

The Academic Background

Sparinvest's strategy for the management of a series of funds and mandates investing exclusively in Danish Bonds has been heavily influenced by the following academics and their research findings:

Frank K Reilly & Keith C Brown, whose book 'Investment Analysis and Portfolio Management' is required reading for most students of economics. Theirs is probably the best known of the many academic studies to examine the subject of interest-rate forecasting – all of which conclude that successful and consistent forecasting is an impossibility. Reilly & Brown show that the best forecast is not to make any forecast at all. Their research findings imply that the best indicator that we have of future interest rates is in fact the current interest rate (or the yield curve of today).

Blake, Elton and Gruber who published a paper in 1993, entitled: 'Evaluating Government Bond Fund Performance with Stochastic Discount Factors.' In this paper, they argue that expenses are the main determinant of net performance from fixed-income funds. To minimize the impact of costs on performance, therefore, it is necessary to keep turnover low and costs to a minimum.

Michael C Jensen whose 1968 paper, 'The Performance of Mutual Funds in the Period 1945-64', was the first major study of fund manager performance. It concluded that no mutual fund manager was able to use timing abilities to add value over the long term.

Eugene Fama whose 1960's PhD dissertation gave rise to the hugely influential 'Efficient Market Hypothesis' which states that at any given time, security prices fully reflect all information available to market participants. Therefore, if a market is efficient, no individual investor should expect to be able to outperform an appropriate benchmark of that market on a sustained basis.

Benjamin Graham

In addition, we are mindful of the human factor that affects all investments – as described in the following quotation from Benjamin Graham:

"The Investor's chief problem – and even his worst enemy – is likely to be himself" ■

In order to understand the unique nature of Denmark's fixed interest market, it is necessary to understand the investment instrument that accounts for over two thirds of the total market value – namely the mortgage bond. Denmark's mortgage system owes its origins to a disastrous event that occurred over 200 years ago.

Fixed Income Strategy

In 1795, a fire swept through central Copenhagen, destroying more than a quarter of the city's homes in just 24 hours. The Government of the day found itself unable to meet the costs of the massive reconstruction work. So, in 1797, Kreditkassen for Husejere i Kjøbenhavn (The Credit Association of Copenhagen homeowners) was founded – effectively the first Danish mortgage credit institution.

The basic idea was that by pooling their mortgage requirements, borrowers would be able to achieve a better deal from lenders than they would be able to negotiate on an individual basis. The idea proved so successful that the Government enshrined it in law and it has been the principal method of raising finance for home purchase in Denmark ever since.

Denmark can now boast one of the world's largest, best-run and most robust mortgage markets, valued at over €180 bn. Moody's has pronounced it the safest mortgage system in the world, with the three largest bond issuers achieving AAA ratings. Despite world wars, economic and political disruptions, there has never been a default in over 200 years of mortgage bond trading. As a consequence, Danish mortgage bonds are rated as one of the safest investment options available, but they also have unique features that provide investors with the opportunity to achieve above average return with a high degree of capital security. ■

About Danish Mortgage Bonds

In Denmark, a mortgage can only be used to finance 80% of a home purchase or 60% of a purchase of commercial premises. Danish mortgages are set up in such a way as to be a very attractive proposition both for the mortgagee (borrower) and for the ultimate investors in the mortgage-backed securities that the market creates. The principal investors are usually pension funds, mutual fund managers and insurers.

Advantageous to the Borrower

The borrower's loan is protected by a combination of fixed interest rates and an option to repay the loan before term (at par plus administration costs). This is referred to as 'prepayment'. Thus if interest rates rise after the home is bought, repayments are unaffected because of the fixed interest rate and if rates fall, the borrower has the right to prepay the old loan and take out a new mortgage at a lower rate.

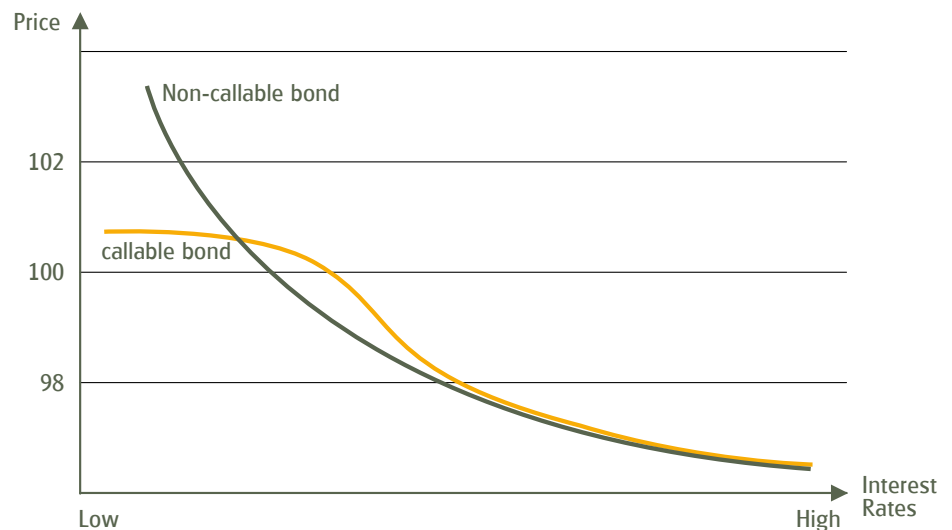
Advantageous to the Investor

Danish mortgages are financed by credit institutions who issue tranches of bonds with fixed coupons and long durations. The mortgage-backed securities are standardised into large pools which makes them very liquid. These bonds adhere to the 'balance principle', meaning that the maturity and cash flows of the bonds must match those of the underlying loans almost perfectly.

Approximately half of Danish Mortgage Bonds are 'callable', giving debtors the opportunity to prepay their loans at par. Historically, callable bonds have returned a better yield than non-callable bonds with the same credit rating because they offer a premium to compensate for the prepayment risk. However, callable bonds also require continuous surveillance to track the prepayment risk probability. ■

Fixed Income Strategy

Price Trend of a Callable Mortgage



As interest rates decrease, the probability of prepayment on a callable bond increases, resulting in a higher credit premium for risk. Large-scale prepayment causes the price to plateau out. ■

The Sparinvest Approach to Fixed-Income

A long-term horizon and a constant risk profile

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. That's why we invest in order to achieve a constant risk profile, creating 'well-behaved' investment instruments that can be relied upon to maintain their position on the duration spectrum and provide a reliable mechanism to offset liabilities.

Sparinvest believes in a policy of 'clearly-defined duration' in fixed-income fund management. A short duration fund should behave as a short duration fund and seek to maximise the opportunities of this investment strategy and a long duration fund should seek to maximise the returns for investors over a longer investment horizon. Our huge expertise in Danish Bond fund management enables us to manage mandates successfully across the duration spectrum.

We also advocate that investors should keep their own risk profiles and portfolios as constant as possible. ■

Investment Policy

Forecasting is Impossible

Based on the academic evidence, Sparinvest does not believe that the forecasting of interest rate movements is possible. Consequently, we do not attempt to adjust our bond portfolios on the basis of constant guesswork. Instead, we look at the yield curve of today and measure the inherent risk in each of our bond portfolios to ensure that it is in line with what we have promised investors over the duration. We constantly monitor the scenarios of how much investors will earn if rates go down by 1% or lose if they go up by 1%, based on what's already in the portfolio.

Our objective is to achieve good relative performance over time. That is to say, better than the benchmark – irrespective of market direction or interest rate movements.

Fixed Income Strategy

Low Turnover

Given the academic evidence that shows how bond fund performance is eroded by costs, our Danish Bonds team constantly seeks to keep turnover low and costs to a minimum.

Our policy is:

- To keep turnover low
- To adjust portfolios only in order to achieve a better future return or to take advantage of advantageous tax rules in individual markets
- We are not affiliated with any investment banks and have no income centre for trading. We therefore have no incentive to trade other than for portfolio rebalancing when strictly necessary
- To shop around for best execution rates from different brokerage houses
- To pass on the exact same trading costs that we have incurred in the market to the customer without any mark-up or hidden margins
- To keep our administration fees as low and competitive as possible.

Avoiding Decisions Based on Timing

The bond fund industry is awash with economic data and data-watching is its favourite pastime. Certain statistics are eagerly awaited because the market deems them to be useful markers for determining the future direction of interest rates. Key data on housing, inflation, employment, sales levels and other 'confidence indicators' is released by the Danish Government on specific days.

Whilst Sparinvest does not believe in trying to predict interest rate movements, we must, of course acknowledge the fact that the 'Efficient Market Hypothesis' relies on the dissemination of information and that the release of economic key indicators can have an impact on the market (positive or negative.) Therefore, if we are in a position where we feel that our portfolios need rebalancing, we would either avoid trading on days that are earmarked for the release of economic data or else we would seek to achieve rebalancing in two parts – before and after data-release days.

Keeping the 'Human Factor' in Check

It may be human nature to lose confidence if the market is falling, but experience tells us that recouping losses is seldom achieved by changing strategy. Our objective is therefore to maintain a disciplined and focused strategy – no matter what gains or losses might result.

We are assisted in this objective by the fact that our Investment Committee constantly monitors fund managers to ensure that there is no 'style drift' in their portfolio management techniques. The primary objective is to manage funds in accordance with investors' expectations of the risk profile of the fund. ■

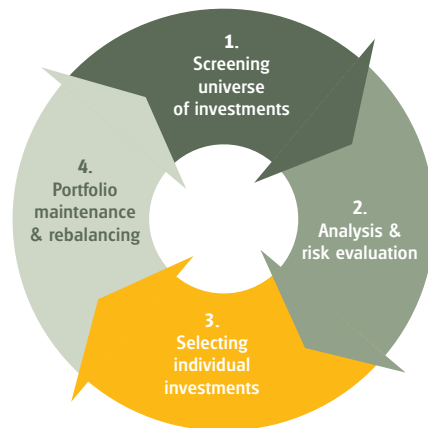
When composing or inheriting a fixed-income portfolio, we start by establishing its risk profile and our investment parameters. We consider interest-rate duration to be a 'hard' risk limit, whereas the portfolio's allocation to segments reflecting the composition of the overall bond market is a 'soft' risk limit which may be subject to change over time. We look at all the bond types available within the universe and decide which are most suitable to fulfil the investment objective of the portfolio. For efficiency and diversification, we try to allocate the portfolio to different bond types – Government bonds, callable and non-callable mortgage bonds, floating-rate notes, etc. We also establish which index the portfolio will be monitored against.

Investment Strategy (Process)

Fixed Income Strategy

Once the portfolio is established, the investment process is an ongoing one and has the objective of ensuring that the portfolio remains constant in terms of its risk profile identified at the outset. ■

Ongoing Process



1) Daily Screening

In order to keep a close eye on the detail of the portfolio, we rely on a comprehensive database of over 2,000 individual bonds and daily data input of over 150 key figures. This enables us to keep an eye on the pre-payment risk levels for callable mortgage bonds – based on current interest rates – and to ensure an adequate diversification of the callable mortgage bond part of the portfolio between low- par- or high-coupon bonds, based on the probability of pre-payment.

2) Risk Evaluation

Using the relevant key figures, we will seek to optimise the portfolio for its return horizon, imposing the relevant diversification, duration and risk criteria. The resulting model portfolio will form the basis of our more subjective analysis, because we might have preferences or specific views on certain bonds.

3) Subjective Analysis

Our experienced fixed-income fund managers will analyse the model portfolio both on an individual bond basis and in a portfolio context to achieve optimal allocation. They will consider any market disequilibria that might be exploited to the advantage of the fund – for example factors such as the liquidity of certain instruments, tax effects and risk versus reward for carry trades. Once they have established the ideal ‘theoretical portfolio’, they will implement any trades required to achieve it on a best-execution basis.

4) Maintaining the Ideal Portfolio

To keep costs low, we trade only when strictly necessary and then on a best execution basis. We do not pay any investment banks for analysis, as we believe in our capacity to achieve this in-house. On a daily basis, all portfolios are monitored to ensure that their risk profile remains constant and that they are therefore staying on track to meet investor expectations

Fixed Income Strategy

The focus of daily portfolio management is on best execution, maintaining low turnover/ low trade activity, off-the-run bonds, buy-back cases and squeezes, tax effects (of importance to pre-tax investors as well), risk/reward considerations for carry-trades and portfolio diversification – we aim for a combination of a few large bets and many small bets, based predominantly on quantitative analysis. ■

Summary

Sparinvest's Fixed Income strategy is focused on:

- Applying the lessons learned from academic investigations into bond fund management
- Maintaining a constant risk profile rather than trying to call interest rate movements
- Keeping costs to a minimum
- Avoiding trading on the basis of – or being overly influenced by – the release of key economic figures
- Remaining disciplined and true to our investment strategy. ■

The mentioned sub-funds are 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.