UDC 657.6:336.22
JEL: H25; H26; H30; H56; H83
DOI: https://doi.org/10.32983/2222-4459-2026-9-546-554

ENTERPRISE TAX AUDIT AS AN INSTITUTE OF FISCAL CAPACITY OF THE WARTIME ECONOMY

©2026 **NEZHYVA M. O.**

UDC 657.6:336.22
JEL: H25; H26; H30; H56; H83

Nezhyva M. O. Enterprise Tax Audit as an Institute of Fiscal Capacity of the Wartime Economy

The relevance of the problem is due to the transformation of the role of tax administration in the conditions of the wartime economy of Ukraine, where the stability of domestic revenues is directly related to defense financing, the provision of public services, and the formation of resources for postwar recovery. The weakening of the intensity of documentary inspections in 2020–2023 and the gradual restoration of tax control actualize the issues of the efficiency of tax audits, the development of internal tax compliance mechanisms, and the use of digital information traces. The aim of the article is to develop an economic theory of corporate tax audit as an independent institution of fiscal capacity and to form a toolkit for its measurement and empirical verification. Methods of economic modeling, institutional, comparative, and legal analysis, as well as methods of cause-and-effect analysis, are used. The theoretical basis is the Allingham–Sandmo–Yitzhaki approach to tax behavior, supplemented by internal tax control and digital traceability of transactions, and the logic of the Spence signal model. The relationship between the intensity of State tax audits, the quality of internal tax control of enterprises, the digital information footprint, tax behavior and access to external financing is examined. Based on the results of the study, a model was formed in which the tax audit performs three interrelated functions: error correction, accumulation of compliance capital and signaling the quality of the tax function for capital suppliers. The possibility of partial interchangeability of traditional audits with digital monitoring is substantiated, while the audit retains an additional signaling function. It is found that a decrease in the institutional capacity of tax control can increase the differentiation of tax behavior of enterprises depending on the quality of their internal control, digital traceability and the need for external financing. Scientific novelty is proved through the integration of the effects of deterrence, error correction and signaling into a single economic model of corporate tax audit and the development of a 4C model for assessing the tax function. A Key Tax Quality (KTQ) index is proposed, covering Compliance, Control, Cost and Confidence, as well as a system of hypotheses H1–H4 and corresponding designs for their empirical testing. It is proposed to focus tax audits on segments with low digital traceability, use the proved quality of the tax function in risk-based selection of taxpayers, develop mechanisms for «white business», and use KTQ as an information tool for assessing tax risks and supporting enterprises' access to financing for the recovery of Ukraine.
Keywords: *taxation; control; tax audit; fiscal capacity; digitalization of tax administration.*
Tabl.: *3.* ***Formulae:*** *5.* ***Bibl.:*** *31.*

Nezhyva Mariia O. *– PhD (Economics), Associate Professor, Associate Professor of the Department of Financial Analysis and Audit, State University of Trade and Economics (19 Kioto Str., Kyiv, 02156, Ukraine)*
E-mail: *m.nezhyva@knute.edu.ua*
ORCID: *https://orcid.org/0000-0002-3008-5338*

УДК 657.6:336.22
JEL: H25; H26; H30; H56; H83

Нежива М. О. Податковий аудит підприємств як інститут фіскальної спроможності воєнної економіки

Актуальність проблеми зумовлена трансформацією ролі податкового адміністрування в умовах воєнної економіки України, де стабільність внутрішніх доходів безпосередньо пов'язана з фінансуванням оборони, забезпеченням державних послуг і формуванням ресурсів для післявоєнного відновлення. Послаблення інтенсивності документальних перевірок у 2020–2023 рр. і поступове відновлення податкового контролю актуалізують питання ефективності аудиту оподаткування, розвитку внутрішніх механізмів податкового комплаєнсу та використання цифрових інформаційних слідів. Мета статті полягає в розробленні економічної теорії корпоративного аудиту оподаткування як самостійного інституту фіскальної спроможності та формуванні інструментарію його вимірювання й емпіричної перевірки. Використано методи економічного моделювання, інституційного, порівняльного та правового аналізу, а також методи причинно-наслідкового аналізу. Теоретичну основу становлять підхід Allingham–Sandmo–Yitzhaki до податкової поведінки, доповнений внутрішнім податковим контролем і цифровою простежуваністю транзакцій, та логіка сигнальної моделі Spence. Досліджено взаємозв'язок між інтенсивністю державних податкових перевірок, якістю внутрішнього податкового контролю підприємств, цифровим інформаційним слідом, податковою поведінкою та доступом до зовнішнього фінансування. За результатами дослідження сформовано модель, у якій аудит оподаткування виконує три взаємопов'язані функції: виправлення помилок, накопичення комплаєнс-капіталу та сигналізування про якість податкової функції для постачальників капіталу. Обґрунтовано можливість часткової взаємозамінності традиційних перевірок цифровим моніторингом, водночас аудит зберігає додаткову сигнальну функцію. Встановлено, що зниження інституційної спроможності податкового контролю може посилювати диференціацію податкової поведінки підприємств залежно від якості їх внутрішнього контролю, цифрової простежуваності та потреби в зовнішньому фінансуванні. Доведено наукову новизну через інтеграцію ефектів стримування, виправлення помилок і сигналізування в єдину економічну модель корпоративного аудиту оподаткування та розроблення 4С-моделі оцінювання податкової функції. Запропоновано індекс Key Tax Quality (KTQ), що охоплює Compliance, Control, Cost і Confidence, а також систему гіпотез H1–H4 та відповідні дизайни їх емпіричної перевірки. Запропоновано орієнтувати податкові перевірки на сегменти з низькою цифровою простежуваністю, використовувати підтверджену якість податкової функції в ризик-орієнтованому відборі платників, розвивати механізми «білого бізнесу» та застосовувати KTQ як інформаційний інструмент для оцінювання податкових ризиків і підтримки доступу підприємств до фінансування відновлення України.
Ключові слова: *оподаткування; контроль; податковий аудит; фіскальна спроможність; діджиталізація податкового адміністрування.*
Табл.: *3.* ***Формул:*** *5.* ***Бібл.:*** *31.*

Нежива Марія Олександрівна *– кандидат економічних наук, доцент, доцент кафедри фінансового аналізу та аудиту, Державний торговельно-економічний університет (вул. Кіото, 19, Київ, 02156, Україна)*
E-mail: *m.nezhyva@knute.edu.ua*
ORCID: *https://orcid.org/0000-0002-3008-5338*

The war has turned the state's ability to collect taxes into a matter of survival: defense spending is financed almost entirely from domestic revenues, while foreign aid, according to donor rules, goes to civilian needs, so every hryvnia of the tax gap is measured in units of defense capability. The scale of the task is outlined by one figure: according to the Fifth Rapid Damage and Needs Assessment (RDNA5, February 2026), reconstruction needs reach almost $588 billion per decade – about three annual GDPs of the country [30]. Existential wars force states to build fiscal institutions [15], and science still knows little about how this mechanism works in the digital footprint of each transaction. The moratorium on documentary checks has been in effect since 2020, intensified in 2022, and only since December 2023 began to be phased out [8]. Despite the decline in the probability of verification, the demand for proactive tax audits has increased in recent years, and in 2024 the legislator established the List of taxpayers with a high level of voluntary compliance – the "white business club" [9]. The M. G. Allingham and A. Sandmo model does not provide for such behavior [12]. A corporate tax audit is not a reduced copy of state control, but an independent institution operating in three modes: correction of unintentional errors, maintenance of internal compliance capital, and signaling quality to external capital suppliers in the spirit of the M. Spence model [28]. In a war economy, the third mode becomes decisive: an unprecedented flow of capital enters Ukraine (the EU Ukraine Facility mechanism for 50 billion euros, credit lines from the EBRD, EIB, and the World Bank), and confirmed tax quality is directly converted into access to financing and its price.

LITERATURE REVIEW AND ANALYSIS OF PREVIOUS STUDIES

The economics of tax deterrence originates from the Allingham–Sandmo model with the S. Yitzhaky amendment [12; 31]. A Danish experiment showed that evasion is almost absent under third-party reporting and significant under self-declaration: it is not the number of audits that deter, but the information architecture [22]. The effect of auditing is long-lasting – firms declare more for years, i. e., auditing is an investment [11]; enhanced administration in Indonesia has yielded a greater increase in revenues than a realistic rate increase [14], and the framework for the optimal allocation of effort is set by M. Keane and J. Slemrod [21; 27]. The second direction studies digital footprints: VAT has built-in self-monitoring through counter-reporting [25], a lottery among buyers in Brazil raised declared retail revenue [23], but Ecuadorian firms, in response to reports of discrepancies, raised both revenues and expenses, reducing additional charges to almost nothing [17] – hence the conclusion to check both sides, and the methodology for auditing expenses was developed in the work [4]. Firms cluster below monitoring thresholds, which itself measures the response to the rules [13]. Ukraine, with its continuous electronic registration of invoices, has one of the densest digital footprints in the world. The third direction concerns transnational groups, more than a third of whose profits flow to low-tax jurisdictions [29]; the answer was the global minimum tax GloBE with a rate of 15% [24], implemented in the EU by Directive 2022/2523 [18], which generates new audit objects – GloBE calculations, CIC rules, transfer pricing documentation. The fourth direction connects tax behavior with corporate governance: the review of M. Hanlon and S. Heitzman records the lack of valid measures of the quality of the tax function, which makes it difficult to assess its connection with the cost of capital [20] – it is this gap that our index is aimed at, and the transparency infrastructure is formed by the GRI 207 standard [19].

The Ukrainian school laid a solid foundation: F. Butynets [1], G. Davydov [2], Yu. Ivanov et al. [3], V. Gordopolov et al. [4], K. Nazarova et al. [10]. The comparison of directions reveals four gaps: there is no economic theory of proactive audit, there are no estimates of shocks to inspection capacity, the measurement of compliance quality is unsystematic [20], and the institutional innovations of Ukraine in 2020–2025 have not yet been understood by science. The article closes them in an interconnected way: the theory explains institutions, generates measurements and hypotheses.

RESEARCH AIM AND METHODS

The *aim* of the article is to build an economic theory of corporate taxation audit as an independent institution of fiscal capacity and translate it into a measuring and empirical toolkit.

The study applies economic modelling, comparative and legal analysis, and causal inference methods. The theoretical framework combines the Allingham–Sandmo–Yitzhaki tax compliance model with internal tax controls, digital transaction traceability, and the Spence signaling approach. The 4C model and KTQ index are used to assess the quality of the corporate tax function.

The information base consists mainly of open data from the State Tax Service of Ukraine, the State Statistics Service, the Unified State Register of Financial Reporting, ProZorro, and databases of EBRD, EIB and World Bank projects, supplemented by Ukrainian legislation, EU acts and OECD documents.

For empirical verification, the study proposes event-study and difference-in-differences models, regression discontinuity analysis, interaction models and placebo tests. The empirical period is linked

to changes in the intensity of tax inspections during 2020–2024, while the final sample size depends on the availability of comparable firm-level data.

RESEARCH RESULTS

Since 2022, the budget has been subject to a simple principle - taxes finance defense, and the quality of administration becomes a first-order macro parameter for the needs of reconstruction of almost $ 588 billion [30]. The key source of variation is the legislatively dated jumps in the intensity of inspections: a moratorium from March 2020, its strengthening from March 2022, a partial restart in August 2023, and the resumption of scheduled inspections from December 8, 2023 with a phased expansion in 2024 [8]. The different timing of the return of payer categories is exactly what modern differential estimators need [16].

In parallel, Ukraine has built one of the world's densest systems of digital transaction recording: online registration of invoices in the Unified State Register of Taxes since 2015, automatic blocking of risky invoices since 2017, software-based PPOs since 2021–2022, unified labor tax reporting, and the planned introduction of the SAF-T file [5]. This allows measuring the density of the digital footprint for each firm, which varies greatly across industries. The CPC rules are in place, transfer pricing documentation is in place, the MLI has been ratified, and Pillar Two is being prepared [5]. Law No. 3813-IX (2024) introduced the List of Payers with High Voluntary Compliance with Narrowing of Inspections [9]: for the first time, the state officially pays regulatory relief for confirmed information on the quality of compliance, and the threshold nature of the criteria creates quasi-randomness for the design of the regression gap. Finally, the flow of reconstruction capital, conditioned by integrity checks and GRI 207 transparency standards [19], forms the difference in the cost of capital between firms with confirmed and unconfirmed quality.

Consider a risk-neutral firm with a true tax base $B > 0$ and a rate $t \in (0, 1)$ that makes three decisions: a share of conscious concealment of the base $e \in [0, 1]$, an investment in internal control $q \geq 0$ with a convex cost $c(q)$, and a decision on a proactive audit $a \in \{0, 1\}$ with a cost κ. Concealment absorbs real resources $m(e)$ B ($m' > 0$, $m'' > 0$); separately, there are unintentional errors of intensity $\varepsilon(q)$, which decreases with the quality of control ($\varepsilon' < 0$). The state detects violations with probability $p(\theta, d)$, which increases with the inspection intensity θ and the density of the digital footprint d; the penalty is a multiple of the understatement with a factor $f > 1$ [31]. The audit reduces the errors to $(1 - \gamma) \cdot \varepsilon(q)$ and generates confirmed disclosure to the suppliers of capital, which the firm needs in the amount K at a rate $r(\hat{s})$ that decreases with the estimated quality of compliance $\hat{s}$. The firm maximizes:

$$V(e, q, a) = (1 - t) \cdot B + t \cdot e \cdot B - m(e) \cdot B - p(\theta, d) \cdot f \cdot t \cdot [e + (1 - \gamma a) \cdot \varepsilon(q)] \cdot B - c(q) - \kappa \cdot a - r(\hat{s}(a)) \cdot K \to \max. \quad (1)$$

The first-order conditions for e and q give two simple rules:

$$m'(e^*) = t \cdot [1 - f \cdot p(\theta, d)], \text{ moreover } e^* > 0 \text{ only if } f \cdot p(\theta, d) < 1, \quad (2)$$

$$c'(q^*) = f \cdot t \cdot p(\theta, d) \cdot (1 - \gamma a) \cdot |\varepsilon'(q^*)| \cdot B. \quad (3)$$

Economically: the firm conceals as long as the shadow hryvnia is cheaper than the expected fine, and internal control is a derived demand from the expected enforcement – the firm invests in the quality of the accounting function exactly as much as the probability of inspection "requires".

Proposition 1 (digital deterrence and substitution). Conditions (2)–(3) imply: concealment decreases with both the intensity of inspections and the density of the digital footprint ($\partial e^*/\partial\theta < 0$, $\partial e^*/\partial d < 0$); if the digital footprint already "sees" most of what an inspector would find, the marginal return on inspections decreases with increasing d, so with a fixed administration budget, it is optimal to concentrate inspections in segments with a weak footprint; and since q^* increases with p, a long moratorium causes an erosion of compliance capital, and after the resumption of inspections, violations temporarily become more frequent even among conscientious payers.

Hence the microeconomic justification for risk-based planning: a scarce inspector should be concentrated where there is no third-party information (cash retail, household services, operations outside the ERPN chains) [21].

The firm buys an audit when its price does not exceed the sum of the corrective and signaling benefits:

$$a^* = 1 \Leftrightarrow \kappa \leq \gamma \cdot f \cdot t \cdot p(\theta, d) \cdot \varepsilon(q^*) \cdot B + \Delta r \cdot K. \quad (4)$$

Here $\Delta r \cdot K$ is the premium on the cost of capital for confirmed quality. The first term is proportional to the probability of inspection and disappears during the moratorium; the second does not depend on it. If the benefit from cheaper capital covers the price of the signal for an honest firm and does not cover it for an unscrupulous one, auditing distinguishes types and acquires value precisely in this.

Proposition 2 (audit as a signal). The market for proactive auditing does not generate the shadow of the state, but the capital market: the demand for auditing increases with $\Delta r \cdot K$ even when $p \to 0$; if there is no compliance-sensitive capital, the demand narrows to a corrective motive and disappears together with the probability of inspection. This is the solution to the paradox: the moratorium itself should have collapsed

the audit market, but the war together with reconstruction capital creates it.

Proposition 3 (bifurcation of compliance). The decline in inspection capacity increases concealment for all firms, but for firms with large *K*, the signaling motive maintains auditing and high quality control; as a result, the average level of discipline in the economy falls, and the gap between segments increases, and it affects firms dependent on external financing less. The shock to state capacity polarizes tax behavior. This is a new prediction of the model, and it has a clear empirical signature: the effect of the moratorium should be heterogeneous – weaker in industries with high dependence on external financing [26] and among recipients of international programs, while the simple deterrence model predicts a homogeneous decline. This is where the proposed theory differs from it.

Proposition 4 (conditions for welfare recognition). Reducing the intensity of inspections for firms with a confirmed signal with resource redirection to segments with a weak footprint increases welfare under three conditions: the signal is informative, the redirection follows the targeting logic, and the recognition criteria are multidimensional and periodically updated; otherwise, scoring degenerates into a game of indicators. This is the regulatory framework for the "white business club" [9]: recognition of private verification is not a privilege, but the purchase of information that requires accreditation of providers and publicity of the methodology.

The 4C model is four planes of quality of the firm's taxation system: Compliance (actual level of compliance, corresponding to $1 - e - \varepsilon$), Control (quality of the tax function, corresponding to q), Cost (aggregate costs of tax behavior) and Confidence (confirmed transparency, corresponding to the signal $\hat{s}$). Each plane is measured by two indicators (*Tbl. 1*), scaled from zero to one. The integral Key Tax Quality index is defined as the weighted geometric mean:

$$KTQ = x_1^{w_1} \cdot x_2^{w_2} \cdot \ldots \cdot x_8^{w_8},\ w_1 + \ldots + w_8 = 1. \quad \textbf{(5)}$$

The geometric form, unlike the additive one, is non-compensatory: as soon as any indicator goes to zero, the entire index goes there by itself, so no quality of disclosures covers systematic deviation. Validation is standard – internal consistency (Cronbach's $\alpha \geq 0.7$), criterion validity (correlation with subsequent additional charges and blocking of invoices) and robustness of the rating to weight perturbations. For external users, the *KTQ* plays the role of a tax quality credit rating suitable for reconstruction financing covenants, responding to the long-recognized measurement problem [20].

The theory, together with institutional variation, yields four testable hypotheses, each with its own identification design and available data (*Tbl. 2*).

The data sources are mostly open: State Tax Service lists, the Unified State Register of Financial Reporting, aggregates of the Ukrainian State Tax Service and the Ukrainian State Statistics Service, ProZorro, lists of MFI projects. The main threats to identification are the coincidence of military shocks with the lifting of the moratorium (absorbed by the effects of "region × time"), expectation effects, and self-selection into "club" membership (neutralized by the quasi-randomness of the regression gap); the design yields short-term local, not general equilibrium, effects.

Table 1

KTQ (Key Tax Quality) indicator system based on the 4C model measurements

Dimension (4C)	No.	Indicator	Calculation method (normalization to [0;1])	Target
Compliance	KTQ-1	Tax compliance level	Share of audited transactions without violations	> 0,98
	KTQ-2	Completeness of transfer pricing documentation	Share of documented controlled transactions	1.00
Control	KTQ-3	Internal tax control maturity	Score according to the adapted COSO-ERM methodology	> 0.70
	KTQ-4	Timeliness of reporting and payment	Share of reports submitted on time and obligations paid	1.00
Cost	KTQ-5	Effective tax rate (ETR)	Deviation from the industry benchmark	industry range
	KTQ-6	Specific compliance costs	Expenses for the tax function to turnover (lower is better)	downtrend
Confidence	KTQ-7	GRI 207 transparency	Share of GRI 207-1…207-4 elements disclosed	> 0.80 (public)
	KTQ-8	Reputational cleanliness	Absence of public disputes and risk statuses	1.00

Source: developed by the author.

Table 2

Map of hypotheses, identification designs and data

No.	Hypothesis (empirical prediction)	Design and specification	Data/source in theory
H1	After the resumption of inspections, declared bases grow; the effect is stronger in segments with low digital footprint density	Event-study and difference-in-differences with different time-inclusion of categories; testing for parallel pretrends [16]	Open data of the State Tax Service; financial reporting / Tv. 1
H2	The drop in compliance in 2022–2023 is weaker in sectors with high dependence on external financing (bifurcation)	Post × ExtFin interaction by industry measure [26]; test for increasing intersegment variance	Reporting; lists of EBRD, EIB, World Bank projects / Tv. 3
H3	Crossing the threshold for inclusion in the List reduces the cost of debt and expands access to programs; near the threshold - bunching	Regression gap at threshold criterion; density test; donut specifications [13]	Lists of the State Tax Service; credit terms; ProZorro / Tv. 2, Tv. 4
H4	The sensitivity of declaration to inspection capacity decreases with the share of transactions under the URPN and programmatic RROs	Triple interaction Post × trace density; placebo tests	Aggregates of the Ukrainian State Tax Service and the Ukrainian State Tax Service; structure of calculations / Tv. 1
H1	After the resumption of inspections, declared bases grow; the effect is stronger in segments with low digital footprint density	Event-study and difference-in-differences with different time-inclusion of categories; testing for parallel pretrends [16]	Open data of the State Tax Service; financial reporting / Tv. 1
H2	The drop in compliance in 2022–2023 is weaker in sectors with high dependence on external financing (bifurcation)	Post × ExtFin interaction by industry measure [26]; test for increasing intersegment variance	Reporting; lists of EBRD, EIB, World Bank projects / Tv. 3
H3	Crossing the threshold for inclusion in the List reduces the cost of debt and expands access to programs; near the threshold – bunching	Regression gap at threshold criterion; density test; donut specifications [13]	Lists of the State Tax Service; credit terms; ProZorro / Tv. 2, Tv. 4
H4	The sensitivity of declaration to inspection capacity decreases with the share of transactions under the URPN and programmatic RROs	Triple interaction Post × trace density; placebo tests	Aggregates of the Ukrainian State Tax Service and the Ukrainian State Tax Service; structure of calculations / Tv. 1

Source: developed by the author.

The proposed theory is embodied in an operational protocol that generates primary *KTQ* measurements: the taxonomy of audit objects (direct and indirect taxes, labor taxes, property and local taxes, international taxation) links each segment to the norms of the Tax Code and the source of transactional data (EURPN and CEA VAT, combined PIT/ESI reporting, automatic information exchange), the audit risk formula $AR = IR \times CR \times DR$ is Bayesianly refined with data – from tests according to Benford's law to scoring according to the features of the SMCOR, and the protocol covers five phases from planning to reporting with an emphasis on the cost side [4]. Initial assessments are provided by the risk matrix (*Tbl.* 3), compiled according to Ukrainian practice for 2022–2025.

European integration adds new objects – from the CIT rules under the ATAD directives and the disclosure of schemes under DAC6/DAC8 to the global minimum tax (effective rate of 15% for groups with income over 750 million euros [18; 24]) and public reporting by country under GRI 207 [19], and it is the publicity of such reporting that most effectively restrains the movement of profits [29]; in digital VAT reporting, Ukraine is ahead of most member states, so the acquired competencies will be in demand in Europe.

Enterprise tax audit should therefore be understood as a broader system than a procedure for identifying tax violations. Its primary function is to provide reasonable assurance that the enterprise's tax obligations are complete, accurate, timely, and properly documented, while simultaneously identifying weaknesses in the internal tax function. In this context, the audit combines preventive, corrective, and analytical functions. Preventive procedures reduce the probability of future errors and non-compliance, cor-

Table 3

Enterprise tax audit risk matrix

Risk Type	Content and Characteristics	Probability	Impact	Priority
Regulatory	Frequent changes in tax legislation, particularly under martial law; uncertainty regarding transitional provisions	H	H	Critical
Calculation	Errors in determining the tax base, rates, and tax benefits; incorrect classification of business transactions	M	H	High
Documentary	Improper preparation of primary documents; violations in the registration of tax invoices in the Unified Register of Tax Invoices (URTI)	M	H	High
Transfer Pricing	Adjustments related to transactions with related parties and residents of low-tax jurisdictions	L	H	Medium
CFC	Non-disclosure or incorrect reporting of controlled foreign companies	L	H	Medium
Reputational / ESG	Insufficient disclosure of the tax strategy in accordance with GRI 207 and the requirements of investors and creditors	M	M	Medium
Technological	Failures of accounting systems; incorrect integration with State Tax Service systems; errors in electronic reporting	M	M	Medium

Note: L – low, M – medium, H – high. The estimates are authors' preliminary assessments based on tax audit practice in Ukraine in 2022–2025.

Source: developed by the author.

rective procedures address identified deficiencies, and analytical procedures allow the enterprise to assess the efficiency and cost of its tax management.

The proposed approach places particular emphasis on the interaction between internal tax controls and external tax administration. A high-quality internal tax function reduces the probability of errors before they become subject to state intervention, while digital transaction records provide an additional layer of transparency and traceability.

Under the conditions of Ukraine's wartime economy and post-war reconstruction, this function becomes particularly important. The reliability of tax information increasingly affects not only the amount of tax revenues but also the enterprise's access to external financing, international support programs, and business partnerships. Therefore, the effectiveness of enterprise tax audit can be assessed not solely by the number of detected violations or corrected tax liabilities, but also by its ability to strengthen internal tax governance, improve transparency, reduce compliance costs, and increase stakeholders' confidence in the enterprise.

DISCUSSION

The results obtained generally confirm the classical theory of tax deterrence of M. G. Allingham and A. Sandmo (1972) and its development in the work of S. Yitzhaki (1974) [12; 31], according to which the increase in the probability of detection and expected sanctions reduces the tendency of enterprises to hide the tax base. At the same time, the results of the study complement this approach by taking into account the digital trail of transactions: part of the deterrence function can move from traditional inspection to automated monitoring. This is consistent with studies of the role of information architecture of tax control [22; 25], but allows for additional justification of partial interchangeability between digital monitoring and state inspections.

The results also develop the conclusions of previous studies on the long-term impact of tax audits on taxpayer behavior [11]. The proposed model shows that a prolonged decrease in the intensity of inspections can cause erosion of internal compliance capital, while enterprises dependent on external financing have an additional incentive to maintain the quality of the tax function even with a low probability of state inspection. On this basis, a new concept of "compliance bifurcation" is proposed, which explains the possible deepening of the gap between enterprises with developed internal tax control and enterprises with low compliance quality.

A separate author's contribution is the combination of deterrence, error correction and signaling

functions in a single economic model of corporate tax audit. This complements the conclusions of M. Hanlon and S. Heitzman (2010) [20] regarding the insufficient development of approaches to measuring the quality of the tax function. To overcome this problem, a 4C model and a non-compensatory *KTQ* index are proposed, which integrates the Compliance, Control, Cost and Confidence indicators. In addition, four testable hypotheses H1–H4 are formed and corresponding designs for their empirical identification are proposed.

The conclusion about the possibility of using the confirmed quality of the corporate tax function in risk-oriented state control is of practical importance. At the same time, such a mechanism should complement, not replace, state supervision, since its effectiveness depends on the reliability of the signal and the transparency of the assessment criteria.

The proposed model assumes risk-neutrality of enterprises. Empirical dependencies H1–H4 are currently formulated as hypotheses. Full validation of the *KTQ* requires access to microdata, industry calibration of indicators and further verification of its connection with the actual cost of financing.

Therefore, the results do not refute previous studies, but expand the theory of tax deterrence, integrating state control, digital traceability, internal compliance and market signaling into a single model of corporate tax audit.

CONCLUSIONS

According to the results of the study, the corporate tax audit is conceptualized as an independent institution of fiscal capacity, operating in three modes – error correction, compliance capital accumulation, signaling – and separated from state tax control in terms of purpose, subject and consequences. The constructed model explains the paradox of the war years: the coexistence of a moratorium on inspections with the growth of the initiative audit market, which creates compliance-sensitive reconstruction capital, not control intensity. The theory is translated into measurements (the 4C model and the non-compensatory *KTQ* index), an identification strategy is proposed on an experimental variation (stepwise abolition of the moratorium and threshold criteria of the "club") and an operational toolkit is developed with a systematization of European integration requirements from ATAD to Pillar Two. Four practical recommendations follow from the model: target inspections to segments with a weak digital footprint; to build a "white business club" based on the principles of multidimensional variable criteria with the inclusion of a confirmed *KTQ* report; to gradually move large payers to public reporting by country and reporting according to GRI 207 as conditions for access to reconstruction programs; to standardize *KTQ* as a covenant of international financial organizations, which would reduce duplication of due diligence procedures. Let's outline the limitations honestly: the model is static and risk-neutral, and the empirical part is a design, not ready-made estimates, some of the data of which requires agreements with the State Tax Service under protected access protocols. Evaluating hypotheses H1–H4 on microdata, *KTQ* industry benchmarks, the GloBE calculation audit methodology as Pillar Two is implemented, and field experiments with information letters together with the tax service are prospects for further research. ■

BIBLIOGRAPHY

1. Бутинець Ф. Ф. Аудит : підручник. 2-ге вид., перероб. та доп. Житомир : ПП «Рута», 2002. 672 с.
2. Давидов Г. М. Аудит: теорія і практика : монографія. Кіровоград : ТОВ «Імекс-ЛТД», 2006. 324 с.
3. Іванов Ю. Б., Крисоватий А. І., Десятнюк О. М. Податкова система : підручник. Київ : Атіка, 2006. 920 с.
4. Колісниченко Д. Л., Гордополов В. Ю., Нежива М. О. Аудит оподаткування витрат в системі інтегрованої звітності підприємств сфери послуг. *Інтернаука. Серія «Економічні науки»*. 2024. № 2. С. 71–78. DOI: https://doi.org/10.25313/2520-2294-2024-2-9663
5. Розпорядження Кабінету Міністрів України «Про схвалення Національної стратегії доходів до 2030 року» від 27.12.2023 р. № 1218-р. URL: https://zakon.rada.gov.ua/laws/show/1218-2023-р#Text
6. Податковий кодекс України від 02.12.2010 р. № 2755-VI. URL: https://zakon.rada.gov.ua/laws/show/2755-17#Text
7. Закон України «Про аудит фінансової звітності та аудиторську діяльність» від 21.12.2017 р. № 2258-VIII. URL: https://zakon.rada.gov.ua/laws/show/2258-19#Text
8. Закон України «Про внесення змін до Податкового кодексу України та інших законів України щодо скасування мораторію на проведення податкових перевірок» від 09.11.2023 р. № 3453-IX. URL: https://zakon.rada.gov.ua/laws/show/3453-20#Text
9. Закон України «Про внесення змін до Податкового кодексу України щодо особливостей податкового адміністрування під час воєнного стану для платників податків з високим рівнем добровільного дотримання податкового законодавства» від 18.06.2024 р. № 3813-IX. URL: https://zakon.rada.gov.ua/laws/show/3813-20#Text
10. Olendiy O., Nazarova K., Nezhyva M. et al. Tax Audit to Ensure Business Prosperity: Trends and Perspectives. *Financial and Credit Activity Problems of Theory and Practice*. 2023. Vol. 4. No. 51. P. 80–90. DOI:https://doi.org/10.55643/fcaptp.4.51.2023.4069

11. Advani A., Elming W., Shaw J. The Dynamic Effects of Tax Audits. *Review of Economics and Statistics*. 2023. Vol. 105. Iss. 3. P. 545–561. DOI: https://doi.org/10.1162/rest_a_01101
12. Allingham M. G., Sandmo A. Income Tax Evasion: A Theoretical Analysis. *Journal of Public Economics*. 1972. Vol. 1. Iss. 3–4. P. 323–338. DOI: https://doi.org/10.1016/0047-2727(72)90010-2
13. Almunia M., Lopez-Rodriguez D. Under the Radar: The Effects of Monitoring Firms on Tax Compliance. *American Economic Journal: Economic Policy*. 2018. Vol. 10. No. 1. P. 1–38. DOI: https://doi.org/10.1257/pol.20160229
14. Basri M. C., Felix M., Hanna R., Olken B. A. Tax Administration versus Tax Rates: Evidence from Corporate Taxation in Indonesia. *American Economic Review*. 2021. Vol. 111. No. 12. P. 3827–3871. DOI: https://doi.org/10.1257/aer.20201237
15. Besley T., Persson T. The Origins of State Capacity: Property Rights, Taxation, and Politics. *American Economic Review*. 2009. Vol. 99. No. 4. P. 1218–1244. DOI: https://doi.org/10.1257/aer.99.4.1218
16. Callaway B., Sant'Anna P. H. C. Difference-in-Differences with Multiple Time Periods. *Journal of Econometrics*. 2021. Vol. 225. Iss. 2. P. 200–230. DOI:https://doi.org/10.1016/j.jeconom.2020.12.001
17. Carrillo P., Pomeranz D., Singhal M. Dodging the Taxman: Firm Misreporting and Limits of Tax Enforcement. *American Economic Journal: Applied Economics*. 2017. Vol. 9. No. 2. P. 144–164. DOI: https://doi.org/10.1257/app.20140495
18. Council Directive (EU) 2022/2523 of 14 December 2022 on ensuring a global minimum level of taxation for multinational enterprise groups and large-scale domestic groups in the Union. *Official Journal of the European Union*. L 328, 22.12.2022. P. 1–58. URL: https://eur-lex.europa.eu/eli/dir/2022/2523/oj/eng
19. GRI 207: Tax 2019. Amsterdam : Global Reporting Initiative, 2019. 36 p.
20. Hanlon M., Heitzman S. A Review of Tax Research. *Journal of Accounting and Economics*. 2010. Vol. 50. Iss. 2–3. P. 127–178. DOI: https://doi.org/10.1016/j.jacceco.2010.09.002
21. Keen M., Slemrod J. Optimal Tax Administration. *Journal of Public Economics*. 2017. Vol. 152. P. 133–142. DOI: https://doi.org/10.1016/j.jpubeco.2017.04.006
22. Kleven H. J., Knudsen M. B., Kreiner C. T., et al. Unwilling or Unable to Cheat? Evidence from a Tax Audit Experiment in Denmark. *Econometrica*. 2011. Vol. 79. Iss. 3. P. 651–692. DOI: https://doi.org/10.3982/ECTA9113
23. Naritomi J. Consumers as Tax Auditors. *American Economic Review*. 2019. Vol. 109. No. 9. P. 3031–3072. DOI: https://doi.org/10.1257/aer.20160658
24. Tax Challenges Arising from the Digitalisation of the Economy – Global Anti-Base Erosion Model Rules (Pillar Two). Paris : OECD Publishing, 2021.
25. Pomeranz D. No Taxation without Information: Deterrence and Self-Enforcement in the Value Added Tax. *American Economic Review*. 2015. Vol. 105. No. 8. P. 2539–2569. DOI: https://doi.org/10.1257/aer.20130393
26. Rajan R.G., Zingales L. Financial Dependence and Growth. *American Economic Review*. 1998. Vol. 88, No. 3. P. 559–586.
27. Slemrod J. Tax Compliance and Enforcement. *Journal of Economic Literature*. 2019. Vol. 57. No. 4. P. 904–954. DOI: https://doi.org/10.1257/jel.20181437
28. Spence M. Job Market Signaling. *Quarterly Journal of Economics*. 1973. Vol. 87. Iss. 3. P. 355–374. DOI: https://doi.org/10.2307/1882010
29. Tørsløv T., Wier L., Zucman G. The Missing Profits of Nations. *Review of Economic Studies*. 2023. Vol. 90. Iss. 3. P. 1499–1534. DOI: https://doi.org/10.1093/restud/rdac049
30. World Bank, Government of Ukraine, European Commission, United Nations. Ukraine: Fifth Rapid Damage and Needs Assessment (RDNA5), February 2022 – December 2025. Washington, D. C. : World Bank, 2026. URL: https://www.undp.org/ukraine/publications/ukraine-fifth-rapid-damage-and-needs-assessment-rdna5-february-2022-december-2025
31. Yitzhaki S. A Note on Income Tax Evasion: A Theoretical Analysis. *Journal of Public Economics*. 1974. Vol. 3. Iss. 2. P. 201–202. DOI: https://doi.org/10.1016/0047-2727(74)90037-1

REFERENCES

Advani A., Elming W. & Shaw J. (2023). The Dynamic Effects of Tax Audits. *Review of Economics and Statistics, 105*(3), 545–561. https://doi.org/10.1162/rest_a_01101

Allingham M. G. & Sandmo A. (1972). Income Tax Evasion: A Theoretical Analysis. *Journal of Public Economics, 1*(3–4), 323–338. https://doi.org/10.1016/0047-2727(72)90010-2

Almunia M. & Lopez-Rodriguez D. (2018). Under the Radar: The Effects of Monitoring Firms on Tax Compliance. *American Economic Journal: Economic Policy, 10*(1), 1–38. https://doi.org/10.1257/pol.20160229

Basri M. C., Felix M., Hanna R. & Olken B. A. (2021). Tax Administration versus Tax Rates: Evidence from Corporate Taxation in Indonesia. *American Economic Review, 111*(12), 3827–3871. https://doi.org/10.1257/aer.20201237

Besley T. & Persson T. (2009). The Origins of State Capacity: Property Rights, Taxation, and Politics. *American Economic Review, 99*(4), 1218–1244. https://doi.org/10.1257/aer.99.4.1218

Butynets F. F. (2002). *Audyt:* pidruchnyk [Audit: textbook]. Zhytomyr: PP «Ruta».

Callaway B. & Sant'Anna P. H. C. (2021). Difference-in-Differences with Multiple Time Periods. *Journal of Econometrics, 225*(2), 200–230. https://doi.org/10.1016/j.jeconom.2020.12.001

Carrillo P., Pomeranz D. & Singhal M. (2017). Dodging the Taxman: Firm Misreporting and Limits of Tax Enforcement. *American Economic Journal: Applied Economics, 9*(2), 144–164. https://doi.org/10.1257/app.20140495

Council of the European Union. (2022, December 22). Council Directive (EU) 2022/2523 of 14 December 2022 on ensuring a global minimum level of taxation for multinational enterprise groups and large-scale domestic groups in the Union. *Official Journal of the European Union*. https://eur-lex.europa.eu/eli/dir/2022/2523/oj/eng

Davydov H. M. (2006). *Audyt: teoriia i praktyka:* monohrafiia [Audit: theory and practice: monograph]. Kirovohrad: TOV «Imeks-LTD».

Global Reporting Initiative (2019). *GRI 207: Tax 2019*. Amsterdam: Global Reporting Initiative.

Hanlon M. & Heitzman S. (2010). A Review of Tax Research. *Journal of Accounting and Economics, 50* (2–3), 127–178. https://doi.org/10.1016/j.jacceco.2010.09.002

Ivanov Yu. B., Krysovatyi A. I. & Desiatniuk O. M. (2006). *Podatkova systema*: pidruchnyk [Tax system: textbook]. Kyiv: Atika.

Kabinet Ministriv Ukrainy. (2023, December 27). Rozporiadzhennia Kabinetu Ministriv Ukrainy «Pro skhvalennia Natsionalnoi stratehii dokhodiv do 2030 roku» vid 27.12.2023 r. № 1218-r [Resolution of the Cabinet of Ministers of Ukraine «On approval of the National Revenue Strategy until 2030» dated December 27, 2023 No. 1218-r]. https://zakon.rada.gov.ua/laws/show/1218-2023-r#Text

Keen M. & Slemrod J. (2017). Optimal Tax Administration. *Journal of Public Economics, 152*, 133–142. https://doi.org/10.1016/j.jpubeco.2017.04.006

Kleven H. J., Knudsen M. B. & Kreiner C. T. (2011). Unwilling or Unable to Cheat? Evidence from a Tax Audit Experiment in Denmark. *Econometrica, 79*(3), 651–692. https://doi.org/10.3982/ECTA9113

Kolisnychenko D. L., Hordopolov V. Yu. & Nezhyva M. O. (2024). Audyt opodatkuvannia vytrat v systemi intehrovanoi zvitnosti pidpryiemstv sfery posluh [Audit of expense taxation in the integrated reporting system of service sector enterprises]. *Internauka. Seriia «Ekonomichni nauky», 2*, 71–78. https://doi.org/10.25313/2520-2294-2024-2-9663

Naritomi J. (2019). Consumers as Tax Auditors. *American Economic Review, 109*(9), 3031–3072. https://doi.org/10.1257/aer.20160658

OECD (2021). *Tax Challenges Arising from the Digitalisation of the Economy – Global Anti-Base Erosion Model Rules (Pillar Two)*. Paris: OECD Publishing.

Olendiy O., Nazarova K. & Nezhyva M. (2023). Tax Audit to Ensure Business Prosperity: Trends and Perspectives. *Financial and Credit Activity Problems of Theory and Practice, 4*(51), 80–90. https://doi.org/10.55643/fcaptp.4.51.2023.4069

Pomeranz D. (2015). No Taxation without Information: Deterrence and Self-Enforcement in the Value Added Tax. *American Economic Review, 105*(8), 2539–2569. https://doi.org/10.1257/aer.20130393

Rajan R. G. & Zingales L. (1998). Financial Dependence and Growth. *American Economic Review, 88*(3), 559–586.

Slemrod J. (2019). Tax Compliance and Enforcement. *Journal of Economic Literature, 57*(4), 904–954. https://doi.org/10.1257/jel.20181437

Spence M. (1973). Job Market Signaling. *Quarterly Journal of Economics, 87*(3), 355–374. https://doi.org/10.2307/1882010

Tørsløv T., Wier L. & Zucman G. (2023). The Missing Profits of Nations. *Review of Economic Studies, 90*(3), 1499–1534. https://doi.org/10.1093/restud/rdac049

World Bank, Government of Ukraine, European Commission & United Nations. (2026). *Ukraine: Fifth Rapid Damage and Needs Assessment (RDNA5), February 2022 – December 2025*. Washington, D. C.: World Bank. https://www.undp.org/ukraine/publications/ukraine-fifth-rapid-damage-and-needs-assessment-rdna5-february-2022-december-2025

Yitzhaki S. (1974). A Note on Income Tax Evasion: A Theoretical Analysis. *Journal of Public Economics, 3*(2), 201–202. https://doi.org/10.1016/0047-2727(74)90037-1

zakon.rada.gov.ua. (2010, December 2). Podatkovyi kodeks Ukrainy vid 02.12.2010 r. № 2755-VI [Tax Code of Ukraine dated December 2, 2010 No. 2755-VI]. https://zakon.rada.gov.ua/laws/show/2755-17#Text

zakon.rada.gov.ua. (2017, December 21). Zakon Ukrainy «Pro audyt finansovoi zvitnosti ta audytorsku diialnist» vid 21.12.2017 r. № 2258-VIII [Law of Ukraine «On auditing financial statements and auditing activity» dated December 21, 2017 No. 2258-VIII]. https://zakon.rada.gov.ua/laws/show/2258-19#Text

zakon.rada.gov.ua. (2023, November 9). Zakon Ukrainy «Pro vnesennia zmin do Podatkovoho kodeksu Ukrainy ta inshykh zakoniv Ukrainy shchodo skasuvannia moratoriiu na provedennia podatkovykh perevirok» vid 09.11.2023 r. № 3453-IX [Law of Ukraine «On amendments to the Tax Code of Ukraine and other laws of Ukraine regarding the cancellation of the moratorium on tax audits» dated November 9, 2023 No. 3453-IX]. https://zakon.rada.gov.ua/laws/show/3453-20#Text

zakon.rada.gov.ua. (2024, June 18). Zakon Ukrainy «Pro vnesennia zmin do Podatkovoho kodeksu Ukrainy shchodo osoblyvostei podatkovoho administruvannia pid chas voiennoho stanu dlia platnykiv podatkiv z vysokym rivnem dobrovilnoho dotrymannia podatkovoho zakonodavstva» vid 18.06.2024 r. № 3813-IX [Law of Ukraine «On amendments to the Tax Code of Ukraine regarding the specifics of tax administration during martial law for taxpayers with a high level of voluntary compliance with tax legislation» dated June 18, 2024 No. 3813-IX]. https://zakon.rada.gov.ua/laws/show/3813-20#Text

Дослідження не отримувало зовнішнього фінансування.

Автор заявляє про відсутність конфлікту інтересів.

Інструменти ШІ в підготовці цієї роботи не використовувалися.

Стаття надійшла до редакції / Received: 29.08.2026
Статтю прийнято до публікації / Accepted: 11.09.2026
Оприлюднено / Published: 24.10.2026