Asset allocation in an age of low rates, high-priced stocks and market tantrums

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Risk allocation strategies are now a well-established part of the tool kit of multiasset portfolio managers. But how should investors proceed in an environment in which a static approach to risk allocation may not work, or diversification, the foundation of asset allocation, is in short supply?

Jeffrey Knight, global head of investment solutions and co-head of global asset allocation at Columbia Threadneedle Investments, takes a deep dive into risk allocation strategies, and explains why his evolved version of risk parity — "adaptive risk allocation" — is his preferred investment approach for today's challenges.

P&I: Your strategy adapts its risk allocation based on market "states." Can you explain how it does this and why you have taken this approach?

Jeffrey Knight: Risk parity is a breakthrough in asset allocation, maybe the most important one that I've seen in my career.

There's a huge benefit to risk balancing and relaxing the no-leverage constraint — both of which set risk parity apart. But I think that there are things that can improve classic risk parity. One is dispensing with the idea of parity, meaning that all of the building blocks in the portfolio need to have identical representation in the outcome of the portfolio. A philosophical commitment to parity is not necessary. In fact, from a portfolio efficiency perspective, parity has demonstrated that it is suboptimal under some conditions. We wanted to understand if those conditions could be established ex ante, and what would be a better allocation approach than parity in those conditions.

Based on our research, we have set up a methodology to identify when it makes sense to defect from a risk-balanced portfolio. Based on bond market signals and stock market signals we make an ex-ante determination on the market state.

Bond market investors are good at worrying about what can go wrong — recession, deflation or financial stress. Stock market investors, on the other hand, tend to be more adept at evaluating what can go right. Conditions in equity markets that are discernable and unusual tend to be positive ones.

While the inputs to our algorithm are stock and bond conditions, the output carries with it implications for all asset classes. The way that these conditions interact is also very powerful, offering additional precision to the diagnosis of markets.

Based on the inputs, we have established four defined market states: capital preservation, neutral, bullish and highly bullish. The majority of the time, the market state will be neutral, and a risk-balanced approach makes sense here.

P&I: When you have determined that market state, how do you parlay that into your risk allocation strategies?

Knight: We have studied the historical behavior of all asset classes that we include in our portfolio, subject to the classification of market states. The results suggest that a very different strategic allocation — a policy portfolio — makes sense corresponding to each of the four market states.

If we are in the neutral market state, we have a neutral policy portfolio. If we are in capital preservation, we have a specific capital preservation portfolio, which forces us to reduce and reallocate risk in a way that a simple tactical overlay cannot achieve.

Essentially we operate with a switching methodology, employing a balanced-risk approach when that makes sense, and adding, reducing or reallocating risk as indicated by the signals.

P&I: Is this analysis running all the time? How do you guard against misclassifying the market state?

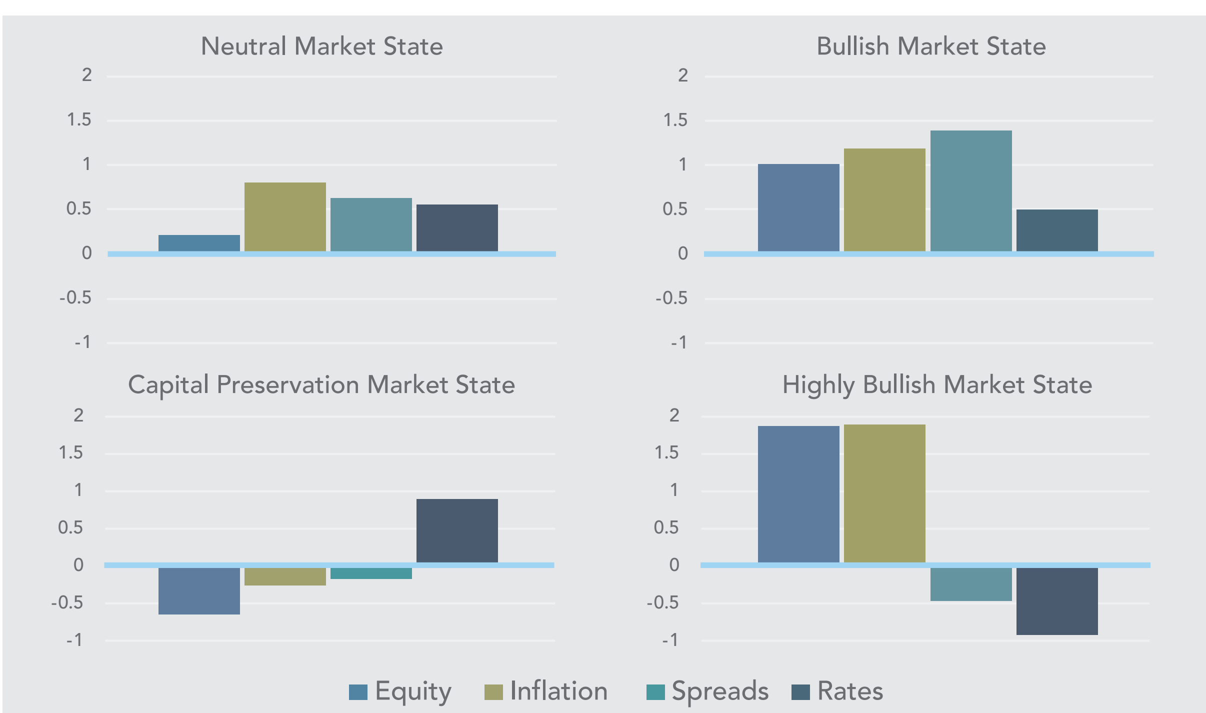
Knight: It is running all the time and we are constantly monitoring the key variables. It is important to take a thoughtful approach, parsing temporary mean reversion within a prevailing trend from that longer-term trend itself. Our approach looks for persistence in the indicators required to change market states, and the determination of the state is made on a monthly basis.

P&I: Looking at today's markets, why is an adaptive approach to risk allocation most relevant?

Knight: Today's conditions are unusual because the aggressiveness of monetary policy around the world — cheap money and quantitative easing — has created asset price inflation across asset classes. It is tricky, because on the one hand, that is actually a great circumstance for a risk parity strategy because you are diversified and leveraged, and Sharpe ratios are fairly evenly distributed. On the way up it works great.

A change in circumstance, though, can create a simultaneous reversal across all asset classes. A risk parity portfolio can be very vulnerable to these

SHARPE RATIOS VARY BY MARKET STATE[1]



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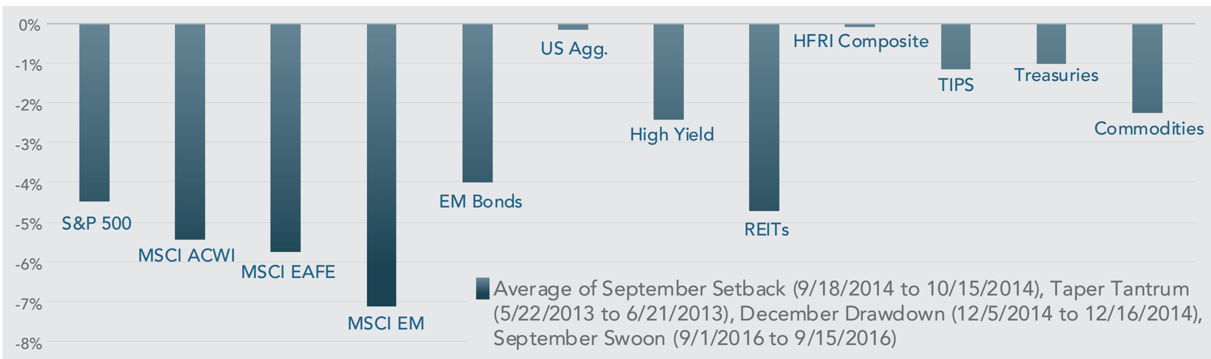
INVESTMENT INSIGHTS

ASSET CLASS PERFORMANCE DURING EPISODES OF VOLATILITY[2]



correlated moves down, which now have a name, "market tantrums."

Diversification alone will not stabilize portfolios if most of the components are declining in value. I favor deliberate shrinking of position sizes in these environments — reducing exposure and reallocating risk in the portfolio to minimize drawdown. Preparing for tantrum conditions was one of the motivations for our research into the strategy.

P&I. Do you think traditional tools and approaches to risk allocation are sufficient for the investment challenges today?

Knight: If you have to pick a single approach to asset allocation, the tools of risk parity — balance and leverage — are the best. The static approach to asset allocation is increasingly dangerous, however, and we think an investor will be better off adapting when we cross through important thresholds in the stock market or bond market.

P&I: Last year, many of the assets that managers use in risk parity strategies performed badly, sometime in unison. How are the asset classes performing and behaving this year?

Knight: Last year we had a repricing of the U.S. dollar versus other currencies. A lot of diversifying assets have a sensitivity to dollar strength that works against them simultaneously when the dollar is appreciating. It didn't pay to be properly diversified. Given that broad and balanced diversification is a core idea in risk parity strategies, these strategies struggled a bit last year.

This year we have had a weaker dollar, and that has given some breathing room to these asset classes. Owning high-yield credit was terrible in 2015, and it has been great this year. Emerging markets exposure was terrible last year and, while not great so far, has been better than developed market exposure.

If we see a return to significant dollar strength, then we may see a relapse into 2015 kind of conditions. This gets back to the monetary stance and the prospects for a tantrum. The Federal Reserve communicated an intent for four rate hikes this year, but that clearly hasn't happened. By backing down from these aggressive plans, the Fed has allowed the patterns of broad-based asset price inflation to resume for the time being.

P&I: There was a spike in volatility over the summer. How does volatility play into your strategy and risk parity generally?

Knight: Volatility is at the heart of these strategies. The relative volatility of different pieces of the portfolio matters, and the absolute volatility matters.

There is an impression that when volatility rises, risk parity managers have to sell, and when volatility falls they have to buy. Instead, we use longer-term volatility to determine capital allocation weights that make sense in a robust way.

We don't try to constantly calibrate our portfolio weights to incremental changes in the volatility landscape.

P&I: Some critics have said the success of risk parity has come as a result of being able to lever fixed income. How may this help or hurt given current bond market dynamics, including the possibility of a bond bubble?

Knight: That's a dangerous simplification of risk parity. The conventional understanding is that risk allocation, be it static or adaptive, is just a fancy levered bond trick.

Instead, at its core it is about extracting a payoff from a stronger approach to diversification, and separating the diversification decision from the aggressiveness decision. Those are very powerful investment concepts.

The analytical way to think about it is you create an unlevered portfolio with the proper risk distribution and then you scale the portfolio to whatever level of volatility you are targeting. So you identify the unlevered weights that get you the risk distribution that you are looking for, and then apply leverage to achieve your desired level of volatility. That is our approach: The leverage applies to the whole portfolio rather than a specific asset class.

I would not say that we are in a bond market bubble, and I think that it still makes sense to amplify the contribution of bonds given their negative correlation with equities. To me the better questions are: Is there a point at which bond yields become so low that they become irrelevant as diversifiers? Is the prospective Sharpe ratio of bonds better than the prospective Sharpe ratio of equities? That's what our approach sets out to determine.

P&I: Do you expect the election to have any particular impact on your risk allocation strategy?

Knight: I'm perfectly comfortable going into election season well-diversified and balanced. That core approach would be resilient to the kind of volatility we would get out of election noise.

It is central bank policies and the prospect of future tantrums that create conditions that make an adaptive approach an indispensable tool.

P&I: How do you see the role of a risk parity strategy within an institutional portfolio? Is there an optimal allocation?

Knight: The challenge that most institutional plans have is the asset-liability mismatch.

Risk parity helps with this problem in two ways. It wrings out as much return from traditional levels of volatility as possible. That's very useful when you're investing against a particular liability.

Secondly, there's a better match of this asset strategy to the dynamics of the liability. It is by nature a longer-duration strategy than the classic asset allocation.

To the degree that an investor believes in the principles of diversification and portfolio efficiency, I think that a risk-based approach should be a significant part of a portfolio. Based on our research, there is a substantial incremental benefit to overall portfolio efficiency up to 35% of the whole portfolio. Going beyond 35% is still beneficial but the benefit starts to taper off a bit. ❖

[1]Source: Columbia Management Investment Advisers, LLC. Market states based on CMIA proprietary model. Data is based on index results for the time period from January 1, 1970 through December 31, 2015 and may not reflect future market conditions. Equity represented by 100% global equities. Inflation hedging represented by 30% TIPS USD unhedged, 30% TIPS USD hedged, 20% commodities, 20% REITs. Interest rates represented by 50% U.S. Treasury, 25% Non- U.S. Treasury in USD hedged, 25% Non-U.S. Treasury in USD unhedged. Spreads represented by 40% high yield, 20% emerging market USD bonds, 25% investment-grade corporate bonds, 15% mortgage-backed securities.

[2]Source: Columbia Management Investment Advisers, LLC. Asset classes are represented by the following indices: Bloomberg Barclays U.S. Aggregate Bond Index (US Agg.), Bloomberg Barclays High Yield Index (High Yield), Bloomberg Commodity Index, JPMorgan EMBI, FTSE NAREIT Index (REITs), Citigroup 3-Month Treasury Bill Index (Treasuries) HFRI Composite (hedge funds).

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