Smart Beta in fixed Income

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Paul van Gent, CIO

Corestone Investment Managers AG

Contents

Our firm

We construct portfolios with the best mix of managers rather than a mix of the best managers

- **Who we are**
  - Executive Management averages 20 years' investment and management experience
  - Manager Selection team averages 16 years' specialised investment experience

- **What we do**
  - Management of multi-asset/manager portfolios for third parties (eg. pensions funds, family offices, HNWI)
  - Development and Management of tailored investment products and solutions, in both traditional and peripheral asset categories
  - Multi-Asset/Manager specialist within Robeco Investment Solutions

- **Assets under management and advisory**
  - EUR 26.4 billion on open architecture platform (as of March 2015)

Strong parent companies

Corestone operates at arm's length

Orix Corporation

Headquartered in Tokyo, Japan, offering diversified financial services including leasing, lending, rentals, real estate, life insurance, as well as environmental and energy businesses

Rabobank

Financial services company, headquartered in Utrecht, the Netherlands. It is a global leader in Food and Agribusiness financing and in sustainability-oriented banking

ROBECO

- EUR 281 Billion AuM (March 2015)
- 1,300 Professionals in 13 Countries offering Equity, Fixed Income, Quantitative Strategies, Investment Solutions and Alternative Investments

CORESTONE

- Multi-Asset/Manager specialist within Robeco Investment Solutions (Fiduciary Management, DC plans)
- Within the group operating at 'arm's length': As a fiduciary manager, Corestone acts only in the interests of its clients and is under no obligation to select group's products.

Organisation

Supervisory Board

Hans Rademaker
Martin Mlynár
Hans-Juerg Appenzeller

Investment Advisory Committee

John Shakeshaft
Joost Rietvelt
Martin Pereboom

Investment Solutions	Portfolio Management, Manager Selection		Operations & Client Service
Martin Mlynár, CEO	**Paul van Gent, CIO**	**Sadruddin Rejeb,** Head of Research & Financial Engineering	**Cian Maynard,** Head of Operations & Client Service

Trends in Fixed Income

Trends in Fixed income

Market trends

- Banks aren’t lending
- Regulations have restricted trading
- Search for yield
- Client preferrence for simplicity
- Fear of higher rates.

Manager trends

- Bespoke benchmarks – for liability hedging but also for country weightings.
- Factor investing
- Unrestricted mandates – managers want more freedom.

Market Trends - Examples of Recent Changes Across Fixed Income Asset Classes

	Search for yield	Fear of higher rates	Simplification, less restricted mandate	Search for yield
Have we taken action on the theme	Yes	Yes	Yes	No
Asset Class Funding Source	Euro Government Bonds	US High Yield	European Investment Grade Credits	Developed IG Corporates
Asset Class Funding Recipient	Dutch Mortgages	US Bank Loans	US/Global Investment Grade Credits	Emerging IG Corporates
Major Trade-off	Better spread for same credit rating/ less liquid	Lower interest rate sensitivity/ less liquid	Greater diversification/ currency hedging	Higher spread per unit of risk/short history

Smart beta (1) – How we see it

FT- Lexicon: Smart beta refers to an investment style where the manager passively follows an index designed to take advantage of perceived systematic biases or inefficiencies in the market.

It can be understood as an umbrella term for rules based investment strategies that do not use the conventional market capitalisation weights.

- Smart beta is not per se about generating a higher return but about generating a better risk adjusted return (a higher Sharpe ratio).
- We think of smart beta basically as factor investing. So then what are these factors?
  - Market - Low volatility
  - Value - Momentum
  - Size - Term
  - Credit - Other

Smart beta (2) – Decisions that need taking

- What do you need to tackle to make a smart beta
  - Defining the factor: what to measure, what period to measure it over (lots of assumptions based on empirical evidence).
  - Limiting implementation costs (i.e. limiting turnover).
  - Defining the rules for weighting positions.
  - Dealing with other factor exposures (an investment may be exposed to multiple factors).

- For the investor
  - Is it a strategic allocation or a tactical allocation (investment horizon and timing when to have exposure to what factor)?
  - Will you allow derivatives usage?
  - How large should the allocation be?

Smart Beta (3) – Is it active management or is it a beta?

- **Smart beta is active management**.
  - Rules need to be designed and the portfolio by definition deviates from the market portfolio.

- **Smart beta is a beta**
  - If it's a rule perhaps it is a beta…

- **Maybe though ….**

whether or not smart beta is active management or beta is perhaps not the right question.

Smart Beta: What is it?

We believe the truly relevant questions for choosing and implementing any strategy are twofold:

- **Firstly: Are you doing the right thing?**

  We call this the beta. Setting the strategy is 80% of the game but once done ....

- **Secondly: Are you doing it right?**

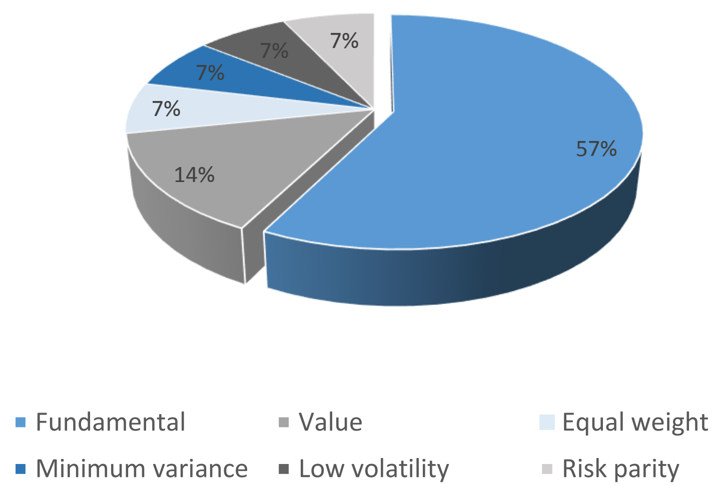
  We call this the alpha. To determine this you need a benchmark. We believe you shouldn’t invest in anything until you have found an acceptable benchmark.

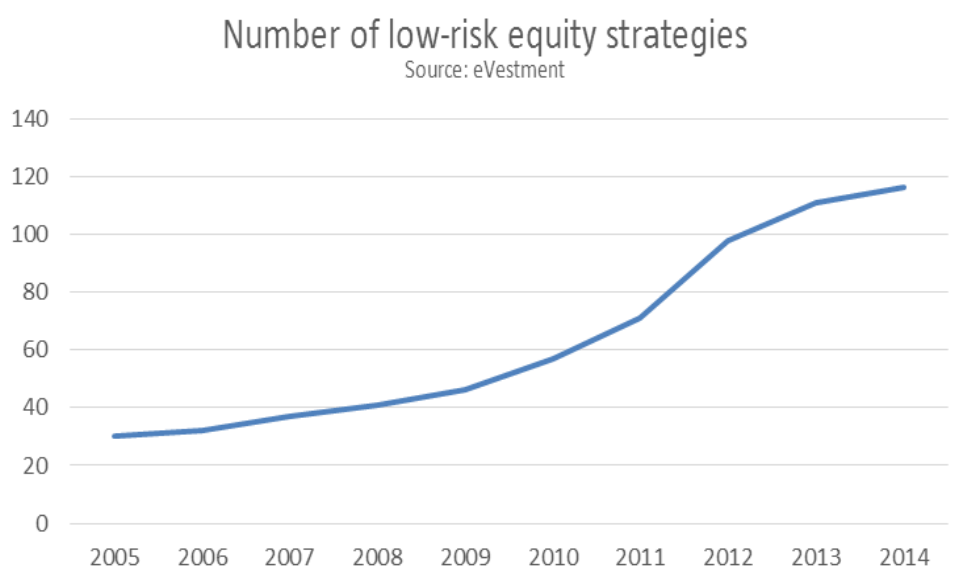
Smart Beta investing – so what are other people doing (1)

Fundamental indexing by far in the majority
… still very equity focused

- 21% of asset owners in the US have a smart beta allocation, 40% in Europe.
- Smart beta has already made its way into equities.
- Increasing number of managers incorporating factors in the equity space.

Types of smart beta strategies being used
source: FTSERussell Smart Beta 2015 Global survey (214 asset owners)





Smart Beta in Fixed income

If it's a beta then strategy manages the allocation

- Fixed income either pays out or doesn't, leading smart beta to focus on avoiding losses and managing risk.
- In fixed income it's more the norm not to own everything that gets issued
- In fixed income smart beta has been around for a while
  - Duration (is basically a volatility factor);
  - Issuer capped weight benchmarks (is basically a small cap factor);
  - Credit rating based benchmarks (is basically also a volatility factor).
  - Fundamental factors are most commonly applied,
  - Some equity like factors are being used in credits,
- Smart beta is developing and offers additional opportunities

The majority of reactions are positive
Some combine it with active management.

What a few others think

- **Blackrock** has developed a **sovereign risk index that incorporates factors** such as fiscal strength, external financing position, financial sector health and willingness to pay.
- **Research Affiliates** corporate bond **indices are weighted by cash flow**, sales, book value of assets and dividends.
- **Russell** says there are **persistent factors**, such as credit quality that lend themselves to being expolited
- **Barclays** has **GDP weighted** or fiscal strength weighted bond indices.
- **AXA** says smart beta credit funds provide **more intelligent diversification** than market cap-weighted indices, avoiding overexposure to a particular sector.
- **Robeco**: certain factor characteristics are known to deliver **higher risk-adjusted returns**, compared with investing in the broad market index.
- **Invesco**: By **combining an active individual stock selection with a low volatility** stratgey the portfolio should outperform in 4 out of 5 market phases.
- **Alliance Bernstein**: By **rotating factors** we can enhance risk-adjusted returns, and the lack of correlation between these portfolios and fundamental research-based strategies gives a very high degree of diversification.

- **Vanguard**: Overall, a market-cap-weighted index is both the best representation of an asset class and the best starting point for portfolio construction discussions.

So what do we advise with regard to smart beta

Benchmark what you decide to do

- Always think about what you want.
- Obviously what you decide to is smart ….
- …. so anything you choose to do is Smart beta
- Adding smart beta should in any case increase diversification
- However beware of other people calling what they do smart. Some strategies may be smarter than others
- Distinguish between the naive rule and the proprietary insights (which is where the alpha is)

Factor Investing – What to watch out for

Having a better opportunity is great, but it's only a starting point

- Are you comfortable your assumptions are correct.
  - Why do you believe a strategy will outperform other strategies.
- Can you time the market or can you tolerate a prolonged period of underperformance.
- On what do you want to spend your risk.
- Given the choice between active management and a rules based strategy why follow only the rule
- If the smart beta opportunity set leaves enough breadth, why not consider active management on top of it?

Manager Selection and Smart Beta

Overview manager selection and portfolio management process

Asset class analysis

- Benchmarks
- Risk / return drivers
- Investment styles
- Active / passive

Screening

- Define universe and criteria
- Quantitative screening
- Manual additions / exclusions
- Longlist / shortlist

Due diligence

- Detailed RfP
- Conference calls
- On-site meetings
- Several rounds of scoring
- Manager review documents

Monitoring

- Quarterly conf calls
- Annual on-sites
- Ongoing risk / return reviews

Implementation

- Mandate and investment guidelines
- Transition
- Setup monitoring

Portfolio construction

- Uncorrelated alpha drivers
- Risk and budget constraints
- Fit with overall portfolio

Manager selection: What’s special to fixed income

... It’s more difficult to analyze than equities

- Custodian and manager reporting
- Seeing the intended bets
- Risk tools – each issue is different
- Evaluation periods – need to pick a relevant period
- Benchmarks – can be very narrow
- Passive – not always a good alternative
- Bespoke benchmarks - bad comparability
- Assessing the forward looking return potential

Sounds good in theory but a tough task requiring significant investment

Global Credit Manager Trends – Most Managers We See Want More Freedom

	Team Investment Required	Process Investment Required	Risk Management Investment Required	Operations Investment Required
Manager Wants to Diversify Duration Risk (long/short government bonds, rates)	Addition of Sovereign Economists/ Analysts	Identify relative value opportunities between rates and credits. Much more granular attribution systems.	Risk Management Tools to model Sovereign vs Credit Risk	More back office support to set-up ISDA's and CSA's for OTC Derivatives. More compliance personnel for monitoring
Manager Wants to Diversify Credit Risk (ABS, MBS, HY, EMD Corporates)	Addition of Analyst headcount across multiple asset classes	Identify relative value amongst liquid vs illiquid credits. Better defined exit strategies.	Risk Management Tools to model Illiquidity Risk	Expert traders for less liquid more opaque asset classes

Example: Screening the universe - avoid arbitrary screening periods

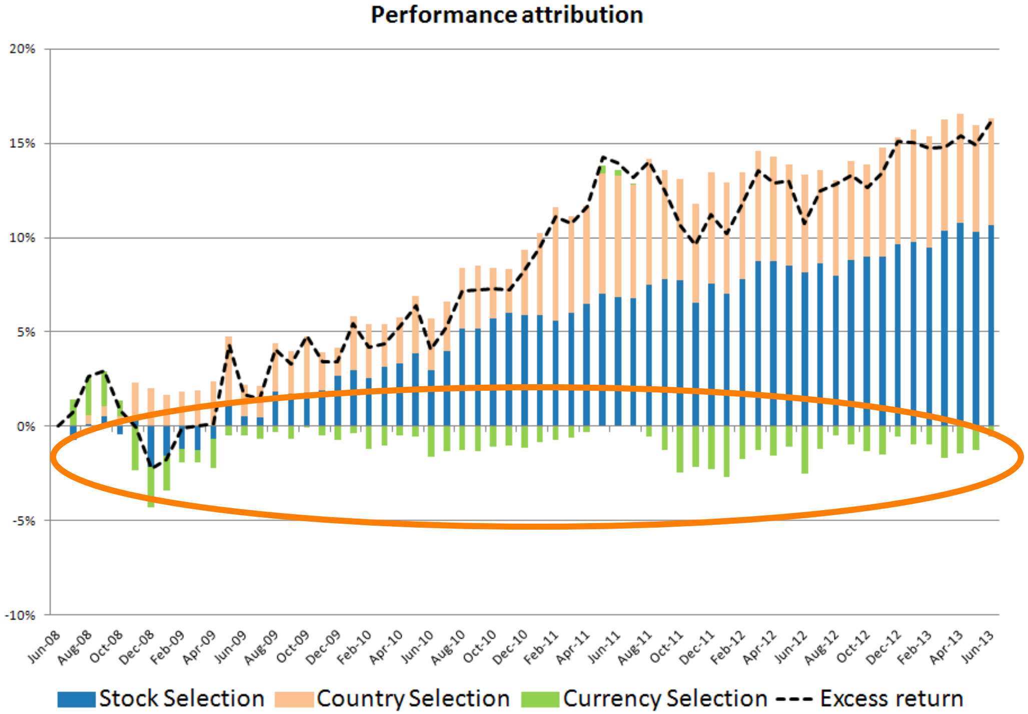
Arbitrary screening/inadequate index analysis can lead to false conclusions. (Also a point for Smart Beta assessment!)

Credits Screening Focused on Multiple Stages of a Credit Cycle

US Market		Price, Yield and Spread Levels				Spread to Yield	Sentiment	Economic Environment			Credit Actions
Credit Stage Description	Period	Barclays US Corporate Index - Market Average Monthly Return	% of Positive Months	Average Spread (%)	Average Yield (%)	Risk as Proportion of yield	Investor Sentiment - Vix Level	GDP Growth	Debt to GDP	Inflation	Net Global Short Term Ratings Actions
Recovery Stage 1	October 2002 to October 2003	0.8%	71%	Spread tightening inflection point in October 2002 Average: 1.6%	Decreasing Yields Average: 4.8%	31%	Inflection Point - Lowering investor uncertainty	Medium Growth	60-70%	Medium Inflation	Negative
Low Return Stage	November 2003 to May 2007	0.3%	64%	Spreads reach low point in November 2003 Average: 0.9%	Trending but marginally increasing yields Average: 5.2%	18%	Inflection Point - Low and stable uncertainty	High Growth	60-70%	Rising Inflation	Positive
Bear Market Stage	June 2007 to February 2009	-0.1%	57%	Spread widening inflection point in June 2007 Average: 3%	Yield widening inflection point Average: 6.5%	44%	Inflection Point - Increasing investor uncertainty	Recession	less than 80%	Rising Inflation	Negative
Recovery Stage 2	March 2009 to March 2010	1.8%	92%	Spread tightening inflection point in March 2009 Average: 2.8%	Yield tightening inflection point. Average: 5.7%	50%	Inflection Point - Decresing uncertainty	Low growth	less than 100%	Low Inflation	Negative early but positive late
Spread Volatility Stage	April 2010 to September 2012	0.8%	77%	Spread tightening ends. Spread volatility stage. Average: 1.8%	Yield tightening continues. Average: 3.7%	50%	Inflection Point - Volatile Sentiment and Euro Sovereign Periphery CDS Widening	Low/Negative Growth	above 100%	Low/Medium Inflation	Positive early but negative late

Example: Segregated accounts - tailor the guidelines to the (alpha) strategies that you actually believe in

Scrutiny of manager (alpha) strategies



The reasons for excluding the currency strategy:

- Lower management fees: The currency strategy is traded daily which makes a managed account expensive
- The currency part was not the most convincing part of the process and hasn't added much value since inceptionand also not really lowered the risk (TE).
- Using only the equity parts of the strategy it becomes a more pure implementation of the index
- EM currencies are less fundamentally driven and there is a lot of government intervention.

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Appendix

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