

#### O'ZBEKISTONDA BUXGALTERIYA HISOBINING XALQARO MOLIYAVIY HISOBOT STANDARTLARI (nomoddiy aktivlar misolida)

#### I.f.d., prof. **Rizaev Nurbek Kadirovich** Oʻzbekiston Respublikasi Bank-moliya akademiyasi

Annotatsiya. Maqola globallashuv jarayonida yuzaga keladigan muammolarni ko'rib chiqishga bag'ishlangan va O'zbekistonda Milliy Buxgalteriya Hisobi Standartlarini (MBS), shu jumladan nomoddiy aktivlar bilan bog'liq standartni Xalqaro Moliyaviy Hisobot Standartlariga (IFRS) muvofiq ravishda tuzatish tajribasiga bag'ishlangan, shuningdek, yechimlar taklif qilingan. Bu bilan muallif xalqaro standartlarga muvofiq nomoddiy aktivlarni tan olish, balans qiymatini baholash, amortizatsiyani hisoblash usuli, qayta baholash modeli, moliyaviy hisobotda nomoddiy aktivlar to'g'risidagi ma'lumotlarni oshkor qilish tartibi bo'yicha ishlab chiqilgan tavsiyalarni taklif etadi (38-IFRS). Bundan tashqari, nomoddiy aktivlarning boshlang'ich qiymati, amortizatsiyasi, uzoq muddatli va ja'mi aktivlarga ta'sirini baholash uchun ularni qayta baholash modeli bo'yicha ba'zi fikrlar mavjud.

*Kalit so'zlar:* aktiv, balans qiymati, nomoddiy aktiv, tadqiqot, ishlanma, amortizatsiya, moliyaviy hisobot, qayta baholash, foydali iqtisodiy xizmat muddati, adolatli qiymat, korrelyatsiya, regressiya, tahlil.

### БУХГАЛТЕРСКИЙ УЧЕТ В УЗБЕКИСТАНЕ ПО МЕЖДУНАРОДНЫМ СТАНДАРТАМ ФИНАНСОВОЙ ОТЧЕТНОСТИ

#### (на примере нематериальных активов)

Д.э.н., проф. **Ризаев Нурбек Кадирович** Банковско-финансовая академия Республики Узбекистан

Аннотация. Статья посвящена рассмотрению проблем, возникающих в процессе глобализации и опыта корректировки Национальных Стандартов Бухгалтерского Учета (НСБУ) в Узбекистане, в том числе стандарт по нематериальным активам в соответствии с Международными стандартами финансовой отчетности (МСФО), а также предлагаемые им решения. При этом автор предлагает разработанные рекомендации по признанию нематериальных активов, оценке балансовой стоимости, методу расчета амортизации, модели переоценки, порядку раскрытия информации о нематериальных активах финансовой отчетности в в соответствии международными стандартами (МСФО 38). Кроме того, существуют некоторые соображения по модели переоценки нематериальных активов для оценки их влияния на первоначальную стоимость, амортизацию, долгосрочные и общие активы.

Ключевые слова: актив, балансовая стоимость, нематериальный актив, исследование, разработка, амортизация, финансовая отчетность, переоценка, срок полезного использования, справедливая стоимость, корреляция, регрессия, анализ.

### I SON - YANVAR, 2024

106-125

#### ACCOUNTING IN UZBEKISTAN BASED ON INTERNATIONAL FINANCIAL REPORTING STANDARDS (as exemplified by intangible assets)

Professor **Rizaev Nurbek Kadirovich** Banking and finance academy of the Republic of Uzbekistan

Abstract. The article is devoted to the consideration of the problems arising in the process of globalization and experienced in adjusting the National Accounting Standards (NAS) in Uzbekistan, including the standard related to intangible assets, in compliance with the International Financial Reporting Standards (IFRS), as well as the solutions proposed thereof. Herewith the author proposes the recommendations worked out for recognition of intangible assets, assessment of book value, the method of calculating amortization, revaluation model, the order of disclosure of information on intangible assets in the financial statements in accordance with international standards (IFRS 38). Moreover, there some considerations on the revaluation model of intangible assets to assess their impact on initial value, amortization, long-term and total assets.

*Key words:* asset, book value, intangible asset, research, development, amortization, financial reporting, revaluation, useful economic life, fair value, correlation, regression, analysis.

#### Introduction.

Currently ongoing the process of globalization requires particular attention to the creation of intangible assets based on new knowledge and technologies, their targeted and efficient use. Nowadays the growth rates of the intangible asset market account for over 10 percent per year (in China – 23 percent, in the USA and Russia – 5 percent and in France – 2 percent). For example, as a result of the issuance of more than 1 billion patented objects, which constitute the basis of intangible assets, digital platforms and services for the efficient management of intangible assets have been introduced. According to statistics, the total assets of companies in developed economies amounted to more than 90.0 trillion USD and out of this amount 47.8 trillion USD (52.6 percent) are represented by tangible assets and 42.2 trillion USD (47.4 percent) of intellectual property falls on the share of intellectual property rights. Therefore, it is crucially important to make effective use of the experience of international accounting practices in the national economy in the assessment of intangible assets created in all countries, organization of their accounting, calculation of their depreciation and the disclosure of information in financial statements.

According to the Resolution of the President of the Republic of Uzbekistan NºPR-4611 "On additional measures for transition to international financial reporting standards" dated February 24, 2020, starting from January 1, 2021, joint stock companies, commercial banks, insurance companies and enterprises included in the category of large taxpayers, must handle accounting and preparation of financial statements for 2021 on the IFRS basis. According to this resolution, a special "Roadmap" has been worked out on the gradual introduction of the international standards with the account of advanced foreign experience. Thus, there is the need to improve national accounting standards by adjusting them in compliance with the IFRS. To achieve this aim, the following primary objectives have been set:

*first,* preparing comprehensive information on essential differences between national accounting standards and the IFRS with the involvement of international experts;

*second,* developing new national accounting standards and making amandments to existing national standards.

Thus, one of the most urgent issues is introduction of modifications to existing national accounting standards or development of new standards in accordance with the IFRS requirements. As a result, in accordance with the Roadmap developed on the basis of

Resolution №PR-4611, in cooperation with the Ministry of Finance, two existing standards are being adjusted in compliance with IAS 38 "Intangible Assets"<sup>32</sup>. In this regard, what is the reason for amending or updating the existing NAS, is it actually necessary? The following brief answer to this question is that the rules (principles) of accounting for experimental design with intangible assets are consolidated in a single international standard (IFRS 38). However, in our practice, these are reflected in two standards (NAS 7 and NAS 11). As a result, there is a need to generalize both standards, to adjust the concepts, terms and methodology presented in them in compliance with the international standards and to introduce a single national standard. In this regard the article focuses on aligning intangible asset revaluation procedures with the international standards, as well as relevant ideas and solutions.

#### Literature review.

Some considerations of economists, scholars and experts on the concept of intangible assets and their accounting, as well as disclosure of information in the financial statements are discussed.

Tomac, Carlin (1998) describes intangible assets as the most obscure and qualitatively insignificant item of the balance sheet. He emphasizes significance of valuing intangible assets. In our view, if intangible assets were to be used more efficiently, it would be possible for the balance sheet assets to become the most profitable item, even the whole activity of the enterprise may depend on a single patent or trademark that seems to be neglected.

From the point of view of Sveiby (1998), in its model the company divides intangible assets into three groups: external structure (trademark, corporate image and product recognition), employee competency (knowledge, intellectual knowledge, work experience and skills), internal structure (patent, copyright, management) systems, databases and scientific developments). Leontyev (2002) includes intangible assets in intellectual capital and, in addition, shows that the value of all assets available in the enterprise consists of a database of intellectual news, knowledge, skills, aggregate knowledge. Dontsova (2008) evaluates intangible assets in terms of economic analysis as depreciable assets of the enterprise and considers that they consist of exclusive rights to various scientific developments, computer programs, patents, copyrights, films, trademarks and service marks. Moreover, she emphasizes significance of focusing on revenue or reducing the costs of the enterprise in determining the economic benefits (income) of intangible assets, and focuses on the methodology of analysis to evaluate them as long-term assets of the enterprise. Ivanov (2008) considers the person creating intangible assets as an absolute right to the results of intellectual activity and emphasizes that their composition consists of a trademark, company name, place of origin, service mark. Summarizing his views, he assesses intellectual property as a part of these intangible assets. In the opinion of Pokrovsky (1894), the use of intangible assets, including the use of the achievements and technical inventions of each inconvenient intellectual property owner (author), may be published and reproduced without his consent. Lytneva (2006) proposes to divide intangible assets into the following groups: objects of industrial property, objects of copyright and means of goods individualization. This grouping is almost close to international practice and is grouped according to the intellectual property objects used in the majority of companies.

Dusmuratov (2003) believes that intangible assets, by their nature, are referred to the income-bearing funds, which do not possess any physical nature, but included in the other assets used in the performance of the enterprise. In addition, Dusmuratov (2003) particularly notes that the concept of intangible assets is a complex and diverse at the international level, and that there are no uniform standards for their accounting resulting. Ochilov (2007):

<sup>&</sup>lt;sup>32</sup> National Accounting Standard 7 (registered by the Ministry of Justice of the Republic of Uzbekistan under №1485 on June 27, 2005). National Accounting Standard 11 "Expenditures on research and development" (registered by the Ministry of Justice of the Republic of Uzbekistan under № 581 on December 28, 1998).

Intangible assets are the assets of non-tangible nature intended for long-term use in economic activities.

According to Sotivoldiev (2007), intangible assets are the assets of the enterprise that can be appreciated. From the point of view of Rakhimbekova (2003), intangible assets are the assets that do not have a physical appearance and will generate income in the future. In the opinion of Isroilov (2006), intangible assets are included in the structure of goods and chattels in the classification of property tax objects. According to this scholar, in the conditions of market relations, the result of the human intellectual labour, that is, intangible benefits, are also recognized as property. Gulomova (2000) supposes that intangible assets include objects that do not have a physical appearance and provide an opportunity to generate additional income. Ismanov (2009) considered the issues of transforming some peculiarities of recognizing objects of intangible assets and reflecting in the accounting into the international financial reporting. In the opinion of Ilkhamov (2005), patents, licenses, know-how, trademarks, industrial samples, software, the rights to use land and natural resources, organizational costs, linking the value of intangible assets with the minimum wage to a minimum service economic life of more than one year, franchisees, copyrights and other assets. Pulatov (2017) investigated intellectual property, which he considered the main component of intangible assets and according to the model proposed by Brooking (1996), intangible assets represent a structural component of the intellectual capital of the enterprise. According to this model:

#### Intellectual capital of the enterprise > intellectual property>patent, copyright, trade mark, know-how and service mark.

As can be seen from the model, intellectual property is part of intellectual capital in terms of its objects.

IAS 38 "Intangible Assets" sets out the criteria for recognizing and measuring intangible assets and requires disclosures about them. An intangible asset is an identifiable non-monetary asset without physical substance. Such an asset is identifiable when it is separable, or when it arises from contractual or other legal rights. Separable assets can be sold, transferred, licensed, etc. Examples of intangible assets include computer software, licenses, trademarks, patents, films, copyrights and import quotas<sup>33</sup>.

According to NAS 7 "Intangible assets": "Intangible assets - identifiable objects of property that do not have a material content, which the enterprise contains in order to use them in the process of manufacturing products, performing work, providing services or selling goods, or for performing administrative and other functions for a long period"<sup>34</sup>.

"Accounting of intangible assets" (Regulation on accounting 14/2007): "Intangible assets include, for example, works of science, literature and art; software for electronic computers; inventions; utility models; selection achievements; production secrets (know-how); trademarks and service marks".

Analyzing the content of legal and regulatory documents on the organization and maintenance of the accounting of intangible assets at the level of foreign countries, we can see that these countries apply several regulations.

For example, in accordance with USGAAP requirements in the US accounting system, such rules and regulations as FAS 142-3 "Determining the useful economic life of intangible assets", EITF 08-7 "Protected intangible assets", 141R "Business Consolidation" are developed by the Bureau of Accounting Standards (FASB)<sup>35</sup>.

<sup>&</sup>lt;sup>33</sup> Order of the Ministry of Finance of the Russian Federation dated 27.12.2007 № 153 (edition dated May 16, 2016) (Regulation on accounting 14/2007)" (Registered in the Ministry of Justice of the Republic of Uzbekistan № 10975 dated January 23, 2008). <sup>34</sup> National Accounting Standard of the Republic of Uzbekistan "Intangible Assets" (NAS 7), paragraph 4. <sup>35</sup> FSP FAS 142-3 (AS ISSUED)/https://www.fasb.org/pdf/fsp\_fas142-3.pdf/

Summarizing the considerations, specified above, the following approach is applied to the category of intellectual property, which is an essential component of intangible assets: "Intangible asset (intellectual property) is knowledge that arises due to the human mental capacity, which requires legal protection as an object or asset (funds)" (Rizaev, 2019).

#### **Research Methodology.**

In this paper, based on the revaluation model of the value of intangible assets, in order to assess the impact of their increase on the initial, depreciation and residual values, correlation - statistical relationship (variable) of two or more random variables has been widely used. Two main random variables have been selected: the revaluation value of intangible assets and their initial or depreciable or long-term or total asset value. The ten largest joint-stock companies with intangible assets in the balance sheet have been selected to perform these analyses.

The correlation coefficients for revaluation of intangible assets in the taken objects are expressed at different levels, which resulted in the development of positive and negative conclusions. The implied forecasts whether intangible assets depreciated to their initial value or depreciable cost.

In our research, the revaluation of intangible assets had a correlation coefficient relative to their initial value: r = 0.996. This has demonstrated that there is a very strong and correct relationship between the factor and the outcome, and that the factor's effect on the outcome is that the coefficient of determination is  $r^2 = 0.992$  (positive correlation). In the second case, when the value of intangible assets after revaluation relative to the value of total assets is estimated, the correlation coefficient is r = 0.22, and the relationship between factor and outcome is very weak, which can be considered insignificant. The reason is that the effect of the factor on the result on the revaluation indicator accounted for 4.8% (negative correlation).

In addition, the article presents the results of a descriptive statistical analysis, in which the standard deviation of output and long-term assets from the sale of selected objects has been much higher than other variables (this is due to the fact that the selected objects are operating in different fields). In the analysis, the minimum and maximum values among the objects in terms of the minimum values have been taken. The mutual correlation of these variables constitutes an important part of the empirical analysis, and the following table presents the correlation matrix of the variables. The main goal of the regression analysis of intangible assets is to estimate how much increase in total revenue would occur from the increase in output, and in this regard there are 3 models calculated by means of least square method. According to the results of various model of regression analysis, the positive effect of intangible assets on product revenue has been empirically proven. It has been revealed that the effect of intangible assets on output is positive and of high statistical significance in the properties of all models.

#### Analysis and results.

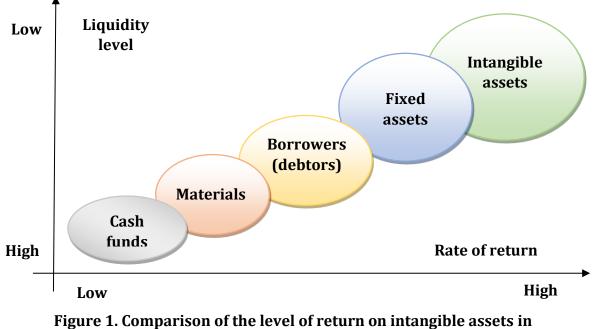
In reliance upon the financial statements, the share of intangible assets in long-term assets and total assets of enterprises is considered on the basis of the following analytical data. Large tax-paying joint-stock companies with intangible assets have been selected to analyze the status of intangible assets. "Uztransgaz" (the share of intangible assets accounted for 64375 million UZS at the beginning of the year and 64375 million UZS at the end of the year) and "Navoiazot" (the share of intangible assets amounted to 133220 million UZS at the beginning of the year and 143478 million UZS at the end of the year) can be referred to enterprises with a small share of intangible assets.

Table 1.

	assets and total assets <sup>36</sup>							
	loint stock	Intangible assets at the beginning of the period		Intangible assets at the end of the period		Differen ce of share in	Differen ce of	
Nº	Joint-stock companies	in relation to long-term assets, %	in relation to total, %	in relation to long- term assets, %	in relation to total, %	relation to long- term assets	share in relation to total assets	
1.	"Maxam – Chirchik"	0,03	0,01	0,008	0,003	-0,022	-0,011	
2.	"Uzbekistan	0,12	0,04	0,10	0,03	-0,02	-0,01	
	Metallurgical Combine"							
3.	"Uzbekistan railways"	0,009	0,006	0,009	0,006	0	0	
4.	"Navoiyazot"	0,001	0,001	0,001	0,01	0	0,009	
5.	"Uzhimprom"	0,004	0,004	0,004	0,004	0	0	
6.	"Almalyk Mining and Metallurgical Combine"	0,22	0,14	0,16	0,12	-0,06	-0,02	
7.	"Uzdonmahsulot"	0,08	0,01	0,08	0,01	0	0	
8.	"UzAuto Motors"	4,32	0,95	2,15	0,46	-2,17	-0,49	
9.	"Uztransgaz"	0,019	0,0002	0,001	0,002	-0,018	0	
10.	"Kvarts"	0,046	0,019	0,04	0,009	-0,006	-0,01	

### Estimation of the share of intangible assets in relation to long-term assets and total assets<sup>36</sup>

These data show that the share of intangible assets in the selected objects is long and varies in terms of total assets. The best performance indicator belongs to "UzAuto Motors", which accounts for 4.32% (!) compared to the beginning of the reporting period. This can be assessed as a record level among enterprises in sectors of the economy. This is due to the fact that the share of intangible assets is not only higher than we expected in our country, but also in developed countries. Below is one reason why intangible assets have a lower share than enterprise assets.



relation to other assets

<sup>&</sup>lt;sup>36</sup> Reporting information on the financial condition of joint-stock companies. As of January 1, 2022. https://openinfo.uz/ru/

Intangible assets have the least liquidity in the long-term assets of the enterprise (or may not be liquid at all). On the other hand, intangible assets appear to be the most profitable asset.

There are interrelationships and differences between the International Financial Reporting Standard (IFRS 38) and the National Accounting Standard (NAS 7) used in the accounting for intangible assets:

Aim of IFRS 38:	Aim of NAS 7:
focuses on defining an account approach for intangible assets	nting determining the methodology of accounting and financial reporting of intangible assets belonging to
upprouch for intungible ussets	enterprises

Moreover, international standard requires an entity to recognize an intangible asset only when it meets certain criteria and determines how the book value of the intangible asset is evaluated and discloses specific information about the intangible asset.

The aim of both standards is almost identical, focusing on the formation of complete information about intangible assets based on the definition of the approach or methodology in accounting. The main difference of NAS 7 from IFRS 38 is that it fully covers the processes from the recognition of intangible assets to their write-off the balance. One of the important aspects of standards is in which cases the rules of this standard apply, i.e. which standards are covered by the scope or activity.

It should be noted that the definitions and terms given in the national standard (NAS 7) do not use terms such as fair value, non-monetary asset, research, experimental design (for these terms, separate rules of IFRS 11 apply). In our opinion, it is expedient to unify NAS 7 and NAS 11. This will improve the standard for intangible assets, which is unique, and adjust it in compliance with the rules of the international standard. The following table illustrates acomparison of the rules of the international standard for recognizing and revealing intangible assets.

Table 2.

## Interrelationships and differences between international and national standards in the recognition of intangible assets<sup>37</sup>

Intangible assets (NAS 7)	Intangible assets (NAS 38)	
The patent owner's exclusive right to inventions, industrialsamples and utility models	Patents	
Absolute right to computer software and databases		
Absolute right to topologies of integrated circuits	Software	
The exclusive right to a trademark and service mark, as well	Trade brands, marketing rights,	
as the right to use the name of the place of origin of the goods	import quotas	
Absolute right to selection achievements	Right of authorship (copyright)	
The right to use natural recources		
The right to use property	Licenses and franchises	
Other intangible assets (products, works, services, other rights)		

IFRS 38 requires the following aspects when recognizing an asset as an intangible asset: *first, the definition of an intangible asset;* 

second, recognition criteria.

These requirements apply to the cost of purchasing or creating an intangible asset and the cost of adding, replacing or servicing the part. In addition, herewith application of

<sup>&</sup>lt;sup>37</sup> Civil Code of the Republic of Uzbekistan. https://lex.uz/docs/180552

recognition criteria for separately acquired intangible assets, initial valuation of intangible assets acquired through government grants, conversion of intangible assets, accounting for internally generated goodwill and initial recognition of internally created intangible assets are covered and evaluated.

The peculiarity of an intangible asset in compliance with an international standard is that, in most cases, there is no asset or replacement part to be added. Consequently, most of the deferred costs may retain the expected future economic benefits embodied in the current intangible asset instead of meeting the definition and recognition criterion of the intangible asset in this standard.

However, it is usually more difficult to determine whether deferred costs are directly attributable to a particular intangible asset relative to the entire business. Regardless of whether the purchase is internally created, subsequent costs on bends, title titles, publication names, customer lists, and essentially similar items are always recognized in profit or loss. The reason is that such costs are no different from the costs directed to the development of the whole business.

An intangible asset is recognized in accordance with IFRS 38 in the following cases:

- there is a possibility that the entity will receive future economic benefits associated with the intangible asset;

- the cost of the asset can be measured in the reliable manner.

The entity should estimate the probability of future economic benefits expected using reasonable and well-thought assumptions that reflect management's best estimate of the set of economic conditions that will operate during the useful economic life of the intangible asset. The entity uses competent consideration in assessing the degree of accuracy of future economic benefits obtained from the use of the intangible asset, based on the evidence available at the time of initial recognition, rather than external evidence. The initial evaluation of an intangible asset is disclosed in an international standard separately. IFRS 7 states that the original cost of all types of intangible assets should be the initial cost and that they are accounted for at that cost.

Table 3.

## Differences between IFRS and NAS in the recognition and evaluation of intangible assets

Recognition and evaluation of intangible assets					
IFRS 38	NAS 7				
<ul> <li>separate purchase;</li> <li>purchase as part of a business unit;</li> <li>current costs for the purchased research and development projects on progress;</li> <li>purchase of assets with the help of a state grant;</li> <li>exchange of assets;</li> <li>internally created goodwill;</li> <li>internally developed intangible assets.</li> </ul>	<ul> <li>delivery and acceptance of the created object after completion of development;</li> <li>purchase of the object under the contract of sale;</li> <li>receipt in the charter capital in the form of the founders' contribution;</li> <li>accounting for government subsidies;</li> <li>exchange;</li> </ul>				
	- identification of surplus intangible assets.				

The concept of subsequent evaluation of intangible assets basically means that they are revalued. In the international standard, the object is accounted in the following two cases:

- accounting model by prime-cost;

- revaluation model.

Both of these models should be selected in the entity's accounting policies. If an intangible asset is accounted for using the revaluation model, all other assets in its category must be accounted for using the same model. Herein there is no active market for these assets.

A category of intangible assets is a grouping of assets in terms of the same property and use in the entity's operations. Items in the category of intangible assets are revalued at the same

time, avoiding the selective revaluation of assets and the presentation in the financial statements of amounts that reflect the combination of cost and value at different dates.

	after initial recognition in accordance with the model, the
Accounting model by	intangible asset takes into account any accumulated
prime-cost:	depreciation and any accumulated impairment loss, which
	is less than its prime-cost.
	under the revaluation model, an asset is carried at its fair
	value (i.e. revalued amount) less any accumulated
	depreciation and any accumulated impairment
<b>Revaluation model:</b>	losses.Revaluations should be made with sufficient
	regularity to ensure that the carrying amount does not
	differ materially from fair value at the end of the reporting
	period.

Therefore, regardless of the order of recognition of intangible assets in the accounting and their reflection in the accounts, the most important thing is to pay close attention to the order of their valuation.

After an initial recognition of an intangible asset, it shall be carried at an amount that is revalued. It is a revalued amount being its fair value at the date of revaluation less than any subsequently accumulated amortization and any other subsequent accumulated impairment losses. Revaluations shall be carried out with a regularity that at the end of the period to report, the carrying amount of the intangible asset does not differ according to material from its fair value.

In terms of intangible asset revaluation model, the standard does not allow the following: *first,* a revaluation of an intangible asset that has not been previously recognized as an asset;

second, the recognition of intangible assets at values other than prime-cost.

In addition, the standard notes that the periodicity of revaluation depends on the variability in the fair value of the revalued intangible assets. If the fair value of the revalued item differs significantly from its book value, a revaluation is required. In some cases, the requirement is not required for intangible assets that do not have large fluctuations in fair value.

The purpose of the valuation of an intangible asset after it has been recognized as an item of intangible assets is to obtain the income from the item being valued. In most cases, the valuation of items is used when writing-off or selling intangible assets.

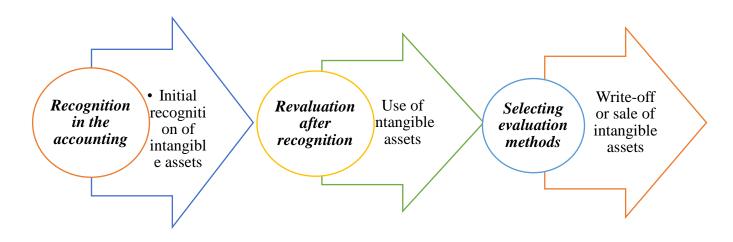


Figure 2. Stages of intangible assets valuation

The following wording is stated in paragraph 28 of NAS 7 used in our republic: "An entity may revaluate based on evidence of fair value at the date of the revaluation, provided that the fair value can be reliably determined from an active market. Revaluations must be carried out with sufficient regularity so that the carrying (replacement) value does not differ from the market value at the date of the balance sheet". However, nowadays there is no annual normative order in terms of the revaluation of intellectual property objects. That is, while the required guidelines are set out in the National Accounting Standards for the revaluation of intangible assets, no indices have been developed for each group of intangible assets.

In this regard, Davletov (2018) states the following: "While the regulatory framework for revaluation of intangible assets has been created, their revaluation is not carried out at current market prices. As a result, it is possible to provide users with reliable and accurate information from this financial report".

The following is stated about revaluation of intangible assets in the national standards of accounting: "...revaluations must be carried out with sufficient regularity so that the carrying (replacement) value does not differ from the market value at the balance sheet date. When revaluing an intangible asset, the entire group of homogeneous intangible assets to which this revalued asset belongs should also be revalued, unless there is no active market for such assets. Intangible assets as a result of revaluation are reflected in accounting and financial statements at their current (replacement) cost". The applicable national standard rules specify the use of an indexingmethod. At this point, the present value of the intangible asset is accounted for in relation to its initial value. This situation is reflected in foreign experience, in the practice of the Russian Federation, in which the market value of intangible assets is determined in relation to their residual value in the balance sheet (Regulation, 2007). It is also clear from these regulatory documents that there is no a single annual index for revaluation of intangible assets. This indicates that different coefficients may be used in their reassessment or that reassessment may not be carried out in practice in general.

It is also advisable to publish annual revaluation indices for intangible assets (for facilities where the useful economic life is expected to increase).For this purpose, intangible asset revaluation indices are proposed.

Table 4.

Nº	Intangible assets grouping	Revaluation index (in coefficient)
I.1.	Patents (inventions, utility models and industrial samples)	1.20
I.2.	Franchising and licenses	1.25
II.1.	Trademarks	1.25
II.2.	Country of origin of the goods manufactured	1.20
II.3.	Company names	1.20
III.1.	Software	1.25
III.2.	Database	1.20
IV.1.	Rights to use property and natural resource	1.20
IV.2.	Selection achievements	1.25
V.1.	Authorship rights (copyrights)	1.15

#### Proposed annual indices of revaluation of intangible assets

These proposed revaluation indices provide an opportunity to bring the value of intangible assets closer to the current market value. On the other hand, it will be possible to reduce the costs (other operating expenses) paid to appraisal organizations in determining their market value each year. The choice of intangible asset revaluation indices is strictly determined by the accounting policy of the enterprise (unless there are changes in the

legislation). The accounting policies of the enterprises selected for the study include the following information on the revaluation index of intangible assets:

Table 5.

#### Indices selected in the accounting policies of enterprises for revaluation of intangible assets

Nº	Joint-stock companies	Selected valuation indices for intangible assets (in coefficients)
1.	"Maxam – Chirchik"	1,20
2.	"Uzbekistan Metallurgical Combine"	1.20
3.	"Uzbekistan railways"	1,20
4.	"Navoiyazot"	1,20
5.	"Uzhimprom"	1,20
6.	"Almalyk Mining and Metallurgical Combine"	1,20
7.	"Uzdonmahsulot"	1,20
8.	"UzAuto Motors"	1,20
9.	"Uztransgaz"	1,20
10.	"Kvarts"	1,20

In the data, illustrated in the table below, it is obvious, that the amounts increased as a result of revaluation of intangible assets in 10 objects selected for the research(enterprises with intangible assets on the balance sheet).

Table 6.

	Residual value of intangible assets					
N⁰	Joint-stock companies	Beginning of the period	Change from revaluation*	End of the period	Change from revaluation*	
1.	"Maxam – Chirchik"	31502.00	+6300.4	27642.00	+5528.4	
2.	"Uzbekistan Metallurgical Combine"	650627.00	+130125.4	424654.74	+84890.94	
3.	"Uzbekistan railways"	441575.00	+88315.00	170156.00	+34031.1	
4.	"Navoiyazot"	76570.00	+15314.00	81266.00	+16253.2	
5.	"Uzhimprom"	67200.00	+13440.00	50400.00	+10080.00	
6.	"Almalyk Mining and Metallurgical Combine"	19319098. 00	+3863819.6	16591696.0 0	+3318339.2	
7.	"Uzdonmahsulot"	172086.00	. 24417 2	61731.00	122462.00	
			+34417.2		+123462.00	
8.	"UzAuto Motors"	56862435.	+11372487.18	51388831.7	+10277766.43	
		93		1		
9.	"Uztransgaz"	21995.00	+4399.00	12338.00	+24676.00	
10.	"Kvarts"	36743.00	+73486.00	25214.00	+50428.00	

## Introduction and changes in the revaluation index of intangible assets in relation to their residual value

\* The residual value of intangible assets increased by 1.20.

When revaluing the initial (replacement) cost of an intangible asset, its accumulated depreciation at the revaluation date is adjusted to the relevant indices of the change in the initial (replacement) value of the intangible asset and subsequently amortized from the revalued (replacement) value. The revaluation index is determined by dividing the present value of an intangible asset by its initial value. The amount of increase in the value of intangible assets as a result of revaluation is transferred to the reserve capital account "Adjustments for revaluation of long-term assets".

The amount of decrease in the value of intangible assets as a result of revaluation is performed to reduce the reserve capital on the account "Adjustments for revaluation of long-term assets" within the limits of the amount of decrease in the value of this object in previous reporting periods. The results of the revaluation of intangible assets are reflected in the financial statements in the current period in which the revaluation of intangible assets is performed.

Selection of intangible asset revaluation indices should be strictly defined in the accounting policy of the enterprise (unless there are changes in the legislation). The revaluation index is considered in the following example: "UzAuto Motors" has intangible assets in the amount of 111719829.33 thousand UZS as of January 1, 2022 (amortization - 54857393.40 UZS).

The revaluation index is considered in the following example: as of January 1, 2022, "UzAuto Motors" has intangible assets of 111719829.33 thousand UZS (amortization - 54857393.40 UZS). As a result of revaluation of intangible assets at the enterprise (coefficient of 1.20 has been applied) in relation to their residual value increased by +12372487.18 UZS (69234923.11 - 56862435.93). Or as a result of the effect of amortization, the residual value of intangible assets increased by 115.7 percent (69234923.11/56862435.93 x 100) compared to the beginning of the period.

Table 7.

Nº	Indicator name	Cost (thousand UZS)
I.	The situation before the revaluation	tion:
1.	Intellectual property objects:	
	- initial value	111719829.33
	- amortization value	54857393.40
	- residual value	56862435.93
2.	Revaluation index (coefficient)	1.20
II.	The situation after revaluation	n:
3.	Intellectual property objects:	
	- initial value	134063795.19
	- amortization value	65828872.08
	- residual value	69234923.11

Revaluation of intangible assets in accounting policy of "UzAuto Motors"

It is formalized in the accounting as follows. Initial value: Debit of "Intangible assets" account - 12372487.18 thousand UZS,

Credit of Adjustments for revaluation of long-term assets" account - 12372487.18 thousand UZS,

Amortization value:

Debit of "Adjustments for revaluation of long-term assets" account - 10971478.68 thousand UZS;

Credit of "Depreciator of intangible assets" account - 10971478.68 thousand UZS.

One of the problems to be solved here is to ensure the uniformity of the terms related to the accounting. The name of the account that covers the revaluation is interpreted differently in the regulations. For example, NAS refers to the adjustment to the revaluation account for long-term assets, while another standard states that the revaluation of intangible assets is transferred to the revaluation reserve account as part of the revalued reserve capital. International financial reporting standards, including IFRS 38 "Intangible Assets", state that the revaluation value of an asset is included in the "Reserve capital" account.

The name of the revaluation account in NAS differs from the concepts or accounts in IFRS 38. It is therefore advisable to make amendments in the relevant paragraphs of this standard as follows and to change the name of the account.

Table 8.

Revealing intaligible assets by th	
NAS 7	IFRS 38
1. Debit of "Adjustments for revaluation of property"	
account - 220857 thousand UZS.	
Credit of "Profits of previous year" account – 220857	Debit of "Adjustments for
thousand UZS.	revaluation of property" account - 220857
2. Debit of "Profits of previous year" account –	thousand UZS.
220857 thousand UZS.	Credit of "Retained profit
Credit of "Final financial outcome" account – 220857	(uncovered loss)" account – 220857
thousand UZS.	thousand UZS.
3. Debit of "Final financial outcome" account –	
220857 thousand UZS.	
Credit of "Retained profit (uncovered loss)" – 220857	
thousand UZS.	

Revealing intangible assets by the revaluation model

As it is obvious from the table, our republic requires to adjust the concepts and terms used in the statutory acts, namely in the field of accounting, in compliance with the international financial reporting standards. The revaluation model of intangible assets is based on the following table data in assessing their impact on initial, depreciable and residual values and long-term assets and total assets of the balance sheet.

The second part of the article is devoted to the correlation analysis, which has been made to assess the impact of the revaluation of intangible assets on their initial, depreciable and residual value.In turn, the impact of revaluation of intangible assets on long-term assets and total assets of enterprises has been analyzed as well. For this purpose, the following two tables are used as a source of data based on the balance sheets of a total of 10 objects selected for the research.

#### Table 9.

#### State of intangible assets in the balance sheet of joint stock companies

(first source)

	Intangible assets (thousand UZS)						
				gible assets	(thousand U		
	Loint stock	Initial value		Amortization value		Residual value	
N⁰	Joint-stock	Beginning	End of the	Beginnin	End of	Beginnin	End of
	companies	of the		g of the	the	g of the	the
		period	period	period	period	period	period
1.	"Maxam –	129203.00	34553.00	97701.00	6911.00	31502.00	27642.00
	Chirchik"						
2.	"Uzbekistan	1718669.00	1718669.32	1068042.00	1294014.58	650627.00	424654.74
	Metallurgical						
	Combine"						
3.	"Uzbekistan	2197836.00	2187570.00	1756261.00	2017414.00	441575.00	170156.00
	railways"						
4.	"Navoiyazot"	133220.00	143478.00	56650.00	62212.00	76570.00	81266.00
5.	"Uzhimprom"	84000.00	84000.00	16800.00	33600.00	67200.00	50400.00
6.	"Almalyk	27274021.00	27274021.00	7954923.00	10682325.00	19319098.00	16591696.00
	Mining and						
	Metallurgical						
	Combine"						
7.	"Uzdonmahsulo	551776.00	551776.00	379690.00	490045.00	172086.00	61731.00
	t"						
8.		111719829.33	111309001.72	54857393.40	59920170.01	56862435.93	51388831.71
	Motors"						
9.	"Uztransgaz"	64375.00	64375.00	42380.00	52037.00	21995.00	12338.00
10.	"Kvarts"	82305.00	82305.00	45562.00	57091.00	36743.00	25214.00

### Table 10.

State of long-term and total assets in the balance sheet of joint-stock companies

lsocond	source)	
second	source	

	loint stool	Long-term assets		Total assets		
N⁰	Joint-stock	(thousand UZS)		(thousand UZS)		
11-	companies	<b>Beginning of</b>	End of the	Beginning of	End of the	
		the period	period	the period	period	
1.	"Maxam – Chirchik"	386077830.00	431167915.00	894280559.00	1034098809.00	
2.	"Uzbekistan					
	Metallurgical	1350810868.00	1678071529.29	3832943155.00	4426106008.00	
	Combine"					
3.	"Uzbekistan railways	24263525866.00	23639636266.00	36250088159.00	36794808596.00	
4.	"Navoiyazot"	11319403873.00	13102673275.00	12445738625.00	14012074762.00	
5.	"Uzhimprom"	1949462441.10	1996579152.20	2032691476.50	2134011167.40	
6.	"Almalyk Mining					
	and Metallurgical	12193229275.00	16714169648.00	20002933034.00	23604911149.00	
	Combine"					
7.	"Uzdonmahsulot"	678451378.00	678290635.00	5564737348.00	5488845400.00	
8.	"UzAuto Motors"	2582709049.99	5186994807.87	11694092781.73	23983887691.09	
9.	"Uztransgaz"	3334280942.00	4787648057.00	26640244249.00	29622051550.00	
10.	"Kvarts"	178858028.00	223542807.00	439727241.00	914358452.00	

#### 1. <u>Assessing the impact of revaluation of intangible assets on initial their cost</u> (at the beginning of the reporting period).

A factor analysis has been performed to assess the effect of the revaluation model on intangible assets on their initial and residual values when applying the revaluation model in compliance with the requirements of international financial reporting standards. As a result, the following scientific conclusions can be drawn from the data at the beginning and end of the reporting period, i.e., the analytical data show that the correlation coefficient accounts for: r = 0.996. This means that there is a very strong and correct relationship between the factor and the outcome, and that the factor's effect on the outcome is that the coefficient of determination is r2 = 0.992.

It is also important to note that the structured model is statistically significant: F = 6, 66428E-10.

Regression statistics				
Several R	0,996046162			
R- squared	0,992107956			
Normalized R-squared	0,880996845			
Standard error	3406497,832			
Observation	10			

*F significance* 6,66428E-10

It is possible to make a general conclusion, that an increase in the value of an intangible asset as a result of a revaluation raises its effect on its initial value and can be considered a positive situation.

2. Assessing the impact of revaluation of intangible assets on their cost
 3. (at the end of the reporting period).

The rate of revaluation of intangible assets relative to the initial value at the end of the reporting period, i.e. the correlation coefficient accounted for r = 0.997. This means that there is a very strong direct correlation between factor and outcome. In addition, it is possible to observe that the resulting effect of the revaluation factor is statistically significant for a structured model with 99.4%.

Regression statistics				
Several R	0,99725			
R- squared	0,994508			
Normalized R-squared	0,883397			
Standard error	2831746			
Observation	10			

*F significance* 1,55942E-10

Significance level in this analytical data amounts to: F = 1,55942E-10, the model is statistically significant.

#### 3. <u>Assessing the impact of revaluation of intangible assets on their depreciable amount (at</u> <u>the beginning of the reporting period)</u>

When assessing its impact on the amortization value of the intangible asset revaluation model, the correlation coefficient at the beginning of the period constituted r = 0.78. This shows the average and correct relationship between the cost of revaluation of intangible assets and the depreciable amount.

Regression statistics				
Several R	0,786681301			
R- squared	0,618867469			
Normalized R-squared	0,507756358			
Standard error	2034689,659			
Observation	10			

*F significance* 0,005069476

The impact of the factor on the result accounts for 61.88%. We can see that this model is statistically significant. The coefficient, achieved as a result, shows that it is smaller than the norm: significance: F = 0,005069476 or < 0.005.

#### 4. <u>Assessing the impact of revaluation of intangible assets on their depreciable amount (at the</u> <u>end of the reporting period).</u>

If we assess the value of intangible assets after revaluation, we see that there is a strong correlation between the factor and the result, with a correlation coefficient r = 0.99.

Regression statistics		
Several R	0,990227357	
R- squared	0,980550219	
Normalized R-squared	0,869439108	

Standard error	2831746,276
Observation	10

*F significance* 2,4814E-08

This constitutes the basis for our conclusion that proves a direct connection. This is because the effect of the factor on the outcome amounts to 98%. Hence, the model is statistically significant.

#### 5. <u>Assessing the long-term impact of revaluation of intangible assets</u> (at the beginning of the reporting period).

The analytical data examined the impact of revaluation of intangible assets on the longterm assets of enterprises as well. In this case, the correlation coefficient accounts for r = 0.22, and the relationship between the factor and the result is very weak, which can be considered insignificant, i.e. almost none. This is due to the fact that the impact of the factor on the outcome of the revaluation indicator accounts for 4.8%.

Regression statistics				
Several R	0,220628488			
R- squared	0,04867693			
Normalized R-squared	-0,062434181			
Standard error	9696934348			
Observation	10			

F significance

0,516532493

In general, this model, i.e., the model for assessing the impact of intangible assets on longterm assets, is considered statistically insignificant (significance level: F = 0.516532493). The fact that the coefficient is higher than 0.005 indicates that this model should be abandoned in the overall conclusion, in fact, the increase in the revalued amount of intangible assets relative to the long-term or total assets of enterprises or its effectiveness can not be assessed.

#### 6. <u>Assessing the long-term impact of revaluation of intangible assets</u> (at the end of the reporting period).

Assessing the impact of intangible assets on long-term assets at the end of the period it can be concluded that the correlation coefficient is higher than at the beginning of the period, but this is not enough for a positive outcome.

Regression statistics				
Several R	0,311698261			
R- squared	0,097155806			
Normalized R-squared	-0,013955305			
Standard error	10346850718			
Observation	10			

*Significance F* 0,353878559

That is, it has a low indicator: r = 0.31, which, in turn, makes an impact of 9.7% on the result of the factor (significance level: F = 0.353878559). As a result, the fact that this figure is also higher than 0.05 proves our conclusion.

# 7. <u>Assessing the impact of revaluation of intangible assets on their total assets (beginning and end of the reporting period).</u>

Now we consider the impact of revaluation of intangible assets on the total assets of the balance sheet. We see that these figures are also lower than for long-term assets. At the beginning of the reporting period, this correlation coefficient was r = 0.33 and the impact between factor and outcome amounted to 11.52% (significance level: F = 0.310388331). As a result, this figure is also higher than 0.05

Regression statistics				
Several R	0,339538078			
R- squared	0,115286107			
Normalized R-squared	0,004174995			
Standard error	16490406323			
Observation	10			

Significance F

0,353878559

At the end of the period, the coefficient constituted r = 0.50. Herein the coefficient between the result and the factor amounted to 25.3%

Regression statistics			
Several R	0,503248366		
R- squared	0,253258918		
Normalized R-squared	0,142147807		
Standard error	17321818172		
Observation	10		

Significance F

0,118754885

As a result, there is the conclusion, that the model of the impact of revaluation of intangible assets on long-term assets is insignificant. The reason is that the result of revaluation of intangible assets accounted for aound 0.0001% of total assets.

Another important issue is that the increase in the value of intangible assets from practical activities affects the company's revenue from sales as well. With this aim, the impact of the increase in the value of intangible assets on sales revenue has been examined and the following results have been obtained (descriptive statistician of variables in the production of enterprise assets).

#### Table 11.

Descriptive statistical analysis of intangible assets						
Indicators	Revenues from sales	Intellectual property objects	Long-term assets	Current assets		
Average	2312060501	14971664.64	1768873084	1029396462		
Standard deviation	3477179347	31022214.4	3019015268	2050982284		
Minimum	47098879	14000	6934845	1372562709		
Maximum	10261781347	102822702	10222335009	6291970206		
Number of objects	10	10	10	10		

Descriptive statistical analysis illustrates that the standard deviation of revenue and longterm assets from revenues from product sales is larger than other variables, which is due to the fact that enterprises operate in different industries. According to the minimum values, the company with the lowest intangible assets is "Kvarts" with the amount of 178858028.00 thousand UZS, the company with the largest amount of intangible assets is "UzAuto Motors" with the amount of 111719829.33 thousand UZS. The mutual correlation of these variables is an essential part of the empirical analysis, and the following table presents the correlation matrix of the variables.

According to the correlation matrix data, there is a positive correlation between the revenues from the product sales and other variables. It should be noted, that the correlation between revenue from product sales and intellectual property objects has a higher difference than correlation with other variables.

				Table 12.	
Mutual correlation matrix of variables.					
Indicators	Revenue from the product sale	Intangible assets	Long-tem assets	Current assets	
1. Revenue from the product sale	1.00				
2. Intangible assets	0.68	1.00			
3. Long-term assets	0.44	0.08	1.00		
4. Current assets	0.57	0.83	0.42	1.00	

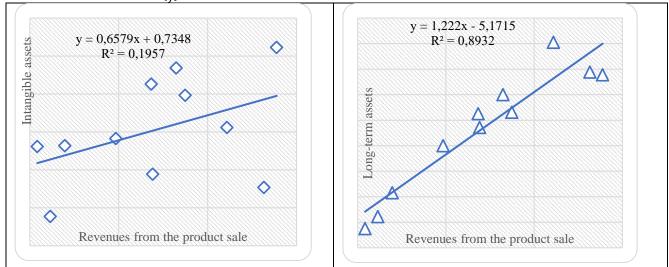
The correlation of asset types is of a positive nature as well, while the correlation of intangible assets and current assets is rather high. This in turn requires a careful approach to the result when incorporating these two variables into the regression model. This is because such a high correlation of free variables can result in a multicollinearity problem. Drawing correlational relationships enables to witness more precise formal relationship. Therefore, the correlation of some naturally logarithmic variables is given below.

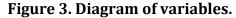
As can be seen from the following figure, there is a strong positive correlation between the revenue of the product sale and other variables.

In that case, the empirical model is written as follows:

$$VCT_{i} = a + bNA_{i} + gX_{i}^{J} + e_{i}(1)$$

here,  $VCT_i$  – *i*–revenues from the product sale,  $NA_i$  – *i*- intangible assets,  $X_i^j$  – other assets included in the model,  $\varepsilon_{iit}$  – error.





The main objective of making regression analysis of intangible assets is to estimate how much their increase in 1 UZS will raise the revenues from the product sale. The following table lists 3 models calculated with method of the least squares.

According to the results of various models of regression analysis, the positive impact of intangible assets on the revenue from the product sale has been empirically proven. In the case of all models, the impact of intangible assets on the revenue from the product sale was positive and had statistical significance. According to the models, the increase in the intangible assets of one of the above enterprises by an average of 1000 UZS resulted in an increase in its revenue from the product sale by an average of 98000 UZS.

			Table 1
Regression model results			
	Model [1]	Model [2]	Model [3]
Intangible assets	76.67**	73.02**	143.95**
	(27.25)	(24.67)	(48.29)
Long-term assets		0.44	0.76**
		(0.25)	(0.30)
Current assets			-1.33
			(0.80)
Constant value	1164125369	433932776	171611221
	(903486969)	(915439957)	(844394064)
R-square	0.47	0.62	0.72

has \*\*\* 1 percent statistical significance, \*\* 5 percent statistical significanceand \* 10 percent statistical significance

In conclusion, the revaluation of intangible assets in enterprises can provide a positive assessment of the indicators of their condition and their performance. This will enable in the future to further raise the size of enterprises and formation and development of innovative economies in the country as a result of the introduction of new technologies.

#### **Conclusion and proposals**

The following conclusions can be made in reliance upon the results of research made on the basis of the model of adjustment and revaluation of intangible assets accounting, in particular, adjusting national accounting standard in compliance with with the requirements of International Financial Reporting Standards:

*first,* the aim of National Accounting Standard 7 "Intangible Assets" and its composition should be adjusted in compliance with the requirements of international standards, namely, IFRS 38;

*second,* it is recommended to consolidate (join) NAS "Intangible Assets" and NAS 11 "Expenditures on research and development", currently acting in our country, and bring them into a single standard in accordance with international standards:

*third,* in order to obtain accurate information on intangible assets, annual revaluation indices should be published (for facilities which useful economic life is expected to increase);

*forth*, according to the revaluation model, the results of revaluation of intangible assets should be reflected directly in the capital of enterprises, i.e. in the account "Retained earnings";

*fith*, correlation and regression analysis of the results of revaluating intangible assets enables to assess their initial value, amortization, long-term assets and the degree of dependence on total assets.

#### **Reference:**

Brooking A., Motta E.A (1996) Taxonomy of Intellectual Capital and Methodology for Auditing It/17th Annual National Business Conference, McMaster University, Hamilton, Ontario, Canada. January 24-26.

Davletov I. (2018) "Improvement of accounting and audit of intellectual property in agriculture". Dissertation claiming for the scientific degree of the PhD in economics.

Dontsova L. (2008) Analysis of financial statements: textbook/6th edition. Updated and revised - Publishing House "Business and Service", -368 p.

Dusmuratov R.D. (2003) Basics of audit. Textbook. –T.: p. 612.

Gulyamova F.G. (2000) "Guide to independent study of accounting". T.: "World of Economy and Law, p.229.

IAS 38 "Intangible assets. Paragraph 8.

Ilkhamov Sh.I. (2005) "Accounting and audit of investment activities" Abstracts of the dissertation claiming for the scientific degree of the PhD in economics, p.24.

Ismanov I.I. (2009) Improving the methodology of accounting and auditing of long-term assets. Abstracts of the dissertation claiming for the scientific degree of the Doctor of Sciences. p.37.

Isroilov B.I. (2006) "Tax accounting and analysis: problems and their solutions." T.: "Uzbekistan", p. 92.

Ivanov I.V. et al. (2008) Financial management: Cost-based approach: Manual: Alpina Business Books, -504.

Leontyev B.B. (2002) The price of intelligence. Intellectual capital in Russian business. - M.: "Aktsioner".

Lytneva L. (2006) Accounting. Tutorial: M-Forum: INFRA-M: ИНФРА-М, -p. 496

Ochilov I. Qurbonboev J. (2007) "Financial accounting"/Manual. T.: «IQTISOD-MOLIYA», p. 265.

Pokrovsky I.A. (1894) The role of Roman law in the legal history of mankind and in modern jurisprudence. // Scientific notes of Yuryev University. -V. 3. - p. 1-30

Polatov M.E. (2017) "Improvement of intellectual capital accounting and auditing methodology", 08.00.08 - "Accounting, Economic Analysis and Auditing", Abstracts of the dissertation claiming for the scientific degree of the Doctor of Sciences.

Rakhimbekova R.M. (2003) "Financial Accounting in the Enterprise". Almaty. "Economy" Publishing House. p.94.

Regulation (2007) Ministry of Finance of the Russian Federation. Order  $N^{\circ}$  153n "On approving accounting regulations. "Accounting for intangible assets" dated December 27, (Regulation on accounting 14/2007). http://www.consultant.ru.

Resolution of the President of the Republic of Uzbekistan №PR-4611 "On additional measures to transition to International Financial Reporting Standards" dated February 24, 2020.

Rizaev N.K. (2019) "Methodology of organizing accounting and financial analysis of intellectual property", dissertation claiming for the scientific degree of the Doctor of Sciences.

Sotivoldiev A.S. (2007) "Modern accounting"/Manual. T.: BAMA. Volume 2.

Sveiby K.E. (1998) Intellectual Capital and Knowledge Management. -213 p.

Thomas P. Carlin. Albert R. Macmin, (1998) III. Analysis of financial statements (based on GAAP). Textbook. Translation of the fourth English edition. M.: IFRA-M. -p. 448.