

Ineichen Research and Management ("IR&M") is a research boutique focusing on investment themes related to absolute returns.

April 2010

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Absolute returns revisited

Absolute returns revisited

- The term "absolute returns" has been battered as well as misused by business and politics alike. We aim to clarify. The term stands for an investment philosophy that stands in stark contrast to financial orthodoxy. And that's a good thing.
- Market heterogeneity with moderately leveraged financial institutions reduces systemic risk. Market homogeneity with excessively leveraged institutions doesn't.
- After challenging some "axioms" of financial orthodoxy, we introduce PPMPT (Post-post-modern portfolio theory) as an alternative to mean-variance optimization.

In search of permanent capital

■ Most hedge fund managers gather assets the old fashioned way. They take out their knee pads and tin cups and go begging – one investor at a time. This is a tough road. It generally requires an appearance by the founder and/or portfolio manager and disrupts their ability to maximize returns. Premiums (for insurers and reinsurers) and deposits (for banks) are wonderful alternatives that do not take anywhere near the same effort to generate and do not tie up the founder or portfolio manager's time.

UCITS: Latest hype or investor panacea?

■ UCITS look very much like a new market reality. The migration from an exclusively offshore business model towards a model including a UCITS offering seems to be a logical evolution. However, hedge fund managers need to understand that UCITS is not an asset management tool but rather a distribution wrapper. The main challenge lies in the fact that UCITS asset gathering is a fundamentally different exercise than the way they have raised assets so far.

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I would like thank Henrik de Koning and Joe Taussig for allowing me to use their IP in this report, and Larry Chen for reviewing the document and helping me avoid some embarrassing mistakes. I benefited greatly from discussions with Wolfgang Stolz. Many thanks to all those—you know who you are—who lent me their time checking a fact or two. The views expressed in this document are the opinions of the author, and might or might not be in line with the names mentioned above. Factual errors, omissions and ambiguities are, of course, the author's responsibility.

Alexander Ineichen 21 April 2010

Executive summary

■ Risk management is a craft, neither a science nor an art. It works on the premise of *learning by doing*. Interestingly, financial regulation also seems to work on the premise of *learning by doing*. (Basel I, Basel II, Basel III, etc.)

- The financial crisis was not "caused" by a single event or a single group of investors. More likely, a series of conditions needed to be met for the dominos to fall one by one and the system to crack. The idea that hedge funds were the first stone to fall and thereby causing the chain reaction, seems infinitely improbable from what we know today. However, a disproportionate amount of regulatory zeal and political energy is spent on regulating "alternative" funds. This we find odd, especially given that the "too big to fail" issue is the single most important aspect related to systemic risk and is far from being resolved.
- Politicians blamed *speculators* for "causing" oil to go to \$147. However, politicians didn't thank *speculators* for "causing" oil going back to \$35. This seems odd. In the Greece situation, it's again the *speculators* who get blamed. Bismarck often remarked that if one likes laws and sausages it is best not to see them being made. This is probably also true for the price mechanism in a free market economy, as the impact of the market responding to bad news isn't always pretty.
- Reality is always easier to understand when modelled in one form or another. A model is a simplified map of reality's complexities. However, if we learn that the models do not work, then instead of increasing the complexity of the model, we could also try to simplify reality.
- Many investment choices do not fit into the current scientific framework. Correlations spike when diversification is most needed, and many of the first principles of finance are challenged. We introduce post-post-modern-portfolio-theory (PPMPT) that isn't built on the onerous assumption that investors are rational. PPMPT assumes investors are not rational but human and implicitly recommends questioning all science that assumes investors are rational and not human. (The funny thing is, of course, assuming investors are human and not rational is actually more rational.)
- In a financial crisis correlation moves towards unity. However, managed futures seem to defy the gravitational pull time and time again.
- The hedge fund industry has lost dearly because trust was lost. This trust is currently being re-gained. This takes time. Those market players who behaved prudently during the crises are having an advantage versus those who didn't. Forced to summarise the relationship between investor and manager going forward, we would opt for: "Trust, but verify."
- Hedge funds are very close to high water mark and assets under management have recovered and are just 2% below their all-time-high from October 2007, according to HFR.
- We argue that financial crises are (historical) accidents and discuss a financial equivalent to the Richter Scale. It's safe to say that there will be further accidents down the road. Active risk management and an "absolute returns" focus remain the most viable options when dealing with uncertainty.

Absolute returns revisited

By Alexander Ineichen

"Rest assured: We have instruments of torture in the cellar, and we're going to show them, if necessary."

—Jean-Claude Juncker, PM of Luxembourg, on "speculators" on Greece¹

Introduction

This is the inaugural research report of "IR&M". The aim of this report is to contrast some of the abuse that has been done to the term "hedge fund", expose some of the mischief that has been conducted with the "absolute returns" moniker, and discuss some aspects related to systemic risk and regulation. Given that the regulatory landscape is changing for nearly all financial agents (a "known") but the impact is still uncertain (an "unknown"), we were able to add two guest articles on the possible future structure of hedge funds from two authorities in their respective field. Furthermore, we reiterate our case for active risk management and, in passing, suggest investors revisit the usefulness modern portfolio theory (MPT) and mean-variance optimizations in modern times.

In February 2009 yours truly asked rhetorically "Will the hedge fund industry survive this?" with "this" referring to the financial crisis of 2008-2009.³ The answer then was "Yes, most likely it will." At the time of writing, the hedge fund industry was still standing and had nearly recovered its losses from the historic drawdown. Assets under management were 2% shy of their all-time-high.

Your author decided more than twenty years ago to become an analyst. Stand-up-comedy was never a reasonable career choice; personality being too high a barrier to entry (analysts and stand-up-comedians—we were once told—occupy the two opposite ends of the fun-to-go-out-with spectrum). However, we, at times, find it quite difficult to remain serious. Many of our beliefs have not been shattered but certainly "softened" during the financial crisis. (Some, fortunately, have stood the test of time well.) Overall it was an intellectually humiliating experience, ending certain strains of thought but, on the other hand, and there is always "another hand," it added new perspectives. We believe the financial crisis was a humiliating experience for many (but not all) investors and this is at least one positive. Investors who lived through this crisis and survived will arguably be better risk managers going forward. Risk management is a craft and crafts are learned on the job. The aphorism "learning by doing" should be declared a *first principle* of risk management.

"If I only had a little humility, I'd be perfect."

—Ted Turner

[&]quot;Survival in the end is where the winners are by definition, and survival begins with humility."

[—]Peter Bernstein²

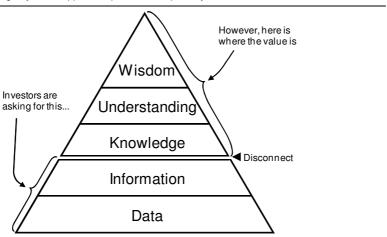
¹ Interview in Handelsblatt, 1st March 2010. Original in German: Q: "Und wie wollen Sie die [Spekulanten] daran hindern?" A: "Das möchte ich jetzt hier nicht näher bestimmen. Aber Sie können sicher sein: Wir haben die Folterwerkzeuge im Keller, und wir zeigen sie, wenn es nötig ist."

² CFA Magazine, Jan/Feb 2003, "Words from the Wise"

³ See Ineichen (2009a)

In this report we use humour not to overcompensate for personality shortcomings but for making sure that no one believes we are dogmatic about our beliefs. Post 2008 we think this to be as important as ever. There is always another side; and everything is in flux. We do appreciate that we are dealing with very serious issues, even if, at times, that doesn't seem obvious. We use Winston Churchill's remark in the side text as our first line of defence. We strive not for data and information, but for knowledge, understanding and, ideally, wisdom, as depicted in Chart 1. We recommend investors do the same. Understanding the joke helps. Some of our out-of-the box remarks we have put in a box (pun was intended of course), not to disturb too much the flow and line of argument. We also use quotes in the side text. A quote is often "bundled wisdom" from someone who acquired wisdom through experience (as in "learning by doing") that helps us *understand* what is going on. As mentioned before, it is applied wisdom that improves investment decisions, not data.

Chart 1: The Knowledge Pyramid¹ applied to quest for transparency



Source: Ineichen (2009a), concept adapted from Ackoff (1989)

Hedge funds (or "speculators") are often blamed for causing mischief in financial markets. In this report, we take the defence side and discuss the *hedge fund blame game* in relation to systemic risk and regulation. To some, hedge fund regulation in Europe for example resembles a circus, to others a play. It resembles a *circus* because as soon as the show for the general public is performed, it moves on. The draft legislation has been handed from one jurisdiction to the next as the EU presidency rotates. It resembles a *play* because the rhetorically loudest jurisdictional voices have no hedge fund industry to speak of and with their banking sectors in shambles and a continuous risk to the global financial system, spending large quantities of political energy and capital on hedge fund legal code and its 1,669 amendments (the largest in EU drafting history) can appear surreal.

The financial crisis has added more question marks about the role and practicability of financial economics (MPT, CAPM, alpha, correlation coefficients, etc.). (We have added a question of our own in Box 1 for the quick reader to skip.) Chart 2 is an attempt to visualize what we believe is becoming apparent to more and more market participants: There is a big difference between the model world and the real world. The model world was always the model world and everyone

-Winston Churchill

—Thomas Friedman

-Peter Bernstein

[&]quot;It is my belief, you cannot deal with the most serious things in the world unless you understand the most amusing."

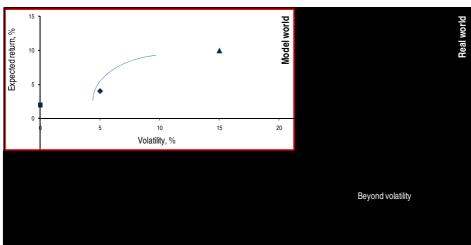
[&]quot;I don't want to kill the animal spirits that necessarily drive capitalism — but I don't want to be eaten by them either."

[&]quot;Remember always: Risk is not about uncertainty but about the unknown, the inescapable darkness of the future."

¹ The Knowledge Pyramid is most often credited to Ackoff (1989). Some versions exclude "understanding". The idea also known as the "Data Information Knowledge and Wisdom Hierarchy" (DIKW) or the "Knowledge Hierarchy".

knew it. However, the difference between the model and real world is so large that one is probably better off ignoring the former (in its current form) in its entirety. US economist J.K. Galbraith's brought it to the point: "There can be few fields of human endeavour in which history counts for so little as in the world of finance." For believing that an equity long-only strategy is *investment panacea* one has to ignore nearly all economic systems that have failed. Truncating time series or deleting outliers from a time series for it to fit more neatly into the optimizer, i.e. the scientific framework, is not unheard of. Chart 2 shows conceptually that real risk is "beyond volatility" and that asset classes can indeed compound negatively for a very long period of time. Correlations are too unstable to be of practical use, an issue we will address later. And the real world is obviously even more multi-faceted than shown here.

Chart 2: Model world versus real world



"It is far better to gasp the universe as it really is than to persist in delusion, however satisfying and reassuring."

-Carl Sagan

Source: IR&M

Nassim Taleb on what went wrong with economics as a science:

"There was a bunch of intelligent people who felt compelled to use mathematics just to tell themselves that they were rigorous in their thinking, that theirs was a science. Someone in a great rush decided to introduce mathematical modelling techniques (culprits: Leon Walras, Gerard Debreu, Paul Samuelson) without considering the fact that either the class of mathematics they were using was too restrictive for the class of problems they were dealing with, or that perhaps they should be aware that the precision of the language of mathematics could lead people to believe that they had solutions when in fact they had none (recall Popper and the costs of taking science too seriously). Indeed the mathematics they dealt with did not work in the real world, possibly because we needed richer classes of processes – and they refused to accept the fact that no mathematics at all was probably better." 1

Regulatory and accounting frameworks such as for example Basel II need to build on the scientific consensus. What else? If the "scientific consensus" turns out to be wrong then the framework still needs to be on a scientific footing. Again, what else? In business, those with the responsibility have a strong incentive to be managerial correct which means handing down responsibility to those who have

"If a million people say a foolish thing, it is still a foolish thing." —Anatole France (1844-1924), French writer

¹ From Taleb (2001), p. 146

Box 1: Extraterrestrials to run pension money

Imagine extraterrestrials have been observing us throughout the past 6,000 years of civilisations and decided to come down and run our pension funds. Would they come down, put MPT (modern portfolio theory) to work and run mean-variance optimizations with data that have no gaps to assist them in their investment decisions? We think not. After a short examination of the first principles of financial economics (efficient markets, rational man and rational expectations, frictionless markets, etc.) they probably would dispatch MPT in its entirety. What would they do instead?

The most logical thing to do is to study the first principles of human behaviour and the place where humans commercially interact, i.e. the markets. Markets are the aggregate of all investment decisions. Every investor makes investment decisions as well as he can. Those decisions are essentially based on the investor's beliefs, which might or might not be true or rational. Speaking of *rational beliefs*: Which of the two statements makes more sense: (1) "I believe dinosaurs walked with man around 6,000 years ago." (2) "I believe creatures from Alpha Centauri are beaming us messages of world peace through our hair dryers."

From all we know both statements are infinitely improbable that for all practical purposes we can safely say that they're untrue. However, someone believing in (1) will not be perceived as insane whereas someone believing in (2) will most likely be kindly advised so seek professional help. Why? The reason is that (1) is a different form of ignorance than (2). In some parts of the world it might even be politically insensitive to suggest (1) is nonsense. There are people who actually believe (1) to be true. And because it's a somewhat *common false belief* (as far as we can tell), it's not perceived as insane. This means some false beliefs have an influence on markets and decision making and some don't, depending on how many decision makers hold the false belief.

An example of a common false belief held by many not so long ago was the idea one can turn sub-prime junk into AAA, somewhat akin to the idea of turning lead into gold. This common false belief was held until it wasn't. The pattern is that the common false belief builds over a long time as contagion reinvigorates the trend. However, the "reality kick" typically sets in fast and the trend reverses quickly. It's like jumping from the 81st floor: The false belief held during the first 80 floors is that one is flying.

So how would extraterrestrials run pension money after dispatching MPT? We believe they would seek a balanced strategic asset allocation with regular rebalancing, generally trying to understand what they do, subscribe to continuous learning as all things keep changing, constantly seek potential new sources of returns, care about avoiding absolute losses and thereby aim to compound capital positively in the long-term, and, recognising that their somewhat inertial decision making process due to heavy governance structures is suboptimal in fast moving markets, seek for business partners who are closer to the market, whose interests are more or less aligned with theirs, and, perhaps most importantly, who they trust. But then, who knows? They might just continue to beaming us massages of world peace through our hair dryers.

scientific credibility (even if the gut suggests otherwise). In politics, *political correctness* dictates going with the (scientific) consensus too. As Margaret Thatcher put it:

"To me consensus seems to be the process of abandoning all beliefs, principles, values and policies in search of something in which no one believes, but to which no one objects—the process of avoiding the very issues that have to be solved, merely because you cannot get agreement on the way ahead. What great cause would have been fought and won under the banner 'I stand for consensus'?"

Our main point here is that regulation too works on the premise of "learning by doing." This is the reason why Basel II was the sequel to Basel I and now Basel III is in the making.

¹ From a 1981 speech, Wall Street Journal, 6 October 2009

Systemic risk and regulation

The blame game

We believe to have found a circular pattern whenever there is a financial crisis. It goes like this.

- 1. Some "speculators" position themselves for a potential crisis in an asymmetric fashion, e.g. buying insurance either as medium or long-term hedge or as outright short or medium-term trade.
- 2. The negative event occurs and becomes front page news.
- 3. Regulators and/or politicians blame hedge funds or "speculators," do some name-calling for their constituencies, thus amassing political capital, and thereby actively divert the public's attention—in the name of rebuilding trust—from the cause of the crisis.
- 4. During market mayhem volumes rise. The "speculators" who have positioned themselves for the potential negative event use the liquidity to take profits and, sometimes, take the opportunity of an over-reacting market under duress to go the other way.
- 1. Some "speculators" position themselves ...

One or two years after the negative event there is an academic paper or a book examining the negative event in question. The conclusion is often that hedge funds were well positioned going into the unfolding of the crisis and used the panic of the investing herd and high volumes to take risk off the table. Thus they behave anti-cyclically and become liquidity providers when the market most needs/wants it. Hedge funds do not become providers of liquidity out of the goodness of their hearts. Nevertheless, their economic utility is positive and systemic risk is often reduced. Philip L. Carret, author of *The Art of Speculation* put it in the late 1920s as follows:

"Those who decry stock market speculation usually have stock market gambling in mind. The speculators are those who use brains as well as ink in writing the order slips for their brokers. They perform a service of substantial value to society.

Just as water always seeks its level, answering the pull of gravity, so in the securities markets prices are always seeking a level of values. Speculation is the agency by which the adjustment is made. Has a new industry arisen, filling a new demand, adding new wealth to society, requiring new capital in generous volume? The alert speculator discovers it, buys its securities, advertises its prosperity to the investing public, provides it with a new credit base. Is a once prosperous company falling upon evil days, its profits dwindling, its management declining in competence? The speculator is looking for such hidden weak spots in the market. He pounces upon it, advertises the difficulty on the stock ticker, gives timely warning to the investor. In this fashion the speculator is the advance agent of the investor, seeking always to bring market prices into line with investment values, opening new reservoirs of

"It's easy being a humorist when you've got the whole government working for you."

— Will Rogers (1879-1935), American humorist

Providing liquidity to the market place is not an altruistic endeavour; but economically desirable nevertheless

¹ This is a generalisation. The hedge fund industry is heterogeneous and therefore doesn't lend itself very well for generalisations. There is obviously pro-cyclical market behaviour in hedge fund space too.

capital to the growing enterprise, shutting off the supply from enterprises which have not profitably used that which they already possessed."

We hope we did not appear insincere when we said "we believe to have found a circular pattern whenever there is a financial crisis." The pattern is of course a very old one, as Carret's remarks demonstrate. We believe the bottom line to be that it is market *heterogeneity* and anti-cyclical behaviour that lowers systemic risk whereas it is market *homogeneity* (brought upon us, among other things, through regulation and accounting rules) and pro-cyclical behaviour that increases systemic risk. As Richard Bookstaber put it more than ten years ago:

"Some people think of speculative traders as gamblers; they earn too much money and provide no economic value. But to avoid crises, markets must have liquidity suppliers who react quickly, who take contrarian positions when doing so seems imprudent, who search out unoccupied habitats and populate those habitats to provide the diversity that is necessary, and who focus on risk taking and risk management."

Sometimes we feel like Bill Murray in *Groundhog Day* where the main character, TV meteorologist Phil Connors, wakes up every morning to live through the same day over and over again and being the only one aware of the repetition. It's the same in finance during a crisis while many stakeholders behave as if the same repetitions hadn't already happen before. The verbal attacks on "speculators" in connection with Greece's downfall are a case in point. Greek authorities, as it seems, have misrepresented its finances, have never come close in meeting the Maastricht criteria, and the nation has arguably an issue with corruption.² The Wall Street Journal reported that a forthcoming Brookings Institution study, which examines the correlation between corruption indicators and fiscal deficits across 40 developed or nearly developed economies, highlights how corruption has hurt public finances in parts of Europe, especially in Greece and Italy, and to a lesser extent in Spain and Portugal.³ And "speculators" behaved dishonourably?

For all we can tell (again, the hedge fund industry doesn't lend itself very well for generalisations) hedge funds bought sovereign insurance *prior* the crisis becoming page one news, thereby being able to sell the insurance back to the market when the news did indeed hit page one and many market participants—in a very procyclical and synchronised fashion—panicked and hedged their sovereign risk exposure by buying the insurance off the "speculators" at higher prices. At one stage, hedge funds bought the bonds in distress (in some cases too early) as the market was under duress and spreads had risen dramatically. The take-away here is that the anti-cyclical behaviour of hedge funds reduces systemic risk while the

—Johann Wolfgang von Goethe

-Bill Murray (actor)

—Mr. Sarkozy telling French farmers that Greece was the number one importer of French beef

[&]quot;When ideas fail, words come in very handy."

[&]quot;The government can destroy wealth but it cannot create wealth, which is the product of labour and management working with creation."

[&]quot;The euro has no sense if there is no solidarity between ourselves."

¹ Risk Management Principles and Practices, AIMR, 1999, p. 17

² Greece, together with Bulgaria, Macedonia and Romania, ranks 71st on the Corruption Perceptions Index (CPI: 1st is least corrupt, 180th is most corrupt). Italy ranks 63rd, Portugal 35th, and Spain 32nd. As a comparison: New Zealand 1st, Denmark 2nd, Singapore and Sweden 3rd, Switzerland 5th, Germany, 14th, Japan and UK 17th, United States 19th, Cuba and Turkey 61st, Ghana 69th, Somalia 180th. From www.transparency.org.

³ Tragic Flaw: Graft Feeds Greek Crisis, The Wall Street Journal, 15 April 2010.

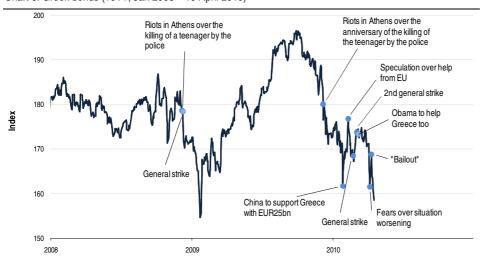
⁴ Some hedge fund managers have stated that bond and CDS trades for the peripheral Eurozone economies were crowded, volatile and therefore risky trades with the potential for regulatory squeezing. Thus many Global Macro, Managed Futures and Fixed Income Arbitrage managers chose to avoid trading directly in Greek bonds and CDS, and focused instead in instruments and asset classes that were indirectly affected such as currencies (some shorted Sterling and the Euro which hit a 9-month low in February against the US Dollar) and less volatile fixed income products.

pro-cyclical behaviour of larger and more tightly regulated entities increases systemic risk. Given the above, blaming "speculators" seems ill-advised. A market doesn't work if there are—at any point in time—only buyers or only sellers. There needs to be both, buyers and sellers for a market to be a market.

Sometimes hedge funds get blamed for *buying* too. Remember oil going to \$147? "Speculators" were to blame of course. We remember well a research piece by *Michael Lewis* from *Deutsche Bank* comparing commodities that have futures contracts and therefore can be bought by "speculators" with a group of commodities (Cadmium, Molybdenum, Ferrochrome, Tungsten, etc) that do not have a derivatives market and therefore cannot be bought or sold by speculators.² The latter group also increased, in some cases even more strongly than the first group. The true (main) cause of all commodities going up was economic growth in BRICs, especially China that was (is) buying up everything under the sun. Speculators (momentum strategies) might have participated in this trend but their market impact is open to debate to say the least, given that prices of the second group went up even more strongly. It was the *market place* that was bidding heavily for commodities, including institutional investors and retail investors through ETFs. Also: if politicians blamed hedge funds for "causing" oil to go to \$147, why didn't they thank them for "causing" the prices to fall back to \$35?

Hedge funds are sometimes blamed for selling, sometimes for buying

Chart 3: Greek bonds (10Y+; Jan 2008 - 19 April 2010)



Source: IR&M, Bloomberg

One of the important functions of free markets is price discovery; Chart 3 showing the price discovery/formation of Greek long-term sovereign bonds. Capitalism works essentially, among other things, because of trial and error. Capital allocation mistakes and failures are corrected much faster than in alternative systems. This isn't always pretty and pleasing to all market participants and socio-economic agents. The quote in the side text could easily read "capitalism" rather than "democracy." Both, the makings of democracy and capitalism aren't always pretty. (Bismarck remarked that if one likes laws and sausages it is best not to see them being made.) When something goes wrong, free markets are essentially a

-Winston Churchill

[&]quot;It has been said that democracy is the worst form of government except all the others that have been tried."

¹ Note that as of 8 March 2010, the German regulator (BaFin) announced that it did not find any evidence of a speculative attack on Greek bonds through Credit Default Swaps in response to German politicians suggesting otherwise. Let the cooler heads prevail.

² Lewis, Michael (2008) "Commodities & The Role of Speculators," Commodities Research, Deutsche Bank, 9 May.

mechanism that favours an end with a fright over a fright with no end. It makes the failure or mistake or common false belief transparent and apparent for everyone to see; or, in Warren Buffett's parlance: "It's only when the tide goes out that you see who has been swimming with their trunks off." Once the mistake is visible, or the nudists exposed, the market repositions itself accordingly. Blaming economic agents for their repositioning is about as wise as killing the messenger of bad news in medieval times.

Our main point is that regulation of the system is always well intended but what sometimes gets lost during the regulatory production process is that failure and destruction are part of the system.

Another case in point is Ireland. Although the US credit crisis precipitated it, the Irish credit crisis is an identifiably separate one, which might have occurred in the absence of the US crash. The distinctive differences between them are notable. Almost all the apparent causal factors of the US crisis are missing in the Irish case. Ireland had no Community Reinvestment Act, no president "talking up" property, no Ayn Rand glorification, no Fannie Mae or Freddie Mac. More surprising, as Paul Krugman pointed out, was the unimportance of exotic finance: Ireland's bust wasn't a tale of collateralized debt obligations and credit default swaps; it was an old-fashioned, plain-vanilla case of excess, in which banks made big loans to questionable borrowers, and taxpayers ended up holding the bag.¹

The reason for pointing this out here is that the *real* cause of a financial crisis is something really old fashioned: human failure. Most things fail eventually; including, or perhaps especially, complex man-made systems.² A financial market is a complex man-made system and financial crisis is best viewed as an accident of that system. For an accident/failure of a complex system to occur, a series of events need to occur in linear progression (domino effect) or in a chaotic fashion (butterfly effect).³ In a financial crisis it is multiple human failure of some sort. This is true for the US crisis, Irish crisis, and for the Greek crisis. The *blame game* of politically motivated agents might or might not be perceived as ill-advised. However, it often misses the *cause* of the crisis in its entirety. Connor et al (2010), the paper which is the basis of Mr Krugman's op-ed remarks, identify four common features of the two credit crises: capital bonanzas⁴, irrational exuberance, regulatory imprudence, and moral hazard. How many times did these gentlemen mention "hedge fund" or "speculator" in their paper? Not once.⁵

lan Morley on moral hazard and the blame game addressed above:

"If you give someone great reward for taking risks with someone else's money, while at the same time they are not obligated or even not allowed to risk their own money, you create an asymmetry between their personal reward (large or enormous) and their personal risk (small). This is moral hazard, and reflects the way many of our large investment banks were run and the

"The Iron Law of Failure appears to extend from the world of biology into human activities, into social and economic organizations. The precise mathematical relationship which describes the link between the frequency and size of the extinction of companies, for example, is virtually identical to that which describes the extinction of biological species in the fossil record. Only the timescales differ."

—Paul Ormerod (2006)

[&]quot;Everyone has a theory about the financial crisis."

[—]Paul Krugman

¹ From "An Irish Mirror," Paul Krugman, New York Times, 7 March 2010.

² See Ormerod (2006) for information on *The Iron Law of Failure*, or, for a summary, Ineichen (2007) or the Appendix section of Ineichen (2008).

³ See Ineichen (2009b) for more "colour."

⁴ According to Reinhart and Rogoff (2009), a common feature in banking crises is a sustained surge in capital inflows in the run-up period before the crisis. Reinhart and Reinhart (2008) call this a *capital flow bonanza*.

⁵ Note that the term "bank" appears 109 times and the term "regulator" appears 48 times.

egregious rewards for those running the in-house proprietary desks...
We may hate the banks, but we think we need them. We do hate the hedge funds but think we can live without them. Yet the hedge funds' role is to make money for their investors by judging the levels of temperance and excess in markets. They are often the first to expose the moral hazard of others and bring the whole party to a grounding halt. For that reason alone, they are a force for good economics against the prejudice of ill-informed attack."¹

What if the first principles of finance are wrong?

Another aspect related to systemic risk and the hedge funds blame game is the role of academia. Some common false beliefs from financial economics were arguably part of the problem. In at least one of his writings, Nassim Taleb (arguably a heretic of financial convention) argued that whenever a normal distribution was part of the analysis or risk assessment, the model output was useless. This idea is sometimes referred to as "garbage in, garbage out", for short: GIGO. If the input is wrong, how can one have faith in the quality of the output?

Herein we argue—for the sake of an argument—that not only is the assumption of returns being normally distributed wrong, but everything else in financial economics is wrong too. Finance textbooks want to make us believe that there are axioms, that is, first principles, on which our knowledge is supposed to be based. But what if the axioms are false? Surely GIGO must apply.

Economics promises objective science but actually delivers hidden metaphysics. Economists tend to think of theologians as naive in their lack of economic knowledge, but most economists are themselves also naive about the character for their most basic presuppositions, the first principles. Economists are often embedded in an economic culture where the validity of the first principles is hardly ever questioned and the economic way of thinking is simply taken for granted as the correct way of thinking, i.e. the best means of access to genuine knowledge about the world.²

As Nassim Taleb put it in 2004:

"Finance academia, unlike the physics establishment, seems to work like a religion rather than an empirical science with beliefs that have resisted any amount of empirical evidence. Financial theory being a fad, not a science, it may take a fad, and not necessarily a science, to unseat its current set of beliefs."³

"The EMH has proven to be the most wildly mis-specified theory in the history of finance, and the most expensive."

—Jeremy Grantham

"A nerd is simply someone who thinks exceedingly inside the box."

-Nassim Taleb

"In the face of uncertainty, both scientists and theologians fall back on belief."

—John Adams, author of "Risk"

¹ "Hedge funds don't cultivate moral hazard – they expose it," lan Morley, www.absolutereturn-alpha.com, 24 March 2010

² The parallels between religion and economics are striking and are written up in Nelson (2001). (The differences are striking too, obviously.) Nelson's main thesis is that the economics profession constitutes the new priestly class of the modern, materialistic, scientific world. He hit a nerve with us in saying that these debates would be far more constructive if we would engage the moral and philosophical issues rather than blanketing them with technical jargon. Nelson closes his book by remarking that the cutting edge of social thought can be found in the libertarian and environmental movements.
Both have the advantage that they define themselves in significant part by a rejection of mainstream economics. They thus have greater freedom to abandon current (potentially false) social and economic orthodoxies.

³ Nassim Taleb's book review of "The (Mis)Behavior of Markets: A Fractal View of Risk, Ruin, and Reward," by Benoit Mandelbrot and Richard Hudson, Basic Books, 2004, www.fooledbyrandomness.com.

In essence, economic theory remains rooted in a vision of the world which was derived from the physical sciences of the 19th century. At first sight, this seems like a good idea. The analytical techniques and mathematical tools used by 19th century scientists enable us to understand a great deal of the world. However, these tools and techniques have been much less successful when applied to socioeconomic systems. The fundamental reason for this is that this approach regards equilibrium—a static, changeless state of the world—as the natural order of things. This so called general equilibrium theory describes a competitive economy in which a set of prices exits at which supply and demand balance out in every single market. It is a Platonic idea of a market in which unemployment is zero and all is well with the world. Most of conventional economics is built on equilibrium theory and is focused on finding equilibrium solutions, solutions in which the system is at rest, static, in which continuity and lack of change are its hallmarks.¹ However, Peso crisis, Asian crisis, Russian debt crisis, Enron, 9/11, sub-prime crisis, etc. doesn't indicate that the financial system is ever thinking of taking a rest. Quite the opposite, it seems. As Schumpeter emphasised, the key features of economies were change and discontinuity, not equilibrium; and as Minsky pointed out, stability leads to instability, not rest.

"Science gives us knowledge, but only philosophy can give us wisdom."

-Will Durant

First principles of finance are sitting ducks

Some of the first principles in mainstream economics and/or financial economics are:

- Humans are rational marginal utility maximisers, hold homogeneous expectations and beliefs, and all investors are rational mean-variance optimizers.
- Markets are efficient and complete.
- Markets are frictionless, i.e. all trading costs and restraints are non-existent.
- Markets are continuous, i.e. we can execute our orders at the market price.
- Returns are independent and follow a random walk.

At the back end of the recent financial crisis, these "axioms" seem like sitting ducks:

- Humans are not rational in a Mr Spock kind of way, not all humans believe man landed on the moon, and investors were not mean-variance optimizing during 2008, they were selling.
- Markets are not efficient; mispricings, imbalances and bubble and bursts do indeed exist. Markets are not complete and do not seek equilibrium; they're in constant flux, and constantly seek to punish the foolish and irresponsible.
- Markets are not frictionless; some investors do actually still pay commissions and taxes.

"Believe nothing, no matter where you read it, or who has said it, not even if I have said it, unless it agrees with your own reason and your own common sense."

—Buddha

"In theory, theory and practice are much the same. In practice, they are not."

-Albert Einstein

¹ Dynamic stochastic general equilibrium (DSGE) is a response to these shortcomings. However, DSGE models too rely on an assumption of complete markets, and are also unable to describe the nonlinear dynamics of economic fluctuations.

Markets are not continuous, they jump and gap. You can only execute your orders at the market price in theory but if your "liquidity providing" market maker doesn't pick up the phone when you call to sell, you can't in practice.

Returns are not independent as investors have a memory (an argument some readers might find an object of debate). Today's return depends on yesterday's return and the random walk might apply to molecules but not security prices.¹

A large majority of market participants agrees that markets are not efficient. However, the financial science profession seems to add complexity to the existing theories rather than abandon what does not work in the real world and come up with new theories that feed off axioms that are actually true. Reality is always easier to understand when modelled in one form or another. A model is a simplified map of reality's complexities. However, if we learn that the models do not work (as in "learning by doing") then instead of increasing the *complexity of the model*, we could also try to *simplify reality*. We believe the latter to be more intelligent than the former. Albert Einstein brought it to the point:

"Any intelligent fool can make things bigger, more complex and more violent. It takes a touch of genius—and a lot of courage—to move in the opposite direction."

We quite often come across the notion that financial economics needs its Einstein. Einstein's insight caused—to use Thomas Kuhn's words—a paradigm shift resulting in many old beliefs turning out to be false and replaced with new-andimproved better ones. Einstein came out of nowhere, i.e. his early groundbreaking papers were published not when he was part of the academic establishment but when he was working at a patent office in Bern, which for at least some readers probably fits the description of "nowhere" pretty well. However, we find the comparison with Darwin more apt. Einstein's revolution came out of the blue while Darwin's paradigm shifting insight did not. There was great disbelief of the prevailing orthodox paradigm over many decades prior to the publication of *On* the Origin of Species in 1859. However, On the Origin of Species tied all the bits and pieces together in one theory. It wasn't the beginning of the Scientific Revolution that started with Copernicus, it—sort of—marked the end of it. In finance we are in the 1840s or early 1850s, i.e. there is enough evidence to claim the prevailing orthodoxy to be false but we do not have a new theory tying the "bits and pieces" together. The practical relevance of this is that regulation and accounting rules are still based on the assumption that there are indeed fairies, as Douglas Adams put it in the side text, at the bottom of the garden.

"Remember the two benefits of failure. First, if you do fail, you learn what doesn't work; and second, the failure gives you the opportunity to try a new approach."

—Roger von Oech, Author and founder of Creative Think

"Isn't it enough to see that a garden is beautiful without having to believe that there are fairies at the bottom of it too?"

—Douglas Adams

¹ We recently came across the notion that Professor Burton Malkiel (author of "Random Walk Down Wall Street", first published in 1973) started to acknowledge that markets were indeed not a random walk in the eight edition. Lo and MacKinlay rejected the idea in 1988.

If we were forced to put a date on when MPT died it would be Thursday 23 October 2008 when Alan Greenspan paid a visit to *Capital Hill*² to admit that he had misunderstood how the world works. After asking Greenspan a few questions, the chairman of the House Committee on Government Oversight and Reform, Henry Waxman, summed up. "In other words, you found that your view of the world, your ideology, was not right. It was not working."

Mr. Greenspan Precisely. That's precisely the reason I was shocked,

because I had been going for forty years or more with

very considerable evidence that it was working

exceptionally well.
But let me just, if I may ...

•

Mr. Waxman Well, the problem is that the time has expired.

Mr. Davis of Virginia He wishes to answer. Can you just let him answer.

Mr. Waxman We have many members.

Mr. Greenspan If I could have just a minute...

The hearing went on in that style.³ (Needless to say, Mr. Greenspan received many accolades for his candour and for what must have been a difficult and humiliating (but potentially liberating) experience.) It is fair to say that regulators will be taking freedom away from capital markets in the medium to long term. In the short term this results in great regulatory uncertainty. The regulatory changes to come are the "knowns" while the new structure and impact thereof are the "unknowns". As Adair Turner, chairman of the Financial services Authority (FSA) in the UK put it:

"We have had a very fundamental shock to the "efficient market hypothesis" which has been in the DNA of the FSA and securities and banking regulators throughout the world. The idea that more complete markets and more liquid markets are definitionally good and the more of them we have the more stable the system will be, that was asserted with great confidence up to three years ago. But what precisely we do as a result of the collapse of that approach is unclear."⁴

Bottom line

The financial crisis was not "caused" by a single event or a single group of investors. More likely, a series of conditions needed to be met for the dominos to fall one by one and the system to crack. The idea, that hedge funds were the first stone to fall and thereby causing the chain reaction, seems infinitely improbable from what we know today. However, a disproportionate amount of regulatory zeal and political energy is spent on regulating "alternative" funds. This we find odd, especially given that the "too big to fail" and moral hazard issues are the single most important aspects related to systemic risk and are far from being resolved.

—Alan Greenspan¹

Regulatory uncertainty is high and not easing

[&]quot;A Nobel Prize was awarded for discovery of the pricing model that underpins much of the advance in derivatives markets. This modern risk management paradigm held sway for decades. The whole intellectual edifice, however, collapsed in the summer of last year, because the data inputted into the risk management models generally covered only the past two decades, a period of euphoria."

¹ Testimony to the House Committee on Government Oversight and Reform on 23 October 2008.

² The misspelling wasn't intended but we left it as a pun.

³ From original transcript 23 October 2008: http://oversight.house.gov/images/stories/documents/20081024163819.pdf.

⁴ "How to tame global finance," Prospect, Interview with Adair Turner, 27 August 2009.

Banks are in fact still highly regulated entities; despite all the deregulation.¹ There is no other industry where the number of internal and obligatory lawyers, auditors and compliance officers—whose job it is to ensure its commercial activities are compliant with all relevant laws and regulations—per capita is as high as in a large bank. Did it help?

The trust-me factor

Questioning the nonsensical axioms of finance is one thing. However, now what?

The foundation of business is built on trust. *Trust* is not a financial term of course. It is a "fuzzy" term and therefore lends itself well to ridicule. After all, Bernie Madoff was a man of trust; many reasonable and honest people trusted him. Leaving ridicule aside for the moment, needless to say that trust is important; perhaps even an "axiom" (truth taken for granted and starting point for further truths) or the *sine qua non* ("a condition without which it could not be") of business. Business is nothing else than *human* action of a commercial sort. This is relevant for investment management because the industry is about financial people professionally managing assets (or *risk*, as we prefer to say) for other people. When a management agreement is signed it is a business contract, i.e. a business decision whereby there is trust between principal and agent. If the trust is not there, the agreement won't take place. It goes without saying that trust can be both won and lost. A *bank run* or a *flight-to-cash* scenario is essentially a scenario in which trust is lost in an instant.

During our 20+ year career we came across many very successful sales people who knew very little about finance or the product they were selling. It took us a while to understand how that works. We believe there are two conditions that need to be met: First, the sales person needs an edge in a sense that he can understand the product better than the client and is able and willing to close that knowledge gap over time. We therefore believe the quote in the side text is applicable to many areas in business and investment management. Second, successful sales people gain the *trust* of their clients. (*Gaining trust*—we always thought—is not synonymous with *being trustworthy*.) Note that trust can be gained through integrity and honesty as well as trickery.²

We believe that prior to the institutionalisation of the hedge fund industry in the 2000s, the industry functioned on a "trust-me" basis. The manager was typically in New York while the private investor channelled the funds through Geneva. There was no such thing as *operational due diligence* by today's standards. The early private wealthy investor viewed a small allocation to a hedge fund somewhat akin to an investment professional today regards the purchase of an out-of-the-

—Oliver Wendell Holmes (1809-1894), American writer

"If you don't know whose side someone is on, he's probably not on yours."

-Warren Buffett

-George Soros

[&]quot;Put not your trust in money, but put your money in trust."

[&]quot;As an investor, as long as you understand something better than others, you have an edge."

¹ Note that the "Financial Deregulation Index" by Philippon and Reshef (2008) is at an all-time-high. Figure 6 on page 54 of the paper is not reproduced here but is worth googling. It shows the tight relationship between deregulation and relative pay in banking. The highs and lows are pretty much synchronous.

² Hubbard (2009) mentions some tricks. Here are some we picked out: (1) Sell FUD (Fear, uncertainty, and doubt). (2) Convert everything to a number, no matter how arbitrary. Numbers sound better to management. If you call it a *score*, it will sound more like golf, and it will be more fun for them. (3) As long as you have at least one testimonial from one person, you are free to use the word *proven* as much as you like. (4) Build a giant matrix to "map" your procedure to other processes and standards. It doesn't really matter what the map is for. The effort will be noticed. (5) Develop a software application for it. If you can carry on some calculation behind the scenes that they don't quite understand, it will seem much more like magic and, therefore, more legitimate. (6) If you go the software route, generate a "spider diagram" or "bubble chart." It will seem more like serious analysis.

money option, i.e. unlimited upside with limited downside. A hedge fund investment in the early days came with the added benefit of having some taking material for social get-togethers.

The advent of the institutionalisation changed that. The "trust-me" factor died out. The institutional investor could not allocate funds based on some fluffy *I-like-the-guy* argument. This is where "science" came in. The financial "scientific" language that the institutional investor spoke from around the late 1960s or early 1970s onwards was that of MPT, EMH¹, APT, CAPM, etc. (The concept of alpha and beta is derived from the CAPM.) We believe prior to the institutionalisation of the hedge fund industry, the long-only community spoke about "adding alpha" with their investors whereas hedge fund parlance and the language spoken on a trading floor were "about making money." What we found fascinating at the time was that the hedge fund themselves didn't really use the term *alpha* when talking among themselves. The vocabulary of most hedge funds does not include the term *alpha* to this day other than when talking to clients. It seems, using the term *alpha* is like being able to say "hello" in Mandarin when travelling in China; it's an ice breaker.

"Investment is by nature not an exact science."

-Benjamin Graham

Most business people will agree that speaking the same language as the prospect about to be pitched is an advantage. It ought to be. It allows for easier and smoother communication. It's one barrier less to be torn down before trust is built and cooperation and business can commence. Some people learn basic language skill of those countries they travel to for the simple reason that it helps with communication.

Speaking the same language is an ice breaker

In the 1990s fund of hedge funds ("FoHFs") were pitching energetically with the institutional investor but with limited success. It was arguably an uphill battle. There were many reasons for most institutional investors not being interested in hedge funds, the main one probably being soaring stock markets. However, we believe that from a business perspective, the hedge fund sharks simply did not gain the *trust* of the investing fish. Hence, business was slow. Then came LTCM which wasn't exactly a confidence boost for what hedge funds had on offer.

"Of course the markets are efficient. I make them efficient."

—John Meriwether

At one level the "alpha talk" became a language that especially FoHFs could speak and institutional investors understood. At the beginning of the institutionalisation the mindset as well as the industry-specific language was materially different between the traditional industry and the hedge funds industry. This gap started to close rapidly when institutional investors started to look into hedge funds more seriously. It wasn't lost on the hedge fund industry that the term "alpha" also works in marketing; with some market participants continuously pointing out, that it is *marketing* where hedge funds really excel. (Neither was it lost on the traditional fund industry that the term "absolute returns" has some marketing magic associated to it.) Some argue that yours truly played a part in this "gap-bridging" with a research publication called "In Search of Alpha" in October

"Some drink deeply from the river of knowledge. Others only gargle."

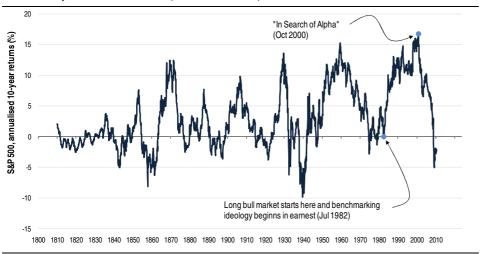
—Woody Allen

¹ Warren Buffett once jested that he would like to fund university chairs in the EMH, so that the professors would train even more misguided financiers whose money he could win. He called the orthodox theory "foolish" and plain wrong. Yet none of its proponents "has ever said he was wrong, no matter how many thousands of students he sent forth misinstructed. Apparently, a reluctance to recant, and thereby to demystify the priesthood, is not limited to theologians." Found in Mandelbrot and Hudson (2004), p. 14.

² We remember a head trader in the late 1980s referring to fund management as "fun" management because managers were not held accountable for losing money, which is from the perspective of a trader rather odd.

2000.1 (This is complete nonsense of course, but we thought we mention it anyway.) In any case, the year 2000 was a good time to look for "alternatives," as Chart 4 shows.

Chart 4: Ten-year returns of S&P 500 (1800 – March 2010)



Source: IR&M, Global Financial Data, Bloomberg

Chart shows annualised and nominal ten-year returns of the S&P 500 (price) Index.

What do we get if we combine the "trust-me" factor from the early days of the hedge fund industry with the request for transparency and due diligence of today's institutionalised industry? We believe we get something along the lines of "doveryay, no proveryay" which is a Russian proverb that translates into "trust, but verify." It means that trust without accountability is blind faith, and accountability without trust defeats the purpose of a true partnership. Lenin, apparently, used the term, as did Reagan.² Trust is difficult to gain and easy to lose. However, trust cannot be commoditised.

—Leo Tolstoy

Bottom line

We believe trust is an axiom or the sine qua non of business, a condition without which business doesn't work. The hedge fund industry has lost dearly because trust was lost. (Well, the whole financial services sector has "lost dearly because trust was lost.") This trust is currently being re-gained. Those market players who behaved prudently during the crises have an advantage versus those who didn't. Trust alone is not enough. When investing in hedge funds some additional effort is required, i.e. the verifying. This verifying comes at a cost. The investor requires a return that is higher than this "cost", or, put differently, the selection risks needs to be compensated through higher returns. There is arguably a certain irony that "relative returns" matter in "absolute returns" space too.

The issue of trust also applies to the integrity of the overall financial system in which all financial agents operate. The financial system, one could argue, had its "trust" tested during the financial crisis. In the following section we look at hedge fund regulation with a particular focus on Europe.

"There is no greatness where there is not simplicity, goodness, and truth."

¹ Sign of the times: In Search of Alpha from 2000 was translated into Japanese. The Ineichen Dialogues from 2009 has been translated into Chinese.

² From Wikipedia: At the signing of the Intermediate-Range Nuclear Forces Treaty in 1987 Reagan used it again and his counterpart Mikhail Gorbachev responded: "You repeat that at every meeting," to which Reagan answered "I like it."

Regulation

Eliot Spitzer gave an interview to the FT last October. Mr Spitzer was arguably regulator as well as politician. What piqued our interest was what a regulator and politician had to say on regulation once out of office:

"Regulators get to the point of their incompetence and create the crisis because they fail to regulate, and then use the crisis as the argument for more power, and so now you have the Council of Regulators made up by the very same people who created the crisis in the first place." 1

Regulators and politicians have a different axe to grind than the commercially active. At a very general level, and leaving competency aside for the moment, financial regulators have two main tasks:

- Guarantee and safeguard market integrity that includes protecting investors from fraudulent behaviour, and
- Calm the market during a period of market mayhem and rebuild trust in times of crises

Short selling rules, for example, were introduced not because many people believe it's a particularly good idea, but because something had to be done during market mayhem when many financial stocks were beaten, in some cases, as we now know, quite literally to death by the market place. Not only had something needed to be done, something needed to be done fast. If one's stock is being sold off vehemently by the market, even libertarian hard liners turn to the authorities for help. The important thing was that something was done to break the panic. It could have been anything really, just something. The short covering that followed the ban was a brief pause, for market participants to cool off a bit.

During market mayhem even banking CEOs doing God's work are in favour of short selling rules

Because the most recent financial crisis was too big for regulatory bodies to handle by themselves; central bankers, treasurers, and politicians became involved. Financial markets in the US and Europe were at the brink of collapse. We credit the coordination between regulators, treasurers, central bankers and politicians for having saved markets from falling over that proverbial cliff into the abyss. Even if the actions and on-the-record statements by politicians at times looked clumsy, to say the least, the system was saved. Time might heal all wounds, but if you die in the interim it's not much solace, is it? It could have been a lot worse and given the hand the authorities were dealt, they did well. This doesn't mean that all the problems are solved; they're not.

"Life is like a game of cards. The hand you are dealt is determinism; the way you play it is free will."

— Jawaharlal Nehru (1889-1964), 1st Prime Minister of India

Regulation in Europe

The intricacies of the draft Directive on Alternative Investment Fund Managers (AIFM), which aims to create a 'comprehensive and effective regulatory and supervisory framework for AIFM in the European Union,' is beyond the scope of this publication. At the time of writing there were 1,669 amendments on the table. To us, this seems a lot. (Well, it was reported that it was the largest number of amendments in EU drafting history.)

"The farther one goes; the less one knows."

—Tao Te Ching

¹ Lunch with the FT: Eliot Spitzer, 30 October 2009

Table 1 shows a list of some headlines related to hedge fund regulation in Europe. We find www.aima.org is a good source when trying to remain up to date. A quick reader can skip this table except for the entry from 22 June 2009.

Table 1: Recent chronology of European hedge fund regulation

Date	Headline and comment or quote
07.05.2009	A harmful hedge-fund fixation. Gillian Tett points out that some single banks are as large has the whole hedge fund industry. Last paragraph: "Of course, it is possible that European politicians have cannily spotted that logic and are simply focusing on hedge funds as a convenient, distracting scapegoat. It is also possible all the heat about hedge funds will disappear once the European parliamentary elections are over. That is what some senior UK government figures and bankers
17.05.2009	hope." Europe's classic exercise in closet protectionism. Paul Marshall writes in the FT. Last sentence: "All it [draft legislation] does is enhance the suspicions held by some in the UK that it is
03.06.2009	highly risky to engage with the continental Europeans on matters of crucial British interest." Hedge funds may quit UK over draft EU laws. Ian Wace told the Treasury it should modify tax rules to allow the thousands of Cayman based funds to move to be fully regulated in London, rather
07.06.2009	than have much of the industry abandon Europe. Pointless railing against regulators. Quote from IMA's CEO: "The political momentum behind them is too strong."
22.06.2009	Regulators call for greater hedge fund scrutiny. Quote: "Securities regulators recognize that the current crisis in financial markets is not a hedge fund driven event. Nevertheless the crisis has given regulators the opportunity to consider the systemic role hedge funds <u>may</u> play and the way in which we deal with the regulatory risks they <u>may</u> pose to the oversight of markets and protection of investors."
13.07.2009	Dodging the draft. Hedge fund managers say draft directive is poorly drafted, ill conceived and anti- competitive. Quote: "A blatant attempt by the French and Germans to sock one to London."
26.07.2009	Brussels official faces up to sharp criticism of 'ogres'. A Brussels official, the "deputy directorgeneral of the Commissions' internal market directorate-general," couldn't be bothered.
04.09.2009	Alternative funds score EU victory after Swedish diplomats recommended sweeping changes to controversial European legislation.
12.09.2009	EU plans for hedge fund rules 'flawed'. Poul Nyrup Rasmussen, architect of the regulation and self-confessed "bogeyman" of London's alternative investment sector, acknowledged that it would be "foolish" to push ahead without more consultation. Lord Myners said that the EU's draft rules were "deeply flawed", "tilted at mythical windmills" and "pandered to prejudices."
18.10.2009	High hopes for alternatives redraft. Cautious optimism for substantial amendment by Swedish presidency of EU.
06.11.2009	Flaws in hedge fund rules detailed. Report by external consultants says proposed rules would increase compliance costs to a much greater extent than the European Commission's own assessment and will have investment choices "significantly restricted."
22.11.2009	The taxman cometh. Taxation will spark next "revolution". Governments need their coffers replenished.
13.01.2010	Pension funds fear EU hedge funds rules. Dutch pension funds warned that proposed EU regulation would cost them EUR1.5bn a year.
03.02.2010	Spain raises protectionist fears. Spain published its first "compromise proposal", which it hopes will secure backing from the 27-coutnry bloo's member states.
10.03.2010	Geithner warns of rift over regulation. The US Treasury secretary has delivered a blunt warning to the European Commission that its plans to regulate the hedge fund and private equity industries could cause a transatlantic rift by discriminating against US groups.
11.03.2010	France and UK seek hedge fund deal. British PM shares concerns of US Treasury secretary Geithner that a draft EU directive to introduce tighter regulatory controls could impose new barriers to business.
16.03.2010	Brown intervenes in hedge fund talks. EU finance ministers abandon efforts to get a compromise deal over the EU's controversial proposals to reform alternative investments after a last-minute intervention by Gordon Brown.
17.03.2010	Germany pushes UK on hedge fund rules. Angela Merkel: "I work well with Gordon Brown. But his once-off tax on bonuses is only half as good an idea as the hedge fund rules we are considering, and which Great Britain ought to approve. That is what we must fight for, and I am expecting some support."
18.03.2010	MEPs to continue with hedge fund revisions. European lawmakers pledged to forge ahead with their own efforts to revise controversial EU proposals to regulate hedge funds and private equity funds on a pan-European basis for the first time, in spite of an impasse amongst member states.
06.04.2010	Geithner urges EU fund rules rethink. Second letter to EU finance ministers urging not to discriminate against US fund managers. AlMA's CEO said Mr Geithner's latest "important letter illustrates the international concern that Europe's AIFM directive has diverged from the Group of 20 path and will have a protectionist outcome".
08.04.2010	Brussels reassures US on financial regulation. EU (Barnier) writes to Geithner: "Discrimination has no place in the emerging regulatory framework. By providing a level playing field for domestic and foreign players alike, we eliminate opportunities for regulatory arbitrage and create the conditions for fair competition."
Source: IR&M	1. headlines are in bold and are from the FT

Source: IR&M, headlines are in bold and are from the FT

There is a debate as to how far the draft legislation is protectionist. Those who argue the draft legislation is protectionist argue that one needs a EU pass to distribute within the EU.¹ Those who argue the draft legislation is not protectionist argue that one just needs to comply with EU regulation irrespective of whether the product provider sits in the EU or not. The former is clearly the consensus in the hedge fund industry, which is largely outside the euro zone. In any case, the regulatory uncertainty is *suboptimal*, to say the least; for both product providers *and* investors.

There is "good reason" for becoming protectionist. When the euro was introduced more than ten years ago there was the idea that continental Europe would take market share from London as Britain decided not to take part in—what some people call—the *euro experiment*.^{3,4} It didn't happen. London continued to flourish despite not being part of the Economic and Monetary Union (EMU).⁵ In the light of competing financial centres, there might be more behind the rhetorical blame game of continental European politicians. They must know too that the hedge funds industry (and the private equity industry) has economic advantages. They certainly must have noticed that the *locusts* create well paid (and well needed) jobs. They might know that spreading some of the risks that are still on the enormous balance sheets of European banks is quite healthy from a systemic risk point of view. It is possible that there is a vision behind all the political and regulatory smoke screens; a vision of a regulated alternatives industry within the euro zone, essentially taking business away from London.

Note that this is pure speculation. However, this speculation would explain the massive amounts political energy that is going into the draft. Also, the rhetoric is at times so daft that one cannot seriously believe that the political talking heads really mean it. The rhetoric could be part of "master plan", a vision, that is executed in a (funny or) clandestine kind of way. (We don't think so; but it could be.) It could well be that the future for large parts of banking and fund management is finally moving on-shore, rather than remaining off-shore. Many investors are tired of the Madoffs and the unpleasant negatives and crudity of capitalism and its markets, sometimes referred to as "casino capitalism". It might not be lost on continental European politicians that what we call "alternative investments" is nothing else than "traditional investments" in its early stage. Equities were once too an alternative investment; in some places not so long ago we might add.

"If hedge funds were cheese then the EU cheese directive would tell all EU cheese-eaters they could only eat EU cheese, from EU cheese makers using milk from EU cows fed in EU fields on EU grass."

"I have no regret whatsoever. It is a

—Doug Shaw, Blackrock

nice image, locusts that move into a field, eat it to the ground, and move on to the next without looking back. I think it was quite apt...

We have rules governing the social market economy here, and I would like them extended to Europe and, if possible, to the world. So let us develop rules, create transparency, and keep all this under control...

The economy is here for the people and not the other way round."

—Franz Müntefering in 2007

—Franz Müntefering in 2007 defending his "locusts" statement from 2005²

¹ Where a fund is established and managed outside the EU it is envisaged that reports to regulators will need to be made to the regulators of each EU member state where the fund is marketed. This is arguably an onerous obligation for non-EU managers seeking to market their fund into multiple jurisdictions.

² "German vice-chancellor stands by his call to tackle 'locusts'," FT, 15 February 2007.

³ Niall Ferguson recently gave the Swiss the same recommendation he's giving Britain: "keep your currency". (NZZ am Sonntag, 21 March 2010)

⁴ When the UK Treasury was considering whether Britain should join the Euro, examples of currency unions were so thin, it was forced to study the examples of Tuvalu, Tonga and Burkina Faso, among others. (From FTfm, 12 April 2010.)

⁵ Potentially the idea of "learning by doing" applies here too: Britain, one could argue, learnt an expensive economic lesson in 1992 with the ERM experiment (ERM stands for "Exchange Rate Mechanism," sometimes dubbed "Eternal Recession Mechanism"); essentially the predecessor of the EMU. It looks as others are now learning pretty much the same lesson; namely that if different national economies do not run perfectly in synch, it is a free floating currency and independent monetary policy that is the lubricant that allows the moving parts of the system to run smoothly. The longevity of the euro is obviously subject to debate.

Next steps

The G20 Finance Ministers will meet in Washington DC on 23rd-25th April. It is likely that hedge fund regulation will be discussed then, although this has not been confirmed as an agenda item. It is worth remembering, as AIMA has pointed out, what G20 leaders signed up to a year ago at the London summit in terms of hedge fund regulation. They agreed that all hedge fund managers should be registered and authorised by their national regulators, and that those managers should report systemically-relevant data to those regulators in the interests of financial stability. They concluded with an unambiguous declaration that they would not follow a protectionist path. EU politicians occasionally use the "spirit of G20" in London as an argument for the AIFM Directive. However, the EU proposals go far beyond the G20 agreement.

The next formal meeting of Economic and Financial Affairs Council (ECOFIN) is now not until May 18th, and it is likely that the Spanish Presidency will seek an agreement then. The Spanish may seek to produce another compromise text of the Directive reflecting recent bilateral discussions for review at an informal meeting, but a formal decision would be made only at the meeting in May.

A change of government in the UK during May could spice things up, as both David Cameron and the Shadow Chancellor of the Exchequer George Osborne have been critical of the Directive in the past. Despite recent postponements of proceedings in Council and Parliament, the timetable of a vote in plenary session in July remains in place although there is of course scope for further slippage.

"Politics is just another form of residual magic in our culture – a belief that somehow things come from nothing; that things may be given to some without first taking them from others."

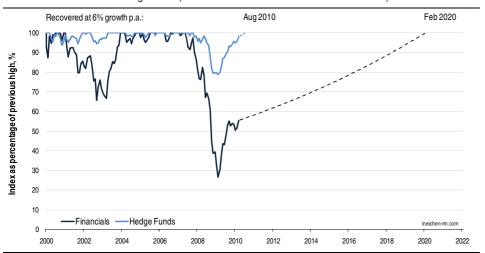
— Karl Hess (1923-1924), American political philosopher

Bottom line

We believe the following three bullets to be true:

Regulated is not synonymous with safe. Chart 5 shows a drawdown chart for financials (regulated) and hedge funds (less regulated). Regulation can give a false sense of security.

Chart 5: Financials versus hedge funds (Jan 2000 - Mar 2010 with assumed 6% CAGR)



Source: IR&M, Bloomberg

Financials: S&P 500 Global 1200 Financials; Hedge funds: HFRI Fund Weighted Composite Index. The dotted line shows an estimated path for recovery assuming 6% compound annual growth rate (CAGR).

- Complex systems (1,669 amendments!) can experience accidents and fail too. Efforts to make the system stronger, while well intended, make the system more complex and therefore—quite often and perhaps always—more prone to accidents.¹
- EU regulation (and financial reform, and announced lawsuits, and not yet announced lawsuits, etc.) is *manna* for the legal profession.

"A common mistake that people make when trying to design something completely foolproof is to underestimate the ingenuity of complete fools."

—Douglas Adams

¹ This bullet is based on work by Ormerod (2006), Buchanen (2000), Perrow (1999) and Gonzales (2003). Also Malcolm Gladwell (2008) in *Outliers* touches on the *complexity/prone-to-accident* issue. Applying this work to the regulatory system is our own.

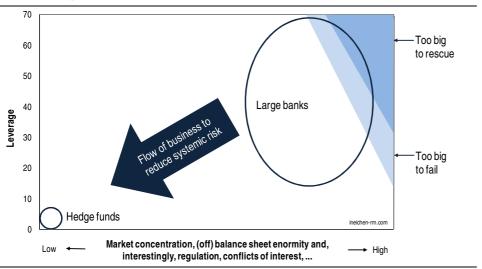
Systemic risk in a nutshell

The range of leverage among large banks prior to the financial crises was anywhere between 12 to 70 times equity. In many countries the market of large banks was concentrated to a few large (and regulated) organisations. (Ironically, parts of Europe being much worse in that regard than the US, where the crisis originated.) Some banks have turned out to be too big to fail and a few, according to some market observers, too big to rescue. While banks have deleveraged a bit and were able to "stabilize" their equity base through the generosity of the authorities who—in the name of the tax payer—successfully managed to steepen the yield curve to allow the banks to earn their way back to health, the systemic problems to the financial system have not yet been solved. Chart 6 summarises and simplifies.

"Capital will always go where it's well treated. Capital is not just money. It's also talent and ideas. They, too, will go where they're welcome and stay where they are well treated."

—Walter Bigelow Wriston (1919-2005), banker and former chairman of Citibank

Chart 6: Leverage-market concentration matrix



Source: Ineichen Research and Management

We do admit that the circle in the lower left hand corner of Chart 6 turned out to be too small¹ and is not only inhibited by hedge funds but also some private banks, asset management boutiques, new investment banks,² etc. We ask the reader for lenience in this regard but someone has to contrast all the *gobbledygook* about hedge funds that has been put forward. We are well aware that there are serious issues in hedge fund land, not all of which are addressed in this report.³ Note that LTCM was on the right hand side of the chart. The problem therefore, is not "bank" or "hedge fund" but "leverage," or, more precisely, the excess use thereof, in combination with market concentration.

Someone has to do it

¹ One could also argue that the circle in the lower left hand corner is too big. As of 2007, more than 60% of hedge funds had leverage of less than 2:1. The UK's FSA shows an average leverage of 3.3:1 for October 2009, i.e. a number we think is too high (and they acknowledge). They equal weight across strategies giving high-leveraged fixed income arbitrage a much larger weight than low-leveraged long-short equity. Whatever the numbers, when it comes to leverage, the average hedge fund seems virginal when compared to large (European) banks.

² We came across the term "new investment bank" as describing a specialised corporate finance advisory business that lacks the conflict of interest issues in old investment banks that arise from the combination of private and public functions, advisory and research, trading and brokerage, etc.

³ Probably the single most significant "negative" of the hedge fund industry were unjustifiable suspension of redemptions. Suspending redemptions in the best interest of the remaining shareholders were, given circumstances, to some extent justifiable; suspending redemptions in the sole interest of the manager weren't.

We believe the bottom line regarding systemic risk is that business *should* flow from the upper right hand corner in Chart 6 to the lower left hand corner. (We are aware that this is rather hypothetical at this moment in time.) This would mean:

- Less leverage. Under the regulators and Basel's watchful eye, bank leverage has mushroomed to stratospheric levels over the past decades. A modern bank is sometimes referred to as a "bank plus hedge fund" because of the combination of traditional, socio-economic commendable bank lending activities and highly leveraged, less socio-economic commendable trading activities. (Note that calling a bank "a bank plus a hedge fund" could be perceived as an affront by a hedge fund, as the leveraged balance sheet of a large hedge fund can be smaller than that of a large bank by the factor of 50 or more.) An important side effect of "less leverage" is less dependence on short-term financing. At the end of the day any leveraged institution meets the *Grim Reaper* when financing is disrupted. The higher the reliance on (short-term) financing, the more likely is liquidity to run dry in a distressful environment. Today we should all agree that combining large amounts of leverage, market concentration and reliance on short-term financing is not the
- Less market concentration with fewer or—ideally no—firms that are too big to fail or rescue. Even well intended regulation harmonizes the market place and synchronizes the market participants' behaviour. This is true even if the regulation were based on an intellectual framework that was not false. The US seems to be heading towards Glass-Steagall (Volcker Rule) while in Europe the thinking is more towards tougher capital requirement and an "externality fee". However, financial reform seems slow. Hence, regulatory uncertainty is likely to persist for some time longer.

pinnacle of investment wisdom; at least not from a systemic risk point of view.

- Fewer conflicts of interest. A small specialist has arguably fewer issues in that regard.
- More small failures and less big failures and that's a good thing. Failure—apart from the fact that it occurs whether we like it or not—is an integral part of everything, i.e. stars, species, forests, hair lines, and, yes of course, also capital markets. Instability and destruction, whether it's creative or not, are integral parts to both progress and survival. However, the status quo—risk taker takes upside, tax payer downside—many find rather odd and worthy of reform.
- More transparency. Less regulation means less complexity. Less complexity means fewer loopholes and shadow businesses exploiting the loopholes.¹ (A focus on regulation that is unambiguous and enforceable in the real world would also result in less and better regulation.) Fewer loopholes should result in higher transparency. In finance, we really ought to simplify a bit, no?

Yes, we know it's easier said than done. We also know that many hedge funds originated in banks and therefore moved from the right to the lower left in Chart 6; a healthy trend from a systemic risk point of view that we believe has been in place for at least 15 years. We also know that the world is steering towards more regulation, not less. Regulatory uncertainty will take some time to resolve itself. In the meantime, we can take Dumas' advice and wait and hope that regulation shall

-Rahm Emanuel

[&]quot;You never want a serious crisis to go to waste."

[&]quot;All human wisdom is summed up in two words - wait and hope."

⁻ Alexandre Dumas

¹ Repo 105 anyone?

improve, market integrity to be restored, and that in the end everything will be just fine.

Note that our guest articles by Joe Taussig and Henrik de Koning both relate to fast changing (regulatory) landscape in one form or another. Joe Taussig makes the provocative and interesting case that there are possibly other ways for a hedge fund to manage money than in the current structure. Henrik de Koning looks at the UCITS structure, a phenomenon that is arguably a growth story and cannot be ignored.

In the next section we look at issues related to hedge fund performance and active risk management.

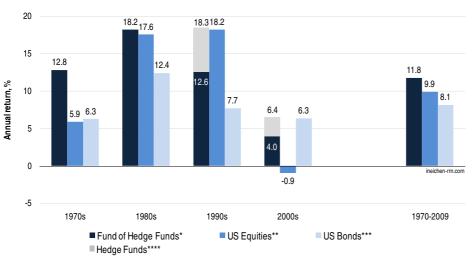
Performance and active risk management

Performance update

\$100 invested in the average fund of hedge fund ("FoHFs") on 1 January 1970 turned into \$9,585 at the end of February 2010. \$100 invested in US equities on 1 January 1970 grew to around \$4,318 assuming gross dividends were reinvested untaxed. Without dividends the \$100 would have grown to \$1,209.1 \$100 in a broadly diversified US bond portfolio would have grown to roughly \$2,296. Chart 7 shows annual nominal returns by decade over the past four decades and the compounding rates over the full four decades on the right hand side of the chart. We also show compounding rates for the average hedge fund (HFRI Fund Weighted Composite Index) in light grey for the 1990s and 2000s. The chart more or less speaks for itself.

Long-term hedge fund performance looks reasonably good both in absolute and relative terms

Chart 7: Annual nominal returns by decade (1970-2009)



Source: IR&M, Banque Privée Edmond de Rothschild, Bloomberg, Global Financial Data (GFD) All returns are total returns (proceeds reinvested untaxed).

Before we compiled the data for Chart 7 we wanted to see if the following sentence/statement was true:

"Never in the history of hedge funds has there been a decade in which a balanced hedge funds portfolio did not outperform equities <u>and</u> bonds and any unlevered combination thereof."

We cannot prove that statement to be true for two reasons. First, we have no data on the 1950s and 1960s. Second, the average hedge fund only "outperformed" the S&P 500 TR Index by five basis points in the 1990s and "outperformed" our chosen bond total return index by seven basis points in the 2000s; which is of course not very meaningful. However, by examining Chart 7 we believe to have come at least pretty close to verifying the statement. Note that if we were

If relative performance were a major objective, the hedge fund industry would have nothing to be ashamed of

^{* 1970-1989} Leveraged Capital Holdings from Banque Privée Edmond de Rothschild, 1990-2009 HFRI Fund of Funds Composite Index; ** 1970-1989 total return for US equities estimates from GFD, 1990-2009 S&P 500 TR Index via Bloomberg; *** 1970-1979 total return estimates for US Corporate Bonds from GFD, 1980-2009 BarCap US Aggregate TR Index from Barclays Capital via Bloomberg); **** HFRI Fund Weighted Composite Index.

¹ The S&P 500 (price) Index stood at 92.06 on 31 December 1969 and at 1,115.1 forty years later.

desperate to produce a graph whereby FoHFs look better relative to equities and bonds, we could have; but we weren't, so we didn't.¹

Given that we put out a book with the title "Absolute Returns" some aeons ago,² we feel obliged to focus on absolute returns rather than relative returns; this despite a large part of the financial industry caring a lot about the latter and only caring somewhat about the former—it seems—when losing money. Switching back and forth between these two approaches makes no sense of course; it's *either/or*. Caring about relative returns on the way up and absolute returns on the way down is about as wise as a hypothetical society in which profits were privatised and losses nationalised.

"You cannot eat a relative sandwich."

—Anonymous pension fund manager in Edinburgh, early 2000s

Active risk management is the key to the kingdom

We see "absolute returns" as an investment philosophy that is quite the opposite from the relative return investment philosophy of benchmarking and indexation. At the most simplistic level, absolute returns means making money when things go well and not giving it all back when things do not; or, put differently, compounding capital positively over the long-term. This definition refers to absolute return strategies executed for example by hedge funds as well as capital guaranteed structured products or strategies, where the maximum loss is limited through risk management tools and techniques. We then went on to use the term "asymmetric returns" to describe the implementation of the absolute return investment philosophy.³ With asymmetric returns we were referring to the preference for positive returns over negative returns.⁴ The "asymmetric" in asymmetric returns, therefore, suggests a preference for many and large positive returns, while trying to avoid *negative* returns, especially large ones. The key "insight" is that large losses are not good for one's financial and mental health, as they kill the rate at which capital compounds. A loss of 50% requires a return of 100% just to breakeven.

"Absolute returns" is an investment philosophy and "asymmetric returns" is the implementation thereof

The main motivation for using these terms was that we thought we couldn't really describe the hedge fund phenomenon by being limited to (linear and equilibrium seeking) CAPM and using terms as "alpha" and "beta". In a nutshell the following bullets summarise our work throughout the *naughties*:

- ets summarise our work throughout the *naughties*:

 An absolute return focus makes sense while the relative return investment
- Large losses kill the rate at which capital compounds and are not good for one's financial and mental health.

—Douglas W. Hubbard's short definition of risk management⁵

philosophy does not.6

[&]quot;Being smart about taking chances."

¹ Using world indices rather than US indices would do the trick.

² See Ineichen (2003)

 $^{^{\}rm 3}$ We mentioned "asymmetric returns" in Ineichen (2002) for the first time.

⁴ The concept of "volatility" and "correlation" makes no preferential difference between positive and negative returns. A relative return manager who loses 50% of his investor's money while the benchmark fell by 52% did an "excellent" job.

⁵ Hubbard (2009), p. 10. The long definition of risk management is: "The identification, assessment, and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events." For us, the shorter version works just as well.

⁶ Asset/liability matching for example is also a relative return approach. It essentially means—simplifying a bit—that when interest rates rise (and liabilities therefore "fall") it is actually ok to lose money, i.e. assets to fall in line with liabilities. We assume that the pension fund managing extraterrestrials (see Box 1 on page 5) would not only ditch MPT but also the accounting framework that brought us asset/liability matching.

- Active risk management is the key to long-term positive compounding of capital and therefore the key discipline in investment management.
- Active risk management and continuous investment success is difficult. We are sceptical of all the academic research suggesting otherwise.
- Active risk management is a craft, neither a science nor an art. A craft is learnt on the job, i.e. it's "learning by doing."
- Markets might or might not be forecastable; active risk management is doable and worthwhile in any case.
- Many axioms in economics and finance (rational expectations, efficient markets, etc.) are wrong and expensive to investors and the system alike.
- Not data or (ever more) information, but knowledge, understanding, insight, perspective, and, ideally, applied wisdom improves the quality of investment decisions
- When it comes to understanding, most of the detail simply does not matter. Common sense trumps minutiae.¹
- Leanordo da Vinci hit the proverbial nail on its head: "Simplicity is the ultimate sophistication."

The "absolute return" moniker has been abused

Table 2 shows our attempt to distinguish between relative and absolute returns. Note that if a long-only fund is re-branded to include the "absolute returns" moniker, it does not mean that it is indeed an absolute returns vehicle. A TAA (tactical asset allocation) program that is fully invested at all times also doesn't fit our premise of an absolute return vehicle. Buyers beware. A lot of mischief has been done with this term.

Table 2: Difference between relative return and absolute return model

Absolute-return model Relative-return models (Indexing) (Benchmarking) Return objective **Absolute returns** Relative returns Exploit investment General idea is to Replicate benchmark Beat benchmark opportunity Risk management Tracking risk **Total risk** General idea is to Replicate benchmark Beat benchmark Preserve capital

Source: Ineichen (2001)

The return objective of a relative return manager is determined by a benchmark. An index fund aims to replicate a benchmark at low cost while a benchmarked manager tries to beat the benchmark. In both cases the return objective is defined relative to a benchmark, hence the term "relative returns". Hedge funds do not aim to beat a market index. The goal is to achieve absolute returns by exploiting investment opportunities while staying alive. We do understand that the absolute return moniker lends itself well to ridicule after 2008.

Trying to compound capital positively is materially different from trying to outperform a

benchmark

A pig named "duck" is not a duck

¹ Common sense needs to be an "overlay," some sort of "top-down smell-test." Common sense obviously has its limitations and lends itself all too well to ridicule; as Einstein put it: "Common sense is the collection of prejudices acquired by the age of eighteen."

The difference between the two models, in terms of how risk is defined and managed, is more important. Defining risk as *tracking risk* means that the risk-neutral position of the manager is the benchmark and risk is perceived as deviations from the benchmark. For instance, a benchmarked equity long-only manager moving from equities into cash (yielding the risk-free rate) is *increasing risk* as the probability of underperforming the benchmark increases. In the absolute-return space, the risk-neutral position is cash. A move from an equity long position into cash means *reducing risk* as the probability of losing money decreases. The same transaction, moving from equities into cash, can mean both increasing as well as decreasing risk, depending on how risk is defined. (Note that some market participants argue that "absolute returns" is nothing else than "relative returns" with cash being the benchmark.)

"The essence of investment management is the management of risks, not the management of returns."

-Benjamin Graham

Put simply, under the absolute-return approach, there is an investment process for the upside (return-seeking by taking risk) and for the downside (some sort of contingency plan if something unexpectedly goes wrong or circumstances change, etc). Absolute-return investing, therefore, means thinking not only about the entry into a risky position, but also about the exit. Protecting the investor's capital is part of the value proposition. We still find that an absolute return strategy can be viewed as the opposite of a long-only buy-and-hold strategy.

"When you are finished changing, you're finished."

—Benjamin Franklin

Note that "investor protection" is not the same as protecting the investor's money. Regulation, transparency and a market benchmark protects the investor. However, with the relative return approach, the investor's principal is not entrusted to a fiduciary who tries to preserve it in difficult times but whose mandate implicitly or explicitly dictates that the principal is exposed to the full extent of market volatility – the volatility of the market benchmark. This exposure has been considered acceptable, at least up until 2000, because the wealth protection function was held by the end investor and because of some strong-held beliefs with respect to return expectations, diversification benefits and investment processes during the long bull market.

"Finance is the art of passing currency from hand to hand until it finally disappears."

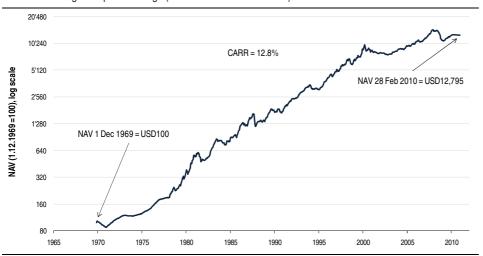
— Robert W. Sarnoff (1918-1997), former chairman of RCA

The compounding of capital

We like compounding capital positively. Dennis Gartman from The Gartman Letter calls what we call *compounding capital positively*: "from the lower left to the upper right." What he means by that is the performance of a long investment that rises gradually over time, i.e. moving from the lower left to the upper right in a chart. Chart 8 is an example of "moving from the lower left to the upper right." The chart shows the performance of the oldest FoHFs in hedge fund history, i.e. Leveraged Capital Holdings¹ that was founded in Geneva in 1969 and is still in existence today.²

Moving "from the lower left to the upper right"

Chart 8: Leveraged Capital Holdings (1 Dec 1969 to 28 Feb 2010)



Source: IR&M, data from Banque Privée Edmond de Rothschild

Monthly data available since 1978. Prior to 1978, official annual returns were divided by 12 to get monthly returns.

The hedge fund industry has gone through some material changes over such a long period. We believe the main changes to be the institutionalisation over the past ten years as well as the increase in heterogeneity of the industry, allowing to constructing conservative portfolios with "risky" entities. In the earlier history of hedge funds it was more difficult to construct conservative portfolios because the industry was much smaller and, more importantly, more one-sided, i.e. less diverse than it has been over the past ten years. Note that the institutionalisation of the hedge fund industry is not the cause for the industry becoming heterogeneous. If anything it is the other way around. It is *because* the hedge fund industry permitted constructing conservative portfolios with equity-like positive returns and bond-like negative returns, that institutional investors were drawn into the industry. (We believe the main reason for the institutionalisation to be the equity bull market running its course ten years ago and the resultant negative outlook for equities in the decade to follow.)

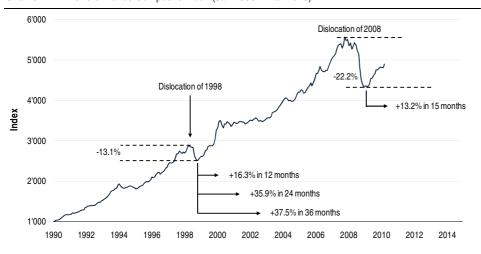
Chart 9 shows the performance of the HFRI Fund of Funds Composite Index, a proxy for FoHFs. The recovery from the 1998 dislocation was swift. The recovery from the 2008 dislocation wasn't.

The hedge fund industry has changed over the years

¹ Neither IR&M nor your author has an affiliation with the product provider or a position in the product shown.

² See Appendix of Ineichen (2008) for a brief write-up of hedge fund history or Ineichen (2003) for a write-up less brief.

Chart 9: HFRI Fund of Funds Composite Index (Jan 1990 - Mar 2010)

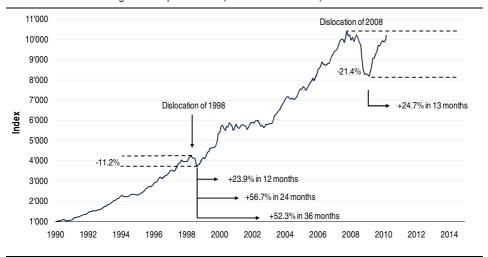


Source: IR&M (adapted and updated from Ineichen (2009a)), Bloomberg

Chart 10 shows the performance of the HFRI Fund Weighted Composite Index, a proxy for direct investments in hedge funds. The recovery from the 1998 dislocation was swift. The recovery from the 2008 dislocation was swift too.

A swift recovery, given circumstances

Chart 10: HFRI Fund Weighted Composite Index (Jan 1990 - Mar 2010)



Source: IR&M, Bloomberg

Hedge funds had not yet reached their high water mark at the time of writing, but were arguably very close. Note that this is true for the average hedge fund. There is wide dispersion among managers and strategies. Some have surpassed their high water mark while others have still some way to go.

Table 3 below shows recent hedge fund performance by strategy for a selection of indices over the past 24 months with an equity and a bond index as reference, latest returns shown first. We have colour-coded the returns not because we are Bob Marley fans and believe that sometimes the sheriff indeed needs to be shot, but to visualise the extreme returns as well as the correlation among strategies. (Detail is lost when printed in greyscale.) The last column indicates whether the index has surpassed the high water mark set prior to the crisis.

Hedge funds close to high water mark

Table 3: Recent hedge fund performance (March 2008 – March 2010)

		2010							200	9										2008								
	03 10			12 09					05 09							12 08 10 08 09 08								04 08	YTD	-12M	-24M	HW
MSCI World TR Gross, USD	6.2	1.4	-4.1	1.8	4.1	-1.8	4.0	4.2	8.5	-0.4	9.2	11.3	7.6	-10.2	-8.7	3.3	-6.4	-18.9	-11.9	-1.4	-2.4	-7.9	1.6	5.3	3.35	53.2	-12.2	1
BarCap Global Aggregate TR, USD	-0.1	0.4	1.5	-1.6	1.3	0.5	1.1	1.1	1.6	0.6	0.7	0.5	1.4	-0.4	-0.9	3.6	3.7	-2.6	-1.4	1.0	-0.1	-0.1	-0.8	-0.3	1.80	7.8	11.4	
IFRI FW Composite	2.7	0.6	-0.7	1.3	1.5	-0.2	2.8	1.3	2.5	0.2	5.1	3.6	1.7	-1.2	-0.1	0.2	-2.7	-6.8	-6.1	-1.4	-2.3	-1.3	1.9	1.6	2.56	22.6	0.9	
IFRI FoHF Composite	1.7	0.2	-0.4	0.8	0.8	-0.1	1.7	1.1	1.5	0.4	3.3	1.1	0.0	-0.4	0.7	-1.5	-2.6	-6.2	-6.5	-1.5	-2.7	-0.9	1.7	1.0	1.54	12.8	-9.6	
S Tremont Multi Strategy	1.4	0.6	0.6	1.2	1.0	1.1	2.9	1.4	3.0	1.6	4.3	2.2	0.4	-0.1	3.4	-1.5	-4.6	-6.9	-7.3	-1.3	-2.5	0.1	1.2	0.7	2.59	23.4	-0.3	
IFRI Relative Value (Total)	1.5	0.6	1.5	2.0	0.6	1.3	2.5	1.8	3.0	1.5	3.9	3.1	1.0	0.5	2.1	-0.2	-2.8	-8.0	-5.9	-0.1	-0.8	-0.6	1.3	1.4	3.58	25.8	8.3	
HFRI RV: CB Arbitrage	2.7	0.4	0.1	2.8	1.0	0.7	4.3	3.4	7.0	2.8	9.7	6.0	3.5	2.4	4.8	1.1	-2.8	-16.0	-11.8	-1.1	-1.6	-2.3	0.8	1.3	3.22	48.9	12.0	
CS Tremont Fixed Income Arbitrage	1.4	0.1	2.0	0.8	1.7	1.9	2.8	2.4	3.6	1.8	4.3	1.9	1.7	1.0	0.5	-0.8	-5.6	-14.0	-6.8	-0.7	-0.4	-0.5	1.3	2.1	3.57	27.8	-5.7	
IFRI Event Driven (Total)	3.2	0.8	0.7	2.4	1.3	0.5	3.8	2.3	2.8	1.5	4.7	3.2	1.3	-1.4	0.4	-1.5	-3.7	-8.2	-6.0	-0.5	-1.4	-1.6	1.5	1.0	4.68	30.6	4.6	
HFRI ED: Distressed/Restructuring	2.8	0.3	1.8	2.5	1.5	1.5	4.3	2.8	2.8	1.7	5.5	3.2	-0.2	-1.6	1.2	-3.8	-5.2	-7.9	-5.9	-0.8	-1.8	-0.5	1.2	0.5	4.97	35.4	3.4	
HFRI ED: Merger Arbitrage	0.6	0.6	0.3	0.9	0.8	0.4	1.2	1.1	0.7	1.0	1.4	1.1	2.1	0.2	0.2	1.2	-0.3	-2.5	-2.9	0.3	-0.4	-1.4	0.9	1.4	1.48	10.5	8.2	
IFRI Equity Hedge (Total)	3.4	0.9	-1.3	2.1	1.6	-0.7	3.2	1.4	3.2	0.2	6.4	5.4	2.9	-2.2	-0.9	0.2	-3.8	-9.5	-8.1	-2.2	-2.8	-2.4	2.4	2.4	2.95	28.6	-2.8	
HFRI EH: Quantitative Directional	3.2	1.2	-1.9	1.5	1.8	-0.9	2.3	1.1	3.1	0.5	3.6	4.7	2.7	-4.0	-2.7	0.8	-3.7	-9.1	-7.5	-1.4	-1.3	-2.9	2.7	2.6	2.50	22.0	-6.2	
HFRI Equity Market Neutral	0.7	0.6	-0.3	0.6	-0.3	-0.1	0.3	0.5	0.3	0.2	1.1	-0.4	0.1	-0.9	0.2	-2.6	0.0	-0.5	-2.9	-1.4	-1.1	1.4	1.1	0.2	1.01	3.1	-4.0	
Eurekahedge L/S North America	3.2	1.6	-1.4	1.9	1.9	-1.4	3.0	1.6	2.6	0.6	4.8	4.4	3.0	-2.3	0.8	0.4	-3.4	-6.4	-6.4	-0.6	-1.7	-1.0	2.9	2.2	3.37	25.2	8.3	
Eurekahedge L/S Europe	3.4	-0.5	0.9	1.4	0.1	0.2	4.1	3.3	2.0	-0.6	4.9	4.9	2.0	-0.9	-0.9	-1.7	-2.0	-6.3	-7.4	-2.0	-3.1	-0.8	1.8	1.5	3.72	26.4	1.5	- 1
Eurekahedge L/S Japan	3.2	-0.1	1.0	1.4	-2.0	-0.8	-0.4	1.3	0.8	2.3	3.5	1.5	0.6	-1.8	-1.5	2.1	0.8	-2.2	-2.7	-2.0	-1.4	-2.4	1.7	2.1	4.07	12.1	2.3	- 1
Eurekahedge L/S Asia ex-Japan	3.4	0.0	-2.4	2.1	2.8	1.2	3.7	-1.2	6.0	1.5	9.6	5.3	3.6	-1.0	-0.9	3.2	-1.1	-8.3	-6.4	-2.7	-1.6	-5.0	-0.4	2.8	0.93	36.4	7.7	- 1
IFRI Macro (Total)	2.0	0.2	-1.9	-1.3	2.2	-0.5	1.7	0.4	0.5	-1.2	3.5	-0.1	-0.6	-0.1	-0.1	1.1	0.7	1.6	-1.2	-1.2	-2.6	1.2	1.2	0.0	0.20	5.5	4.1	
CS Tremont Global Macro	0.4	1.1	1.1	-1.4	3.5	0.2	2.8	0.9	1.8	-0.8	1.5	0.2	0.0	0.2	2.3	1.1	1.5	-5.1	-6.6	-1.4	-2.6	2.0	1.8	-1.6	2.57	11.5	0.4	-
CS Tremont Managed Futures	4.2	1.8	-3.8	-5.0	4.9	-2.2	3.0	0.9	-0.4	-2.3	0.9	-3.2	-2.2	-0.2	-0.6	2.4	3.2	5.0	-0.6	-2.5	-4.2	4.8	1.4	-2.1	2.09	-1.8	1.7	-
IFRI Emerging Markets (Total)	5.0	-0.1	-1.2	1.7	1.5	1.1	5.5	1.4	4.5	0.7	9.6	7.7	4.3	-1.3	-1.8	-0.4	-4.0	-14.4	-10.4	-4.9	-3.4	-3.8	1.4	2.8	3.63	43.8	-6.0	
HFRI EM: Asia ex-Japan	4.2	-0.1	-2.5	2.1	2.2	0.3	4.1	-1.0	5.6	1.5	10.3	6.5	3.9	-1.3	-1.3	3.3	-1.7	-11.0	-8.4	-4.2	-1.9	-6.1	-1.0	4.1	1.58	38.0	-1.2	-
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Source: IR&M, Bloomberg

- October 2008 wasn't a good month.
- In extremely good and extremely bad months, correlation among strategies and correlation between most hedge fund strategies and equities is very high.
- Some strategies were above high water mark as of February 2010.
- Over the past twelve months there has been a big difference in performance between Global Macro and Managed Futures.
- FoHFs performance has lagged single hedge fund performance by around ten percent over a 12 and 24-month period.

Have FoHFs lost it?

In the most recent past FoHFs seemed correlated with the equity markets on the way down but decoupled on the way up. Through much of FoHFs history it was the other way around; equity like returns on the upside and bond like returns on the downside. There is some limited solace in the fact that FoHFs still look good relative to equities which is of course not what investors had signed up for. The FoHFs investor's drawdown is less severe than that of a comparable long-only strategy in equities. This is a weak argument in the fund of funds' defence; but it's an argument nevertheless.

Up to the end of 2007, the FoHFs story was arguably a success story. The institutionalisation of the hedge fund industry took place mainly through FoHFs. However, the value of the industry's assets under management began to fall in mid-2008 as hedge funds recorded slight losses and nervous investors began converting their investments into cash. But when more investors tried to remove money, worried by the collapse of Lehman Brothers, many found their FoHFs unable to pay within the timescale they had been led to expect. The Madoff scheme hitting the news wires in December 2008 worsened the situation further. Many FoHFs had operational due diligence as a big part of their value proposition.

"I dislike arguments of any kind. They are always vulgar, and often convincing."

-Oscar Wilde

"Investors will want to make sure that they don't start out with the money and the hedge funds start out with the experience, and then when all is said and done, the hedge funds have the money, and the investors have the experience."

— John Webster, Greenwich Associates, 2003

 $^{^{\}star}$ High water mark (HWM): Y = index has passed high of 2007-2008; N = index hasn't.

An institutional FoHFs who had been marketing their due diligence capabilities and was caught out with exposure to Madoff (in some cases in excess of 5%) was perceived by many institutional investors—rightly or wrongly—as having lied. It seemed that a consensus was manifested that a FoHFs either had an operational due diligence or Madoff, but not both. Trust was lost and credibility damaged. This will take some time to rebuild.¹

Fees are obviously one reason why FoHFs returns trail those of hedge funds. However, the difference over the past 12 and 24 months is too large to be explained by fees. Below are some factors which could explain why FoHFs' performance lags strongly behind that of single hedge funds.

- FoHFs redeemed fast and big time during the crisis, anticipating redemptions from their investors. Exceptionally high cash levels were a drag on performance when things turned for the better in 2009. To some extent this can be seen in Table 3 on page 33 where the lag was particularly high in March, April, and May of 2009. FoHFs continued to redeem well into H2 2009. Inflows started to over-compensate outflows around mid-2009.
- FoHFs might face a smaller universe of investment opportunities. (1) As big redeemers they are not as welcome anymore as they once were. This certainly does not apply to all FoHFs but some FoHFs do indeed have "avoid" stamped to their foreheads and might only be able to be putting new money to work with the most desperate of hedge funds², (2) some hedge funds (dare we say the "good ones") are actively diversifying their investor base, trying to replace FoHFs money with direct investments by institutional investors that are not FoHFs or trigger-happy (US) endowment funds.³
- Most likely there is an element of survivorship bias explaining the difference between hedge fund and FoHFs performance as poorly performing and closing hedge funds stopped reporting their returns to the index providers while their returns were still measured in FoHFs performance. Note here that the gap between hedge funds and FoHFs is not HFRI specific; an examination of Eureka indices revealed similar performance differences as the ones shown above.
- There might have been less equity beta (low net exposures) in FoHFs than in hedge funds during the recovery since March 2009. We do not believe this to be an argument with great explanatory power. FoHFs did indeed redeem from hedge funds where redeeming was possible, i.e. hedge funds with more liquid strategies and/or "generous" (and now regrettable) liquidity provisions. However, it was not only equity (beta) strategies that experienced a rebound post March 2009, some of the less liquid and less redeemable strategies performed well too, in some cases even more strongly.

¹ The cynical response to this sentence is that investors have a short memory for which we do acknowledge there is indeed some anecdotal evidence.

² We are aware that many readers will disagree with this notion and argue that "everyone" is desperate to raise money at the moment.

³ Some US endowments were "forced sellers," i.e. had to respond to capital calls from their private equity investments by cutting their hedge fund allocations *en masse*. David Swensen, CIO of the Yale endowment fund and a long-time promoter of alternatives, called FoHFs "a cancer on the institutional-investor world," (WSJ 13/01/2009) a quote your author verified with the journalist conducting the interview. (We don't believe everything we read.) The irony is, of course, that because of their aggressive redeeming in hedge fund space, some endowments are now perceived as cancer too.

Another (weak) factor is asset allocation. Managed futures did exceptionally well in 2008 while some relative value strategies did not. It is possible that a majority of FoHFs did not rebalance at the end of 2008, i.e. going into 2009 with higher than normal allocation to last year's winner and a lower than normal allocation to last year's losers. Given that 2009 was somewhat a mirror image of 2008, this could partially explain the performance difference. Even FoHFs are occasionally said to be "return chasers".

- Another factor may have been the skew of large FoHFs to large hedge fund managers who were likely to have gated, suspended, and/or side pocketed. So these "messy" issues show up in the returns of large FoHFs more than the average of the hedge fund universe which still has a skew to (less "messy") long/short equity.
- Many (leveraged) structures and overlays (portable alpha, CPPI, currency hedging) were done on the FoHFs level. The unwinding of these structures and overlays came at a cost. These costs are in the FoHFs NAVs but not in the NAVs from hedge funds.
- Some FoHFs took the side pocket out of NAV when they were forced to meet redemptions. Parts of the performance difference could potentially be explained by these side pockets not being in the FoHFs returns while being in the returns reported by hedge funds. NAV was not marked down but the number of shares adjusted to reflect new lower investor value. A lot of the illiquid stuff has rebounded after it became clear that the financial world would indeed not fall into the abyss; at least not during 2009. When the side pockets rebounded and were distributed out, redemption proceeds did not come back into the core NAV just into investors' pockets. This would explain a drag in FoHFs returns/NAVs, as measured by the index providers.

Some market observers and investors doubt that FoHFs have any survival stamina left in them. Over the years, we noticed to be more positive on FoHFs than many (non-FoHFs) investment professionals. The reason for people being negative on the FoHFs' business model is that the offering has to a large extent been commoditised. This means that either they add no value, or competition has reached cut-throat levels and margins erode, or that there are cheaper alternatives available.

The reason for us being less negative on FoHFs than our peers is that we always have compared hedge funds to stocks and FoHFs to mutual funds. The logic behind this is that a hedge fund is an entrepreneurial entity and the selection risk, therefore, is higher, somewhat akin to stocks, and needs to be diversified. Sometimes even blue chip stocks have accidents. Investors do not hold one stock they hold a portfolio of stocks. Some investors build and manage their stock portfolio on their own. However, many investors seek professional help. (Pun was not intended, but we left it there.) We believe the same logic to apply to hedge fund selection.

Note that the large parts of mutual fund industry's offerings have been commoditised some time ago. However, the industry is huge, and is still alive and kicking. That doesn't mean the FoHFs industry has no challenges; it has. (Some of these challenges are a topic for another day.) However, to us their value proposition—managing hedge fund portfolios—seems intact.

Correlation? What correlation?

The world seems flat

A couple of years ago the New York Times Foreign Affairs columnist Thomas Friedman wrote his bestseller *The World is Flat*. The title is a metaphor for viewing the world as a level playing field in terms of commerce, where all competitors have an equal opportunity. Friedman argued that one of the main flatteners was the fall of the Berlin Wall in 1989. After that event, everyone was—simplifying a bit ideologically "on the same page." After the fall of the Wall, countries that had followed the Soviet economic model—including India, China, Russia, and the nations of Eastern Europe, Latin America, and Central Asia—began to open up their economies. When these new players converged with the rest of the globalized marketplace, they added new brain power to the whole playing field and enhanced horizontal collaboration across the globe. Add to this the fact the rise of the internet and the world being wired up with fibre optic cable that links everyone to everyone else. If all investors have the same information at the same time, investment and business decisions become synchronised and correlation ought to increase. "Great men think alike" turned into everyone else thinking alike too.

Table 4 shows quarterly GDP estimates for the largest economies over the past five years, latest estimate shown first. The colour-coding allows to seeing by what degree the figures are synchronised. The worst quarter was Q1 09 and the five economies were perfectly synchronised. We therefore shouldn't be too surprised if the correlation of our investment choices are correlated too during economic hardship. Note that the worst growth estimate for China (6.1% in Q1 09) is higher than the highest estimate for all the other four economies.

If everything is synchronized, correlation ought to increase

Table 4: Global economies are synchronized (GDP, QoQ, %)

		03 09	12 08	09 08	06 08	03 08	12 07	09 07	06 07	03 07	12 06	09 06	06 06	03 06	12 05	09 05	06 05	03 05
2.2	-0.7	-6.4	-5.4	-2.7	1.5	-0.7	2.1	3.6	3.2	1.2	3.0	0.1	1.4	5.4	2.1	3.1	1.7	4.1
7.7	7.:	6.1	9.0	9.9	10.4	10.6	13.0	13.4	13.4	13.0	11.6	11.8	12.0	11.4	10.4	10.4	10.5	10.5
0.7	0.4	-3.5	-2.4	-0.3	-0.6	1.6	0.1	0.8	0.3	0.3	1.0	0.9	1.5	0.9	0.2	0.5	0.7	0.2
-0.6	-0.1	-3.7	-1.3	-1.7	-1.6	0.6	0.1	-0.7	0.0	1.1	0.8	0.1	0.7	0.0	0.2	0.1	0.7	0.1
-0.3	-0.7	-2.6	-1.8	-0.9	-0.1	0.7	0.5	0.5	0.6	0.8	0.8	0.5	0.4	1.1	0.7	0.6	0.7	0.3
	7.7 0.7 -0.6	7.7 7. 0.7 0.4 -0.6 -0.1	7.7 7. 6.1 0.7 0.4 -3.5 -0.6 -0.1 -3.7	7.7 7.1 6.1 9.0 0.7 0.4 -3.5 -2.4 -0.6 -0.1 -3.7 -1.3	2.2 -0.7 -0.4 -0.4 -2.7 7.7 7.1 6.1 9.0 9.9 0.7 0.4 -3.5 -2.4 -0.3 -0.6 -0.1 -3.7 -1.3 -1.7	2.2 -0.1 -0.4 -0.4 -2.7 1.5 7.7 7.1 6.1 9.0 9.9 10.4 0.7 0.4 -3.5 -2.4 -0.3 -0.6 -0.6 -0.1 -3.7 -1.3 -1.7 -1.6	2.2 -0.4 -0.4 -0.4 -0.7 -0.6 -0.6 -0.6 -0.6 -0.1 -3.7 -1.3 -1.7 -1.6 -0.6	2.2 -0.4 -0.4 -0.4 -0.4 -0.7 -0.7 -0.7 -0.7 -0.7 -0.1 -0.6 -0.1 -0.1 -0.6 -0.1 -0.1 -0.6 -0.1 -0.6 -0.1 -0.6 -0.1 -0.6 -0.1 -0.6 -0.1 -0.6 -0.1 -0.6 -0.1 -0.6 -0.1 -0.6 -0.1 -0.1 -0.6 -0.1 -0.1 -0.6 -0.1 -0.1 -0.6 -0.1 -0.1 -0.6 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1	2.2 -0.7 -0.4 -0.4 -2.7 1.5 -0.7 2.1 3.5 7.7 7. 6.1 9.0 9.9 10.4 10.6 13.0 13.4 0.7 0.4 -3.5 -2.4 -0.3 -0.6 1.6 0.1 0.8 -0.6 -0.1 -3.7 -1.3 -1.7 -1.6 0.6 0.1 -0.7	2.2 -0.7 -0.4 -0.4 -2.7 1.5 -0.7 2.1 3.6 3.2 7.7 7.7 6.1 9.0 9.9 10.4 10.6 13.0 13.4 13.4 0.7 0.7 0.4 -3.5 -2.4 -0.3 -0.6 1.6 0.1 0.8 0.3 -0.6 -0.6 -0.1 -3.7 -1.3 -1.7 -1.6 0.6 0.1 -0.7 0.0	2.2 -0.4 -0.4 -0.4 -0.7 -0.4 -0.7 2.1 1.5 -0.7 2.1 3.0 3.2 1.2 7.7 7.5 6.1 9.0 9.9 10.4 10.6 13.0 13.4 13.4 13.0 0.7 0.4 -3.5 -2.4 -0.3 -0.6 1.6 0.1 0.8 0.3 0.3 -0.6 -0.6 -0.1 -3.7 -1.3 -1.7 -1.6 0.6 0.1 -0.7 0.0 1.1	2.2 -0.4 -0.4 -0.4 -0.7 -0.7 -0.7 -0.7 -0.7 -0.7 -0.7 -0.7	2.2 -0.1 -0.4 -0.4 -0.4 -2.7 1.5 -0.7 2.1 3.6 3.2 1.2 3.0 0.1 7.7 7. 6.1 9.0 9.9 10.4 10.6 13.0 13.4 13.4 13.0 11.6 11.8 0.7 0.4 -3.5 -2.4 -0.3 -0.6 1.6 0.1 0.8 0.3 0.3 1.0 0.9 -0.6 -0.1 -3.7 -1.3 -1.7 -1.6 0.6 0.1 -0.7 0.0 1.1 0.8 0.1	2.2 -0.7 -0.4 -0.4 -0.4 -2.7 1.5 -0.7 2.1 3.6 3.2 1.2 3.0 0.1 1.4 1.7 7.7 7.1 6.1 9.0 9.9 10.4 10.6 13.0 13.4 13.4 13.0 11.6 11.8 12.0 0.7 0.4 -3.5 -2.4 -0.3 -0.6 1.6 0.1 0.8 0.3 0.3 1.0 0.9 1.5 -0.6 -0.1 -3.7 -1.3 -1.7 -1.6 0.6 0.1 -0.7 0.0 1.1 0.8 0.1 0.7	2.2 -0.7 -0.4 -0.4 -2.7 1.5 -0.7 2.1 3.0 3.2 1.2 3.0 0.1 1.4 5.4 7.7 7.7 6.1 9.0 9.9 10.4 10.6 13.0 13.4 13.4 13.0 11.6 11.8 12.0 11.4 0.7 0.4 -3.5 -2.4 -0.3 -0.6 1.6 0.1 0.8 0.3 0.3 1.0 0.9 1.5 0.9 -0.6 -0.1 -3.7 -1.3 -1.7 -1.6 0.6 0.1 -0.7 0.0 1.1 0.8 0.1 0.7 0.0	2.2 -0.1 -0.4 -0.4 -2.7 1.5 -0.7 2.1 3.0 3.2 1.2 3.0 0.1 1.4 5.4 2.1 7.7 7.7 6.1 9.0 9.9 10.4 10.6 13.0 13.4 13.4 13.0 11.6 11.8 12.0 11.4 10.4 0.7 0.4 -3.5 -2.4 -0.3 -0.6 1.6 0.1 0.8 0.3 0.3 1.0 0.9 1.5 0.9 0.2 -0.6 -0.1 -3.7 -1.3 -1.7 -1.6 0.6 0.1 -0.7 0.0 1.1 0.8 0.1 0.7 0.0 0.2	2.2 -0.4 -0.4 -0.4 -0.4 -0.7 1.5 -0.7 2.1 3.0 3.2 1.2 3.0 0.1 1.4 5.4 2.1 3.1 7.7 7.7 6.1 9.0 9.9 10.4 10.6 13.0 13.4 13.0 11.6 11.8 12.0 11.4 10.4 10.4 0.7 0.7 0.4 -3.5 -2.4 -0.3 -0.6 1.6 0.1 0.8 0.3 0.3 1.0 0.9 1.5 0.9 0.2 0.5 -0.6 -0.1 -3.7 -1.3 -1.7 -1.6 0.6 0.1 -0.7 0.0 1.1 0.8 0.1 0.7 0.0 0.2 0.1	7.7 7.7 6.1 9.0 9.9 10.4 10.6 13.0 13.4 13.0 11.6 11.8 12.0 11.4 10.4 10.4 10.5 0.7 0.6 -0.1 -3.5 -2.4 -0.3 -0.6 1.6 0.1 0.8 0.3 0.3 1.0 0.9 1.5 0.9 0.2 0.5 0.7 -0.6 -0.1 -3.7 -1.3 -1.7 -1.6 0.6 0.1 -0.7 0.0 1.1 0.8 0.1 0.7 0.0 0.2 0.1 0.7

Source: IR&M, Bloomberg

Q4 09 US growth was largely referred to as "statistical". Excluding inventory changes the (third) estimate of 5.6% for Q4 09 would have been around 1.9%.

Table 5 looks at PMI (Purchasing Managers Index) as a proxy for the trend of economic activity and/or credit conditions. A rising figure above 50 is good and a falling figure below 50 is bad; in a nutshell at least. The table shows that the perception of business and/or credit conditions were synchronised too, with China being a tick earlier than the other four. The table also shows that all the talk about "green shoots" in the first two quarters of 2009 was actually quite appropriate, at least when a Reggae colour coding is applied. (Again, detail is lost when printed in greyscale.) Starting in March 2009 stock markets began to anticipate these tables turning green.

Table 5: Global credit outlook is synchronized (PMI from June 2008 to March 2010)

	03 10	02 10	01 10	12 09	11 09	10 09	09 09	08 09	07 09	06 09	05 09	04 09	03 09	02 09	01 09	12 08	11 08	10 08	09 08	08 08	07 08	06 08
United States	59.6	56.5	58.4	54.9	53.7	55.2	52.4	52.8	49.1	45.3	43.2	40.4	36.4	35.7	35.5	32.5	36.7	38.4	43.2	49.2	49.6	50.0
China	55.1	52.0	55.8	56.6	55.2	55.2	54.3	54.0	53.3	53.2	53.1	53.5	52.4	49.0	45.3	41.2	38.8	44.6	51.2	48.4	48.4	52.0
Germany	60.2	57.2	53.7	52.7	52.4	51.0	49.6	49.2	45.7	40.9	39.6	35.4	32.4	32.1	32.0	32.7	35.7	42.9	47.4	49.7	50.9	52.6
Japan	52.4	52.5	52.5	53.8	52.3	54.3	54.5	53.6	50.4	48.2	46.6	41.4	33.8	31.6	29.6	30.8	36.7	42.2	44.3	46.9	47.0	46.5
United Kingdom	57.2	56.5	56.6	54.6	51.8	53.4	49.9	49.7	50.2	47.4	45.4	43.1	39.5	34.7	35.8	34.9	34.5	40.7	41.2	45.3	44.1	45.9

Source: IR&M, Bloomberg

Table 6 shows yield curves (10-year minus 2-year) at the end of the month. More or less the same pattern occurs across the five economies: a positive yield curve allows the banks to reflate their balance sheet. Borrowing short and lending long adds capital to the banking system. Central bankers and treasurers will certainly get a bonus this year because they are—quite literally—"making a lot of money."

Table 6: Yield curves (10Y-2Y from June 2008 to March 2010)

	03 10	02 10	01 10	12 09	11 09	10 09	09 09	08 09	07 09	06 09	05 09	04 09	03 09	02 09	01 09	12 08	11 08	10 08	09 08	80 80	07 08	06 08
United States	281	280	277	270	253	249	236	243	237	242	254	222	187	204	189	145	194	241	186	144	144	135
China	151	127	140	199	199	185	187	183	173	196	182	174	181	169	166	149	98	49	45	65	71	75
Germany	213	215	208	206	190	194	196	201	204	202	217	184	176	180	176	120	107	136	54	7	10	2
Japan	122	114	116	114	103	115	105	106	113	104	113	104	93	88	89	79	80	92	71	69	75	80
United Kingdom	278	309	266	270	235	276	271	269	257	236	267	245	197	218	220	197	156	160	44	-2	0	-10

Source: IR&M, Bloomberg

Table 6 also shows how China is trying to cool economy from overheating by restraining potential real estate and stock bubbles, and hedging against possible inflation, by two reserve requirement increases in Q1 10. It marks Beijing's latest attempt to rein in last year's stimulus programs – a spree of bank lending that fuelled Chinese growth and helped a weak global economy, but now threatens to inflate dangerous asset bubbles.

Table 7 shows 3M rates as a proxy for monetary policy. The monetary policies were more or less synchronised too with China and the US easing earlier.

Table 7: Monetary policies are synchronized (3M rates from June 2008 to March 2010)

	03 10	02 10	01 10	12 09	11 09	10 09	09 09	08 09	07 09	06 09	05 09	04 09	03 09	02 09	01 09	12 08	11 08	10 08	09 08	08 08	07 08	06 08
United States	0.15	0.11	0.07	0.05	0.05	0.04	0.11	0.13	0.18	0.18	0.13	0.12	0.20	0.25	0.23	0.08	0.04	0.44	0.90	1.71	1.66	1.73
China	1.24	1.39	1.29	1.27	1.25	1.32	1.30	1.30	1.33	0.90	0.92	0.86	0.84	0.92	0.99	0.92	1.97	2.45	3.21	3.37	3.20	2.90
Germany	0.31	0.28	0.28	0.36	0.39	0.40	0.36	0.34	0.38	0.54	0.69	0.75	0.68	0.90	1.12	1.66	2.14	2.53	3.02	4.32	4.33	4.19
Japan	0.12	0.13	0.12	0.13	0.16	0.16	0.15	0.15	0.16	0.15	0.18	0.20	0.24	0.27	0.28	0.20	0.49	0.38	0.56	0.57	0.58	0.58
United Kingdom	0.65	0.64	0.62	0.61	0.61	0.59	0.54	0.69	0.89	1.19	1.28	1.45	1.65	2.05	2.17	2.77	3.91	5.84	6.30	5.75	5.78	5.95

Source: IR&M, Bloomberg

Table 8 shows the target rate by the central banks, applying the colour coding to the past ten years, not to the period shown, as with the other tables. It will be interesting to see what happens with equity markets when these target rates start to rise. We have added Australia to the list as there monetary authorities have started to tighten some months ago with no obvious negative effect on the stock market. It's funny, isn't it, when sentiment is positive, *rising* rates is a good thing because it means that the worst is over and the economy is back on track. However, when sentiment is negative, *rising* rates is a bad thing because it means liquidity is taken out of the system. (This would mean that it is the mood of the market that is all that matters.)

Table 8: Target rates are obviously synchronized too (O/n target rates from June 2008 to March 2010)

	03 10	02 10	01 10	12 09	11 09	10 09	09 09	08 09	07 09	06 09	05 09	04 09	03 09	02 09	01 09	12 08	11 08	10 08	09 08	80 80	07 08	06 08
United States	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1.00	1.00	2.00	2.00	2.00	2.00
China	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	2.97	4.32	4.32	4.32	4.32	4.32
Germany	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.25	1.50	2.00	2.00	2.50	3.25	3.75	4.25	4.25	4.25	4.00
Japan	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.30	0.30	0.50	0.50	0.50	0.50
United Kingdom	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	1.00	1.50	2.00	3.00	4.50	5.00	5.00	5.00	5.00
Australia	4.00	3.75	3.75	3.75	3.50	3.25	3.00	3.00	3.00	3.00	3.00	3.00	3.25	3.25	4.25	4.25	5.25	6.00	7.00	7.25	7.25	7.25

Source: IR&M, Bloomberg

Inflation and deflation are too more or less synchronised as shown in Table 9. It seems the world is indeed flat.

Table 9: Inflation is synchronized (CPI from June 2008 to March 2010)

·	03 10	02 10	01 10	12 09	11 09	10 09	09 09	08 09	07 09	06 09	05 09	04 09	03 09	02 09	01 09	12 08	11 08	10 08	09 08	80 80	07 08	06 08
United States	2.3	2.1	2.6	2.7	1.8	-0.2	-1.3	-1.5	-2.1	-1.4	-1.3	-0.7	-0.4	0.2	0.0	0.1	1.1	3.7	4.9	5.4	5.6	5.0
China	2.4	2.7	1.5	1.9	0.6	-0.5	-0.8	-1.2	-1.8	-1.7	-1.4	-1.5	-1.2	-1.6	1.0	1.2	2.4	4.0	4.6	4.9	6.3	7.1
Germany	1.1	0.6	0.8	0.9	0.4	0.0	-0.3	0.0	-0.5	0.1	0.0	0.7	0.5	1.0	0.9	1.1	1.4	2.4	2.9	3.1	3.3	3.3
Japan	n.a.	-1.1	-1.3	-1.7	-1.9	-2.5	-2.2	-2.2	-2.3	-1.8	-1.1	-0.1	-0.3	-0.1	0.0	0.4	1.0	1.7	2.1	2.1	2.3	2.0
United Kingdom	n.a.	3.0	3.5	2.9	1.9	1.5	1.1	1.6	1.8	1.8	2.2	2.3	2.9	3.2	3.0	3.1	4.1	4.5	5.2	4.7	4.4	3.8

Source: IR&M, Bloomberg

What do Germany and India have in common? Not much one could argue; different history, culture, food, politics, economics, humour, football and cricket skill, etc. So why is it then that their stock markets are nearly perfectly correlated, as shown in Chart 11? Every major and minor movement looks like a mirror image of one another, save perhaps for the general elections in India in May 2009. (Were Germany to elect a German equivalent of Manmohan Singh—arguably an economic reformer—the DAX would jump too.)

Chart 11: Sensex versus DAX (Jan 2003 - Mar 2010)



Source: IR&M, Bloomberg

Indices are shown with daily price levels, colour coding is based on monthly returns.

The correlation coefficient between these two indices is 0.39 based on daily returns and 0.66 based on monthly returns. Which is the right number? The eye suggests something closer to 1.0, does it not? On the way down these two time series could hardly have been more in sync. The colour coding at the top of the chart shows that the extremes, especially the negative ones, are most often in synch.

It is the source of return that matters, not jumpy correlation coefficients

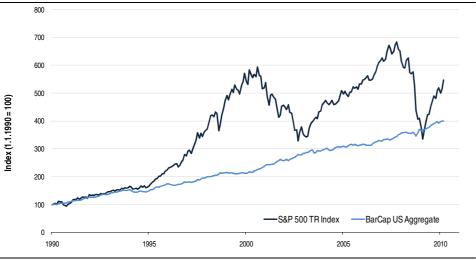
Do correlation coefficients really matter? Once we've binned MPT, they don't. It is the source of return that matters. The correlation coefficient is just a measured proxy for causality; a very imprecise one, we might add. As we will show further below, correlation disappears when it is most needed; a well-known but potentially underappreciated phenomenon.

Let's look at some more relevant investment pairs, the correlation between equities and bonds. Chart 12 shows two total return indices for equities and bonds in the US. The eye suggests that sometimes the two asset classes move in synch and sometimes they don't.

"Every great advance in natural knowledge has involved the absolute rejection of authority."

— Thomas Henry Huxley (1828-1895), English biologist

Chart 12: S&P 500 versus BarCap US Aggregate (Jan 1990 - Mar 2010)



Source: IR&M, Bloomberg

The correlation coefficient for the whole period was 0.17 based on monthly total returns. Is this meaningful? Shall we use this figure for an optimizer? The range of 3-year correlation between these two asset classes is -0.45 and +0.66.

Where are we taking this? We believe the following sentence to be true:

"When diversification matters most, correlation is roughly 1.0 and trying to squeeze certain viable investment choices into an optimizer is unwise."

For many institutional investors real estate is classified as *alternative investment*. (For some other institutional investors real estate is the most traditional investment they can think of.) However, we have never seen anyone trying to squeeze real estate into an optimizer. (This doesn't mean, of course, that it has never been done.) The reason is that it wouldn't make any sense. A real estate investment has a cash flow element (the rent) and a price element (long-term price appreciation in most cases); the latter being too difficult to evaluate accurately on a regular basis. The idiosyncrasies of real estate do not lend themselves well for mean-variance tools. The same can be said for private equity, infrastructure and hedge funds.

Coming to think of it, there are actually *no* investment choices that lend themselves well for mean-variance optimization. The main reason is probably due to liquidity, or, more precisely, the lack thereof. Liquidity is an illusion as it disappears when most needed, as originally identified by Keynes. The *illusion of liquidity* is a false sense of optimism an investor has over the safety and resilience of his portfolio, and/or the market as a whole. It is the belief in being able to "getting out" in time when things turn for the worse. In periods of economic optimism, investors eagerly expand their credit lines, often underestimating risks in the belief that their investment structures are safe and liquid. However, there is investor contagion on the way up and there is even more contagion on the way down. As we highlighted earlier, it is this pro-cyclicality and market homogeneity that is bad for investors and the system alike.¹

—David Swensen

Many long-term investment choices do not lend themselves very well for mean-variance optimization

[&]quot;Investors should pursue success, not liquidity."

¹ Keynes toyed with the idea of <u>reducing</u> market liquidity to increase the prevalence of long-term investing: "The spectacle of modern investment markets has sometimes moved me towards the conclusion that to make the purchase of an investment permanent and indissoluble, like marriage, except by reason of death or other grave cause, might be a useful

Econometric models have not come close to picking up the level of high correlation in markets during the financial crisis. Gustave Le Bon (1982) popularised the phrase of contagion in 1896. Le Bon observed that in a group, individuals who may by very different from one another in every respect are transformed into a unified body with a collective mind that causes its members to behave very differently than they would if each person were acting in isolation. The sentiment of the crowd as well as its acts, Le Bon argued, is highly contagious. Legendary investor Barnard Baruch summarised Le Bon's work in one sentence (side text). History shows that correlation increases in market downturns: the greater the "accident", the higher the correlation.

"Anyone taken as an individual is tolerably sensible and reasonable – as a member of a crowd, he at once becomes a blockhead."

-Bernard Baruch

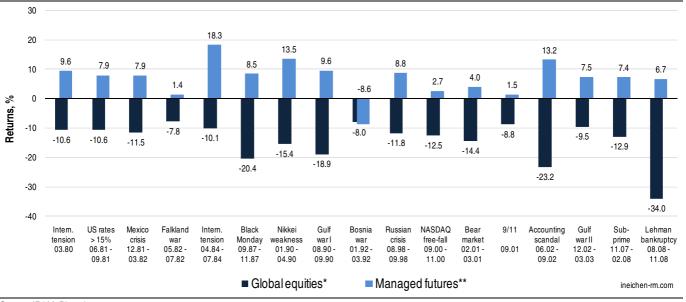
Exception to the rule

There seems to be an exception to this rule: managed futures. Chart 13 compares managed futures with global equities and the graph speaks more or less for itself. The graph shows <u>all</u> occurrences where the MSCI World lost more than 7% of its value within one, two, three, or four months from 1980 to 2009 on a month-end basis. The negative equities event was then compared to a proxy for managed futures over the same period.

"The young man knows the rules, but the old man knows the exceptions."

— Oliver Wendell Holmes (1809-1894), American writer





Source: IR&M, Bloomberg

Managed futures seem to defy gravity, save for one occurrence where correlation was close to 1.0 in 1992. We remember (faintly) discussions we had with investors based on similar graphs not showing the last data points, on whether the apparent negative correlation during market stress was potentially regime-specific. Some investors argued that the negative correlation could have been specific to the regime of disinflation from 1982 to 2000. However, the last couple of data points suggest that this is not the case. The 2000s was arguably a different regime than was the 1980 to 1999 period. The negative correlation properties seem to work 16 out of 17 times, roughly.

Managed futures seem to be negatively correlated to equities during market stress

remedy for our contemporary evils. For this would force the investor to direct his mind to the long-term prospects and to those only." (Found in Swensen (2000), originally from Keynes' *General Theory of Employment, Interest and Money.*)

^{*} MSCI Daily TR Gross World USD Index;

^{**} CISDM CTA Asset Weighted Index formerly known as CISDM Trading Advisor Qualified Universe Index

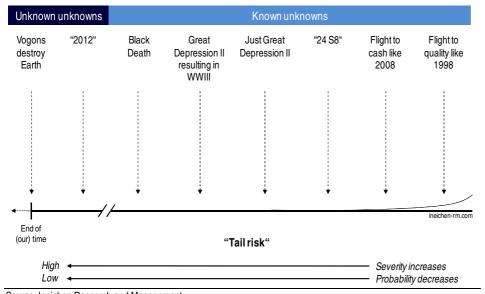
Accidents and time diversification

Correlation 1.0 events

We regard "correlation 1.0 events" as accidents. Accidents are not foreseeable. If they were, they wouldn't occur. The market didn't see the 2008 crisis coming. Nouriel Roubini and Paulson & Co. did, but not the market. Chart 14 is an attempt to classify accidents that matter to investors. (There are many low probability events that do not matter, as they have no impact.) One can view this exhibit as the left tail of a distribution, although we'd rather see it as the financial equivalent to the Richter Scale that measures geological "accidents". Probability decreases and severity increases as we move from right to left. (We like *reductio ad absurdum* ("reduction to the absurd") as a form of argument every now and then because it allows for an open mind, out-of-the-box reasoning, and makes us aware of the fact that there are indeed "unknown unknowns" out there in abundance.)

Note that the Richter Scale has a logarithmic scale. Because of the logarithmic basis of the scale, each whole number increase in magnitude represents a tenfold increase in measured amplitude; in terms of energy, each whole number increase corresponds to an increase of about 31.6 times the amount of energy released, and each increase of 0.2 corresponds to a doubling of the energy released. The tsunami in the Indian Ocean at 9.3 in 2004 released roughly 90 times more energy than the Sichuan earthquake at 8.0 in 2008 and was roughly 2,800 times more powerful than the 2010 Haiti Earthquake at 7.0. We understand Chart 14 to have a log scale of some sort too.

Chart 14: An alternative Richter Scale



Source: Ineichen Research and Management

■ What is the ultimate worst-case scenario? This is a calamity that is ultimately severe and radically improbable (or absurd). One suggestion for the ultimate worst-case scenario is described by English author Douglas Adams in *The Hitchhikers' Guide to the Galaxy* whereby an alien race of bureaucrats, the *Vogons from Vogsphere*, vaporise Earth to make way for a "hyperspace bypass". For the sake of this argument it is the worst-case scenario. (Two humans survive the incident and the *Vogons* live happily ever after, which

"Doubt is not a pleasant state of mind, but certainty is absurd."

-Voltaire

"Man can believe the impossible, but can never believe the improbable."

-Oscar Wilde

"There is nothing new in the world except the history you do not know."

—Harry Truman

means it could have been a lot worse.) Note that the Richter Scale too is open on the upside. 9.5 on the Richter Scale is not the worst earthquake *possible*, just the worst earthquake ever *measured*. It goes without saying that if the worst-case scenario occurs, the size of the allocation to hedge funds—or any other investment choice—does not really matter that much.

- Once we have established the worst-case scenario, we can move towards the right on our "probability distribution" and discuss scenarios that are pretty unpleasant too, but not as bad as the worst-case scenario. This means that, when assessing risk, we are looking at events and scenarios that are somewhere between the worst-case scenario and the norm; that is, we are looking for a scenario that is unlikely to occur and is also harmful, but not as improbable and harmful as everyone being vaporised. The second event from the left we dubbed "2012," as in Roland Emmerich's disaster movie with the same name. The film's story in a nutshell is that neutrinos from a massive solar flare are causing the temperature of the Earth's core to increase rapidly thereby triggering a catastrophic chain of natural disasters. Everyone dies except for a couple of thousand people who save themselves from the floods in big "arks". This is arguably not as bad as the previous "incident". Note that from an asset/liability point of view this is a non-event: not only are the assets gone, but the "liabilities" are "gone" too. Hence the mismatch between the two is essentially zero.
- A third event we called "Black Death" whereby "only" 20% of the world's population dies.² (Spanish Flu in 1918 took 3% with around a third of the population being infected.) This is the first event that actually *did* occur. This means something along the lines of the previous two scenarios did not occur³ while the third scenario actually did occur in the 14th century. This third scenario is therefore more a "known unknown." We *know* that these things happen, but we do *not know* when the next event will occur and neither do we know the severity. While the severity of such an event can be high, the probability of occurrence is negligible to the point that for all practical purposes, the scenario can be safely ignored. The irony here is that prior to the 2008 financial crisis, an event triggering a series of bank runs was also a "known unknown" and was—for all practical purposes—safely ignored. Note that from an asset/liability point of view this can be viewed as a "positive" occurrence: 20% of the "liabilities" gone without the "liabilities" taking the assets with them.
- Many of the prosperity destroying events and periods over the past one hundred years have been wars, inflation and governments toying with flawed socio-economic ideologies resulting in nationalisation, i.e. events that resulted in total loss and/or destruction. In most of these events, debt played a role. The sequence of (1) economic hardship due to consequences from excessive debt, (2) inflation/deflation, (3) social unrest, (4) international conflict, (5) war

--Voltaire

- Pliny the Elder (I think)

—Stephen Colbert, political satirist

[&]quot;Everything's fine today, that is our illusion."

[&]quot;The only certainty is that nothing is certain."

[&]quot;There's an old saying about those who forget history. I don't remember it, but it's good."

¹ There is always some "science" behind a disaster movie. The exact date is 21 December 2012, the Winter Solstice, where—apparently—a 5,125-year long cycle ends, whereby Earth has a linear shot, unobstructed by any other planets, to a powerful field of magnetic energy emanating from the centre of our Milky Way. *Live long and prosper* no more.

² Whenever there is a biological scare (mad cow disease, Swine flu, etc.) the Great Death (and Spanish Flu) is brought up as a possible scenario: The pandemic is the "known" while the severity and impact the "unknown."

³ The dinosaurs—if they were still around—would surely beg to differ. As well as roughly 99.9% of all other species that once existed but are now extinct.

is occasionally brought up as a possible scenario in modern times, a scenario somewhat analogous to 1920s-1945.

■ Moving further to the right, "24 S8" refers to the story line of Season 8 of the TV series "24" in which New York is a target of a nuclear terror attack. This scenario too is a "known unknown" because the city has already been a terrorist target twice since 1997. The timing, severity, and impact are unknown, but the probability of occurrence, according to Warren Buffett, is everything but negligible. At the 2002 annual meeting of Berkshire Hathaway, he was quoted saying: "We're going to have something in the way of a major nuclear event in this country. It will happen. Whether it will happen in 10 years or 10 minutes, or 50 years ... it's virtually a certainty." We are now eight years into that prediction. He went on to mention Washington and New York as the obvious targets.

We could go on describing unpleasant events, but we won't. The main point is that it is uncertainty that matters to absolute return investors, neither tracking error of some sort (an assets/liability mismatch is a form of tracking risk) nor the annual standard deviation of supposedly independent and randomly distributed returns, aka "risk". We do admit that bringing Vogons into the equation might be a tick over the top. However, treating the "risk-free rate of return" as a risk-free rate of return—as many investors still do—is over the top too, just on the other side of the bull-bear spectrum. If the perma-bears have their way, we might be entering a period whereby relying on old truths and orthodox thinking is the worst course of action. The main point from the Vogons chart is that in most negative events correlation is close to 1.0 and mean-variance optimization seems as a task

about as wise as rearranging the deck chairs on the Titanic.

"We are now—and are likely to be in the indefinite future—vulnerable to physical attack. Which means that the risks in decisions of all sorts have been increased by a large order of magnitude—especially risk framed by expectations over the long run."

-Peter Bernstein¹

"Hope for the best. Expect the worst. Life is a play. We're unrehearsed."

-Mel Brooks

Time diversification

Over the past 20 years or so there has been a debate as to whether time reduces or "diversifies" risk or whether risk is amplified when the investment horizon is lengthened; sometimes referred to as the *time diversification controversy*. We believe the consensus on the topic is the former, i.e. the idea that time indeed diversifies risk. The premise of investing for the long run in a long-only buy-and-hold fashion is that short term volatility is ironed out in the long run. This is true if risk is defined as volatility (annualised standard deviation of returns). The logic is that if one has an investment horizon of 25 years or longer, one has the time to sit it out, i.e. can recover from large dislocations. In addition, equities have a higher probability of outperforming government bonds over 25 years when compared to outperformance probability over one year. Many institutional investors have the financial stability and liquidity to handle a downturn in the market even with a large allocation to long-only equities. For these plans, any amount not invested in equities simply reduces the long-term growth of assets with no offsetting benefit.

We believe time amplifies risk. It is true that the annual average rate of return has a smaller standard deviation for a longer time horizon. However, it is also true that the *uncertainty* compounds over a greater number of years. Unfortunately, this latter effect dominates in the sense that the total return becomes more uncertain the longer the investment horizon. The logic here is that over the longer term,

"The long run is a misleading guide to current affairs. Economists set themselves too easy, too useless a task if in the tempestuous seasons they only tell us that when the storm is past the ocean will be flat."

- John Maynard Keynes

The long term is nothing else than many short term periods adjoined together

^{1 &}quot;Throw Out The Rulebook!" Interview with Peter Bernstein, welling@weeden, Vol. 5, Issue 4, 28 February 2003

more bad things can happen and the probability of failure (i.e., non-survival) is higher. The probability, for example, of San Francisco being wiped out by a large earthquake over the next 100 years is much larger than over the next 100 days. If accidents happen in the short term, one might not live long enough to experience the long term. After all, the *long term* is nothing else than many *short term* periods adjoined together.

Chart 15 is a drawdown chart (showing loss as percentage of previous all-time high) and shows a Japanese equity and a bond index with two possible future scenarios for equities. The first dotted line assumes the Nikkei 225 starts compounding at 6% per year. In such a scenario the index would reach its all-time-high from December 1989 around the year 2031. (This means a 43-year old who entered the market when he was 22 will reach breakeven when he's 64; assuming the index starts compounding at 6% that is). A discussion on the *equity risk premium* is beyond the scope of this publication. Our point here is that one might not live long enough to pick it up. (Keynes was arguably onto something re the long run.)

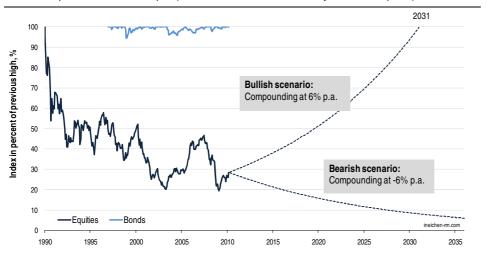


Chart 15: Equities and bonds in Japan (Jan 1990 - Mar 2010 with two trajectories for equities)

Source: IR&M, Bloomberg

Equities: Nikkei 225 shown in percent of all-time-high of 38,915.87 from 29 December 1989 based on monthly data (Jan 1990 - Mar 2010). Trajectories are based on annual compounding of 6% and -6%. Bonds: Bank of America Merrill Lynch Japan Broad Market Index (Jan 1997 – Mar 2010).

Equities are expected to rise in the long run, i.e. time is supposed to diversify/reduce risk. However, from market open on 4 January 1990 to 26 March 2010 the Nikkei compounded at an annual rate of -6.0%. That's the trend.¹ The second trajectory in Chart 15 shows the index assuming compounding continues at -6% per year. In theory, buyers should come in when there are valuation differences. In practice, the theory doesn't seem to hold up very well. We do acknowledge that mean reversion is one of the most powerful concepts in finance (dead cats nearly always bounce). However, it doesn't always seem to work. There is uncertainty in that regard.

Many "western" societies are aging. This, we believe, is affecting everything. Japan might be "ahead of the curve." The fertility rate in Japan is low and falling (1.44 in 2000 vs. 1.27 in 2008)²; both men and women are dropping out of the

What if dead cats stop bouncing?

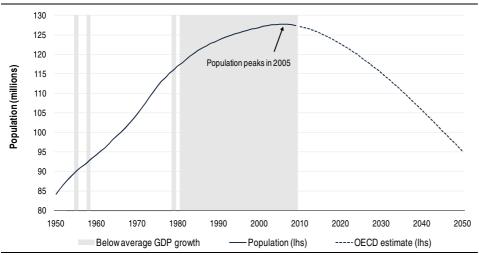
¹ If a bullish trend is defined as a rising 200-day moving average then the trend of the Nikkei 225 is up, not down.

² From CIA World Factbook. World TFR (total fertility rate) fell from 2.80 in 2000 to 2.61 in 2008.

marriage pool, albeit for different reasons; immigration is restrictive, to say the least, and Japan's elderly population, aged 65 or older, could double from 22% in 2009 to 40% in 2055 according to one estimate.

Chart 16 shows population growth in Japan. The trend—according to at least one estimate—is down. Something quite extraordinary needs to happen for this trend to reverse. The rate of change has been negative throughout the two lost decades and there is of course causality between changing demographics and (sup-par) economic growth.¹ One question that arises from this is whether Japan's society is in perpetual decline and whether Europe is just a decade or two behind. Note that the US has a fertility rate of 2.1 births per woman which is the rate that, ceteris paribus, keeps population stable. The double whammy of an aging and declining population is therefore more likely to apply to Europe than it is to the US.

Chart 16: Population growth in Japan



Source: IR&M, Thomason Financial, Bloomberg, OECD

Value investors have been pointing out for years that the Japanese stock market is cheap. Many stocks have been trading below book value for years. However, stocks (as well as everything else for that matter) only go up if the buyers are more powerful than the sellers. If there are no buyers, share prices do not rise, irrespective of their valuation or the "sentiment" among investors.² This lack of buying could be due to long-term changes in demography. We use this as an argument for what we earlier called "active risk management". Some ideas based on long-held beliefs simply might not work anymore if the regime—brought upon us through regulation³ or demographics or anything else—changes in a material way. As Keynes asked rhetorically: "When circumstances change, I change my view. What do you do?"Active risk management requires an open (and pragmatic)

-Bertrand Russell

[&]quot;In all affairs it's a healthy thing now and then to hang a question mark on the things you have long taken for granted."

¹ See Ineichen (2009a) or, for more detail, insight, colour, and perspective, Magnus (2008).

² We're simplifying a bit. While the Japanese market is cheap in relation to book values, the returns on capital are often very low, and the market therefore can be perceived as *fundamentally* unattractive.

³ Regulatory requirements regarding how much capital needs to be set aside for holding certain assets, for example, can be a "game changer". Solvency II, for example, which is expected to come into effect in October 2012, will require European Union-based insurance companies to hold capital against certain risks. Under the 'equity risk sub-module' that insurance companies will consider in calculating capital levels, hedge funds are included within a 'bucket' of risky investments, which would require insurance companies to hold capital against such investments which is disproportionately high, compared to the actual market risk. If Solvency II is implemented in its current draft form this means it is likely that insurance companies will reduce hedge fund investment after October 2012, at the latest. We believe it is already affecting current demand and decision making.

Box 2: How to finance pensions for the long term

Many societies have in their pension legislation a retirement at of 65 or a figure very close to 65. Where does this number originate?

We believe today's pension idea can be traced to Otto von Bismarck (1815-1898) who in 1881 recommended to the then emperor, Wilhelm the Great (1797-1888), to introduce worker friendly laws to protect workers from illness, accident, disability and old age. The "Old age and disability insurance bill" (Gesetz zur Alters- und Invaliditätsversicherung) was passed on 24 May 1889 and became law on 1 January 1891. The scheme was funded by taxing workers and was designed to provide a pension for workers who reached the age of 70 and had contributed for 30 years. Life expectancy then was around 40-45 years. The contribution was 1.7% and was shared equally between employer and employee. Ideologically the idea of saving *during* work-years for *after* work-years goes back even further, at least as far back to Frederick the Great (1712-1786) who in 1775 created a scheme for old age and widows. Some cooperative arrangements of a similar nature of some guilds can even be traced back to the Middle Ages.

In the midst of WWI, probably with the prospect of ever reaching 70 being rather slim, Kaiser Wilhelm II reduced the retirement age from 70 to 65 in 1916. And there it is to this day—nearly 100 years later—with new-born life expectancy around 80.

The gap between life expectancy and retirement age of 65 therefore was around -15 years in 1916, assuming life expectancy of 50. Today this gap is closer to +15 years, i.e. a difference of 30 years. One possible solution to funding issues is to restore the old gap of -15 years, i.e. increase retirement age to 95.

mind to "change". So the whole idea of the equity risk premium and the idea that shares always go up in the long term could be regime specific, i.e. a function of population growth. Declining and aging populations (the "known"), potentially, could have an appetite for bonds, rather than stocks. Japan just could be a decade or two ahead of the curve in that regard; with the continuation and/or end of this trend being the "unknown". Box 2 contains a "suggestion" as to how the financing of pensions can be secured for many decades into the future.

Changing demographics is one potential "game changer". Another one is geopolitical changes. Fareed Zakaria (2008) argued that the "post-American world" is not necessarily a decline of the United States but "the rise of the rest". Innovation and wealth are not as concentrated in the West anymore as it once was. The "rest" are catching up. The economic growth of the "rest" is slowly generating a new global landscape where the power is shifting too. Even if China and India never get past middle-income status, they are likely to be the secondand third largest economies in the world for much of the twenty-first century. It is not that the US is becoming less powerful, it is the rest becoming more powerful economically and politically.

The "rise of the rest" or the relationship between the United States and China could be such a geopolitical game changer. One historical precedent that has been gaining traction lately is the US taking over from the British, economically in the 19th century, politically after WWII. The historical parallel is that the British Empire owed the United States a lot of money after WWII. In the Suez Crisis the British weren't able to do what the British wanted, but what Eisenhower told them to do, i.e. withdraw. The British government faced political and economic pressure somewhat along the lines of "he who pays the piper calls the tune." As Jim Rogers put it:

-Niall Ferguson¹

"He who pays the piper calls the tune."

—Saying

[&]quot;Despite the investment of over a billion pounds of Western funds, the promise of Victorian globalization went largely unfulfilled in most of Asia, leaving a legacy of bitterness towards what is still remembered to this day as colonial exploitation."

¹ Ferguson (2008), p. 287

"Throughout history, the center of the world has shifted to where the capital is, where the assets are. You don't see any period in history where things are shifting to the debtors, and America's the largest debtor nation in the history of the world. Unless something's different this time, unless the world's changed very very dramatically, the center of the influence, the center of the power, the center of the earth, the center of the globe, is going to be shifting towards Asia, because that's where all the money is. Have you ever heard of anybody saying, 'Let's go to where all of the debtors are'? It just doesn't happen that way."

In Ineichen (2009a) we called this "Reverse Pax Americana".

Bottom line

The practical relevance for investors is that "things" do indeed change; at a certain level, "it" is always different. This means assessing risk of investment opportunities must be an active approach, not a passive one. In a world that is changing, it does not make much sense to invest in a fashion that worked well in the past. What worked in the past could be regime-specific. This is particularly important for strategic asset allocation. As the regime changes, so do the opportunities and the strategies and approaches to unlock value and survive whatever stress the markets put upon us. And stress markets will be putting upon us sooner or later and every now and then, for that we are sure. As every mariner knows, a quiet sea is just a storm in the making.

"The key is not to predict the future, but to be prepared for it."

-Pericles

Below we introduce—tongue-partially-in-cheek—PPMPT (post-post-modern portfolio theory) that takes all of the above into account. Note that PMPT (post-modern portfolio theory) already exists. Both PMPT and MPT propose how rational investors should use an optimizer to construct their portfolios. PPMPT doesn't require an "optimizer" and assumes investors are not rational but human and implicitly recommends binning all science that assumes investors are rational and not human. The funny thing is, of course, assuming humans are human, and not rational, is actually more rational.

"Seriousness is the only refuge of the shallow."

—Oscar Wilde

¹ Interview with Time magazine, 28 April 2009

Post-post-modern portfolio theory (PPMPT)

An alternative to mean-variance optimization could be the following circular threestep process for asset allocation:

- 1. Invest only in investment choices you understand.
- 2. Determine allocation based on idiosyncratic preferences and constraints¹, and rebalance portfolio regularly.
- 3. Adapt to change, learn continuously, seek new sources of returns, and reevaluate allocation regularly. Go to 1.

This simple approach would be consistent with four pieces of wisdom we value above all else:

- 1. "Risk comes from not knowing what you're doing." (Warren Buffett)
- 2. "Investment is by nature not an exact science." (Benjamin Graham)
- 3. "A safe investment is an investment whose dangers are not at that moment apparent." (Lord Bauer, economic advisor to Margret Thatcher)
- 4. "The essence of investment management is the management of risks, not the management of returns." (Benjamin Graham)

We could argue that to some extent this three-stage process is already partially in place in practice and that these four nuggets of wisdom were actually accounted for when investing in hedge funds. Many institutional investors—sort of—ignored the result from a mean-variance optimizer when starting to invest in hedge funds: The first allocation was small despite any optimizer suggesting an allocation that was huge. This first investment was the institutional investor's proverbial toe dipped in the water after moving up the learning curve and getting comfortable with the "new" source of return

Below we add some colour to these four nuggets of wisdom.

Understanding: Corporate governance structures require the agent to have a certain level of understanding; the "prudent expert" rule is one example of this idea. This is a good thing. However, it also implies that "alternative investments" is not for everyone. Note that there is anecdotal evidence of both sophisticated as well as unsophisticated investors liquidating illiquid alternative investments in an unorderly fashion with the most inopportune timing. With "unsophisticated" we mean an investor whereby laypeople are part of the strategic asset allocation decision making process. A pension fund for example can have highly sophisticated investment professionals running the fund but if the board with its trustees doesn't *understand* what they're doing, it is the board that is the weakest link. We remember one UK pension fund manager explaining to us about ten years ago (about five minutes before we were to address the board and trustees on "hedge funds") that on his board there were trustees who needed the terms

"The business schools reward difficult complex behaviour more than simple behaviour, but simple behaviour is more effective."

-Warren Buffett

"If you can't explain it simply, you don't understand it well enough."

—Albert Einstein

-Paul Ormerod

[&]quot;Species, people, firms, governments are all complex entities that must survive in dynamic environments which evolve over time. Their ability to understand such environments is inherently limited."

¹ Once the "rational mean-variance optimizing" investor puts all his constraints into the optimizer, the optimizer often suggests a portfolio that pretty much resembles the investor's pre-optimization intuition and preferences anyway.

"equities" and "bonds" explained to them ahead of every triennial board meeting. Surely things have improved since then.

Science: Harry Markowitz apparently had chosen a 50/50 allocation between equities and bonds in his retirement account despite knowing, in theory, that he should have estimated the returns and volatilities and the (historical) co-variances of the asset classes, determine the efficient frontier and invest accordingly. Why many investors rely on unstable historical returns, unstable volatilities and very unstable correlation coefficients when making investment decisions, we do not know. (Well we do know: it's the scientific method of doing these things.) Mr. Markowitz apparently knew that his theories are theories and are better left as such. However, the investment world as well as the accounting-rules-and-capital-requirement-determining world has put this theory into practice. Who can safely say that a 50/50 allocation to equities and bonds—essentially a strategy of *least regret*—is less intelligent than a 70/30 or 30/70 allocation for the next ten years?

Uncertainty: It is uncertainty that matters, not risk. See Box 3. Long-term investors should get compensated for bearing uncertainty, not from bearing some arbitrary measure of "risk" such as volatility. Kenneth Griffin on managing risk and some of the softer factors:

"Nothing is constant. Nothing is the way it's always been. So what I find is that people who are really good at this [managing risk], have great intuition. They have great instinct. Their gut actually tells them something. The mathematics are important because they demonstrate you understand the problem, but ultimately the decision about whether or not to take a given risk, I think is really a human judgment call in every sense of the word."³

Risk management: Hubbard's (2009) short definition of risk management is: "Being smart about taking chances," as already mentioned on page 28. We believe that a lot that has been written in the field of risk <u>management</u> is focused on risk <u>measurement</u>. The typical method (factor and style analysis) is to model historical time series and come up with some risk factors that explain some of the historical variation in returns. While this is all very interesting, it only covers a small part of the complexities of risk management. Why?

Our preferred definition of "risk" is:4

Risk = exposure to change⁵

— Edward B. Titchener (1867-1927), English psychologist

"When one admits that nothing is certain one must, I think, also admit that some things are much more nearly certain than others."

- Bertrand Russell

"Since the mathematicians have invaded the theory of relativity, I do not understand it myself anymore."

-Albert Einstein

[&]quot;Common sense is the very antipodes of science."

¹ We weren't able to source this story as we have forgotten where we read it first. However, the story can easily be verified via google.

² Note here that there currently is a debate in the academic journals that come our way as to whether an equally weighted portfolio is superior to an optimized portfolio or not. For the purpose of our line of argument, it is sufficient to *know* that there is a debate. The fact that there is a debate tells us that we cannot really *know* for sure whether a 50/50 allocation makes sense or not? Our 50/50 statement, therefore, is naive (and to MPT aficionados potentially vulgar) but not as naive as it initially sounds. The funny thing is, the more we think about it, the more sense it actually makes.

³ Picked up in Niall Fergusons' TV adaption of "Ascent of Money," Channel 4 (UK), Part 4, 8 December 2008

⁴ There is of course more than one definition of risk. Rahl (2003) for example defines risk as "the chance of an unwanted outcome." This definition implies that the two sides of a return distribution (or, more importantly, the investors' utility thereof) are different and that the risk management process should be structured accordingly.

⁵ Originally we've got this definition from O'Connor Associates in the 1980s.

Box 3: Difference between risk and uncertainty

In finance we tend to distinguish between "risk" and "uncertainty" also known as Knightian Uncertainty, named after US economist Frank Knight (1885-1972). Risk describes situations in which an explicit probability distribution of outcomes can be calculated, perhaps on the basis of actuarial data. In contrast, uncertainty describes situations in which probabilities are unknown, and more importantly, where they are impossible to calculate with any confidence due to the uniqueness or specificity of the situation.

When discussing matters related to risk, we assume we know the distribution from which destiny will pick future events (most often a normal distribution is assumed). This is the reason why financial textbooks always discuss coin flipping games or examples with dice or roulette tables. In these instances, the probabilities can be exactly calculated. For instance the probability of throwing six sixes in a row with an even dice can be precisely calculated whereas the probability of spotting an alien walking down 5th Avenue cannot (despite Sting's efforts). It goes without saying that for all practical purposes, it is uncertainty that matters, not risk. We can apply rigorous quantitative analysis to matters related to risk, but not uncertainty. To deal with uncertainty requires thought and, most likely, common sense. As John Kenneth Galbraith put it: "One of the greatest pieces of economic wisdom is to know what you do not know."

Knight argued that profits should be defined as the reward for bearing uncertainty.

This definition is very simple and somewhat unscientific but pragmatic and very powerful as it doesn't exclude *uncertainty*. Risk measurement deals with the objective part; what is referred to as "risk" in Box 3. The risk measurer either calculates bygone risk factors, simulates scenarios or stress tests portfolios based on knowledge available today according to an objective (and statistically robust) set of rules. Real risk (as in uncertainty), however, has to do with what we do not know today. More precisely, risk is exposure to unexpected change that could result in a large loss or non-survival. By definition, we cannot measure what we do not know. We are free to assume any probability distribution, but that does not imply an objective assessment of risk. In other words, risk measurement, on the other hand, is more quantitative and rule-based, and has a rear mirror view by definition. As the late Peter Bernstein put it in the last chapter of *Against the Gods*:

"Nothing is more soothing or more persuasive than the computer screen, with its imposing arrays of numbers, glowing colors, and elegantly structured graphs. As we stare at the passing show, we become so absorbed that we tend to forget that the computer only answers questions; it does not ask them. Whenever we ignore that truth, the computer supports us in our conceptual errors. Those who live only by the numbers may find that the computer has simply replaced the oracles to whom people resorted in ancient times for guidance in risk management and decision-making."²

—Frank Knight

"Visibility is never what we think it is. Uncertainty is a constant, not a variable, and we never know the future—so in the long run is inescapably a frail reed to lean on."

-Peter Bernstein¹

[&]quot;All science is static in the sense that it describes the unchanging aspects of things."

¹ "Throw Out The Rulebook!" Interview with Peter Bernstein, welling@weeden, Vol. 5, Issue 4, 28 February 2003

² From Bernstein (1996), p. 336

Practical considerations

The practical implication of this three-step approach of PPMPT would be that the less sophisticated institutional investor would have a 50/50 allocation to equities and bonds for the part of the portfolio that is not held in cash. The advantage would be the simplicity and the layperson's good-night sleep. The disadvantage would be that it isn't a very good portfolio. Speculating a bit, arguably tongue-firmly-in-cheek, it is possible that the less sophisticated investor has only two bad options: (1) A by today's standards poorly balanced portfolio (of which 50/50 is just one example; albeit an intuitive one), or (2) copying more sophisticated investors thereby not knowing what they're doing, being last to invest in the latest idea, and quite likely being exposed to the third and fourth quartile product providers. If this argument has at least some merit, option (1) would be the better of the two bad options and therefore be more intelligent as well as more prudent. This portfolio would have the added benefit that its implementation and running costs are virtually zero.

"To invest successfully over a lifetime does not require a stratospheric IQ, unusual business insight, or inside information. What's needed is a sound intellectual framework for decisions and the ability to keep emotions from corroding that framework."

-Warren Buffett

This is potentially a step too far in our current simplicity-is-the-ultimate-sophistication mode. However, wouldn't it be intellectually more honest for an investor who knows that its set-up is suboptimal and who knows that it is *not* connected to and *not* in the information loop of the prime providers to seek a *simple* strategy that is *cheap* to implement? It is possible that some institutional investors are best advised to go the route that resembles the asset allocation of the *Yale Endowment fund*. However, we doubt that such an equity and alternatives heavy portfolio works for all. Even ivy-league endowment funds have the occasional riff with their stakeholders.

"Real knowledge is to know the extent of one's ignorance."

-Confucius

The returns for Yale Endowment fund for 2005-2009 were 22.3%, 22.9%, 28.0%, 4.5%, and -24.6%², thus compounding at 8.7% over this five year period. The allocation range of "Absolute Return" strategies was between 23.3% and 25.7%, i.e. relatively constant. Some market participants have argued that Yale's equity- and alternatives heavy portfolio approach has failed because of the negative 2009 return (fiscal year is from July 08 to June 09). We don't think so. The 20-year return was 13.4% which, among institutional money management, must be among the best (and compares very well with the long-term returns shown in Chart 7 on page 27). This stellar performance is a function of many things, not just strategic asset allocation, but also proximity to investment talent and manager selection skill and, to paraphrase Ken Griffin from page 49, great intuition, great instinct, and a talking gut.

"I've been imitated so well, I've heard people copy my mistakes."

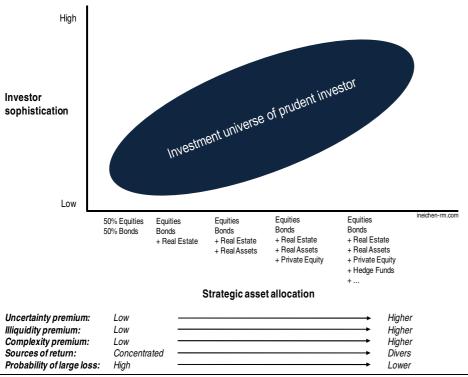
— Jimi Hendrix

We've tried to illustrate our thoughts in Chart 17. The shown trade-off gives an incentive for all decision makers to continuously move up the learning curve. We even believe there is a mini trend of professionalizing the decision-making process of the institutional investor at the strategy level. Note that with *real estate* we mean real estate and land and with *real assets* we mean commodities and infrastructure. (And yes, we are aware that asset classes can be classified differently.)

¹ In areas where real estate is not an "alternative investment" this would mean one third each in equities, bonds and real estate.

² http://www.yale.edu/investments/

Chart 17: Investor sophistication versus uncertainty premium



Source: Ineichen Research and Management

The further to the right one goes in the chart, the less appropriate is mean-variance optimization. The ideal case on the right hand side is a well balanced portfolio that is regularly rebalanced (because mean reversion is such a powerful phenomenon) and reasonably well understood by all who carry responsibility. Uncertainty, illiquidity, and complexity premiums should be higher for such a portfolio. The sources of returns are obviously more divers and the probability of a large loss, therefore, should be smaller.

At the beginning of the last decade Peter Bernstein challenged the investment community by appealing to investors to rethink strategic asset allocation and the static policy portfolio which in the US was around 60:40 equities versus bonds and 70:30 in the UK with allocations to real assets and alternatives being non-existent or negligible. The assertions were provocative because the status quo, i.e. equity-heavy long-only portfolios, worked so well for so long, and the interpretation from Bernstein's remarks were that he—rightly or wrongly—advocated *market timing* which most investment professional believe doesn't work on a consistent basis. (Note that active risk management is not the same as market timing.) In an interview in 2003 he answered the question—probably with Keynes' work somewhere at the back of his mind—whether "institutions should trash their strategic asset allocation policies" as follows:

"Yes, if you consider that the purpose of a policy portfolio has been to establish an asset allocation structure that would remain in place until circumstances changed so fundamentally that a revision in the policy portfolio

— Alfred North Whitehead (1891-1947), English mathematician and philosopher

"My point is that we've reached a funny position where the long run doesn't work. Where long-run evidence doesn't fit circumstances as they are today."

—Peter Bernstein in 2003²

[&]quot;Seek simplicity and distrust it."

¹ The problem of "all who have *no* responsibility" intervening and telling those *with* responsibility what to do, is an interesting one; albeit beyond the scope of this report.

² "Throw Out The Rulebook!" Interview with Peter Bernstein, welling@weeden, Vol. 5, Issue 4, 28 February 2003

would be necessary. The keystone supporting the entire strategy was the long run "1"

Rob Arnott and Peter Bernstein argued in 2002 that some of the axioms supporting the case for equities as long-term investments are founded on some debatable assumptions and long-term return expectations were most likely too high; 8% real return and a 5% equity risk premium being the standard assumptions in the US at the time. Their paper was used as an argument for diversifying what was arguably a very concentrated and poorly balanced (policy) portfolio. Moving from a poorly designed portfolio to an improved and better balanced one is not market timing by any stretch of the imagination. Improving portfolio construction was wise then, and it still is. The funny thing is, of course, that during the 2000s the portfolio with the *lower risk* (less market concentration) has been the portfolio with the *higher return*.

"The recurring pattern of history is that exceptionally poor or exceptionally rapid economic growth is never sustained for long." —Rob Arnott and Peter Bernstein (2002)²

Bottom line

We close this line of argument with a comment by Peter Bernstein on the change of asset allocation, taken from an interview in 2003.

"I am suggesting that we have to begin by focusing on the meaning of the long run—think about it differently in the post-bubble world. That means that our approach to investing's fundamental problem, asset allocation, has to change. The thrust of my argument is that we are going to have to learn to live without the crutch of things like policy portfolios—because the conditions that justified their existence for so long have been shattered."

These words still seem wise today; after the bubble that burst six years after the bubble that Mr. Bernstein was referring to.

This is it from our side. Let the search for *permanent capital* commence.

¹ Ibid

² The conclusions from that award-winning paper are still worth a read today, especially in the light of these two gentlemen getting it uncomfortably right.

³ "Throw Out The Rulebook!" Interview with Peter Bernstein, welling@weeden, Vol. 5, Issue 4, 28 February 2003

In search of permanent capital

By Joe Taussig

"Twas the best of times, 'twas the worst of times. 'Twas the age of wisdom, 'twas the age of foolishness."

—Charles Dickens

A tale of two capital structures¹

Charles Dickens' opening words from "A Tale of Two Cities" are appropriate for describing the years leading up to 2008 and the last two years. Just as Dickens compared London and Paris at the time of the French Revolution, these words are also appropriate as we compare two capital structures and their implications for hedge funds ("HFs"), funds of hedge funds ("FoHFs"), and family offices.

The way hedge funds go about their business is far from perfect

Our starting point is the evolution of two private partnerships in financial services over the last 40 years and 10 years respectively, and the impact of their metamorphosis on their managements and investors. Afterwards, we will extrapolate lessons learned from their experiences and compare the most common capital structure for HFs, FoHFs, and family offices with these two alternatives, either of which should provide investors relative to their fund or partnership structures with: (1) significantly better returns without proportionate increases in risk; and (2) equal or vastly superior liquidity.

The alpha is in the structure

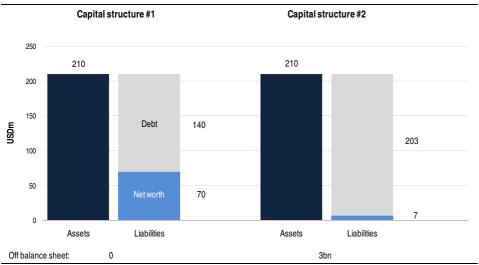
Since the managers of HFs, FoHFs, and family offices are also investors, the investor benefits alone should be compelling enough to thoroughly research these two alternatives. However, most managers who implement these structures only do so because the structures also: (1) greatly increase assets under management ("AuMs") without the painful exercise of having to sell their funds to one investor at a time; (2) provide the stability of permanent capital without incurring a discount to NAV; and (3) provide a vehicle to monetize the fund manager or family office that will usually be far superior to selling some or all of the fund manager or family office to a large financial institution or taking it public through an IPO, without eliminating any of the options for selling some or all or going public.

Potential benefits are worth an effort

Please examine the following financial services capital structure in Exhibit 1. Capital structure #1 is from 40 years ago. The CIO had previously delivered returns of approximately 30% per year for more than ten years. Capital structure #2 is from ten years ago. The notional value of its off balance sheet derivatives was \$3bn.

¹ This article is a strongly shortened version from an unpublished manuscript.

Exhibit 1: Two capital structures



Source: Taussig Capital

Notice that the magnitude of assets is identical in both capital structures. The differences are in the liabilities and equity accounts, as well as the off balance sheet contracts. There are some questions to consider:

- Is one of the capital structures a hedge fund?
- Are you, the investor, comfortable with this capital structure?
- Is it merely leveraged 29 to 1 or is it really 458 to 1 because of the off-balance sheet notional?

The CEO and CIO of capital structure #1 say it is an insurance company. It is regulated by a number of state insurance commissioners in the U.S. The SEC does not consider it to be an investment company under the 40 Act. The IRS taxes it like an insurer. Under the duck theory, it must be an insurer, although we would argue that it is still a hedge fund imbedded in an insurer.

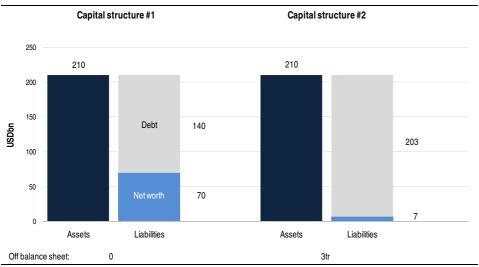
The leadership of capital structure #2 says it is a commercial bank. It is regulated by the Fed, the OCC, and the FDIC in the U.S. The SEC does not consider it to be an investment company. The IRS concurs and taxes it like a bank, even though interest income is miniscule as a percentage of revenues. It is obviously a commercial bank and not a duck.

As Robert Redford said to Paul Newman, "Who are those guys, Butch?" Any ideas? Take a look at these capital structures again in the context of their "true" businesses in Exhibit 2. Note that the vertical axis changed from million to billion and the off balance sheet derivatives in capital structure #2 from billion to trillion.

"If it walks like a duck, quacks like a duck, looks like a duck, it must be a duck."

—"Duck theory"

Exhibit 2: Two capital structures, revised



Source: Taussig Capital

By 2002, capital structure #1 had grown 1,000 fold, i.e. the millions became billions. While a 1,000 fold increase in 33 years (1969-2002) is more than commendable, \$70 billion (net worth of structure #2 in Exhibit 2) is somewhat less than \$400 billion that 30% returns would have produced, so the obvious conclusion is that the CIO failed to match the historic 30% investment target.

The difference between \$70bn and \$400bn is arguably rather large

Failed to match it he did. The CIO exceeded it. In actuality, he produced ROEs of 32%, which should have compounded to \$660 billion by 2002 and \$4.6 trillion today (assuming that returns do not diminish with size – of course, they do diminish with size and have diminished with size – earlier years out performed the most recent 10 years by a large margin) instead of \$400 billion in 2002 and \$2.5 trillion today.

Unmasked

Capital structure #1 is Berkshire Hathaway. The reason that 32% returns on equity failed to translate into \$660 billion in 2002 and \$4.6 trillion today, is that Berkshire is taxed on its earnings at both the federal and state levels. Asset managers only report pre-tax returns, so the CIO delivered 32% on equity (12% on assets – equity and two increments of reserves minus 2% for costs of insurance ("COI") for each increment of reserves). But because of taxes, Berkshire the insurer "only" compounded at 20.3%.

Even then, its book value is only \$120 billion, while its market cap is \$155 billion. This difference is explained by the premium to book value of 29%. If Berkshire had been based in Bermuda, rather than Omaha, and enjoyed the same premium to book value, it would theoretically be worth nearly \$6 trillion.

In a 1966 article on A.W. Jones, Carol Loomis called private investment partnerships "hedge-funds." The Buffett Partnership was identified in the article as one of these vehicles. Today, Carol Loomis of Forbes edits Buffett's annual letters, which would make it difficult for Buffett to deny he was one of the ancestors of the 2 and 20 crowd. Three years later, the Buffett Partnership

[&]quot;Every day is exciting to us; no wonder we tap-dance to work."

—Warren Buffett

¹ A.W. Jones referred to his fund as a "hedged" fund.

morphed into both a reinsurer and bank (as reflected in capital structure #1, Exhibit 1 on page 55).

Capital structure #2 is Goldman Sachs.¹ We have divided the numbers in Exhibit 1 by a factor of 1,000 mainly not to scare anyone. Not unlike Berkshire, Goldman Sachs metamorphosed from being a partnership into a publicly traded corporation (as a broker-dealer), and more recently it became a commercial bank. Capital structure #2 depicts Goldman Sachs just prior to converting from its partnership structure.

e nger. If o they ctures

Some market participants have always viewed the investment banking model as an over-levered hedge fund combined with conflicts of interest

Berkshire Hathaway and Goldman Sachs. Two companies run by some of the smartest people on the planet. Each was a partnership in its past, but no longer. If the partnership structure was so superior, why did they abandon it? What do they know that HF, FoHF, and family office managers who are in partnership structures do not know? More importantly, what can HFs, FoHFs, and family offices learn from Berkshire Hathaway and Goldman Sachs' metamorphosis and apply in the future for the benefit of their investors and themselves?

Structural alpha

The real secret to Buffett's success

We are huge fans of Warren Buffett. This sentiment should always be kept in mind as this article is being read. However, no one is perfect and there is room for improvement in everyone, including Buffett. Thus, this paper is long on critique. But critique in the context of how one of the greatest performances in the history of business (if not the greatest) was achieved, how it might have been improved, and the application of those lessons to HFs, FoHFs, and family offices and their investors.

Buffett the hedge fund manager

To the extent that a hedge fund is defined as a non-traditional investment strategy that actively buys and sells negotiable instruments (as opposed to private equity or real estate), seeks to generate alpha, absolute returns, and asymmetric returns, and primarily rewards its manager with a percentage of the profits, then it is arguable that the best known and most successful person to have ever run a hedge fund for more than 10 years is Warren Buffett.

Buffett started a series of private investment partnerships in 1956 with \$700 of his own money and less than \$100,000 from friends and family. He worked from his bedroom in his parents' house. Focusing on publicly traded securities, he always beat the benchmarks (alpha), never had a down year (absolute returns), and emphasized taking risks only when potential rewards more than justified them (asymmetric returns). He charged no management fee and a performance fee of 25% of profits in excess of 6%. God forbid, he even took short positions. The partnerships eventually merged into one called the Buffett Partnership.

-Warren Buffett

[&]quot;Whether we're talking about socks or stocks, I like buying quality merchandise when it is marked down."

¹ Stop press: US regulators announced the filing of a civil fraud case against Goldman Sachs on Friday 16 April 2010. The ideas and remarks in the article are not affected materially by the filing. The numbers herein are based on year-end 2009. Note that the continuous rumors of Goldman Sachs wanting to morph into a hedge fund structure also do not affect the line of argument presented in this article.

13 years after starting, Buffett's fund had produced returns of approximately 30% since inception (net of fees), was roughly \$100 million in size, and Buffett's share was \$25 million. However, by 1969, roughly 50% of the fund consisted of a 70% stake in a publicly traded textile company: Berkshire Hathaway.

Had Buffett stumbled prior to 1969, he would have likely had redemptions, would have been unable to liquidate Berkshire in an orderly fashion, causing more losses and further redemptions, and might have suffered the same fate as Tiger 30 years later. If today's hedge fund manager had 50% of his fund in an illiquid 70% stake in a publicly traded company, and the tidal wave of 2008 redemptions washed over him, he would be marked for life.

In the event of large drawdowns in his partnership structure, Buffett too would have faced redemptions

By any standard, Buffett was a very, very, very successful hedge fund manager. Then he quit and went into insurance, reinsurance, and banking. From here on out, insurance and reinsurance will often be collectively referred to as (re)insurance. To do this, Buffett liquidated the Buffett Partnership and made a distribution in kind (which is tax free). Through horse trading and the liquidation of other positions, he increased his indirect stake in Berkshire from about 17.5% at the time the partnership was dissolved to a direct stake of 41%.

Buffett was a successful hedge fund manager and then quit

Prior to the dissolution of the Buffett Partnership, Berkshire had acquired insurance, reinsurance, and banking businesses. Because of the interests in the insurer, reinsurer, and bank and because his 41% stake (and the other 29% held by his former partners) gave Buffett control of Berkshire, he was able to continue to invest in publicly traded securities without being deemed to be a closed end fund and running afoul of the Investment Company Act of 1940 (11 years later, regulators made him give up either (re)insurance or banking and he sold off Illinois National Bank).

At the time that he sold Illinois National Bank, banks in Illinois could not have branches (that is why First Chicago and Continental Illinois evolved into international powerhouses out of major high rises) and banks in general could not cross county lines in some cases and state lines in other cases. As such, banking as a lone structure would have been too confining and keeping the (re)insurer was a no-brainer.

Regulatory environment dictated to keep the (re)insurer rather than the bank

Today, banks can operate across state lines, even globally. However, if Buffett were given the choice today, we believe he would still choose (re)insurance. While its publicly traded portfolio represents roughly 60% of Berkshire's net worth, Buffett has purchased more than 80 whole companies and could not have done so if Berkshire were a bank. As such, we are relatively confident that if he had to choose (re)insurance or banking today, he would still choose (re)insurance.

(Re) insurance potentially still a nobrainer

Why did he quit?

The official story is that his investors had come to expect a level of performance that he did not feel he could continue to match in the future. As such, he felt that he would be letting them down if he tried to continue as in the past and hated the pressure of having to meet their expectations and perform at a level that he no longer thought was achievable. Furthermore, as they grew in number and the fund grew in size, the investors increasingly impacted his time.

Investors can be time consuming

There is little doubt in our mind that performance pressure was a major factor in his decision and quite possibly the only factor. However, the decision had several other salutary benefits and it is difficult to imagine that a man as savvy as Buffett was unaware of any (or even all) of these other benefits.

The first benefit was that it removed him from having to deal with his investors as regularly as he had to do as an investment partnership. In fact, because Berkshire was a public company, he could no longer communicate for legal reasons as the partnership investors had come to expect in the past.

As we pointed out earlier, at the time of the transition, the Buffett Partnership had roughly 50% of its assets in one stock – Berkshire Hathaway. This position represented roughly 70% of Berkshire's shares. As long as the fund kept growing through a combination of performance and new AuMs, this was a manageable situation. But what if 1969 were 2008? Buffett suffered losses as did most everyone else in 2008 and if his performance in 1969 had also suffered in the same manner as it did in 2008, he would likely have had net redemptions as did most of the hedge fund industry. With 50% of assets owning a 70% position in a single stock, it could have been very ugly. Thus, by morphing into the (re)insurance and banking businesses, Buffett solved his redemption risk and simultaneously achieved "permanent capital". It is difficult to imagine that he was unaware of this outcome, but we have never seen it mentioned. Then again, drawing attention to this possibility might have triggered a sequence of events that he feared or should have feared.

Access to management of public company is more difficult than access to management of partnership

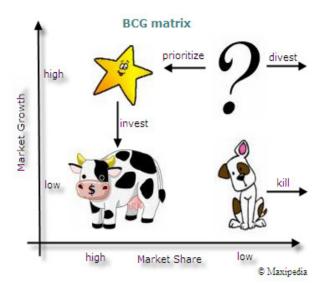
Buffett created permanent capital by morphing into (re)insurance and banking

On the surface, the transition from the hedge fund to Berkshire Hathaway was a transition from a partnership to a holding company. At the time, one of the seminal business theories was espoused by Bruce Henderson, the founder of the Boston Consulting Group ("BCG"). Essentially, Henderson's concept (today known as *BCG Matrix* or *BCG Growth-Share Matrix*) was to milk the cash cow as it declined in order to fund new, ascendant business initiatives. Whether or not this influenced a voracious reader like Buffett is uncertain, but he redirected the cash flows of a declining textile business into other, unrelated lines of business, particularly (re)insurance and banking.

When one thinks of "growth", (re)insurance and banking do not normally come to mind (although Buffett's versions of (re)insurance and banking were truly ascendant). As such,

there may have been other considerations at play in Buffett's thinking. Thus, aside from the logical economic benefit of redeploying capital from a declining business to businesses that were ascendant, the selection of (re)insurance and/or banking had three additional significant, but very subtle, benefits.

First of all, reinsurers and banks are exempt from the Investment Company Act of 1940. If Berkshire were not primarily engaged in (re)insurance and/or banking, its own public status and its portfolio of publicly traded securities would likely have required it to be regulated as a mutual fund. Had it been a mutual fund, Buffett would not have been able to intervene in GEICO or Salomon as he did, nor could Berkshire have acquired the more than 80 whole companies that it has over the



Regulatory environment dictates best choice of corporate structure

last 40 years. Buffett also had several legal and regulatory problems early in the Berkshire saga (an anti-trust suit against Blue Chip Stamps, reorganization problems in consolidating his partnerships, and the acquisition of a savings and loan in California). It also appears to us that the acquisitions of GEICO and Gen Re may have insulated him from "inadvertently" becoming an investment company later on.

The second subtlety was the "float", Buffett's euphemism for leverage. Leverage is generally in disrepute at this time and Buffett has publicly eschewed the use of leverage over the years. However, there is leverage and there is leverage. As we will see later on, a form of specialized leverage without the drawbacks of traditional leverage is the major factor in the success of Berkshire Hathaway.

The real problem with traditional leverage (short-term borrowing) is the combination of its costs and availability. Asset values tend to move inversely with the risk free rate of return, which is the basis for the pricing of most loans. Thus when costs of leverage go up, the asset values supporting it usually decline. This often has an effect on its availability in that loan to value ratios often require more equity when equity is unavailable, causing a liquidation of assets at a most inopportune time. However, the availability of leverage is also tied to the inclination and ability of the leverage provider to continue to provide leverage. If the leverage provider is having difficulties on its own, it may have to withdraw its funding for reasons unrelated to the performance of the borrower. This has clearly

(Re)insurers and banks are leveraged by their very nature. However their costs of leverage are significantly lower than the costs of most loans (roughly 3% each and every year in (re)insurance, and variable in banking – currently less than 2%). Furthermore, the availability of their leverage is relatively independent of asset values (tied to insurable events in (re)insurance and depositor confidence – often backed by government guarantees – in the case of banking). Thus, reserves and deposits are less costly and far more stable than margin type loans.

The third subtlety is that (re)insurers and banks with believable balance sheets (a rarity these days) generally tend to trade at a premium to book value (1.25x to 3x). The implications of this, coupled with far higher ROEs due to leverage, cannot be overstated. Had the shareholders of Berkshire Hathaway sold all of their holdings in 1969 and reinvested the proceeds in the S&P 500, their \$70 million would have compounded at 8.9% for 40 years and be worth \$2.1 billion today. But what of Warren Buffett, the "world's greatest investor"? We have reverse engineered his investment record within Berkshire Hathaway: 12.0% per year. In investment parlance, his investment "alpha" is 3.1% per year. This is pretty good, but does it qualify him for the reputation he has as the "world's greatest investor"? Had the same investors liquidated their holdings in Berkshire Hathaway and had Buffett the asset manager manage the proceeds in the Buffett Partnership, the \$70 million would have grown to \$4.4 billion in 40 years. This is a far cry from the \$153 billion of market cap that BRK/A enjoys today. This difference between \$153 billion and \$4.4 billion is what we call "structural alpha".

In the (re)insurance businesses, the industry standard is that underwriting profits (or losses) equal premiums, minus claims, minus operating expenses. These generate an average underwriting loss of 3% per year (also known as the cost of

There is leverage and then there is leverage

The problem with leverage is cost and availability

(Re)insurers and banks have lower cost of leverage

Buffett's structural alpha is enormous

been the case in 2008.

insurance or "COI") for each dollar of reserves. The industry generally invests these reserves in long-only fixed income ("because that is how we have always done it"). Assume that the fixed income generates 5% per year. Thus, for every dollar of reserves in a traditional (re)insurer, returns are 2% per year (5% for investments minus 3% COI). In terms of ROEs, the key is the ratio of reserves to equity (leverage), which runs around 5x in the industry. With its equity invested in the fixed income portfolio at 5% plus 5x of reserves earning 2% per increment of reserves, pre-tax ROEs tend to be 15% and after-tax ROEs are roughly 10%.

Under Buffet's leadership, Berkshire never had a cumulative underwriting profit until 2006 (after which time his cumulative cost of "float" or COI became less than 0.0%). Up until that time, Berkshire's underwriting losses were still better than the industry norm (his COI was 1% to 2% p.a.). Furthermore, at 2x, his level of leverage was far less than the industry standard of 5x. Investing the equity at 12% and adding 10% for each increment of reserves (investment returns of 12% minus the 2% COI), the total was a pre-tax 32% (12% + 2x10%). Taxes reduced it to an after-tax 20.3%. 20.3% compounding for 40 years turns \$70 million into \$120 billion. A price to book of 1.29x brings it to \$153 billion. Thus the structure generated \$149 billion of alpha (\$114 billion in better ROEs and \$35 billion in a premium to book value).

Stated another way, if Buffett had been run over by a truck 40 years ago but Berkshire had done all of the same things that it did in the meantime, except that it invested in the S&P 500, Berkshire would still be worth \$26 billion (versus \$2.2 billion in the S&P or \$4.4 billion with a manager who could consistently generate returns of 12%). Substitute the HFRI Composite Index (a random selection of hedge funds) for the S&P 500 and the amount is \$101 billion. While \$153 billion seems like a lot more, Buffett's share of the difference is far greater than any major hedge fund manager's performance fees, save Steve Cohen. However, had Berkshire invested in the S&P 500 and been in Bermuda, it would have been worth \$323 billion or twice what it is today (the most valuable company in the world – without Buffett). Again, substitute the HFRI Composite Index, and Bermuda based Berkshire would top \$1 trillion. Berkshire with Buffett in Bermuda would have been worth the previously mentioned \$6 trillion.

Bottom line so far

As a pure hedge fund manager, Buffett was successful by any standard. However, because he quit the hedge fund business as we know it, he has been able to achieve a legendary level of success that is unlikely to be attained by any of today's HF or FoHF managers who exclusively use the traditional hedge fund structure.

Alice Schroder's 2008 book on Buffett is called "The Snowball". The snowball is a metaphor for the power of compounding. Buffett has always emphasized that the objective was to compound book value per share each and every year (sounds like a duck, er, hedge fund). While he is a very good investor, his investment skills without the structure were only worth \$2.2 billion more than the S&P 500. Within the structure, they have been worth about \$130 billion (if the structure remained in Omaha) more than the S&P, but less than worthless if Berkshire had invested in the S&P and been in Bermuda. While Buffett may not be the "world's greatest investor" after all, he would certainly earn our vote as the "world's greatest structurer".

A tale of two jurisdictions: Omaha versus Bermuda

"Compound interest is the eighth natural wonder of the world and the most powerful thing I have ever encountered."

-Albert Einstein

Replicating the Goldman and Berkshire models

Goldman Sachs and Berkshire Hathaway have benefitted significantly by abandoning their partnership structures and becoming a bank in Goldman's case and a (re)insurer and bank in Berkshire's case. In each case, their investors have been able to obtain returns that were superior to those they would have achieved as a partnership and do so without a proportionate increase in risk. This is largely due to their access to leverage that is far cheaper and far more stable than available to a partnership structure (or publicly traded broker dealer in the case of Goldman) and a premium to book value their stock prices command. As public companies, their investors also enjoy daily liquidity that was unavailable when they operated as partnerships. However, because they are based in the U.S., their earnings became subject to double taxation, whereas if either had started offshore, only their U.S. operations would be subject to double taxation. In addition, the new level of taxation is applied annually, which has major ramifications for compounding returns over long periods of time.

"Tony (Nicely at GEICO) and I feel like two hungry mosquitoes in a nudist camp. Juicy targets are everywhere."

-Warren Buffett

From their perspective as managers, Goldman and Berkshire are accessing assets they would otherwise be unable to access in a partnership structure, have permanent capital, and have been able to imbed the management in the structure, thus monetizing their management roles in a far superior manner than selling out to a larger institution or floating the management function on a standalone basis.

Goldman and Berkshire have found a better way to monetize their investment management skill

Any HF, FoHF, or family office manager that can consistently outperform long-only fixed income returns on a multi-year basis can replicate the best parts of either or both of Goldman's or Berkshire's successes. In doing so, their investors (including themselves as investors) should enjoy a combination of: (1) significantly better returns than offered by the partnership structure, without a proportionate increase in risk; (2) daily liquidity: and (3) gentler taxation in the UK and U.S. As managers, they can: (1) greatly increase AuMs that would not otherwise be available; (2) obtain permanent capital; and (3) gain an additional option with respect to monetizing the manager's business.

The potential benefits of thinking about structural alpha are overwhelming

It is important to remember that Goldman's net worth is, at the time of writing, \$62 billion and Berkshire's net worth is \$120 billion. There should be no delusions that following their path will create a challenger to either of them. The idea is to follow their lead in creating a business that should benefit both investors and managers in ways that are far superior to the benefits of a fund structure. HF managers, FoHF managers, or family offices do not need to take such a drastic step as quitting the HF, FoHF, or family office business cold turkey as Buffett did. Instead, he or she can simply start or acquire a (re)insurer or bank (whereby he or she would manage all of its investable assets) and treat the foray as he or she would treat the launch (or acquisition) of a new fund. In order to do this, it is more than helpful (but not absolutely necessary) if the new business becomes publicly traded as soon as possible (even as a start-up), because the HF manager's, FoHF manager's, or family office's clients and (unaffiliated) strategic investors will be far more willing to make larger commitments if those commitments can be conditioned on the success of an IPO.

Aligning interests between investor and manager can be improved by abandoning the fund structure

Significantly improving the investor proposition

While it is possible to obtain a number of benefits of (re)insurance or banking relative to a partnership structure without the involvement of unaffiliated investors, there are significantly greater benefits for the manager if his investors come along for the ride. The investors will only join the party if it clearly improves their investor proposition, relative investing in a fund structure. When any investor makes an investment, he or she surveys the landscape and commits to the one investment whose prospective returns exceed all others of a similar degree of perceived risk and/or legal and regulatory constraints at that moment in time. As such, it is assumed that each investor in a given HF, FoHF, or family office has already come to this conclusion about that fund when he or she initially invests and then continues to hold the fund only if there is nothing better to invest the after-tax proceeds of the fund investment into something more promising.

For purposes of this section, we will assume that the prospective investor has narrowed his or her choice to either investing in (or holding, if already an investor) a given fund or investing in an insurer, reinsurer, or bank that allocates all of its investable assets to that same strategy managed in the same fashion by the same manager. To make this choice, the investor needs to examine the sources of return, terms, and conditions for an investment in the fund or an insurer, reinsurer or bank, and the risks of a fund relative to those for an insurer, reinsurer, or bank that allocates its investable assets to that given strategy. As such, we can demonstrate that all investors in insurers, reinsurers, or banks that allocate all of their investable assets to a given strategy should enjoy: (1) significantly better returns than funds using the strategy, without a proportionate increase in risk; (2) equal or better liquidity (daily if there is an IPO); and (3) gentler tax treatment in the UK and the U.S.¹

New structure needs to improve both, the investors' *and* managers' economics

Scottish Annuity, Max Re and Goldman Sachs

In the late 1990s, two hedge fund managers sponsored the formation of two start-up reinsurers that eventually became publicly traded. Maverick Capital (Lee Ainslie) sponsored Scottish Annuity and Moore Capital (Louis Bacon) sponsored Max Re. The original intention of each was to have the respective managers manage all of the investable assets. Neither was a smashing success. The traditional investment establishment (mutual funds, long-only managers, Wall Street analysts) remembers that they were hedge fund sponsored and cites their lack of success as evidence that an investment driven insurer or reinsurer simply doesn't work (even with hindsight, they might still say the same thing about Berkshire). But is this correct?

Not all hedge fund-turnedreinsurance structures have succeeded

As the two companies evolved, a combination of insurance executives, Wall Street bankers and analysts, and traditional insurance investors watered down the originally intended investment strategy. In the case of Scottish, Lee Ainslie never managed any of the assets. In the case of Max Re, the strategy quickly evolved to 50% alternatives and 50% long-only fixed income and then the 50% alternatives morphed into 10% to Louis Bacon and 40% to a fund of funds run by his brother Zach (who had no previous FoHF experience of significance and was never able to

Previous attempts failed due to false implementation

¹ The third point is outlined in detail in the main manuscript.

make a great success of his FoHF business). Today, Max Capital's alternative investment portfolio is only 20%.

We have reviewed the results of Scottish and Max over the years and reconstructed each of them as if Ainslie and Bacon had managed all of the assets as originally conceived. In each case, the companies raised roughly \$800 million of equity capital over the last 10 years. In the case of Scottish, the maximum amount of cumulative earnings was on the order of \$400 million (net worth of approximately \$1.2 billion) and in the case of Max, the cumulative earnings were roughly \$500 million (net worth of roughly \$1.3 billion).

Superimposing Lee Ainslie's returns on Scottish's assets over its history would have added more than \$2 billion to the maximum net worth. Scottish eventually shot itself in the foot with an imbedded derivative in its reinsurance contracts and did not survive in its original form. However, it is arguable that if a talent like Lee Ainslie had managed the Scottish portfolio and held a major equity (as originally intended and as David Einhorn does with Greenlight Capital Re) Ainslie would have taken an active interest in the company and it would have avoided the calamity of the imbedded derivatives (we have every confidence that David Einhorn will avoid them at Greenlight Capital Re) and even if Scottish still suffered from the imbedded derivatives, the extra \$2 billion cushion would have probably ensured its survival. Missing out on Ainslie's magic was an exceptionally costly mistake.

Since Max is still in business in more or less the same form as over the last 10 years, the comparison of what could have been and what has happened is far more instructive. Over its life, Max's cumulative investment returns have been approximately \$1.25 billion and have averaged 5.5% per year. Since cumulative earnings are roughly \$500 million, it means that underwriting losses were approximately \$750 million or 3% per year (consistent with industry economics). By comparison, Buffett's cumulative underwriting losses were 1% to 2% for more than 40 years, but he invested the "float" – 2x equity capital at far higher returns than 1% to 2% and earned leveraged profits (the leverage was not only cheap, but its availability was tied to insurance events, rather than asset values or lender stress).

During the same time, Bacon earned 10.1%. Superimposing those returns on Max's assets over the life of the company, the net worth would have been roughly \$1.9 billion greater (\$3.2 billion vs. \$1.3 billion). Max currently trades below book value and would likely trade at a significant premium to book if Bacon had managed its assets (IRRs significantly greater than 20%). Which version of Max would you want to own? Put another way, would you want to own Berkshire if Buffett only ran 10% of the assets?

If Ainslie and Bacon had run the assets of Scottish and Max, would the earnings have been lumpy? Of course they would have been. But their fund earnings were lumpy anyway, and their (far more) sophisticated investors have stayed. In the interest of pleasing insurance executives who do not have the ability to reorganize their thinking, Wall Street bankers and analysts who have always done it their way, and traditional investors, a combined \$1.6 billion of investor capital was unnecessarily *dumbed down* and earned roughly \$800 million over 10 years, leaving nearly \$4 billion on the table.

"Structural alpha" without the alpha doesn't work

Just prior to going public, Goldman Sachs had something on the order of \$210 billion of assets, \$203 billion of liabilities, only \$7 billion of equity, and an off balance sheet swap and derivatives book with a notional value of roughly \$3 trillion, as shown earlier. Some might argue that the notional value should have been added to both sides of the balance sheet. Regardless, the assets are the assets. It is brain power that makes those assets perform. What is amazing about Goldman Sachs is that the duration of its liabilities could have been measured in nanoseconds. The duration of liabilities in the life insurance industry is often 30-50 years, so it is arguable that a life insurer that had the brain power to run the assets like Goldman Sachs would be far better suited to handle Goldman Sachs balance sheet (and even more profitable). The same could be said for a property and casualty insurer, a reinsurer or a commercial or private bank. The instability of traditional funding sources for broker dealers sunk Bear Stearns, Lehman, and Merrill Lynch and Goldman and Morgan Stanley became commercial banks to access more stable funding (deposits).

It is brain power that makes assets perform

Bottom line

While a life insurer (or reinsurer) is unlikely to attract that brain power, it can rent it from alternative assets managers. For all of the structural reasons previously outlined, that is very unlikely to happen. What is more likely to happen is that alternative assets managers will most likely start (or take over – but legacy liabilities and the premium to book value entry fee makes this less likely) insurers, reinsurers, or banks and impose those risk adjusted economics from without. Thus, the takeover or infiltration of the insurance, reinsurance, and banking industries by the HF and FoHF industries may not be so far-fetched an idea.

Hedge funds about to take over world

Permanent capital

The HF or FoHF structure is inherently unstable and many HF or FoHF funds have "blown up" when they suffer losses, which trigger redemptions, requiring untimely liquidations and a spiral of additional losses, further redemptions, and more liquidations may repeat itself (often more than once). Leverage further exacerbates this spiral because its availability is often tied to asset values or amount of equity and thus, it may be pulled and require multiple liquidations (per dollar of redemption) into falling markets, which further depress prices and may start another round of redemptions, liquidations, and losses.

Hedge fund managers are all too aware of the potential death spiral inherent in their structures

Because of the "high water mark", many HF and FoHF employees leave during these cycles of loss, redemption, and liquidation, because they are unlikely to see any incentive fees for several years no matter how well they perform if they stay, but, if they join another firm, even a start-up, they can immediately be rewarded for identical performance. By the same token, no one is likely to join a firm undergoing one of these cycles, since performance and compensation are disconnected until the high water mark is reached.

The high water mark has some negative side effects

"Blowing up" rarely means that investors lose all of their investment, unless fraud is involved. However, investors often realize additional if not meaningful losses when a fund "blows up", and a "blow up" usually means that significant redemptions have reduced the organization and/or the fund to a level that it is no longer able to realize the returns envisioned or the fund manager is unable or unwilling to continue to operate it.

Redemptions can cripple a fund for life

This is what happened when XL Capital funded Front Point for two of the most senior members of Tiger Management. A number of the Tiger staff followed them out the door, and no one was available to replace them. As such, the largest hedge fund in the world went out of business, not because its investors lost everything, but because there were too few people left to service the remaining assets and investors continued to redeem until Tiger finally decided to return all remaining funds. Using Tiger as a metric, for every 1% of loss, approximately 2% of the remainder of the fund was redeemed. When Tiger disbanded, it had delivered returns since inception in excess of 20% and had \$6 billion in AuM, which would still have made it one of the largest hedge funds at that time and more than viable in terms of size and performance. It just couldn't service those assets. Nobody was home.

For 1% of loss, approximately 2% of assets were redeemed

Ironically, while Tiger investors endured losses relative to the high water mark, many of them were long time investors who had actually prospered mightily from the time of their original investment in Tiger until their funds were returned. This is analogous to finding a stock early, riding it upwards, and then watching it back off 20%. At any time, investors can choose to take a healthy profit or stick with the stock (as they have done with Berkshire Hathaway). In Tiger's case, the early investors had still done exceedingly well; they just never had the opportunity to stick with the manager.

Lock-Ups and Closed End Funds

In the hedge fund industry, the traditional remedies for this instability are lock-ups (including variations, such as longer redemption and notice periods and/or gating) or closed end funds. Lock-ups and their variations have historically met with investor resistance. Part of this stems from the fact that lock-ups sometimes exceed the real amount of time that a manager needs for an orderly liquidation. Even when successfully negotiated, lock-ups are often too short to take advantage of some of the opportunities for superior performance that require a longer term view.

Lock-ups and gates are designed to stabilize capital

In 2008 and 2009, many managers have had to liquidate some of their most promising assets in order to meet redemptions and have done so at the expense of those who remain (including investors who might be loyal for the longer term). This is the equivalent of being in a theatre when someone yells "Fire", correctly deciding that it is a false alarm, but being trampled in the stampede anyway. As such, lock-ups, which were difficult to sell in the past, will be even harder to sell in the future.

While lock-ups are economically viable, they became a difficult sell post 2008

Closed end funds are also problematic, because history argues that they are virtually certain to trade at a discount to net asset value. As long as investors can obtain a virtually identical investment strategy in an open ended fund at NAV, there is no reason to buy a closed ended fund with an identical investment strategy at a premium to NAV, nor does it make sense to even buy at NAV if its upside relative to NAV is capped and the likelihood is a discount when an open ended equivalent can always redeem at NAV. Thus, knowledgeable investors usually avoid closed end funds on the offering (the investment banking, legal, and accounting fees put it at an immediate discount), preferring to take advantage of the sure discount in the aftermarket and purchase later on (advantageously vis-à-

Closed end funds nearly always trade at a discount

vis the open ended equivalent), if at all. If no one buys the offering, will there be an after-market discount to take advantage of?

To a large extent, closed end funds often depend on "dumb money". There have been a modest number of closed end hedge funds and closed end funds of hedge funds launched in the UK because two types of investors were willing to suffer a discount to NAV, provided that it was not too great: (1) taxable investors in the UK used to get far better tax treatment in closed end funds (in comparison to open ended funds), although newer UK tax rules have both eliminated and reestablished some of this benefit (taper relief went from 10% to 18%, but ordinary rates have gone from 40% to 50%); and (2) certain regulated entities can only access the returns of hedge funds or FoHFs through closed end funds. However, in order to succeed, most of these closed end funds have had to promise to buy back shares in the open market if the discount becomes too steep, so it is questionable whether or not this is really permanent capital (which is nonetheless far better for a manager than the normal HF or FoHF structure, although it is questionable that the complaint factor for an otherwise successful manager is worth it).

Closed end funds as permanent capital are not as *permanent* as could be

(Re)insurance and Banking

There is little doubt that Goldman gave up its partnership structure in order to obtain permanent capital and while it is uncertain whether permanent capital was part of Buffett's thinking in converting his partnership into an insurer, reinsurer, and bank, Berkshire has benefitted mightily from it. The only permanent capital in the HF, FoHF, or family office businesses is the partners' capital. All other investors have redemption rights of some kind. As such, every investor that converts his partnership interest into shares of a (re)insurer or bank that allocates all of its equity capital to the HF, FoHF, or family office manager, is now providing permanent capital to that manager. Thus, if there are no other shareholders in the (re)insurer or bank than the manager and existing clients, this takes a lot of pressure off the manager and is of substantial value in and of itself. However, begetting begets begetting. If there is enough of a commitment on the part of the manager and existing investors to attract strategic or public capital, this capital is not only permanent too, but it also represents fee generating assets AuMs that the manager would not otherwise have under management.

The only permanent capital in a hedge fund structure is the partners' capital

Equity capital, raised in an IPO, is only part of the permanent capital story. The equity should always be managed by the HF or FoHF manager and can never go away unless the company fires him (for complicated reasons, this is almost impossible to do, whereas in a closed end fund it is far easier). However, insurers and reinsurers generate permanent capital in addition to their equity by issuing policies and contracts for premiums and investing those premiums (net of operating expenses) until claims are paid. Again, these are fee generating AuMs that the manager could not otherwise have under management.

Equity capital is only part of the permanent capital story

Banks can also generate permanent capital in addition to their equity by taking deposits and using them to make loans (in the case of credit strategies), provide portfolio financing for the HF or FoHF manager's investors, or directly invest in the hedge fund strategy (prop book). While premiums and deposits are not quite as permanent as the equity capital, they are far more permanent than most lock-ups and far more permanent than margin financing, without having their availability

Bank deposits are not permanent but more permanent than most lock-ups and margin financing

being correlated to asset values or the willingness or ability of the lender to continue to make margin loans.

To the extent that a (re)insurer continues to operate, new premiums replace reserves as claims are paid. To the extent that the net worth is growing, it can support ever increasing reserves if the underwriting opportunities are available. However, the availability is tied to (re)insurance events, rather than asset values or lender issues. This is the secret to Buffett's success.

(Re) insurer's permanent capital tied to (re)insurance events, rather than asset values or lender issues

In banking, the key is to never have a run. This can be handled in a combination of several ways. First of all a bank run is all about confidence. Simply never give depositors a cause for concern vis-à-vis confidence. One key ingredient is government backed deposit insurance. Another is to maintain a very liquid balance sheet and/or focus on deposits of a savings nature, particularly term deposits.

Most hedge fund managers gather assets the old fashioned way. They take out their knee pads and tin cups and go begging – one investor at a time. This is a tough road. It generally requires an appearance by the founder and/or portfolio manager and disrupts their ability to maximize returns. Premiums (for insurers and reinsurers) and deposits (for banks) are wonderful alternatives that do not take anywhere near the same effort to generate and do not tie up the founder or portfolio manager's time.

There two ways to raise capital: the old way and the new way

When a policyholder buys insurance, the insurer gets to hold the assets (less operating expenses) until a claim has to be paid. When an insurer buys reinsurance, the reinsurer gets to hold the assets (less the operating expenses) until the claims are paid. When an HF or FoHF manager sponsors an IPO for an insurer or reinsurer, he or she gets to manage the assets created by the premiums, without having to make a typical hedge fund type of sales call. (Re)insurance underwriters generate the assets and do so without requiring the founder or portfolio manager to make an appearance (which frees them up to concentrate on maximizing returns).

The art of raising money without the manager needing to be show up

We generally use 2 to 1 (Berkshire's level of leverage) for forecasting purposes. Even if policyholders quit buying coverage, these funds remain for a long time and if policyholders continue to buy, new premiums usually replace claims that are paid, so the level of permanent capital is maintained (or continues to grow), arguably forever, which, in effect, makes it more or less permanent. When a bank gathers deposits, the manager does not have to participate in the asset gathering side of the business as he does in the fund business.

If the (re)insurer's policyholders continue to buy, the (re)insurers capital is indeed permanent

Banks can provide permanent capital for the manager in two ways: (1) by lending to and providing HF and FoHF linked structured products (rated and unrated principal protected notes, rated and unrated fund linked notes, total return swaps, barrier options, letters of credit for captive insurers and reinsurers) to investors in the manager's HF or FoHF strategies; and (2) by directly investing some of the deposits in the strategy itself (some credit strategies might be able to utilize most, if not all of the deposits this way).

Caveat lector

A word of caution – unlike insurance or reinsurance liabilities, which can last for years, if not decades, deposits can leave rather quickly and as a source of "permanent capital" might not be so permanent if the bank is not careful,

although we have developed some methods to significantly mitigate this for most banks.

Summary

At the end of the day, the successful launch of an insurer, reinsurer, or bank can reasonably result in permanent capital of anywhere from 60 to 260 times the investment that a HF or FoHF manager may personally make (talk about an outsized return). Aside from the 10 to 20 times the return (22 to 45 times, if taxable) that the HF or FoHF manager can make as an investor over 10 years (as opposed to investing in his own funds), he or she also stands to earn incremental management and incentive fees each and every year that may be far in excess of the amount of his personal investment.

Because of their permanent capital, insurers, reinsurers, and banks with large amounts of capital have gravitas. Think about it. Do the publicly traded HF and FoHF managers have the market clout that a reinsurer or bank with equity capital identical to their AuMs would have?

UCITS: Latest hype or investor panacea?

By Henrik de Koning

"A ship in port is safe, but that's not what ships are built for."

-Oscar Wilde

The market has recently been flooded by a great number of UCITS¹ regulated funds managed by hedge fund managers. UCITS hedge funds are said to manage an estimated \$35 billion and more than 200 of these funds have debuted in the last 18-24 months according to Hedge Fund Research. We also saw the emergence of specialized "UCITS Hedge Fund" Indices: three of such indexfamilies were launched in the first quarter of 2010. Many funds of hedge funds are also widely considering UCITS as a potential instrument to regain assets from private banking clients and high net worth individuals who have not returned to alternative investments yet. These so-called 'NewCITS' have therefore become one of the key topics in the hedge fund industry.

The launch of UCITS funds is arguably a trend in full swing

UCITS are a set of EU Directives, which establish a common regulatory regime for collective investment schemes, and enable a Europe wide distribution of such products. Even beyond the European Union, UCITS enjoy a high level of recognition; it has become the 'gold standard' of investment funds, leading to a proliferation of products with total assets under management in excess of EUR 5.3 trillion at the end of 2009

'Gold Standard'

For the sake of this article, we will define as UCITS hedge fund any UCITS regulated fund with an absolute return objective, generally employing active investment management techniques to acquire both long and short positions and eventually some degree of financial leverage.

Current universe

It is difficult to properly assess the size of this market. There is no such thing as a classification of UCITS, which could allow to isolating hedge fund strategies from traditional investment strategies. News articles and press releases on the topic put figures forward ranging from 100 to 350 UCITS hedge funds already launched. We believe there are about 150 to 200 of such funds open for investment.

About 150 to 200 UCITS hedge funds open for business

It is undeniable that this market is growing rapidly in terms of number of funds and in terms of assets under management. Institutional investors have been the early adopters of the concept but it is the private banks, which are likely to bring this to the next level. Funds of hedge funds are also entering in this space with more than 25 multimanager UCITS launched to date (March 2010). The fact that the investment universe is still relatively small is an impediment to the development

Arguably a growth story

¹ UCITS stands for Undertaking for Collective Investment Scheme in Transferable Securities. They are investment funds that have been established in accordance with the UCITS Directive (first adopted in 1985).

of such offering but this issue is getting smaller every time a new UCITS hedge fund is launched

A significant number of private banks are keen on having a UCITS fund of hedge funds offering rather than a single manager UCITS offering. The main reason for this is their general reluctance to take single manager (selection) risk. Some funds of hedge funds are patiently waiting for more depth in this investment universe and some single managers are counting on funds of hedge funds to partially seed their UCITS hedge fund; a *chicken and egg* classic.

Private banks still prefer fund of funds to mitigate single manager risk

Hype or fundamental shift in the industry?

Investor demand is arguably strong, fuelled by concerns about transparency, risk management and liquidity. An increasing number of investors are looking for UCITS to add to their hedge fund portfolio.

Demand is strong

As far as hedge fund managers are concerned, the uncertainty related to the proposed Alternative Investment Fund manager Directive (AIFMD) constitutes in itself a good reason to look into UCITS. Under the current proposed directive only alternative investment fund managers established in the EU will be able to provide their services and market their funds in the European Union. Managers based outside the EU will be prohibited from selling their funds to EU investors, unless they meet various fiscal and regulatory requirements.

There is still regulatory uncertainty as to who is allowed to provide their services within the EU

For managers within the EU, the lower risk strategy is to set up their UCITS to secure at least one distribution channel into the European Union. UCITS constitutes a real opportunity to access, to retain or to increase investments from institutional investors. It is worthwhile pointing out that capital coverage requirements are often lower in the presence of regulated funds, which is a further factor contributing to the increasing popularity of UCITS among institutional investors. The same popularity holds for high net worth individuals and even retail investors in the EU and beyond.

The launch of a UCITS fund is a low risk strategy

It is therefore not surprising that a very significant number of hedge fund managers are either managing or seriously considering the launch of a UCITS hedge fund in the coming year. The emergence of so-called 'UCITS platforms' developed by some investment banks and investment managers to facilitate the launch of such vehicles is a further indication that we are in the presence of a solid and sustained trend.

The case for managed accounts

UCITS and managed accounts are usually jointly named as the solutions to address the type of issues investors faced in the 2008 hedge fund crisis. In a UCITS Fund of Hedge Fund distribution survey conducted by KdK Asset Management ("KdK") in February-March 2010, fund distributors were asked whether they consider either of these approaches as a superior (or a more appropriate response) in the light of their own investors' concerns; 50% of the respondents were of the opinion that UCITS is a better response while only 19% disagreed with this statement. 22% considered that the propositions are not comparable and 9% have no opinion. These results are a bit surprising at first sight: Don't managed accounts offer the highest degree of transparency and unconstrained liquidity?

UCITS is considered a better response than managed accounts to liquidity and transparency issues

If we believe recently published research¹, the renewed interest in managed accounts is mainly a consequence of recent negative liquidity experiences such as gates and side pockets, as well as the impact of some high profile fraud cases. Investors now believe they are better off investing in a portfolio that they control themselves rather than being co-mingled with other investors and thus vulnerable to their behaviour. In addition to liquidity concerns, requirements for more transparency and better risk management have also contributed to this shift towards a managed account structure. The ability to impose investment guidelines is seen as a further significant advantage of this approach. In short, managed accounts constitute a valuable opportunity to improve (1) liquidity terms, (2) mitigate operational and fraud risk and (3) get a better visibility over the risk exposure of an investment.

Investors believe managed accounts provide for better liquidity and allow for better risk control

The (probably) most important advantage of a managed account is the isolation of the investment management role from all other activities related to the management of the investment (administration, risk monitoring, reporting, etc), in order to increase transparency and control. We note that this is by and large also a given with UCITS.

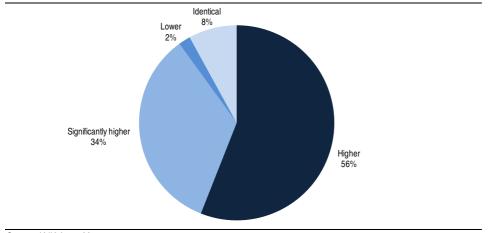
Consequently, we think that the reason why a majority of the survey respondents prefers UCITS over managed account solutions is due to the fact that they think as distributors. (Real) managed accounts are not accessible to smaller investors and many can't cope with the operational burden nor are they sophisticated enough to deal with the information he will have access to. Large investors (pension funds and funds of funds) are expected to be the main users of a (individual) managed account approach, whereas UCITS seems to be a more suitable solution for wider distribution.

UCITS allow providing smaller investors with advantages usually only accessible to large investors

An adequate regulatory framework

With assets in excess of EUR 5.3 trillion at the end of 2009, UCITS have proven to be successful and are widely used by European investors. UCITS account for 75% of the total fund management industry in the European Union. UCITS is a global brand, attracting investors from the EU, Switzerland, South America and Asia.

Figure 1: Distribution potential for hedge funds: UCITS versus offshore



How would you consider the distribution potential to your client base for a UCITS hedge fund compared to its equivalent offshore fund?

Respondents: 59 Skipped question: 0

Source: KdK Asset Management

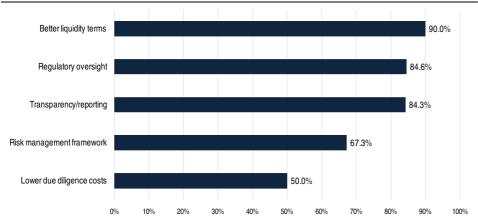
¹ Opalesque ran an interesting four-part series on managed accounts in August/September 2009.

KdK's UCITS Fund of Hedge funds Distributor Survey confirms the distribution potential of UCITS; 90% of the respondents consider that a UCITS wrapper is adding potential in terms of distribution, as shown in Figure 1.

The relevant EU directives are outlining the requirements for the set-up, the management and oversight of UCITS. Among others, they provide guidelines for fund organization, custody, risk management, asset eligibility, liquidity, diversification, leverage, etc. Since 2002, the UCITS framework offers extended financial instrument scope, which has triggered a convergence of the hedge fund industry with the long-only fund industry. Investment managers are allowed to use a broad range of (derivative) instruments to access different type of exposures, which are generally associated with managers generating 'alpha'. The gap between hedge funds and UCITS compliant funds is arguably narrowing.

The growing popularity of UCITS hedge funds with end-users is due to their appeal in terms of liquidity and the (perceived) additional security provided by the regulatory framework. As far as distributors are concerned, the biggest selling points of UCITS hedge funds as compared to offshore hedge funds¹ are better liquidity terms, regulatory oversight and transparency, as shown in Figure 2.

Figure 2: Advantages of UCITS versus offshore hedge funds



Source: KdK Asset Management

The above table has been computed on the basis of all the responses given, making the average of 0 for "no benefit" (or N/A), 50% for "marginal benefit", and 100% for "strong benefit"

- Liquidity: A UCITS must provide liquidity at least twice a month. It is also worthwhile pointing out that it is more difficult to gate a UCITS (although not impossible, as opposed to is widely assumed) or to organize side-pockets. Therefore, one can assume that managers should be more careful about liquidity mismatches.
- Regulatory oversight is perceived as a true advantage of UCITS. Assets are to be held in a segregated account and placed under the responsibility of the custodian.
- Transparency and reporting are seen as significant advantages of UCITS over offshore funds. Mandatory reporting, however, is limited to the production and filing with the regulator of (audited) annual accounts and (unaudited) semi-annual accounts. In terms of transparency (i.e. the type of information

UCITS framework favours convergence between "alternatives" and traditional asset management products

Where do you see the value added of UCITS as compared to offshore funds?

Respondents: 59 Skipped question: 4

Segregated assets is an advantage

¹ From KdK FoHF Distributor Survey, February-March 2010

disclosed), the norm for UCITS is probably not more valuable to investors than what the average offshore hedge fund provides.

Risk management framework: The UCITS requirement for the implementation of a risk management process is seen as mildly positive. Actually, the fact that a hedge fund manager will typically have to perform more complex transactions than in an offshore fund fully justifies some additional safeguards. Limited added value in terms of risk management

■ Lower due diligence costs are seen by the survey respondents as a marginal advantage. Indeed, UCITS only partially protect against fraud. When it comes to the assessment as to whether the manager or the different service providers have the experience, the capabilities and the adequate set-up to fulfil their tasks, the client still has to perform his own analysis.

Due diligence is still required

There are substantial benefits of operating in the UCITS framework. However, the benefits have at a price: The manager will have to comply with some organization requirements and most probably alter the way he has traditionally managed his assets. In the following we look at some of the challenges.

The benefits have a price

Main challenges

Organizational challenges

The UCITS regulations require for a manager to have a real substantial presence in the country where the fund is domiciled. Ensuring the standards of compliance and risk management under this regime may add a significant cost as compared to running an offshore fund. Substantial physical presence required

The managers are basically facing the choice as to whether set up a UCITS on their own or through a so-called platform. Such platforms are generally run by investment banks or asset managers. Recently a few 'independent platforms' have also been launched in Ireland and in Luxembourg. Current active players are Merrill Lynch-Bank of America, Deutsche bank, JP Morgan, Schroders, Luxembourg Financial Group, Merchant Capital and Decision Analytics.

Managers may opt for a platform solution

In order to take a decision, the factors to consider, in our view, are:

Timing: a platform (established umbrella SICAV, ICVC) will generally have a shorter time to market. Setting up an independent fund (may) take more time, although one should be aware that investment banks have a thorough internal approval process for each transaction, which may negatively impact time to market.

The use of a platform also impacts flexibility: The hedge fund manager is no longer in control of the pace for fund launch, registration timeline or country passporting. Product development plans may be influenced by decisions made by the platform provider or other managers using it. Platforms are quoting lead times of 4 to 6 weeks. However, there is some anecdotal evidence suggesting that 4 to 6 months might be more realistic in some cases.

Costs: Platforms promote their offering as cheaper than an independent approach. Due to economies of scale, established relationships, etc. it is true that costs can be reduced significantly. However, platforms may charge an ongoing fee

which exceeds the higher set-up and maintenance costs of an independent set-up (legal, administration and "substance" costs).

Choice of service providers: Platforms usually impose constraints on structure and service providers. This reduces the ability to negotiate fees, to seek competitive derivative pricing, etc. It also prevents the potential to replicate partially the existing operational framework such as the relationship with the fund administrator, some aspects of the prime brokerage relationship, etc.

Flexibility: The platforms offer no scope to change the legal structure, or the service providers. Some platforms (especially those run by investment banks) require to trade exclusively with them as derivative counterparty.

Distribution: Platforms, and in particular investment banks platforms come with a brand name and a distribution network. Usually, the hedge fund strategy becomes directly also "eligible" for in-house indices and structured products. In some cases, banks may even provide for seed capital (although this becomes rare). The flip side is that the brand may in some cases negatively impact distribution potential. Platforms may sometimes require exclusive distribution rights and may require for disclosure of the hedge fund manager's investor list.

It is also worth highlighting that it is a misconception that partnering with a large universal bank comes automatically with distribution through their private banking networks. Independent or asset manager run platforms also provide only a limited assistance in terms of distribution.

UCITS is a distribution story in theory, but in practice has its limitations

Investment management challenges

From an investment management perspective, the main challenges can be summarized as follows:

Diversification: UCITS are required to maintain a significant spread of their investments. This is known as the "5/10/40" rule, which requires that any UCITS cannot be exposed in excess of 10% to securities issued by the same body (with an exception for issues guaranteed by a government), and that the sum of the exposures exceeding 5% have to remain below 40% of the scheme's net assets. Further risk spreading requirements apply to cash deposits, derivatives or investments in other funds.

Flexibility: Prohibition on direct investment in certain assets such as commodities and on physical shorting. This may limit a hedge fund manager to deliver its investment strategy in full.

Leverage: A UCITS is not allowed to borrow for investment purposes. It can however obtain leverage through derivatives. A UCITS global exposure through derivatives is in principle limited to 100%, which means it is theoretically limited to 200% gross exposure (100% on balance sheet + 100% off-balance sheet). There is some flexibility in calculating this exposure in accordance with a valuation methodology and risk monitoring framework acceptable to the UCITS home regulator (Value at Risk approach).

Liquidity: the maximum redemption period for a UCITS is fourteen days and redemptions must be made in principle at the fund's net asset value. Therefore, the ability of managers to take positions in illiquid assets or illiquid strategies may

be limited, restricting again the manager's ability to deliver its investment strategy in full

Note that some challenges can be overcome with the use of derivative instruments. Provided certain conditions are met, short positions, leverage and even exposure to ineligible assets will be possible through the use of financial derivative instruments. Most of the prime brokers offer synthetic prime brokerage services, which usually take the form of portfolio swaps. In such relationship, the nature of the relation with the prime broker is very similar to the relationship in a traditional offshore hedge fund set-up. For some strategies, such as long/short equity funds for example, where extensive leverage is not used, the UCITS can even be run without such a synthetic prime brokerage relationship, the fund just facing derivative counterparties to implement short or leveraged positions.

Derivatives help to overcome some challenges

Impact on Performance

When compared to its sister offshore hedge fund, a UCITS hedge fund may end up underperforming to a certain extent. The main (known) sources of differences in performance are investment and counterparty restrictions, liquidity, and operations.

Investment restrictions: In terms of regulatory guidelines, we are tempted to say 'less is more'. Restrictions are reducing the opportunity set and consequently reducing the performance potential. This, of course, only holds if we assume that the manager is effectively generating alpha.

Liquidity: UCITS are required to provide at least for bi-monthly liquidity. In practice, UCITS Hedge Funds have weekly or even daily liquidity. If used on an investor level, this calls for more transactions and potentially a higher portfolio turnover on a fund level (compared to offshore funds). The higher the costs, the lower the performance.

Operations: A practical aspect often neglected by product developers is related to operations. A poor handling of executed transactions generally requires the attention of the manager. This unnecessary use of his time may prevent him to focus on generating performance.

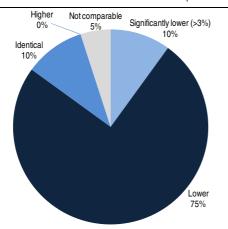
Counterparty restrictions: A substantial proportion of the fund's economic exposure may have to be acquired through derivatives. This highlights the need for negotiation power, absent of which, the fund could end up paying inflated prices for each transaction. UCITS hedge funds are generally restricted to a few counterparties (due to the necessity of having a contractual framework in place with each derivatives counterparty). Moreover, when a transaction has been entered into with a designated counterparty, it has to be closed with the same counterparty, which may constitute an issue in terms of 'best execution'.

Consequently, managers should carefully analyse the different alternatives to best deliver their investment strategy and to build a sustainable UCITS business. A particular focus should be given to flexibility and independence of the approach chosen. If it is decided to go for a platform solution, one should clearly assess the quality of the proposed operational framework and obtain assurances or even hard commitments in terms of distribution.

Distribution potential

A vast majority of the respondents of the KdK UCITS FoHF Distribution Survey expect UCITS Hedge Funds to underperform as compared to their sister Hedge Funds. This outcome is quite unsurprising given the fact that the survey was filled-in by investment professionals aware of the cost impact of the UCITS regulations.

Figure 3: Expected performance differential: UCITS versus offshore equivalent



How do you expect the performance of a UCITS hedge fund (single manager) to compare to its equivalent offshore fund?

Respondents: 59 Skipped question: 1

Source: KdK Asset Management

The potential for distribution is dramatically higher for a UCITS hedge fund than for an offshore hedge fund despite of the expected underperformance. Hedge Fund managers have been used to "let the performance talk". In other words, a good investment process, solid and consistent performance were the ingredients of successful distribution. In the UCITS world, this is clearly not enough.

Growth despite expected underperformance

There is a widespread belief that a hedge fund just needs to launch a UCITS to see dozens of pension funds, insurance companies and private banks pour money into it. Needless to say that this is largely overstated. Hedge fund managers will need to understand what investors want. In order to fully exploit the UCITS potential, a manager will need to set up his fund in the right jurisdiction, provide for adequate liquidity, charge an adequate level of fees, pay trailer fees, etc.

Expectations potentially too high

As an example, depending on where one wants to distribute, the choice of the domicile of the UCITS, has its importance. The preferred domicile for UK distributers, based on our survey, were Luxembourg with 36% of the votes and Ireland with 21%. The preferred domicile for UCITS from Spanish and Italian distributers were 60% Luxembourg and only 10% Ireland. Level of management fee, performance fee, liquidity features, minimum denomination, etc. will all have some degree of significance and distribution potential will be affected by the choices taken. The UCITS framework is a regulatory standard but not a marketing standard.

Luxembourg could be big beneficiary

Potential risk

There is growing concern among industry organisations that such funds are being sold to retail investors that do not understand them. UCITS may provide investors with a false sense of security and this should be carefully addressed. UCITS hedge funds are not necessarily more risky than traditional 'long-only' UCITS. In fact, it is probably even the other way round. UCITS hedge funds will have a more controlled risk profile, usually referred to as an asymmetric risk profile, which aims at protecting investor capital in a downward market.

Industry concerns regarding false sense of security

The risk lies in the complexity of the exposure. The counter-performance of a long-only US equity fund is easy to explain when the S&P 500 Index is down. However, negative performance becomes more difficult to explain in the case of an *absolute return* fund falling in a negative market environment.

"Risk comes from not knowing what you're doing."

-Warren Buffett

Communication is key. This means that promoters of UCITS hedge funds should be careful in targeting their audience and make sure that the risks associated with investments in their vehicles are well understood. "The ultimate security is your understanding of reality."

-H. Stanley Judd

Conclusion

UCITS look very much like a new market reality. The migration from an exclusively offshore business model towards a model including a UCITS offering seems to be a logical evolution. However, hedge fund managers need to understand that UCITS is not an asset management tool but rather a distribution wrapper. The main challenge lies in the fact that UCITS asset gathering is a fundamentally different exercise than the way they have raised assets so far.

It is no rocket science to set-up a UCITS but it is—potentially—an art to do it in such a way that flexibility, independence and potential for performance are preserved.

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