

PREDICTING FUTURE LOAN DEFAULTS

by [Steve Brown](#)

The other day a Minnesota banker remarked that our Loan Pricing Model soon could be worth "all the tea in China." This got us thinking about how much the customer might be willing to pay, as it turns out that China produces over 855k metric tons of tea annually. At a current price of \$1.87/kilo, that comes to about \$1.6B. While we agree there is tremendous value in the model, this banker was more than likely just being nice instead of making us a real offer. Regardless, we are excited about our July release of the model that will contain more relationship profitability analysis and 4-digit NAICS code level probability of default rates. By the end of this year, we will be sampling more than 3mm independent bank loans and have zip code level default data on much of the U.S. market. More importantly, we are hard at work further refining our commercial real estate projection capabilities - which is today's subject. When we evaluate loans, we narrow down those factors that have the greatest influence and forecasting value into independent bank loan defaults. In like manner, we do the same when it comes to quantifying geographical risk. Our underlying premise is that real estate underwriting within a sector is comparable within each market. Yes, the price per square foot, appraised values and cap rates change, but on a relative basis, commercial real estate underwriting within a sector (such as office or multifamily) can be boiled down to constant ratios to capture more than 70% of the risk. We have narrowed down the geographical considerations to 9 factors and present them here in case anybody would like to use them for real estate forecasting or chime in with ones they feel we may have missed. Our factors are, in the order of correlation to CRE defaults: employment, population, current vacancy/occupancy levels, net new space, net absorbed space, retail sales, regional production, current rents (net of givebacks) and personal income. From these figures we achieve more accurate projections of future rental rates, cash flow and ultimately debt service coverage. While there is a host of some 45 other indicators that we have reviewed, such as home sales, education, population age, manufacturing and even days of sunshine, most of these indicators we have found to be only loosely correlated to loan performance. For bankers curious how other general geographic data might be correlated to defaults, let us know and we will attempt to derive the correlation for you. We continue to back-test our model in order to refine its accuracy, but so far the results look very promising. Using this data, we predict continued improvement in places such as San Francisco, Los Angeles and NY. For the nation as a whole, we can tell you that real estate is getting weaker, as our predicted supply of new space is projected to outstrip demand in about 65% of the 160 regional markets that we monitor. As a result, we expect rents to trail down in many markets, causing additional pressure on debt service coverage (which will increase the expected probability of defaults). Our current CRE loan underwriting model is very accurate out to 9 months and over time we hope to get acceptable accuracy out to 24 months (about as good as one can expect from any model). As we continue to refine the model and improve our back-testing correlations, it is our hope that the value of our work with independent banks will go from being worth all the tea in China to all the coffee in Brazil (about \$7B).

BANK NEWS

M&A:

Prosperity Bancshares (\$6.3B, TX) will acquire Bank of Navasota (\$73mm, TX) for about \$17.4mm, or 2x book.

M&A:

Citigroup will acquire Bisys Group, Inc. for \$1.45B in an all-cash transaction. Bisys' Investment Services division propels Citi into a market leading position in hedge fund administration and mutual fund servicing. At closing, Citi also said it would sell the Retirement and Insurance Services Divisions of Bisys to affiliates of J.C. Flowers & Co. LLC, making the net cost of the transaction about \$800mm.

Stick It To 'Em

Superior Bancorp (\$2.4B, AL), in an effort to prevent RBC Centura Bank's (\$23B, NC) new presence in the area from eating up too much market share, has come up with a novel advertisement. Superior has posted bill boards that say "Sweet Home Canada" with the Canada crossed out then "Alabama" and the words, "It didn't sound right to us, either" next to it. RBC Centura stresses that it is an American bank that just happens to be owned by a Canadian bank.

Amnesty

TX is offering Amnesty from 6/15/07 to 8/15/07 for all businesses that have not paid taxes or are not up to date on paying taxes. The amnesty will allow these businesses to pay taxes in full without risking interest charges and penalties.

New Approach

Downy Financial Corp (\$16.2B, CA) is introducing a new home loan product - a fully amortizing home loan, accompanied by a savings account with an interest rate equal to the home loan rate for up to 10% of the loan amount.

Housing

In another sign the housing sector may continue to languish, national home builder Centex (the 4th largest in the country) reported an 11% drop in 1Q revenue. Meanwhile, the CEO commented that the environment was "one of the most difficult markets in 25 years."

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