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INVESTMENT MANAGEMENT

A Case for Aggregate Euro Fixed Income Portfolios

FIXED INCOME | GLOBAL FIXED INCOME TEAM | INVESTMENT INSIGHT | 2019

We think it makes sense to manage euro fixed income portfolios on an aggregated basis, i.e., with all the sectors in a single portfolio. This is because the eurozone has experienced periods of systemic stress, which have affected all fixed income assets, and may well re-occur. In such periods, when the correlation between asset returns either moves toward +1 or -1, it makes sense for one portfolio manager to have control of the whole portfolio, to ensure different sectors are not all overweight of the same risk factor, and also to optimise off-setting hedge positions.

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Why the trend to disaggregation makes sense ...

The trend in fixed income mandates in recent years has been towards management disaggregation. Rather than instruct a portfolio manager to manage a mixed portfolio of assets (credit, securitised, government bonds, etc.), end investors have allocated individual mandates to single sector specialists, e.g. appoint a government bond fund manager to manage the sovereign portion of the portfolio. The logic for this is clear: the end investor can access best-in-class investment skill in each asset class. They can also optimise the diversification[1] benefits by setting an asset allocation across sectors which best matches his investment goals, rather than using the market cap weighting of an aggregate index.

[1] Diversification does not eliminate the risk of loss.

… and why it doesn't (in euro fixed income)

However, we believe there is a compelling argument for aggregation, rather than disaggregation, when it comes to managing euro fixed income assets. This is because aggregation provides a better way to manage the risks stemming from the systemic crises which have periodically affected euro fixed income markets.

The nature of a systemic crisis is that it affects the performance of all assets, sometimes in ways which investors would not have previously expected. To make things more difficult, eurozone crises have varied in their length, nature and intensity, depending on whether the problem stemmed from a global financial crisis (e.g. 2008), a domestic banking crisis which contaminated the sovereign and rest of the economy (e.g. Ireland and Spain in 2010), or a political crisis which affected the sovereign and the banking system, as well as other countries (e.g. Greece in 2010 and 2015).

Systemic risk events argue for aggregate portfolios

In such an environment, we believe it is advantageous to have a single investment manager who is aware of all the risks in a portfolio, and is better placed to manage the overall risk holistically. A particular risk of disaggregation is that investment managers, operating independently of each other, may implement similar and correlated risk positions in their portfolios, which amplify overall portfolio risk. Similarly, working independently of each other, they are unlikely to maximise the internal hedges which exist within a multi-asset fixed income portfolio. Judged primarily on their own individual performance, they have limited incentive to help the overall aggregated portfolio achieve better risk-adjusted returns.

For example, imagine a situation in which the macroeconomic fundamentals for country A were improving. In a disaggregated portfolio, the managers of the corporate credit, sovereign and the securitised portfolios may all look to overweight country A. However, collectively this might lead to an imprudently large exposure. The manager of an aggregate fund would be better placed to judge if the overall exposure was appropriate, as well as the best way to gain that exposure, e.g. through financials or the sovereign debt.

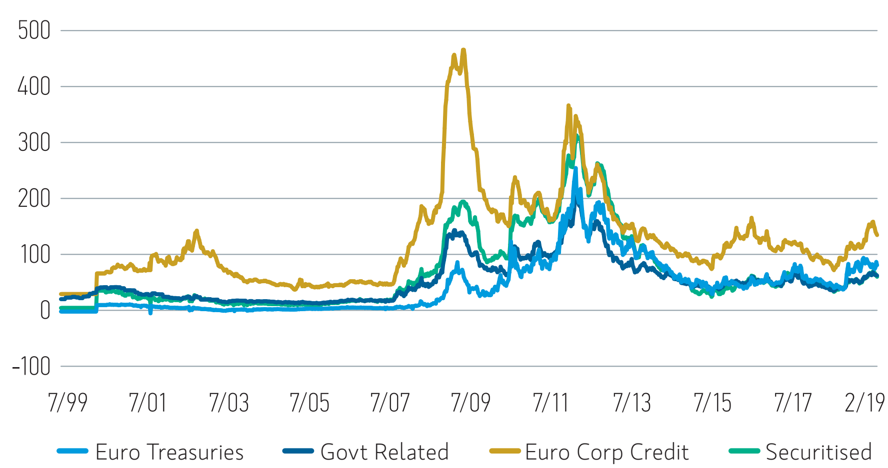
In addition, he may be able to engineer a better potential return, on a risk-adjusted basis, by owning a larger allocation of low-risk government bonds to offset the high-yielding risky positions. He may not expect the government bonds to do very well, but thinks they are worth owning to help mitigate risk in case things turn out worse than expected and the risky positions do badly. In a disaggregated portfolio, individual managers are not aware, nor incentivised, to hedge each other's risk positions in this way.

Disaggregation may also slow the optimal re-allocation of assets between asset classes as opportunities and threats emerge. It can be time-consuming to redeem investments, re-allocate them and redesign mandates if they turned out to be inappropriate. Many euro fixed income assets have experienced several unanticipated periods of stress over the last 20 years, and may not have performed as initially anticipated. For example, the usual benchmark for euro sovereign portfolios prior to 2010 was a market cap weighted index of euro sovereign bonds. This was generally expected to be the "safe haven" component of a portfolio, delivering modest returns but performing well during periods of economic and financial stress. Few investors foresaw that, from 2010 to 2013, one issuer making up around 10% of the index (i.e. Greece) would default, others (Portugal and Cyprus) would lose their investment-grade rating, some of the initially AAA-rated sovereigns (Spain and Ireland) would require bailouts and the largest member of the index (Italy) would become the most volatile euro fixed income asset.[2]

Let's explain and illustrate these points with reference to the historical data for euro fixed income assets since the beginning of monetary union in 1999. Whilst past returns may not be a good reflection of future returns, they do highlight some of the risks investors have experienced in the past and may therefore face in the future.

DISPLAY 1

OAS spreads for main euro fixed income sectors



The index performance is provided for illustrative purposes only and is not meant to depict the performance of a specific investment. **Past performance is no guarantee of future results.**

See Disclosure section for index definitions.

Source: Bloomberg.

[2] Source: Bloomberg Barclays Euro Aggregate Bond index.

A brief history of euro fixed income markets

Display 1 shows the option adjusted spread (OAS) for the major sectors of the Bloomberg Barclays Euro Aggregate index, i.e. Euro Treasuries, government related, securitised and corporate credit. It provides us with a history of the euro fixed income markets and the relative performance of the main sectors. In particular, the period from 1999 until 2007 was characterised by very tight and stable credit spreads in most products, the only exception being when some corporate sectors (e.g. telecoms) came under pressure following the dotcom bust.

The first major crisis started in 2008 as the global financial crisis caused distress in euro credit markets, in particular for financials. Significant stress was also experienced in securitised markets, given their connection to the financial sector, forcing the European Central Bank (ECB) to launch the first covered bond purchase programme. Sovereign debt in countries with impaired financial sectors (Belgium, Holland, Austria) also cheapened as investors saw the financial sector's problems as contingent liabilities of the state.

Credit spreads tightened sharply in 2009 as the global economy recovered and the crisis faded, but then widened out again from 2010 until 2013. This time the problem was more to do with the sovereign sector, in particular Greece, although in other countries (e.g. Spain and Ireland) the problem started in the banking sector and spread to the sovereign. As stresses built up within the economy and financial system, other countries (e.g. Italy, Portugal and to a lesser degree France) were also pulled into the crisis as it exposed their vulnerabilities. Issuers deemed as safe havens (primarily the German sovereign) experienced additional demand.

A combination of central bank emergency measures and fiscal support helped end the crisis, leading to a period of sustained spread compression from 2013 onwards, apart from some corporate credit spread widening in 2016 and 2018 (due to economic growth concerns), and wider sovereign spreads in 2018 (due to heightened political risks in Italy).

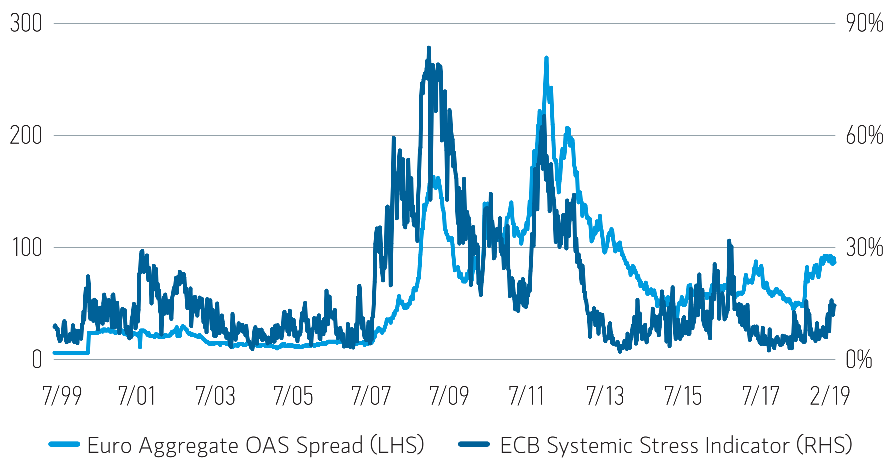
We learn several things from this history:

1. **CRISES AFFECT ALL SECTORS:** a systemic crisis, by definition, affects everything in the system. It's unsurprising that the OAS spread for the Bloomberg Barclays Euro Aggregate index was highly correlated with the ECB's Systemic Stress Indicator (see *Display 2*). The severity may vary depending on how severe the crisis is, but finding good hiding places can be hard during these periods.

Even sectors which one would have thought have few fundamental links to each other turned out to be highly correlated. For example, the credit spreads of government-owned or sponsored agencies, which generally

DISPLAY 2

Euro Aggregate index OAS spread & ECB Systemic Stress Indicator

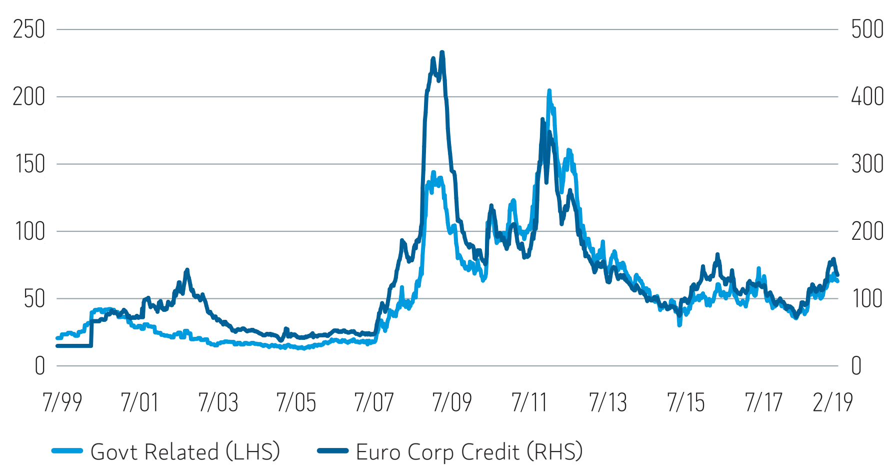


The index performance is provided for illustrative purposes only and is not meant to depict the performance of a specific investment. **Past performance is no guarantee of future results.**

Source: Bloomberg, ECB.

DISPLAY 3

Government related and corporate credit spreads



Source: Bloomberg.

have very high and stable credit ratings versus sovereigns, were very highly correlated to corporate credit spreads (see *Display 3*).

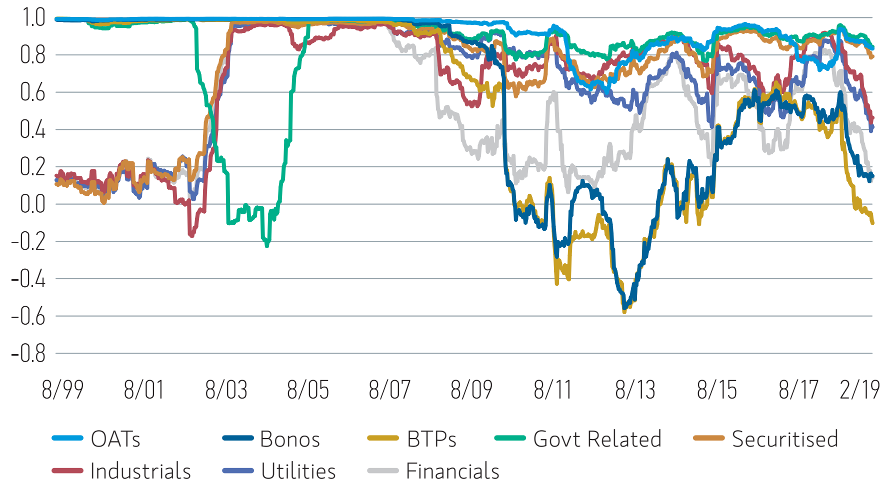
2. **NO TWO CRISES ARE THE SAME:** depending on why the crisis started, and also because investors and regulators respond to past crises, asset performance varies from crisis to crisis, e.g. 2008 was primarily about financials, while 2010-12 was about sovereigns, especially the "periphery." This means the "beta," i.e. the relative volatility of different assets, varies over time. The correlation between assets also varies over time, both depending on how each crisis builds and recedes and which assets it affects most.

3. **DIVERGENCES IN PERFORMANCE PROVIDE DIVERSIFICATION OPPORTUNITIES:** the silver lining to a systemic crisis is that "safe haven" assets can mitigate downside risks in a range of risky assets. In particular, AAA-rated sovereigns like Germany have performed very well in periods of stress. While the correlation between "risky" sectors in a crisis has risen, the correlation with Bunds has become more negative (see *Display 4*), providing a portfolio diversification opportunity, at least for those who have been able to invest in both high quality government bonds and spread product.

4. **NOT ALL ASSETS PERFORM AS EXPECTED:** the 2008 crisis is remembered for how many structured credit products had far higher default risk than their credit rating would have suggested. In the 2010-12 euro sovereign crisis, investors discovered large portions of their sovereign bond portfolios, which were previously thought to have little or no default risk, were actually very risky, both in terms of credit spread volatility and actual default (with Greece restructuring its debt in 2012). While the Treasury OAS spread is far less volatile than other spreads, this hides significant variation within the sovereign universe. Italian Treasury OAS spreads are currently wider and more volatile than any other sector of the index.

DISPLAY 4

Rolling 1-year correlation between bund returns and other sectors



The correlations are provided for illustrative purposes only and is not meant to depict the correlation of specific investments. **The correlations presented are no guarantee of future results.**

Source: Bloomberg, MSIM.

Why we fear further systemic crises

Unfortunately, we believe that the eurozone may face further periods of systemic stress. Many of the structural and fiscal imbalances which have caused problems in the past have not been fully resolved, and while backstop and support mechanisms are better than they have been in the past, they are not strong enough to make investors feel entirely confident. Highly indebted sovereigns with low trend growth economies, most notably Italy, remain a key source of concern for investors, especially given the Greek experience made it clear that euro sovereign debt is not default-risk free. Another source of concern is the continued link between sovereigns and the banking sector, a potential source of contagion which runs in both directions. While the European Union (EU) has worked hard to reduce risk in the financial sector, more substantial measures, like a eurozone-wide deposit guarantee system, have yet to be achieved.

These lessons lead us to believe that it is better for euro fixed income portfolios to be actively managed on a holistic basis, i.e. with the potential performance and correlation of all assets taken into account.

Risk Considerations

Fixed income securities are subject to the ability of an issuer to make timely principal and interest payments (credit risk), changes in interest rates (interest rate risk), the creditworthiness of the issuer and general market liquidity (market risk). In the current rising interest rate environment, bond prices may fall and may result in periods of volatility and increased portfolio redemptions. **Longer-term securities** may be more sensitive to interest rate changes. In a declining interest rate environment, the portfolio may generate less income. Certain **U.S. government securities** purchased by the strategy, such as those issued by Fannie Mae and Freddie Mac, are not backed by the full faith and credit of the U.S. It is possible that these issuers will not have the funds to meet their payment obligations in the future. Public bank loans are subject to liquidity risk and the credit risks of lower-rated securities. **High-yield securities (junk bonds)** are lower-rated securities that may have a higher degree of credit and liquidity risk. **Sovereign debt securities** are subject to default risk. **Mortgage- and asset-backed securities** are sensitive to early prepayment risk and a higher risk of default, and may be hard to value and difficult to sell (**liquidity risk**). They are also subject to credit, market and interest rate risks. The **currency market** is highly volatile. Prices in these markets are influenced by, among other things, changing supply and demand for a particular currency; trade; fiscal, money and domestic or foreign exchange control programs and policies; and changes in domestic and foreign interest rates. Investments in **foreign markets** entail special risks such as currency, political, economic and market risks. The risks of investing in **emerging market** countries are greater than the risks generally associated with foreign investments. **Derivative instruments** may disproportionately increase losses and have a significant impact on performance. They also may be subject to counterparty, liquidity, valuation, correlation, and market risks. **Restricted and illiquid securities** may be more difficult to sell and value than publicly traded securities (liquidity risk). Due to the possibility that prepayments will alter the cash flows on **collateralized mortgage obligations (CMOs)**, it is not possible to determine in advance their final maturity date or average life. In addition, if the collateral securing the CMOs or any third-party guarantees are insufficient to make payments, the portfolio could sustain a loss.

INDEX DEFINITIONS

The **Bloomberg Barclays Euro Aggregate Bond Index** is a broad-based flagship benchmark that measures the investment grade, euro-denominated, fixed-rate bond market, including treasuries, government-related, corporate and securitized issues. Inclusion is based on currency denomination of a bond and not country of risk of the issuer.

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