



ISSN 2579 - 2555

ՖԻՆԱՆՍՆԵՐ ԵՎ
ՀԱՇՎԱՊԱՀԱԿԱՆ ՀԱՇՎԱՌՈՒՄ

2

ԵՐԵՎԱՆ - 2022
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**ՀԱՇՎԱՊԱՀՈՒԹՅԱՆ ՈՒՍՈՒՑՄԱՆ ՄԻՋԱԶԳԱՅԻՆ
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INTERNATIONAL ACCOUNTANCY TRAINING CENTRE

МЕЖДУНАРОДНЫЙ ЦЕНТР ПО ОБУЧЕНИЮ

БУХГАЛТЕРИИ

**ՖԻՆԱՆՍՆԵՐ ԵՎ ՀԱՇՎԱՊԱՀԱԿԱՆ
ՀԱՇՎԱՌՈՒՄ**

ԳԻՏԱԿԱՆ ՀԱՆԴԵՍ

2 (10)

FINANCE AND ACCOUNTING

SCIENTIFIC JOURNAL

ФИНАНСЫ И БУХГАЛТЕРСКИЙ УЧЕТ

НАУЧНЫЙ ЖУРНАЛ

ԵՐԵՎԱՆ 2022

«ՀՈՒՄԿ» ՀԻՄՆԱԴՐԱՄ ՀՐԱՏԱՐԱԿԶՈՒԹՅՈՒՆ

«Ֆինանսներ և հաշվապահական հաշվառում» գիտական
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Հրատարակվում է 2018 թվականից:

The scientific journal “Finance and Accounting” is published twice
a year. It has been published since 2018.

Научный журнал “Финансы и бухгалтерский учет” выходит два
раза в год. Издается с 2018 года.

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FINANCE AND ACCOUNTING ◦ **ФИНАНСЫ И БУХГАЛТЕРСКИЙ УЧЕТ**

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Financial Accounting

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HUMAN CAPITAL REPRESENTATION ISSUES IN ORGANIZATIONS' FINANCIAL STATEMENTS

Abstract: As a key component of national wealth, Human capital has been constantly assessed and valued by different methodological approaches. However, this research has mainly been focused on the macroeconomic level, where accumulated human capital is calculated through efficient use, economic security of the country, sustainable development, and competitiveness. This calculated human capital index is then used as a comparative measure within different countries.

Despite this, the recognition and measurement of human capital is not yet practiced at a microeconomic level. As a key **component of the means of production, it's important for companies** to record their human capital within published financial statements to make economic interpretations in that direction. This article proposes an approach to the assessment of human capital at the company level through accounting and presentation of results in financial statements.

Keywords: financial statements, international accounting standards, labor resources, human capital valuation, human capital accounting

JEL classification: M40

Research aim: to present accounting approaches and **presentation of their human capital results within an organization's** financial statements.

Research hypothesis: existing opportunities to measure human capital at the level of organizations and present it in financial statements.

Research novelty: recommendations were made for the recognition, evaluation, and presentation of human capital in the **organization's financial statements.**

Introduction

The financial statements published by the organizations currently do not provide for the presentation of human capital in practice. Additionally, there is no such requirement within the International Financial Reporting Standards (IFRS). Human capital is more than an economic resource, making it a necessary component within the financial statements of organizations. Even though economists have been trying to estimate its accumulation at both country and organizational levels from the 18th century, the intangible nature of human capital complicates its measurability.

To address this issue, in 2013 the European Conference of Statistics formed a special group to develop a methodology for measuring human capital and statistical accounting. An experimental satellite account recording human capital was then put into operation in the system of national accounts to attempt this. However, this practice is not widespread due to several issues with the methodology behind the measurement.

Research Results

There are several factors that can complicate the measurement and presentation of human capital within the financial statements of.

Firstly, human capital reserves are constantly undergoing active dynamic changes due to several factors including generational reproduction, mortality. Additionally, as migration processes are intensified, the structure of accumulated capital and qualitative characteristics constantly change, making it difficult to accurately measure human capital at a specific time [1].

The heterogeneity of the qualitative components of human capital adds additional complexity to the problem of measurability. If some are presented in economic measurements (investment costs in education, healthcare), then most are not subject to economic dimensions (work skills, creative skills, leadership skills, etc.), which does not allow for accurate measurements of accumulated human capital [2].

Finally, even if the individual components of human capital are measurable, they are measured in different ways, such as years of working life, the reward of vocational education with reduced future incomes, the state of health with the number of diseases, and the level of general education at the expense of education. Thus, it is not possible to place different individual components of human capital within the same field of comparison, making it difficult to create a summary assessment of accumulated capital resources [2].

In practice, researchers have repeatedly attempted to present measurements of accumulated human capital with consistent estimates, at both macro and micro economic levels. One of the most common approaches used is the use of the Human Capital Index, which is calculated using three indicators: life expectancy, income, and education through the following formula.

$$\text{HDI} = \sqrt[3]{\text{LEi} \times \text{Ei} \times \text{Ii}} \quad (1)$$

where.

LEi - life expectancy index,

Ei - education census index,

Ii - income index.

In practice, however, these calculations become difficult to implement due to the difficulty with the application of sound methodologies for computing these three key components.

Such problems arise in the case of another approach to the macroeconomic measurement of human, where the calculations depend on health capital, education capital, and cultural capital, using the following formula:

$$\text{ЧК} = \text{K}_0 + \text{K}_3 + \text{K}_k \quad (2)$$

where.

ЧК - value of human capital,

K₀ - value of education capital,

K₃ - cost of health capital,

K_k - value of cultural capital.

From a macroeconomic point of view, the value of human capital is also observed in terms of generating additional economic output, as calculated in following formula:

$$\text{Human capital} = [\text{gross income} - (\text{gross expenditure} - \text{salary} + \text{benefits})] / \text{indicator of full employment} \quad (3)$$

Methodological problems arise here in terms of the country's full-time employment rate, as the calculation considers not

only the unemployment rate of the active population as well as the opportunities to work and receive public benefits by profession [4].

Different approaches to the valuation of human capital are also offered in the microenvironment where the emphasis is mainly on the employee, assessing the value characteristics of the individuals who make up human capital. The calculations are then based on the combination of expected income-expenses related to the individual's activity in the organization, as well as the amount of salary paid. The expected indicators in the valuation calculations are then presented at the present value. The most common of these methods of evaluation was suggested by G. Bakers using the following formula [5]:

$$V_a = \sum_{i=a}^n (B - C) * (1 + i)^{-t} \quad (4)$$

where:

V_a - valuation of the employee as human capital a at the age;

B - total salary paid;

C - the part of the salary that is directed to the labor recovery,

n - the age at which an individual's active work activity ends;

i - discount rate.

It is also suggested to consider investments made using an individual's income and their professional growth when calculating the value of human capital [6].

$$E_i = X_i + \sum_{j=1}^m r_{ij} \times C_{ij} \quad (5)$$

where:

- E_i - income received by a particular individual,
- X - the result of the initial capital of the individual,
- J - indicator of investments in human capital,
- r_{ij} - rate of return on personal investment,
- C_{ij} - investment value.

Researchers also suggest the use of employee potential assessments as a measure of brand equity. Considering that the value of personnel potential within an organization is the totality of the value assessments of its employees based on salary paid - the goodwill coefficient determined for an employee can be calculated as shown below.

$$S = \text{ЗП} \times \Gamma_{\text{кп}} + \text{И} \times T \quad (6)$$

where.

S - employee assessed as human capital
the value;

ЗП - is the amount of salary paid to the employee,

Г_{кп} - is the goodwill coefficient of the employee
potential,

И - investments in recruited staff are;

T - investment period.

The goodwill coefficient can be calculated for each employee involved in a business organization, by considering their capabilities in performing these functions and generating additional benefits. It represents the potential of human capital in the pursuit of material goods by taking an individual approach to each employee.

From an organizational standpoint, the most important and analyzed factors when evaluating human capital are the work abilities, professional skills, organizational and management skills of the individual and working groups. The presentation of human capital at the organizational level is intended to assess the performance of labor resources at the micro level and is commonly recommended within professional accounting literature.

We agree with researchers who suggest that human capital accounting be organized at the organizational level by presenting collected labor resources as assets with liabilities equilibrium human capital item [7]. However, the problem of how human capital will be assessed arises here as well. To solve this, we suggest using as simplified of a method as possible, based on the payment of workforce within the organization. Provided the number of staffs recruited and their salary information, we propose an assessment of human capital of an organization in parallel with traditional capital (see Table 1).

Therefore, the equalized financial condition in the organizations presupposes having the following comparisons with the balance sheet items:

$$\left\{ \begin{array}{l} a + b - f = d: \\ c = f \\ a + b + c = d + f: \end{array} \right.$$

Table 1. Human capital approach in reporting on the financial condition of organizations¹.

Assets		Capital and Liabilities	
Material resources	a	Traditional capital d	d
Financial resources	b	Human capital	e
Work Resources	c	Liabilities f:	f

Conclusion

In general, traditional equity in the statement of financial position is the value group of the entity's own financial and non-financial assets, which includes the additional output generated using capital (profit growth, asset revaluations, etc.). Consequently, the inclusion of labor resources involved in the assets of the organization to fully represent the development of economic resources and the return on their use, and the corresponding representation of human capital in liabilities, is now becoming a necessity that creates an opportunity.

Firstly, to present the economic resources of the organization and their sources of emergence more comprehensively, in terms of material, financial and labor forces, where the managed capital is valued in human, financial and material shares.

Secondly, to evaluate the effectiveness of an organization's policy in terms of human resource and quality improvement of the managed workforce, as an increase in compensation is correlated with an increase in the quality of the workforce.

Finally, human capital accountability can also be assessed by organizations in terms of competitiveness, as the qualitative

¹ Composed by author

improvements in the labor resources involved provide a stable guarantee of a competitive position in the market.

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**ՄԱՐԴԿԱՅԻՆ ԿԱՊԻՏԱԼԻ ՆԵՐԿԱՅԱՑՄԱՆ
ՀԻՄՆԱԽՆԴԻՐՆԵՐԸ ԿԱԶՄԱԿԵՐՊՈՒԹՅՈՒՆՆԵՐԻ
ՖԻՆԱՆՍԱԿԱՆ ՀԱՇՎԵՏՎՈՒԹՅՈՒՆՆԵՐՈՒՄ**

Բանալի բառեր – ֆինանսական հաշվետվություններ, հաշվապահական միջազգային ստանդարտներ, աշխատանքային ռեսուրսներ, մարդկային կապիտալի գնահատում, մարդկային կապիտալի հաշվառում

Մարդկային կապիտալը հանդիսանալով ազգային հարստության կարևորագույն բաղադրիչ, մշտապես գնահատման և արժևորման է ենթարկվել տարբեր մեթոդաբանական մոտեցումներով: Սակայն, այդ ամենը մինչ այժմ հիմնականում կատարվում է մակրոմակարդակով, երբ կուտակված մարդկային կապիտալը դիտարկվում է արդյունավետ օգտագործման, երկրի տնտեսական անվտանգության, կայուն զարգացման, մրցունակության ապահովման տեսանկյունից: Այս առումով, տարբեր երկրների համար հաշվարկվում և համեմատության մեջ են դրվում մարդկային կապիտալի համաթվեր:

Մինչդեռ, մարդկային կապիտալի ճանաչումն ու չափումը դեռևս գործնական կիրառում չի ստանում կազմակերպությունների մակարդակով: Հանդիսանալով արտադրական միջոցների կարևորագույն բաղադրիչ, արդեն իսկ անհրաժեշտություն է առաջանում մարդկային կապիտալի արձանագրումը հրատարակվող ֆինանսական հաշվետվություններում և այդ ուղղությամբ տնտեսագիտական մեկնաբանումների և որոշումների իրականացումը:

Հոդվածում կատարվում են առաջարկներ կազմակերպությունների մակարդակով մարդկային կապիտալի գնահատման, հաշվառման և ֆինանսական հաշվետվություններում ստացված արդյունքների ներկայացման մոտեցումների վերաբերյալ:

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ПРОБЛЕМЫ ПРЕДСТАВЛЕНИЯ ЧЕЛОВЕЧЕСКОГО КАПИТАЛА В ФИНАНСОВОЙ ОТЧЕТНОСТИ ОРГАНИЗАЦИЙ

Ключевые слова - финансовая отчетность, международные стандарты бухгалтерского учета, трудовые ресурсы, оценка человеческого капитала, учет человеческого капитала

Человеческий капитал, являясь ключевым компонентом национального богатства, постоянно подвергается оценке с помощью различных методологических подходов. Однако пока все это в основном делается на макроуровне, когда накопленный человеческий капитал рассматривается с точки зрения эффективного использования, экономической безопасности страны, устойчивого развития, конкурентоспособности экономики. В связи с этим рассчитываются и сравниваются индексы человеческого капитала для разных стран.

Между тем, признание и измерение человеческого капитала еще не практикуется на уровне предприятий. Являясь ключевым компонентом средств производства, человеческий капитал уже необходимо отражать в публикуемой финансовой отчетности, делать экономические интерпретации в этом направлении. В статье сделаны предложения о том, как подойти к оценке человеческого капитала на уровне предприятий, учету и представлению результатов в финансовой отчетности.

Submitted: 18.09.2022

Accepted for publication: 15.11.2022

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FEATURES OF EVALUATION AND ACCOUNTING OF BIOLOGICAL ASSETS IN ACCORDANCE WITH THE REQUIREMENTS OF IFRS 41 "AGRICULTURE"

Abstract: Changes to IAS 41 Agriculture in recent years are intended to improve the accounting for biological assets, and changes to the standards are automatically reflected in the financial statements. Exclusion of some biological assets from the scope of IAS 41 shall in itself lead to the differentiation of biological asset valuation and accounting mechanisms.

This article presents the "fair value less costs to sell" biological asset valuation model and accounting procedures that need to be identified and developed on a theoretical-practical level to prepare financial statements.

Keywords: **IAS 41 "Agriculture"**, **biological assets**, **fair value less costs to sell**, valuation, accounting

Research aim: The aim of the research is to study the accounting and valuation models of biological assets according to IAS 41, which will promote the effective management of the biological transformation of biological assets.

Research hypothesis: It is supposed, that biological asset valuation models are important, from the point of view of agricultural organizations' accountment of income and expenses,

increasing the degree of reliability of the information included in financial statements.

Research novelty: The scientific novelty is the methodological development of the theoretical bases of the valuation and accountment of biological assets at their real value in order to effectively manage the biological transformation of biological assets in agricultural organizations.

Introduction

Throughout the whole period of activity of a living organism, quantitative and qualitative changes occur due to the growth, development, degeneration, reproduction and other biological changes of a living organism, in a word, due to biological transformation. That is to say, among the organization's assets, biological assets (plants, animals) are unique due to their ability to undergo biological transformation.

Therefore, according to IAS 41 "Agriculture" standard the accounting of biological assets is connected with the biological transformation of these assets, more specifically, to the results of biological transformation.

Biological assets have the ability of producing a product (food, crop) and giving an additional asset (generation), they are used in economic activities, provide economic benefits, they are controlled and reliably valued, they are produced either in an organization or received from other individuals [1].

The classification of plants and animals (non-current and current), in the accounting according to the amendments made in the IAS 41 standard, is presented in Figure 1.

According to Figure 1, non-current biological assets include the agricultural products that will be harvested after 12 months, as well as productive animals that will be kept for more than 12 months, also trees that are grown for timber. It should be noted that after the amendments made in IAS 41, the productive trees are out of the

scope of the "Agriculture" standard and are considered as fixed assets, valued at their initial cost.

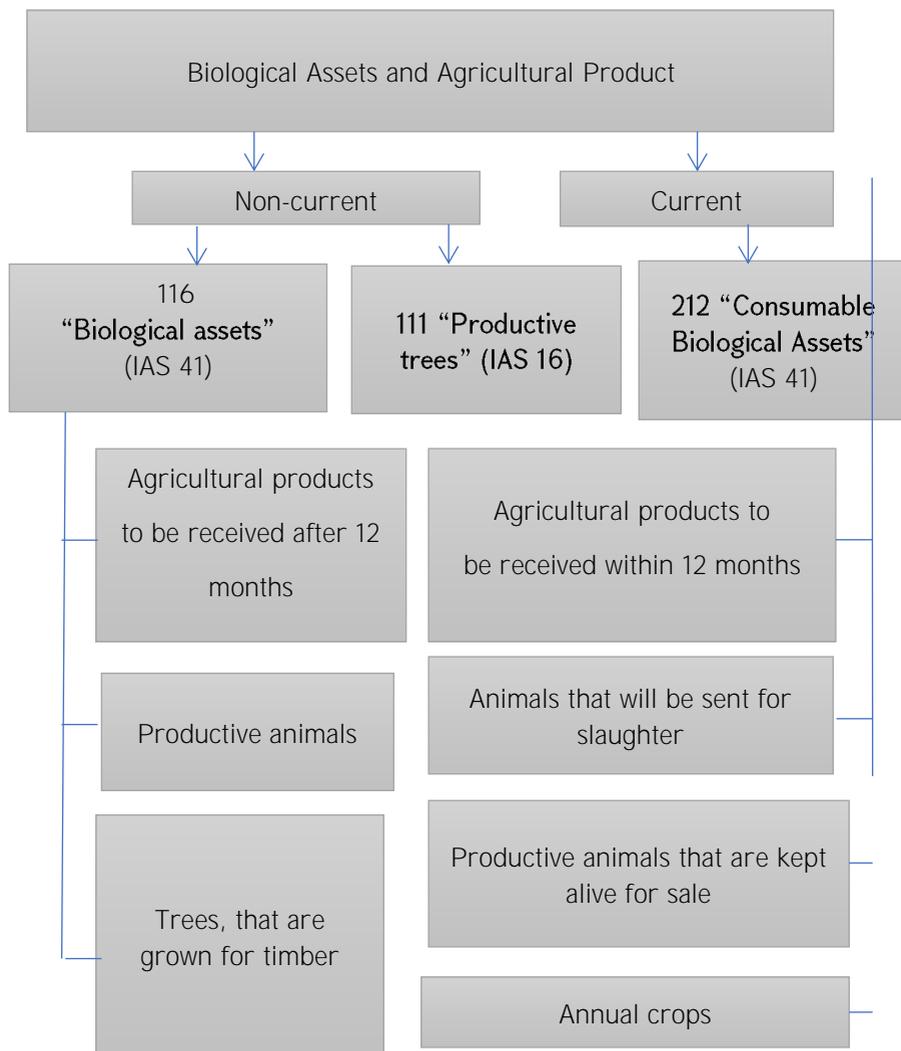


Figure 1. Classification of biological assets and agricultural products into current and non-current

According to the above presented figure, current, i.e. consumable biological assets include the crop or food that should be harvested within twelve months as from the accounting period or the animals, that should be sent for slaughter or kept alive for sale, within twelve months, also annual cultured plants the crop of which is obtained within twelve months. Thus, non-current biological assets are presented in two separate assets' accounts, being included in the sphere of action of different standards (IAS 16, IAS 41). Let's add that agricultural products (crop, food) are considered as stock after harvesting and are included in the sphere of action of IAS 2 "Inventories" standard.

In a number of works, it is suggested to classify biological assets in an analytical accounting, according to "affiliation to the sphere (plant -breeding and cattle-breeding), according to the period of usage (up to 12 months and more than 12 months), according to the nature of usage (consumable or productive) and according to characteristics (ripened and unripened))" [2]. Ripened biological assets are able to regularly provide crops, food, and the consumable ones will be considered as ripened, when they provide certain parameters that will enable these assets to be used for the purpose to obtain crops or food [3].

As biological transformation is the peculiarity of biological assets, so, accounting of biological assets is associated with that biological transformation, more exactly, accounting is carried out at the moment when the result of biological transformation is recorded: harvest, product, generation, etc.

Thus, the expenditures on the productive tree before the harvest are not ascribed to unfinished production, as well as the expenditures on the mother flock are not ascribed to unfinished production. The latter are collected in the "Main production"

account and written off as an expense of the period at the end of the accounting year:

DR Expenses from agricultural activities

CR Main production.

And the crop, food, generation are accounted as consumable biological assets, but not as product (finished articles) at the moment of receipt;

DR Consumable biological assets

CR Incomes from agricultural activities.

If the organization's intentions are such as the obtained generation should be included into the main flock (in order to provide generation later), then it will be reflected in the accounting not as current (consumable) biological assets, but as non-current biological assets;

DR Biological assets

CR Incomes from agricultural activities.

If the organization's intentions are such as the part of the harvested crop should be kept as seed, then it will be reclassified as material;

DR Materials

CR Consumable biological assets.

And when realizing the harvest, food, generation, they are credited, attaching with the accounts, accounting the receivable debts or financial means or received deposits;

DR Sales receivable debts

CR Financial means

DR Received deposits

CR Consumable biological assets.

That is to say, when selling biological assets, they are not written off at their sale cost price or book value, but at fair value less costs to sell, and expense accounts are not involved here.

According to IAS 41, the consequences of biotransformation of biological assets will be reflected in the report at the moment when the biotransformation took place, that is to say, the obtained crop, food, generation are reflected in the accounting just at the moment of receipt, therefore, the income for them is already recognized at the moment of receipt, rather than when sell. And when realized, these assets are credited with the corresponding accounts recording either in cash or the installment or advance payment.

While, if valued with the initial cost model, the effects of biotransformation of biological assets would be reflected in the report not at the time when the biotransformation took place, but when the asset was realized [4].

A biological asset should be measured at its fair value less costs to sell at the time of initial recognition and at the end of each accounting period, besides the case when fair value cannot be measured reliably [5].

The fair value of an asset is defined as the price that would be obtained from the sale of the asset in an ordinary transaction between market participants at the measurement date.[6] Biological assets do not receive an objective valuation until they are recognized in the market. It can be argued that accounting for biological assets and agricultural products under IAS 41 is interwoven with the existing market, and future economic benefits are estimated by measuring significant physical or qualitative characteristics of biological assets in the existing market, creating an opportunity to reliably determine future economic benefits.

Figure 2 shows the valuation procedure for biological assets and consumable biological assets at “fair value less costs to sell” at the time of initial recognition (acquisition). According to the figure, the book value of biological assets, as well as consumable biological assets, is exactly the market price that would be obtained from the sale of biological assets and consumable biological assets as of the balance sheet date, excluding transportation, loading, unloading costs, commissions and other disposal fees. That is, the latter are subtracted from the real value as much as they would have been if a sale had been made at that moment.

Consequently, fluctuations of the fair value (market price) will be reflected in the accounting;

- **increase in fair value or physical increase as benefits:**

DR Biological assets

CR Income from agricultural activities

- decrease in fair value or decline in physical characteristics as losses;

DR Expenses from agricultural activities

CR Biological assets.

Costs to sell deducted from fair value are additional costs directly attributable to the disposal of the asset. Examples of additional costs include commissions paid to brokers and dealers, fees paid to regulators and commodity exchanges, transportation taxes and duties [7].

And in terms of providing reliable information, when the value of biological assets is revalued at the end of each year, the latter should include not only changes in fair value or physical changes, but also changes in selling costs.

Therefore, changes in the rates or value of transportation, loading, unloading, commissions and other disposal fees will also

change the book value of the biological asset, and will be reflected in the accounting as benefits or losses;

- increase in cost of sales will be reflected as losses

DR Expenses from agricultural activities

CR Biological assets

- reduction in selling expenses as benefits

DR Biological assets

CR Income from agricultural activities

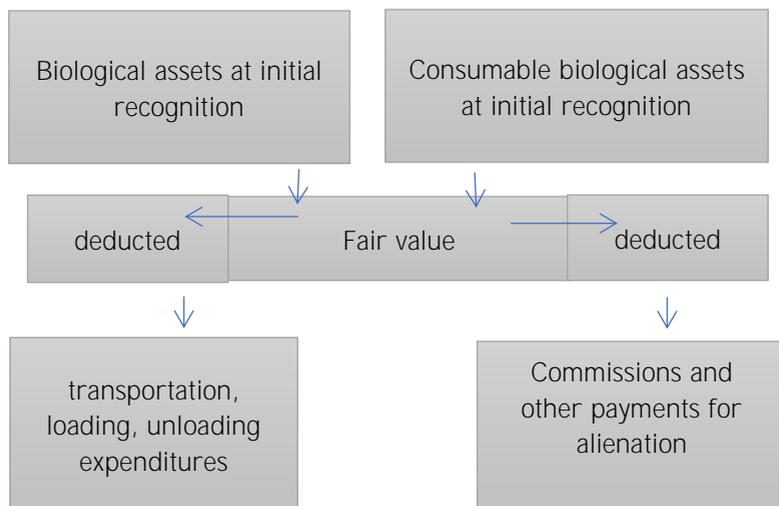


Figure 2. The biological assets' valuation model

While calculating the fair value of certain biological assets, when there is no active market for them, it is allowed to use the price of the last transaction that took place in the market (if there were no significant changes in economic conditions between the date of the last transaction and the reporting date), also , market **prices for similar assets are applicable, reflecting their differences**, and in the case of absence of the first two, industry indicators for prices of biological assets are applicable. [8]

Regarding the evaluation and accounting of consumable biological assets, let's present a conventional example, according to which the organization is engaged in the cultivation of "Grom" type autumn wheat (vegetation: 223-278 days) and it has done land preparation and sowing works since October 2020. In 2021 wheat cultivation continued and in May of the same year, a wheat harvest of 1000 tons was obtained. As of the accounting date, the real value i.e. the market price of "Grom" winter wheat was 170,644.36 drams for 1 ton in May 2021, in addition, in order to transport the wheat to the market for sale, the organization will bear transportation costs of 4,000,000 drams, and if it sells through an intermediary organization, it will also pay that organization a commission of 1 percent of the market price (table 1).

Conclusion

Thus, an entity's benefits and losses are formed at the moment of recognition of a biological asset (in the following example, a consumable biological asset) when they are measured at "fair value less costs to sell."

This value is the book value of the biological asset, and the latter should reflect the market environment in which the sale transaction would be carried out as of the balance sheet date, from the point of view of accounting, the costs incurred on biological assets are considered as agricultural activity costs, at the end of the reporting year they are expensed, and they are attributed neither to incomplete production and nor to the product.

Table 1. The Order of accounting and estimation of consumable biological assets

Operations	Correspondence	Sum (AMD)
October 2020		
Reflection of expenditures of stone collection, zigzag raking of the soil, loosening, seed disinfection and winnowing, sowing, sprout watering	DR Main production CR Materials CR Debts for wages and other short-term repayments of employees CR Fixed assets attrition	94 812 000
December 31, 2020		
Registration of the incurred expenses for winter wheat	DR Expenditure for agricultural activities CR Main production	94 812 000
March-May 2021		
Reflection of expenditures for irrigation, soil fertilization, harrowing, raking, against pests, diseases, mowing, grain drying, filtering and disinfection.	DR Main production CR Materials CR Debts for wages and other short-term repayments of employees CR Fixed assets attrition	20 510 000
May 2021		
Registration of incurred expenses for winter wheat	DR Expenditure for agricultural activities CR Main production	20 510 000
May 2021		
Real price of crop (1000 tons)		170 644 360

Expenditures for transportation the crop to market (if saled at that time)		(4 000 000)
Commission on the sale of the crop (if saled is at that time)		(1 706 444)
Debit of winter wheat at the time of harvesting regarding "fair value less costs to sell."	DR Consumable biological assets CR Income from agricultural activities	164 937 916

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դասախոս, ՀՊՏՀ

**ԿԵՆՍԱԲԱՆԱԿԱՆ ԱԿՏԻՎՆԵՐԻ ԳՆԱՀԱՏՄԱՆ ԵՎ
ՀԱՇՎԱՌՄԱՆ ԱՌԱՆՁՆԱՀԱՏԿՈՒԹՅՈՒՆՆԵՐՆ ԸՍՏ ՀՀՄՍ
41 «ԳՅՈՒՂԱՏՆՏԵՍՈՒԹՅՈՒՆ» ՍՏԱՆԴԱՐՏԻ
ՊԱՀԱՆՋՆԵՐԻ**

Բանալի բառեր - ՀՀՄՍ 41 «Գյուղատնտեսություն», կենսաբանական ակտիվներ, իրական արժեք՝ հանած վաճառքի ծախսումներ, գնահատում, հաշվառում

Վերջին տարիներին ՀՀՄՍ 41 «Գյուղատնտեսություն» ստանդարտում կատարված փոփոխությունները միտված են կենսաբանական ակտիվների հաշվառման կատարելագործմանը, իսկ ստանդարտներում կատարված փոփոխություններն ինքնաբերաբար արտացոլվում են ֆինանսական հաշվետվություններում:

Կենսաբանական ակտիվների մի մասի բացառումը ՀՀՄՍ 41 ստանդարտի գործողության ոլորտից ինքնին հանգեցնում է կենսաբանական ակտիվների գնահատման և հաշվառման մեխանիզմների տարբերակմանը:

Սույն հոդվածում ներկայացված են հաշվապահական հաշվառման միջազգային որևէ այլ ստանդարտում չներառված կենսաբանական ակտիվների «իրական արժեք՝ հանած վաճառքի ծախսումներով» գնահատման մոդելն ու հաշվառման կարգը, որոնք ֆինանսական հաշվետվությունների պատրաստման համար տեսական և գործնական մակարդակով բացահայտման ու մշակման կարիք ունեն:

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ОСОБЕННОСТИ ОЦЕНКИ И УЧЕТА БИОЛОГИЧЕСКИХ АКТИВОВ В СООТВЕТСТВИИ С ТРЕБОВАНИЯМИ МСФО 41 «СЕЛЬСКОЕ ХОЗЯЙСТВО»

Ключевые слова - МСФО 41 «Сельское хозяйство», биологические активы, «справедливая стоимость за вычетом затрат на продажу», оценка, учет

Изменения в МСФО (IAS) 41 «Сельское хозяйство», внесенные в последние годы, призваны улучшить учет биологических активов, а изменения стандартов автоматически отражаются в финансовой отчетности. Исключение некоторых биологических активов из сферы применения МСФО (IAS) 41 само по себе должно привести к дифференциации механизмов оценки и учета биологических активов.

В этой статье представлена модель оценки «справедливая стоимость за вычетом затрат на продажу» и процедуры учета биологических активов, не включенных в какой-либо другой Международный стандарт финансовой отчетности, которые необходимо определить и разработать на теоретико-практическом уровне для подготовки финансовой отчетности.

Submitted: 10.09.2022

Accepted for publication: 15.11.2022

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MANAGERIAL AUDITING INFORMATION PROVISION ISSUES

Abstract: The accounting information published by organizations based on international standards is not only retrospective, but also mainly reflects the financial side of economic activity. However, managerial auditing also requires non-financial information. Of course, a certain range of non-financial results of the organization's activity is always subject to accounting, and in different dimensions. However, from the point of view of decision-making, this information is not enough, especially when it comes to managerial auditing and evaluations of business competitiveness of organizations. As a rule, non-financial traditional accountability of accounting is aimed at satisfying the internal interests of the organization, protecting assets, and making decisions aimed at the uninterrupted production process.

Managerial auditing is currently interested not only in the range of indicators of financial statements, but also in non-financial accountability, which ensures sustainable development and strengthening of competitive positions, in connection with the satisfaction of not only narrow economic, but also public interests related to business, such as environmental issues, the social sphere, the obligations of organizations towards the state. With these motives that the article sets out the task of organizing the accounting

of non-financial results and the presentation of relevant reports arising from it, which significantly expands the information scope of the managerial auditing.

Keywords: managerial audit, business objectives, non-financial accounting, goal-setting accounting, ratio deviations

JEL classification: M40, M41

Research aim: to present ways of improving managerial audit information provision.

Research hypothesis: it is possible to organize accounting in such a way, that it presents a report on the implementation of the objectives of entrepreneurship management

Research novelty: a system for recording the results of the implementation of business goals was proposed, which presents a report on the availability of both financial and non-financial target indicators for using in managerial auditing.

Introduction

In the framework of drawing up financial reports according to current international standards, there is no specific requirement to present information on the non-financial results of the organizations' activities. However, at the same time, the set of annual reports can present not only explanations from the non-financial sphere addressed to corporate interests, but also non-financial results of public interest, which are related to the organization's activities [1].

They are mainly management comments aimed at strengthening the organization's good reputation among the organization's internal and external stakeholders. And, for that reason, the non-financial information presented in this way is not systematic in nature and is often presented with the positive aspects

of the organization's activity, bypassing the negative manifestations. In this regard, the current financial accounting system is entering a crisis stage, as it may not fully satisfy the information expectations of internal and external users, both in terms of achieving non-financial results and in terms of the performance of future-oriented target expectations.

The International Financial Reporting Standards (IFRS) regulate the approaches to the preparation of published accounting reports. However, here the emphasis is on the principles of presentation of financial information, and non-financial information, as a rule, is left out of the reporting system. This is mainly due to the framework of financial accounting, which includes the organization's assets, liabilities, capital, income and expenses. And today, the business world is also interested in non-financial information, in order to evaluate not only the financial status of the organization, but also the strengthening of competitive positions, opportunities for sustainable development, corporate interests, security issues, environmental and social activities [2].

Naturally, such information cannot be presented with financial valuation, which makes the possibility of including non-financial information in the accounting system a matter of discussion among theorists.

Research Results

The demand for non-financial reporting has already become traditional for enterprises in which financial information is supplemented with other performance indicators, assessing the effectiveness of the company's activities in relation to the achievement of various objectives related to corporate and social responsibility. Integrated reporting shows, how the organization's

tactical and strategic goals and their performance lead to the creation of not only financial, but also non-financial values.

International financial reporting standards of organizations are aimed at serving the needs of external users of information. However, at present, the external beneficiaries of the enterprise also seek to receive information related to the fulfillment of social, environmental, as well as various public obligations of the organizations, which are almost not reflected in the financial reports. Moreover, accounting reports are also an informative source for the management of organizations, which evaluate the strengths and weaknesses of economic activity and make decisions in the direction of strengthening the competitive positions of entrepreneurship [3].

Therefore, only with financial statements, where there are no clear objectives and indicators of their actual achievement, both internal and external users feel "information gap", because only the records of retrospective results are not sufficient when making decisions of both strategic and tactical nature. And so, at present, the problem is to apply such accounting that will provide clear information not only about the past economic activity of the organization, but also evaluate the progress of reaching future goals. In this sense, we suggest to use goal-setting accounting in organizations along with the existing financial accounting, which will fill the "information gap" of financial reports. On the other hand, if non-financial results are included in the accounting system, then they must be comparable with uniform measures, have the same dimension, so that they are subject to double registration in the accounts [4].

And mostly, the non-financial results of economic activity are presented in different metrics (kg, m, liter, hour, etc.), which

makes it difficult to present them in a comparable field, even more, the systematic accounting. Therefore, when organizing the accounting of goals, the current structure of traditional accounting is radically revised and other methodological approaches begin to work [5].

Perhaps, there is no doubt about the fact that the structure of financial accounting formed five hundred years ago has not undergone changes until now precisely because of the application of the principle of double registration, with the help of which it is possible to coordinate all the recorded information and present regulated reports. Adopting the formula "Assets = capital + liabilities" as a pillar, double registration of economic operations creates an opportunity to balance the financial information of economic activities of organizations with a systematic approach.

In this sense, we also propose to build the accounting system of goals with a balancing approach, but by creating a balancing relationship between the organizations' goals and their actual achievement, using the following formula: "Goals = Actual Achievements + Deviations", which also receives its value changes by double recording and thereby ensures balanced and systematic information flows.

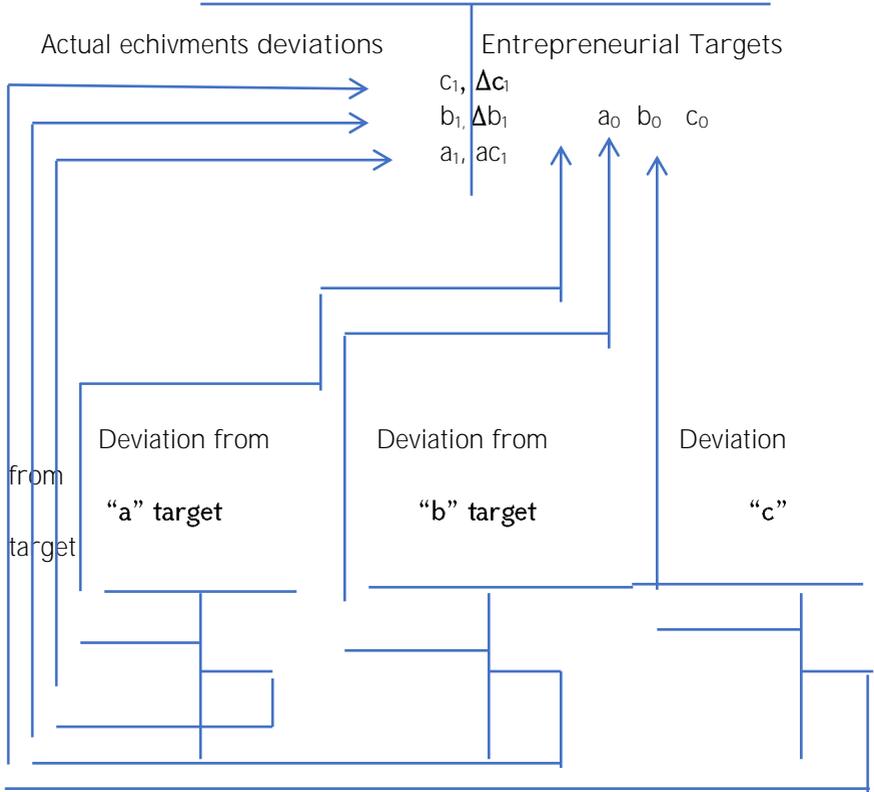
In this case, special accounts are also used, in which, on the principle of double registration, both financial and non-financial balanced indicators of the organization's activity are recorded, but as a result, presenting an alternative accounting balance, based on the following structure of interconnection of accounts.

Therefore, the philosophy of goal accounting is not limited to recording past events, but it provides informative comments on the actual achievement of financial and non-financial $\sum n$ goals by the organization (see Figure 1). In this sense, the calculation of goals

is most closely related to the management system, because n target indicators derive from the interests of competitive business. In this sense, in contrast to traditional financial accounting, goal-setting accounting focuses on the future and provides insight into the performance of defined tasks, which is used for making future-oriented managerial decisions. And the larger the range of n target indicators, the more ambitious the requirements for the accounting of targets become.

Thus, Table 1 presents the objectives of the organization, which are considered key to ensuring the competitiveness of the organization and are of interest to users of accounting reports. Moreover, the table includes not only the expected goals with their different units of measurement, but also the actual achievements at the end of the reporting period. In order for the specified indicators to be recorded to be presented in the field of comparability, accessibility coefficients and deviations are calculated for them (see table 1). Moreover, the smaller the coefficient of deviation, that is, the accessibility tends to 1.0, the more the degree of accessibility of concrete goal setting is highly appreciated by the information users.

Entrepreneurial goals



$$\underbrace{a_0 + b_0 + c_0 + n_0}_{\text{Targets}} = \underbrace{a_1 + b_1 + c_1 + n_1}_{\text{Achievements}} + \underbrace{\Delta a + \Delta b + \Delta c + \Delta n}_{\text{Deviation from targets}}$$

Figure 1. Goal - setting accounting information flows²

² Created by author

Table 1. Calculation of factor deviations from targets

Entrepreneurial goals		Financial and non financial indicators		Achievement Ratio	Deviation Ratio
		Expected	Actual		
Ensuring annual sales volume	a	250 bl AMD	230 bl AMD	0,92	0,08
Average asset annual balance	b	740 bl AMD	725 bl AMD	0,98	0,02
Return on capital	c	5%	4.5%	0.9	0.10
Tax burden in relation to the volume of sales	d	28%	37%	0,75	0,25
Involvement of socially vulnerable groups	e	7%	2%	0,28	0,72
Opening of new jobs	f	36	30	0,83	0,17
Competitive quality assurance	g	100%	92%	0,92	0,08
Expansion of environmental activities	h	4%	4%	1,0	0

The road map for the formation of the structure of accounting of objectives also includes the registration of deviations of actual achievements from the objectives set by double entry. In this case, special accounts are opened for each objective, which record the deviations of the actual achievements for each objective, which are formulated with the following accounting reports based on the data of table 1.

- the goal of ensuring the annual sales volume was formulated.

DR "Target of the annual volume of sales"1.0

CR "Entrepreneurial goals"1,0

- the actual availability of the annual sales volume was formulated.

DR "Entrepreneurial objectives"0.92

CR "Target of the annual volume of sales".....0.92

- the deviation from the goal of securing the annual sales volume was formulated.

DR "Entrepreneurial objectives".....0.08

CR "Target of the annual volume of sales".....0.08

- the objective of ensuring the balance of assets was formulated.

DR "Average Asset Balance Target".....1.0

CR "Entrepreneurial objectives".....1,0

- the actual access to the average balance of assets was formulated;

DR "Entrepreneurial objectives".....0.98

CR "Average Asset Balance Target".....0.98

- the deviation from the goal of ensuring the average balance of assets was formulated;

DR "Entrepreneurial objectives".....0.02

CR "Average Asset Balance Target".....0.02

By the same principle, by recording the coefficient deviations from the remaining goals with double registration, we will get the balance correlation of the performance of the business goals of the organization with the help of the following account.

Thus, the proposed "Entrepreneurial goals" account is closed at the end of the accounting period, the performance of reaching the goals set in the debit syde, and the number of goals included in the accounting system is in the credit.

Entrepreneurial objectives

(a _i) 0,92	(a _o) 1,00
(Δa) 0,08	
(b _i) 0,98	(b _o) 1,00
(Δb) 0,02	
(c _i) 0,90	(c _o) 1,00
(Δc) 0,10	
(d _i) 0,75	(d _o) 1,00
(Δd) 0,25	
(e _i) 0,28	(e _o) 1,00
(Δe) 0,72	
(f _i) 0,83	(f _o) 1,00
(Δf) 0,17	
(g _i) 0,92	(g _o) 1,00
(Δg) 0,08	
(h _i) 1,00	(h _o) 1,00
(Δh) 1,00	
6,00	6,00

Conclusion

Having an accounting report of factor deviations from the goals set by the organization, it is possible to:

First, to transfer accounting to the field of assessing the achievement of future-oriented goals, and thereby provide systematic information to managerial auditing about the progress of the organizations' activities according to the specified target directions.

Second, to simultaneously include financial and non-financial information in the accounting system, thus providing accountability not only for economic, but also for social,

environmental, and public interest satisfaction in various areas of business activity, presenting goals and actual achievements in these directions.

Thirdly, to assess the degree of realization of the objectives undertaken by the organizations and thereby contribute to increasing the effectiveness of the managerial auditing, presenting information on the deviations of the actual achievements from the objectives of the enterprise. Thus, if in the above-mentioned situation a maximum of 6 units of goal achievement was set, and the total negative deviation from it was 1.42, then the organization failed to achieve the key development indicators set by 23.7%.

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ԿԱՌԱՎԱՐՉԱԿԱՆ ԱՌԻԴԻՏԻ ՏԵՂԵԿԱՏՎԱԿԱՆ ԱՊԱՀՈՎՄԱՆ ՀԻՄՆԱԽՆԴԻՐՆԵՐԸ

Բանալի բառեր – կառավարչական աուդիտ, ձեռնարկատիրական նպատակադրումներ, ոչ ֆինանսական հաշվառում, նպատակադրումների հաշվառում, գործակիցներով շեղումներ

Կազմակերպությունների կողմից միջազգային ստանդարտների հենքով հրապարակվող հաշվապահական հաշվառման տեղեկատվությունը ոչ միայն հետահայաց բնույթ ունի, այլև հիմնականում տնտեսական գործունեության ֆինանսական կողմն է արտացոլում: Սակայն, կառավարչական աուդիտը պահանջ է զգում նաև ոչ ֆինանսական տեղեկատվության: Իհարկե, կազմակերպությունների գործունեության ոչ ֆինանսական արդյունքների որոշակի շրջանակ միշտ էլ ենթարկվում է հաշվառման, այն էլ տարբեր հարթություններով: Սակայն, որոշումների ընդունման տեսանկյունից տվյալ տեղեկատվությունը բավարար չէ, նամանավանդ, երբ խոսքը վերաբերում է կառավարչական աուդիտին և կազմակերպությունների գործարարության մրցունակության գնահատումներին: Որպես կանոն, հաշվապահական հաշվառման ոչ ֆինանսական ավանդական հաշվետվողականությունը նպատակաուղղվում է կազմակերպության ներքին շահերի բավարարմանը, ակտիվների պաշտպանությանը, արտադրական գործընթացի անխափանությանն ուղղված որոշումների կայացմանը:

Կառավարչական աուդիտին ներկայումս հետաքրքրում է ոչ միայն ֆինանսական հաշվետվությունների ցուցանիշների շրջանակը, այլև կայուն զարգացում և մրցակցային դիրքերի

ամրապնդում հուսադրող ոչ ֆինանսական հաշվետվողականությունը՝ կապված գործարարությանն առնչվող ոչ միայն նեղ տնտեսական, այլև հանրային շահերի բավարարման հետ, ինչպիսիք են բնապահպանական խնդիրները, սոցիալական ոլորտը, պետության նկատմամբ կազմակերպությունների ստանձնած հանրային պարտավորությունների կատարումը, համայնքային խնդիրների լուծումները, գործընկերների նկատմամբ դրսևորվող գործարարության վարքագիծը և այլն: Հենց այս շարժառիթներով հողվածում խնդիր է դրվում կազմակերպելու ոչ ֆինանսական արդյունքների հաշվառում և դրանից բխող համապատասխան հաշվետվությունների ներկայացում որով էականորեն ընդլայնվում է կառավարչական աուդիտի տեղեկատվական շրջանակը:

ПРОБЛЕМЫ ИНФОРМАЦИОННОГО ОБЕСПЕЧЕНИЯ УПРАВЛЕНЧЕСКОГО АУДИТА

Ключевые слова - управленческий аудит, бизнес-цели, нефинансовый учет, учет поставленных целей, коэффициентные отклонения

Бухгалтерская информация, публикуемая организациями на основе международных стандартов, носит не только ретроспективный характер, но и в основном отражает финансовую сторону хозяйственной деятельности. Однако для управленческого аудита также требуется нефинансовая информация. Безусловно, определенный круг нефинансовых результатов деятельности организации всегда подлежит учету, причем в разных измерениях. Однако с точки зрения принятия решений этой информации недостаточно, особенно если речь идет об управленческом аудите и оценках конкурентоспособности организаций. Как правило, нефинансовая традиционная отчетность бухгалтерского учета направлена на удовлетворение внутренних интересов организации, защиту активов, принятие решений, направленных на бесперебойный производственный процесс.

Управленческий аудит в настоящее время интересуется не только комплекс показателей бухгалтерской отчетности, но и нефинансовая отчетность, которая обеспечивает устойчивое развитие и укрепление конкурентных позиций, в связи с удовлетворением не только экономических, но и общественных интересов, связанных с бизнесом, такие как вопросы экологии, социальная сфера, обязательства организаций перед государством, выполнение общественных обязательств, решение общественных проблем, деловое поведение по отношению к партнерам и т.д.

Именно с этой целью в статье ставится задача организации учета нефинансовых результатов и представления вытекающих из него соответствующих отчетов, что значительно расширяет информационный объем управленческого аудита.

Submitted: 03.09.2022

Accepted for publication: 15.11.2022

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CHALLENGES OF AUDIT PROFESSION

Abstract: Discussed recent critique over audit profession and concerns raised by regulators, scholars and stakeholders. Evaluated challenges faced by the audit profession in performing its main duty of enhancing public trust over financial reporting. Recommended approaches to address the challenges as well as meet increased expectations and demands from audit profession.

Keywords: Public-Interest Entities (PIEs), audit, accountability, audit specialists, information Technology (IT)

JEL Code: M 4 (M 41, M 42, M 48)

Research aim: Propose recommendations to address current challenges in audit profession resulting from strengthened requirements from regulators and scarcity of human capital in audit profession.

Research hypothesis: Currently there is fueled skepticism over the value of the audit and its continuing role on economic development, as well as there are no precise measures that the audit firms can take to address with increasing challenges faced by the profession.

Research novelty: Based on economic statistics and best practices, recommendations are developed and proposed for segregating audit regulations over PIEs and non-PIEs audits, to revise the objective and scope of audit services, as well as to address the rapid drop in number audit human resources.

Introduction

The role and future of the external audit continues questioned and gets under increasing scrutiny: Is there space for audit in future financial reporting and what distinct value it would bring to preserve is prestigious place in accountability chain? Such skepticism is well articulated in the BEIS (United Kingdom) report of March 2021: **“Stakeholder and wider public trust in credibility of directors’ reporting and the statutory audit has been shaken** by a succession of sudden and major collapses which have caused **serious economic and social damages...; Alongside this, the audit regulator has in recent years found up to a third of audits carried out by the seven largest audit firms to be in need of improvement or significant improvement”** [1].

There is also wide range of scholarly research regarding possible impact of blockchain technologies that already include approved reliability functions on the audit and assurance profession. On of the articles even **goes to title as “to be, or not to be of audit”** [2].

Similar concerns are raised regarding to audit of public organizations as well, for example, highlighting their insufficient response of effectively addressing key social impacts, such as, wars, epidemics (e.g. COVID-19), climate change, austerity, Brexit, black lives matter, and so on [3].

The external audit is vital part of corporate governance and financial reporting, thus many of those concerns are direct implication of continuing significance of role of financial reporting and corporate governance themselves in the future. Thus, challenges and skepticism that external audit faces are largely can be viewed in overall accountability and financial investment scope, and its not just sole feature of the audit itself.

Nevertheless, the governments of developed countries still believe that to be leading attractive place to invest, start and grow the business, to enhance trust and public confidence in business and the regulations that govern them sound corporate governance regime, the audit will continue to preserve fundamental role to ensure quality, accuracy, and reliability of the corporate reporting [4].

Research results

As the general challenges relating to corporate governance and accountability is much wider and complex, in this article we will evaluate some specific issues currently faced by the audit profession, in addition to those implied from the overall corporate reporting challenges:

- A. Financial reporting standards and requirements becoming much more complex and require specific knowledge other than pure accounting and auditing skills, or some overall knowledge of the audited industry pursued years ago by the auditors. For example, to response requests from G20 leaders International Sustainability Standards Board (ISSB) was established in by IFRS Foundation Trustees in November 2021 to deliver a comprehensive global baseline of sustainability-related disclosure standards that provide investors and other capital market participants with information about **companies'** sustainability-related risks and opportunities to help them make informed decisions [5]. ISSB already issued drafts of two news standards that would be required to be included in the International Financial Reporting Standards (IFRS) financial **statements as they become effective: IFRS S1, "General Sustainability-related Disclosures" and IFRS S2, "Climate-related Disclosures"**. It is expected that final versions of the standards will be published end of 2022 [5].

B. Audit standards and requirements become much more demanding both in audit firm worldwide compliance with quality management: International Standards on Quality Management (ISQM) 1, “Quality management for firms that perform audits or reviews of financial statements, or other assurance or related services engagements”, ISQM 2, “engagement Quality Reviews”, that are applicable from [6] as well as comprehensive assessment and documentation of audited entity’s broader inherit and control risks, as well as Information Technology (IT) risks in line with rapid development of the IT in all entities financial reporting and control environment, which most often will require IT audit specialist significant involvement in the audit process, which is scarce resource. – ISQC, ISA 315 (Revised 2019), “Identifying and Assessing the Risks of Material Misstatements [7].

Therefore, to successfully cope with above enhanced requirements as well as effectively address higher expectations of the governments, stakeholders and general public, as discussed above the audit firms need to: (a) invest enormously to acquire and develop robust IT and other relevant resources, and (b) attract and inspire audit professional. However, both straightforward objectives are getting more and more difficult to realize.

Regarding the investment in IT and other relevant resources, it is obvious that those require multi-million investments continuously as IT technologies and ISA requirements develop rapidly as discussed above. Therefore, audit firms that invest intensively expect reasonable return which can be achieved only when there is fair market competition in the audit sector which has the highest public interest, such as audits of so-called Public Interest

Entities (PIEs), which can be ensured only with strict efficient regulation and oversight. For example,

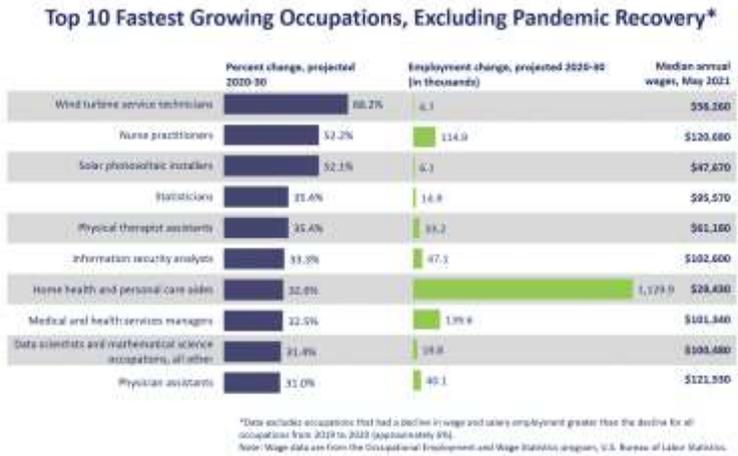
- ✓ In UK, BEIS report of December 2018 recommends strengthening the PIEs audit supervision through: (a) replacing Financial Reporting Council (FRC) by Audit, Reporting and Governance Authority (ARGC) which will have much higher status (e.g. reporting directly to the Parliament) and more authority and responsibility to protect the interests of investors and the wider public interest by setting high standards of corporate governance, corporate reporting and statutory audit, and by holding to account the companies and professional advisers responsible for meeting those standards [4].
- ✓ In United States of America (USA), the Public Company Accounting Oversight Board (PCAOB) is established by the Congress to oversee the audits of public companies (listed and other PIEs) in order to protect investors and further the public interest in the preparation of informative, accurate, and independent audit reports [8]. Also, PCAOB requires auditors to issue integrated reports for issuers, which consists of **auditor's report both on financial statements and internal controls**. While, audit of non-listed and non-PIEs audits, that possess less risk for the public interest, are supervised by American Institute of Certified Public Accountants (AICPAs) [9].

The other key challenge that rapidly takes pace is scarcity of the human resources in audit profession. The audit profession struggling to maintain its attractiveness for graduates, as well as to cope with rapidly increasing turnover rates, especially as obvious that IT related jobs are considered as much more attractive and having long term prospective among current graduates and even

among practicing auditors many of them option to leave audit profession for starting new career path in IT sector.

As evident from related statistics of U.S. Bureau of Labor Statistics (US BLS), the top then fastest growing occupations in USA relate to healthcare and IT [10].

Table 1. Top 10 Fastest Growing Occupations [10]



It is not surprising that many of attractive professions for 2020's mostly relate to healthcare or IT jobs, e.g. per the US BLS list of fastest growing occupations projections for 2020-30, the top 30 does not contain any accounting, auditing or finance related profession but relates to following areas: [11]

- ✓ Healthcare – 14,
- ✓ IT – 7,
- ✓ Technical – 3,
- ✓ Other – 6.

Therefore, the audit profession will continue to struggle to attract or at least retain audit professionals, therefore the profession shall look for alternative solutions in area of dropping workforce, such as:

- Reducing the scope of statutory audits that require application of comprehensive complex audit and financial reporting standards; accordingly, only requiring such for PIEs;
- Considering shift from auditing services to other audit services for many engagements, such as:
 - Reviews services – ISRE 2400, Engagements to Review Historical Financial Statements;
 - Assurance services – ISAE 3000, Assurance Services Other than Audits or Reviews of Historical Financial Information;
 - AUPs – ISRS 4400, Agreed-Upon Procedures Engagements.
- Big audit firms streamlining their process to align with dropping number of audit professionals, thus deploying Artificial Intelligence (AI) and other advance IT technologies in their audit process; while smaller audit firm concentrating non-PIEs audits or other-audit services.

Conclusion

Currently there is rising scrutiny over role and future of the external audit, while the profession adapts with increasing requirements from regulators, and growing complexities of financial reporting and auditing standards. Also, recent years, the scarcity of auditing talent recruitment and rapid outflow of audit professionals bring enormous challenges to audit firms.

Based on the research, it is recommended that audit regulations of audit of PIEs should be enhanced, including clear segregation from non-PIEs audits, as well as many audit services

should be replaced with other-audit services, such as AUPs or assurance services covered under ISAE 3000.

It is also recommended that bigger firms should heavily deploy into AI and other IT technologies, while small firms should concentrate on non-PIEs, non-complex audits and other-audit services.

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Գնել Խաչատրյան
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 «ԲԻ-ԴԻ-Օ Արմենիա» ՓԲԸ

ԱՌՒԴԻՏԻ ՄԱՍՆԱԳԻՏՈՒԹՅԱՆ ՄԱՐՏԱՀՐԱՎԵՐՆԵՐԸ

Բանալի բառեր - Հանրային նշանակալի կազմակերպություններ (ՀՆԿ-ներ), աուդիտ, հաշվետվողականություն, աուդիտի մասնագետներ, տեղեկատվական տեխնոլոգիատներ (SS), արհեստական բանականություն (ԱԲ)

Ներկայումս աճում է արտաքին աուդիտի դերի և ապագայի նկատմամբ հարցադրումները, մինչդեռ մասնագիտությունը շարունակում է ադապտացվել կարգավորող մարմինների աճող պահանջներին և ֆինանսական հաշվետվողականության և աուդիտի ստանդարտների շարունակական բարդություններին: Նաև, վերջին տարիներին, աուդիտորական տաղանդի հավաքագրման սակավությունը և աուդիտորական մասնագետների կտրուկ արտահոսքը լուրջ մարտահրավերներ են առաջացրել աուդիտորական ընկերությունների համար:

Համաձայն հետազոտության՝ առաջարկվում է կատարելագործել ՀՆԿ-ների աուդիտի աուդիտի կարգավորումները, ներառյալ հստակ տարանջատել ոչ-ՀՆԿ-ների աուդիտից, ինչպես նաև շատ աուդիտորական ծառայություններ փոխարինել այլ աուդիտորական ծառայություններով, ինչպիսիք են համաձայնեցված ընթացակարգերը (AUP) կամ երաշխավորման ծառայությունները (ISAE 3000):

Առաջարկվում է նաև, որ խոշոր աուդիտորական ընկերությունները մեծապես ներդնեն արհեստական բանականություն (AI) և այլ տեղեկատվական տեխնոլոգիաներ (SS), մինչդեռ փոքր ընկերությունները պետք է կենտրոնանան ոչ-ՀՆԿ-ների աուդիտի և այլ աուդիտորական ծառայությունների վրա:

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ВЫЗОВЫ В ПРОФЕССИИ АУДИТОРА

Ключевые слова - Организации общественного интереса (ООИ), аудит, отчетность, специалисты по аудиту, информационные технологии (ИТ), искусственный интеллект (ИИ)

В настоящее время возрастает внимание к роли и будущему внешнего аудита, в то время как профессия сталкивается с растущими требованиями со стороны регулирующих органов и усложняющихся стандартов финансовой отчетности и аудита. Кроме того, в последние годы нехватка кадров для аудита и быстрый отток специалистов по аудиту создают серьезные проблемы для аудиторских фирм.

На основании исследования рекомендуется усовершенствовать правила аудита ООИ, в том числе четко отделить их от аудита, не относящегося к ООИ, а также заменить многие аудиторские услуги другими аудиторскими услугами, такими как процедуры согласования (AUP) или услуги по заверению по стандарту ISAE 3000.

Также рекомендуется, чтобы более крупные фирмы активно внедряли ИИ и другие ИТ-технологии, в то время как малые фирмы должны сосредоточиться на аудите, не связанном с ООИ, и других аудиторских услугах.

Submitted: 25.09.2022
Accepted for publication: 15.11.2022

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THE ROLE OF LARGE TAXPAYERS IN THE RA TAX SYSTEM: TRENDS AND DEVELOPMENT PROSPECTS

Abstract: The role of large taxpayers in the RA tax system is significant. One thousand large taxpayers provide 70-80% of total tax revenues. Therefore, from the point of view of increasing tax revenues and fair distribution of the tax burden, it is essential to analyze the features of taxation of large taxpayers, the applied tax control mechanisms, and identify possible risks. The article examines the dynamics of tax revenues of large taxpayers of RA in 2014-2021, identifies existing problems, and outlines some directions for improving the tax administration applied to large taxpayers.

Keywords: tax, tax policy, RA tax system, taxpayers, large taxpayers

JEL classification: H2, H7

The objective of the research: to analyze the dynamics of tax revenues paid by large taxpayers in RA and outline the main directions for improving the administration.

The scientific novelty of research: the problems of taxation of large taxpayers in RA have been identified, and recommendations for their solution have been presented.

Introduction

Taxes reflect the degree of coordination of relations between the population, business entities, and the state, which are the primary tool for ensuring the country's stability and concentrating the financial resources necessary to implement state functions. Taxation, directly affecting consumption, production, and distribution, pursues the goal of ensuring economic progress and increasing the welfare of society. From that point of view, the role of tax policy and the tax system is significant in socio-economic development because the continuous increase in their efficiency will undoubtedly lead to an increase in state revenues, revitalization of investment policy, implementation of important state programs and, finally, ensuring stable rates of economic growth.

Since about 95% of the revenues of the RA state budget are provided by tax revenues and state duties, and more than 70% of tax revenues are provided by large corporations, from the point of view of the implementation of tax reforms, particular importance is given to improving the mechanisms of taxation of large taxpayers, tax control and emerging risk management issues.

It is necessary to be as careful as possible in the choice of instruments applied to large taxpayers since any change made by the tax authority (tax rates, tax incentives, administration, etc.) can lead to a significant decrease or increase in tax revenues.

Thus, the analysis of tax revenues of large taxpayers is of crucial importance, as it highlights several problems in the tax system, the solution of which will lead to an increase in tax revenues.

Literature review

The effectiveness of the tax policy largely depends on the tax administration implemented in the country. Tax administration can be defined as an activity carried out by tax authorities, within

the framework of the powers and functions assigned to them by legislation, aimed at collecting tax revenues, accurate calculation of tax liabilities, ensuring the widespread and correct application of tax legislation, and the implementation of the tasks of the tax authority.

One of the essential methods of state influence on socio-economic processes is tax regulation, which is one of the essential directions of economic policy [1].

The main task of tax regulation is to create favorable conditions for the normal functioning of the economy by using appropriate levers. Tax regulation is one of the essential elements of the state regulation of the economy. This economic lever targets the state's influence on the participants in economic relations [2]. Especially in the current complex economic realities, the development and implementation of an effective tax policy have a decisive role in overcoming the economic recession and ensuring continued growth.

As a result of an effective tax policy, it is possible to ensure a high level of tax revenues, which the state uses to solve various socio-economic problems [3]. In general, the effectiveness of the tax policy depends on the ability and opportunity to solve the problems faced by the state.

Tax policy is the set of legislative actions by the state administration in the context of planning, collection, control, and regulation of state revenues [4]. Tax administration includes a set of measures such as the registration of taxpayers in tax authorities, the creation of a service system for them, the implementation of tax control, the implementation of awareness and explanatory activities among taxpayers, the use of measures of influence and responsibility for violations of tax legislation [5]. Tax administration is aimed at increasing tax revenues, evenly distributing the tax

burden, complying with the requirements of legislation during the taxation process, and ensuring the tax system's efficiency [6].

The stability of the tax legislation is essential from the point of view of the effectiveness of the implemented tax administration. On the one hand, it makes it possible not to use the tax policy to solve situational problems. On the other hand, it creates conditions for business entities to plan their economic activities in the long term [7].

Contemporary research suggests that taxation of large businesses worldwide has become more liberal over the past few decades, giving them an even more significant competitive advantage [8]. In this situation, some researchers propose to ease the tax burden in competitive markets [9].

Research results

2014-2021 was chosen as the period for analyzing large taxpayers' tax revenues. Regarding the compilation of the list of 1000 large taxpayers in 2020, during this period, a change in methodology took place, as a result of which another list of 1000 large taxpayers was published in 2020, which included not only economic entities, but also state administrative institutions, including ministries, other state departments, so when carrying out the comparison both old and new methodology lists were used as the 2020 index.

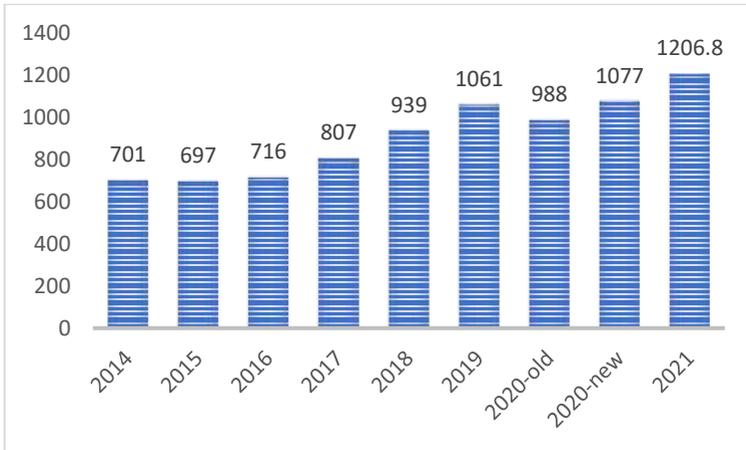


Figure 1. The total amount of taxes paid to the RA state budget by 1000 large taxpayers in 2014-2021, billion drams³

Figure 1 shows the total amount of taxes paid to the RA state budget by 1000 large taxpayers. As can be seen, the total amount of taxes paid to the state budget by 1000 large taxpayers in 2015 was about 697 billion drams, which is 0.6% less than the same indicator of the previous year. This was caused by the decrease in the share of taxable branches in the GDP and the unfavorable macroeconomic environment. Since 2016, there has been an increase in tax receipts paid by large taxpayers. The picture changes in 2020. If we look at the list of taxpayers where only business entities are included (old methodology), then in 2020, In the months of January-December, the total amount of taxes paid to the state budget by 1000 large taxpayers was about 988 billion drams, which is 6.9% less than the corresponding indicator of the previous year. As a result of the change in the methodology of compiling the list of

³ All the figures were compiled by the author based on the tax reports by the first 1,000 large taxpayers in 2014-2021 published by the RA CA SRC.

1000 large taxpayers, an increase of around 16 billion drams is observed, which is 1.5 percentage points more than the previous year's index.

Large taxpayers have a relatively large share of tax revenues, which has increased after including state bodies, ministries, and other departments in the list of large taxpayers.

Look at the list of 1,000 large taxpayers representing only business entities. The decrease in the proportion of taxes paid by them in the tax revenues makes the consequences of COVID-19 and the 44-day Artsakh war on the size of tax revenues and, therefore, the economy. It is noteworthy that although the tax revenues of large taxpayers in 2021 were absolute than in 2020, their share in total tax revenues decreased slightly, making 79.4% (Figure 2).

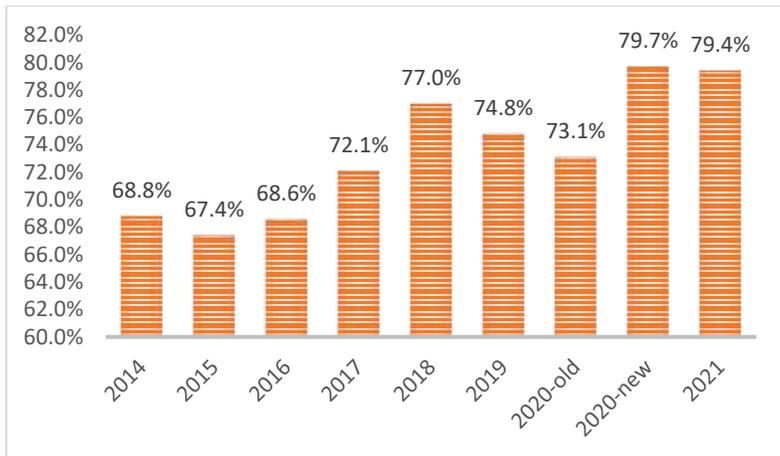


Figure 2. The share of taxes paid to the RA state budget by 1000 large taxpayers in the total structure of RA state budget tax revenues in 2014-2020, percent

Figure 3 shows the dynamics of taxes paid by the first 50 and last 50 organizations in the list of 1000 large taxpayers. In

particular, the taxes paid by the first 50 organizations on the list grow more slowly than the increase in the amount of taxes paid by the last 50 organizations on the list. In 2018-2021 the volume of taxes paid by the first 50 organizations on the list increased by 17.7%, while the volume of taxes paid by the last 50 organizations on the list increased by 45.8%. If we compare the indicator of 2021 with 2014, the difference is even more significant: the increase is 57% and 101%, respectively.

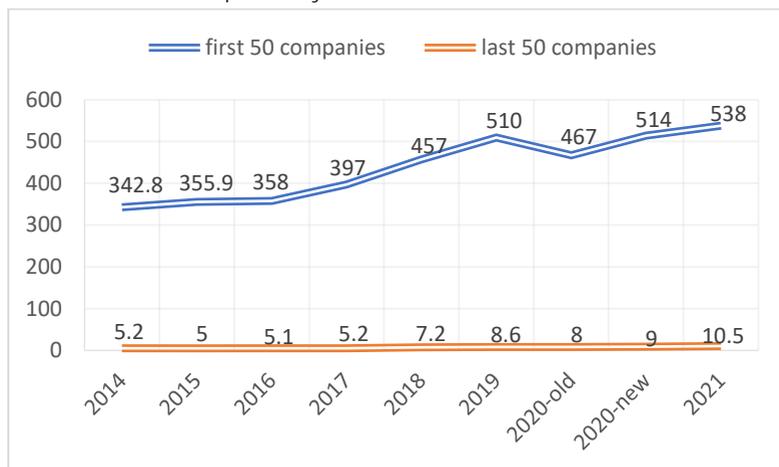


Figure 3. The total amount of taxes paid by the first 50 and last 50 organizations on the list of 1000 large taxpayers in 2014-2020, billion drams

From 2014-2021 significant changes were recorded in the amounts of payments made by large taxpayers. In 2014, 124 companies in RA paid 1 billion AMD more in tax, and in 2021 the number of such companies was 218. It is noteworthy that if by 2021, the number of companies paying taxes up to 200 million drams was several hundred, then in 2021, in the list of 1000 large taxpayers, the company, which is at the bottom position, paid about 205.8

million AMD in tax. According to the results of 2019, to be included in the list of 1000 large taxpayers, it was necessary to pay more than 168 million drams in tax. In 2018 it was a little more than 138 million drams, and in 2014, it would be enough to fulfill the tax obligation of only 104.5 million drams. It turns out that the number of companies paying taxes of more than 1 billion drams and from 500 million drams to 1 billion drams has an increasing trend, and the number of companies paying taxes up to 200 million drams among 1000 large taxpayers has decreased from 448 to 0 (Figure 4).

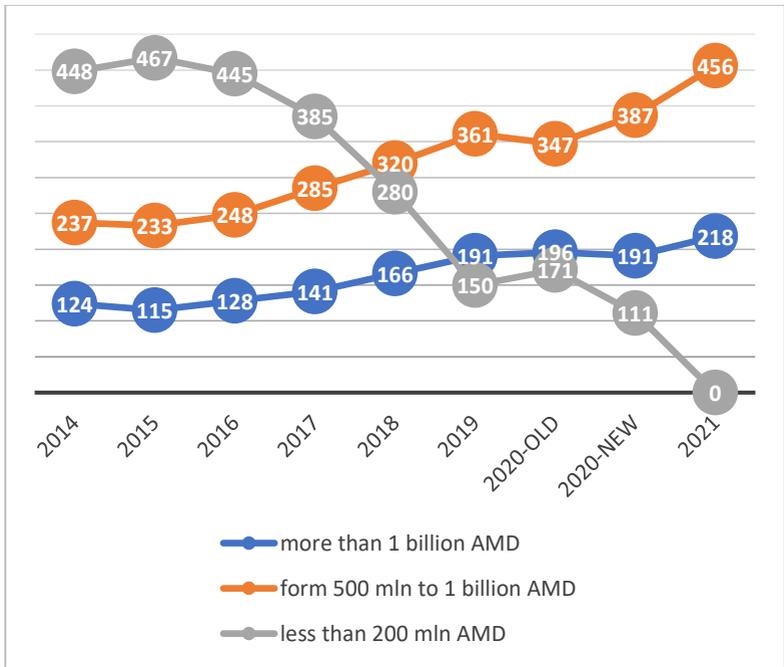


Figure 4. The number of taxpayers included in the list of 1000 large taxpayers according to the total amount of taxes paid to the RA state budget in 2014-2020

Based on the published reports on taxes paid by 1000 large taxpayers to the state budget, by relating the total amount of taxes over 1 billion drams to the number of companies that paid taxes over 1 billion drams, we will get how much tax on average, one company whose tax threshold is higher than 1 billion drams has paid. Let's apply the same approach to companies that have paid taxes from 500 million AMD to 1 billion AMD and up to 200 million AMD. The resulting picture is presented in figure 5. It turns out that the number of organizations has changed significantly, but the average amount of tax paid has not. This is more evident when comparing the index of organizations that paid more than 1 billion drams in taxes in 2019 and 2021.

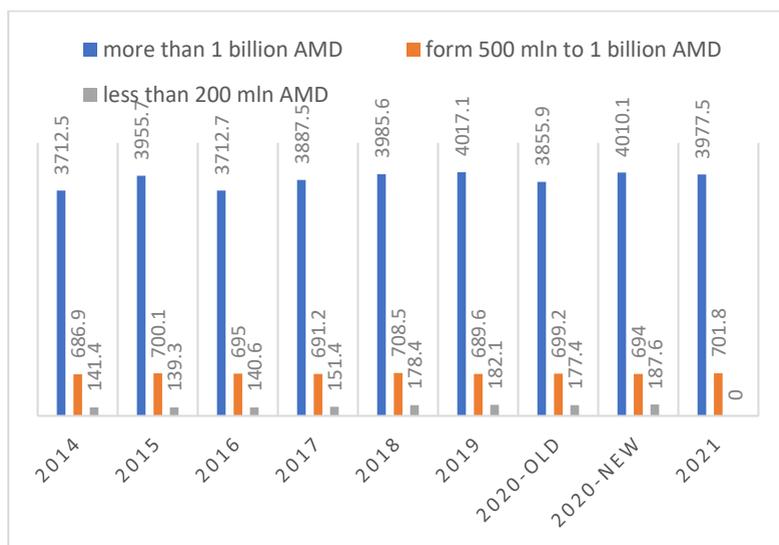


Figure 5. The average amount of taxes paid by taxpayers included in the list of 1000 large taxpayers in 2014-2021

Conclusion

In recent years, the increase in tax revenues was mainly due to economic growth, the increase in tax and customs administration efficiency, and the taxation of shadow transactions. Despite specific steps taken, no significant progress is observed in improving tax revenues' structure.

The analyzes allow us to conclude that the tax revenues of large taxpayers in 2020-2021 during this period, despite the unfavorable economic conditions caused by COVID-19 and the 44-day Artsakh war, still increased due to 2020 with a change in the methodology in the list of 1000 large taxpayers, as a result of which, in addition to business entities, state administrative institutions, departments, and ministries were also included in the list. We believe that such an approach does not provide an opportunity to form an objective opinion about the current situation in the economy, as it artificially increases the volume of tax revenues. Although state and local self-government bodies are also taxpayers, to understand an accurate picture of the economy, commercial organizations must consider the amount of tax revenues paid.

The analysis shows that the growth rate of tax revenues collected from the first 50 organizations included in the list of 1000 large taxpayers is significantly lower than the last 50. This indicates that the administration carried out by the tax authority is more focused on the organizations at the end of the list. We suggest choosing such a toolkit that will allow you to refer to the organizations at the beginning of the list at specific intervals as well, carrying out more frequent camera checks, as a result of which opportunities for increasing tax revenues can be revealed.

Although the number of organizations paying taxes of more than 1 billion drams and from 500 million drams to 1 billion drams is increasing year by year, there is still no significant change in the amount of tax revenues paid by one organization on average, which is worrying and indicates the slow pace of economic development or the still large shadow economy, about the volume.

Summarizing the analysis carried out, it can be concluded that to increase tax revenues by large taxpayers, it is necessary to take measures to increase the efficiency of tax administration, to identify effective ways of expanding the tax bases of the types of taxes defined in RA, to improve their implementation mechanisms, and to develop such methods and approaches that significantly contribute to the reduction of the volume of the shadow economy, the concentration of financial resources necessary for the implementation of state functions and the improvement of the business environment in the republic.

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**ԽՈՇՈՐ ՀԱՐԿ ՎՃԱՐՈՂՆԵՐԻ ԴԵՐԸ ՀՀ ՀԱՐԿԱՅԻՆ
ՀԱՄԱԿԱՐԳՈՒՄ, ՄԻՏՈՒՄՆԵՐ ԵՎ ԶԱՐԳԱՑՄԱՆ
ՀԵՌԱՆԿԱՐՆԵՐ**

Բանալի բառեր - հարկ, հարկային քաղաքականություն, ՀՀ հարկային համակարգ, հարկատուներ, խոշոր հարկ վճարողներ

ՀՀ հարկային համակարգում չափազանց մեծ է խոշոր հարկ վճարողների դերը: 1000 խոշոր հարկատուներն ապահովում են ընդհանուր հարկային եկամուտների 70-80%-ը: Հետևաբար հարկային մուտքերի ավելացման, հարկային բեռի արդարացի բաշխման տեսանկյունից կարևոր է վերլուծել խոշոր հարկ վճարողների հարկման առանձնահատկությունները, կիրառվող հարկային հսկողության մեխանիզմները և բացահայտել հավանական ռիսկերը: Հոդվածում ուսումնասիրվել է ՀՀ խոշոր հարկ վճարողների հարկային մուտքերի դինամիկան 2014-2021 թթ., բացահայտվել են առկա խնդիրներն ու նախանշվել խոշոր հարկ վճարողների նկատմամբ կիրառվող հարկային վարչարարության կատարելագործման որոշ ուղղություններ:

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РОЛЬ КРУПНЫХ НАЛОГОПЛАТЕЛЬЩИКОВ В НАЛОГОВОЙ СИСТЕМЕ РА: ТЕНДЕНЦИИ И ПЕРСПЕКТИВЫ РАЗВИТИЯ

Ключевые слова - налог, налоговая политика, налоговая система РА, налогоплательщики, крупные налогоплательщики

Роль крупных налогоплательщиков в налоговой системе РА значительна. Тысяча крупных налогоплательщиков обеспечивает 70-80% всех налоговых поступлений. Поэтому с точки зрения увеличения налоговых поступлений и справедливого распределения налогового бремени необходимо проанализировать особенности налогообложения крупных налогоплательщиков, применяемые механизмы налогового контроля, выявить возможные риски. В статье рассматривается динамика налоговых поступлений крупных налогоплательщиков РА в 2014-2021 гг., выявляются существующие проблемы и намечаются некоторые направления совершенствования налогового администрирования применительно к крупным налогоплательщикам.

Submitted: 31.08.2022

Accepted for publication: 15.11.2022

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ABOUT EFFECTIVE TAXATION PRECONDITIONS IN THE REPUBLIC OF ARMENIA

Abstract: One of the preconditions for the effective operation of the tax system is the transparency and understanding of the information system of the sector. Accounting in organizations is one of the most important sources of tax information. However, in practice, there is not always a harmony between the results of tax accounting and financial accounting. If tax and financial accounting tax information is to some extent comparable in the area of deferred tax assets and liabilities by international accounting standards, such harmonization of bad debts as well as revaluations of agricultural assets has not yet been established. This article outlines the ways in which tax and financial accounting information can be harmonized, which can be useful for both reporting and user support for effective tax preconditions.

Keywords: tax system, accounts receivable, bad debts, reserve fund, biologically active, profit or loss, risk management systems

JEL classification: P34

Research aims: introduce tax and financial accounting results harmonization issues from the perspective of financial information users.

Research novelty: were offered ways to reconcile receivables and asset revaluation in the context of tax and financial accounting systems.

Introduction

The transition to a market economy implies the implementation of structural changes conditioned by liberal economic relations in different branches of the economy. Naturally, the tax system of the country can not be left out of the mentioned processes, as the complexity of economic transformations is a possible precondition for economic development. This problem is most acute for countries that have not previously had established approaches and traditions in tax and fiscal policy. The tax reform program should define the main principles of elaboration of the state policy in the tax sphere, the program bases of the implementation of that policy and regulate the relations related to them. It should include the main objectives of the project, the scope of activities envisaged by the program, the schedule, the principles of budget allocations, their effective use, as well as the priorities for the implementation of the work. In order to regulate tax relations, to ensure the operation of these subsystems, as well as the efficiency of the entire tax system, it is necessary, first of all, to have a stable legislative basis [1]. For this reason, the issues of legal provision of tax policy have always been in the focus of both managers and legal-economic researchers. The tax system should be based on modern management systems (including electronic) approaches, to be competitive in terms of attracting investment, creating a favorable business environment, should allow taxpayers to register, and with the tax authority - tax control will be carried out with the least possible resources [2].

Research results

Resolution 1373-N of the Government of the Republic of Armenia establishes an order on the formation of a reserve for

possible losses of tax **payers' receivables, unreliable recognition and** write-off of receivables and accounts payable [5]. Receivables or payables are considered to be overdue if they are not repaid on time. In case no receivable or payable debt repayment period is set, the receivables or payables debt repayment period is considered to be the 60th day following the day of execution of the transaction (transaction, fact) that generates that debt. The statute of limitations **for receivables' accounts receivable begins on the date of the claim,** but no later than the 61st day following the transaction. In case the period of repayment of the receivables or accounts payable is extended by mutual agreement before they become unreliable, the receivables or payables shall be deemed to have expired in case of non-repayment within the new period.

Partial repayment of receivables or payables is not considered a delay in repaying the debt (outstanding amount). Reciprocal receivables or accounts payable from different transactions (transactions, facts) between the same taxpayers are made only with written consent. In case of absence of information on repayable (partially repayable) receivable or payable debt, the repayable (partially repaid) receivable or payable debt is accepted. For the purposes of this procedure, unreliable recognition of receivables or payables **u** write-off does not refer to the measurement of receivables or payables for recognition in the balance sheet, write-off (derecognition) **u** inclusion (recognition) of relevant income or expense in the income statement. The write-off of a receivable or payable debt is not considered to be forgiveness of the receivables or payables. From the time of write-off, the receivable or payable debt is accrued to the taxpayer until the settlement of the receivables or payables or the expiration of 3 years following the date on which the receivables or payables are

discharged, if the receivables or payables have not been settled. Receivables or payables that have not been settled for 3 years after the date on which they are settled shall be derecognized.

In case of formation of reserve (reserve fund) of possible receivables losses by the organizations, contributions to the reserve (reserve fund) may be made only for the overdue receivables that have arisen for the work (goods) delivered to other persons, services provided. Deposits to the reserve (partial write-offs of receivables) are made to the amount of outstanding debt owed by the debtor at the following interest rate: no reserve is created in case of 90 days overdue, in case of 91-180 days overdraft, 25% of overdue debt is created. In case of 181-270 days by 50%, in case of 271-365 days by 75%. If the amount of the reserve (reserve) calculated at the end of the given year at the interest rates of the overdue debt is less than the amount of the reserve (reserve) at the beginning of the given year, the difference is recognized as an increase in gross income; g) the amount of the difference is treated as another deduction. The receivable debt is recognized as unreliable from the 366th day of becoming overdue, if the total amount of the debtor's debt does not exceed 100 thousand. from the date of entry into legal force of the court act on the satisfaction or rejection of the claim for confiscation of the receivable amount (judgment, decision or order, except for the decision on the receipt of the receivable debt or the decision, order or order not to claim it on any grounds). exceeds 100 thousand drams, in case of the debtor being declared insolvent (bankrupt) in the manner prescribed by the RA legislation or the debtor organization being liquidated, or the debtor being removed from the state register, or the debtor notary suspended, or the debtor's death, regardless of the debt repayment period.

For receivables that expire on the 366th day of the settlement but are not recognized as unreliable, the taxpayer must adjust (reduce) the amount of the reserve (reserve fund) raised at the end of the previous year by the amount of the deducted amount, adding it to the gross (tax) year. income on which the 366th day of the debt was overdue. Organizations that do not make a provision (receivable fund) for receivables that are recognized as unreliable are written off in the reporting (tax) year of becoming unreliable. when determining the damage. In case of repayment of unreliable receivables **u** (or) derecognized, the gross income of the reporting year (tax) of the organization is increased by the amount repaid. In case of forgiveness of the receivable debt agreement) of the creditor's decision not to demand the debt in another way) or concession of the right of claim (transfer, including gratuitous), The gross income of the reporting (tax) year (in case of creating a reserve) is added to the amount written off (partially written off).

The cost of the product is one of the main indicators characterizing the financial and economic activity of the organization, on the basis of which it is possible to determine the degree of efficiency of the management activity of the organization. Properly calculated cost and calculations based on it make it possible to determine the selling prices of the products that are finally marketed. There are many problems related to the correct determination of the cost of products produced in the Republic of Armenia and their presentation of their real value in the financial statements, especially in the field of agriculture. Under IAS 41 Agriculture, an entity shall recognize a biological asset or agricultural product only when the asset is controlled by the entity as a result of past events, the future economic benefits associated with the asset are likely to flow to the entity. The fair value or cost

of an asset can be measured reliably [4]. According to IAS 41 Agriculture, a plant or animal is considered to be biologically active, and an agricultural product is a product derived from an organization's biological assets. An example of a biological asset is a dairy animal, and the agricultural product is milk obtained from it, a similar example is a fruit tree, the crop obtained from it. IAS 41 Agriculture is applicable to agricultural produce, which is the product of the organization's biological assets at harvest time.

Subsequently, IAS 2 Resources is applied, the biological asset at the time of initial recognition and at the end of each reporting period should be measured at fair value less costs to sell [3]. The same requirement applies to agricultural products derived from biological assets, which must also be measured at fair value less costs to sell [6]. Such measurement is the initial value at the date that IAS 2 or other relevant standard is applied. For example, the fair value of a bovine animal is the market price of the animal, minus the cost of transporting the animal to the market. Because biological assets are living organisms that are transformed over time: growth, degeneration, they undergo quantitative-qualitative changes, respectively, at each reporting date, it must be determined to present its true values in the reports [8]. Gains or losses arising on the initial recognition of the biological asset less costs to sell, as well as changes in the fair value less costs to sell the biological asset, should be included in profit or loss for the period in which they **arose [7]. The requirements of IAS 41 “Agriculture” standard listed above, however, are not met by businesses engaged in agricultural activities in the Republic of Armenia. In the best case, the actual cost is calculated, which includes the salaries of the employees involved in the business before receiving the agricultural products, animal feed, used fertilizers, fuel, equipment depreciation, etc. Of course,**

all this is very important and should be presented to the relevant decision makers, but the basic requirement of the standard to present biological assets agricultural products at their fair value less costs to sell is ignored.

Conclusion

The summary of the results based on the judgments and analyzes is as follows.

1. When receiving semi-assets within the organization, collect the costs associated with their production in the debit of account 821 "Expenses for construction (creation) of non-current tangible assets", and then, when ready, transfer on credit to the debit of account 116 "Biological assets". If the fair value of the biological asset less costs to sell exceeds the actual cost of acquiring the biological asset.

2. If possible, have an orientation to increase the number of partners, with the aim of reducing insolvent partners, focusing on the amount of receivables, their individual types, the dynamics of further development, as well as reducing the risk of default. Strengthen control over receivables. Encourage debtors to make early or timely payments through discounts, preferential terms, bonuses, and more.

3. Take appropriate measures to increase the level of receivables intensity, paying particular attention to the development of receivables turnover reducing unreliable debts in the receivables.

4. Determine the optimal structure of receivables, ensure the optimal ratio between receivables and payables.

5 . As far as possible, reconcile asset valuation efforts with existing tax legislation, so that users of financial statements can make tax decisions more confidently.

6. In order to lighten the tax burden, review some of the discrepancies in the current Tax Code of the Republic of Armenia,

as it is possible to implement effective tax planning and lighten the tax burden of small and medium-sized organizations through optimal tax policy.

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Նարինե Մարտիրոսյան

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ՀԱՅԱՍՏԱՆԻ ՀԱՆՐԱՊԵՏՈՒԹՅՈՒՆՈՒՄ ԱՐԴՅՈՒՆԱՎԵՏ ՀԱՐԿՄԱՆ ՆԱԽԱՊԱՅՄԱՆՆԵՐԻ ՇՈՒՐՋ

Բանալի բառեր - հարկային համակարգ, դեբիտորական պարտքեր, անհուսալի պարտքեր, պահուստաֆոնդեր, բիզնեսական ակտիվներ, շահույթ և վնաս, ռիսկերի կառավարման համակարգ

Հարկային համակարգի արդյունավետ գործունեության նախապայմաններից է ոլորտի տեղեկատվական համակարգի թափանցիկությունն ու հասկանալիությունը: Կազմակերպություններում կազմակերպվող հաշվապահական հաշվառումը հարկային տեղեկատվության կարևորագույն աղբյուրներից է: Սակայն, ոչ միշտ է, որ գործնականում հարկային հաշվառման և ֆինանսական հաշվառման արդյունքների միջև ներդաշնակություն է նկատվում: Եթե հաշվապահական միջազգային ստանդարտներով հարկային և ֆինանսական հաշվառման հարկային տեղեկատվությունը ինչ-որ չափով համադրելի է դառնում հետաձգված հարկային ակտիվների և պարտավորությունների մասով, ապա անհուսալի դեբիտորական պարտքերի, ինչպես նաև գյուղատնտեսական ակտիվների վերազնահատումների գծով նման ներդաշնակություն դեռևս չի սահմանվում:

Հոդվածում ներկայացվում է, թե ինչ եղանակներով է հնարավոր դառնում ներդաշնակեցնել հարկային և ֆինանսական հաշվառման տեղեկատվությունը, որը կարող է օգտակար լինել ինչպես հաշվետվություններն օգտագործողների որոշումների կայացման, այնպես էլ արդյունավետ հարկման նախապայմանների աջակցման համար:

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ПРЕДПОСЫЛКИ ЭФФЕКТИВНОГО НАЛОГООБЛОЖЕНИЯ В РЕСПУБЛИКЕ АРМЕНИЯ

Ключевые слова - налоговая система, дебиторская задолженность, безнадежные долги, резервные фонды, биологические активы, прибыль-убыток, система управления рисками

Одной из предпосылок эффективной работы налоговой системы является прозрачность и понятность информационной системы сектора. Бухгалтерский учет в организациях является одним из важнейших источников налоговой информации. Однако на практике не всегда наблюдается соответствие между результатами налогового учета и бухгалтерского учета.

Если в налоговом и финансовом учете налоговая информация по части отложенных налоговых активов и обязательств в некоторой степени сопоставима согласно международным стандартам бухгалтерского учета (IFRS), то в такой связи по учету безнадежной дебиторской задолженности, а также по переоценке сельскохозяйственных активов, еще не обнаружено. В статье описываются способы гармонизации налоговой и финансовой отчетности, которые могут быть полезны как для отчетности, так и для поддержки пользователей для эффективных налоговых предварительных условий.

Submitted: 26.09.2022

Accepted for publication: 15.11.2022

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APPROACHES FOR ASSESSMENT OF TAX BURDEN INDICATORS IN ORGANIZATIONS OF ARTSAKH REPUBLIC

Abstract: Tax burden assessments are typically carried out at the macroeconomic level, with the aim of making interstate comparisons or assessing the effectiveness of tax policies in the country. In recent years, however, much attention has been paid to corporate tax assessments, which are mainly used in micro-level tax planning. And while macro-level tax burden assessments are universal acceptable to researchers, there is some discrepancy in the assessment of corporate tax burden.

The article discusses the approaches to assessing tax burden assessment indicators in the organizations of the Artsakh Republic and suggests ways to improve them. Here, the peculiarities of the economy of the Artsakh Republic are taken into account, which form a special framework of tax policy and, consequently, influence the tax burden formed in the organizations.

Keywords: tax planning, macroeconomic assessments of tax burden, microeconomic measurements of tax burden, financial statements of organizations

JEL classification: P34

Research aim: to offer indicators of tax burden of organizations, based on the peculiarities of the economy of the Artsakh Republic

Research novelty: The tax burden indicators of the organizations were proposed, taking into account the peculiarities of the economy of the Artsakh Republic

Introduction

Tax burden assessments, both in theory and in practice, were initially carried out at the macroeconomic level. The scope of the objectives of such assessments was diverse: to establish control over tax collection; to assess the effectiveness of tax collection. Even today, on the one hand, the government seeks to assess the efficiency of tax revenues by comparing them with gross domestic product. On the other hand, the tax burden is compared with the indicators of macroeconomic stability, thus assessing the stimulating role of taxation in the development of the country's economy. At the macroeconomic level, tax burden assessments are also carried out during the development of the state budget formation strategy [1].

Quantitative measurements of the tax burden and correlation of tax inputs in the macroeconomic sphere have deepened in the twentieth century, and Laffer clearly presented the general behavior of tax collection in connection with changes in tax rates. Moreover, according to his research, it turned out that with the increase of tax rates, tax revenues increase, but only in the case of a certain limit. He proved, that starting from a certain breaking point in raising tax rates, the increase in rates already has a negative impact on tax revenues, as the high tax burden makes business unattractive, leads to a passive economy, and, consequently, a decrease in tax revenues [2].

As a rule, theorists currently offer macroeconomic indicators of the tax burden, such as the amount of taxes collected per capita, the rate of taxes collected / gross national income. And the

most used indicator of the tax burden at the macroeconomic level is the tax-to-GDP ratio. [3] At the same time, solutions to tax burden assessment issues at the micro-economic level is coming important.

Research results

Statistics show that the tax / GDP ratio in the Artsakh Republic is at a high level, amounting to about 29.5% in recent years. Moreover, in terms of regions, the Artsakh Republic is also in a leading position in terms of taxes / GDP, which testifies to the proper level of tax administration (see table 1).

Table 1. Taxes / GDP ratio in regional countries

Countries Taxes	(% of GDP)	Social contributions (% of GDP)	Total:
Armenia	21.07	0.00	21.07
Artsakh	28.23	0.00	28.00
Azerbaijan	13.13	2.92	16.05
Georgia	25.40	0.00	25.40
Turkey	18.24	7.70	25.94
Russia	20.51	7.23	27.74

Source: International Monetary Fund, Government Finance Statistics, <https://data.imf.org/?sk=a0867067-d23c-4ebc-ad23-d3b015045405&slid=1544448210372>

However, it should be noted that tax burden assessments are more closely related to micro-level tax planning functions, as tax savings are contrasted with tax liabilities so that private business activity is not affected. In this regard, we propose a cyclical approach to tax planning at the organizational level, as this process should be constantly dynamic in nature, due to changes in internal and external factors on the business environment [4]. At the same

time, each round aims to improve the tax burden on organizations through planning tools.

In this regard, it should be noted that the professional literature does not show a unified approach to tax burden assessment indicators at the organizational level. In particular, it is proposed to measure the tax burden on companies in terms of tax-sales ratio, but it is reversed in the sense that the price change factor has a significant impact on the growth of the index, so it can not provide a realistic picture of the tax burden.

Researchers also suggest measuring the tax burden on organizations in terms of tax / net profit ratio, thereby assessing how justified the business results are in terms of tax payments [5]. In this case, the question is how the surplus output produced as a result of the business is distributed among the organization and state, how justified is the proportion of the distributed distribution in terms of business promotion. In the professional literature, there are also opinions that the tax burden at the level of organizations should be assessed on an integral basis, which takes into account not two but more factors. Thus, according to them, the evaluation process becomes more realistic and comprehensive.

We suggest using calculation bases that are more closely related to the formation of tax liabilities in measuring the tax burden at the enterprise level. Thus, indirect taxes are formed in the volume of sales of products or services, so the combination of their results in terms of "indirect taxes / sales revenue" gives a more realistic picture of the tax burden. In addition, we suggest combining direct taxes with operating profit by the organization, as it is in the operational sphere of the organizations that the profit tax and income tax are mainly formed [6].

On the contrary, by applying a number of indicators to measure the tax burden, it will be possible to orient oneself correctly in setting tax planning goals.

Thus, different indicators of tax burden assessment of the organizations of the Artsakh Republic, from which it becomes clear that the same indicator in the organizations receives different valuation not only according to the years, but also according to different spheres of business (see table 2).

When conducting tax burden assessments in corporate planning, objective definitions are used from the perspective of outlining budget commitments [7]. When companies expand their businesses, the absolute amount of tax liabilities increases, which is not a concern for businesses as long as the tax burden in relative terms is stable.

However, when the business burden increases as the business expands, organizations look for ways to reduce their increased tax liabilities and save on tax payments [9]. Therefore, it is at this stage that tax planning sets itself the task of setting goals that will not only lead to tax savings, but also create a balance between increasing budget liabilities and reducing liabilities so that they lead to tax burden optimization [8].

Table 2. Approaches to tax burden assessment of the Artsakh Republic in production companies

	Tax burden indicators	2018	2019	2020	2021
1.	"Artsakh HPP" OJSC				
1.1	- taxes / net profit	46.1%	80.1%	(9.6%)	53.6%
1.2	- taxes / sales revenue	32.5%	43.1%	52.3%	40.3%
1.3	- direct taxes / operating profit	13.9%	25.6%	24.3%	73.8%
1.4	- indirect taxes / sales revenue	18.7%	17.3%	28.1%	33.4%
2.	"ERMI" CJSC				
2.1	- taxes / net profit	183%	117%	58.4%	44.8%

2.2	- taxes / sales revenue	39.6%	47.7%	26.9%	115%
2.3	- direct taxes / operating profit	38.4%	47.9%	28.3%	148%
2.4	- indirect taxes / sales revenue	3.9%	3.7%	1.6%	13%
3.	"Artsakh Fruit" CJSC.				
3.1	- taxes / net profit	(191)	(104)	(103)	(243)
3.2	- taxes / sales revenue	23.6%	25.2%	27.5%	18%
3.3	- direct taxes / operating profit	(5.5)	(4.9)	(9.7)	(1.4) %
3.4	- indirect taxes / sales revenue	1.7%	1.6%	1.3%	1%

Source: Compiled on the basis of accounting reports published by production organizations of the Artsakh Republic

Conclusion

In the context of tax planning, the cyclical structure of tax burden assessment proposed by us provides an opportunity.

First. Establish harmonization between the fiscal policy of the state the expectation of tax liabilities by organizations, which results in the creation of an optimal tax burden environment.

Second. Carrying out comprehensive assessments of the tax burden on business due to changes in internal and external factors, which periodically reviews tax planning goals, lays the groundwork for structural tax burden reforms.

Third. Assess the financial resources of the organization during tax planning, which will ensure the optimization of the tax burden;

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ՀԱՐԿԱՅԻՆ ԲԵՌԻ ՑՈՒՑԱՆԻՇՆԵՐԻ ԳՆԱՀԱՏՄԱՆ ՄՈՏԵՑՈՒՄՆԵՐԸ ԱՎ ԿԱԶՄԱԿԵՐՊՈՒԹՅՈՒՆՆԵՐՈՒՄ

Բանալի բառեր – հարկային պլանավորում, հարկային բեռի մակրոտնտեսական գնահատումներ, հարկային բեռի միկրոտնտեսական չափումներ, կազմակերպությունների ֆինանսական հաշվետվություններ

Հարկային բեռի գնահատումներն որպես կանոն իրականացվում են մակրոտնտեսական մակարդակով, նպատակ ունենալով կատարելու միջպետական համեմատումներ, կամ գնահատելու երկրում վարվող հարկային քաղաքականության արդյունավետությունը: Սակայն վերջին տարիներին, մեծ ուշադրություն է դարձվում կազմակերպությունների մակարդակով հարկային բեռի գնահատումներին, որոնք օգտագործվում են հիմնականում միկրոմակարդակում իրականացվող հարկային պլանավորման ժամանակ: Եվ եթե, մակրոմակարդակով հարկային բեռի գնահատման ցուցանիշները համընդհանուր են և ընդունելի հետազոտողների կողմից, ապա կազմակերպությունների հարկային բեռի գնահատման պարագայում արձանագրվում են որոշ տարածայնություններ:

Հոդվածում քննարկման են արժանանում Արցախի Հանրապետության կազմակերպություններում հարկային բեռի գնահատման ցուցանիշների գնահատման մոտեցումները և ուղիներ են առաջարկվում դրանց բարելավման գծով: Այստեղ հաշվի են առնվում նաև Արցախի Հանրապետության տնտեսության առանձնահատկությունները, որոնք ձևավորում են հարկային քաղաքականության առանձնահատուկ շրջանակ և հետևաբար ներազդում են կազմակերպություններում ձևավորվող հարկային բեռի վրա:

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ПОДХОДЫ К ОЦЕНКЕ ПОКАЗАТЕЛЕЙ НАЛОГОВОГО БРЕМЕНИ В ОРГАНИЗАЦИЯХ РЕСПУБЛИКИ АРЦАХ

Ключевые слова - налоговое планирование, макроэкономическая оценка налогового бремени, микроэкономическое измерение налогового бремени, бухгалтерская отчетность организаций

Оценки налогового бремени обычно проводятся на макроэкономическом уровне с целью проведения межгосударственных сравнений, или оценки эффективности налоговой политики в стране. Однако в последние годы большое внимание уделяется исчислению налогового бремени на уровне предприятий, которое в основном используется в налоговом планировании на микроуровне.

И хотя оценки налогового бремени на макроуровне являются универсальными и приемлемыми для исследователей, то в оценке налогового бремени компаний существуют некоторые расхождения.

В статье рассматриваются подходы к оценке показателей оценки налоговой нагрузки в организациях Республики Арцах и предлагаются пути их улучшения. При этом учитываются особенности экономики Республики Арцах, которые формируют особенности налоговой политики и, следовательно, влияют на формируемую налоговую нагрузку в организациях.

Submitted: 18.08.2022

Accepted for publication: 15.11.2022

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TAX POLICY IN THE PROCESS OF STATE REGULATION OF THE RA ECONOMY

Abstract: The changes currently taking place in the RA economy require the implementation of such a tax policy that will contribute to ensuring stable rates of economic growth and the formation of a tax system with effective management. The article analyzes the ways of their improvement, in particular, within the framework of the functions of the tax system, it is necessary to carry out the study and mapping of "business" processes regulating tax procedures, as a result of which it will be possible to form a tax system with such functionality and structure that will ensure the increase of the efficiency of tax policy and system management. The thesis was put forward, according to which it is necessary to improve the tax risk management systems in order to target the most targeted selection of the evasive entities subject to control, to transfer some part of the taxable activities within the framework of the micro-entrepreneurship system to the general field of taxation, to partially or completely exempt from the profit tax the part of the company's profit that will be invested in economic innovation programs (which is widely used in many foreign countries).

Keywords: tax policy, tax system, management system, economic growth, tax risks

Research aims: To present the tax policy and the tax system as one of the most important economic regulators of the state regulation of the RA economy under market conditions.

Research novelty: Ways to improve the effectiveness of tax policy and tax system financial management in the process of state regulation of the RA economy have been revealed.

Introduction

Market economy does not mean at all that the state has been removed from the processes of economic management and regulation. On the contrary, in the current period of the functioning mechanism of market relations, the regulatory role of the state in the development of the economy is relevant. In order to ensure the process of continuous progressive economic development in RA and to solve the social problems of the society, the state should use the arsenal of all the methods it has to influence the economy. The main problems of the state are due to its functions. In solving these problems, the role of tax policy is special, which is an important tool for achieving and maintaining the macroeconomic balance of the economy, because through taxes and public expenditures, the state gets the opportunity to promote business activity, influence employment and inflation. Tax policy practically affects the entire socio-economic sphere of the country and is inextricably linked with state administration, including financial administration, as well as with such important categories as monetary policy, pricing, structural reforms of the economy, trade and industrial policy, etc. The state, manipulating the tax policy, stimulates economic development or restrains it. However, in the end, the main direction of the tax policy is to ensure economic growth. It is the economic growth that determines the development of production and its efficiency indicators, the possibilities of increasing the quality of life and standard of living. As in the whole world, as well as in Armenia, the increase in government spending requires an inevitable increase in revenues and a corresponding increase in the tax burden.

However, it is obvious that this trend cannot be endless, and there is a limit beyond which the further increase of the tax burden is socially and politically impossible for objective and subjective reasons. The concept of sustainable economic development, which is increasingly recognized in the world, requires a review of the value system that underlies the definition of goals, and the more, the higher the level of governance.

Research results

The development of RA tax relations has made tax policy issues very demanding, both theoretically and practically. And along with that, the state regulation of the economy, in turn, is perceived as a process of regulation and adjustment of the natural market mechanism of self-regulation of the economy, which is carried out by the state in order to minimize the negative consequences of the inevitable "failures" of the market mechanism [4]. Taking into account the theories of state regulation of the economy, two important models of the market economy can be distinguished (see Table 1), which differ according to the degree of state regulation of the economy and the level of state participation in solving the social problems of citizens [2]. The liberal model of the economy, upon reaching a high level of economic development, provides a decent standard of living for the majority of citizens. State paternalism covers only the poor class of the population, guaranteeing them fairly decent living conditions. This model is available in USA, Great Britain, Canada. The mechanism of the model of social orientation of the economy ensures the combination of economic efficiency and social orientation of the economy. This model works in Germany, Sweden, Norway, etc. Thus, the essence of this or that model is determined by the economic and social role of the state in the development of society.

Table 1. Characteristics of market economy models

Parameters of the economy	The market economy model	
	Liberal	Social Orientation
Size of the public sector	Minimum	Big (> 50%)
The degree of freedom of economic entities	Max	A high level of regulation of the rules of the market game
State participation in economy regulation	The monetary nature of regulation, mainly at the macroeconomic level	Government regulation at both the macroeconomic and microeconomic levels
State participation in solving social problems	Minimum, only at the level of the poor class of the population	Includes all members of society

Depending on the applied model of the market economic system in the state, the type of tax policy is also determined. The liberal market economy model corresponds to a tax policy that implies a relatively moderate level of taxation with a rather restrained social security policy. A socially oriented market economy implies a tax strategy with a sufficiently high level of taxation, which guarantees a system of broad social guarantees for all classes of the population. In general, the methods of state regulation of the market economy can be divided into three groups [3]:

- 1) direct or administrative;
- 2) indirect;
- 3) combined, which includes various combinations of direct and indirect methods.

In a market economy, indirect regulation methods, which are essentially similar to market mechanisms, are most in demand. Tax instruments, which are best adapted to the market mechanism, occupy a dominant position among indirect methods. That is why taxes today are the most important tool for the state regulation of

the RA economy and the implementation of the socio-economic strategy of the state. Tax policy belongs to the indirect methods of state regulation, because it is more flexible than the tools of direct regulation and ensures interest or lack of interest in the activities of natural and legal entities and is not based on the base of administrative relations. In the most general definition, tax policy represents the policy of the state in the field of taxation [5]. In other words, the tax policy is a set of economic, financial and legal means of the state aimed at the creation of the country's tax system in order to meet the demands of individual social groups of the state and society due to the redistribution of financial resources. Basically, the RA tax policy represents the determination of taxpayers and taxable incomes in various fields of economic activity, types of taxes, setting their rates, regulation of tax collection and payments, their legislative and legal support, as well as the internal and external connections of these processes and the revenue part of the budget. a complete system of the main sources of formation. Thus, RA tax policy can be defined as a system of measures implemented by the state administration and local self-government bodies, an integral part of the state's general economic strategy, through which a complex solution to taxation problems is ensured in accordance with the national interests and goals of our country.

Consequently, the fiscal goal of the RA state tax policy has always been and will be the most important for our state. From the point of view of assessing the effectiveness of the RA tax policy, we consider the following indicators:

- 1) The level of the tax burden both at the level of the economy as a whole and at the level of an individual sector or taxpayer;
- 2) The fact that tax revenues are sufficient for the state's activities;

- 3) Compliance of the tax policy with the social, financial, investment and other policies of the Republic of Armenia, etc.

In economics, nonrival consumption goods or services are called public goods [1]. When the private sector fails to allocate goods efficiently, a market failure occurs. External interventions, public goods, asymmetric information, price floors and price ceilings can also cause market failure. Legal acts and actions on ensuring efficiency are mainly related to the management of tax systems. From this point of view, a management system should be created that will maximize public benefits and minimize costs. The collection of necessary resources and its effective use is closely related to the financial management of the tax system, which is the management system aimed at managing financial resources and their movement (see Table 2).

Thus, the collection, redistribution and cost management of financial resources are the most important components of the financial management system. The management of the RA tax system is based on socio-economic processes taking place in a mixed economy: in the state, mixed, private sector, as well as in public, non-commercial organizations, using special methods of regulation, economic and organizational means of motivation, behavioral regulations of various economic structures. At the macroeconomic level, the financial management of the tax system, as a part of state management, takes into account the global processes related to the formation of the world economic system and the aggravation of environmental contradictions, the interests of current and future generations. RA 2017-2021 The indicators presented in the structure of state budget revenues (see Figure 1) once again confirm the importance of effective financial management of the tax system and tax policy in the process of state regulation of the economy [8].

Table 2. Financial management

Management entity	→	Management tools	→	Management object	→	Result (end goal)
Financial bodies (financial system)		Financial mechanism		Financial relations (finance system)		Financial policy
-RA National Assembly;		- Financial law;		- National (public) finances;		- Stabilizing policy;
- RA Government;		- Financial planning;		- Community finances;		- Restraining policy (policy of limiting business activity);
- RA State Revenue Committee;		- Current setting;		- Finances of state departments, organizations, institutions-enterprises.		- Stimulating policy (economic growth policy).
-RA Ministry of Finance;		- Financial control;				
- RA Ministry of Economy;		- Financial information				
- RA Audit Chamber;						
- RA Central Bank;						
- Financial departments of state departments, and organizations						
- Financial units of communities.						



Figure 1: Revenues of the RA state budget in 2017-2021, billion drams

The RA tax authority carries out [7] tax administration and effective tax control, provision and accounting of budgets, revenues controlled by the tax authority, prosecution of crimes under the authority of the tax authority, contributes to the economic security of the RA, organizes the training of tax officials and taxpayers works, etc. The mission of the tax authority, under the above framework, is meant to define the role of the tax authority as a state structure and to show the public's expectations of how that role should be implemented.

As in all countries, the tax system in RA is in the process of constant improvement. It affects the economic and social conditions of development and adapts to them. The RA tax reform program should define the main principles of the development of the state policy in the tax field, the program bases of the implementation of that policy and regulate the relations related to them.

2020-2024 of the RA State Revenue Committee The strategic plan for development and administration improvement is regularly reviewed, aligning it with the tax policy conducted by the state, the general guidelines defined by the plan of the RA government, promptly responding to internal and external challenges and defining the new strategic development directions and measures in line with them [6].

Conclusion

Summarizing the article, we come to the conclusion that the tax reforms in RA imply, on the one hand, the relaxation of tax pressure and the solution of fundamental problems for business, and on the other hand, the transparency of taxpayers' activities for the state and the exclusion of opportunities to avoid taxation. Consequently, the main goal of the tax reforms implemented in RA

is the implementation of a tax policy that ensures sustainable economic growth and promotes the attraction of investments, which will ensure guaranteed budget revenues, the gradual increase of the tax/GDP ratio, the expansion of the regulatory and stimulating function of taxes, the ability to quickly respond to changes in time and competitive formation and further improvement of the tax system with a management system. Thus, based on the conclusion based on the research and analysis carried out by the author, we offer:

- ✓ Initiate the **study, mapping and restructuring of the “business”** processes regulating tax procedures within the framework of their functions by SRC departments, as a result of which it will be possible to form a tax system with such functionality and structure that will ensure the increase in the efficiency of tax policy and system management,
- ✓ Improve the tax risk management systems in order to more target the selection of the evading entities subject to supervision,
- ✓ Partially or completely exempt from profit tax the part of the company's profit that will be invested in economic innovation projects (which is widely used in many foreign countries),
- ✓ Transfer some part of the taxable activity within the micro-enterprise system to the general field of taxation.

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**ՀԱՐԿԱՅԻՆ ՔԱՂԱՔԱԿԱՆՈՒԹՅՈՒՆԸ ՀՀ ՏՆՏԵՍՈՒԹՅԱՆ
ՊԵՏԱԿԱՆ ԿԱՐԳԱՎՈՐՄԱՆ ԳՈՐԾԸՆԹԱՑՈՒՄ**

Բանալի բառեր - հարկային քաղաքականություն, հարկային համակարգ, կառավարման համակարգ, տնտեսական աճ, հարկային ռիսկեր

ՀՀ տնտեսությունում ներկայումս տեղի ունեցող փոփոխությունները պահանջում են այնպիսի հարկային քաղաքականության իրականացում, որը կնպաստի տնտեսական աճի կայուն տեմպերի ապահովմանը և արդյունավետ կառավարում ունեցող հարկային համակարգի ձևավորմանը: Հոդվածում վերլուծվել են դրանց կատարելագործման ուղիները, մասնավորապես՝ հարկային համակարգի գործառույթների շրջանակներում անհրաժեշտ է իրականացնել հարկային ընթացակարգերը կանոնակարգող «բիզնես» գործընթացների ուսումնասիրություն և քարտեզագրում, որի վերջնարդյունքում հնարավոր կլինի ձևավորել այնպիսի ֆունկցիոնալություն և կառուցվածք ունեցող հարկային համակարգ, որը կապահովի հարկային քաղաքականության և համակարգի կառավարման արդյունավետության բարձրացումը: Առաջ է քաշվել այն թեզը, ըստ որի՝ անհրաժեշտ է կատարելագործել հարկային ռիսկերի կառավարման համակարգերը՝ հսկողության ենթակա տնտեսվարող սուբյեկտների առավել թիրախային ընտրության նպատակով, միկրոձեռնարկատիրության համակարգի շրջանակներում հարկվող գործունեության որոշ մասը տեղափոխել հարկման ընդհանուր դաշտ, շահութահարկից մասնակի կամ ամբողջությամբ ազատել ընկերության շահույթի այն մասը, որը կներդրվի տնտեսական նորարարական ծրագրերում, ինչը լայնորեն կիրառվում է մի շարք արտասահմանյան երկրներում:

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НАЛОГОВАЯ ПОЛИТИКА В ПРОЦЕССЕ ГОСУДАРСТВЕННОГО РЕГУЛИРОВАНИЯ ЭКОНОМИКИ РА

Ключевые слова - налоговая политика, налоговая система, система управления, налоговые риски, экономический рост

Происходящие в настоящее время в экономике РА изменения требуют проведения такой налоговой политики, которая будет способствовать обеспечению стабильных темпов экономического роста и формированию налоговой системы с эффективным управлением. В статье анализируются пути их совершенствования, в частности, в рамках функций налоговой системы необходимо провести исследование и картографирование «бизнес»-процессов, регламентирующих налоговые процедуры, в результате чего будет возможно сформировать налоговую систему с таким функционалом и структурой, которые обеспечат повышение эффективности налоговой политики и управления системой.

Выдвинут тезис, согласно которому необходимо совершенствовать системы управления налоговыми рисками с целью наиболее целенаправленного отбора уклоняющихся субъектов контроля, перевода части налогооблагаемой деятельности в рамках микросистемы предпринимательства в общую сферу налогообложения, частично или полностью освободить от налога на прибыль ту часть прибыли компании, которая будет инвестирована в экономические инновационные программы, что широко используется во многих зарубежных странах.

Submitted: 31.08.2022

Accepted for publication: 15.11.2022

Financial Management and Decision Making

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APPROACH TO THE ASSESSMENT OF THE CORRELATION BETWEEN OWN CURRENT ASSETS AND CURRENT FINANCIAL DEMAND IN A BEVERAGE COMPANY

Abstract: One of the key areas of financial management in manufacturing companies is the regulation and effective control of current financial demand. Within the framework of this article, we have set a task to analyze the current financial requirement based on the data of the actual financial reports of Kotayk Beer LLC from the organizations producing beverages operating in Armenia, to evaluate the impact of its calculation components, to propose a new

approach to regulation and control. With the proposed approach, it was possible to assess the impact of the components underlying the current financial demand on the current financial demand in two scenarios. In the first scenario, when an attempt is made to reach an effective settlement through a single component, accounts payable are eliminated, from which the policy of stable liabilities becomes paramount. In the case of the second scenario, when the effects of the factors influencing the current financial demand are maximized by squaring according to the method of the matrix, it was possible to achieve harmonization, which in practice gives equal opportunities to all three components of the current financial demand index. The approach presented in the article is expedient from a practical point of view for a specific organization or organizations of the same branch.

Keywords: capital, liquidity, matrix method, current assets, current liabilities, receivables, resources

JEL classification: M40, M41

Research aim: Analyze current financial demand on the example of a specific business organization, propose a new approach to financial management

Research novelty: the management of current financial receivables in any business requires the application of interconnected management approaches to inventories, receivables and current liabilities, which will be more effective in terms of financial management decisions under the new approach to harmonized control of current financial demand components.

Introduction

One of the key areas of financial management of commercial organizations is the effective control of their own current assets. Improving the management mechanism of its current assets in a changing economic environment is an urgent issue, which strongly emphasizes the need for scientific research in the field of management of the organization.

Numerous studies have been conducted to study the effectiveness of the use of current assets in various sectors of the economy. In particular, Aktas N., Croci E., Petmezas D. considered the issue of assessing the impact of current assets (working capital) management on the value of the organization as key [1. pp. 98–113].

In one of his studies, Talat Afza identified the key features of current asset management [2. pp. pp. 223–235].

In their joint study, A. Raheman and M. Nasr considered current asset management issues in the context of the relationship between commercial lending, inventory balance, and accounts payable [3. pp. 279-300].

R. P. Boisjoly, T. E. Conine, and M. B. McDonald in their joint study linked one of the ways to increase the efficiency of current asset management with the problem of non-collection of receivables [4. pp. 1-8].

Norton D., Kaplan R. In their research, they considered the study of the connection between the operational activities of the strategy, linking it directly with the problem of ensuring the competitive advantage of the organization [5].

Khachatur Baboyan, one of the Armenian researchers, proposed his solutions from the point of view of solving the problem

of optimizing the capital structure, considering the interdependence of the provision of the main groups of liabilities with their own current assets as key [6. pp. 74-80].

Despite sufficient research on current financial asset management, the issues of formulating its own current asset management policy, developing planning and forecasting models, improving analytical methods, monitoring, and assessing correlation with its own current financial demand require new and key solutions. has become relevant in this article.

Research Results

Using the factual data of the financial reports of "Kotayk" Brewery LLC, a company producing Armenian beverages, we offer the following approach to assessing the correlation between our own current assets and current financial demand. It was built with the following steps:

1. In the period from 2011 to 2019 we have determined the current financial demand (inventories + receivables - accounts payable), actual values of own current assets (current assets - current liabilities), the proportion of receivables in current assets and the proportion of accounts payable in current liabilities. We have presented the calculations in Table 1.

The current financial demand index in "Kotayk" beer factory LLC in 2011-2019 showed a decreasing tendency. In practice, from a financial management perspective, the current financial demand ratio should be reduced as much as possible. In case of making it negative, the latter will be considered more effective. In the context of the above, it is obvious that the regulation and management of

the current financial demand in "Kotayk" Brewery LLC was effective from the point of view of comparative analysis in 2016-2017.

Table 1. The values of the indicators used in the construction of the proposed approach

Observations / indicators	2011	2012	2013	2014	2015	2016	2017	2018	2019
Current <u>financial demand</u>	604945	716107	402782	370186	308792	197247	168881	418463	469912
(Current <u>financial demand</u> / Sales revenue)*100- X_1	56.95	64.57	38.57	42.54	53.04	50.88	51.03	67.31	53.91
The proportion of receivables in current assets - X_2	43.74	59.12	37.05	33.09	28.22	38.76	26.95	32.10	54.19
The proportion of accounts payable in current liabilities - X_3	60.71	93.15	71.88	52.09	55.98	51.12	49.18	16.68	17.97
Own current assets	521177	797592	386822	225279	286487	38574	-42882	-	-
(<u>Own current assets</u> / Sales revenue)*100- Y	49.06	71.92	37.04	25.89	49.20	9.95	-12.96	-72.94	-48.60

Use Figure 1 below to estimate the behavior of the current financial demand ratio.

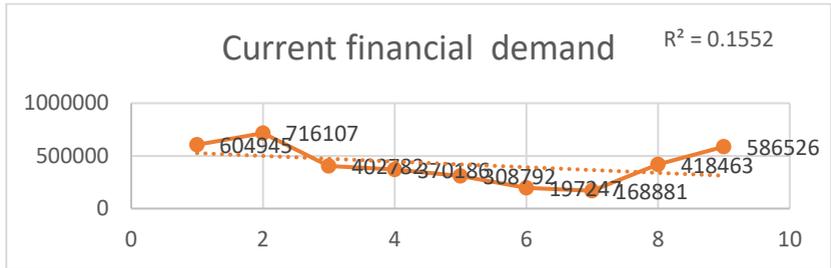


Figure 1. Dynamics of Current Financial Demand in Kotayk Brewery LLC

In particular, using the trend valuation method, we reveal the high volatility of the decisions made within the framework of controlling the current financial demand index. This is the value of R^2 (0.1552). This reveals the problem of harmonizing its individual components in the regulation and management of current financial demand.

As for the tendencies to change the share of the current financial demand in the net income from sales, 2013 will be assessed more effectively in the analyzed period.

The receivables used in the calculation of the current financial demand have an optimization problem in terms of management in "Kotayk" Brewery LLC. The share of receivables in current assets in terms of control in 2011-2019 was effective in 2015-2017, respectively, amounting to 28.22% and 26.95%.

The other component of the current financial liability calculation, which is considered important from the point of view of fixed liability strategy, accounts payable, showed a downward trend during the period under review. In particular, the share of accounts payable in current liabilities in 2019 compared to 2011 decreased by 42.74%, amounting to 17.97%.

From the point of view of financial management efficiency, it is necessary for the index of own current assets to accept a positive value. The negative value of this indicator proves the problem of not being secured with own assets, endangers the financial stability and solvency of the organization. At the same time, complexes arise in the process of financial management of working capital. "Kotayk" Brewery LLC was effective from the point of view of financial management during 2011-2019 from 2011 to 2016. The own current assets ratio in 2017-2019 assumed a negative value, which had a direct impact on the financial condition of the organization, deepening the crisis in this organization.

The share of own current assets in the net income from sales was the highest in 2012, amounting to 71.92%. The lowest value (in terms of inefficiency) was recorded in 2017-2019.

2. The next step is to build a table of standardized coefficients, for which we present the results in Table 2.

Table 2. Table of standardized coefficients

	X1	X2	X3	Y
2011	0.791805	0.739728	0.651825	0.682162
2012	0.959247	1	1	1
2013	0.573008	0.626731	0.771694	0.515073
2014	0.63198	0.559681	0.559198	0.359974
2015	0.787881	0.477239	0.601038	0.684174
2016	0.755933	0.655544	0.548791	0.138368
2017	0.758093	0.455873	0.528041	-0.18017
2018	1	0.542979	0.179082	-1.01417
2019	0.800944	0.916545	0.192899	-0.67574

We have built the table of standardized coefficients based on Table 1. As a basis for standardization we have taken the maximum values of the output variable Y of the variables X1, X2, X3.

- Based on the data in Table 2, we have evaluated the correlation relationships between the variables of the output index Y and X1, X2, X3. We have presented the results obtained in this step in Table 3.

Table 3. Evaluation of correlation relationships according to the table of standardized coefficients

	Y	X1	X2	X3
Y		-0.28891	0.188214	0.925039
X1			0.322358	-0.19336
X2				0.254861
X3				

The evaluation of the correlation links shows that the variable X3 has a significant positive correlation on the resultant Y. X2 has a noticeable positive correlation with the Y index, and the variable X1 has a negative correlation with Y.

- In this step we have constructed the regression equation $Y = A_0 + A_1 * X_1 + A_2 * X_2 + A_3 * X_3$ based on the table of standardized coefficients. We have presented the statistical bases of the constructed regression equation in Table 4. We used the method of smallest squares [7].

Table 4. Regression according to a standardized table

Regression Statistics	
Multiple R	0.926411
R Square	0.858237
Adjusted R Square	0.773379
Standard Error	0.320009
Observations	9

ANOVA					
	df	SS	MS	F	Significance F
Regression	3	3.099833	1.033278	10.09004	0.014611
Residual	5	0.512028	0.102406		
Total	8	3.611862			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-1.04979	0.663092	-1.58317	0.174231	-2.75432	0.654744	-2.75432	0.654744
X Variable 1	-0.03267	0.498627	-0.06503	0.950293	-1.31444	1.249088	-1.31444	1.249088
X Variable 2	-0.20015	0.688207	-0.29083	0.782858	-1.96924	1.568941	-1.96924	1.568941
X Variable 3	2.448228	0.455366	5.376391	0.002999	1.277671	3.618785	1.277671	3.618785

The constructed regression equation is as follows:

$$Y = -1,049 - 0,033 * X_1 - 0,2 * X_2 + 2,448 * X_3$$

X3 is the most important factor in the effective management of the output index Y with the constructed regression equation, which strongly emphasizes the expediency of the policy of applying stable liabilities in this organization.

- Using the matrix method, in this step we have constructed a table of squares [8].

You have presented the obtained results in Table 5.

Table 5. Table of squares

	X1	X2	X3	Y
2011	0.626955	0.547198	0.424876	1.264527
2012	0.920154	1	1	1.708846
2013	0.328339	0.392792	0.595511	1.14745
2014	0.399398	0.313243	0.312702	1.012593
2015	0.620757	0.227757	0.361247	1.099891
2016	0.571435	0.429737	0.301171	1.141203
2017	0.574705	0.20782	0.278828	1.03022
2018	1	0.294826	0.03207	1.15191
2019	0.641511	0.840054	0.03721	1.232386

When constructing the square table, we increased the values of the indices of the standardized coefficients to the power of the square.

- In this step, based on the data in Table 5, we performed an assessment of correlation relationships. We have presented the obtained results in Table 6.

Table 6. Estimate correlation relationships by squares

	Y	X1	X2	X3
Y		0.564985	0.866346	0.712327
X1			0.358846	0.015932
X2				0.451788
X3				

The correlation evaluation shows that the variables X2 and X3 have a significant positive correlation on the Y output index and the

variable X1 has a close positive correlation. The correlation assessment performed in this step shows that in case of doubling the effect of the selected variables X1, X2, X3 (which is manifested by increasing the square), the resultant Y has a significant positive effect.

7. In this step we have constructed the regression equation $Y = A_0 + A_1 * X_1 + A_2 * X_2 + A_3 * X_3$ based on the table of squares. We have presented the statistical bases of the constructed regression equation in Table 7. We used the method of smallest squares [7].

Table 7. Regression according to the matrix method

Regression Statistics	
Multiple R	0.996682
R Square	0.993375
Adjusted R Square	0.9894
Standard Error	0.021671
Observations	9

ANOVA					
	df	SS	MS	F	Significance F
Regression	3	0.352121	0.117374	249.9171	7.26E-06
Residual	5	0.002348	0.00047		
Total	8	0.354469			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.535045	0.022593	23.71693	2.48E-06	0.477767	0.593923	0.477767	0.593923
X Variable 1	0.470045	0.02601	18.07174	9.53E-06	0.403184	0.536905	0.403184	0.536905
X Variable 2	0.445567	0.033326	13.36996	4.19E-05	0.3599	0.531234	0.3599	0.531234
X Variable 3	0.439795	0.029259	15.03087	2.36E-05	0.364581	0.515009	0.364581	0.515009

The regression equation based on the square table data is as follows:

$$Y = 0,535 + 0,470 * X_1 + 0,445 * X_2 + 0,439 * X_3$$

In the effective management of the output index Y by the constructed regression equation, all three variables exhibited the same effect; from the point of view of financial management, no direct or significant dependence on any of the specific variables is emphasized.

Conclusion

The results obtained from the proposed approach give grounds to conclude that in a specific commercial organization, particularly in the field of production, the regulation and management of current financial demand can be effectively carried out taking into account the following recommendations:

- ✓ The current financial demand management policy should be developed taking into account the specifics of the activity and industry affiliation of the organization.
- ✓ Indicators used to calculate current financial demand: inventories, receivables, accounts payable, in practice should be tracked by interrelated rather than specific components, as the results of bilateral regression analysis showed differentiated control of current financial demand. In this case, the strategy of stable liabilities becomes preferable. by variable X_3 (first regression equation). Please note that not all organizations and definitely not in all conditions can implement an effective policy of stable commitments. At the same time, leaving aside issues related to inventory and receivables, we believe that in the future they will create new problems in the financial system of the organization.
- ✓ More effective control over current financial demand is possible with the results of the second regression equation. In essence, by doubling the meanings of the three variables selected on the output index, their effects are practically harmonized. In this case, equal attention should be paid to the optimal management of stocks, as well as the determination of the amount of

receivables, collection, implementation of the policy of stable liabilities.

The proposed approach should be considered from a practical point of view for a specific organization or organizations in the same field. It is designed to make the current financial demand control task more effective in the overall financial management system.

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**ԽՄԻՉՔՆԵՐ ԱՐՏԱԴՐՈՂ ԸՆԿԵՐՈՒԹՅՈՒՆՈՒՄ ՍԵՓԱԿԱՆ
ԸՆԹԱՑԻԿ ԱԿՏԻՎՆԵՐԻ ԵՎ ԸՆԹԱՑԻԿ ՖԻՆԱՆՍԱԿԱՆ
ՊԱՀԱՆՋԻ ՓՈԽԿԱՊԱՑԿՈՒԹՅԱՆ ԳՆԱՀԱՏՄԱՆ
ՄՈՏԵՑՈՒՄ**

Բանալի բառեր – կապիտալ, իրացվելիություն, մատրիցային մեթոդ, ընթացիկ ակտիվներ, ընթացիկ պարտավորություններ, դեբիտորական պարտքեր, պաշարներ

Արտադրական կազմակերպություններում ֆինանսական կառավարման առանցքային ոլորտներից է ընթացիկ ֆինանսական պահանջի կարգավորումն ու արդյունավետ վերահսկումը: Սույն հոդվածի շրջանակներում մենք խնդիր ենք դրել վերլուծել ընթացիկ ֆինանսական պահանջը Հայաստանում գործող խմիչքներ արտադրող կազմակերպություններից «Կոտայք գարեջուր» ՍՊԸ-ի փաստացի ֆինանսական հաշվետվությունների տվյալների հիման վրա, գնահատել դրա հաշվարկային բաղադրիչների ազդեցությունը՝ առաջարկելով կարգավորման և վերահսկողության նոր մոտեցում:

Առաջարկվող մոտեցմամբ հնարավոր է գնահատել ընթացիկ ֆինանսական պահանջարկի հիմքում ընկած բաղադրիչների ազդեցությունն ընթացիկ ֆինանսական պահանջի վրա երկու սցենարով:

Առաջին սցենարում, երբ փորձ է արվում մեկ բաղադրիչի միջոցով հասնել արդյունավետ լուծման, կրեդիտորական պարտքերի ազդեցությունը շեշտվում է, առաջնային է դառնում կայուն պասիվների քաղաքականությունը:

Երկրորդ սցենարի դեպքում, երբ ընթացիկ ֆինանսական պահանջի վրա ազդող գործոնների ազդեցությունները առավելագույնի են հասցվում քառակուսիների միջոցով՝ ըստ մատրիցային մեթոդի, հնարավոր է լինում հասնել ներդաշնակության, որը գործնականում հավասար հնարավորություններ է տալիս ընթացիկ ֆինանսական պահանջի բոլոր երեք բաղադրիչներին:

Հոդվածում ներկայացված մոտեցումը գործնական տեսանկյունից նպատակահարմար է նույն ճյուղի կոնկրետ կազմակերպության կամ կազմակերպությունների համար:

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ПОДХОД К ОЦЕНКЕ СООТНОШЕНИЯ СОБСТВЕННЫХ ОБОРОТНЫХ СРЕДСТВ И ТЕКУЩЕГО ФИНАНСОВОГО СПРОСА В КОМПАНИИ ПО ПРОИЗВОДСТВУ НАПИТКОВ

Ключевые слова - капитал, ликвидность, матричный метод, оборотные активы, краткосрочные обязательства, дебиторская задолженность, товарно-материальные запасы

Одним из ключевых направлений финансового менеджмента в производственных компаниях является регулирование и эффективный контроль текущего финансового спроса. В рамках данной статьи мы поставили задачу проанализировать текущий финансовый спрос со стороны компаний-производителей напитков, работающих в Армении, на основе данных фактических финансовых отчетов ООО «Котайк Бир», оценить влияние его расчетных компонентов, предложить новый подход к регулированию и контролю. С помощью предлагаемого подхода можно оценить влияние основных компонентов текущего финансового спроса на текущий финансовый спрос в двух сценариях.

В первом сценарии, когда предпринимается попытка достичь эффективного решения с помощью одного компонента, подчеркивается влияние кредиторской задолженности, и первостепенное значение приобретает политика стабильных обязательств.

Во втором сценарии, когда эффекты факторов, влияющих на текущий финансовый спрос, максимизируются с помощью квадратов по матричному методу, можно добиться гармонизации, дающей практически равные возможности всем трем компонентам текущего финансового спроса.

Представленный в статье подход практически целесообразен для конкретной организации или организаций в данной отрасли.

Submitted: 05.09.2022

Accepted for publication: 15.11.2022

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ISSUS OF COMMERCIAL ORGANIZATIONS FINANCIAL POSITION RATING

Abstract: The efficiency of the financial management process in commercial organizations and the development of new approaches for improvement are directly associated with the addressing of theoretical and practical methodological challenges. In this article, by analysing data from some commercial organizations of the Republic of Armenia, we have proposed an approach to the rating of financial situation in the framework of financial management. Thus, we aimed to classify organizations in the context of correlation between business activity and operational management as the components of financial situation which will be very helpful, especially in making management decisions.

Keywords: financial position, business activity, golden rule, coefficient, sales revenue, factor, variable, assessment

JEL classification: M40, M41

Research aim: introduce a new approach to the rating of commercial organizations by components of financial position

Research novelty: a rating approach for commercial organizations RA, based on the extension of financial stability zones was proposed.

Introduction

The problem of assessing the financial condition of commercial organizations has necessarily received new solutions in line with the requirements of the time. In this regard, it should be

noted, that from the point of view of and theoretical-methodological and practical application, the main emphasis has been made on complex, within the framework of which, in part, the development of approaches. Therefore, as states in his point of view. Yurzinova “**In the modern economy**, the main emphasis should be on decisions based on experience-based assessments or on the diagnosis of consequences of financial decisions (the latter can generally be considered identical to those based on experience-based assessments). ... “ [1].

The management decision database is important for reducing the uncertainty in order to increase the efficiency of the financial management process. Therefore, in this respect, we agree with A. according to Tebekin and V. Mantusov, the formal definition of the issue of management decision-making is necessary to reduce the level of uncertainty in the process of management decision-making, to define what is expected to be achieved as a result of their implementation. to create an information-**analytical space**. ... » [2].

The importance of ratings is essential in the set of analytical-evaluation tools used in the financial management process of commercial organizations. Ratings are important in the set of analytical-evaluation tools used in the financial management process of commercial organizations. The purpose of the rating is to identify the key features of the rating system. It defines, first of all, the aspect of the financial condition of the enterprise, on which, according to the interests of the user groups, the researcher's attention should be focused, secondly, the basic type of rating evaluation [3].

Many researchers interested in this foundation have offered their solutions in this direction. In particular, N. Kalandirova used the four zones of normative values of the applied indicators. R. Beke used four basic rules to calculate a rating based on relative indicators, which are able to provide sufficient information bases for that rating **u** required accuracy [4].

Armenian researchers offered their solutions for ranking commercial organizations to A. Kocharyan, using the cash flows in

the rating system [6], A. Harutyunyan, emphasizing the issue of factor assessment of the financial stability of the organization, E. Muradyan [7], giving priority to alternative approaches, in particular, to business activity in the process of stabilizing the financial situation. Given the decline in business activity due to the global economic downturn in recent years, in order to address the issue posed by us in this article, we propose the following approach to business activity component - operational management interconnection rating, the results of which will help expand management decision database improvement.

Research Results

We have constructed the proposed ranking approach with the following steps:

1. The following main coefficients characterizing the business activity of the surveyed commercial organizations are calculated:

- C1 - asset turnover ratio;
- C2 - equity turnover ratio;
- C3 - current assets turnover ratio;
- C4 - receivables turnover ratio;
- C5 - inventory turnover ratio.

The aggregate estimate based on the actual results of the above business activity coefficients, which we have chosen for the regression equation based on the linear relationship of the rating approach, is calculated as the resultant index: Y.

2. The actual values of the following variables selected by us from the point of view of operational management are calculated:

- X1: profit from sale (loss) / assets;
- X2: net profit (loss) / assets;
- X3: operating profit (loss) / net sales revenue;
- X4: net profit (loss) / accumulated profit.

3. Construct a linear regression equation expressing the correlation between the business activity component and operational management.

$$Y = a_0 + a_1 * X_1 + a_2 * X_2 + a_3 * X_3 + a_4 * X_4,$$

Where a_0 is the free member and a_1 - a_4 are the weight effects of the corresponding variable. We determined them by the method of the smallest squares.

4. Based on the constructed regression equation u weight effects of variables, we perform a rating u zoning for the business activity component.

We present the actual values of the coefficients that characterize the business activity of the commercial organizations we surveyed u the total estimate of the business activity component based on them. Using the relevant data from the financial reports of the surveyed commercial organizations, we built a comparison table.

Table 1. Comparable table of variables and output index by average value by companies RA

Enterprises	X_1	X_2	X_3	X_4	Y
"Agates" LLC	0.020	-1.653	-0.033	0.355	0.046
"Hrazdan Jack" OJSC	0.029	-2.696	-0.556	0.215	0.618
"AR-BE Armenian-Belarusian	0.021	-2.414	-0.115	0.279	0.828
Chamber of Commerce" LLC	0.063	-3.218	-0.587	1.293	0.603
"Sam Tshar" LLC	0.048	-0.203	-0.073	0.012	1.152
"Yerevan Jewelry Factory-GNOMON" OJSC	0.193	-2.631	-0.191	12.446	1.289
JTI Armenia CJSC	0.038	-1.305	-0.348	1.111	0.328
"Euromotors" CJSC	-0.004	0.544	7.198	0.290	0.216
"Multi Group" Concern LLC	0.009	-0.425	-1.243	0.437	0.549
"GREEN POWER" LLC	0.078	-5.853	-0.571	0.713	0.951
"ARSANA" CJSC	0.021	8.990	6.828	0.560	0.657
"ONE" CJSC	10.677	19.232	0.500	5.735	4.764

Using the method of the smallest squares, we construct the following equation with the linear regression expressing the correlation of the business **activity component u between operations management**:

$$Y = 0.696 + 0.33 * X_1 + 0.17 * X_2 - 0.049 * X_3 + 0.042 * X_4, (1):$$

In the constructed regression equation, the factor having a negative impact on the aggregate valuation of the business activity component was X3: operating profit (loss) / net realizable income, variable.

Based on the values of Y^* , in this step we define the corresponding zones for the surveyed organizations and according to the results of their classification and the letter mark. The decision of the four zones corresponding to the values of Y^* was made according to the following principle: First we determine the mean value of Y^* , then the mean value of the mean and the maximum value range, obtaining the effective (awarded A-letter) and favorable (awarded A-letter) zones of business activity. Then we determine the average for the range of the mean value of Y^* and the minimum value, obtaining the crisis zones of business activity (given by the letter B) and dangerous (given the letter B - given). With the mentioned approach, we have presented the results of the ranking within the framework of the business activity component of the business activity component of the commercial organizations we surveyed in Table 2.

Table 2. The results of the ranking of the surveyed organizations according to the proposed zones

An effective area of business activity 2.356-4.767 "A" marked ranking	Favorable area for business activity 1.247-2.356 "A" marked ranking	Business Crisis Zone 0.699 - 1.247 "B" marked ranking	Dangerous area of business activity 0.366-0.699 "B" marked ranking
"Alex Hotel" LLC	"JTI Armenia" CJSC	Yerjan Jewelry Factory -GNOMON" OJSC	"Agates" LLC
		"Sam Tshar" LLC	"Hrazdan Jack" OJSC
	"	"GREEN POWER" LLC	"AR-BE Armenian-Belarusian Chamber of Commerce" LLC
		"Euromotors" CJSC	"Multi Group" Concern LLC
			"ARSANA" CJSC
			"ONE" CJSC

Conclusion

According to the results of the final rating, the best is "Alex Hotel" LLC - **4,767 points, respectively "A" point characters**. The second is "JTI Armenia" CJSC, which is classified in the favorable zone of business activity - 1,247 points, respectively A point characters. In the other ten commercial organizations surveyed, business activity was identified as low efficiency in the operational

management interconnection, as a result of which six organizations were classified in the crisis zone of business activity, receiving a B point mark.

This circumstance made it possible to raise the issue of low efficiency of resource use at this stage, substantiated the need for capital structure reconstruction. Therefore, the surveyed **organizations that are classified in the hazardous $n\pi\beta\lambda\mu$ crisis areas** of business activity have the problem of optimizing the sources of financial resources, which will have to be taken into account in terms of making business decisions.

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Խաչատուր Բաբոյան
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տնտեսագիտության ինստիտուտ

**ԱՌԵՎՏՐԱՅԻՆ ԿԱԶՄԱԿԵՐՊՈՒԹՅՈՒՆՆԵՐՈՒՄ
ՖԻՆԱՆՍԱԿԱՆ ԴՐՈՒԹՅԱՆ ՎԱՐԿԱՆՇՄԱՆ
ՀԻՄՆԱԽՆԴԻՐՆԵՐԸ**

Բանալի բառեր - ֆինանսական դրություն, գործարար ակտիվություն, ոսկե կանոն, գործակից, իրացումից հասույթ, գործոն, փոփոխական, գնահատական

Առևտրային կազմակերպություններում ֆինանսական կառավարման գործընթացի արդյունավետությունը և կատարելագործման նոր մոտեցումների մշակումն ուղղակիորեն կախված է ինչպես տեսական, այնպես էլ գործնական մեթոդաբանական խնդիրների լուծմամբ: Սույն հոդվածի շրջանակներում հետազոտելով ընտրված ՀՀ առևտրային կազմակերպությունները, առաջարկվել է ֆինանսական կառավարման շրջանակներում ֆինանսական դրության վարկանշման մոտեցում: Նպատակն է ֆինանսական դրության բաղադրիչներից գործարար ակտիվության և գործառնական կառավարման փոխկապակցության համատեքստում դասակարգել կազմակերպությունները, ինչը բավականին օգտակար կլինի, հատկապես, կառավարչական որոշումներ կայացնելիս:

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ПРОБЛЕМЫ РЕЙТИНГА ФИНАНСОВОГО ПОЛОЖЕНИЯ ТОРГОВЫХ ОРГАНИЗАЦИЙ

Ключевые слова - финансовое положение, деловая активность, золотое правило, коэффициент, выручка от продаж, фактор, переменная, рейтинг

Эффективность процесса управления финансами в коммерческих организациях и разработка новых подходов к совершенствованию, напрямую зависит от решения как теоретических, так и практических методологических задач. В рамках данной статьи путем изучения выбранных коммерческих организаций Республики Армения предложен новый подход к оценке финансового рейтинга.

Цель предлагаемого подхода состоит в том, чтобы классифицировать организации в контексте взаимосвязи финансовых составляющих, таких как бизнес активность и оперативное управление, что будет весьма полезно, особенно при принятии управленческих решений.

Submitted: 10.10.2022

Accepted for publication: 15.11.2022

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THE ISSUES OF EMPOWERMENT OF SMALL SHAREHOLDERS IN THE CONTEXT OF THE BUSINESS ACTIVATION IN THE RA

Abstract: The objective of the article is to research doing business rating, including the component of protecting the rights of small shareholders to improve investment environment in the Republic of Armenia, since this component has been at the minimal level compared to others for many years.

The issues under consideration are related to the protection of the rights of small shareholders, which is a tool to improve the investment environment in the Republic of Armenia. This tool entails demonstration of availability of free funds of individuals and legal entities, and their injection into real sector of the economy through the acquisition of small shares. This will result in stronger business relations between organizations and increase in the efficiency of attracting free funds to the economy through a multiplicative effect.

The indicators of investment, economic growth and the GDP deflator index in the Republic of Armenia implementing methods of comparison, analysis and induction and the rating components of business environment in the Republic of Armenia have been studied.

Considering the importance of small shareholders from the point of view of improving the investment environment in the Republic of Armenia, it is necessary to implement appropriate legislative changes and develop measures aimed at increasing the number of small shareholders so that legal entities and individuals

have the desire to make small investments in organizations, since the constant attraction of investments is of greater importance for the economy.

Keywords: investments, business environment, rights of small shareholders, investment policy, deposits, free cash

JEL code: E22

Research aim: identify ways to support small equity activities both in the legal and economic fields

Research hypothesis: expanding the rights of small shareholders can significantly increase the investment attractiveness of the country

Research novelty: the legal and economic ways of activating small shareholding partnerships have been revealed, which will contribute to the expansion of investments in RA.

Introduction

For the establishment and development of entrepreneurship, it is essential to make investments in a practically uninterrupted legislative field. The effectiveness of the latter is due to the optimal combination of the interests of state, national, social and economic security and ensuring the personal success of the individual and family [1].

In order to improve the business environment in the Republic of Armenia, it is necessary to create preconditions to ensure the transparency of the activities of joint-stock companies and to make the rights of shareholders publicly available, as well as to make the society a participant in the development of the economy, even through the purchase of small shares. Legal and natural persons should be given the opportunity to purchase shares of various Armenian organizations from publicly accessible open platforms, including Internet platforms. As a rule, the mentioned

persons are called "insignificant" (minority, small) shareholders. In American reference literature, a minority shareholder is defined as an owner of such a small number of shares of a corporation that he does not have the ability to control the management of the corporation or elect its directors [4].

The World Bank defines the business and investment environment as the opportunities and incentives for companies to invest effectively, create jobs, and expand. The business and investment environment is a system of prerequisites for foreign and local companies to do business and make a profit in a given country. There is a close causal relationship between investment and economic growth. Although there are different points of view due to the fact that what is the mechanism of impact of investments on the economy and what should be the direction of state regulation of the investment process. According to one point of view, investments are the main "engine" of the economy. The more a country invests, the higher its economic growth rates. According to another point of view, the chain of causality is exactly the opposite. high demand causes an increase in production, which is why companies invest [2].

Research results

Analysis of indicators of investment, economic growth and GDP index-deflator in RA

In order to make the above connection more obvious, let's present the combination of indicators of investments, economic growth and GDP index-deflator in RA.

The indicator of economic activity (IEA) is a monthly aggregated index of changes in the real volume of output in the country's economy. It covers all types of economic activity and is initially calculated using the average annual prices of the previous year, which makes it possible to create chronological series of the

IEA - chain indexes. For each month, it represents one aggregate indicator for the entire economy in the form of an index. In contrast to the GDP index calculated by the National Accounts methodology (which has quarterly and annual periodicity), the monthly IEA characterizes the change in the volume of output of goods and services in the economy, rather than the change in added value. The GDP deflator is the ratio of the GDP calculated at current prices to the volume of GDP calculated at comparable prices of the previous year.



Figure 1. Deflator of investment volume, economic activity index and GDP index in RA for 2011-2021

Source: www.databank.worldbank.org, <https://www.armstat.am>

Figure 1 clearly shows, that the dynamics of changes in the volume of investments and the fluctuations of the GDP deflator index are not consistent. We believe, that they are due to the fact that the IEA characterizes the change in the volume of output of goods and services in the economy, not the change in added value,

and unlike the index of prices of goods and trees, the GDP deflator characterizes the wage, profit (including mixed income), changes in the consumption of fixed capital as a result of changes in prices.

It is clear from Figure 1 that the decline in the economic activity index from 2019 to 2020 was combined with a decrease in the volume of investments, and in 2020 to 2021, on the contrary, both registered an increase, but if in 2020 the volumes of investments decreased by 1.7 times, and the economic activity index decreased by 15.3 percent, then in 2022, if the investment volume increased 6.2 times, the economic activity index increased by 14.4 percent.

Thus, we can say that the consequence of the decrease in investment volume is felt more prominently on the decrease in economic activity, even every citizen feels the decrease in investment volume individually, than the threefold increase in investment after the recession before the recession, so it is important to maintain a constant level of investment attraction and strive to increase them every following year. In developing the economy, attracting investments and creating jobs, it is necessary to take into account that there are free financial resources both in organizations and with individuals.

During an individual's lifetime, income changes quite predictably. Young employees, especially students, who spend most of their time studying, have low incomes. Experience and earnings increase as young to mature professionals typically peak around age 50 and then decline individually as they approach retirement. Around the age of 65, they suddenly decrease. A stereotypical pattern of changes in the income of such an individual is called a life cycle. Given that people have the ability to compensate for the life cycle of income through borrowing and saving, the quality of life

at any age depends more on the income that the individual receives over the lifetime rather than on an annual basis [3].

Thus, it is clear from the above that an individual has savings at certain stages during his life, which are managed by the decision of the given person. In particular, an individual can choose the approach of making savings as a deposit, or he can buy shares with his small savings, if of course the latter opportunities are created in the given state and the rights of his investments are protected.

Analysis of deposits in commercial banks from free funds in RA

First of all, in order to understand how much free funds are available in RA both with legal entities and with individuals, which can essentially be directed to the development of the economy, 2020 was chosen for the study. October 2020, the heaviest month of the 44-day war, and August 2022, the period before the war operations of 2022.

Thus, according to the official bulletin of the Central Bank of the Republic of Armenia for October 2020, during the month of October 2020, legal entities and individuals deposited 61 billion AMD, 151 million USD and 10 million Euros in commercial banks in the Republic of Armenia.

Its becomes clear that only in October 2020, the deposits made by individuals in AMD are 3.7 times higher than the deposits made by legal entities, and it also becomes clear that legal entities preferred to make deposits with a maturity of 181 days to 1 year. making up 37 percent of the investments made, and individuals preferred deposits with a maturity of 1-5 years - 65 percent.

Thus, according to the official newsletter of the Central Bank of the Republic of Armenia for August 2022, during the month

of August 2022, legal entities and individuals invested 116 billion AMD, 281 million USD and 34 million Euros as deposits in commercial banks in the Republic of Armenia. However, it becomes clear, that the deposits made by individuals in August 2022 in AMD are already 3.2 times higher, than the deposits made by legal entities, and it also becomes clear that legal entities preferred to make deposits in this month from 1 to 5 with a maturity of one year, making up 48 percent of the investments made, and with a maturity of 181 days to 1 year, making up 35 percent of the investments made, and during this period, individuals preferred deposits with a maturity of 1-5 years - 60 percent.

Thus, from the distribution of deposits by individuals during the selected two months, it can be concluded that individuals are ready to invest money on a long-term basis, therefore, if appropriate opportunities are created, the possibilities of acquiring a share with the mentioned free funds can be discussed. As for legal entities, there has been a change in their behavior, if in 2020 legal entities preferred to make a deposit with a maturity of 181 days to 1 year, making up 37 percent of the investments made, and in 2022 they already preferred to make a deposit with a maturity of 1 to 5 years. maturity, making up 48 percent of the investments made, therefore, if legal entities are given the opportunity to make small investments in other organizations, then the latter can also become shareholders of other organizations instead of deposits and create stronger partnership relations.

Study of business environment in RA

In order to study the business environment in the Republic of Armenia and find ways to improve it, the rating of the business environment of the Republic of Armenia, including its components, was studied in order to identify the existing gaps and develop proposals for their elimination, as a result of which it will be possible

to increase the rating of the Republic of Armenia from the point of view of attracting investments.

Now, let's examine the work being done to meet the international standards in the mentioned area. One of the most important prerequisites for the economic development of the Republic of Armenia is the improvement of the business and investment environment, and to achieve this, the RA government aims to create a simple, transparent and low-cost environment for state regulations, services and administrative procedures for business activities in Armenia, equal competitive conditions, and developed market infrastructures supporting business. , as well as implement a balanced tax and customs policy.

By the World Bank in 2019 According to the "Business 2020" rating report published on October 24, Armenia ranks 47th among 190 countries, instead of 41st in 2019. The reason for the deterioration of Armenia's position in the "Business 2020" rating report is the change in the World Bank's evaluation methodology, as a result of which the "Far from the best result" indicator for Armenia in the "Protection of Small Shareholders" indicator has decreased, being rated 42 points instead of 63.33 last year, and the position From 51 it became 120.

As for the previous year, we can record that according to the data of the rating report "Doing Business 2019" published by the World Bank and the International Finance Corporation on October 31, 2018, which is compiled based on the summary of the questionnaires filled by businessmen and government bodies (see Figure 2). Armenia took the 41st place among 190 countries. Compared to the previous year, Armenia recorded a 2.06% increase, registering 75.37 points. In the above annual reports, the

general indicator is based on ten internal indicators, among which is also the indicator of "Protection of Small Shareholders".

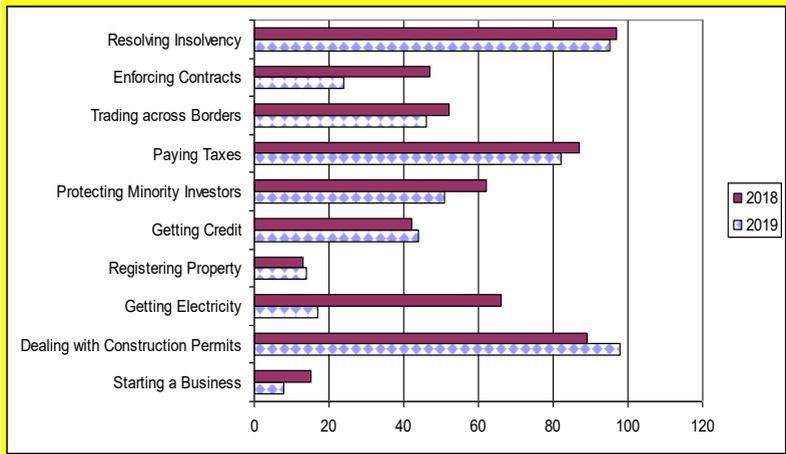


Figure 2. The position of the Republic of Armenia according to Doing Business indicators among 190 countries

Source: www.doingbusiness.org 02.11.2022

The indicator "Protection of small shareholders" is evaluated with the following 2 components:

- ✓ Statutory regulation of interest transactions and availability of judicial protection mechanisms for shareholders
- ✓ Shareholders' rights in the context of general corporate governance standards and access to financing from capital markets.

The first component is measured by the average scores of the sub-indicators "disclosure of information", "strength of directors' liability" and "lawsuits by shareholders" and evaluates the protection of small shareholders in self-interested transactions.

The second component, which is the average of the scores of the sub-indicators "shareholder rights", "ownership and control"

and "corporate transparency", evaluates the strength of shareholder rights in listed joint-stock companies and the corresponding rights and guarantees in limited liability companies. These sub-indicators assess shareholder rights in major corporate decisions, governance safeguards that protect shareholders from undue board control and interference, and corporate transparency in related party transactions.

In the 2020 report, there was a positive change in the first sub-indicator, as the "Disclosing Information" sub-indicator increased by 1 point. As a result, Armenia improved the average score of the first component by increasing the provision of information on transactions of interest. However, the latter did not have an impact on the improvement of the country's position, because during the evaluation of the Indicator, Armenia's "shareholder rights", "ownership and control" and "corporate transparency" indicators were evaluated as 0 points. Because of this, the country's position in the Index has increased from 51 to 120. The reason is the change in the World Bank's assessment methodology, according to which, if a country does not have at least 10 non-state-owned companies listed on the stock exchange, it does not receive any assessment, regardless of its legal regulations. Figure 4 shows the above sub-component comparison from 2016 to 2020;

Currently (and as of May 1) shares of 10 companies are traded on the stock exchange (B platform - 3 companies, free market (C platform) - 7 companies). In the WB Report, only the 3 companies of platform B were considered. RA Law "On Joint Stock Companies" and RA Laws "On Limited Liability Companies" 2019 the implemented reforms did not have any effect on Armenia's

"Protection of Small Shareholders" indicator, and therefore also on the "Ease of Doing Business 2020" general index.

Based on the analysis in commercial banks of RA, we have concluded that there are enough free funds with organizations and individuals who can invest in enterprises instead of making passive investments in the form of bank deposits, why not also have the opportunity to participate in the management issues of enterprises.

Conclusion

Thus, it can be concluded, that the consequence of the decrease in investment volumes is felt more clearly on the decrease in economic activity, even each citizen feels the decrease in investment volumes individually, rather than the triple increase of investments after the recession before the recession, so it is important to maintain a constant level of investment attraction and strive to increase them every following year. On the other hand, natural persons are ready to invest money in the long term, therefore, if appropriate opportunities are created, the possibilities of acquiring shares with the specified free funds can be discussed, and if legal entities are given the opportunity to make small investments in other organizations, then the latter can also be other instead of deposits. shareholders of organizations and create stronger partnership relations.

As a result of the study carried out within the framework of this research, we recorded a number of problems, that hinder the involvement of small shareholders in enterprises in the Republic of Armenia, therefore they hinder the protection of the rights of small investors and the rating of the Republic of Armenia, therefore we propose the following:

1. The relevant department of the RA (Ministry of Economy of the RA) will develop a concept regarding the involvement of small

shareholders in companies, both legal entities and individuals, because additional funds are needed to ensure the activity of the economy, and currently the latter have funds in the Republic of Armenia. who can invest their free funds in the long term. The latter will enable the existing inactive financial resources of the Republic of Armenia to be involved in the economy by taking steps aimed at the involvement of small shareholders and protection of rights.

2. To involve the "Armenia Stock Exchange" open joint-stock company in the development and implementation of measures aimed at improving the business environment, because in our opinion, the latter can stimulate the development of the stock buying and selling market. In particular, it is proposed to the mentioned company to create opportunities for both individuals and legal entities to acquire shares without hindrance, that is, to present the procedure for the purchase of shares by the latter as clearly as possible. In other words, to objectively present to organizations, as well as citizens, the possibilities of investing in the purchase of shares from electronic platforms, both from the point of view of credibility assessment and profitability.

3. Clarify the rights of small shareholders in RA, including introducing mechanisms to exclude forced appropriation of the shares of small shareholders by large shareholders of organizations.

4. Make appropriate legislative changes, providing for the opportunity to participate in shareholders' meetings of organizations without limiting the percentage ratio and to be involved in decision-making regarding the direction of the organization's future development strategies, as well as to clarify the range of powers according to the percentage ratio, for example, to allow those with up to 10 percent of shares to participate in the supervisory board , and for example, to give those who have 20 to 40 percent shares

the opportunity to present a candidacy during the election of the director.

5. We propose to create favorable conditions for taxation with profit tax for individuals who are small shareholders, for example, to apply a zero rate to the profit received for 1 or 2 years after the purchase of the share.

6. We suggest that the relevant department of the RA (Ministry of Economy of the RA) submit recommendations to the World Bank to clarify the methodology of the "Protection of the rights of small shareholders" indicator, as a result of which the corresponding sub-indicators of the mentioned indicator will be improved.

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**ՓՈՔՐ ԲԱԺՆԵՏԵՐԵՐԻ ԱԶԱԿԱՑՄԱՆ ՀԻՄՆԱԽՆԴԻՐՆԵՐԸ
ՀՀ ԳՈՐԾԱՐԱՐ ՄԻՋԱՎԱՅՐԻ ԱԿՏԻՎԱՑՄԱՆ
ՀԱՄԱՏԵՔՍՈՒՄ**

Բանալի բառեր - ներդրումներ, գործարար միջավայր, փոքր բաժնետերերի իրավունքներ, ներդրումային քաղաքակա- նություն, դեպոզիտներ, ազատ փողեր

Հոդվածի շրջանակներում ուսումնասիրվել է ՀՀ-ում ներդրումների, տնտեսական աճի և ՀՆԱ ինդեքս-դեֆլյատորի ցուցանիշների համադրությունը՝ գնահատելու ներդրումների տատանումների իրական ազդեցությունը տնտեսության վրա: Ուսումնասիրվել է նաև ՀՀ առևտրային բանկերում ներդրված ավանդների բաշխումն՝ ըստ ընտրանքային ընտրված ամիս- ների՝ 2020 թ. հոկտեմբերը (2020 թ. 44-օրյա պատերազմի ամիսներից մեկը) և 2022 թ. օգոստոս ամիսը (այդ ամսին հաջորդել է 2022 թվականի սեպտեմբերին տեղի ունեցած ՀՀ սահմանների նկատմամբ լայնամասշտաբ ռազմական գործո- ղությունը):

Հոդվածի նպատակն է ուսումնասիրել ՀՀ ներդրումային միջավայրի բարելավման համար ՀՀ գործարար միջավայրի վարկանիշը, այդ թվում վերջինիս բաղադրիչներից փոքր բաժնետերերի իրավունքների պաշտպանության բաղադրիչը, քանի որ այն տարիներ շարունակ նվազագույնն է եղել մյուսների համեմատ:

Հոդվածի խնդիրն է ներկայացնել ՀՀ ներդրումային մի- ջավայրի բարելավման գործիք հանդիսացող փոքր բաժնետե- րերի իրավունքների պաշտպանությանն առնչվող հարցերը՝

ներկայացնելով ֆիզիկական և իրավաբանական անձանց մոտ առկա ազատ դրամական միջոցների առկայությունը և դրանք որպես ներդրում փոքր բաժնետոմսերի ձեռքբերման միջոցով ներարկելու տնտեսության իրական հատված: Վերջիններիս արդյունքում կստեղծվեն առավել ամուր բիզնես փոխհարաբերություններ կազմակերպությունների միջև և կունենանք տնտեսության մեջ ազատ դրամական միջոցների ներգրավման արդյունավետության բարձրացում՝ մուլտիպլիկատիվ ազդեցության միջոցով:

Հոդվածի շրջանակներում կատարված հետազոտությունում կիրառվել է գիտական հետազոտության մեթոդներից գիտական ճանաչողության ընդհանուր մեթոդի էմպիրիկ մեթոդներից համեմատությունը, վերլուծության և ինդուկցիայի մեթոդը:

ՀՀ ներդրումային միջավայրի բարելավման տեսանկյունից՝ անհրաժեշտ է համապատասխան օրենսդրական փոփոխություններ իրականացնել և մշակել փոքր բաժնետերերին քանակի ավելացման ուղղված միջոցառումներ, որպեսզի կազմակերպություններում փոքր ներդրումներ իրականացնելու ցանկություն ունենան իրավաբանական և ֆիզիկական անձինք:

ВОПРОСЫ РАСШИРЕНИЯ ПОЛНОМОЧИЙ МЕЛКИХ АКЦИОНЕРОВ В КОНТЕКСТЕ АКТИВИЗАЦИИ БИЗНЕСА В РА

Ключевые слова - инвестиции, бизнес-среда, права мелких акционеров, инвестиционная политика, депозиты, свободные деньги

В рамках статьи было изучено сочетание показателей инвестиций, экономического роста и индекса-дефлятора ВВП в Армении для оценки реального влияния колебаний инвестиций на экономику. Изучалась также распределенность вкладов, вложенных в коммерческие банки РА, по выборочно выбранным двум месяцам: октябрь 2020 года (самый тяжелый месяц 44-дневной войны 2020 года) и август 2022 года (за указанным месяцем последовала широкомасштабная военная операция против границ РА в сентябре 2022 года).

Цель статьи-изучить рейтинг бизнес-среды РА для улучшения инвестиционной среды РА, в том числе компонента защиты прав мелких акционеров, поскольку данный компонент рейтинга бизнес-среды РА на протяжении многих лет был минимальным по сравнению с другими.

Задача статьи-представить вопросы, касающиеся защиты прав мелких акционеров, являющихся инструментом улучшения инвестиционной среды РА, представив наличие свободных денежных средств у физических и юридических лиц и в качестве инвестиций путем приобретения мелких акций для внедрения в реальный сектор экономики. В результате последних будут созданы более прочные деловые отношения между

организациями, и мы будем иметь повышение эффективности привлечения свободных денежных средств в экономику посредством мультипликативного эффекта. В исследовании использовались сопоставление методов научного исследования, общий метод научного познания, эмпирические методы, метод анализа и индукции.

С точки зрения улучшения инвестиционной среды РА необходимо осуществить соответствующие законодательные изменения и разработать меры, направленные на увеличение числа мелких акционеров, чтобы юридические и физические лица были заинтересованы в небольших инвестициях в организации.

Submitted: 28.10.2022

Accepted for publication: 15.11.2022

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ANALYSIS OF POSSIBLE RISK OF INSOLVENCY AND BANKRUPTCY IN ARMENIAN COMMERCIAL ORGANIZATIONS

Abstract: Considering the crisis situation caused by COVID-19 and the aftermath of the Artsakh war, in the framework of this article, we aim to identify insolvency by combining several approaches to bankruptcy risk forecasting in randomly selected RA commercial organizations in 2019-2020. problems in terms of insolvency. Inefficient financial risk management often leads to financial difficulties and crisis in commercial organizations, which reach a large scale, especially in the case of negative externalities. In the face of a large debt burden, when sales are declining in parallel and the profitability is declining, the near-solvency manifestations of commercial organizations often become chronic, which can eventually lead to bankruptcy.

Keywords: model, insolvency, bankruptcy, risk, forecast, approach, margin, current assets, current liabilities, liquidity

JEL classification: M40, M41

Research aim: to perform a comparative analysis of insolvency and bankruptcy of commercial organizations

Research novelty: the assessment of insolvency and bankruptcy of commercial organizations should not be based on only one approach, but it is necessary to make a comparative analysis of the results of the application of a number of models offered in the professional literature.

Introduction

The theory of anti-crisis management in commercial organizations practical issues have become more important in recent years, in particular, in the context of the crisis caused by COVID-19. In general, the crisis tendencies in the RA commercial organizations lately are mostly connected with external factors. In the context of this, it is very urgent to assess the insolvency and possible risk of bankruptcy of local commercial organizations, to introduce anti-crisis mechanisms and increase financial stability, to establish an effective financial control system.

Despite the financial analysis and theoretical methodological experience accumulated in the field of anti-crisis management, there are few comprehensive assessments by researchers on the potential risk of insolvency and bankruptcy.

Existing valuation and forecasting methods for them are largely based on financial accounting information, with the result that a number of important indicators of managerial accounting are left out of the overall valuation and forecasting process.

Research Results

In order to identify the causes of insolvency of commercial organizations, it is expedient to consider some interpretations of the provisions of classical economics, according to which the movement of capital value is the basis of economic activity of any business structure [1].

In the course of its life cycle, any commercial organization encounters both objective and subjective circumstances, as a result of which it is not possible to fulfill its obligations on time. The reason for this can be both the dry management actions and the complexities of non-fulfillment of timely payment obligations by the debtors for the sale of the product. Based on this circumstance, the insolvency of commercial organizations is classified into three

levels: temporary insolvency, permanent insolvency and absolute insolvency.

Temporary insolvency is related to the inability of the debtor organization to fulfill its monetary obligations at the current stage, at the same time the latter's financial situation is assessed as satisfactory, enabling it to make those payments at a later date.

Sustained insolvency occurs when the debtor organization is unable to meet the creditors' claims in the long run. As a rule, persistent insolvency raises systemic difficulties in this area of business, as well as the crisis manifestations of the corporate economy. One of the essential factors for the emergence of stable insolvency is the lack of liquid assets. Often, one of the possible ways to overcome insolvency is the sale of non-current assets or the involvement of long-term credit resources. However, the latter is considered more dangerous, as a result of which the financial risk of the organization's activities increases due to the debt burden and requires a sound business plan. Absolute insolvency is defined as the total liabilities exceeding the fair value of the assets typically exceed one year. The difficulty lies in the fact that absolute insolvency can not be prevented even in case of radical changes in the activities of the organization. In some cases, the elimination of absolute insolvency is possible through statutory capital investments or targeted financing, but such situations can be considered as exceptional, which is applicable to organizations of strategic or systemic importance. From the characteristics of the presented classification we can conclude that the solvency is not considered a direct sign of the incapacity of the economic entity; it is not always determined by that incapacity. At the same time, insolvency indicates systemic difficulties in the organization's activities, which are considered as a characteristic criterion for a more detailed study of prospective activities.

In practice, the insolvency of organizations depends not only on the internal features of the organization of finances, but also largely on external factors of the financial environment. At the present time, external factors influence certain directions of the organization's activity, thus participating in the formation of a dynamic equilibrium state of the microenvironment. In this case, the internal factors of the financial environment directly participate in the formation of the dynamic equilibrium state of the macro-environment in the future stages.

Thus, we can say that in assessing the current financial condition of the organization, but the problem of predicting the potential risk of insolvency and bankruptcy of organizations requires taking into account the predictive value of external factors of the financial condition of the enterprise. At present, the main emphasis in insolvency risk assessment and forecasting methods is mainly on the internal performance of the organization, a significant portion of which is based on accounting data. However, these data are characterized by a certain inertia, especially in unstable economic conditions; they do not fully reflect the real financial situation of the organization.

Examining the impact of external factors on the risk of insolvency of organizations is associated with a number of complications. First of all, the financial condition of business structural units can influence the change of the market structure non-economic factors of the financial environment. A separate issue in this regard is the determination of the priorities of the sectoral criteria of the financial and economic activity of the organization, the interrelationship of external factors of the financial environment. In addition, the study of the impact of external factors on the risk of insolvency of organizations requires a sufficient

amount of data for analysis, which must be complete and reliable. The main complexity is that a significant part of the required quantitative information is considered as internal accounting information and is missing in the available available sources. At the same time, there are some difficulties in taking into account the impact of such external factors on the financial condition of the organization, such as natural geographical, demographic, climatic, legal factors.

Existing methods of predicting the insolvency and bankruptcy risk of organizations in the professional literature are divided into two groups:

- Quantitative,
- **Qualitative.**

Quantitative methods are based on the calculation of a certain conditional indicator, the significance of which is considered as an assessment of the financial condition of the organization, or are based on a comprehensive analysis of the significance of financial ratios. The basis of quantitative methods is the processing of analytical information, which is mostly related to the data of the organization's accounting reports. Obtaining the necessary reliable analytical data, which will describe the real financial condition of the organization with high accuracy, is considered to be the main problem to be solved by quantitative methods.

As for the quantitative-qualitative methods of insolvency, bankruptcy risk of organizations, at the present stage there is no common approach to their classification in the professional literature - a standard methodology regulating their use.

The first attempts to assess the financial condition of organizations were made in the early 19th century. The first indicator used for this purpose was creditworthiness.

However, it was not until the 20th century that financial and economic indicators began to be widely used to predict not only insolvency but also various financial difficulties. Altman and Beaver have made a great contribution to this process.

Beaver 1966. To predict the probable risk of bankruptcy of organizations, he proposed model [2, Pages 71-111], for the construction of which data from 79 American companies, which went bankrupt in 1954-1964 were included.

The best known approaches to insolvency risk assessment is presented Altman [3, Pages 278-285, 4, pp. 589-609]. The approach proposed by Altman is currently considered one of the most popular methods of predicting insolvency [5, pp. 189-209].

Altman's main contribution is the use of multidisciplinary analysis in prediction models, which was later continued by a large number of researchers.

Studying Taffler 1969-1975 . 92 organizations, 46 of which failed and 46 were financially viable, also proposed four-factor models for predicting potential risk of bankruptcy [7, p. 169].

In their research, the issue of bankruptcy forecasting and financial recovery of commercial organizations was addressed by A. Milkov [8], I. Dolgol [9, Pages 54-56], L. Jurova A. Shekhtman [10, Pages 32-38], EGFiodorova, E. Gilenko S. Dovzhenko [11, Pages 85-92], T. Vysotskayan [12, Pages 1-12] and others. At different stages of time, Armenian researchers have proposed comprehensive estimates of the risk of insolvency of commercial organizations and the potential risk of bankruptcy. In particular, S. In his dissertation on economics, Torosyan proposed four factor equations within regression analysis [13, Pages 83-85].

Within the framework of the rating methods, A. Sheremet, RSSifulin and EGHEgash մշակ have developed a system of indicators իկա a method of express assessment of the stability of organizations. With this method, the rating of organizations is

carried out by means of 5 indicators, which, according to the mentioned researchers, more fully describe the financial situation. The equation for determining the total rating of the proposed rating is as follows [14]:

$$R = 2 * K_1 + 0.1 * K_2 + 0.08 * K_3 + 1.54 * K_4 + K_5, \quad (1)$$

Where:

K_1 = own current assets / current assets,

K_2 = current assets / current liabilities

K_3 = net sales revenue / equity,

K_4 = profit from sales / net income from sales,

K_5 = net profit / equity.

According to this method, if the actual values of the financial ratios fully correspond to their normative minimum values, the rating of the organization will be equal to 1. For the organizations, the rating of which will be less than 1, the financial situation will be assessed as unsatisfactory.

Fulmer was one of the researchers in 1984. proposed a model for classifying the potential risk of bankruptcy of organizations, during the construction of which 60 organizations were observed, 30 failed, 30 operating normally with an average annual turnover of \$ 455,000. Fuller model has the following appearance :

$$H = 5.528 * X_1 + 0.212 * X_2 + 0.073 * X_3 + 1,270 * X_4 - 0.120 * X_5 + 2.335 * X_6 + 0.575 * X_7 + 1.083 * X_8 + 0.894 * X_9 - 6.075, \quad (2)$$

Where:

X_1 - total retained earnings / balance sheet of previous years;

X_2 net proceeds from sale / balance sheet total

X_3 profit before tax / equity

X_4 cash flows / total liabilities

X_5 long-term liabilities / balance sheet total

X_6 are current liabilities / assets

X_7 log (tangible assets),

X_8 current assets / liabilities

X_9 - log (profit before tax + interest payable) / interest paid).

Conclusion

Using the models described above in Armenian commercial organizations, we came to the following conclusions.

- ✓ Solving the problem of restoring solvency and financial stability: Gazprom Armenia CJSC, Bacon Product LLC, Charat Kapan CJSC, TEX CJSC, Map CJSC, Vedi Alco
- ✓ All randomly selected organizations have the problem of improving their liquidity;
- ✓ Concern Energomash CJSC, Alex Textile LLC, Yerevan Beer CJSC, Armenian Mining Contractor LLC have a problem of strengthening financial stability.

In our opinion, the solution of the identified problems will be more effective if financial stability, liquidity, solvency, interconnection harmonization and determination of its border ranges are implemented within the framework of fiscal policy.

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Խաչատուր Բաբոյան
տ.գ.թ., ՀՀ ԳԱԱ Մ. Քոթանյանի անվան
տնտեսագիտության ինստիտուտ

**ԱՆՎՃԱՐՈՒՆԱԿՈՒԹՅԱՆ ԵՎ ՍՆԱՆԿԱՑՄԱՆ
ՀԱՎԱՆԱԿԱՆ ՌԻՍԿԻ ՎԵՐԼՈՒԾՈՒԹՅՈՒՆԸ ՀՀ
ԱՌԵՎՏՐԱՅԻՆ ԿԱԶՄԱԿԵՐՊՈՒԹՅՈՒՆՆԵՐՈՒՄ**

Բանալի բառեր – մոդել, անվճարունակություն, սնանկություն, ռիսկ, կանխատեսում, մոտեցում, սահմանային միջակայք, ընթացիկ ակտիվներ, ընթացիկ պարտավորություններ, իրացվելիություն

Նկատի ունենալով COVID-19-ով պայմանավորված ճգնաժամային վիճակը և Արցախյան պատերազմի հետևանքները սույն հոդվածի շրջանակներում մեր կողմից նպատակ է դրվել անվճարունակության և սնանկության ռիսկի կանխատեսման մի քանի մոտեցումների համադրմամբ վեր հանել պատահական ընտրված ՀՀ առևտրային կազմակերպություններում 2019-2020 թթ. կտրվածքով անվճարունակության առումով կուտակված խնդիրները:

Շատ հաճախ ֆինանսական ռիսկերի անարդյունավետ կառավարումը առևտրային կազմակերպություններում դառնում է ֆինանսական դժվարությունների և ճգնաժամի պատճառ, որը մեծ մասշտաբների է հասնում հատկապես արտաքին միջավայրի բացասական դրսևորումների դեպքում: Պարտքային մեծ բեռի կուտակման պայմաններում, երբ զուգահեռաբար կրճատվում են իրացվման ծավալներն ու տեղի է ունենում շահութաբերության նվազում, առևտրային կազմակերպությունների մոտ անվճարունակության դրսևորումները շատ հաճախ սկսում են կրել քրոնիկական բնույթ, ինչն էլ վերջնարդյունքում կարող է դառնալ սնանկության պատճառ:

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АНАЛИЗ ВЕРОЯТНОСТИ РИСКА НЕПЛАТЕЖЕСПОСОБНОСТИ И БАНКРОТСТВА ТОРГОВЫХ ОРГАНИЗАЦИЙ РА

Ключевые слова - модель, несостоятельность, банкротство, риск, прогноз, подход, маржа, оборотные активы, текущие обязательства, ликвидность

Учитывая кризисную ситуацию, обусловленную COVID-19 и последствиями Арцахской войны в рамках данной статьи стремились выявить неплатежеспособность бизнеса, путем объединения нескольких подходов к прогнозированию риска банкротства случайно выбранных коммерческих организаций РА в 2019-2020 гг. с точки зрения проблем с неплатежеспособностью.

Неэффективное управление финансовыми рисками часто приводит к финансовым затруднениям и кризисам в коммерческих организациях, которые достигают больших масштабов, особенно в случае отрицательных внешних эффектов. В условиях большой долговой нагрузки, когда параллельно падают объемы продаж и снижается рентабельность, проявления околоплатежеспособности коммерческих организаций нередко приобретают хронический характер, что в итоге может привести к банкротству.

Submitted: 20.08.2022

Accepted for publication: 15.11.2022

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RISK FACTORS MODEL AND PROJECT MANAGEMENT: A STUDY OF THE MUNICIPAL ORGANIZATION

Abstract: In recent years, project risk-taking has been considered by many managers as well as researchers. In the present study, a hybrid method has been used to achieve the model. 10 pivotal studies in this field have been reviewed. Three main coding steps were performed to achieve the final model of this study.

Keywords: project management, hybrid approach, selection process, risk management

Research novelty: In this research, the causal conditions of the internal processes of organizational culture were considered as the main group. Risk strategies were also identified and entered into the final model. This model includes all areas and risk interferer. Finally, we arrive at a dynamic model of project management risk-taking, the relationships of which are defined.

Introduction

Due to their nature, projects are exposed to many risks. If the project risks are not managed properly, they will incur heavy costs. Therefore, project risk management is an important issue for developers. In general, project risk management includes three stages of risk identification, assessment and response [1, 2].

Researchers have cited some of the reasons for the many failures in service organizations' projects as the inadequacy of risk management mechanisms and processes, as well as the negligence of project managers in implementing them. Projects whose risks are

not effectively managed will face greater risks [3]. However, as the projects of service organizations become more complex and important, there is a need to implement a systematic approach to deal with project issues and risks to ensure greater project success [4]. In the book (Measures, Key Performance Indicators, and Project Management Indicators), Harold Krzner, a leading professor of project management, states that about 70% of projects in the world are delayed [5]. It is observed that delays in world projects are a natural thing that indicates poor performance in various areas of projects. In Iran, which is another developing country, delays in implementation projects are enormous. In 1985, the Center for Research and Development of Project Management conducted a study and published a report on the reasons for the delays in the country's projects. The report states that the average project time in the second development plan was 6/8 years, in the third development plan was 5/9 years, and in the first year of the fourth development plan was 11 years, and the duration of Iran's national projects was 5/2 years. Is equal to the global duration. In its report, the Development and Renovation Organization of Iran also mentioned that the duration of large-scale projects at the international level is 3 years, which is about 9 to 11 years in Iran. Risk identification involves the process of determining the risks affecting the project and documenting their characteristics. Risk assessment examines project risks according to their characteristics such as probability, severity and risk response to progress. In addition, strategies are selected and implemented with the aim of reducing risk exposure. Risk response plays an important role in reducing the negative severity of project risks [3]. In this study, an attempt is made to introduce the mentioned gap by introducing a model that

covers some approaches, steps and underlying aspects of project management.

Research Methods

One of the methods that has been introduced to study the composition and pathology of past research in the past few years is a hybrid approach, which has been used mostly in the field of medical research [6]. Hypertext is a qualitative method that is used to provide interpretations and theories through a combination and compare a qualitative study in a specific field; In other words, a hybrid approach transforms the results of qualitative studies in the relevant field again [7]. This method is especially useful when the researcher is looking for a visa concept in existing articles as well as extensive paradigm shifts have occurred in the theoretical foundations of a field of study hence given that the concepts presented for risk Acceptability in studies is scattered in terms of context, concept and consequences, and risk-taking and project management in areas outside of service organizations have been examined, using this approach to provide a coherent model is justified [8].

The steps of the hybrid approach are as follows:

1. Beginning: Develop a question that the study answers. This question can be changed during the study;
2. Identify the relevant study: Pay attention to the most relevant studies and exclude studies that are less relevant;
3. Reading: The process of constantly reading and taking notes on metaphors during synthesis;
4. Controlling the relationship between studies: Comparison of identified concepts of studies to determine the relationship between them (triple coding process was used);

5. Review of each study from the perspective of other studies: The concepts identified in each study and their relationship with other studies (reviewed) are compared;
6. Synthesis: determining common concepts by comparing the interpretation of concepts with each other obtained from the previous step and constructing new concepts;
7. Report synthesis results: Synthesis results that are expressed in terms of culture and language of the audience to be understood by them [9,10].

The questions posed were presented as the first a hybrid approach step in the introduction. The second stage of a hybrid approach deals with the statistical determination of the studied reports and the selection of the final sample [11]. This is a hybrid approach of determining the studies that should be included in the process and the cases that should be excluded [12].

The statistical population of this research includes articles and dissertations that have been done between 2000 and 2020 in the field of project management and risk taking. A Google Scholar site search was performed with three key exact phrases:

- Project management (300 items);
- Project risk-taking (88 cases);
- Project timing (47 items);

Having each of these expressions was the criterion for entering studies that obtained a sample of 434 studies. The study continued due to having a project management risk model, which was the criterion for excluding related studies, and finally reduced the sample to 10 final studies. The selection process is presented in Figure 1.

To go through stages 3-6 meta-combination, a three-stage coding approach was used through which all the remaining studies

were read and coded in three stages: free coding, axial coding and selective coding. Free coding is the process of size reduction, conceptualization evaluation, and data classification [11]. This approach is a process of deductive analysis to identify concepts and characteristics [14]. Axial coding is the process of assigning free codes to classes. Axial coding is the process of linking classes (higher abstraction rates) to subclasses (lower abstraction). The central term was used because the coding in this approach revolves around the main class and connects the subclasses. Selective coding is the final stage in coding during which the theory is modified and combined.

The main class is modified in selective coding to reveal the main theme of the theory and the details of the combination between the main class and other classes [13]. The Bohemian (2004) coding example was used to integrate the classes to obtain the final model.

Atlas T6 program was used in the coding process to record the codes and concepts of exploitation as well as the illustration of the final model [15,16]. The inter-coder reliability method was used to analyze the reliability of the softs. Inter-coder reliability the number of agreements between two coders over the same source, which is divided by the average number of codes generated by each coder, is usually given as a percentage. The inter-encoder reliability analysis for the data is presented in Table 1.

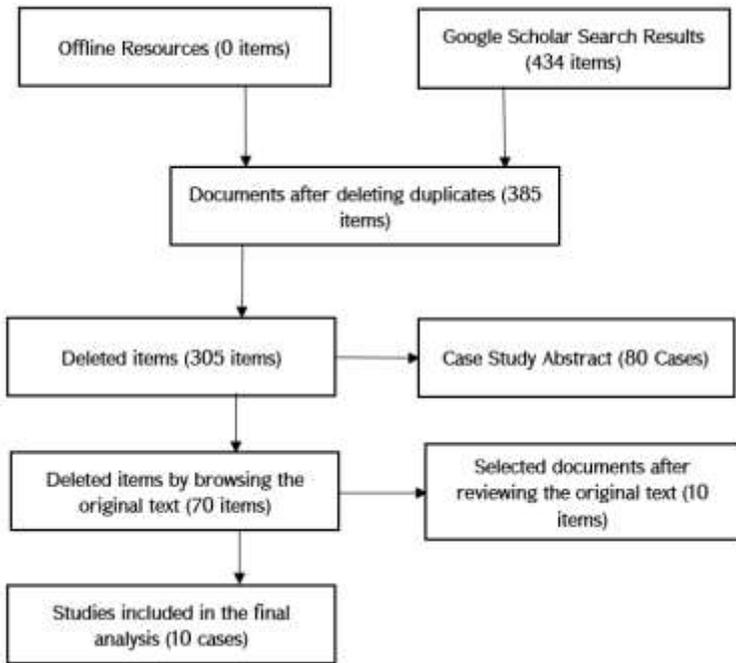


Figure 1. Document selection process

Table 1. Reliability analysis

Coded items	Number of agreements	Number of differences	Percent
Article 3	15	14	93%
Article 5	16	13	88%
Article 7	25	22	91%
Total	56	51	91%

According to Table 1. The total percentage of reliability between the coders in the present study was 91%, which is more than the threshold of 90% for this criterion.

Analysis of research data and findings

The models studied in this study are summarized in Table 2.

Table 2. Summary of reviewed models

Researcher	Summary of findings
[17]	In the present study, a model based on synergies among project risk responses was developed that is capable of considering the various criteria in the objective function and optimizing them based on the defined projects. Risk response selection for a large-scale project is a complex problem. Because of the nondeterministic polynomial time (NP)-hardness of the presented model, two meta-heuristic algorithms, namely, the self-adaptive imperialist competitive algorithm and invasive weed optimization, were developed to solve the proposed MIP model. A large-scale high-rise residential building was evaluated as a case study to investigate the model proposed in this study empirically.
[18]	In this article, we present our own construction process model consisting of 16 stages and eight phases, which is particularly applicable to large investment projects. In the context of each project phase, we examine how the appropriate way of scheduling construction processes affects the problem of the risk of prolonging individual phases and the whole project, as well as of not meeting Deadlines (which is one of the main problems faced by management practitioners in the construction industry). We show how the implementation of the process model (individual phases) and the whole project can be considered in the context of the covariance matrix between all its phases and how changes in the arrangement of these phases can affect the risk of time extension of the whole project. Our study is based on simulation data for a large development project (Fort Bema/Parkowo-Leśne housing estate complex) in Bemowo, a district of Warsaw, carried out between 1999 and 2012. The entire investment project involved the construction of almost 120,000 m ² of floor space.
[19]	Through expert interviews supported by policy documents, we found that the municipalities understand compound events as either a condition or situation and develop precautionary strategies to some extent. Depending on their respective geographical surroundings, they observe compound events either as no clear trend (Odense), a trend to be critically watched (Hvidovre), or already as a partial reality (Vejle). They perceive flood drivers and

	<p>their combinations as major physical risks to which they adopt different tailor-made solutions. By choosing a bottom-up approach focusing on local governance structures, it demonstrated that the mismatch between responsibility and capacity and the ongoing separation of services related to climatic risks in the Danish municipality context need to be critically considered. The findings highlight that the complex challenge of compound events cannot be solved by one (scientific) discipline alone. Thus, the study advocates a broader inclusion of scientific practices and increased emphasis on local focus within compound event research to foster creative thinking, better preparation, and subsequently more effective management of their risks.</p>
[20]	<p>The purpose of this article is to present a hybrid project management approach that uses not only traditional project management approaches, but also agile and pure approaches and seeks to promote change, strengthen customer interaction and increase project value by using it. Component of agile approach to increase the probability of success of construction projects; And to eliminate waste by visualizing the component of the pure approach. This paper thoroughly reviews the existing literature on different project management approaches and proposes a hybrid project management model for construction projects, and presents and discusses key traditional, agile and pure methods.</p>
[21]	<p>This paper presents a framework for solving a risk response action selection problem by considering: 1) the impact of risk events on the project objectives, 2) the interactions between risk events, 3) management criteria and preferences. To full these purposes, a framework is developed by combining an optimization-based model with a Multi-Criteria Decision Making (MCDM) approach. First, in the optimization-based model, Ant Colony Optimization (ACO) is used to find the best combination of response actions with greater effects on time, cost, and quality. In addition, in this model, to overcome the imprecision situation resulting from lack of knowledge or insufficient data, risk parameters are determined using the fuzzy set theory. Moreover, the Design Structure Matrix (DSM) is used to capture the effect of interactions between risk events. Second, the Fuzzy Technique for Order Preference by Similarity to Ideal Solution (FTOPSIS) method is used to analyze the obtained solutions by ACO based on other management criteria. Finally, the efficacy of the proposed framework is examined by its implementation in a real building construction project. Discussions concerning the case study show that decision makers can evaluate</p>

	more aspects of response actions by using the proposed framework.
[22]	An innovative integrated model aimed at flexing the existing gap, supporting a structural decision-making process, and facilitating the integration of two disciplines characteristic of different approaches and competencies, but with one common goal: the great success of the model's validity with an average of a. The items identified on one of the EPC contractors were cost / benefit analysis on four items.
[23]	This study examined the critical risk factors in GPC and provided relevant suggestions for managers to reduce risk and ensure the correctness of the process. First, 18 risk factors were summarized along four dimensions: the certification institution, the entrusting enterprise, the certification business, and the implementation of the certification. Second, the Delphi method was used to determine the formal research framework, and the decision-making trial and evaluation laboratory (DEMATEL) method was applied to analyze the causal relationships among the risk factors to identify the ones driving risk and those representing the outcomes of GPC .This was used to construct a causality diagram of the risks related to green certification. Finally, the analytic network process (ANP) method was used to calculate the weight of each risk factor, and the weighted prominence of each is calculated to identify the critical factors. The results showed that the working life and experience of the certification institution were the critical driving risk factors in GPC. Corresponding countermeasures were also proposed to mitigate these risk factors

As mentioned in the research method, three coding steps were performed on the summarized texts. The first stage was free coding, in which the texts and summary phrases that were important in this field of study were transformed into meaningful citations, and each was then labeled and concepts and specifications were formed. When the initial tagging was completed, 60 original tagged quotes were obtained.

By examining the initial codes and comparing them with each other, the overlap between them was determined and the overlapping items were merged under one label. With the publication of this work, the number of codes in this step reached

39, and these codes are listed in Table 3. To have meaningful classes, the original codes had to be placed in more abstract classes. This process is called axial coding. Classes are also associated with subclasses during this process. First the main floor is selected and then the coding is done around the main floor. The result of axial coding is shown in Table 3 (class).

Table 3. The result of axial coding

N	Code	Classification	Total
1	Specialized personnel	Familiarity of employees with project control	2
2	Proper trainability		3
3	Lack of infrastructure		3
4	Avoid financial loss	Financial burden imposed	2
5	Identify and track costs incurred		2
6	Exact project risk	Initial miscalculation and incomplete definition of stakeholder needs	1
7	Accurate and accessible tools		2
8	Determine the scope of the project		2
9	Use of previous project data		3
10	Intra-organizational relationships	Internal processes of organizational culture	2
11	Creating organizational culture		2
12	Non-continuity in project implementation	Organizational risk	1
13	Lack of strong supervision		2
14	Lack of pursuit of rights		2
15	Insufficient information		2
16	Poor flow of information transfer from senior managers to colleagues		1
17	Lack of transparency of information		1
18	Creating inconsistencies due to management styles between project partners		2

19	Lack of mutual understanding due to the difference in organizational culture between recipient and donor		1	
20	Wrong way of transferring technical knowledge		2	
21	Lack of regulatory and legal system		2	
22	Poor decision-making process in the organization		2	
23	Complex and ambiguous contracts		2	
24	Low efficiency of specialists		2	
25	Insufficient commitment of the senior manager	Individual risk	2	
26	Manager's ignorance of potential project risks		3	
27	Weakness in teamwork		2	
28	Weak social and communication skills		3	
29	Behaviors contrary to professional ethics		3	
30	Weaknesses in outsourcing		3	
31	Weakness of specialized manpower		3	
32	Political risks		2	
33	Change in the rules		Environmental risk	2
34	Environmental laws			3
35	Exchange rate fluctuations	4		
36	Dangerous technology	3		
37	Informal communication	Interpersonal risk	4	
38	Weak communication relationship		3	
39	Lack of mutual trust		1	
40	Lack of teamwork spirit		2	
41	Insufficient experience of employees		1	
Total	17+7+6+3+11+6+15+16		81	

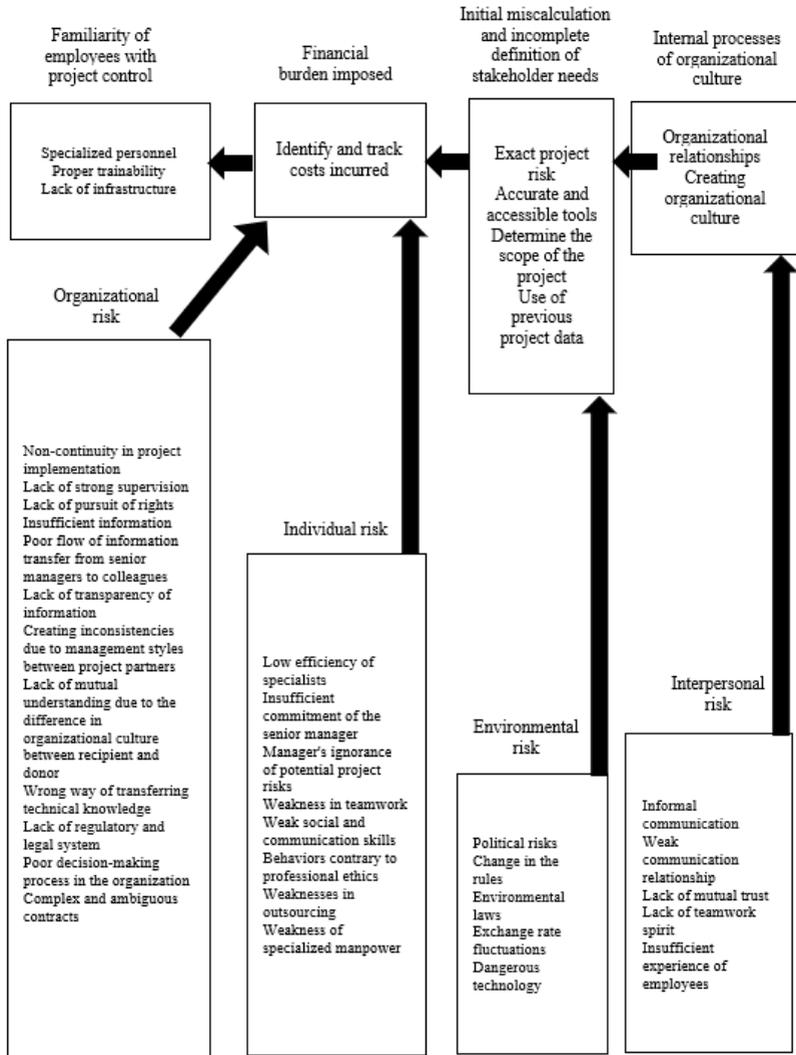


Figure 2. Dynamic model of project management risk-taking

Conclusion

Project management and project risk-taking have so far attracted the attention of many researchers in this field, and each study has sought to clarify its various aspects; But in this study, a holistic model was introduced in which the dynamics of project management can be seen; a model that combines project risk-taking with the nature and process of project management, cognitive aspects, and the context and environment of the project. Existing models of project management and risk-taking were examined and their summaries were coded in three stages of free, axial and selective coding. Based on this integrated model, it was found that risk-taking also remained an option among all options. It is important to note that the risk selection and analysis process is informal and personal in the beginning and becomes a formal process with cognitive processes and reduction of uncertainty due to the completion of available information.

It takes an analytical form the results showed that some of the factors of internal processes are called organizational culture, preceded by risk-taking and are as follows (organizational relationships, creating organizational culture). This study showed that the temporal aspects of risk-taking should also be included in the model. These codes had a sequence time load that was, as it were, an information step; the stage of risk assessment and selection and the stage of risk design and implementation. The last floor was a new floor that was added to the common models extracted from the three coding steps. Although many researchers want the evaluation of the model to be more empirical, considered it in detail, but no holistic model to consider in-house culture, organizational risk, individual risk, interpersonal risk for project management, and there is no risk. The present project introduces a framework for

such a model; however, it is suggested that future research evaluate the components of the model and the relationships within it empirically in order to achieve stronger results. The findings of this study revealed the strategies that project managers use in the risk-taking process and can be useful in preparing hybrid approaches.

Research streams determine the factors influencing the risk-taking process. But these studies ultimately limit risk-taking to cost-benefit calculations to determine the actual output of projects. This stream ignores non-monetary costs and benefits. The consequences and strategies of risk-taking, as revealed in this study, largely fill the gap, but there is an urgent need to separate these factors and separate their relative effects on risk-taking. Future research should focus more on non-monetary considerations in project risk-taking. Project risk research is a process that includes studies that begin mostly with the minds of project managers and follow the steps until the final choice of risk. These studies should further consider the internal and external environmental factors and the context and consequences of risk that became clear in the present study. More empirical studies are needed to determine the relationships between project managers' minds and underlying factors. Also, political, cultural and social environments can be introduced as an impact on project risk, which itself requires empirical studies.

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**ՆԱԽԱԳԾԵՐԻ ԿԱՌԱՎԱՐՈՒՄԸ ԵՎ ՌԻՍԿԵՐԻ
ԳՈՐԾՈՆԱՅԻՆ ՄՈԴԵԼԸ ՄՈՒՆԻՑԻՊԱԼ
ԿԱԶՄԱԿԵՐՊՈՒԹՅՈՒՆՆԵՐՈՒՄ**

Բանալի բառեր - նախագծերի կառավարում, հիբրիդային մոտեցում, ընտրանքի գործընթաց, ռիսկերի կառավարում

Հետազոտությունը նվիրված է մունիցիպալ կառույցներում իրականացվող ռիսկերի կառավարման գործընթացի բարելավման հիմնախնդիրներին: Նախագծերի վերջնարդյունքների ստացման գծով ռիսկախին գործողություններն ընտրելիս ընդհանուր շեշտադրում չի կատարվել միայն ծախսերի և օգուտների հաշվարկների վրա, այլև նախագծային ռիսկերի ընդունման ժամանակ առավելապես կենտրոնացել ենք ոչ դրամական նկատառումների վրա:

Ծրագրի իրագործմանը առնչվող ռիսկերի հետազոտությունը գործընթաց է, որը ներառում է ուսումնասիրություններ, որոնք սկսվում են հիմնականում ծրագրի ղեկավարներ անձնակազմի նախաձեռնությամբ՝ մինչև ռիսկի վերջնական ընտրությունը: Այստեղ հաշվի են առնվում ներքին և արտաքին միջավայրի գործոնները, ռիսկի համատեքստն ու հետևանքները, որոնք իրենց պարզաբանումներն են ստացել սույն ուսումնասիրության մեջ:

Ավելի շատ էմպիրիկ ուսումնասիրություններ են անհրաժեշտ՝ որոշելու փոխհարաբերությունները ծրագրերի ղեկավար անձնակազմի մտահաղացումների և բացահայտված ռիսկային գործոնների միջև: Պետք է նշել, որ նաև քաղաքական, մշակութային և սոցիալական միջավայրերը կարող են ներկայացվել որպես ազդեցություն ծրագրի ռիսկի վրա, որն ինքնին պահանջում է էմպիրիկ ուսումնասիրություններ: Հոդվածում վերանայվել են ոլորտին առնչվող շուրջ 10 առանցքային հետազոտություն: Այս հետազոտության վերջնական մոդելին հասնելու համար իրականացվել են կոդավորման երեք հիմնական քայլեր՝ կիրառելով հիբրիդային մոտեցում:

ПРОЕКТНЫЙ МЕНЕДЖМЕНТ И МОДЕЛЬ ФАКТОРНЫХ РИСКОВ В МУНИЦИПАЛЬНЫХ ОРГАНИЗАЦИЯХ

Ключевые слова - управление проектами, гибридный подход, процесс выборки, управление рисками

Исследование посвящено вопросам совершенствования процесса управления рисками в муниципальных структурах. При выборе рискованных действий для получения конечных результатов проекта, общий упор сделан не только на расчет затрат и результатов, но и недежных активов. Акцент на проектных рисках был в основном на неденежных соображениях.

Исследование рисков реализации проекта - это процесс, который включает в себя инициативы в первую очередь менеджмента проекта вплоть до окончательного выбора риска. Он принимает во внимание факторы внутренней и внешней среды, контекст риска и последствия, которые были выявлены в этом исследовании.

Необходимы дополнительные эмпирические исследования, чтобы определить взаимосвязь между идеями руководителей проектов и «выявленными факторами риска».

Также политическая, культурная и социальная среда может быть представлена как влияние на проектный риск, что само по себе требует эмпирического исследования.

В статье рассмотрены около 10 ключевых исследований, связанных с этой областью. Чтобы получить окончательную модель этого исследования, были выполнены три основных этапа кодирования с использованием гибридного подхода.

Submitted: 20.10.2022

Accepted for publication: 15.11.2022

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EVALUATION OF THE EFFECTIVENESS OF COMMUNITY CONSOLIDATION USING AN ECONOMETRIC MODEL

The process of community consolidation was almost completed by 2021. Elections to local self-government bodies of enlarged communities were held, as a result of which the number of communities became 79. In this context, there is a need to assess the effectiveness of the consolidation of communities, to identify the factors affecting them and the degree of their influence, to present methods of quantitative assessment characterizing the relationship between these factors. As part of the study, a survey was conducted, the results of which were summed up and evaluated by the least squares method, as a result of which a linear relationship was revealed between the effectiveness of community enlargement and factors affecting it.

Keywords: consolidation of communities, efficiency of consolidation, participation of residents, financial independence, linear regression model, survey

In 2011, by the protocol decision of the Government of the Republic of Armenia No. 44, the concept of consolidation of communities and the formation of intercommunal associations was approved. According to the concept, a new stage of administrative and territorial reforms in the Republic of Armenia was launched, which was to significantly affect the capabilities of communities, become the basis for the socio-economic development of communities [1, pp. 3-4].

Prior to the start of the process of community consolidation, there were 915 communities in the Republic of Armenia. So far, 5 stages of community consolidation have been carried out. The enlargement of communities began in 2015, and by the end of 2021, the largest number of communities were included in the enlargement program. In general, the number of communities has increased to 79, including the capital Yerevan. There are communities that have not yet been included in the consolidation process (communities inhabited by national minorities).

From the point of view of assessing the effectiveness of community enlargement, it is important to choose a model for evaluating the effectiveness of enlargement by residents. The chosen model should answer the following questions: how positively the residents consider the enlargement of their community, by what indicators it is possible to assess whether the enlargement had the same effectiveness for residents of the center and adjacent settlements. The main purpose of the conducted research is to find an answer to such questions.

In order to conduct the study, a survey was conducted in 6 enlarged communities of Gegharkunik region. The survey was conducted online (on the principle of voluntary sampling).

To determine the optimal sample size, a Sample Size Calculator was used. According to the population of Gegharkunik region, the confidence level is 95% and the confidence interval is 5%. The sample size required to meet the conditions is 384 [2].

419 residents took part in the survey. The sample is presented according to the gender μ community of the respondents. The sample is also presented according to education, age μ employment. 196 of the respondents represent the center of the enlarged community, and 223 - the adjacent settlements.

This indicator is more than important, since the survey results indicate that residents of the center and the adjacent settlement have significantly different ideas about the effectiveness of enlarging their community.

To the question "Please indicate how you assess the process of enlargement of your community as a whole", the majority of residents of adjacent settlements gave a negative answer, while only 12% of residents of the center believe that the enlargement had a negative result (figure 1).

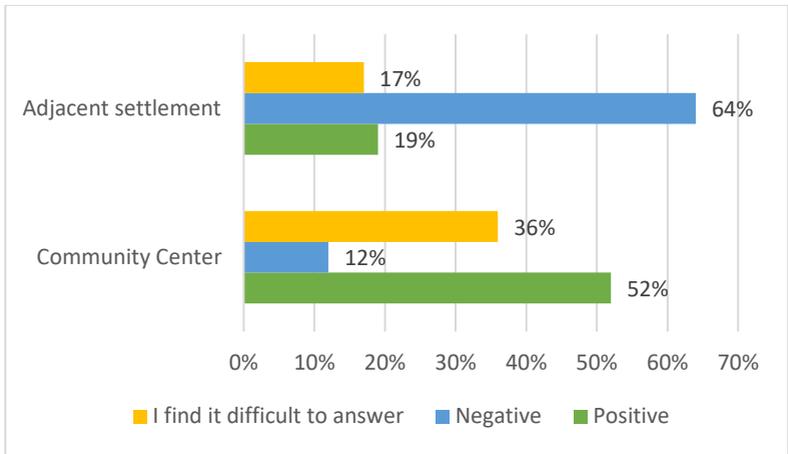


Figure 1. Effectiveness of community enlargement at the center and adjacent settlement

In addition, it is also interesting that the assessment of the effectiveness of the enlargement of residents also differs from the answer to the question when the community was enlarged. Residents of both communities enlarged in 2021 and residents of previously enlarged communities took part in the survey.

It became clear from the study that 44% of residents of a previously enlarged community negatively assess the enlargement,

and in the case of an enlarged community in 2021, this figure is 32%. It turns out that many residents have positive expectations from the enlargement of the community, while residents of an already enlarged community believe that these expectations were not met, and the enlargement did not give the desired result.

The main principle of the choice of questions was to identify the factors that determine the effectiveness of consolidation. The questions were chosen precisely with the assumption that the attitude of residents to enlargement depends on their answers.

The answers to the questions were multilevel. There were 2 to 5 possible answers to each question. The Likert survey scale was chosen for the survey.

A survey scale represents a set of answer options—either numeric or verbal—that cover a range of opinions on a topic. It's always part of a closed-ended question (a question that presents respondents with pre-populated answer choices) [3].

Then the different levels were converted to the same scale in order to include them in the model. The Likert scale conversion method was used for the conversion. The transformation was carried out according to the following formula [4].

$$Y = (B - A) * (x - a) / (b - a) + A$$

To summarize the results of the survey, we will try to build a linear regression model. The efficiency of consolidation was chosen as a dependent variable, and the other variables were chosen as independent variables. We believe that there is a linear relationship between these variables.

Below are all the independent variables selected for the model (Table 1).

Table 1. Independent variables included in the model

Q7	Have you participated in the local government elections in your enlarged community?	Q18	How you assess the effectiveness of the provision of services by local authorities in your community.
Q9	Please note whether you have ever participated in the activities of local self-government bodies of your community.	Q19	Please note how the consolidation of communities has affected or how it will affect the quality and availability of services provided by local authorities.
Q10	Please note whether you have made suggestions during public discussions.	Q20	Has the administrative head of your settlement effectively solves the issues you have raised?
Q11	For what reason you did not participate in the activities of local self-government bodies.?	Q21	Has the income of your community will increase as a result of the consolidation of communities?
Q12	Have you ever read your community's budget or the five-year community development program?	Q22	As a result of income growth after the consolidation of communities, will all settlements benefit equally or some communities will gain an advantage?
Q13	How the enlargement of communities has affected or how it will affect the level of participation of residents in the activities of local governments?	Q23	Please note how the consolidation of communities has affected or how it will affect the level of financial independence of communities.
Q14	How you assess the level of transparency of the activities of local governments in your community?	Q24	How the fact that the head of the enlarged community is not a resident of your settlement may affect your settlement.
Q15	How the consolidation of communities has affected or how it will affect the transparency (be accountable to the public) of the activities of local governments.	Q25	Please indicate how the distance between your adjacent settlement and the community center may affect the effectiveness of solving the problems that you raise.
Q16	Please indicate will the performance of garbage collection in your community improve as a result of the consolidation of communities.	Q26	Please pay attention to how you evaluate the activities of local authorities after the consolidation of communities.
Q17	Please indicate whether the organization of preschool education in your community will improve as a result of the consolidation of communities.		

The least squares method was used to assess the influence of 19 independent variables presented in the table. The model was compiled and evaluated using the software "Eviews 12".

As a result of the preliminary evaluation of the model, it turned out that some variables are not significant and their influence on the dependent variable is minimal. The preliminary model is shown in the figure 2.

Dependent Variable: EFFICIENCY
Method: Least Squares
Date: 05/15/22 Time: 17:11
Sample: 1 419
Included observations: 419

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Q7	-0.034087	0.018645	-1.828167	0.0683
Q9	0.065260	0.029498	2.212373	0.0275
Q10	0.028021	0.028678	0.977107	0.3291
Q11	-0.129599	0.028595	-4.532190	0.0000
Q12	0.010137	0.018865	0.537329	0.5913
Q13	0.138118	0.050958	2.710436	0.0070
Q14	0.138169	0.043140	3.156464	0.0017
Q15	0.119996	0.049550	2.421740	0.0159
Q16	0.023868	0.035937	0.664164	0.5070
Q17	0.043900	0.030232	1.452125	0.1473
Q18	-0.130217	0.042619	-3.055342	0.0024
Q19	-0.025522	0.041830	-0.610147	0.5421
Q20	-0.112004	0.023655	-4.734788	0.0000
Q21	0.064570	0.036838	1.752810	0.0804
Q22	-0.093286	0.022414	-4.161885	0.0000
Q23	0.109523	0.038118	2.873264	0.0043
Q24	-0.077794	0.025010	-3.110540	0.0020
Q25	0.035576	0.026231	1.356231	0.1758
Q26	0.087013	0.050723	1.715456	0.0870
R-squared	0.682914	Mean dependent var	0.343675	
Adjusted R-squared	0.668646	S.D. dependent var	0.475502	
S.E. of regression	0.273715	Akaike info criterion	0.290828	
Sum squared resid	29.96800	Schwarz criterion	0.473930	
Log likelihood	-41.92853	Hannan-Quinn criter.	0.363205	
Durbin-Watson stat	1.549142			

Figure 2. Initial econometric model

The insignificance of some variables was due to the existence of outliers, as a result of the exclusion of which variables become significant. In addition, all variables whose coefficient F (Prob) is less than 0.05 after the exclusion of outliers are removed from the model, as a result of which the quality of the model changes significantly, and the independent variables are significant and explain the dependent variable.

For a linear regression model, it is important that the data have a normal distribution. After removing the non-essential variables of the model, the normal distribution check looks like this (figure 3) .

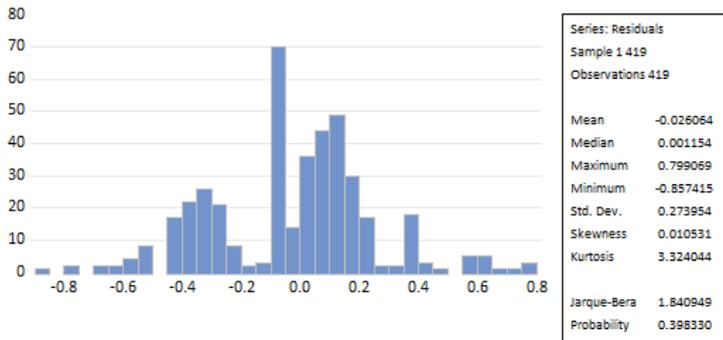


Figure 3. Result of normality test

In order for the data included in the model to have a normal distribution, it is necessary that, as a result of checking the normal distribution, the Skewness is equal to 0 (in the model-0.01), the Kurtosis is 3 (in the model-3.32) [5], and the Jarque-Bera coefficient in the model is 1.84. For comparison, we note that at the level of significance of 0.05, the critical value of the Jarque-Bera coefficient is 5.99 [6].

In general, we can say that with the exception of outliers, the data included in the model has a normal distribution, and there is a linear relationship between dependent variables and independent variables.

The next important indicator evaluating the quality of the model is the absence of autocorrelation, which is checked by the Durbin-Watson coefficient. In order for there to be no autocorrelation between the variables, it is necessary that the Durbin-Watson coefficient be 2 [7]. In the model, as we can see, it is equal to 1.54.

There are many methods that allow you to correct autocorrelation between variables and eliminate its influence on the model. Therefore, we have included a false variable (Efficiency (-1)) in the model, which

neutralizes autocorrelation. As a result of entering a false variable into the model, it received the following form (figure 4).

Dependent Variable: EFFICIENCY				
Method: Least Squares				
Date: 05/15/22 Time: 17:29				
Sample (adjusted): 2 419				
Included observations: 418 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
Q7	-0.021553	0.017258	-1.248907	0.2124
Q9	0.076756	0.019687	3.898821	0.0001
Q11	-0.115890	0.025027	-4.630579	0.0000
Q13	0.054397	0.049815	1.091978	0.2755
Q15	0.103155	0.044777	2.303732	0.0217
Q20	-0.057493	0.018477	-3.111592	0.0020
Q22	-0.070065	0.019712	-3.554421	0.0004
Q23	0.126898	0.035565	3.562465	0.0004
Q24	-0.056885	0.021622	-2.630894	0.0088
Q26	0.148057	0.043376	3.413359	0.0007
EFFICIENCY(-1)	0.260122	0.039588	6.570775	0.0000
R-squared	0.696329	Mean dependent var	0.342105	
Adjusted R-squared	0.688868	S. D. dependent var	0.474983	
S. E. of regression	0.264942	Akaike info criterion	0.207352	
Sum squared resid	28.56906	Schwarz criterion	0.313548	
Log likelihood	-32.33647	Hannan-Quinn criter.	0.249333	
Durbin-Watson stat	2.054201			

Figure 4. Final econometric model

As you can see, the Durbin-Watson coefficient has become 2.05, which means that there is no autocorrelation in the model.

Among the important characteristics of the model based on panel data are the criterion Akaike info, Schwartz and Hannan-Quinn. They allow you to compare which of the two models given better explains the dependent variable [8]. The values of these criteria in the initial and final form of the model are presented in the table 2.

Table 2. Initial and final values for evaluating the quality of model

Criterion	Initial value	Final value
Akaike info criterion	0.29	0.20
Shwarz criterion	0.47	0.31
Hannan-Quinn criterion	0.36	0.24

From the table it becomes clear that the quality of the model has significantly improved and it can well assess the dependent variable (the effectiveness of community consolidation).

The last important indicators of the model evaluation are the coefficient of determination (R^2) and the adjusted coefficient of determination (Adjusted R^2) [9]. In the model, they are equal to 0.69 and 0.68, respectively.

The coefficient of determination shows which part of the resulting indicator is interpreted by the behavior of independent variables. If the adjusted coefficient of determination is almost equal to the coefficient of determination, then it can be argued that the behavior of the independent variables included in the model clearly explains the behavior of the dependent indicator.

Generalizing the model, let's imagine what relationship exists between the assessment of the enlargement of communities and the selected independent variables. The results of the model are presented according to the following formula:

$$\text{Efficiency} = 0.07*Q9 - 0.13*Q11 + 0.12*Q15 - 0.05*Q20 - 0.08*Q22 + 0.14*Q23 - 0.06*Q24 + 0.16*Q26 + 0.28* \text{Efficiency}(-1)$$

It turns out that the effectiveness of community consolidation is highly appreciated: if a resident begins to participate in local self-government (Q9, Q11), if the transparency of the activities of local self-government bodies increases (Q15), the administrative head or the head of the community (in the case of the center) solves the problems of concern to residents (Q20), if after consolidation the incomes of all communities increase evenly (Q22), if the level of financial independence of communities increases (Q23), etc.

If we generalize the variables that affect the effectiveness of consolidation, then it can be argued that the effectiveness of the consolidation of communities depends primarily on the following 3 components:

- ✓ Participation in local self-government,

- ✓ Transparency and accountability of the activities of local self-government bodies,
- ✓ Financial independence.

However, it should also be considered that months have passed since the consolidation in a number of communities, and we can only rely on subjective assessments of residents to assess the effectiveness.

Conclusion

However, it becomes clear from the conducted research that:

- ✓ Residents of the center positively assess the consolidation of communities,
- ✓ The opinion of residents of a previously enlarged community differs significantly from the opinion of residents of communities that were enlarged only recently,
- ✓ The evaluation of the effectiveness of community consolidation is linearly dependent on the indicators included in the model,
- ✓ Participation, accountability of local self-government bodies, financial independence are the main indicators characterizing the effectiveness of community consolidation.

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**ՀԱՄԱՅՆՔՆԵՐԻ ԽՈՇՈՐԱՑՄԱՆ ԱՐԴՅՈՒՆԱՎԵՏՈՒԹՅԱՆ
ԳՆԱՀԱՏՈՒՄԸ ԷԿՈՆՈՄԵՏՐԻԿ ՄՈԴԵԼԻ ԿԻՐԱՌՄԱՄԲ**

Բանալի բառեր - Համայնքների խոշորացում, խոշորացման արդյունավետություն, մասնակցային կառավարում, ֆինանսական անկախություն, գծային ռեգրեսիոն մոդել, հարցում

Համայնքների խոշորացման գործընթացը 2021 թվական գրեթե ավարտին հասցվեց: Տեղի ունեցան խոշորացված համայնքների տեղական ինքնակառավարման մարմինների ընտրություններ, որի արդյունքում համայնքների թիվը դարձավ 79: Այս համատեքստում անհրաժեշտություն է առաջանում գնահատել համայնքների խոշորացման արդյունավետությունը, բացահայտել դրա վրա ազդող գործոնները և դրանց ազդեցության չափը, ներկայացնել այդ գործոնների միջև կախվածությունը բնութագրող քանակական գնահատման մեթոդներ:

Հետազոտության շրջանակներում անցկացվել է հարցում, որի արդյունքներն ամփոփվել և գնահատվել են փոքրագույն քառակուսիների եղանակով, ինչի արդյունքում բացահայտվել է համայնքի խոշորացման արդյունավետության և դրա վրա ազդող գործոնների միջև գծային կապը:

ОЦЕНКА ЭФФЕКТИВНОСТИ УКРУПНЕНИЯ ОБЩИН С ИСПОЛЬЗОВАНИЕМ ЭКОНОМЕТРИЧЕСКОЙ МОДЕЛИ

Ключевые слова - укрупнение общин, эффективность укрупнения, участие жителей, финансовая независимость, линейная регрессионная модель, опрос

Процесс укрупнения общин к 2021 году был почти завершен. Состоялись выборы в органы местного самоуправления укрупненных общин, в результате которых число общин стало 79. В этом контексте возникает необходимость оценить эффективность укрупнения общин, выявить факторы, влияющие на них, и степень их влияния, представить методы количественной оценки, характеризующие зависимость между этими факторами.

В рамках исследования был проведен опрос, результаты которого были подведены и оценены методом наименьших квадратов, в результате чего была выявлена линейная связь между эффективностью укрупнения общины и влияющими на нее факторами.

Submitted: 25.10.2022

Accepted for publication: 15.11.2022

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ISSUES OF ENTERPRISES BANKRUPTCY RISK ASSESSMENT

Abstract: For each Company during its activity it is very important to have financial sustainability, which is very important as to attract new investments and to create new partnerships rankings. Nevertheless, companies often faced with the insolvency problem, which brings to a risk of bankruptcy, and as a result the company may cease to exist. There are different methods and ways of bankruptcy risk assessment. In our research is reviewed two-factor and the five-factor model of Altman and the Model of Toffler.

Keywords: insolvency, bankruptcy risk, financial condition, liquidity

JEL code: G 17

Research goals: comparative analysis of enterprise bankruptcy risk assessment approaches

Research novelty: in case of assessing the risk of bankruptcy of organizations, should not be guided by only one model and it is necessary to apply differentiated analytical approaches, creating an opportunity to interpret the types of solvency risks and ways of their prevention in the field of comprehensive assessment.

Introduction

In the current situation of the Republic of Armenia, when the development of the economy is highly dependent on internal and external

factors, the problem of financial management of enterprises in a crisis becomes especially relevant. In the process of ensuring real conditions and sustainable economic growth, it is crucial to achieve the desired level of financial stability of economic entities, which is important for attracting new investments and for forming a rating in partnerships. However, in practice, there are very often cases when enterprises, for various reasons, find themselves in a financial crisis, which in most cases is the cause of insolvency or bankruptcy. Therefore, the factors associated with identifying unfavorable trends in the development of an enterprise, predicting a crisis situation and bankruptcy, are of interest to many specialists and managers of an enterprise. In this regard, it is currently considered relevant to solve the problem of methodological improvement of business risk assessment

Research results

The definition of the term "bankruptcy" does not cause disputes and is interpreted unambiguously. The legislation gives a clear definition **of this concept: "bankruptcy is understood as the inability of the enterprise recognized by the court or declared by the debtor to fully satisfy the claims of creditors for monetary obligations and fulfill the obligation to make mandatory payments" [1].**

The reasons leading the enterprise to a crisis state can be different. At the same time, there is no single generally recognized classification of the causes of the insolvency of an enterprise. The deterioration of the financial condition of the enterprise may be the result of an insufficient amount of own funds of the enterprise and the refusal of credit institutions in further financing, inefficient asset management, and a decrease in the competitiveness of products. Such consequences are caused by management errors made in the conduct of business activities. Bankruptcy issues are especially important in market economies, where each business entity is responsible for its financial decisions.

Bankruptcy is a state in which a company is unable to meet its long-term obligations. The lack of confidence on the part of investors does not allow attracting funds to refinance their obligations. But bankruptcy ultimately cleans up the market environment - removing weaker participants from the market and leaving strong, competitive ones. Thus, we can say that there is an "evolution" of the market economy [2].

Obviously, bankruptcy does not appear immediately, and the first sign of this is the poor financial condition of economic entities, resulting in bankruptcy. In all cases, enterprises with financial difficulties, as partners, create a number of difficulties for the implementation of a sustainable economic policy in the country. In general, in the Republic of Armenia, insolvency relations are regulated by the Civil Code of the **Republic of Armenia and the RA Law "On Bankruptcy"**.

In the process of entrepreneurial activity, economic entities are aimed at ensuring the desired level of financial stability, which is necessary to attract investment and to form the necessary rating in partnerships. Bankruptcy is a documented inability of a business entity to pay its debt obligations and finance current core activities due to lack of funds [3].

The prerequisites for bankruptcy are diverse - this is the result of the interaction of numerous factors, both external and internal. They can be classified as follows.

External factors:

1. Economic: the crisis state of the country's economy, the general decline in production, instability of the financial system, rising prices for resources and other factors One of the reasons for the insolvency of business entities may be the wrong fiscal policy of the state. A high level of taxation can be unbearable for an enterprise.

2. Political: political instability.

3. Strengthening international competition in connection with the development of scientific and technological progress.

4. Demographics:

Internal factors:

1. Deficit of own working capital
2. Working capital turnover ratio (turnover rate)
3. Growth of overdue receivables
4. Lack of commodity markets
5. Attracting non-targeted bank loans, etc.

Bankruptcy, as a rule, is the result of the combined action of internal and external factors. Considering the above factors, the company should coordinate its planning activities. An important component of planning is bankruptcy forecasting. The calculation of the relevant indicators allows company executives to receive notifications of possible bankruptcy. The correct interpretation of these indicators and the appropriate steps can save the company from bankruptcy.

Before talking about the insolvency of an enterprise, it is necessary to calculate two components of the indicator: the current liquidity ratio and the ratio of own working capital, and to recognize the insolvency of the company, one of the following conditions is required.

- ✓ The current liquidity ratio at the end of the reporting period is below the standard. This coefficient in Russia is 2, in the Republic of Belarus - 1.7, in the Republic of Armenia it is not registered by law. Just to note, the Accountants Union guarantees a minimum value of 2 for audit purposes [4].
- ✓ The adequacy ratio of own current assets at the end of the reporting year is below the standard (in the Russian Federation - 0.1, in RA - 0.1).

The calculation of insolvency indicators was made on the basis of the balance sheet data for 2020-2021 of the following companies.

Table 1. Assessment of the solvency of enterprises

	Indicators	“Sharm Holding” company		Mir “Molybdenum” company		Normative
		2020	2021	2020	2021	
1.	Current liquidity ratio (current assets / current liabilities)	5.12	3.06	0.072	0.1597	2.0
2.	Interest coverage ratio (characterize the financial risk the firm's ability to respond on its external obligations own property)	0.8	0.67	-12.83	-5.26	0.1

Calculation sources: www.audit-it.ru/finanaliz/start/, www.azdarar.am

The given data indicate that in the studied companies, the **calculated 2 coefficients are lower than the standard only in “Mir Molybdenum” LLC**

Bankruptcy risk assessment is a very urgent problem for organizations around the world to plan their activities and to achieve an effective and desirable result. The risk of bankruptcy is present at all stages of the life cycle of an organization.

Altman proposed a simple method for predicting the probability of bankruptcy - a two-factor model for assessing the bankruptcy of a company.

$$Z = a_0 + a_1x_1 + a_2x_2$$

where`

a_0 - measurements of the influence of other factors on bankruptcy,

a_1, a_2 - weight coefficients of influencing factors

Conventionally, the bankruptcy risk coefficient is assigned the letter Z , the range of which varies $-0.3 < Z < 0.3$:

In addition to the two-factor model, Altman also proposed a five-factor Z model for predicting the bankruptcy of economic entities, which is expressed in weight coefficients.

$$Z = 1.2y_1 + 1.4y_2 + 3.3y_3 + 0.6y_4 + 0.999y_5$$

where:

y_1 = (current assets, current liabilities) / total assets,

y_2 = accumulated (retained) profit / total assets

y_3 = Net income (before taxes) / total assets

y_4 = (Market value of common and preferred shares) / current and long-term liabilities,

y_5 = Net sales income / Total equity (assets):

If $Z < 1.8$ - the risk of bankruptcy of this business entity is quite high.

If $1.8 < Z < 2.7$ - the risk of bankruptcy is at an average level

If $2.7 < Z < 2.9$ - the risk of bankruptcy is not so high

If $Z > 2.9$ - the risk of bankruptcy is very small or there is no risk of bankruptcy

To obtain a complete picture of the bankruptcy of the surveyed companies, it is necessary to use the Lees and Toffler models. The results of bankruptcy evaluation are shown in the following table.

Table 2. Comments on assessing the risk of bankruptcy of enterprises

Enterprise bankruptcy assessment coefficient by models (Z)	“Sharm Holding” company		“Mir Molybdenum” company	
	Actual indicator	Normative indicator	Actual indicator	Normative indicator
Two-factor Altman model	-4,7 The risk is low	-0,3<Z<0.3	-0.4577 The risk is low	-0,3<Z<0.3
Five -factor Altman model	2,81 The risk is low	2,7<Z<2,9	-1,3194 The risk is high	2,7<Z<2,9
Modification of Altman's five-factor model for enterprises that are not JSCs	2,463 According to the model, no risk was identified	Z>1,23	-0,829 According to the model, there is a fairly higher risk	Z>1,23
Liss model	0,0282 According to the Liss model, there is a risk of bankruptcy	Z<0,037	0,022 According to the Liss model, there is a risk of bankruptcy	Z<0,037
Tafler model	3,156 According to the Tafler model, the firm has fairly good prospects.	Z>0,3	0,092 The firm is more than likely in bankruptcy	Z>0,3

Calculation sources: www.azdarar.am

Conclusion

Summarizing the above coefficients for evaluating bankruptcy based on models, we can say that Sharm Holding LLC has opportunities and development prospects, and other things being equal, Mir Molybdenum LLC has the probability of bankruptcy. In our opinion, any methods for assessing the prediction of a possible bankruptcy of an enterprise should identify in advance the emergence of a crisis situation of a legal entity, even before the appearance of obvious signs of absolute insolvency.

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Գոհար Կոստանյան
տ.գ.թ., դոցենտ, ՀՊՏՀ

Գոհար Հարությունյան
ՀՊՏՀ դասախոս

ԿԱԶՄԱԿԵՐՊՈՒԹՅՈՒՆՆԵՐԻ ՍՆԱԿԱՑՄԱՆ ՌԻՍԿԻ ԳՆԱՀԱՏՄԱՆ ՀԻՄՆԱԽՆԴԻՐՆԵՐԸ

Հիմնաբառեր - անվճարունակություն, սնանկացման ռիսկ, ֆինանսական դրություն, լուծարելիություն

Յուրաքանչյուր կազմակերպություն իր տնտեսական գործունեության ընթացքում ձգտում է ապահովել ֆինանսական կայունության ցանկալի մակարդակ, որը կարևոր պայման է նոր ներդրումներ ներգրավելու և գործընկերային հարաբերություններում անհրաժեշտ վարկանիշ ձևավորելու համար: Սակայն կազմակերպությունը հաճախ կանգնում է անվճարունակության խնդրի առջև, որն իր հերթին առաջացնում է սնանկացման ռիսկի: Գործում են սնանկացման ռիսկի գնահատման տարբեր մեթոդներ և եղանակներ: Դրանցից մեր հետազոտությունում դիտարկվել է Ալտմանի երկգործոն, հինգ գործոն մոդելները, Լիսի, Տաֆլերի գործակիցները:

Հետազոտության արդյունքում հանգել ենք այն եզրակացության, որ կազմակերպությունների սնանկացման ռիսկը գնահատելիս չպետք է կողմնորոշվել միայն մեկ մոդելով և անհրաժեշտ է կիրառել բազմագործոն վերլուծական մոտեցումներ: Այս դեպքում հնարավորություն կստեղծվի համապարփակ գնահատման դաշտում մեկնաբանել սնանկացման ռիսկերի տեսակներն ու դրանց կանխարգելման ուղիները:

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ПРОБЛЕМЫ ОЦЕНКИ РИСКА БАНКРОТСТВА ПРЕДПРИЯТИЙ

Ключевые слова - несостоятельность, риск банкротства, финансовое положение, ликвидность

Каждое предприятие в своей экономической деятельности стремится к обеспечению желаемого уровня финансовой устойчивости, который имеет важное значение для привлечения новых инвестиций, а также для формирования рейтинга в партнерских отношениях.

Однако, предприятие часто сталкивается с проблемой неплатежеспособности, что приводит к риску банкротства, и в результате компания может прекратить свое существование.

Существуют различные методы и способы оценки риска банкротства, из которых в нашей работе рассмотрены двухфакторные и пятифакторные модели Альтмана, модели Лиса, Таффлера. В результате исследования мы пришли к выводу, что при оценке риска банкротства организаций не следует руководствоваться только одной моделью и необходимо применять многофакторные аналитические подходы. В этом случае появится возможность интерпретировать виды рисков недостаточности банкротства и путей их предотвращения методом комплексной оценки.

Submitted: 28.10.2022

Accepted for publication: 15.11.2022

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