

Re: Mortgage Strategy Business Plan

Objectives of Mortgage Strategy

- monitor the value of the mortgage sector relative to other bond markets
- to identify and monitor relative value opportunities and MBS trading strategies within MBSs
- evaluate broker-generated trade ideas
- evaluate risk-reward profile of new products
- recommend trade ideas to the portfolio managers
- monitor portfolio performance and duration tracking
- hedge analysis
- assess and anticipate the impact of exogenous events on markets (e.g. regulation)
- write research and performance reports for clients

Procedures for identifying relative value

In my opinion, **the MBS markets are not sufficiently efficient to consistently correlate “value” with “price performance”, as they often lack the required linkage of liquidity.**

While securities that offer “value” usually perform well, it is also often the case that good total return performance can be extracted from securities that deliver “relatively rich” cashflows (e.g. balloons), as well as poor short-term total return performance from securities that provide valuable cashflows (e.g. long PAC Zs). This is because, very often, **“technicals” can overwhelm the relative value relationships.**

My philosophy is to differentiate between “value” and “technicals”. Value can be identified by applying and analyzing a number of statistics and procedures, such as yield spreads, breakeven spreads to the total returns of benchmarks, total return projections, volatility of cashflows, vector analyses, replication of cashflows in the swaps markets, market implied prepayment speeds, estimates of duration and convexity, and even OASs. None of these methods can be used on a standalone basis, and should be subjectively analyzed to determine if the bond’s cashflows are cheap. Most of these methods are also used to determine a bond’s risk characteristics, which should determine if they are suitable investments for the money under management. The choices among analytical techniques often depend on the type of security being analyzed, but ultimately, they need to be subjectively assessed. Even some portfolio managers with very sophisticated black-box computer models occasionally purchase securities that their “eyes like, but their models hate”.

Value should be sufficient criteria to justify purchase for investments that are to have a long horizon, where returns are to be captured through the receipt of cashflows, and liquidity is not necessarily required. This should be especially true of the insurance money under management. Analysis to identify value will, however, usually correlate with the technicals for liquid bonds. Such analysis, for example, led me to recommend 15-year Passthroughs last fall, 15-year companions this April, and discount GNMA over discount conventionals in mid-June. I am currently recommending 30-year discount companions for the similar reasons. However, relatively illiquid bonds are also often cheap e.g. PAC Zs, and should have a place in portfolios.

“Technical” become more of an issue for portfolios where the investment horizon is likely to be shorter. Technicals involve the analysis of primarily historical data - prices, price spreads, yields, spreads, OAS trends, etc. The primary reason for analysis of technicals is that pricing discrepancies often reverse in the marketplace, allowing one to earn relatively high total returns over short periods. These type of analysis is also important for indexed portfolios, where the identifying passthroughs with a pricing discrepancy relative to another with a similar duration can allow one to incrementally outperform a benchmark. For products with greater liquidity, such as passthroughs, it is possible to recommend securities that might be rich from a value perspective, but have attractive technicals. However, for illiquid securities and sectors, it is critical for the bonds to possess fundamental value; attractive technicals (such as a spread widening) alone are not sufficient reasons for investing, as they might not revert. It is also important to understand the market’s reasoning behind the technical price movement, since exogenous factors, such as the recent FAS 115 and FFIEC debates, can permanently alter the pricing of securities e.g. 15-year backed and Balloon PACs.

It is important to consider both value and technicals in the analysis of any sector. Very often, the technicals hide fundamental valuation changes for a given class of securities. For example, the FFIEC debate led to a great concern about extension risk in CMOs, and led to 15-year backed PACs tightening dramatically in response to increased demand by bank held-to-maturity portfolios. This increased demand for 15-year backed PACs is, in my opinion, permanent, and will imply tighter spreads relative to 30-year backed PACs. While this made 30-year paper relatively cheaper, as they offer better value for the cashflows and risk, the sector that tightened in this case, 15-year backed PACs, is unlikely to snap back toward the 30-year spread levels.

Another sector where technicals overwhelm fundamentals is in ARMs. Fully indexed 1-yr. CMT ARMs are, in my opinion, consistently rich, as they have greater demand than supply, even though there are alternative short duration assets, such as short PACs, that offer significantly better convexity, value and total returns. In contrast, teaser ARMs have exhibited much greater volatility, in spite of significantly better risk-return tradeoffs than their fully indexed counterparts, as they are dramatically influenced by supply issues. Depending on the type of money being managed, and the NAV and horizon considerations, it is possible to recommend both types of ARMs.

Computing effective hedge ratios also involves analysis of both fundamentals and technicals. For example, for current coupon conventionals that are being bid-up due to demand from CMOs, the effective durations and convexities are likely to be different from those suggested by OAS models, as these securities often widen as they drift away from being the current coupon. Identifying pricing under different movements in rates, by analyzing historical price data, is likely to be more effective for estimating passthrough durations. Similarly, analyzing CMO pricing at different price levels (premiums or discounts), relative to interest rate levels, is likely to be more indicative of realized price changes.

It is thus important to analyze both the fundamental value of a security, as well as the technicals involving in its pricing. The analysis should be considered in light of the constraints of the portfolio being managed, in order to arrive at a buy or sell decision.

Street Research Interaction

Given the labor intensive nature of relative value analysis, it is important to leverage off the street as much as possible. Independently evaluating the trade ideas put forward by the street should be a large part of the strategist's responsibilities. From the street's perspective, the strategist should be an integral part of portfolio management, and the street should have direct access to the strategist in order to postulate and discuss concepts.

Required Analytics

The processes detailed above require both a large amount of computer-driven analysis, as well as subjective thinking for identifying inputs to models and assessing the results of analyses. The following resources are likely to be sufficient for the purposes of generating and evaluating trade ideas, short of building a proprietary system.

- Bloomburys with CMO Passport & 2 screens
- Yield book
- Pru's IMPACT
- Portfolio analysis software - GAT ?
- Historical price data - passthrough and IO prices, and brokers' inventory offerings of CMOs.
- Historical prepay reports & float reports
- Personal computers with communications, spreadsheets, word processing, statistics

Building proprietary analytics might be attractive from a marketing perspective, but I would not recommend it. It is likely to be prohibitively expensive, will take a long time to develop (1-2 years), might be obsolete by the time of its completion, and will require a full time staff to maintain and modify. Given the MBS market's inefficiencies and susceptibility to technicals, a dependence on too much precision is likely to be as dangerous as not enough quantitative analysis, as the recent Askin experience shows.

Additional Assistance

- MBA - finance w/ math, CS, engineering or economics (quantitative) undergrad
- Secretarial/Organizational assistance + data input (optional)