

Dear Investor Friends,

Following a difficult year in 2008, at the end of November 2009 your Sextant Funds have regained a large part of the lost ground, with an excellent performance. Most of the investors who have placed their trust in us for around eight years now, have made their choice between risk and uncertainty by holding on to our funds, and often by reinforcing their positions during the financial crisis. We therefore have over 300 million euros under management, and have kept our financial soundness, and in particular kept our management team.

We have come out of the storm but we are still in the fog. So in such cases, we turn to the market theorists to explain to us what happened... and why it could happen again.

Deficient market theory

To manage risk, anticipate crashes or prevent bubbles, the most discerning thinkers are regularly convened, like an unreliable witness after an accident, to assess the respective faults and make changes in the regulations in the name of the famous principle of precaution.

Since our first steps as investors, we have experienced six successive crashes none of which had a common cause:



Performance of the CAC 40 Index since its creation on 31 December 1987 (Source: Bloomberg)

1987 - interest-rate hike: monetary crisis

1991 - invasion of Kuwait: political crisis

1998 - Asian crisis: over-indebtedness of large Asian companies indebted in dollars

2000 - dot-com bubble: over-investment, supply-side crisis

2007 - US real estate crisis: over-indebtedness of American households

2008 - Banking crisis: complete panic!

New crises never occur for the same reasons, which is why it is no use preparing for the next one by looking in the rearview mirror. The only new invention since the share price collapse of 2008 has been the 2009 launch by numerous management companies of the famous flexible funds, funds that can move into cash holdings when the market is falling. Unfortunately the market has already fallen: a classic example of a good marketing response to a problem that is no longer topical.

And yet the regulator must regulate, with the tools available to him. Since the tools depend directly on the theory, and since the theory cannot be wrong, scapegoats have to be found: swindlers, golden boys, greedy bankers or complicit auditors.

We wanted to re-examine the dominant theory governing the markets and market thinking and try to understand why good workers can have bad tools, such as John Meriwether, a very intelligent investor doing very sophisticated things. In 1994, his LTCM hedge fund recruited two Nobel Prizes in Economics, Myron Scholes and Robert Merton, the founding fathers of the mathematical model for valuing options, to finally hit a wall in 1998 and then again in 2009, with great consistency in their efforts.

What does financial theory tell us about risk and what tools do we have to assess it?

THE THEORY: INVESTMENT IS A SCIENCE

$$\sigma(R^i) = \sqrt{\frac{1}{n-1} \sum_{t=1}^n (R_t^i - \bar{R}^i)^2}$$

Definition of historic volatility

The theory is still based on the discoveries made in the 1960s by Eugene Fama, who was the first to expound the efficient market principle, according to which at any given time the price of a share reflects all the information available in the market. Shares obey a random model dictated by the appearance of new information. It is not possible to beat the market, and active management is therefore doomed to underperform an index, according to William Sharpe (Nobel Prize). The investor endeavours, in investing, to maximize his performance for a given level of risk. Risk is likened to volatility, i.e. the deviation of a share's price relative to its mean. A share that deviates little from this mean is not risky, whereas a share that deviates sharply from it is very risky. The same applies to a fund which is an equity portfolio. To take an example at random, Bernie Madoff's fund, which for 20 years posted one of the lowest volatilities in the market, was a very low-risk fund. Quod Erat Demonstrandum!

So long as science is merely a veneer placed over reality, reality will give it wake-up calls, often dramatically.

Reality is more like a racecourse:

The questions most frequently asked are simple:

1. What will the CAC40 do between now and the end of the year?
2. How can you invest with such volatility?

3. How do you explain your underperformance last month?
...or, in professional terms:
 1. What is your expected return on your asset class in the near future?
 2. How do you monitor your tracking error?
 3. What are your performance drivers to generate alpha?

One hesitates between *The Bourgeois Gentleman* and *The Affected Young Ladies*. What we need is an analysis grid that is probably more psychological than scientific. That is what we are proposed by a market practitioner, Sir John Templeton, whose disappearance unfortunately went unnoticed in the stockmarket meltdown of the summer of 2008. Templeton wrote as follows:

"Remember that unlike other professionals, a prudent and wise investor cannot afford to do what other investors do. For example, if 10 doctors tell you an appropriate prescription, then it's wise to accept that consensus. Likewise, if 10 engineers agree on the design of a bridge, then that's surely the right way to build it. But if 10 investment analysts tell you to buy a particular stock, it is probably the wrong thing to do. And that's not because the analysts are dumb. It's simply because if they are all recommending the same company, its price must be near its high. The only reason it rises is because the consensus is buying it. So if everyone is recommending one stock in particular, it's better to stay away".

This introduces us to the behavioural approach to markets. Can you have a scientific approach in a discipline in which the observer influences the phenomenon observed? We had already discussed this issue in our investor newsletter of April 2007. When share valuation entails quantum physics...

The other new contribution in the attempt to model financial markets comes to us from Nassim Taleb and his predecessors who examined the highly improbable or even virtually impossible events that resurge in the market at irregular intervals. In his book entitled *The Black Swan*, he mentions the impact that the discovery of the first black swan could have had on people's way of thinking at a time when the old world was convinced that all swans, without exception, were white.

This type of event has three principal characteristics: it is an aberration which goes beyond our framework of thought. Nothing in the past points to the possibility that it could occur, making its impact all the more massive. Finally, our human nature leads us to rewrite history afterwards to make the phenomenon appear less random, and more predictable than it was. Hence, the famous "I told you so"!

Reality, history and the market are not continuous phenomena obeying a normal distribution curve that can be easily modelled, but rather a long, quiet river that, from time to time, sustains inexplicable jolts. Nassim Taleb gives us a very concrete example which takes us from *Mediocristan* - the place in which the normal distribution reigns - to *Extremistan*, which is more like financial markets: assemble together one thousand people chosen at random from the population, and identify which of them is the heaviest. Their weight will not account for more than 0.6% of the total sample. Repeat the same test selecting individuals according to their wealth, after placing in this sample Bill Gates, the founder of Microsoft, who by himself weighs 80 billion dollars. What proportion of the total wealth would he represent? 99.9%.

In *Extremistan* a single observed phenomenon can have a disproportionate impact on the whole. You will find it hard to imagine the mean of any observed sample, because it can vary considerably on

the basis of a single observed phenomenon. Once again, we find the famous Six Sigma events which do not exist for normal distribution, and which occur in markets from time to time.

Why do we find it so hard to accept that markets are unpredictable, and that anything can happen?

Simply because of the way our minds work, it is difficult to think outside of the box. Most of our thinking is inductive and based on the past to predict the future. As the length of the historical series increases and the facts analysed become more numerous, so our level of confidence increases.

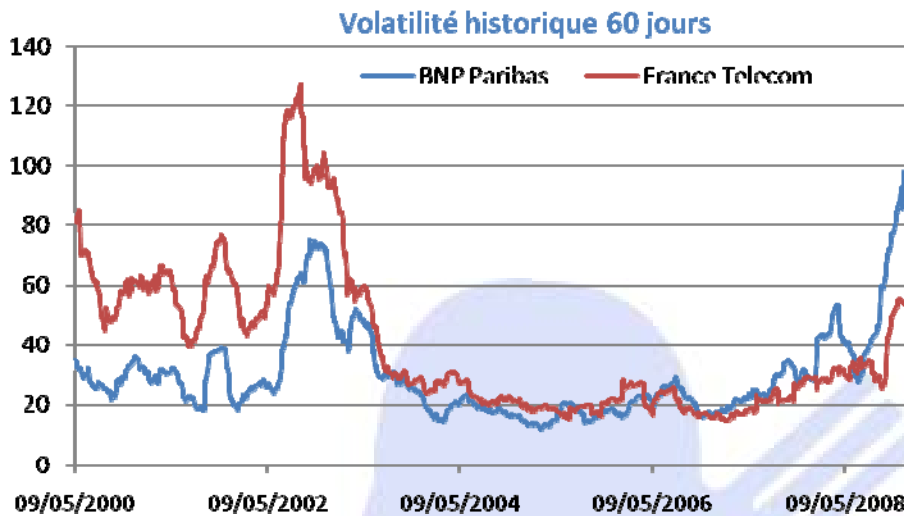
This is the famous Christmas turkey paradox. Imagine a turkey that is fed every day by a pleasant farmer. Each day that passes is an opportunity to fatten and verify the fact that the intuition of the day before is confirmed. Then comes the day before Christmas, and an unexpected event leads it to revise what it thought was logical reasoning, and was merely a belief: the nice farmer wrings its neck to prepare a good Christmas dinner.

Each of us must resign ourselves to being this turkey; it's hard for the ego but it is possibly a condition of survival for the investor. It is impossible to predict market movements, just as it is not possible to write history before it happens.

Why does the mathematical definition of risk, taught in our schools and universities, and used by investors each day not work?

The simple fact is that there is no correlation between past volatility and present or future volatility. Accordingly, trying to control one's risk by moving into assets with historically low volatility is absolutely no guarantee of protection. Consider one simple example: in 2002, a conservative manager keen on theory built his efficient portfolio giving priority to the least risky sectors, banks and insurance companies, and carefully avoiding the most volatile sectors, telecom operators and technology.

In 2007 his efficient portfolio should have, at all costs; avoided the most volatile sectors, banks and insurance companies, to focus on the least volatile ones, technology and telecom operators; thus basing his investment decisions on contradictory factors. The graph below gives a simplified illustration of this situation. It shows the historic volatility of two shares: BNP for the banking sector and France Télécom for technology. It confirms that danger can be lurking everywhere, move from one sector to another, and especially that the absolute level of volatility can double in a few weeks without any warning. Controlling risk seems a very ambitious goal!



**Comparative historic volatilities of France Télécom and BNP Paribas from 2000 to the present
(Source: Bloomberg)**

Another commonly used approach is to measure the relative volatility of a fund against an index rather than an absolute volatility, the famous tracking error. If your fund moves away from the index, it is risky, and if it sticks closely to the index you keep your job, and your boss does too! This approach conceals the fact that very often it is the index itself that is more volatile than your fund.

Why is volatility not a good indicator?

Since 2006 we have been interested in a Canadian oil exploration company, UTS. Its volatility low of around 35% corresponded to a valuation peak of around 6 euros. It was not very interesting to buy it at the time. We estimate its asset value at around 4 dollars. In January 2009 its volatility peak was around 176% when it traded at only 80 cents. No one wanted to buy oil at the time; it was the end of the world! We initiated our investment at 1.60 dollars, feeling well protected by an asset value of more than twice our buying price. Fortunately we did not rely on volatility to take our decision. Never was an investment in UTS as low-risk as when its volatility was highest!

Conversely, recent financial history provides us with examples of low-volatility assets that proved very risky: the real estate sector, historically the least volatile, was the starting point of the most recent stockmarket crash. Bernie Madoff's fund, mentioned above, sold well because it had extremely low volatility. The famous dynamic money-market funds, with very low volatility and high-performing for a long period of time, finally disappeared in a few days. They held portfolios of unsellable securitized bonds¹. These examples introduce us to another dimension of risk, the principal risk in our opinion, consists in being invested in an asset which you don't understand!

For your Sextant funds, based on the methodology of fund pickers, it is fairly hard to get an idea of the quality of the management, but fairly easy to get an idea of the robustness of the method. One illustration with your Sextant PEA fund:

- in 2008 Sextant PEA, with a 28% volatility, delivered a dreadful performance of -58%. Its Sharpe Ratio of -2.07 was very bad.

¹ Securitization is an operation by which assets (which should not be there) are placed on the market.

• in 2009 Sextant PEA, with a 24% volatility, delivered an exceptional performance of +64% at end October. Its Sharpe Ratio of +2.66 is excellent.

And yet it is the same fund, at one year's interval, and with roughly the same companies in the portfolio!

In conclusion, let's not spend too much time considering volatility, it is merely one market factor which can become an opportunity by enabling us to buy an equity inexpensively.

Pragmatic risk management entails scrupulously obeying two principles:

1. invest only in what you understand
2. do not pay more than fair value for a company.

We have repeated these two principles to ourselves over and over again since 2002.

As the year draws to an end, we take this opportunity to wish you pleasant sailing toward calm waters.

Your devoted crew

