

**XIII Всеукраїнська науково-практична дистанційна конференція
«Облік, оподаткування і контроль: теорія та методологія»
6 грудня 2024 року, м. Тернопіль**

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**STATISTICO-ECONOMIC METHOD IN ACCOUNTING,
TAXATION, AND AUDITING**

Introduction. The statistico-economic method is an important tool for studying and analyzing economic phenomena, widely employed in accounting, taxation, and auditing. Its primary objective lies in evaluating and forecasting financial and economic processes, enabling enterprises to effectively manage their resources, plan activities, and ensure compliance with legislative requirements. This method is grounded in the use of statistical data, economic models, and theories, providing objective and accurate information for well-informed decision-making. In accounting, the statistico-economic method facilitates the qualitative evaluation of financial outcomes; in taxation, it ensures the correct calculation of tax liabilities; and in auditing, it promotes the reliability of financial statements and identifies potential violations. As a result, the application of this method enhances corporate management efficiency and minimizes financial risks.

Research Findings. The statistico-economic method applied in accounting, taxation, and auditing is based on several key principles that ensure precision and reliability of the analysis.

The first principle is the use of large-scale observations, which involves utilizing a substantial volume of data to obtain objective results. This approach captures all aspects of economic activity and reduces the likelihood of errors. The second principle is the representativeness of data, ensuring they reflect general trends and real processes within the enterprise or the economy. Objectivity of analysis is also crucial, as only unbiased and fair conclusions are acceptable, particularly for audits and tax inspections.

The principle of systematicity in research requires considering economic processes as interconnected systems, enabling comprehensive evaluations. The comparability of indicators allows for assessing changes in economic data over different periods or among various enterprises, thus revealing trends and deviations. All these principles are effectively complemented by applying mathematical and statistical tools that provide precise methods for analysis, forecasting, and evaluating economic processes. Through statistical methods, such as correlation or regression analysis, it becomes possible to identify patterns and assess the influence of different factors on performance outcomes. These principles form a solid foundation for managerial decision-making, accurate calculation of tax liabilities, and the conduct of effective audits [2].

In accounting, the statistico-economic method is a powerful instrument for analyzing and evaluating a company’s financial and business performance. Key areas of its application in

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accounting include:

- **Analysis of the company's financial and business operations:** Systematizes and examines all financial transactions recorded in accounting documents.
- **Assessment of resource efficiency:** Evaluates how effectively an enterprise utilizes its material, labor, and financial resources.
- **Forecasting future economic indicators:** Employing statistical forecasting methods, such as trend or regression analysis, enables predicting financial indicators based on historical data.
- **Identifying reserves and potential risks:** Helps uncover hidden efficiency reserves or problematic aspects in enterprise management, such as unnecessary expenses or low profitability of certain products or services, which need adjustments to improve financial outcomes. Various statistical analysis methods are used in accounting for more detailed research and assessment of financial results:
- **Horizontal analysis:** Involves comparing indicators across different time periods.
- **Vertical analysis:** Focuses on examining the structure of individual indicators at a specific date. For example, in balance sheet analysis, each element of assets or liabilities is compared to the total figure.
- **Trend analysis:** Studies changes in economic indicators over an extended period to identify persistent trends and forecast their development. For example, it may be used to analyze sales volumes or expenses to predict the future trajectory of the business.
- **Comparative analysis:** Compares a company's financial results with other enterprises in the same industry or with industry benchmarks.
- **Factor analysis:** Assesses the impact of various factors on a company's financial results [1].

The statistico-economic method is also essential in taxation and auditing, enabling a detailed analysis of financial indicators, evaluation of the effectiveness of tax and auditing procedures, and ensuring adherence to legal norms. One of the primary applications in taxation is analytical tax control. Using statistical methods, it is possible to assess the tax burden on enterprises and particular categories of taxpayers. This is achieved by employing various statistical indices to compare tax amounts with a company's income or expenses. Such analysis not only detects areas of excessive tax pressure but also assesses the overall effectiveness of the tax system.

Statistical methods are also applied to evaluate the efficiency of the tax system. Statistical analysis helps determine whether the tax system is equitable and whether tax collection mechanisms function correctly. Moreover, these methods can identify opportunities for optimizing tax rates and improving tax administration, which is vital for maintaining economic stability at the national level.

Another important application of the statistico-economic method in taxation is the forecasting of tax revenues. Based on an analysis of historical data and current economic conditions, statistical models can predict future tax revenues. This enables fiscal authorities to plan budgets effectively, detect potential shortfalls, and adjust tax policies in a timely manner.

Statistical methods are crucial for identifying tax risk areas as well. They help uncover cases where tax liabilities may be inadequately calculated or where tax abuse or fraud could occur. In addition, correlation analysis can determine the impact of changes in tax policy on economic

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indicators such as investment levels or employment, allowing for the prediction and prevention of possible negative consequences.

In the field of auditing, statistical methods play an equally important role. Auditors use them to conduct sample-based examinations of documents, significantly reducing time and resource costs without compromising accuracy. Sample-based checks provide sufficient information to evaluate the correctness of financial operations and detect potential errors or violations. Furthermore, statistical testing methods—such as anomaly detection in financial indicators—can reveal inconsistencies or inaccuracies in accounting records [2].

Risk assessment is another critical element in auditing where statistical analysis enables effective evaluation of potential financial risks arising from errors or abuses in financial reporting. This is achieved by analyzing data on previous violations and current financial indicators of the enterprise.

Utilizing statistical methods also allows auditors to forecast financial indicators, essential for assessing a company's financial stability and growth prospects. Such an approach makes it possible not only to evaluate the current state but also to predict possible future changes, ensuring timely responses to challenges.

Equally important is the formation of representative samples using statistical methods. By drawing statistically valid samples from financial documents, auditors can draw conclusions about the accuracy and reliability of the company's entire financial reporting without verifying each transaction individually. This significantly reduces audit costs and increases efficiency.

Another important task is establishing confidence intervals to estimate the probability of errors in the data. This allows auditors to determine an acceptable margin of error in evaluating financial indicators and ensure the credibility of the audit results [3].

Conclusion. The statistico-economic method is an integral component of modern management in accounting, taxation, and auditing, as it provides objective and accurate analysis of economic processes. Its application facilitates not only the evaluation of an enterprise's financial and business activities but also contributes to effective resource management, forecasting future results, and identifying potential risks. In taxation, statistical methods enable in-depth analysis of tax revenues, assessment of tax burdens, and optimization of tax strategies. In auditing, these methods help ensure the reliability of financial statements and minimize risks associated with non-compliance. Thus, the statistico-economic method serves as an essential tool for improving enterprise management efficiency, ensuring financial stability, and maintaining conformity with legislative requirements.

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AUDYT FUNKCJI PERSONALNEJ

Zdobywanie przewagi konkurencyjnej zdeterminowane jest wieloma zmiennymi. Do najczęściej wymienianych zalicza się zasoby finansowe, materialne, informacyjne oraz ludzkie. W bogatej literaturze przedmiotu oraz w praktyce zarządczej podkreśla się, iż najważniejsze z zasobów są zasoby ludzkie. Twierdzenie to jest prawdziwe, gdyż od jakości zasobów ludzkich zależy optymalne wykorzystywanie zasobów pozostałych. W tym miejscu konieczne jest doprecyzowanie terminu zasoby. Niektórzy twierdzą, że termin ten w odniesieniu do ludzi jest niewłaściwy, gdyż sugeruje ilościowe i przedmiotowe traktowanie pracowników. Jednakże, jeżeli pod pojęciem zasoby będziemy rozumieli kapitał zagregowany w zatrudnionych pracownikach, to koniecznością każdego pracownika oraz kierownika jest dbanie o ten kapitał.

Jakość zarządzania kapitałem ludzkim jest szczególnie ważna i aktualna w kontekście starzenia się społeczeństw i zmniejszaniu się liczby osób w wieku produkcyjnym, co przekłada się na ustawiczne niedobory pracowników. Konieczność dokonywania ocen przedmiotowego kapitału, w szczególności wśród przedsiębiorstw mikro, małych i średnich (MSP), wynika także ze struktury podmiotów kategoryzowanych według liczby pracujących oraz generowania przez nie produktu krajowego brutto (PKB). Dane liczbowe podane według stanu na 2022 rok, odnoszone do Polski i Unii Europejskiej (UE) są zbliżone. Podmioty MSP w Polsce generują około 45% PKB, stanowią 99,9% ogólnej liczby zarejestrowanych (w UE – 99,8%) oraz 67,5% ogółu pracujących Polaków (w UE – 64,4%) (PARP 2024, s. 6-10).

W sygnalnie zarysowanej sytuacji niezmiernie istotne jest monitorowanie i ocena wszystkich procesów zachodzących w organizacjach, a więc także procesów realizacji funkcji personalnej. Stąd celem publikacji jest zwrócenie uwagi na konieczność audytowania procesów personalnych realizowanych we wszystkich podmiotach, a szczególności w MSP. Wskazanie tej grupy podmiotów jest zasadne, bowiem audyty personalne wykonywane są okazjonalnie i to z reguły w średnich organizacjach. Według informacji odbieranych od zarządzających podmiotami mikro i małymi nie mają oni czasu i wiedzy oraz środków finansowych na zlecenie audytów