

## Trending Credit Data - When The Big Short meets Moneyball

Michael Lewis' brief career as a Wall Street trader was depicted in his first book *Liars Poker* published in 1989. The 2015 film adaptation of his *The Big Short* explained to a battered public the insanity that led to the 2008 financial meltdown and the advantage of seeing what the markets couldn't see until it was too late. Nationally housing has recovered and mortgage behavior has changed, so why hasn't private capital returned to the second largest asset class? The answer may be found in Lewis' 2003 pre crisis "baseball" book and post crisis 2011 film - *Moneyball*.

The Oakland Athletics are a small market American League baseball team who were outspent by the New York Yankees by 5X – yet in 2002 the A's won the same number of games. The A's success was the result of unique insights into player value extracted from data that baseball has collected for 150 years. Baseball's past and today's mortgage thinking was described by Peter Brand *Moneyball's* young quant. *"There is an epidemic failure within the game to understand what is really happening. This leads owners to misjudge their players and mismanage their teams. Baseball thinking is medieval, they are asking all the wrong questions."*

The *Moneyball* diagnosis would sound familiar to *The Big Short* traders. The central inconvenient fact of the so-called "subprime" crisis is that prime loans defaulted at a higher rate than subprime loans. A 2015 study by the National Bureau of Economic Research highlighted the disconnect in our understanding of credit risk - *"The findings eliminate almost entirely the empirical importance of the Prime and Subprime labels in predicting foreclosures."* The *Moneyball* parallel is that the metrics used to measure risk haven't changed since Fannie Mae began credit scoring in 1994. Calamities change the nature of risk and we don't *understand what is really happening*.

The crisis illustrated the predictive deficiencies of FICO, debt to income and loan to value. These indicators mattered - just not very much. The surprise of the "smart" money was captured by David Nelms CEO of Discover, *"so many people incorrectly looked at FICO as a measure of risk."* Howard B. Hill author of *Finance Monsters* reported how the industry's models predicted that 75% of the subprime loans would default – when only 7.5% actually did. Nobody could determine what the assets tied to residential mortgages were worth – and we still can't.

Our biggest risk going forward is that markets still don't understand the drivers of mortgage credit risk. The GSE's can ask all the wrong questions because they are backed by the New York Yankee's (government) balance sheet and are captive to a calcified legacy infrastructure. The huge investment in a Common Securitization Platform and debating the need for trending credit data signifies the ongoing dependence on frameworks and models that failed – catastrophically.

Which loans will be most vulnerable when the next economic downturn hits? Answering that question requires different data. Job types, local economic spending, capital flows, land use, transit accessibility, neighborhood supply and demand and foreclosure execution were predictive during the crisis, and this information is – knowable.

The *failure within the game* to examine the gaps in risk relevant information has perpetuated an outdated hierarchical structure that can't contain costs, measure production quality or sustain private capital formation. The GSE's kept the lights on through the crisis, but can't respond to shifts in demand or advances in technology. Government's role as the systemic backstop has been locked in with private capital playing at the margins. Investors know they are blind to truer measures of asset value and banks are leaving an over regulated and dumber system.

What if we asked different questions? What if investors had visibility into neighborhood spot markets in near real time and relative futures? What if guarantors could determine manufacturing quality before the loan closes? What if production costs could be cut by 50%? What if we knew which loans were most vulnerable within the servicing process? What if new sources of data could safely expand the credit box and reach new pockets of demand? Billy Beane the A's General Manager said it best, *"we will have changed the game."*