

Painting By Numbers

by [Steve Brown](#)

For many, estimating probabilities of default ("PD") is about as exciting as watching paint dry. Yet, this concept is integral to banking, arguably a significant pillar needed for anyone to properly model credit risk and a key component used by large banks to decide upon loan terms. Since independent banks all compete in the marketplace with national banks (particularly on loans larger than \$5mm), understanding how pricing is derived is crucial. For simplicity, let's say PD is the number of times a given loan is more than 30 days late on a payment. To clarify, we exclude this grouping because late payments within this time period may be the result of non-credit related events (i.e. many small businesses have partners that may be responsible for making loan payments and for whatever reason they are out of town, sick, etc. so some payments are periodically missed). To provide additional illumination on this subject, we assume a default event is defined as a borrower payment default within some stated time period. The goal of the analysis is to calculate the probability of a given loan going bad (with a high degree of statistical certainty), over a specific time period (usually a year). Intuitively, we know that a high quality borrower would have a low default rate, while a low quality borrower would have a greater chance of default. Similarly, we also know that since a lower quality borrower has a higher chance of defaulting, the yield we receive on their loan should be higher than the yield received for a higher quality borrower. The market often bears this out, as we often see larger sized loans typically priced lower than smaller ones (also seen as lower FICO = higher rate charged). The assumption here is that the larger the loan size, the better the credit quality of the borrower (in general) and therefore, the greater number of banks competing for their business. By definition, when a credit cycle turns, lower quality borrowers are strained the most and defaults usually increase on that group of loans first. Once a bank can quantify PD, it now has a key pillar in which to measure the profitability of a loan. The important point to recognize with PD is that it is largely cashflow and borrower based and not related to collateral. Collateral effects loss given default (which we will cover another time), however PD is the largest determinate of loan pricing. While independent banks don't have to adopt Basel II, it is important to note that national banks are already doing so, substantially impacting loan pricing nationwide. The more national banks compete for small commercial customers (commoditizing lending to these smaller credits over time, much like SFR has become), the more independent banks need to understand such methodologies. It is important to note that Basel II incorporates PD methodology, so it will become increasingly important. Top performing banks understand that risk-taking is part of the business and that the greater the control they have over the process, the more that process can be maximized within acceptable risk parameters. These banks make lending decisions by augmenting expert judgment with quantitative, model-based techniques. Since credit risk is the dominant source of risk for banks, knowing and understanding this (and other such) concepts will help independent bankers not only better understand where risk exposures are coming from, but also how to manage them and leverage the right ones. For the past year, the Banc Investment Group has utilized PD in our loan pricing, trading and credit shock models. Banks interested in learning more about PD or any of these models are urged to contact us.

BANK NEWS

Acquisition

First Banks (\$9.4B, MO) will acquire Oak Lawn Bank (\$68mm, IL) in a deal valued at 13.9mm or 2.40x book.

Acquisition

Chicksaw Banc Holding (\$84mm, OK) will acquire AllNations (\$17mm, OK) for an undisclosed sum.

Housing

The real estate market has contributed as much as half the U.S. economy's growth since 2001, according to estimates by Wall Street economists.

FHLB Debt

FHLB Chicago issued \$1B in debt this week, a move that had been discouraged by two lawmakers. Senator Paul Sarbanes opposed issuance on the grounds that it should not be counted towards the bank's leverage ratio. The debt will be used to fund excess stock buyback required by regulators.

M&A Activity

Analysts continue to speculate that Wachovia's acquisition of Golden West Financial will spark more consolidation in the banking industry. Names mentioned as potential acquisition candidates include Fifth Third, U.S. Bancorp, Washington Mutual, City National, SunTrust, Key, Compass and First Horizon (formerly First Tennessee).

New Chairman

The Senate unanimously voted to approve former Assistant Treasury Secretary Sheila Bair as the new FDIC chairman.

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