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# Risk Assessment in Performance Audit: European Union Practice

**Abstract.** This paper analyses one of the integral elements of audit methodology in public sector. Since the risk assessment is part of the audit at any stage it should be constantly reviewed throughout the assurance engagement. As an example of best practice, this article specifically discusses the methodology provided by European Court of Auditors. European Court of Auditors as well as independent Supreme Audit Institutions of European Union countries promote their rich experience in enhancing public accountability and financial management in third countries.

The article also pays attention to the risk factors in performance audit context and considers modern risk assessment approaches.

**Keywords:** state audit, performance audit, European Court of Auditors, risk assessment.

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In Kazakhstan and likewise throughout the world, risk evaluation process in state audit context has become extremely important since introduction of new public sector auditing conceptual framework. This has been caused by plenty of procedural standards and methodical documents issued by Supreme Audit Institution of the Republic of Kazakhstan. Procedural standard on performance audit describes risk assessment as an indispensable precondition for all directions of this type of audit. However, the complexity of performance audit in public sector demands thorough explanation of audit methodology.

This article first defines the term risk in general and then in context of performance audit. Identifies differences between conventional and modern approaches. Further the audit methodology provided by European Court of Auditors will be discussed in depth.

Risk is a future occasion or condition with a realistic probability of occurring and an adverse consequence or effect on the successful achievement of established goals and objectives if they occur [1]. The literature suggests three major peculiarities of risk:

- 1) risk relates to the future (it does not relate to the past of present as it is unchangeable. But, by altering current behaviour better outcomes could be expected in the future);
  - 2) expected changes;
- 3) risk relates to a possibility of a choice, and simultaneously relates to the uncertainty which is a reason for that possibility [2].

Risk is an integral part of any activity and auditing as well. Initially, auditors considered the risk assessment process as an isolated area of auditing. By the time the importance of risk evaluation has become dominant feature of the assurance engagements. A great deal of audit methods has been created in order to minimize the probability of making decision. The difference between approaches described in detail in Table 1.

Table 1 Comparison of the conventional and modern risk evaluation approaches

The conventional approach	The modern approach
Risk evaluation is conducted occasionally (if	Risk evaluation is a constant and regular
there is a reason)	activity.

Risk determination and administration is the duty of the accounting and internal auditing departments	Risk determination and administration is the duty of all employees of the institution.
	Concentration – risk evaluation and
independently.	administration are coordinated by supervisors
Control is concerned with avoiding any risk.	Control is concerned with reducing the risk to an acceptable low level.
Actions taken after the risk identification	Risk is anticipated and prevented by constantly observing risk controls.
Incompetent staff is a main source risk.	Inefficient processes are a main source of risk.

Note: adapted from [2]

Performance audit risk is a diversified term. There is no unified frameworks, also substantial differences exist in defining the notion. The reason for that is the various objects of the audit. They may have completely different functions, goals, missions and structures. Nevertheless, reviewing the methodological documents and reports of Supreme Audit Institutions of the European Union countries showed some common features in risk evaluation practice [3]:

- 1. result-oriented approach;
- 2. problem oriented approach;
- 3. system-oriented.

First approach evaluates the achievement of predetermined objectives. Second approach starts with the identified problems or issues, analyses its causes. The last one assesses the overall control system. There might be mixed approaches combining two or more of these approaches. Despite this 3E's (efficiency, effectiveness and economy) are permanent features of any performance audit.

As mentioned earlier the risk relates to all the stages of audit process (Figure 1).

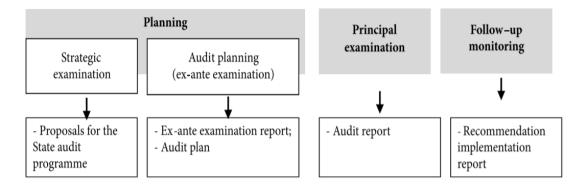


Figure 1. Classic performance audit stages Source: compiled by the authors based on auditing standards

Performance audit usually begins with analysing its basic criteria (3E's). European Court of Auditors defines [4] "the principle of economy requires that the resources used by the audited entity in the pursuit of its activities shall be made available in due time, in appropriate quantity and quality and at the best price". From this definition several risk factors may arise (Table 2).

Table 2

# Risk factors related to economy

Objectives of		Issues to be addressed
economy	General risk factors	in audit
<ul> <li>Minimising</li> </ul>	1) waste – usage of resour-	1) does the institution acquire the required volume of resour-
the cost of	ces that are not neces-	ces of the required quality at a lowest price (e.g., the exa-
resources	sary for the attainment	mination shall include the procedure for publishing public
used for an	of the expected outco-	procurement calls, selection of proposals, and the assess-
activity	mes or results;	ment of the entity's possibilities to acquire the resources);
<ul> <li>Achieving</li> </ul>	2) overpayments – resour-	2) are the financial and physical resources used efficiently;
more output	ces are acquired disre-	3) does the management activity meet the sound adminis-
(in terms of	garding the principle of	tration principles and advanced management practice;
quantity) for	economy;	4) does the institution manage its resources seeking to mi-
the input	3) luxury expenses - the	nimise the general costs;
	acquired resources are	5) was it possible to prepare and implement the intervention
	of much better quality	in a different way by reducing its costs;
	than required for the	6) are the resources procured used rather than stored;
	attainment of expected	7) is the staff used in all cases to a full extent;
	outcomes or results.	8) does the organisation apply optimisation methods.

Note: adapted from [2],[4],[5]

Three different risk factors reveal economy principle from completely different perspectives though not contradicting with its definition. In first case, it is more linked to the natural meaning of the word economy, when the objects of the audit may squander given resources. In the second case, the resources may be used accurately, at the amount that needed, but the cost of the products may be overpriced. In the last situation, the resources may be used accurately, but their quality requirements do not reflect the desired outcomes of the object.

Regarding the principle of efficiency: "it concerns the best relationship between resources employed and results achieved" [4]. Theoretically, there are two evaluation ways of resources from efficiency perspective. It can be based on the quantity, for instance numbers of produced or published units, number of students where there is a threshold, number of employed graduates etc. On the other hand, it can be based on certain quality characteristics satisfaction of citizens regarding service quality, professional assessment by experts or any quality requirements that are described in strategic documents of the organisation. There are plenty of risk areas that depend on auditors' professional judgement and creativity. Following the simplest explanation, the main idea is the link between "inputs" and "outputs". Also, the term may be similar to the productivity measure of the organization, divisions, programs or individuals. The definition may vary across jurisdictions as professional audit organizations only set the core ideas that imply further development by auditors for different audit objects. The summarized risk factors of the efficiency principle are illustrated in Table 3.

Table 3

# Risk factors related to efficiency

Objectives of		Issues to be addressed
efficiency	General risk factors	in audit
The relationship between outputs	1) <i>loss</i> – having used the resources, the desired	<ol> <li>are the programmes properly prepared and planned; are they clear and consistent;</li> </ol>
and the resour- ces used to pro-	outcomes have not been achieved;	<ol> <li>are the objectives and the provided measures (legal, financial, etc.) appropriate, consistent and relevant;</li> </ol>
duce them	2) less than optimal	3) are the works performed within suitable terms avoid-
Are resour- ces spent on	resource to outcome ratio – low labour	ing any delayed or unnecessary expenses; 4) was the activity planned, organised and implemented
outputs that	efficiency level;	in an appropriate manner;
produce most outcome?	3) slow implementation of the intervention; 4) unidentified and	<li>assess the efficiency of the structure of the organisa- tion, decision making process and the programme implementation management system;</li>
	uncontrolled eternal factors – expenses	does the programme implement or duplicate other related programmes, partly overlap with them, or
	imposed upon natural and legal persons that are not covered by the	contradict the same; 7) does the quality of public services meet the expectations of people and the set up objectives;
	intervention of the subject.	<ol> <li>determine the suitability of the system for the assess- ment and monitoring of the programme efficiency, and the reporting about the programme;</li> </ol>
		<ol> <li>assess the efficiency of the public investment and the programme(s) and their components, i.e., have the objectives been attained;</li> </ol>
		10) identify the actions preventing the attainment of the satisfactory efficiency or objectives;
		11) analyse the reasons for the outcome received and the problems identified with a view to identifying the methods to enhance the efficiency of the perfor-
		mance and programmes of the State; 12) determine a relative benefit of alternative methods
		in ensuring better results or eliminating the factors reducing the efficiency of the programme.

Note: adapted from [2],[4],[5]

"The principle of effectiveness concerns the attainment of the specific objectives set and the achievement of the intended results" [4]. In the same vein, there might be number of issues from effectiveness perspective. The principle idea is the achievement of intended results and feasibility of this ultimate goals in general. Views on risk factors regarding effectiveness are demonstrated in detail in table 4.

Table 4

## Risk factors related to effectiveness

Objectives of		Issues to be addressed
effectiveness	General risk factors	in audit
The extent to which objectives have been achieved and the relationship between the intended impacts and actual impacts of an activity.  • Are intended impacts actually achieved?	1) wrongly drawn up policy – inadequate evaluation of needs, unclear and inconsistent objectives, inadequate intervention measures, or the impracticability of objectives;  2) management failures – objectives not attained, as the attainment of objectives was not perceived as a priority by the management.	<ol> <li>are the objectives of a programme properly defined, presented according to specific levels, and to what extent they were attained. Are the programme objectives attainable with justifiable costs;</li> <li>are the human, financial and other resources used efficiently;</li> <li>are the programmes, entities and activities efficiently managed, regulated, organised and implemented, monitored and assessed;</li> <li>does the performance of the organisation correspond to the prescribed objectives and requirements;</li> <li>are the public services of appropriate quality, customised to the customer needs and provided in a timely manner.</li> <li>establish whether the monitored direct or indirect social, economic, environmental impact appeared because of the activities or for other reasons.</li> </ol>

Note: adapted from [2],[4],[5].

Performance audit practice uses various risk evaluation techniques, and as of now, there is no unified form except methodical recommendations. Some scholars attempted to develop mathematical techniques; however, it cannot be applied only with pure quantitative results. Performance audits usually require high level of professional judgement compared to more standardized audit types.

Figure 2 explains the approach used by European Court of Auditors: inputs or resources; activities or processes; results, outcomes and impact.

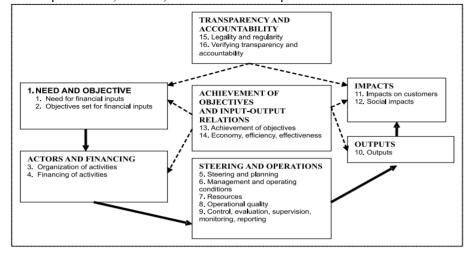


Figure 2. Risk analysis in performance audit Note: adapted from [5].

As demonstrated in Figure 2, performance audit risk depends on many factors. Literature suggests more research on this direction. In general, there might be either external or internal risk factors

In conclusion, the growing number of audit objects was a reason for the development of risk evaluation approaches. The analysis of methodical documents of the European Court of Auditors provide in depth understanding of the basic criteria. However, the desire to develop more standardized risk evaluation approaches demands more research in future.

#### References

- 1 COSO (2012). Risk assessment in practice. [Electronic resource]. URL: http://www.coso.org/ (Accessed: 17.12.2019)
- Daujotaitė, D. (2013). Insights on risk assessment in performance audit. Business Systems & Economics, 3(2), 220–232. doi: 10.13165/vse-13-3-2-08
- Public Audit in the European Union 2019 Edition. (n.d.). [Electronic resource]. URL: https://op.europa.eu/webpub/eca/book-state-audit/en/ (Accessed: 17.12.2019)
- 4 European Court of Auditors. (2017). Performance audit manual. [Electronic resource]. URL: https://www.eca.europa.eu/Lists/ECADocuments/PERF\_AUDIT\_MANUAL/PERF\_AUDIT\_MANUAL\_EN.PDF (Accessed: 18.12. 2019)
- 5 Guidelines on risk assessment in performance audits [Electronic resource]. URL: https://www.eca.europa.eu/Lists/ECADocuments/GUIDELINE\_RISK\_102013/GUIDELINE\_RISK\_102013\_EN.pdf (Accessed:18.12.2019)

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# Тиімділік аудитіндегі тәуекелдерді бағалау: Еуропалық Одақ тәжірибесі

Аңдатпа. Бұл жұмыста мемлекеттік сектордағы аудит әдістемесінің ажырамас элементтерінің бірі талданады. Тәуекелдерді бағалау барлық кезеңде аудиттің бөлігі болғандықтан, ақпараттың дұрыстығын растау бойынша келісім барысында үнемі қарастырылып отыруы керек. Ұлгілі тәжірибенің мысалы ретінде Еуропалық аудиторлар соты ұсынған әдістеме нақты қарастырылған. Еуропалық аудиторлар соты, сондай-ақ Еуропалық Одақ елдерінің тәуелсіз жоғары аудит органдары үшінші елдерде қоғамдық есеп беруді және қаржылық менеджментті жоғарылату бойынша өздерінің бай тәжірибесін ұсынады.

Мақалада сонымен қатар тиімділік аудитін жүргізу жағдайында тәуекел факторларына назар аударылады және тәуекелдерді бағалаудың заманауи тәсілдері қарастырылады.

**Түйін сөздер:** мемлекеттік аудит, тиімділік аудиті, Еуропалық аудиторлар соты, тәуекелді бағалау.

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#### Оценка рисков в аудите эффективности: практика Европейского союза

**Аннотация.** В данной статье анализируется один из неотъемлемых элементов методологии аудита в государственном секторе. Поскольку оценка риска является частью аудита на любом этапе, она должна постоянно пересматриваться в течение всей проверки. В качестве примера передовой

практики в данной статье рассматривается методология, предоставленная Европейским судом аудиторов. Европейский суд аудиторов, а также независимые высшие органы аудита стран Европейского Союза, распространяют свой богатый опыт в повышении общественной ответственности и совершенствовании финансового управления в третьих странах.

В статье также уделяется внимание факторам риска в контексте аудита эффективности и показаны современные подходы к оценке рисков.

**Ключевые слова:** государственный аудит, аудит эффективности, Европейский суд аудиторов, оценка риска.

#### References

- 1 COSO (2012). Risk assessment in practice. [Electronic resource]. Available at: http://www.coso.org/ (Accessed: 17.12.2019)
- Daujotaitė, D. (2013). Insights on risk assessment in performance audit. Business Systems & Economics, 3(2), 220–232. doi: 10.13165/vse-13-3-2-08
- Public Audit in the European Union 2019 Edition. (n.d.). [Electronic resource]. Available at: https://op.europa.eu/webpub/eca/book-state-audit/en/ (Accessed: 17.12.2019)
- 4 European Court of Auditors. (2017). Performance audit manual. [Electronic resource]. Available at: https://www.eca.europa.eu/Lists/ECADocuments/PERF\_AUDIT\_MANUAL/PERF\_AUDIT\_MANUAL\_EN.PDF (Accessed: 18.12.2019)
- 5 Guidelines on risk assessment in performance audits [Electronic resource]. Available at: https://www.eca.europa.eu/Lists/ECADocuments/GUIDELINE\_RISK\_102013/GUIDELINE\_RISK\_102013 EN.pdf (Accessed: 18.12.2019)

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