



The Mathematics Of Great Loan Pricing

by [Steve Brown](#)

Drinking alone is never a good idea, but now, if you own a cat or dog, you don't have to. Apollo Peak, a Denver-based company, has come out with a line of non-alcoholic wines made especially for cats and dogs. For your feline companions, the company offers bottles of the aptly named Pinot Meow, The Moscato and The Catbernet, which contain a proprietary blend of all-natural organically grown catnip, fresh beets and natural preservatives. For your canine friends, there's The ZinfanTail and The CharDOGnay--a blend of herbs and beets--that you can purchase online or at select pet stores across the country. Best of all, if your little brother accidentally drinks a bottle, it's perfectly safe, according to the company.

Before you go buying any of these delicacies for your cat or dog, it probably makes sense to check with your pet's veterinarian--just to make sure he or she has no qualms about the products. Likewise, a significant amount of research is also necessary if you're looking at loan pricing software.

Perhaps our best advice here is to know that any model you purchase will only be right some of the time. Conditions change, relationship data may not be collected accurately, linkages to other customers may not be known and humans make errors all the time so inputs may just not be correct. The key to using any loan pricing model is to adopt it so that your bank gains consistency and comparability across loan types and structures. Despite advances in robotics and artificial intelligence to date, no model we know is yet capable of doing what a person does and understanding all of the pieces and value of specific relationships.

This said, many banks we know are downright shocked when they load everything up and find out loan pricing can improve in many cases, it can deliver real bottom line performance and it can improve structuring capabilities of lending teams. After all, conditions shift, rates move, overbuilding occurs and risks ebb and flow so much like water over time. This is where a pricing model can help out.

When you get down to it, accurately pricing a loan at a given point in time requires multivariate analysis (basically, a set of techniques dedicated to the analysis of data sets with more than one variable process). To calculate profitability, a model is needed that is robust enough to handle this and that is not easy. Further, a top level model helps not only in structuring but also creates a common and consistent platform for customer facing teams to play with assumptions and compare loan choices to maximize return. Finally, loan pricing models must be built on real yield curves that shift and change during given markets and also adjust for a variety of risk factors.

The very best models go beyond a blunt ROE or ROA analysis to one that has been risk adjusted (RAROC). In addition, the top shelf systems measure BOTH interest rate risk and credit quality risk (few do this on the market).

Ideally, any loan pricing software you purchase should be part of a larger package that allows you not only to measure loan profitability, but also allows you to evaluate the profitability of all of the bank's

customers on the deposit side as well. This can be a little more expensive than a standalone product, but it's important to have a big-picture view of all of the bank's profit centers as opposed to viewing each on a standalone basis.

We recommend you take the time to evaluate several different options for loan pricing software, utilizing the same rigorous sniff test with each. It's okay to be finicky when it comes to choosing something this important. Customers and others tell us our loan and relationship pricing models are some of the very best in the industry and easy to use, so give us a call. We'll show you how to use a model to not only structure better loans, but do so as you quantify various subcomponents in order to make more money.

BANK NEWS

CIO Job

A Deloitte survey of CIOs finds those at the best performing companies (beat S&P for prior 3Ys) take such actions as prioritizing performance and growth over cost, build strong relationships with the CFO and business unit leaders, deliver on their commitments, make internal customers happy, focus on customer experience as a competitive differentiator, develop talent, and embed security and privacy in business operations before linking it to growth and customers.

Charter Decline

The latest FDIC supervisory insights report finds recent research by the Fed suggests that economic factors alone (including a long period of zero interest rates) help explain at least 75% of the post crisis decline in new bank charters.

Fined

BOKF (\$32B, OK) will pay \$1.6mm to settle charges it improperly handled municipal bond offerings as trustee to purchase and renovate senior living facilities. Bond offerings in question were later found to be fraudulently managed by a businessman in Atlanta.

Short Term

Research by the World Economic Forum on jobs finds issues that will impact industries and business models by 2018 to 2020 are: advanced robotics and autonomous transport, artificial intelligence and machine learning, advanced materials, biotechnology and genomics.

Q3 GDP

The latest from the Atlanta Fed projects the economy will grow at a 3.6% rate in Q3 vs. the 3.5% projected prior.

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