

DECISION-MAKING AND THE BLACK SWAN

by [Steve Brown](#)

Much has been made of the "Black Swan" concept lately so we wanted to highlight its relationship to banking. The popular book by Nassim Nicholas Taleb, called *The Black Swan: The Impact of the Highly Improbable*, argues that we should devote more resources in preparing for rare, low probability events that have a major impact. Written in 2007, the book eerily foreshadowed the risk environment around our current economic crisis.

The central thesis of the book relates to the enigmatic black swan. Before black swans were discovered in Australia, the world had no reason to believe these beautiful birds could be any other color than white. Without knowledge of such, no one stopped to ask the question if anyone had seen a black swan or if a black swan was even possible. As it relates to risk, the arrival of black swans can instantaneously change the game.

Black Swan events are not all bad. In fact, these unforeseen changes can help as much as hurt. For example, the rise of the Internet or the availability of TARP Capital was not something forecasted, but each has served to change how banks conduct strategy. From a business model standpoint, banks want to take the maximum amount of exposure to Black Swan events that could turn out to be positive, while minimizing exposure to negative Black Swan events.

That all sounds straightforward enough, except banking is largely based on the opposite view - a systemic problem in the industry. Loans and securities, for instance, have limited upside, but catastrophic downside. It is this asymmetric effect that is causing our industry to restructure. In 2008, for example, we found all the good times of 15% plus ROE didn't compensate for the negative times when loan losses shoot up. Since we are still living this down cycle, it is hard to speculate, but one possible outcome could be greater pricing going forward with possible more equity participation for exposure to commercial development or even subprime loans. While this wouldn't offset the credit exposure, it would improve the return in good times, allowing for a more symmetrical set of outcomes.

Another problem with Black Swan events is that since we don't know what we don't know, how do we plan? While it is difficult to predict Black Swan-type risk, there are some things we can do about it. For starters, we can better understand the limits of our models. Asset-liability, liquidity, pricing, credit stress, value-at-risk and other commonly used models all fell short at predicting actual risk in the last year. To come to the conclusion that models are worthless misses the point. All models contain predictive errors. The predictive error in our models now, for example, is a whole lot less than it was 18 months ago. These errors can stem from an adjustment in distributions, wrong probabilities or just missing a key risk element. The important point is that you know the model's limitations.

The classic example right now is our mortgage prepayment model, that helps predict cashflows in loan and securities portfolio. Historically, we have provided banks with one of the most accurate forecasts of future cash flow. Now that this huge Black Swan showed up at our door, we know that given the potential for loan modifications, spread changes and liquidity, we have a huge error factor introduced to prepayment prediction. As such, we do more planning around events outside of our model's analysis.

The importance of the Black Swan is to ask more questions around what other risks or opportunities you could be missing and how "fragile" or exposed your models are to error. Understanding your own decision-making process is the first step to making the Black Swan a welcome sight.

BANK NEWS

Stress Tests

The Federal Reserve has reportedly told Bank of America and Citigroup that they may need to raise more capital, based on results of the stress tests conducted on 19 of the major banks, the WSJ is reporting. Meanwhile, analysts at Morgan Stanley indicate SunTrust KeyCorp and Regions are the "most likely" banks to need additional capital. Results of the stress test are scheduled to be released May 4.

CU Closed

Eastern Financial Florida Credit Union (\$1.6B, FL) was closed Friday. The state noted issues with ongoing credit quality and noncompliance with accounting principles.

More Power

FDIC Chair Shelia Bair said in a speech yesterday that her agency should have expanded powers to take over and close financial institutions that include insurers or bank holding companies. She suggested forming a "good bank" "bad bank" model as part of the process and that the FDIC should have authority to close even large and "systemically important" financial firms.

No More Paper

American Express announced that it will no longer send paper statements to its more than 7.1mm cardholders after June 4th.

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