



ASPEN PARTNERS  
ASPEN MANAGED FUTURES BETA INDEX

Managed Futures & Rising Rates  
January 2017

FOR INVESTMENT PROFESSIONAL USE ONLY

## Key Points

- Advisors should be contemplating portfolio changes resulting from a shift to higher interest rates.
- Gold, fixed income, and real estate investment trusts are among the asset classes adversely affected by rising rates.
- Managed futures perform better as rates rise, which is likely due to the increased market volatility exhibited during those periods.

## The New Paradigm

Interest rates have been in a downtrend for much of the last three decades. “Black swan” events such as the technology bubble, the 9/11 terrorist attack, and the Enron and WorldCom frauds, and the Global Financial Crisis have prompted the Fed to stimulate the economy. More broadly, the unusually low rate of inflation that has prevailed over the last thirty years has allowed for an easy money policy.

But in December, 2015, the Federal Reserve elected to increase the Federal Funds rate, kicking off the first rate hike cycle in nearly a decade. While the same pattern has not yet occurred in other developed economies, a rising rate backdrop in the United States may be of outsized importance, given the dollar’s role as reserve currency and as the numeraire for most commodity pricing.

---

*After nearly a decade of declining interest rates, the US is finally in a rising rate backdrop.*

---

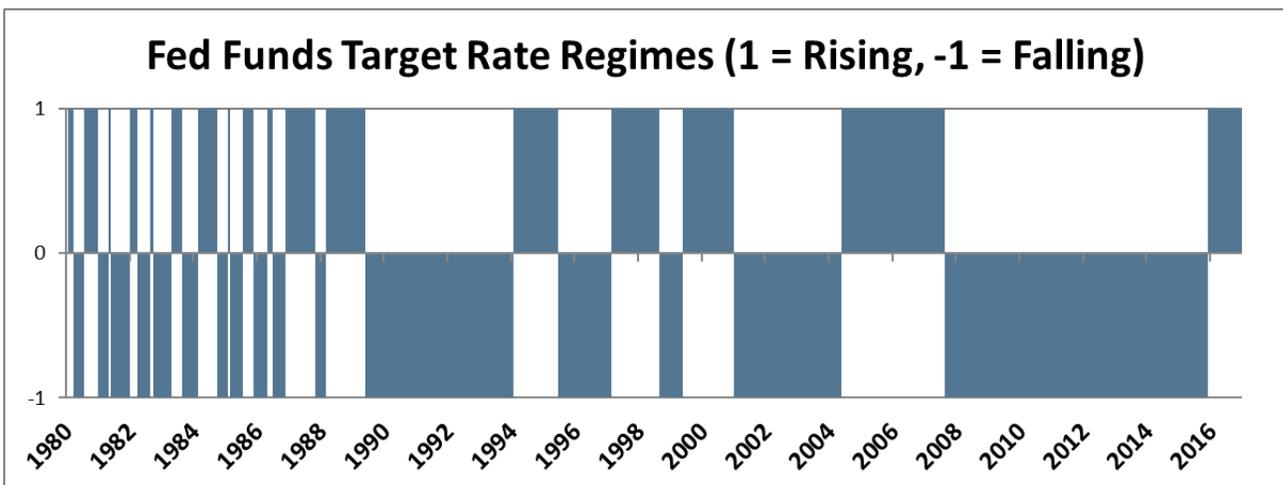
This study illustrates the effects of higher rates on client holdings. Our methodology includes defining rising rate and falling rate periods; measuring the performance of a number of asset classes for each period; and analyzing the results.

## Interest Rate Regimes

Perhaps the most straightforward definition of rising and falling rate periods is the concept of a “rate regime.” **A rising (falling) rate regime consists of any period over which the most recent rate action on the Fed Funds target rate was an increase (decrease).** Since the Federal Reserve only changes its target rate on a periodic basis and because Fed Funds rate changes tend to occur in series of multiple increases or decreases, these “regimes” can often last months or years.

See Figure 1 for a graphical depiction of rising and falling rate periods under these two definitions. From the graphs, it is clear that periods of rising and falling rates exhibit some “stickiness.”

Figure 1: Fed Funds Rate Regimes



Data Source: Bloomberg.

The next step in the analysis is to determine the performance for various asset classes during rising and falling interest rate regimes. Table 1 illustrates the results for eight different investments.

**Table 1: Asset Class Performance During Up and Down Fed Funds Rate Regimes <sup>1</sup>**

Start Date	Managed Futures		Stocks		Fixed Income		REITs	
	Jan-80		Jan-80		Jan-80		Jan-80	
	Rates Up	Rates Down	Rates Up	Rates Down	Rates Up	Rates Down	Rates Up	Rates Down
Annualized Return	12.30%	7.49%	10.17%	12.01%	5.38%	9.50%	2.94%	14.98%
Annualized Standard Deviation	15.68%	11.85%	14.49%	15.31%	5.00%	5.59%	13.54%	18.11%
Return / Standard Deviation	0.78	0.63	0.70	0.78	1.08	1.70	0.22	0.83
Average T-Bill Rate	6.03%	3.89%	6.03%	3.89%	6.03%	3.89%	6.03%	3.89%
Sharpe Ratio (Risk Free=Avg. T-Bill)	0.40	0.30	0.29	0.53	-0.13	1.00	-0.23	0.61
Correlation to S&P 500	0.02	-0.03	1.00	1.00	0.10	0.25	0.48	0.62
Start Date	Hedge Funds		Gold		Commodities		Long Puts	
	Jan-90		Jan-80		Jan-80		Jul-86	
	Rates Up	Rates Down	Rates Up	Rates Down	Rates Up	Rates Down	Rates Up	Rates Down
Annualized Return	9.56%	10.37%	-4.07%	4.39%	8.20%	0.46%	-8.55%	-10.26%
Annualized Standard Deviation	7.14%	6.44%	14.96%	18.58%	17.96%	20.43%	7.75%	10.92%
Return / Standard Deviation	1.34	1.61	-0.27	0.24	0.46	0.02	-1.10	-0.94
Average T-Bill Rate	4.54%	2.31%	6.03%	3.89%	6.03%	3.89%	5.04%	2.64%
Sharpe Ratio (Risk Free=Avg. T-Bill)	0.70	1.25	-0.68	0.03	0.12	-0.17	-1.75	-1.18
Correlation to S&P 500	0.70	0.77	0.08	0.02	0.01	0.25	-0.83	-0.84

Data Source: Bloomberg.

As the data shows, managed futures performs better in rising rate environments, both on an absolute and a risk-adjusted basis. Commodities also perform better on average as rates increase, but the return-to-volatility ratio is much less favorable for investors.

*Unless properly hedged, fixed income investors could suffer significantly in rising rate environments.*

Although equities do not suffer as much during more rising rate periods as one would expect, fixed income suffers a dramatic reduction in return when rates are not falling. A popular alternative with investment advisors, real estate investment trusts likewise earn much less as rates climb.

One of the most interesting results is the one for gold. The yellow metal performs much better as rates fall; as rates rise, gold returns are historically negative. **This indicates that, contrary to popular belief, gold may not be not an effective hedge against inflation.**

A constant position in long put options in order to provide a hedging mechanism fails to add value in either rising and falling rates, due to the propensity of stocks to rise over time. Hedge funds tend to lose their edge when rates are rising, but the correlation benefit to equities in either rate scenario is not as compelling as for other alternatives.

In our view, domestic interest rates will eventually increase. We believe that the return benefits of managed futures during periods of rising rates justify its inclusion in a thoughtfully diversified portfolio.

## **Notes**

<sup>1</sup> “Rates Up”/ “Rates Down” means the most recent change to the Fed Funds target rate was an increase/ decrease. Data are from January 1980 through December 2016, unless otherwise indicated below. Asset classes are defined as follows:

- *Managed Futures: Barclay CTA Index*
- *Stocks: S&P 500 total return*
- *Fixed Income: Barclays Aggregate Bond Index*
- *REITs: FTSE NAREIT Index*
- *Hedge Funds: HFRI Fund Weighted Index (data from January 1990 through December 2016)*
- *Gold: Gold spot price*
- *Commodities: Goldman Sachs Commodity Index total return*
- *Long Puts: Reverse of CBOE Put Write Index returns (data from July 1986 through December 2016)*

*These benchmarks are unmanaged and do not represent the attempt of any manager to generate returns on an investment. These benchmark indices do not include transaction costs, fees, and other expenses. An investor cannot invest directly in an index.*

## **Important Disclosures**

*Past performance is no guarantee of future results.*

*This document does not constitute an offer to sell or solicitation of an offer to buy any security. The information contained herein is provided for educational purposes only and is not intended to solicit interest in any investment opportunity.*

*Data has been obtained from reliable sources. Aspen Partners believes the information herein to be reliable; yet no warranty or guarantee is made as to its accuracy or completeness.*

*Aspen Partners markets investment products through Frontier Solutions, LLC a wholly-owned subsidiary and a member of FINRA/SIPC. Marketing personnel of Aspen Partners are registered representatives of Frontier Solutions, LLC.*

## **Definitions**

*Annualized Return: The year-over-year growth rate of an investment over a specified period of time. The rate of return that, if compounded every year, would have produced the same total return as was produced by the investment.*

*Correlation: A statistical measure of how an index moves in relation to another index or model portfolio.*

*Sharpe Ratio: A measurement of risk-adjusted performance which subtracts the "risk-free" rate of return from an investment's performance.*

*Standard Deviation: A measurement of the annual rate of return's dispersion from its mean, indicating an investment's volatility.*