

A Primer On How To Manage And Reduce Hedge Costs

Careless work and incorrect assumptions can increase problems while decreasing profits.

By Bob Gundel

Hedging a pipeline of loans for mandatory delivery, capturing as much of the best-efforts-to-mandatory spread value as possible, while reducing and managing hedge cost, are paramount to the success of secondary marketing managers' (SMMs) business. For lenders selling loans on a mandatory basis, the gains associated with hedging equal the pickup in price they receive for mandatory sales over best-efforts sales less any hedge cost.

But what is hedge cost? Where does it come from, and how is it calculated? By choosing to sell loans mandatory and, therefore, holding locks until they fund and are eligible for sale, lenders expose themselves to both interest-rate risk and fallout risk. In order to manage these risks, most lenders hedge by buying and selling securities to the broker-dealer community using a dynamic pull-through model.

In a dynamic pull-through model, SMMs add hedge coverage after the market sells off and reduces hedge coverage following a rally. The fact that hedgers are adding and removing coverage in response to changes in the market creates a natural cost of hedging. However, there are several other factors that can contribute to increased hedge costs: mismanaged and inaccurate loan and hedge data, inaccurate pull-through modeling and assumptions, and various other operational deficiencies.

One of the most important factors for an SMM who is considering profitability and hedge cost is calculating and recording an accurate day-one profit margin. This means pricing to a mandatory execution when generating rate sheets, maintaining and re-



ording accurate corporate/base margins, and managing and recording any originator-level margin adds/subtracts.

The base premise here is that if you do not know what your day-one margin is, you do not know what you are expecting to make when you originate a loan - which makes it difficult, if not impossible, to measure how well the loan performed when reviewing gain on sale and realized profit margin.

For example, let's say that on Day N, an originator prices a loan on a mandatory execution and records 100 basis points (bps) of corporate/base

margin but incorrectly assumes an additional originator margin add of 25 bps. On Day N+30, when the originator sells the loan to an investor, the realized profit margin is 97 bps instead of the 125 bps that was expected.

By incorrectly recording margin for this loan, the SMM believes the hedge cost to be 28 bps and is stuck wondering how this loan underperformed - when, in reality, the hedge performed very well, protecting 97% of the true profit margin.

Another common scenario that causes inaccurate day-one margin is when lenders price loans on their rate sheets using a best-efforts execution rather than a mandatory execution. When lenders price in this manner, a portion of their true day-one margin is attributed to the best-efforts-to-mandatory spread.

In this case, assume that a lender prices a loan to a best-efforts execution and records a day-one margin value of 75 bps. The SMM assumes that the total margin value will be the 75 bps of base margin plus the recent average mandatory spread value of 40 bps, for a total margin value of 115 bps. However, the best-efforts-to-mandatory spread is a moving target; on any given day, the spread can vary by product, delivery term and note rate.

For this particular loan, the best-efforts-to-mandatory spread value is only 21 bps, which means the actual total margin value is only 96 bps.

When the loan is sold, the SMM realizes 91 bps of margin, as opposed to the 115 bps that the SMM was expecting to make on the loan.

In this scenario, the SMM is again wondering how the hedge cost on this loan is in excess of 20 bps. By incorrectly recording margin for this loan, the SMM is searching in vain for reasons why the loan underperformed when, in reality, the hedge performed quite well. More importantly, the SMM is unable to isolate accurate originator-level hedge cost in this scenario and, therefore, cannot establish proper originator profit margins to protect himself from originators that truly have excessive hedge cost.

Outside of measuring true hedge cost, mispricing margin, as seen in the above examples, can have adverse effects on pull-through modeling and can cause inaccurate coverage levels, which impacts hedge performance.

Another key factor in moderating hedge cost is producing accurate mark-to-market (MTM) valuations on locks and inventory, as well as mandatory commitments and hedge instruments. On the loan side, this is crucial both when pricing loans as they are originated, and throughout the life of the loan lock.

An accurate MTM on locks and inventory ensures that loans are priced correctly at origination and provides SMMs with the confidence to anticipate gain on sale in order to manage cash requirements and produce monthly financial accounting standards (FAS) reporting. Accurate MTM on locks in the pipeline, coupled with accurate cost and margin data, is also necessary for calculating hedge coverage in a dynamic pull-through model. Inaccurate hedge coverage due to flawed MTM valuations can lead to major losses in certain market environments.

Accurate loan MTM is also vital to the maintenance of warehouse relationships, because many warehouse lenders require reporting on MTM prices for funded loans being held for sale. Major deviations between MTM and mark-to-trade (MTT) pricing would certainly be perceived by warehouse lenders as high-risk.

Recording an accurate MTM valuation on hedge instruments is also necessary for successful pipeline hedging. An accurate MTM on trades allows SMMs to manage cash requirements for pair-offs, as well as margin requirements, while providing a measure for performance analysis and allowing for accurate monthly FAS reporting on open hedge instruments.

The right stuff

Loan data integrity is absolutely critical to producing an accurate MTM. In order to have a confident mark, lock characteristics, occupancy, loan-to-value ratio (LTV) and combined LTVs and credit-related data must be recorded correctly in order to arrive at a base price and then be properly adjusted for investor loan-level price adjusters. Inaccurate recording of loan data can increase hedge cost exponentially, severely impacting profitability for hedgers.

Let's assume that a lender originates a loan on Day N and records an inaccurate representative FICO score and, thus, does not pass along the appropriate price adjustment to the borrower. The loan funds and is sold to an investor on Day N+32. On Day N+45, the SMM receives purchase advice on the loan and is forced to absorb the credit-related price adjustment, thereby greatly increasing the hedge cost on the loan.

Inaccurate data can also lead to inaccurate underwriting, which can have devastating effects on loan delivery eligibility. Hypothetically, let's say that a lender originates a loan with an 85% LTV but incorrectly indicates that the property will be owner-occupied instead of an investment property. The loan is underwritten to a specific investor's guidelines, and those guidelines state that the maximum LTV for an investment property is 80%.

However, due to inaccurate occupancy data, the guideline violation is not caught. The loan is sold to the investor, but during the review period, it is denied due to ineligibility, and the SMM is forced to sell it as a scratch-and-dent - which greatly increases the hedge cost on the loan.

Mismanaged pull-through assumptions represent another leading cause

of poor hedge performance. The keys to successful pull-through modeling are strong analytics, data integrity and frequent analysis.

Lenders using a pull-through model typically look back and analyze pull-through across a defined time frame to determine how the pull-through on their pipeline changed in different market environments. They use that historical data to set and manage their pull-through assumptions and set coverage levels. Using stale, dated pull-through assumptions can lead to losses in the right market environment.

For example, let's consider an SMM who is selling loans mandatory but has not performed a pull-through analysis in over a year. Over the course of the last year, several changes have occurred, including the addition of new branches and updates to the hedge policy and best practices. The market has experienced a sell-off over the course of the last month, and the pull-through assumptions are calling for 70% hedge coverage.

However, following the addition of more seasoned originators and less "operational fallout" as a result of operational improvements implemented over the course of the year, the realized pull-through on the pipeline is 81%, severely affecting performance for the month.

As this example illustrates, different originators have different pull-through ranges. Those with a tighter range of pull-through typically have lower hedge costs than originators with a wide range of pull-through, especially in volatile markets. By performing analysis and revisiting and updating pull-through assumptions regularly, while using pull-through data to set originator level margin, lenders can minimize hedge cost associated with mismanaged pull-through assumptions.

Another critical element in successful pipeline hedging is having multiple delivery channels for loans. Lenders with several options will typically deliver to the investor the best price in order to squeeze every last basis point out of the loan and maximize profits. This means that investors are competing with one another

for the lender's business and product.

The need to keep pricing competitive means that lenders with multiple delivery options tend to see better investor pricing than lenders that have a single delivery option. More competitive mandatory pricing means an increase to the spread over best efforts, which should result in increased profitability if all other things are equal. Multiple delivery options then create another level of best execution for SMMs to model and analyze when selling loans.

SMMs should consider investor, coupon and delivery-month best execution when calculating MTM on locks and inventory, as well as when they are preparing to sell funded loans to investors. With the proper technology, deriving accurate MTM pricing that factors in all applicable note rate, occupancy and credit adjustments; delivery cutoffs; early bonuses and price spiffs across multiple investors can be achieved in a timely and accurate manner. Lenders failing to capture best execution at the time of sale create opportunity cost results in higher hedge costs, because the full best-efforts-to-mandatory spread value is not realized.

Rocky markets

There is also another issue at play: The continued volatility of the mortgage market is positively correlated to hedge cost, and typically, increased volatility means an increased cost of hedging. There are a number of fac-

tors contributing to this, including a widening of the bid/ask spread for hedge securities in volatile markets. In a volatile market, broker-dealers want to pad their theoretic edge over fair value, and they do this by bidding securities at slightly lower levels and offering securities at slightly higher levels, thus widening the bid/ask spread.

Lenders hedging a pipeline and paying the bid/ask spread feel the effect of worse hedge execution on their bottom lines. In highly volatile markets, it also becomes difficult to market time-hedge security transactions and loan sales. Pair-off timing is always a critical factor of effective hedging, but it becomes extremely difficult in highly volatile situations.

High market volatility also has adverse effects on pull-through - typically decreasing - and renegotiations - typically increasing. One positive result of market volatility is the effect it has on the best-efforts-to-mandatory spread. We expect the spread to widen as market volatility increases, because investors are expecting their hedge costs will increase.

Therefore, investors may reduce what they are willing to pay for unclosed loans to offset the increased cost. This widening of the best-efforts-to-mandatory spread helps to somewhat offset the increased hedge cost we expect the lenders to experience in a volatile market.

The last key components SMMs need to manage in order to maximize

profitability is in the post-closing processes. Poor delivery performance and purchase reconciliation inadequacies can both lead to reduced performance. Once a loan is committed, the loan documentation must be delivered in a timely manner in order to allow investors time to review the loan prior to purchase.

Meeting delivery dates and ensuring that all the required documentation is included in the file are critical to avoiding the extensions and fees associated with rolling trades. When purchase advice is received from investors, it must be addressed and resolved in a timely fashion. Failing to do so will result in the need to roll commitments, subjecting the lender to fees.

SMMs should monitor loans that are aging on the warehouse line in order to avoid unnecessary costs associated with rolling commitments. They should also monitor and analyze purchase advice, looking for common themes in order to find areas where processes and procedures need improvement. SMMs should also monitor and analyze any discrepancies between anticipated gain on sale and realized gain on sale in order to improve MTM valuations and to ensure that the loan was, in fact, purchased at the correct price. **SME**

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