LOAN PREPAYMENT VALUE

by Steve Brown

Will Smith, had an interesting point in a 60 Minutes interview. Before he started his movie career, he researched what elements were present in top grossing movies. He found that to be successful at the box office, it helped to have aliens, romance, action, explosions and comedy wrapped into a single movie. Some 75% of the top grossing action movies had those elements including, E.T., The Terminator, Alien and the Star Wars films. Smith then went on to pick movies to work on like Independence Day, Men in Black and a host of other film to play on his findings. Where other actors would have taken any role suggested by their agent, Smith statistically put the odds in his favor by proactively going out and seeking those films that gave him the best chance of success.

In similar vein, banks need to structure loans that give them the best chance for profitability. Last week when we talked about optionality on a bank's balance sheet we had a healthy response. We made the assertion that community banks' balance sheets are rife with embedded derivatives that detract from shareholder value. Many readers raised questions, particularly as it relates to the loan portfolio. As such, over the next two days we want to highlight some details to give bankers better insight into structuring loan value.

Not all financial instruments behave as they first appear and what on the surface may appear to be a profitable asset, may in fact, after option-adjusted analysis, show itself to be a value detractor for a bank. For example, let's assume that a bank is willing to offer a borrower a $3mm, floating rate loan for a 5Y term, based on a 25Y amortization period. Immediately, the bank is short an option. If credit spreads widen, the borrower will not refinance the loan (the existing loan is underpriced and the borrower will extend the bank's underperforming asset). On the other hand, if spreads narrow, the borrower will prepay the loan and take out a new loan at smaller spread (assuming the transactions costs are compensated with a new lower rate). This is the very essence of lending: the lender gives the borrower a one-sided option. However, over the last year, the above loan would have decreased in value by approximately $93k as credit spreads on the average commercial loan have increased. There is very little a bank can do to avoid this optionality and extension risk, except prudently analyzing credit and charging appropriately.

Let's now consider the same structure on a fixed-rate loan. Many community banks will charge a premium for a 5Y fixed-rate loan since the loan can play havoc with a bank's asset-liability structure. Let's assume the bank does not charge a prepayment penalty. The value of the option the bank gives the borrower (the ability to prepay the loan if rates drop) is $139k. Stated another way, the cost of the option has reduced the bank's economic spread (gross yield) by 112.5bps. That means, that if you had to sell that loan (as many banks are now having to do), that loan would be 112.5bp less than a loan with a 5,4,3,2,1 prepay protection. If we assume that the bank can only obtain a 3,2,1 prepayment protection, than the value of the option to the borrower is approximately $41k and the gross yield on the loan should be 34bps higher to offset the value of the prepayment option. Assume the bank obtains a 5,4,3,2,1 prepay protection, but offers the borrower the ability to prepay up to 20% of the outstanding loan amount per annum. The bank has effectively given the borrower an option worth $61k or 49bps in gross yield equivalent. Banks that successfully win a loan from a competitor and still charge a higher rate are often times unwittingly giving up much of their higher spread to the borrower in the form of an option.

A key takeaway point is that not having prepayment protection on loans increases optionality and lowers loan performance over time. Understanding the value of this embedded optionality can help create more shareholder economic benefit and put the odds back in management's favor. Tomorrow, we will take a look at the value of caps and floors in this interest rate market.

BANK NEWS

M&A

BancIndependent ($778mm, AL) will purchase Citizens Bancorp of Lawrence ($115mm, AL) for an undisclosed sum.

FRB Confirmation

The Senate confirmed Betsy Duke as a Fed Governor. She will become the only Fed governor with commercial banking experience.

Bank Credit

Weekly bank credit reported to the Fed has fallen 9.1% on an annualized, seasonal basis. This is the fastest rate of decline in the history of the series.

Marketing Campaign

Online video contests are being used as marketing tools aimed at the 20-something demographic. Top entries often win prizes such as matching deposits, grants or job offers. One bank used a video contest to find its spokesperson, while promoting the company through user-generated websites, like Facebook and Twitter.

Equities

The Dow is down 14.5% this year and banks are down an average of 32% compared to last year. Most large and regional banks are trading between their 10Y and 20Y low.

Economy Getting Worse

Billionaire investor Warren Buffett said last week that he thinks the economy is not only in a recession, but is getting worse.