

# PowerSeller® Risk Manager

## Risk Assessment Methods

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### Overview

PowerSeller allows you to apply a variety of risk measures to your pipeline hedging efforts. These efforts include Value At Risk and Volume At Risk.

### Value At Risk

The value at risk or dynamic stress framework is a sophisticated yet very practical way to view your exposure in terms of bottom-line profit sensitivity. The PowerSeller value at risk framework ties together a multitude of factors and returns a risk reading upon which it is easy to focus, understand and take action.

Risk in this framework is defined as the loss or gain in market value of a given position that is expected to occur for a specified probability.

The PowerSeller Value At Risk (VaR) may incorporate all of the following items:

- Current Value Levels
- Price Sensitivity Dynamics
- Loan and Hedge Volume Dynamics
- Direction of the Interest Rate Change (vector)
- Interest Rate Volatility of Base Line Instrument
- Yield Spread Dynamics vs. Base Line Instrument
- Impact of the Passage of Time
- Forward Price Structure of Mortgage Markets
- Obligation Terms to Borrowers
- Earliest Practical Delivery of Loans
- Targeted Release Date of Coverage
- Impact of Instrument Liquidity and Market Friction

### Volume At Risk

The volume at risk framework is another often used approach to measuring risk exposure and one that is provided with PowerSeller. Practitioners who utilize cross-hedging techniques are most likely to apply this technique. Why? The volume at risk measure allows you to convert oranges to an equivalent number of apples. Once this is accomplished you may then answer the question how many apples do I need to hedge this basket of fruit. In this case, the apple is benchmark instrument, by which all other fruit is calibrated.

The volume at risk framework does not focus on profit or profit sensitivity. Rather, it looks at price sensitivity. This price sensitivity can be provided in either a static or dynamic context.

The PowerSeller Volume At Risk may incorporate all of the following items:

- Price Sensitivity Dynamics
- Loan and Hedge Volume Dynamics
- Direction of the Interest Rate Change (vector)
- Interest Rate Volatility of Base Line Instrument
- Yield Spread Dynamics vs. Base Line Instrument
- Impact of the Passage of Time
- Obligation Terms to Borrowers
- Earliest Practical Delivery of Loans
- Targeted Release Date of Coverage

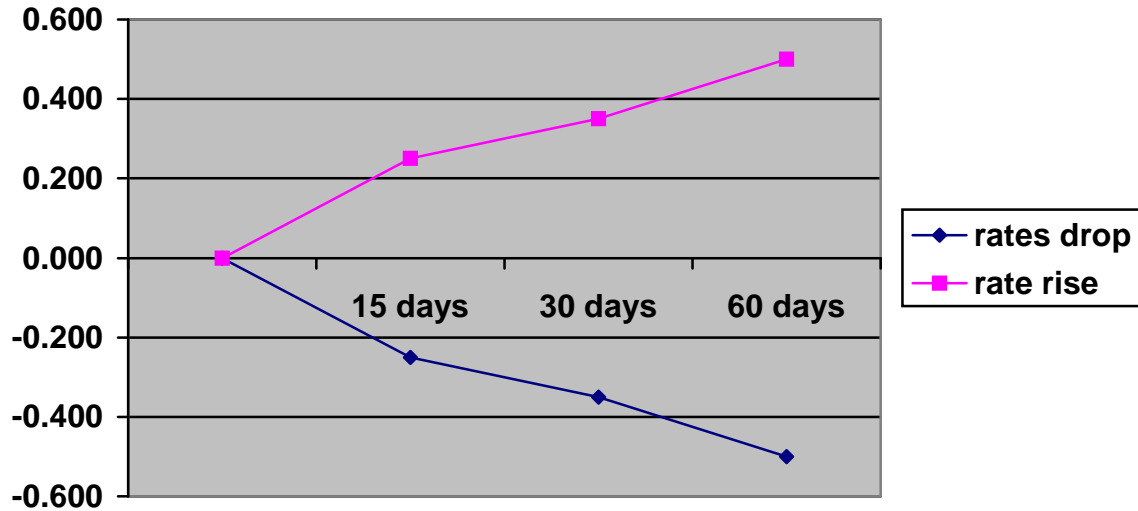
## The Rate Cone

The first item that impacts the value at risk measure is the baseline rate shift evaluated. This is the catalyst that sets off the chain of events in the calculation that returns the profit sensitivity factor that is PowerSeller's value at risk measure.

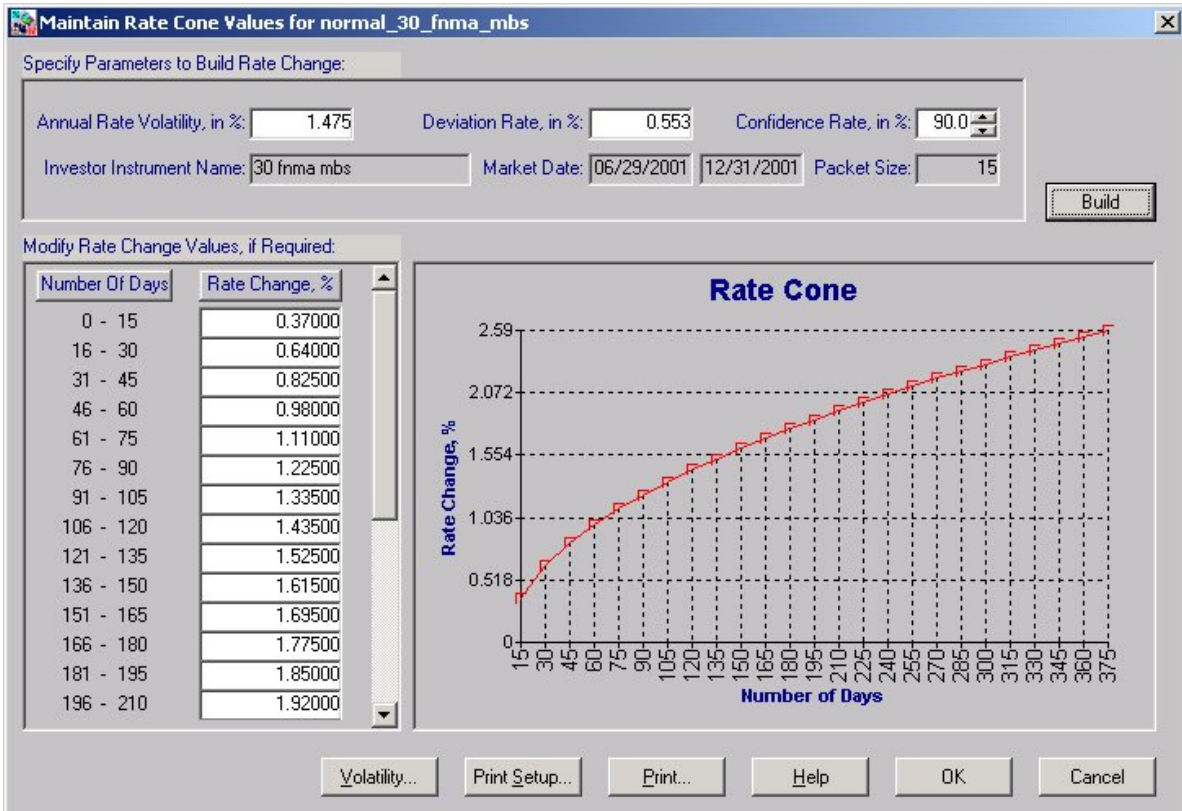
We subscribe to the theory that the longer the time frame the more interest rates may fluctuate.

We supply a process to incorporate the most appropriate interest rate risk exposure for a specific loan into the hedge analysis process.

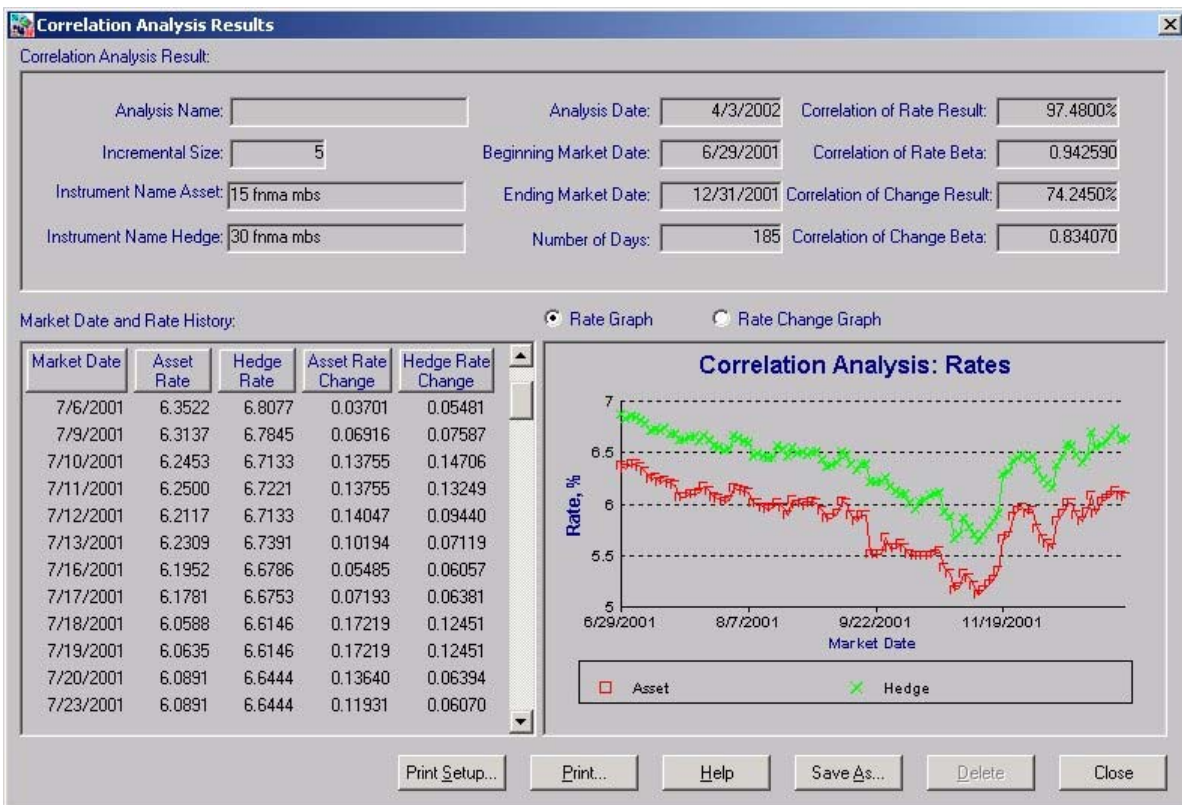
Typically if you graphed a series of loans with ever increasing Days until Delivery for both a higher and lower rate vector the result would be cone shaped.



PowerSeller provides a workplace to develop rate cones that will provide the baseline rate volatility . The base rate shift horizon may be edited to suit your modeling requirement.



PowerSeller provides the user with a tool to view interest rate fluctuation rates for specific products and time frames.

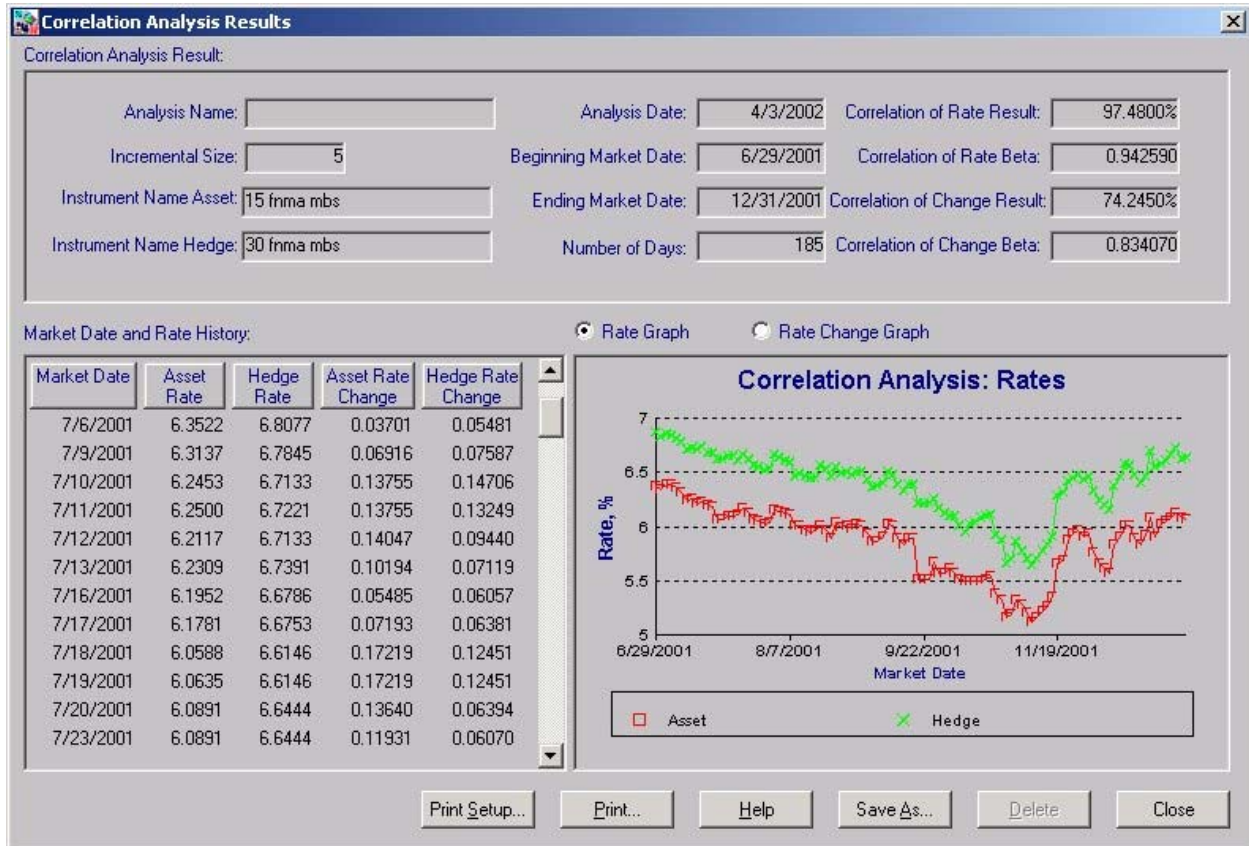


## The Rate Beta

Many users focus on duration or the price sensitivity of the asset and hedge to a change in interest rates. But, do not consider the magnitude of the interest rate fluctuation, nor the possibility that one markets interest rate may move faster or slower than another's.

PowerSeller's Rate Beta tool allows you to use the base line volatility you created with the Rate Cone and modify a specific instrument's volatility for lower and higher rate shift conditions.

In addition to the volatility study tool, PowerSeller provides an interest rate correlation and beta analysis tool.



For more information about PowerSeller's Risk Manager, contact ASC at 800-628-4687 or check us out online at [www.powerseller.com](http://www.powerseller.com).