

BAD MATH

by [Steve Brown](#)

Bad math comes in all forms, but it is especially prevalent in banking for some reason. Maybe we all like nice, easy, tried and true formulas or maybe we are just too tired to think anymore. No matter what is driving this problem, sometimes it makes sense to step back and think about the problem at hand to see if the way one may be grappling it is out of date and dare we say it - irrelevant or decoupled from the real world.

Take for instance non-performing assets/loans (NPAs) as a percent of loans. This calculation is sort of ok, as long as a bank is not actively deleveraging assets/loans (pretty much every bank out there these days) and reinvesting in lower risk weighted assets. Here, banks that are shrinking their loan book get hurt by the calculation, as "stickier" NPAs (that usually take 6 months to a year to come off the books) don't move much (numerator), while performing loans can be paid off (denominator) much faster. As a result, the percentage gets worse and worse the more progress a bank makes in protecting its capital (by acting rationally and paying down loans). While this is exactly what regulators and investors should want, many still use this metric today despite its significant shortcomings. Thinking about this another way, you can "game" the calculation simply by purchasing loans in the open market as you work on the NPA number. This increases the denominator at a faster pace than the numerator. While this will also strain capital ratios, it nonetheless fixes this particular calculation, so care must be taken as to the "value" of this metric all by itself. Perhaps a better metric would be to use NPAs-to-capital (since capital doesn't move around as much). Plus, just because you have an NPA it doesn't mean you will experience a loss (non-performing for administrative reasons, but 50% LTV on collateral). One possible suggestion is to consider incorporating NPAs-to-total assets to capture any shift from higher risk-weighted assets to lower ones.

Another metric that just doesn't make sense in this environment is comparing reserves to loans. This direct comparison of the relative size of the loan loss reserve and the loan portfolio is probably one of the most utilized techniques for evaluating the reserve, but it is flawed because it does not assign any "value" to partial chargeoffs taken (partially charged-off loans where the remaining recorded balance is considered fully collectible). As such, the ratio is almost always understated. To correct this issue, banks should gross up both the allowance and the loan balances that have been partially charged off, to see how much reserve was actually in place compared to the loan portfolio. By doing this added step, banks can better determine ALLL adequacy and get a visual viewpoint that more clearly explains where the bank truly has been and actions they have taken.

An offshoot of the one above is the heavily misused analysis comparing reserves-to-noncurrent loans. While it sounds good in print to compare how much a bank has available in reserves to cover noncurrent loans, it falls down in practice, as banks take partial chargeoffs which are not captured in this calculation. Here again, the ratio is typically understated as a result, so a bank that proactively charges down problem loans is not given credit for the action despite the fact that it may be a very prudent risk management technique.

Finally, NIM isn't a great metric to track either, particularly given structural changes in the industry. Consider that banks now leave interest bearing balances at the FRB which goes into NIM as interest, while just a few years ago that was not possible. Back then, banks left excess monies in cash, which

is non-interest bearing, so it did not go into NIM. Looking backwards in time and trying to compare NIM on a chart or report it to the board may have bankers thinking NIM is improving over time. In fact, once you hold all things equal, this single structural shift might be one of the primary catalysts for any NIM increase. NIM comparability over time is suspect given these industry changes.

Metrics are great, analysis is great and we are big fans of using math to stay on course (after all if you don't measure something it cannot improve). We just warn bankers to think more deeply about weaknesses of the math problem or analysis being used to demonstrate how your bank is doing, as it may be telling a story that simply does not make sense.

BANK NEWS

Cloture Vote

The move to end the financial reform debate failed, with another vote scheduled for 2:30pm ET today.

Poor Service

MSN Money's customer service poll ranks 5 of the national's largest banks in the bottom 10 companies with the worst customer service. HSBC came in 10th, Wells Fargo fell to 9th, Citibank took 8th, Capital One was 5th and Bank of America ranked 2nd. JPMorgan Chase missed the bottom 10 by a hair, taking 11th place. For customer service, consumers rank knowledgeable staff as the most important factor.

CDO Values

According to the WSJ, the FDIC has asked to replace Riverside National Bank (a failed institution) as a plaintiff in a 6-month old lawsuit in which more than a dozen brokers are being accused of inflating the mark-to-market on CDOs that they purchased in their investment portfolios.

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