Н.В. ТРУСОВА

(Таврійський державний агротехнологічний університет, м. Мелітополь, Україна)

Критерії оцінки ефективності санаційних заходів суб'єктів господарювання

Oдним із головних питань антикризового менеджменту ϵ питання фінансового оздоровлення підприємств – санації. Головною метою санації є мобілізація фінансових ресурсів для відновлення платоспроможності та ліквідності підприємств, а також формування фінансового капіталу для здійснення санаційних заходів. Визначення ефективності санаційних заходів дає можливість вибору найбільш оптимальних з них з точки зору порівняння передбачуваного результату та ресурсів, необхідних для його отримання. Метою статті ϵ обгрунтування критеріїв оцінки ефективності санаційних заходів на основі комплексної оцінки фінансового потенціалу суб'єктів господарювання. Розглянуто систему показників та критеріїв оцінки ефективності санаційних заходів суб'єктів господарювання. Проведено аналіз структури майна та джерел формування фінансових ресурсів суб'єктів господарювання України на предмет їх стійкого фінансового стану. Визначено наукові підходи та методи оцінки ефективності санації. Обґрунтовано оздоровчі напрями санації господарюючих суб'єктів, які за допомогою зовнішніх й внутрішніх джерел фінансування, дозволяють проводити організаційні та виробничо-технічні заходи виходу з кризи без оголошення банкрутства, забезпечуючи прибутковість і конкурентоспроможність у довготерміновому періоді. Рекомендовано до використання інтегральний показник оцінки динаміки стану фінансової спроможності суб'єктів господарювання, який визначає межі максимально, нормативного й оптимального його значення. Доведено, що методичний підхід до оцінки динаміки стану фінансової спроможності суб'єктів господарювання України може застосовуватися як складова частина системи прогнозування і планування національних, галузевих програм або конкретних фінансових планів розвитку бізнес структур.

Ключові слова: санація, фінансові ресурси, фінансові коефіцієнти, фінансова спроможність, неплатоспроможність суб'єктів господарювання.

N.V. TRUSOVA

(Tavria State Agrotechnological University, Melitopol, Ukraine)

Criteria of the Evaluation of Efficiency for Sanation Measures at Business Entities

One of the main issues of anti-crisis management is the issue of financial recovery of enterprises – sanation. The main goal of the sanation is the mobilization of financial resources to restore the solvency and liquidity of enterprises, as well as the formation of financial capital for the implementation of sanation measures. Determining the effectiveness of sanation measures provides the opportunity to choose the most optimal of them in terms of comparing the expected result and the resources needed to obtain it. The purpose of the article is to substantiate the criteria for evaluating the effectiveness of sanation measures on the basis of an integrated assessment of the financial potential of economic entities. The indicators and criteria for evaluating the efficiency of sanation measures of business entities were considered. The analysis of the financial conditions of Ukrainian enterprises according to the structure of property and sources of financial resources formation was carried out. The scientific approaches and methods of evaluation of efficiency of sanation were determined. It was grounded that sanation are considered successful if, with the help of external and internal financial sources, organizing and production-of technical measures, the entity exits the crisis (normalizes production activity and avoids bankruptcy announcements) and ensures its profitability and competitiveness in long-term period. An algorithm for estimating the dynamics of the state of financial capacity of economic entities was presented. An integral indicator of the dynamics of the state of financial capacity of economic entities was proposed. The criteria and limits of the maximum, normative and optimal state of financial capacity of enterprises were determined. The proposed approach to assessing the dynamics of the state of financial capacity of economic entities of Ukraine can be used as an integral part of the forecasting and planning system within the framework of national, branch programs or specific financial plans of enterprise development.

Keywords: sanation, financial resources, financial ratios, financial ability, insolvency of business entities.

* **Трусова Наталя Вікторівна,** завідувач кафедри «Облік і оподаткування» Таврійського державного агротехнологічного університету (м. Мелітополь), доктор економічних наук, доцент.

Introduction. Successful implementation of sanation is associated with a timely assessment of the effectiveness of such measures, their impact on the state of the entity. Such an assessment allows to quickly adapt the developed sanation plans, to stimulate their performers. The issue of evaluating measures for the exit of companies from a difficult financial position is of great importance for their owners, organizers and for the authorities responsible for the development of the industry and the region. The latter is due to the fact that the unsatisfactory state of enterprises has a negative impact on counteragents in connection with the violation of industrial relations and the balance between them. At the same time there is a lack of budgeting of corresponding amounts of income. Determining the effectiveness of bailouts gives the opportunity to choose the most optimal version of the rehabilitation program in terms of comparing the predicted result and the resources necessary for its receipt of resources.

Brief literature review. The problems of crisis management and sanation of enterprises, due to their relevance, were the subject of research by such scientists as L. Barton, Z. Varnaliy, V. Vitlinsky, M. Kulchytsky, L. Ligotenko, O. Rayevneva, G. Springait, S. Stepurina, G. Telnova, O. Tereshchenko, V. Fedorova, D. Chesser, V. Shlahetko, A. Shtanghreta. Taking into account the significant contribution of domestic and foreign scientists in solving problems related to the financial sanation of business entities, not all aspects of this complex system have been clarified and well-grounded. This is especially the case with the optimization of the structure of sources of capital formation in order to improve the health and comprehensive evaluation of the state of financial capacity of the entity.

The purpose of the study is to implement criteria for evaluation of the efficiency of sanation at business entities on the basis of a comprehensive assessment of financial capacity.

Main Results. The problem of evaluation of the efficiency of the outcome of certain sanation is a rather difficult task in terms of the criteria for this evaluation and the choice of adequate methods. The essence and purpose of evaluating the efficiency of the result involves a comprehensive analysis of the qualitative and quantitative changes that occur as a result of the influence

of certain actions. There are currently various criteria for the effectiveness of sanation. In our opinion, according to the Law of Ukraine «On Restoring Debtor's Solvency or Declaring it Bankrupt» the efficiency criterion of bailouts - restoring solvency of the debtor – is a quite narrow issue and it does not fully consistent with the goals of sanation measures. At the same time solvency is considered to be restored in the absence of signs of bankruptcy [3].

Successful use of sanation enables to achieve its main goals, which include the coverage of current losses and elimination of the causes of their occurrence; renewal or maintenance of liquidity and solvency; reduction of all kinds of debts; improving the working capital structure; formation of financial resources for conducting bailouts of industrial and technical character. However, in the long term use the rehabilitation procedure should ensure competitiveness, financial stability, investment attraction and, consequently, increase the market value of the entity [7].

The main criteria for evaluating the efficiency of sanation in Ukrainian practice are usually indicators of liquidity and solvency, financial sustainability, profitability, added value created as a result of rehabilitation and competitive advantages. Also, in order to evaluate the results of the sanation, it is necessary to calculate the amount of additional income (the difference between its amount after and before the bailouts). Additional profit in this case is formed as a result of the normalization of the economic activity of the entity for the corresponding financial support (in comparison with the amount of profit that arose in the conditions of the crisis state of the enterprise). In the process of calculating the efficiency of the sanation, the amount of additional income of the entity is reduced to current value [6, p. 172].

The formed structure of property and sources of financial resources of enterprises of Ukraine makes it possible to characterize their financial situation as unstable (Fig. 1), since the values of the coefficients of autonomy and financial dependence, after their relative stability in the period of 2013-2014, have changed the direction towards the deterioration, and in 2017, the ratio of debt and equity to enterprises was 1.38 versus 0.89 in 2013, and the coefficient of financial independence was respectively, 0.44 versus 0.52 [4].

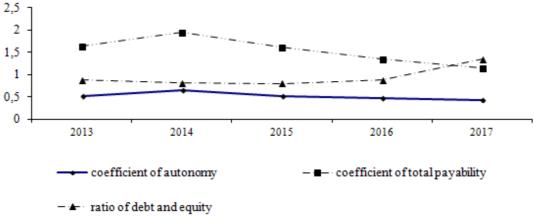


Figure 1. Financial condition of economic entities of Ukraine

Source: calculated by the author according to [4].

Фінанси та оподаткування

Significant is also the unstable tendency of the general (current) solvency, which indicates deterioration in the ability of commodity producers to fully meet their current obligations. Failure to comply with contractual and settlement discipline, untimely presentation of claims regarding emerging debts, leads to a significant increase in unreasonable receivables. In case of uncertainty about its return to business entities there is a dubious debt, for returning of which it is necessary to make a claim to the economic court. But this is a negative and troublesome phenomenon.

The inability of debtor companies to fulfill their debt obligations to counterparties causes a threat to insolvency of the latter, leads to a breach of the bankruptcy case, and subsequently to the liquidation of business entities.

The situation is complicated by the formation of significant amounts of receivables and payables as a part

of financial resources as a result of inflation, instability of the exchange rate of the national monetary unit, inconsistency of the stages of the working capital of enterprises. During the period of 2014-2017, current accounts receivable of enterprises grew by 3 times, or by 101.5 million UAH, while debt liabilities increased by 28.3 million UAH or 64.8 % (Fig. 2).

We should note that it is desirable to have a ratio where payables prevail over the receivables by 10-20 %. Instead, for Ukrainian enterprises there is a significant excess of receivables over payables, which threatens their financial stability and leads to the need to attract additional sources of funding. At the same time, it is worth noting the strengthening of negative trends in the ratio of receivables and payables: in 2013 this figure was 1.14, and in 2017-2.1.

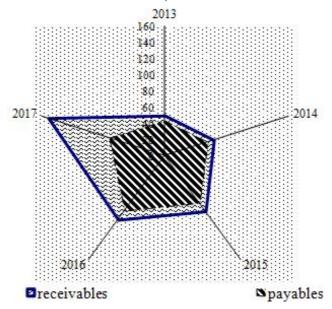


Figure 2. The dynamics of receivablei and payablei of business entities of Ukraine, mln.UAH Source: calculated by the author according to [4].

Despite the tendency of a relative decrease in the number of enterprises that receive a loss from economic activity, their share in the total number of economic entities remains rather high (about 26 % by the results of 2017), and therefore, such enterprises have preconditions for bankruptcy in the future.

Currently, under crisis conditions, internal mechanisms for securing debt obligations to prevent bankruptcy and restore financial security of economic entities should be carried out on the basis of anti-crisis measures that take into account the legal and economic procedure for the reorganization of debtor enterprises.

It should be noted that the cost of bailouts is determined by developing a special budget (rehabilitation budget). Fundamentally, these costs may be defined as the bailout investment in an enterprise for the purpose of profit in the next period. This approach makes it possible to apply methods for evaluating the efficiency of real investments to assess the bailouts efficiency.

The rehabilitation is considered successful if, with the help of external and internal financial sources, organizing and production of technical measures, the businessman comes out of the crisis (normalizes production activity and avoids bankruptcy announcements) and provides its profitability and competitiveness in the long-term period.

In our opinion, the efficiency of the sanation of economic entities should be considered in terms of financial results, as a system of criteria for assessing bailouts with gradation by the level and type of effect (Fig. 3).

Reviewing the effectiveness of the sanation can be done from the standpoint of each of the participants in the recovery, but we are more interested in investigating the debtor himself. Consequently, the criterion of efficiency of the sanation will be the restoration of normal production activity, solvency and financial sustainability of business entities in the long-term period.

It should be noted that for evaluation it is necessary to take not only the static values of the indicators before and after the sanation measures, and their indexes, which allows to evaluate not only the overall effectiveness of a particular rehabilitation project at a specific time, but also to predict its change in the process of implementing one or another complex of remedial measures. During the implementation of the rehabilitation plan, it is necessary to continuously monitor the efficiency of the use of resources, solvency, liquidity and profitability of the enterprise in order to respond promptly to the

manifestations of negative trends of activity, taking into account the calculation of these indicators before and after the implementation of a certain stage of remediation and analysis of their changes [2].

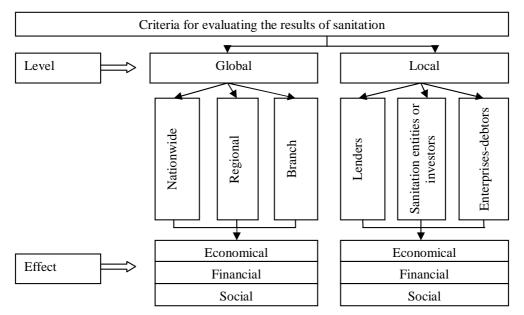


Figure 3. The system of criteria for evaluating the efficiency of sanation Source: improved by the author [5; 6].

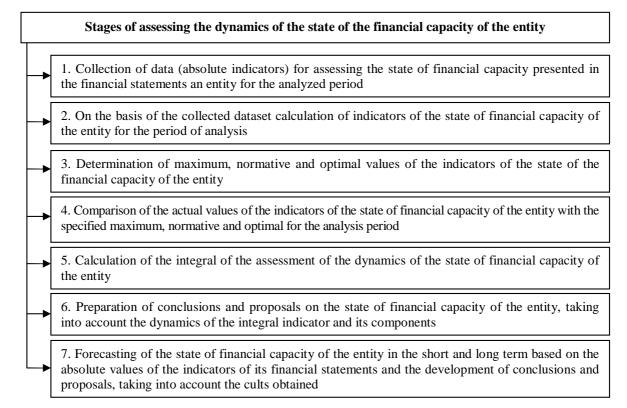


Figure 4. Algorithm for assessing the dynamics of the state of financial capacity of business entities Source: developed by the author.

In today's practice of corporate finance management, the problem of qualitative and quantitative substantiation of managerial financial decisions, which cannot be effectively taken without the use of financial analysis, is important. However, a large part of financial decisions requires an integrated (integral) approach to the study of the dynamics of the state of financial capacity of the enterprise. That is, it is necessary to determine the

Фінанси та оподаткування

objective general principles of the formation of effective methods of organizing and conducting an assessment of the dynamics and forecasting of the state of financial capacity of economic entities.

In this regard, it is suggested, based on the selected indicators in the financial statements of economic entities, to derive a generalized indicator that allows to assess the dynamics of achievement of the efficiency of the operation of enterprises in terms of deviation of the actual results from the maximum (normative, optimal) in previous periods of activity and draw conclusions about possible measures to heal it.

In accordance with the algorithm shown in Fig. 4, the first stage introduces an array of data, namely: the value of assets, non-current and current assets, accounts receivable and payables, current liabilities, own and borrowed capital, current liabilities, inventories, sales revenue, net profit for the analyzed period.

In the second stage, such indicators are calculated: profitability of capital, profitability of proceeds from sales on net profit, solvency ratios, equity coverage, and turnover of working capital, total liquidity, balance of accounts receivable and payable, self-financing, financial stability. The searches are then made for their maximum values, which are compared with actual ones.

The next stage provides the calculation of the integral

indicator of the assessment of the dynamics of the state of financial capacity of economic entities for the analyzed period by the following formula:

$$\mathcal{L}C\Phi C_{i} = \frac{1}{\mathring{\mathbf{a}} (1 - K_{i})^{2}}$$
 (1)

where $\mathcal{LC\Phi C}_i$ — is the indicator of the dynamics of the state of financial capacity of economic entities of the i-th period; K_i — i-th factor of dynamics of the state of financial capacity of economic entities in relation to its maximum (normative, optimal) level. For the optimum level, the maximum (normative, optimal) value for the entire period of analysis is taken.

The coefficient of dynamics of the state of financial capacity of economic entities is determined by the formula:

$$K_i = \mathop{\rm a}_n \frac{\Phi p_i}{M(H,O)_i} \tag{2}$$

where Φp_i — is the actual level of the *i*-th coefficient; $M(H,O)_i$ — maximum (optimal, normative) level of the *i*-th factor among the achieved ones during the analysis period; n – number of coefficients.

Thus, formula (1) will have the following form:

$$\mathcal{A}C\Phi C_{i} = 1, \begin{array}{c} \overset{\acute{e}}{\underset{\bullet}{\text{c}}} & \overset{}{\underset{\bullet}{\text{c}}} & \overset$$

where Pa_{ϕ} , Pa_{M} — the actual and maximum value of the profitability of assets; Ppn_{ϕ} , Ppn_{M} — actual and maximum value of the profitability of sold products at net profit of the entity; Knn_{ϕ} , Knn_{H} — actual and normative level of the solvency ratio; $K_{3}B_{K_{\phi}}$, $K_{3}B_{K_{H}}$ — actual and normative level of the factor of provision of stocks by own funds; $K_{0}\delta_{\phi}$, $K_{0}\delta_{M}$ — actual and maximum level of turnover rate of working capital; $K_{3}n_{\phi}$, $K_{3}n_{H}$ — actual and normative level of the coefficient of general liquidity; $K_{0}\delta_{K_{3}}$, $K_{0}\delta_{K_{3}}$, the actual and normative level of the coefficient of the

ratio of receivables and payables; Kc_{ϕ} , Kc_{u} – actual and normative value of the coefficient of self-financing; $K\phi c_{\phi}$, $K\phi c_{u}$ – the actual and normative value of the coefficient of financial stability.

Let's turn to the analysis of the dynamics of the state of financial capacity of enterprises of Ukraine (Fig. 5). Based on the main financial indicators, we forecast using the average annual increments of 2013-2017 to study the state of financial capacity of domestic enterprises in 2018 and 2019.

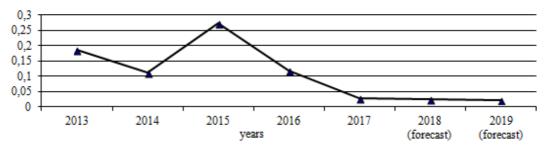


Figure 5. Dynamics of the integral indicator of financial capacity of business entities of Ukraine Source: calculated by the author according to [3].

The maximum stable state of financial capacity of enterprises should be considered as a period that corresponds to the maximum value of the proposed indicator. In our case, this is 2015 with the value of the indicator of the dynamics of the financial state of 0.2745 (0.31% – the profitability of assets, 0.23% – the profitability of sales, 0.4 – the ratio of solvency, 2.3 – the factor of stock provision of own funds; 2.61 – coefficient of turnover of working capital; 1.17 – coefficient of general liquidity; 0.85 – ratio of receivables and payables; 0.822 – self-financing factor; 2.0765 – coefficient of financial stability).

It should be noted that starting from 2016, the integral indicator of the financial capacity of the enterprises of the Ukraine has a steep tendency to decline, which, compared with 2015, has stalled by an increase of 56.5 %, and from 2017, more than 85 %, which indicates a decrease in the efficiency of their functioning. As for the forecast for 2018-2019, it is quite pessimistic, as it is supposed to gradually reduce this indicator.

The indicator of the dynamics of the state of the financial capacity of the subjects of domination may vary within the following limits: The upper limit is explained by the situation when the coefficients included in the given indicator will approach the optimal (maximum, normative), respectively, the denominator will go to zero, and the indicator - to infinity. The lower bound characterizes the situation in which the indicators will essentially deviate from the optimal (maximum, standard), so the denominator will theoretically go to infinity (the more so that some of the coefficients may reach negative values), and the indicator itself will go to zero.

Thus, it should be noted that the indicator of the assessment of the dynamics of the state of financial capacity of economic entities proposed by us can be used for both individual enterprises and for the enterprises of the region, industry or national economy as a whole. It should be noted that other indicators that characterize the financial capabilities of economic entities can be taken into account, but it is only necessary to clearly determine which will be the optimal value of the coefficient (minimum, maximum or normative). For example, the optimal value of the turnover rate of working capital will be its maximum value for the period of operation of the enterprise, provided that it is engaged in the main activity, and the duration of one turnover in days is the minimum.

A disturbing symptom may be the situation when the integral index is constantly reduced due to the decline of its individual coefficients (plateau capacity, profitability, turnover, etc., which are taken into account when calculating), which indicates a decrease in the efficiency of the operation of the investigated enterprise or national economy in general. Accordingly, the bodies of state self-government, whose competence includes the regulation of business entities, by means of prediction of the integral indicator, are able to diagnose the problem symptoms promptly and in a timely manner on a particular firm, their aggregate or the economy as a whole, and to make sound management decisions to eliminate them.

On the other hand, the calculation of such an indicator is also useful for private business structures, potential

investors, etc., as it serves as a unique indicator of a comprehensive assessment of phenomena and processes at a particular enterprise in particular, or in the industry as a whole, and simplifies the decision-making process for financial activity, investment attraction, conclusion contracts, agreements between economic entities.

Conclusions. The proposed approach to assess the dynamics of the state of financial capacity of Ukrainian business entities can be used as an integral part of the forecasting and planning system within the framework of national, branch programs or specific financial plans for enterprise development. They, in turn, are the main means of realization of state financial policy of the state, specific enterprises, priority directions of economic, social, ecological, scientific and technical development of Ukraine, concentration of financial, logistical, labor and other resources and coordination of activities of enterprises, institutions, organizations and consumers in order to solve the most important national problems in the field of activity of business entities and increase the efficiency of the functioning of domestic financial systems in general.

4 Список використаних джерел

- 1. Борщ А. Г. Економічна природа капіталу та фінансових ресурсів підприємств: точка зору на дискусійну проблему. *Облік і фінанси АПК*. 2011. N0 1. С. 137-140.
- 2. Злотнікова Є. Методичні підходи до оцінки ефективності санації сільськогосподарських підприємств. URL: http://sophus.at.ua/publ/2011_11_15_16_kampodilsk/section_4_2011_11_15_16/metodichni_pidkhodi_do_ocinki_efektivnosti_sanaciji_silskogospodars kikh_pidpriemstv/6-1-0-108
- 3. Про відновлення платоспроможності боржника або визнання його банкрутом: Закон України від 14.05.1992 р. № 2343-XII. URL: http://zakon2.rada.gov.ua/laws/show/2343-12
- 4. Статистична інформація Державної служби статистики України. URL: http://www.ukrstat.gov.ua
- 5. Фінансова санація та банкрутство підприємств: навчальний посібник / А. М. Штангрет, В. В. Шляхетко, О. Б. Волович, І. В. Зубрей. Львів: Українська академія друкарства, 2010. 337 с.
- 6. Цар О. З. Удосконалення теоретичних основ санації підприємств в Україні. Сталий розвиток підприємств, регіонів, країн: матеріали міжнародної наукової конференції. Дніпропетровськ, 2012. С. 171-172.
- 7. Череп А. В., Романченко О. О. Аналіз критеріїв оцінки ефективності санації. *Економічний простір*. 2010. № 35. С. 299-312.
- 8. Чорнявська Т. М. Облікова політика підприємства як фактор управління доходами і фінансовими результатами діяльності. *Облік і фінанси АПК*. 2012. № 1. С. 82-85.

Фінанси та оподаткування

4 References

- 1. Borshch, A. H. (2011). Ekonomichna pryroda kapitalu ta finansovykh resursiv pidpryiemstv: tochka zoru na dyskusiinu problem [The economic nature of capital and financial resources of enterprises: the point of view on the discussion problem]. *Oblik i finansy APK*, (1), 137-140.
- 2. Zlotnikova, Ye. (n.d.). Metodychni pidkhody do otsinky efektyvnosti sanatsii silskohospodarskykh pidpryiemstv [Methodical approaches to the assessment of the efficiency of agricultural enterprises' remediation.]. Retrieved from http://sophus.at.ua/publ/2011_11_15_16_kampodilsk/sect ion_4_2011_11_15_16/metodichni_pidkhodi_do_ocinki_efektivnosti_sanaciji_silskogospodarskikh_pidpriemstv/6_1-0-108
- 3. Verkhovna Rada Ukrainy. (1992). Pro vidnovlennia platospromozhnosti borzhnyka abo vyznannia yoho bankrutom: Zakon Ukrainy [On restoration of the debtor's solvency or recognition of it as a bankrupt: the Law of Ukraine]. Retrieved from http://zakon2.rada.gov.ua/laws/show/2343-12

- 4. Official site of the State Statistics Service of Ukraine. Retrieved from http://www.ukrstat.gov.ua
- 5. Shtanhret, A. M., Shliakhetko, V. V., Volovych, O. B., Zubrei, I. V. (2010). Finansova sanatsiia ta bankrutstvo pidpryiemstv [Financial rehabilitation and bankruptcy of enterprises]. Lviv: Ukrainska akademiia drukarstva.
- 6. Tsar, O. Z. (2012). Udoskonalennia teoretychnykh osnov sanatsii pidpryiemstv v Ukraini [Improvement of the theoretical bases for the reorganization of enterprises in Ukraine]. In *Stalyi rozvytok pidpryiemstv, rehioniv, krain: materialy mizhnarodnoi naukovoi konferentsii* (pp. 171-172). Dnipropetrovsk.
- 7. Cherep, A. V., Romanchenko, O. O. (2010). Analiz kryteriiv otsinky efektyvnosti sanatsii [Analysis of the criteria for assessing the efficiency of sanation.]. *Ekonomichnyi prostir*, (35), 299-312.
- 8. Chorniavska, T. M. (2012). Oblikova polityka pidpryiemstva yak faktor upravlinnia dokhodamy i finansovymy rezultatamy diialnosti [Accounting policy of the company as a factor in the management of income and financial performance.]. *Oblik i finansy APK*, (1), 82-85.