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INTERNAL CONTROL SYSTEM: SOX-REOUIREMENTS APPROACH TO ASSESSMENT

Abstract. The European integrational vector of Ukraine's development significantly enhances the requirements for the quality of enterprises' financial reporting that are subjects of public interest, and obliges them to build an effective system of internal control due to the open economy conditions and business chalanges, the availability of a reliable information environment, which would create unquestionable guarantees of investment preservation, becomes significant for the owners of invested capital. By adapting the best practice of doing business, domestic business entities seek to improve the reliability of their internal control system through the usage of tools that have been tested by many years successful business in developed countries. Particularly, under these conditions, the provisions of the Sarbanes-Oxley Act, whose previous perception was focused directly on compliance with the law, deserve merit, and participation in risk management was merely an idea. Today, compliance with the law is an important part of the company's risk management system. In the conditions of doing business in an open economy, this objective can only be achieved if the reliable control environments of the company represented by its internal control system are set up. Domestic methods for assessing internal control systems do not take into account the enterprises' needs to undergo SOX control and sjould be improved. The concept of constructing a matrix of internal control system assessment, which includes Control Matrix, Assessment, Remediation and Testing, is developed. The said units of the matrix of the internal control system assessment cover the homogeneous nature of the group of business processes depending on the factors that may affect the enterprise control environment. Each of these blocks can be expanded, depending on the size of the enterprise. The proposed development allows organizing the qualitative and operational work of the internal control system, which will contribute to the effectiveness of making managerial decisions and aimed at preventing the occurrence of fraud.

Key words: internal control system, audit, SOX-assestment.

JEL Classification: G39, M21 Formulas: 0; fig.: 1, tabl.: 0, bibl.: 13

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СИСТЕМА ВНУТРІШНЬОГО КОНТРОЛЮ: ПІДХІД ДО ОЦІНКИ НА ОСНОВІ ПОЛОЖЕНЬ SOX

Анотація. Євроінтеграційний вектор розвитку України значно підвищує вимоги до якості фінансової звітності підприємств, які є суб'єктами суспільного інтересу, та зобов'язує їх здійснювати побудову ефективної системи внутрішнього контролю, адже в умовах відкритої економіки відчутного значення для власників капіталу набуває наявність надійного інформаційного середовища, яке б створювало беззаперечні гарантії збереження інвестицій. Адаптуючи передову практику ведення бізнесу, вітчизняні суб'єкти господарювання прагнуть покращити рівень надійності їх системи внутрішнього контролю через механізм застосування інструментів, які перевірені багаторічною практикою розвинених країн світу. На особливу увагу, за цих умов, заслуговують положення закону Сарбейнса-Окслі, сприйняття якого раніше було більше сфокусовано безпосередньо на дотриманні вимог законодавства, а участь в управлінні ризиками була лише задумкою. На сьогодні ж, дотримання закону є важливою складовою системи управління ризиками компанії. За умов ведення бізнесу в умовах відкритої економіки, зазначена мета може досягатися лише за умови налагодження надійного середовища контролю компанії, що представлене її системою внутрішнього контролю. Вітчизняні методики оцінки систем внутрішнього контролю не враховують потребу підприємств проходити SOX-контроль та потребують вдосконалення. У статті розроблено концепцію побудови матриці оцінки системи внутрішнього контролю, яка включає такі блоки: «Опис тестів контролю», «Оцінка», «Проведення тестування» та «Узагальнення результатів тестування та подальші дії». Зазначені блоки матриці оцінки системи внутрішнього контролю охоплюють однорідні за сутністю групи бізнес-процесів залежно від чинників, які можуть впливати на середовище контролю підприємств. Кожен із зазначених блоків може бути розширено, в залежності від розміру підприємства. Запропонована розробка дозволяє організувати якісну та оперативну роботу системи внутрішнього контролю, що буде сприяти ефективності прийняття управлінських рішень та зменшенню ризику шахрайства.

Ключові слова: система внутрішнього контролю, аудит, SOX-оцінка.

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Аннотация. Евроинтеграционный вектор развития Украины значительно повышает требования к качеству финансовой отчетности предприятий, являющихся субъектами общественного интереса, и обязывает их осуществлять построение эффективной системы внутреннего контроля в соответствии с требованиями закона Сарбейнса-Оксли. Отечественные методики оценки систем внутреннего контроля не учитывают потребность предприятий проходить SOX-контроль и нуждаются в совершенствовании. Разработано концепцию построения матрицы оценки системы внутреннего контроля, которая включает блоки «Описание тестов контроля», «Оценка», «Проведение тестирования» и «Обобщение результатов тестирования и дальнейшие действия». Указанные блоки матрицы оценки системы внутреннего контроля охватывают однородные по сути группы бизнес-процессов в зависимости от факторов, которые могут воздействовать на среду контроля предприятий. Предложенная технология позволяет организовать качественную и оперативную работу системы внутреннего контроля, будет способствовать эффективности принятия управленческих решений и предупреждению риска мошенничества.

Ключевые слова: система внутреннего контроля, аудит, SOX-оценка. Формул: 0; рис.: 1, табл.: 0, библ.: 13

Introduction. The European integration vector of Ukraine's development, declared in the Agreement on the Association between Ukraine and the European Union, significantly expands the potential of domestic business entities to enter the international market. This significantly increases the requirements for the quality of financial reporting of enterprises that are subjects of public interest, and obliges them to build a system of internal control aimed at minimizing the probability of errors in reporting information, improving the quality of risk management and the effectiveness of the business process management system.

In accordance with the Sarbanes-Oxley Act, which defines specialized requirements for companies whose shares are traded on international stock exchanges, monitoring and testing of the internal control system is an important determinant of effective management and compliance with internal policies and procedures. The need to undergo SOX-control makes it intrinsically necessary for enterprises to build a comprehensive and high-quality methodology for assessing the internal control system based on its key elements.

Actual scientific researches and issues analysis. The study of theoretical and practical foundations of the construction and evaluation of the internal control system has become the subject of scientific interest of such domestic and foreign scientists as M. Beasley, J. Carcello [1], D. Gramling [2], V. Gordopoiov [3], D. Hermanson [1], T. Kamenska [4], E. Mnih [5], T. Neal [1], N. Proskurina [6], A. Schneider [2], J. Smith [7], N. Stephens [7], W.Van der Stede [8], N. Vyhovska [9] and others. Recognizing the importance of scientific progress of scientists, we note that the strategic benchmarks of Ukraine's development determine the need to improve existing methodological approaches to assessing the system of internal control in accordance with SOX-requirements that can be implemented in the part of developing a parametric matrix of the enterprise internal control system assessment based on the formation of a continuum of key business processes. The importance of solving this problem led to the relevance of this study.

The purpose of the article is to improve the methodological principles of evaluating the system of internal control (hereinafter referred to as SIC) of an enterprise by developing a matrix



that covers the homogeneous nature of a group of business processes depending on the factors that may affect the enterprise control environment.

Research results. A qualitative SIC of an enterprise is a guarantee of its management effectiveness and a tool for prevention and detection of fraud, which in general is aimed at preserving and increasing the resources of the enterprise. Taking into account the latest changes to the Law of Ukraine "On Accounting and Financial Reporting", the internal confirmation of the quality of the prepared information becomes especially urgent. In this regard, internal and external auditors, when evaluating SIC, will widely use Sarbanes Oxley Act (hereinafter - SOX) [10] rules which require management of the organization to carry out and continuously monitor the system for ensuring the effectiveness of internal control over the preparation of financial statements.

By adapting best practice, domestic business entities began to formulate internal audit systems to perform only the supervisory function. Since the introduction of the SOX Act, its perception was more focused on complying with the requirements of the law. Participation in risk management was merely an idea. Today, compliance with SOX is an important part of the risk management system, which is designed to add value to the enterprise.

Considering the formation of an effective enterprise management strategy, the use of SOX provisions is given particular attention, directly in order to increase corporate responsibility and the usefulness of disclosure of financial and corporate information.

One of the key reasons for recourse to external audit services is the shortcomings in the work of the IAA, which is also confirmed by the results of the global EY study. 70% of respondents say about the need to improve the IAA Most respondents, whose internal audit participates in the SOX program, said that less than 25% of the IA budget is spent on SOX testing, which is essentially justified, due to the effect that the users receive from the information [11]. The above study provides four directions for expanding SOX functions:

- automatization of processes;
- control tests codification (Q1-Q16);
- use of IT-investments:
- strategic innovations concerning SOX implementation.

The use of the SOX act to expand its business opportunities will lead to an expansion of the auditors' tasks when conducting an internal audit.

In order to carry out a comprehensive and qualitative assessment of the internal control system of the enterprise, we recommend using a matrix that covers the homogeneous groups of business processes according to the factors that may affect the enterprise control environment.

We propose to divide the matrix into such separate groups:

- 1. FRA (Financial Reporting and Accounting).
- 2. REV (Revenue and Receivables).
- 3. PUR (Purchasing and Payables).
- 4. PPE (Property, Plant & Equipment and Intangibles).
- 5. PIN (Production and Inventory).
- 6. PAY (Payroll).
- 7. HRC (Human Resources Controls).

In order to better understand the technique of using the matrix, it is necessary to look at its content (Pic. 1). The first block (Control Matrix) of matrix is theoretical information about a specific control procedure, its contents, goals, possible risks and recommendations for its implementation. The second block (Assessment) discloses information directly on the control tests, the evaluation of the control environment, its frequency, the ones responsible for the control of the persons, the evidence regarding the detected, as well as the results of control measures. The third block (Remediation) provides information based on the results of the control measures in the previous block, as a result of which the recommendations for correction of the situation are provided and a deadline for their implementation is set. The fourth block (Testing) reflects the results of the 1st and 2nd test period, as well as the person responsible for conducting it. The conducting of 2 test periods



is assumed to be, 1 st primary and 2nd according to the results of the implementation of the recommendations.

Information of 2nd-4th blocks is variable and depends on the result of a specific test. In its turn, the information of the 1st block is constant and represents a kind of instruction for conducting control within each homogeneous group of business processes. In order to get a better understanding, we propose to consider the theoretical filling of the 1st block of the FRA group on an example.

- 1. Cycle ID FRA.
- 2. Cycle Description Financial reporting and accounting.
- **3. Sub-Cycle ID -** FRA.01-4.
- **4. Sub-Cycle Description** (Segregation of duties; Reviewing; Tax; Payment Processing.
- 5. Control Objective Description.

Segregation of duties/ Access rights appropriate segregation of duties is in place with corresponding system access rights.

Document retention / Financial documents are retained in accordance with information security guidelines and statutory requirements.

Period-end Closing/Proper Cut-offvEnsure that an accounting period is closed as defined after period end and that the cut-off is done properly.

Accuracy and Completeness of Financial Statements Information & Disclosure.

6. Control Activity Description.

- Physical security of eBanking authorization tools/devices and cheques Security tokens/password devices/other devices used in the process of electronic payments authorization are physically secure and accessible to approved personnel only
- All tokens/password devices/other devices in operation and authorized signatories are tracked to ensure that any unused/expired tokens have been returned to the bank/third party as applicable on a timely basis.
- For entities using physical cheques: Cheques and mechanical cheque signing devices or signature plates are physically secure and only accessible to approved personnel only. The cheque quantities and serial numbers are tracked and reviewed monthly for missing numbers.
- Access rights to eBanking tool If possible, the administration of the tool should be done by the bank. If the user administration of the eBanking tool is conducted in-house, no administrator should have access to transactions allowing to execute or approve payments. Changes to user access rights are processes based on an authorized request to ensure the four-eyes-principle.
- A list of all administrators, users and authorizers should be reviewed by management at least on a semi-annual basis.
- A document retention and archiving procedure is in place and followed, in accordance with statutory, regulatory and/or Novartis internal requirements. Documents are stored in a suitable storage facility. Retention schedules are maintained and kept current.
- Procedures are established to ensure that periods (month/quarter/year) are closed for posting in a controlled and timely manner and critical jobs are run.

It is recommended that these procedures clearly define: 1) The month-end calendar; 2) The list of month-end activities with the required supporting documentation; 3) Key activities and corresponding monitoring controls, including accruals and provisions calculation and review, Received Not Vouchered account clearing, Goods in Transit review and other related intercompany movements; 4) Roles and responsibilities for each activity and for monitoring controls on those activities.



Control Matrix

- Cycle ID
- Cycle Descripti Sub-Cycle ID
- Sub-Cycle Descriptio ·Control Objective

Description

- Possible Validation Control Activity Description
- Recommended Evidence

entity?

- e.g. procedures, flowcharts...
- Control (e.g. report (Q7) Evidence of management...) signed by
- (Q8) Control owner or Unit-Code Service Provider
 - control activity? (Y/N (Q10) Maturity level (Q9) Staff trained to

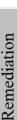
Testing

- Testing Period 1 (Pass/Fail)
- Testing Period 1 Impact (High/Medium/Low)

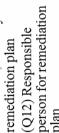
Testing Period 1 Tester's

- Testing Period 2 Impact Testing Period 2 (Pass/Fail) name
- Testing Period 2 Tester's (High/Medium/Low)

- level 4 or 5, define your (Q11) If Maturity is
- person for remediation (Q12) Responsible plan
- MON-YYYY)
 - remediation plan
- Description (optional) •(Q15) Deficiency







- •(Q13) Due Date (DD-
 - (Q14) Deficiency Category

































































- comments to control activity (free text) (Q4) Additional
- (Q5) Frequency of contr
 - •(Q6) Documentation
- (Q8a) Organizational Ownership
- from 1 to 5

Pic.1. Concept of constructing a matrix of estimation of the quality of the enterprise's internal control system Source: developed by authors basing on [10-12]



1. Possible Validation Steps.

- Assess reasonableness of security around security tokens/password devices/other devices used in authorization of electronic payments. Ensureaccessislimitedtoapprovedpersonnelonly.
- Inventory of tokens/devices is maintained indicating the ones in use, expired and returned tokens/password devices/other devices to ensure no tokens are missing.
- Annual revalidation of tokens/password devices/other devices in operation, including ensuring unused/expired tokens have been returned.
 - Review listing of cheques issued in each month and ensure cheque numbers are not missing.

2. Recommended Evidence.

- Procedures approved by management.
- Access control of tokens/password devices/other devices.
- Sign off on annual revalidation and inventory.
- For entities using physical cheques: Access control ofcheques and signing devices.
- Sign off on listing of cheques issued in each month by Management.
- Approved change requests.
- Reviewed users access list.
- Procedures and flow charts approved by management aligned with Group/divisional policies and legal requirements.
 - Records management schedules.
 - Procedures approved by management.
- Defined Period End Closing calendar reflected in checklist, reviewed and released by Finance Management.
- Ensure procedures are in place for checking reported information of source documentation and for verifying clerical accuracy by individuals who did not actively participate in the gathering or the summary of the underlying data.

With the emergence of an additional business process in the enterprise that relates to any of the elements of financial reporting, the list of control procedures can be extended, and, depending on its content, the installation can be prescribed before it is carried out.

This matrix can serve as an internal regulation for conducting an internal control of an enterprise, since it provides for the step-by-step implementation of actions that are not unclear. Its benefits are manifested in the optimality, ease and efficiency of use. This matrix can be modified (expanded or shortened) with a filter so that it can be used for both large and small businesses.

Conclusions. Investigating the issue of the value of SIC at an enterprise, it was found that according to monitoring data, owners of enterprises lack the quality and operational information, the reason for this is the manipulation of enterprise resources due to the lack of quality SIC. Improving the methodological basis for assessing the system of internal control of an enterprise in terms of elements of financial system, by developing a matrix that covers the homogeneous business processes by nature of a group, depending on factors that can affect the enterprise control environment, allows to organize high-quality and operational work of SIC that will promote efficiency of making managerial decisions and aimed at preventing the occurrence of fraud. The qualittative SIC of the enterprise will contribute to the quality and efficiency of the audit, which is becoming more and more relevant in the context of the necessity of confirmation of enterprises reporting.

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