Investment from a Behavioural Finance Perspective – a Sparinvest Interview with Dr. Thorsten Hens

The past two years have witnessed both the worst financial crisis since the 1930's and one of the most spectacular and sustained market recoveries. In recognition of this, Sparinvest held an interview with Professor Dr. Thorsten Hens, one of Europe's leading economists and experts in behavioural finance. The intention was to find out more about behavioural finance and how it could be used to interpret the events of the last two years. Below, Professor Hens argues that until investors learn to overcome their behavioural biases, they will continue to make the classic investment mistake of selling low and buying high and ignoring proven 'alpha' strategies like value investing.

Professor Dr. Thorsten Hens is SFI Professor of Financial Economics at the University of Zurich's Swiss Banking Institute. He is also one of Europe's pre-eminent economists and a leading light in the field of behavioural finance. In researching how investors make their decisions, Professor Hens draws on work in psychology and applies insights from biology in order to understand the dynamics of financial markets. In state-of-the-art laboratories based within Zurich University, Professor Hens conducts his experiments on real people. His aim is to find explanations for extremes of market behaviour. His theories and observations often question the supreme idea of traditional finance – the notion of the efficient market.

Along with Professor Dr. Allan Timmermann of the University of California San Diego, Professor Hens joined the Sparinvest Advisory Board in July 2009. The Advisory Board facilitates the work of Sparinvest's Investment Committee which aims to discover superior investment strategies for the longer term through academic insight.

About Behavioural Finance

What is the definition of Behavioural Finance?

The 'behavioural' part means that you study the behaviour of both people and of markets. From that perspective, the discipline is very different to traditional finance because in traditional finance you would assume that investor behaviour is rational; you wouldn't question that. So the main innovation with behavioural finance is that we study how people actually behave – in laboratory experiments for example – instead of building models where you assume that people will always behave in a rational way. That's why we have to keep experimenting all the time to see the different aspects of people's behaviour and how it changes – in crises, in good times, etc.

Does Behavioural Finance have different approaches?

Yes, there is the laboratory approach where you study human and sometimes market behaviour. Doing so we use different subjects for our experiments – students, traders, CEOs, even journalists! But then there is also a great deal of data from the markets (rather than laboratory data) and we try to filter out the rational and irrational parts within it. Then, of course, there are other branches such as behavioural corporate finance where you study the overconfidence of CEOs, for example.

Is there a difference between behavioural finance and neuro-finance?

Yes. Neuro-finance is a 'joint venture' – if you like – between financial economics and neuroscience and it gives you a foundation for behavioural finance. So let's say that you have a certain bias and we explain it to you in the attempt to correct it. But you still behave in the same way. So we explain it again and you still behave the same…That's when we decide to scan your brain and figure out what's wrong with you!

In my research group, we also have access to a brain-scanner. We let students play cards while they are linked to it and we analyse what happens. The problem with this kind of research is that the sample size is small. The team can only experiment on around 5 people for one study, whereas in the standard labs it can be hundreds at a time. One of the things that we have discovered is that the area of the brain where gain is experienced is quite a different area to the one where losses are experienced. So something has to happen to link the two – gains need to be weighed against losses – because the two areas aren't naturally connected in the brain.

The funny thing is that if you study in traditional finance, you would think that both gains and losses would be at the forefront of the brain – the cognitive section – and that you would weigh one against the other, but it's simply not true. Both gains and losses are 'located' in those parts of the brain that are very old – where you have the emotions and feelings. So it really needs some conviction to bring it out of that part of the brain and into the forefront where you can talk about it rationally.

The brain has developed over time in different stages and it is the cognitive area (the one that sets humans apart from other animals) that developed latest. The earliest parts of the brain to develop house all the emotions and this we share with other animals. This more 'primitive' area is where we experience gains and losses.

So is it because it's hard to bring losses out of the emotional part of the brain and into the cognitive area that it is difficult to admit to having made losses? You'd rather sit on shares that are going down and down instead of selling them?

Well perhaps that is for a different reason. When you are a social animal, it's difficult to admit to making mistakes because it can harm your reputation – particularly for the male of the species! It's always hard for me to find an investor who has made any losses – particularly when I ask men! I don't know what happens in the financial markets but whenever I talk to anyone it seems they all make gains!

How can investors use the knowledge of Behavioural Finance in order to build a successful portfolio?

Behavioural finance helps to explain why certain outperformance factors work and thus why portfolios

should be weighted towards them. Behavioural finance is concerned with both the 'behavioural beta' and the 'behavioural alpha' factors involved with investing.

- Behavioural Beta reveals that most investors fail to beat the index because they buy in when it is expensive and due for a downturn and they sell when it is on the way down and due for an upturn. Understanding behavioural beta can help you to check your psychological mistakes.
- Behavioural Alpha reveals that there is money to be made by exploiting the mistakes of others. For example value investing is a strategy that is proven to work. A company becomes a value investment when its price declines below its actual worth, meaning that a price decline may be a good signal to buy. However, individual investors may have trouble in identifying which mistakes are worth exploiting and should delegate this to experts. The best process for value investment is a mixture of quantitative screening and then deep analysis. There is an element of intuition that is important from value managers who really know what they are looking for.

What is the use of Behavioural Finance in economics and asset management? What type of event could Behavioural Finance explain?

We explain many things – like bubbles and crashes (most importantly) but also we explain things like what we call 'asymmetric volatility' or why markets are more volatile in downturns than in upturns. We also explain the value premium – why is it that you can get this premium from value investing which doesn't disappear but remains stable over time at about 4-5%* per annum above the yield of passive investments?

What is the objective of your studies?

The objective is threefold:

- To give advice to investors and help them to achieve the behavioural beta, i.e. waste less money
- To make financial products that satisfy investors' requirements
- To help create mutual funds that can achieve some alpha by focusing on outperformance factors

* Refers to the long-term average over horizons with at least 10 years.

Behavioural Biases

Cognitive Biases
- Mental Accounting
- Miscalibration
- Availability & Attention Bias
- Trend Chasing Biases

Emotions and Investing
- Greed and Fear
- Pride, Regret, Surprise

Intuition
- Trust (home bias)
- Gut feeling

Gender Differences
- Over-confidence
- Self Attribution Bias

Herding, Conformism, Panics

What are the biases/concepts/notions on which Behavioural Finance is based?

The biases can for example be ordered in this way:

- **Cognitive biases.** These are the biases that you have some hope of explaining! So, for example if you make a miscalculation or are not very good with your abilities, then we can sit down and show you your mistakes and you might understand.
- **Emotional biases.** Strong emotions like greed and fear are well known for tilting our decisions. These are much more difficult to overcome.
- **Intuition and gut-feeling.** This can be good – and bad. It depends what you want to do. If you are a day-trader or a stock-picker, it is preferable not to use intuition. But if you are a value investor, it is better to have intuition because when you make intuitive decisions, they are typically based on long-term observations. The human layer is important to value investing. Whilst it is certain that you can build a value strategy through an index approach (and it may be a cheap way of doing it) I still think that you get something extra when you have a good value team – although of course it's costlier.

The Financial Crisis from a Behavioural Finance Perspective

Did you gain new insights from the financial crisis and subsequent recovery?

I found this a very interesting crisis – in the sense that it was a great opportunity to see whether our laboratory experiments into investor behaviour were borne out by reality. In the lab students are given cash to play with so that they become like traders. My team and I manipulate the markets, feeding the students with 'extreme' news and events which are more severe than in reality. We can then evaluate their reactions, trading decisions, behaviour patterns and overall investment success. The crisis provided a great opportunity for us to see how real investors reacted to a really extreme crisis.

So how do the market developments of the past two years prove the Behavioural Finance Theory?

They very much proved the loss aversion theory – that investors are more sensitive to downturns. After the 2001 crisis, (the Internet bubble) it took retail investors around 3 years to recover their risk appetites. The panic around the internet bubble was caused by investors' inability to short sell their holdings. The market wasn't sufficiently mature and most of the shares being bought were not traded on the larger exchanges. In this latest downturn what we saw was 'accumulated panic' with the memory still fresh from the previous downturn – especially around the collapse of Lehman's. Investors remembered that markets could move down fast so they wanted to get out quickly, precisely when they should have started buying. The panic reached such a pitch that many retail investors are still standing on the sidelines, too scared to re-enter the equity markets. Trust has been lost – particularly in the banking sector.

Normally investors tend to be very optimistic when markets are moving up and pessimistic when they are going down. Although 2009 was a very good year for stocks, private investors still seem rather pessimistic. Is this true? And if so, why is the pessimism so profound?

Private investors are all scared to invest. They have had their fingers burnt, the economy is looking insecure, they fear unemployment and they feel poorer. To be a rational investor, you have to learn to overcome natural behavioural urges. Thus – if we have the money available to invest – a market downturn is the best time to invest it. As adaptive learners, people do get better at investing with experience. However, the market itself will always involve a segment of irrational participants/newcomers, making it irrational.

Will investors ever learn not to follow the herd? Is there any chance of convincing private investors of the benefits of countercyclical investing?

Investors follow the herd because it looks and feels safer to be moving with the herd. People feel that if things are going wrong for everyone, then someone in a position of authority will have to come and rescue them.

Do you see any positive aspects of the crisis? Are there any improvements regarding products, advice or investor behaviour?

In terms of products, I would argue that the 'ideal' investment product would be something that is engineered around the concepts of value investing for the upside and capital protection for the downside. Value investment creates an excess of around 6-7% in good years but it also suffers a more severe downturn than the index. I believe that the perfect product would be one that sets aside 1-2% of the excess amount generated by value during upturns and uses it to insure against

the downturns. The problem is that investors only think that capital protection is a good thing when they have just lost a lot of money (i.e. too late). They should have been demanding such products in 2007, not 2008. When markets go sky high, investors should be buying a parachute rather than 100% exposure to stocks.

Has anything occurred over the past two years that would make you want to change the questions you ask an investor to establish his/her risk profile?

Yes, we would now want to check for behavioural biases. The risk profiler used by companies such as Sparinvest was developed with MIFID legislation in mind. The profiler is MIFID compliant but MIFID doesn't ask to check for behavioural biases. One example would be the disposition effect (not wanting to sell at a loss). Another would be the pro-cyclical bias. We would also ask questions about trust – who do investors trust the most to look after their money. (Banks score quite low at the moment.)

Outperformance Factors and Sparinvest Products

Sparinvest's value investment process is based on finding *'intrinsic value'* ***compared with market value. How is the difference between the two prices explained by Behavioural Finance?***

The nice thing is that Behavioural Finance is the only research area which would acknowledge and explain the difference. Traditional finance would say that the market price is always right. But in studies we have found deviations away from the long term market price so that we can explain why we have some periods where prices are too low and others where they are too high. So, in a sense, it gives comfort to the investor when they don't just see a black box that shows a positive return from a certain strategy, but they can also see the argument behind why this is the case.

How do you explain the Momentum Premium?

The way to understand it is that the financial market is there to trade and we have now observed the value premium and the momentum premium have existed together for more than 80 years. So there is a clear indication that – somehow – it's a trade: I get something from you, you get something from me and we are both happy. And now – if you look at the types of returns from value and momentum, they are quite different. Both make excess returns – that's not the difference. But if you look at volatility, they are quite different. Also, they behave differently in different time horizons. And, what you see is that more patient investors go into value investing and the impatient investors who don't like 'extreme' returns, go into momentum. Then you can set up a model to explain that they are both happy. They trade with each other and it's like – somebody is producing Coke and the other is producing milk and they are both happy. So this will persist all the time. That's why, when you want to 'sell' value investing, you shouldn't sell it by saying 'This is the best strategy for you whatever type of investor you are'. You need certain characteristics in the investor to really appreciate value returns. The more myopic investors will be happier with momentum returns.

So is there an argument that you don't sell a value stock at fair value; that instead you sell at fair value plus momentum premium?

Ideally you would combine those effects. In fact Sparinvest has started this with a product called Equitas. Value and momentum are complimentary to each other. If you look at correlations, they are not highly correlated. So by combining them, there is something extra to be obtained.

Does Equitas capture all the outperformance factors or are there more?

There are almost certainly more. But the right way to think about this is not so much in terms of biases but in terms of the types of returns you get. If you combine value and momentum, you get a different kind of return from usual and again some investors won't like it. Perhaps some are happier with pure value returns and others with pure momentum returns. So blending different styles changes the return characteristics but at the same time it could end up by generating results that appeal to a larger number of investors than would a product focused on a single factor.

Insight

Professor Thorsten Hens recently finished an international experiment looking at how risk attitudes vary from country to country. (42 out of 50 nations invited to participate responded. Participants in each country were 100 undergraduates studying economics.)

He was looking attributes such as patience and at the three dimensions of risk – i.e. risk ability, risk tolerance

and risk awareness. In terms of patience, which is very important for investment purposes, he found that the Scandinavian/Germanic countries came out on top (out of the 42 nations that responded). The least patient were the Americans! In fact, several African nations scored higher than the US. The study disproved the stereotype that Asians are gamblers with a high risk tolerance. In fact they have similar risk tolerance to Europeans but they have less risk awareness. For example, if they enter a lottery they are more likely to think that they have a chance of winning than a European would be!

Another aspect of the survey showed that the more individualistic a nation is (as opposed to collectivist), the more it will panic in downturn mode. This is called the 'cushion hypothesis'. In countries where extended families are the norm, individual family members will worry less about losing a job or house because the rest of the family/community will rally around and help.

For more information on Professor Hens, follow link http://www.isb.uzh.ch/institut/staff/hens.thorsten

Sparinvest offers the following equity and bond funds which are all designed to capture the outperformance potential of value investing.

Our Value Equity Funds

Fund	ISIN code
Ethical Global Value	LU0362355355
European Value	LU0264920413
Global Small Cap Value	LU0264925131
Global Value	LU0138501191

Our Value Bond Funds

Fund	ISIN code
Emerging Markets Corporate Value Bonds	LU0519053697
Ethical High Yield Value Bonds	LU0473784196
High Yield Value Bonds	LU0232765429
Investment Grade Value Bonds	LU0264925727

Equity Fund

Fund	ISIN code
Equitas	LU0362354549

(Equitas invests with a bias towards both value and momentum equities)

Further information on all of these funds is available at sparinvest.eu

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/representatives 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 Investor Services Bank S.A., Zurich Branch, Badenerstrasse 567, P.O. Box 101, CH-8066 Zurich. Published by Sparinvest, 28, Boulevard Royal, L-2449 Luxembourg. Sparinvest makes reservations for typos, calculation mistakes and other possible mistakes in the material.