

Two of a Kind?

With a poker face, Wall Street sees similarities between a card game and its own game

By **MICHAEL SANTOLI**

FOLKS WHO WORK ON WALL STREET love their games. Witness the prevalence of broker-hosted golf outings and trading-room betting pools. And, every so often, Wall Streeters' affinity for games converges with their obsession for trying to figure out the stock market, generating a fashionable metaphor for thinking about investing.

It's now one of those times. There's a vogue in investment circles for exploring the world of gambling -- particularly poker -- in the hunt for insights into investor psychology, good decision-making and sharp risk-reward analysis.

Of course, the language and lore of betting has long been a part of the rhythm of the Street. The terms "ante," "vig" and "house money" have all doubled as shorthand for investment phrases. And both Wall Street and the gambling demimonde tend to attract young men dreaming of easy money. Some rely on their wits; others use complicated computer-driven systems to coax profits from long odds.

But these days -- at investment conferences and in market-strategy essays and chats with portfolio managers -- a more high-toned, analytical take on the gambling arts and sciences is being aired.

Legg Mason's celebrated fund manager Bill Miller hosted a provocative conference for clients last fall in Las Vegas, where his colleague David Nelson delivered a talk on the ways in which poker is akin to investing (read it at <http://www.leggmason.com/billmiller/conference/illustrations/nelson.asp>).

Just this month, the Society of Quantitative Analysts held a seminar featuring presentations on sports betting by a finance professor and another on Texas hold 'em poker. The latter was delivered jointly by a Harvard Business School professor and a former professional poker player-turned-options-trader-turned-hedge-fund-manager.

And from conversations with brokers and fund managers lately, it's clear that one of the books making frequent rounds on Wall Street recently is *Bringing Down the House*, a best-selling account of a scheme by MIT students to win millions at blackjack in the 'Nineties.

No doubt, the general revival of popular interest in gambling culture is part of Wall Street's focus on the betting life these days. The unlikely success of the World Poker Tour on the Travel Channel has been echoed by the hit *Celebrity Poker Showdown* on the Bravo network. It's no surprise that reality-TV impresario Mark Burnett (the culprit behind *Survivor* and *The Apprentice*) has created *The Casino*, which premiered this month.

James McManus, author of another hot poker-related book, *Positively Fifth Street*, makes a broad claim in the introduction to the new anthology *Read 'Em and Weep*. "The case can be made for poker having supplanted baseball as our national pastime," he ventures. "What used to be called 'the cheater's game' is now, for better or worse, at the heart of America's romance with market democracy."

Extending this line of thought a bit, the gambling-oriented books in favor today may qualify as this year's *Moneyball*, the Michael Lewis book about the "value investing" approach favored by Oakland A's general manager Billy Beane in acquiring baseball players.

Released a year ago, *Moneyball* was perhaps the most popular nonfinancial book in years to penetrate the consciousness of professional investors, who eagerly gave it to clients and invoked "Billy Beane-ism" as shorthand for their stock-picking strategy. It got to the point where references to *Moneyball* in fund managers' annual shareholder letters quickly attained cliché status.

It contained statistics and a misapprehension of what traits contribute to winning. It offered hope to money managers who continue to search for the profitable key to selecting stocks that the market has missed.

Bringing Down the House is more a vicarious pleasure, but one that seems to appeal to Wall Streeters' hope for stumbling on to a "system" that lets them get the better of the competition in a game with the odds arrayed against them.

As if to underscore the common threads, Amazon.com lists *Moneyball* as the first suggestion among other books a reader of *Bringing Down the House* might enjoy. And to complete the loop, the Amazon page for *Moneyball* refers readers to investor-focused works like Enron post-mortem *The Smartest Guys in the Room* and Michael Lewis' first book, the men-behaving-manly Wall Street memoir *Liar's Poker*.

The blackjack-as-stock-trading analogy is a tempting one for investors to seize, mainly because blackjack is a "beatable" game, given enough statistical computing power, strict discipline, a permissive casino boss and sufficient capital to weather the vagaries of hand-by-hand luck.

Market pros also like the comparison because blackjack "is the only casino game of chance whose outcome depends on past outcomes," as John Allen Paulos writes in *A Mathematician Plays the Stock Market*. That's because each player sees all the cards that have been dealt and can then compute the odds of any unseen card being dealt from the remainder of the deck.

There are other simplifying aspects of blackjack that may draw investors' interest. A player bets only against the house, whose dealer must adhere to rigid rules known by everyone. For instance, the dealer will take another card until he or she has a 17 or better, or has busted by having taken cards that add up to more than 21.

If only the stock market were so straightforward.

Sure, investors routinely extrapolate past performance to project future investment results. But everything from academic studies to mutual-fund disclaimers exposes the fallacy of relying on the historical record to infer performance down the road. And in the markets, no investor knows, in advance or after the fact, what "rules" are motivating the investor on the other side of the trade.

Justin Wolfers, a Stanford professor who is joining the staff of the Wharton School at the University of Pennsylvania, has shown that legal sports-betting "markets" are mostly as efficient as financial markets. And they're inefficient in some of the same ways, mainly rooted in participants' behavioral biases.

For instance, deep long shots in horse racing are systematically over-bet, meaning that 50-1 shots win far less often than once in 50 times. In the same way, deeply out-of-the-money stock options routinely are priced higher than their theoretical value. This may be due to a "What the heck" impulse among players, and a human inability to distinguish long odds from truly minuscule odds, says Wolfers.

Poker gets the most play as a Wall Street metaphor, for good reason. Both it and investing are "probabilistic" pursuits, requiring imperfect analyses of many possible outcomes.

Both are games of incomplete information, meaning that players can only estimate their odds of success, because certain factors remain unknown.

Perhaps most interesting, both investing and poker expose behavioral tendencies that can spur irrational decision-making and can be exploited by other players.

Clearly, those who put money on the line in either game recognize they are taking their chances on the course of subsequent events -- no guarantees. The trick is for investors and poker players to train themselves to think in terms of probabilities, understanding that a large portion of the bets that look good when they're made will go sour. Winning, in both cases, is a matter of coming out ahead a slim majority of the time.

Stocks and poker being games of incomplete information distinguishes them from other games requiring intellect and wits. Chess, for instance, offers full transparency and symmetry of information to both players, which means there can often be an unambiguously "correct" move.

In the markets or at the poker table, only educated guesses are possible. There are known probabilities (how many kings might be left to be dealt, how often a stock has outperformed the market after hitting a certain valuation), which must be blended with unknowable facts to generate tactical decisions.

Also in both venues, the concept of "expected return" is useful. Stock analysts can compute price-earnings ratios, project earnings growth, plug in prevailing interest rates and use other measures to arrive at a theoretical expected return for a stock, just as a poker player can figure the odds of a pair of queens winning a hand, given other common cards that are showing. But, in either case, that expected return is only a starting point.

All these theoretical similarities may be of some interest, but what's truly illuminating about comparing poker with stock picking is the role of human nature and behavioral tendencies to determine success or failure.

A behavioral quirk common to stock and card players is that so many inferior competitors happily go up against better-equipped sharks. The illusion of simplicity and the chances of lucking into a big payday make for a steady supply of dumb money.

Notes David Sklansky, in his definitive *The Theory of Poker*: "It doesn't take long for pool players or golfers to realize they're outclassed and to demand to be handicapped, but losers in poker return to the table over and over again, donating their money and blaming their losses on bad luck, not bad play."

The traits that determine good play from bad are pretty much the same, whether flipping chips or stocks.

The Legg Mason Funds' chief investment officer, Michael Mauboussin, cites three common attributes of the most successful investors: a focus on process versus outcome, a constant search for favorable odds and an understanding of the role of time.

The focus on process is a matter of discipline, making sure decision-making is sound and sticking with it even when the result is sometimes negative. Recall that this is a probabilistic game, where the object is simply to win more often than lose, and to win more money when winning than is lost when losing.

Sklansky offers what he calls the fundamental theorem of poker: "Every time you play a hand differently than the way you would have played it if you could see all your opponents' cards, they gain; and every time you play your hand the same way you would have played it if you could see all their cards, they lose."

This is akin to a good investor's ignoring short-term price movements that affect a portfolio, while constantly reviewing the thesis behind each stock holding to ensure that it's sound.

A bedrock piece of poker wisdom is to play a hand only when you see the odds in your favor, or, in gambling terms, when you "have the best of it."

Says Sklansky: "Serious gamblers bet only when they have the best of it; when they have the worst of it, they pass."

And, say the experts, when you have the best of it, wager aggressively, to drive up the value of the pot. If a hand is good enough to hold and to "call" other players' bets, then it should be good enough to "raise" them.

Doing this isn't easy for many, if not most, people. Behavioral research consistently shows that humans are risk-averse when it comes to gains but reckless when trying to avoid losses. In the market, this tendency means that investors lock in profits too quickly on stocks that have risen and stubbornly hold on to losers too long (or add to positions as they fall), in hope of "getting even."

Randy Cohen, the Harvard Business School professor who spoke to the analysts group on poker recently, describes different hands as being high- or low-volatility hands.

Working toward a straight or a flush -- hands that become more likely the more cards are dealt -- is like owning an option, or being long volatility. This means the player should bet low and try to make the game last longer, to improve the chances of completing a winning hand.

Holding a high pair is like being short volatility, meaning the chances of prevailing fall as other players get more cards. Here, the player should bet aggressively to scare off other bettors and end the game quickly.

Of course, knowing the odds and living by the probabilities is only one part of winning at poker. In the short term, luck can trump brains. But in the long run, the small minority of players possessing skill and discipline can overcome random chance.

Sounds a bit like Wall Street, doesn't it?