

# TIME TO UNDERSTAND LIBOR & amp; THE SWAP CURVE

by Steve Brown

Time is a funny thing. It continues forward endlessly, yet we do not consciously perceive its movement. When time is needed, it cannot be found. When time seems to stop, we often wish it would not. Since bankers have little in the way of extra time and time is money (and bankers love money), we will get right to the point of our article this morning.

We are often asked by bankers what the difference is between Libor and the Swap Rate. In general, when people refer to the "Swap Rate" (or Swap curve) and others say "Libor," they are both talking about the same thing. Forget all the chatter you have heard over the years about how difficult an index Libor can be, or how it is only offered by big banks, and read along for another minute or two.

When it comes to banking, there are basically 2 types of interest rate terms usually quoted to customers. The first is a short-term and the second is a longer-term. At the short-end of the maturity spectrum, when we examine the assets of a bank, we generically find Fed Funds, loans and securities. When we refer to 'Fed Funds,' we are nearly always talking about a rate that resets every day (i.e. overnight rate). When we look at loans or securities and refer to 'Libor,' we almost always talking about a rate that resets every 1 month or 3 months.

That is relatively straightforward; however the confusion seems to start when we delve deeper into loans. In an effort to help clear that up, consider that a loan coupon can based upon any index (i.e. Libor, Prime, FHLB, Treasuries, etc.) and can reset at nearly any frequency (i.e. monthly, quarterly, etc.). To keep interest rate risk from getting out of hand, large banks most often use 1 month Libor as a base rate for loans that have a coupon that resets each month and 3 month Libor for loans that have a coupon that resets each quarter. For really short daily lending (mostly to each other), large banks use Fed Funds, because its rate changes every day.

To get to the Swap curve, we need a little more background. Everyone knows that when banks make loans to customers, they must also get funding from somewhere. To do so, banks seek out and track their wholesale borrowing rate. To do that, large banks utilize a funding curve. In the old days, all banks used to use Treasuries as a rough proxy for wholesale funding costs. As time has marched on, however, the Treasury Department reduced supply and market volatility increased. Over time, these factors and others have shown Treasury rates are an unreliable way for banks to calculate their wholesale funding costs.

Therefore, in order to better manage interest rate risk exposures and calculate wholesale funding costs, banks needed a better mousetrap. That is where the Swap or Libor curve comes in. In short, the Swap curve is a yield curve similar to Treasuries, but with a lot more depth and 24-hour support from banks all over the world. In this global economy, bank finance teams need a consistent source they can use to approximate wholesale funding costs and manage risk. Since the swap market is the primary source of information about expectations for credit risk and loan demand on a global basis (and is used by large banks as the base level for deposit pricing), it has become the defacto standard base rate for loan and deposit pricing for all banks.

Specifically, the Swap curve basically identifies the relationship between various swap rates for various maturities. Put another way, the Swap curve is the rate at various maturity dates (2Y, 5Y, 10Y, etc.) where market counterparties will do Libor-based swaps with other counterparties, in return for the stated fixed rate (i.e. Swap rate) for the stated term. While there are other nuances to this, in general bankers aren't that far off if they think about a 2Y swap rate of 2.55% as the rate right now where market counterparties are willing to exchange such cashflows over that period of time.

In closing, Libor is the index, the rates for swaps of different maturities comprise a Swap curve and the Swap curve is the market consensus of where Libor is expected to move over time. Our time is up, but hopefully this helps clear up the confusion.

## **BANK NEWS**

#### **Foreclosures**

The MBA reported 2% of all homes in the country were in foreclosure as of the end of last month. The worst state in the country was CA, with 2.23% of all mortgages in foreclosure (about 9% worse than the national average). In addition, while subprime loans make up only 13% of all home loans, some 29% of them were delinquent or in foreclosure. By type, adjustable rate subprime mortgages were performing the worst, with about 35% in trouble.

### **Banking**

Merrill Lynch issued a new research report on the banking industry, cutting its 2008 and 2009 earnings estimates on mid-cap banks by 16% and 12% respectively. Merrill said more banks will cut their dividends in coming periods as credit issues, margin compression and regulatory pressure force further writedowns.

#### **Bad Statistic**

The latest tally shows banks and securities firms have taken \$245B in asset writedowns and credit losses related to subprime, more than the thrift crisis of the 80's and 90's in total dollar terms.

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