How Risk Parity Works in the Fixed-Income Space

Taking advantage of risk parity strategies' benefits doesn't mean having to load up on leverage. Torsten von Bartenwerffer, portfolio manager at Aquila Capital, talks about where a risk parity bond fund could fit into your portfolio.

aiCIO: Aquila's multi-asset risk parity strategy first launched in 2004. Why did you decide to extend the range with a strategy that applies the concept to just one asset class—fixed income?

Bartenwerffer: There are several reasons. Let us say you're a fixed-income investor who has invested for the last 30 years and witnessed the Great Moderation coming out of the 1980s. Central banks started to micromanage interest rates. That led to a smooth business cycle where we had calm waters, enabled globalization, and basically worked as a hugely successful machine. Whenever the economy struggled, the central bank simply lowered interest rates, greasing the economy with cheap money.

In retrospect, as a fixed-income investor, you would have done well easily. The only thing you should have done is buy the bond with the longest duration and hold onto it and watch the windfall profits it reaped. Long-only fixed-income investors made a lot of money.

But today there is a problem. Interest rates can go down, but they can't go below zero for an extended period of time. If interest rates stay low, investors won't make a lot of money. But if they go up, investors will lose on a mark-to-market basis.

Secondly, we are living in a world in which financial markets are jittery and apprehensive. People need to think about where they lay their nest-egg and how they achieve real diversification within their investment allocation.

We wanted to provide a solution to both of these problems, and risk parity can help: It's extremely diversified—and diversifying is the only thing investors can do in a risky and insecure world.

And in an environment where interest rates can rise, you can protect your money or potentially even increase your returns down the road.

What makes this possible is that, while a lot of things are called fixed income, there are a lot of different return drivers within this bucket.

High yield, for example, has very different return drivers than investment-grade corporates. This means that just within fixed income, there is enough diversification to find uncorrelated assets.

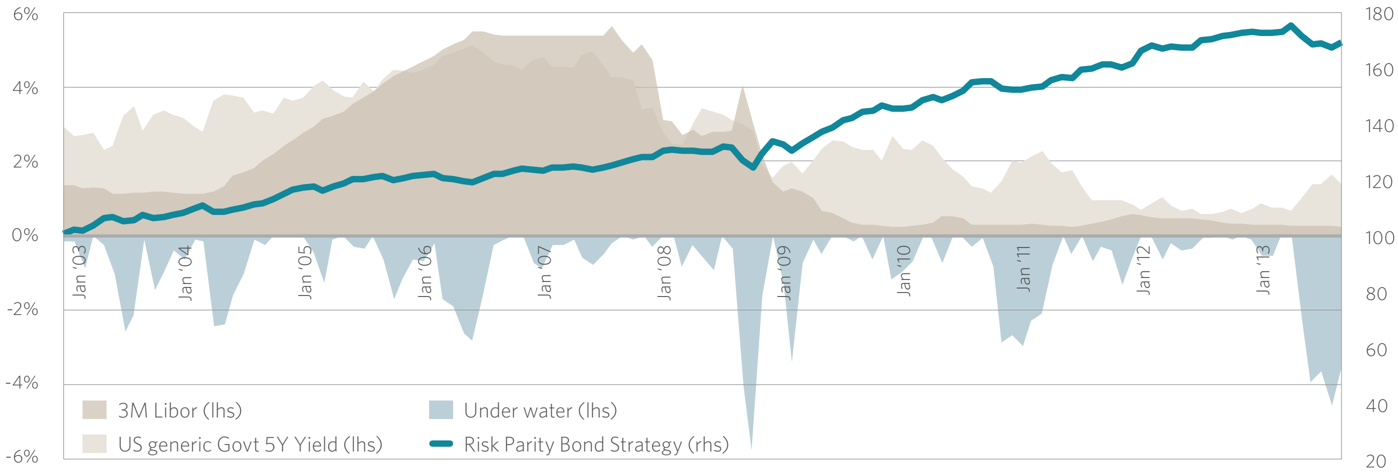
aiCIO: What sort of investors is the strategy suitable for?

The strategy is suitable for long-term conservative investors who either want or have to be invested in fixed income. Most institutional players have—and prefer—simple, transparent, long-only exposure. We are not leveraged, which is very important since a lot of risk parity strategies include leverage. Risk parity approaches do not rely on forecasts but aim to have exposure to assets that deliver returns irrespective of the economic or inflationary environment.

How is the strategy implemented?

The asset mix of Government Bonds, Corporate Bonds, Carry Positions in Emerging Markets and Inflation-linked Bonds that you see in our

Backtested performance of the Risk Parity Bond Strategy



The chart displays the track record (back test) of the Risk Parity Bond Strategy net of fees (institutional share class) compared with the three-month LIBOR index. Backtested returns are no guarantee of future performance. Source: Aquila Capital Research, Bloomberg

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Reprinted from aiCIO September 2013.

portfolio is unorthodox. You will rarely find fixed-income funds that invest in all of the different types of assets at the same time by equally weighting their contribution to the overall risk. What is innovative is how we combine these different sub-asset classes.

We start by constructing a stable portfolio. The returns harvested come from the fact that all these assets have a long-term positive risk premia.

Having looked at the different economic and interest rate phases, we consider that there are two factors that define these phases: inflation and growth.

Taking these two parameters, you can see there are four different economic seasons, and, for each of these phases, there will be fixed-income investments that are particularly well-suited for those phases, just like in a multi-asset environment.

We identify the instruments that come out of the different asset buckets, which will behave the best in each phase, and then take the assets that are most uncorrelated and apply a risk parity weighting to them.

If you want or need to be invested into fixed income in the future, you can either go short, use tactical strategies or stay long. We do not believe that tactical strategies can deliver alpha in the long run. If fixed-income hedge funds become fashionable again, investors have probably forgotten how few promises they have kept so far. So it's long or short, then. Our research shows that even if you can be 100% certain interest rates will rise over the next 30 years, being short will lose you money. That's because the aforementioned risk premia are here to stay. So, the only solution is being long—but in the smartest way possible. With uncorrelated assets that will take out the volatility.

How did you arrive at the specific mix of asset types, and why have you chosen not to use leverage?

The objective is to have assets and instruments that exhibit low correlation to each other and deliver positive returns in different market environments. We don´t believe we can time the fixed-income market and thus want to hold a well-diversified portfolio with different sources of returns. As fixed income primarily sits within the return component of portfolios (as opposed to the growth part), we do not seek to use leverage in the strategy.

That means we have to make sure that the volatility levels of all assets are in the same ballpark, which leads us to the current asset mix. Our overall portfolio construction contains assets that work well throughout the cycles and are liquid enough to invest in.

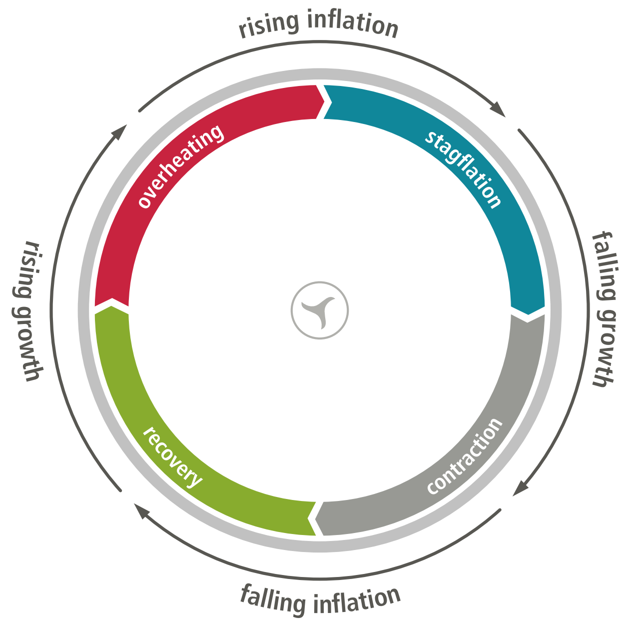
Do you anticipate a change in the mix over time? Are there any non-systematic factors involved?

As markets and instruments evolve and change, there could be changes made. For example, if there was a liquid way to invest in convertibles, that would be attractive.

What are the best and worst conditions for the strategy? Will recoveries from any drawdowns be quick?

The ideal environment is of course a prolonged falling interest-rate environment. If interest rates fall, anything with a duration factor will see some windfall profits. Since we are fixed-income investors and not going short duration, all assets carry a duration factor.

Having said that, when interest rates rise we expect lower returns, but we would still expect returns to be positive over time. This is because



Source: Aquila Capital Research

the positive risk premia remains constant over time, even if interest rates rise.

As we are broadly diversified in terms of investing in sub-asset-class instruments, different countries, currencies, and durations, we are well-positioned to harvest these risk premia.

The strategy has not been running publicly for long, but we got through the tapering crisis in May and June this year—which, in absolute terms as well as in relative terms, was a crisis that was worse than 1994—well. If that's the worst the market can throw at us, I am happy.

This being a systematic strategy, what is the likely regularity of drawdowns?

Generally, one of the key concepts of risk parity is to explicitly not make predictions. But, looking historically at what the strategy has done in different phases, a normal drawdown would be around a loss of about 3%.

There might be exceptions, such as the 2008 financial crisis, which saw a larger drawdown, but even then we recouped it in 38 days.

Why has this type of strategy never been offered before?

Until recently it has been difficult to get access to some assets that we use. This is because they have only developed in a liquid, investable form in the last few years.

As an example, emerging markets only developed liquid access relatively recently. It's the same with inflation-linked cash bonds. For a long time there weren´t a lot of instruments to pick from.

Also, the demand for a risk parity bond fund and the objectives it can achieve—our target return is somewhere around Libor +3%—hasn't been all that attractive until now. But it will be going forward. ■

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