

Aspects Concerning the Relationship between Internal Audit and Fraud Risk

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In the current economical situation, fraud cannot be regarded as an exception with random occurrence and limited effects on credit institution. Major fraud scandals that shook the financial markets required a rethinking of the organization and control of the banks to keep intact the trust of customers. Identifying and assessing risks is a concern not only for managers, but also for internal and external auditors. Management may implement programs or measures to limit the risks or deciding to accept some risks. In order to identify the main causes generating fraud risk and increasing the quality of banking activity we used a quantitative research method that was based on a questionnaire administered individually, using SPSS.

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1. Introduction

Changing economic environment presents major opportunities for banks, but also risky and complex variables that represent a challenge for banking management.

Banking fraud are constantly growing and expanding as fraudsters resort to various methods to steal amounts of cards and customer accounts. Certainly, technology is the most important weapon in the fight against banking fraud. Systems anti-skimming on ATMs, chip cards or devices "card reader" are effective ways to prevent frauds in banks. Although there are substantial costs of implementing these measures, most banks choose to apply them.

Internal audit aims to ensure protection and quality of information and to apply management instructions and to improve the performances.

Internal audit is an independent, objective assurance and consulting services designed to create value and improve the operations of a credit institution.

2. Internal audit and fraud

Internal audit plays an important role in finding effective solutions and assisting the implementation process and development of techniques and instruments in the process of risk identification.

The role of internal auditor in the detection of fraud depends on his training and practical skills.

Analysis of the changing nature of fraud and fraudster can help credit institutions to strengthen their defence against these criminal activities.

In order to commit fraud in a credit institution must be a series of favourable circumstances. Most fraud that occurred globally, 54% was facilitated by ineffective internal controls performed within the credit institution. Regarding Romania, many frauds were committed by managers in crossing controls, 38% of frauds detected unlimited authority managers was a key factor in achieving fraud.

One way to improve the internal control environment is the implementation of an effective mechanism for reporting integrity; most cases investigated were detected in Romania through informal picks.

Those who have suffered damage as a result of fraud that took place under a credit institution may apply to legislation which penalizes fraud drastically.

3. Audit Committee

Audit Committees appeared from the need to send recommendations to the general management / board of directors. Audit Committee members may be members of the Board of Directors, non-executive, non-executive directors and persons with long experience in the field of academics and research.

In practice, not to be confused members of the Audit Committee with internal auditors.

Quality of internal auditing is a profession authorized to be exercised in accordance with professional and ethical standards, and membership in an Audit Committee confers rights and obligations.

In Romania, there are Audit Committees in banks for monitoring the implementation of the internal audit function in the Bank that will help to minimize the fraud risk.

The composition of the Audit Committee is key to its success. For these reasons, it is important the selection of members, the requirements of autonomy, the committee size and length of service.

According to BNR Regulation no. 5/2013 on prudential requirements for credit institutions, an audit committee must (without limitation):

- monitor the effectiveness of internal control, internal audit and risk management;
- supervise external auditors of the credit institution;
- recommend approval by the management or by shareholders the appointment, remuneration and removal of the external auditors;
- consider and approve the scope and frequency of internal audit;
- examine the internal audit reports;
- check adoption by senior management necessary corrective actions to remedy weaknesses in the control, non-compliance with the legal and regulatory policies and other problems identified by auditors.

However, an Audit Committee fully understand their responsibilities as a delegate key management / board is able to respond effectively to all the problems facing the entity.

4. The risk of fraud and its management

Financial and banking fraud can be committed by customers (external fraud), damaging the bank and by the bank staff (internal fraud).

Internal frauds can be made:

- bookkeeping clients - is a mistake to transfer the account to the account;
- internal bookkeeping;
- earnings by assuming certain banking operations.

External fraud - committed by persons who are not employees of the bank. Possible causes of external fraud:

- safety weak banking system;
- hostility former employees;
- the low level of protection of information networks;
- failure to comply with the code of ethics on access to bank information.

The most important cause of occurrence of bank fraud is incorrect personnel management so that in the financial and banking fraud are detected in cash and lending operations.

Cashier operations are dangerous, especially for customers since the injury in this type of operation is supported by the customer, but can be detected through effective internal control.

Although Cashier fraud is most common fraud, vulnerable, in terms of conducting fraud it is also the lending department. The frequency of fraud encountered in this compartment is lower than the cash desk operations, but the amounts stolen from one tranche may be much higher.

Fraud risk management, the bank will consider the following ways to eliminate fraud:

- Timely detection of staff addiction
- Creating a favorable psychological climate in the collective bank through which every employee to feel good protected and checked
- Creating a system of rotation of staff
- The division of responsibilities
- Testing and verification of information systems and introducing innovations in systems
- Creating a system of checking staff at headquarters.

After a committed fraud, all subjects who were involved in bank-client relationship are suffering. If the damage is supporting the bank's customer, in addition to material loss occurs the loss of confidence in the bank. If the damage is supporting bank, in addition to material loss, this action means losing credibility customers, which is the basic element in the finance and banking.

Thus, following the adoption of appropriate measures and compliance with prudential rules established by the regulations of the National Bank of Romania, the bank's management considers that any level of exposure to risks in the financial-banking losses can be minimized if the operations will be organized and managed rationally professionally.

5. Practical aspects of internal audit and fraud risk

In order to identify the main causes generating fraud risk we used a quantitative research method that was based on a questionnaire administered individually. By applying this questionnaire we sought to identify the defining elements of improving the quality and determination of long-term factors that determine fraud.

In sample size to determine if random sampling we considered the maximum permissible error of $\pm 5\%$ at a confidence level of 95%. We determined the sample size follows:

$n = t^2 * p * (1-p) / e^2$, where:

n = the sample size;

t = probability theory accepted (usually take $t = 1.96$ for a confidence level of 95%);

p = percentage of the population owns sampling feature (usually = 0.50);

e = error of representativeness permissible limit (accepted between 1% and 5%).

By applying this formula, the sample obtained will be corrected depending on the size of the population as follows: $n_1 = n / [1 + (n-1) / N]$ where:

n_1 = corrected sample size;

n = sample size obtained earlier;

N = the total population.

This questionnaire is addressed to legal entities, also bank customers and is divided into three sections that focus on identifying key measures to combat fraud and bank damage.

They sampled were clients of credit institutions, as legal entities. The total volume of the sample was in the amount of 30 companies but only 28 of them answered the questions, of which 13 in Galati, 10 of Braila and five other localities.

The study on the behavior of firms in order of their ranking to confidence in the banking system and the desire to improve legislation in this area in order to minimize the risk of fraud, was sent to a sample of 28 companies of different sizes and current state of development.

The data processing was done using SPSS processing system. SPSS (Statistical Package for the Social Sciences) is one of the most used statistical analysis with a wider application range expanded program with strong components for data management (selection, reconfigure, creating new data) and documenting data (there is a metadata dictionary, which retains data characteristics).

At the operation of SPSS in terms of interface, data management and statistical analysis can be added flexibility regarding the types of data accepted as the way to build reports and operational procedure. [Jaba, E.; Grama, A.; 2004]

In the specific case based on documentary research firms we have formulated the following hypotheses:

1. The surveyed companies expressed their agreement or disagreement for the first approach, "focusing on trust in the banking system" vs. "damaged banking system".
2. A second hypothesis present in the same questionnaire "orientation to improve banking legislation" vs. "orientation towards improving the banking system of internal control".

Cluster analysis on the audit valid on the 28 respondent companies based on the questionnaire study variables in companies that were grouped into the following two main components and record the following results (principal component analysis):

- The current attitude of bank staff vs. the errors detected in the banking system;
- Existence of legislative gaps in the banking system facilitates production of errors vs. improving the internal control system and adoption fraud detection systems to reduce risks in the banking system.

We made an hierarchical cluster analysis using the Ward Method with squared euclidian distance (square root of the sum of differences squared) as a method for calculating the distances about 50% of the available cases.

After principal component analysis it was resulted the following distribution of latent variables (Table No. 1) :

Table No. 1 Distribution of variables

Question	PC1	PC2	PC3	PC4
C1. How do you see the transparency of banking?	-19.41	- 1.67	14.53	-3.65
C2. How do you evaluate the degree of customer information by bank staff regarding the possible errors?	-16.66	- 5.53	- 5.43	-3.13
C3. How often do you use banking products or services per month?	-12.35	- 8.62	-10.65	-2.93
C4. How do you appreciate the regularity of fraud the institutions of credit?	-10.98	- 2.18	- 4.95	-3.60
C5. Have you suffered damage as a result of a fraud committed by staff of a credit institution?	- 9.38	17.84	2.40	-0.57
C6. At what bank did you suffere the damage?	- 8.66	0.40	1.14	-0.19
C7. Did fraud has an impact on a product or service banking?	- 7.14	13.39	- 0.76	-5.49
C8. What was the value of fraud you suffered?	- 6.73	- 7.34	- 7.71	7.31
C9. In your opinion using a rigorous control system will decrease the risk of fraud?	- 6.64	- 7.57	0.87	4.35
C10. Do you think that improving banking legislation will lead to more efficient banking supervision?	- 6.46	-11.01	5.23	4.45

Source: own processing

These dimensions / axes group determined at least eight combinations (or four) of the score of the company H - high and L - low; using two dimensions, Cluster 1 record low score at PC1 and high score at PC2, Cluster 2 record high score both PC1 and PC2 at, etc, in a table summarizing, clusters are defined as follows:

Table No. 2 - PC1 and PC2 scores recorded

Cluster	Score @ PC1	Score @ PC2
Cluster 1	H	H
Cluster 2	H	L
Cluster 3	H	H
Cluster 4	H	L

Source: own processing

Similarly, one can identify 8 clusters using the three-dimensional. For the case of two dimensions, the graph (Figure 1) illustrates the uneven distribution on PC1 & PC2 dials because the correlation shown in the figure below:

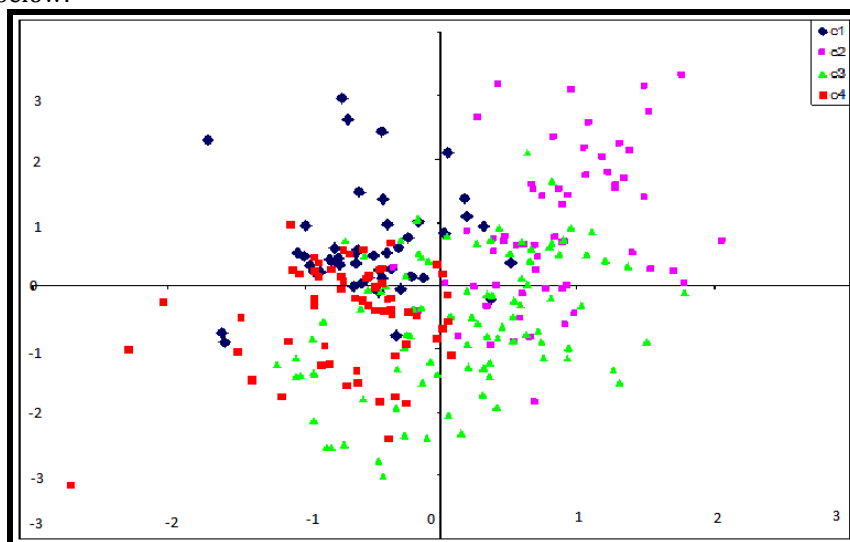


Figure 1. Distribution of the four clusters

Source: own processing

As conclusions of the cluster analysis we can observe the following:

-10 Of the surveyed companies were identified as being targeted and focused by the confidence in the banking system. Cluster 1 is how it should behave credit institutions so as to be fallen in with the needs of customers in order to gain and maintain their trust.

-18 Businesses, Cluster 3 illustrates the willingness of professionals to enjoy improve banking legislation and achieve higher performance in the near future in this area, by increasing the quality and service and align them centered on the beneficiaries (clients).

- Cluster 2 and Cluster 4 though similar 1 and 3 are populated with companies that want to improve the banking system so that it can cope with internal and external vulnerabilities and obstacles.

After obtaining this information, there is a need to change the current culture in the banking system, seen in terms of quality. It is recommended to act on the causes of the outbreak of bank errors.

To implement this change we suggest using the following methods:

- Promoting a rigorous control system inside the credit institution

The internal auditor has an important role in a credit institution. At the end of the audit engagement, the auditor is required to evaluate the findings and to establish views on the findings.

It is imperative that the internal auditor have high knowledge, extensive experience, to prepare and continuously update his knowledge in banking and auditing techniques. At the same time, it must have the ability to collect information, to examine them, to assess the situation and communicate conclusions

- Organizational development including organizational learning

The rapid evolution of information and communication technology as well as concerns on the creation of an integrated European market for financial services and the establishment of the Single Euro Payments, determined some significant investments in the banking sector, for enhanced security of information and transactions in real time. It is also imperative the bank staff training and development in these new directions so that the volume errors to be at minimum.

- Culture change using technology.

Improving or diversifying computer system draws a number of changes regarding work processes, interactions between individuals, strengthening specific behaviors; all contributing to minimizing the risk of banking errors.

6. Real-Time detection fraud

A general anti-fraud system aims at providing services fast, reliable and complete information to customers (accounts, deposits, interests, online payment systems / card, money laundering).

The most common fraud in banking system manifested in the last 5 years were caused by the following elements:

- Fraud absence from work, unregistered, settlement company costs of goods / services that are used in the interests of the employee's personnel;
- Obtain cash advances before closing expense account for previous advances and the use of money to cover the lack of funds / documents supporting the use of advances;
- Granting loans / facilities to customers by managers of financial entities, beginning to achieve its sales goals, and then to collect bonuses;
- Insufficient monitoring of people who leave out to other banks (often competing) or leave the system due to non-compliance and internal security work.

According to European regulations and the national rules established by BNR, financial and banking institutions have to fulfill by operating rules, goals such as: each bank had to take a firm attitude regarding the stopp of any attempts of fraud targeting both its heritage and its customers products or services; bank must not tolerate fraud or practices that do not agree with standards for employee conduct, entered in the Internal Rules.

Starting from these aspects, implementing an anti-fraud system must ensure the integration of all users or roles, both leadership and execution. If one link is left out monitoring, the entire production process can enable security breaches.

Intellinx [<http://www.intellinx-sw.com/products/product-features/>] is a management solution that reduces security incidents operational risks by detecting fraud and suspicious activity in real time.

The advantages of Intellinx are:

- It discourages fraudulent potential users through sessions that all users are registered.
- Improves internal audit efficiency by alerting on suspicious behavior detection and providing complete visibility for internal auditors at all suspicious actions;

- Implement security policies of the credit institution by detecting security breaches and eliminating exceptions and allows the configuration of new rules that can be applied after the events or incidents;
- Improves compliance with national regulations and creates a complete audit trail on all sessions end users, including queries that normally leaves no trace in most systems;
- Detect business opportunities in real time to enable immediate action. For example, if customer bank deposits that exceed a certain limit: permite various investment offers by sending an early warning in the system;
- Increases productivity and improves customer satisfaction by detecting suspicious activity, transmission of the alert level operating violation admitted and blocking real-time working session, as appropriate;
- It is non-invasive and does not involve risks to implementation;

It was developed and implemented already in several banking institutions in Romania. Unlike other providers antifraud to which the client must provide the data analysis (from the log files and data warehouses), Intellinx provides a comprehensive and efficient management fraud, covering a wide range of functions, from data capture, analysis and investigation.

7. Conclusions

The banking community remains concerned about the consequences of fraud by forgery, identity theft, and documents work forgery and continues to support the need to implement projects aimed at protecting customers in good faith and avoid incidents that affect image and stability of the banking system. Organizing a formal framework to improve lending by reducing the risk of fraud and streamline operational processes lending is one of the main concerns of the banking community.

ARB and ANAF concluded a Cooperation Protocol through which banks can check the loan applicants income individuals and legal entities' financial statements (with the consent of the applicant). The objective is to streamline lending activity and reduce the incidence of bank fraud that are based on forged documents.

The primary responsibility for preventing and detecting fraud return to those charged with governance of the entity and to the management. Management should focus on prevention of fraud, which could lead to reduced opportunities for producing fraud and on the fight against fraud.

„European Money Week program " which debuted in 2015, is conducted simultaneously in the States Member of the European Union, beeing an action initiated by banking associations members of the European Banking Federation (FBE). The objective of the program at EU level is raising awareness of the importance of financial education.

In the first edition of the „European Money Week”, ARB launched website dedicated to financial education www.educatiefinanciara.info in order to promote to the public the information that financial and banking allowing proper assumption of rights and obligations financial risks, thereby reducing the number of clients harmed by the banking system.

Following the analysis made on the basis of questioning of the 28 companies in Galati, Braila and other localities we have seen clients distrust in the banking system generated by the financial crisis, poor communication between bank and customer and damages suffered in recent years.

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