

Reaping the Whirlwind¹

Jeremy Grantham

The time to blame should be past, or at least in abeyance until the crisis is past, but I find it impossible to avoid it completely. Sorry. In any case, just to set the scene, it is necessary to review briefly the poisonous wind that we all sowed.

1. We had an extended period of excess increase in money supply, loan growth, leverage, and below normal interest rates.
 2. This combined with a remarkably lucky global economic environment that we described as “near perfect” to produce a bubble in asset classes, as such a combination has done without exception according to our research. Since all these factors were global, the combination produced what we have called “the first truly global bubble” in all assets everywhere with only a few modest exceptions.
 3. While these asset bubbles were inflating, facilitated by easy money, the authorities – the Fed, the SEC, the Treasury, and Congress – rather than tightening existing regulations, partially dismantled them. They freed commercial banks while further reducing controls on investment banks, allowing leverage to take wing. More recently they almost gratuitously, without being pressured, removed the uptick rule for shorting. And this is just a sample. Simultaneously, attempts in some quarters to address growing risks were beaten back or diluted by Democrats and Republicans alike. Examples here include early efforts to rein in stock options and the attempt to add controls to Fannie and Freddie. (I’m biting my lip not to name names.) Worse yet, the regulating authorities appeared to encourage the worst excesses by admiring the ingenuity of new financial instruments (okay, that was Greenspan), and by repeating their belief that no bubbles existed (or perhaps could ever exist) and that housing at the peak “merely reflected a strong U.S. economy.” Finally,
- as the bubbles inevitably began to break, all was said to be contained and the economy was claimed to be strong.
4. The combination of favorable conditions and irrationally exuberant encouragement from the authorities produced an even more poisonous bubble – that in risk-taking itself. Everybody, and I mean everybody, got the point that risk-taking was asymmetrical and reached to take more risk. The asymmetry here was that if things worked out badly they would help you out (this sounds very familiar!), but if all went well you were on your own, poor thing. Ah, the joys of pure capitalism!
 5. In this regard, some deadly groundwork had been laid by the concept of rational expectations, or market efficiency. This argued that we were all far too sensible for major bubbles to appear. This is a convenient theory for mathematical treatment, but obviously totally unconnected to the real world of greed and fear. It dangerously encourages the belief that if you take more risk you will automatically receive more reward. That condition might often, even usually, be the case because in normal quiet markets a rough approximation of that relationship is usually priced into the markets. But in wildly-behaving markets where risk is mispriced, it is not true. From June 2006 to June 2007 on our seven-year data, investors lulled by these beliefs and the conditions of the market were actually paying to take risks for the first time in history.
 6. Just as all bubbles have broken, these bubbles did. Far from being a surprise, the bubbles breaking were absolutely not outlier events, contrary to protestations. The bubbles forming in 1998 and 1999 and in 2003 through 2007 were the outlier events. The U.S. housing market, which was a clear bubble with prices at least 30% above a previous very stable trend, is

¹ “For they sow the wind, and they reap the whirlwind.” Hosea 8:7

well on its way back to normal, and equities and risk-taking may well have made it all the way back.

7. The stresses on the financial and economic world of these bubbles breaking was always going to be great. To repeat a comment I made 18 months ago, “If everything goes right (as a bubble breaks) there will always be lots of pain. If anything is done wrong there will be even more. It is increasingly impressive and surprising how much we have done wrong this time!”
8. By far, the biggest failing of our system has been its unwillingness to deal with important asset bubbles as they form (see last quarter’s Letter). I started a long diatribe on this topic in 1998 and 1999 and reviewed it in *Feet of Clay* (2002), which is aimed at my arch villain, Alan Greenspan. With the housing bubble even more dangerous to mess with than equities, Bernanke joined my rogues’ gallery. If we change our policy and move gently but early to moderate bubbles, this crisis need never be repeated. There are signs that the previously intractable authorities are reconsidering their bone-headed position on this topic. If they change, all this pain will not have been totally in vain. (See Part 2 of this Letter, titled “Silver Linings,” in two weeks or so.)
9. The icing on the cake as far as the bust is concerned has been provided by Buffett’s “financial weapons of mass destruction” – the new sliced and diced packages of loan material so complicated that, shall we say, few understood them. The uncertainties and doubts generated by their complexities were impressive. Trust and confidence are the keys to our elaborate financial structure, which is ultimately faith-based. The current hugely increased doubt is a potential lethal blow to the system and must be addressed at any cost as fast as possible. Concern about moral hazard is secondary and must be put into abeyance for the time being. Wall Street leaders are in any case now fully scared and are likely to stay that way for a few years!
10. To avoid the development of crises, you need a plentiful supply of foresight, imagination, and competence. A few quarters ago I likened our financial system to an elaborate suspension bridge, hopefully built with some good, old-fashioned Victorian over-engineering. Well, it wasn’t over-engineered! It was built to do just fine under favorable conditions. Now

with hurricanes blowing, the Corps of Engineers, as it were, are working around the clock to prop up a suspiciously jerry-built edifice. When a crisis occurs, you need competence and courage to deal with it. The bitterest disappointment of this crisis has been how completely the build-up of the bubbles in asset prices and risk-taking was rationalized and ignored by the authorities, especially the formerly esteemed Chairman of the Fed.

Where Was Our Leadership?

This brings us to ask the question: Why did our leaders encourage the deregulation, encourage the leveraging and risk-taking, and completely miss or dismiss the growing signs of trouble and what we described as the “near certainties” of bubbles breaking? Well, I have two theories. The first is our old chestnut and is related to my current stump speech, which is called “Career Risk and Bubbles Breaking: the Only Things that Matter.” Career risk is why CEOs, entrusted with our money, were still dancing late into the game. So late that the clock had already struck midnight and they had already turned back into pumpkins or rats, but just didn’t know it. It’s what I call the Goldman Sachs Effect: Goldman increased its leverage and its profit margins shot into the stratosphere. Eager to keep up, other banks, with less talent and energy than Goldman, copied them with ultimately disastrous consequences. And woe betide the CEO who missed the game and looked like an old fuddy-duddy. The Board would simply kick him out, in the name of protecting the stockholders’ future profits, and hire in more of a gunslinger from, say, Credit Suisse.

My second theory would be even harder to prove, and this is it: that CEOs are picked for their left-brain skills – focus, hard work, decisiveness, persuasiveness, political skills, and, if you are lucky, analytical skills and charisma. The “Great American Executives” are not picked for patience. Indeed, if they could even spell the word they would be fired. They are not paid to put their feet up or waste time thinking about history and the long-term future; they are paid to be decisive and to act now.

The type of people who saw these problems unfolding, on the other hand, had much less career risk or none at all. We know literally dozens of these people. In fact, almost all the people who have good historical data and are thoughtful were giving us good advice, often for **years** before the troubles arrived. They all have the patience of Job. They are also all right-brained: more intuitive, more

given to developing odd theories, wallowing in historical data, and taking their time. They are almost universally interested – even obsessed – with outlier events, and unique, new, and different combinations of factors. These ruminations take up a good chunk of their time. Do such thoughts take more than a few seconds of time for the great CEOs who, to the man, missed everything that was new and different? Unfortunately for all of us, it was the new and different this time that just happened to be vital.

It is therefore ironic that we fire these top CEOs when the trouble hits. The headline should read: “Come back, leaders of Merrill, Citi, Bear, and Lehman. All is forgiven (for a while).” The typical CEO is precisely equipped to deal with emergencies and digging out. Thus, Paulson was just the man to miss the point, but equally just the man – or at least a typically good one – to deal with a complicated crisis under stress.

While reading this section to my wife, she asked, “But what about the Boards of Directors? Can’t they complement the CEOs’ short-term decisiveness with longer-term wisdom?” What a great idea – a balance of left- and right-brained thinking. And so it should be, and actually is intended to be, on paper. What a shame that we have typically subverted this balance into a CEO fan club of old friends and mutual backscratchers.

Near Certainties

The three “near certainties” we talked about in mid-2007 have all behaved themselves. They were that U.S. and U.K. house prices would decline, that profit margins globally would decline, and that risk premiums everywhere would rise, and all three with severe consequences on markets and the financial and economic systems. The U.S. and U.K. housing markets, the proximate cause of our current troubles, have declined. The U.S. market has probably quite a way to go, but likely is well over the mid-point of its correction. The price declines of the U.K. market have, in contrast, merely started. Housing transactions, in contrast, have vaporized. In fact, the scariest single data item for me, out of a huge selection, was the August decline in U.K. net new mortgages of 98% year over year (from over £7 billion down to under £200 million, a near total freeze-up)! And this with the official house price index pretending to be down only 10% at the end of August. This is one of the biggest shoes left to drop of Round I of this crisis. (I think of Round I as asset price bubbles breaking. Round II is the effect of this, especially of housing on the financial system. Round III

is the effect of both Rounds I and II on the real economy.) When the U.K. housing shoe hits the floor it will come with another wave of write-downs and stress that, very fortunately for everyone, the British taxpayers have been volunteered to share. Thank you from everyone!

Global profit margins, the second near certainty, are also declining rapidly, but have a **long** way to go. The estimates of future earnings that we have been sniggering at for a year are still inconceivably high. Why do they bother? To repeat our mantra: global profit margins were recently at record highs. Profit margins are the most provably mean-reverting series in finance or economics. They will go back to normal. After big moves, they almost invariably overrun. With the current set of global misfortunes, they are very likely to overrun considerably this time.

But the most dramatic ground has been covered by the third near certainty – risk premiums. From record narrow spreads 18 months ago in fixed income markets in developed countries, most are far beyond normal already, although a few probably still don’t get the full horror of some of the footnotes. (In contrast, in emerging countries we guess that most of the pain from the crisis unfortunately is still ahead, and here and there it could be very severe, although in total much less than in developed countries. It’s just taking a long time to work through the system for them.) Developed equities – which we have written about as the slow-witted of the two major asset classes – had, as usual, a much harder time getting the point than bonds. At least that was the case until what seems like a few minutes ago when, in a clap of thunder, they got the whole ugly point in a wave of panic. The global equity markets moved in three weeks from quite expensive to moderately cheap for the first time in at least 20 years.

Basics

At times like this it is good to ask yourself what it is that you really know or think you really know. For us (in our asset allocation division) it is definitely **not** the ins and outs of the financial system, although we’re trying harder and harder. The financial system is so mind-bogglingly complex that very few, even those with far deeper backgrounds than ours, fully understand it. Puzzlingly, despite our relative ignorance of financial details, we were more accurate than many experts in the last year about the big picture, and we can speculate why. First, as historians, we recognized that when bubbles break they almost invariably cause more pain than expected.

Second, we are Minsky mavens and believe that, with sadly defective humans making up the markets, Minsky was right to see periodic financial crises as well-nigh inevitable. Thus in the middle of last year when the experts at Goldman Sachs said they expected write-downs of \$450 billion, I immediately wrote that we'd be lucky if it wasn't a trillion. I was playing off their detailed expertise and adding a generalized historical observation as I had done with the prediction that "at least one major bank – broadly defined – would fail," and that half of the hedge funds would be gone in five years. In previous banking crises, major banks had failed, and this crisis seemed likely, to us semi-pros, to be worse than most. So we studied in broad strokes previous crises and **armchaired** that we should up the ante. We got lucky in an area in which we were not real experts, and we know we were lucky. We will attempt to keep the luck and hedge our bets by also increasing our skills. The addition of Edward Chancellor, an experienced financial journalist/historian with a focus on credit crises, has been a very helpful start.

In contrast, what we do know, I believe, is asset class pricing and the behavior of bubbles, which are both derivatives of our single, big truth: mean reversion.

Bubbles Breaking

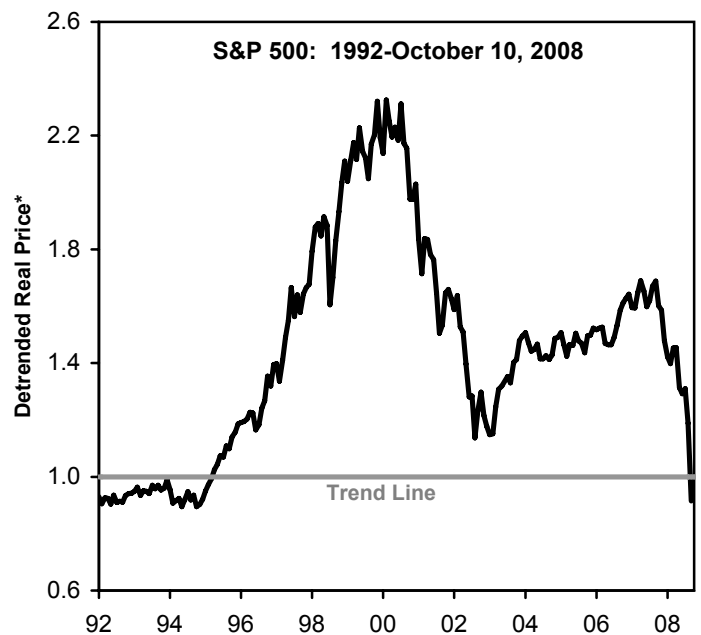
Back in 2000, as we continued to shake in our boots as the mad tech bubble kept defying gravity, we tried to reassure ourselves by looking at historical bubbles. We found 28 bubbles since 1920, defined arbitrarily but reasonably as two-standard-deviation events that in a Gaussian world should occur once every 40 years. All but one burst all the way back to the trend that existed prior to the start of the bubble. The single exception was the S&P 500 itself in 2000-02. Under the influence of what I've called "enough stimuli to get the dead to walk," the S&P, down from 1550, could not quite reach its trend value, which we had calculated to be 725. Instead it rallied at 775. (It had to fall 55% to reach trend, but fell 50%. Close, but no cigar. But, more critically, we had expected a fairly major overrun, which is historically so common.) Seeing this aberrant event led us to describe the market advance from 2002-07 as "the biggest sucker's rally in history." Now a wrinkle here is that, unlike most, we measure bull and bear markets based on their trend line growth after adjusting for inflation. The real growth in the index has historically been only 1.8% per year for the S&P, but for technical reasons (low payout rates in particular) we have allowed

for moderately more real growth in recent years. In the six years since October 2002, the trend line has risen to 975 (plus or minus a little – we are constantly fine-tuning a percent here or there). Needless to say, two weeks ago the market crashed through that level, producing Exhibit 1. So now all 28 burst bubbles are present and accounted for. Long live mean reversion!

As for asset class returns, the early October crash has presented us with an opportunity to brandish our 10-year forecasts even more than we did last quarter. Exhibit 2 shows our 10-year forecast from September 30, 1998 and the actual asset returns for the most important assets for us in asset allocation.

Our 10-year forecast for the S&P 500 10 years ago was a lowly -1.1% real, an extreme outlier among forecasts. At the end of September the real return was exactly nil (0.0%). But it only took three days of October to hit our -1.1% forecast on the nose! Ten years and three days. For emerging equities, our forecast was +10.9% real and the actual was +12.8%. Not too bad, but even here in seven days – horrible days, admittedly – the return of emerging crossed our forecast on the way down. So today (October

Exhibit 1
The Bubble Finally Breaks



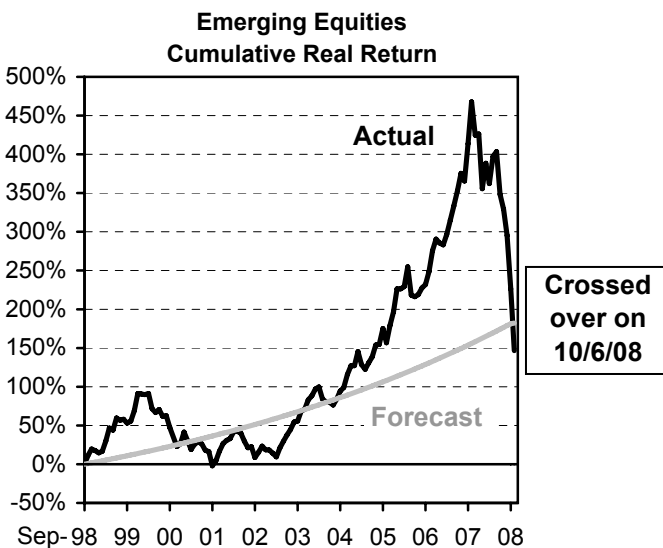
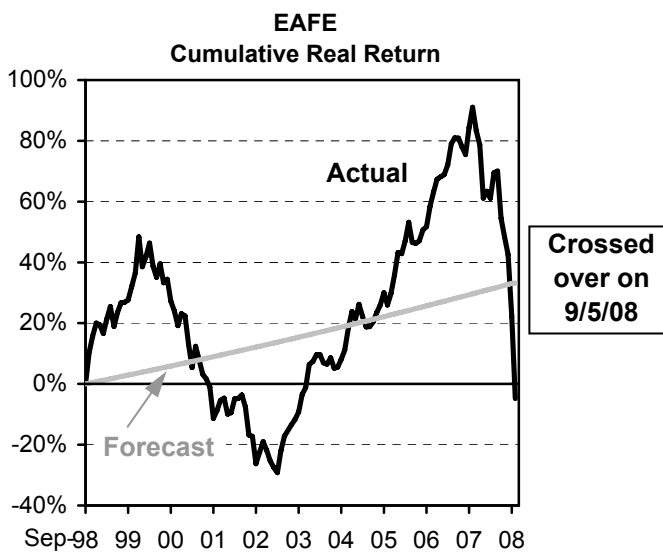
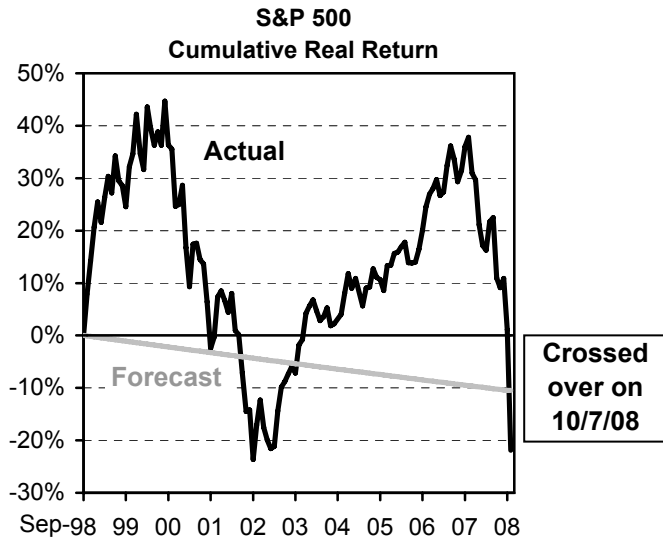
Note: Trend is 2% real price appreciation per year.

* Detrended Real Price is the price index divided by CPI+2%, since the long-term trend increase in the price of the S&P 500 has been on the order of 2% real.

Source: GMO As of 10/10/08

Exhibit 2

On-Time Arrivals, Despite Some Turbulence



Source: GMO As of 10/10/08

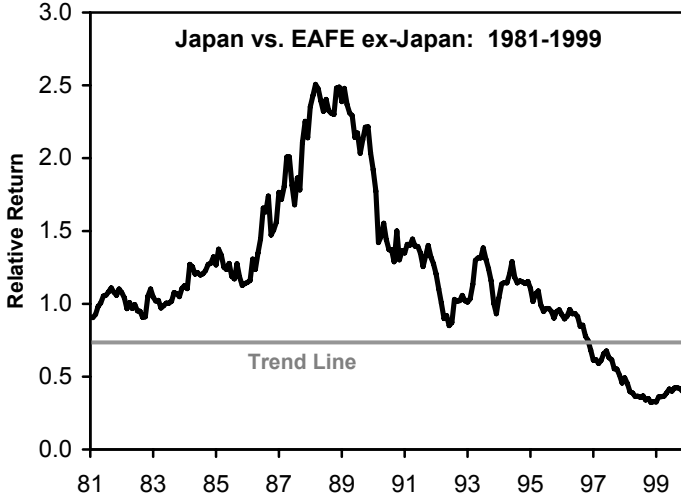
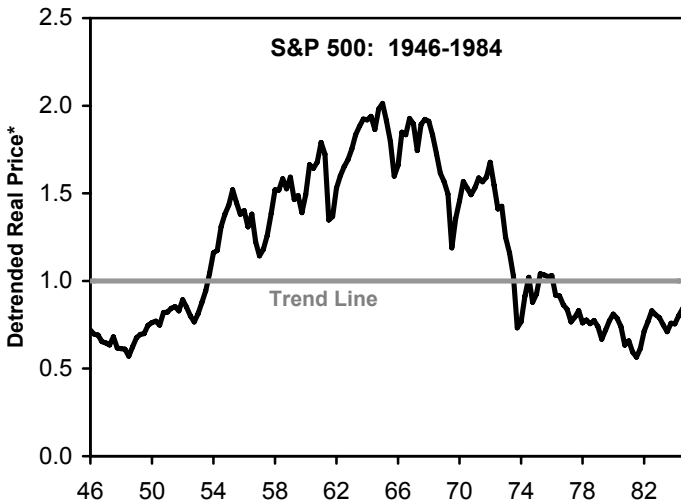
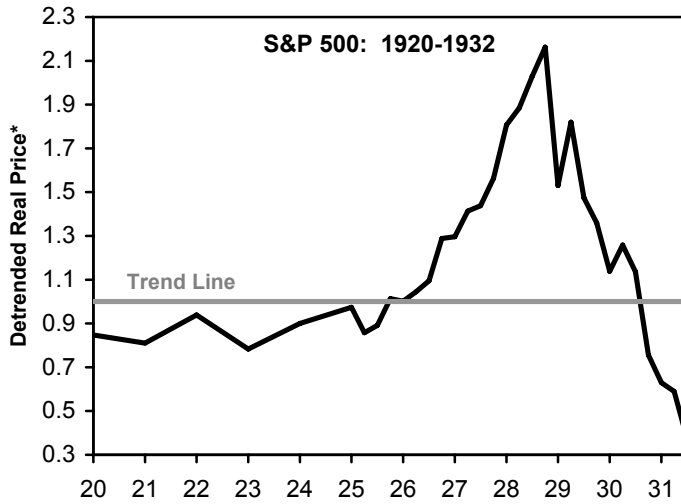
10), our forecasts of 10 years ago were optimistic, if you allow us a few days' leeway.

Where Are We Now?

So brandishing our old 10-year forecasts and resisting the idea that even a blind pig will occasionally find a truffle, we have had some confidence in saying that by October 10th global equities were cheap on an absolute basis and cheaper than at any time in 20 years. Full disclosure requires that we add that, in our opinion, this is not as brilliant as it sounds, for markets have been more or less permanently overpriced since 1994 and have not been very cheap since 1982-83 and perhaps a few weeks in 1987. There is also a terrible caveat (isn't there always?), and that is presented in Exhibit 3, which shows the three most important equity bubbles of the 20th Century: 1929, 1965, and Japan in 1989. You will notice that all three overcorrected around their price trends by more than 50%! In the interest of general happiness, we do not trot out these exhibits often and, until recently, they would have been seen as totally irrelevant and perhaps indecent. But, after all, it's just history. Being optimistic like most humans, we draw the line at believing something so dire will happen this time. We can hide behind the fact that there are only three data points, and therefore no self-respecting statistician can give them much weight. We can convince ourselves that things are different this time since the background to each of the four events, including this one, is different. One of them had high inflation; three, including the current situation, did not. Japan and 1929 were characterized by complete incompetence, while this time we had only – shall we say – very widespread incompetence. This time we have thrown ourselves more quickly into battle, although not so quickly as some would have liked. Not all of the differences are favorable: we have a more global, interlocking, and complicated system, including non-bank players like hedge funds. We also have the “financial weapons of mass destruction” – asset-backed securities that are tiered and sliced and repackaged – and, perhaps most destabilizing of all, totally unregulated credit default swaps. Did we have even more greed and short-term orientation this time than they did? Well, we certainly didn't have less! Still, a 50% overrun seems unacceptable. Probably governments would feel that the consequences of such a loss in asset value would simply be too awful and would do anything to prevent it. And perhaps, just perhaps, their “anything” would work. But a reasonably conservative investor looking at the data would want to allow for at least a 20% overrun to, say, 800 on

Exhibit 3

Overrun!



Note: Trend is 2% real price appreciation per year.

* Detrended Real Price is the price index divided by $CPI+2\%$, since the long-term trend increase in the price of the S&P 500 has been on the order of 2% real.

Source: GMO

the S&P 500, and have a tiny portion of their brain loaded with the notion that it just might be quite a bit worse.

The Curse of the Value Manager

We at GMO have a strong value bias, and our curse, therefore, like all value managers, is being too early. In 1998 we saw horribly overpriced stocks that at 21 times earnings equaled the two previous great bubbles of 1929 and 1965. Seeing this new “peak,” we were sellers far, far too early, only to watch it go to 35 times earnings! And as it went up, so many of our clients went with it, reminding us that career risk is really the only other thing that matters. The other side of the coin is that only sleepy value managers buy brilliantly cheap stocks: industrious, wide-awake value managers buy them when they are merely very nicely cheap, and suffer badly when they become – as they sometimes do – spectacularly cheap. I said as far back as 1999, while suffering from selling too soon, that my next big mistake would be buying too soon. This probably sounded ridiculous for someone who was regarded as a perma bear, but I meant it. With 14 years of an overpriced S&P, one feels like a perma bear just as I felt like a perma bull at the end of 13 years of underpriced markets from 1973-86. But that was long ago. Well, surprisingly, here we are again. Finally! On October 10th we can say that, with the S&P at 900, stocks are cheap in the U.S. and cheaper still overseas. We will therefore be steady buyers at these prices. Not necessarily rapid buyers, in fact probably not, but steady buyers. But we have no illusions. Timing is difficult and is apparently not usually our skill set, although we got desperately and atypically lucky moving rapidly to underweight in emerging equities three months ago. That aside, we play the numbers. And we recognize the real possibilities of severe and typical overruns. We also recognize that the current crisis comes with possibly unique dangers of a global meltdown. We recognize, in short, that we are very probably buying too soon. *Caveat emptor.*

Round III: The Economic Effects

Rounds I and II – the asset bubbles breaking and the credit crisis – will soon be mostly behind us, but the effect on the real world of economic output lies, unfortunately for all of us, almost entirely ahead. Employing our usual historically loaded armchair technique, we have been writing for several quarters that global economic weakness will be substantially worse and will last substantially longer than the official forecasts. We maintain that view even though official forecasts have dropped considerably.

The global economy is likely to show the scars of this crisis for several years. In particular, the illusion of wealth created by over-inflated asset prices has been dramatically reduced and, though most of this effect is behind us, a substantial part of the housing decline in some European countries and the U.S. is still to occur. We were all spending and, in the case of the U.S., importing as if we were much richer than is in fact the case. Particularly here in the U.S., increasing household debt temporarily masked some of the pain from little or no increase in real hourly wages for 20 to 30 years. Household debt since 1982 has added over 1% a year to consumer spending. Unfortunately, this net benefit does not go on forever.

In the first year in which you borrow 1% of your income, the interest payment barely makes a dent and your spending is close to 101% of your disposable income. But each year you borrow an incremental 1%, your interest load grows. After 15 years or so in a world of an average 7% interest rate, the interest on the accumulating debt fully offsets the new borrowing when one looks at consumers collectively. Well, we in the U.S. are closer to a model of 30 years of borrowing an incremental 1%, meaning that we passed through break-even years ago and now pay much more in interest than we borrow incrementally. This is a situation favorable to an overfed financial structure as long as everyone can and will pay their interest, but it is no longer beneficial to aggregate consumption compared with the good old-fashioned way of waiting until you had actually saved up to buy a TV set. Indeed, a visitor from Mars examining two countries, one with accumulated consumer debt of 1.5 times GDP and the other with zero, would, I am sure, notice no difference except for the reduced number of consumer lending outlets.

This generally unfavorable picture gets worse when you consider that we are likely to have, for the next 10 years or so, a modest annual reduction in personal debt of, say, 0.5% of gross income per year as well as a continued interest payment. So the debt accumulation effect reverses as does the illusion of the wealth effect from overpriced stocks and housing, especially the illusion of a decent accumulated pension. As we said two years ago (embroidering on Buffett), when the tide of overpriced assets goes out, it will be revealed not only who is not wearing swimming shorts, but also who has a small pension! Our silly joke has become a sick one in just two years.

This reversal of the illusory wealth effect added to deleveraging will be felt worldwide, but especially in the

so-called Anglo-Saxon countries, and will be a permanently depressing feature of the next decade or so compared with the last decade. It is indeed the end of an era.

To end Part 1 of this Letter, there is only one further point I want to add on this topic, and that is about China.

Like a Bear in a China Shop

I suggested last quarter that it was ridiculous to expect great financial and economic skills from the Chinese government, which is faced with the spectacularly complicated task of maintaining the highest economic growth rate in history. "Surely they will stumble," I said. Well, the more I think about it, the more likely it seems that this is both the most likely and most dangerous disappointment (even shock) that awaits the current consensus.

Moving back to our armchair at 56,000 feet (don't you miss the Concorde?), an amateur economist could summarize and simplify the Chinese economy as 39-37-37: an astonishingly large 39% of the GDP is capital spending, 37% is internal consumption, and an amount equal to 37% of GDP is exported. (These numbers do not sum to 100 as we are not using exports net of imports because we are concerned with the vulnerability of total exports to a weak global economy.) The U.S., in comparison, is 19-70-13, disturbingly on the other side of normal; 70% consumption compared with 57% in both Germany and Japan, for example, and nearly twice that in China. China's mix is of course an utterly unprecedented one, and comes with great advantages in booming times. Now, however, we might ask: how do you stimulate the building of a new steel mill when rows of mills are sitting empty? How do you increase exports into a global economy that is not just slowing, but is unexpectedly very weak? And are they good enough at stimulating local consumption to have an impact on such a small percentage of GDP in the face of a negative wealth effect from declining stock and housing prices in their local market?

Simple old "Econ 101" thinking would suggest that their capital goods sector will have a bigger drop than the rest of the economy, and that export growth rates might slow from very large to even nil or worse. The one open-ended offset might be in Keynesian or Rooseveltian government spending, upping their already massive infrastructure spending by A LOT. (This is a specialized economic term.) And they will surely do some of that. On balance I find myself more and more convinced that

this is becoming our #1 disagreement with consensus. If we are right, it will be a very important and distressing surprise for global growth. The good news is that this is far from the “near certainty” of our recent views on housing, profit margins, and risk premiums. At best, if right, it is an inspired insight straight from the armchair. At worst, if wrong, an ill-researched hunch.

On the Virtues of Offsetting Errors

During early October (up to the 10th) global equities, in our opinion, were finally quite efficiently priced, at least for a day or two after a 20-year wait. But we did not get to this point where our 10-year forecasts were exactly right for a second because the market had taken into its head to finally be reasonable or efficient. No, it took two giant offsetting errors! I am sure the market does not yet get the full extent of future earnings and economic disappointments, nor does it easily accept how low trend line P/Es are. (Oh yes, I remember now. P/Es should be higher because of much improved stability and better economic management!) In fact I believe it will take at least another year for the truly dreary global outlook to be fully appreciated and priced in. I was also counting on over a year or more being required to break the high animal spirits that had been baked in by years of exceptionally fortunate events, moral hazard, and rising asset prices.

Offsetting this optimism, we produced – with a fairly traditional mix of greed and incompetence, but in a giant dose this time – a full-fledged panic. With no one trusting anyone’s financial integrity (often including their own), and with margin calls, redemptions, and other technical factors causing forced selling, we had an old-fashioned meltdown. And by some minor miracle, this confluence of offsetting events or beliefs produced efficient long-term pricing for a few days. (P.S. The rally of October 13th may usher in a more sustained rally and help resuscitate animal spirits so that we might be able to limp through to my original target of a market low in 2010, but don’t hold your breath.)

If the U.K. plan (also advocated by both Soros and Buffett independently) had not been widely adopted and the global authorities had followed the dithering U.S. lead, we would

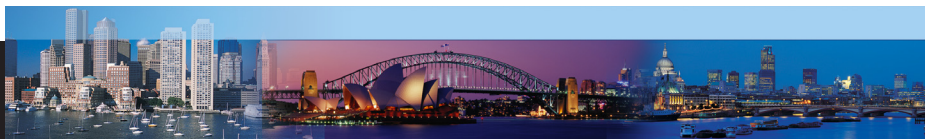
have been set up for some very unusual developments. The market would have continued to fall for a few more weeks or worse (as by October 16th it seems to be doing) until eventually the world’s central bankers got their act together. The imputed seven-year returns by then might have reached, say, 15% real per year for emerging, 11% for the U.S., and, say, 12% or 13% a year for EAFE. These exceptional opportunities, nearly equal to the legendary lows of 1982 and 1974, would have set up, in my opinion, a paradox from hell for serious investors. They would have been looking forward to an 18-month-long diet of sustained genuine disappointments; disappointments in both economic growth globally and, more importantly, in global earnings for the market’s consensus. Yet into those disappointments the market would likely have steadily risen because the recovery from the extreme lows of the panic would have inadvertently and accidentally more than offset all the bad news. This would have proved intellectually very difficult to deal with: you predict an unpleasant surprise, but yet you should buy! It would have been a rare historical event, which a big rally here may change. Still, you never know your luck. Something like it may still happen. (For the record, in 1932 a rally of 111% started in the face of persistent disastrous economic news.)

Provisional Recommendations (October 10 - S&P 900)

At under 1000 on the S&P 500, U.S. stocks are very reasonable buys for brave value managers willing to be early. The same applies to EAFE and emerging equities at October 10th prices, but even more so. History warns, though, that new lows are more likely than not. Fixed income has wide areas of very attractive, aberrant pricing. The dollar and the yen look okay for now, but the pound does not. Don’t worry at all about inflation. We can all save up our worries there for a couple of years from now and then really worry! Commodities may have big rallies, but the fundamentals of the next 18 months should wear them down to new two-year lows. As for us in asset allocation, we have made our choice: hesitant and careful buying at these prices and lower. Good luck with your decisions.

Disclaimer: The views expressed are the views of Jeremy Grantham through the period ending October 17, 2008, and are subject to change at any time based on market and other conditions. This is not an offer or solicitation for the purchase or sale of any security and should not be construed as such. References to specific securities and issuers are for illustrative purposes only and are not intended to be, and should not be interpreted as, recommendations to purchase or sell such securities.

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Silver Linings and Lessons Learned

Jeremy Grantham

Summary and Conclusions

When asked by *Barron's* on October 13th if we would learn anything from this ongoing crisis, I answered, “We will learn an enormous amount in a very short time, quite a bit in the medium term, and absolutely nothing in the long term. That would be the historical precedent.”

That is unfortunately likely to be the case. But over the next several years at least, there are many silver linings and valuable lessons to be learned. We have had a generally unattractive and difficult investment environment for the past 10 years. For most of that time we have also had a negative savings rate.

We have had a bloated financial industry feeding off the real world and a breach of the social contract with the increasing maldistribution of income (encouraged by tax changes!) in favor of the very rich at the expense of ordinary people. We also had unnecessary flaunting of this new great wealth. To cap it off, we had blinkered, narrow-minded leadership by the government and financial corporations. Well, much of this is ending. Some undesirable elements will disappear for a long time and some will just be moderated, but it is truly the end of an era and a rather disgusting one in my opinion, speaking as a thrifty Yorkshireman. We can now re-assess a lot of our thinking about investing, particularly market efficiency, outlier risks (boy, did Nassim Taleb get that one right!), and theories of diversification and longer-term asset allocation.

A very weak global economy is not without partially offsetting benefits: We can temporarily forget about consumer inflation and particularly enjoy the advantages of lower oil prices as reflected in lower heating oil and gas prices. Falling metal and agricultural prices will also help relieve some of the pressure on otherwise squeezed consumers. In a global crisis like this, the U.S. finds itself unexpectedly cast in the role of a safe haven. The dollar is as strong as a horse and yet our trade deficit still makes

progress from earlier sustained dollar weakness, helped by new tumbling oil prices and falling consumption of other imports. Chief among the many benefits of this crisis are unprecedented opportunities for investing in some fixed income areas where some spreads are so wide as to reflect severe market dysfunctionality. As of October 18th, we also have moderately cheap U.S. and global equities for the first time in 20 years. (You really have to put the dates in these days!) Probably quite soon, global equities too will offer exceptional opportunities after the additional pain that is likely to occur in the next year. We at GMO are already careful buyers. We are reconciled to buying too soon, but we recognize that our fair value estimate of 975 on the S&P 500 is, from historical precedent, likely to overrun on the downside by 20% to 40%, giving a range of 585 to 780 on the S&P as a probable low. The world faces unavoidable declines in economic activity and profit margins, so this overrun is unlikely to be much less painful than average, although you never know your luck.

All We Have To Thank Is Fear Itself

Thankfully, pure fear – approaching blind panic – finally induced some real action on the part of the authorities. This more decisive phase, injecting money directly into the banks as well as supplying liquidity in many forms, was initiated in the U.K. by Prime Minister Brown, the previously profligate Chancellor of the Exchequer. European governments managed somehow to grind their teeth and overcome their natural reluctance to follow Perfidious Albion anywhere. This, in turn, apparently encouraged the U.S. to jump on board with this more direct approach.

This was a game-changing event that has probably saved us from tipping into the pit. There will unfortunately be considerably more financial pain where the recent pain has come from: more global bank failures, more massive write-downs from credit cards and leveraged debt, and,

increasingly now, the typical corporate defaults that follow a very weak economy. And the economies of most countries will surely be very weak. In the U.S., the downturn is likely to rival 1982 or worse, and almost everywhere it is likely to be a much longer downturn than normal.

Also high up the list of silver linings and lessons learned is the Fed's apparent change of heart on the topic of bubbles in asset pricing. The breaking of the tech bubble set up the excess stimulus of 2001–03, which in turn created the housing bubble as surely as if a law had been passed that all house prices had to be marked up 50%. And now at last, there are signs of hope: signs that Bernanke is reconsidering: "Obviously, the last decade has shown that bursting bubbles can be an extraordinarily dangerous and costly phenomenon for the economy (*Ed.: the man's indisputably a genius*), and there is no doubt that, as we emerge from the financial crisis, we will all be looking at that issue and what can be done about it." So all the unnecessary suffering inflicted on us by short-sighted policies dictated by academic economists may not have been entirely in vain!

However it is definitely not a done deal. Few academics change their minds, and few scientific theories founder on the simple facts. "Science advances one funeral at a time" is how Max Planck expressed his belief in academic flexibility, but a suggestion that we use firing squads would seem mean-spirited. Already, Fed members are making the obvious point that interfering with investment bubbles as they grow by using the "blunt instrument" of raising rates would likely "in the short run curtail some economic growth!"¹

But interfering with bubbles forming would not destroy growth, only postpone it, which is undesirable enough. Bubbles breaking, in contrast, reveal the destruction of wealth produced by the extreme misallocation of capital that has sucked so much investment into certain areas – dotcom start-ups, overbuilding of housing, hiring multitudes of real estate agents, and designers of elaborately structured financial notes, for example. And if the bubbles precipitate a true credit freeze-up, then some inputs into really useful investments may be lost forever: factories not built, education postponed indefinitely, and man hours wasted in unemployment. If we collectively become more leery of asset bubbles and their inevitable

downsides, it will be a giant step forward. I am not too confident of the authorities, especially the Fed, but I am pretty confident that at least the rest of society will take the formation of asset bubbles much more seriously. We'll take what we can get.

Another potential lesson learned might be our realization that capital markets don't always work for the best. My friend and former partner Paul Woolley, now retired from GMO, set up a center at the London School of Economics a year ago bearing the tantalizing title: "The Woolley Centre for the Study of Capital Market Dysfunctionality." (Fortunately for the title, his friend Wilde could not find the funding money.) I must confide that his investment timing at GMO was seldom this perfect, for in one year he has gone from suspicious eccentric to enlightened visionary, and long lines of luminaries are queuing up to be involved. We have collectively had a touching faith that capitalism – just because it's the only effective driving force behind economic growth – is basically flawless, and any controls are bound to be counter-productive. Pure Ayn Rand capitalism obviously cannot deal with social issues of the tragedy of the commons variety, such as climate change. It cannot turn corruptible and greedy types into the reasonable and honest types that our readers represent. It cannot begin to address social justice. And apparently it does a lousy job at dealing with asset bubbles and the ensuing economic and credit problems. Society's attitude on this topic will change and, with a little luck, an increase in enlightened regulation will increase the public good. I for one am optimistic. The American ship of state (among many) appears to move forward by lurching too far in one direction and then like a super tanker with an amateur at the helm, overcorrecting. (And, oh my, have we had some real amateurs at the helm recently!) For the past eight years, we have had a darned good lurch, and we need some correction. Somehow, in the long run, the ship seems to zigzag its way roughly in the right direction. The Jim Grants of the world and other very sensible people, as well as the usual right-wing suspects, will say that increased regulation has a dismal record, and they are right. But so does totally unregulated capitalism, apparently. We will have to muddle our way to an acceptable mix, and we can be sure of only one thing – that it won't be highly efficient. But it may be acceptable enough, and we must hope that it is.

¹ Gary Stern.

Still at the meta level, I would like to bring up the hope that as a result of our current misfortunes we will re-examine how we pick our leaders. It would seem for starters that a lack of prejudicial bias would be helpful. If you're looking for an open mind, why would you pick Robert Rubin or Hank Paulson for a job at Treasury that might, just might, involve decisions on the life and death of their beloved Goldman Sachs? And in the case of Paulson, why pick one of the five leaders of financial firms who lobbied hard at the SEC against increased reserves for investment banks? Why would you pick an Ayn Rand extremist like Alan Greenspan to be the Fed Boss when he openly deplored increased regulation in almost any form and thought untrammelled capitalism was the bee's knees? Wouldn't an open mind be better? Or Ben B, whose reflex is so clearly to believe in market efficiency? He believes it so profoundly that he prejudged important data such as the very dangerous housing bubble of the last few years. He seemed to believe that since no such extreme inefficiency should exist, then it did not exist. Not a good idea.

On this same topic, why would we not insist on a proven record of excellence on a relevant topic for the really important job? Ben B has an excellent record as an academic economist, but has had little contact with the messy, real world until now. And as for Alan! He had a proven record. It was proven for years that he was a very mediocre, lightweight commercial economist. He sat on a few politically connected committees, met the right people a lot, and, hey presto, had the second most important job in the land.

Lower down on the pecking order, I think we have learned not to value CEOs so highly. We have seen their limitations when under novel stresses, and we have examined how their reward system was out of kilter with the ordinariness of their talents. The boss of Lehman did an honorable and long service in my opinion, and I have no doubt he tried hard. But frankly, Lehman even in its heyday was a B player and, in its last few months, a D player. It is probably unfair to weigh too heavily his lack of skill down the home stretch and the pain he inflicted on many by holding out too long. He was obviously very unlucky to be picked out as a sacrificial lamb. But even before the unraveling, did he really deserve to have accumulated a \$650 million holding in Lehman – all wealth that would otherwise have accrued to stockholders – in addition to immense annual rewards for basically doing an average job? I believe society will reconsider the merits of such

remuneration and the structure that enables it.

Surely we will also reconsider the merits of having such an overdeveloped financial industry whose share of corporate profits had risen from 10% in 1982 to 27% last year. Some of these people – ideally my better competitors – could find something else to do with more redeeming social value. They could be doctors or, perish the thought, actually make something.

The permanently bullish spin put out by the financial industry – like real estate agents in heat – has also been revealed, and I hope we can expect some serious reaction. Permanent bullishness does not serve the clients well. The ridiculous bullishness of bottom-up earnings forecasts has long been a joke among serious investors, but we still see them everywhere. The bullish bias pervades the industry right up to Paulson and the other Wall Street CEOs. Estimates even from more seasoned cool types, such as those at the IMF, and economists in general have their economic forecasts creeping downward while looking nervously over their shoulders: they are desperate to avoid getting too far ahead of the pack and committing Keynes' key crime of being wrong on their own. Thus, estimates of global growth in GDP are still +3% for the world and +9.2% for China. In a crisis, the estimates always lag on the upside, and this does not help. Similarly, but worse, the earnings estimates for the S&P have stayed ludicrously higher than were likely given the rolling crisis. For example the IBES earnings estimate for the S&P over the next 12 months is still \$98.5 a share. At even normal margins it would be \$71, and at margins 20% below normal it would fall to \$56. With any luck, the usefulness of standard industry advice will be reconsidered and routinely adjusted for congenital bullishness.

Perhaps it is also time to reconsider the fixed asset allocation approach – what I used to refer to as the “watch the locomotive coming” effect. It is fine in theory to urge ordinary investors to grit their teeth in the face of losses and show patience. But in the real world, many perfectly normal investors who take huge losses simply cannot bring themselves to stand the pain. Holding firm and waiting the 15 or 20 years for earnings to catch up is great advice for a computer, but computers don't invest, and humans are ... well, very human. They will often sell out near lows and lock in enormous pain. This is a great opportunity to re-evaluate the merits of moving more assets – if only marginally – away from dangerously overpriced asset classes toward relatively cheap ones before the great bear

markets do their usual thing. I don't mean to recommend racing around on a day-to-day basis as some tactical asset allocators do. What I do recommend is an occasional significant response to outlier events both at the bull and bear ends of the spectrum. This, of course, runs into major career or business risk. But, that's life.

It will also be a silver lining if we get rid of some of the gilded-age excess on the part of the titans of industry, especially in the financial world. They should have kept their heads below the trench (see *The Blackstone Peak and the Turning of the Worms*, July 2007), and they certainly did not. They jumped way up, begging for a sharpshooter to notice them, and they were indeed noticed. It will now surely cost them in hostile legislation in some form or other.

One of the biggest silver linings will be in increased household savings. Now it is clear that the increased wealth was only temporary. It was paper wealth based on very overpriced assets. The losses will have to be repaired the hard way by deferred gratification – lower consumption and higher savings. The tragedy here is that since more than 10 years of normal savings were sacrificed to the grand illusion of paper wealth, it is unlikely that all of the lost savings can ever be made up. People will simply retire poorer than they might have done.

It will be pointed out that increased savings will depress consumption and lower GDP growth in the near term. This short-termism has been the logic in the past behind Bush and others who overtly encouraged consumption and therefore personal debt. But in the long term, which economies grow the fastest: China with 40% savings, or the U.S. and U.K. with negative personal savings? High savings and investment rates, of course, encourage growth, and we have to absorb the short-term negative effects of what had become over-consumption if we want to be a healthy economy. The recent crisis in credit and assets is a slap in the face, a rude wake-up call, and we will move to a better balance. The problem here is the timing. Although we need this re-adjustment to greater savings for the long term, if we get there too quickly – since one person's extra saving is another person's unexpected loss of top-line revenue – we risk getting caught in a downward spiral that breaks animal spirits. This is the nightmare that kept Keynes up at night in the 1930s. So it has to be slow and steady, at which level the extra capital spending and increased industrial capacity creates its own offsetting stimulus.

The research science world is no doubt sighing with relief at their silver lining: the prospect of once again recruiting some of the best PhDs who had been lining up to work for Goldman or a hedge fund (and even, I must admit, a few for GMO). There they designed the cleverly repackaged mortgage paper so admired by Greenspan, or developed quant equity models and “stat arb.” Now they will have to waste their time once again designing nuclear facilities and second generation biomass projects. Oh well.

A real lesson will also have been learned on the “Let's all look like Yale” front. (See *Immoral Hazard*, April 2008.) Yes, diversification is a great idea other things being equal, but if the demand is so trendy that it overwhelms either the liquidity of small asset classes, or the talent involved in hedge funds, private equity, and other fields, then there is always likely to be a problem squeezing through the door together. And that's before someone shouts, “Fire! Fire!”

The great buying pressure from funds aspiring to look like the great endowment funds facilitated second-rate, overpriced private equity deals. (See Appendix to *Letters XII: Evaluating the Usefulness of Private Equity Managers*, July 2007.) Because these deals were typically overpriced in the last three years, excessive leverage had to be used to even tease out the possibility of a decent return. This, in turn, guaranteed that in a profit margin squeeze all the equity would be lost. The flood of money also allowed for over-funding of first-rate hedge funds and the start-up of thousands of second-rate funds. Real investment talent has always been scarce, and does not jump out of the ground just because there's a massive demand. Nuclear physicists do not immediately become investment talents even with IQs of 150.

The hedge fund industry is just an extension of our larger zero sum game. It adds collectively no value, it just reshuffles the existing pool of wealth minus the higher fees. Last year, in its prime, it offered mainly in place of real value added, or alpha, a simulated alpha that was dependent on rising asset prices, falling interest rates, or easy credit. All three in many cases. The existing alpha did not increase to meet the increased demand but probably shrank under the competition, and then the shrunken alpha was spread more thinly over more capital. And all that was needed for this phony alpha to be seen as wearing no clothes was a steady return to more normal conditions. Lord knows, it did not need to be stripped naked in the city square so abruptly! Fate really can be cruel.

All of these new, recently sexy alternative investment areas will now be re-evaluated: their illiquidity and their tendency to pick up nickels in front of steam rollers will be fully taken into account. Value at risk (V.A.R.) as a reliable measure of risk will hopefully be taken out and shot at dawn. In short, we will all live in a more realistic, if less exciting, world.

What I Learned

This experience has, not surprisingly, reinforced my faith in mean reversion – that all bubbles break and that it is best to study the data, make up your own mind, and screen out general opinion. It has underlined the importance of mixing with the right people: I never realized how many sensible people there were sprinkled through our business. We are certainly grateful for their input and reinforcement in nerve-wracking times. One never has enough confidence. That little voice is always there suggesting that, since there are so many of them, there may be something to their arguments. So you go long the Yen and short the financials but never enough. It was rammed home to us that some of the best bets were very technical and we needed help. So we got help and we hired good people, but much too slowly, while opportunities of a lifetime slipped through our fingers, leaving us with merely a decent profit. We have learned that in the future we need to have expertise – or at least moderate competence – in almost every aspect of the global capitalist system. It's not easy, but we have learned the hard way – missed opportunities that did not last long and would not wait for us – that it is necessary. Above all, we learned to never, ever trust the competence of government officials.

The Gold Lining

Topping off all of the offsetting virtues of this ugly last year is the arrival of cheap assets. All too easily we forget that you can compound wealth rapidly only by having cheap assets. For those with a long horizon, it is always better to have assets fall in price so that the compounding returns are higher. For an unparalleled 20 years, global equities, especially U.S. equities, have been overpriced. Now, finally, they are cheap and likely to get cheaper. Likely, I believe, to set up a once-in-a-lifetime investing opportunity (or maybe twice in a long career).

How Low Is Low?

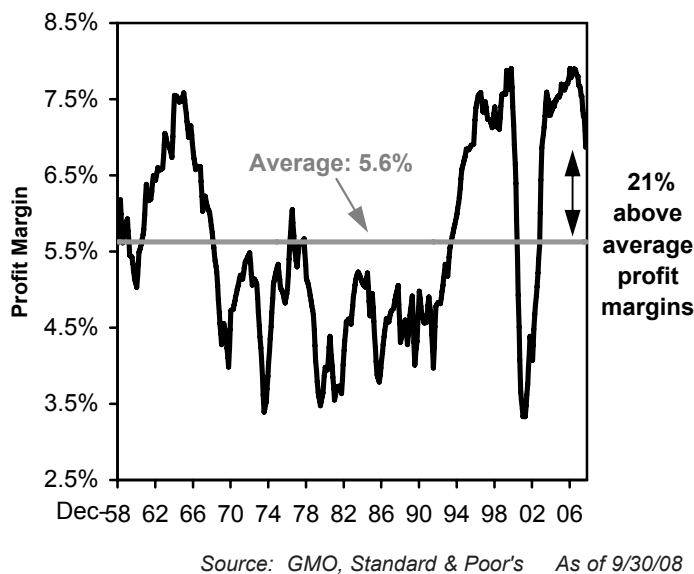
We have a pretty good fix on fair values. For the S&P 500 we believe it is about 975 ± 25 . This is calculated, as always, by the simple technique of assuming that at fair price we will have a normal P/E ratio, and that profit margins will also be normal. We also showed two weeks ago how typical it is for great bubbles to overrun badly. Usually we don't invest our money on estimated likely overruns, but instead filter our money in slowly and hope to get lucky. After all, if stocks are attractive and you don't buy and they run away, you don't just look like an idiot, you are an idiot. Still we are informed by our work on overruns. So where are we this time? History says a 50%+ overrun has characterized the aftermath of the three important equity bubbles. I believe we could also come at this from a very different angle: We could work out what we think the likely range of profit margins is going to be in a severe recession, and then look at what multiples have historically been applied to earnings that are equally depressed.

In a rational world, low profit margins would be multiplied by a high P/E and vice versa to normalize for the economic cycle. In a Bernanke/French and Fama world, the correlations would be -1. High margins would always be exactly offset by low P/Es and vice versa, so that the market would always sell at fair value or replacement cost. The market would thus always be efficient, and that chunk of the financial establishment that urges the buying and holding of index funds regardless of price would unarguably be correct. In the crazy real world, in contrast, we can't even get the correlation sign right: it is positive .32, which means that high margins are multiplied by high P/Es and vice versa. Remarkably, this is particularly true at the extremes where the correlation rises. Thus in 2000, the equity bubble that Alan could not see forming sold at the highest P/E in history (35) multiplied by the highest margins in history! 1982, in contrast, sold at 8 times depressed margins. This double counting makes the market far more volatile than it needs to be by driving prices far above and far below efficient price levels.

Exhibit 1 shows our series on U.S. profit margins. This is a pretty dependable mean reverting series so you can be extremely confident that margins will come back to normal. What is easy to forget is that, of course, they spend half their time below normal. In the global conditions that we expect, S&P margins should fall below their normal

Exhibit 1

Profit Margins for the S&P 500



levels by 20% to 40%. In 1982 and 1974, which were respectively quite severe recessions, profit margins fell by 36% and 39% below normal.

Given the extreme current difficulties in the financial and economic scene, margins 36% to 39% below normal would not seem especially Draconian, but let's be slightly friendly and predict only a 28% overrun this time. These diminished margins have typically been reflected in a below average P/E as discussed above. The historical expected P/E for profit margins depressed by 28% would be 15% to 20% below average; let us assume 17% below. This would give us a market selling at 83% of its normal P/E on profit margins that would be at 72% of their normal. This computes $(.83 \times .72)$ to be almost exactly 60% of fair value. Our current fair value estimate for the S&P 500 of 975 modified by a likely overrun of 40% would yield a price of about 585 in an environment of a quite severe economic and profit recession. If the global economy surprises on the

upside, however, and somehow profit margins hang in, the result would of course be far less severe. Our conclusion, though, that the S&P is likely to bottom out in the 600 to 800 range within the next two years can unfortunately be seen as not particularly pessimistic from a historical perspective.

Finally, a Single Piece of Advice for the Government

I have never been a fan of the hysteria that has surfaced on all sides in recent years at a hint of recession, and the panic to throw public money at the economy. Mild recessions have several long-term advantages discussed in earlier Letters, but in recent years we seem to have lost interest in the long term.

However, this time it's different. This is the Real McCoy crisis, and we must welcome all the stimulus we can get. It is easy, though, to end up employing people to build mildly useful parks or, in the Japanese style, nearly useless bridges to nowhere. Government stimulus can have a decent (even high) return in the long run. It absolutely doesn't have to be a series of boondoggles. Let me suggest that the magic word this time is not "plastics" but "alternatives." Massive spending on energy and, better yet, energy savings will create jobs, stimulate the economy, produce a good long-term economic return, reduce dependence on depleting Middle Eastern oil, curtail carbon dioxide emissions, and set, for once, a real example for other countries. From the simplest – better insulation and more efficient machines – through the new alternatives – solar, wind power, and second generation biomass – to the potentially massive investments in new nuclear plants and efficient energy transmission, this could be in total a long range bonanza for the U.S. in economic and broader respects. Such a program could offset the risks of a Japanese-style drawn-out recession. It would be potentially an epoch-defining change, and one of which, like the Marshall Plan, future generations might be proud.

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