Global Perspectives on Investment Management

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Conversation with a Money Master

BILL MILLER, CFA

with FRED H. SPEECE, JR., CFA

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Speece: You have an impressive long-term track record as a portfolio manager. Given today's very efficient and sophisticated market, do we still have room for stock picking?

Miller: When we discuss market efficiency, we run into a semantic issue about what exactly is meant by the term ''market efficiency.'' At Legg Mason, we believe that the markets are pragmatically efficient, which means that they are extremely competitive and usually beat most active managers. For example, fewer than 35 percent of large-capitalization managers beat the market in the recent 12-month period ending 30 June 2006, just under 30 percent in the past 5 years, about 20 percent in the past 10 years, and about 22 percent in the past 15 years. So, on average, the market has beaten 70 percent or more of all active managers in time periods longer than one year. Managers should start out with the belief that if they are trying to actively manage money and outperform the market, the odds are against them.

Nevertheless, the market has room for active managers. Passive management does *not* give investors the return of the index; it gives them the return of the index less costs. So, the longer they have their money passively managed, the greater their underperformance will be relative to the index. One of the arguments against active management is that it underperforms. But passive management underperforms every year, forever. And the wedge between

Bill Miller, CFA, is chairman and chief investment officer at Legg Mason Capital Management, Inc., Baltimore.

the index return and the investor's return gets wider. To have a prayer of outperforming, an investor must have some active management.

In the current market, one of the changes, in my opinion, is that the advent of hedge funds has made the market highly informationally efficient in the short run. The result is an opportunity for ''time arbitrage,'' which means that by lengthening the time horizon for thinking about a company's results three to five years out rather than one year out, you can increase the probability that you will outperform. Put somewhat differently, in a market that's informationally efficient in the short term, thinking three years ahead is likely to be more effective than thinking three to six months ahead. This assumes that the investor is fundamentally oriented, not technically oriented, where short-term price trends drive behavior.

Speece: You are a value manager. How do you define value?

Miller: We take our approach to value directly from the textbooks. The value of any investment is the present value of the future free cash flows that are going to come from that investment.

What makes us different is that most value managers don't value assets that way. They'll use a wide variety of practical heuristics—like P/E, price to book, and price to cash flow. They'll use all kinds of historical metrics. They'll do all kinds of things to try to assess value, but they're not actually doing the pure, theoretical value. So, part of what we do in our shop is use all of those heuristics but also take theory and apply it to a wide variety of investments.

Most value investors weight past data *very* heavily. As I tell our analysts, 100 percent of the information you have about any business reflects the past, and 100 percent of the value of that business depends on the future. So, it is only to the extent that the future resembles the past, or maps onto it in some kind of systematic way, that historical data are useful for assessing value.

Speece: Investors hire you to take risk in order to enhance return. Your approach to risk taking has been compared with that of Earl Weaver, former manager of the Baltimore Orioles baseball team. What is your definition of risk?

Miller: What Earl Weaver said is that more games are won on three-run homers than on sacrifice bunts. I think that is right. Part of what people insufficiently distinguish, or confuse, is the difference between frequency and magnitude—that is, how often you're right or wrong versus how much money you make when you're right and how much money you lose when you're wrong. Most people look for a high batting average—a high frequency of being right. And most of the time when they do that, they have what is known in philosophy as a ''high epistemic threshold.'' They need a lot of information and a lot of stuff to convince them that they are right.

As a result, they focus on how often they are right and not on how much money they make when they are right. They might make 10–20 percent when they are right. But then, of course, they've got to reinvest. Mathematically, if they make one significant error, it will offset a lot of instances where they were right.

We focus not on our batting average, to continue the baseball metaphor, but on our slugging percentage. So, if we have a few investments where we make 5 or 10 times your money—or as we did in Dell and AOL, 50 times your money—that pays for a lot of mistakes. It pays for a lot of misses of 10 percent or 20 percent.

Speece: How does that approach translate into what your portfolio looks like today? Where is the swing for the home run?

Miller: Well, one thing that's interesting about today's market compared with historical markets is that the market is not offering valuation anomalies in which you can confidently invest with a really high expected rate of return. This is because valuation across industries is actually at about the 98th percentile. To put it differently, only about 2 percent of the time have valuations been less narrow than they are today. And so the problem is that you're not being paid to make big bets. The benefits are theoretically diminished because of the greater homogeneity across sectors and industries.

Speece: Do you view dividends and share repurchases as signals that companies use?

Miller: We have a huge interest in how companies allocate capital because we're long-term investors. Our turnover is 15–20 percent a year. So, our time horizon is five, six, seven years on average. And that's a distribution across things we've owned for 15–20 years and things that we've owned for a year or two.

But broadly speaking, how companies allocate capital is going to determine what our returns are going to be. And as Warren Buffett has noted, if you're the CEO of a company and you earn 15 percent on equity and have a zero payout ratio, and if you're the CEO for five years, you're going to allocate about half of the total equity capital that the company has generated in its history no matter how long that history is.

If you allocate it at a return above the cost of capital, you'll create value. If you allocate it at a return below the cost of capital, you'll destroy value. So, how a management allocates capital is critically important.

So as to dividends and share repurchases, the only thing we try to do with our companies is just inform them of certain mathematical principles. For example, one of the things we tell them is that if they pay a dividend, the rate of return that their shareholders will earn on that dividend, on average, is the market rate of return. It's paid out to all of these different shareholders. Broadly speaking, they will reinvest it, and they will not earn an excess rate of return—they'll earn the market rate of return.

On the other hand, if you repurchase your shares at a price below what the business is worth, then the shareholders will earn an above-average rate of return because the business is worth the present value of future free cash flows adjusted for risk and so on. So, if the company's shares trade at a big discount to what they're worth, management should be repurchasing shares. If the shares trade at or above what they're worth, management should be paying out dividends. And that's all that we try and make sure that they have in front of them. My colleague, Michael Mauboussin, has published a terrific analysis of this issue.[1]

Speece: Are earnings and quality of earnings important to you?

Miller: We hope and trust that our analysts are thinking carefully about the earnings that our companies are reporting and the quality of those earnings. We don't have any kind of a grid or any kind of a threshold with respect to quality of earnings because basically—and this is both a strength and a weakness—we tend not to pay much attention to earnings because, again, to go back to value, the value of the business is the present value of the future free cash flows.

So, we're basically looking at free cash flows. We're looking at them normalized, and we're looking at them reported. We're looking at all that kind of stuff. So, whatever the company's reported, whatever its accounting conventions are, we look through those to its free cash flows. And historically, I think that's served us well over the years. But it does have its downside because in a lot of cases, we tend to underestimate historically the impact on companies that kind of run fast and loose on the accounting side.

For example, some companies use gain-on-sale accounting. We would say, "Well, we understand gain on sale. So, who cares? We can look through that and convert it to portfolio accounting; we can make adjustments." But guess what? Whenever companies convert from gain-on-sale accounting to portfolio accounting, their stocks collapse. So, we finally learned that just because we can see through it doesn't mean that other people are thinking about it the same way.

Speece: Do you use a valuation model for setting a price target?

Miller: We use a multivariate model. So, we use every valuation methodology known to anyone who's ever done this. If there's any evidence at all that it has value, we will use it. It can be very simple historical correlations. It can be DCF (discounted cash flow) models, DDMs (dividend discount models), or LBO (leveraged buyout) models. Actually, LBO models are probably in the current world a little more effective than some of the other models, given the short-term nature of the market and the heavy influence of private equity. So, we tend to put a little more weight on that than we have historically.

Speece: Because the private equity segment is so big and so active that the players cannot find enough private companies, they are coming into the

[1] See http://www.leggmason.com/funds/knowledge/mauboussin/Mauboussin_on_Strategy_011006.pdf.

public markets. Is the traditional spread between private valuation and public valuation narrowing?

Miller: It's narrowing slowly. Part of the reason private equity is so active is that public market valuations are so attractive. At the current financing rates, there are a lot of businesses going private. When PETCO announced it would be going private at a 49 percent premium, it's important to understand that the private equity guys think that they're going to earn an excess rate of return on *that*.

There are all kinds of deals where the private equity guys have picked these things off, and even without taking them public again, they have been able to earn pretty good returns just by flipping them to other private equity guys. So, I think public market valuations are really attractive—especially in the big-cap range, partly because the mega caps are too big to take private.

Speece: Perhaps money managers spend too much time analyzing the mathematics of the valuation models and not enough time analyzing company management. Do you find talking to corporate managers to be a useful tool?

Miller: It's more effective the longer your time horizon is because in the *short* run, I don't think that you gain a lot by talking to management. Management is constrained by Regulation Fair Disclosure (Reg. FD) in the very short run. And if you're new to following the company, you don't have a context for understanding how that particular CEO or CFO has behaved in the past. I think if you've owned a company for 3, 5, 10 years and had a lot of extensive contact with the management, you can learn a lot from the nuances in the way in which management answers questions, the way they think about strategy, and so forth.

I agree with Buffett totally when he says that ignorance is not a virtue in our business. So, any source of knowledge, any source of information, is useful as long as you understand its pluses and minuses. What these companies do is try to put the best spin or face on their situation. Rarely will managements tell you how bad things are.

But you understand that going in. So, you're really trying to understand how they think about the business and how their views may have changed in recent years.

For example, a couple of years ago, Amazon.com was down around $7–$8 a share, and we were the biggest shareholder other than its chairman, Jeff Bezos. So, one night at dinner, I asked him, ''Jeff, what kind of things are you spending your time on these days?'' And he said, ''Oh, it's different from last year when I spent a huge amount of time on our financial situation—on our cash flow. These days, I'm spending it on the customer experience.''

I thought, ''That's really good.'' What that told me was that he was no longer worried about the way the business was developing—the financial situation. To put it in simple terms, he had been playing defense during the prior 12 months. Now, he could switch from playing defense to playing offense.

Well, the stock price was telling you that Amazon was still playing defense. So, that was really important information as we thought about that investment.

Speece: When you meet with corporate managers, do you have an agenda or do you let the talk roll and look for windows of insight?

Miller: It's actually all about insight, but it's about *long-term* insight. So, to take an example, Hank McKinnell from Pfizer came in to see us, and he brought his entire management team, including the chief medical officer. And we're not major shareholders of Pfizer; we have a few-hundred-million-dollar position. It's not one of our really big positions.

But one of the things that he talked about was the nature of the R&D pipeline in the pharmaceutical industry. And the reason we'd been underweight pharma for years was that we were aware of the fact that the marginal productivity of that pipeline was in a steady fall for most of the past 10 years. That was part of the reason that the multiples contracted, because that, in essence, was a window into the future rates of return on marginal capital.

I asked, ''What's different about the business; is there anything we should know? What is it that people don't understand?'' And he said, ''They don't understand that in the long-cycle nature of an R&D pipeline, the productivity of our R&D at the margin is turning up.''

Well, if that's true, that's huge. So I asked, ''Do you have evidence for that?'' And he said, ''Absolutely.'' And he gave data on how many typical drugs that go into Phase I make it to Phase II. It used to be that 40 percent in Phase I made it to Phase II. Now, almost 70 percent make it to Phase II because of new drug-discovery programs.

And then, subsequently, Pfizer reported, and it actually raised guidance, which is really interesting because it sold off the consumer products division, which was being valued more highly than the pharma division. And when it reported, it raised guidance moderately and referenced the pipeline. So, there's a lot of evidence now that it's turning up.

Pfizer has the lowest P/E of the big pharmas, to take a simple metric. And now it has the highest dividend yield, or certainly one of the highest dividend yields. Pfizer has announced that it is going to buy back $17 billion worth of stock. It didn't disclose exactly what it was doing with the dividend, but Pfizer gave a strong indication that dividend growth would be at least double digits.

So, how much can the valuation degrade from 13 times earnings—actually, 12 times next year's earnings? Well, I think the answer is not much—especially if the marginal productivity on capital is going up. And if the dividend is going to be growing at double digits starting out from a 3.5 percent yield and the valuation doesn't degrade, that is close to a 14 percent implied rate of return against an implied market rate of return of, say, 7–8 percent. That seems like a pretty easy one.

Now, the problem is that no one really cares about Pfizer right now. It has performed poorly over the past few years. So, everyone says, ''There's no sense of urgency. Who cares?'' But for us, it's all about implied rate of return relative to the market because that's where we'd want to put more capital now than we would otherwise.

Speece: So, you saw raising the dividends as a good signal?

Miller: Pfizer raised its dividend every year for a generation, but what is important is that the company believes it can continue to raise the dividend despite starting out with an above-average dividend yield.

When I first met John Neff 25 years ago, we compared portfolios. He said, ''Your portfolio looks pretty good, kid. But where's your yield? It looks like it's below the market!''

I said, ''John, I know you like above-market yield, but you know that an asset's value doesn't depend on how it pays out its return, unless you believe that the market systematically misvalues yield or you can allocate that return to earn a rate of return higher than the market can.''

And he said, ''Yeah, I believe both.'' So, I said, ''Well, that's why you have a high yield in *your* portfolio. That makes perfect sense then.'' So, John was very rational even then, which is why he was a great manager.

Speece: A lot of big shareholders met with Kenneth Lay of Enron Corporation, and Lay lied to them. How do you protect against that?

Miller: The short answer is that you can't protect yourself against fraud. You can protect yourself slightly, maybe, against managements that dissemble or that you think aren't answering questions clearly. But Enron is a name that occupies a unique spot in our history because we bought Enron just before it went bankrupt. We had avoided it all the way up and all the way down, even though we were interested in the company. I had met with Jeff Skilling a few times. Enron was one of *Forbes* magazine's most admired companies, and Andy Fastow was regarded as the best CFO. But we always regarded it as being richly priced because no matter how quickly its earnings were growing, it actually didn't earn its cost of capital.

That was a red flag to us because that was the theme of the old W.T. Grant case back when I took the CFA exam about 25 years ago. It was one of the classic cases. So, it was clear that Enron couldn't keep doing that. But when it slowed its growth and it looked like it might earn its cost of capital or more, then we got interested.

When the stock got down to the mid-teens, we started to do some serious work on it, and we parsed off every hard asset (the pipelines, etc.) against the debt. We looked at all of the off-balance-sheet stuff. It was sort of opaque, but we knew what had gone into it. And we assumed that the equity in the off-balance-sheet partnerships was zero. But we also assumed that it could pay its debt.

We had all of the assets parsed off except for the trading operation, and we valued the trading operation in the twenties—assuming access to capital and assuming an investment-grade rating. So, to make a long story very short, we concluded that if it could maintain access to capital, it was a buy.

So, we bought it starting in the low teens—all the way down to about $3—and we put $300 million in it. And the reason I'm going on about it is that I think it's instructive about our process. This was in the fall of 2001—I guess it was post-September 11.

As we looked at it, we thought there was about a 10 percent chance that it was a zero. We didn't know of any fraud there, but we knew that, because of all the controversy, if Enron lost access to capital, it would be a zero.

And our view was, ''OK, if it's a zero, can we still invest in it? How much can we invest in it if it goes to zero and with our overall portfolio, still beat the market?'' And that's how we calibrated our position size in it. As it turned out, our average cost was probably $7, and we sold it at 80 cents.

We lost $300 million in 60 days—the fastest that we ever lost that kind of money in our history. But we still beat the market that year, so it wasn't a total disaster, but it was close.

Speece: For value investors, the biggest enemies are time, lack of patience, and ''the value trap''—mistaking a dog for a value stock. You have said that you average down relentlessly. With that bias, how do you protect your clients' money against the value trap?

Miller: Almost every value trap is the result of people extrapolating past returns on capital and past valuations onto a different situation today. They say, ''Oh, Toys 'R' Us' historical multiple was X. And now it's 0.8X, so there's an opportunity here.'' Or, ''Look at what the pharmaceutical companies did for the last 50 years, and now they're cheap compared with that. So, now they're a good value.''

The problem is that in most value traps, the fundamental economics of the business has deteriorated. And the market is gradually marking down the valuation of those to reflect the fundamental economic deterioration.

So, what we've tried to always focus on is, in essence, what the future return on capital will be, not what the past return on capital has been. What's our best guess at the future return on capital and how the management can allocate that capital in a competitive situation that is dynamic so that we can avoid, in essence, those value traps? We make a lot of other mistakes, but that one is not one that we make a whole lot.

Speece: A value trap that may be earlier in the cycle than the pharmaceuticals is newspaper stocks. One of your sister organizations, Private Capital Management, is a big owner of newspaper stocks. What is your take on that business?

Miller: The newspapers look like a value trap—or at least have appeared to be so over the past few years. Their long-term economics are under attack on a variety of fronts. The team at Private Capital knows these names as well as anyone and has a fabulous long-term record, so it's hard to be too critical of them because we don't yet know what ultimate rate of return they'll earn on their newspaper holdings.

Eastman Kodak Company (Kodak) is a name we own (they do, too, now, by the way) that is dealing with secular challenges brought on by technology similar to those facing the newspapers. One difference is that the move from film to digital is happening so fast that Kodak has had to move very quickly. This has been extremely challenging, but we think it is over the hump and that the next few years will be much better than the last few have been. The secular problems of newspapers are unfolding more slowly. That gives them more time to respond, but it's also permitted many of them to move too slowly, in my opinion.

I was at a presentation on new and old media a year or so ago at which Warren Buffett was also present. He raised his hand and asked, ''If the internet had been invented first, do you think we'd have newspapers today?''

After some pondering, the answer came back, ''No, I don't think so.'' And I recall Warren saying, ''That's all you need to know about the future of newspapers.''

Meg Whitman at eBay told me some time ago that its classified business was going really well, and she pointed out how much easier it is to navigate classifieds on the internet than it is via a newspaper.

And then there are movies. I think movie ads represent something like up to 10 percent of the ad revenue at some of the major newspapers. How effective are they at driving traffic versus trailers on the internet, for example? I think movie ads in newspapers are likely to decline pretty significantly. And I understand that Sony Corporation is looking at whether those ad dollars are really necessary in a connected world. So, the challenges are endemic.

And many of the newspapers trade at 8–9 times EBITDA (earnings before interest, taxes, depreciation, and amortization), or thereabouts, with declining circulation and declining or, at best, anemic organic revenue growth. So, why own them when you can buy Sprint Nextel at 5 times EBITDA with subscribers growing? After all, it's a subscription business just like newspapers.

Speece: Sometimes, an analyst will slide from *believing* something is going to happen to *hoping* it is going to happen, but the analyst, on whom you depend, does not realize that a slide has occurred. How do you help the analyst—and yourself—avoid that tipping point?

Miller: ''Hope'' is a deadly word. We pay close attention to the descriptions and the semantics of the analysts. When the word ''hope'' starts to appear in things, it's very bad. We want to see ''I think,'' ''I believe,'' even ''I feel confident that'' but not simply ''I feel.'' When ''I feel'' or ''I hope'' start to crop up, emotions are taking over.

Speece: That verbiage can also be bound in Wall Street's sell-side research. Do you use that research and monitor their biases, or do you stick to your in-house research?

Miller: Today, I may scan sell-side research, but I read almost none of it. I pay attention to it only in relation to particular names that we know.

The incentive structure for most sell-side people is such that they neither structure their tasks nor describe what they are doing in a way that comports with what we are looking for. We do expect all of our analysts to know who the analysts with good reasoning are in a particular industry, sector, or company and to read their analyses.

Speece: You appear to rely heavily on your background in psychology and philosophy as an analytical tool in the investment business. Is that a fair characterization?

Miller: Everybody comes to the job with his or her own toolset, right? So, I don't have an MBA. I don't have any training in finance, which is probably obvious to most people when they talk to me.

I do have the CFA charter, which is the only thing that I was able to start with. But my technical toolkit actually comes out of analytic philosophy. That's what I bring to bear on the process, and I've found it to be very useful. But again, those are all the tools that I have.

I have adopted what Charlie Munger says. His view is that if you have a basic grounding in Psychology 101, Economics 101—most of the various disciplines—and you can combine them properly, they can provide you with all you need. I think that's mostly right. So, you don't need a great understanding of psychology. Psychology 101 works well.

Speece: Do you believe tracking error, benchmarks, and information ratios are good tools for the client?

Miller: Clients will ask us what benchmarks they should benchmark us against, and we tell them to use whatever they want. We are going to do what we do. We have a certain thing we are going to do, and however they want to evaluate us is fine.

We do try to make sure that our clients or potential clients understand our portfolio construction process, so the information ratio may be relatively more useful than tracking error or benchmarks. The information ratio may provide clients with a decent sense at certain points in time of how good the investment manager's process is.

If people care about tracking error, they should not hire us. We do not think or care about it.

Speece: You do not have a benchmark?

Miller: Our benchmark for Legg Mason Value Trust is the S&P 500 Index, but we do not construct the portfolio with any eye to the S&P 500 in the sense of overweighting, underweighting, or forecasting. If I have to have a position in each sector of the S&P 500, then what I know before the year even starts is that I will have exposure to the worst sectors of the market as well as the best. Why would I have a process that guarantees exposure to the worst sectors of the market? If I am in the worst sectors, it is because either I made a mistake or I chose to be there for the long term versus the short term. But over a three-year to five-year period, I want to have no exposure to what is really bad and maximum exposure to what is really good.

Speece: You have a very large separate account business, so your size may limit what you can do. How do you turn that facet into an advantage?

Miller: We've got about $65 billion in my group, and $40 billion to $45 billion of that is in a single product style. Fortunately, that's large-cap U.S. stocks, which has the advantage—or disadvantage—of being able to absorb a lot more than $45 billion. And because it was one of the worst performing sectors of the market in the last five years, it's one of the sectors with a high future expected rate of return.

We tell potential clients that it's good news and bad news where we are. The bad news is we are currently well behind the market because these names have performed poorly this year. The good news is that we can take double, triple, or quadruple whatever they can give us, and we think we'll do fine over the *next five* years. If the large- and mid-cap U.S. stocks looked like they did in 1999, then we couldn't do that well in absolute terms. But right now, we can take in almost unlimited amounts of money.

Speece: When you do a trade, how do you disguise it?

Miller: Our head trader has been with us for 15 years, and he is really good. We have a younger trading group that works with him.

In the early and middle years, we had a lot of trouble trying to, euphemistically, ''train'' our brokers not to give up our name to people. They learned that we imposed a high penalty for such deeds; basically, we gave them no business for a couple of years. But today, we do not have a problem in terms of people knowing too much about what we are doing.

Also, when we are buying, we tend to be liquidity providers to the market, as most value investors are. We are buying mostly what people do not want, and we are selling mostly what they do want. We tend to run against the tide with that, which makes it a bit easier.

Speece: We will now open questioning to the audience.

Question: Companies like Pfizer and Schering-Plough Corporation haven't done well recently, but I believe Fred Hassan, chairman and CEO of Schering-Plough since April 2003, can add value over time. What do you think?

Miller: We don't own Schering-Plough, but we do have a high regard for the CEO and what he's done previously. For us, it was a valuation call, not a management call.

Historically, concentration has paid off, but it doesn't pay as much right now. For any industry or sector, we typically want our analysts to collapse what they believe into the single best trade-off of risk and reward. So, ideally, we only want to own one or two names in any given group—not now, but historically. So, if we own Pfizer, we typically wouldn't own Schering-Plough and Merck & Co. and something else.

Question: Are you changing your process at all because of the issue of backdating stock options?

Miller: We're one of the largest shareholders of United Healthcare Corporation, and there's a backdating issue there. We've talked to the board members; we've talked to Chairman and CEO Bill Maguire; and we've talked to the lead investigator of the whole thing. And obviously, they can't tell us—because of Reg. FD—anything that they haven't told the world, but we kind of get a sense of what's going on.

We don't know how that's going to come out, except that our read on that particular situation—and I'm answering the question obliquely on this one—is that it's far from clear that there wasn't backdating.

It's a little bit like Microsoft Corporation. Microsoft had a policy of awarding options at the lowest price in any given quarter. So, if that's your policy, then backdating isn't an issue. In *this* case, Maguire had the authority to choose the date, so it's a bit murky.

But broadly speaking, we were well aware of the option dating situation—not backdating so much as just the fortuitous granting of options at low prices. So, it wasn't something that was secret. There were even some academic papers going back about six or seven years ago highlighting that.

We used to flip out at the repricing of options before there was an accounting penalty attached to it. And that drove us bananas—or at least it drove us bananas until we saw an academic paper that said when companies reprice options, they typically do it at or near the low. So, we said, ''OK, it's like insider buying. We get it.''

So, then when they'd reprice, we'd yell at them and then go buy the stock. And that worked pretty well.

Question: You seem to be relatively optimistic, or at least neutral, on the valuation of large-cap U.S. stocks, whereas many analysts see a somewhat bearish prospect for U.S. equities because, on a top-down basis, profit margins and macrolevels seem to be at all-time record highs. What is your view on the overall level of the U.S. equity market?

Miller: Our view is that reasoning from the macro to the micro tends to be very dangerous. Margins are at historical highs. I think it's actually very interesting because when you go back and look at what profit margins have been on a long-term basis, they are at historical highs, but the trend is up.

Grantham, Mayo, Van Otterloo & Co. LLC's Jeremy Grantham has this whole regression to the mean thing. And I have a systematic problem with that because the mean is not a stationary item. It migrates. So, if you can identify the mean and think it's stationary, then I'll buy it. However, I don't necessarily believe that.

Let me put it this way: U.S. mega-cap stocks are really cheap relative to U.S. small- and mid-cap stocks on a historical basis. They're also very cheap relative to their returns on equity and their reinvestment rates. You can see that, basically, reinvestment risk is what people are worried about in those things.

But take Microsoft's announced $40 billion buyback. That will tend, I think, to assuage people's concerns about reinvestment risk. And because Microsoft is a bellwether, a lot of other companies will probably follow its example. So, that's partly why we're quite bullish on U.S. mega caps.

And we're bullish on it for another reason. One of the markers, in my opinion, of a high future return is where the worst rate of return has been during the preceding five or six years. And it turns out that one of the worst things that you could have owned during the last five or six years has been U.S. mega cap. Everything else—small cap, mid cap, commodities, emerging, or what have you—has done great. Meanwhile, mega caps have done poorly.

Lots of people criticize Home Depot's Bob Nardelli or General Electric's Jeff Immelt, but all of these stocks have been cut in half. And meanwhile, their earnings have been doing fine. So, I think that's another marker of a likely high future return.

Question: In your long career of managing money, what was your biggest mistake, and did you learn any lesson from it that you can share with us?

Miller: Enron was my biggest dollar mistake. It was the most money—the most absolute dollars—I've ever lost in the shortest period of time.

The most egregious mistake I've ever made, I think, is one that I would be willing to bet that none of you here has ever made—or ever will make—in your entire investment career. Salant Corporation was an apparel company that owned the Perry Ellis brand at one point. We bought it in the early days in our fund, in the early 1980s, at around $10 a share.

Then, the U.S. Federal Reserve Board raised rates in 1984, and the economy slowed down a little bit. Salant ran into some problems—including foreign competition—and it went bankrupt. But we didn't sell it.

Well, then the company brought in a new CEO, and I met with him. At the time, the stock was at $1. This guy was a turnaround expert, and he told a great story. So, I thought, "Hey, this sounds pretty *good*. I like this." So we ramped up the position big time. The stock went from $1 to $30, so I felt pretty good about that.

But then in the late 1980s, he levered the company up to make acquisitions, and the Fed began raising rates again. The economy got worse, and the company went bankrupt for the second time. So, that CEO left and it brought in a new guy who said, ''Oh, we can get rid of this debt. After all, we have good brands here, etc.'' So, I thought, ''OK, I made 30 times my money the last time. Why not ramp it up and do it again?'' So, I bought more of it, and it rose to $20 this time, if I remember correctly, before it went bankrupt again—for the third time—with us owning it.

Finally, I sold it, and we put a rule in place: Three bankruptcies and you're out.

Today, risk controls would prevent such a sequence. Risk controls must be appropriate to the sort of risks involved.

A senior manager at one of the biggest hedge funds in the world told me recently that risk control and risk management have assumed a dominant role because clients don't like volatility. Clients are paying high fees to avoid it. He said, ''Three years ago, we bought McDonald's Corporation at $13 a share. When it went to $12, our risk management committee told us we had to sell it because it was down. It was down 10 percent and we had to sell it! We convinced them to let us keep it. Then, McDonald's tripled over the course of a few years after the company changed menu items and so forth.''

What the risk management committee had done was take the risk management procedures that are appropriate to the global macro scene, currencies and so on, and applied them to individual securities. Such a misuse is plainly crazy. Nevertheless, and despite the fact that the fund has a great record, three years later, it has 35 lawyers and others monitoring risk control who will still try to sell the fund out of a stock if the stock drops 10–15 percent.

Question: Most of your funds have had little exposure to energy stocks, but most investors still see great value in energy stocks. Do you plan to change your view of this sector?

Miller: We are always thinking about all the things we've done wrong and all the things we ought to be doing in the future. We clearly missed the energy names in our portfolio.

We construct our holdings on the basis of a probabilistic scenario weighting. The error that I made was overweighting the long-term data relative to the short-term data—sort of the reverse of what behavioral finance says investors tend to do. Had I been more alert, I would have realized that every time we have what is, in essence, a global recession—especially one accompanied by a period when commodities are weak going into it—the demand curve will shift when the economy gets better and push commodity prices up. Based on history, this upward movement should last, at the shortest, 18 months and, at the longest, three to four years.

In fact, based purely on that call and the fact that on a pure valuation basis the odds favored it, one of our portfolio managers did overweight energy in late 2003. We almost did it in Value Trust, but then stocks moved up in December 2003, and I hate to pay up for anything, so I said forget it. So, I left some three-baggers on the table.

Question: What are some of the biggest mistakes plan sponsors make when hiring investment managers, and how can they be avoided?

Miller: Dick Strong, a good friend of mine who is now, unfortunately, out of the business, told me 20 years ago when we were first getting started that the only thing that matters to a plan sponsor is your most recent performance. He said that in every hiring competition, the manager with the best quarterly performance and the best annual performance will win 90 percent of the time. And that has been our experience.

First, plan sponsors tend to vastly overweight the most recent information. Suppose you are on the investment committee and you are looking at five managers. They all have great long-term records, but one of them has done great recently and also in the last year. Why wouldn't you hire that manager? Why would you hire the person who has done worse? If four managers continue to do worse, you're going to question why you didn't hire the manager who did best, right? Overweighting the most recent performance is the most common mistake. The correlated mistake is then to overweight subsequent recent performance.

Both mistakes arise, based on our experience, because plan sponsors tend to overweight performance relative to process. That is, they take the outcome of our process, which is our performance, and weight it a lot more heavily than they weight our process. Understanding the process, however, is a lot more important than recent performance. They think performance equals process, which, if true, is only true long term.

Question: In relation to dividends versus share buybacks, a year ago Dell was selling at 17 times book value of equity and stockholders' equity was going down every year because income was being used almost totally to buy back shares. How do you balance the dividend or the yield versus what the company is doing with the cash it is generating?

Miller: Dell has not covered itself with glory in its share repurchase program during the past five years. We owned Dell from about 1995 until early 2000, and then it collapsed. So, we bought a little bit back and then sold it. And then we were only in it again recently.

Dell has done what a lot of other tech companies have done—and this was its error—which was to systematically repurchase stock to ''offset option dilution.'' Well, that's idiotic because what you're doing is effectively just a pure transfer from the public shareholders to the management and employees. And usually, if you're doing it that way, it's without regard to the rate of return that you're earning on that transfer.

So, I'm not going to make any excuses for that use of capital, which was far from optimal.

That's different from what it is doing now. Now, quite apart from the options thing, Dell bought back 2.5 percent of its stock last quarter. And we value Dell on our multifactor model at up to $40 a share. Our view is that if you buy back stock at its current price, you're earning big returns for the shareholders, and it's much better than a dividend at that level.

Also, when the company was buying back stock from the late 1990s up until a year or so ago, its founder and chairman Michael Dell never bought a share. Well, Michael's now buying the stock personally. And it's not like he needs more exposure to Dell. So, to me, that's a pretty good signal that this management understands what this business is worth.

I'm not sure that I answered your question. However, the wisdom of any share repurchase, in our view, always begins with, ''What's the business worth? What's the present value of its future free cash flows?''

If a company is buying back shares below that value, then its management is adding value. If it is buying back shares above that value, then it is destroying value—all other things being equal.

Question: Do you see any value in the automobile industry? And how do you view the proposed alliance of General Motors Corporation (GM), Nissan Motor Co., and Renault?

Miller: We were a big shareholder in Chrysler Corporation back before it got sold to Daimler-Benz. And we've actually invested with Kirk Kerkorian a number of times—whether in MGM casino, MGM movie, or Chrysler. Typically, buying what Kirk is buying and selling when he's selling has been a pretty good strategy.

With respect to this particular go around, we bought GM bonds—the long bonds—in the Opportunity Trust. We did not buy any common stock, and GM stock has done great this year.

I think the proposed alliance with Carlos Ghosn and Renault is certainly really interesting, but it's unclear to us what long-term difference that would make. There are some interesting things going on in GM's pension plan where it's going to flip in about two years. So, it's going to start running in its favor, relatively speaking, although everything's relative. However, again, I think that some really interesting things are going on there.

We don't see a margin of safety sufficient to allow us into it right here. We have bought some Lear Corporation, by the way, in the Opportunity Trust, as well. And the GM bonds seem to me to be—even at 78 on the long-dated stuff—sort of a no-brainer. But the stock, I think, is less certain.

Question: Do you have any parting words of wisdom?

Miller: When I first got into the business, I met Bill Ruane, Warren Buffett's friend who ran Ruane Cunniff. Somebody asked him, ''If you could give some advice about investing, what would it be?'' And as Ruane related this story to me, he said, ''I told the guy that if he reads *Security Analysis* [by Benjamin Graham and David Dodd] and *The Intelligent Investor* [by Benjamin Graham] and then reads all of Warren Buffett's annual reports, and if he really understands what they were saying, he will know everything there is to know about investing.''

I thought about that advice for a number of years and agree with it, and then I heard this comment from two-time World Series of Poker champion Puggy Pearson: ''Ain't but three things to gambling. Number one: knowing the 60/40 end of a proposition. Number two: money management. And number three: knowing yourself.'' This advice is succinct and encompasses all you really need to know about how to approach investing.

Here's why: Knowing the 60/40 end of a proposition means knowing when you invest that the odds are in your favor. However you compute the odds, the odds have to be in your favor.

Money management involves knowing how much you commit to that position. Will you commit 1 percent, 5 percent, 10 percent? I recommend the book *Fortune's Formula: The Untold Story of the Scientific Betting System That Beat the Casinos and Wall Street* (by William Poundstone). It is a far better way of thinking about asset allocation than mean–variance analysis.

Finally, knowing yourself means knowing your personal psychology and how you react to adverse circumstances.

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