How to Handle Negative or Credit Transactions within Statistical Sampling Audits

By
Dr. Don Roberts
Dr. Will Yancey

Why do credits exist?

- In sales and payables data files, nearly all credits (negative amounts) are reversals or adjustments of debits (positive amounts).
- Some businesses have many credits every month. Some credits are related to debits within the same month and some are not.
- Analyzing credits is not as important in financial statement and income tax audits, because those audits focus on the ending balance (net amount) in the accounts.

Credits - effect on taxes

- Numerous different credit situations.
  - Some have sales and use tax implications.
  - Some do not.
- Tax issues:
  - Sourcing tax to jurisdictions
  - Reversing tax accruals on credits might not be consistent with original debit
  - Timing influences penalty and interest

V-3

Types of Credits

- Cancelled transaction
- Returned item
- Adjusted price
- Bounced check
- Correct data entry error
- Reclassification between general ledger accounts or cost centers

V-4

Example: Expense Account Reclass

$300 expense recorded in December. Reclassed in January. Assume same vendor number.

Date	G/L Account	Debit Amount	Credit Amount
12/21/2005	63702	300.00	
01/12/2006	63702		300.00
01/12/2006	63795	300.00	

V-5

Example: Credit reclass three debits

Three different $100 debits in December. One $300 credit of in January reclasses those three $100 debits. Assume same vendor number.

Date	G/L Account	Debit Amount	Credit Amount
12/21/2005	63702	100.00	
12/22/2005	63702	100.00	
12/23/2005	63702	100.00	
01/12/2006	63702		300.00
01/12/2006	63795	300.00	

V-6

Credits – effect on Sampling Frame

- Auditor's purpose is to audit certain sales or purchases.
- Credits do not initiate a purchase or a sale.
- In an ideal world the sampling unit would be a transaction (sale or purchase) with an outside party. In practice we have a data file with accounting entries.
- When credits exist, there may be several accounting entries (credits and debits) related to the same transaction. The dollar amounts might be in different strata.

V-7

Credits as sampling units

- Unless scope of audit is limited, leaving credits in frame biases sample selection
- Presence of both positive and negative sampling units precludes using some estimators (ratio and regression estimators).
- Credits may correspond to debits outside the sampling frame.
- Credit amounts in transactions may result in tax credits due taxpayer. In what month should the taxpayer get the tax credit?

V-8

Alternatives

- Match credits with corresponding debits prior to sampling. Remove the matching credits and debits from sampling frame. Allow field auditor to examine the matched credits and debits on an actual basis.
- Sample from both credits and debits
- Use absolute value of each unit (not recommended by Roberts and Yancey).
- Segregate credits from debits and sample from debits only.

V-9

Example: Sampling Plan

In this example after removing matched credits and debits, the credits are small relative to the debits.

Range	***Base $***	***Plan***
Credits ≥ $ 10,000	$ (2,627,678)	Detail
Credits $0 to $10,000	$ (1,975,123)	Project result from sampled debits
Debits $0 to $10,000	$ 21,544,323	Stratified sample
Debits ≥ $ 10,000	$ 34,234,245	Detail

V-1o

Recommendation

- Match credits to debits and remove from sampling frame if possible.
- Sample only debits and search for any corresponding credits to sampled debits even when they occur outside the audit period.
- If sampling credits is desired, use credits as a separate population and evaluate separately.