Banking Deconstructed

by Steve Brown

We are big fans of the Science Channel's "How Stuff Works" and "Deconstructed." Exploring how our bones work together, the science behind

night vision goggles and how the Segway keeps upright beats most reality shows. We will even watch segments twice, as the inner workings of a glucometer sailed past our heads.

We wondered how many episodes should be devoted to banking. The primary function of a bank is financial intermediation. Banks borrow funds from a group at one rate and lend funds to another group at a different rate. Money is made by a "spread gap" between the cost of borrowing and lending. This sounds simple, but the key to producing a 12%+ ROE is managing that spread gap to achieve the most efficiency.

The control and measurement of margin is divided into 3 concepts: 1) value allocation, 2) expense allocation, and 3) cost of economic capital. We'll cover each concepts in more detail in future BID publications, but we'll define each today.

Value allocation is done through funds transfer pricing ("FTP"). Here value is assigned between service, liabilities and assets of a bank. FTP is strictly an internal performance measure. At community banks 30% to 60% of the "spread gap" (and much larger percentage of profits) is generated on the liability side of the balance sheet - depending on business model, geographic location and age of the bank. Most community banks calculate some FTP, mostly through term matching of interest rates. We find that the biggest challenge faced by CFOs at community banks is comparing the right curve, adjusting for embedded optionality (prepayment and caps and floors) and the modeling of indeterminate deposits.

The second concept, expense allocation, involves analytically less challenging concepts which have been around for a long time. Yet expense allocation, or assignment of cost to a process or person is the most difficult to understand. The importance of this measurement cannot be underestimated, as expense ratios are 60% to 75% for the average healthy community bank. Because the majority of expenses are incurred on shared systems and services, the average manager finds it difficult to attribute overhead to profit. Because all products are typically charged the average expense within a bank, we find that banks can increase accounting ROE by an average of 5% by simply being able to allocate costs appropriately and then measure return for business units and products based on "correct" costs. Going thru that exercise is eye opening, as it highlights which service, liability and asset products/divisions are profitable.

Finally, we touch on economic capital. The concept has been around for banks since the early '90s and while it has evolved significantly, recent credit developments indicate that some additional evolution is needed. Economic capital is a dollar measure that serves as a common allocation of equity to offset each risk within a going concern. Economic capital is attributed to each transaction in a portfolio and then calculated on a portfolio level. Because loans have complex and uncertain cash flows, elaborate analytical methods are required to capture such risk. Aside from safety and soundness, the primary purpose of the measure of economic capital is to align business units' performance with maximizing shareholder return. Economic capital helps banks price product, allocate resources, and create appropriate measurement goals for unit managers. In banking, two seemingly similar products can have widely different return on economic capital (as much as hundreds of percent difference). Being able to distinguish return on capital for two similar loans, where one's risk-adjusted return is -135% and another is 35% is huge in this market.

We doubt we'll see an upcoming episode on "How to Make a Loan" on the Science Channel, but stay tuned for future BID publications where we'll talk more about the above concepts and discuss them in greater detail.

BANK NEWS

Sell Thy Self

According to a prompt corrective action directive, the OTS has ordered Home Federal Savings ($14.9mm, MI) to merge.

Real Estate

Kowtowing to political pressure, Congress is set to pass an appropriations bill banning the FRB and Treasury from allowing banks to enter into the real estate brokerage business.

Freddie Mac

The Company will obtain another $31B in federal aid, as it posted a $24B 4Q loss.

SBA

Losses from loans stemming from lending programs jumped to almost $1.3B in 2008, more than double the losses in 2007 of $504mm. On another note, the House stimulus bill proposes an increase in government guarantees to 95% on certain SBA loans and increase loan limits to $3mm on 7(a) SBA loans.

Corporate Loans

S&P is reporting credit losses on corporate loans in 2008 reached $430B, or about 7x more than the prior 3Ys combined.