

Five Fraud-searching CAAT Tests in Financial Statements

The ICAI Auditing and Assurance Standards lays down the Auditor's Responsibility to consider fraud and error in an Audit of Financial Statements. The AAS is effective for all audits relating to accounting periods beginning on or after April 1, 2003.

Internationally in the US, SAS No. 99 recommends the use of computer-assisted audit techniques (CAATs) to search through electronic files for evidence of fraudulent or unusual transactions that require additional investigation.

Data Analysis tools - CAATs has proven invaluable as a tool and can also be used to summarize and stratify data that will enhance your analytical reviews and highlight trends that can corroborate or refute

claims made by clients. The following five tests can be performed with CAATs to respond to identified risks of fraud in financial statements.

Test One

Overall Responses to the Risk of Material Misstatement

"The auditor should incorporate an element of unpredictability in the selection from year to year of auditing procedures to be performed..."

Instead of examining expected accounts and using sampling, perform a 100% review of all general ledger activity. You can summarize the general ledger details by source to see what the total debits and credits are by account, then investigate unusually large or unexpected activity, such as:

- High number of debits to sales, especially in months following a quarter-end.
- High number of credits to expense accounts.

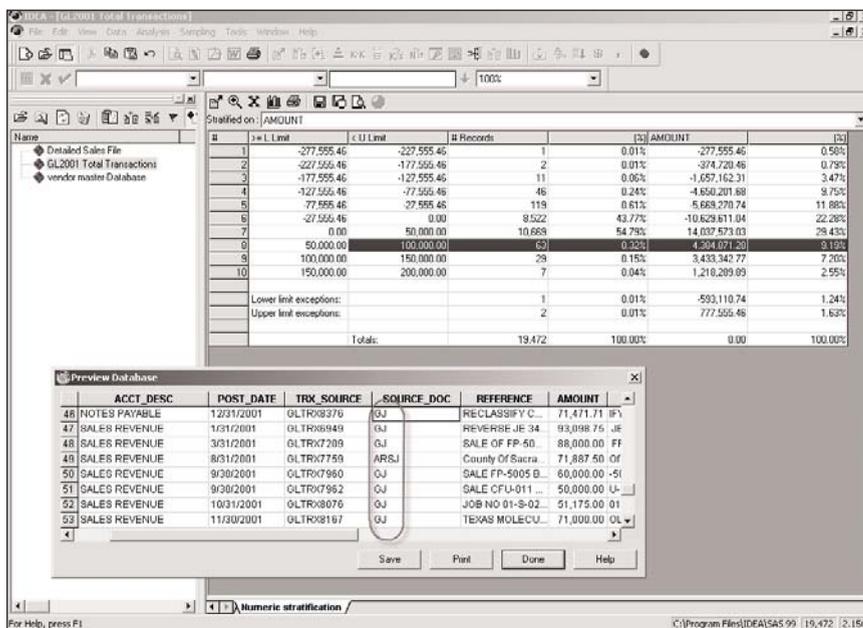
For example, the stratification below shows the credits and debits to all revenue accounts in a company's general ledger. Does the total agree with sales or revenue in the financial statements? Since a result tab has been created, double-clicking on any band will let you preview all the details. Is the high frequency of journal entries (GJ in source doc field) an indication of management overrides to controls?

Test Two

Responses involving the Nature, Timing, and Extent of Procedures to Be Performed to Address the Identified Risks

"The extent of the procedures should reflect the assessment... CAATs may enable more extensive testing of electronic transactions and account files . . . to select sample transactions from key electronic files, to sort transactions with specific characteristics, or to test an entire population instead of a sample."

Selecting a sample by hand can be time-consuming and subject to error if the staff accountant misses on the high values or nth selection. IDEAScript can be used to write a script that allows the user to perform the following functions on an imported file with only a few clicks, the entry of the high value amount,



and the number of random items to select.

- Extract all that meet the high value criteria
- Extract all that do not meet the high value criteria into a separate file for sampling
- Extract a random sample of items
- Append the two sample files into one containing the high value items and random sample.

Test Three

Additional Examples of Responses to Identified Risks of Misstatements Arising From Fraudulent Financial Reporting

“Performing substantive analytical procedures relating to revenue using disaggregated data, for example, comparing revenue reported by month and by product line or business segment during the current reporting period with comparable prior periods.”

If you haven't used any Data Analysis tool - CAATs Pivot Table for this kind of analysis, get ready for a pleasant surprise! Under the Analysis menu, Pivot Tables let you analyze the open database by two or more variables. For example, you can summarize the amount and number of invoices for revenue by product line by month. If the month field is not a separate field, but the database contains a date field, first create a virtual field called month by using the **@month** function.

To perform a month-by-month analysis without using the Pivot Table, use the IDEAScript called **Amounts by Month** which can be created. The script asks you to

MONTH	Data	01	02	03	04	05	06	Total
1	Sum of GROSS_SALE					50,058.43		50,058.43
	Count of GROSS_SALE					16		16
2	Sum of GROSS_SALE			9,595.95		224,223.67		233,819.62
	Count of GROSS_SALE			4		59		63
3	Sum of GROSS_SALE	4,364.36	4,541.25	5,448.25	89,836.50	212,159.81	3,899,925.00	4,216,275.17
	Count of GROSS_SALE	1	2	3	2	58	1	67
4	Sum of GROSS_SALE			33,990.05		216,131.18		250,121.23
	Count of GROSS_SALE			9		62		71
5	Sum of GROSS_SALE			13,849.10	59,609.16	295,906.00		369,364.26
	Count of GROSS_SALE			8	4	74		86
6	Sum of GROSS_SALE		337.35	7,522.10	3,170.70	127,431.26		138,461.41
	Count of GROSS_SALE		1	4	1	56		62
7	Sum of GROSS_SALE	27,986.84	2,387.40	30,967.15	65,527.80	355,614.32	3,536,451.99	4,018,935.50
	Count of GROSS_SALE	2	1	10	3	144	1	161
8	Sum of GROSS_SALE			1,159.95		200,922.57		202,082.52
	Count of GROSS_SALE			1		72		73
9	Sum of GROSS_SALE				179,567.31	302,746.58		482,313.89
	Count of GROSS_SALE				2	55		57
10	Sum of GROSS_SALE				332,923.50	431,202.13		764,125.63
	Count of GROSS_SALE				3	90		93
11	Sum of GROSS_SALE				22,829.04	264,033.21	134,157.42	421,019.67
	Count of GROSS_SALE				1	79	1	81
12	Sum of GROSS_SALE				23,780.25	251,310.45		275,090.70
	Count of GROSS_SALE				1	69		70
Total	Sum of GROSS_SALE	32,351.20	7,266.00	102,532.55	777,244.26	2,931,739.61	7,570,534.41	11,421,668.03
Total	Count of GROSS_SALE	3	4	39	17	834	3	900

Would you pay more attention to Product Code 06 than Product Code 05 in this example?

select the imported file you want to use, then provides selection boxes for the appropriate date, amount, and summarization field you would like to use.

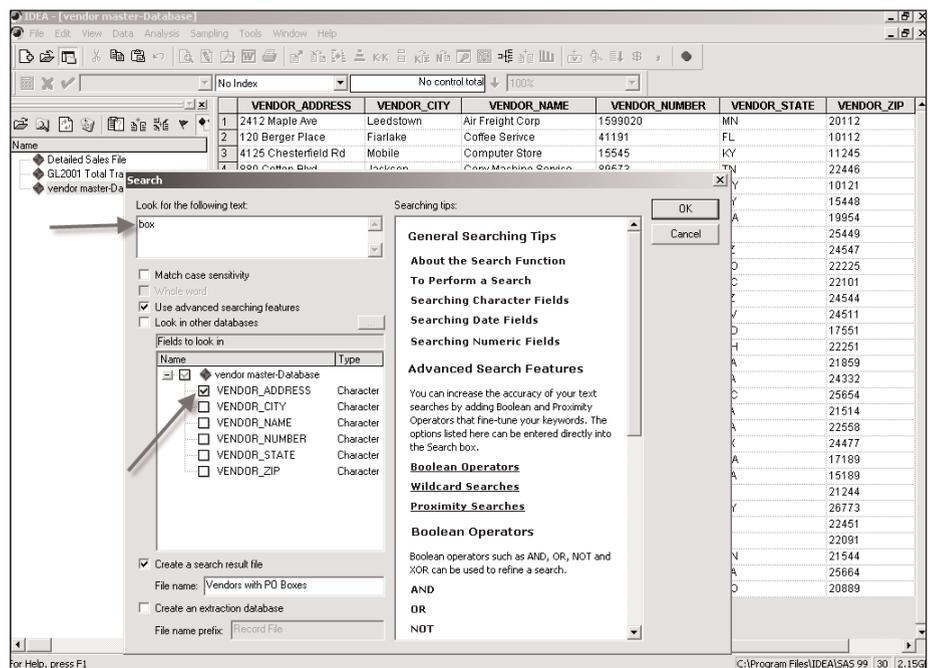
Test Four

Examples of Responses to Identified Risks of Misstatements Arising From Misappropriations

of Assets

“...if a particular asset is highly susceptible to misappropriation...obtaining an understanding of the controls related to the prevention and detection of such misappropriation and testing the operating effectiveness of such controls may be warranted.”

How would you handle a lack



of segregation of duties over cash? What if an employee had access to cash disbursements and was responsible for maintaining the vendor list for cheque payments? Since there are no controls to test, searching the vendor list to find similar names but different addresses, searching for names with PO Boxes as payment addresses, or searching for vendor addresses that match employee addresses might uncover this kind of fraud.

Below is an example of a search that can be used to extract all the addresses that are PO Boxes by searching the address field for the word “box”.

The screenshot shows the IDEA software interface. The main window displays a summary table with columns: SOURCE_DOC, #Records, [%], CREDITS, and [%]. The data is as follows:

SOURCE_DOC	#Records	[%]	CREDITS	[%]
AJ	16	0.08%	-74,615.36	0.31
APCCR	5,645	28.99%	-2,488,589.63	10.43
APTRX	7,403	38.02%	-3,894,553.93	16.33
APVCH	44	0.23%	55,144.10	0.23
APVCK	48	0.25%	-24,024.06	0.10
APICRJ	943	4.84%	-3,795,984.91	15.91
APRSJ	1,372	7.05%	-5,281,752.05	22.14
GJ	4,001	20.55%	-8,236,563.37	34.59

Below this is a 'Preview Database' window showing a list of transactions with columns: ACCT_NO, ACCT_DESC, REFERENCE, and AMOUNT.

ACCT_NO	ACCT_DESC	REFERENCE	AMOUNT
1	000-1000 CASH - OPERATING - BANK ONE	CORRECT CODING ON BANK ACCT	8,506.17
2	000-1000 CASH - OPERATING - BANK ONE	CLOSE BANK ONE ACCT	2,269.59
3	000-1000 CASH - OPERATING - BANK ONE	RECORD DEEP EAST TEXAS CHECK	11.95
4	000-1000 CASH - OPERATING - BANK ONE	RECORD WELL FLOW CK #17721	4,891.21
5	000-1000 CASH - OPERATING - BANK ONE	TIF FROM COMPASS TO BANK ONE	15,428.22
6	000-1000 CASH - OPERATING - BANK ONE	TIF FRM COMPASS TO BANK ONE	415.84
7	000-1000 CASH - OPERATING - BANK ONE	RECORD WELL S/B IN DEC 01	148,685.30
8	000-1010 CASH - OPERATING - COMPASS	REFUND CK MADISON FILTER	349.81
9	000-1010 CASH - OPERATING - COMPASS	WELL FLOW CHECK 11600 1-9-01	12,000.00
10	000-1010 CASH - OPERATING - COMPASS	WELL FLOW CK 17454 1-23-01	3,146.19
11	000-1010 CASH - OPERATING - COMPASS	CLOSE BANK ONE ACCT	4,714.01
12	000-1010 CASH - OPERATING - COMPASS	ENVIRI SALES-COLLECTIONS	1,610.00
13	000-1010 CASH - OPERATING - COMPASS	REFUND CK WATKINS #914660	535.19
14	000-1010 CASH - OPERATING - COMPASS	CK #3075 FROM LYNN LUSSIER	130.06

Test Five

Examining journal entries and other adjustments for evidence of possible material misstatement due to fraud

“...the auditor should identify and select journal entries and other adjustments for testing.”

In the first example, we saw how a CAAT stratification feature can be used to highlight debits and credits to an account or group of accounts that have been extracted. The following example shows how

journal entries can be isolated by summarizing the general ledger transaction file by source document type, then identifying large journal entries.

The Preview Database View can be saved as a database in CAAT. High value entries can be easily identified by creating an absolute amount field in the new database and sorting the data on the amount field using the quick-index feature in CAAT (double-click on field name for ascending and again for descending).

Conclusion

CAATs power and ease of use can assist your firm in compliance with Auditing and Assurance Standards and SAS 99. The tests described are only a few that can be used to help identify where fraud might be occurring, whether through misappropriation of assets or in the financial statements via cooking the books. Ultimately, only your imagination will limit you in what you can do with CAAT's.

(Contributed by Deepjee Singhal and Manish Singhal)

ANNOUNCEMENT

The Fiscal Laws Committee is happy to announce that it has brought out a new publication “Taxation of Non-residents”.

The opening up of the Indian economy and its globalisation has resulted in far reaching changes. The inflow of funds from foreign institutional investors and non-residents has led to the emergence of taxation of non-residents as an extremely important topic in the current context.

The dimensions of the issues relating to taxation of non-residents of late have vastly expanded. The enormous increase in the cross border transactions, the inflow of funds from foreign institutional investors, the entry of multinational corporations in the Indian economy and the emergence of business process outsourcing have made the subject of taxation of non-residents extremely important and absorbing.

Considering the importance of the subject, the Fiscal Laws Committee decided to bring out this publication which comprehensively discusses the statutory provisions as well as important judicial decisions relating thereto for the benefit of the members.

The publication is available in the Headquarters of the Institute and in the Regional Offices as well. It has been priced at Rs.150/-.