RATELAB

MERRILL LYNCH US RATES STRATEGY

# We Are Going to Party Like It's 1991

The chart below should be quite familiar to regular readers of the Ratelab. But to remind you, this is a chart of the Option Adjusted (model) Duration of the constant current coupon "Par MBS" versus the Slope of the Yield Curve as measured by the 10 year Swap rate minus the 2 year Swap rate. This is not rocket science: As the curve steepens, forward rates rise relative to spot rates. As this occurs, the model perceives the probability of a rate driven prepayment to be reduced. The lower the possibility of a ReFinance, the lower the "delta" on this prepayment option. Since the OADuration is just the sum of the positive cashflow duration of the stated mortgage payments minus the negative duration of the callability, the lower the "delta", the greater the duration of the MBS.

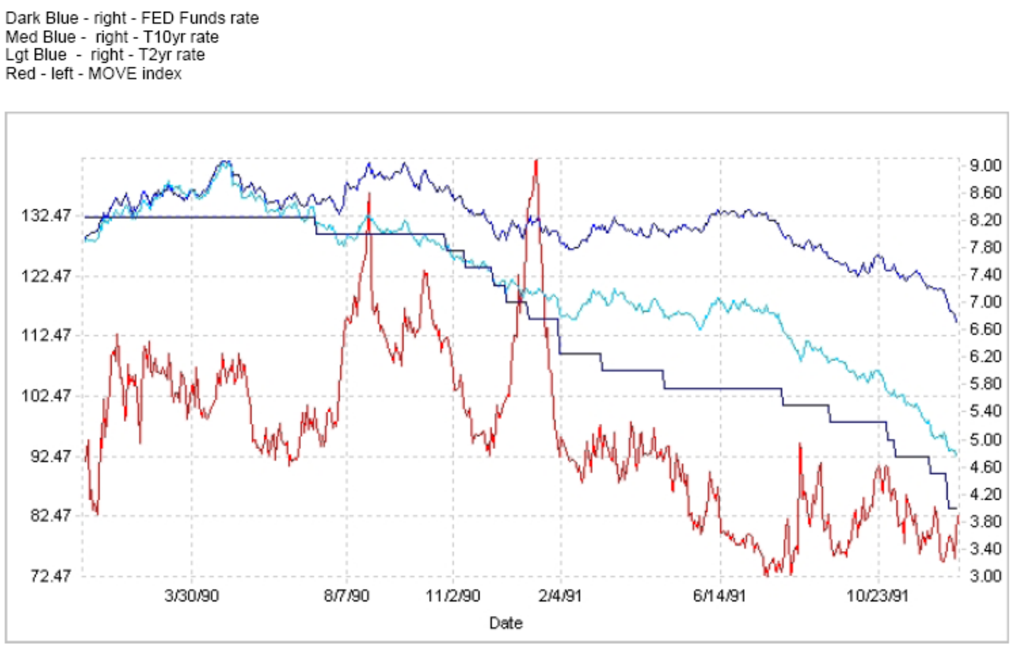
This has been a key theme for us at RateLab over the past few months. We have proposed that if rates were to decline further from present levels, it would be FED induced and lead to a much steeper curve. As such, it is theoretically possible that MBS could actually extend as prices increase, an idea totally contrary to conventional wisdom.

Red - right - Current Coupon OADuration
Blue - left - Sw10yr rate minus Sw2yr rate

## This Might Look Familiar:

This concept by itself is NOT worthy of deep thought, especially when the current SubPrime debacle is the leading topic of the day. However, there is a knock-on effect that is interesting. Most Hedgies and line traders were kicking the slats on their cribs the last time we had a meaningful housing crunch. This occurred from 1989 to 1993 when the S&L industry over extended itself into the real estate markets. To remind you, the USGovernment formed the Resolution Trust Corporation (RTC) to buy out the loans and close down the various S&Ls. The real losses incurred were about $250bn. Residential property values declined, especially on the coasts where substantial speculative investment occurred during the late 1980s.

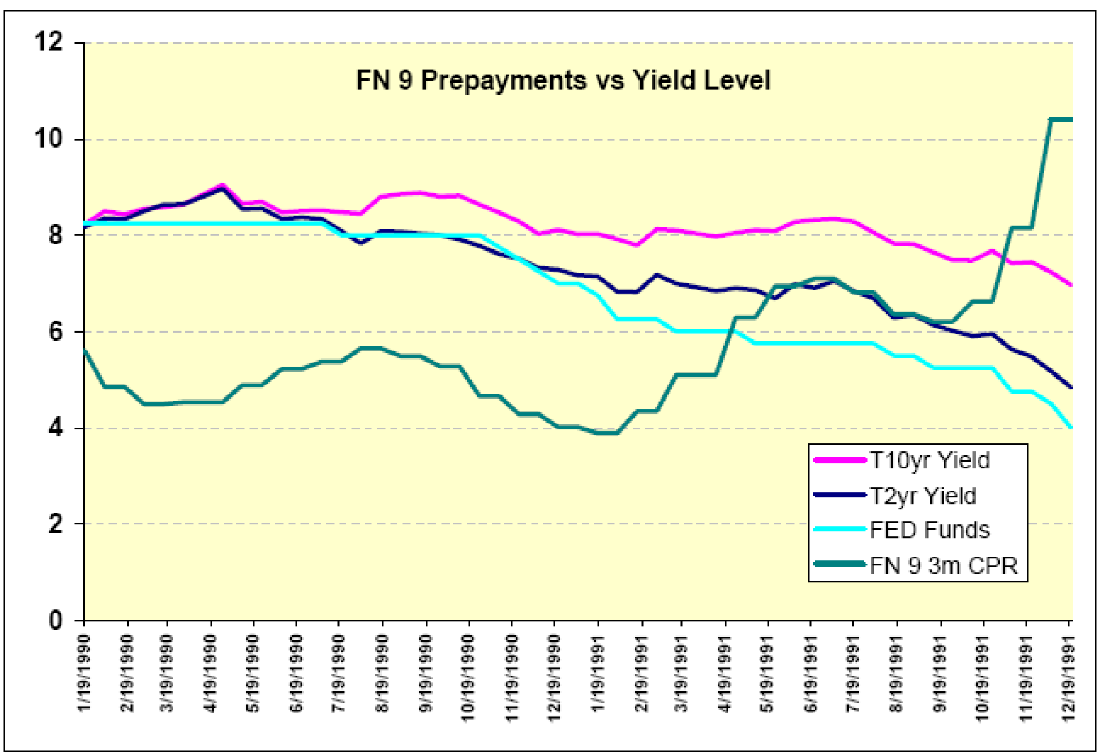
As shown below, The FED made their first rate cut in mid-1990. This was followed by a much more aggressive easing as the economy slowed in 1991. The curve steepened and volatility, as measured by the MOVE Index, rose. Notice how *the curve led the FED to lower rates*, similar to our current situation.



## The Models Are Turned Upside Down:

Basic prepayment models have three main drivers:

1) Core turnover are prepayments that occur that are not rate driven. These are generally people who move to change jobs or buy a larger house. Consequently, GDP is the key driver of core turnover.
2) Fixed to ARMs prepayments. The Yield Curve can create ReFinancing via a substantial steepening. This is why focusing solely on long Tsy/Swap rates or fixed current coupon rates can be suspect for proper hedging.
3) Loan to Value (LTV). A rate driven ReFinance is usually not a modification of the outstanding loan. As such, it entails an all new application process. When property values are increasing, as they did over the past five years, some loans will ReFinance even when rates are higher as the homeowner will tap into his increased equity to paydown credit cards or other high rate consumer debt. On the flip side, if property values decline to the extent that the outstanding loan is greater than the value of the real estate, the homeowner becomes "locked in" and cannot ReFinance, even if current rates are below his contract rate.



Similar to our current situation, in the early 1990's many LTVs rose above 100%. The –light blue line- is the target FED Funds rate. The –dark blue line- and the –pink line- are the Tsy 2yr and Tsy 10yr respectively. The –green line- is the actual three month prepayments (CPRs) for the entire FN 9s cohort. Notice how prepayment speeds declined from mid-1990 to mid-1991 despite the FED easing almost 200bps. In conjunction, Tsy 2yr rates and Tsy10yr rates declined by about 100bp and 50bp, respectively. It took another 200bps of FED easing, and proportional declines in other rates, to finally kick prepayments into high gear.

## What Are The Implications?

There are certainly a lot of moving parts to the MBS market, aside from prepayments, that can impact Passthru prices including Implied Volatility and core OAS risk spreads. That said, we at RateLab expect the following:

1) The SubPrime induced credit/liquidity concerns will steepen the Yield Curve and make MBS much longer.
2) A general slowdown in the economy will reduce job transfers; moreover, an associated decline in consumer confidence will hinder homeowners from "stepping up" to a larger home. This will reduce core prepayments and make MBS longer.
3) Lower housing prices will create a large cohort of +100% LTV homeowners. Their inability to ReFinance will make MBS much less rate sensitive, i.e., less negatively convex. (We will ignore the default induced prepayments since that is de minimus for Prime conforming loans.)

## Trade Idea:

MBS options are mathematically too cheap. Although difficult to manage, long MBS options positions should outperform in both up and down markets since the underlying bonds will soon trade longer than their recent empirical/realized durations.

ML US Rates Strategy
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