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INTERCONNECTION ISSUES OF COMPREHENSIVE AND SYSTEMIC ECONOMIC ANALYSIS

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Abstract: In practice, when conducting economic studies, problems arise in choosing the tools of complex or systemic analysis. Moreover, often the frameworks of economic complex and systemic analysis have practical intersections and analysts have a problem choosing one of them. The article comments on the distinctive features and directions of application of complex and systemic analysis in economic research, as well as the goals of these two types of analysis in the decision-making process.

Keywords: complex economic analysis, system analysis tools, decision making, analysis objectives, economic studies

JEL code: M 41

Research aims: interpret the features of complex and systemic economic analyses and clarify the directions of application of their tools in economic calculations.

Research novelty: The objectives of complex and systemic economic analyses have been classified and the directions for their harmonization in the economic decision-making process have been substantiated.

Introduction

In general terms, analysis is a method of cognition of reality, with the help of which the phenomena of nature and social life, the laws of their development are studied. During analysis, the object under study is divided into separate elements, which makes it possible to evaluate each of them in the studied combination, revealing the laws specific to the object under study (Financial & Economic Analysis: Differences and Similarities 2025).

In the analysis system, along with the division, a synthesis is also carried out, in which case, by connecting the separate elements of the phenomenon under discussion with each other, the essence of the object under study is clarified. Thus, analysis acts as a unity of division and combination and, when studying its subject, on the one hand, performs decomposition, and on the other hand, combines the separated elements for the purpose of qualitative conclusions (Economic analysis 2025).

When a patient consults a doctor to find out what health problems he has, the doctor first of all organizes a comprehensive examination. Having passed a number of medical professional cabinets, the patient collects diagnostic data related to different parts of his body and presents them to his treating doctor, who, generalizing this information, makes a decision on the course of treatment, directions and methods. And it turns out that during this time the patient's entire organism seems to be divided into research

parts, each of which is studied and, summarizing the results, the appropriate direction of the treatment course is determined. In other words, a health-related analysis takes place and decisions are made by the doctor based on it.

This is relevant also for economic analysis, which can be organized by complex or systemic way. Economic analysis is defined as a set of formal, quantitative methods used to compare two or more treatments, programs, or strategies concerning their resource use and expected outcomes. It involves making choices between alternative uses of resources while considering both costs and outcomes (Khachatryan, N., Khachatryan, K. 2025).

Research results

The analysis is not perceived unambiguously by users, who first of all set themselves the task of conducting a complex, or systematic study. In both cases, the object of research is divided into separate components in order to collect analytical information on each of them. Subsequently, the methodology of the study changes, based on the goals of a complex or systematic analysis (Khachatryan, N. 2024).

Thus, if a complex examination is carried out to improve the patient's health and the cause of the disease is determined, then during the systematic analysis, in addition, the interactions of the individual components being analyzed (individual parts of the human body) that affect the health system are revealed. When prescribing pills to a patient with a complex health analysis for the treatment of a specific organ, it also finds out whether taking these

pills can negatively affect other organs (Tshughuryan, A., Mnatsakanyan, H., Grigoryan, L. 2025).

Therefore, if in the case of a complex analysis, a panorama of the individual components of the object under study is obtained, with its strengths and weaknesses, and decisions are made on the basis of this for improvement, then the systemic analysis also aims to assess the interrelationships of the analyzed components, and subsequently make optimization decisions.

Complex and systemic analyses differ not only in their research features, but also in the scope of their scope. Thus, when a doctor comprehensively analyzes a patient's cardiovascular condition, the scope of the study, as a rule, has limitations, covering only the work of the heart and the capacity of the coronary vessels. And when a systematic analysis is carried out in this direction, the scope of the study is expanded, since the problem also arises of finding out what qualitative changes the work of the brain or spinal cord affects the work of the cardiovascular system. Or, conversely, the scope of a complex analysis of the cardiovascular system can be expanded if the problem is set to find out what are the stress-causing personal characteristics of the patient's work, family and life conflicts, diet, physical activity, which directly or indirectly affect the work of the heart.

Sometimes, the scope of complex and systematic analysis almost coincides, which is especially characteristic during the financial analysis of the activities of organizations (Hakobyan, A., Tshughuryan A., Martirosyan, G. 2023).

Thus, when assessing the financial stability of for-profit organizations, both complex and systemic analysis use the package

of published financial statements with their corresponding components. However, in this case, the objectives of the analysis differ. If complex analysis, using its special tools, assesses the financial condition of the organization, revealing the weaknesses and strengths of financial stability, then systemic analysis assesses the possibilities of changing financial ratios that contribute to improving the financial condition of the organization.

Thus, when a comprehensive analysis reveals that the accumulation of an organization's accounts payable negatively affects the solvency and autonomy of the business, but on the other hand, they provide positive signals to accelerate the turnover of working capital, then a systematic analysis should determine the proportions of accounts payable that, on the one hand, will not lead the organization to bankruptcy (in the case of over-accumulations), and on the other hand, will not slow down the turnover of working capital with their under-accumulations, causing problems with obtaining additional funds.

The overlap of the frameworks of complex and system analysis and the differentiation of objectives can also be presented when ordering food in a restaurant, when the waiter offers the customer 3 dishes on the menu: coffee with sweets, appetizer salad and hot dish. Of course, both complex and system analysis will examine the same overlapping framework of the menu, but with one difference.

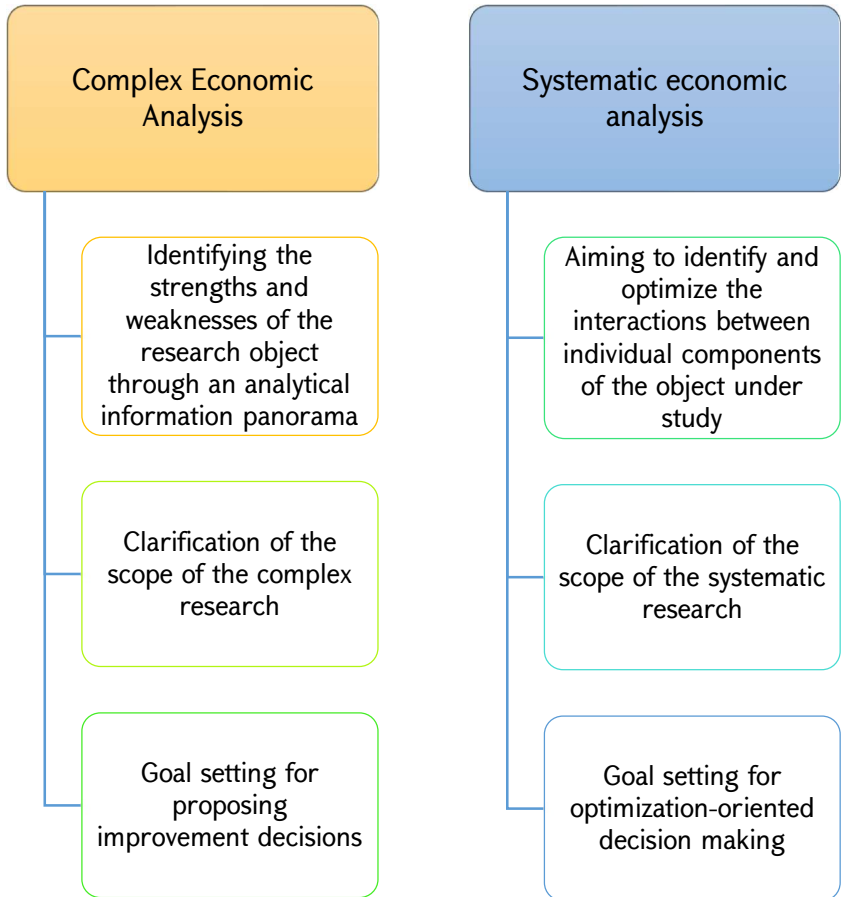


Figure 1. Objectives of complex and system analysis¹

If in the case of complex analysis only the complete ordering and tasting of these three ordered dishes by the restaurant guest will be considered, then complex analysis will also consider the following requirement for the sequence of serving dishes: first -

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appetizer salad, second - hot dish and only then the third - coffee with sweets.

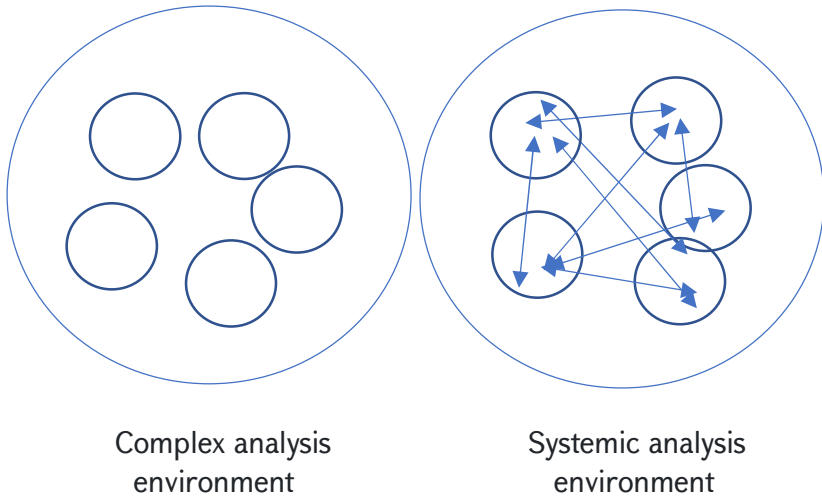


Figure 2. Structural difference between the use of complex and systems analyses²

Conclusion

Although the approaches of complex and system analysis may overlap to some extent, they are quite different in terms of their objectives (see Figure 1). Complex analysis mainly emphasizes the scope of the research, as a more comprehensive study of the influence of factors affecting the object of study and, thereby, recommendations for its improvement. System analysis, in parallel, attempts to create interaction links between the individual components of the object of study (see Figure 2), to counterbalance

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them and present not only assessments of the situation, but also recommendations for optimizing the functioning of the system.

For this reason, if complex analysis examines a specific framework that includes components, then systemic analysis, in addition, defines the relationships between these components in such a way as to form specific analytical systems for selecting optimal options for improving the performance of the object under consideration.

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ՀԱՄԱԼԻՐ ԵՎ ՀԱՄԱԿԱՐԳԱՅԻՆ ՏՆՏԵՍԱԿԱՆ ՎԵՐԼՈՒԾՈՒԹՅԱՆ ՓՈԽԱՌՆՉՈՒԹՅՈՒՆՆԵՐԸ

Քնարիկ Խաչատրյան

Հայաստանի պետական տնտեսագիտական համալսարան,
դասախոս

Բանալի բառեր - համալիր տնտեսական վերլուծություն, համակարգային վերլուծության գործիքակազմ, որոշումների կայացում, վերլուծության նպատակադրումներ

Ընդհանուր ձևակերպմամբ, վերլուծությունը իրողությունը ճանաչելու մեթոդ է, որի օգնությամբ ուսումնասիրվում են բնության և հասարակական կյանքի երևույթները, դրանց զարգացման օրինաչափությունները: Վերլուծության ժամանակ հետազոտվող օբյեկտը տրոհվում է առանձին տարրերի, ինչը հնարավոր է դարձնում գնահատել դրանցից յուրաքանչյուրին ուսումնասիրվող համակցության մեջ՝ բացահայտելով հետազոտվող օբյեկտին հատուկ օրինաչափությունները:

Վերլուծության համակարգում, տրոհմանը զուգընթաց, իրականացվում է նաև համադրում, որի դեպքում քննարկվող երևույթի առանձնացված տարրերը կապակցելով միմյանց, պարզաբանվում է ուսումնասիրվող առարկայի էությունը: Այսպիսով, տնտեսական վերլուծությունը հանդես է գալիս որպես տրոհման և համադրման միասնություն և, իր առարկան ուսումնասիրելիս, մի կողմից կատարում է տարրալուծում, իսկ մյուս կողմից՝ որակական եզրահանգումների նպատակով իրականացվում է առանձնացված տարրերի համադրում:

Գործնականում տնտեսագիտական ուսումնասիրություններ կատարելիս հիմնախնդիրներ են ծագում համալիր կամ համակարգային վերլուծության գործիքակազմերի ընտրության հարցում: Ավելին, հաճախ, տնտեսական համալիր և համակարգային վերլուծության շրջանակները գործնական հատումներ են ունենում և վերլուծաբանները խնդիր են ունենում ընտրելու դրանցից որևիցե մեկին:

Հոդվածում իրենց մեկնաբանություններն են ստանում համալիր և համակարգային վերլուծության տարբերակիչ հատկանիշներն ու կիրառման ուղղությունները տնտեսագիտական հետազոտություններում, ինչպես նաև վերլուծության այդ երկու տեսակների նպատակադրումները որոշումների կայացման գործընթացում:

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