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The changing relationship between equities and bonds: the causes and some implications for investors

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Key points

- Over the past 2½ years, a decline in equity markets has been accompanied by a steady fall in government bond yields. Returns from the two asset classes have been negatively correlated. This note takes a long-term perspective on the relationship between equity and bond markets and asks whether this correlation will persist.

- The conclusion is that a negative correlation between the two asset classes is a key characteristic of periods of low inflation. When inflation is low and stable, asset markets are primarily driven by expectations about future economic growth. Higher growth benefits equities at the expense of bonds and vice-versa. In addition, a fall in inflation expectations from today's low levels is seen as having an adverse impact on growth and hence is bad for equities. When inflation was higher, falling price expectations did not weaken long-term growth expectations. Consequently both equity and bond markets did well. Today, the correlation is reversed.

- While the outlook for inflation could change, our central view is that we have returned to a period where prices are broadly stable (with a global inflation rate running at circa.2%). The risks are probably evenly skewed between higher and lower inflation, with a not insignificant risk of deflation. This suggests that the negative correlation between equities and bonds is likely to persist.

- This does not mean that equities are stuck in a permanent bear market, only that going forward the two assets are likely to experience different fortunes. The important implications for investors are:

  - Falling bond yields do not automatically make equities cheaper as they are probably signalling lower earnings and dividend growth.

  - The choice between asset classes becomes more important to overall returns, increasing the potential gains, but also the risks to tactical asset allocation. The distinction is made even sharper in a world of low inflation and low nominal returns as the choice could well represent the difference between a gain and a loss.

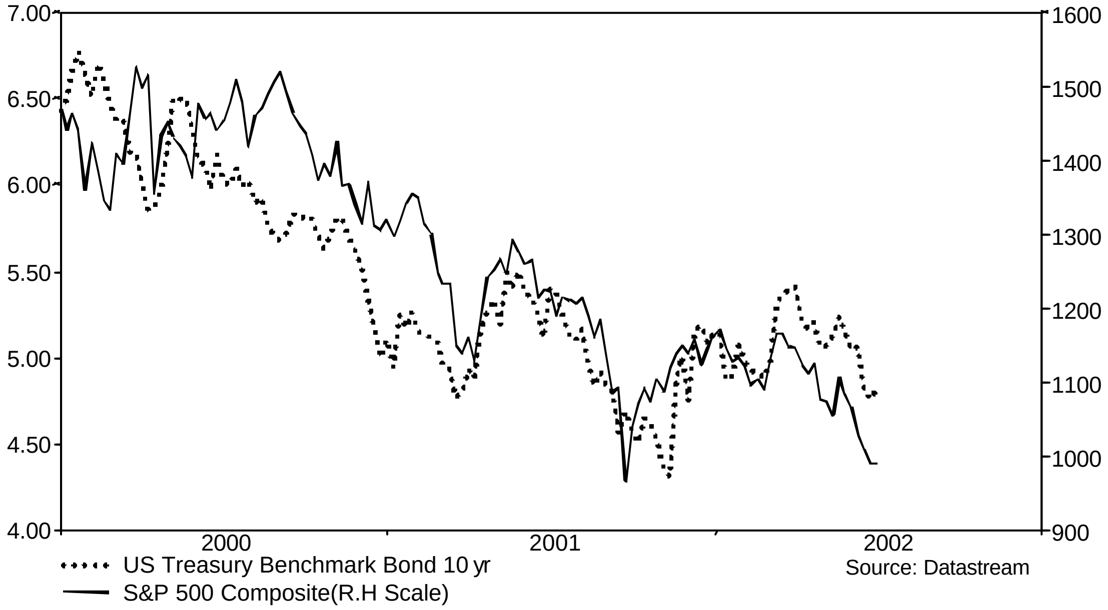
  - a balanced portfolio of equities and bonds achieves more diversification than before. A portfolio containing only one asset will be sub-optimal.

  - An end to the current bear market in equities will be signalled by a sustained period of rising bond yields, a move which will be confirmed by interest rate rises from the Federal Reserve.

The changing relationship between equities and bonds

It is widely recognised that equity and bond markets are moving in opposite directions these days. Movements in one market are often attributed to the other giving rise to such headlines as "Bonds thrive on equity market weakness". Such an observation has become commonplace and as our chart shows it has become hard to spot the difference between S&P500 and the bond yield in the US.

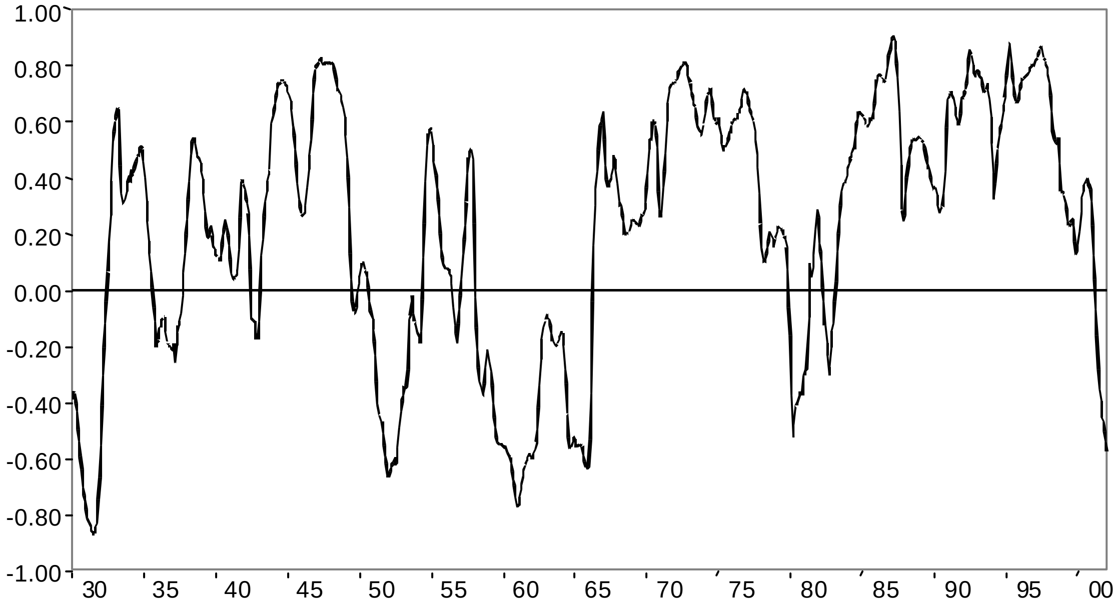
Chart 1: S&P500 index and US 10 year government bond yield



However, it seems to have been forgotten that this represents a big change from the not so distant past: for much of 1980s and 1990s the two asset classes moved together. What was good for bonds was good for equities. In a memorable remark from the period one Chief Investment Officer of a large UK pension fund said that whenever he felt like buying gilts he would take a brisk walk around the block, come back and buy equities. Such a strategy served investors well as falling bond yields underpinned rising valuations in the equity market.

Recognising that today's environment is different, we have taken a long run perspective on the relationship between equities and bonds using data for the US going back to 1927. The chart (produced by Schroders ISU) plots the correlation between returns on the two asset classes in the US on a 3-year rolling basis. It is not a particularly stable relationship, but does show prolonged periods when, like today, the two asset classes have been negatively correlated. For example, returns on equities and bonds were negatively correlated during the 1930's, for much of the 1950's and 60's and briefly in the early 1980's (see chart 2).

Chart 2: The correlation between US equity and government bond returns



Source: Schroder ISU

The question is whether we are moving back to a period where the two asset classes move against one another, or whether this will be just prove to be a temporary phenomenon.

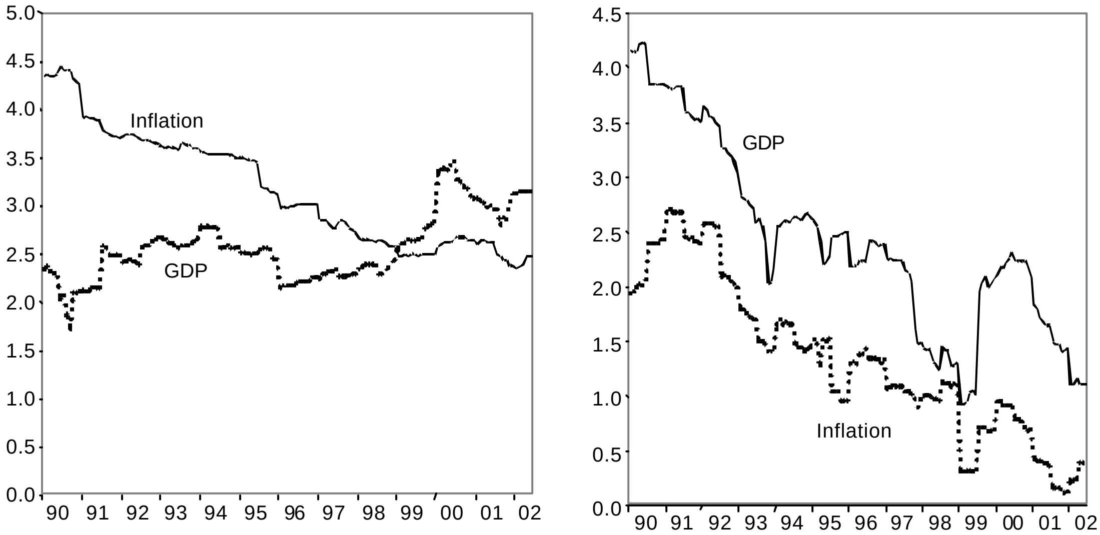
Market drivers: growth and inflation

The underlying factor behind the change in relationship is the move to a world of low and stable inflation. To see this, go back to the 1980s and the first half of the 1990s when the reduction in inflation was the primary aim of central banks and governments. For the OECD area, inflation began the period at 12½% in 1980 before declining to 2.5% by the mid-1990s, an overall reduction of more than ten percentage points. Since then the OECD inflation rate has been broadly stable. This decline in inflation was the principal factor behind the fall in long bond yields from more than 12% to 6% in the US, a move matched in the UK and elsewhere. According to figures from the London Business School/ ABN-Amro, bonds enjoyed their best returns since the 1930s.

From an equity perspective the important feature of this decline in inflation was that it was not accompanied by a fall in growth expectations. Using consensus forecasts, there was little change in outlook for growth. This meant that equity markets could enjoy the benefits of a falling discount rate from lower bond yields, without the loss of value associated with a cut in dividend growth. In fact, the fall in inflation was accompanied by a rise in growth expectations in the US (see chart 3a). Consequently, both equity and bond prices rose. The story was similar in Europe: inflation fell without damaging the outlook for growth. The exception, of course, was Japan where the fall in inflation was accompanied by a collapse in growth forecasts chart 3b). JGB's thrived whilst the Nikkei slumped.

Chart 3: Growth and inflation expectations (consensus 5 year forecasts)

a) The US **b) Japan**



Source: Consensus Economics

The situation today: falling inflation expectations no longer good for equities

Today, inflation in the OECD is running at around 2.5% and has been for the past five years. Most economists see this as very close to a stable price level as price indices are not good at capturing the ability of consumers to shop around. Inflation expectations have been reduced and are now steady at this level. Central banks are seen to have met their objectives.

While economists and equity markets have welcomed the victory over inflation, a further fall in inflation expectations would not be so favourably received as this would mean coming close to, or actually tipping into deflation. As we have seen in Japan, a falling price level is fine for bonds, but equity markets would suffer as future earnings and dividend growth expectations are cut. (It is notable that Japanese inflation expectations were 2% in 1990, close to where OECD inflation is today). Consequently, lower inflation expectations today are seen as positive for bonds, but negative for equities.

Stable inflation means growth is the driver

Our central view is that we have returned to a period where inflation is low and stable. The risks are probably evenly skewed between higher and lower inflation, with a not insignificant risk of deflation. Going forward, inflation expectations should be steady and therefore changes in growth prospects will be the main driver of equities and bonds. As both react differently to this, the negative correlation between the two assets is likely to persist.

This diagnosis matches the long run picture - we found that periods of low inflation were characterised by a negative correlation between the two asset classes. At these times expectations about activity were the dominant influence on the markets. Like today, inflation was not investors primary concern. For some of these periods deflation was rife (e.g. the 1930's). We found that there was also a negative correlation during some of the periods when the US economy was in recession. However, this was not as good a match as the periods of low inflation (see appendix charts).

On the basis that we have now entered another period where inflation expectations are set to remain low for some time then we can expect the negative correlation between the two asset classes to continue. Of course we would not rule out a burst of inflation, but it would seem unlikely that policymakers would allow this to be sustained for very long. More importantly, in our view the risks on the inflation front today are evenly skewed, rather than just being on the upside. Recent research from the US Federal Reserve indicates that concerns about deflation are becoming more widespread.

While we have focussed on changes in growth and inflation expectations as the drivers of equity and bond markets, there is a further dynamic at work. In the US the equity market itself can influence growth expectations through the wealth effect. For example, recent falls in the US market, largely driven by corporate concerns, have added to worries about consumer spending and growth. This has provided a further boost to the bond market.

Some implications for investors

On the basis that the negative correlation between equity and bond markets is likely to persist, there are important implications for investors which, in our view, have yet to be fully taken on board. The important points are:

First, valuation methods based on a comparison between equity and bond yields are flawed. Most strategists recognise that this has always been a suspect area, but in a world where growth expectations drive markets it is clear that lower bond yields do not automatically justify higher equity valuations.

Second, when equities and bonds were moving together it really did not matter which you were in. Most investors took the view that as equities tended to outperform it was probably best to stick with them, as the CIO quoted above would argue. Today, with equity and bond markets moving in opposite directions, the choice between the two assets becomes far more important for returns. This means that the spread of returns and rewards for successful asset allocation should be considerably greater. So are the risks. The distinction is made even sharper in a world of low inflation and single digit nominal returns as the choice could well represent the difference between making a gain or a loss.

Third, the diversification benefits of a balanced portfolio of equities and bonds is increased. Holding a mix of equities and bonds has always been the best method of optimising the risk-return trade-off even when the two assets were moving in the same direction as long as they were not perfectly correlated. In a world of negative correlation, the diversification benefits are greater. This means that wholesale moves from equities into bonds need to be examined closely as to whether they achieve the risk objectives of the fund. In today's environment a greater risk reduction could be achieved with a mix of both equities and bonds at no cost to expected return.

Finally, this does not mean that we are stuck in a permanent equity bear / bond bull market. However, it does suggest that an end to the current bear market in equities will be signalled by a sustained period of rising bond yields, a move which will be subsequently confirmed by interest rate rises by the Federal Reserve.

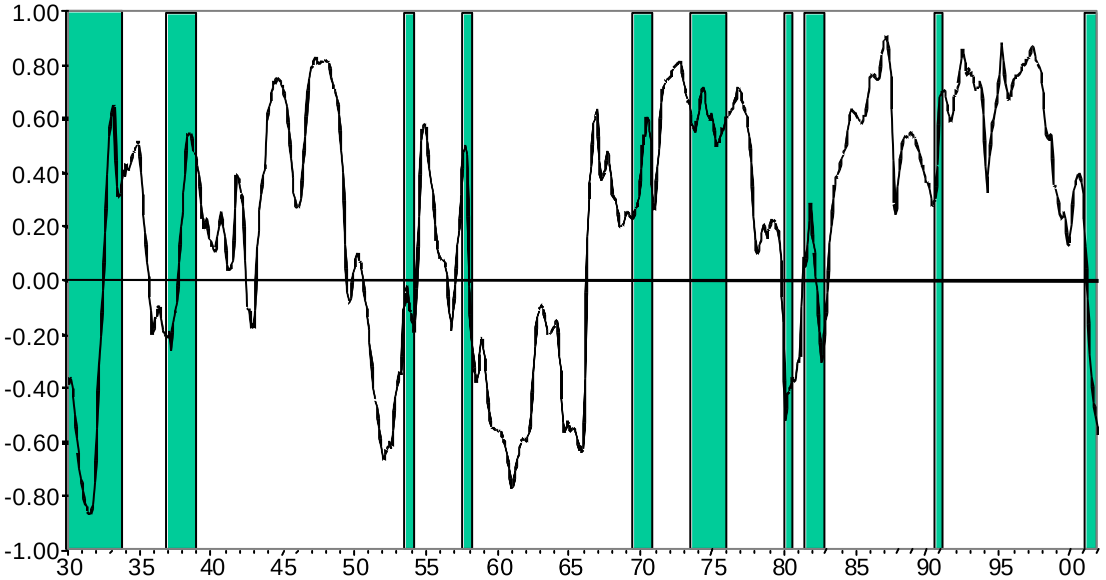
References

Global Investment returns Year book 2002 - ABN-Amro/ London Business School

Preventing deflation: lessons from Japan's experience in the 1990s - Board of Governors of the Federal Reserve System Discussion paper 729. (June 2002)

Appendix

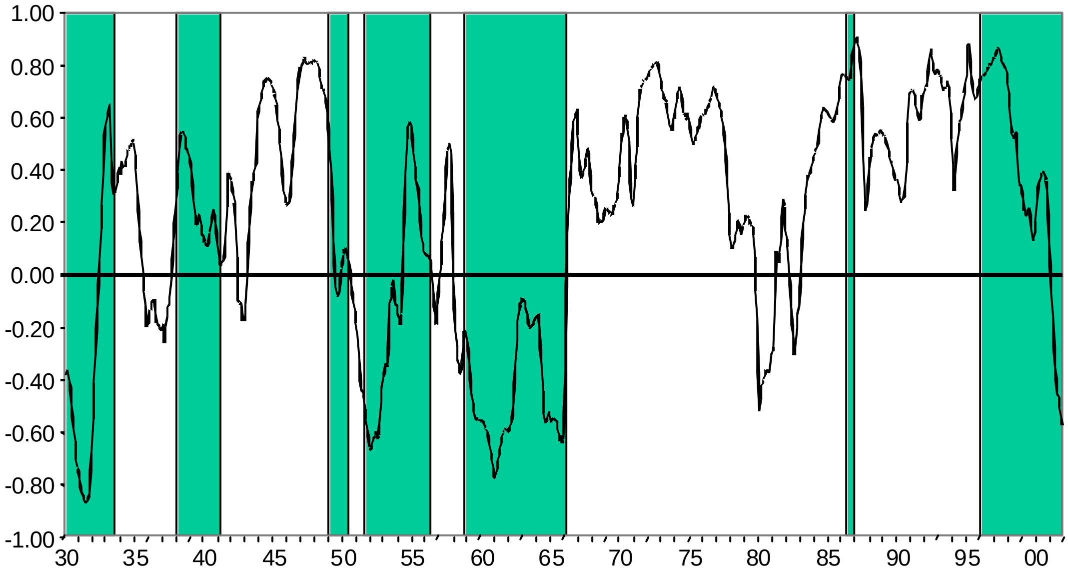
Correlation between equities and bonds: shaded areas = recessions



Key: shaded areas = recessions

Source: Schroder ISU/Economics

The correlation between equities and bonds: shaded areas = low inflation



Key: shaded areas are periods where Headline CPI is less than 2.0% y/y (pre-1996)
and where Core CPI (ex food and energy) is less than or equal to 3.0% y/y (post-1996)

Source: Schroder ISU/Economics