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Consider All The Economics To Maximize Your MBS Profits

Pipeline and risk management may be the focus of most managers, but execution selection and optimization are equally important to the bottom line.

BY TED KRAMER

A primary focus of most secondary marketing managers is pipeline and risk management, consuming the majority of available resources on development/installation and ongoing refinement of the requisite tools.

Many shops, however, would be well served by refining three areas equally critical to maximum profitability:

- comparative analysis,
- mortgage-backed securities (MBS) pool optimization, and
- daily pricing.

Many may be missing key economics, as well as the tools to accurately measure and incorporate them and to exploit all available opportunities for arbitrage.

With the numerous options for asset disposition and the ever-shortening duration of servicing-released contracts (three to six months being typical today), the need to accurately evaluate the many economic variables is more important than ever.

Most of the factors - such as optimized pool formation - are critical to all three areas. However, to best illustrate the relativity of some key economic variables, we will perform a comparative analysis of two execution methods available for servicing-

released sellers hedging their own pipeline: assignments of trade (AOTs) and co-issues.

These examples are for demonstration purposes only, and the results in no way endorse a particular type of outlet. Each scenario is unique and must be evaluated on its own merit based on market conditions at the time.

Comparative analysis

Oftentimes, the biggest economic opportunities are missed before the first loan or pool is sold, during the evaluation and selection of an execution method or outlet.

In the current market environment, the service-released premium (SRP) paid for the first 25 bps of servicing by AOT buyers may be substantially larger than that of co-issue buyers. At first glance, the differential - in some cases, as much as 70 to 80 bps - may appear too large to overcome.

But, as Figure 1 shows, after factoring additional economics, a different picture emerges. Indeed, a 75 bp SRP differential is erased after factoring just a subset of economics, including interest spread, roll value and optimized MBS prices.

Let's break them down.

Two factors often underestimated or overlooked altogether - and difficult to derive without the proper tools - are roll value and net interest spread. The two share a causal relationship - delivery cutoffs.

Roll value. Co-issue transactions use the agency delivery cut-offs for MBS pools. The standard cut-off is generally five business or seven calendar days prior to the Bond Market Association (BMA) settlement date. For a fee, the agencies offer programs to

further shorten this cut-off to as little as one business day.

Delivery cut-offs for AOT transactions can be as much as 10 to 20 days prior to the agency (and co-issue) cut-off. The additional time provides the AOT buyer ample time to receive,



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Figure One

The initial higher service-released premium of assignment of trade issues is erased after accounting for additional factors. Figures are in basis points.

	AOT	Co-Issue	Difference
Base SRP	1.990	1.240	(0.750)
Roll Value	(0.251)	0.077	0.328
Net Interest Spread	0.116	0.130	0.014
Optimized MBS Price (including excess)	101.744	102.027	0.282
Agency "Early Funding" Fee of 3 bps on 14%	-	(0.004)	(0.004)
AOT Suspense Roll	(0.043)	-	0.043
Non-Impond Fee (10%)	(0.038)	-	0.038
Setup Fee \$100 vs. \$40	(0.070)	(0.028)	0.042
Final Cost	103.448	103.441	(0.006)

review and purchase whole loans prior to placing them into pools by the same agency cut-off date.

As a result, the AOT seller will incur a roll (pricing to the following settlement month) several days before the agency cut-off. And further increasing the roll, the seller typically needs additional days to prepare and ship whole loans versus pools.

The difference is particularly significant in the current environment, where the roll is easily 40 bps or more.

In Figure 2, roll economics are calculated for an average AOT scenario. For precision, the values are weighted across the seller's daily historical closing distribution.

The baseline assumption is that loans closed in November will be placed in (and/or priced to) December pools. Note that loans closed on or after the 17th will be priced to January, incurring a weighted roll cost (for the month) of 25.1 bps.

In Figure 3, the co-issues extended delivery cut-off permits 14 additional days of November production to be priced to December. Also, closings through Nov. 5 will be included in November pools, for a positive roll, relative to the December baseline.

The resulting weighted roll is +7.7 bps, a pick-up of 32.8 bps. Note that an agency early funding option was

used to extend the pool cut-off. A 3 bp fee was applied to the affected loans.

A common misperception is that the roll is simply passed on in pricing, and is therefore not relevant. Not true: this is a tangible economic benefit to the seller - and often one of the largest - particularly at today's security price roll levels.

Net interest spread. The AOT's weighted net interest spread in Figure 2 is 11.6 bps. We have assumed an average of seven calendar days from receipt of a whole loan to purchase by the AOT buyer. Post-purchase, the buyer receives the benefit of spread through BMA settlement date.

In contrast, the co-issue seller receives interest spread through BMA settlement, increasing net interest to 13 bps. While the pick-up may seem smaller than expected, keep in mind that five days of closings are now settling in the same month, versus being held through December settlement.

An agency or private gestation repurchase line (repo) is another tool, providing balance sheet (warehouse) relief and, in most cases, increasing net interest spread due to the lower cost of funds. For clarity, our analysis will not contemplate repos.

When comparing the MBS price

component of multiple outlets and/or methods, many comparisons begin and end with macro calculations in two areas: guaranty fee and excess servicing valuations.

All too often, present value calculations, similar to this one, are the sole determinants of the MBS price differential.

AOT implied G. fee: 22.

Co-issue G. fee: 18.5.

Difference (3.5) x yield:price multiple (3.63) = present (price) value (12.705 bps).

The yield:price multiple used was the inter-coupon multiple between 5.5 and 6 securities. Another commonly used value is the average of agency buy-up and buy-down multiples for the then-current par rate.

As Figure 1 shows, the fully optimized differential was actually much larger: 28.2 bps. This is more than can be explained by the excess servicing multiple or a larger guaranty fee multiple. Why?

There are far too many moving parts influencing optimal pool formation (virtual pools in the case of AOTs) to be captured by the macro approach.

To properly compare multiple execution outlets, an entire net pipeline - or recent production in similar market conditions - should be fully optimized and pooled against each outlet's rule sets.

This is another area where, without the proper tools, many shops leave significant value on the table by not taking advantage of all arbitrage opportunities. This is an area equally critical to executing optimal pooling and forward sales strategies.

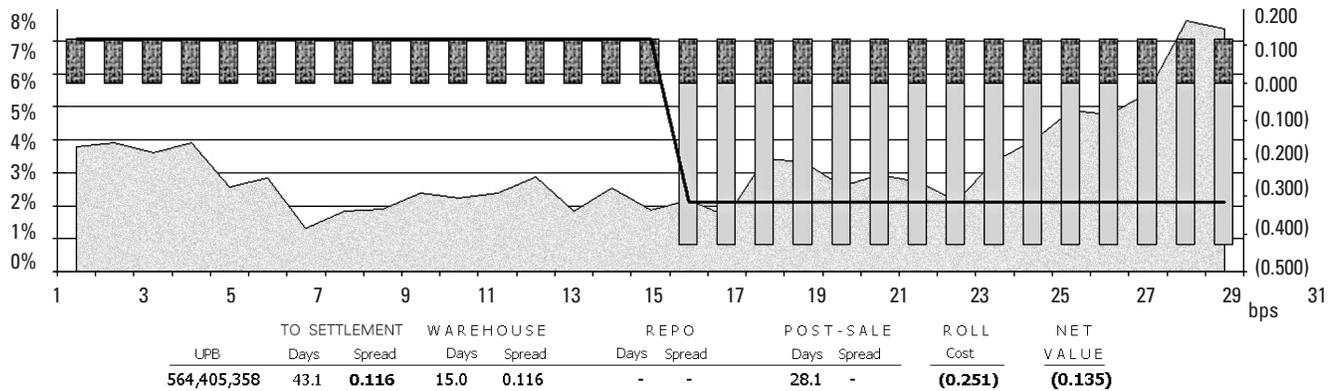
The elements fundamental to MBS pool formation are considered to some degree in most in-house best execution models: security prices, guaranty fees, agency buy-up/buy-down grids and excess servicing values. They are also the easiest for most analysts to incorporate into their spreadsheet applications.

Indeed, many AOT buyers now even supply a basic customized best execution model to the seller, placing each note rate into the high or low coupon yielding the greater sale proceeds.

Some of the buyer-supplied models

Figure Two

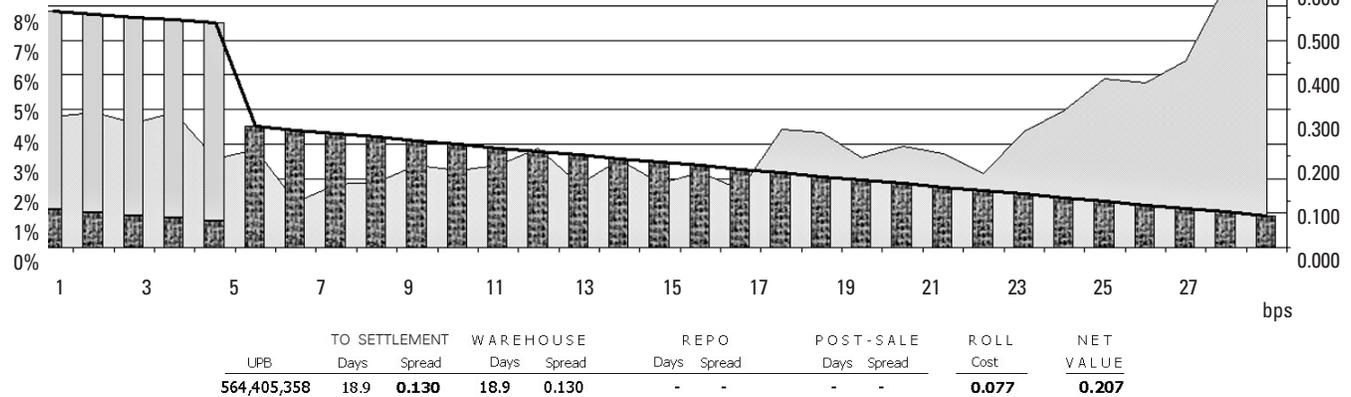
Roll value is an important factor that should not be ignored. This sample AOT shows an FHLMC 30-year securitization with a weighted gross note of 6.223%, a weighted coupon of 5.7% and a cost of funds of 3.4%.



SOURCE: TMK Consulting

Figure Three

This sample co-issue shows an FHLMC 30-year securitization with a weighted gross note of 6.223%, a weighted coupon of 5.7% and a cost of funds of 3.4%.



SOURCE: TMK Consulting

may be adequate for their specific rules sets but are far from what is needed to optimize other outlets and methods. And use of multiple models creates another set of issues, including data redundancy and integrity, making an apples-to-apples comparison difficult.

Convexity adjustors

It stands to reason that as the number of rules and price adjustments increase, flexibility and opportunities

for arbitrage decrease.

As a seller moves further away from the secondary market transaction, additional variables - in the form of adjustments and/or restrictions beyond the agency requirements - must be considered.

The majority of these variables are convexity-driven, at a minimum, aimed at mitigating the buyer's financial risks associated with prepayment or negative convexity. Convexity adjustors take the form of several,

often overlapping variables. The majority price and/or limit the amount of excess servicing created:

- agency buy-up and buy-down multiples,
- price caps,
- adjustments to price and/or servicing multiples,
- pooling restrictions limiting excess servicing or the value paid,
- gross margin caps,
- buy-up caps,
- buy-downs (no excess creation),

- maximum excess value paid,
- servicing valuation methods,
- note level vs. aggregate and
- single vs. multiple tiers.

Clearly, with so many moving parts, a comprehensive analysis is necessary.

The AOT and co-issue values in Figure 1 labeled Optimized MBS Price (including excess) were obtained by using TMK Consulting's proprietary MBS Pool Optimizer. For each scenario, all of the relevant variables were taken into account and optimized. To accurately measure the impact of the convexity adjusters, the seller's actual net pipeline (note rate) distribution was used.

Even the more sophisticated in-house models, employing rarely used techniques such as partial buy-ups and elective and partial buy-downs, fail to take full advantage of a parameter common to many co-issue, as well as forward bulk, contracts: aggregate excess servicing valuations.

Consider the co-issue scenario. Had each note rate been optimized on its own merit - as is the case in an overwhelming majority of models - the optimized price would have been 101.954 vs. 102.027.

By optimizing at the aggregate level, we have picked up an impressive 7.3 bps over the note level approach - a rare capability in the marketplace. And this value can be larger, or smaller, depending on the parameters and the note rate distribution.

Additional considerations

Figure 1 includes an AOT suspense roll value. Most, but not all,

AOT programs require a full or partial file review prior to purchase. We have conservatively estimated that 10% will incur a roll due to suspense conditions.

We have also included differentials

A common misperception is that the roll is simply passed on in pricing, and is therefore not relevant.

in transaction fees (i.e. delivery or set-up fees) and non-impound fees for demonstrative purposes, though these may not always differ. Additional factors must also be considered, and can usually be applied as top-line adjustments.

In all but the rarest cases, there will be incremental costs to prepare and deliver whole loans versus pools. In our example, the additional time frame's impact on roll costs has already been accounted for. Some examples of other incremental costs include labor, copying and mail.

Captive value is the present value of a seller's internal captive reinsurance, if permitted by the buyer. More often than not, AOT buyers do not permit this. Co-issue transactions vary.

The so-called secondary market captives (SMCs) are not relevant to

AOT transactions. With SMCs, the agencies are the benefactors of captive reinsurance coverage, passing some of the value on in the form of reduced guaranty fees.

To compare with precision, the pipeline should be optimized with and without the SMC reduction to guaranty fee.

Many times, the devil is indeed in the details. Besides the obvious loan-level adjusters (investor properties, second homes, etc.), carefully comb your bid language for additional factors such as mix of business percentages and additional convexity adjusters outside the pricing exhibits. Many are quite punitive.

One intangible example is the value of a direct agency relationship. Each seller must assess and assign a value to, among other things, the ability to negotiate credit (underwriting) guidelines or participate in community lending initiatives.

Without the proper tools, much of the margin that secondary marketing managers strive to protect (by an effective hedge) are eroded - or never realized due to improper selection of outlets.

The ideal tool facilitates analytics, optimization and pricing from a common set of inputs - for consistency, efficiency and the ability to quickly adapt as outlets change. When origination levels begin their next inevitable downward cycle, superior competencies in these areas will be even more critical to preserving margins.

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