

Risk Management Strategies for Mortgage Servicing Rights

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Risk Management Strategies for MSRs



- Global Hedge Strategies
- Measuring Economic Value of Mortgage Servicing Rights
- Hedging strategies for MSRs - Economics vs Accounting
- FAS 133 Challenges with Hedging MSRs

Global Hedge Strategies

- Global Hedge Strategies
 - take into account all offsetting risks within the entity
 - attempt to minimize hedge costs and basis risk when there are natural offsets in the business model
 - work best in mortgage companies that have a balanced business model between production and servicing

Global Hedge Strategies

- Global Hedge strategies would view all the components in an entity that are subject to interest rate risk to determine the net economic value at risk in the company:
 - Mortgage Servicing Rights
 - Pipeline and Warehouse
 - Portfolio Loans or securities on the balance sheet
 - Production Capabilities

Measuring Economic Value of Mortgage Servicing Rights



- **Defining Economic Value at Risk**
 - What are the mortgage servicing rights worth to your company?
 - Should be viewed on an all-in basis including all value related to the customer relationship
 - Should be viewed on a required return basis - I.e. how much return does your company require on this investment, given the risks?
 - This return requirement may vary in different rate environments given other business risks

Measuring Economic Value of Mortgage Servicing Rights



- Components of Economic Value at Risk
 - All traditional servicing cash flows (service fees, ancillary income, float benefits, costs to service, foreclosure costs, yield maintenance, etc.)
 - Economic value may also be comprised of
 - Prepayment estimates using internally developed prepayment models
 - OAS Valuation techniques

Measuring Economic Value of Mortgage Servicing Rights



- Additionally, an economic value may include:
 - Costs of Hedging
 - Funding Costs
 - Deferred Tax Benefits
 - Cross Sell potential
 - Internal customer retention capabilities

Hedging Strategies for MSRS - Economics vs Accounting



- In a perfect world, using a global hedge strategy with a balanced business model, a lot of entities would not need to hedge or would need to hedge a small amount of net risk
- So, why do we all have to hedge?
- **ACCOUNTING RULES!**

Hedging Strategies for MSRS - Economics vs Accounting



- In trying to provide a stable return to shareholders, entities try to minimize volatility in the income statement
- In a perfect world, the gain or loss on your mortgage servicing rights would be offset in your P&L by the gain or loss on your pipeline/warehouse position and the production franchise value

Hedging Strategies for MSRS - Economics vs Accounting



- It is not a perfect world
 - MSRs are LOCOM, so limited mark to market gains
 - Warehouse is LOCOM, so limited mark to market gains
 - Production Franchise value is not recognizable until earned
 - Pipeline is mark to market, new under FAS 133

Hedging Strategies for MSRS - Economics vs Accounting



- So, to the extent we try to use global hedge strategies and natural business hedge offsets, we still have potential P&L volatility from the timing difference
- Other accounting rules have impacts
 - FAS 140 bucketing issues
 - FAS 140 - market value vs economic value

Hedging Strategies for MSRS - Economics vs Accounting



- Hedging strategies for MSRs should focus on economics
- Must have a view of accounting implications
 - bucketing issues
 - timing differences

FAS 133 Challenges with Hedging MSRs



- Portfolio of similar assets
 - Number of buckets to manage increases the more granular you become in your valuation modeling
- Translation between portfolio of similar assets and FAS 140 buckets
- Sliding Scale issues
 - Can result in significant ineffectiveness

FAS 133 Challenges with Hedging MSRs



- Derivatives tied to different indices other than designated benchmark can lead to basis ineffectiveness
- Derivative value change attributable to the passage of time flows through the P&L as ineffectiveness
- Designation of hedged risk may result in not hedging the right risk economically (e.g. LIBOR rate vs mortgage rate)

Risk Management Strategies for MSRs



Questions?