Trading And "Moneyball"

What do baseball and trading have in common? More than you would have thought.

by John A. Sarkett

C an an individual retail trader venture into the marketplace, take on elite, highly paid hedge fund managers, mutual fund managers, market makers, and other assorted professionals, and come out ahead? A new book that is all the buzz in Chicago trading circles would say "yes."

Moneyball: The Art Of Winning An Unfair Game, by Michael Lewis (his other books include *Liar's Poker)*, tells the unlikely story of one Billy Beane, a supertalented professional baseball player who never achieved his potential in the major leagues, who changed course and then, in a most unlikely turnabout, became the most successful general manager in baseball. He did it by forming a fundamentally different and iconoclastic view of the game, one that is built on a statistical foundation of *what actually works.*

You must read this book to absorb the full weight of the evidence, but to whet your appetite, here are the salient points that you can apply directly to your financial market operations.

WHAT'S THE STORY?
Once upon a time, Billy Beane was the top prospect in major league baseball. Regarded as more gifted than 95% of professional players playing at the time, he signed at 16. In baseball parlance, he had the "hose" (arm), "wheels" (speed), body to do it all, and the "Good Face" — that is, the look of a baseball god. He was, as one scout remarked, "a player you could dream on."

In accordance with the adage, "Life is what happens when you are making other plans," it was all downhill from there. Much later, Beane came to realize he didn't really enjoy playing baseball, was never comfortable with the pressure, and had signed on and played for the money only.

ANDREW VANDERKARR

After bouncing around the majors and the minors, he quit at 27 to become a scout — a move that was unheard of. Unlike most baseball front office types, Beane's mentor, Oakland As general manager Sandy Alderson, was not a baseball player in his past life, but had been instead an attorney and Marine officer, who believed in systems and science. And soon enough, so did Beane.

Beane would become a general manager himself at 35. He

was aided indirectly by several notable statisticians, individuals like Bill James, who published the *Baseball Abstract* series, annual volumes of hitherto-overlooked statistics, facts, and analysis on baseball, and directly by Paul DePodesta, who was then Beane's assistant in the As organization. There were even some consulting companies retained along the way, one specializing in arcane baseball analysis, the Society for American Baseball Research (SABR).

This was all most unorthodox. To most powers that be in baseball, the sport was art, indefinable. To Billy Beane and his various bean counters, it was science. Collectively, they became the equivalent of card counters, the "Einsteins of baseball," armed with new evidence and able to see the national pastime in new and startling ways. Here are just a few tenets of their "new" way of analyzing the sport:

1. The single most important thing in the game is to not make an out.

2. As such, bunts, and "hit and run" plays were highly overrated, as were "manufacturing runs."

3. Patience mattered: patience to walk, for example. On-base percentage is more important than batting average.

4. "Taking" the first pitch puts the odds of a successful at-bat in the hands of the batter.

5. Batters can create walks by deciding which pitches to swing at.

6. Pitchers who know how to strike out batters can often be more valuable than 100 mile-per-hour hurlers. The market, however, values the latter more highly. Beane traded these individuals whenever it was to his advantage.

All of the above were *proven* statistically, and only statistically. The naked eye could not discern these facts, Beane and his counters realized. Did it work?

Beane's amazing win-loss record as general manager of the Oakland As went like this:

- 1998: 74 wins, 88 losses
- 1999: 87 wins, 76 losses
- 2000: 91 wins, 70 losses
- 2001: 102 wins, 60 losses
- 2002: 103 wins, 59 losses
- 2003: 99 wins, 66 losses

Did the As have the stars? No, just the opposite. The Yankees paid their players between $50 million and $100 million *more* than the As *each year*.

It wasn't the money, it was management. The *system* was the star.

Great. What's this got to do with trading?

THE SYSTEM IS THE STAR

Many traders flit from idea to idea, tip to tip, hot market to hot market. When it doesn't work, they take the blame person-

ally. So instead, ask yourself: What is your system? What is your edge? Who are you earning your dollars in the market from and why? If you can't state your system in one sentence or two, you don't have one. Beane's offensive system: get on base, score runs. Defense: get batters out. Sounds simple, doesn't it? But most baseball managers are more fixated on effect versus cause: 100 mile-per-hour "heat," being aggressive at the plate, speed on the base paths. Beane looked past these ancient yardsticks to actual results.

So what works? Does your system work? Can you prove it? *Probabilities: put them to work for you.* In your trading, stack the odds in your favor: fundamentals, technicals, then options analysis.

Here's an example. You want to be long a stock. Instead of choosing an overvalued candidate, one that's already run up and garnered its share of attention in the media, look for an overlooked candidate. Here's an example. At this writing, Liberty Media (L) sells for just under $9 a share. Analysts put the break-up value of the company (which holds stakes in News Corp., Time Warner, shopping network QVC, and others) some 20% to 30% higher. So the fundamentals are there. It has traded recently in a band of $10 to $12. Next, use technical analysis (stochastics, relative strength index [RSI], and so forth) to spot oversold buy points. Finally, use options to generate leverage and/or risk management.

With those simple actions, you just put the odds in your favor three ways: fundamentals, technicals, and options. Doing so doesn't guarantee you the win, but it's a world of difference from taking uncalculated risks.

TRADING THE BILLY BEANE WAY

Still not convinced? Take another look, comparing baseball played the Billy Beane way and trading:

Backtest. Go back in time. How would the strategy you are proposing have worked across time? To trade your system, you must have confidence. What was the win/loss percentage, drawdowns, and all the rest? Make this process part of your routine.

See the same things everybody else does but in a different way. Most managers pine after big, strong 100 mph hurlers. But when Billy Beane would get one, as often as not, he would trade the pitcher. He looked for real-results players, sometimes chubby, out-of-shape players whom other teams spurned. What does this tell you? Be a hedge fund yourself; "sell" the overpriced securities, buy the obscure and overlooked. Too many traders only look for the long side of a market. Rewards on the short side can be faster and more dramatic. *Think two ways.*

Maintain a positive psychology. When Beane was a

> What is your system? What is your edge? If you can't state your system in one sentence or two, you don't have one.

player, he was a mental mess. Bullpen pitchers would come down to the dugout for one of his at-bats just to see what destruction he would wreak when he struck out. As a foil, in *Moneyball*, Lewis profiled Beane's teammate Len Dykstra as "... able to instantly forget any failure and draw strength from every success. He had no concept of failure." One time, Beane and Dykstra were watching Baseball Hall of Famer Steve Carlton warm up. Dykstra didn't recognize the pitching legend and asked who he was. When Beane told him, Dykstra replied that he could get a hit off him. "I'll stick him," he said. Then he went out and did it.

Beane did have one good mental trait: he never allowed himself to become sentimental about a game, a player, or his own experiences. Translating that trait to the markets would be: "Ours is not to reason why, ours is just to sell and buy." Enter your stops or buy your puts, and if it goes, it goes.

Don't do it (just) for the money. After Beane became the most successful general manager in baseball, he worked a notable trade: himself, to the Boston Red Sox organization, for $12.5 million over five years. The deed done, he couldn't go through with it. After his misshapen baseball career as a player, he had vowed to never do anything just for the money again. He was loyal to the As, to his job, to his life in Oakland. He still had the dream of winning the World Series, and all that would mean to the validation of his ideas. So he stuck with the As.

Similarly, there are other rewards for trading, some psychic:

As Bill James wrote in his *1988 Baseball Abstract*: "It is a wonderful thing to know you are right and the world is wrong."

With probabilities, system, and method working for you, you can have a chance to know this feeling, directly, for yourself in your trading.

John A. Sarkett, developer of Option Wizard Scan and Scan Wizard software (http://option-wizard.com), may be reached at jas@option-wizard.com.

SUGGESTED READING

James, Bill [2003]. *The 2004 Bill James Handbook*, ACTA Publications.

_____ [1988]. *1988 Baseball Abstract*, Ballantine Books.

Lewis, Michael [2004]. *Moneyball: The Art Of Winning An Unfair Game*, WW Norton & Co.

_____ [1990]. *Liar's Poker: Rising Through The Wreckage On Wall Street*, Penguin Books.

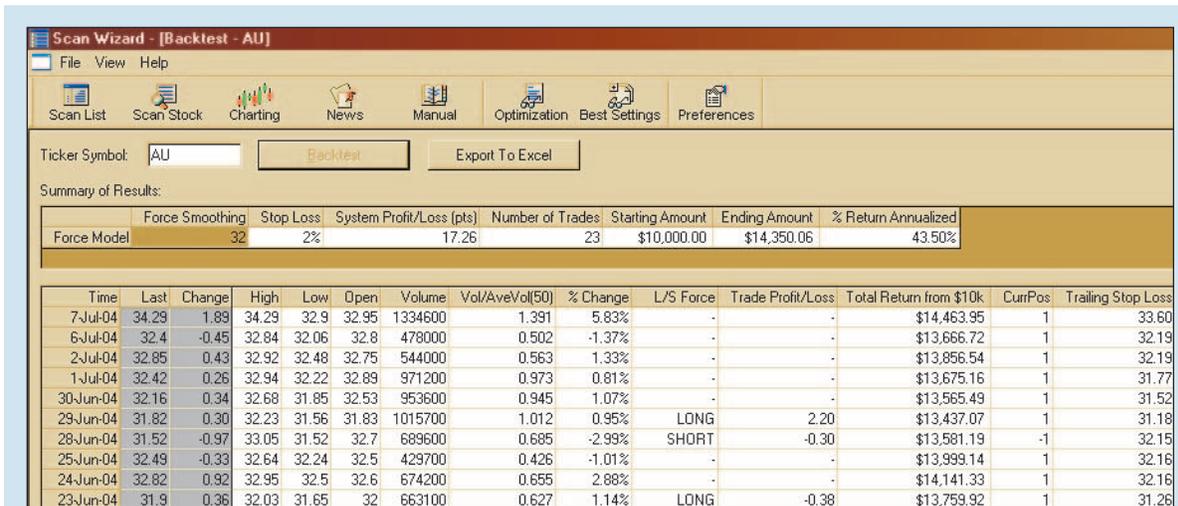Surowiecki, James [2002]. "The Buffett Of Baseball," *The New Yorker*: September 23.

http://option-wizard.com

‡Option-Wizard

†See Traders' Glossary for definition
‡See Editorial Resource Index

Scan Wizard - [Backtest - AU]

File   View   Help

Scan List | Scan Stock | Charting | News | Manual | Optimization | Best Settings | Preferences

Ticker Symbol: AU   Backtest   Export To Excel

Summary of Results:

	Force Smoothing	Stop Loss	System Profit/Loss (pts)	Number of Trades	Starting Amount	Ending Amount	% Return Annualized
Force Model	32	2%	17.26	23	$10,000.00	$14,350.06	43.50%

Time	Last	Change	High	Low	Open	Volume	Vol/AveVol(50)	% Change	L/S Force	Trade Profit/Loss	Total Return from $10k	CurrPos	Trailing Stop Loss
7-Jul-04	34.29	1.89	34.29	32.9	32.95	1334600	1.391	5.83%	-	-	$14,463.95	1	33.60
6-Jul-04	32.4	-0.45	32.84	32.06	32.8	478000	0.502	-1.37%	-	-	$13,666.72	1	32.19
2-Jul-04	32.85	0.43	32.92	32.48	32.75	544000	0.563	1.33%	-	-	$13,856.54	1	32.19
1-Jul-04	32.42	0.26	32.94	32.22	32.89	971200	0.973	0.81%	-	-	$13,675.16	1	31.77
30-Jun-04	32.16	0.34	32.68	31.85	32.53	953600	0.945	1.07%	-	-	$13,565.49	1	31.52
29-Jun-04	31.82	0.30	32.23	31.56	31.83	1015700	1.012	0.95%	LONG	2.20	$13,437.07	1	31.18
28-Jun-04	31.52	-0.97	33.05	31.52	32.7	689600	0.685	-2.99%	SHORT	-0.30	$13,581.19	-1	32.15
25-Jun-04	32.49	-0.33	32.64	32.24	32.5	429700	0.426	-1.01%	-	-	$13,999.14	1	32.16
24-Jun-04	32.82	0.92	32.95	32.5	32.6	674200	0.655	2.88%	-	-	$14,141.33	1	32.16
23-Jun-04	31.9	0.36	32.03	31.65	32	663100	0.627	1.14%	LONG	-0.38	$13,759.92	1	31.26

TRADING SYSTEMS

A mechanical, statistically based trading system — like Scan Wizard (shown), which was devised by the author — can help take the emotion out of trading and allow you to focus on what actually works over time. Consider purchasing or creating an optimizable system that provides buy/sell signals (both long and short), exit points, and trailing stops. The program should also keep a track record.