

The Establishment and Development of Forensic Economic Examination in Ukraine

Alexei Horlachuk *

* PhD in Economics, Ternopil SRFC of the MIA of Ukraine, Ternopil, Ukraine,
ORCID: <https://orcid.org/0000-0001-8982-2438>, e-mail: horlachuk@ukr.net

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Forensic economic examination, as a significant state institution, indirectly reflects the state of economic relations, as it studies them within the procedural field using the methodological foundations of economic sciences. The article's purpose is to study the main stages of the development of forensic economic examination, depending on the evolution of economic relations. The author examines stages of forensic economic examination development using the criterion of the transformation of economic relations. By employing methods of analysis, synthesis, and generalization, the conditions for the development of forensic economic examination are identified at each stage, highlighting characteristic features and patterns. Due attention has been given to issues of economic property as the driving force behind economic relations. Since economic relations are directly linked to the issues of property rights, the outcomes of violations of these rights in the economic sphere are the subject of an investigation by forensic economic examination appointed by judicial investigative authorities. The author examines the leading system-forming blocks of forensic economic examination which form its essence and are in constant dynamic development and interconnection. The stages of the development of forensic accounting examination are analyzed, and the transformation of economic relations on a global and national scale is considered as a criterion for periodization.

Keywords: forensic economic examination; forensic accounting examination; economic relations; economic sciences; public production.

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Research Problem Formulation

Initially, the subject matter of our research has already received sufficient attention in the national scientific literature, thus it may not contribute significantly to scientific value, as it primarily involves a review of well-established key points in the development of forensic economic examination. However, if we consider this scientific matter as an issue of the transformation of multi-format economic (technical and economic, organizational and economic, socio-economic) relations of social production in historical epochs, identifying characteristic features and patterns, these issues acquire new, relevant content.

Analyzing the development of public production as a set of socio-economic relations, the course of which can be described by economic laws (general, specific or those that operate in several socio-economic formations or at one of the stages of the social mode of production), allows us to comprehend the deep cause-and-effect relationships of the process of the historical transformation of the economic environment and, on this basis, to study the relevant chronological changes in the functioning of the judicial and legal system, a crucial element of which is forensic economic examination.

The economic activity of the society is decisive concerning its other types. Given this indisputable fact of society's vital functioning, it is possible to trace the

emergence and development of forensic accounting expertise (its methodological basis being specialized economic sciences), which (as a result of the epoch-making socio-economic transformations from the 20th to 21st centuries and the shift from a command and control system of management to a market-based one) has evolved into forensic economic examination.

In our research (along with considering the development of economic relations), the issue of economic property relations is of great importance (because the type of property is of key importance for forming the type of economic system) since they are fundamental prerequisites for forming and developing economic relations. Judicial-legal system (in particular, forensic economic examination, of which it is an element) projects onto itself the entirety of transformations of economic relations caused by the action of property relations, which gives grounds to consider this issue as a cause-and-effect relationship, which gives it a more prominent and deeper meaning and determines the relevance of the topic of our research.

Analysis of Recent Researches and Publications

Well-known Ukrainian scientists have devoted their works to the study of this issue: M. Bilukha ¹, L. Dikan with co-authors ², N. Klymenko and V. Fedchyshyna ³,

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- 1 Білуха М. Т. Судово-бухгалтерська експертиза : підручник. Київ, 2004. С. 27—33.
 - 2 Дікань Л. В., Понікаров В. Д., Кожушко О. В. Судово-економічна експертиза : навч. посіб. Харків, 2014. 432 с URL: <http://repository.hneu.edu.ua/handle/123456789/7964> (date accessed: 20.11.2023).
 - 3 Клименко Н. І., Федчишина В. В. Судово-економічна експертиза: сучасний стан і актуальні питання . *Криміналістичний вісник*. 2016. № 1 (25). С. 56—61. URL: http://nbuv.gov.ua/UJRN/krvis_2016_1_11 (date accessed: 20.11.2023).

O. Kovalenko ⁴, A. Oriekhova ⁵, I. Panchenko ⁶, I. Perevozova ⁷, V. Ponikarov and O. Kozhushko ⁸, A. Cherednichenko ⁹. While acknowledging their creative contribution to exploring the concepts of developing forensic economic examination, we believe that this issue requires further research related to the global transformation of economic relations at both the national and international levels.

Research Methods

The methods of analysis, synthesis and generalization are used to determine the conditions for the development of forensic economic examination at each stage, with the identification of characteristic features and patterns.

Article Purpose

To explore the establishment and development of forensic economic examination in correlation with the development of economic relations in public production and to identify, based on this correlation, potential future scenarios.

Main Content Presentation

Public production is the objective reality and necessary condition for human life. The history of mankind shows that the priorities of human economic existence are the basis for the development of all spheres of human activity.

- 4 Коваленко О. В. Розвиток судово-економічної експертизи в Україні . *Криміналістика і судебна експертиза*. 2013. Вып. 58 (2). С. 482—488. URL: http://nbuv.gov.ua/UJRN/krise_2013_58%282%29__91 (date accessed: 20.11.2023).
- 5 Орехова А. І. Історичні аспекти розвитку судової бухгалтерії як форми контролю. *Стан та перспективи розвитку економіки України в умовах глобалізації: теорія та практика* : колективна монографія / за ред. О. О. Непочатенко. Умань, 2014. URL: <https://repo.snau.edu.ua/bitstream/123456789/2151/1/%D0%9E%D1%80%D1%94%D1%85%D0%BE%D0%B2%D0%B0%20%D0%90.%D0%86.%20%D0%86%D1%81%D1%82%D0%BE%D1%80%D0%B8%D1%87%D0%BD%D1%96%20%D0%B0%D1%81%D0%BF%D0%B5%D0%BA%D1%82%D0%B8%20%D1%80%D0%BE%D0%B7%D0%B2%D0%B8%D1%82%D0%BA%D1%83%20%D1%81%D1%83%D0%B4%D0%BE%D0%B2%D0%BE%D1%97%20%D0%B1%D1%83%D1%85%D0%B3%D0%B0%D0%BB%D1%82%D0%B5%D1%80%D1%96%D1%97%20%D1%8F%D0%BA%20%D1%84%D0%BE%D1%80%D0%BC%D0%B8%20%D0%BA%D0%BE%D0%BD%D1%82%D1%80%D0%BE%D0%BB%D1%8E.docx.pdf> (date accessed: 20.11.2023).
- 6 Панченко І. А. Організація судово-бухгалтерської експертизи: теоретико-практичні аспекти : автореф. дис. ... канд. екон. наук. Київ, 2007. 21 с. URL: <http://194.44.12.92:8080/jspui/handle/123456789/1620> (date accessed: 20.11.2023).
- 7 Перевозова І. В. Історико-ретроспективний аналіз становлення економічної експертизи в Україні. *Культура народів Причорномор'я*. 2013. № 256. С. 38—43. URL: <http://dspace.nbuv.gov.ua/handle/123456789/92336> (date accessed: 20.11.2023).
- 8 Поникаров В. Д., Кожушко О. В. Теоретические основы становления и развития судебно-экономической экспертизы в Украине . *Бізнес-Інформ*. 2011. № 2 (2). С. 158—160. URL: https://www.business-inform.net/export_pdf/business-inform-2011-2_2-pages-158_160.pdf (date accessed: 20.11.2023).
- 9 Чередніченко А. П. Історичні аспекти становлення та розвитку судово-економічної експертизи в Україні . *Криміналістика і судебна експертиза*. 2013. Вып. 58 (1). С. 353—364. URL: http://nbuv.gov.ua/UJRN/krise_2013_58%281%29__46 (date accessed: 20.11.2023).

Economic and social aspects of society and individual activity are prioritized in the system of modern values ¹⁰.

The history of the emergence, establishment and development of forensic accounting examination today is limited to the history of accounting theory and practice, leaving aside the evolution of the use of accounting knowledge in legal activities ¹¹.

The starting point of our study is the statement that the economy and economic relations are the basis for the formation and development of other activities, so the study of this multiform relationship in the context of forensic economic activity is epistemologically sound. Until 2001, forensic economic examination was called forensic accounting, so we will use these concepts in the chronological order of their application.

First of all, it should be noted that forensic accounting examination arose out of the practical need to assist law enforcement agencies in the investigation of economic crimes, having moved from a form of control to a form of application of accounting knowledge in the judicial process. This transformation took place under the influence of several factors (in particular,

the emergence of accounting; accounting performing the function of controlling the preservation of the owner's property; the use of accounting data for making court decisions; the complication of economic activity, which led to the occurrence of offenses; low level of knowledge (or lack thereof) in economics (e.g., accounting) among law enforcement officials) ¹².

Therefore, for meaningful coverage of the problem of our research, we will consider the leading system-forming blocks of forensic economic examination which form its essence and are in constant development and dynamic interconnection:

- retrospective of the transformation of economic relations, which makes it possible to fully reflect the development of forensic expert activity in the economic sphere, which was entirely dependent on these processes;
- the emergence, development and differentiation of humanitarian knowledge (diverse economic sciences) that accompanied these processes, since the emergence of forensic accounting examination became possible only due to the formation of economic sciences

10 Філіпенко А. С. Основи наукових досліджень. Конспект лекцій : навч. посіб. Київ, 2005. С. 38. URL: <https://kpd.edu.ua/biblioteka/%D0%9E/%D0%9E%D1%81%D0%BD%D0%BE%D0%B2%D0%B8%D0%BD%D0%B0%D1%83%D0%BA%D0%BE%D0%B2%D0%B8%D1%85%D0%B4%D0%BE%D1%81%D0%BB%D1%96%D0%B4%D0%B6%D0%B5%D0%BD%D1%8C%D0%A4%D1%96%D0%BB%D1%96%D0%BF%D0%B5%D0%BD%D0%BA%D0%BE%D0%90.%D0%A1..pdf> (date accessed: 20.11.2023).

11 Орехова А. І. Op. cit. URL: <https://repo.snau.edu.ua/bitstream/123456789/2151/1/%D0%9E%D1%80%D1%94%D1%85%D0%BE%D0%B2%D0%B0%D0%90.%D0%86.%D0%86%D1%81%D1%82%D0%BE%D1%80%D0%B8%D1%87%D0%BD%D1%96%D0%B0%D1%81%D0%BF%D0%B5%D0%BA%D1%82%D0%B8%D0%80%D0%BE%D0%B7%D0%B2%D0%B8%D1%82%D0%BA%D1%83%D0%B1%D1%83%D1%85%D0%B3%D0%B0%D0%BB%D1%82%D0%B5%D1%80%D1%96%D1%97%D0%8F%D0%BA%D0%84%D0%BE%D1%80%D0%BC%D0%B8%D0%BA%D0%BE%D0%BD%D1%82%D1%80%D0%BE%D0%BB%D1%8E.docx.pdf> (date accessed: 20.11.2023).

12 Панченко І. А. Op. cit. С. 6. URL: <http://194.44.12.92:8080/jspui/handle/123456789/1620> (date accessed: 20.11.2023).

based on the study of economic relations (primarily accounting, which is rightly considered their mother science);

- judicial and legal system as a procedural field in the application of the functional purpose of forensic economic examinations, the species composition of which tends to increase due to the complication of economic relations.

At the same time, it should be remembered that the history of economic accounting predates the history of the judicial system, but only the emergence of the judicial system has led to the need to analyze economic accounting data, i.e., forensic accounting. This confirms the thesis that economic relations prevail over all other relations in the activities of society.

These system-forming blocks have their respective content: the first and second — economic, the third — procedural and legal.

The economic content of forensic accounting examination is the implementation of knowledge system in the field of accounting, finance, audit, inspection, economic analysis, etc. These features related to the use of specific expertise distinguish forensic accounting examination as an independent type of forensic examination. The procedural and legal content of the examination is to define it as a process governed by a system of rules enshrined in law. From the procedural and legal point of view, forensic accounting examination is no different from other forensic examinations¹³.

The system-forming blocks and their interaction are shown schematically below.

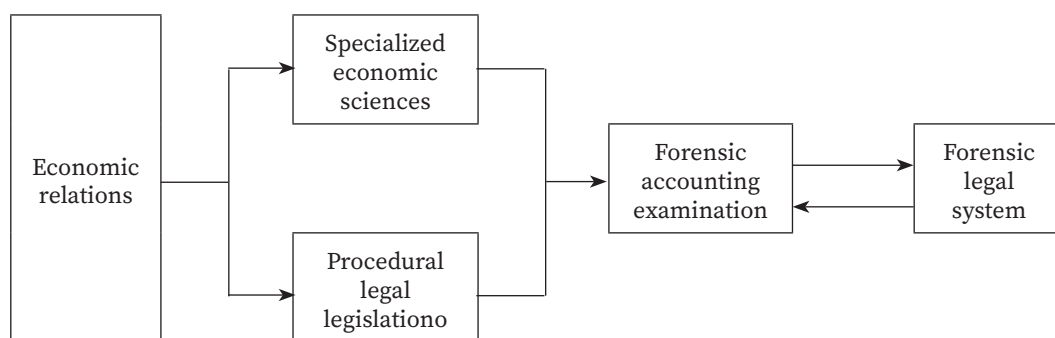


Fig. System-forming blocks of forensic economic examination in their interaction

13 Волкова І. А. Судово-бухгалтерська експертиза : навч. посіб. Київ, 2009. С. 10. URL: https://library.nlu.edu.ua/POLN_TEXT/CUL/39-Sud_buh_Eksper-Volkova.pdf (date accessed: 20.11.2023).

In the scientific literature (e.g., by A. Panchenko), one can find a systematic periodization of the formation and development of forensic accounting examination, in which researchers consider the following main historical stages¹⁴:

- I – the emergence of accounting and, at the same time, forensic accounting examination in the form of control as its function, which arose from the practical need to apply accounting knowledge in resolving commercial disputes;
- II (17th century) – establishment of particular institutes of expert accountants, whose specialists conducted examinations at the request of the judiciary;
- III (the beginning of 20th century) – separation of the spheres of audit, inspection and forensic accounting examination;
- IV (from the end of 1960s) – forensic accounting examination becomes an independent field of knowledge and with the advent of thorough scientific research acquires a theoretical basis.

A. Shelekhov considers three main stages in the development of forensic accounting¹⁵:

- I – formation of accounting practice, which covers the period from the 30th century BC to the second half of the 16th century AD and includes two sub-stages (the emergence and development of oral and written counting). At this time, primary data on counting (account) emerged and accumulated, creating the prerequisites for using these data in finding out the truth;

- II – formation of the theory of accounting and practice of forensic accounting (second half of the 16th century to the 20th century), when new forms of accounting emerged, theoretical knowledge about it was formed, and the practice of their application in legal activities was established;
- III – formation of forensic accounting, covering the period from the 20th to the 21st centuries. At this time, theoretical knowledge about the practice of applying the theory of accounting in legal activities (in particular, law enforcement) emerges and accumulates.

Of course, these periods of development and transformation of forensic accounting expertise are rather conditional, because they are based on the periods of the emergence and development of accounting.

We will consider the stages of development of forensic accounting examination, choosing the transformation of economic relations as the periodization criterion both on a global scale (since the emergence of the market and the corresponding economic relations in the classical form, as well as accounting (without which forensic accounting examination would not exist) are associated with developed countries, and the cause-and-effect relationship will be discussed further), and taking into account the national experience.

***Stage 1: “The emergence of accounting”
(from the time of the first states to the
beginning of the Middle Ages)***

During this period, socio-economic prerequisites emerged in their original form,

14 Панченко І. А. Оп. cit. С. 6. URL: <http://194.44.12.92:8080/jspui/handle/123456789/1620> (date accessed: 20.11.2023).

15 Шелехов А. О. Судова бухгалтерія : навч. посіб. Одеса, 2010. С. 6. URL: <http://dspace.oduvs.edu.ua/handle/123456789/320> (date accessed: 20.11.2023).

which later, after the emergence and development of accounting, formed the basis for the formation of specialized economic knowledge.

First of all, it should be noted that in the 9th millennium BC, Mesopotamia developed the first accounting system in the world history ¹⁶ (although in its simplest form). The first written documents on accounting date back to that time, which is due to the powerful economic development of this ancient civilization, which left behind enough historical facts of economic life.

In the Ancient World, there were categories of people (civil servants and officials who had knowledge of primitive accounting and were literate) who controlled the use of public funds ¹⁷, and had authority in the courts in resolving economic disputes between different groups of the population. These processes could arise only in the conditions of the existence of a state, the formation of which is associated with the emergence of property relations (namely, the right to ownership of surplus products). They included the following individuals:

- who controlled and checked the use of the state treasury (treasurers, royal controllers) for various state or public needs (construction of roads, buildings, water canals, pyramids, etc.);

- knowledgeable in commercial matters, who were involved by one of the parties in resolving commercial disputes in courts (artisans, merchants, moneylenders, etc.) to prove their case or refute the evidence of the opposing party.

Even then, there was a need for specialists who were literate and familiar with monetary transactions due to their work, and who were able to perform control or audit functions (merchants, treasurers, etc.): such specialists in the modern world are expert accountants.

Historically, the emergence of economic accounting preceded the emergence of the judicial system, so with its emergence, courts began to widely use the data from this accounting. Accounting recorded the facts of economic life, i.e., actions and events that caused or could have caused legal consequences ¹⁸.

At the same time, the emergence of forensic accounting examination was preceded by certain economic prerequisites, without which it would not have existed at all, so their analysis allows us to trace this important cause-and-effect relationship. The leading place in this is occupied by property relations (they arose simultaneously with the emergence of the concept of the state as one of the most important

16 Geschichte der Buchhaltung / BVBC. . URL: <https://www.bvbc.de/baden-wuerttemberg/chronik/geschichte-der-buchhaltung> (date accessed: 20.11.2023) ; Die Geschichte der Buchführung / Rechnungswesenforum.de. URL: https://www.rechnungswesenbuch.de/geschichte_der_buchfuehrung.php (date accessed: 20.11.2023).

17 Історія економічних учень : підручник. У 2 ч. Ч. 1 / за ред. В.Д. Базилевича. Київ, 2006. С. 37, 41, 48.

18 Орехова А. І. Оп. cit. URL: <https://repo.snau.edu.ua/bitstream/123456789/2151/1/%D0%9E%D1%80%D1%94%D1%85%D0%BE%D0%B2%D0%B0%20%D0%90.%D0%86.%20%D0%86%D1%81%D1%82%D0%BE%D1%80%D0%B8%D1%87%D0%BD%D1%96%20%D0%B0%D1%81%D0%BF%D0%B5%D0%BA%D1%82%D0%B8%20%D1%80%D0%BE%D0%B7%D0%B2%D0%B8%D1%82%D0%BA%D1%83%20%D1%81%D1%83%D0%B4%D0%BE%D0%B2%D0%BE%D1%97%20%D0%B1%D1%83%D1%85%D0%B3%D0%B0%D0%BB%D1%82%D0%B5%D1%80%D1%96%D1%97%20%D1%8F%D0%BA%20%D1%84%D0%BE%D1%80%D0%BC%D0%B8%20%D0%BA%D0%BE%D0%BD%D1%82%D1%80%D0%BE%D0%BB%D1%8E.docx.pdf> (date accessed: 20.11.2023).

institutions of society), which are of exceptional importance for all state-building and social processes.

The priority of the property criterion is determined, *firstly*, by the fact that property is a multifaceted sociological category with several aspects that reflects almost the entire range of relations between individuals, collectives, states and other entities. *Secondly*, the type of economic property (for means of production, labor results, property management, etc.) determines socio-economic progress in society and the formation of the most powerful incentives to work. *Thirdly*, comprehensive human development involves not only the progress of the human worker but also the progress of the human owner.

The presence and degree of development of commodity-money relations is a specification of the property criterion. In this regard, a distinction is made between natural and commodity production, market, free market, socially oriented market and regulated market economies ¹⁹.

I. Perevozova calls the emergence and development of writing the objective prerequisites for the emergence of economic examination (along with the emergence of the state and financial and economic relations) ²⁰. The history of accounting in Western European countries (e.g., in Germany at the time) and in Kievan Rus dates back to the accounting in the centers of education and culture of the time — monasteries and churches ²¹.

Therefore, it can be argued that the prerequisites for the emergence of forensic accounting expertise are directly related to property relations (of course, in their more advanced form, which occurred much later), the control over the observance of which, as well as the protection of the interests of their participants following the rules of the time (for example, the collection of laws “Russian Truth”, “Arthashastra”, “Guan Tzu”) was carried out by the state ²².

It is worth noting that in the times of Kievan Rus, expert documents were developed and submitted to the princely court by written persons familiar with economic accounting (dyaks, clerks, translators, interpreters, etc.) ²³.

Essential aspects of the stage: the prerequisites for the emergence of forensic accounting examination are related to the emergence of property relations, which are the basis of economic relations.

Stage 2: “Forensic accounting examination at the stage of commodity production” (Middle Ages)

During this period, the productive forces gradually developed, creating conditions for the emergence of a new, market (capitalist) mode of social production and its characteristic economic relations at the next stage.

An important factor of this stage, which had a huge impact on the economic life of Europe and the world and which explains

19 Мочерний С. В., Ларіна Я. С. Політекономія : підручник / 3-тє вид., перероб. і допов. Київ, 2006. С. 66—67.

20 Перевозова І. В. Оп. cit. С. 39. URL: <http://dspace.nbuv.gov.ua/handle/123456789/92336> (date accessed: 20.11.2023).

21 Білуха М. Т. Оп. cit. С. 29 ; Die Geschichte der Buchführung. URL: https://www.rechnungswesenbuch.de/geschichte_der_buchfuehrung.php (date accessed: 20.11.2023).

22 Історія економічних учень С. 37, 41, 48.

23 Перевозова І. В. Оп. cit. С. 39. URL: <http://dspace.nbuv.gov.ua/handle/123456789/92336> (date accessed: 20.11.2023).

the course of many economic processes of that time, is the geographical discoveries (late 15th– 17th centuries), which resulted not only in the discovery of new lands that later turned into new markets for goods but also in the enormous influx of precious metals (gold and silver) to Europe.

For this period, the emergence of the first banks providing loans with interest to entrepreneurs and merchants, as well as exchanges as one form of trade, is noted. By the way, the first international stock exchange appeared in 1460 in Antwerp (modern-day Belgium). In general, the purpose of the exchange (both commodity and stock) is not to provide the economy with capital or raw materials but to organize, regulate, and standardize capital markets, commodities, and so on ²⁴.

These socio-economic transformations in Europe gave a powerful impetus to the development of trade and industry, which contributed to an increase in financial flows and trade turnover between their participants. This required appropriate financial control over business operations, which was of interest to merchants, bankers, landowners, and the state. These economic transformations created a need for people with knowledge of accounting.

At the same time, another important event took place in scientific and

economic life – accounting was finally formed (in a much more advanced form), which, although dating from the 13th century, is more often associated with 1494, when Luca Pacioli published a fundamental work on accounting “*The sum of arithmetic, geometry, proportions and proportionality*”, which contained a separate section entitled “*Treatise on Calculations and Records*” ²⁵ (there is no consensus on the time of its appearance).

Of course, the emergence of accounting was facilitated by economic life itself (to organize the ever-increasing volume and intensity of commodity exchange transactions), so it is quite understandable why it became the foundation (mother science) and the most important tool of forensic accounting. Accounting was spread unevenly in European countries.

Forensic economic examination, in the modern sense, emerged in the 13th–17th centuries, when the first institutions of experienced persons in the field of accounting and reporting were formed to verify calculations whose reliability was questioned and challenged in various instances ²⁶. Therefore, it is quite reasonable to assume that with the emergence of accountants as a separate institution, courts began to engage them to assist in resolving commercial disputes.

24 Бурковська А. В., Бурковський І. Д., Лункіна Т. І. Особливості виникнення і розвитку бірж у країнах світу. *Науковий вісник Ужгородського національного університету*. 2015. Вип. 3. С. 51–52. URL: <https://dspace.uzhnu.edu.ua/jspui/bitstream/lib/12837/1/%D0%9E%D0%A1%D0%9E%D0%91%D0%9B%D0%98%D0%92%D0%9E%D0%A1%D0%A2%D0%86%D0%92%D0%98%D0%9D%D0%9A%D0%9D%D0%95%D0%9D%D0%9D%D0%AF%D0%86%D0%A0%D0%9E%D0%97%D0%92%D0%98%D0%A2%D0%9A%D0%A3%D0%91%D0%86%D0%A0%D0%96%D0%A3%D0%9A%D0%A0%D0%90%D0%87%D0%9D%D0%90%D0%A5%D0%A1%D0%92%D0%86%D0%A2%D0%A3.pdf> (date accessed: 20.11.2023).

25 Корягін М. В., Чік М. Ю. *Основи наукових досліджень : навч. посіб. / 2-ге вид., стер.* Київ, 2017. 622 с.

26 Сімакова-Єфремян Е. Б., Федоренко В. Л., Свиридова Л. В. та ін. *Класифікація судових експертиз : монографія / за заг. ред. Е. Б. Сімакової-Єфремян.* Харків, 2021. С. 386. URL: <https://nncise.org.ua/diyalnist/naukova> (date accessed: 24.11.2023).

The practice of applying accounting knowledge in courts since the 15th century has led to a distinction between forms of special accounting knowledge used in procedural and non-procedural forms²⁷: accounting data was used to control the safety of a merchant's property in courts, and elements of examination were used to verify the reliability of accounting data.

The evolution of private property (the right to transfer it), capital, trade (exchange of goods), credit, writing (to keep permanent records), money, and arithmetic (as a means of calculation) led to a significant event for accounting — the introduction of double entry (accounts of own funds were added to the list of accounts of simple accounting), which contributed to the formation of a new theory of accounting: The rights and obligations of business entities were no longer considered as objects of accounting (real estate, goods, money)²⁸, which significantly affected the requirements for the use of an accountant's special knowledge in courts.

At the same time, the first legislative acts regulating the use of specific expertise (in particular, accounting) in legal practice were adopted at the state level²⁹.

Essential aspects of the stage: the emergence of the accounting profession and the emergence of double-entry bookkeeping; courts began to hear accountants as experts who could apply specific expertise in procedural and non-procedural forms.

Stage 3: "Forensic accounting examination at the stage of formation of market relations" (early 16th – late 19th centuries)

During this period, the driving force of social production was the Industrial Revolution, which began first in England and later took place in all Western European countries at different times, bringing about tremendous socio-economic transformations and introducing a new mode of production, the market (capitalist) economy.

The results of the Industrial Revolution gave a powerful impetus to the development of production, trade, and accounting. The evolutionary changes in accounting occurred in the introduction of important aspects of its management, which changed the reflection of income and expense accounting, profit and loss to collecting data on the costs of manufacturing a unit of production, and the concepts of "capital accounting", "depreciation of fixed assets", "relations with shareholders", "profit", as described in the works of the authors of that time³⁰.

The role of economic science in these processes was direct: it reflected these changes and at the same time generated them. In addition, in the seventeenth century, science turned into a special social institution. At the end of the seventeenth century, the first scientific revolution turned into an industrial revolution, which resulted in the development of a capitalist industrial society. Since then, the develop-

27 Перевозова І. В. Оп. cit. С. 39. URL: <http://dspace.nbuv.gov.ua/handle/123456789/92336> (date accessed: 20.11.2023).

28 Шелехов А. О. Оп. cit. С. 6—9. URL: <http://dspace.oduvs.edu.ua/handle/123456789/320> (date accessed: 20.11.2023).

29 Там само.

30 Томілін О. О., Гаврилова О. А., Мирошніченко А. О. Теорія бухгалтерського обліку : навч. посіб. Полтава, 2011. С. 9—10. URL: <https://dspace.pdau.edu.ua/handle/123456789/8881> (date accessed: 20.11.2023).

ment of science has been largely driven by the needs of science and production³¹.

In the middle-19th century, accounting was significantly improved: the Italian Francesco Villa revealed the legal and economic aspects of accounting in its essence (control over the organization of the economy and property, which involves the preservation of values and the efficiency of their use; ensuring maximum results at minimum costs), thanks to which accounting turned into an independent theoretical discipline with its own categorical apparatus and principles of conduct³².

Thus, the second half of the 19th century can be considered the time of the formation of accounting as a science. Subsequently, the theoretical and methodological basis of accounting made it possible to use it in forensic accounting. However, it should not be assumed that forensic accounting expertise as such was developed solely due to accounting, as it was influenced by other economic sciences.

In the middle-19th century, joint-stock companies emerged and spread in European countries (including Ukraine, a large part of which was then part of the Russian Empire) due to the complexity and improvement of economic relations, the concentration of production, and the need to combine different types of capital. A characteristic feature of joint-stock companies is that they raise resources by issuing shares, which, when traded on stock markets, provide significant speculative profits. These processes are directly related to the activities of banks that lend to industry

(primarily to sectors of the economy with above-average profit margins).

The intensive development of trade, economic and banking activities resulted in a significant number of debt obligations and claims to them, the complexity of accounting and collateralization of which, in turn, led to numerous lawsuits and court proceedings, which required legal regulation of accounting. Of course, the very nature of the market economy (we mean the market at the highest stage of its development), which is characterized by certain irregularities and chaos (unemployment, periodic crises due to overproduction, etc.), contributed to economic disruption to some extent.

Essential aspects of the stage: the transformation of accounting into a scientific discipline, which, thanks to the methodological framework, has become the mother science of forensic accounting.

Stage 4: “Forensic accounting examination in the conditions of developed market relations” (20 century)

When characterizing this stage, we will not cover the organizational aspects of the development of forensic accounting examination, which are caused by purely administrative measures. Instead, following the economic approach, we will focus on its landmark moments, established by economic factors.

At this stage, the type of our country's economic system changed from market to command-and-control (directive planning). Since the 1920s, the national

31 Філіпенко А. С. Оп. cit. С. 12–13. URL: <https://kpd.edu.ua/biblioteka/%D0%9E/%D0%9E%D1%81%D0%BD%D0%BE%D0%B2%D0%B8%20%D0%BD%D0%B0%D1%83%D0%BA%D0%BE%D0%B2%D0%B8%D1%85%20%D0%B4%D0%BE%D1%81%D0%BB%D1%96%D0%B4%D0%B6%D0%B5%D0%BD%D1%8C%20%D0%A4%D1%96%D0%BB%D1%96%D0%BF%D0%B5%D0%BD%D0%BA%D0%BE%20%D0%90.%D0%A1..pdf> (date accessed: 20.11.2023).

32 Корягін М. В., Чік М. Ю. Оп. cit.

economy began to operate in a planned mode, which affected the form of economic relations, as well as the development of economic sciences that explained them.

With the growth of the state sector of the economy in the USSR and the near disappearance of enterprises of other forms of ownership (collective farms were effectively controlled by the state), the range of issues addressed by forensic accounting examination regarding the procedure for accounting and preservation of socialist property has hardly changed. However, in the context of total planning of the activities of state-owned enterprises, when the criteria for evaluating their efficiency were the fulfillment of targets and the introduction of new forms of remuneration, there was a need to solve problems of qualitative and quantitative characteristics of processes related to non-compliance with planning and economic discipline. This required the use of other research methods and techniques, some of which were borrowed from economic statistics, mathematics and planning, but most of all from economic analysis³³.

In the judicial and legal system, in addition to traditional forensic accounting, there was a need for planned economic examination. In the 1960s, forensic accounting examination developed into an independent field of knowledge³⁴, which was explained by its enrichment with the methodology of economic sciences.

In the 1990s, the national economy shifted to a market model, which led to a change in the format of economic relations between a significant number of its actors represented by different forms of ownership and management. In the context of the formation of a market econo-

my and the corresponding infrastructure, the legal framework that regulated the activities of business entities was sometimes contradictory. Under such circumstances, the number of economic crimes typical of a market economy increased (illegal privatization, bankruptcy, financial fraud with securities, etc.). When investigating complex economic violations, forensic authorities required special economic knowledge, which eventually led to the emergence of new types of forensic accounting examinations (financial and credit, taxation, securities transactions, etc.), which required appropriate classification and a change in the names of various types of forensic examinations in the field of economics to forensic economic examinations. In addition, the field of research of an economic specialist went beyond purely accounting (for example, the study of securities transactions).

Essential aspects of the stage: forensic accounting examination has emerged as an independent field of knowledge.

Stage 5: "Forensic economic examination in the period of digital economy" (from the beginning of the 21st century to the present)

The transition of economic relations to a qualitatively new level (division of labor, specialization, cooperation, and intensification) in the early twentieth century in various countries of the world required comprehensive scientific research and the search for methods to minimize production costs, which became possible through the use of a theoretical and methodological framework:

- general economic sciences (economic theory, political

33 Сімакова-Єфремян Е. Б., Федоренко В. Л., Свиридова Л. В. та ін. *Ор. cit.* С. 386. URL: <https://nncise.org.ua/diyalist/naukova> (date accessed: 24.11.2023).

34 Ibidem.

economy, national economic management theory, etc.);

- specific economic sciences (functional (interdisciplinary) sciences that study aspects of economic system development — finance, credit, labor economics, pricing, etc., as well as sciences that study sectoral specifics industrial, agricultural, transport, etc. Among the economic sciences, a special place is occupied by the sciences that study quantitative relationships and statistical patterns of economic systems - economic statistics, accounting, economic programming, etc.)³⁵.

We would like to draw attention to the following important aspect: economic analysis, which is widely used today in forensic economic examinations, is a “*synthesized science formed by integrating several economic sciences*”³⁶; it originated in the intensification of social production, when, in the context of increased competition, the number of business entities increased, which required analysis of their economic activities to make effective management decisions.

Thus, the emergence of specific economic sciences and the cause-and-effect relationships between them contributed to the formation and development of forensic accounting examination and enriched it with methodological tools.

It is interesting to analyze from the economic point of view the importance

and role of the state in these processes. Since the establishment and formation of the market economy, the economy has been developing by impulses (depending on periodic crises of overproduction, the formation of monopolies, and sharp differentiation of society). Given the results of market self-regulation, since the 1930s, developed countries have faced an objective and urgent need to combine state regulation of the economy with market instruments of self-regulation.

As of today, regulation of the economic system with a significant number of subsystems and interactions between them is the prerogative of the state. The economic system itself is a set of interrelated and appropriately organized elements (productive forces, economic relations, and the economic mechanism). In its turn, the system of economic relations includes technical and economic relations (on the creation and use of tools and objects of labor), organizational and economic relations (on the application of methods and techniques of organization and management of social production) and socio-economic relations (property in the economic sense of the term)³⁷.

That is why, in order to ensure the development of the economic system, the state, on the one hand, must have a certain informative database necessary for making managerial decisions on balancing the economic system and its subsystems (primarily on regulating property relations), and on the other hand, the state's prerogative is also to use the judicial and legal system to protect the

35 Економічна енциклопедія. У 3 т. Т. 1 / редкол.: С. В. Мочерний (відп. ред.) та ін. Київ, 2000. С. 479.

36 Федоришина Л. І. Витоки розвитку економічного аналізу. *Причорноморські економічні студії*. 2016. Вип. 11. С. 234. URL: http://nbuv.gov.ua/UJRN/bses_2016_11_52 (date accessed: 20.11.2023).

37 Мочерний С. В., Ларіна Я. С., Устенко О. А., Юрій С. І. Економічний енциклопедичний словник. У 2 т. Т. 1 / за ред. С. В. Мочерного. Львів, 2005. С. 204.

interests of all participants in economic relations (primarily the state, which, according to the Constitution, protects the interests of the Ukrainian people).

We would like to note one more important aspect: the above-mentioned economic measures of state influence on the economy have played, are playing and will continue to play a leading role in the formation and development of the institute of forensic economic examination, which is due to the fundamental law of systematic economic development at the present stage.

Let's examine the essential areas of government regulation in the economy³⁸:

- 1) the system of productive forces in general and each of its elements in particular;
- 2) economic property relations (for example, its individual forms: joint-stock, state, etc.);
- 3) technical and economic relations (for example, the concentration of production, its specialization, etc.);
- 4) organizational and economic relations and, above all, management.

From the foregoing, we conclude that state regulation of the economy involves primarily the regulation of economic relations, which (in the event of their violation in the economic system) are indirectly related to forensic economic examination (since it examines their economic side).

Modern forensic economic examination has a developed methodological framework that allows for a complete study of the economic side of an economic offense. As is well known, each method contains a certain set of techniques (e.g., documentary verification, comparison of documents, modeling), the number of which has

a natural tendency to increase with the development of the theory and practice of forensic economic examination.

At the same time, economic transactions at the end of the 20th century and today are actively developing due to the use of information and communication technologies, rapid digitalization of some processes of economic life and the use of artificial intelligence, which soon will change the form of economic relations and will require forensic economic examination to develop new research methods (some of which can be created with the help of artificial intelligence).

Based on the study of the development of forensic economic examination at the considered stages, it is possible to identify its most important features and patterns:

- the emergence of the concept of property is a starting point, a prerequisite for the formation of the judicial system and, accordingly, the institute of forensic economic examination as an element of the judicial and legal system, since economic violations are always associated with the right of ownership (of an individual or legal entity, the state) to an object;
- the formation of forensic economic examination is associated with a certain level of development of economic relations and related economic sciences (formation of market infrastructure, the dominant role of the state in regulating economic processes and social production within the functioning of the economic system);
- the crucial role of the state in the formation of forensic accounting

³⁸ Економічна енциклопедія С. 323.

examination as a necessary element of the judicial and legal system and a state institution for protecting the interests of participants in economic relations;

- the number of forensic economic examinations decreases as the level of economic crime decreases and vice versa.

The state of economic relations is determined by the level of economic stability (economic security), in which the state is particularly interested. Forensic economic examination as an element of the judicial and legal system (except for procedural nature) to some extent performs preventive functions (by providing suggestions to judicial and investigative authorities on preventing economic violations in the economy), which is also one of the indirect indicators of the state of the national economy.

Economic relations are directly related to the issue of property, and the consequences of violation of property rights (material losses, lost profits, shortages, etc.) in the economic plane are the subject of forensic economic examination.

The issue of ownership and the ratio of its types (state, collective, private, communal, mixed) in the national economy is one of the leading factors in the progress of social development (forensic economic examination is indirectly related to them through the mediation of forensic investigative bodies).

According to Article 13 of the Constitution of Ukraine: *“the land, its subsoil, atmosphere, water and other natural resources within the territory of Ukraine, natural resources of its continental shelf and of the exclusive (maritime) economic zone*

*shall be the objects of property rights of the Ukrainian people. Government authorities and local government shall exercise the ownership rights on behalf of the Ukrainian people within the limits determined by this Constitution”*³⁹.

Thus, the transfer of natural monopolies and large enterprises to state ownership will help restore the balance between state, private, and municipal ownership. The state plays a crucial role in the functioning of the economic system, which already implies its transformation into a major participant in economic relations. Moreover, the global nature of these relations does not always mean positive results for the national economy. In today's environment, the state, acting on behalf of and in the interests of the Ukrainian people, must always protect national economic interests. That is why this set of measures will undoubtedly have a positive impact on the economic stability of the state, and thus on reducing the level of economic crime through a more controlled impact on the development of economic relations.

Conclusions

Forensic economic examination has undergone a lengthy evolution as a crucial state institution. As an effective tool of the judicial and legal system and the embodiment of the principles of legality, independence, objectivity and completeness of research, it reflects the complex and contradictory results of economic relations, which always have the potential for improvement.

Of course, the functional purpose of forensic economic examination is to

39 Конституція України : Закон України від 28.06.1996 р. № 254к/96-ВР (зі змін. та допов.). URL: <https://zakon.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80#Text> (date accessed: 05.11.2023).

provide important evidentiary sources of information to the needs of judicial and investigative authorities. However, the most important thing is that economic examination (as any element of the judicial and legal system) should protect the economic interests of the Ukrainian people.

**Становлення та розвиток
судової економічної експертизи
в Україні
Олексій Горлачук**

Судова економічна експертиза як важливий державний інститут опосередковує відображає стан економічних відносин, оскільки досліджує їх у процесуальному полі, використовуючи методологічну базу економічних наук. Метою статті є дослідження ключових етапів розвитку економічної експертизи залежно від еволюції економічних відносин. Розглянуто етапи розвитку судової економічної експертизи з використанням критерію трансформації економічних відносин. Застосовуючи методи аналізу, синтезу й узагальнення, визначено умови розвитку судової економічної експертизи на кожному з етапів із виокремленням характерних особливостей і закономірностей. Належну увагу приділено питанням відносин економічної власності як рушійної сили економічних відносин. Оскільки економічні відносини безпосередньо пов'язані з питанням прав власності, то результати порушень цих прав в економічній площині є предметом дослідження судової економічної експертизи, яку призначають судово-слідчі органи. Розглянуто провідні системно-утворювальні блоки судової економічної експертизи, які формують її сутність і перебувають у постійному динамічному розвитку та взаємозв'язку. Проаналізовано етапи розвитку судово-бухгалтерської експертизи, як критерій періодизації розглянуто трансформацію економічних відносин у світовому й національному маси-

табі. Розкрито роль держави в розвитку економічних наук і судово-бухгалтерської експертизи.

Ключові слова: *судова економічна експертиза; судово-бухгалтерська експертиза; економічні відносини; економічні науки; суспільне виробництво.*

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Declaration of Competing Interest

The author declares no conflict of interest.

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