**RiskGPS: Risk Tolerance Assumptions**

**Purpose of the Margin Risk Tolerance Report**

The Margin Risk Tolerance report is not a regulatory requirement for Interest Rate Risk (IRR) compliance. Instead, it serves as an internal management tool to assess the level of risk your bank can sustain before it adversely affects capital. This report helps determine how much risk the bank can afford, based on current performance trends.

RiskGPS automatically estimates most Risk Tolerance assumptions using the bank’s recent performance data. These estimates should be reviewed and adjusted, particularly if projections for the next four quarters differ significantly from historical trends. To ensure consistency, align your projections with your institution’s budget.

**Interpreting the Risk Tolerance Report**

**1. Projected Asset Growth**

* Enter your bank’s expected growth in assets and earning assets over the next 4 quarters. If this cell is left blank, RiskGPS will apply a system-generated estimate.
* Other input examples:
  + Entering “10” indicates a 10% projected growth.
  + Entering “0” implies no change.
  + A negative value indicates a projected decline over 12 months.

**2. Tier 1 Capital Ratio Calculation**

RiskGPS initially holds your Tier 1 capital constant and divides that number by projected total assets to create a ratio. If this ratio exceeds your minimum capital ratio, no additional capital is required. If it falls short, RiskGPS will compute the additional capital necessary to meet the minimum ratio.

**3. Projected Dividends**

Any dividends paid from current earnings over the next year should be entered here.

* The sum of capital needed to maintain the minimum ratio, plus any projected dividends, is the income needed to maintain adequate capital. The dividend entered in this assumption is used to calculate a break-even point for the bank so enter the **minimum** dividend you would pay if the bank encountered stressed earnings, instead of what you expect to pay with budgeted performance.

**4. Net Overhead and Adjustments**

* Net Overhead includes all non-interest components of income.
* A negative sign for Net Interest Income (NII) does not signify negative income; rather, it indicates an amount subtracted in the minimum margin calculation.
* The Tax Equivalent Adjustment calculates interest income on a tax-equivalent basis.

**5. Loan Loss Provision**

* RiskGPS uses the actual total reported in the most recent four call reports as the default.
* This figure can vary significantly in future quarters, especially after a large recovery or charge-off. Review and adjust this value as needed.

**6. Income Tax Assumption**

Income tax on the amount of earnings needed to cover the capital requirement from the first section of the Risk Tolerance calculation is added. The system calculates this from recent call reports, but you may want to adjust it to reflect expectations. Remember that this rate includes both national and state income tax rates and may be lower than those marginal rates because of tax exempt income or loss carry-forwards.

**Minimum Net Interest Income (NII) Requirement**

After summing the capital/dividend requirements and Other Expenses, RiskGPS computes the minimum net interest income required to prevent capital impairment. The next calculation is:

**Current Margin Under Flat Rates**

* Also referred to as **Projected Net Interest Income in a flat rate environment**.
* If Projected NII exceeds the Required Net Interest Margin, the bank has a **positive Risk Tolerance**—indicating surplus earnings to absorb risk.
* If it falls short, Risk Tolerance is **negative**, and the capital ratio will decline over time.

**Risk Sensitivity Analysis**

RiskGPS identifies the maximum change in individual components of income, expense, or dividends that the bank can tolerate before falling below its minimum capital ratio.

The second page of the Risk Tolerance report shows how much each of eight key variables can change before the capital ratio drops below the minimum threshold. This data is also critical for setting a benchmark margin in the **Rate Shock Margin** analysis.

**Key Reminders on Assumptions**

* **Quarterly Updates**: All user-entered assumptions are cleared each quarter. Be sure to enter updated assumptions after every new system update.
* **Board Oversight**: Regulatory best practices recommend an **annual board-approved documentation** of key modeling assumptions, including:
  + Beta values
  + Decay terms
  + Loan prepayment rates