данный момент, отождествление валовой прибыли с маржинальной невозможно из-за включения в алгоритм вычисления валовой прибыли величины амортизационных начислений, несмотря на то, что эти расходы не зависят от объема произведенной продукции, то есть их по большинству признаков должно отнести к так называемым условно-постоянным расходам, которые исключаются из расчета маржинальной прибыли. В имеющемся случае расчет валовой прибыли и отражение ее отдельной строкой в финансовой отчетности теряет аналитический смысл. Необходимо пересмотреть процедуру вычисления валовой прибыли с целью получения ею смысловой нагрузки. Дальнейшие исследования будут направлены на устранение содержательных разночтений в определении ключевых понятий финансового анализа с целью гармонизации форм финансовой отчетности.

**Ключевые слова:** валовая прибыль, маржинальная прибыль, финансовая отчетность, операционная деятельность, расходы, финансовый результат.

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## METHOD OF ASSESSMENT OF FINANCIAL RELATIONS STABILITY IN UKRAINE

Ensuring economic development is impossible without optimizing financial relations as the main element of organizational and economic relations in the economic system. The study aims at justification criteria (evaluation parameters) of assessment of the financial relations stability and, through them, determine the dynamics of financial relations in Ukraine. Methods of economic and mathematical analysis, synthesis in processing of statistical data; induction and deduction in determining cause-effect relationships have been used in the study. The focus is on stabilizing the financial relations connected with the creation and use of financial resources businesses, households and the state. It has been proved that financial relations is the part of the economic relationship that defines relations between economic agents, employees and the state for the purpose of distribution and redistribution of gross social product. State, economic businesspersons and employees are subject to financial relations and create the necessary financial (cash) funds providing expanded reproduction process, meet social and other needs, material incentives of employees. The subject of economic relations taking part in the distribution of gross product can be considered as structure-forming sign of classification of financial relations. Characteristics of determination of the optimal proportions in the field of development and distribution of final incomes have been suggested. Based on the analysis the basic problems of the institutional structure of financial relations in Ukraine have been determined. An assessment of factors of influence on the stages of actual GDP formation (as the basis of financial relations), the formation of primary incomes and formation of gross disposable income of institutional sectors relative to GDP provide scientific novelty of the study. Evaluation of the current state of stability of financial relationships does not allow determining their condition as stable. Signs of instability, and in some cases criticality, need to identify potential options for stabilizing the financial relations. Further studies will be used to identify potential macro shocks that lead to the destabilization of financial relations in Ukraine.

Keywords: financial relations, financial relations institutional structure, stability of financial relationships, GDP.

### INTRODUCTION

Formulation of the problem. Ineffective implementation of Ukrainian model of social market economy and the negative impact of internal and external factors led to a decline in production of real sector of economy of Ukraine, the poor state of social sphere – science, education, health and culture. Experience shows that many problems of social and economic imbalances emerged in the monetary sector, and later spread nationwide. Therefore, research of trends of the real sector of the economy from the standpoint of stabilizing the financial relations is one of the most acute and large-scale problems.

## Analysis of recent research and publications.

Among Ukrainian and Russian scientists who investigated the characteristics and problems of formation of optimal financial relations, and analyzed their impact on the characteristics of macroeconomic stabilization and economic development, are the works of Alexeeva I. V., Vasylyk O. D., Vovchak O. D., Krupka M. I., Lisitzkyy V., Lunina I. O., Lyutyy I. O., Lyovochkin S. V., Nosov A. Yu., Oparin V. M., Savluk M. I., Sutormina V. M., Fedosov V. M., Filipenko A. S., Shevchuk V. O., Yuriy S. I. etc.

The aim of the article. The aim of the study is justification of criteria (evaluation parameters) of evaluating the stability of the state financial relations and,

through them, determining the dynamics of financial relations in Ukraine.

### RESEARCH RESULTS

Consistency and continuity of the process of social production is only possible when all created in the production and realized in the exchange value will be distributed (redistributed), that is cash funds will be generated, which will be the basis to meet the social and personal needs. These cash funds, money relations, related to distribution (redistribution) of gross social product and part of the national wealth, form the content of finance.

V. Oparin defines financial relationships as relationships that «...reflecting the value movement from one subject to another, characterize the exchange, distributive and redistributive processes and appear in cash flows» [1, p. 25].

In the process of social production, financial relations reflect primarily relations of division. Finance is the tool of cost distribution of the social product according to the intended purpose and subject of economic relations. In the distribution process, each participant of the process of social production distributes its own income into two parts: consumption fund and the accumulation fund. It is at this stage the state intervenes in the process of dividing and removes the part of individual and collective revenues (through taxes, fees, insurance premiums, etc.) to form their own (public) funds.

In the economic literature, there is no unequivocal definition of financial relations. However, by summarizing the existing approaches to the interpretation of the content of this concept it can be concluded that financial relations is the part of economic relations that defines the relationship between economic agents, employees and the state in terms of distribution and redistribution of gross national product.

State, economic entities and employees are subject to financial relations and create the necessary financial (cash) funds that provide increase of reproduction, meet social and other needs, material incentives of employees. Taking part of economic entity in the distribution of gross product can be considered as structure-sign classification of financial relations.

In the economic literature content of financial relations is often identified with the state, that is it is only a study of monetary relations associated with the formation and subsequent use of public funds. So according to T. V. Braycheva, «... financial relations are objective economic relations, have ... imperative form as organically linked to the functioning of the state. This feature (imperative form of manifestation) emphasizes direct financial conditionality of existence of the state, rather than adjusting their economic relations in general» [2, p. 12]. B. M. Sabanti emphasizes that «...finance is always a monetary relationship in which one of the subjects is a state» [3, p. 5]. The author proposed three signs of financial relations: firstly, it is always monetary relations; secondly, these monetary relations are caused by the fact of the presence of the state as a governing body; thirdly, the relationship is associated with redistribution of already distributed total product.

We believe that each of these features has certain

inconsistencies. Financial relations are mostly, but not always, monetary relations. An example of this may be the payment of taxes or the formation of transfer payments in kind. The part of the state in financial relations is not necessary. The relationship of the primary distribution related to the production phase of social product form their basis. It is at this stage, the primary distribution of created value and the formation of primary incomes of economic agents (wages, business profits, rent, interest generated by financial capital) takes place.

The modern financial system of the country (set of different financial relationships within the economy) can be roughly divided into its two components: state and municipal finance; finance of economic entities and population.

The first component forms financial relations associated with the formation of centralized financial funds necessary for state functions. The second part is connected with the formation and use of decentralized funds to meet the needs of economic entities and population.

Financial relations associated with the formation of state and municipal finances, occur on the stages of production and distribution of the social product of primary incomes of economic agents (Fig. 1). These features are the foundation of the budget system.

Financial relationships related to the finance of business entities and population, occur at the stage of final income distribution and redistribution of income through the state budget system.

State participation in the formation of financial resources depends on its investment and social functions. An increase or decrease in the expenditure of budget system for the development of sectors of the economy, and the share of social spending define the scope of public finances, which are aimed at changing incomes of economic agents and the public.

The magnitude of finance of economic entities and population is greatly affected by the possibility of redistribution of available cash through a credit system. The impact of this participation depends on the efficiency of the existing country's credit infrastructure (banks and other financial institutions).

Each of these elements forms the necessary financial resources of economic entities for further distribution to funds of accumulation and substitution, personal and general consumption.

According to L. K. Voronova and M. P. Kucheriavenko financial relations «...are the relationships that govern the formation, distribution and use of centralized and decentralized funds. The most important features and characteristics that reveal the essence of finances, are reflected in their functions. Finance, functioning as a tool for the distribution of the gross national product, at the same time controls its sharing, the ratio of parts, ways of spending funds. This also causes the two functions of finance, controlling and distributing» [4].

Financial relations have some differences that allow distinguishing them from the totality of monetary relations:

- for the most part, they are connected with the stages of production, distribution and redistribution of the social product;
- significant financial relationships characteristic is that the movement of money is unequal, i.e. there is no

process of replacing monetary measurements on natural-ware:

- part of these relations has the nature of exclusion and is linked to irreversible withdrawal of part of income of economic agents in the form of taxes and other obligatory payments (the process of redistribution of primary income of economic entities and formation of funds of public interest - the state budget, off-budget funds etc.)

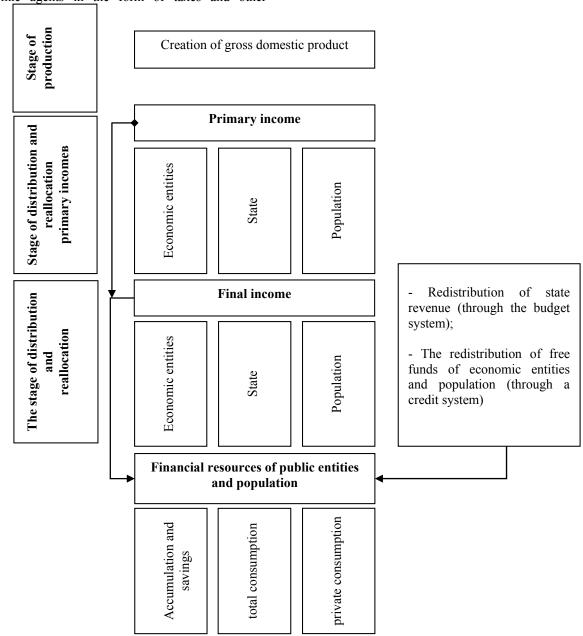


Fig. 1. Financial relations in the economic relations

Evaluation of factors that cause destabilizing effects on the financial relations in Ukraine, allow exploring the current state of financial relations (to evaluate it as the best, unstable or critical). Evaluation of influencing factors is conducted at the stage of actual GDP (as the basis of financial relationships), the formation of primary incomes and formation of gross disposable income of institutional sectors relative to GDP.

Indicators at the stage of the GDP formation include the production volume index (% of GDP in 1992), the final consumption expenditure (% of GDP), gross fixed capital formation (% of GDP), net exports (% of GDP). Determined characteristic values of the stability of financial relationships are shown in Table 1.

Justification of characteristic values of these

parameters:

Indicator 1 - The index of physical volume of production - should be determined basing on necessity to restore the level characteristic of the Ukrainian economy in the early 1990s. Despite the trend towards gradual growth in production from year to year (except in 2009), the index of physical volume of production in Ukraine is less than 0.8 (80%) of GDP in 1992. This is because the optimal value ( $x_{out}$ ) of the indicator is set 1 (100%).

Defining characteristic values for other classes of state are held as follows:

- Unstable  $(x_{unst})$  is defined as a deviation from the optimum value by 20%:

$$X_{necm} = X_{onm} - X_{onm} \times 0.2 = 1 - 1 \times 0.2 = 0.8$$
 (1)

- Critical  $(x_{crit})$  is defined as a deviation from unstable class values by 10%:

$$X_{\kappa pum} = X_{necm} - X_{necm} \times 0,1 = 0,8 - 0,8 \times 0,1 = 0,7$$
 (2)

The proposed values coincide with the thresholds of

industrial safety indicators "real production index", defined by Decree of the Ministry of Economy of Ukraine №60 of 02.03.2007. "On approval of the methodology for determining the level of economic security" [6].

Table 1
Indicators for assessing the stability of the state financial relations in Ukraine

Indicators	optimal condition	unstable condition	critical condition	2004	2010	2014		
Financial relations at the stage of GDP								
The index of physical volume of production, 1992 *	1	0,8	0,7	0,73	0,77	0,76		
Final consumption expenditure, % of GDP	60	75	87	71	83	90		
Gross accumulation, % of GDP *	30	25	15	21	19	14		
Net exports, % of GDP	8	0	-2	8	-3	-4		
Financial relations at the stage of formation of primary income								
Compensation of employees, % of GDP	47	55	59	46	48	50		
Taxes on production and imports, % of GDP	10	11	12	11	12	13		
Gross profit, mixed income, % of GDP	43	34	30	43	40	37		
Financial relations at the stage of formation of final incomes								
(Percentage of gross disposable income)								
Non-financial corporations, % of GDP *	14	9	4	14	4	4		
Financial corporations, % of GDP *	2	3	4	4	4	2		
General government, % of GDP *	18	20	30	20	15	28		

<sup>\*</sup> Source: Decree of the Ministry of Economy of Ukraine «On Approval of the methodology for determining the level of economic security of Ukraine» // http://zakon.nau.ua/doc/?code=v0060665-07; author's calculations.

Determining the optimum, critical and unstable distribution proportions of GDP is partly based on the values enshrined in the procedure. In particular, the share of gross fixed capital formation % of GDP is determined by the following values:  $x_{opt} = 30$ ;  $x_{unstm} = 25$ ;  $x_{critm} = 15$  [6].

Forming the optimal value of gross fixed capital at 30% of GDP can be justified by other reasons:

- analysis of the statistics shows that the average gross fixed capital formation is about 20% of GDP [7]. Among the priorities of the global economy defined by the World Economic Forum in Davos in 2010 setting the optimal value of gross fixed capital at 20% -30% of GDP;
- the study of the structure of GDP according to final consumption categories in the CIS also justifies the choice of the above mentioned index.

The characteristic values of the share of *net exports*, % of GDP is not appropriate to determine on the basis of statistical analysis of the global economy, as this component of GDP is sensitive to characteristics of a particular country, including the sectoral structure of the national economy, strategic export and import etc. Therefore, to determine the values of index analysis of the dynamics of net exports of goods and services in Ukraine is used. Analysis of the structure of GDP according to final use categories (2000 - 2014) proves that under favorable world market conditions, share of net exports may reach a value of 8% of GDP (2003-2004.), which can be defined as optimal ( $x_{opt}$ ). Share of net exports at 0% can be considered as parameter of instability. Critical condition is characterized by the index level (-2) - (-5)% of GDP.

The share of final consumption expenditure, % of

GDP is the highest in the structure of GDP. Characteristic values for this parameter are determined by increasing the amount of gross fixed capital formation and net exports to 100%. The values are as follows:  $x_{opt}$ = 60% of GDP,  $x_{unst}$  = 75% of GDP,  $x_{crit}$ = 87% of GDP.

At the stage of initial income formation characteristic values of financial proportions are based on analysis of statistics of Ukraine and other countries. Determined on the basis of the obtained results optimal value: the share of compensation of employees - 47% of GDP, net taxes on production and imports - 10% of GDP, gross profit, mixed income - 43% of GDP.

Calculations  $x_{unst}$  and  $x_{crit}$  have been conducted based on the methodology above. The obtained values of parameters are shown in the Table. 1. As to identification of trends and orientation of changes in the primary components of income, the global trend to increase wages of employees and trends characteristic of Ukraine's economy - the growth of the share of net taxes on production and imports, should be considered.

At the stage of final incomes formation of institutional sectors, thresholds of macroeconomic security offered by the Department of Economic Security have been used to determine the characteristic values. [6]

By comparing actual performance of the economy of Ukraine in 2004, 2010 and 2014 the characteristics of the stability of financial relations are defined (Table. 2).

Based on the study it can be concluded that there is a clear trend towards deterioration of the stability of financial relations at all stages. Particularly critical situation is at the stage of GDP formation and final incomes: it is not only worsening, but also acquires the features of the crisis.

## Assessment of the stability of financial relations in Ukraine

Table 2

Indicators	2004	2010	2014	
Financial relations at the stage of GDP formation				
The index of physical volume of production, 1992	К	Н	К	
Final consumption expenditure, % of GDP	Н	К	К	
Gross capital formation, % of GDP	К	К	К	
Net exports, % of GDP	O	К	К	
Financial relations at the stage of formation of primary income				
Compensation of employees, % of GDP	O	О	О	
Taxes on production and imports, % of GDP	Н	К	К	
Gross profit, mixed income, % of GDP	O	О	Н	
Financial relations at the stage of formation of final incomes				
Non-financial corporations, % of GDP	О	К	К	
Financial corporations, K% of GDP	К	К	О	
General government, % of GDP	Н	O	К	

Note. O - the best; H - unstable; K - critical.

Some Ukrainian economists [8; 9] propose for creating optimal proportions in the distribution of gross disposable income to use the principle of "golden section" – it is a division in which a smaller portion is compared with the bigger one, as bigger one is compared with the whole. A number of "golden section" is obtained by multiplying the previous number by 1,618. The proposed proportions are as follows: the share of households in gross disposable income is 61.8%; the share of the general government sector is 23.6%; non-financial corporations is 9.0%, share of financial corporations is 1,3%. These proportions are confirmed by relevant statistics.

The calculated parameters (see. Table. 2) partly differ from the calculated ones with the help of "golden section". Deviations concern specified shares of gross disposable income of the general government and financial corporations. We believe that the decline in the share of income of non-financial corporations leads to a reduction in capacity of development of economic entities, decline in fixed capital formation. The deterioration of the quality characteristics of fixed assets after a certain period is a factor slowing down the pace of development of the real

sector of the economy. The proposed "golden" proportions correspond to trends of developed countries that are able to afford to redirect financial flows from the real sector of the economy to the state. For the Ukrainian economy, which is, according to almost all analyzed parameters, in crisis or pre-crisis state, the proposed proportions cannot be considered optimal. Ukraine's economy requires significant technological modernization, and thus financial flows should be directed in favor of non-financial corporations and households (growing share of household savings is able to ensure the revival of investment activity).

## CONCLUSIONS AND PROSPECTS FOR FURTHER RESEARCH

Evaluation of the current state of stability of financial relations does not allow determining their condition as stable. Signs of instability, and in some cases criticality, need to identify potential options for stabilizing the financial relations. Further studies will be directed at identifying of potential macro shocks that lead to the destabilization of financial relations in Ukraine.

### REFERENCES

- 1. V. N. Oparin. Finance institutional structure of society / V. N. Oparin // Finance of Ukraine. 2001. №8. P. 24-30.
  - 2. Braycheva T. V. State Finance / T. V. Braycheva. SPb .: Peter, 2001. 288 p.
  - 3. Sabanty B. M. Finance Theory / B. M. Sabanty. M: Manager. 164 p.
- 4. Voronova L. K. Banking Financial and legal dictionary-Directory / avt.-compilation. L. K. Voronova. K.: ASK, 1998. 287 p.
- 5. Ukraine's GDP at constant prices [electronic resource] / International Monetary Fund. Access: http://www.imf.org/external/pubs/ft/weo/2015/01/weodata/weorept.aspx.
- 6. Order «On approval of the methodology for determining the level of economic security of Ukraine» / Ministry of Economy of Ukraine. Access: http://zakon.nau.ua/doc/?code=v0060665-07.
- 7. K. Эrrou. Economic Transformation: tempos and scales. Reforms by US and Russian scientists [electronic resource] / K. Эrrou. Access mode: http://gallery.economicus.ru/cgibin/frame\_rightn.pl?type=in&links=./in/arrow/biogr/arrow\_b2.txt&img=bio.jpg&name=arrow.
- 8. Kryuchkova I. V. Harmonization of sectoral proportions in GDP by income: challenges, trends and prospects / I. V. Kryuchkova // Economics and Forecasting. 2001. № 3. P. 9-25.
- 9. Kryuchkova I. V. Institutional sectors and cross-sector income distribution: Market transformation of post-socialist economy and macrostructural changes in Ukraine / I. V. Kryuchkova / Eng. Economic center. and flight. Studies.

Razumkov // National Security and Defence. – 2003. – № 4. – P. 15-19.

## Черничко Тетяна Володимирівна МЕТОДИКА ОЦІНКИ СТАНУ СТАБІЛЬНОСТІ ФІНАНСОВИХ ВІДНОСИН В УКРАЇНІ

Забезпечення економічного розвитку неможливо без оптимізації фінансових відносин, як основного елементу організаційно-економічних відносин в економічній системі. Метою дослідження є обтрунтування критеріїв (оціночних параметрів) оцінювання стану стабільності фінансових відносин та, з їх допомогою, визначення динаміки стану фінансових відносин в Україні. У процесі дослідження використано методи економічного та математичного аналізу, синтезу та узагальнення при обробці статистичних даних; індукції та дедукції при визначенні причинно-наслідкової залежності. Основна увага приділяється стабілізації фінансових відносин, пов'язаних зі створенням та використанням фінансових ресурсів суб'єктів господарювання, домашніх господарств та держави. Обгрунтовано, що фінансові відносини – це частина економічних відносин, яка визначає стосунки між господарюючими суб'єктами, працівниками та державою на предмет розподілу та перерозподілу вартості валового суспільного продукту. Держава, економічні господарюючі суб'єкти і працівники  $\epsilon$  суб'єктами фінансових відносин та формують необхідні фінансові (грошових) фонди, які забезпечують процес розширеного задоволення соціальних та інших потреб, матеріального стимулювання працюючих. відтворення, Структуроутворюючою ознакою класифікації фінансових відносин можна вважати участь суб'єкта економічних відносин в розподілі вартості валового продукту. Запропоновано характеристики визначення оптимальних пропорцій в сфері формування та розподілу кінцевих доходів. На основі проведеного аналізу визначено основні проблеми інституційної структури фінансових відносин в Україні. Наукову новизну проведеного дослідження забезпечує проведення оцінки факторів впливу на етапах формування фактичного обсягу ВВП (як основи фінансових відносин), формування первинних доходів та утворення валового наявного доходу інституційних секторів економіки по відношенню до ВВП. Оцінювання поточного стану стабільності фінансових відносин не дозволяє визначити їх стан як стабільний. Ознаки нестабільності, а в окремих випадках і критичності, потребують визначення потенційних варіантів стабілізації фінансових відносин. Подальші дослідження будуть спрямовані на визначення потенційних макро-шоків, які призводять до дестабілізації фінансових відносин в Україні.

**Ключові слова:** фінансові відносини, інституційна структура фінансових відносин, стабільність фінансових відносин, ВВП.

# Черничко Татьяна Владимировна МЕТОДИКА ОЦЕНКИ СОСТОЯНИЯ СТАБИЛЬНОСТИ ФИНАНСОВЫХ ОТНОШЕНИЙ В УКРАИНЕ

Обеспечение экономического развития невозможно без оптимизации финансовых отношений, как основного элемента организационно-экономических отношений в экономической системе. Целью исследования является обоснование критериев (оценочных параметров) оценки состояния стабильности финансовых отношений и, с их помощью, определение динамики состояния финансовых отношений в Украине. В процессе исследования использованы методы экономического и математического анализа, синтеза и обобщения при обработке статистических данных; индукции и дедукции при определении причинно-следственной зависимости. Основное внимание уделяется стабилизации финансовых отношений, связанных с созданием и использованием финансовых ресурсов субъектов хозяйствования, домашних хозяйств и государства. Обосновано, что финансовые отношения — это часть экономических отношений, которая определяет отношения между хозяйствующими субъектами, работниками и государством на предмет распределения и перераспределения стоимости валового общественного продукта. Государство, экономические субъекты и работники являются субъектами финансовых отношений и формируют необходимые финансовые (денежных) фонды, которые обеспечивают процесс расширенного воспроизводства, удовлетворения социальных и других потребностей, материального стимулирования работающих. Структурообразующим признаком классификации финансовых отношений можно считать участие субъекта экономических отношений в распределении стоимости валового продукта. Предложено характеристики определения оптимальных пропорций в сфере формирования и распределения конечных доходов. На основе проведенного анализа определены основные проблемы институциональной структуры финансовых отношений в Украине. Научную новизну проведенного исследования обеспечивает проведение оценки факторов влияния на этапах формирования фактического объема ВВП (как основы финансовых отношений), формирование первичных доходов и образования валового располагаемого дохода институциональных секторов экономики по отношению к ВВП. Оценка текущего состояния стабильности финансовых отношений не позволяет определить их состояние как стабильное. Признаки нестабильности, а в отдельных случаях и критичности, требуют определения потенциальных вариантов стабилизации финансовых отношений. Дальнейшие исследования будут направлены на определение потенциальных макро- шоков, которые приводят к дестабилизации финансовых отношений в Украине.

**Ключевые слова:** финансовые отношения, институциональная структура финансовых отношений, стабильность финансовых отношений, ВВП.

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