

Ponzi rules!

1. From forbidden games...

The whispered comment that it was actually illegal naturally made the whole thing much more exciting. And breaking the law did not seem so serious to the boys and girls involved that it wasn't worth trying that miraculous means of multiplying money – the chain letter. How did this asset multiplier work? Very simply: there was a list of eight names and addresses. You had to send two francs, let's say – a serious sum of money 50 years ago – to the person whose name was at the bottom of the list. Then you put your own name and address at the top of the list, copied the letter twice and sent it to friends and colleagues for them to do the same. Then you waited for the happy arrival of twice 2 to the power of 8, or 512, francs. And waited. And waited.

That hardly any chain letters ever worked for any length of time probably had much to do with the lack of Xerox machines. Copying out eight addresses twice was tiresome. And so the self-perpetuating chain of letters was soon broken. Another main reason was the weak or non-existent solidarity between the first and the last names on the list. Why pay when you don't have to, and when you might still get your own pay-out anyway? The chain-letter principle is vulnerable to the general weakness of the human character. The third reason is that if chain letters really worked, they would soon run out of people. With one series of letters being sent each week, it would take only 23 weeks to cover the entire population of Switzerland, and a mere 33 weeks to reach the entire population of the world. And what then? Move on to the Martians?

Those with good memories will also recall that it was always the same people who were invited to take part; the personnel problems of the chain-letter system obviously result in social multipliers – which are already to be found in the playground – rapidly being pushed into a sort of nodal function for the network. As these multipliers' liquid funds were quickly exhausted, while they still had

to wait for the promised returns, this lack of human resources put an end to a good many chain letters before they could reach the entire population of the world. The unwelcome learning experience for the small boy with the big expectations? Pocket money gone, and the devil take the hindmost. A lesson for life (as a private banker).

2. ...to mega-fraud

This is pretty much how an investor must be feeling today who had funds in any of Bernard Madoff's many vehicles. The money's gone, and the devil take the hindmost. There are differences between a chain-letter system and a so-called Ponzi scheme. But what they have in common is that at the end there is nothing left, and the remaining investors lose out.

Once started, a chain-letter system runs on its own, while a Ponzi scheme needs someone to run it. At the beginning of the 1920s, Charles Ponzi, who emigrated from Italy to the United States in 1903, promised investors returns of 50 percent within 45 days, or their money doubled within 90 days. He found about 40,000 investors prepared to entrust him with a total of some 15 million dollars. He claimed that the enormous returns were the result of currency arbitrage between the dollar and the lira, based on the then common use of postage stamps as a payment instrument for international trading in goods. The vast sums involved, for that period, the frivolous nature of the promised returns and the classic simplicity of the process gave his name to a scheme long and often used before his time, and one that since has been frequently repeated, in a variety of guises. The record has now been set by Bernard Madoff and, in view of the 50 billion dollars that have probably been lost, it might be asked whether the scheme should not be renamed.

What is a Ponzi scheme in economic terms? It is a system of payments in and payments out, with at its heart an over-leveraged balance sheet. Payments out are thus mainly made with money recently paid in. This money however, involves new liabilities, so that the over-leverage is further increased. The literature on the subject (e.g. Spre-

mann, 2004) distinguishes between malignant and half-way benign Ponzi schemes. Unless they are fundamentally challenged, the benign variety is capable of continuing in existence for a very long time. This is the case when the system always remains liquid, as the growth of the debt (or the extent of the liabilities) remains sufficiently low. Malignant Ponzi systems, on the other hand, inevitably consume themselves sooner or later

Ponzi systems may be “fundamentally challenged” through intervention by authorities who identify a situation of overindebtedness, or by members of the scheme who simultaneously request the return of their investments, or by the person running the scheme removing himself to a Caribbean island with the remains of the proceeds. But the scheme usually comes apart before this, for it is typical of most of those who run Ponzi schemes that they first aggravate the over-leverage of their balance sheets with their ostentatious and expensive lifestyle, and then try to attract new funds with thoroughly unrealistic promises.

What do Ponzi schemes and chain letters have in common? The erroneous belief in promised, but economically absurd, returns, combined with the absence of value creation within the system. In contrast to the Ponzi scheme, the chain letter depends on the disciplined solidarity of its participants (which is, as mentioned, why it fails). It reveals its exponential growth mechanism to its participants, while the person running a Ponzi scheme conceals his activities and manages all transactions centrally. The chain letter must ultimately run up against the limitation of the global population; theoretically, a Ponzi scheme could continue almost indefinitely – as long as it does not grow faster than the overall economy, so that sufficient funds for new payments into the scheme can always be generated from outside it. It inevitably becomes necessary at this point to make reference to social benefits based on the pay-as-you-go principle. Their long-term functioning depends precisely on this situation. If it is not the case (which sadly applies to most social systems in the Western industrial nations), more or less benign Ponzi schemes mutate into genuinely malignant ones.

3. Too good to be true

A great deal has already been written about Bernard Madoff; interestingly enough, before any court has found him guilty. There is, of course, something fascinating about a person who has been able, for over twenty years, to operate a fraud on this scale. How did it happen that the questions raised by academics and financial ana-

lysts were so easily dismissed? That they were not taken seriously by the responsible supervisory authorities or seized upon gratefully by normally critical journalists? How did Madoff manage to ensure that no-one regarded the lack of governance at the heart of his scheme – there was obviously no separation between asset management, brokerage and the custodian function – as grounds for greater caution? Fair enough, the hedge funds serving as first purchasers were also under his control, but they had their own regular auditors, which should have asked such questions.

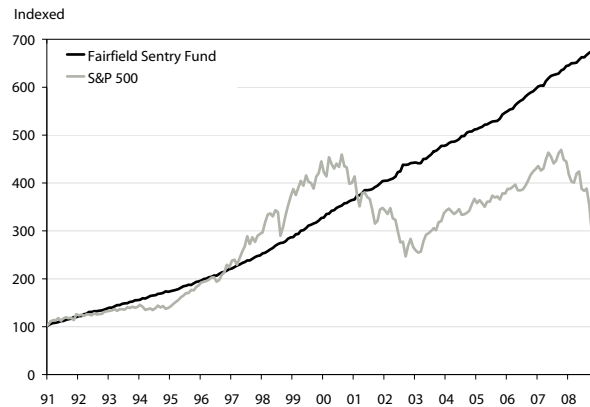
The most fascinating aspect of the Madoff case is the amount of goodwill that can be generated by trust in one person: trust that was capable of overlooking what should have been obvious questions. As with Ponzi, so with Madoff: the volumes that would have been needed to operate the scheme in what was claimed to be the underlying business were far too great. There is a limit to the amount of postage stamps required for trading goods between Italy and the USA. Given the volume of all his funds, the differentials between direct investments and index put/call options, with which Madoff claimed to generate his revenue, would have filled all the trading books in New York

Really cunning swindlers – and if all the accusations are founded, then Madoff is among the most cunning of them all – fulfill exactly those expectations that will appeal to their victims. First of all, a swindler must appear harmless, respectable and modest. Hot-air merchants and poseurs have much less of a chance, except among those susceptible to glamour, who are few and far between when it comes to money matters. A swindler must also possess a sufficient degree of empathy, to come across as someone who is concerned for his fellow men and can be generous to the less well off. And exploiting an association with a respected faith community will always pay off. Public-service engagements are also naturally of great benefit – in Madoff’s case, his help in developing Nasdaq. This sort of engagement appears to offer clear proof of the swindler’s altruism. Numerous contacts, carefully maintained in an unending round of conferences and parties, create a social network that renders the swindler almost immune to critical questions. Targeted donations to politicians, obviously including Hillary Clinton in this case, provide good cover on the regulatory front.

The cunning swindler is really only distinguished from a straight player by things being slightly overdone: an excessive degree of perfection with regard to all that makes for trust. It is exactly the same with the products or schemes that the swindler is selling: everything is fine, but just a bit too

good to be true. The figure below, showing the development of the Fairfield Sentry Fund, a hedge fund invested one hundred percent in Madoff's scheme, reveals this excessive perfection with brutal clarity.

As regular as clockwork



Source: Bloomberg; analysis

Over the whole period – by no means an easy time on the financial markets, as is made plain by the course of the S&P 500 stock index – Fairfield Sentry continually “generated” positive returns. Annualized over the whole period, they averaged 11.2 percent. The fund achieved this hefty return with a volatility of 2.4 percent, which gives a Sharp ratio of 3.4, assuming an interest rate for a risk-free investment of 3 percent. Such risk/return data are way beyond any kind of economic sense. It is almost disappointing that in 2001, the year of the New York terror attack, Madoff did not depart, at least briefly, from such consistency. For that is what might be expected of the really cunning swindler: not least in order to appear sympathetic to the victims of the attack and his then hard-hit colleagues in the fund industry, to slack off his fraud for a brief and insignificant period, subsequently to revert with full power to his remarkable rates of return. The cunning swindler realizes how important the exception can be in particular cases, for it is the exception that proves the rule. It looks as if Madoff ironed out this lack of empathy at the end of 2002 and the beginning of 2003, in what were very dark days for the financial world. At least, that's what it looks like for the data series.

4. It takes two...

So much for the swindler's perspective. But there are also all those who were ready to be swindled out of that 50 billion dollars. And those who helped them. A good deal less has been said from this perspective, understandably enough. For these people are all among us. Pitiably victims indeed, but not just that. Everyone is obviously

free to engage in things that look too good to be true. But when this is done by a highly visible collective, and when there was (and still is) obviously some sort of industry encouraging such behavior, then more rigorous analysis is required.

We have already said that continuous outperformance, as suggested by the development of the Fairfield Sentry Fund, is nonsensical in economic terms. Why so? Because this outperformance, if it really existed, would imply that everyone else who paid a price for a given return – a risk premium in other words – were absolute idiots. Why should anyone stick to the S&P 500 Index and put up with volatility of over 14 percent for an average return of 5.7 percent between 1990 and 2008, when a higher return could be had for less risk? Sustained outperformance indicates the (economically highly improbable) existence of a “free lunch”. Let us suppose for a moment that there is such a thing as an extraordinarily able super-portfolio-manager, and that he managed to achieve such outperformance. What reason would he have for sharing this ability with an indefinite number of unknown investors? Look at it how you like; what Madoff & Co. had on offer is simply an impossibility.

The demand for this supposed economic paradise on earth was, however, overwhelming, and it still persists, even after Madoff. The enormous boom in hedge funds is partly explicable in terms of this economic illusion, for most of them operate with the prospect of low risk (“absolute return”) and comparatively attractive returns. The notion that something like this might actually exist is particularly popular among those who have never really emancipated themselves from thinking like pensioners, although their wealth would make this easily possible. There are reasons for this. Wealth, particularly when inherited or acquired by some other means, is often accompanied by a creeping increase in expenditure. A residence with numerous staff here, another elsewhere, security staff and chauffeurs, a continually growing number of people in a family office providing an ever-increasing range of pseudo-services, accompanied by a need to compensate one's own cultural shortcomings by the acquisition of expensive works of art – and in no time, what had looked like wealth has turned into an unstoppable avalanche of liabilities. The response to the resulting lack of economic room to maneuver is an attempt to increase the revenue flow. But one is naturally not going to be satisfied with the risk-free rates of interest offered on the markets, for one is, after all, a High Net Worth Individual (HNWI) and a smart investor – and so the demand for vehicles with economically impossible returns is born.

This phenomenon also involves a moral problem. Firstly, it is fundamentally questionable whether the demand for something intrinsically impossible is not morally dubious per se. Providers might thus be tempted into paths of error. Consumers and their entourage (which also profits) have at least a shared responsibility – not only in the case of trainers made by child labor, but also for financial products. Secondly, there is a practical moral problem in capitalism when precisely those who possess sufficient capital and staying power are unwilling to put their capital at risk and entrust it to business, but rather chase after an “absolute return”. They thus replace the only social function they could and should fulfill with an attitude and lifestyle that might be appropriate for a recipient of social benefits, but certainly not for them. The potential political dynamite of the rich no longer being prepared to act as providers of capital is obvious enough.

5. No tirade against hedge funds

This might sound rather like a backward-looking banker lashing out at all the modern, innovative ideas associated with hedge funds. And there may be some truth in this, at least to the extent that hedge funds and similar vehicles pretend they can consistently deliver economic impossibilities or improbabilities. Sadly, this is the case with many providers and many prospectuses. Protected by a great deal of small print concerning any accountability for the promised outperformance, they suggest, by means of all possible indicators, graphs and sleight of hand, that they have indeed discovered the secret of generating sustained outperformance. Such practices are extremely problematic, not only directly for the provider, but also for the intermediary and the fund-of-funds manager. Sheer scale does not make the false expectations any more acceptable.

Apart from this, there is not much to be said against hedge funds. They are collective investment vehicles that offer investors a greater degree of freedom in the management of their assets and liabilities than normal investment funds, which are concerned only with the asset side, and often only with a single asset category. The most important characteristic of hedge funds is their ability to take up credit, with its potential to reduce, but also to increase, risk. The largely unconstrained management of a wide variety of asset categories under one roof also makes it possible to exploit temporary or longer-term correlations between investments. Should a hedge fund manager conclude, for instance, that with a falling differential between the price of oil and pork bellies, the price of reinsurance stocks generally tends to rise

against the stocks of manufacturers of Japanese textile machinery, then he can incorporate this insight in his fund. It's obvious enough that such an investment strategy, assuming it made sense, would not be without risk, for correlations are anything but stable. If they look stable, then everyone copies the strategy, makes the same sort of investment, and so changes the correlation.

Basically, hedge funds help to add a high degree of diversification to the interest rate, market and counterparty risks inherent in portfolio management, as well as the additional component of liquidity risk. Most of the “outperformance” by hedge funds in recent years is probably the result of managing liquidity risk, that is, of collecting a regular premium for investments whose market liquidity is not a given in all circumstances. This premium makes sense in economic terms, as does the management of such risks for people in a position to carry them. But 2008 has made it clear enough that the risks are real ones, and it is ultimately questionable whether the result is really “outperformance”. Liquidity risks must by definition occur abruptly, simultaneously and unavoidably. This means, among other things, that it can look for a very long time as if a premium is being collected without a corresponding risk. Hedge funds' wonderfully consistent returns, which we would by no means wish to equate with a Ponzi scheme, are explicable in economic terms by this premium for liquidity risk. And most such hedge funds provided empirical proof last year that it was indeed a matter of managing liquidity risk.

Despite the fact that it offers genuine economic profit, not even the effort to achieve greater diversification will necessarily deliver the desired positive results. Last year showed clearly that, while this rarely happens, it is possible for everything imaginable to go wrong at once, and that strategies that had delivered “alpha” (outperformance against a given benchmark) by means of better diversification almost as a matter of course could produce unwelcome surprises. However tiresome this may be on any specific occasion, at a higher level such outliers are exactly what is required to demonstrate that even exceptional talent is subject to the laws of economics.

So, then; investors and their advisers cannot avoid taking a very close look at what risk is contained in which vehicle, and whether taking on this risk really makes sense in the overall context of the assets and the investment targets aspired to. But this is only possible if there is sufficient transparency on the hedge fund. Hedge funds provide the best evidence of transparency by regular publica-

tion of the net asset value at which the shares in the fund can be, and actually are, traded.

Managers who prefer to keep their cards close to their chest, by contrast, will find life after the Madoff debacle more difficult. And there will be no trust at all in those who report all too attractive – or even impossible – gains, anymore than there will be in their auditors, no matter how prominent their names are. According to the Financial Times of 18 December 2008, Fairfield Sentry and Kingate were audited by on PricewaterhouseCoopers. Statements concerning outstanding governance, with impeccable names on the bodies concerned, will also be greeted with understandable skepticism. And there will be justifiable mistrust of the whole distribution chain, right down to the “funds of hedge funds” that have presented themselves as being so harmless. Madoff has made fools of all too many punters, and the whole process may well have been helped on its way by a good few fat commissions. All those inclined to rely simply on “talent” to achieve their investment aims, without devoting any attention to the economic basis of the chosen strategies, will from now on have to be aware that the ultimate hedge fund is one that has absolutely no content, but whose “returns” can be managed on the basis of the blind trust that the public has in the fund and its manager. The potential to operate a Ponzi scheme under the title of a hedge fund will long remain the mark of Cain of this investment vehicle.

6. How a Ponzi scheme comes about

As mentioned, the literature distinguishes between malignant and half-way benign Ponzi schemes. In our view there are, in addition to the deliberate schemes like those of the presumed swindler Madoff, something resembling implicit Ponzi schemes, not deliberately created, but nevertheless with the potential for malignancy. What do we mean by this?

A Ponzi scheme is defined in economic terms as one in which an overleveraged balance sheet is at the center of a system of payments in and out, when the results generated are financed by a sustained flow of funds that bring with them further and greater liabilities. Two economic aspects are relevant here. Firstly, that, for whatever reason, liquidity is not an issue, and secondly, that overleverage is a fundamental component. Overleverage, or in Madoff’s case the complete absence of assets, may be deliberate; but it may also occur gradually; for example, as a result of adverse economic developments.

Let us take, as a harmless and fictitious example, a real estate company that, from 2003 to 2007, invested mainly in newly built owner-occupier apartments in the coastal regions of the USA. During this period, the company has been able to pay an annual dividend of, let’s say, 6 percent out of the regular sale of the apartments. It has also been able to increase its stock price by 37 percent over the period, or some 7 percent p.a. – corresponding to the increase in the value of American real estate. With these positive figures, demand for the stock has risen continuously until recently; capital requirements have been easily covered by recapitalizations and mortgages from the banks. The company has been unaffected by the sub-prime crisis, as it is selling luxury properties, that have long become uncoupled from the crisis at the cheap end of the sector. Suddenly, however, the world has changed: no-one any longer wants luxury properties with sea views, prices are collapsing, and there is a complete lack of potential purchasers in a position to finance an acquisition.

What would normally happen next? The company would have to make hefty corrections to its asset values and stop paying dividends, in order to at least be able to pay the interest on the mortgages; without access to fresh capital, it would have to declare bankruptcy and go into liquidation. Normally speaking. That would be the end of this bad investment. The creditor banks would have to swallow a partial loss, the shareholders probably a total loss, and a few bold purchasers would gain properties with a sea view at very attractive prices.

However, the way things have gone so far with the sub-prime crisis in America, the way attempts are being made to manage the much more general credit crisis, and the way the global economic crisis is now being handled are painting a very different picture from what would happen “normally speaking”. Every effort is being made to conceal overleveraged balance sheets, to sugar-coat with guarantees assets whose value has plummeted, and to maintain the liquidity of many systems, both large and small, with more and more new money. Trying to protect the apparently poor, but over-advantaged owners of US property from apparently excessive and unjustified interest and amortization payments has developed into a full-blown political program. It is obvious enough that such an implicit discharging of debtors from their own individual responsibilities, and perpetuation of their quasi-gratis right of residence will only accelerate the collapse in the value of the assets concerned. This will do nothing to defuse the excessive debt levels in the banking system.

Put another way: what is currently going on in the international banking sector, with the active support of every conceivable public body, is the transformation of enterprises previously subject to the laws of business economics into systems whose assets are of questionable value, but whose abilities to meet their liabilities one way or another is ensured by state payments. This corresponds precisely to the definition of a Ponzi scheme, and herein lies the drama of the current crisis, or rather, of its “management” by public authorities whose behavior is becoming increasingly frivolous. Not even the provision of fresh equity for the banks, as practiced by the British government, for example, seems to be entirely above suspicion, for this capital is going to support balance sheets whose value is continually being revised downwards. This is known in banking jargon as “throwing good money after bad”, and is the same as making a bad investment. And the name of this investment, in the worst case, is Ponzi.

7. A worrying rush to restructure

Given the billions poured by governments all over the world into the supposed support of the banking sector and the revitalization of the economy over the past weeks, anyone not suffering from a severe anxiety attack must be somehow stuck in a state of juvenile belief in the possibility of the automatic multiplication of money. In addition to the “crowding out” of private seekers after funds by the increased demands of states on the capital markets, there are three aspects that are of particular concern to us.

Firstly, we do not believe that the urgently required restructuring of the economy will be accelerated by state involvement; au contraire. We estimate the surplus capacity in the financial sector at 30 to 50 percent. State-created structures like Fannie Mae, Freddie Mac or the British Housing Finance Corporation (HFC) – all of them among those who triggered the crisis – remain entirely untouched. Nothing has changed about their stubbornness with regard to personnel levels, identified a month ago in Investment Commentary 260, of 9 December 2008 – in contrast to the rest of the world of banking, not a single job has yet been cut! Nor – apart from the state guarantees – has there been any improvement in the desolate state of their balance sheets. De facto, these agencies are overleveraged and only being kept above water by state support: Ponzi perpetuated. It was not to be expected that these darlings of the British, and now the new American governments would disappear from the scene any time soon. But the determination to

ensure structural maintenance is now spreading to other sectors of the economy. The automobile industry is well to the fore: rescue plans like those of Chancellor Merkel or President Sarkozy are also open to more or less anything that political calculation may suggest. Our concern is simply that all these injections of money will mostly turn out to be extremely bad investments, both because they are devoted to obsolete structures and because they will also generate further consequential costs. The state as a large-scale investor will not find it so easy to get out of its bad investments.

The second aspect concerns the opportunity costs of these actions. The “crowding out” effect has already been mentioned. The mere fact of the foreseeable additional state debt – an increase of up to 10 percent in overall state debt is expected over the next 12 months – will also have an impact on the private sector. State-financed infrastructure construction projects may create jobs, but jobs will also be lost, because higher taxes will mean that private citizens lose interest in investing. Why make the effort, bear the risk, have the worry, suffer sleepless nights, when a financially over-challenged state will anyway have to resort to fiscal dispossession in a couple of years? The enthusiasm currently displayed by popular economists and politicians for the apparent blessings of Keynesian economics consistently fails to consider the downside of people’s rational expectations. We expect the net impact of stimulation programs to be negative, so that they will tend to aggravate the crisis, rather than help resolve it.

Thirdly, we fear that the galloping deterioration in the state of national budgets that mostly already have their fair share of problems will ultimately damage the credibility of the public authorities to a more or less irreparable extent. True, it takes a great deal till a state is genuinely overleveraged, for its potential for reconstructing its finances by means of future taxes is almost unlimited. Discounting them to present-day value and setting them against existing debt would still give a positive result for most civilized states. And many states also have unrealized – and in principle saleable – assets, such as motorway networks, infrastructure enterprises, land reserves, and so on. The problem is simply that the intrinsic value of both future tax revenue and state-owned assets is highly dependent on the attractiveness of the current and expected future situation. This is particularly true for social benefit systems based on transfers from active to passive citizens, which anyway resemble Ponzi schemes. A small negative shift in the trend of future economic or population growth, and the already implicit debt has

multiplied. The danger that, in the wake of the financial and economic crisis, many states will find themselves in a negative spiral, which will definitively destroy intrinsic value, and will be difficult to reverse, cannot easily be dismissed. The incentive for politicians to give an overleveraged, indeed largely worthless, construct the appearance of a perfectly functioning system – that is, to play Madoff – is enormous. The result would be a giant Ponzi scheme. A malignant one.

8. Where is hope to be found?

The current contraction of the global economy, accompanied by extreme collapses in the price of stocks, and also of some bonds whose issuers are not entirely above reproach, has already been discounted. When things will bottom out remains a matter for speculation, which we do not wish to indulge in here. One thing is certain though: the private sector has already been hit by a tidal wave of value corrections. The public sector, by contrast, with the exception of Iceland, remains largely unaffected. A very great deal of money has sought, and found, shelter within the accounts of the public authorities.

In our view, this high degree of recoverability of money – effectively loans by citizens to the central banks of their countries – and of government bonds does not reflect reality. There is a great danger that the financial irresponsibility of the political sector will mean that money and government bonds will be the next investment categories whose value will have to be adjusted downwards. The extent of the adjustment will vary, depending on the currency and the credit-worthiness involved. But the general direction will be the same: relative to the real values of the private sector, the value of money and government bonds will fall.

This may happen gradually, or alternatively in ways that are only to be found in economics textbooks. Some 80 years ago, Germany experienced hyperinflation with unforeseeable political consequences; just 60 years ago, Ludwig Ehrhard carried through a complete financial restructuring (successfully!). In a historical context, monetary revaluations are not uncommon. Nor should we dismiss the possibility of a partial collapse of over-complex currency regions or explicit or implicit exchange rate systems (currency boards).

As difficult as it may be to get this across in the light of the losses we have experienced on investments in the real-value-oriented private sector, we believe that investors should take note of

the logic of the threatening correction of the relative value of public-sector investments. In plain language, this means that the previously beneficial cash positions, in the form of deposits with banks ultimately sponsored and guaranteed by the state, must be reviewed. There is far too much liquidity in the hands of individual debtors, and sooner or later this risk cluster will bite back.

Since the crisis started, our bank has recommended the maximum possible diversification across investment categories, currencies, regions of the world and economic sectors. This is because we were not sure when the anticipated correction to the value of money and public debt would occur, or which country, which region, which currency would be hit first and hardest. However well-founded it may have been in economic terms, this strategy has been a costly one, compared to a flight to cash on the accounts of the state-protected banking sector.

Nevertheless, we stand by that recommendation, more so now than ever. Indeed, we would go further: the deliberate orientation of the portfolio towards investments that politicians cannot dilute by decree, or central bankers with a dose from their mobile liquid manure dispensers. We are currently working flat out to develop a portfolio design or, for smaller investors, a financial product that embraces the stocks of less-leveraged, globally active companies. Our aim is to be able to offer our clients an alternative to the mostly national-debt-oriented money-market funds and the no less state-dependent deposits with the big banks.

What is such a real-value-oriented instrument really based on? Simply on the undeniably optimistic attitude that, despite all the depressed and depressing, there are enough people in the world who want a better life and are prepared to work for it. Humanity's capacity for invention and its desire to achieve greater prosperity are powerful enough to create a positive outcome out of every crisis, no matter what structures fall by the wayside in the process. This is why it is right to keep one's assets as safe as possible from the threatening destabilization of systems and structures, so as to enable participation in the inevitable upturn when it comes. The coming months will require a high degree of strategic thought and action, from investors and their advisers alike.