

SEQUENTIAL SAMPLING FOR HOMOGENOUS ASSETS FOR LOW-RISK INSTITUTIONS

Summary

The examiner will undertake "sequential sampling," under which an initial sample of 15 loans is initially reviewed to determine if the loans made during the review period are prudently underwritten, and if seasoned loans are performing as agreed. If the review discloses no exceptions, no additional loans should be reviewed. If exceptions (as defined in Appendix A) are noted, the sample size is increased as detailed in the chart below, until either the number of exceptions is within the acceptable tolerance or the number of exceptions total 4 or more.

<u>Sample Size</u>	<u>Number of Exceptions Allowed</u>
15	0
25	1
34	2
43	3

If the number of exceptions is within the tolerable limit, an examiner can conclude, with a 90% confidence level (reliability), that the pool of assets are underwritten in a prudent fashion. Specifically, there is only a 10% risk that the population error rate (e.g., the number of assets that are not underwritten prudently) exceeds 15%.

If 4 or more exceptions are found, the sample results indicate that the examiner should conclude that a significant number of assets in the pool of assets have not been underwritten in a prudent manner (or, for seasoned loans, are paying as agreed).

To ensure that a significant number of assets in the pool of assets are inappropriately decided to be exceptions, exceptions should be reviewed by the EIC or another examiner. This review, like the initial review, should focus on whether the assets were underwritten in a safe and sound fashion, as discussed in Appendix A. The results of this review should be used for purposes of determining if the institution is prudently underwriting the pool of assets.

Process

Step 1: The institution's assets should be divided into separate pools based on the underwriting policies the institution uses. As noted in Appendix B, homogeneous assets will generally be divided into just two pools, one- to four-family residential real estate loans and consumer loans.

Step 2: From each pool, the examiner should systematically select 15 assets for review, unless the sample size can be reduced in accordance with [Appendix C](#).

- One method to systematically select the assets for review is to assign each asset in the pool a number, starting from 1. The examiner should then divide the total number of assets in the pool by 15 to get the "numeric interval" to be used to select the loans to review.

For example, if there are a total of 900 one- to four-family residential real estate loans, the examiner should divide 900 by 15, which equals 60 ($900/15 = 60$). 60 is the "numeric interval" - the examiner will review every 60th loan. The examiner should start selecting loans from a random starting place between the 1st and 60th loan. If loan number 3 is the first asset selected for review, the examiner should next select loan number 63 ($3 + 60$), then loan number 123 ($63 + 60$), and so on, until all 15 loans have been selected for the sample.

Step 3: The examiner should then review the assets selected.

- For loans made since the preceding examination, the review should focus on whether the loans were underwritten in a safe and sound fashion, and whether the institution is exercising proper lending controls. For loans made in prior periods, examiners will generally evaluate asset quality by reviewing loan performance. Exceptions are defined in [Appendix A](#).

If the institution has adequate written policies on the underwriting of a given category of loans, the examiner should determine whether the sample of loans were underwritten in accordance with those policies. For any loan in the sample that deviates from the institution's written policies, the examiner should focus on whether the loan was nonetheless prudently underwritten. If the institution does not have adequate written policies for the underwriting of a given type of loan, the examiner should just focus on whether the sampled loans were prudently underwritten.

Examiners should refer to other Examination Handbook sections for guidance on safe and sound underwriting on various loan types.

The definition of "Exception" in [Appendix A](#) provides further guidance on reviewing older homogeneous assets.

- If no exceptions are found (e.g., all 15 loans are underwritten in a prudent fashion), the examiner can conclude that the whole pool is underwritten in a prudent fashion and the examiner should proceed to Step 4.
- If exceptions are noted, the sample size should be expanded in accordance with the chart above, until either the number of exceptions is within the acceptable tolerance or the number of exceptions total 4 or more.

Step 4: The examiner should document his/her conclusions about the institution's underwriting of homogeneous assets, and should state any recommendations for necessary corrective measures, in the appropriate work papers and, if necessary, in the Report of Examination.