Perhaps There's a Better Way

Byron R. Wien (Byron.Wien@morganstanley.com)

Every once in a while, when I'm in a melancholy mood, I think of how little the craft of portfolio management has changed during my 40-year career. Sure we have computers now instead of Quotrons, and programs to determine value at risk and volatility, but if you analyze how money managers spend their days, it isn't all that different from what is was in the 1960s.

Salespeople file into conference rooms early each morning to listen to analysts' comments on earnings, new products, and meetings they attended. The sales force then calls portfolio managers who are soon off to their own meetings to discuss what should be bought and sold. Every so often a macro concept like legislation, currency, or interest rates is assessed, and asset and sector allocations occasionally come into play, but portfolio managers spend their time relentlessly in pursuit of a group of perfect stocks. Everyone is so busy talking on the telephone, reading emails and research reports, and attending meetings, when do they have time to think? Why don't salespeople call in the afternoon when portfolio managers are more relaxed? Is the information that urgent? Or will the portfolio manager wonder who got called in the morning?

For the buy-side, performance, as elusive as it seems to be, is everything. The highest compliment you can pay a portfolio manager is he or she is a great stock picker. Nobody points someone out in a crowd and says, "That guy really knows how to construct a sound portfolio." The heroes beat their benchmarks if they are long only, or they earn satisfactory absolute returns with low volatility if they're hedge funds. They do that by picking winners and, if they are hedged, shorting losers.

I have often thought that one reason so many managers have trouble beating the market is because building a portfolio one stock at a time may not be the best way to manage money. Even if you make judgments on the relative attractiveness of sectors based on the fundamental outlook and quantitative values and then pick the individual stocks afterwards, your effectiveness does not seem to improve all that much. There is so much data on stocks, I thought there must be a way to determine the quantitative characteristics of winners and losers and to build portfolios accordingly. Some portfolio managers pay attention to quantitative analysis, and some firms run money using that approach, but most money is still managed the old-fashioned way.

It was perhaps because of my thinking about an alternative approach to investment management that I responded so enthusiastically to Michael Lewis' new book *Moneyball* (see Steve Galbraith's essay, "Searching for the Financial Equivalent of a Walk," *US Investment Perspectives,* 8/06/03). As many of you know by now, this book is ostensibly about baseball, but almost from the first page it sang out to me about money management.

For those of you don't know the story, *Moneyball* is about the Oakland A's and its general manager Billy Beane. This team, which had a poor record and limited funds for signing top players, dramatically changed the way it identified talent. They employed a young Harvard-trained computer whiz who studied the statistics relating to player performance and identified a series of factors that were likely to determine whether a college player would succeed in the major leagues. Until then the selection of players was highly influenced by the team's scouts. Experienced baseball professionals, often ex-players, would travel through their assigned regions watching players day after day. Here is how Lewis describes it.

> In the scouts' view, you found a big league ballplayer by driving sixty thousand miles, staying in a hundred crappy motels, and eating god knows how many meals at Denny's, all so you could watch 200 high school and college baseball games inside of four months, 199 of which were completely meaningless to you. Most of your worth derived from your membership in the fraternity of old scouts who did this for a living. The other little part came from the one time out of two hundred when you would walk into the ballpark, find a seat on the aluminum plank in the fourth row directly behind the catcher, and see something no one else had seen — at least no one who knew the meaning of it. You only had to see him once. "If you see it once, it's there," say Eric. "There's always been that belief in scouting." And if you saw it once, you, and only

> you, would know the meaning of what you saw. You had found the boy who was going to make you famous.

The scouts were looking for certain "tools." "These were the ability to run, throw, field, hit and hit with power," according to Lewis. "A guy who could run had 'wheels,' a boy with a strong arm had a 'hose.'" But for Billy Beane, there seemed to be a better way. "He'd flirted with the idea of firing all the scouts and just drafting kids straight from Paul's (Paul DePodesta, the computer whiz) laptop. Paul's laptop didn't have a tiny red bell on top that whirled and whistled whenever a college player's on base percentage climbed above .450, but it might as well have."

As I sat through some portfolio manager stock-picking dinners during the past month I wondered whether we were all like the scouts. Although investment management literature is filled with evidence of how hard it is to beat the indexes, we all keep trying in the belief that our combination of knowledge and skills will enable us to outperform our benchmarks consistently. Even long-short equity hedge funds that delivered outstanding performance during the 1990s are having a hard time of it this year. They did relatively well during the difficult 2000-2002 period, but are underperforming now because their short positions are offsetting the appreciation of their longs. Some argue that you should expect hedge funds to underperform in strong rallies because they are "defensive," but I never heard that argument during the 1990s when hedge funds were shooting the lights out. I worry that many of these funds are giving up performance points to achieve low volatility.

The investment lesson of *Moneyball* is that the way portfolio managers pick stocks is too subjective. There is ample data on stocks to enable a skilled quantitative analyst to determine the statistical pattern of winners and losers. Critics will argue that the data are historical and not particularly useful in forecasting future performance, just as the scouts would argue that baseball data are no substitute for watching a player on the field. But the Oakland A's built a succession of playoff teams with lower budgets than their competition by analyzing the data on past performance. I wonder if portfolio managers couldn't learn from their example. A few people I know who have read the book say it may be useful for value investors, but I think the discipline could help growth stock buyers as well.

The Moneyball metaphor extends beyond stock picking and toward a holistic idea of portfolio construction. Think, for example, of how many basis points you might gain over your benchmark if you could just modestly reduce the number of losers or increase the winners. Here is a description of how Paul looked at the whole baseball season quantitatively rather than a player or a game at a time:

> Before the 2002 season, Paul DePodesta had reduced the coming six months to a math problem. He judged how many wins it would take to make the play-offs: 95. He then calculated how many more runs the Oakland A's would need to score than they allowed to win 95 games: 135. ... Then, using the A's players' past performance as a guide, he made reasoned arguments about how many runs they would actually score and allow. If they didn't suffer an abnormally large number of injuries, he said, the team would score between 800 and 820 runs and give up between 650 and 670 runs.* From that he predicted the team would win between 93 and 97 games and probably wind up in the play-offs. "There aren't a lot of teams that win 95 games and don't make it to the play-offs," he said. "If we win 95 games and don't make the play-offs, we're fine with that."

I thought about my experience as a buy-side analyst. Although I went to broker-sponsored conferences, I always thought there was something especially useful about visiting a company in its home office and touring a plant. Most portfolio managers I know still believe face-to-face meetings with top executives are especially useful. Our clients tell us they reward brokers who set up company meetings for them. Looking back I can think of instances where those meetings were useful, but many others where an investor would have been misled and come to the wrong conclusion.

Identifying undervalued sectors using quantitative data may be more useful than many believe. As for individual stocks, price-to-sales and price-to-book (we will be doing more work on this) may be to portfolio managers what on-base percentage and walks were to the Oakland A's. Perhaps Paul's careful work in baseball will have an impact in areas beyond what he originally envisioned. Lewis observes:

> And so, surely for the first time since the dead ball era, the Harvard Old Boys' network came to baseball. Paul himself sat at the desk on the other end of the room. I ask them if it ever troubled them to devote their lives, and expensive educations, to a trivial game. They look at me as if I've lost my mind, and Paul actually laughed. "Oh, you mean as opposed to working in some deeply meaningful job on Wall Street?" he said.

*They wound up scoring 800 and allowing 653.

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