# Equity and Bond Correlations. Inflation. Commodities. Implications.

In 2014 we saw stronger equity markets and falling bond yields. In 2015 we see slowing equity markets, slower growth and rising bond yields. The 2014 correlation went against historical correlations but could be explained by equity valuations being supported by falling discount rates and thus rerating. Also, despite a stronger economy, bond yields fell as a result of demand and supply conditions. Corporate tax revenues were strong, defense spending was receding and the US treasury started to fund with 2 year FRNs for the first time reducing supply at longer maturities. This explains the unusual correlations in 2014.

In 2015 we have a weaker US economy, low inflation in Q1, a Fed seeking to raise rates but confounded by data, and rising bond yields.

1. Is the correlation between equities and bonds reverting to their historical levels?

Equity Bond correlations are widely accepted to be negative. In fact they are highly variable and often change sign. They are also sensitive to short term interest rates and inflation. Correlations were negative in the 1950s through 1960s, and from the late 1990s to the present. They turned positive in 2014. And, they were positive throughout the 1970s and 1980s. In 2015 correlations appear to have reverted to negative although the time frame is too short for statistically significant estimation.

Focusing on recent behavior, it is possible that with the multiple asset purchase programs of the central bank, bonds have come to be regarded as a risk asset held for return and not for safety. In that respect, bonds would have become a risky asset and correlations with equities would have turned positive. This would explain 2014 behavior. With bonds falling and equities holding as the economy slows, there is a risk that either the correlations have reverted to negative, or one of either the bond or equity market is lagging the other.

Scenario A: Let us assume that correlations have indeed reverted to negative. Let us assume that the US economy is in a phase of stable but low growth with a moderate cyclicality around it. This should be moderately supportive of equity markets. With negative correlations, bonds should weaken as investors substitute away from the safety of the reserve asset to the risky asset. The current cyclical weakness in the economy and the weakness of the USD seem to contradict this scenario. If this scenario is in fact valid, the USD would have to recover and the economy rebound. There are expectations for both so time will tell if this scenario is valid.

Scenario B: Let us assume that bonds are a risky asset and that correlations are therefore positive. Let us assume again a stable, low growth economy with moderate cyclicality. In this environment cyclical weakness might trigger a selloff in risky assets leading to weak equity and bond markets. The relative weakness would depend on the weight of capital in each asset class attempting to exit. Given the leveraged nature of bond holdings one might reasonable expect a sharper sell off in bonds than equities. The reserve asset here would no longer be bonds but cash. The bond purchases of the central bank would have led to private investors front running the central bank rendering bonds a speculative asset instead of a risk-free asset and at the same time impairing price discovery so that the efficient market price of the bond was unknown. If at the same time as the cyclical weakness the central bank was considering raising rates for other than economic reasons, such as resetting a policy tool for example, the coincident impact on bonds could be exacerbated. Even if weak data delayed central bank action bonds would remain volatile with a downside bias. In this environment, equities would be vulnerable.

| **Equity Bond Correlation** | **Positive** | **Negative** |
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| **Strong growth** | Equities positive<br>Bonds positive<br>USD positive<br>High yield positive<br>Short duration credit neutral<br>USD curve flattens<br>Agency and Non Agency RMBS positive | Equities positive<br>Bonds negative<br>USD positive<br>Short duration credit positive<br>Long duration credit negative<br>USD curve neutral<br>Prefer Non Agency to Agency RMBS |
| **Weak growth** | Equities negative<br>Bonds negative<br>USD negative<br>Investment grade neutral<br>USD curve steepens<br>Agency and Non Agency RMBS negative | Equities negative<br>Bonds positive<br>USD negative<br>Investment grade credit positive<br>Short duration credit negative<br>USD curve flattens<br>Prefer Agency to Non Agency RMBS |

2. What are inflation expectations?

Inflation is a significant risk. Inflation expectations have been stable except for the 2008 crisis. In 2014 inflation expectations, as indicated by the breakevens, fell, mostly on the back of weak commodity prices. Commodity prices have stabilized in Q2 2015 and may well recover. This would lift bond yields.

Apart from the recovery in commodities, the monetary base remains very much inflated and any acceleration in the velocity of money could result in a strong increase in nominal growth. This risk is tempered by capacity utilization retreating from the 80 level in recent months. Also, the Fed has tools at hand to absorb liquidity should prices accelerate. The cost, however, would be higher repo and short rates.

3. If money is coming out of equity and bond markets, where is it going or how is it being absorbed?

The default reserve asset is cash. Investors will not stay long in cash if inflation accelerates and alternatives will be sought.

For yield seeking investors who are unwilling to raise cash, they may seek alternatives such as ABS, leveraged loans or commodities or gold. Most investors, especially ex US, are unfamiliar with ABS and loans. The complexity of ABS will deter some but loans could absorb significant capital. Currently retail investors are reducing exposure as institutional investors are adding to loans. Recent experience in commodities has been volatile and investors may take some time to return to the asset class. Gold is an asset class that will likely benefit from inflation but will also require that investors exhaust the set of viable liquid alternatives before large scale inflows can be expected. If correlations are in fact positive, which is a strong assumption, the set of viable alternatives could shrink very quickly. However, all that is required is that one or two alternatives are found which are more liquid with lower transaction and storage costs.

* This analysis does not consider the possibility of investing internationally to simplify the analysis. Cross border investing will be considered separately.