

Gold, the “Fear Trade” and Mr. Market

Summary

- The price of gold and the level of interest rates have been highly correlated
- It is possible that the past is prologue
 - If interest rates rise to 4%, the price of gold could fall to about \$800/ounce
 - If interest rates rise to 5%, the price of gold could fall to about \$500/ounce
 - “Pain trade, short squeeze”, rates fall to 2%, the price of gold could rise to about \$1,500
 - “Pain trade, short squeeze”, rates fall to 1%, the price of gold could rise to about \$1,900
- Gold and bonds were popular “go-to” investments during the Financial Crisis
- “Fear” of a bleak future increased the demand for gold and bonds
- If Mr. Market’s “fear” diminishes, the impact on gold’s price could be significant

If Past Is Prologue

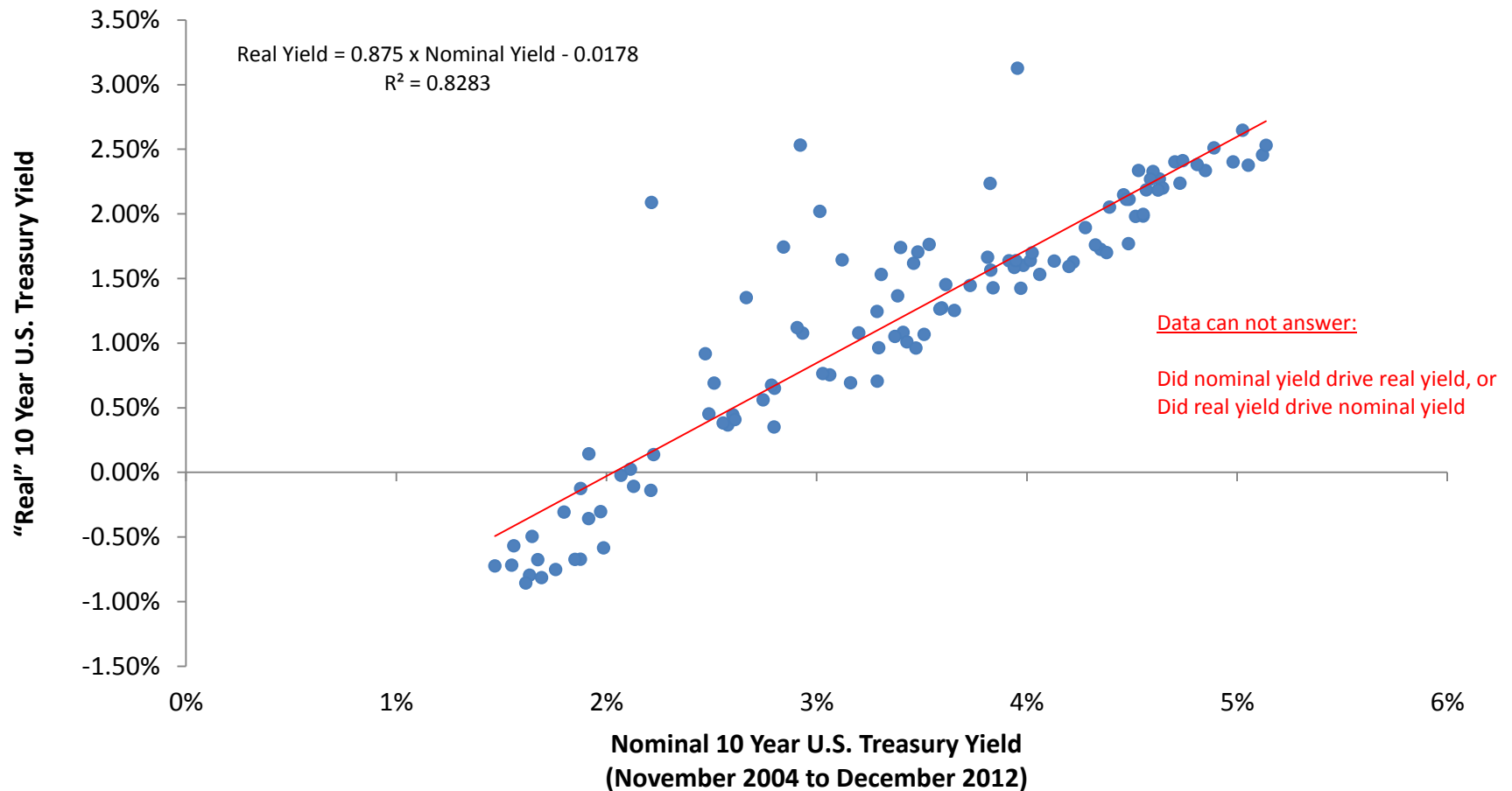
- A number of “pattern-seeking, story-telling” behavioral possibilities
- Since the launch of the SPDR Gold ETF in 2004,
 - It seems that interest rates have driven the price of gold
 - Or it could be that gold has driven interest rates
 - Some other influence, “fear” perhaps, has driven both rates and gold

10 Year Treasury	10 Year Real	Gold Price	GLD Price	GLD Gold Holdings	S&P 500 Price	PTTRX AUM
1.00%	-0.90%	\$1,910.37	\$185.05	51.45	\$1,321.08	\$324
2.00%	-0.03%	\$1,550.54	\$150.53	41.17	\$1,307.74	\$262
3.00%	0.85%	\$1,190.71	\$116.01	30.88	\$1,294.40	\$200
4.00%	1.72%	\$830.88	\$81.50	20.59	\$1,281.06	\$138
5.00%	2.60%	\$471.05	\$46.98	10.30	\$1,267.71	\$76

Note: Linear regression estimates using data since the launch of the SPDR Gold ETF in November 2004

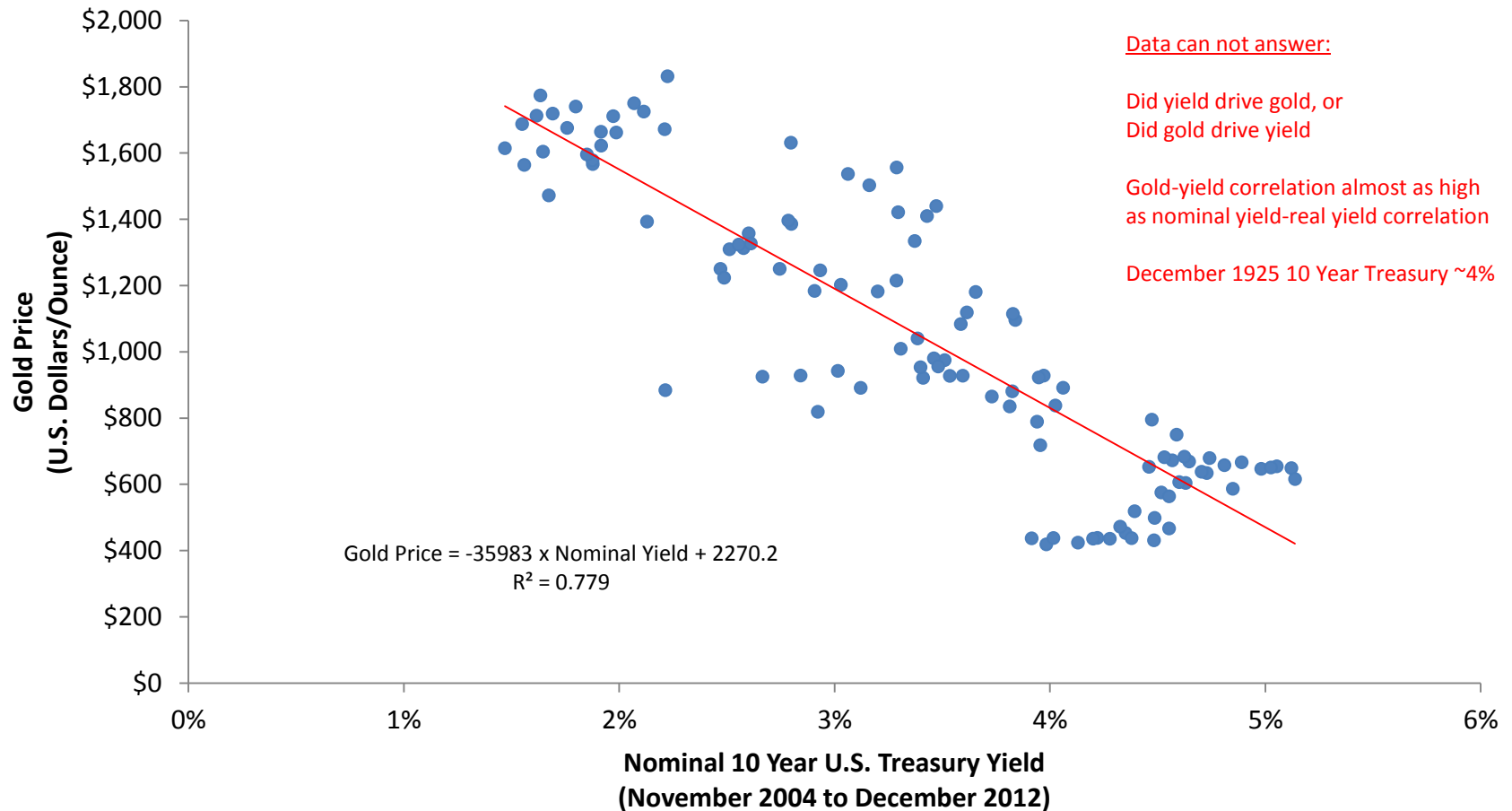
High Historical “Real Yield-Nominal Yield” Correlation

A Behavioral Connection



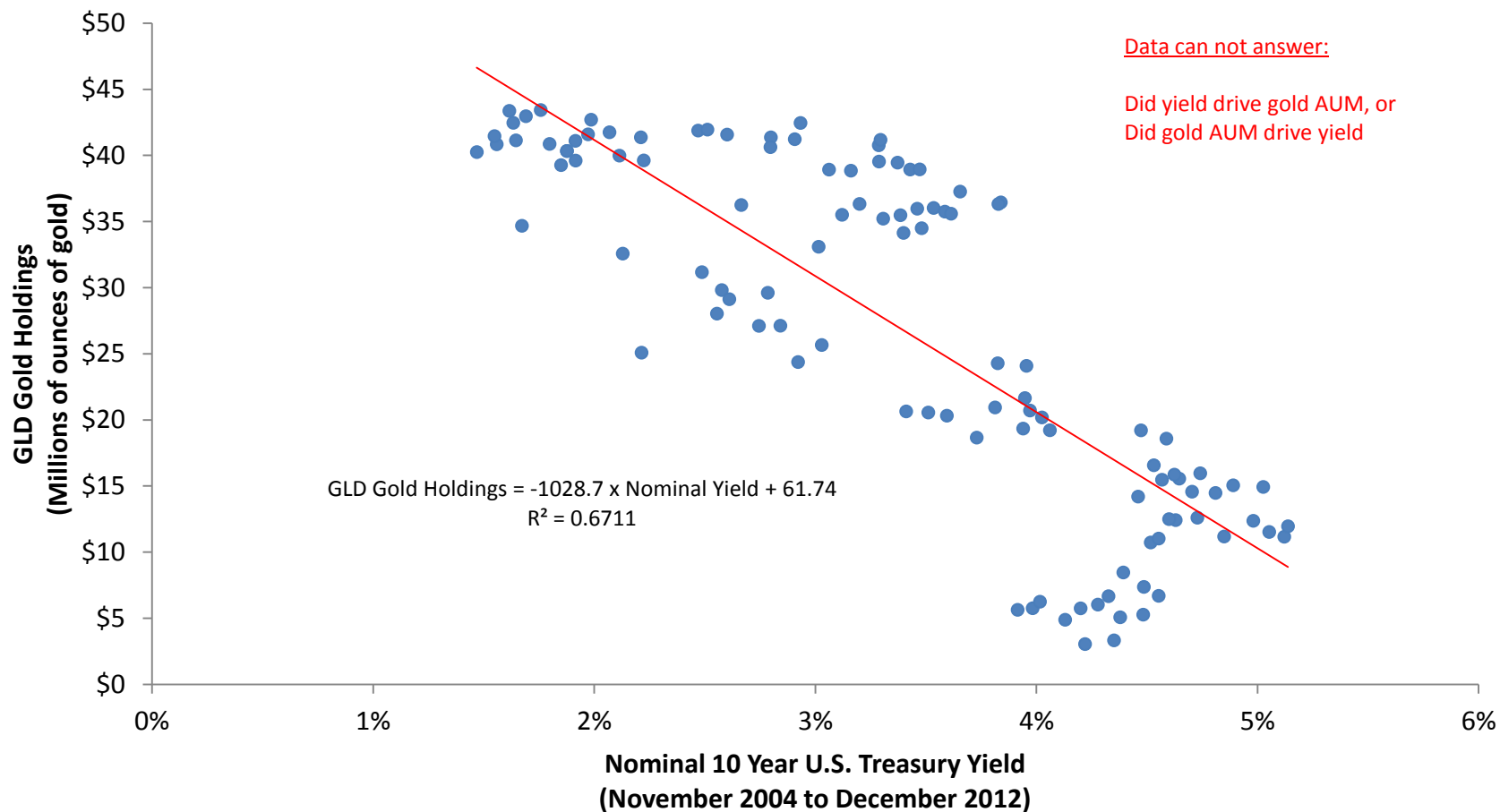
High Historical “Gold Price-Nominal Yield” Correlation

A Behavioral Connection

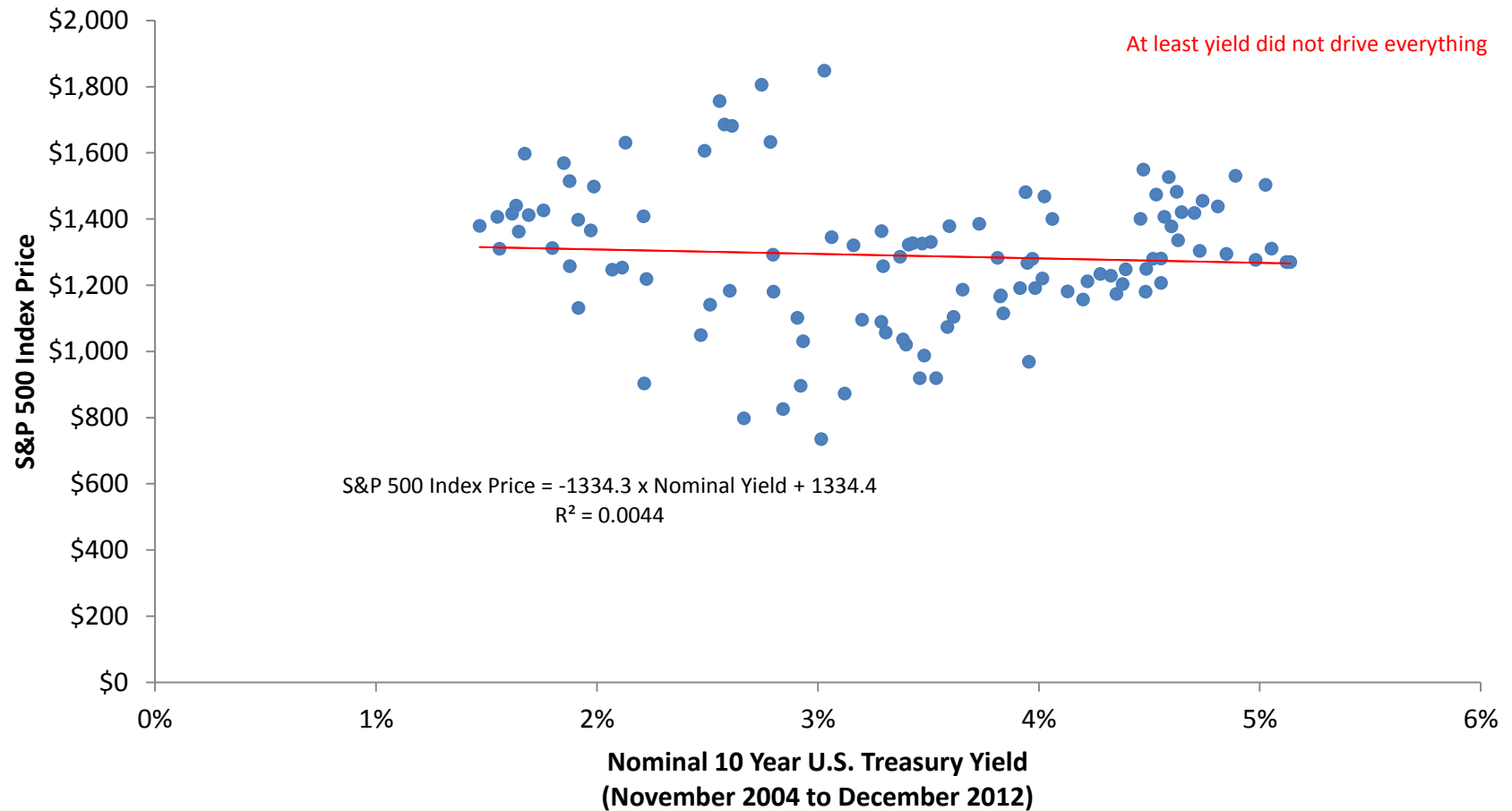


High Historical “Investment Gold Holdings-Nominal Yield” Correlation

A Behavioral Connection



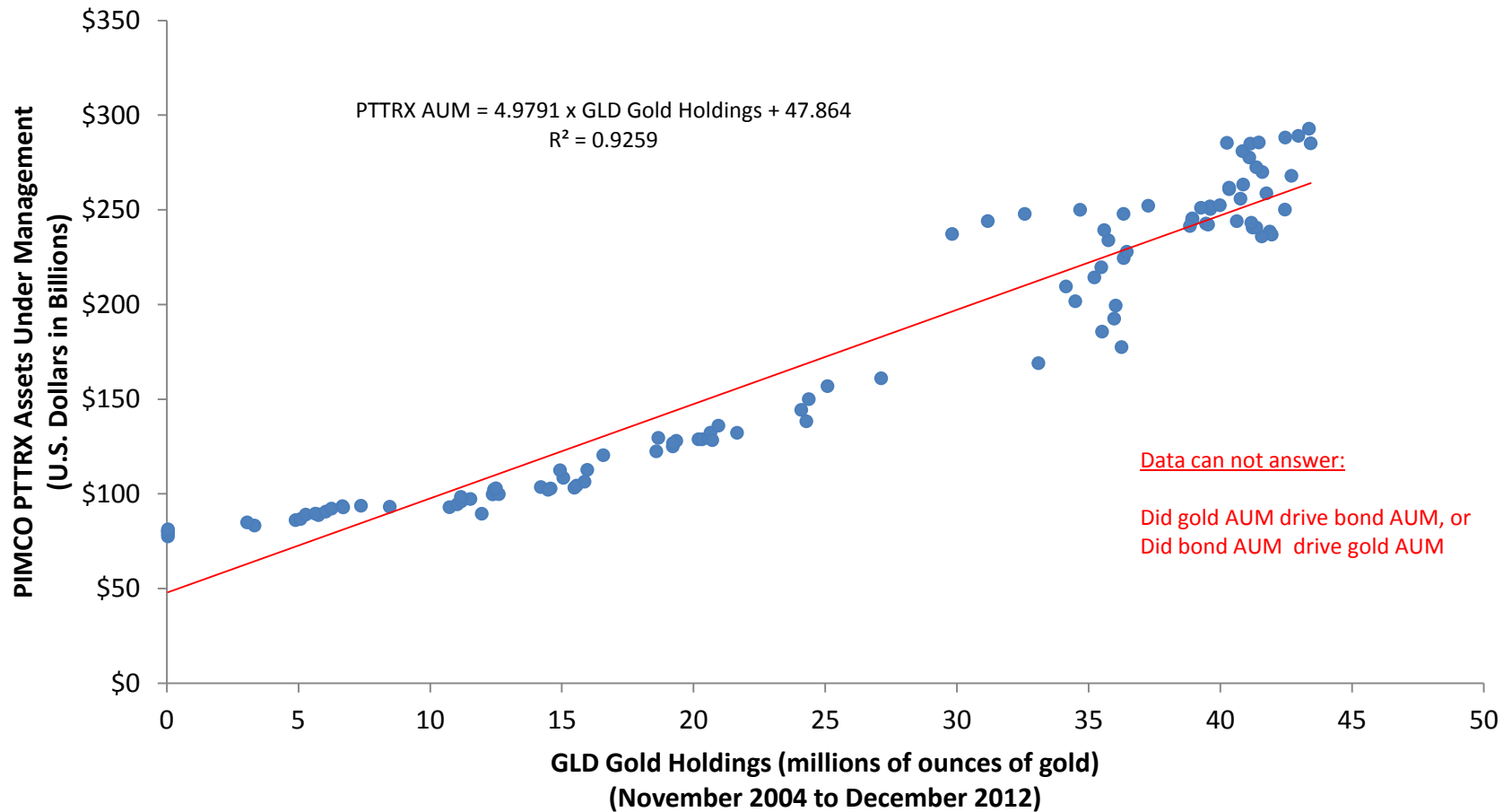
Low Historical “Stock Price-Nominal Yield” Correlation



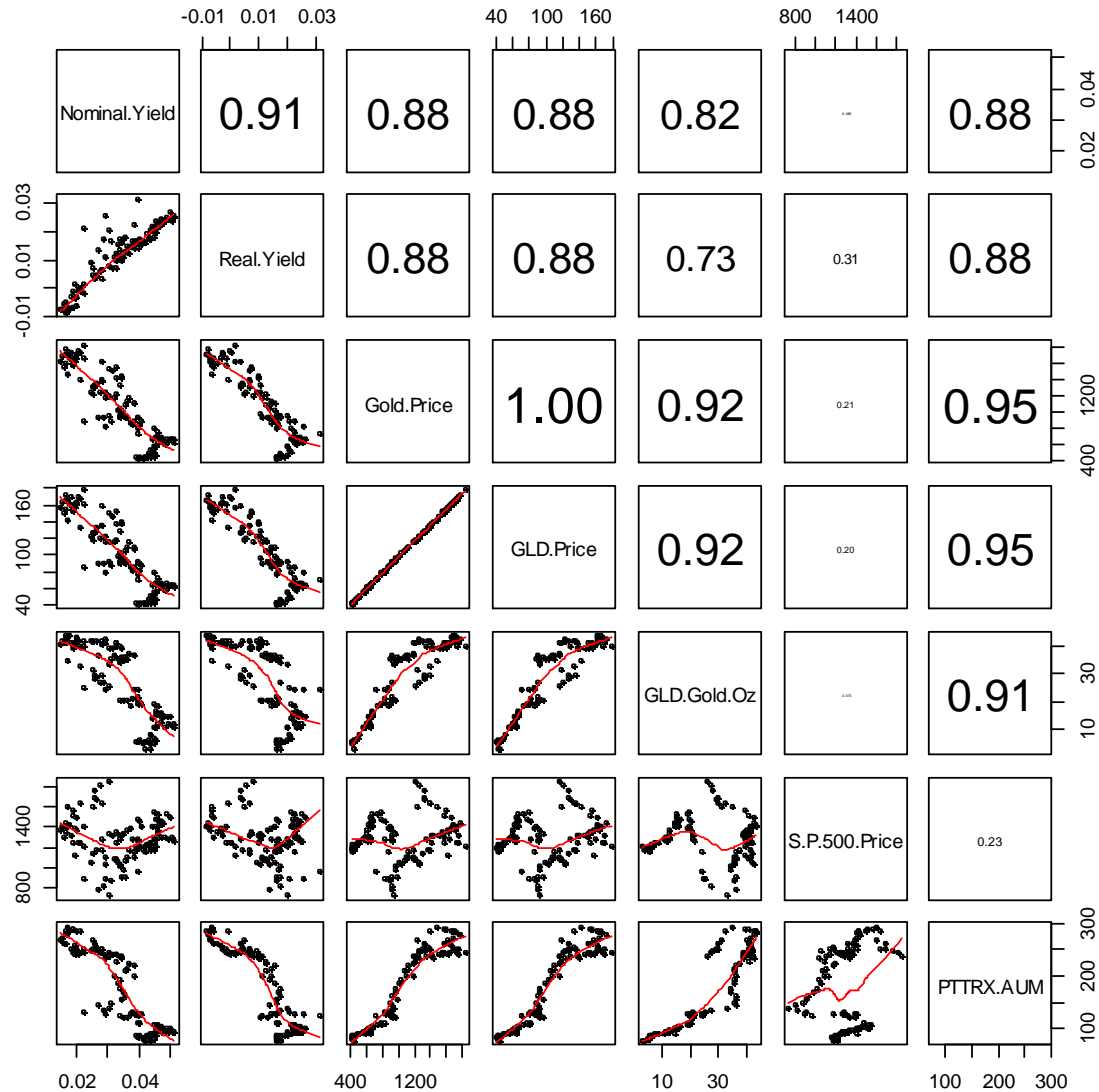
High Historical “Bond Fund AUM-Nominal Yield” Correlation A Behavioral Connection



High Historical “Bond Fund AUM-Investment Gold Holdings” Correlation A Behavioral Connection



Correlation Is An Answer To A Specific Question



The Fear Trade

A Possible Common Influence

- “Fear” influenced investment behavior

The major asset in this category is gold, currently a huge favorite of investors who fear almost all other assets, especially paper money (of whose value, as noted, they are right to be fearful). Gold, however, has two significant shortcomings, being neither of much use nor procreative. True, gold has some industrial and decorative utility, but the demand for these purposes is both limited and incapable of soaking up new production. Meanwhile, if you own one ounce of gold for an eternity, you will still own one ounce at its end.

What motivates most gold purchasers is their belief that the ranks of the fearful will grow. During the past decade that belief has proved correct. Beyond that, the rising price has on its own generated additional buying enthusiasm, attracting purchasers who see the rise as validating an investment thesis. As “bandwagon” investors join any party, they create their own truth – *for a while*.

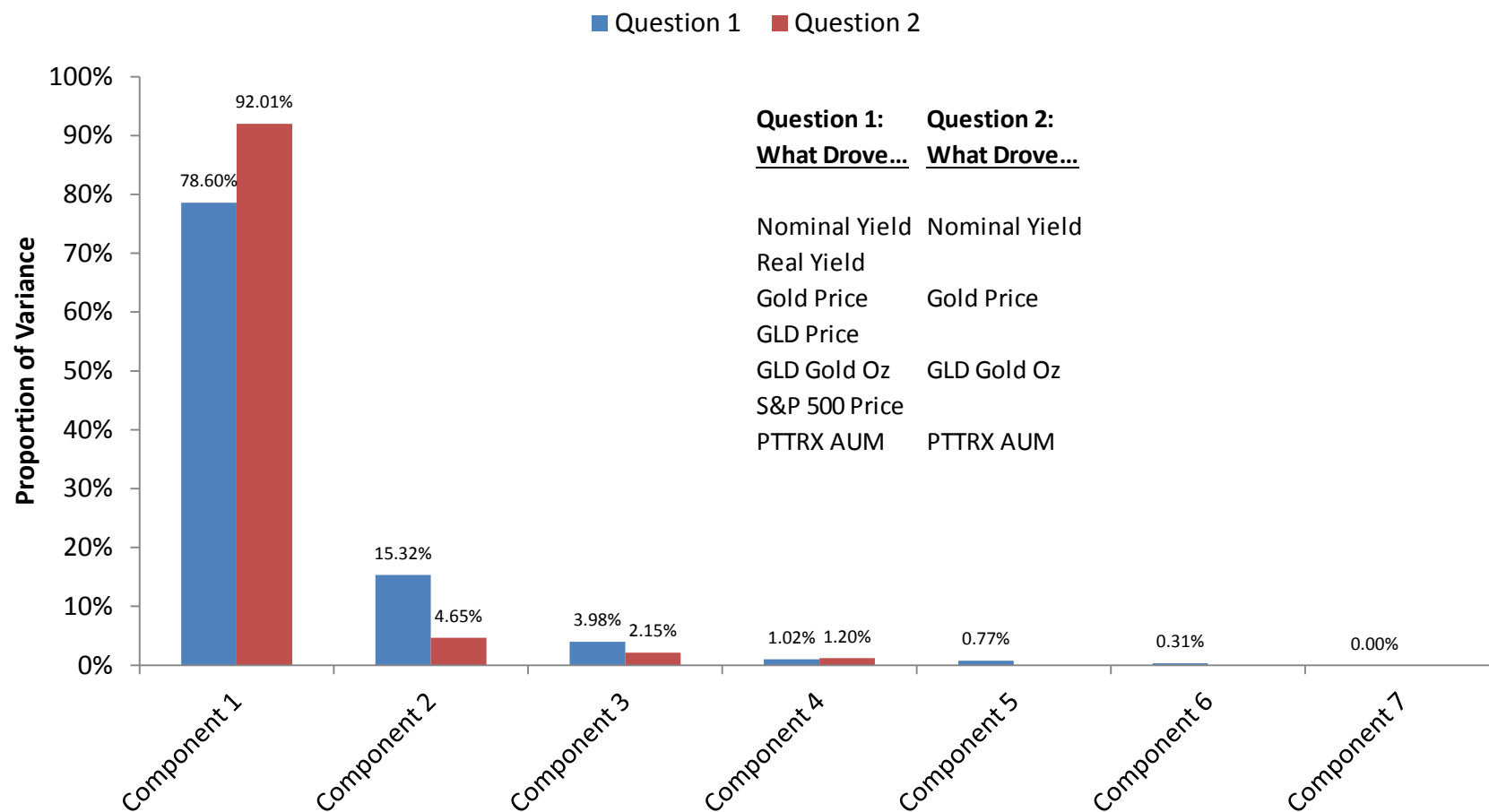
- Unfortunately, there is no clear, unambiguous way to measure “fear”

The Fear Trade: A Possible Framework

- What if one wanted to know how gold and rates zigged and zagged
- Correlation provides some insight when comparing two objects
- What if one asked the following more complex question:
 - “Have there been common influences driving interest rates, the price of gold, the amount of investment in gold, the stock market and the amount of investment in bonds?”
- Correlation provides little insight
- What one wants to know is “what is driving all of these things?”
- Certain statistical concepts help explore complex questions
 - With all the normal caveats

Principal Components Analysis

One Significant Common Driver



The Upshot

- Did gold drive interest rates or did interest rates drive gold?
- Both gold and rates were highly correlated, but it is hard to believe
 - That one drove the other
 - Gold was a fear of hyperinflation play
 - Bonds were a fear of deflation play
- It is possible that something like Buffett's "fear trade" drove both
- Statistically, one factor drove up to 90% of gold and rates variability
- If the "fear trade" explains the linkage between gold and bonds
 - Then a diminution of fear will be bad news for gold

The Invisible Man

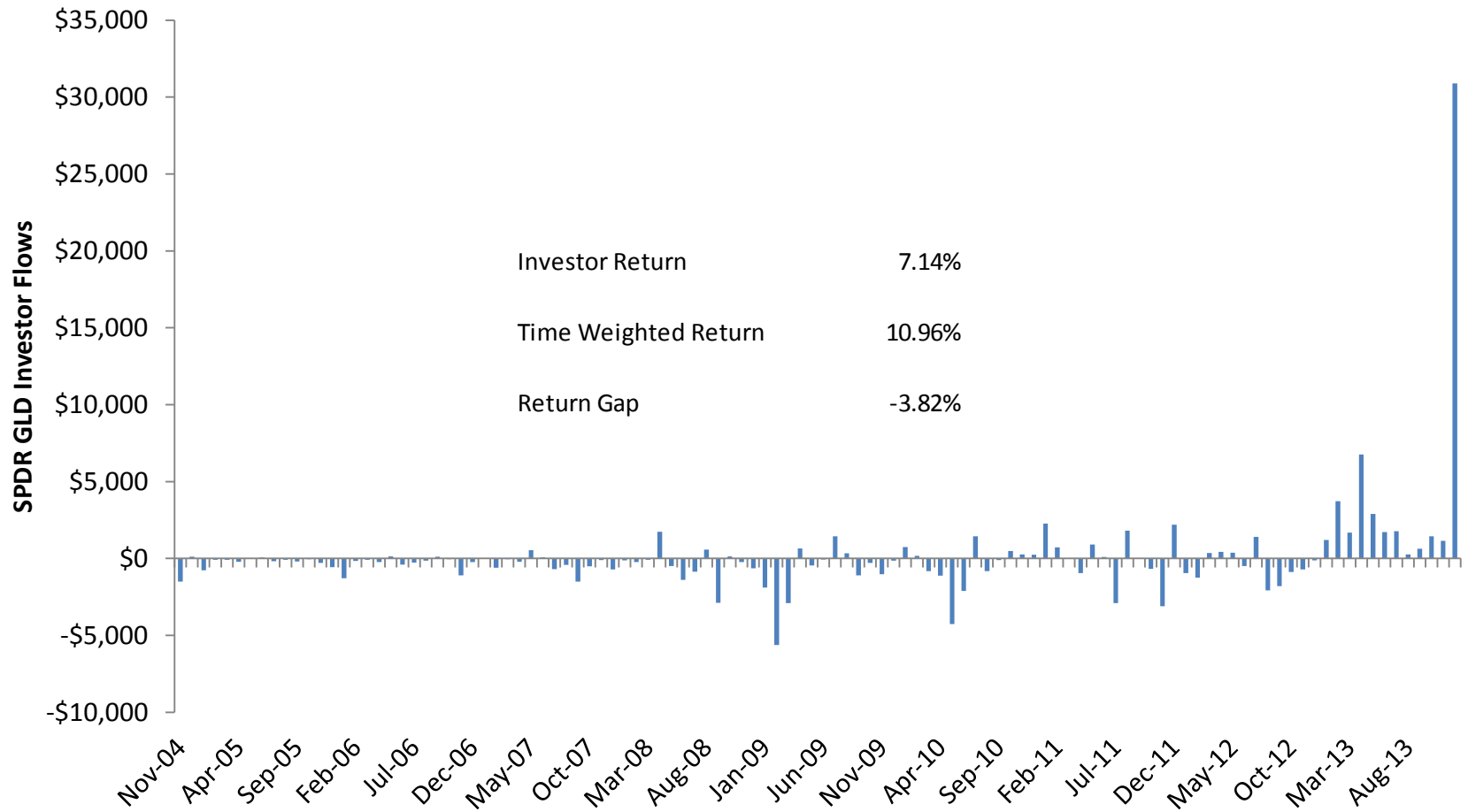
- Mr. Market has “incurable emotional problems”
- “At times he feels euphoric....”
- “At other times he is depressed...”
- Omnipresent yet never photographed

Ben Graham, my friend and teacher, long ago described the mental attitude toward market fluctuations that I believe to be most conducive to investment success. He said that you should imagine market quotations as coming from a remarkably accommodating fellow named Mr. Market who is your partner in a private business. Without fail, Mr. Market appears daily and names a price at which he will either buy your interest or sell you his.

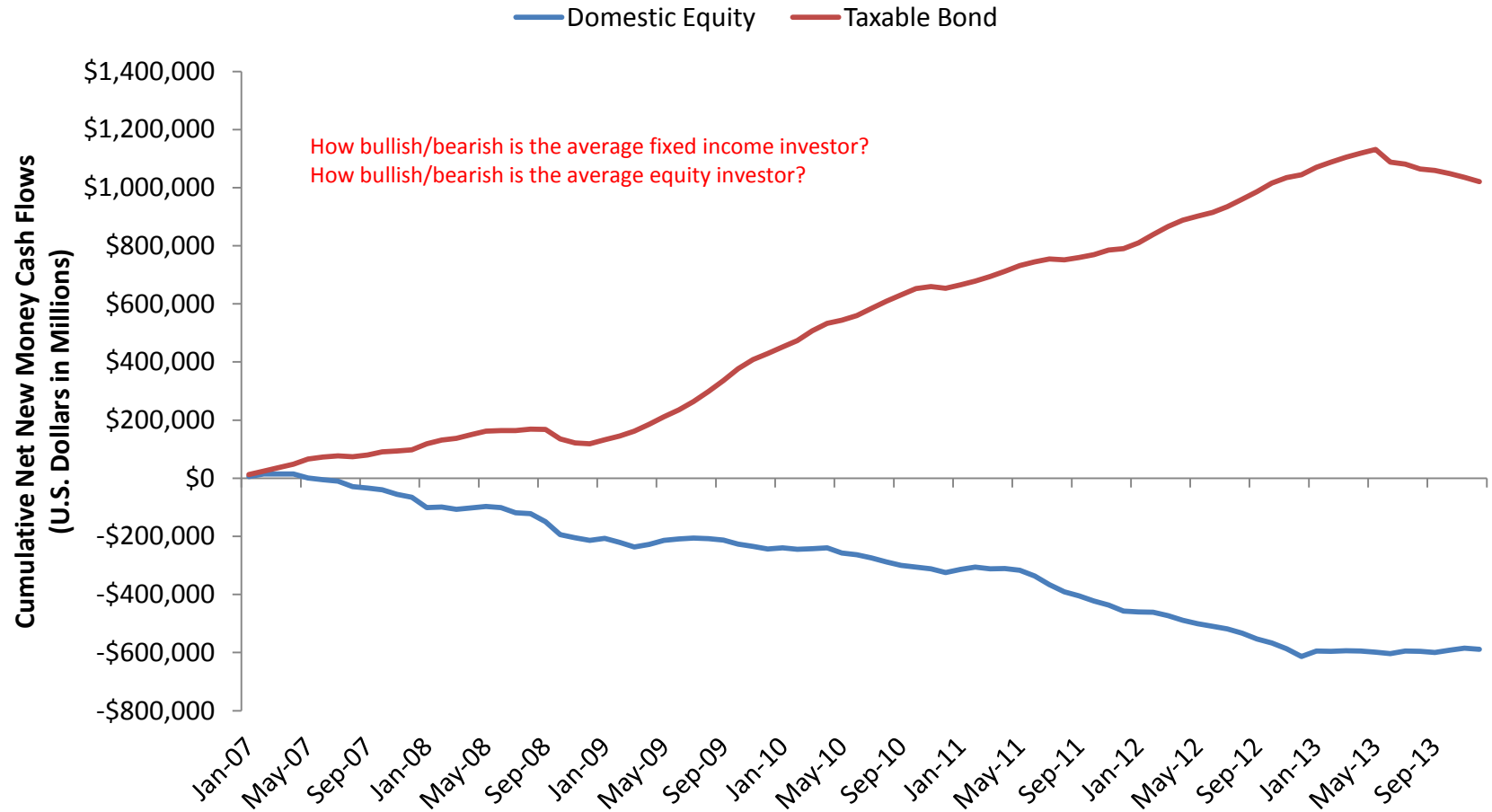
Even though the business that the two of you own may have economic characteristics that are stable, Mr. Market's quotations will be anything but. For, sad to say, the poor fellow has incurable emotional problems. At times he feels euphoric and can see only the favorable factors affecting the business. When in that mood, he names a very high buy-sell price because he fears that you will snap up his interest and rob him of imminent gains. At other times he is depressed and can see nothing but trouble ahead for both the business and the world. On these occasions he will name a very low price, since he is terrified that you will unload your interest on him.

SPDR GLD Investor Return and Time Weighted Return

The Return Gap and Mr. Market



Significant Allocation Towards Fixed Income and Away From Equities



Different Ways of Saying the Same Thing

- Price may differ from value

Voting Machine

Noise

Luck

Weighing Machine

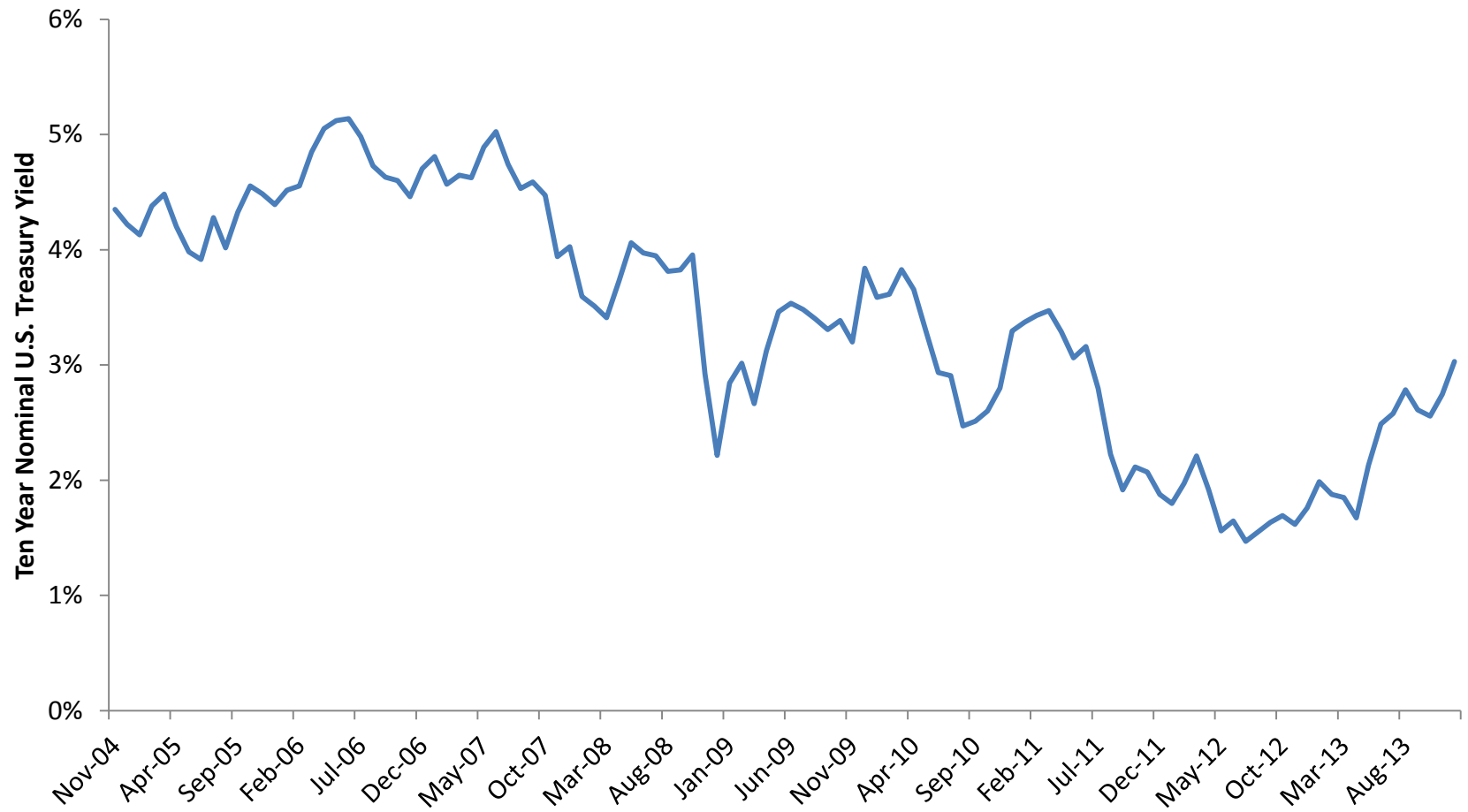
Signal

Skill

- If most investors want to be in the top 1%, how many can be in the top 1%?
- When more than 1% of investors are fearful, how likely is it
 - That there will be an attractive pay-off to fear?

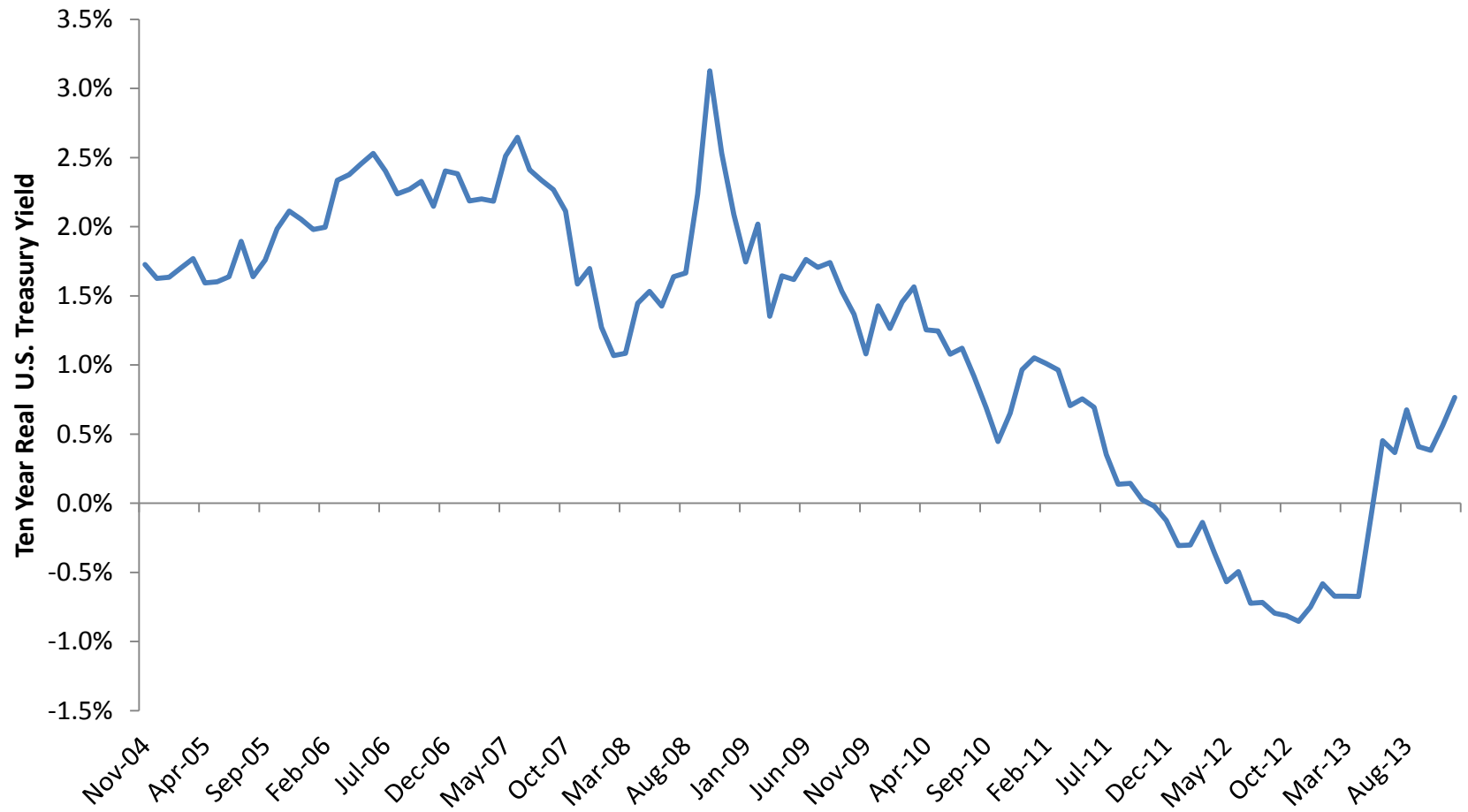
ADDITIONAL

Ten Year Nominal U.S. Treasury Yield



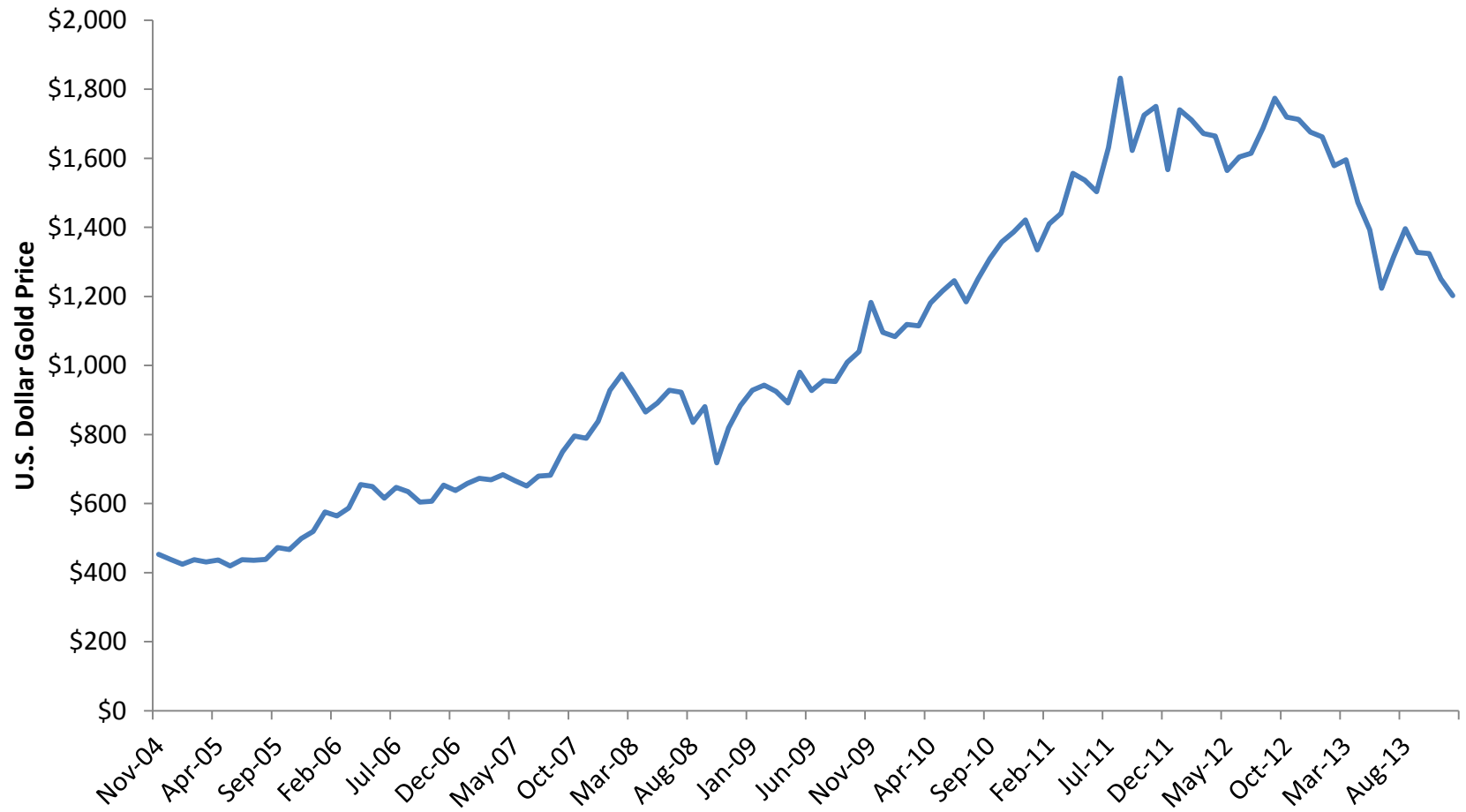
Note: Data source: Bloomberg.

Ten Year Real U.S. Treasury Yield



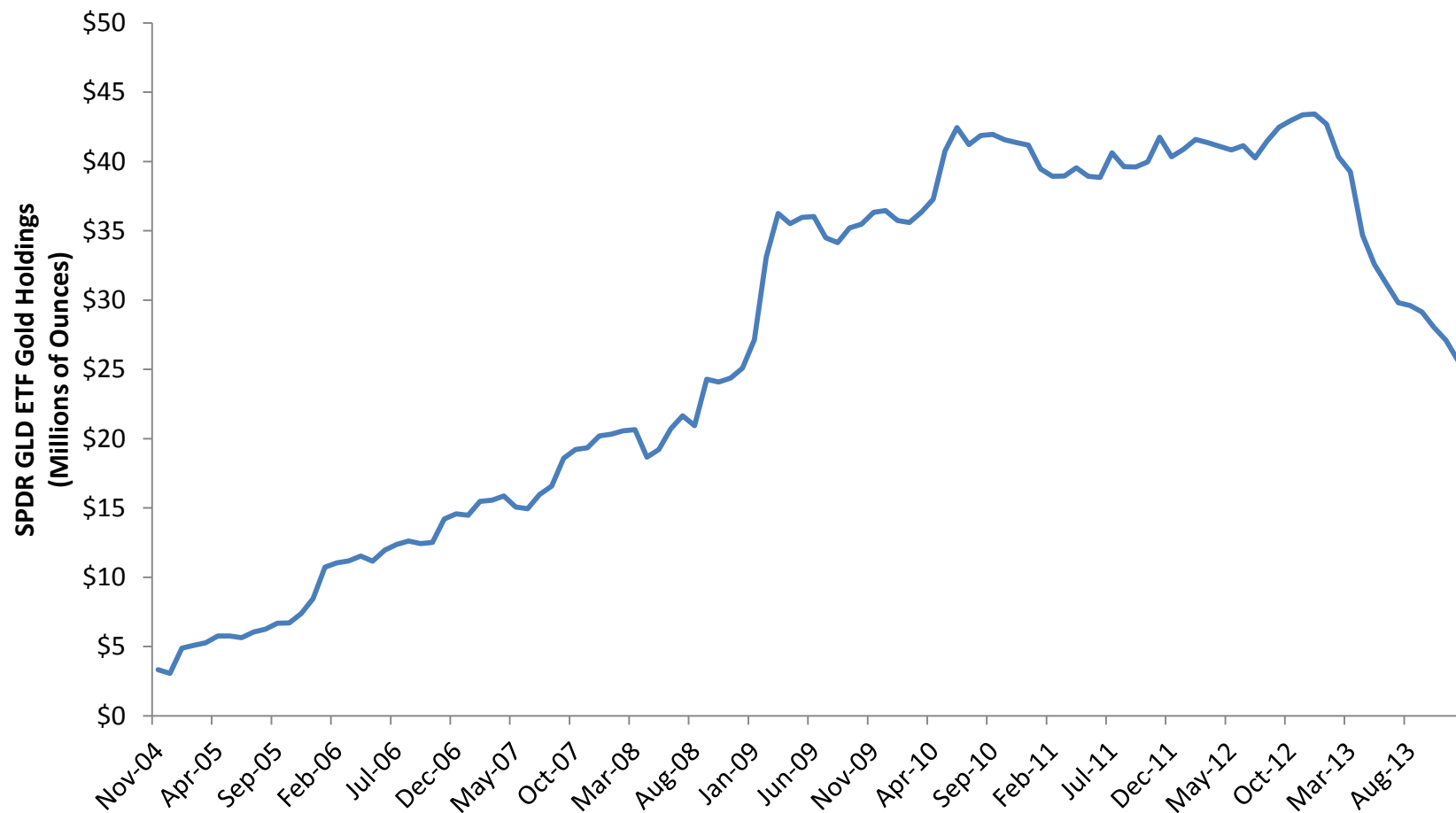
Note: Data source: Bloomberg.

U.S. Dollar Gold Price



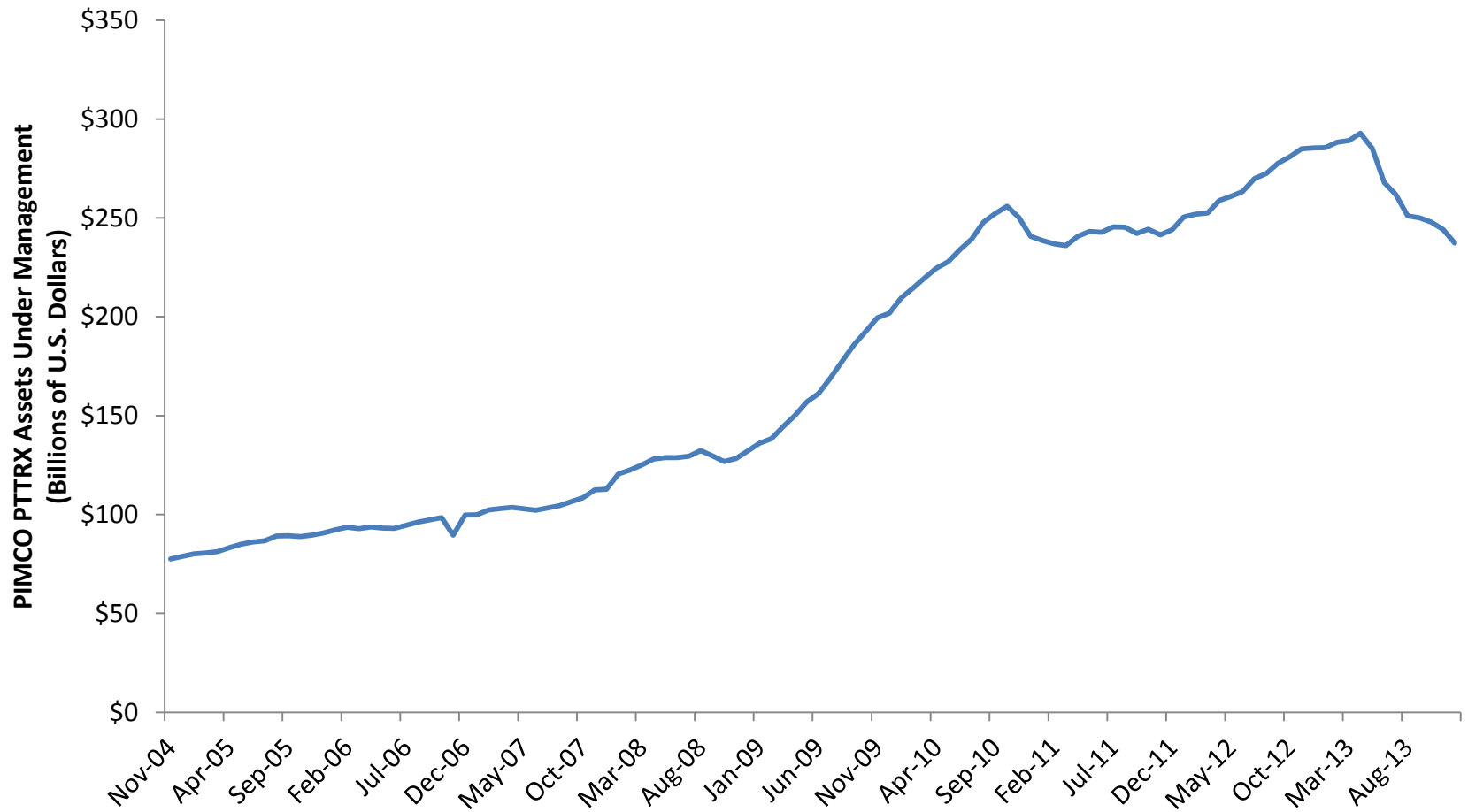
Note: Data source: Bloomberg.

SPDR GLD ETF Gold Holdings (Millions of Ounces)



Note: Data source: Bloomberg.

PIMCO PTTRX Assets Under Management (Billions of U.S. Dollars)



Note: Data source: Bloomberg.

References

- Erb and Harvey
 - The Golden Dilemma
 - http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2078535
 - <http://www.cfapubs.org/doi/pdfplus/10.2469/faj.v69.n4.1>
 - An Impressionistic View of the “Real” Price of Gold Around the World
 - http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2148691
- Asness
 - Fight the Fed Model: The Relationship Between Stock Market Yields, Bond Market Yields and Future Returns
 - http://papers.ssrn.com/sol3/papers.cfm?abstract_id=381480