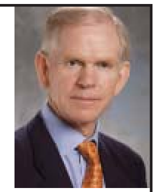
GMO

QUARTERLY LETTER

July 2010

Summer Essays



Jeremy Grantham

1 Portfolio Outlook and Recommendations

Well, I, for one, am more or less willing to throw in the towel on behalf of Inflation. For the near future at least, his adversary in the blue trunks, Deflation, has won on points. Even if we get intermittently rising commodity prices, which seems quite likely, the downward pressure on prices from weak wages and weak demand seems to me now to be much the larger factor. Even three months ago, I was studiously trying to stay neutral on the "flation" issue, as my colleague Ben Inker calls it. I, like many, was mesmerized by the <u>potential</u> for money supply to increase dramatically, given the floods of government debt used in the bailout. But now, better late than never, I am willing to take sides: with weak loan supply and fairly weak loan demand, the velocity of money has slowed, and inflation seems a distant prospect. Suddenly (for me), it is fairly clear that a weak economy and declining or flat prices are the prospect for the immediate future.

The worrying news is that most European countries, led by Germany (not surprisingly in this case), are coming on more like Hoover than Keynes. More surprisingly, Britain and half of the U.S. Congress are acting sympathetically to that trend, which is to emphasize government debt reduction over economic stimulus. Yet, after a relatively strong initial recovery, the growth rates of most developed economies are already slowing, despite the immense previous stimulus. You don't have to be a passionate follower of Keynes to realize that to rapidly reduce deficits at this point is at least to flirt with a severe economic decline. We can all agree that we had a financial crisis, a drop in asset values, and an economic decline, all three of which were global (although centered in the developed countries), and all three of which were the worst since the Great Depression. All three were destined to head a whole lot deeper into the pit without the greatest governmental help in history, also global. Yet despite this help, the economic recovery was merely adequate, unlike the stock market recovery, which was sensational and, as often happens, disproportionate to the fundamental recovery. But in the last three months, more or less universally in the developed world, there has been a disturbing slackening in the rate of economic recovery. (Perhaps Canada and Australia on their own look okay, propped up by raw materials and, so far, un-popped housing bubbles.)

I am still committed to my idea of April 2009 that there would be a "last hurrah" of the market, supported psychologically by a substantial economic recovery but then, after a year or so, that this would be followed by a transition into a long, difficult period that I called the "seven lean years." I had, though, supposed that the economic reflex recovery – how could it not bounce with that flood of governmental help to everyone's top line? – would last longer or at least not slow down as fast as we have seen in the last few weeks. And with unexpectedly strong fiscal conservatism from Europe and perhaps from us, this slowdown looks downright frightening. I recognize that in this I agree with Krugman, but I can live with that once in a while. However, where I am merely fearful, he is talking about another "Depression."

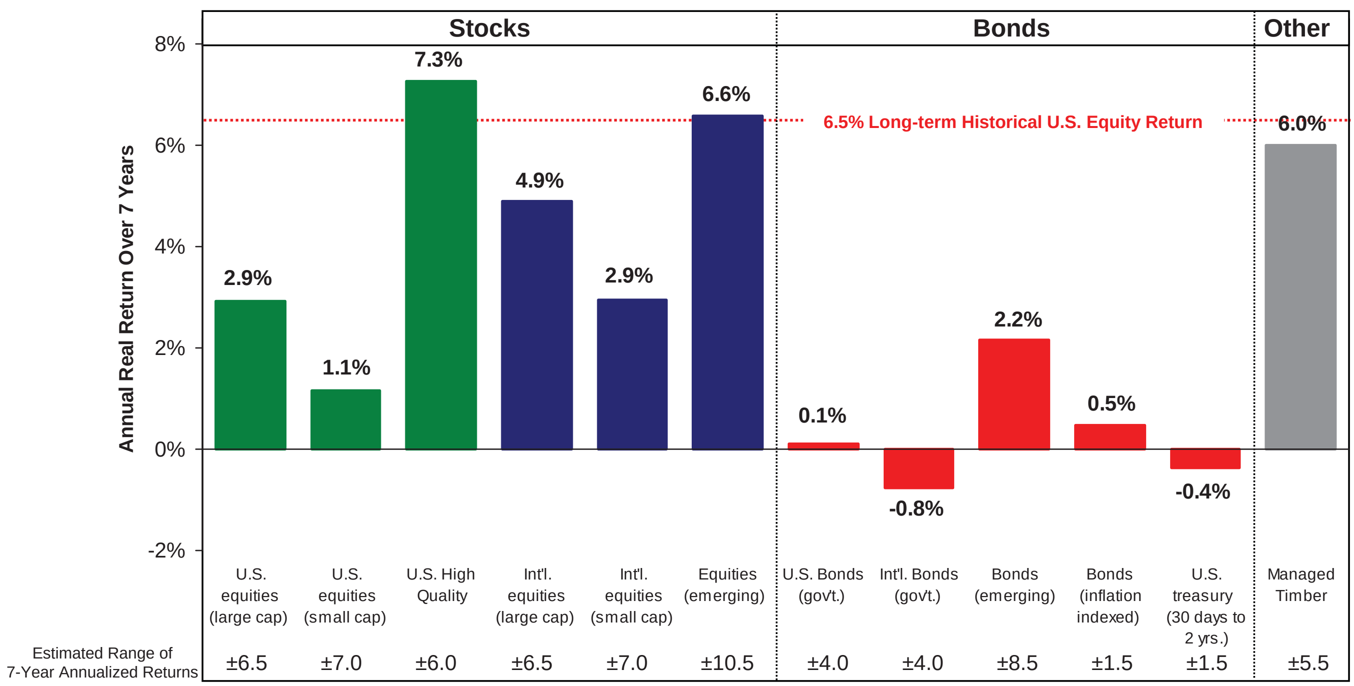
At GMO, our asset allocation portfolios, however, are merely informed on the margin by these non-quantitative considerations. They draw their strength from our regular seven-year forecast. Today this forecast (see Exhibit 1) suggests that it is possible to build a global equity portfolio with just over the normal imputed return of around 6% plus inflation. With our forecast, this can be done by overweighting U.S. high quality stocks and staying very light on other U.S. stocks. At a time when fixed income is desperately unappealing, this, not surprisingly, results in our accounts being just a few points underweight in their global equity position, which is suddenly a little nerve-wracking as the growth of developed countries slows down. A little more dry powder suddenly seems better than it did a few weeks ago, but then again, prices are 13% cheaper. I regret not having seen the light a few weeks earlier. Running at the same rate of change in attitude as both the market and general opinion is both frustrating and unprofitable. But even as global equities approach reasonable prices, I would err on the side of caution on the margin.

Let me give a few more details: just behind U.S. high quality stocks, at 7.3% real on a seven-year horizon, is my long-time favorite, emerging market equities at 6.6%. This is now above our assumed 6.2% long-term equilibrium return. Additionally, my faith in an eventual decent P/E premium over developed equities exceeding 15%, perhaps by a lot, is intact. Emerging equities' fundamentals also continue to run circles around ours. EAFE equities at 4.9% are a little expensive (6% or 7%) but make a respectable filler for a global equity portfolio. Forestry remains, in my opinion, a good diversifier if times turn out well, a brilliant store of value should inflation unexpectedly run away, and a historically excellent defensive investment should the economy unravel. Otherwise, I hate it.

Exhibit 1

GMO 7-Year Asset Class Return Forecasts*

As of June 30, 2010



***The chart represents real return forecasts[1] for several asset classes. These forecasts are forward-looking statements based upon the reasonable beliefs of GMO and are not a guarantee of future performance. Actual results may differ materially from the forecasts above.**

[1] Long-term inflation assumption: 2.5% per year.

Source: GMO

Other Advice

Don't walk in the woods any more than you have to these days. Don't get sick until September, when medical practitioners' vacations end. *The Girl with the Dragon Tattoo* really is as readable as they say, and the movie is even better. The Sharpe series by Cornwell is the easiest read ever and a painless way to pick up some Napoleonic history. *War and Peace* is the most self-indulgent, overwritten work ever. There is, though, a great 600-page novel lurking inside it. 4,300 clicks on my Kindle! Have a good summer!

Correction

I mentioned in last quarter's *Letter* that UBS had fired the inestimable Gary Brinson at the peak of the 2000 bull market. This turned out to be incorrect, as Gary was not fired. He and UBS had agreed to his withdrawal for a variety of personal and other reasons some considerable time earlier. No negatives were meant to be applied to Gary. Quite the reverse. Being fired for standing one's ground for a good cause is always an honorable activity in my opinion. My apologies.

2 Finance Goes Rogue (But Volcker Wins a Round!)

My previous argument in the *Economist* debate* was that the 3% of GDP that was made up of financial services in 1965 was clearly sufficient to the task, the proof being that the decade was a strong candidate for the greatest economic decade of the 20th century. We should be suspicious, therefore, of the benefits derived from the extra 4.5% of the pie that went to pay for financial services by 2007, as the financial services share of GDP expanded to a remarkable 7.5%. This extra 4.5% would seem to be without material value except to the recipients. Yet it is a form of tax on the remaining real economy and should reduce by 4.5% a year its ability to save and invest, both of which did slow down. This, in turn, should eventually reduce the growth rate of the non-financial sector, which it indeed did: from 3.5% a year before 1965, this growth rate slowed to 2.4% between 1980 and 2007, even before the crisis.

This bloated financial system was also increasingly deregulated and run with increasing regard for profit and bonus payments at all cost. Thirty years ago, Hyman Minsky could have told you that this would guarantee a major financial bubble sooner or later and at periodic intervals into the indefinite future. This unnecessary explosion in the size of the financial world has been a clear example of the potential for dysfunctionality in the capitalist free market system. I have not been a great fan of the theory of rational expectations – the belief in cold, rational, calculating homo sapiens; indeed, I believe it to be the greatest-ever failure of economic theory, which goes a long way toward explaining how completely useless economists were at warning us of the approaching crisis (with a half handful of honorable exceptions). But it would be a better world if their false assumptions were actually accurate ones: if only information flowed freely, were processed efficiently, and were available equally on both sides of every transaction, we would indeed live in a more efficient and probably better world. The problem that information is asymmetrical in the financial business is a serious one. One side of the transaction, say an institutional pension fund, is often at the mercy of the other, say the prop desk of a talented and mercilessly profit-oriented investment bank.

The problem of asymmetrical information is compounded by the confusion between the roles of agent and counterparty. I grew up in a world where stocks and other financial instruments were traded by the client with a high degree of trust in the agent. Millions of dollars traded on a word, without a tape recording. Somewhere along the way, without any formal announcement of the change, the "client" in a trade mutated into a "counterparty" who could be exploited. Steadily along the way, the agents' behavior became more concerned with the return on their own trading capital than with the well-being of their clients. One of my nastiest shocks in 45 years was the realization one day in 1985 that we had been ripped off by our then favorite broker on one of the early program trades we were doing. We had supposed we had developed a trusting relationship. We had certainly done many incentive trades that were successful from our point of view. Perhaps, with hindsight, our strong incentives might have merely motivated them to rip off some other client.

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* http://economistevents.pb.feedroom.com/economist/economistevents/oneclipgreen/player.html?fr_story=2f1833380e67f2003162128192dedd493ec291d0

So there is an irony in incentive payments. When institutions, for example, pay 20% of their profits to a hedge fund, they are presumably paying a market-derived competitive rate. But what the institutional industry in total misses is that it is a zero-sum game. All of the profits the hedge fund makes are extracted from the market at someone's expense, let us say, to oversimplify, another institution's expense. One part of the collective institutional fund universe is paying a large group of hedge fund managers to squeeze gains out of another part of the total pot and then is sharing these gains in a rather cannibalistic way. The incentive payment is designed in a way that encourages and maximizes this extraction of gains at their own collective expense. One institution pays a fee to encourage another institution's loss, and then participates in the loot. The logic is acceptable only because it is obscured by a fallacy of composition: we always forget that we are the market, and that all costs are a reduction in our returns.

The good news is that we have come close to some version of the Volcker rule. It is a rare opportunity to do away with some of the conflicts and costs to our institutional investors that arise from prop desks within banks. They run multiples of the leverage used by free-standing hedge funds and yet they have been backed by taxpayers' money. Proprietary bank capital knows no "clients" by definition, and simply extracts money from the market at the expense of the institutional world. If we do not ban this activity now we will be saddled with these conflicts for years, greatly to our collective detriment. And we should never ever underestimate the power of the financial lobby to soften or remove the important elements of the bill. Even minor celebrations should be delayed until the fat lady has sung. (I guess she beat me to the punch by one day. Finally, Congress worked more quickly than I expected! As far as I can tell in fifteen minutes, the Volcker component is a great step forward, but the rest of the bill is modest and very, very complicated. I hope it will be worth it.)

Our trading misfortune of 25 years ago also reminds me of another point: how little our side of the industry did to move its business to the more ethical firms and to make a fuss about conflicted or unethical behavior. Had a number of us moved our business, we might have slowed or even stopped the 30-year slide in conflicted, unethical behavior that we have experienced. I, for one, regret the modest nature of our moves. We all could have done more. We have tolerated a pretty nasty decline in standards. Shame on us.

3 The Fearful, Speculative Market

Last quarter, I engaged in the forecaster's last resort: I suggested three main routes for the market and the economy. The least likely in my opinion now, although I gave it a 30% probability, was what one might call the Panglossian way – he of the "everything is for the best in the best of all possible worlds" philosophy. In this encouraging world, the economic recovery would be fairly consistently better than expected. It would be, in short, the type of very strong recovery that normally follows a very severe wipeout. And one that was additionally helped along by unprecedented stimulus. Frankly, I was being deliberately generous to guard against a possible bearish bias. (Inconceivable!) The last quarter, though, has not been encouraging for that route at all. Today a 25% probability would seem generous.

I guessed that the major theme, the line of least resistance as I called it, with a 50% probability, would be a reluctantly and irregularly recovering economy in which Bernanke would be certain to keep rates at rock-bottom for the next 18 months or longer. These low rates, added to the market's awareness that Bernanke's Fed clearly belongs to the old Greenspan put camp, would create a long, steady incentive to borrow and speculate. The key point here is that the economy responds reluctantly to low rates – there are so many other negative factors it has to worry about – whereas the market responds with much more persistent enthusiasm. In such a world, aggressive hedge funds (is that redundant?) can leverage easily and, in their drive to make money, will emphasize more aggressive or more speculative investments. On this path, I suggested that the S&P could move all the way back to 1500 or 1600 before yet another bust, this time a spectacularly dangerous one because the government piggy bank would be empty.

The final path I suggested (with a 21% probability) was that in the six months following last March, two or three of a long list of potential problems would come home to roost and would knock the market down, perhaps all the way down to fair value, which is now about 900 or so on the S&P 500, or about a 25% decline from the peak. I guessed that one major negative would not be enough, but that two or three simultaneously might be enough to expose the thinness of investor confidence. For the record, a 25% decline in any six-month period is about a 3% probability, so this estimate was suggesting that an important drop in the market was seven times its normal probability.

Well, what we are seeing now is a tussle between the 50% sustained speculation branch and the branch where two or three things go wrong and crack confidence. This struggle is an unusual one, and has created market effects I have never seen before, and you have not either. This market might well be called a fearful, speculative market. Low rates, although they tend to produce a feeding frenzy at the aggressive end of <u>institutional</u> investors, merely produce a feeling in ordinary individual investors somewhere between dejection and desperation. They hate to park money in cash at negative real returns, and yet they are still thoroughly nervous, so surveys reveal, about normal equity investing. These investors did not need the recent slowing in growth and sovereign debt problems to become nervous.

Aggressive institutions carry a lot of weight these days, though, and their influence can be felt all over the market. They are not easily intimidated when rates are low and moral hazard is in full swing. The other key component is the conservative half of institutional money that is apparently (and reasonably, I think) seriously disturbed by recent negative global and U.S. economic events. Thus, it is my guess that the main struggle these days is between these two wings of the institutional business. Let's look at some of the symptoms of this struggle.

Anyone who knows anything about the market knows that for the last 30 years, small cap stocks have had a pretty reliably high beta; that is, the group rises and falls in the market more than the blue chips. We at GMO know that there is another very powerful component in this equation, which is badly and widely underestimated, and that is value. For example, at GMO we were very pleased with ourselves in the 2000-02 market break because, first, we were very anti-stocks and, second, for those stocks we had to own, we were very pro small caps. This was more puzzling to our clients than anything I can remember. But we knew from history that <u>value</u> was a key modifier, and that when small cap stocks were normally priced, they indeed fell with a beta close to 1.2 times the market. When they were expensive, they had been typically annihilated, up to a relative decline of 2.0 times the market, but <u>when they were cheap, they outperformed</u>. In 2000, they were as cheap as they have ever been, and fell much less than the S&P despite their higher beta and lower fundamental quality, for that matter. (Yet another blow for Fama and French, et al.) Well, this time, starting from the S&P high of around 1200 in March this year, <u>small caps were expensive</u>, not only absolutely, but also relative to the S&P. So here is a quiz. How many times, when a year has reached a point where the S&P 500 is down 7.5%, have small caps outperformed when they began their decline more overpriced than the market? The answer, since the Russell 2000 index was introduced in 1981, is <u>never</u>. (Before 1981, small caps were barely acceptable in the institutional world, and did not really exist as a separate category. Because of being off the radar screen, they often lagged the market and delivered inconsistent betas, often lower than the market.) Yet by June 30, with the S&P down 7.5%, small caps were 5% less bad!

The same effect, plus 6% or 7% for the relative outperformance of small caps, holds in developed countries outside the U.S. based on the EAFE index. In its way, that is even more remarkable since the headlines have been battering investor confidence there for months. This battering, however, has been focused on financial strength. This focus has finally been sufficient to push high quality stocks in EAFE ahead of low quality (remember, low debt is a component of quality on our definition) after a huge year last year for low quality stocks. But this bad news was not centered on small caps, so the undertow in favor of speculation won out for them. This difference between small cap and low quality – both speculative characteristics – could be viewed as the front line in the struggle between low rates and poor financial and other news. In the U.S., however, we (GMO) were not so fortunate in that headlines, although disturbing, did not sound the same dire drumbeat as they did in Europe, and <u>low quality stocks continued to win</u> as did small caps, by about the same amount. This, then, is the outcome to date in the U.S.: deteriorating fundamentals (especially a slowing in the overall growth rate of GDP), intractably high unemployment, disastrous local government finances, and disturbing news from Europe have been enough to drive the market down 13% from its high and 7.5% for the half year, which is very unusual so early in an economic recovery. Yet the continuing low rates and the Bernanke put have allowed the undertow of speculation or aggressive investing to continue so that, uniquely to this cycle, both lower quality and smaller companies are winning in a down year. Just think about that for a second. Given all of the justifiable misgivings that all of us seem to share, both speculative and small stocks that were relatively overpriced on January 1 have beaten the blue chips year to date. It really is remarkable.

So, how will this unusual struggle resolve itself? Despite growing nervousness and despite a slowing economy, I am so impressed by the power of low rates and Greenspanism (for lack of a better or shorter description) that I would still put odds of 45% (down from 50% last quarter) for the market to rise to over 1400 (down from 1500 to 1600 last quarter) by October of next year, accompanied by a speculative spin. On the other hand, I also have to recognize that the 21% I put on a quick and rapid decline to fair value looks even more likely today, perhaps closer to 30%. If the market does indeed continue down the current sell-off path, it should result in some unusual movement in the Russell 2000 (small cap index) and possibly even the junky stocks, which might give up their unusual relative strength in a real hurry. I can imagine a situation, for example, where the Russell 2000 gives up a relative 10% in two to three weeks as the aggressive investment world finally has second thoughts on the wisdom of continuing to speculate and changes its mind in its usual rapid way. (Remember, you read it here first.) High quality is perhaps not so promising in this respect, but could still win by several percentage points if the world becomes more circumspect. It would be more typical for quality to outperform over several years.

Why Are Quality Stocks Cheap?

High quality stocks were left very much behind in the great rally last year, which was the biggest and most speculative since 1932. Much more surprisingly, they have underperformed this year, probably for the reasons discussed above. But unlike small caps, they have been cheap for almost five years and, given the uncertainties around today, this is unusual. There are surely additional reasons, other than the low rates, why the great companies have persistently sold at a discount. Why didn't quality stocks at least become expensive, and risky stocks become cheap on a relative basis, when we were at the deepest point in the crisis? Most risky fixed income securities certainly became very cheap then. I understand the general direction of the performance of quality stocks: down in 2005, 2006, and 2007, which were speculative years; up a lot in 2008, which was the year of anti-risk panic; and down in 2009 and 2010, which were also very speculative. But, I'm puzzled by the general value level around which they have been moving. It's as if there is an extra and unusual force working against them. This type of mispricing always has a reason. It may not be particularly rational, but there is a reason. Let me confess that I have no certain answer, but I'll offer a couple of candidates. One is the population profile: there are more new retirees per new worker than there used to be. Retirees are selling stocks to pay the bills and to buy more conservative fixed income investments. And what stocks are they selling? By the time they retire, they probably own blue chips, having sold down most of their speculative stocks in the decade before retirement. This is just a guess; I have no good data to prove it. But it does seem reasonable.

A second candidate, accompanied by stronger circumstantial evidence, is the "Let's all look like Yale" syndrome. In the last 10 years, institutions and even ultra-rich individuals have, in general, been increasing the share of their portfolios that is invested in private equity and hedge funds, commodities, and real estate. And even within their equities, they have been increasing their share of foreign equities, including emerging markets and small caps. At the second derivative level, hedge funds may feel that they do not get paid to buy Coca-Cola, and private equity firms, particularly now, do not go after many of the great franchise companies. So what is being liquidated to buy all of this new stuff? Old-fashioned blue chip U.S. stocks and U.S. government bonds that used to completely dominate even sophisticated institutional accounts and now no longer do. In the case of U.S. bonds, we have the noble Chinese to step into the breach for a powerful reason: they have no alternative if they want to run trade surpluses. But blue chip stocks are on their own, without any natural offsetting buyers.

In a rational market, structural selling pressures that are not related to long-term value will create a modest mispricing opportunity into which sensible money will be drawn. That would be a nice, boring world to live in. In ours, where herding dominates and an extreme libertarian like Greenspan or a painfully academic academic like Bernanke are the shepherds, the inefficiencies can be much greater than in Fama's and French's wildest dreams. And so it is today. The next time – at some unknowable point in the future – when relative prices for quality versus the rest of the market once more cross through fair value (as the market in aggregate did in October 2008 and June 2009, by the way), the excess return for quality could be over 40 percentage points! (This is reflected in our seven-year forecasted difference of 7.3% for high quality and 1.1% for the rest of the S&P 500, compounded over seven years as of June 30.) Incidentally, although it is interesting to wonder why certain stocks or groups become cheap, there are no points for getting the reasons right. There are only points for knowing what actually is cheap and owning it.

Supply-demand issues like the two described can be powerful in distorting prices in the short run and even the quite long run, but it is like holding a ping pong ball under water: it needs constant pressure to keep it there. Remove the pressure even for a short while and the normal equilibrium will quickly be restored. In this way, quality stocks might possibly spend much of the next several years underpriced, but from time to time will bounce back to fair value. This is all that patient investors need. It is the converse of the market pattern of the last 20 years: mostly overpriced, but occasionally spiking down to fair value.

4 Everything You Need to Know About Global Warming in 5 Minutes

1) The amount of carbon dioxide (CO_2) in the atmosphere, after at least several thousand years of being quite constant, started to rise with the advent of the Industrial Revolution. It has increased by 40% and is rising each year. This is certain and straightforward.

2) One of the properties of CO_2 is that it creates a greenhouse effect and, other things being equal, causes the temperature to rise. This is just physics.

3) Several other factors, like changes in solar output, have major influences on climate over millennia, but these effects are known, are observable, and have been allowed for in current models. Critically, there have been no important changes in these other factors over the last 100 years.

4) The doubts arise when it comes to the interaction of CO_2 with other variables in a complicated system, especially water vapor. It is impossible to be sure whether the temperature will rise slowly or rapidly. But, the past can be measured. The temperature has indeed steadily risen and is well within the boundaries predicted for the man-made effect. But the forecasts still range very widely, from a harmless negligible rise to a potentially disastrous +6 degrees Fahrenheit or higher within this century. The main danger of the CO_2 interaction with water vapor is the high probability that it will cause a great increase in severe precipitation episodes.

5) Skeptics argue that this wide range of uncertainty lowers the need to act: "Why spend money when you're not certain?" But since the penalties rise hyperbolically at the tail, a wider range implies a greater risk (and a greater expected value of the costs). This is logically and mathematically rigorous and yet is still argued.

6) Pascal asks the question: What is the expected value of a very small chance of an infinite loss? And, he answers, "Infinite." In this example, what is the cost of lowering CO_2 output and having the long-term effect of increasing CO_2 turn out to be nominal? The cost appears to be equal to foregoing, once in your life, six months' to one year's global growth – 2% to 4%, or less. The benefits, even with no warming, include: energy independence from the Middle East; more jobs, since wind and solar power and increased efficiency are more labor-intensive than another coal-fired power plant; less pollution of streams and air; and an early leadership role for the U.S. in industries that will inevitably become important. Conversely, what are the costs of not acting on prevention when the results turn out to be serious: costs that may dwarf those for prevention; and probable political destabilization from droughts, famine, mass migrations, and even war. And, to Pascal's real point, what might be the cost at the very extreme end of the distribution: definitely life changing, possibly life threatening.

7) The biggest cost of all from global warming is likely to be the accumulated loss of biodiversity. This features nowhere in economic cost-benefit analysis because, not surprisingly, it is hard to put a price on that which is priceless.

8) A special word on the right-leaning think tanks: As libertarians, they abhor the need for government spending or even governmental leadership, which in their opinion is best left to private enterprise. In general, this may be an excellent idea. But global warming is a classic tragedy of the commons – seeking your own individual advantage, for once, does not lead to the common good, and the problem desperately needs government leadership and regulation. Sensing this, these think tanks have allowed their drive for desirable policy to trump science. Not a good idea.

9) Also, I should make a brief note to my own group – die-hard contrarians. Dear fellow contrarians, I know the majority is usually wrong in the behavioral jungle of the stock market. And heaven knows I have seen the soft scientists who lead finance theory attempt to bully their way to a uniform acceptance of the bankrupt theory of rational expectations and market efficiency. But climate warming involves hard science. The two most prestigious bastions of hard science are the National Academy in the U.S. and the Royal Society in the U.K., to which Isaac Newton and the rest of that huge 18th century cohort of brilliant scientists belonged. The presidents of both societies wrote a note recently, emphasizing the seriousness of the climate problem and <u>that it was man-made</u>. (See the attachment to last quarter's *Letter*.) Both societies have also made full reports on behalf of their membership stating the same. Do we believe the whole elite of science is in a conspiracy? At some point in the development of a scientific truth, contrarians risk becoming flat earthers.

10) Conspiracy theorists claim to believe that global warming is a carefully constructed hoax driven by scientists desperate for … what? Being needled by nonscientific newspaper reports, by blogs, and by right-wing politicians and think tanks? Most hard scientists hate themselves or their colleagues for being in the news. Being a climate scientist spokesman has already become a hindrance to an academic career, including tenure. I have a much simpler but plausible "conspiracy theory": that fossil energy companies, driven by the need to protect hundreds of billions of dollars of profits, encourage obfuscation of the inconvenient scientific results.

11) Why are we arguing the issue? Challenging vested interests as powerful as the oil and coal lobbies was never going to be easy. Scientists are not naturally aggressive defenders of arguments. In short, they are conservatives by training: never, ever risk overstating your ideas. The skeptics are far, far more determined and expert propagandists to boot. They are also well-funded. That smoking caused cancer was obfuscated deliberately and effectively for 20 years at a cost of hundreds of thousands of extra deaths. We know that for certain now, yet those who caused this fatal delay have never been held accountable. The profits of the oil and coal industry make tobacco's resources look like a rounding error. In one notable case, the obfuscators of global warming actually use one MIT professor who also defended tobacco! The obfuscators' simple and direct motivation – making money in the near term, which anyone can relate to – combined with their resources and, as it turns out, propaganda talents, have meant that we are arguing the science long after it has been nailed down. I, for one, admire them for their P.R. skills, while wondering, as always: "Have they no grandchildren?"

12) Almost no one wants to change. The long-established status quo is very comfortable, and we are used to its deficiencies. But for this problem we must change. This is never easy.

13) Almost everyone wants to hear good news. They want to believe that dangerous global warming is a hoax. They, therefore, desperately want to believe the skeptics. This is a problem for all of us.

Postscript

Global warming will be the most important investment issue for the foreseeable future. But how to make money around this issue in the next few years is not yet clear to me. In a fast-moving field rife with treacherous politics, there will be many failures. Marketing a "climate" fund would be much easier than outperforming with it.

5 "Seven Lean Years" Revisited

The idea behind "seven lean years" is that it is unrealistic to expect to overcome the several problems facing most developed countries, including the U.S., in fewer than several years. The purpose of this section is to review the negatives that are likely to hamper the global developed economy, especially from the viewpoint of how much time may be involved.

First, one of the causes of the financial crisis was the over-indebtedness of consumers in certain countries, including the U.S., the U.K., and several European countries. As of today, although they have stopped increasing consumer debt – which itself is unprecedented and has eaten into consumption – the total improvement in personal debt levels is still minimal. It would take at least seven years of steady reduction to reach a more normal level. Anything more rapid than this would make it nearly impossible for the economy to grow anywhere near its normal rate or, perhaps, at all.

There is in the situation today a nerve-wracking creative tension. At one extreme, massive stimulus induces government debt to rise to levels that cause a real problem in servicing the debt – interest and repayment – or at least a crisis of confidence. At the other extreme, a draconian attempt to hold debt levels while the economy is still fragile runs the risk of causing a severe secondary economic decline. Deciding which horn of this dilemma to favor will probably prove to be the central economic policy choice of our time. I am sympathetic to those in power. This is not an easy choice. My guess, though, is that the best course is less debt reduction now and a longer, slower reduction later. Overdoing it now may well cause an economic setback for an already tender and vulnerable global economy that might easily be enough to more than undo all of the benefits of debt reduction. Indeed, with a weaker economy leading to lower government income, it might sadly cause debt levels to rise after all. This need for time to cure all ills is one reason why I picked a seven-lean-year recovery over a more normal and rapid one. The bad news, though, is that in the end, by hook or by crook, debt levels must be lowered at every level, especially governmental. There is almost no way that this process will be pleasant or quick.

Second, and the most immediately frightening aspect of the seven-lean-year scenario, is that although the credit crisis was caused by too much credit on too sloppy a basis, the cure was to increase aggregate debt by flooding economies with government debt. <u>Dangerously excessive financial system debt was moved across, with additions, to become dangerously excessive government debt</u>, with levels of debt to GDP not seen outside of major wars, and seldom then. <u>Increasingly the "cure" seems more like a stay of execution</u>. With bank crises, there is the backstop of the central government. For minor countries, the IMF <u>may</u> be a net help, but for major countries in trouble, the IMF seems outgunned and, if several major countries have a debt crisis simultaneously, the IMF is clearly irrelevant.

Third, we have lost a series of artificial stimuli that came out of the steady increases in debt levels and the related asset bubbles. For example, the artificial lift to consumers' attitudes resulting from steadily rising house prices is unlikely to return soon. In fact, some further price decline in house prices in the U.S. is probably more than a 50/50 bet, and in the U.K. and Australia is nearly certain. For sure, that feeling of supreme confidence – counting on the inevitability of further steady rises in house prices, which was baked into average U.S. opinion by 2006 (including Bernanke's, unfortunately) – is long gone. The direct shot in the arm to the economy from the rise in economic activity from an abnormally high rate of home construction and the services associated with an abnormally high turnover rate of existing houses (more realtors, etc.) is also a distant memory here. So the stimulus from rising prices has gone, and stock prices, although they have made a strong recovery everywhere in the developed world, are still way down from their highs of 10 years ago and, notably in the U.S., are <u>still overpriced</u>. Both the market and house price declines have also reduced confidence in the nest eggs that people felt they could count on for retirement as well as a little more spending on the way there. Now consumers are readjusting to a greater need to save and, perhaps unfortunately, a greater need to work longer. Unprecedentedly, they are paying down some consumer debt. These changed attitudes will surely last for years.

Fourth, although the financial system has passed its point of maximum stress in the U.S., very bad things may lie ahead in Europe. And the leverage in the system and the chances of further write-downs (yet more housing defaults and private equity write-downs, for example) leave banks undercapitalized and reluctant to lend. Any more shoes dropping here or in Europe, or elsewhere for that matter, will tend to keep them nervous. The growth in the total U.S. GDP caused by previous rapid increases in the size of the financial sector has also disappeared, and with any luck will stay disappeared, for it was not healthy growth in my opinion.

Fifth, the runaway costs in the public sector, particularly at the state and city levels, where average salaries and pensions ran far above private sector equivalents in a mere 15 years (why, that would make a good report by itself!), have run into a brick wall of reduced taxes. State and other municipalities are incredibly dependent on real estate taxes, which are down over 30% from falling real estate prices and defaults, and also on capital gains rates, which have been hit by falling asset prices generally. Their legal need to stay balanced is leading to painful cost cutting, which in turn puts pressure on an economy that is coming to the end of much of the stimulus. With many of the artificial stimuli of the '90s and 2000s gone, their revenues are unlikely to bounce back in one or two years, and a double-dip in the economy or new asset price declines would move their recovery back further.

Sixth, unemployment is high and will also suffer from the loss of those kickers related to asset bubbles. The U.S. economy appears to have an oddly hard time producing enough jobs to get ahead of the natural yearly increases in the workforce. (At least for a while, one long-term economic drag – slowing longer-term growth of the U.S. labor force – becomes an intermediate-term help in reducing unemployment, but beyond five years, it too will work to reduce GDP growth, as it has already done in the last 10 years.) Needless to say, unemployment works to keep consumer confidence and, hence, corporate willingness to invest, below normal.

Seventh, another longer-term problem for the global economy is trade imbalances. The U.S. in particular cannot continue to run large trade imbalances. In a world growing nervous about the quality of sovereign debt – even that of the U.S. – domestic sovereign debt levels have exploded. The added complication and threat to the dollar from accumulating foreign debts just adds risk and doubts to the system. This is similar to the accumulating surpluses of the Chinese. Imbalances destabilize the system. The trick, though, is to reduce these imbalances so that the process does not reduce global growth. This necessary rebalancing will not be quick or easy.

Eighth, there is a related but different problem with the euro: incompetent management in Spain, Greece, Portugal, Ireland, and Italy allowed the local competitiveness of their manufactured goods to become 20% or more uncompetitive with those of Germany. It was never going to be an easy matter to head this process off, and doing so would have taken some tough actions with uncomfortable short-term consequences. But they could see the problem building up like clockwork at about 2% to 3% a year, year after year. This did not result from the banking crisis, and it was never going to be easy to solve with a fixed currency. The difficulty was implicit in the structure of the euro from the beginning. Indeed, my friend and former partner, Paul Woolley,* believed, and let everyone know it, that from day one this was a fatal flaw nearly certain to bring the euro down under stress. But one might have hoped for better evasive action or better survival instincts.

Greece in particular has two largely independent problems. First, it has approximately 22% overpriced labor (complete with 14 months' salary and retirement in one's 50s), which can only be cured by reducing their pay by 22%. This would be tough for any government that does not have an exceptionally well-established social contract – a commitment from individuals that they have obligations to help the whole society to prosper or, in this case, muddle through. The Greeks probably do not have it. Perhaps the U.S. does not either. Would we take being told that ordinary workers would have to earn 22% less when there are so many other people to blame for our current problems? The Japanese, in contrast, probably do, but may well have other offsetting disadvantages.

The second problem for the Greeks is that they have accumulated too many government debts relative to their ability to pay and, as the doubts rise, so do the rates they must pay such that their ability to pay falls and the doubts rise further. Temporary bailouts are postponements of a necessary restructuring. Should the system get out of control, there is the problem of the Greek debt that is stuffed into other European banks. (My colleague, Edward Chancellor, is writing on this topic.) I merely want to make the point that these twin Greek problems, which affect, to varying

* Paul Woolley started a center for the study of "Capital Market Dysfunctionality" at the London School of Economics.

intensity, the other PIGS, have become an intrinsic part of the "seven lean years," more or less guaranteeing slower than normal GDP growth and a long workout period.

Ninth, the general rising levels of sovereign debt and the particular problems facing the euro bloc and Japan are leading to the systematic loss of confidence in our faith-based currencies. It is becoming a fragile system that will increasingly limit governments' choices in terms of dealing with low growth and excessive credit.

Finally, and possibly most important of all, on a long horizon there is a very long-term problem that will overlap with the seven-year workout and make the period even tougher: widespread over-commitments to pensions and health benefits, which is covered in the next section.

6 Aging Populations, Pensions, and Health Costs

The populations of the developed world are getting older and, as they age, they need more medical attention. The march of medical science means that an increasing number of expensive helpful treatments are available. The problem is that they are mostly <u>very</u> expensive and only a <u>little</u> bit helpful. Yet it is hard to limit or ration their use. A symptom of this is that almost 25% of total medical expenses occur in the last year of life, while equivalent spending in prenatal and child care would yield multiples of the payoff to society. Understandably, perhaps people of my age and older are very sensitive to this kind of talk and chants of "death panels" easily arise. The result is that total medical costs rise rapidly, and in the U.S. are handsomely in first place globally, with the percentage of GDP going to medical care at one-third more than the average developed country. With progress in the study of the human genome, we will soon see breathtakingly expensive ways to reduce the incidence of very rare diseases and much more that will be hard to ration or resist. And a great leap in life extension drugs – perhaps rapamycin – although desirable (where can I buy it?) would result in a terrible extension of the age profile problem.

The plain truth is becoming more obvious by the minute. Almost all developed countries are overcommitted to retirement benefits, especially health care. Even without severe aging problems, health costs alone would be a major economic challenge. With an aging population, though, health costs and retirement costs balloon and put an intolerable burden on younger workers. We in developed countries are on a collision course with budgetary integrity: given our current policies on health costs we simply cannot afford the commitments we have made. <u>We all face the choice of reneging or rewriting the social contract</u>. Such rewriting in the U.S. would require a substantially higher level of taxes, approaching the current rates in Europe – oh base and villainous thought!

In the developed world, which choice is made will depend on the country's history and on the strength of its concept of the social contract: how much personal disadvantage is the individual willing to accept in the interest of the social good? The U.S., like most countries, has been brilliant in this area on occasion, but these occasions were only during major wars. Outside of wars, the culture is more like the individual *über alles* and the devil take the hindmost. Japan is always amazing at the other extreme (although finally social cohesion is starting to fray a little), and European countries are somewhere in between, with the Scandinavian countries close to the Japanese level and Greece and some other Mediterranean countries more like the U.S. Under current stresses, the Europeans seem ready to extend the retirement age (never waste a good crisis!), which can fairly be seen as involving a degree of reneging, received with varying degrees of kicking and screaming. Clearly, almost everywhere people will end up working into their late 60s until the baby-bust works its way through the population profile and in 40 years or so begins to be less painful. On average, European countries will also be better than the U.S. at rationing health costs, which of course in the end must be done. The U.K. may have exceptional credit problems, relatively low productivity, and a vulnerable and bloated financial sector, but it does start with huge advantages in this area. It has promised less to retirees and is more advanced in the reasonable rationing of health costs – not that its population likes either development!

This brings us to the U.S. Here the possibility of rationing health benefits to the level society is willing to pay is so anathema that it cannot be talked about sensibly and, if at all, the language must be tortured in order to talk around the point. Our culture demands the best that money can buy, combined with unlimited legal liability (courtesy of the legal lobby and all those lovely lawyers in Congress), and friendly conditions for the drug and insurance industries (courtesy also of their effective lobbies). Nobody gets treated badly except, of course, the ordinary user. That is to say, the ordinary taxpayer, who pays a third more for mediocre or worse aggregate health results, lower life expectancy, etc., etc., etc. Yes, I know for the very rich it is said to be the best system in the world. Yet I am rich, and have had less than brilliant experiences recently with a tiny country tick running rings around the medical industry. And never get sick during vacation season. "Dr X is fishing in Alaska so your call will be forwarded to Dr. Y, who is scuba diving in Grand Cayman. Click." Anecdotal evidence. Heresy. Strike it from the record!

Our cost-laden health system is perhaps fine if you are willing to pay for it. But the same people who scream "death panels" at the concept of sensible rationing also reach for their revolvers, of which they insist on having plenty, at the prospect of having a tax structure nearer the average of the rest of the rich world. <u>Now, this is a non-compute</u>. It has to be one or the other, either rationing or taxes. Presumably we will hunker down, wait for a crisis, and then respond. (To be fair, we did modestly extend the age to receive Social Security and I, for one, had to wait an extra four months. Rage, rage.) In my opinion, this refusal to make painful choices puts the U.S. fairly high up the list of countries with longer-term financial problems. Japan, perversely, has a much worse population profile and has had a terrible 20 years, yet with its social cohesion should still dig its way through these choices and agree to pay the inevitable, very high prices more easily.

A Time-out on Pension Logic

This is a good opportunity to make some points on pensions. The only way that pensions can be paid is out of the current year's GDP – the total output of new goods and new services. You cannot materially move resources to pay pensioners through time. Sure, you can store a few tins of beef and carrots in the basement. This is indeed preparing for the future, but it is by its very nature a rounding error in total scale. I suppose you could build an extra supply of houses, more than you currently need, in order to prepay future bills, but empty houses have a poor return on investment and deteriorate, as we are finding out now, for completely different reasons. No. Every bus ride, every full grocery bag, every TV set, and every doctor's visit for a pensioner comes out of this year's GDP pie just as it does for a young worker. All that accumulated financial wealth does is shuffle the accounting claims to determine the pecking order: in the end, everyone needs to derive a life-support system from the current GDP. In this sense, a pay-as-you-go pension fund like Germany's is merely admitting the obvious. When you have an aging population mix, more of the current year's GDP pie will be eaten by retirees and less by younger workers, and <u>nothing you do can materially change this fact</u>.

So what can you do to prepare even modestly for a shift in population mix? I believe that there are two useful steps that can be taken, or could have been.

Step 1. You can make sure that the infrastructure is as up-to-date as it can possibly be to minimize any unnecessary load on future workers and taxpayers so that no unnecessary maintenance costs have to be paid. In such a sensible world, the roads and bridges are sparklingly well maintained, with many of them new. The schools, water, and energy transmitting systems are as modern and efficient as can be. Obviously, we have totally failed on Step 1. We have <u>not even discussed</u> that our aging population makes this policy extremely desirable. We enter the new difficult world of an aging population profile perhaps as badly prepared as possible, with huge unpaid maintenance bills, the worst in modern times. Our infrastructure is sadly neglected even by our own earlier standards, with poor public transportation, decrepit bridges, etc., etc., etc. It's as if we expected a great and immediate increase in the worker bee percentages, which is the complete opposite of reality.

Step 2. We can pay down all future debts to further ease the problem of the squeezed 30-year period that we know we face. Here again, we enter our trickiest period, with record Federal Debt heaping additional claims onto the future. Not content with having the reduced percentage of workers carrying proportionately more retirees, we have needlessly loaded them with our routine current expenditures so that they – the working taxpayers – will have to add unnecessarily high interest and debt repayments to their future load.

Both steps are completely the reverse of what is needed. What a testimonial to the shortsightedness of both today's and yesterday's politicians. And to be fair, let it be said that long before Obama was a gleam in the eye, no conversations at all were heard on the prudent preparation that this aging population problem desperately required. Congress has played the part of the carefree, unprepared grasshopper perfectly.

Summary

Parts 5 and 6 present a heart-breakingly long list of problems. Some of them stem directly from the recent financial and economic crisis. Some of them draw their importance from bad habits built up in the last 30 years, in what we might call the post-Volcker period. The huge issue of the aging population cannot be blamed on policy, but we can agree that it was an obvious and certain future event, and therefore could have been prepared for.

One group of problems draws a lot of its potency from an overgrown, reckless, and greedy financial system. But all of them owe too much to a common cause: an inadequate supply of wise long-term planning by our leadership in Congress and the rest of government. One of our central problems in investing and in economics in general is our default assumption that "they" (the government) know what they are doing. Unfortunately, nothing could be further from the truth. As investors, we may not have any effective cures up our sleeve other than lobbying ourselves for specific improvements, like the Volcker rule, one by one. We will, however, be generally better investors if we recognize the worst and refuse to live in a fool's paradise.

Just over a year ago, I speculated that where we had formally aspired as developed countries to a growth rate of 3.5%, we would now be doing well to reach 2.25% for the next seven years. Fifteen months later, I think we will be <u>lucky</u> to reach 2%.

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