

## Searching for the Financial Equivalent of a Walk

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My path to the stock market resulted from an early fascination with baseball and statistics. The height of this fanaticism culminated with naming my son after two players who shared first and middle names, as well as 1,248 homeruns. While I have continued a masochistic devotion to denizens of the Fens, it has become increasingly difficult to combine my two passions. Or so I thought. While nominally about baseball, Michael Lewis' latest book, *Moneyball*, is really all about investing — finding value where the consensus does not see it. The book revolves around the seemingly inexplicable success of the Oakland A's, who, in finance terms, consistently and significantly outperform the market with players (stocks) that other teams (investors) deem rejects. The added twist to the story is that the A's General Manager, Billy Beane, was a former wunderkind whom scouts once viewed as a can't-miss prospect — a kind of Enron of the sandlot if you will. The heart of the A's success comes from questioning conventional wisdom. In baseball terms, the A's managers found that convention tended to overrate such sexy achievements as stolen bases and batting averages while underestimating the importance of on-base percentages and walks. Which led us to wonder: What are the financial equivalents of a stolen base and a walk?

**Payroll does not equal success.** The beauty of the baseball team as stock portfolio analog is that, as with money management, both growth and value styles have shown an ability to win. As much as we hate to admit it, the Yankees, with their absurdly high-P/E players, have consistently outperformed the market. In contrast, the Mets, with equally high P/E's, have massively underperformed. Conversely, the A's, made up of players trading below book value, have continued to shine, while Tigers fans seem to be getting just what their management is paying for — the 1962 Mets (Exhibit 1). In both the stock and baseball worlds, the cost of failure is rising. Just as scouts focus on the flame-throwing 17-year-old high school phenom despite overwhelming odds of failure, so analysts fall in love with the Enrons of the world. In generations past, such mistakes could be overcome, given \$10,000 signing bonuses and valuations that actually captured skepticism. In the more recent era of million-dollar signing bonuses and billion-dollar valuations for business

plans, the cost of errors is rising. Given the stakes in both baseball and markets, true insight and analysis should be more highly sought after and rewarded today. Yet in both instances, analysts tend to focus on familiar heuristics, be they batting averages or momentum, with no real sense of whether they actually add value or not.

Exhibit 1

### Growth & Value Both Work in Baseball

Team	2003		Team	2003	
	Payroll \$MM	Winning Pct.		Payroll \$MM	Winning Pct.
Atlanta Braves	105	66%	Toronto Blue Jays	51	50%
San Francisco Giants	82	62%	Los Angeles Dodgers	106	50%
NY Yankees	150	61%	Colorado Rockies	67	50%
Seattle Mariners	87	61%	Minnesota Twins	56	50%
Boston Red Sox	97	58%	Anaheim Angels	79	48%
Oakland Athletics	50	58%	Baltimore Orioles	69	48%
Philadelphia Phillies	71	56%	Pittsburgh Pirates	55	47%
Kansas City Royals	41	54%	Cincinnati Reds	57	46%
Houston Astros	70	54%	Texas Rangers	105	43%
Florida Marlins	48	54%	NY Mets	117	41%
St. Louis Cardinals	83	52%	Cleveland Indians	49	41%
Chicago White Sox	51	52%	Milwaukee Brewers	41	40%
Montreal Expos	52	52%	San Diego Padres	45	39%
Arizona Diamondbacks	81	51%	Tampa Bay Devil Rays	20	38%
Chicago Cubs	81	51%	Detroit Tigers	49	27%

Source: Major League Baseball, *The Associated Press*. Winning percentage through August 3rd.

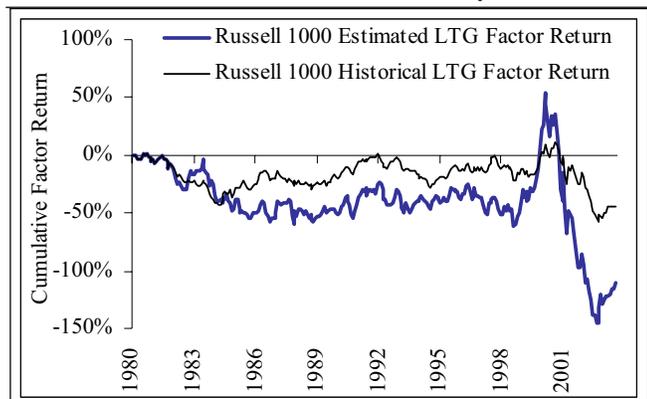
**Growth — the financial equivalent of a .280 hitter with a .290 on-base percentage.** Perhaps one of the most interesting insights Billy Beane brought to the art of picking ballplayers is the observation that “bad” body types can still be terrific players, and vice versa. Too often scouts look at the physical make-up of a player and pre-determine that the 6' 3" beefcake boy will outperform the dumpy 5'8" guy. Beane, as the failed beefcake boy, was in a unique position to offer such an observation. The eloquent spokesperson for the dumpy crowd, of course, is Yogi Berra, he of 5' 8" frame but a Hall of Fame plaque. When informed that he didn't “look” much like a ballplayer, Berra reportedly offered: “So what, I don't hit with my face.” The financial equivalent of the 6' 3" stud who can't hit a curve ball to save his life are typical “growth” factors like historical and long-term forecast growth rates. If one were systematically to buy the quintile of stocks offering the fastest historical or projected growth while shorting companies providing the least, an investor would ... systematically underperform the market to the tune of over 500 basis points per annum (Exhibit 2). Everybody “knows” the bullet-tossing prom king will be a success, so

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scouts overpay for him. Investors similarly fixating on growth rates are also often playing in a picked-over field. If high degrees of success have already been achieved or are forecast, where's the upside?

Exhibit 2

**Past & Forecast Growth — Where's the Upside?**



Source: Morgan Stanley Research. Cumulative return of portfolio rebalanced monthly, long the quintile of stocks with highest forecast & historical growth, short the quintile with the slowest.

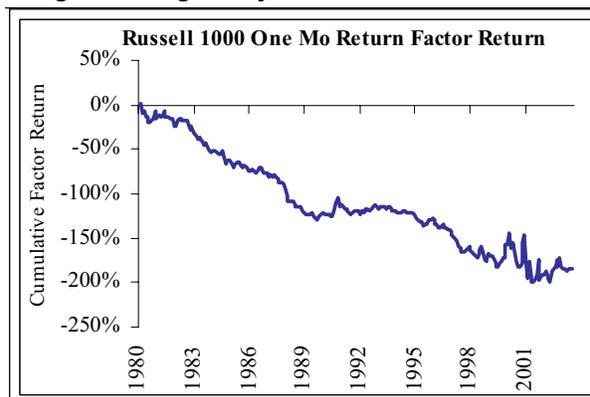
**Caught stealing — Say No to Mo'.** What is an even more obvious way of underperforming than drafting a strapping slugger who runs a 4.40 forty-yard dash or a company that has achieved wonderful recent success in increasing earnings? How about buying a stock that has just gone up — a lot. If high past growth and high forecast growth are tickets to the investing minor leagues, buying yesterday's winners is akin to being caught stealing. If one were to systematically go long the quintile of stocks with the best performance over the prior month while going short the quintile with the worst, one would systematically lose a lot of money (Exhibit 3). Here the analogy may be the one-pitch pitcher. If he keeps coming with nothing but 95 mile per hour heat, after even one at-bat, big league hitters will begin to catch up to him. Similarly, when a stock pops a lot in a single month, chances are investors have caught up to it.

**The walk equivalent.** Although there is a good degree of nuance to the attributes the A's look for in players, the most prominent characteristic is probably a player's ability to draw walks. Analytically, walks are highly correlated with productivity both for what they are not (i.e., outs), but also for what they are (an active use of the opposing pitcher's arm, and a place on the bases). In baseball terms, walks = success. But walks are boring. Walks are passive. Walks do not illicit oohs. As such, walks are grossly undervalued. In finance terms, we have endured an era where investors used everything from ouija boards to price-to-eyeball valuation metrics to pick stocks. In short, investors chased the oohs and aahs.

What have they overlooked? Boring old valuation. Over the long haul, the most important factors we have found in our quant work in adding alpha to portfolios are all valuation oriented. Price to earnings, price to sales, and, yup, even price to book are the financial equivalents of walks. Again, if one were to buy systematically the cheapest quintile of stocks on these metrics while selling short the dearest, one might enjoy an early retirement (Exhibit 4).

Exhibit 3

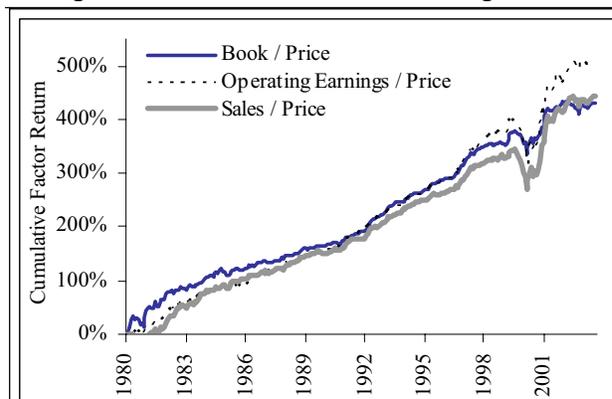
**Caught Stealing — Say No to Mo'**



Source: Morgan Stanley. Cumulative return of portfolio rebalanced monthly, long the quintile of stocks with best one-month return, short the quintile with the worst.

Exhibit 4

**Boring Old Valuation Works Over the Long Haul**



Source: Morgan Stanley Research. Cumulative return of portfolio rebalanced monthly, long the quintile of stocks with the cheapest valuation on these metrics, short the most expensive quintile.

*Moneyball* has confirmed to us that baseball is not only a metaphor for life, but also for finance. Just as being a Red Sox fan prepares one much better for the realities of life than being a Yankees fan, understanding the nuances of baseball can translate to the nuances of investing. In both fields, sizzle is vastly overrated. In an era characterized by corked bats and corked financial statements, give us steak, give us walks, give us cheap stocks.