

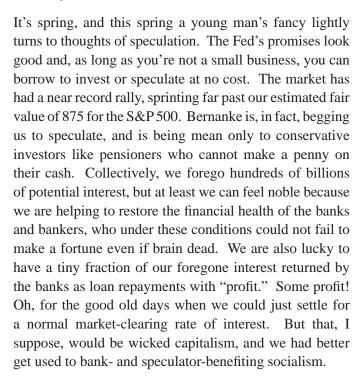
QUARTERLY LETTER



April 2010

Playing with Fire (A Possible Race to the Old Highs)

Jeremy Grantham



The massive bailout program stopped the meltdown of the financial system and engineered at least a temporary economic recovery. We know the obvious cost of this bailout: unprecedented deterioration of the Federal balance sheet. But what of the less obvious costs incurred by taking away the rewards of caution by saving the reckless and incompetent? These weak enterprises, financial and other, were not gobbled up by the stronger, more prudent, and more competent natural survivors, and there is a long-term cost in that.

So now, Bernanke begs us to speculate, and we are obedient. Despite being hammered down twice in 10 years and getting punished for speculating, we again pick ourselves up off of the canvas and get back into the good fight. Such persistence is unprecedented – 20 years for each really painful experience has been the normal recovery time – but Uncles Ben and Alan have treated us so well in these two disasters that, with hindsight, they don't feel so bad after all. Yes, the market is still down

a lot in over 10 years and on our data is likely to have a second consecutive very poor decade, but we have had two wonderful recoveries in which the more speculative you were, the more money you made. So why not break the historical rules and try a third time? Perhaps this time it will be lucky.

Still, it does seem inefficient for the Fed to help us up and then lead us off the cliff again. And to do it twice seems like sadism. And for us to play the game once more seems like lining up behind hot stoves and begging, "Please, can I burn my hand a third time?" Investors used to be more pain averse. It used to be "once bitten, twice shy." This time, surely it should be "twice bitten, once bloody shy!" The key shift seems to be the confidence we now have in Bernanke's soldiering on with low rates and moral hazard to the bitter end, if necessary, cliff or no cliff. The concept of moral hazard has changed. It used to be a vague expression of intent: "If anything goes wrong, I will help you if I can." It seems to have been transmuted into a cast-iron commitment. The Fed seems to be pledging that it will bail us out after every flood. All that is lacking is a rainbow!

Speculators are not stupid. They see that after each crash, a long, artificial period of low rates and easy financial borrowing has been delivered. They see that Bernanke is an unreconstructed Greenspanite in that he refuses to address bubbles, but will leap to help ease the pain should a bubble break. With asymmetry like that, why not speculate? And so another bubble appears and then another. This time, the recovery for the total market was 80% in one year, second only to 1932, and the really speculative stocks are almost double the market, as they also were in 1932. But frankly 1932 was far worse than our crisis where, according to our research, only 7% of the market value of speculative stocks remained, compared with 35% this time. Back then, they deserved that kind of rally. And even though I guessed last April that we would have a quick rally to 1100, this looks quite likely to be far more.



I'm convinced that this excessive market response has occurred because stocks are far more sensitive to both low rates and the Fed's promises than is the economy. The economy is limping back into action, but faces some tough long-term headwinds that I collectively call "seven lean years." Mortgage defaults in housing, steady repayments of consumer debt, and refinancings in commercial real estate and private equity, are all problems that linger, as do many others, on what is becoming a long, boring list. We may get very lucky and have a strong broad-based economic recovery. The economy's durability and flexibility is usually undersold by the bears, and I have generally been leery of underestimating its potential. But we can probably agree that the economy is plagued by unusual problems this time. It is therefore perhaps more likely that the economy will recover in fits and starts, and that over several years it will underperform its historical record.

If the economic recovery is slow and if unemployment drops slowly, then Bernanke will certainly keep rates very low, as he has promised in as clear a way as language permits. In that case, stocks and general speculation will very probably rise from levels that are already overpriced. And if they do, Bernanke will definitely not be concerned and has told us as much. There were some teasing comments from Bernanke at the lows last spring to the effect that the Fed might take the embedded risk of asset class bubbles more seriously, as many foreign central bankers have begun to, and very sensibly so. But that hope has now been utterly squashed, and Bernanke has returned to the original Greenspan line: let the bubbles look after themselves. Even if we were to re-enter bubble territory in a way that would be obvious to anyone who can tell the difference between 15 P/E and, say, 28 P/E (35 of us at last count), he still will do nothing. For he is now once again genuinely unconcerned with bubbles and even doubts their existence, as proven conclusively by his comments during this last one, the 100-year U.S. housing bubble, the breaking of which landed us in the rich and deep manure of 2009: "The U.S. housing market has <u>never</u> declined," etc., etc. No believer in the existence of bubbles could ever say such things.

If we get lucky and have a strong, broad, and sustained economic recovery, interest rates will probably rise before we reach real bubble territory. As rates rise, the market will almost certainly settle down, and we will only have to deal with a substantially overpriced U.S. market and moderately overpriced global equities and risk premiums.

In that world, the market would have to decline, but not disastrously, and would probably exercise no really damaging effect on the economy.

If, however, the economy only limps along, which seems more likely to me, then we run a very real danger of a third dangerous bubble in stocks and in risk-taking in general. For in that event, Bernanke will definitely keep rates low quarter after quarter and speculation will surely respond. Again? Yes, I'm afraid so. In that environment, Bernanke will do nothing to let the air out gently. His lack of antibubble action is pretty much guaranteed. The end of such events is always hard to predict, but usually bubbles break for almost any reason when they are big enough. Of course, the larger the asset bubble, the bigger the shock to the economic and financial system. Now, Greenspan was lucky enough to inherit Volcker's good work, and that gave him a base from which he could launch or blow a huge equity bubble; he also had the advantage that the country's balance sheet was in excellent shape. Even Bernanke inherited a reasonably solid position from which to fund a second bailout. But a third time? It is hard to work out where the resources would come from to resuscitate the economy if a real shock were to be delivered by another collapse of a major asset class. The key problems here are the Fed's refusal to see the risks embedded in asset class bubbles and the willingness of both the Administration and Congress to tolerate this dangerous policy. Heck, they recently reappointed him! Yes, the Congressional natives were restless, but in waiting for a third crisis to kick him out, they may be too late to avoid the majorleague suffering caused by his blind spot.

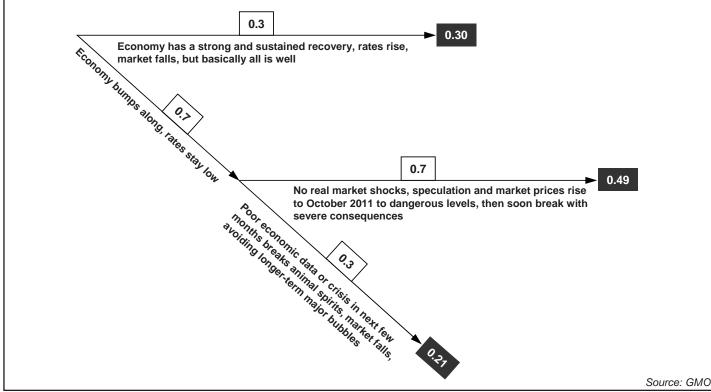
Should unemployment linger at high levels, which I think is likely, and I get these things right better than half the time (I believe about 52%), then we had better hope that something lucky turns up to break the speculative spirit. This is perverse, but so is Bernanke. What could go wrong, preferably in the next few months? Some combination of the following: an unexpected second leg down in house prices and a continued rise in the level of defaults, leading to a crisis at Fannie, etc.; a wash-out in commercial real estate and private equity caused by refunding problems (along the lines of Goldman's and Morgan Stanley's recent real estate fund wipe-outs) that result in a chain of major defaults in properties like Stuyvesant Town; a crisis in the euro where Portugal or Spain or Greece, or all three, default and strange things start to happen; a rapid rise in commodity prices, despite the anemic growth of the developed world, which, with the same caveats, I also think is quite likely; competitive devaluations leading to a serious trade war; or my colleague Edward Chancellor's favorite, two or three wheels falling off of the Chinese economy, which today acts as the main prop to global growth. Okay, enough. We all know that there is plenty that could go wrong. Some combinations would be enough to break the market but still leave the economy limping along. This would be far better than having the market rise through the fall of next year by, say, another 30% to 40%, along with risk trades similarly flourishing and then all breaking. The possibilities of this happening seem nerve-wrackingly high. The developed world's financial and economic structure, already none too impressive, would simply buckle at the knees.

And, briefly, let me give you my reasons why this rally running through next fall is not at all out of the question. In October we enter the third year of the Presidential Cycle, the year every Fed except, of course, Volcker's, helped the incumbent administrations get re-elected. Since 1932, there has never been a serious decline in Year 3. Never! Even the unexpected Korean War caused only a 2% decline. Even when Greenspan ran amok and over-stimulated the first two years instead of cooling the system down – which he did twice, having not suffered

enough the first time – he stimulated Year 3 as well. The result was that we entered Year 3 in October 1998 and Year 3 in October 2006 with horribly overpriced markets, and still the market went up, and by a lot. The overpricing in October 1998, by the way, was so bad that our 10-year forecast was down to -1.1%; in October 2006, by a nervewracking coincidence, our 7-year forecast was -1.0%. If the market is 1320 by this coming October (up 10% from today), our 7-year forecast will again be -1.0%. (Please hum the Jaws theme here.) Do not think for a second that a very stimulated market will go down in Year 3 just because it's overpriced ... even badly overpriced. So far it has had 19 tries to go down since 1932 and has never pulled it off. We can, of course, hope that this time will be exceptional. Even in the best of times, though, overpricing is only a mild downward pull. Its virtue is that it never quits. Eventually it wears the market back down to fair value.

So what do I think will happen? That's easy: I don't know. We have been spoiled in the last 10 years with many near certainties – mainly that real bubbles would break – but this is definitely not one of them. Not yet anyway. (However, I am still willing to play guessing games despite the fact that "I don't know." So here, as Exhibit 1, is my probability tree.) The general conclusion

Exhibit 1
Probability Tree: The Line of Least Resistance



is that the <u>line of least resistance</u> is a market move in the next 18 months or so back to the old highs, say, 1500 to 1600 on the S&P, accompanied by an equivalent gain in most risk measures, followed once again by a very dangerous break. If that happens, rates will still be low and thus difficult to use as a jump starter, the financial system will still be fragile, and the piggybank will be more or less empty. It is remarkably silly for the Fed to allow, even encourage, this flight path. It is also remarkably silly for investors to be so carefree, given their recent experiences. Fortunately, there are several less likely outcomes that <u>collectively</u>, I hope, are equally probable. We are definitely playing with fire and need some luck. The best kind of luck would be that Bernanke gets bitten by a Volcker bug.

Recommendations

Our policy is simple: however complicated the world may be, we will play by the numbers. The global equity markets taken together are moderately overpriced, and the U.S. part is now very overpriced but not nearly so bad as it could be. Surprisingly, within the U.S. the large high quality companies are still a little cheap, having been left totally behind in the rally. They are unlikely to do very well in a bubbly environment, however long it lasts, but should be great in declines and in the end should win. A potential plus for quality franchise stocks in the next few years is that they are far more exposed to emerging countries and, as investors fall in love with all things emerging, this should be seen as an increasing advantage. A mix of global stocks, tilted to U.S. high quality, has a 7-year asset class forecast of about 5% excluding inflation compared with a long-term normal of about 6%. Not so bad. On balance, therefore, we are only slightly underweight equities.

Within my personal portfolio, I have a stronger preference for the already overpriced emerging market equities than do my colleagues at GMO, and actually more than I should have as a dedicated value manager. This is because I believe they will end up with a P/E premium of 25% to 50% in a few years, as outlined two years ago in "The Emerging Emerging Bubble" (*Letters to the Investment Committee XIV*, April 2008). The appeal of emerging's higher GDP growth compared with the slow growth of U.S. developed countries is proving as compelling as I suspected, and I would hate to miss some modest participation in my one and only bubble prediction. It is hard, though, for value

managers like us to ever overweight an overpriced asset, so we struggle on the margin to find kosher ways to own a little more emerging in order to give them the benefit of the doubt. I recommend that readers do the same. The urge to weasel and own a little more emerging is a direct result of the lack of clearly cheap investment alternatives.

Odds and Ends

- 1) SEC and Goldman: to those who said that hedge funds and proprietary trading had nothing to do with the crisis, this recent SEC charge speaks for itself. Watching hedge fund players both outside and inside their banking firms making billions of dollars was an obvious seduction to everyone. It led individuals and even firms to become more aggressive in risk-taking and in interpreting the codes of ethical behavior, and Goldman is probably no worse than average. The real issue here is more about ethical conflicts with clients than about legal restraints. These were, in any case, mostly disassembled by the last four administrations. If we want to be serious about regaining reasonable standards of client protection, then hedge fund-like proprietary trading should of course not be allowed within banks.
- 2) The U.K. and Australian housing bubbles may be unimportant to U.S. investors, but to bubble historians they look extraordinary. The U.K. event in particular has broken out of any previous mold. Despite the usual cry of "special case," they will decline around 40%, back to trend, as was the case for the previous 32 bubbles. If not, it will be the <u>first time in history</u> that a bubble has not behaved in this way. Reversion to trend will involve considerable pain, which I will discuss further next quarter if things are quiet.
- 3) Attached is the first half of a short and accurate letter on global warming by the heads of both the National Academy of Sciences (U.S.) and the Royal Society (U.K.). Couldn't have done better myself!
- 4) I also include here a link to a video of my April 19 *Financial Times* interview about bubbles, which saves me a whole section of writing. It is also a testimonial to talking so fast that they can't ask you too many difficult questions! http://link.brightcove.com/services/player/bcpid71778049001?bclid=69928231001&bctid=79128759001



COMMENT

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What's happening to the climate is unprecedented

Published: April 9 2010 03:00 | Last updated: April 9 2010 03:00

From Prof Martin Rees and Dr Ralph J. Cicerone.*

Sir, We were stimulated by your editorial "Cooler on warming" (April 5). There has undoubtedly been a shift in public and media perceptions of climate change – a consequence of, at least in part, leaked e-mails from some climate scientists and the publication of errors in the fourth Intergovernmental Panel on Climate Change report.

However, as your editorial acknowledges, neither recent controversies, nor the recent cold weather, negate the consensus among scientists: something unprecedented is now happening. The concentration of carbon dioxide in the atmosphere is rising and climate change is occurring, both due to human actions. If we continue to depend heavily on fossil fuels, by mid-century CO 2 concentrations will reach double pre-industrial levels. Straightforward physics tells us that this rise is warming the planet. Calculations demonstrate that this effect is very likely responsible for the gradual warming observed over the past 30 years and that global temperatures will continue to rise – superimposing a warming on all the other effects that make climate fluctuate. Uncertainties in the future rate of this rise, stemming largely from the "feedback" effects on water vapour and clouds, are topics of current research....

* Martin Rees is President of the Royal Society and Ralph J. Cicerone is President of the US National Academy of Sciences.

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SPECIAL TOPIC



April 2010

Letters to the Investment Committee XVI*

Speech at the Annual Benjamin Graham and David Dodd Breakfast (Columbia University, October 7, 2009), edited for reading. (Part 2 may follow next quarter.)



Part 1: "Friends and Romans, I come to tease Graham and Dodd, not to praise them." (On the potential disadvantages of Graham and Dodd-type investing.)

Jeremy Grantham

The main struggle I've had my entire investment life is with the preposterous belief that all information is embedded so quickly and efficiently into stock prices that asset class bubbles cannot possibly occur. But to be honest, I've also been pretty irritated by Graham-and-Doddites because they have managed to deduce from a great book of 75 years ago, Security Analysis, that somehow bubbles and busts can be ignored. You don't have to deal with that kind of thing, they argue, you just keep your nose to the grindstone of stock picking. They feel there is something faintly speculative and undesirable about recognizing bubbles. It is this idea, in particular, that I want to attack today, because I am at the other end of the spectrum: I believe the only things that really matter in investing are the bubbles and the busts. And here or there, in some country or in some asset class, there is usually something interesting going on in the bubble business. The rest of the time, if you keep your nose clean, you will probably keep your job. But when there is a great event, that's the time to cash in some of your career risk units and be a hero. And it turns out that Graham and Dodd themselves were not nearly as anti-the-big-picture as Graham-and-Doddites would have you believe.

This weekend it dawned on me that I had never read *Security Analysis*. I had very strong opinions about it, but had never actually read it. So I did my best to cover all of

the chapters that mattered to me. What I found surprised me; this in particular: "[The] field of analytical work may be said to rest upon a twofold assumption: first, that the market price is frequently out of line with the true value; and, second, that there is an inherent tendency for these disparities to correct themselves. As to the truth of the former statement, there can be very little doubt – even though Wall Street often speaks glibly of the 'infallible judgment of the market' ... The second assumption is equally true in theory, but its working out in practice is often most unsatisfactory. Undervaluations caused by neglect or prejudice may persist for an inconveniently long time ... and the same applies to inflated prices caused by over enthusiasm or artificial stimulants." If ever we were living in a world of artificial stimulus, it is now. (Also, the great quote attributed to Keynes that "The market can stay irrational longer than the investor can stay solvent," comes to mind here. Keynes and Graham and Dodd agree a whole lot more than I would have thought.) Security Analysis continues, "the market is not a weighing machine ... Rather should we say that the market is a voting machine ... product partly of reason and partly of emotion." More shades of Keynes. Now, I have heard that weighing and voting machine line misquoted a billion times by you guys in this room. It is not a weighing machine!

¹ Graham, B. and Dodd, D.L., Security Analysis, McGraw-Hill, 1934.

^{*} The Letters to the Investment Committee series is designed for a very focused market: members of institutional committees who are well informed but non-investment professionals.

So I have come, friends and Romans, to tease Graham and Dodd, not to praise them, even though this is the 75th anniversary of *Security Analysis*. And my second point of attack is that Graham and Doddery is all a little obvious. I was brought up by a Quaker and a Yorkshireman – that is known as "double jeopardy" in the frugality business. Quakers believe waste to be wicked and Yorkshiremen, who consider Scotsmen to be spendthrifts, consider it criminal. The idea that a bigger safety margin is better than a smaller one, that cheaper is better than more expensive, that more cash is better than less cash, deserves, in modern parlance, a "Duh!" It is just rather obvious, and going on about it for 850 pages can get extremely boring.

The next negative point comes from my much admired Chapter 12 of Keynes' General Theory [of Employment, *Interest and Money]* – as for most of the rest of Keynes, as far as I am concerned, you can take it or leave it. It is vague, contradictory, and sometimes dangerous, although I admire his reintroduction of the importance of "animal spirits" as a potential wrecker of the best laid economic plans (there is a nice new book on the subject by Hunter Lewis²). But Chapter 12 is a pearl, a polished pearl. It explains how the market works. And along the way, Keynes makes the point – he makes a lot of points that cut across Graham and Dodd - that you all here represent a threat to the economy: Keynes believes that if we had a margin of safety and showed the typical prudence that Graham and Dodd recommend, no one would undertake to initiate a single new enterprise. Over 80% of all new enterprises have failed fairly quickly in the past. The ones that make it have to struggle with a very uncertain future. Graham and Dodd were not at all comfortable with the future. They thought that dealing with it was speculative. They much preferred the present. What are your assets in the piggy bank <u>now</u>? What is the yield you receive <u>today</u>? It's all quite irrational because they are prisoners of the future just like anybody else. However many assets you have in the corporation, including cash, can all be eroded long before you can get your hands on them.

Keynes continues, "... if the animal spirits are dimmed and the spontaneous optimism falters, leaving us to depend on nothing but a mathematical expectation, enterprise will fade and die ... It is safe to say that enterprise which depends on hopes stretching into the future benefits the community as a whole. But individual initiative will only

² Lewis, H., Where Keynes Went Wrong: And Why World Governments Keep Creating Inflation, Bubbles, and Busts, Axios Press, 2009.

be adequate when reasonable calculation is supplemented and supported by animal spirits, so that the thought of ultimate loss which often overtakes pioneers" – and nearly always overtakes Graham-and-Doddites – "is put aside as a healthy man puts aside the expectation of death." You only undertake dramatic initiatives of the type that create the Microsofts or Apples of the world with a heavy dose of animal spirits. If you Graham-and-Dodded it, you would never do anything spectacularly successful. And this willingness to roll the dice is an important relative advantage for the U.S., and too much risk avoidance will simply kill this instinct.

Let me move on to make a point about how illogical I think it is to leave out the great bubbles and the great busts and focus on the grindstone. That's my main complaint with you guys: very, very narrow focus. There you are, working away, picking stocks, even when the world is having its occasional cataclysms.

When you buy a stock, because it has surplus assets or a good yield or a great safety margin, you are really making a bet on regression to the mean. We are really counting on the fact that current unpopularity will fade, that the current problems in the industry will dissipate, and that the fortunes of war will move back to normal. Well, as a provable, statistical fact, industries are more dependably mean-reverting than stocks, for individual stocks can on rare occasion, permanently change their stripes à la Apple. (Or is that à l'Apple?) Sectors, like small caps, are more provably mean-reverting than industries. The aggregate stock market of a country is more provably mean-reverting when mispriced than sectors. And great asset classes are provably more mean-reverting than a single country. Asset classes are the most predictable of all: when a bubble occurs in a major asset class, it is a near certainty that it will go away. (A bubble for us is defined as a 2-sigma event, statistical talk for an event that would occur randomly every 40 years under normal conditions, a definition that is arbitrary but at least to us feels reasonable. And we define a "near certainty" as over 90% probable.)

For the record, I wrote an article for *Fortune* published in September of 2007 that referred to three "near certainties": profit margins would come down, the housing market would break, and the risk-premium all over the world would widen, each with severe consequences. You can perhaps only have that degree of confidence if you have been to the history books as much as we have and looked

at every bubble and every bust. We have found that there are no exceptions. We are up to 34 completed bubbles. Every single one of them has broken all the way back to the trend that existed prior to the bubble forming, which is a very tough standard. So it's simply illogical to give up the really high probabilities involved at the asset class level. All the data errors that frighten us all at the individual stock level are washed away at these great aggregations. It's simply more reliable, higher-quality data.

Keynes thought that the Graham and Dodd approach, if done in an institutional world, was also incredibly dangerous to your job. "Investment based on genuine long-term expectation," Keynes wrote in Chapter 12 in 1936, "is so difficult today as to be scarcely practicable. He who attempts it must surely lead much more laborious days and run greater risks than he who tries to guess better than the crowd how the crowd will behave; and, given equal intelligence, he may make more disastrous mistakes ... It needs more intelligence to defeat the forces of time and our ignorance of the future than to beat the gun." Keynes understood that what really drives our industry, then and now, is momentum, career risk, and beating the gun. "Moreover, life is not long enough - human nature desires quick results, there is a peculiar zest in making money quickly ... The game of professional investment is intolerably boring and over-exacting to anyone who is entirely exempt from the gambling instinct." All of you here have of course been injected with the Graham and Dodd anti-speculation serum, so my sympathies for the boredom that you have to suffer. "Finally it is the long-term investor ... who will in practice come in for the most criticism, wherever investment funds are managed by committees ... For it is in the essence of his behavior that he should be eccentric, unconventional and rash in the eyes of average opinion." Average opinion, by the way, is prudence. Prudence is defined as doing what a similarly well-educated person would do. Therefore, if you are not going with the pack, you are imprudent. Sorry guys, all of us contrarians are, by this standard, imprudent. To continue with Keynes: "If [our value manager] is successful, that will only confirm the general belief in his rashness" (I like to say that when he's successful he will be patted on the back but, when he leaves the room, he will be described as a dangerous eccentric.) "[And] if ... he is unsuccessful ... he will not receive much mercy." The pure administration of Graham-and-Doddery really needs a long-term lock-up, like Warren Buffett has, or it will have occasional quite dreadful client problems.

Let me tell you a story to illustrate this last point. In 2000, Gary Brinson ran broad-based portfolios of global assets, as did we. He did it for UBS, then, the largest pool of money in the world. He rotated his mix around to avoid troubles and to take advantage of cheaper asset classes. (This seems a perfectly sensible approach but is a very tiny part of our industry.) I considered Gary in the late 1990s completely brilliant. That is to say his portfolio looked identical to ours. He was underweighted in stocks and largely out of growth stocks. Conversely, he was heavily overweighted in value stocks. And two weeks from the market peak, because they had lost about 25% of their asset allocation business as growth stocks surged, he was fired from UBS/Brinson. As was Tony Dye, a die-hard Graham-and-Doddite who ran a very value-based contrarian portfolio for Phillips and Drew, a UBS subsidiary. Gary, by the way, is unlike most of us contrarians: he is a capable administrator and generally made of steel. If any of us could withstand the corporate pressures to go with the flow in a major bull market, he could. It was a fair test, and had the tech bubble lasted just a month or two less, his bets would have been wonderfully successful and we would have had to share that anti-growth market niche with a real 800-pound gorilla. So his firing was very convenient for us. Today, I don't believe any public company could withstand the rapid loss of business involved in opposing an extreme bubble on the grounds of overpricing. Management would simply not stand for the hit to quarterly earnings involved in the inevitable loss of business that comes from fighting a bull market. After Gary's firing, a normally reasonable "trade rag" suggested his stance had been eccentric and moving to a more traditional balance of growth stocks despite their being at 65 times earnings – was, all things considered, less risky. Less risky, that is, for the manager's next quarter's business, not less risky, of course, for the ultimate beneficiaries, the pensioners.

Meanwhile, back in Boston, we, unlike UBS, had no hand holders and no marketing people then. And in our asset allocation division we lost 60% of our book of business. We lost more than any other competitor that we are aware of, then or now. And we lost it by making the right bets for the right reasons - bets we ultimately won. It was a wonderful hothouse experiment – a perfect demonstration to prove Keynes' hypothesis. And we lost the business quickly – in two and a half years. In the fall of 1997 we had a good several-year record in asset allocation, and two and a half years later we had lost 60% of the book of business!

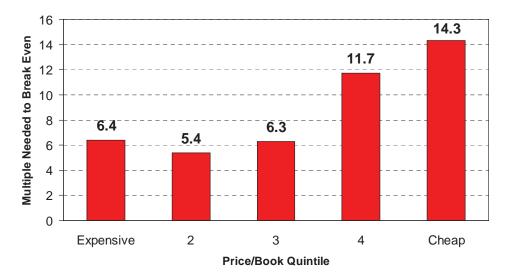
To be more serious in my criticisms, a potential weakness of the Graham and Dodd approach, as it is usually practiced, is in its reliance on low price-to-book (P/B) ratios as one of its cornerstones. Low P/B ratios are, after all, the market's way of saying "these are the assets in which I have the <u>least</u> trust." It should not be surprising, therefore, that when you have a depression, or nearly have one, that more of these "cheap" companies go bust than is the case for the "expensive" Coca-Colas. These serious economic setbacks can give us serious value traps. We had one starting in late 2006, where cheap companies became cheaper and cheaper and quite a few ceased to exist. And several more that were blatantly bankrupt were bailed out by the government for reasons that still seem quite arbitrary and desperate rather than capitalistic. With a less corporate-friendly government, the loss involved in this value trap would have been far worse. In my opinion, despite the pain taken by many heroes of the Graham and Dodd world, you were still collectively desperately lucky, saved by the Great Bailout.

The other value trap that was impossible – or improbable – to avoid was the Great Crash. Normally, a cheap company with lots of assets and a high yield outperforms in a bear market because it's propped up by the yield that

gets higher and higher as its price goes down. These companies almost always end up going down less than the average stock. When there is a really severe recession, however, the dividend starts to get cut and it becomes a little more questionable. And when there is a depression or a crash, then the companies start to get cut - to go out of business – and "value" companies get to take serious pain. We sent someone into the stacks to get data from 1929 to 1932 (he nearly died of dust inhalation). This data (Exhibit 1) is completely proprietary and it must be said that some contradictory data has also been dug out of the archives. If this data is correct, as we believe, then it certainly shows the hidden risk of low P/B. I think P/B and yield and price-to-earnings (P/E) are risk factors. They have less fundamental quality and are therefore more prone to failure in rare crashes. I think this is the one thing Fama and French got right – for the wrong reasons. On everything else, of course, I disagree with them.

Exhibit 1 shows the number of times your holdings had to increase from 1932 to get back to the 1929 level. If you were expensive, on the left, you had to go up 6.4 times. But the cheap stocks with the best P/B ratios had to go up 14.3 times to get their money back. Too many of them had gone the way of all flesh. Let's assume we get two

Exhibit 1
The Hidden Risk of Low Price/Book Stocks – Price/Book in the Great Depression



Post 1933 expected risk premium of low Price/Book stocks

2.0% per year

Time required to catch up with high Price/Book stocks
41 years

Source: GMO

points a year for the extra fundamental risk of carrying cheap P/B stocks. That 1932 drop chewed up what amounts to 41 years' worth of a reasonable risk premium! That was the value trauma of the century. The rest of the time until 2007, admittedly with temporary interruptions or ebbs and flows, you made extra money buying low P/B and low P/E. But in 1929 you basically took such a hit that you had a hard time getting back out of the hole. Let me take this opportunity to point out, courtesy of Jim Grant, that Ben Graham lost 70% in the Crash. That's 70% of his clients' money. He went into the Crash highly leveraged, net long, apparently completely unaware of the possibility of a speculative bubble about to burst. The great value manager, master of the safety margin, was more than 100% long equities! No wonder by 1934 he was very, very conservative. That will do it! (And by the way, just to rub it in, Roy Neuberger went into the Crash net short; that's a big head start.)

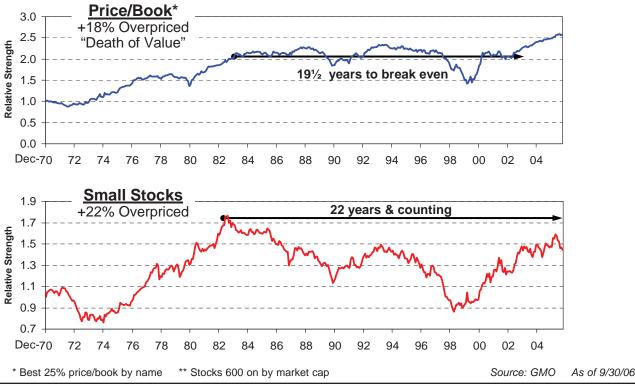
Incidentally, Keynes too got wiped out in the early 1920s, currency speculating, and was bailed out by a rich friend. That's fine if you've got rich friends. He didn't do that well later on in the Crash either, but he began, in the early 1930s, to get the point. He had been hammered enough that he began to adopt a rather Warren-Buffetty

sort of approach – buying a handful of names that he really understood. He became very suspicious of the idea that diversification could be an advantage. It just meant he argued, that you owned a lot of stocks you didn't understand well. It really sounds like Buffett, doesn't it? And he became a contrarian. Quote: "The central principle of investment is to go contrary to the general opinion, on the grounds that if everyone agreed about its merits, the investment is inevitably too dear and therefore unattractive." So, ironically, Graham and Dodd are less Graham and Doddy than you like to think, and Keynes, the Father of Momentum – the beauty contest, musical chairs, and the quick draw – is much more akin to the traditional view of Graham and Dodd and Buffett than is commonly thought.

The "cheapest" P/B ratios have another potential weakness. Sometimes they are not usefully cheap at all. The range of P/B ebbs and flows to a magnificent degree as shown in Exhibit 2. In 2000, the range between the P/B of the market favorites and the market pariahs was very, very wide. As wide as it had ever been. When the range is wide, the top end – the high P/E favorites – are very vulnerable, and the cheap, contrarian stocks at the other extreme can make you a fortune. The top exhibit

Exhibit 2

Even for Price/Book and Small Cap, Relative Value Is Very Unforgiving



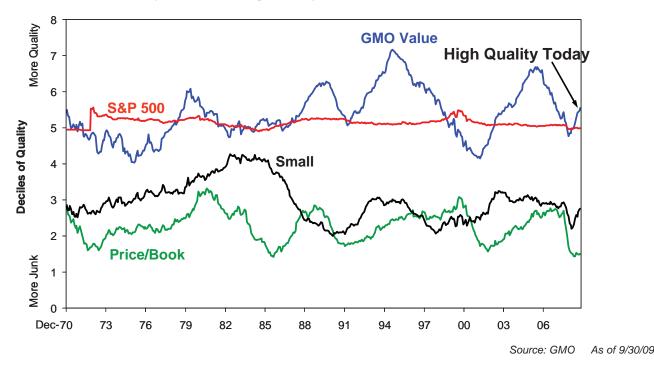
here shows a peak in 1983, when I am very pleased to say I gave a talk in Boston called "The Death of Value." It was looking like a crowded trade. Everybody wanted to be a value manager by 1983 because it had done so dazzlingly well since 1974. It had beaten the market by over 100 percentage points! The growth managers were hiding under the table. Yet from 1984, because value investing became so trendy, you made no extra money in the cheapest P/B (value stocks) for 19.5 years! Now that takes patience! You were paid absolutely nothing extra for carrying the lower fundamental quality that P/B represents. Exhibit 3 shows, relative to the market, this extra risk that P/B derives from being very low quality. Quality here is measured in the standard GMO way, using principally the level and stability of profitability and secondarily the level of debt. This exhibit also shows the similarly low fundamental quality of small cap, so it also is a risk factor. The final bit of data on Exhibit 3 is GMO's intrinsic value series, which recognizes that quality and growth deserve a premium. On this basis, half the time Coca-Cola is "cheap," and half the time expensive, while Microsoft spent several years in the best decile! Traditional value that wants its assets and yield <u>now</u> would never score the great companies as cheap. Yet they must have been for they outperformed, which is the only check on the accuracy of historical value measures that really

counts. What this means is that any outperformance on our intrinsic value is pure alpha, where for P/B, etc., and for small cap it is a risk premium, and a risk that definitely comes to bite you every so often. Yet the client world has seldom been interested in this apparently vital difference, which is an interesting commentary on where our industry has been on this issue. Outperformance of a benchmark is usually everything, and risk-adjusted returns nothing. For us, this approach has been a disadvantage. For the industry, it has pushed managers into ignoring risk in value management.

To cut to the chase, P/B does not represent intrinsic value. Nor do P/E ratios or yields. To make this point I regularly pose a question to investment audiences: "I give you Coca-Cola at 1.2 times book or General Motors at 1.0 times book. Hands up, who wants General Motors?" No one ever puts up their hand, and I say, "Therefore, Q.E.D., P/B is not value." You know that the extra qualities represented by Coca-Cola are worth a premium. The question is only, "How much?"

The simple "value" measures outperformed nicely in the good old days, probably for three reasons. First, they represented the higher fundamental risk shown above – a higher risk of commercial and financial failure. Second, they represented higher career and business

Exhibit 3
GMO Value Has S&P Quality – and It Is High Today



risk. It is hard to justify having bought a contrarian, unpopular stock when things go wrong, which happens quite often. Even reasonable committees felt it was an obvious risk and only imprudent managers would have bought it. In contrast, when a Coca-Cola has a bad time in the market, the same committee tends to see it as a sign of the market's superficiality in not recognizing the stock's great characteristics. This extra career or business exposure should not be borne by value managers without the expectation of a higher return. Before the mid-1980s this was, generally speaking, the case, for at that time (and this is the third and most important reason) the investment community was more risk averse than now so that, with 1929 as the sole exception, stocks with low P/B ratios, low P/E ratios, etc., and small caps typically over discounted the specific problems and the general low quality and consequently outperformed.

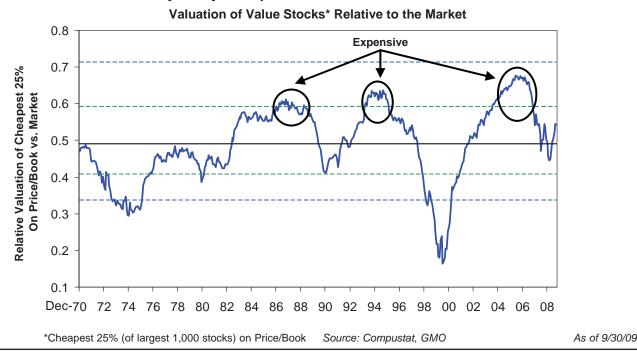
This state of affairs in which simple value measures outperformed was changed by two events, perhaps forever. First, there was the massive outperformance of "value" from 1973 to 1983 when the cheapest decile of P/B outperformed the market by over 100 percentage points. Second, a few years later a newly arriving wave of statistically well-educated "quants" adopted P/B and small cap as winning factors that should be modeled. Egged on by French and Fama, et al., they tended to assume that these "risk" factors delivered an extra return

by divine right, regardless of how they were priced. These factors in the past had delivered the goods because the "spreads" – the range between large and small cap and between high and low P/B ratios – had been wide. As they became mainstream "risk factors," and with the popularity from their huge success in the 70s, the ranges narrowed. When the range between Coca-Cola and U.S. Steel on P/B becomes narrow, it can still easily be picked up and modeled but, it will fail to deliver an excess return. Low P/B stocks, or small cap stocks, only outperform when they are priced to do so, as I hope every Grahamite knows.

And this was precisely the problem by mid-2006. After some strong years of performance, the range of old-fashioned value measures such as P/B and P/E had become severely compacted – the range between the low book ratios and high book ratios had been bid down. Yet some very illustrious Grahamites, including a couple of well-known hedge funds, were saying that "value" was quite well-positioned.

Exhibit 4 shows exactly how the attractiveness of P/B ebbed and flowed on our data. The period starting in 2006 when P/B reached its maximum overvaluation was a pretty shocking time – a 50-year flood for P/B, P/E, and value managers in general. This was the modern value trap from hell, a reminder of 1932.

Exhibit 4
Cheap Price/Book Are Not Always Very Cheap



Small Caps

Like low P/B stocks, small caps peaked in 1983 (see Exhibit 2), but unlike them, small caps have never regained their old relative high of that year. Yes, small caps have won over the very long run and had a truly wonderful rally after 1972, but who do you think goes bust in the Great Depression? The big blue chips with all those workers to protect, or the little companies? If the governor of some state has one telephone call to make to the President, he makes it for a Lockheed, he doesn't make it for some unknown little company. The small caps had to go up 14 times to get their money back, the blue chips 6.8 and 5.4 times. Note that 5.4 isn't a very low multiple, but these were tough times. It's just a whole lot better than 14 times. The time taken to catch up if you had, say, a reasonable 1.5% risk premium for small caps, would have been 48 years. Basically, small cap investing was brilliant for 60 years, but if you had been managing money in small caps in 1929, you would almost certainly have been knocked out of the game, having dug too big a hole too quickly. Would any clients have allowed you the time to recover when they were left with 7% of their money? I suppose the good news is that there were no small cap managers in 1929; nor for that matter, were

there any when we started at Batterymarch in 1970 with a small cap portfolio.

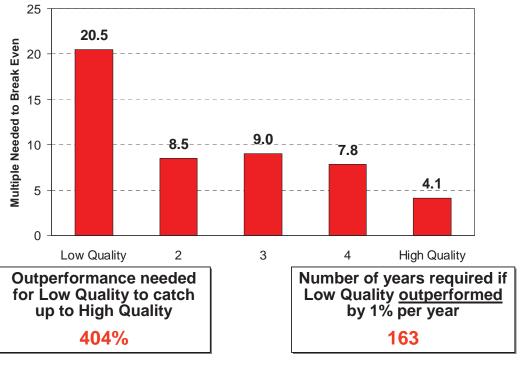
Quality

A missing ingredient in this critique of Grahamism, <u>or</u> rather Grahamism as usually practiced in the real world, is probably Warren Buffett, whose introduction would conveniently bring up the topic of Quality, which typically is something of a missing ingredient in value investing. It is what he really introduces as an extra emphasis into the world of safety margins and attractive traditional value measures.

If the rare value traps are the bane of Grahamism, then equally they offer an opportunity for quality stocks to show their merits. In Exhibit 5 we show the relative performance in the Great Crash of Quality's close cousin, high return on equity. The high return companies that entered the Crash overpriced still outperformed brilliantly. They had a princely 25% of their money left at the low – whoopee! – whereas the low return firms were left with 5% of theirs so that they had to quintuple just to catch up with their high return brethren! If you had picked up a risk premium of 1% a year for holding low quality –

Exhibit 5

Quality as Armor Plating Is Free and When You Really Need It – Quality in the Great Depression



Source: GMO

which on average you had <u>not</u> – it would have taken you nearly 165 years to catch up.

In fact, Quality stocks have outperformed the market since 1965 (when our quality data begins) as shown in Exhibit 6. We define "quality" using primarily a high and stable return. I think you would agree that this is a workable definition of a franchise since to be both high and stable means you have the ability to set your own prices. Secondarily, we look at debt. This yields a very uncontroversial list of stocks of the Coca-Cola, Johnson & Johnson, and Microsoft ilk with not even one financial! Even though the "quality" factor is now cheap, it has still outperformed by a decent (maybe you'd say "modest") 40% over almost 50 years. But this 40% is an amazing free lunch. Warren Buffett doesn't really talk much about the fact that he is playing in a superior universe. Why should he? It's like having the Triple A bond outperforming the B+ bond in the long term by 1% a year when, in a reasonable world, it "should" yield, say, 1% less. And how nicely this messes up the Fama and French argument on risk and return.

That P/B and small cap outperformed was noticed by

academics <u>several decades</u> after investment practitioners at Batterymarch and elsewhere had been using these factors to make money. On noticing this outperformance, embarrassingly late in my opinion, Fama and French adopted a circular argument rather typical of finance academics in the 1970 to 2000 era: the market is efficient; P/B and small cap outperform, ergo they must be risk factors. That the result in this case happens to get to the right result is luck. The real behavioral market is perfectly happy not rewarding "risk" when it feels like it, as is shown by the 70-year underperformance of high beta stocks. But this time it worked. Price-to-book, despite its low beta, is a risk factor because of its low fundamental quality and its vulnerability to failure in a depression. This is true with small cap as well. But what about "Quality?" This factor has outperformed forever. (The S&P had a High Grade Index that started in 1925 and handsomely outperformed the S&P 500 to the end of 1965 when our data starts.) Since the market is efficient, to Fama and French quality must be a risk factor! So, by protecting you in the 1929 Crash and in 2008, and by having a low beta for that matter, Quality as represented by Coca-Cola and Johnson & Johnson must be a hidden risk factor. Oh, I know: "The real world is merely an inconvenient special case!"

Exhibit 6

Quality: Finally, a Free Lunch – High Quality Stocks Win Over the Long Term



Note: GMO defines quality companies as those with high profitability, low profit volatility, and minimal use of leverage.

The historical valuation is determined by our proprietary intrinsic valuation measure.

Source: GMO As of 9/30/09

Disclaimer: The views expressed are the views of Jeremy Grantham through the period ending April 23, 2010, 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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