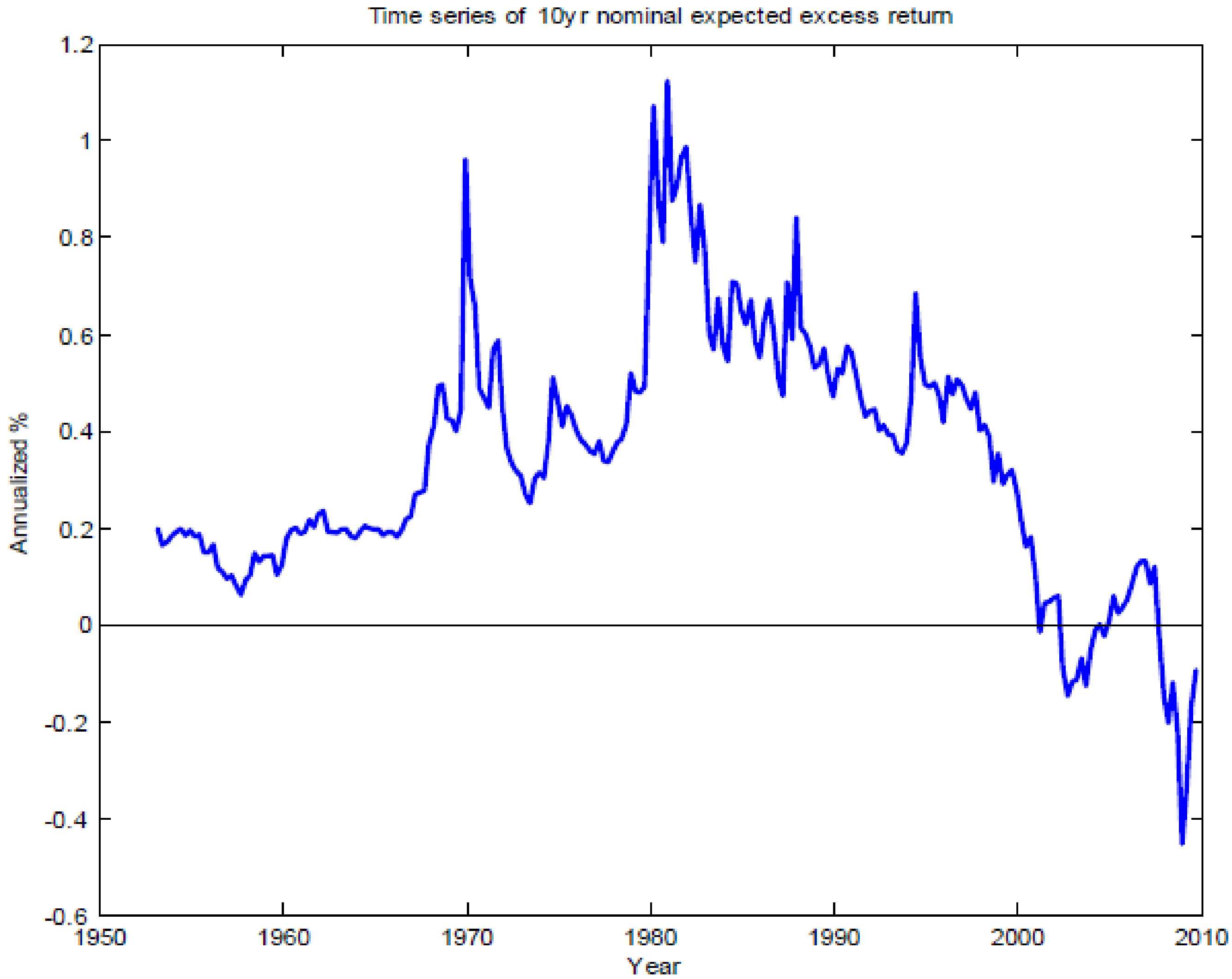


Source: Campbell, Shiller, and Viceira (2009)

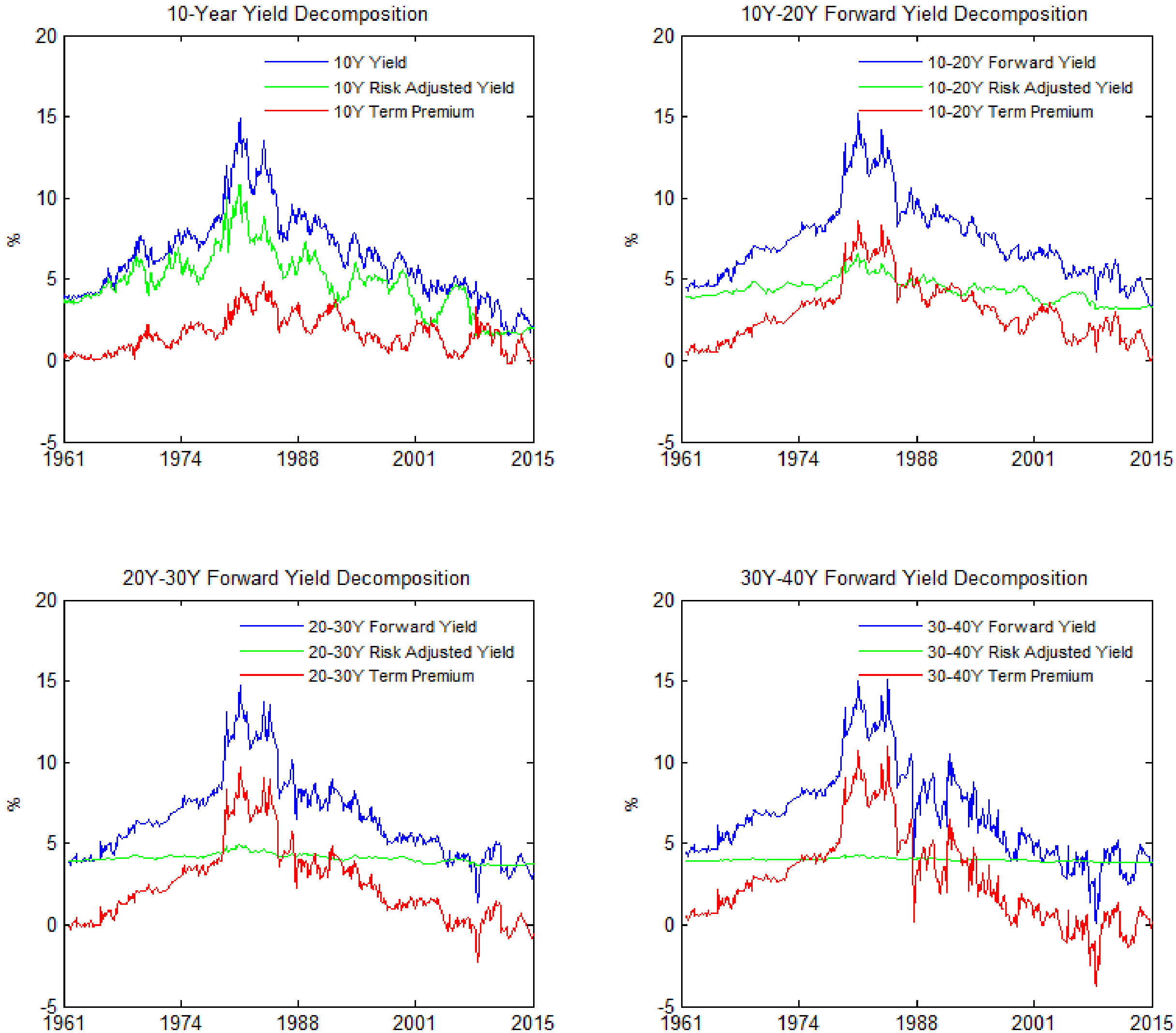
Source: Campbell, Sunderam, and Viceira (2017)

Term Premium



Source: Campbell, Sunderam, and Viceira (2017)

Term Premium



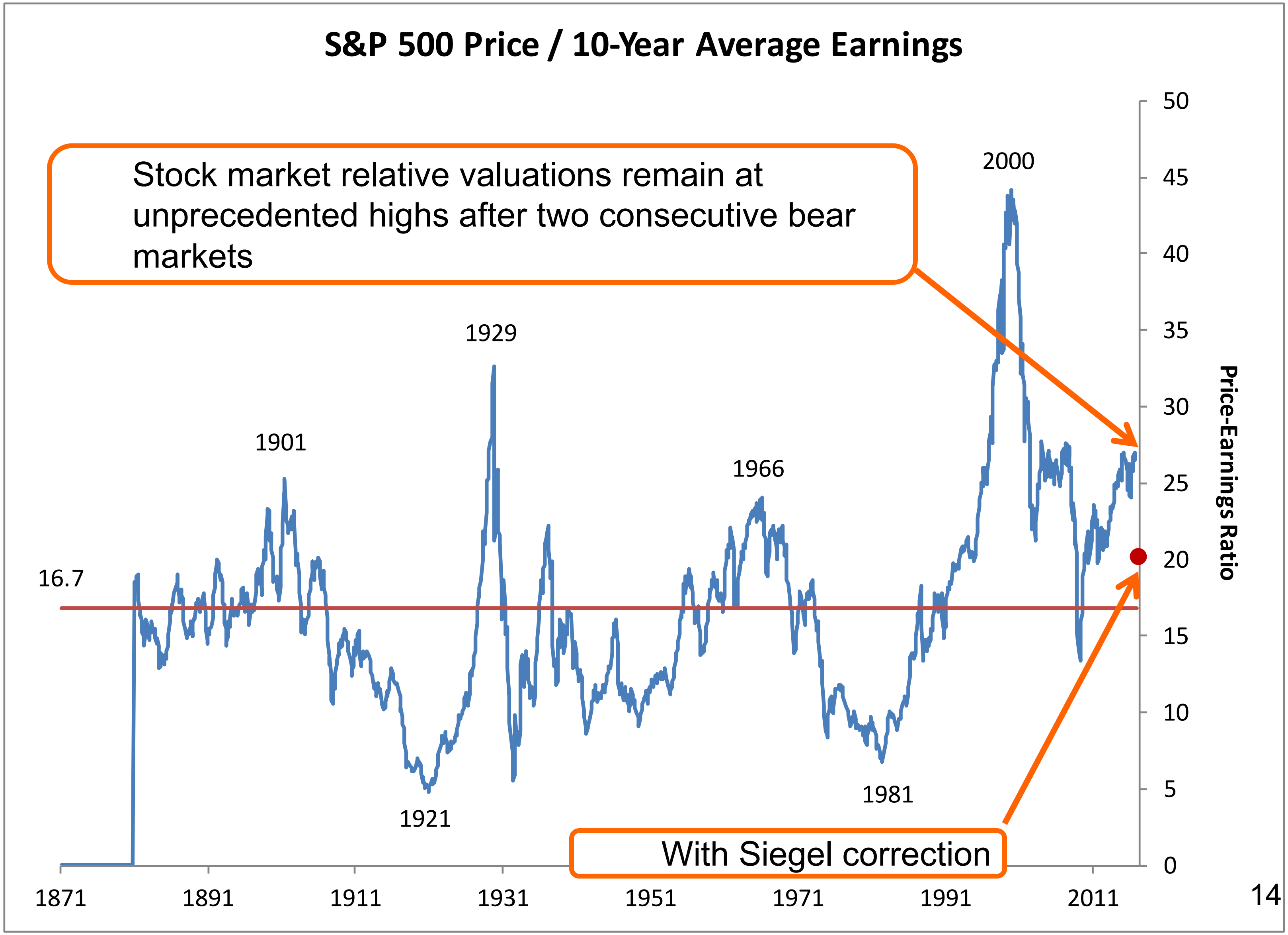
Source: Adrian, Crump, Diamond, and Yu (2015)

Long-Term Bonds Are Hedgers

Campbell, Pflueger, and Viceira (2015):

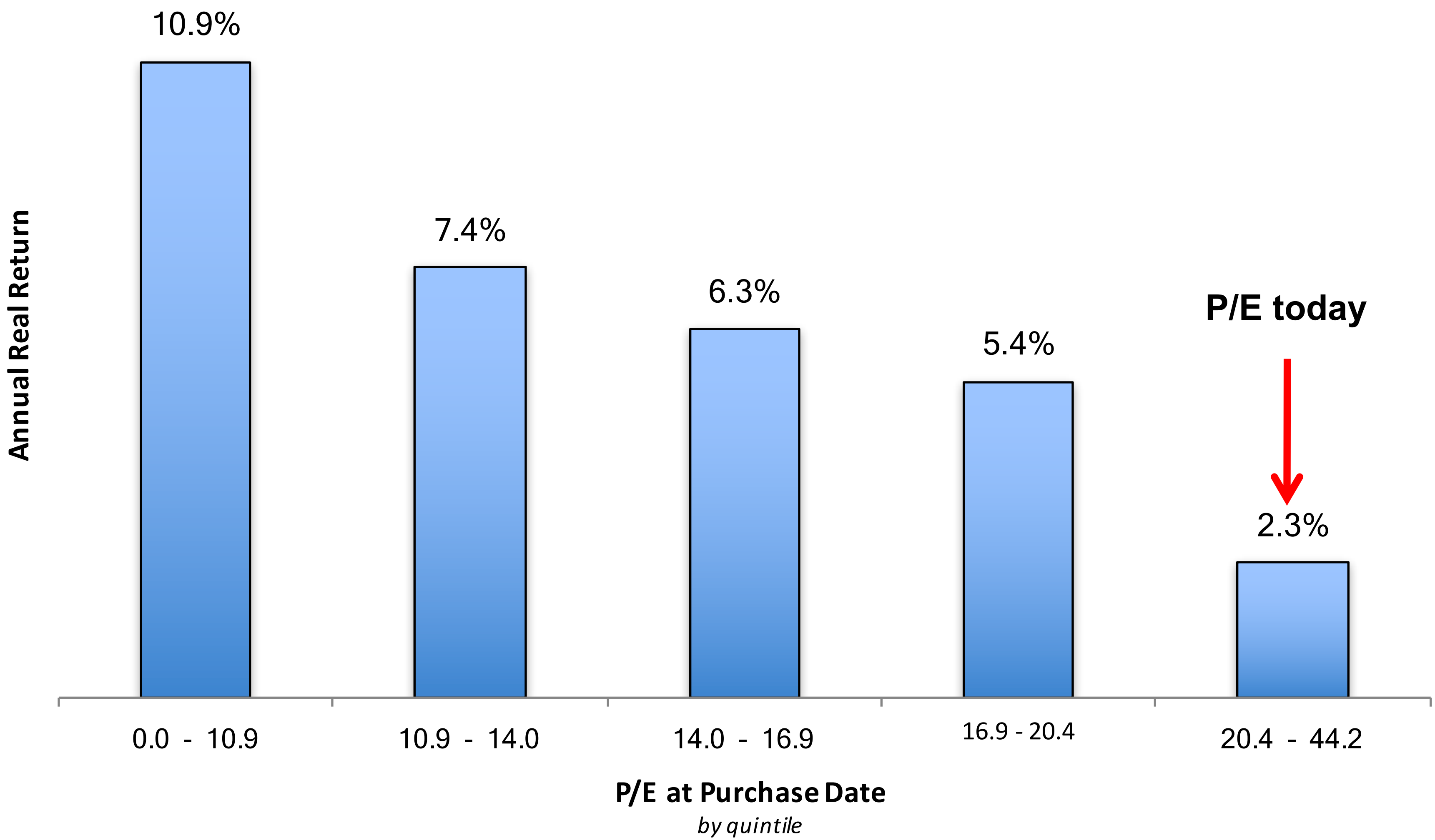
- What makes long-term bonds hedgers since the turn of the century?
  - Predominance of demand shocks over supply shocks which makes inflation to behave procyclically.
  - Renewed Fed focus on recessions.
  - Persistent negative shocks to expected long-term inflation.
- Flight-to-quality amplifies macro risk hedging role of bonds, as investor fly to what they perceive as safe assets when risk aversion increases.
- Of course, the risk of long-term bonds could change in the future if macro risks and/or monetary policy change.

Stock Market Valuations

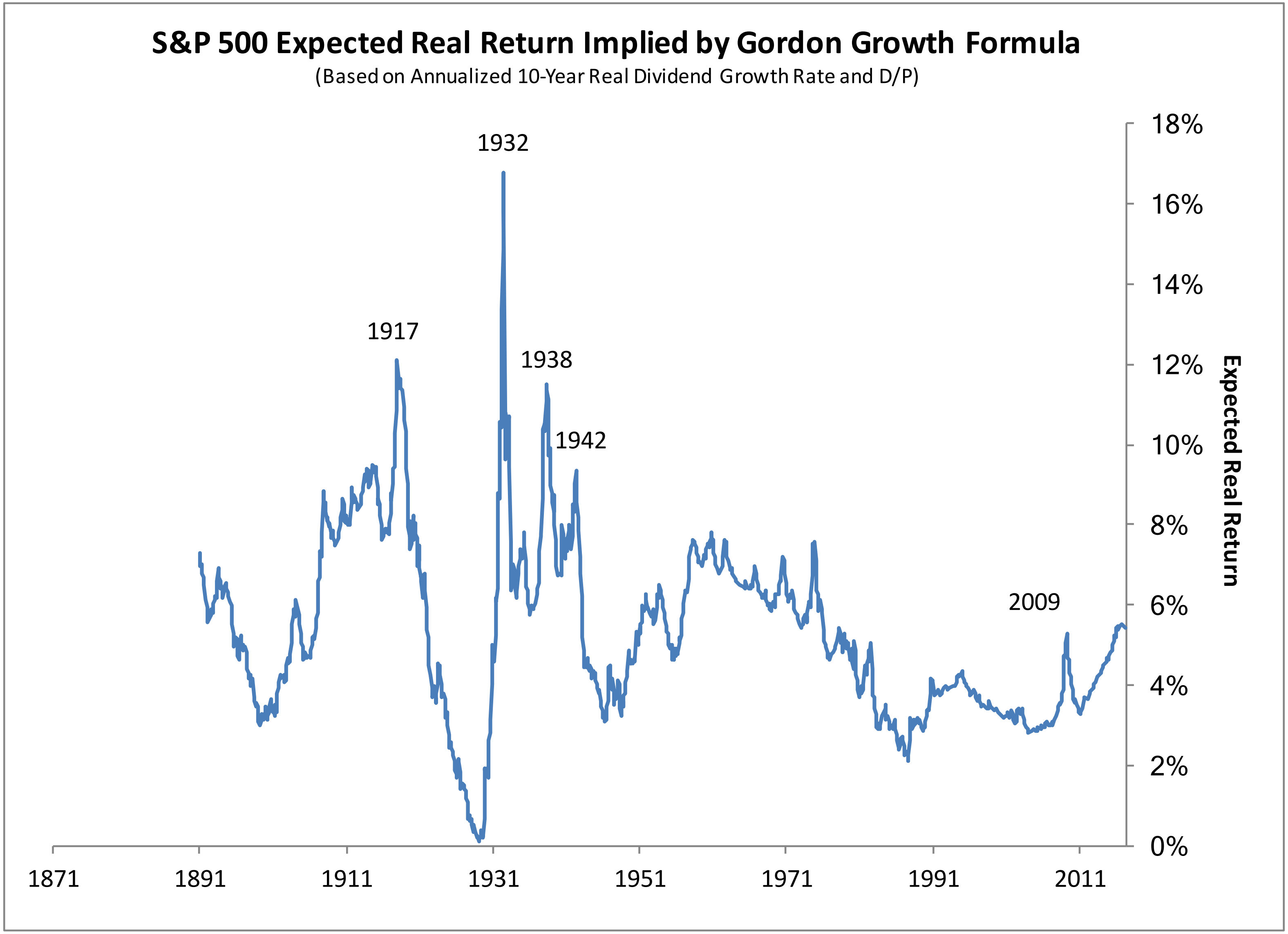


The Future 10-Year Real Return on the S&P 500 When Purchased at Different Price-to-Earnings (P/E) Multiples

(1881 - 2016)



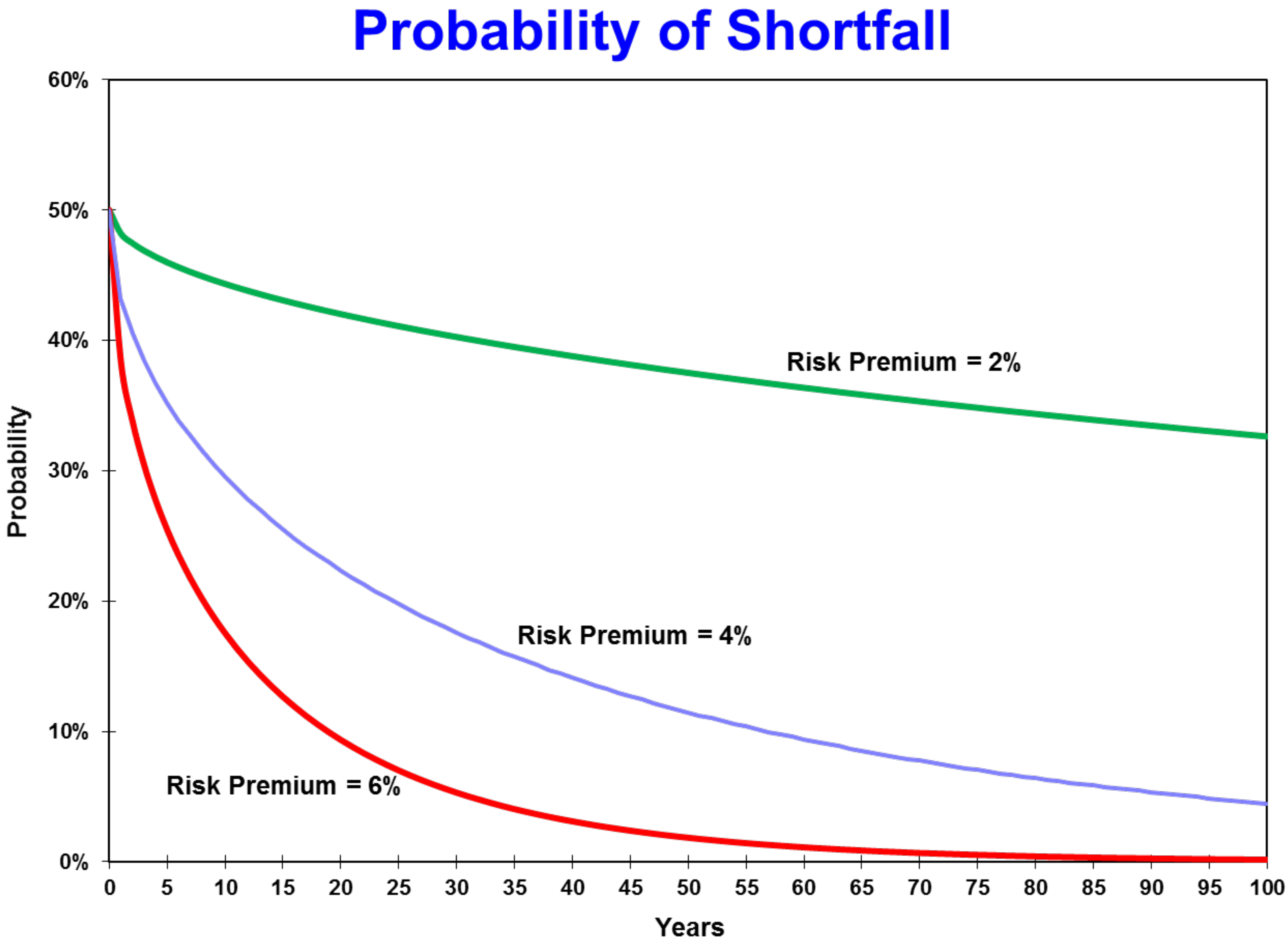
Implied Expected Real Return on Equities



Implications

- Risk management becomes front and center:
  - There is no evidence of a secular decline in risk
  - Lower expected returns exacerbate impact of risk on portfolio performance

Low Expected Returns Exacerbate Risk

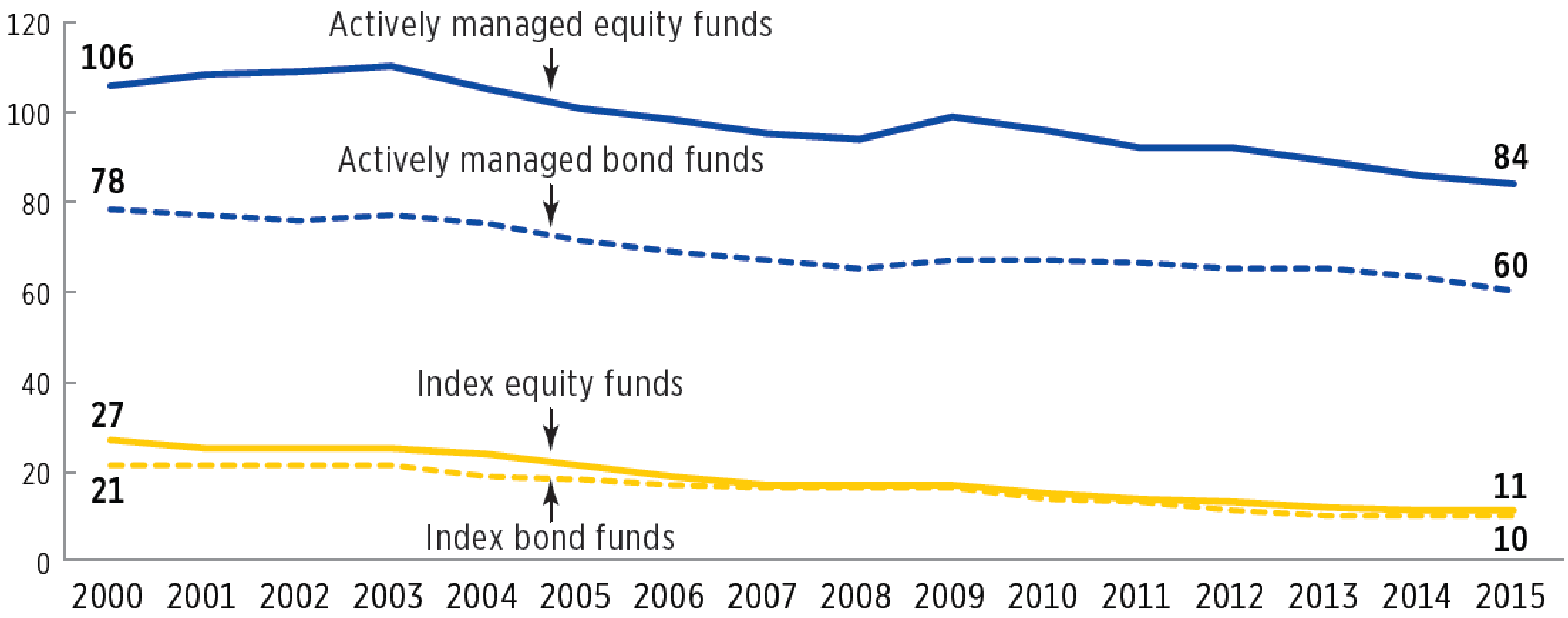


Implications

- Fees also become front and center:
  - Increased awareness of investing costs
  - Fees under pressure
  - Growth in passive (fees are a sure thing, alpha is not)
  - Growth of cheaper alternatives to traditional active investing: quant is here to stay.

Industry Dynamics: Fees Under Pressure

Expense Ratios of Mutual Funds (bps)



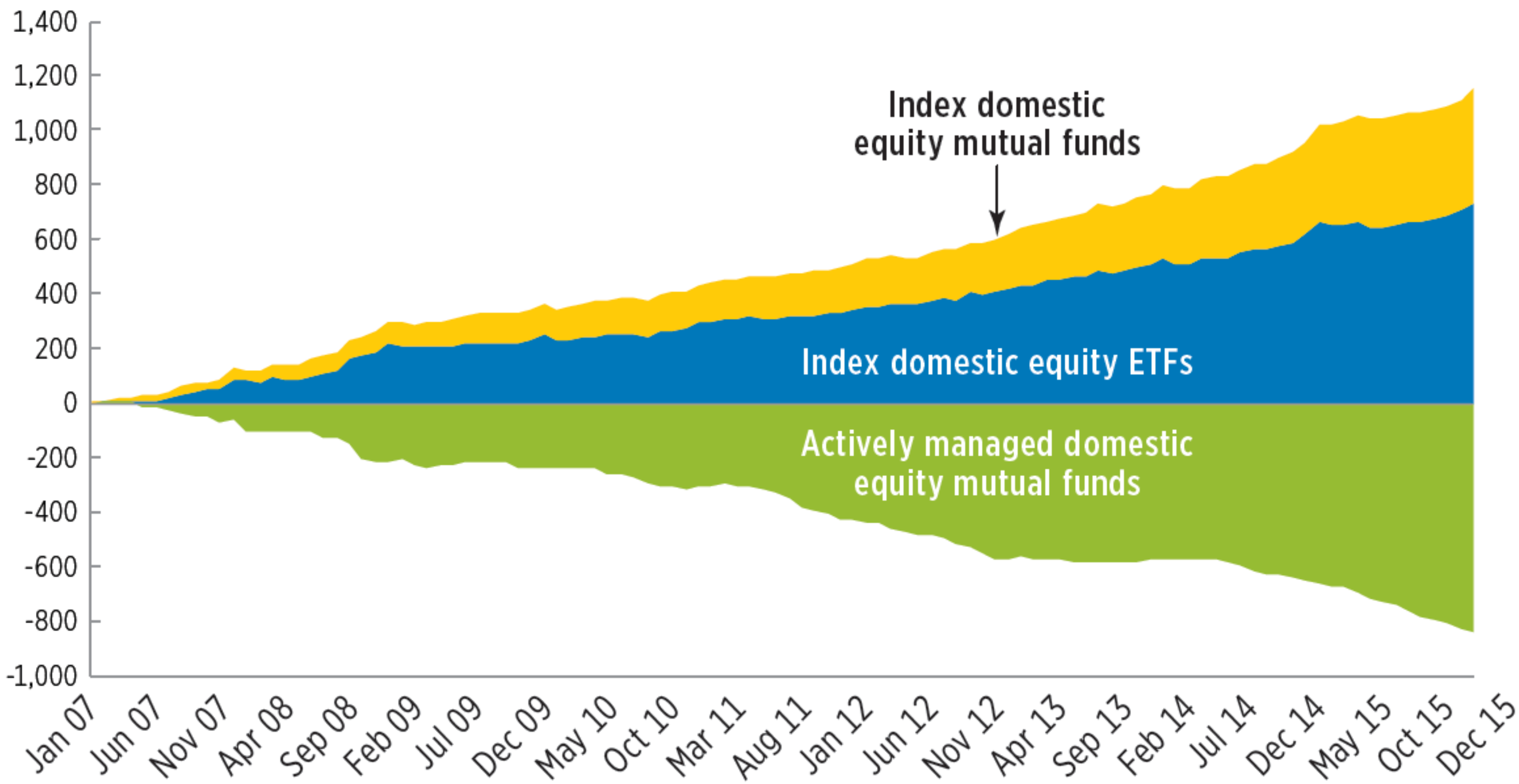
Source: Investment Company Institute

Industry Dynamics: Growth in Passive

FIGURE 2.14

Some of the Outflows from Domestic Equity Mutual Funds Have Gone to ETFs

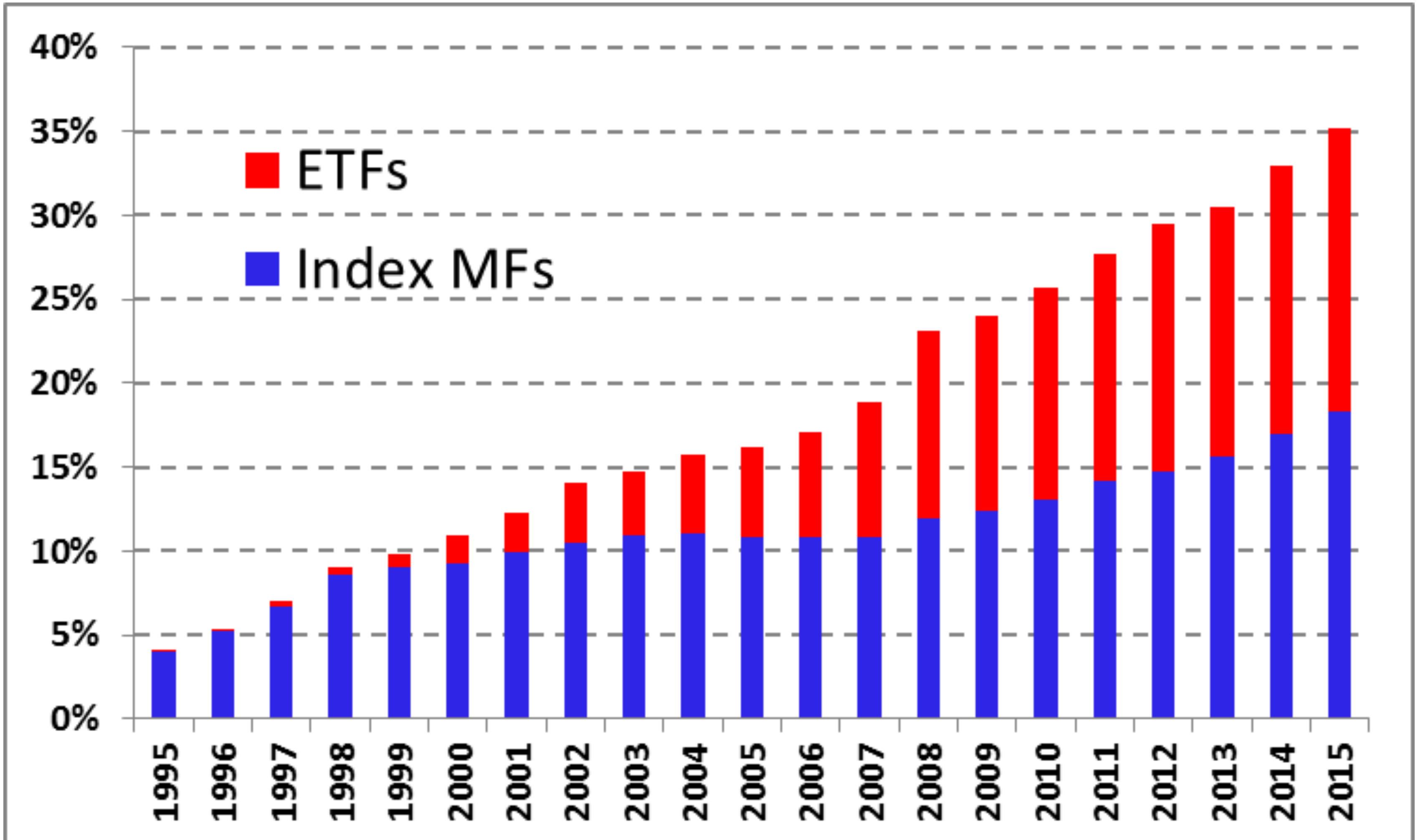
Cumulative flows to and net share issuance of domestic equity mutual funds and index ETFs, billions of dollars; monthly, January 2007–December 2015



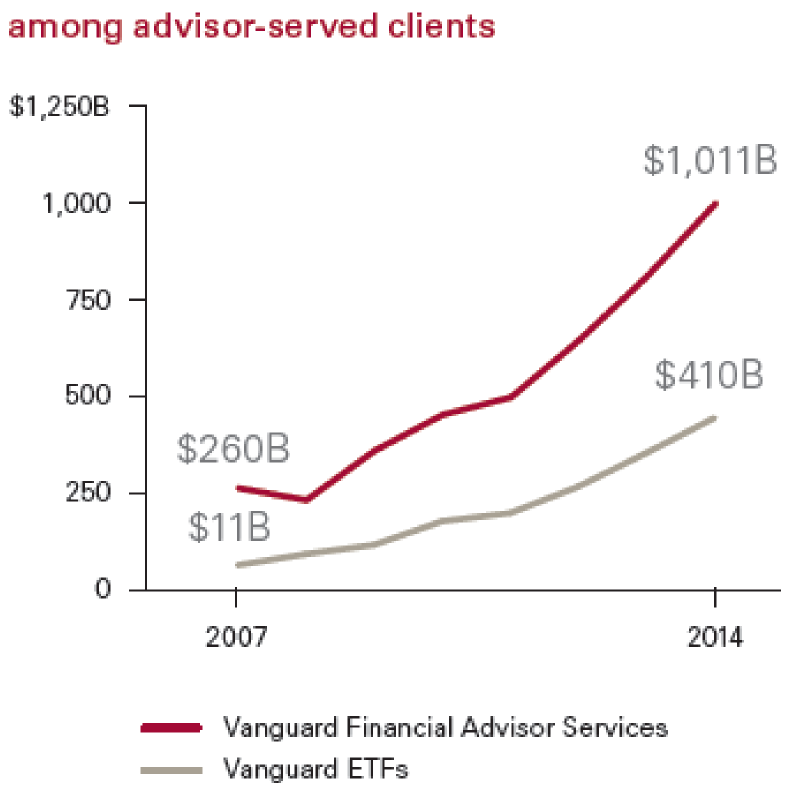
Source: Investment Company Institute

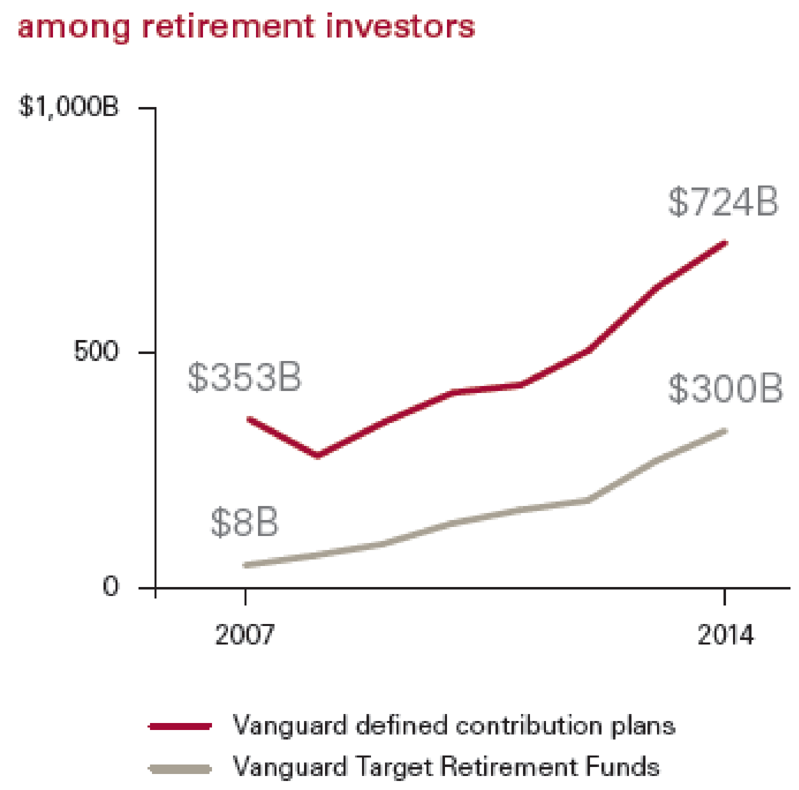
Industry Dynamics: Growth in Passive

Percentage of US Equities Indexed



Advisory Channel Drives Asset Growth in Passive





Source: Viceira, The Vanguard Group, Inc., in 2015: Celebrating 40, HBS Case 216-026

Industry Dynamics: FinTech

- Pressure on fees/costs has also been an important driver of the development of fintech solutions to asset management for retail investors.

Industry Dynamics: Quant Investing

- Growth of quant investing.

- Quant provides active investing at a fraction of the cost.
  - Made possible by revolution in empirical finance, huge increase in data availability, and data analytics (or “Big Data”)
  - Quant has raised the bar for traditional active investors by providing a cheap investable alternative to them.

- Good news for investors: A segment of what used to be expensive alpha is moving into the realm of affordable beta.

Industry Dynamics: Quant Investing

- Akin to Henry Ford's revolution in car manufacturing:
  - Find a way to manufacture at scale what others have been doing by hand.
  - Output might not be a Ferrari or a Lamborghini, but it can be of reliable quality at a fraction of the cost – good enough for most.

- Quant provides active investing at a fraction of the cost.
  - Quant has raised the bar for traditional hedge funds by providing a cheap investable alternative to traditional hedge fund investment strategies.

- Good news for investors: A segment of what used to be expensive alpha is moving into the realm of affordable beta.

Industry Dynamics: Hedge Funds

- Not good news for traditional active investors

- Much harder to start a fund, and much harder to keep it going:
  - Now a hedge fund can't get away with picking the average cherry or lemon: it has to show it can pick the best cherries and sourest lemons.
  - Those charging Ferrari prices for manufacturing Toyotas face a serious threat of extinction.
  - The market for investment talent is becoming much more discerning.

Industry Dynamics: Hedge Funds

- The pace of hedge fund launches in 2016 fell its lowest level in 8 years:
  - 729 new hedge funds launched in 2016, down 25% from 968 in 2015, representing the slowest growth rate since 2008 when only 659 new funds were set up.
  - Terms are much tougher for new entrants

- The pace of hedge fund liquidations in 2016 was at its highest level over the same time span:
  - 1,057 hedge fund closures numbered, up 8% from 979 in 2015, and the largest since 2008 when 1,471 hedge funds were shuttered.

- Steadily increasing concentration of investor capital in mid-to-large hedge fund firms (Kenneth Heinz, President of HFR)

Man *and* Machine in Investing

Being a “stock picker” does not mean what it did fifteen or twenty years ago when we were in our infancy. Then, picking stocks could be done in a virtual bubble and all of our time was spent deep in financial statements….

Today when we add in the use of data sets and “quantamental” techniques that are increasingly important to remain competitive while investing in single-name equities, it is clear that our business is rapidly evolving….

Just as Uber has disrupted the taxi and car rental industries, Amazon has changed retail, and Facebook and Google have altered the print media business, disruptions are also changing investing. While some doors have closed, others are opening.

Dan Loeb, Third Point investor letter, 11/1/2016