

The Month in Review

August 2009

What's New?

Check out the new monthly addition to Compass's newsletter, **Margin Tracker**. This new piece tracks the average 30 year Conventional Note Rate from previous day's locks across Compass's national pipeline client base against the FN 30 year conventional MBS out one month. It's a great source of indicative levels for production note rates and how much margin is priced into the secondary market.

Also be sure to check out this month's Topic of the Month which is Part 1 of a 2 part series on **MSR House Price Appreciation (HPA) sensitivity** and analyzes the impact that property valuation methods and forecasting have on valuing mortgage servicing rights (MSRs).

New in CompassPoint™!

Compass is pleased to report its recent development progress in CompassPoint™, including:

- Cash Treasury Valuation, Duration and Convexity
- UST Term Structure, Discount Function and Indices
- 5 Calendar Date Delivery Payup Schedule
- Best Delivery Month Best Execution
- Cash Flow Report Reference of Loan-Level Variable in CF calculations.
- BETA Stochastic Pullthrough Model w/Historical Price Look-back
- Expanded Bid/Offer Price Collection and Asset Marks
- Generalized Position Benchmark Builder
- Volatility Surface Mechanism for Option Volatility Inputs

CompassPoint™ features and capabilities reflect the business needs as defined and requested by its users. For additional information on new features or to submit suggestions and requests, please contact Rob Kessel at 415-462-7500 or e-mail at rkessel@compass-analytics.com.

Market Update

A volatile month for interest rates in July has now given way to a steady climb to begin August. The monthly parade of economic data has had a better-than-expected flavor recently and that, coupled with the increasing volume of new Treasury issuance, has pushed rates towards the recent highs seen in June. To put a cap on a tough week for mortgage and Treasury prices, the July employment report showed a payroll decline of (only) 247k jobs. June data was revised higher as well. This created the first improvement in the headline unemployment rate in many months – from 9.5% back to 9.4%.

Not that all the data have been rosy, and even positive readings are based on comparisons to well-deflated levels. June's construction spending increase of 0.3% and the pending home sales improvement of 3.6%, among others recently, garnered attention and put pressure on rates, but given how far those measures have fallen, monthly increases were bound to happen eventually.

The second week in August will bring to market the Treasury's quarterly refunding auctions. The total of \$75 billion in securities will likely put more pressure on rates, unless demand is stronger than what was seen in the last round of auctions. The Fed will also hit the tape with their announcement from the Open Market Committee meeting. What's typically been the Fed's favorite inflation gauge, the PCE price deflator, showed a decline to 1.5%, which will give the Fed additional comfort in leaving overnight rates at their current level. But, with some improvement in many recent economic reports, the markets may still head into the announcement with some anxiousness. Participants are still looking to each announcement and Fed minutes reading for signs of an eventual unwinding of the highly accommodative stance. Volatility may rule the next couple of weeks, but unless economic readings take another turn for the worse, at least a test of the June highs in rates may be in the offing. *—Lindsay Hill*

Topic of the Month: MSR HPA Sensitivity Analysis – Part 1

In this and next month's Topic of the Month, we will address the impact that property valuation methods and forecasting have on valuing mortgage servicing rights (MSRs).

First, a quick primer on MSRs: After most residential mortgages are originated, multiple entities retain interest and obligations in the mortgage. The borrower has to repay the loan, the owner of the mortgage or mortgage bond (investor) is expecting principal and interest, a mortgage insurance entity (e.g. Fannie Mae) may be involved to insure return of principal to the investor and finally an entity exists that facilitates the collection of payments (or default procedures in absence of payments) from the borrower and disbursements to insurers, investors, taxing authorities and insurers. Although the distinctions below also apply to investors and insurers, our focus in this and the next segment will be on that final entity, the mortgage servicer who has invested in MSRs.

Servicers earn servicing fees for their efforts. With few exceptions, the fee servicers earn is rate based, i.e. part of the interest rate (e.g. .25%) that a borrower pays on his/her mortgage. Servicers earn servicing fees as long as the mortgage exists and the borrower is making his/her payments. More formally, the servicer's economics (or present value of a single loan's MSR) can be expressed as follows:

$$PV_{MSR} = \sum \{CF_i / (1 + r/12)^i\} ; i = 1 \text{ to } N$$

Where i is the number of the monthly payment, N is last expected payment of loan, r is the expected annual rate of return on the MSR investment and CF_i is the net monthly cash flow the servicer receives. CF_i includes monthly servicing fees, interest earned on payment balances maintained by the servicer, interest expenses on advances made on behalf of the borrower and the expenses associated with servicing the mortgage which increase with collection and foreclosure operations.

In looking closely at the PV function components we see several areas that are likely to be impacted by future housing values (HPA). In order of importance, we see that N , the number of payments (CF_i) the

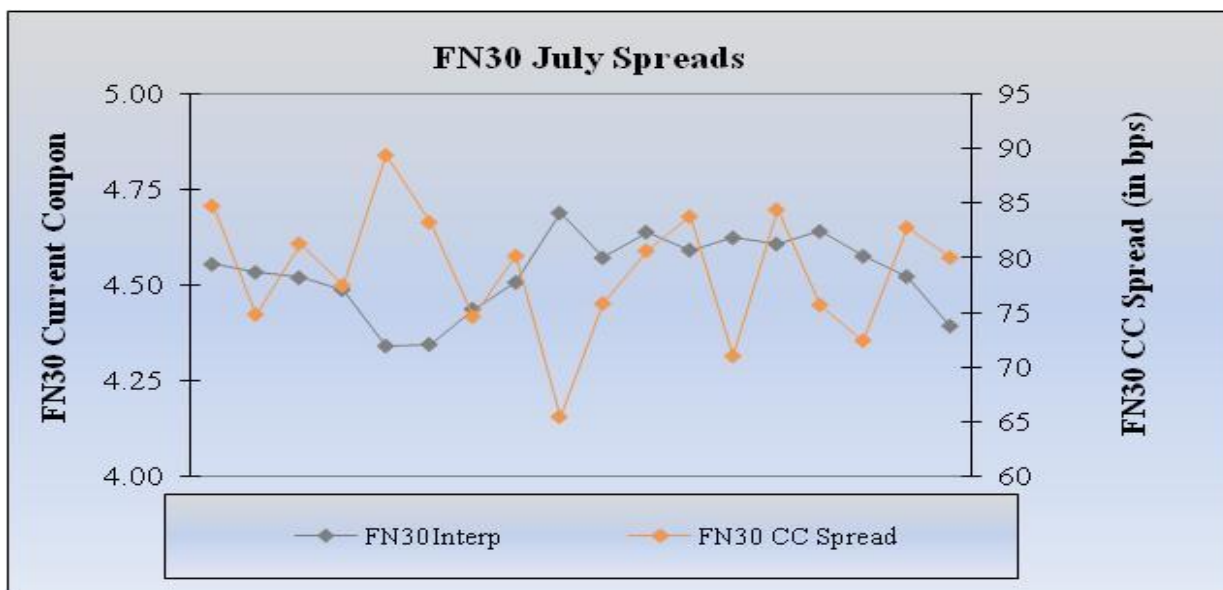
MSR investor actually receives, will be impacted by HPA if a HPA forecast accelerates or decelerates expected prepayments (N). We expect servicer costs and interest expense on advances to go up with greater payment defaults that typically come with depreciating property values (CF_i will be lower). And we reasonably expect that the interest a servicer will earn on borrower balances such as property tax and insurance will be impacted by HPA to the extent property taxes and insurance payments move with property values.

Similar to whole loans, MSR's are valued by models that apply an analyst's assumptions to specific loans or groups of loans in order to model cash flows that are then discounted to derive present value. These models include prepayment, interest earnings and expenses and servicer cost models that implicitly or explicitly bake in a specific HPA forecast(s). Analysts who wish to measure the HPA sensitivity of their MSR asset need to identify what HPA forecast is already being employed in model assumptions and then measure the asset's sensitivity to different HPA forecasts. To accomplish the latter, analysts must first develop the methodology by which model variables are expected to be impacted by different HPA forecasts. For example, if the baseline HPA forecast is 5% per annum, how does the analyst model the impact that a 10% HPA forecast would have on prepayments, delinquency and defaults, property taxes and insurance? In other words, how does the analyst take different HPA inputs and implement those inputs in the relevant models that drive the cash flows of the PV function?

In next month's piece, we will provide some of these answers and with the help of Compass's MSR cash flow model (CompassPoint™) demonstrate methodology to convert HPA scenarios into cash flow model adjustors and observe the associated MSR sensitivity to HPA forecasts. *—Rob Kessel*

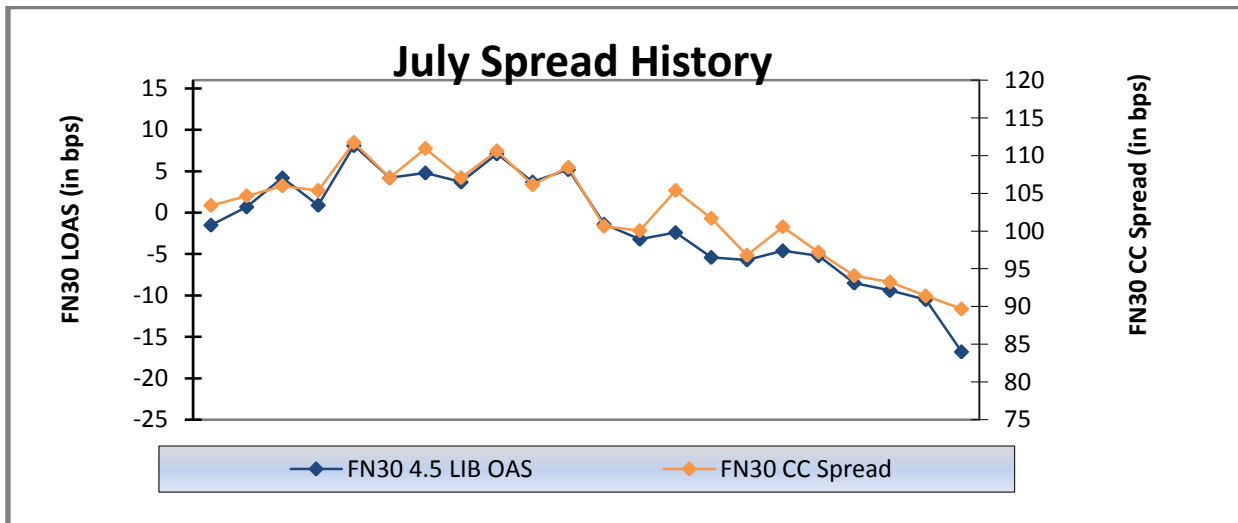
This article was originally written for Radar Logic's monthly newsletter, to see the newsletter in its entirety, please visit www.radarlogic.com.

Margin Tracker



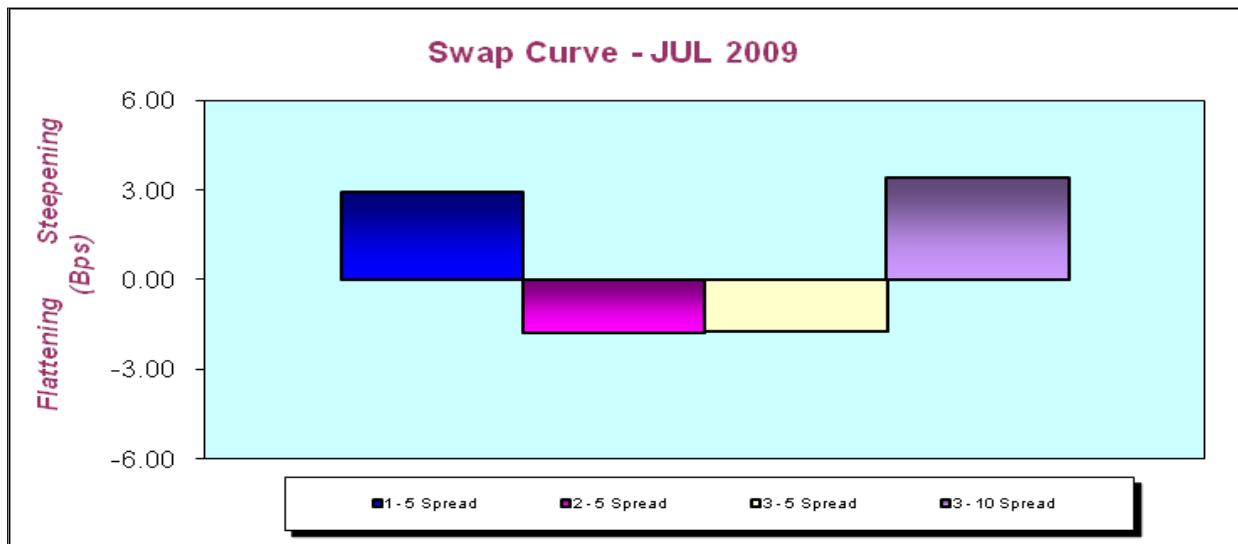
The FN30 CC Spread is the difference between the FN30 Note Rate and the FN30 Current Coupon, in basis points. The FN30 NR is the average conventional note rate across a subset of Compass's client base normalized for volume. The FN30 CC is the Fannie 30-year Mortgage Backed Security yield at par 30 days out. The difference between these numbers gives an indication as to how much margin is priced into the secondary market. The primary factors are interest rates and warehouse line constraints. Lenders may also be slower to improve rates during a rally, and quick to drop their pricing during a sell-off. During July, there was a 25bp peak to trough differential. Shown in the chart above, when the market rallied in the beginning of the month and rates hovered slightly above 4.25%, margins gapped out to 90 bps as lock volume jumped with the lower rates. Conversely, rates started to sell-off in the middle of the month, causing lenders to drop rates to induce borrowers to lock their mortgage. *—Dave Bennett*

Monthly Spreads



FN30 Current Coupon spreads tightened this month. FN30 Current Coupon spreads and LIBOR OAS both showed less volatility the last month. Treasuries 2-10's continue to tighten. Month end was 236bps compared to 242bps at the beginning of the month. *-Glen Brown*

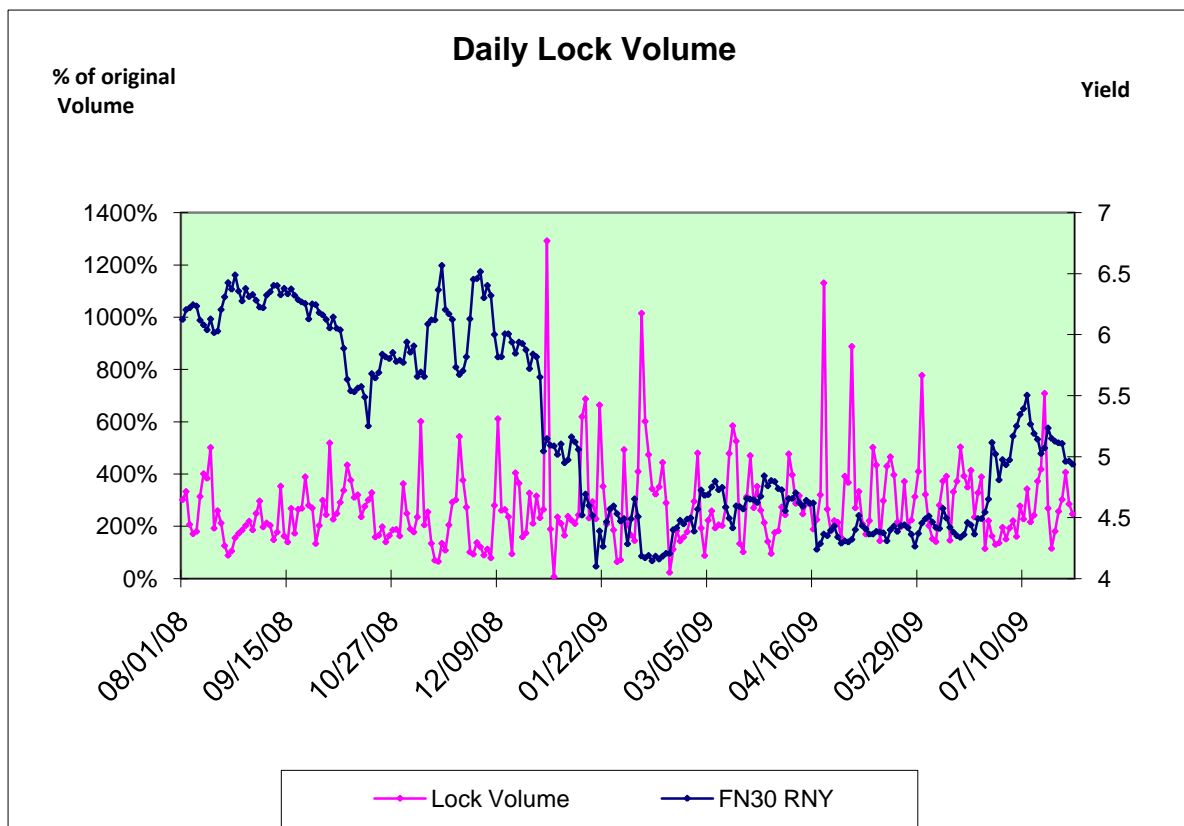
Swap Curve Analysis



Though there was some volatility in rates throughout the month as the market interpreted an abundance of data, the LIBOR/Swap curve finished July much as it started, with yields only slightly lower. 12 Month LIBOR recorded the largest move, off 10 bps from June's close. The 1-10 LIBOR/Swap spread widened about 8 bps to finish the month at 234 bps.

-Virgil Caselli

Production Index



Production in July decreased while rates traded in a narrower range (31bp range in July versus 69bp in June), with the average yield decreasing month over month. Average volume for the month was 252% of our base volume (vs. 270% in June) ranging from a low of 104% to a high of 581%. The average yield on the FN30 RNY in July was 4.93% (vs. 5.12% in June) ranging from a low of 4.73% to a high of 5.04%.

-Brandon Case