

U.S. Customs and Border Protection

Office of Strategic Trade

Regulatory Audit Division

Sampling Technical Guide

Introduction and Background

In March 2003, the U.S. Customs Service became part of the U.S. Customs and Border Protection, which will continue to be referenced as Customs in this document.

The high volume of Customs-related transactions makes an examination of all transactions impractical to perform. Sampling transactions allows conclusions to be drawn about an importer's Customs operations without reviewing all transactions. The goal of sampling in regulatory audits is to be as efficient and effective as possible in reviewing those operations and transactions, determining compliance with Customs laws and regulations, and computing any loss of revenue to Customs.

Sampling may be statistical or nonstatistical (judgmental). Statistical sampling is an objective, defensible, reliable method that is commonly used to draw conclusions about an entire population or universe. As discussed in the Government Auditing Standards (Yellow Book), auditors should use statistical sampling and other aspects of quantitative analysis, when appropriate, to accomplish audit objectives. Statistical sampling requires random selection of sample items and statistical evaluation of sample results. Nonstatistical sampling relies on auditor judgment to select sample items and evaluate sample results.

This Exhibit includes 7 appendices and provides guidance for sampling in Focused Assessments as well as other audits.

Appendix I, Sampling Steps – a step by step narrative process for sampling in various Regulatory audits.

Appendix II, Sampling Methodology Diagram – a pictorial quick reference of sampling methodology for sampling in various Regulatory audits.

Appendix III, Focused Assessment (FA) Sampling Methodology Table – a quick reference of sampling methodology for FA audits.

Appendix IV, Sampling Plans – standard sampling plan forms for various types of sampling in various Regulatory audits.

Appendix V, Example Audit Report Tables – examples of tables to be used in any Regulatory audit report to display sampling information.

Appendix VI, Glossary of Sampling Terms – definitions of frequently used sampling terms.

Appendix VII, Reading List for Audit Sampling – references to publications for those wishing to learn more about sampling in audits.

Procedures

Sampling Techniques

1. Nonstatistical (Judgmental) Sampling

Nonstatistical or judgmental sampling may be used in certain circumstances when statistical results are not needed, there is a high degree of certainty that a conclusion can be drawn without further sampling, and:

- the purpose is to take a survey in order to determine the necessity for and extent of substantive tests (e.g., FA Pre-Assessment Survey);
- there is a desire to concentrate audit effort in a specific problem area revealed by a previous sample or other source of information (e.g., FA Follow-Up);
- the universe is very small and it would be quicker and easier to review all or most of the items in the universe; or
- the area is very sensitive and there is no room for error (i.e., exact results are required and a 100 percent review necessary).

Nonstatistical sampling is the appropriate method for reviewing transactions of particular interest or concern to determine whether more extensive testing is needed. For example, selective limited sampling of items in an account may be used to determine or verify the nature of the account.

2. Statistical Sampling

Statistical sampling will be used in all other circumstances where nonstatistical sampling is not appropriate.

Variable sampling will be used in most cases where statistical sampling is appropriate (e.g., most review areas in FA Assessment Compliance Testing). Variable sampling can be physical unit sampling (selecting physical items or transactions) or dollar unit sampling (selecting dollars which are then tied to physical items or transactions for review).

Attribute discovery sampling may be more appropriate for certain unique audit areas, such as tests for transshipment or undeclared ADD/CVD (anti-dumping duties/counter-veiling duties).

Sample Results Evaluation

1. Compliance

Compliance determinations for FAs will generally be based on the value of systemic errors found in the sample. Appendix IV of this document and FA Program Exhibit 3F contain specific guidance regarding compliance determinations.

2. Revenue

Loss of revenue estimates will be based on the most accurate information available (actual amounts if known, statistical projections, etc.).

If statistical sampling is used, the desired confidence level for revenue projections will be 95 percent. Precision percentages will be calculated to choose the most accurate projection when multiple point estimates are produced. The point estimate with the lowest precision percentage will be used, if the precision percentage is acceptable. If the precision percentages are poor, additional or alternative procedures may be necessary to estimate the revenue due. Appendices I and IV contain guidance on the projection of revenue loss.

Generally, projections of sample results should be limited to the universe from which the sample was drawn. Items examined in one universe may not be representative of other universes and projecting to other universes would not be statistically defensible. However, auditors may express their opinion and make nonstatistical applications if they believe the results apply to another universe.

3. Enforcement Referrals

Referral estimates for enforcement will be based on the most accurate information available (actual amounts if known, statistical projections, etc.). Appendices I and IV contain guidance on the enforcement referral estimates.

Sample Documentation

Audit documentation will fully and clearly document all aspects of the sampling that was used. For each sample, the audit documentation will include as a minimum:

- A sampling plan which documents important elements of the sampling methodology and results. (Standard sampling plans are contained in Appendix IV.)
- The sampling frame itself.
- The procedures used to validate and analyze the sampling frame.
- The sample size determination.
- The random numbers/procedure (for statistical samples) or other methodology (for nonstatistical samples) used to select the sample items.

- The selected sample items and the review of the sample items.
- The evaluation of the sample results (conclusions, projections).
- Any other documentation produced during the planning, selection, review, or evaluation of samples.

NOTE: The sampling plans include sections for various phases of the sampling process. The sections of the sampling plans can be separated as necessary and included in audit documentation as each phase of the sampling process is completed. For example one phase might include Sampling Application, Sampling Approach and Universe and Frame Information and Sample Information. The AFD must approve these sample sections before the sample is taken. The sections for Sample Results may be included in another set of documentation. The auditors should develop the various sections of the plan and document sampling phases as they occur but all phases of the sampling process should be documented using all the sections of the sampling plans. This will result in documenting the sampling plans in different sections of the automated documentation. In addition, this will allow supervisors to timely review and approve the planning sections of the sampling plan. As an alternative, the auditor could include the sampling plan in one document and the AFD could sign off on different sections of the sampling plan as he reviews and approves each section.

Appendix I contains guidance for documenting samples.

Reporting Sampling

A table of basic sampling parameters should be included in the audit report for each sample that significantly supports the audit findings. Additional guidance is in Appendix I, Section VII. Example audit report tables are contained in Appendix V.

The audit report will also include the compliance rate, if computed, and the loss of revenue, if applicable.