**RiskGPS Tutorial: Adjustable Rate Mortgage (ARM) Assumptions**

**Overview**

Call reports typically lack detailed information about Adjustable Rate Mortgages (ARMs) in a bank’s portfolio, aside from the quarterly balance. However, ARMs often contain features that affect interest rate risk in unique ways. RiskGPS enables your bank to enhance the accuracy of rate shock calculations by allowing the input of detailed ARM loan characteristics. This guidance applies specifically to closed-end loans secured by first mortgages on 1–4 family residential properties. Note that commercial ARMs, home equity loans, and second mortgages are addressed separately in the Floating Rate Assumptions section of the RiskGPS module.

**Accessing ARM Assumptions in RiskGPS**

**“Closed-end Loans Secured by First Liens on 1–4 Family Residential Properties.”**

The first line—**RE Loans as Reported**—is auto-populated by the model. It reflects your portfolio’s distribution of 1–4 family first mortgages by final maturity, based on the way you reported them in your call report.

The total balance in this section equals:

Line 1.c.(2).a of Schedule RC-C Part 1  
**minus** non-accrual loans reported on Line 1.c.2.a, Column C of Schedule RC-N. However, since many banks have material volumes of residential ARM loans with characteristics that alter their repricing (such as floors and ceilings), RiskGPS allows you separate the model’s default repricing data that came from the Call Report. Like other RiskGPS assumptions, *completing this section is optional, but highly recommended if your bank has ARMs secured by residential first mortgages.*

**Customizing ARM and Non-ARM Data**

Because many residential ARM loans contain features like interest rate floors and ceilings, RiskGPS allows for the separation of model-default repricing data. Although entering this information is optional, it is strongly recommended if your bank has a significant volume of ARMs secured by residential first mortgages.

**Data Segmentation**

To input detailed assumptions, separate the data into:

* **Non-ARM Volume**
* **ARM Volume**

The total volume must equal the amount reported on Line 1.c.(2).a of Schedule RC-C Part 1  
**minus** non-accrual loans from Line 1.c.2.a, Column C of Schedule RC-N  
**minus** Line 4 from the memorandum section of Schedule RC-C Part 1

*Note*: Line 4 is reported semi-annually (June and December) by some community banks. For other quarters, use the same source or a reasonable estimate.

Both **ARM Volume** and **Non-ARM Volume** should be allocated across time buckets based on the earlier of scheduled repricing or maturity. If a bucket has no applicable balance, enter zero.

Your bank’s loan application data typically includes the fixed/ARM breakdown necessary for this segmentation.

**Entering Rate Characteristics**

Once the repricing volumes are set, input the following values for each repricing bucket:

**1. Floor Rate**

* Represents the weighted average floor rate for ARM loans within each repricing bucket.
* Use loan system data or an estimate based on underwriting practices.
* If your floor rate is consistent regardless of the repricing term/bucket, input your usual floor rate.
* If no floor rate is applicable, enter **0** or **99**.

**2. Ceiling Rate**

* Represents the weighted average ceiling rate per repricing bucket.
* Gather this data similarly to the floor rate—via your loan system or best estimates based on underwriting practices.
* If your ceiling rate is consistent regardless of the repricing term/bucket, input your usual ceiling rate.
* If no ceiling exists, enter **0** or **99**.

**3. Weighted Average Contractual (Indexed) Rate**

* Reflects what the weighted average yield on loans in each bucket would be if there were no floors or ceilings.
* This information is typically available from your loan system; otherwise, use best estimates based on underwriting practices.
* Enter **0** for any bucket where this rate does not apply.

**Model Output and Recommendations**

With these inputs, RiskGPS calculates rate shock impacts on both:

* **Net Interest Margin (NIM)**
* **Economic Value of Equity (EVE)**

These results incorporate both the positive and negative effects of your ARM loan portfolio.