NOVEMBER 2015

Danske Capital

Why high-yield corporate bonds are attractive in a low interest rate environment

With low yields on both European government bonds and covered bonds, high-yield corporate bonds provide an attractive yield pickup in exchange for slightly higher risk.

KEY CONCEPTS

- The high-yield bond market in Europe has grown massively in recent years, providing an alternative source of funding for corporations.
- In the current low interest rate environment, the low duration combined with an attractive yield provides a very interesting investment opportunity.
- High-yield bonds also tend to enhance portfolio risk diversification due to very low correlation with government bonds and modest correlation with equities.
- European high-yield bonds have outperformed European equities since 1999, while exhibiting a lower volatility at the same time.

ANDREAS DANKEL
Chief Portfolio Manager
Credits

Andreas has 18 years' experience in the financial markets and has been with Danske Capital since 2008. Andreas holds an MSc in Business and Economics from the University of Lund.

ASBJØRN PURUP ANDERSEN
Senior Portfolio Manager
Credits

Asbjørn has 8 years' experience in the financial markets and has been with Danske Capital since 2013. Asbjørn holds an MSc in Finance from the University of Aarhus.

The ECB is still keeping rates low as the European economy tries to gain momentum. Modest economic growth and the prospect of limited inflation are set to provide a positive economic climate for the high-yield segment.

EXECUTIVE SUMMARY

With negative yields at the short end of the curve for European government bonds and covered bonds, obtaining an acceptable return in the bond markets has become a challenge for investors. This is why investors are tending to become willing to accept a slightly higher risk in their hunt for higher returns.

In particular, the capital flow is moving away from government bonds with negative or very low yields towards European investment grade and high-yield bonds.

Investment grade bonds can be seen as an alternative to traditional government bonds - but with a slightly higher yield. High-yield bonds provide a substantially higher yield at a level of risk between investment grade bonds and equities.

In Europe, modest economic growth and the prospect of limited inflation are set to provide a positive economic climate for the high-yield segment. However, corporate bonds are not a standard product and require in-depth analysis of both the company's finances and the terms of the bond.

In the present low interest rate environment with significant interest rate risk on long-term government and mortgage bonds, we find high-yield bonds to be an interesting asset class well suited for spreading portfolio diversification.

A European market in growth

While US companies for years have funded their operations by issuing corporate bonds, European companies have traditionally turned to the banks as their primary source of finance.

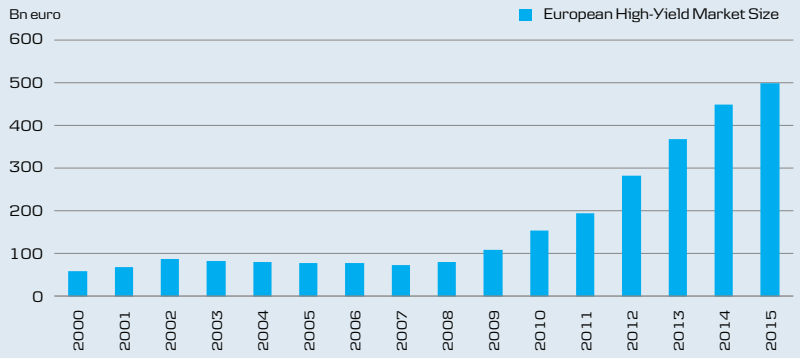
However, this tradition changed with the financial crisis in 2008-2009, when European companies suddenly experienced difficulties obtaining funding from the banks. Consequently, the number of new bond issuances increased strongly, and the value of the European high-yield market more than quintupled between 2008 and 2014.

Recent forecasts suggest further strong growth in 2015, with the European high-yield market to reach a value of EUR 500bn. From being less than a sixth of the size of the US market, the European market corresponds to approximately 30% of the US market in 2015.

Corporate bonds can take the form of a traditional bullet bond, a more complex hybrid structure, or other debt structure types with various lending terms. Approximately 85% of the market for European corporate bonds consists of investment grade bonds with a BBB-rating or better, while the remaining approximately 15% of the market consists of high-yield bonds.

FIGURE 1: Strong growth in the high-yield bond market

The market for European high-yield bonds has increased from EUR 59bn in 2000 to an estimated EUR 500bn by the end of 2015.



Source: UBS, Credit Suisse and T. Rowe - Price

A highly-rated European corporate bond in a robust company with a strong cash flow carries a risk premium as low as 0.5 percentage points.

Within the high-yield segment, risk premiums are significantly greater. Currently, the risk premium also referred to as the credit spread on a high-yield bond is approximately 5.0 percentage points, with considerable variation between individual bonds. At the most secure end of the scale, bonds carry a risk premium of around 2.5 percentage points, while bonds at the more speculative end trade with a risk premium of approximately 10 percentage points.

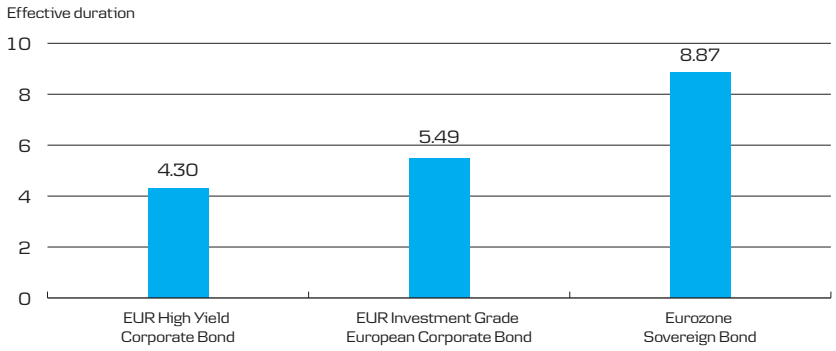
High-yield increases portfolio risk diversification

In an investment portfolio, government and mortgage bonds are an obvious choice as basic constituents of the overall asset allocation. These bonds deliver a stable positive cash flow without significant credit risk. However, given the current low level of yields, the interest rate risk is substantial. Hence, if yields increase, the return on long-term bonds will be negative.

This makes high-yield bonds attractive in relation to the risk composition of the portfolio. A significant characteristic of high-yield bonds is the relatively low duration, which reduces the portfolio's sensitivity to changes in interest rates. In addition, the higher carry provides a buffer against increasing interest rates. The low interest rate risk is complemented with higher credit risk which boosts the yield. Depending on the rating, maturity and specific terms associated with the bonds, the yield typically ranges from 3% to 8% in a broad portfolio of European high-yield bonds.

FIGURE 2: High-yield bonds feature low duration

The graph shows a duration of 4.30 for European high-yield bonds, while European government bonds have a duration of 8.87.



Source: Bloomberg index as of 20 October 2015.

Higher return and lower risk compared to equities

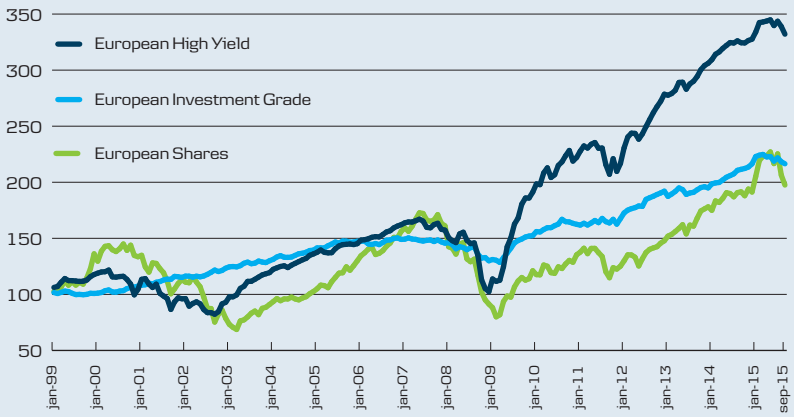
Historically, European high-yield bonds have provided a significantly higher return than other fixed-income portfolios. This is accompanied by increased volatility. However, it is worth noting that price fluctuation on high-yield bonds is closer to the stock market, while developments in the bond market play a minor role.

Correlation with other asset classes

When diversifying portfolio risk, it is important to look at the correlation with other asset classes. An asset class with a low correlation to the other assets in the portfolio can increase the overall risk-adjusted

FIGURE 3: High-yield bonds versus equities

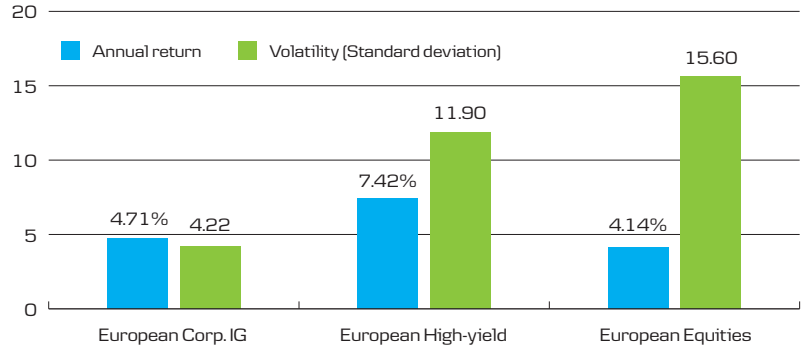
Relative to equities, European high-yield bonds have performed strongly from end-1998 to end-September 2015 with an overall return of 232% versus 98% on equities. However, in the even longer term there is much to suggest that equities will outperform bonds. US data from 1983 to 2015, for example, show that equities provided an average return of 11.0% compared to 9.3% on highyield bonds.



SOURCE: TR unhedged index from Barclays stated in EUR: Barclays Pan-European Aggregate Corporates Index, Barclays Pan-European High-yield index. MSCI Europe gross index stated in EUR. Data period extends from the end of December 1998 to end-September 2015. European data cover a relatively short period, since the European market for high-yield bonds got under way somewhat later than the US market. Annual return has been calculated geometrically based on monthly data. Use of other start or end points, or a longer or shorter period, would result in different relative performances among the asset classes. Past performance is not an indication of future results.

FIGURE 4: Higher return goes hand in hand with increased risk

Since 1999, European high-yield bonds have delivered a substantially higher return than both investment grade bonds and equities. Volatility has been significantly higher than for investment grade bonds, but lower than for equities.

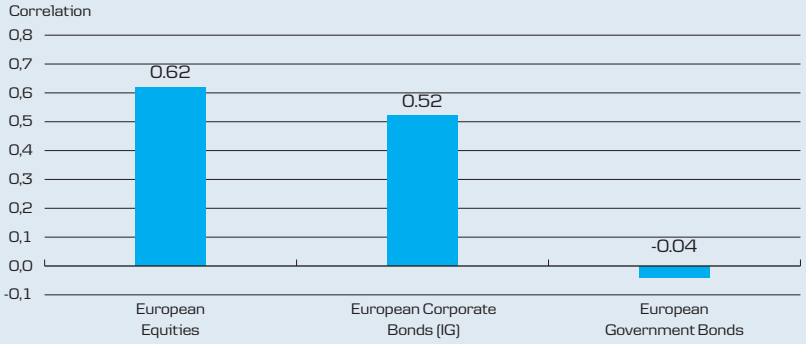


SOURCE: TR unhedged index from Barclays stated in EUR: Barclays Pan-European Aggregate Corporates Index, Barclays Pan-European High-yield index. MSCI Europe gross index stated in EUR. Data period extends from the end of December 1998 to end-September 2015. European data cover a relatively short period, since the European market for high-yield bonds got under way somewhat later than the US market. Annual return has been calculated geometrically based on monthly data. Standard deviation has been calculated based on annualised monthly data. Use of other start or end points, or a longer or shorter period, would result in different relative performances among the asset classes. Past performance is not an indication of future results.

portfolio return, via either a lower risk or a higher return. In this context, high-yield bonds are suitable as an element of the portfolio. High-yield bonds are largely uncorrelated with European government bonds. This can be explained by the fact that government bond prices primarily react to changes in the yield curve, while price movements in high-yield bonds are more closely correlated with the stock market.

FIGURE 5: High-yield bonds' correlation with other asset classes

High-yield corporate bonds have a very low correlation (-0.04) with European government bonds and a correlation of 0.52 relative to investment grade corporate bonds. In addition, their correlation with the stock market is relatively moderate, i.e. 0.62.



Source: TR unhedged index from Barclays stated in EUR: Barclays Pan-European Aggregate Corporates Index, Barclays Pan-European High-yield index. MSCI Europe gross index stated in EUR. Data period extends from the end of December 1998 to end-September 2015. European data cover a relatively short period, since the European market for high-yield bonds got under way somewhat later than the US market. Standard deviation has been calculated based on annualised monthly data. Use of other start or end points, or a longer or shorter period, would result in different relative performances among the asset classes. Past performance is not an indication of future results.

High-yield bonds' correlation with equities is 0.62. We see the same picture when we look at the US market, for which the historical data date back longer. Given this, we regard high-yield bonds as an important element of a well-diversified portfolio.

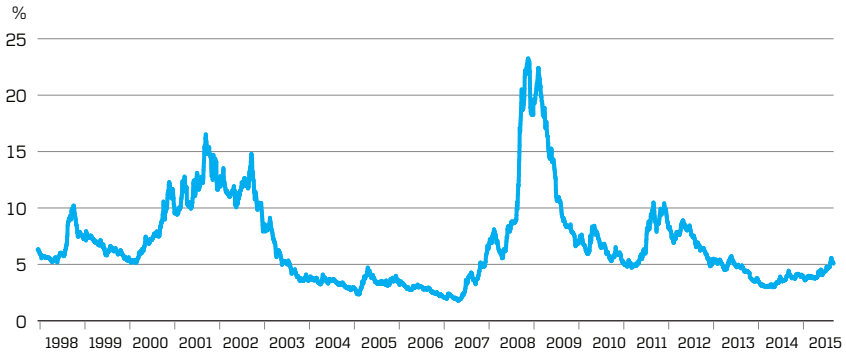
Historical developments in credit spreads

In general, the yield on high-yield bonds is composed of the "risk free interest rate" plus a credit spread often referred to as the risk premium. The credit spread is the payment that the investor receives for the additional characteristics and risks of a high-yield bond relative to a government bond. The risk free interest rate is normally fixed as the yield on AAA government bond with the same duration.

The dominant element of the credit spread is the credit risk, which is the risk that a bond issuer does not meet his debt obligations. Developments in the credit spread are closely related to developments in the stock market, which translates into a widening of the credit spread in times of stock market crisis. During the financial crisis in 2008-2009, we saw significant price falls within the high-yield segment as the credit spread on high-yield bonds widened significantly.

FIGURE 6: Credit spread movements

The graph shows developments in the credit spread on high-yield bonds. Since peaking during the Lehman crisis, spreads have gradually fallen, and in October 2015 they stood at approximately 500 basis points.



SOURCE: Merrill Lynch Euro High-yield Index Option-Adjusted Spread. The spread is measured against a basket of European government bonds. Data period extends from late 1997 to 20 October 2015.

On the other hand, it is worth noting that high-yield bonds fell significantly less than the stock market. Thus, European high-yield bonds fell 33% during the crisis, while the stock market fell 53% during the corresponding period.

Depending on their ratings, corporate bonds were hit differently during the recent stock market crisis. Investment grade bonds outperformed high-yield bonds during the crisis and as a result the European Aggregate Index increased by 4%.

The collapse of Lehman Brothers in September 2008 caused European high-yield bonds to drop 33% while European stocks fell 53%.

Seen in a longer historical perspective, we have learned that corporate bonds enjoy optimum conditions during periods of weak or moderate economic growth, which matches current economic conditions in Europe. If growth is higher, companies will typically focus on paying out earnings to shareholders via dividends and share buy-back activities, or they will acquire other companies. This is negative for bond investors, as in such a scenario money will not be available on the balance sheet for servicing interest payments and repaying debt in an adverse scenario.

CONCLUSION

In the current environment characterised by low yields on government bonds, high-yield corporate bonds are an attractive choice for investors with a need for a regular cash flow and a fair degree of security with respect to the principal relative to e.g. equities.

The outlook of limited economic growth in the coming years should provide a positive climate for corporate bonds. Both liquidity and the market for corporate bonds are still somewhat smaller in Europe than in the USA, but the banks' continued reluctance to provide loans could lead to increasing issuance activity and hence improved liquidity.

DISCLAIMER
Danske Capital has prepared this material for information purposes only, and it should not be regarded as investment advice.
Historical returns are no guarantee of future performance, and returns can be negative.
By investing in high-yield corporate bonds you may risk losing your entire investment.

APPENDIX

What determines the risk premium?

The risk premium for high-yield corporate bonds is determined by a number of factors which relate to both the issuing company as well as the terms of the bonds. Hence investors are compensated for these risk factors via the credit spread associated with a corporate bond.

Credit risk: The risk that the company fails to pay interest or repay the debt principal is the single greatest risk factor for high-yield investors. Hence this credit risk relates both to the likelihood of bankruptcy as well as the uncertainty regarding the subsequent recovery rate in the event of a default. The default rate tends to fluctuate over time and peaked during the financial crisis which was also reflected in the substantial widening of credit spreads. The credit risk is often described by the credit rating.

Liquidity: The corporate bond market is normally less liquid than e.g. the government bond market. This is typically reflected by a greater difference between the bid and the offer price relative to more liquid asset classes. Moreover, for the most illiquid bonds, it can at times be difficult to find buyers or sellers in the market.

Volatility: Corporate bond prices may fluctuate considerably due to volatility in the overall market, even during times without any news related to the specific issuing company. Hence investors may demand a risk premium to hold bonds when market volatility is elevated.

Covenants: Corporate bonds are characterised by many different forms of covenants. Covenants typically serve the purpose of securing the interests of bondholders by limiting the company's ability of incurring additional debt, paying dividends to shareholders, or making acquisitions of other companies. Typically high-yield bonds can also include early redemption clauses. Depending on the quality of the covenants and terms, investors can adjust the risk premium up or down.

Capital structure: The seniority of the claims in the company's capital structure determines the ranking of payment in the event of bankruptcy. This is important for determining the recovery rate. Since junior debt obligations in the capital structure are paid last, these claims are normally considered more risky and investors will demand a greater risk premium relative to senior debt obligations.

FIGURE 7: Typical ranking in the capital structure

In the event of bankruptcy, the seniority in the capital structure determines who are paid first. Junior debt obligations will typically have a lower recovery rate and shareholders have the lowest ranking in the capital structure.

SOURCE: Danske Capital