Risk Management Fundamentals for a Mortgage Banking Operation

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Hedging is a concept that walks hand in hand with risk management across all industries that market products.

Hedging is the process of reducing exposure to a specific risk. Some risks are hedged by purchasing an insurance policy. The amount of the insurance coverage purchased is dependant, among other things, upon the users aversion to risk and the price of the insurance. Buyers of insurance often adjust the deductible and the coverage limits to reduce the premiums they must outlay for the protection.

In some cases users determine that it is more cost effective for them to self-insure. Self-insuring usually involves accruing or setting aside enough capital to cover the damages they would otherwise offset with an insurance coverage claim.

Regardless of the decision the decision maker understands that there is a cost of hedging. The goal of hedging is to trade this smaller more predictable cost for the larger less predictable cost.

Mortgage bankers have many risks they must hedge. There are many significant risks that mortgage bankers encounter for which there does not exist an insurance provider, in the classic sense. Mortgage bankers must use other vehicles to create the insurance coverage they require.

Some of the risks that fall into this category are Production Risk, Interest Rate Fluctuation Risk, Loan Application Fallout Risk, Underwriting Risk, Delivery Risk, Warehouse Capacity and Financing Risk, Loan Prepayment Risk, and Inflation Risk.

Before we define these risk elements let us take a moment to examine the business of mortgage banking. One major element that separates mortgage banking from commercial banking is that the mortgage banker does not intend to invest in the loans they originate. Thus, the mortgage banker does not focus on net interest margin, the interest rate sensitive gap or other bank portfolio management considerations.

The mortgage banker seeks to accrue profits by retaining a portion of each interest payment made by the borrower. This typically ranges from ¼% to ½ % in annual interest rate. The balance of the interest and principal are passed on (or through) to the investor who purchased the loans from the mortgage banker. The mortgage bankers that fit this conduit business model are known as seller/servicers.

A variation on the theme occurs when mortgage bankers sell this right to the future interest stream along with the conduit obligation. Sellers of the debt servicing rights are paid a price that is expected to equal the net present value of the profit stream accruing to the conduit function. These participants are known as mortgage brokers or loan brokers.

Both of these businesses are exposed to risk. However, the path they choose will determine the

types of risk that are most prevalent and most painful.

Production risk is universal in mortgage banking. The process is critically dependent upon volume. Quantity, quality, turnover ratios and the unit profit of loan production are all vital to the final profit picture. The first domino in the chain reaction is production. It sets the stage for the outcomes that follow.

The mortgage banking business gravitates toward being a commodity business not unlike farming, ranching, mining, etc.. To fight this attraction participants endeavor to create new products or delivery methods that will separate them from the crowd. Subprime and high LTV loans are just two examples of boutique creation. In the end, if these innovations gain customer acceptance the niche is swarmed by others and the herd syndrome soon turns the product line from "value added" into a commodity.

In a commodity market if one builds too much profit into their price to the consumer the consumer will go elsewhere and very few sales will be made – a bad outcome. On the other hand, if the price of the product is too cheap the seller will lose money with every sale (origination) – a bad outcome. These are but two of the considerations that production risk poses.

Interest rate fluctuation risk is the risk that a change in interest rates will cause the held for sale loan portfolio to be worth less than the cost of producing – a bad outcome.

Loan application fallout risk is the risk that the portion of the held for sale portfolio comprising unclosed loan applications will not close. This might be the result of the loan being rejected in underwriting or being withdrawn from consideration by the borrower or correspondent representing the borrower. There are also case known as "soft fallout" where the loan is closed but post lock-in concessions were made to the borrower or correspondent. These concessions make the loan less valuable in the secondary marketplace – a bad outcome.

Fallout is one of those risks that has a compounding or amplifying impact on production and interest rate fluctuation risk. The other risks that were mentioned earlier are all significant but to expand the discussion at hand the three mentioned will provide ample fuel.

Why hedge at all? Let us turn that question around. Why would we not hedge? Some would say it costs too much to hedge.

These operators would wait until a loan application has actually closed before deciding how and where to market the asset. The cost of hedging may be too high depending upon how they are approaching hedging, the mix of hedging vehicles they use, and the quality of the loan production they are handling.

Even when that is true the answer still does not automatically equate to not hedging. If a pipeline is studied over several months and pipeline cycles it can be shown that the total outcome would be more profitable if no hedging was performed. Unfortunately, and most importantly the event risk that exists is great enough and occurs often enough to exceed capital draw down levels set by most bankers, stockholders and regulators. Thus, bankers that have considered this eventuality decide that they must either hedge or not be in the mortgage banking business.

The most straightforward hedging approach involves selling pre-closed loans to the investor on a best efforts basis. The best efforts contract obligates the seller to deliver loans only if the loans actually close. Thus, from the seller's perspectives fallout and interest rate risk have been hedged.

The price received for loans sold under this arrangement is often at least ¼ of a price point lower than the buyer would pay were loans delivered under a mandatory delivery contract.

The ¼ price discount is greater than what many mortgage bankers feel it costs to originate loans. The element of production risk increases since best efforts sellers are at a bidding disadvantage to

mandatory sellers.

Many best efforts contracts also require that the seller release (sell) the servicing rights to the investor. The seller must weigh whether the price received is greater than the value of retaining those same servicing rights.

With the best efforts marketing approach we can see the features of an insurance policy. Also, we see the risk / benefit trade-off decision process being involved. In laying off one risk did we increase another beyond an acceptable level?

To deliver into mandatory commitments the mortgage banker must be prepared to manage the pipeline using one or more hedging vehicles. They also may need to change how they view risk.

The hedger will likely begin to separate the act of hedging from the act of loan packaging and delivery. There are a multitude of tools available to hedge the pipeline. The list includes flow-based commitments, master commitments, mortgage backed securities (MBS) forward sales, MBS put options, options on US Treasury securities, exchange traded futures contracts, and options on exchange traded futures contracts.

The level of sophistication required to prudently apply these vehicles obviously varies. The need to implement computer software increases with the use of non-deliverable hedging vehicles. Another thing that tends to change as the mix of hedging instruments grows is the viewpoint used to manage risk.

The closer on the spectrum one is to using delivery slotting (matching) as the hedging approach the more they will view pipeline risk in terms of the Net Loan Volume at Risk. When the hedging mix changes the question changes. Now the question is what is the Net Loan Value at Risk? This also requires software support.

Many feel that this change in perception from Volume at Risk to Value at Risk is required if a mortgage banker is to become a market leader. Others say it is lonely at the front of the pack.

The common thread is mortgage bankers must be hedgers. Hedgers must be comfortable with the risks and rewards their specific hedging and business model create.