

## Strategy

## Value Bonds

### The Academic Background

In introducing the strategy of value bond funds to the fixed income market, Sparinvest was considerably influenced by the following academics to whom we would like to express our gratitude:

**Eugene Fama and Kenneth French** – for discovering the size/value compensation-for-risk effect in equity markets. Fama and French plotted the returns from the US Stock Market for the three decades from 1964 to 1995, on a model that categorized stocks by their size and price-to-book characteristics. The results demonstrated that, above and beyond a stock's beta, there were two further factors that could have a positive impact on investment returns – a company's size and its value. Smaller and undervalued companies offered investors a greater risk compensation premium.

**Edwin J Elton and Martin J Gruber** – for discovering that the Fama/French factors also apply to the corporate bond market. In 2001 Elton and Gruber, Nomura Professors of Finance at New York University, undertook a study of the spread between rates on corporate and government bonds. They concluded that the additional yield available from corporate bonds over government bonds was not solely attributable to compensation for taxes and risk of default, as previously thought. A significant proportion of the credit premium could be explained as being a reward to investors for bearing the systematic risk of investment in smaller and undervalued companies. ■

### Corporate Bonds = Higher Risks, Higher Returns

Historically, the higher yields paid by corporate bonds over government bonds have been viewed as being necessary compensation to investors for two reasons:

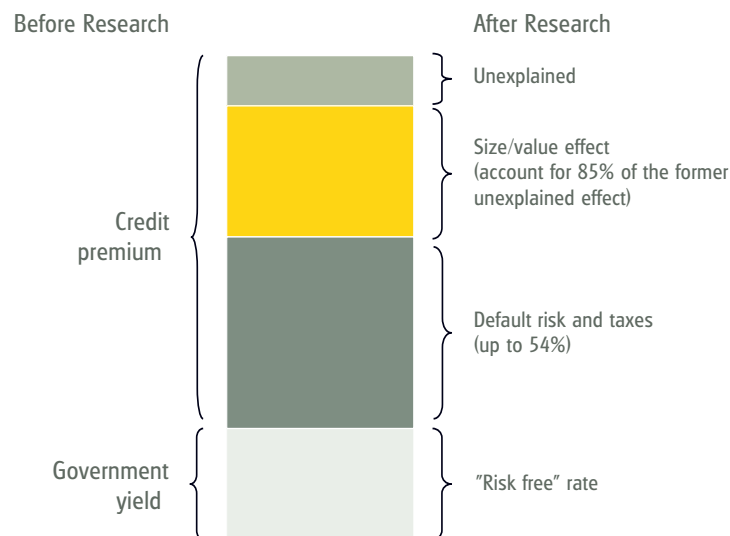
- Income from corporate bonds is taxable, whereas government bonds are tax free
- A corporate bond cannot have a higher rating than the country where it is located because the company is more likely to default on its debts than the nation.

Tax and default risk were accepted as the logical explanation for the 'credit premium' offered by corporate bonds.

In 2001, Professors Elton, Gruber et al. undertook a study – the purpose of which was to see whether any other risk factors could further explain the spread between yields on corporate and government bonds. They discovered that tax and default risk accounted for only just over half of the credit premium. The remainder of the rate spread was attributable to other, previously undiscovered, factors.

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### The Elton/Gruber Breakdown of Yield to Maturity



Source: Elton, Gruber et al (2001)

Elton and Gruber's research established that a significant part of the previously unexplained element of the credit spread was attributable to the same factors identified by Fama & French as being markers for excess returns from equity markets – namely size and value.

Given that both bond and equity holders are effectively lending their money to a company, it is to be expected that the same size/value risk and reward effects should be apparent in both marketplaces. Why shouldn't bondholders also be compensated for the greater perceived risks of making loans to smaller and undervalued companies?

To Sparinvest's Investment Committee, this research raised an interesting question. Would it be possible to apply value investment thinking to the running of a corporate bond fund and deliver higher yields by exploiting size and value factors? ■

At Sparinvest, our investment philosophy means that we thoroughly examine downside risk before we make any investment. Elton & Gruber's work suggested to us that a corporate bond portfolio, screened for the risks involved with undervalued and smaller companies could, potentially, deliver better returns for an investor's risk budget.

Sparinvest's unique combination of:

- long-established expertise in the fixed-income market
- a decade of experience as one of Europe's most successful practitioners of value investment
- an academically-driven approach to product development

meant that we were ideally placed to test the theory.

Our quantitative analysts researched the 'newly discovered' parts of the credit premium to test the effect of applying of value filters to the corporate bond market. They began with the high yield sector, where they expected the results to be more pronounced. The results from three separate screening tests were very encouraging. ■

### Value Screening the Components of the Credit Premium

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## The Three Value Filters

**Price-to-book**

This test should be applied with caution within the bond market. Many companies' shares trade at a low price, but they may also have too high a burden of debt. Ideally a company needs an 'equity cushion', enabling it to absorb more debt if necessary without going bust. By combining the P/B test with the NDE test, the result will be a more robust portfolio and an avoidance of low quality bonds.

Result = P/B screening delivers better yield, but significant increase in volatility.

**Market Capitalisation**

This was the test that convinced Sparinvest that the value approach could boost returns in the bond market. It's logical that you see higher returns from smaller companies. Credit ratings agencies prefer companies to be large and often penalise smaller ones purely on grounds of size – no matter how robust their balance sheets. Companies with lower credit ratings must pay higher yields when they want to borrow money.

Result = Size screening delivers vastly improved yield with slightly higher volatility.

**Net-debt-to-equity**

This test, used for measuring the gearing of a company, is highly correlated to default risk. The higher a company's gearing (higher net-debt-to-equity), the greater the chances that it will default. Benjamin Graham, the founding father of value investment, used this test in his 'margin of safety' calculations to measure the downside risk for an investment. With regard to bonds, he stated:

*"We are convinced that the substantial margin of going-concern value over funded debt is not only important but even vitally necessary to assure the soundness of a fixed-value (bond) investment."*

A bond investor following cautious value investment principles will therefore seek a low gearing and low loan-to-value rate as an indication that a company will be able to repay its debt each year and will look at the expected recovery rate in case of default.

Result = NDE screening delivers better yield, similar volatility. ■

Because Sparinvest strongly believes that an optimal bond portfolio comprises a mix of investment grade and high yield bonds, we conducted a back-test to apply the same three value filters simultaneously in the investment grade market.

Result = Value filters deliver improved yield with similar volatility, resulting in an improved Sharpe Ratio for the value investment grade strategy.

The numbers were sufficiently encouraging for us to launch a fund using this strategy. ■

Analysis of the  
Investment Grade Market

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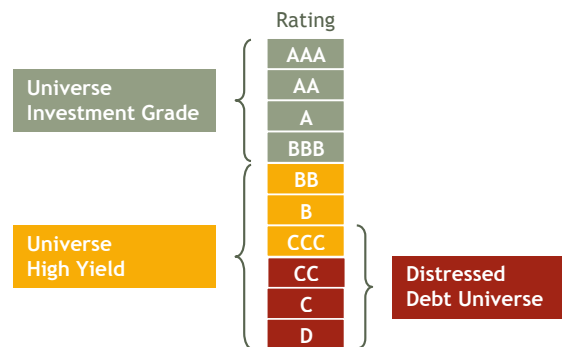
### Corporate Bond Investment with Extra Prudence

At Sparinvest we place prudence at the very heart of our investment philosophy.

We believe that investors have the right to see fixed income as the solid and dependable element of their investment portfolio. Our aim is therefore to ensure that all of our bond funds maintain low risk profiles. Our high yield portfolio has an average debt-to-equity rate that is consistently far lower than the market average and we will only include those triple C credits that have a good chance of withstanding a recession. Our investment grade portfolio is engineered to avoid the LBO activity that can make bond ownership riskier in this universe.

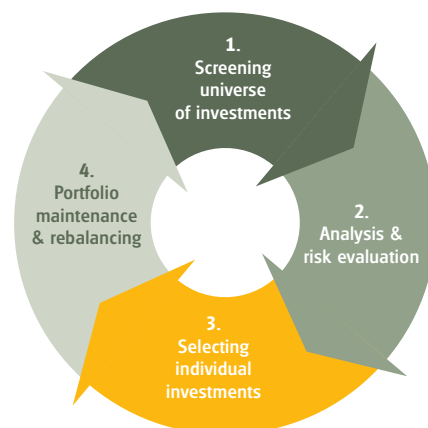
For diversification purposes, Sparinvest's two value corporate bond funds cover the entire yield curve and credit spectrum. The combination of these two funds in an asset allocation model is perfect for achieving an optimal portfolio of corporate bonds. ■

### Credit Quality Rating



The lack of an official credit rating is not necessarily an indication that a company's debt is a high-risk investment. The fact that companies must pay to have their debt rated by an official agency causes some to opt out of the system. In any event, Sparinvest will always conduct its own financial ratio and credit analysis on the company and reach an investment decision independently. ■

### Sparinvest's Value Bonds Investment Process



#### A Closer Look at the Process

Rigorous analysis is essential for the discovery of value bonds. The true attractiveness of a company's debt can only be revealed by a thorough examination of its balance sheet by the skilled analyst by looking at its business fundamentals. At Sparinvest, our process for investment in value bonds comprises several stages:

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### 1) Screening

The first part of the process involves the screening of some 4,000 bond-issuing companies and 30,000 bond issues. Always anxious to avoid the risk of default, we emphasise developed markets where political risk is low. First we look to see if the company is an attractive investment proposition (in the sense of being able to repay its debt and having a falling probability of default.) Then we look to see if the company's debt is attractive and trading at a good yield relative to the credit market. Our ideal scenario is cheap in the equity market (40% discount to intrinsic value) and cheap in the credit market (good price compared with credit premium).

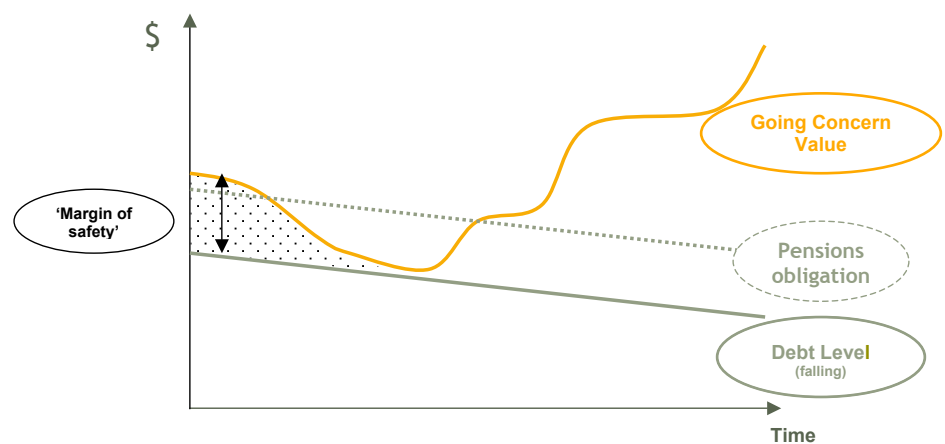
### 2) Company Analysis

Our screening process will give us a gross list of about 300 companies worthy of further investigation. We then conduct a traditional company analysis based on value principles, paying particular attention to the Net-Debt-to-Equity and cash flow figures. In doing this, we work closely with the Sparinvest value equity team, although we place different emphasis on the different numbers to assess the attractiveness of the investment proposition. In fact, we seldom invest in the same companies as the Value Equity team.

Besides the traditional credit analysis, we also take into consideration the company's pension obligations, its good will, any hidden values – such as real estate, off balance sheet items and the company's record of prioritising stakeholders over shareholders.

### 3) Risk Considerations

During this stage of the process, we are looking to establish how well equipped the company is to fund its debt over time. In order to do this, we estimate the long-term earnings power and assess the recovery rate in the event of an economic downturn.



### 4) Bond Selection

Having established that a company is an attractive issuer of bonds, we then need to examine the bonds that it has issued (over the years, there may have been several issues). We look for a preferential position.

We check for special clauses that may prove detrimental to bondholders – for example in the event of a private equity bid for the company (especially poison puts). We look for any prepayment conditions and we judge the relative value of the bond price within the credit market. (Often we find that bonds of longer durations will lose less in the event of a downturn and offer greater gains over time.) The further we go down in the credit quality

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spectrum, the greater the need for judging the merits of a bond on business fundamentals rather than interest-rate sensitivity.

When putting a portfolio together, Most high yield bond fund managers take a top-down approach, allocating according to credit rating and sectors, based on prevailing economic conditions. In adopting a value approach, Sparinvest seeks to minimize default risk and therefore allocates primarily according to net-debt-to-equity parameters. ■

### Summary

Sparinvest's value bond investment objectives are:

- To seek to preserve the capital of our investors by building a portfolio of bonds with low default risk and relative immunity to LBO activity
- To provide investors with superior long-term positive returns from value bond investments without exposing them to riskier credits
- To measure our performance against investor expectations rather than indices (we aim for positive returns rather than relative returns)
- To remain disciplined towards our value investment philosophy at all times
- To lend money to the business on the basis of its fundamental creditworthiness. ■

The mentioned sub-fund is part of Sparinvest SICAV, a Luxembourg-based, open-ended investment company. For further information we refer to the full and/or simplified prospectus and the current annual / semi-annual report of Sparinvest SICAV which can be obtained free of charge at the offices of Sparinvest or of appointed distributors together with the initial statutes of the funds and any subsequent changes to such statutes. Investments are only made on the basis of these documents. Past performance is no guarantee for future returns. Investors may not get back the full amount invested. Investments may be subject to foreign exchange risks. The investor bears a higher risk for investments into emerging markets. The indicated performance is calculated Net Asset Value to Net Asset Value in the fund's base currency, without consideration of subscription fees. For investors in Switzerland the funds' representative and paying agent is RBC Dexia Services Bank S.A., Zurich Branch, Badenerstrasse 567, P.O. Box 101, CH-8066 Zurich. Published by Sparinvest, 28, Boulevard Royal, L-2449 Luxembourg.