



Multi Assets

Monetary policy and portfolio risk

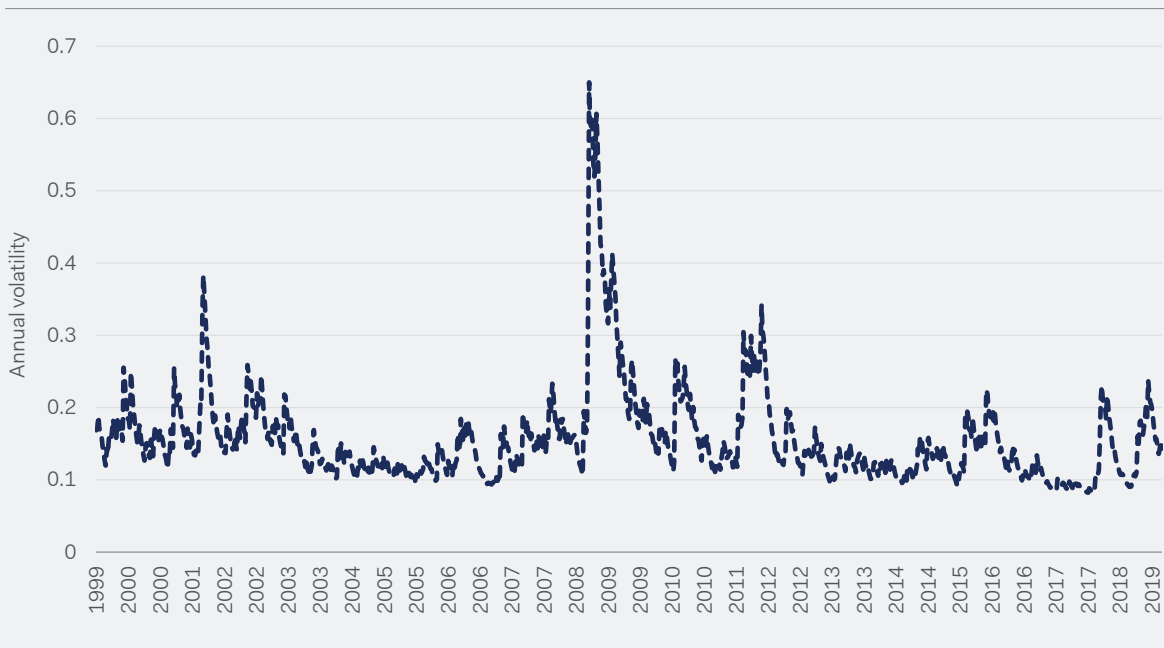
“Don't put all your eggs in one basket”. This statement applies in particular to your investment portfolio. To be more precise, a well-diversified portfolio will optimally protect your capital during bouts of increased uncertainty and volatility in financial markets. This is a very simple rule which, unfortunately, is all too often ignored.

Why is this? Well, putting this rule into practice does require some expertise. **Portfolio diversification** is determined by three factors. Firstly, there is the **weighting of the various positions in the portfolio**. This choice is made by the investor or portfolio manager. The following two factors are linked to the characteristics of the various assets, namely volatility and correlations. The first parameter is a measure of the magnitude of return fluctuations and the expected downwards risk. For example, the volatility of European equities will be higher than that of safe German government bonds. In an efficient market, this higher risk will translate into a higher expected return. The second parameter reflects the **relationship between the various positions in the portfolio**. Here, certain assets typically move in tandem (positive correlation), while an increase in one particular asset may systematically result in a decrease in another asset (negative correlation).

Portfolio diversification can be **optimised** by combining various assets with the lowest possible, possibly negative, correlation. In this way, the failures will be offset by the successes.

So, given a certain allocation, portfolio risk will depend on volatilities and correlations, which vary over time. For example, when the financial crisis erupted in 2008, stock volatility rose from about 17% pre-crisis to over 60% during the crisis. Today, equity volatility remains low and clearly trends down again since the volatility shock at the end of last year. The correlation between equities and government bonds was typically positive until the end of the 90s, and has gone negative since then.

Global equity volatility



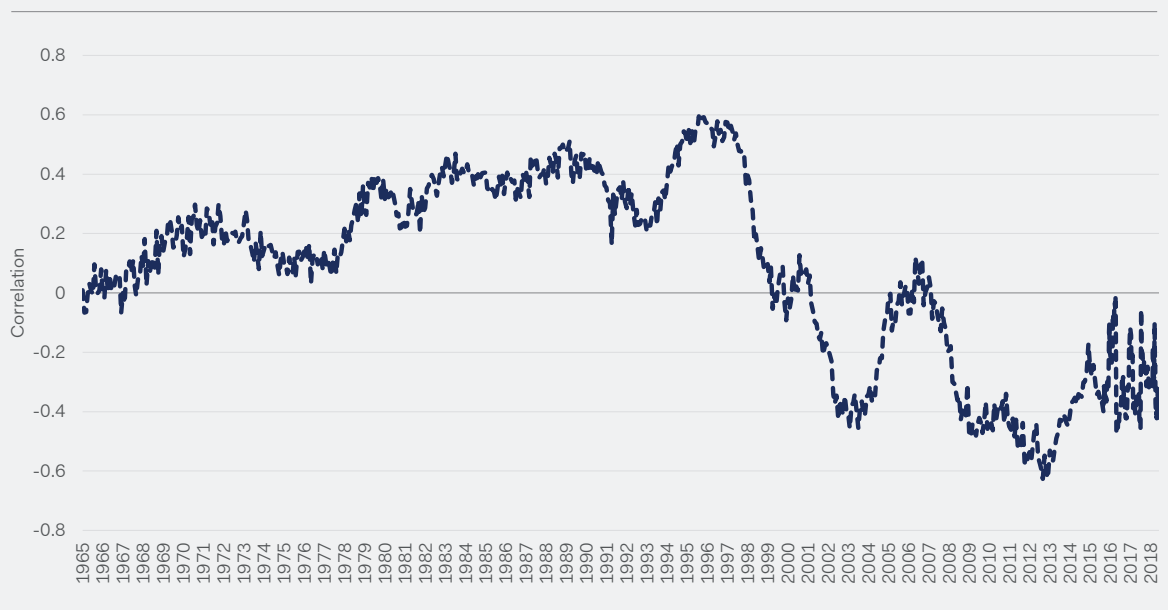
Source: DPAM, Factset

This time variation in correlations and volatilities is driven to a significant extent by the **macro-economic framework**. Recent academic research has demonstrated that monetary policy is an important key. Very accommodating monetary policy may have opposite effects on risk perception. On the one hand, this often leads to greater risk appetite. Here, the central bank is inflating asset prices and pushing interest rates down. A positive wealth effect and the search for higher-yielding assets push investors towards more risk. The current low volatility and low (tightening) spreads on high-yield bonds are an example of this. On the other hand, if the central bank overstimulates, this may send a negative signal to markets about the actual state of the economy, resulting in increased risk aversion. At present, the result seems to be skewed to higher risk seeking.

The type of monetary policy is also a determining factor, as a **countercyclical monetary policy** typically puts more weight on its inflation target. It will therefore not hesitate to hike interest rates in an environment of stagnating growth and rising

inflation (stagflation). In this environment, equities and bonds will fall in tandem, as bonds become a risky asset class (hence, a positive correlation). A pro-cyclical monetary policy will typically lead to falling interest rates in the event of disappointing growth. As a result, disillusioned equity markets will be supported by strong bond prices (hence, a negative correlation). The era of oil crises and inflationary shocks (late 70s, mid-80s) was characterised by a countercyclical monetary policy. However, the global decline in inflation and inflation fluctuations since the late 90s resulted in a comfortable environment for central banks. They could focus more on growth stabilisation and thus became pro-cyclical, resulting in negative correlations between equities and bonds. The figure below shows our long-term estimation of the correlation between US government bond returns and the US equity market returns. The shift in the correlation sign towards the end of the 90's is clearly visible. Note that this sign shift is a global phenomenon since we observe a similar pattern for most developed markets.

Correlation between US government bonds and US equity market

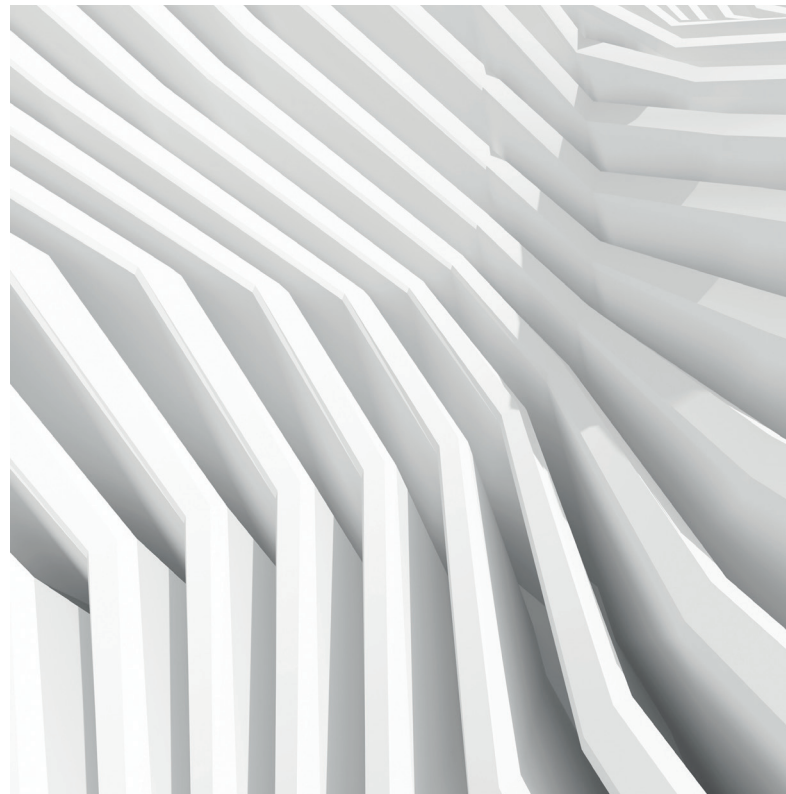


Source: DPAM, Factset

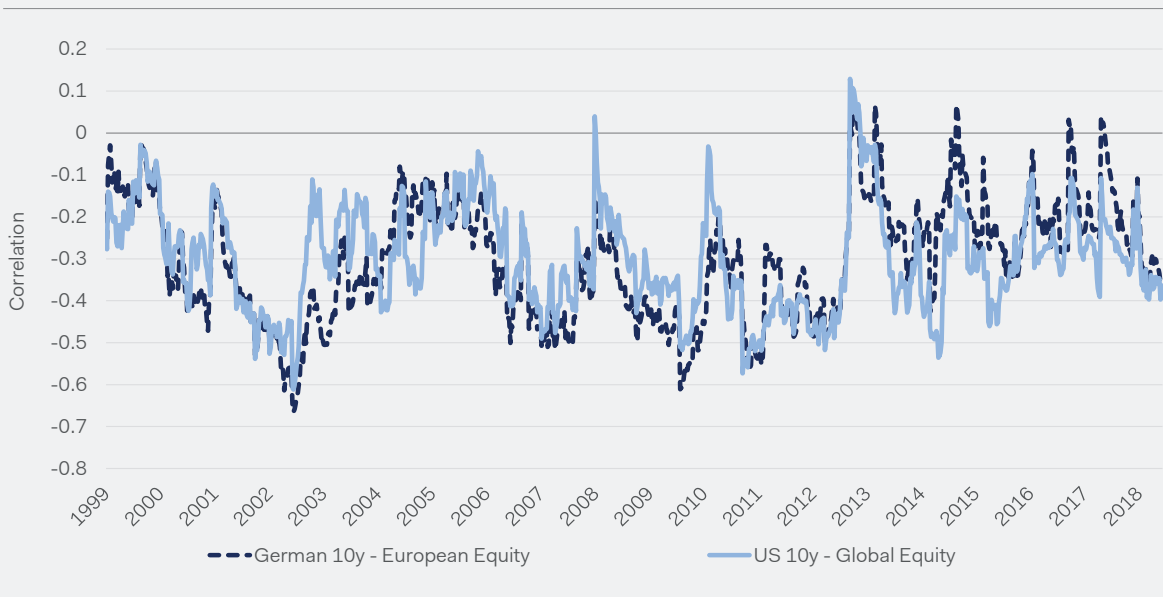
The **interaction between the inflation regime and the intent of monetary policy** is crucial for understanding correlations. Firstly, there is a clearly positive relationship between the level of inflation and the correlation between equities and bonds. During bouts of high inflation, correlations are invariably positive. However, as inflation falls, we also see a decline in correlation, even to negative levels with low inflation. However, this dynamic is not sufficient. We only see negative correlations if the low inflation environment is accompanied by loose monetary policy, and this is exactly the regime we find ourselves in today. However, if the monetary authorities switch to tighter monetary policy, we also see correlations turn positive, regardless of the inflation regime.

So what does this mean for your portfolio? The current environment with cautious central banks and low inflation is resulting in a **strongly negative correlation between equities and bonds**. This means that a well-diversified portfolio can currently make use of a **strong bond component** (regardless of low interest rates). Interest rate risk is negatively correlated with equity risk, which has a stabilising effect. So, don't judge a high quality bond investment only on the interest rate. The investment decision will depend on the expected return, which in turn depends on the bond

yield (carry) and the roll-down, but also on the diversification effect within a multi-asset portfolio.



Correlation between high quality government bond returns and equity markets



Source: DPAM, Factset



Today, equity volatility remains low and clearly trends down again since the volatility shock at the end of last year. The correlation between equities and government bonds was typically positive until the end of the 90s, and has gone negative since then.

If the unprecedented QE of central banks would ultimately lead to higher inflation and possibly to the unwinding of stimulus, we can expect correlations to become positive. This obviously does not mean that bonds will no longer have a place in a diversified portfolio. Instead, the allocation between equities and bonds will have to be adjusted.

Diversification is the key to successful long-term investment. This requires dynamic portfolio management supported by thorough macro-economic analysis and sophisticated tools to measure correlations and volatility. Failing to understand such dynamics may result in portfolios that appear to be diversified at first sight, but in reality still present unwanted risk concentrations. These flaws will then become mercilessly apparent in declining markets.



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