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Diffuse anxieties. Specific answers?

1. The plague and its causes

In “Angst vor Gefahren oder Gefahren durch Angst?” (Anxiety about danger or danger from anxiety?) (Verlag Neue Zürcher Zeitung, 2005), Guy Kirsch, an economist from Fribourg, emphasizes the necessity of distinguishing between “anxiety” and “fear”. The term “anxiety” describes a queasy, uneasy, constricting feeling of an actual or suspected, but anyway fairly undefined, danger. “Fear” on the other hand, defines the reaction to a specific, concrete danger. Kirsch points out the evolutionary advantages that mankind has gained in the course of its development from the ability to clearly recognize, identify and combat dangers. Anxiety alone, and the resulting paralyzed inactivity, would not have been enough to enable a physically fairly weak being surrounded by mammoths, hyenas and snakes to become the crown of creation. The ability to transform “anxiety” into “fear” is a defining characteristic of human existence.

The history of mankind has always been characterized by anxieties about the unknown and the inexplicable, and attempts to render these vague insecurities more specific. When it proved impossible to identify and explain causes within a reasonable timeframe, then it became necessary either to have recourse to religion, or to find a scapegoat – and often to do both simultaneously. In the late Middle Ages, the plague broke out for the first time in central Europe, and caused a high level of anxiety within the population. Neither the methodology nor the equipment then available were at all suitable for discovering either the virus or its means of transmission, so the transformation of “anxiety” into “fear” was achieved by identifying “plague-bearers”, and subsequently also witches, as the causes of the pandemic. In mediaeval St. Gallen, the home of our bank, the Jewish inhabitants were summarily arrested and then burnt. This also disposed of the debts people had incurred with them. A typical process, and an oft-repeated historical pattern: the transformation of “anxiety” into “fear” has utterly false and unfounded results, with sometimes gruesome side-effects. Only much later, and at a safe distance from the anxiety-arousing events, and with the benefit of enlightened scientific understanding, do the real causalities become apparent.

The transformation of diffuse anxieties into specific, well-founded fear is not only a basic necessity for mankind, developed in the process of evolution, but also a significant component of added value – in other words, of economic performance. Professor Kirsch demonstrates that the activities of the media – newspapers, television, websites and blogs – do not in fact simply provide information, but rather serve to apply information, or what passes for it, in order to generate fear. Uneasy feelings are thus transformed into reactions to specific dangers. There is an – obviously immense – demand for “fear”, and those media enterprises can think themselves correspondingly fortunate that regularly succeed in creating actual or supposed scapegoats and plague-bearers. Seen in this light, the success of the American TV station CNN appears easily explicable in rational terms.

The author of the Commentary was recently asked by a journalist what the background to the currently apparently tangible uncertainty on the financial markets might be. The counter-question was, how was it possible to speak of “uncertainty” when volatility was so low? This generated a flood of topics with mostly unknown or blurred outlines – not specific risks, but rather a fairly helpless listing of everything that might possibly happen. And behind it lay the urgent need to move from diffuse anxiety to specific issues with specific probabilities.

The multi-dimensionality and the radical nature of the change that has characterized recent years, and will continue to concern us in the years to come, may well be generally underestimated. It is of course dangerous to define historical turning points prematurely. Nevertheless, the parallel of the transition from the late middle ages to modern times may offer some insights into the change currently observable. This commentary attempts to sketch the outlines of a few areas, avoiding as far as possible putting the blame on plague-bearers, and rather identifying the bacterium

yersinia pestis and the flea *xenopsylla cheopis*. We also address the question of whether or not "anxiety" and "stock exchange" make sense as a pair of concepts. And lastly, we develop a couple of specific responses to the specific challenges thus identified.

2. From Pandora's can of worms ...

Geopolitically, it is possible – entirely without cynicism, naturally – to describe the period after September 11, 2001 as a time in which, to general human satisfaction, evil was called by its name. It was, at least for a while, clear where the greatest dangers for the civilized world were to be found. CNN and the American government made good use of this state of affairs, which persisted until around the time of the second Gulf War: the point at which it became clear that the story about weapons of mass destruction in the hands of Saddam Hussein – as a proxy for Osama bin Laden – did not quite represent the whole truth. "Al Qaeda" and the whole big subject of international terrorism has in the meantime become less clearly delineated again. Fear of the bacterium *Osama pestis* has again given way to a state of diffuse anxiety. Every petty criminal is accused of having links with Al Qaeda, so that this undoubtedly real hydra appears immensely more sinister and powerful than it ever could be. The result is anxiety: some fear a nuclear version of 9/11, in the form of a "dirty bomb" in New York or Shanghai harbour, or the London underground; others forecast a new wave of bio-terror. And the longer this state of affairs continues, the queasier and uneasier we feel.

The assessment of the rise of *China* seems to be similarly diffuse. All sorts of probable and improbable consequences are drawn from the fact that this enormous country, with its unbelievable social disparities (a remarkable phenomenon after 55 years of applied socialism) has now achieved a sustained high rate of economic growth. Some see China soon competing with the USA as a global power, others see it collapsing, and for yet others, it serves as an explanation for their own economic inadequacies (offshoring of jobs and the like). China's immense strategic deficits, such as the absence of any kind of open society, the complete dependence of such a vast country on the reliable import of raw materials, the precarious supply of water and electricity, and finally the lack of the most important resource for any country, children (on account of the one-child policy and rising life expectation, China will become the country with the most unbalanced age-structure pyramid in the world) – all these, clearly delineated dangers – are assiduously excluded from such considerations. As far as China is concerned, the transformation of anxiety into fear (if it all) has not even got under way yet.

Then there are also the equally diffuse anxieties concerning the current weightings in global trade. People refer to an "unsustainable" imbalance – which actually seems to remain remarkably persistent – because the USA is now importing some USD 700 billion more in goods than it can export. This is the result of a considerably greater appetite for consumption by the Americans, compared to Europeans. This appetite for consumption has determined America's robust economic growth for years – and regardless of 9/11. And precisely because such a positive feeling is lacking in Europe, it is above all the Europeans who are ready to provide all sorts of possible and impossible writings on the wall. The *current account deficit* must be counterbalanced financially, and so it is, by means of capital flows; specifically, in that the Chinese and other central banks buy up vast quantities of American bonds. But what if the Chinese don't want to buy any more dollars? What if they revalue their currency? What if they want to sell their pile of dollars, but can't do so at a reasonable rate because, as is well known, debtors' problems become creditors' problems if they get too big? What if American consumption collapses – because the US government wants to, or is forced to, get its budget deficit back in balance?

At the edge of this cloud of whipped-up and insoluble problems towers another mountain of economic issues: the *interest rate problem*. We dealt with it extensively in the last Investment Commentary. There is nothing to be added here, except, remarkably, that there has in the meantime been nothing to add. Interest rates at the long end of the curve did rise a bit for a brief period, only to drop back below where they were before for practically all significant currencies. Greenspan's "conundrum" persists: despite remarkable levels of liquidity in the system for years on end, there is practically no inflationary pressure, and this notwithstanding a dramatic rise in the price of oil. At a time of – in America – attractive growth rates, long-term interest rates are behaving as if there was a recession round the corner. And everyone who has money, or is dependent on a secure return from money (pension funds, life insurances, and the rest: all of us, in fact) is in despair at the prospect of continued low returns. What if this situation should persist much more obstinately than is already the case? And what if the interest rate situation should suddenly keel over? The past offers no patterns. And this

lack of orientation generates anxiety – anxiety as defined by Professor Kirsch: diffuse uneasy feelings in the face of a largely unknown phenomenon.

Low returns, the prospect of lower retirement pensions – and this with an ageing population – record levels of unemployment, continuing zero-rate growth: that is the picture in *Europe*. But at the same time, this horror vision is also characterized by some obviously agile and highly successful enterprises in the global marketplace for anything and everything that can be produced in the way of components. The mood of the average European is, to put it mildly, rotten. He worries about his current job, because his employer can shop around everywhere, and because the rapid expansion of the EU as a giant political system has generated a real increase in the supply of cheap labor. But he must also worry about his future employment, because the same political system is doing everything possible to ensure that no new jobs can be created in the form of new enterprises in promising sectors. The confiscatory tax regimes and absurd regulatory systems obtaining in the core European countries effectively stifle any attempts to solve the problems caused by the change, *ab ovo*.

The result is despondency, complete disillusionment with the institutions and their ability to solve problems, an increasingly cynical attitude towards political and business leaders, of whom it is now taken for granted that they are dishonest and concerned only with their own interests – an assumption, incidentally, that will come as little surprise to those who think in terms of political economy. For these diffuse anxieties concern a Europe paralyzed by slow growth, or no growth at all, in which companies and the investors behind them earn excellently well from their skills in the global allocation of labor, the middle classes are further impoverished through taxation, jobs are systematically destroyed in a unionized labor market, and it is more than probable that the next generation of "plague-bearers" will be identified in the form of immigrants. Instead of getting to grips with the immense internal problems, politicians both at EU level and in the member countries are pursuing an aggressive expansion policy, and "buying" high levels of risk at a high price. With Romania and Bulgaria in 2007, it will be the turn of two financially extremely rickety and internally unstable countries. And the Ukraine is already standing in line – a country where conditions have improved since last year's November Revolution only in the fantasies of democracy-obsessed theorists. Under the protection of the USA and Germany, in reality, chaos reigns, and corruption and extortion are the rule, not the exception.

The Swiss are familiar with the consequences of an aggressive expansion policy, followed without regard for the quality of what is acquired and integrated. This was the policy that Swissair followed with its "Hunter Strategy", and it resulted in the grounding and bankruptcy of a once successful airline. But what for us should be a specific fear remains in the rest of Europe, for the time being, a diffuse anxiety about a "something" that ought not really exist.

3. Anxiety is a poor adviser

The list could go on – easily – and in the process would become ever more anxiety-raising. But the real question is, how relevant this list actually is for investors. For this, and not any political or ideological considerations, is the concern of an Investment Commentary.

A look at the long-term pattern of a very broadly based stock index suggests that it would be fairly absurd to apply the terms "anxiety" or "fear". Anyone who in 1925 invested USD 100 in the (admittedly then non-existent) MSCI World global index, and always similarly reinvested all capital gains (dividends, earnings from share buy-backs, etc.) would today (end of April 2005) have USD 95,641. The annual return would have been 9 percent, and still 6 percent when adjusted for the average US inflation rate of 3 percent. And this despite anxiety-generating events such as the 1929 stock market crash and the subsequent economic crisis, the Second World War, the Cuba Crisis, the Vietnam War, the 1987 stock market crash and the 2001 terror strike.

The longest slump, defined as a particular crisis or a continuous phase with a loss of at least 20 percent from the previous high, that investors had to survive lasted around 58 months (August 1944 to June 1949), and the second longest, 39 months (March 1937 to May 1940). The worst month was September 1931, with a loss of -22.4 percent; October 1944, January 1946 and October 1987 were similarly bad. The highest single-day loss was incurred on October 19, 1987 (-20.5 percent, USA), and the most negative annual return was in 1931 (-32.5 percent). Not good, undoubtedly. But really reason for anxiety attacks and panic reactions?

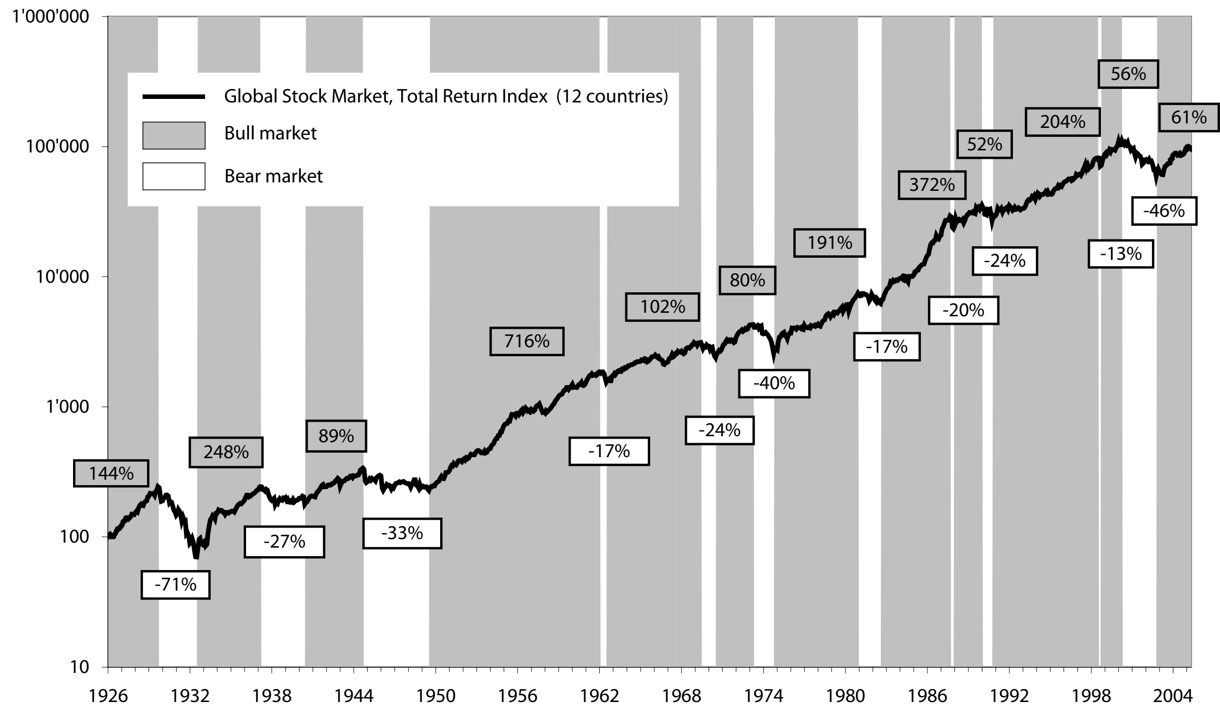
For there were also good times. For example, the highest single-day rise, +16.6 percent on March 15, 1933 (USA), or the longest practically unbroken positive period, of 12½ years from July 1949

to December 1961. Some years gave real cause for rejoicing, and sometimes in series, for example 1985 (+41.8 percent), 1986 (+42.8 percent) and 1987 (+16.8 percent). If our investor had accepted an annual loss bandwidth of up to -10 percent as unproblematic so long as the negative years did not occur in series, then for 66 out of 79 years (since 1925), he would have had no cause for concern, let alone anxiety.

But not every stock exchange collapse is like 9/11. The legendary collapses of October 29, 1929 and October 19, 1987 came out of the blue, so to speak. All the experts were busy explaining how well justified the (high) price of stocks was, how brilliant was the economic outlook, how shareholders in particular (and not stakeholders such as management, employees or other social elements) would share in the growth to come. The

Development of the global stock market, 1925-2004

Indexed, in USD



Source: Bloomberg, Global Financial Data,

4. Slumps are real

Days like September 11, 2001: a 10.2 percent drop in prices under the impact of the collapse of the World Trade Center and the paralyzing uncertainty as to whether there were other targets planned in addition to the skyscrapers and the Pentagon (which does seem to be the case – United Airlines Flight 93 was most probably meant to hit the White House) – under these conditions, a fall in prices was more or less obligatory. Suddenly breaking news – and it could hardly have been clearer in content. A new type of threat; the end of the "end of history" as announced by Francis Fukuyama; the brutal conclusion to a decade of global peace that had replaced the bi-polar global system; the chilly feeling that the civilized, pluralistic West was going to have problems dealing with those motivated by religious fanaticism.

heroes of the boom grinned out with Colgate smiles at the public from the pages of glossy magazines on the kiosk displays. And the public bought and bought, as if there were no tomorrow. Quality was no matter – the main thing was to be part of the action.

And then all of a sudden, everything was different. As if the notorious Australian butterfly had flapped its wings, prices collapsed and public and professional brokers alike were gripped by panic. Sell orders found no buyers, prices were going one way only – down – and soon "the stock exchange had halved". Billions were destroyed, and a whole generation of investors were poorer – much poorer.

To claim that the information available on Day T_+ was significantly different from that available on Day T_- and that the shift from euphoric intoxication to a sobering hangover therefore reflected the behavior of investors with rational expecta-

tions would be to ignore the tautological element in the argument. There was different information available, but simply concerning the fact that prices were in the process of collapsing – that is to say that all the other investors also suddenly had different expectations. That virtually nothing about the real economy had changed in the meanwhile is assiduously overlooked.

There was, then, just as little reason for fear and anxiety on the part of market players with reasonably rational expectations as for the greed and the excessively positive perspectives of a buying spree – at least, on a "non-9/11 day", on which one goes to work, drinks one's coffee and reads the paper in the normal way, and on which the stock market then collapses.

So, we do obviously encounter anxiety, fear and panic on the stock exchange. Why?

5. Diversification neglected, too little time: grounds for anxiety!

There are, for various reasons, hardly any investors who are in a position to build on the long-term development of a broadly based index. Whether they are private or so-called institutional investors, all investors also have other assets, in addition to the financial assets at their disposal; real estate, for example, or future wages. They live somewhere, or are domiciled at several specific locations. These special circumstances give rise to fairly individual obligations; that is to say, entries on the liabilities side of the balance sheet. Were one to subject the entire asset and liability positions of an investor to thorough analysis, then in the vast majority of cases the optimum investment would be not the broadly based global index, but individual investment substrates. Why is this? Because the investor has, for example a particular exposure to a given sector. Let us assume he works in the pharmaceutical industry. In this case, he will not unreservedly accept the proportion of pharma stocks in the global index (pharma stocks currently represent about 10 percent of MSCI World Index). Let us also assume that the greater part of his liabilities are in a currency such as Swiss francs. Can he then casually accept the currency risk of the MSCI World Index (US dollar share currently at 52.3 percent)?

Investors cannot, then, avoid correcting the broadly based indexes for both geography and sector; they will arrive at a degree of "home bias", an overweighting of investments in their home country. This is comprehensible and, with regard to the specific situation, "rational". But from a higher-level, aggregated perspective, it is fairly sub-optimum. Country indexes (which is where a home bias leads) are riskier than a global index. They fluctuate more sharply, and generally have at least similarly long slumps (see table below). This greater volatility of less diversified investments, the more frequent and extreme swings, results in bumpier and more uneven asset-building, which can give rise to states of fear and anxiety.

Volatility and slumps in various stock markets since 1925

Stock market	Annualized volatility*	Duration of longest slump**
Global	15.6%	58 months
UK	16.7%	43 months
Switzerland	17.9%	57 months
Japan	21.5%	53 months
France	24.2%	90 months
Germany	26.6%	56 months
Italy	29.4%	54 months

* Based on end-of-month values of the Total Return stock index in local currencies (global in USD) since 1925.

** Slump: continuous period with over 20% loss from previous high.

Source: Datastream und Global Financial Data

A further point is, however, even more important. Only a few investors have an investment horizon that matches the time patterns of stock investments, even on a fairly well diversified index. Let us assume that our Swiss working in the pharma industry retired at the beginning of 2001, at the age of 65, and had his pension paid out as a lump sum. Given the attractive average returns on the stock market, he invested 50 percent in the MSCI World Index, 25 percent in European stocks, and 25 percent on the Swiss stock market. At December 31, 2002 his capital had shrunk to 56.8 percent and, assuming a historic annual return of 7.7 percent, he would have had to wait till 2010 to regain his original capital. Should he, reasonably enough, want from time to time to draw on his capital and revenue, say at 5 percent p.a., recovery would take 22 years (to the end of 2024), by which time our investor would be 88 years old. But even then, he could not be sure that he would actually have returned to the level of 2001, for the probability that this would happen is only 92.5 percent; that is, in 7.5 of 100 cases the original state would never be regained in the lifetime of the investor. No wonder, then, that investors respond to stock exchange collapses with panic. For individuals, capital destruction can be disastrous, even as the aggregated world continues happily on its way.

6. Anxiety-generating incentives

Many assets are anyway not at all managed on the assumption of a long-term horizon, even if people have such a horizon. Far more often, it is the much shorter reporting horizon that determines the time scale of optimization, and in the best case this reporting horizon is one year; often it is significantly shorter. All institutional assets, and many private ones are managed by a third party, the "agent", who does not participate directly in the successful management of the assets. It is necessary to review the agent's performance from time to time. In the better case, this is done by comparing the return actually achieved on the portfolio with that of a predetermined benchmark portfolio. In the best case, it is done by including in the assessment the risk accepted by the agent during the reporting period. Far more frequent, however, is the worse case, in which the only concern is the absolute return achieved during the period under observation. Anyone with any knowledge of the asset management business will know what then actually happens. Losses relative to the benchmark and variations in risk acceptance are excused, but not so negative returns, and certainly not if they occur in series. This at least implicit pressure on the agent results in him not optimizing the return on the assets, but rather ensuring his survival in an asset management industry characterized by ever shorter reporting intervals. That he is gripped by anxiety and fear when negative returns threaten is only natural. Better to sell off at the right moment than to endanger the annual or monthly return.

The result is extremely cyclical investment behavior. This is further enhanced by legal conditions that practically compel panic selling, for instance by requiring compliance with a solvency ratio, and by the fact that more and more private investors, who are not in fact constrained by particular reporting intervals, also go for short-term optimization. At all events, there seems to be no other explanation for the demand for "absolute return" products.

Between the objectively optimizable term of the investor's calculations and the subjective assessment of the agent managing the assets there yawns an enormous gap. Basically, both players are afraid: the investor fears absolute losses, although actually, from a long-term perspective he could bear them; his agent fears that he will not survive one of the short reporting intervals – and they should indeed both be afraid, for thus they miss their long-term targets.

7. Follow-my-leader: easy enough, but lemmings do it too

Things are thus not perhaps quite so rational as the model of the efficient market and rational expectations would have us believe. Which brings us to the third reason why anxiety and the stock exchange are a valid pair of concepts. The model implies that individual benefits will at any time be optimized on the basis of the available information. In doing so, it overlooks the fact that there is a difference between "available information" and its interpretation. No-one is likely to complain, above all in the age of the Internet, of having too little information. But filtering the relevant material out of the enormous mass of information, and then drawing from it something like the right conclusions for the optimization of individual benefit – that is another matter entirely.

The interpretation of (ever more) information is an exhausting, laborious and expensive undertaking. Trying to avoid doing this, if possible, is not merely sensible, but often also rewarding. For when many people do the same thing over a period of time, this generates a sort of "mainstream", that is both self-extrapolatory and price-determining. "La hausse amène la hausse" (boom breeds boom) is a truism on the stock exchanges. It is true, at least for a certain period – so long, in fact as it is not worth having a different opinion to the mainstream. Sooner or later, the extrapolation game is over and, after some initial agitation on the stock exchange, a new mainstream begins to form. The fracture zone between Mainstream 1 and Mainstream 2 is characterized by an aura of doom, a lack of orientation, the prevalence of risk, and the feeling of a lack of terra firma. Panic occurs. During the great extrapolation game there is a gathering sense of unease, an uncertain feeling that "something" might not be in order, and that prices are too high. But for a long, long time, this unease is negated, day by day, by still higher prices, and voices raised in warning are ridiculed. Elation and anxious trepidation are the natural concomitants of stock market bubbles.

And the time after the bubble bursts? This is characterized by a negative version of the herd instinct. More bad news is extrapolated into the future, and the smallest sign that such negative expectations are being met produces new setbacks. This goes on until the negative mainstream has overwhelmed the last remaining optimist. Then it is time for the Australian butterfly to flap its wings again.

The model that permits the formation of a mainstream beyond individual expectations was first

described by the Stanford economist Mordecai Kurz in his book *Endogenous Economic Fluctuations: Studies in the Theory of Rational Beliefs*. We first mentioned it in the Investment Commentary some three years ago (Investment Commentary 214, March 18, 2002). Mordecai Kurz defines "rational beliefs", which are selected by the individual in order to avoid continually having to form "rational expectations". Kurz's model does not contradict the model of rational development of expectations, but incorporates it as a special case. His model is more general, and has room for the evidently real phenomenon of bubble formation and panic sales in the markets. It can also explain the superior returns from stocks, as opposed to bonds, which the exponents of the model of rational development of expectations were never able to do. These are the strengths of the model. Its weakness lies in the impossibility of forecasting the length of extrapolation phases generated by mainstreams. Indeed, it is precisely one of the axioms of the model that this cannot be forecast, and represents that risk which "entitles" investors to enjoy superior returns.

Mordecai Kurz's model has not yet received the blessing of the academic mainstream and no consideration has yet been given to its implications for practical investing. But it does appear that the academic world would be better advised to pay more attention to this formalizable model than to "psychological" behavioral approaches that possess little explanatory power, have at best anecdotal relevance, and cannot handle concepts such as superior returns, extrapolation and the like.

8. Lengthy sideways trend: grounds for despair?

Unless we are much mistaken, it is more than likely that states of diffuse anxiety may be with us for some time to come, given the fundamental changes taking place in the world in the wake of its territorial expansion following the implosion of the Soviet Union, together with the communication revolution and the information explosion affecting practically every aspect of science and technology. However, as the development of the global stock market index shows, genuine catastrophes are both rare and short-lived. Slumps, though, are neither rare nor necessarily short-lived. Let's face it.

The consequences are foreseeable. *The financial sector's* success has been due entirely to the very long-lasting positive interest rate curve, and the very long-lasting highly attractive stock market returns. Accordingly, it has built up capacity, which will be *redimensioned*, or moved to wherever capital will in the future be allocated in large quantities: to the developing countries. The lower returns from interest rates and stocks will necessitate more efficient allocation mechanisms.

New, innovative products and strategies will emerge. Without false modesty, our bank can point to the new "Active Indexing" line, as well as the structured products always of interest in uncertain periods of low returns. Active Indexing® comes close to squaring the circle, by actively seeking passive (and thus attractively priced) index instruments and deploying them at given investment intervals. It is based on the 17 largest and most liquid country sub-indexes and the 10 sector indexes of the MSCI World Index. Every month what are in our view the six most attractively priced countries and sectors are selected, and invested in. The underlying economic consideration is that it is highly probable that capital will in the future flow to wherever higher returns can be achieved. This will hardly be the case where the price of capital investment is already very high, but rather where something can still be done. The success to date of Active Indexing®, confirmed now over several years, reinforces our determination to pursue this approach.

Such an approach will, for example, include taking the most expensive sub-indexes into account, as well as the "cheapest". Active Indexing® Long/Short follows this strategy, by adding the expensive part of the global index, in sold form, to the Active Indexing strategy. The simultaneous, and more or less identical buying and selling of sub-indexes enables the partial elimination of market risk. This strategy could naturally not keep pace with a genuine boom, but simply reflects the differential between "expensive" and "cheap" countries and sectors. It can, though, also achieve positive returns with falling or sideways markets.

The Active Indexing® family will be completed with an "Active Momentum" strategy, to bridge boom phases in which value-oriented approaches can lag behind. All the strategies are based on highly liquid index instruments, quite unlike many hedge funds, which are often priced only once a month, and are tradable only to a very limited extent.

There are, then, no grounds for despair, but simply grounds for expecting more intelligence and imagination from one's asset manager. These two attributes will, incidentally, in all probability be decisive not merely for the successful mastery of anxiety making times in asset management, but

much more generally. There can be no doubt that we live in a period of radical change. And people are, of course, entitled to their anxieties. Nevertheless, mankind has, time and again, shown that times like these can be successfully mastered – a clearly delineated insight, with plenty of empirical support, which is more powerful than all kinds of anxieties about diffuse threats.

KH, 2.5.2005