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## **ECONOMIC INSECURITY OF HOUSEHOLDS AS A KEY INDICATOR IN ESTIMATING ECONOMIC SECURITY OF THE COUNTRY, REGION, CITY**

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**The novelty of this work** lies in the analysis of alternative foreign modern approaches to estimating economic security through the analysis of households as primary part of the national economy. **The aim of this work** is to consider the status and relevance of the national normative method for estimating economic security of the national economy and to find and study alternative and modern approaches to the economic security estimation. **The objectives of this work** are: to study different approaches to estimating economic security of the country, region, city; to study the possibility of estimating economic security, using the set economic security of households in the country's, region's, city's economy. **Methodology of this research** is presented at the empirical and theoretical levels. In this work, methods of comparison and estimation have been empirically used. At the theoretical level, the authors used the following study methods: abstraction, analysis and synthesis; induction and deduction; mental modelling, etc.

Economic security is a topical question for academic studies, politicians and managers, for countries and companies, for municipalities and households. Condition and level of economic security have their economic value. All subjects of economic security face a dilemma: to pay now for the economic security or to pay later for eliminate the problems of insecurity.

In Ukrainian academic literature enough attention is paid to the economic security research, to the content, nature, status, role and place of economic security in the national economy, at enterprises and in the regions. Sufficient attention is paid to researching the economic security estimation approaches, its components, etc. Principles, recommendations and approaches to the economic security estimation at the national, regional and enterprise levels were studied in the academic works of Ukrainian scientists: Heyets V.M., Komelina O.V., Onishchenko S.V., Zhavoronkov V.A., Vasiliev O. V., Meyta V., Ivanyuta T.N.

Most Ukrainian scientists usually use only one approach to the economic security estimation. They only consider the budget sphere of estimation. They do not consider alternative estimation methods. They absolutely ignore such an important level of the national security system as the level of a city. However, the paper: "The economic security of the state: assessment and strategic goals" [1] discusses various approaches to the economic security estimation, including Ukrainian economy, studies their advantages and disadvantages, paying particular attention to the social security as a component of economy in the article: "Evaluation of social security: systemic and synergetic approach." [2].

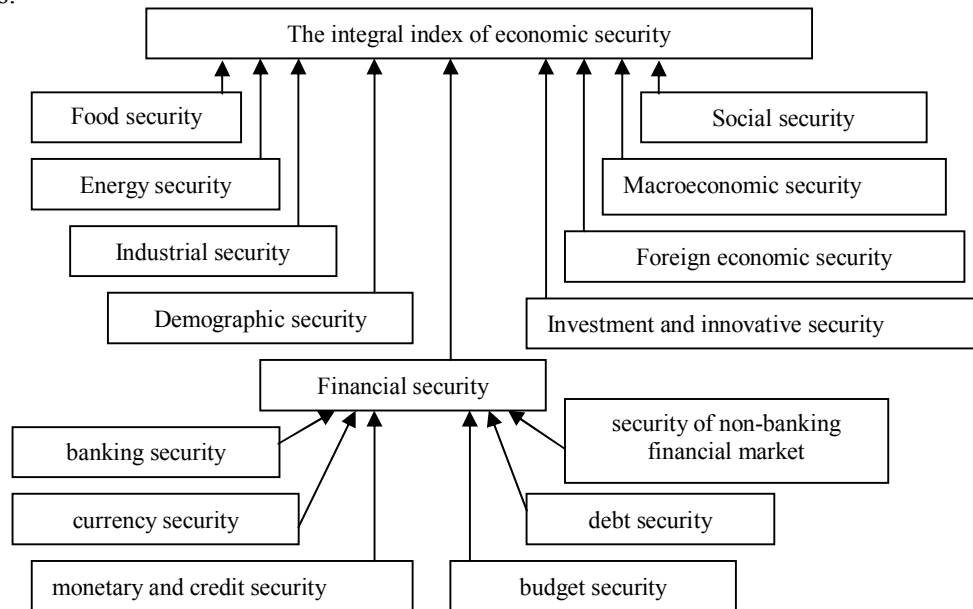
The economic security of the national economy is an important component of the national security. This is a complex and conditionally closed system, which has its own structure, internal logic. It determines the relevance and the need to improve the methodology of estimating the level of economic security, search for alternative approaches to ensure adequate response to the destabilizing factors in the economic and social spheres. Indexes of economic security are important indicators of the current status and dynamics of the economy at the national level, at the level of regions and cities.

Today, in Ukraine, we officially use methodological recommendations for estimating the economic security for the national economy of Ukraine (2013), which were approved by the government regulations [3]. These methodological recommendations are designed for use by analytics of the Ministry of Economic Development and Trade of Ukraine at determining the level of economic security of the national economy. It is accepted to replace the methodology of estimating the economic security of Ukraine (2007) [4]. Ukraine has not got any approved by the government or other authorities methodology to estimate the economic security at the level of a region or a city, so

researchers are trying to use the specified methodological technique and trying to adapt it to the local levels.

The advantage of methodological recommendations 2013, compared with the previous ones is in their covering more spheres of the national economy. This is achieved by identification and evaluation of the nine components of economic security for 130 indicators with set up regulatory thresholds. This system permits reevaluation of quantitative parameters and trends of economic security considering the security situation for each of the components, depending on the economic security in general. However, most of these indicators are, if not duplicate by nature, are subject to complementary positive or negative effects of the risks.

As shown in the schematic Fig.1, this estimation system is cumbersome and overburdened with indicators.

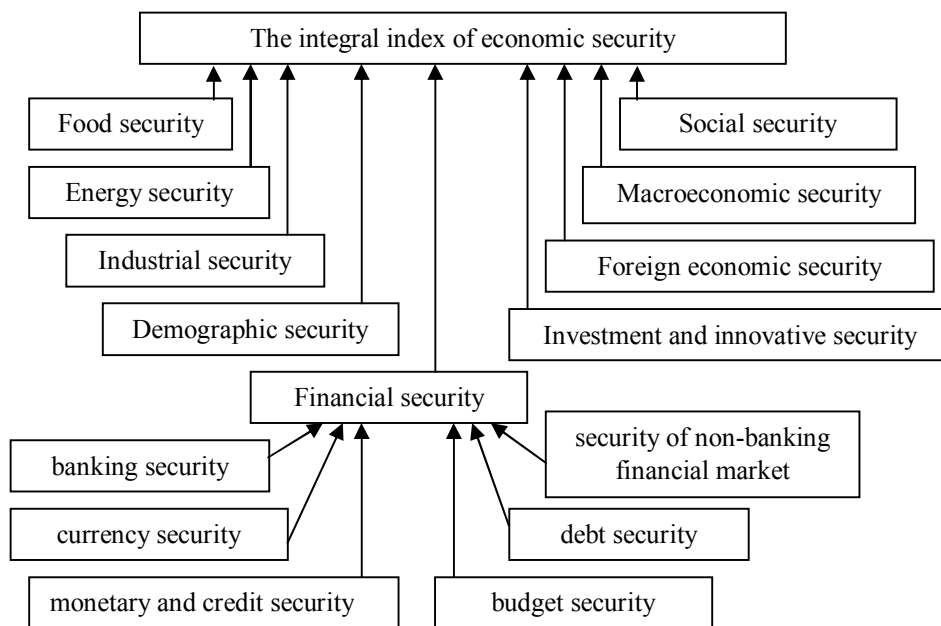


**Fig.1. Integral index of economic security**

Analysis of the methodological recommendations (2013) revealed a series of deficiencies that restrict possibility of their use and cause the necessity to improve the existing methodological approaches and search for alternatives. These deficiencies relate to both the composition of indicators (incomplete consideration of the black economy aspects and ignoring such important indicators as scientific and technological progress, capital downloads, etc.) and the integrated estimation methodology, causing incorrect results of the integral evaluation [5]. Additionally, it should be noted, that there are problems in establishing balance and the importance of various indicators in this structure, making this system enormous and too overloaded for its further use in theoretical estimations of the real situation in the economy. This approach makes it a too complicated option to be adapted and calculate the indicators at the regional or city level. In the modern academic literature, and in certain international organizations there is a fundamentally different approach to estimation of economic security at the national level, this approach makes it possible to define similar economic security at the regional or city level. This approach is based on the analysis and measurements of households' economic security (insecurity) as the primary base of economy.

The study of the national economy's economic security from the position of the aggregate economic security of all households or an average household of the country is important because the absolute majority of households depend on the financial income from employment. Employment and income from it reflect, being generalized, the real economic situation. Accordingly, if the totality of households in the country, region, city is economically secure (insecure), it will indicate a positive or negative economic situation and security in this territory. As shown in the schematic presentation, this approach focuses on studying the particular aggregate risks and their effect on households (Fig.2.).

The Commission on the Measurement of Economic Performance and Social Progress [6], argued in its report that economic insecurity should be one of the dimensions according to which individual well-being is to be analyzed. The Commission highlighted that there are many factors shaping economic insecurity which are reflected in the variety of approaches used to measure them. The individual well-being here is the same as well-being of a household, because theoretically we are interested in studying a household as the primary base of the national economy.



**Fig.2. Theoretical economic (in)security index (formed on the basis of economic (in)security aggregation of households)**

There are few approaches to study economic (in)security by analyzing well-being of a household, which can be found in the modern academic literature. The first approach by Lusardi et al. is to measure the resource adequacy or assets sufficiency [7]. The level of resources or wealth certainly plays a major role in the economic insecurity, and this approach has the advantages of simplicity and reliance on a single data source. Such indices, however, are better understood as measurements of the resource level or buffering capacity of an individual, rather than a measurement of the real security or insecurity. In particular, adequacy measurements do not cover the possibility that an individual will suffer a reversal and need to draw on wealth or resources, a probability that may vary both over time and across individuals. Realized insecurity requires the coincidence of inadequate buffers and the actual experience of economic losses [8].

The second approach is presented by Bossert and D'Ambrosio [9]. They suggested a number of individual insecurity measurements that are based on the current net wealth levels and variations in these levels in the past. Because net wealth can just as well be negative, an absolute approach was applied. The authors described indices in such a way that only current wealth levels and its absolute changes in the past mattered. The notion of wealth in their study is a comprehensive variable, encompassing everything that may help an individual in coping with adverse events. However, there are major difficulties, when it comes to the empirical studies, because the longitudinal data do not contain information of this nature. Therefore, an alternative approach in the practical aspect is to focus on income obtained from employment earnings, that is, income from remunerative work performed by an individual as an employee. If doing so, data availability is not much of a problem, if we admit that employee's income is a standard variable collected in household surveys. The authors focus on a consistent share of decisive socio-political agents in our society. The vast majority of individuals within the labor force are indeed employees. Of course, employment income does not tell the full story of an individual's ability to absorb economic shocks and, thus, such an approach can be no more than an approximation that is imposed by data constraints, but they believe that insecurity raised by employment income plays a major role in the concerns of an individual. The insecurity, that an individual may perceive, is also likely to be influenced by the dynamics of the labor market, he is a member of, and by the comparison to others in a similar situation. The most straightforward variable to touch upon the additional effect of the labour market condition, is the employment rate. The latter is indeed the standard variable, used by labor economists to summarize the relative bargaining power of a worker: the more people an individual sees employed, the less likely it is that he will lose her job or be paid less. Consideration of the employment rates evolution's effects on insecurity over time presents an additional novelty to the present study [9].

The third approach, created by Osberg and Sharpe, uses a weighed index of multiple measurements, which covers multiple dimensions. Their index of the economic security includes the four components of the Index of Economic Well-Being (IEWB), they refer to it as "The IEWB Index of Economic Security" [10]. These indices can be drawn from multiple data sources, but they are sensitive to the type of the measurements included and to how they are assessed. Unfortunately, the

theory provides limited guidance about how to assess those different measurements, partly because of the research and interaction paucity, taking into account a relative impact of different economic risks.

The IEWB prospect is that public policy cannot mitigate or offset all possible economic hazards, and that informing public policy debates is the purpose of social index construction. In the IEWB, the specific contingencies (“security in the event of unemployment, sickness, disability, widowhood and old age”) are identified, because those are the hazards specifically mentioned in Article 25 of the 1948 Universal Declaration of Human Rights. They measure these hazards by [11]:

- the probability of unemployment and the size of financial loss it can produce, as indicated by the unemployment rate and the average proportion of earnings that are replaced by unemployment benefits;
- the financial risk imposed by illness, which in international comparisons is dominated by the coverage of public health care. This is estimated by the percentage of disposable household income spent by households on health care services that is not reimbursed by public or private health insurance;
- the risk of becoming poor due to family breakup, i.e. the probability of divorce, the poverty rate among single female parent families, the average poverty gap ratio among single female parent families;
- the poverty intensity (poverty rate - average poverty gap ratio) experienced by households headed by a person of 65 years of age and over [11].

These components are measured at the national level, estimated by the relative population size directly affected and then aggregated to the total index of the economic security. The resulting aggregate index is therefore “macro” in nature. The employment security component, for example, estimates the aggregate risk of unemployment and the coverage which unemployment insurance offers, on average, to offset the risk of that hazard, i.e. it does not add up to micro-data on the unemployment experience of individuals. The financial risk associated with illness is similarly modeled as proportional to aggregate medical out of pocket spending unreimbursed by insurance. They think that since this total spending is not distributed among households, the role which private wealth could play as an individual’s buffer is ignored [11].

Other approach presented by Hacker et al., veers in the other direction and estimates income or expenditure volatility. This is a measure fundamental to risk or insecurity, which helps explain why the literature on earnings, household income, and consumption volatility is large and growing. However, the observed variability in income fails to account for two critical dimensions of insecurity: the risk of large, involuntary expenditures – such as medical out-of-pocket expenditures – and the capacity of individuals or households to use their wealth to reduce the effect of income changes on consumption, both of which influence American’s concerns about their economic prospects [8].

All that refers to the key shortcomings of each approach. They all grow and extend the recent wave of research on household economic (in) security. However, nothing like that has been studied in Ukraine yet. And this is a new field for further research. We need to find out how to implement these ideas and approaches for current economic situation in Ukraine and to find out the desirable data for calculation. At the same time, the economic (in) security index for Ukraine must be designed as a simple, consistent measure that is simultaneously easy to understand and sophisticated enough to provide a foundation for further research.

**Conclusion.** All the above mentioned approaches represent a tool for studying some of the most important aspects of the economic security. They provide a baseline for research to expand the concept of the economic security beyond its existing scope. These approaches can help study economic security in its different aspects; it also can help us find new ways to estimate economic security of the country, region and cities. We need to implement the studied approaches into Ukrainian academic and practical science research. But we should remember, that ultimately, no single measure and no single approach can cover all the aspects of economic security.

Motivation for the further research in the next paper is the idea that a better study of economic security may help households in cities, regions and in the country’s economy organize their perceptions of social and economic outcomes and thereby help them in improving political and public policy decisions, according to their own valuations of outcomes. Important research agenda thus lies ahead and more research in these fields is to be done.

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**Komelina O.V.**, Doctor of Economics, Professor, Dean of the Management and Business Faculty. **Pluzhnyk A.W.**, Senior lecturer, Economics Theory and Regional Economics Department. Poltava National Technical Yuri Kondratyuk University. **Economic insecurity of households as a key indicator in estimating economic security of the country, region, city.** The aim of this work is to consider the status and relevance of national normative method for measuring economic security of the national economy. The importance and necessity to find the alternative methods for economic security estimation of the national, regional, city economy is justified. Modern foreign approaches to estimating economic security of the country, the region and the city, viewed through the household insecurity, have been analyzed.

**Keywords:** economic security, economic insecurity, households, estimation of economic security.

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**Комеліна Ольга Володимирівна**, доктор економічних наук, професор, декан факультету менеджменту і бізнесу. **Плужник Андрій Васильович**, старший викладач кафедри економічної теорії та регіональної економіки. Полтавський національний технічний університет ім. Ю.Кондратюка. **Економічна незахищеність домогосподарств як ключовий індикатор виміру економічної безпеки національної економіки, регіону, міста.**

Здійснено аналіз та оцінювання результативності існуючих теоретичних і нормативних підходів та інструментів щодо вимірювання економічної безпеки національної економіки, регіону, міста в Україні. Доведено важливість і необхідність пошуку альтернативних методів оцінювання економічної безпеки економіки країни. Проаналізовано сучасні закордонні методичні підходи до оцінювання економічної безпеки країни, регіону, міст з позиції економічної незахищеності домогосподарств.

**Ключові слова:** економічна безпека, економічна незахищеність, домогосподарство, вимірювання економічної безпеки.

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**Ключевые слова:** экономическая безопасность, экономическая незащищенность, домохозяйство, измерение экономической безопасности.