

## BANK CLUSTERING

by [Steve Brown](#)

Once a year we look at bank performance and conduct statistical analysis to see what can be gleaned from the data. We look at correlations, cumulative density and 20 other parametric and non-parametric procedures in order to better understand what drives bank profitability. This year, the evaluation is particularly useful, as we are now learning what attributes drive performance in a negative economic environment. We are going to be looking at the output of this data over the next several months and will present the summarized information at our upcoming Executive Management Conference coming up in May. (to register, see "related links" section below ).Today, we look at a set of factors.

As an aside, we wanted to find out what composes a representative sample for banks? In 2007, the answer was about 210 banks. Now, with greater disparity in performance, the answer is 300. In other words, by looking at 300 banks, an analyst can work with a smaller set of data and be confident that the results can be utilized as representative for the industry. However, in our 2008/2009 study, we looked at a random sample of over 2,000 banks looking at both private and public data.

One technique that we use is one called clustering. Here we look at a variety of factors and then statistically group the banks to see what properties are shared between banks. In our analysis, we separated banks that produced over a 15% ROE in 2008 and compared this cohort to banks that produced less than a -10% ROE.

We confirmed, as we have said for the last 10Ys, that even in a downturn asset size above \$250mm, doesn't matter and has no correlation to performance. The other major item that we confirmed that we have written at length about, is bankers extreme focus on NIM, doesn't matter as having a high margin doesn't mean you will be a top performing bank over time.

Other items that don't matter that bankers may find interesting, net interest margin, the amount of service charges on deposit accounts, the amount of cash dividends, the cost of premises and revenue from fiduciary activity doesn't matter. You can have high amounts of these items and perform in the bottom decile, just as easy as the top decile. None of these items are predictors of performance.

One new item that we have looked at that we haven't focused on in the past is salary level. Here to, the amount of compensation expenses a bank has, doesn't matter to performance. The only subset of data we have found with any relevance is that if you have high compensation expense, statistically, you are most likely going to be an average performer (which is better than a poor performer).

Against the backdrop of many items that don't make a difference, one item that stands out more now than ever before - if you have to make the decision between originating a high priced loan with high risk or a low priced loan with low risk, take the low priced loan. For 2008, banks that had lower priced loans on their balance sheet dramatically outperformed their peers. This is counterintuitive and is a result that even though a loan may have a low price, it may have a high risk-adjusted return (if you don't believe us purchase our pricing model and we will prove it).

In the coming months, we will have lots more statistical information including what geography tells us about performance, if going after retail customers is more profitable than commercial and reams of

data about both lending and deposits. Stay tuned and if you have questions, send them in and we will ask the oracle of the data for answers.

### **Related Links:**

[Executive Management Conference Registration](#)

## **BANK NEWS**

### **M&A**

Bank of America has sold its corporate debt trustee business (purchased from LaSalle) to Wilmington Trust for an undisclosed sum.

### **60 Days**

The OCC and FRB has given Corus Bancshares a limited amount of time to raise additional capital. Corus has a Tier 1 risk-based capital ratio of 10.99% as of 12/31, however the agreement requires a threshold of 12%.

### **Forecast Recast**

The FRB downgraded the economic picture in coming quarters, saying the unemployment rate will likely rise to as much as 8.8% at the end of 2009, before dropping to 8.0% at the end of 2010 (it was 7.6% in January and the prior forecast from Nov. was about 7.4%). The FRB also projected lower GDP at -0.5% to -1.3% in 2009 (prior forecast was -0.2% to +1.1%). In addition, FOMC Chair Bernanke said recent economic data has been "dismal," global activity was "weak," that the recovery would be "unusually gradual and prolonged" and that we were living in "extraordinarily challenging" times.

### **FN/FH Bailout**

The Treasury announced it has doubled its financial backing of FNMA and FHLMC to \$200B each. The move is intended to improve support for the mortgage market.

### **No Building**

The American Institute of Architects is reporting its Architecture Billings Index slid to a historic low in January. Given there is usually a 12 month lag time between the time an architect is hired and a developer spends money on construction, this leading indicator shows softness in building activity will continue through the end of this year.

*Copyright 2021 PCBB. Information contained herein is based on sources we believe to be reliable, but its accuracy is not guaranteed. Customers should rely on their own outside counsel or accounting firm to address specific circumstances. This document cannot be reproduced or redistributed outside of your institution without the written consent of PCBB.*